



HONOLULU AUTHORITY for RAPID TRANSPORTATION

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**Board of Directors Meeting**  
**Ali'i Place, Suite 150**  
**1099 Alakea Street**  
**Honolulu, Hawaii 96813**  
(meeting room entrance on Richards Street)  
Thursday, March 12, 2015 9:30 am

**Agenda**

- I. Call to Order by Chair
- II. Public Testimony on All Agenda Items
- III. Approval of the Minutes of the February 19, 2015 Board of Directors Meeting
- IV. Right of Way Update
- V. Construction and Traffic Update
  - A. West Oahu/Farrington Highway
    1. Rail Operations Center
    2. Update on Procurement and Delivery of Modular Buildings to Leeward Community College
  - B. Kamehameha Highway Guideway
  - C. Airport
  - D. City Center
  - E. Traffic
- VI. February Monthly Progress Report
- VII. December PMOC Monthly Report
- VIII. Interim Report of the Fare Policy Permitted Interaction Group
- IX. Executive Director and CEO's Report
- X. Executive Session

Pursuant to Hawaii Revised Statutes Section 92-4 and Section 92-5(a)(4), the Board may enter into Executive Session for any agenda item to consult with its attorneys on questions and issues on a matter pertaining to the Board's powers, duties, privileges, immunities and liabilities.
- XI. Adjournment

Note: Persons wishing to testify on items listed on the agenda are requested to register by completing a speaker registration form at the meeting or online on the HART section of the [www.honolulustransit.org](http://www.honolulustransit.org) website. Each speaker is limited to a **two-minute** presentation.

Persons who have not registered to speak in advance should raise their hands at the time designated for public testimony and they will be given an opportunity to speak following oral testimonies of the registered speakers.

Any physically challenged person requiring special assistance should call (808) 768-6258 for details at least three days prior to the meeting date.

# HONOLULU RAIL TRANSIT PROJECT



## February 2015 MONTHLY PROGRESS REPORT

# HART

HONOLULU AUTHORITY for RAPID TRANSPORTATION

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

**THIRD PARTY DISCLAIMER**

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

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

**REPORT FORMAT AND FOCUS**

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

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

**ON THE COVER:**

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

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

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

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**LIST OF ACRONYMS**

AB	AnsaldoBreda	ESA	Engineering Services Agreement
AFE	Authorized for Expenditure	FAA	Federal Aviation Administration
AHJV	Ansaldo Honolulu Joint Venture	FAI	First Article Inspections
AIS	Archaeological Inventory Survey	FAT	Factory Acceptance Tests
APTA	American Public Transportation Association	FD	Final Design
ARRA	American Recovery and Reinvestment Act	FDC	Field Design Change
ASG	Airport Station Group	FEIS	Final Environmental Impact Statement
ATC	Automated Train Control	FFC	Fixed Facility Contractors
ATO	Automated Train Operation	FFGA	Full Funding Grant Agreement
BA	Buy America	FHSG	Farrington Highway Station Group
BAC	Buy America Compliance	FTA	Federal Transit Administration
BACM	Buy America Compliance Matrix	FTE	Full-Time Equivalent
BFS	Budget and Fiscal Services	FWS	Fish and Wildlife Service
BMP	Best Management Practice	GAT	Great Aleutian Tsunami
BUE	Bottom-Up Estimate	GDR	Geotechnical Data Report
CAR	Corrective Actions	GEC	General Engineering Consultant
CCO	Contract Change Order	GET	General Excise Tax
CE&I	Construction Engineering and Inspection	GIS	Geographic Information System
CEL	Certifiable Elements List	GSA	General Services Administration
CIL	Certifiable Items List	GT	General Terms
CMP	Corrugated Metal Pipe	HABS	Historic American Buildings Survey
CMS	Contract Management System	HAER	Historic American Engineering Record
CMU	Concrete Multiple Unit	HALS	Historic American Landscape Survey
COI	Conflict of Interest	HART	Honolulu Authority for Rapid Transportation
CONRAC	Consolidated Rental Car Facility	HCC	Honolulu Community College
COR	Corporation Counsel	HCDA	Hawai'i Community Development Authority
CPM	Critical Path Method	HCSA	Hawai'i Capital Special District
CPP	Contract Packaging Plan	HDOE	Hawai'i Department of Education
CSC	Core Systems Contract	HDOH	Hawai'i Department of Health
CSL	Cross Hole Sonic Logging	HDOT	Hawai'i Department of Transportation
CSOC	Core Systems Oversight Consultant	HDPE	High-density polyethylene
CTS	Communications Transmission System	HECO	Hawaiian Electric Company
CZM	Coastal Zone Management	HFD	Honolulu Fire Department
DAGS	Department of Accounting & General Services	HHF	Historic Hawai'i Foundation
DB	Design-Build	HHPRB	Hawai'i Historic Places Review Board
DBB	Design-Bid-Build	HP	Historic Preservation
DBE	Disadvantaged Business Enterprise	HPC	Historic Preservation Committee
DBEDT	Department of Business, Economic Development and Tourism	HPCA	Historic Preservation Certification Application
DBOM	Design-Build-Operate-Maintain	HPD	Honolulu Police Department
DCAB	Disability and Communication Access Board	HPF	Historic Preservation Fund
DCN	Design Change Notice	HRHP	Hawai'i Register of Historic Places
DDC	Department of Design and Construction	HRTS	Honolulu Rail Transit Project
DES	Department of Environmental Services	HTI	Hawaiian Telcom
DFIM	Design Furnish Install Maintain	IAMR	Interstate Access Modification Report
DHHL	Department of Hawaiian Homelands	ICCS	Interface Communications Control System
DHR	Department of Human Resources	ICD	Interface Control Documents
DIT	Department of Information Technology	ICM	Interface Control Manual
DKSG	Dillingham and Kaka'ako Station Group	INMS	Integrated Network Management System
DLIR	Hawai'i Department of Labor and Industrial Relations	ITP	Inspection and Test Plan
DLNR	Department of Land and Natural Resources	ITS	Intelligent Transportation Systems
DOE	Department of Education	JTMS	Joint Traffic Management System
DOH	Department of Health	JU&O	Joint Use & Occupancy
DOL	Department of Labor	JUOA	Joint Use and Occupancy Agreement
DPM	Deputy Project Managers	KCDD	Kaka'ako Community Development District
DPP	Department of Planning and Permitting	KHG	Kamehameha Highway Guideway
DPR	Department of Parks and Recreation	KHSG	Kamehameha Highway Station Group
DPS	Department of Public Safety	KIWC	Kiewit Infrastructure West Company
DS	Downstream	KKJV	Kiewit/Kobayashi Joint Venture
DTS	Department of Transportation Services	LCC	Leeward Community College
ECP	Environmental Compliance Plan	LEED	Leadership in Energy and Environmental Design
E/E	Elevator/Escalator	LPR	License Plate Reader
EMF	Electromagnetic Forces	LRV	Light Rail Vehicle
EMI	Electromagnetic Interference	MIM	Manufacture-Install-Maintain
EMP	Environmental Management Plan	MMIS	Maintenance Management Information System
EOR	Engineer of Record	MMP	Mitigation Monitoring Program
EOS	Electrically Operated Switches	MOT	Maintenance of Traffic
		MOU	Memorandum of Understanding

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

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**\*HIGHLIGHT OF THE MONTH: KAPALAMA STATION**  
 Serving the Kalihi, Kapalama, Honolulu Community College and Outlying Residential Areas



- Station Features:**
- ADA Pedestrian Access
  - Bicycle Parking
  - Elevators and Stairs
  - TheBus – Local service along Dillingham Blvd
  - 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

In February, the project continued to successfully move forward with the following milestones being reached: construction of two miles of guideway, the completion of nearly 90 spans, and more than 140 columns. Construction at the 43-acre Maintenance and Storage Facility is more than 60 percent complete, and production of the rail system’s fleet of 80 vehicles is underway and on schedule.

### Two Miles of Guideway Completed

The Honolulu rail transit project now has more than two miles of guideway extending across the ‘Ewa plain. The two miles of completed guideway is the equivalent of more than 80 spans.



Construction crews have been busy connecting the concrete segments on top of the columns that have been built from east Kapolei and are heading into Waipahu. Workers are also fastening the steel rail onto the elevated guideway.

Other rail-related work underway includes construction of the guideway over the H-1 freeway near the H-1/H-2 merge, and the rail operations center in Waipahu. With safety in mind, traffic notices and updates are issued weekly to the media and regular briefings with traffic reporters help HART keep motorists and the public informed about construction-related traffic changes. HART also uses social media and weekly eBlasts to get the word out regarding traffic.

### Construction Right of Entry Secured for UH Urban Gardens

Kiewit has received a key construction right of entry for UH Urban Gardens. With this agreement secured, guideway construction can now proceed in this location.

### Hitachi to Buy Ansaldo

Hitachi, Ltd. will buy two Ansaldo units from Finmeccanica S.p.A. for \$2.2 billion. Hitachi agreed to buy Finmeccanica’s AnsaldoBreda S.p.A., which focuses on rail vehicles, as well as its 40 percent stake in Ansaldo STS S.p.A., which specializes in rail signaling equipment and control systems. Ansaldo Honolulu JV is a joint venture of these two companies, Ansaldo STS and AnsaldoBreda. The sale is expected to close later this year.

### Cost:

Project Costs Summary Through Jan. 30, 2015		
	Current Budget (\$M)	Incurred To Date (\$M)
Project Budget	\$4,428.8	\$1,387.7
Project Contingency	\$519.8	\$0.6
Finance Charges	\$173.1	\$0.0
<b>TOTAL</b>	<b>\$5,121.7</b>	<b>\$1,388.3</b>

### Schedule:

Project Progress Through Jan. 30, 2015				
	Actual		Early Plan	Late Plan
Overall Project Progress	32.0%		50.3%	41.5%
Overall Construction Progress	24.1%		42.6%	33.6%
Overall Design Progress	83.4%		96.0%	91.3%
Overall Utilities Progress	12.2%		42.1%	26.1%

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

The CSC contractor is continuing to progress through Interim Design into Final Design on many subsystems. Qualification and design verification tests are on-going. The safety certification team continues to finalize the last 2 CILs and is starting the process of signing off design verification elements. Construction interface and mobilization planning is on-going in preparation for the initial work schedule to begin at the MSF. Core Systems has received the revised access dates reflecting the revised contract procurement plan for the Westside Station contracts and the East Side Design-Build contracts. HART will be working with the CSC contractor to develop a revised baseline schedule. (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 actual release for manufacturing dates will be in concert with the actual bid and award date for the various stations. (See Section 4.1.B for details)

West O'ahu Farrington Highway (WOFH) Contract

HART continues to work with the contractor to improve production rates. Kiewit Infrastructure West Company (KIWC) has submitted a revised baseline schedule, which reflects a four month delay to the contractual substantial completion date. KIWC and HART are working to mitigate the impacts to the critical path activities, including the LCC Construction Right of Entry Agreement with the University of Hawai'i (UH). HART has reviewed and provided comments to the schedule baseline revision which includes the resequencing of the work activities. These are being analyzed to minimize Program impacts prior to HART's acceptance of the KIWC rebaseline schedule. (See Section 4.2.A for details)

Maintenance and Storage Facility (MSF) Contract

MSF ongoing work includes utilities, track subdrains, ballast and rail installation, OSB and MOW building elevated slabs and interior partitions, roofing, metal framing, and OSB hydraulic lifts. MSF also focused on completing power distribution work including transformer and switch foundations, as well as commenced track work including setting initial turnout. Overall the project is progressing on time with evaluation of a potential six calendar day delay due to weather at critical times during ground excavation activities. (See Section 4.2.D for details)

Kamehameha Highway Guideway (KHG) Contract

While construction right of entry access issues have been resolved at UH Urban Gardens and Aloha Stadium, HART continues to press the contractor to improve production rates. Kiewit and HART are working to mitigate the impacts to the critical path activities, including the implementation of alternative MOT plans along Kamehameha Highway. Kiewit and HART are also working together with the third-party utilities to confirm their schedules. Mitigation measures include the re-sequencing of work activities, modifications to the allowable traffic control measures, and establishment of elevated task force meetings to resolve third-party issues. (See Section 4.3.A for details)

Airport Section Utilities Construction Contract

The Airport Section Utilities Construction contract is approximately one month behind the baseline schedule due to Navy right of entry issues. Nan and HART are working to mitigate the schedule impacts. Potholing and ITS system installation are current activities occurring in the field. Actual utility relocations have begun. (See Section 4.4.B for details)

Airport Seven Piers Construction Contract

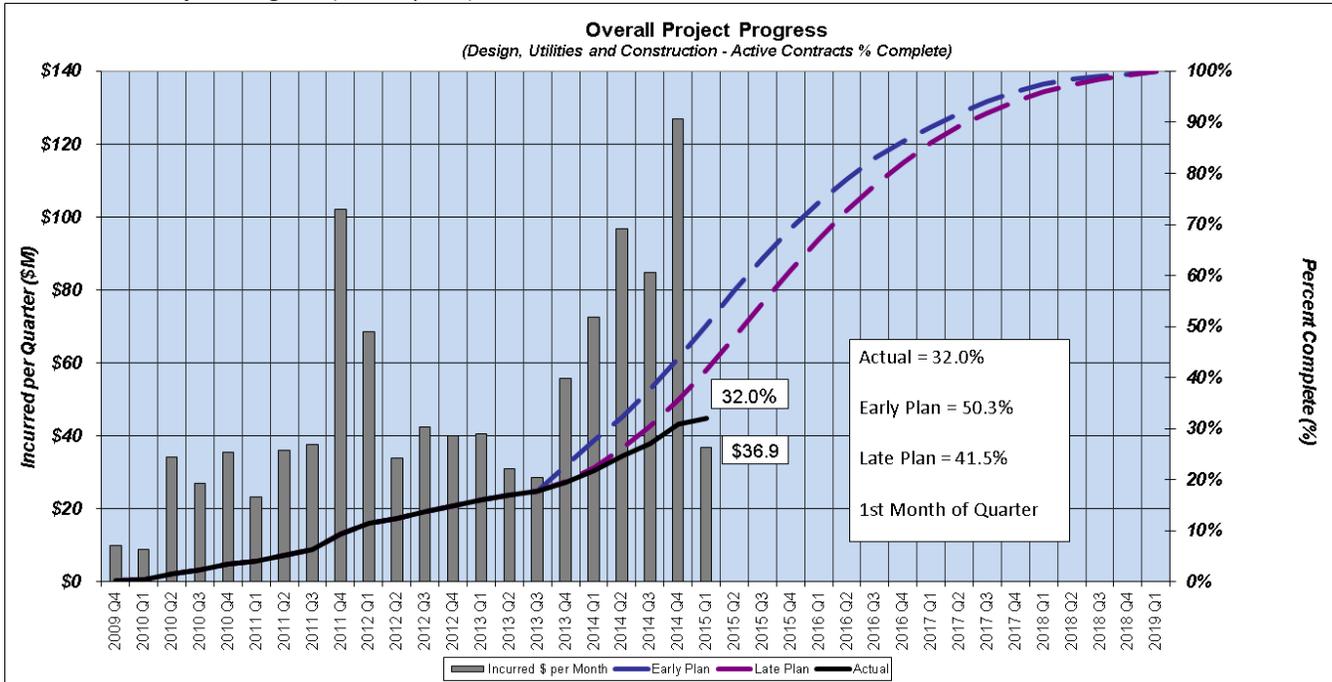
The Airport Seven Piers Construction contract is on schedule. Hawaiian Dredging Construction Company/Condon-Johnson & Associates (HDCC/CJA) have begun shaft construction. Hawaiian Dredging's utility subcontractor, Koga, has begun relocating utilities in the field. (See Section 4.4.C for details)

## 2 OVERALL PROJECT PROGRESS AND FINANCIALS

### 2.1 Project Progress (data as of Jan. 30, 2015)

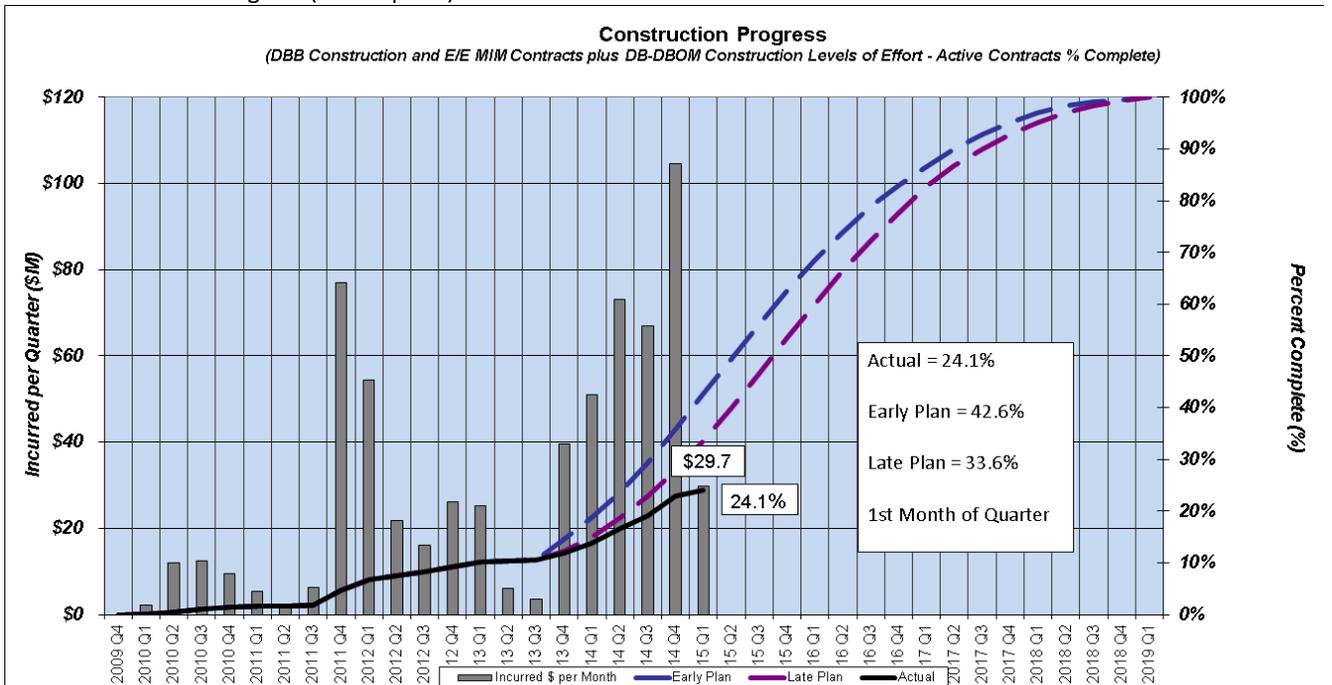
- Note:
- Actual = Actual cost of work performed, based on invoiced-to-date amount.
  - Early Plan = Earliest dates activities can begin and finish, based on logic and durations used in the schedule.
  - Late Plan = Latest dates activities can begin and finish and not have an impact on completion date,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

Figure 1. Overall Project Progress (% Complete)



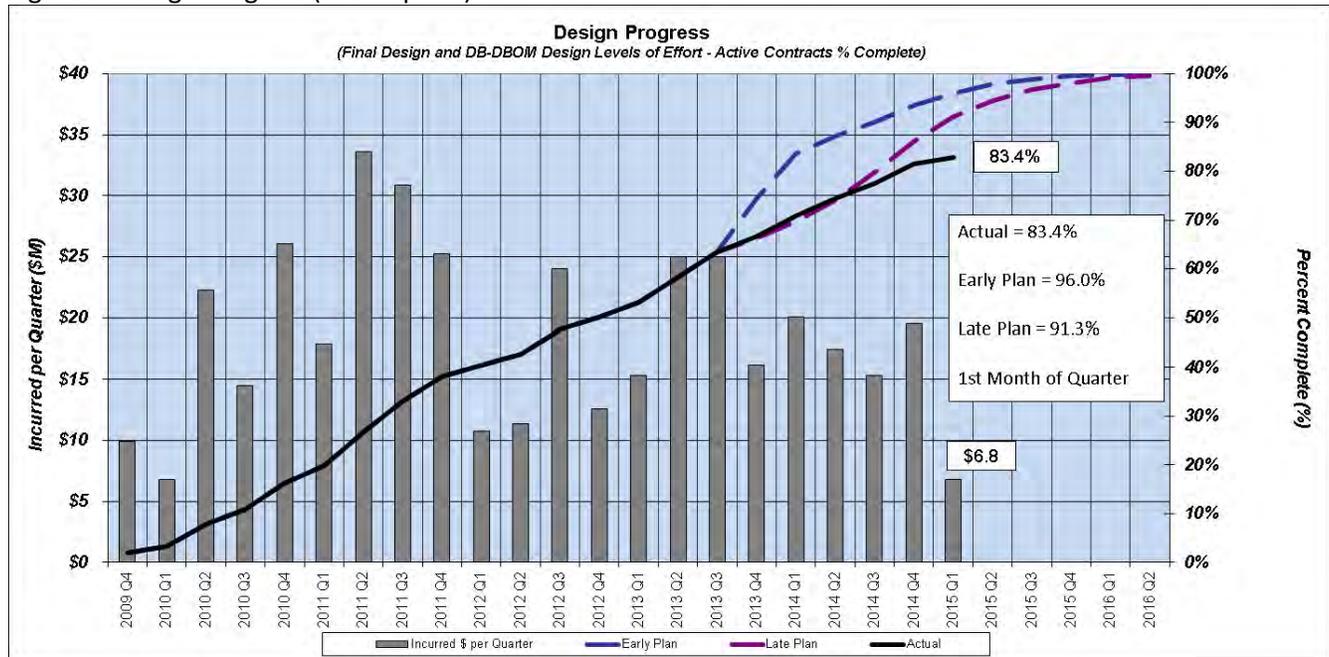
At present “overall” project progress is based on the weighted value progress of the individual construction and design contracts (Design-Build [DB], Design-Bid-Build [DBB], Design-Build-Operate-Maintain [DBOM], Elevator/Escalator Manufacture-Install-Test-Maintain [MIM], Final Design [FD] and DB-DBOM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

Figure 2. Construction Progress (% Complete)



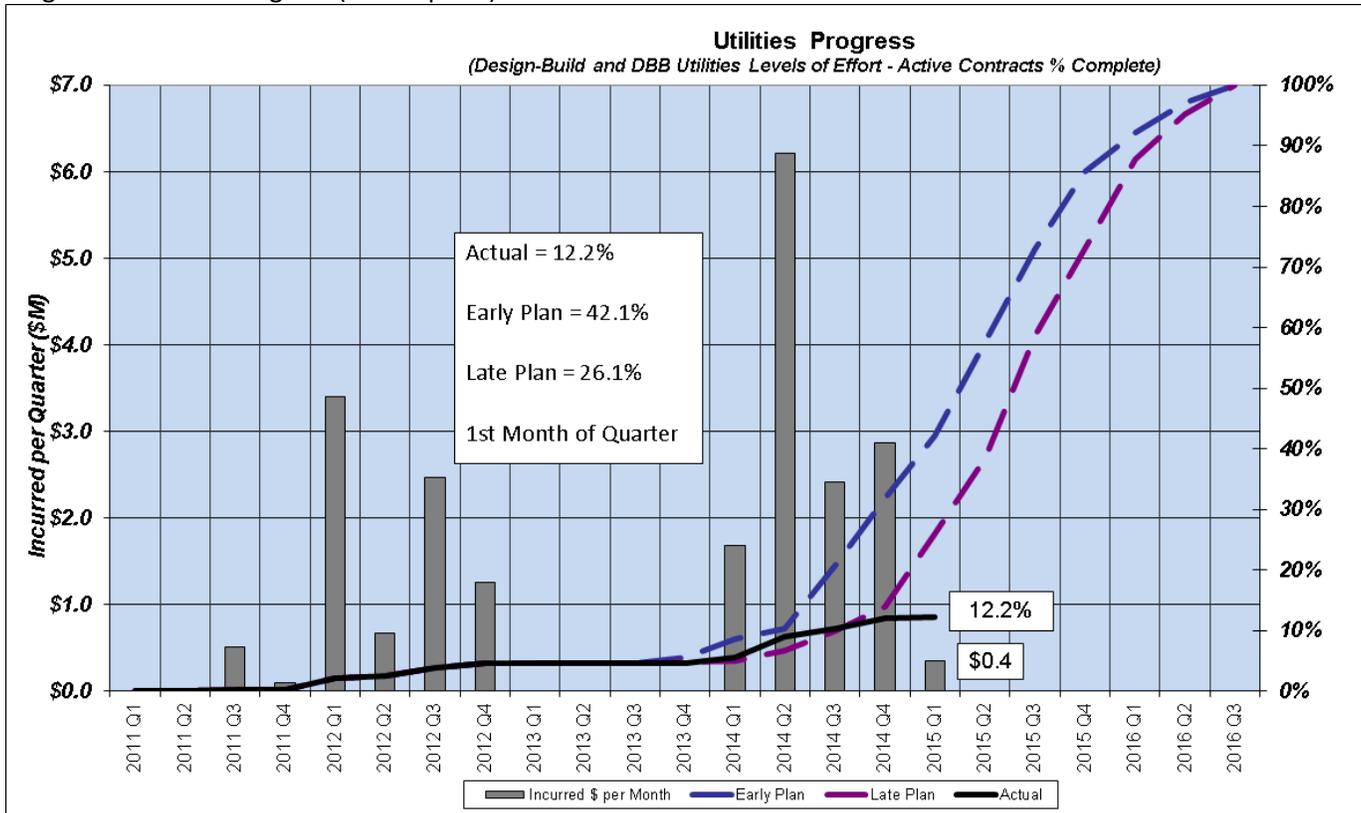
Overall construction progress is based on the weighted average progress of the individual DBB and E/E MIM construction contracts and the DB-DBOM construction levels of effort, not including consultant construction engineering and inspection (CE&I) services.

Figure 3. Design Progress (% Complete)



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

Figure 4. Utilities Progress (% Complete)



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

**2.2 Project Budget (data as of Jan. 30, 2015)**

- FFGA Project Budget = **\$5,121.7M**
  - Current Project Budget - \$4,428.8M
  - Current Project Contingency - \$519.8M
  - Project Finance Charges - \$173.1M
  
- Total Incurred Cost = **\$1,388.3M** (31.3% of current project budget)

*Total Incurred Cost = \$1,388.3M  
(previous report = \$1,341.4M)*

**2.3 Project Contingency (data as of Jan. 30, 2015)**

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

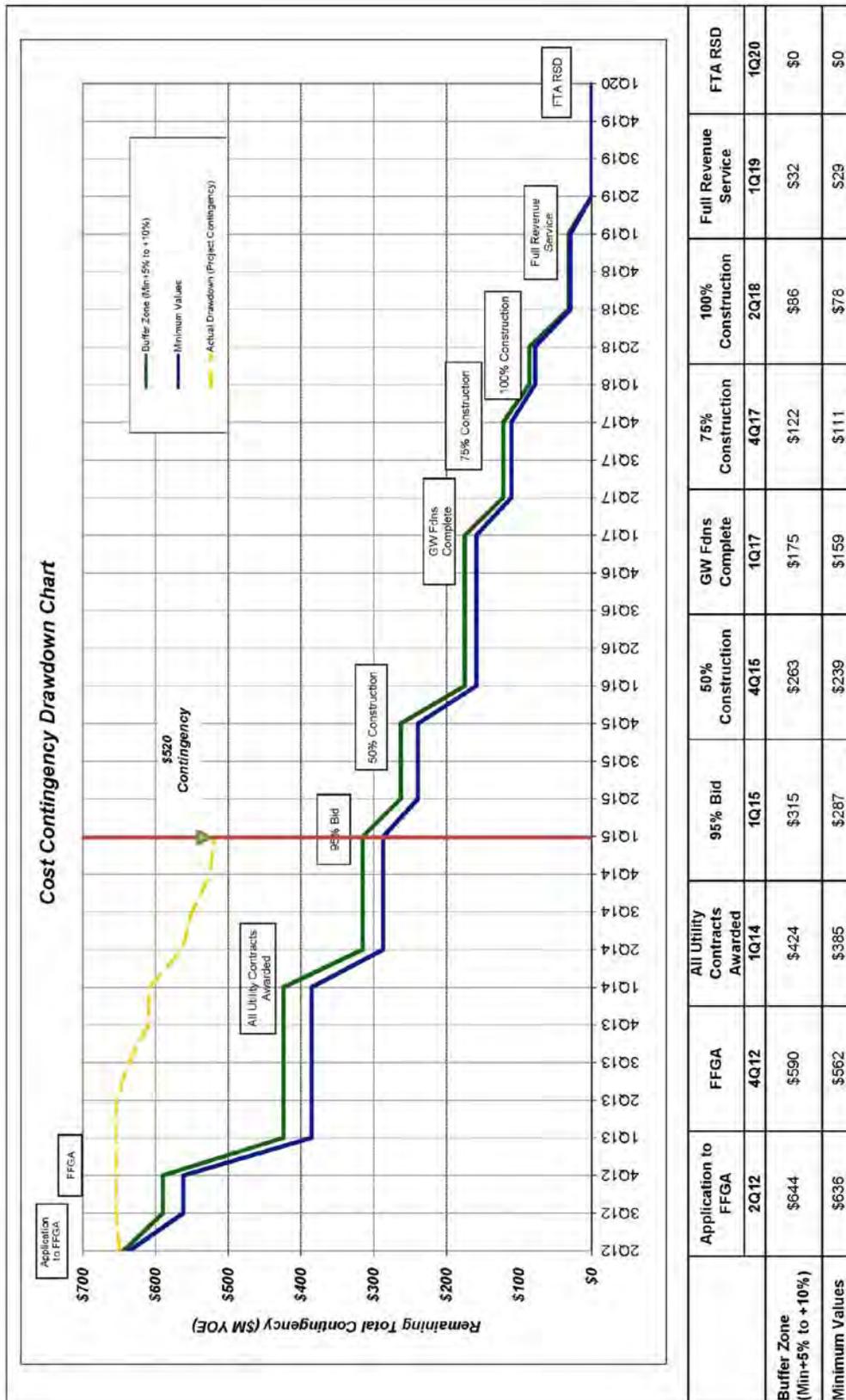
- Current Project Contingency Balance = **\$519.8M**
  - Contingency drawdown to date - \$123.8M (19.2% of baseline project contingency budget)
  - \$4M contingency drawdown during January 2015. Please see Appendix B for more details.

*Current Contingency Balance = \$519.8M  
(previous report = \$523.8M)*

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 November 2014 Report	90.01 - 90.03	(\$111.8)
Contingency drawdown December 2014 Report	90.01 - 90.03	\$10.7
Contingency drawdown January 2015 Report	90.01 - 90.03	(\$18.7)
Contingency drawdown February 2015 Report	90.01 - 90.03	(\$4)
Contingency drawdown to date	90.01 - 90.03	(\$123.8)
<b>Current FFGA Project Contingency</b>	<b>90.01 - 90.03</b>	<b>\$519.8</b>

Figure 6. Draft Cost Contingency Drawdown Chart



Data as of 1/30/15 - January '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 Jan. 30, 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	340	340
FTA Section 5307 Formula Funds	0	210	0	0
ARRA Funds	0	4	4	4
Net General Excise Tax (GET) Surcharge revenues FY2010-FY2023	378	3,291	1026	1,404
<b>Total</b>	<b>385</b>	<b>5,356</b>	<b>1,670</b>	<b>2,055</b>

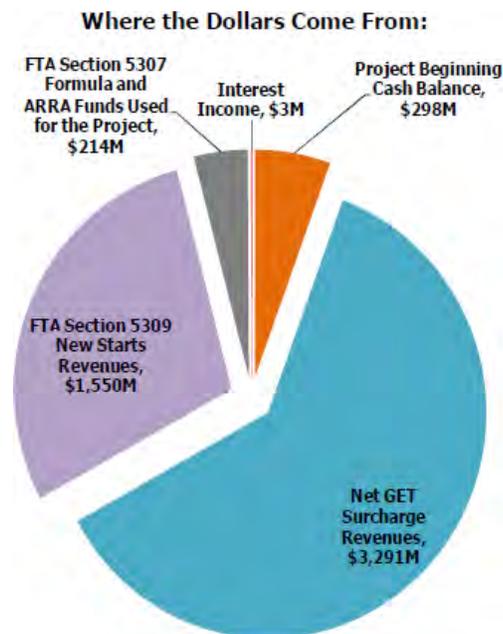
<sup>1</sup> GET and Interest Income received during Pre-Preliminary Engineering (pre-PE) phase prior to entry into PE

<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 201 Totals \$806.3 Million

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



Source: FFGA Financial Plan, p. 2-1

- General Excise Tax (GET) Surcharge
  - \$1,026M = amount received since the Project’s entry into FTA’s Preliminary Engineering phase of project development.
    - \$1,066M = Projected Net GET Surcharge Revenue for FYs 2010-3Q 2015, as stated in FFGA Financial Plan (Table A-1 *Capital Plan Cash Flows*)
    - GET receipts are currently running 4% short of projections, or \$40M behind.
  - \$58M = GET surcharge received in January 2015
- Full Funding Grant Agreement (FFGA)
  - \$27,560,845 = New Starts drawdown received in January 2015.
- The \$5307 funds for the Project, per the Financial Plan, are \$210M.

*Total Cash Received Since PE = \$1,670M  
(previous report = \$1,584M)*

*GET Received Since PE = \$1,026M  
(previous report = \$968M)*

*GET Received Since 2007 = \$1,404M  
(previous report = \$1,346M)*

Figure 9. New Starts Drawdown by Federal Fiscal Year (as of Jan. 30, 2015)

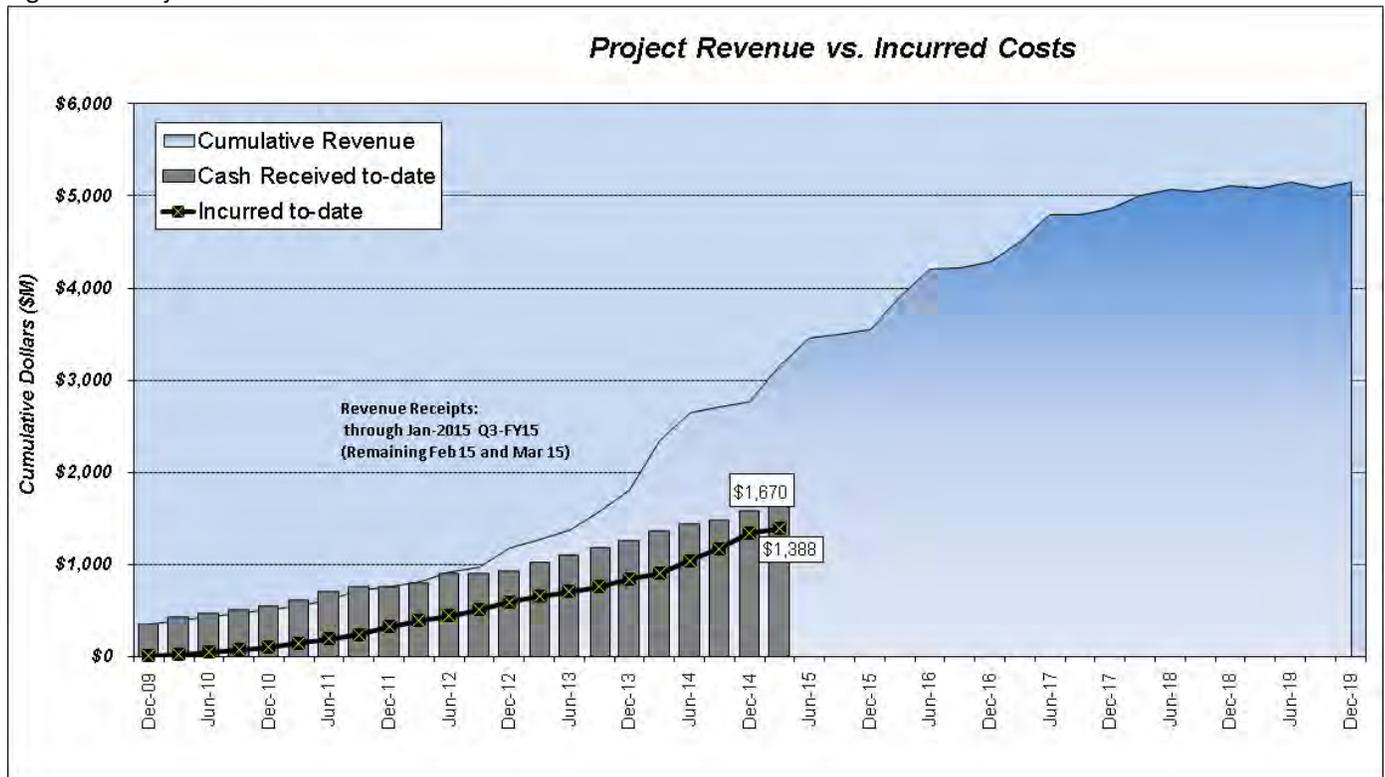
New Starts Grant Information by Federal Fiscal Year				
Federal Fiscal Year Allocation	Obligated Amounts	Actual Drawdown Amounts to Date	Available Balance	FFGA Base Case Cash flow
2008	\$15,190,000	\$15,190,000	\$0	
2009	\$19,800,000	\$19,800,000	\$0	
2010	\$30,000,000	\$30,000,000	\$0	
2011	\$55,000,000	\$55,000,000	\$0	\$20,607,242
2012	\$200,000,000	\$200,000,000	\$0	\$99,382,758
2013	\$236,277,358	\$19,883,262	\$216,394,096	\$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>\$339,873,262</b>	<b>\$1,210,126,738</b>	<b>\$1,550,000,000</b>

2.5 Project Revenue and Costs

(data as of Jan. 30, 2015)

*Ending Cash Balance 1/31/15 = \$347.0M*  
*(previous report = \$322.0M)*

Figure 10. Project Revenue versus Incurred Costs



Planned Funding levels as per the June 2012 FFGA Finance Plan  
Data date for Revenue & Incurred Cost = Jan. 30, 2015

Figure 11. Cash Balance Summary

JANUARY 2015 CASH BALANCE SUMMARY		
	JANUARY	YTD Cumulative
<b>Beginning Cash Balance</b>	322,005,547	441,011,319
Expenditures:		
Operating expenditures	(993,480)	(8,410,903)
Capital Expenditures	(31,885,861)	(298,034,943)
<b>Expenditures Total:</b>	<b>(32,879,341)</b>	<b>(306,445,846)</b>
Receipts:		
GET Surcharge	57,829,491	155,773,862
FTA Drawdown*	0	56,352,391
Interest	15,115	148,915
Other (rental, refunds, copy fees, etc.)	12,442	142,613
<b>Receipts Total:</b>	<b>57,857,048</b>	<b>212,417,782</b>
<b>Ending Cash Balance 01/31/15</b>	<b>346,983,254</b>	<b>346,983,254</b>

\*January's \$27.6M FTA drawdown was recorded on Feb. 3, 2015

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

### 3 SCHEDULE

(data as of Jan. 30, 2015)

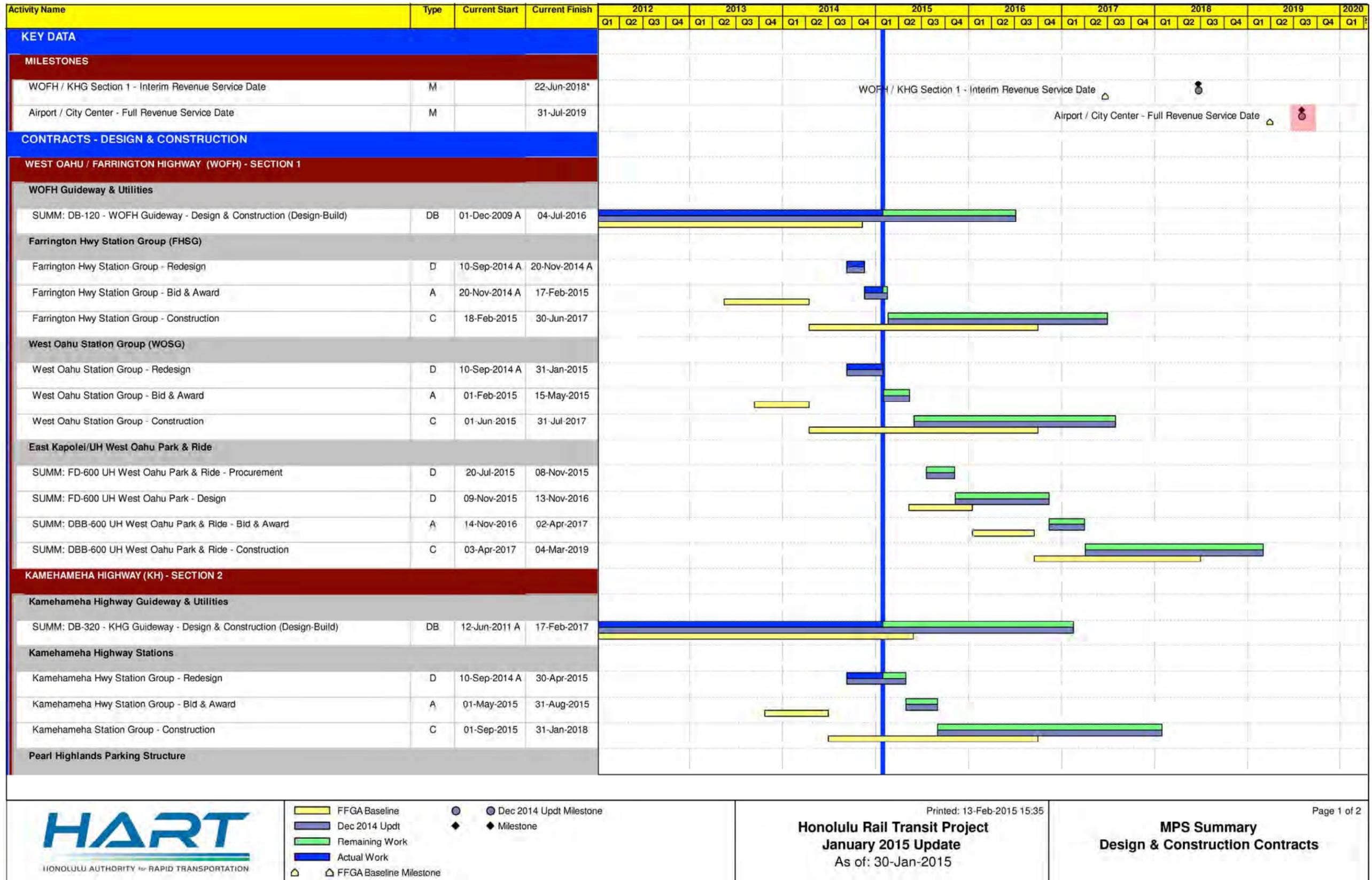
#### OVERVIEW

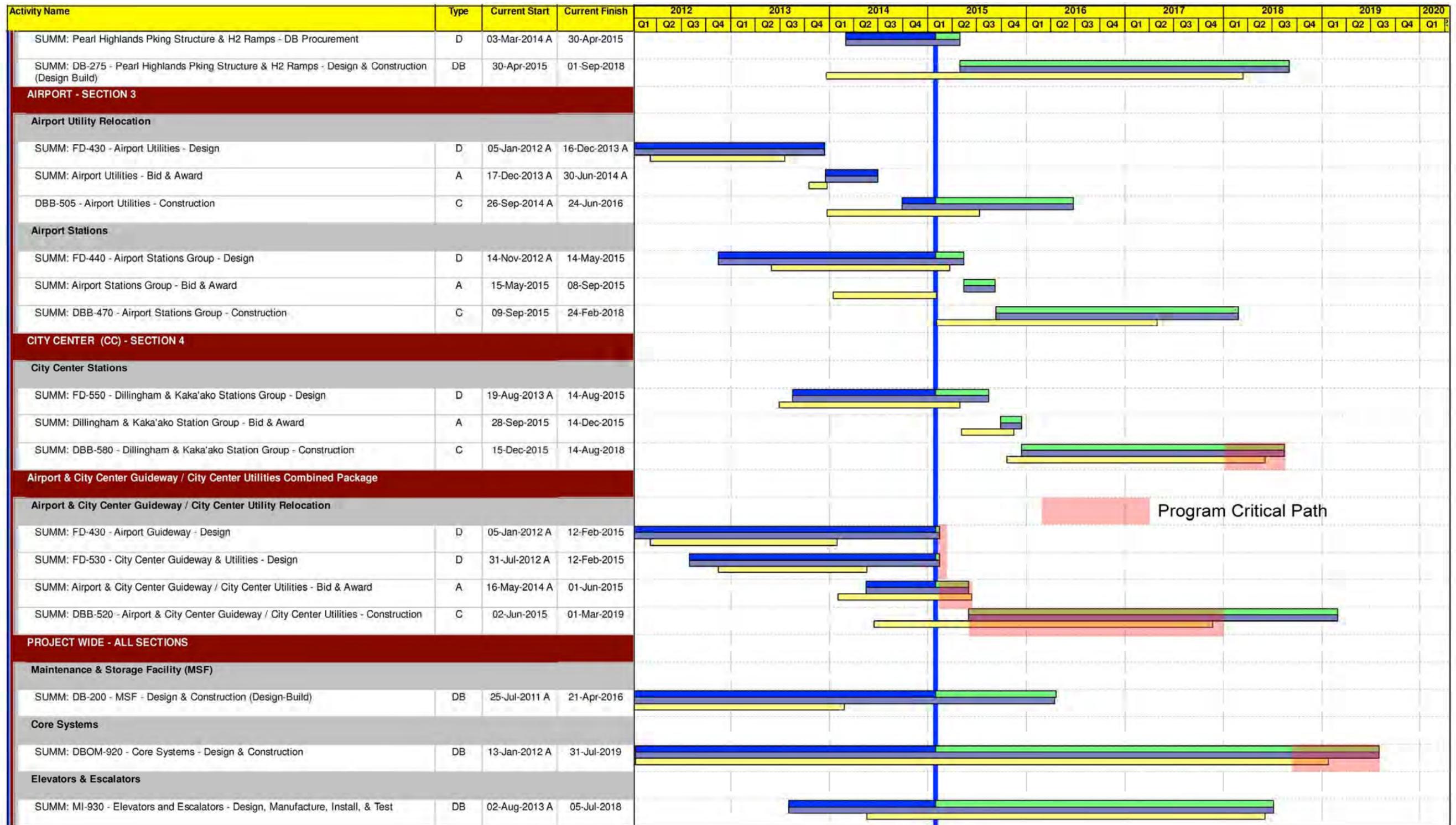
- HART is currently revising its procurement strategy for the east guideway, stations and utility relocations. Once completed, HART will update the design, bid/award and construction dates shown in the monthly MPS summary. Until then, the November MPS forecasts for the Interim Revenue Service Date and the Full Revenue Service will be shown for reference.
- 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

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

Printed: 13-Feb-2015 15:35  
**Honolulu Rail Transit Project**  
**January 2015 Update**  
 As of: 30-Jan-2015

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

## 4 CONTRACT STATUS

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

#### OVERVIEW

- Vehicle Aluminum Carshell Manufacturing is moving forward in Reggio Calabria, Italy.
- Progressing with sub-system testing and design verification activities.
- Executed Change Order # 15 Test and Storage Track Changes at MSF.

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

#### OVERVIEW

- Fare Collection Technical Support RFQ is on track for release in early March 2015.
- Both procurements are linked to signature of MOU by DTS to commit City and County funds for the system databases.

#### KEY ISSUES

- Fare Collection system RFP is under preparation to be released in first quarter 2015, subject to MOU confirmation with the City.
- Confirmation of funding sources for HART and City portions of the multi-modal fare system.

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

#### OVERVIEW

- Consistent Span Erection/Stressing Construction Progress – this consistency will allow the team to have a better reference for reviewing the schedule and forecasting future work.
- Leeward Community College (LCC) Portables and Parking Lot Change Order – Change Order 063, Procurement of LCC Portables/Parking Lot has been developed to allow KIWC to procure four (4) portable buildings for LCC. The procurement of the buildings are long lead time items which have been on the project's critical path. Once the buildings are installed, work can begin at the LCC Station area.
- Track Welding and Concrete Plinth Work – track construction operations are continuing at a good pace. Flash butt track welding began on trackwork north of the Maintenance and Storage Facility, and the concrete plinths under the double crossover (the first of four for the project) east of Ho'opili Station was completed. KIWC is learning from these operations and will continue the push forward into the coming months to construct trackwork.

#### KEY ISSUES

- U.S. Army Corps of Engineers (Corps) Section 404 Permit (for additional detail, see 4.2.A Key Issues)
- Span 67 Damage and Repair Procedures (for additional detail, see 4.2.A Key Quality Issues)
- Drill Shaft Quality/Repairs (for additional detail, see 4.2.A Key Quality Issues)

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

#### OVERVIEW

- MSF on-going work includes underground utilities, track subdrain, ballast and rail installation, OSB and MOW elevated slab, roofing, metal framing, and OSB hydraulic lifts. Commenced work on TPSS foundation.

#### KEY ISSUES

- Resolution of potential Electromagnetic Forces (EMF) interference between low voltage power and automatic train control systems within yard electrical trenches.
- Scheduling HECO incoming power duct bank inspection and installation of service cables.
- Defining access and internal movement requirements for rail car delivery, assembly and transfer to storage.

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

- Construction right of entry access issues have been resolved at UH Urban Gardens and Aloha Stadium.
- Shaft installation along the KHG guideway alignment has resumed at two locations: Shaft 271 (Pearl Highlands) working eastward, and the group of shafts from 415 to 420 (Aloha Stadium) which will be completed as a group before working westward.
- Final Test Shaft, TS 15A, was installed and is pending CSL testing.

KEY ISSUES

- Permanent easements: the Design-Builder has identified 14 locations that are believed to require permanent easements for relocated utilities. KIWC and HART are working together to resolve this issue.
- HDOT betterments: a meeting between HART and HDOT was held and betterments acknowledged by HDOT. HART and HDOT are working together to determine the path forward to resolve this issue while minimizing construction delays.
- Schedule: Lack of a current project schedule from KIWC hampers the project team's ability to plan and mitigate for any critical path items that may be upcoming. The revised schedule submitted on Dec. 5, 2014, was returned to KIWC with the request to re-submit as part of a change order asking for a modification to the substantial completion.

**Final Design Contracts (various sections)**OVERVIEW

- Active Procurements:
  - Bids for the Farrington Highway Stations Group (FHSG) construction contract will be opened on March 3, 2015.
  - Bids for the H2R2 Ramp construction contract will be opened on March 24, 2015.
- Upcoming Procurements:
  - Bid documents for the West O'ahu Stations Group (WOSG) construction contract will be advertised on April 13, 2015.
  - HART is establishing the requirements for the upcoming Airport Guideway and Stations Design-Build (DB) package.
  - HART is establishing the requirements for the upcoming City Center Guideway and Stations DB package.
  - HART is determining the scope for a potential City Center Utilities Design-Bid-Build (DBB) package.

KEY ISSUES

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

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

- Field office set up for DBB-505 Airport Section Utilities Construction.

KEY ISSUES

- ROE into Navy.

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

- Foundation and utility relocation work is currently in progress.

4.1 System-wide

A. Core Systems Contract (CSC)

Contract No.: DBOM-920

DBOM Contractor: Ansaldo Honolulu Joint Venture (AHJV)

Contract Start Date: January 2012

Contract Substantial Completion: March 2019

Projected Substantial Completion: July 2019

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



**Project Overview:** The CSC contractor is continuing to progress through Interim Design into Final Design. Qualification and design verification tests are on-going. The safety certification team continues to finalize the last 2 CILs and is starting the process of signing off design verification elements. Construction interface and mobilization planning is on-going in preparation for the initial work schedule to begin at the MSF. Passenger vehicle manufacturing, key system manufacturing, design verification and qualification testing activities are on-going. HART has provided revised construction access milestone dates for facilities work and the CSC is incorporating these dates into its schedule.

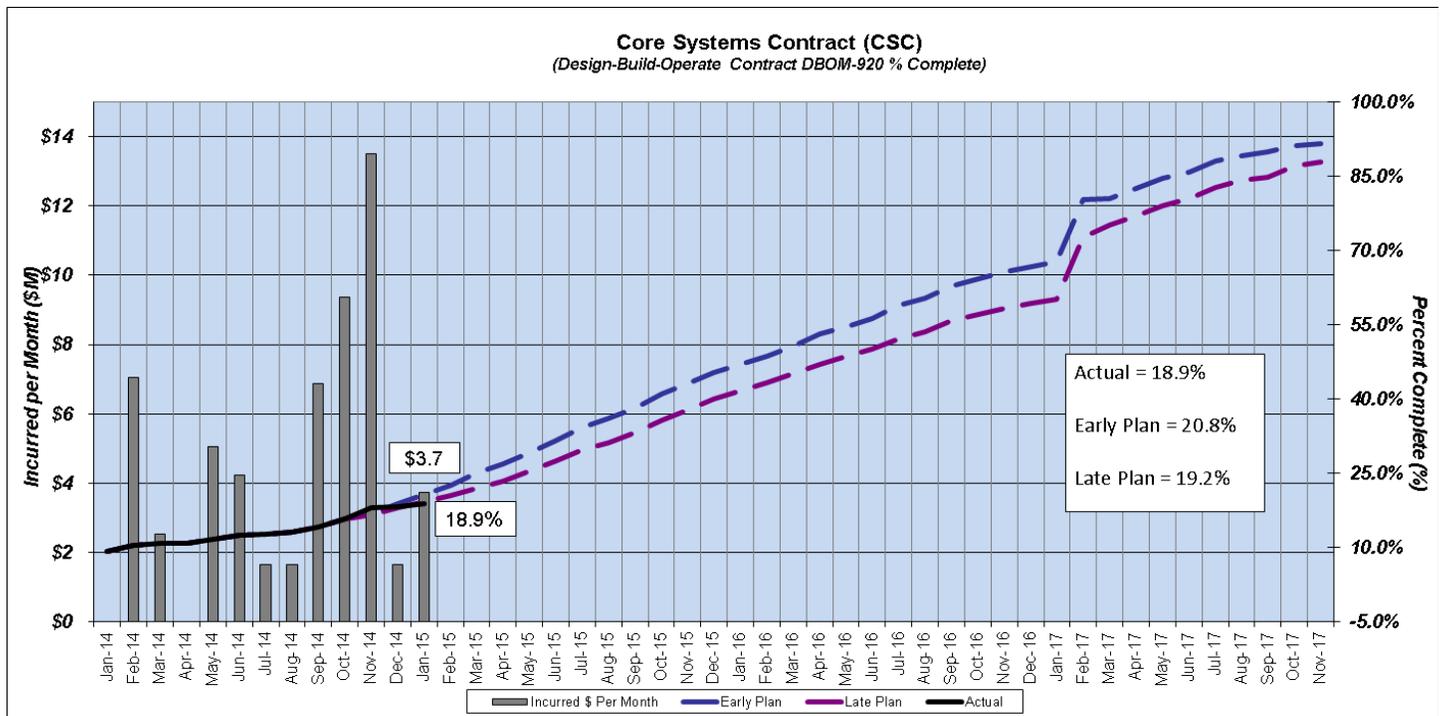
**COST INFORMATION:**

Original Contract:	\$573,782,793	Incurred-to-Date:	\$112,735,639
Current Contract Value <sup>1</sup> :	\$595,139,998	Incurred in Jan.:	\$3,748,053

<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:	\$109,023
DBE % Attained:	0.025%

January Change Orders		
Change No.	Description	Amount (\$)
CCO# 0015	Test Track Changes at MSF	\$2,510,000
<b>Cumulative to Date</b>		<b>\$21,357,205</b>



**SCHEDULE:**



	Interim Design Submitted Documents	Final Design Submitted Documents	Target Completion Date
Passenger Vehicles	82%	5%	2 <sup>nd</sup> Q 2015
Communications	100%	18%	2 <sup>nd</sup> Q 2015
ATC/SCADA	94%	80%	2 <sup>nd</sup> Q 2015
TES	100%	83%	2 <sup>nd</sup> Q 2015
Fire Detection	100%	47%	2 <sup>nd</sup> Q 2015
PSG, UPS, MPV	N/A	24%	2 <sup>nd</sup> Q 2015

**CRITICAL PATH SUMMARY:**



- Developing a new CIL for the construction elements of the Yard Control Bungalow. The team identified a gap in the CIL lists that had been developed to date. We are working to get SSRC approval and sign-off of the design elements in advance of the start of construction activities.
- Continue to coordinate construction activities with the MSF contractor and the CSC installer.
- Vehicle carshell assembly has experienced a delay of 2 weeks due to issues with the start of Underframe Welding. The quality team on-site has been coordinating with the HART on-site inspector and has identified corrective actions to correct the deficiency. Work is again moving forward on the assembly of the first car-shell. At this time, we do not anticipate a delay in the overall planned shipment date to Final Assembly.

**WORK PROGRESS:**

Activities this Month:

- Project-Wide Percent Complete: 20%
- Passenger Vehicle Percent Complete: 20%
- ATC/SCADA – Documents Received: 12, Documents Reviewed: 12.
- Communications – Documents Received: 3, Documents Reviewed: 12.
- Traction Power – Documents Received: 7, Documents Reviewed: 39.
- Fire Detection – Documents Received: 9, Documents Reviewed: 8.
- Platform Screen Gates – Documents Reviewed: 4.
- Passenger Vehicles – Documents Received: 41, Documents Reviewed: 18.
- Conducted ATC/SCADA Vehicle On-Board Equipment Environmental Tests.
- Performed manufacturing oversight at the AnsaldoBreda factory in Reggio Calabria, Italy.
- Witnessed the conclusion of the first phase of the PV truck-mounted gearbox 100-hour qualification tests.
- Developed HART’s Preliminary Engineering Level Certifiable Items List for the Yard Control Bungalow.

Look Ahead:

- Completion of Passenger Vehicle final design.
- Completion of ATC/SCADA Final Design for Segment 1.
- Completion of TES Final Design for Segment 1.
- Passenger Vehicle Manufacturing – Continue carshell assembly of Vehicle #1 in Reggio Calabria, Italy.
- Factory Acceptance Tests for TES equipment (Blue Light Stations, MSF TPSS) – Tualatin, OR and Fontana, CA.
- Factory Acceptance Test for Electrical Operated Switches – Troy, MO.
- Pre-Shipping Inspection Test for Vehicle ATC System Cabracks – Batesburg, SC.
- Pre-Shipping Inspection Test for MSF SCADA Hardware – Batesburg, SC.
- Pre-Shipping Inspection Test for MSF TCCR Equipment – Batesburg, SC.
- UPS Prototype tests for Electromagnetic Compatibility (EMC), compliance with Underwriters Laboratories (UL) Standards, and Seismic Tests – China.
- UPS Design Verification Tests – China.

**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, and/or moving the antenna.
- HART is closely monitoring Passenger Vehicle production in Italy and working with AnsaldoBreda (AB) to prepare for final assembly start-up in Pittsburg.
- HART has provided 2 notices of delayed access; the July 2014 notice and the recent notice of delayed access due to the repackaging of stations and guideway contracts. HART and AHJV are working to evaluate options that can minimize the cost impact associated with the delay.
- 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, but the mediation is delayed awaiting AHJV input to proceed.

**QUALITY MANAGEMENT:**

- Testing and Oversight Activities:

Design Verifications & System Testing		
Subsystem	Test Completed	Date Completed
ATC/SCADA	First part of Vehicle Train Control Environmental and EMI Tests	Jan. 15 to Jan. 23, 2015
Passenger Vehicles	First phase of the PV truck-mounted gearbox 100-hour qualification tests	Jan 26. to Jan. 30, 2015

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

CSC NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
13	13	0

**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.



**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 Farrington Highway Station Group escalators and elevators will be released for manufacturing in March 2015 to meet the required dates for Leeward Community College, Waipahu and West Loch stations. The design for the West O’ahu Station Group will be completed by the end of March 2015. The Kamehameha Station Group will be completed in the third quarter of 2015.

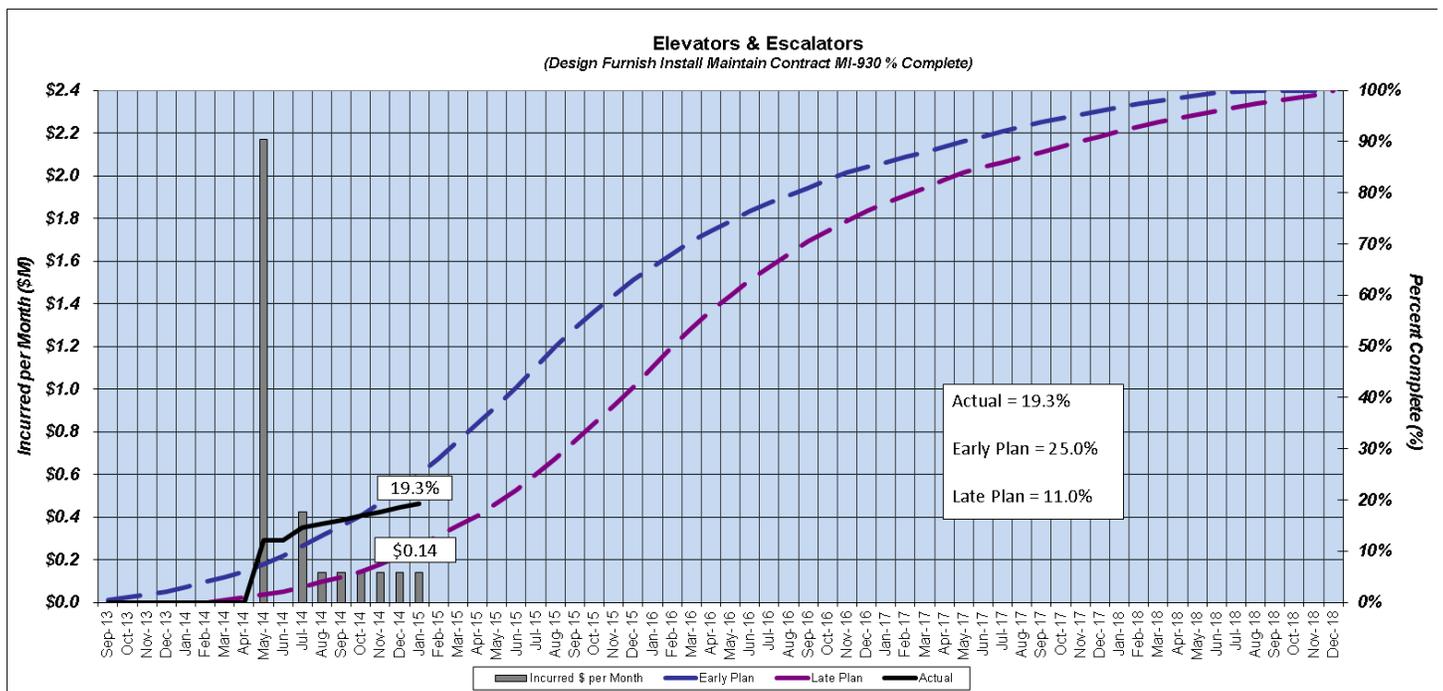
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$50,982,714</u>	<u>Incurred-to-Date:</u>	<u>\$3,439,172</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$50,982,714</u>	<u>Incurred in Jan.:</u>	<u>\$140,824</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%

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





**C. Fare Collection System****Contract No.:** TBD**Contractor:** TBD**Contract Start Date:** TBD**Contract Substantial Completion:** TBD**Projected Substantial Completion:** TBD

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

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

**Project Overview:** The technical specification for the project is approximately 90% complete and the remaining RFP package is 75% complete. Current schedule would see the start of procurement in first quarter 2015, provided an MOU defining the roles, relationships, and funding responsibilities between the City and County and HART is in place, and the funds are allocated and committed. An additional RFP for technical support service will also be launched in a similar timeframe.

**COST INFORMATION:** TBD**SCHEDULE:**

- Anticipated RFP release in first quarter 2015 with RFP award anticipated for start of FY2016 (July 1, 2015).
- System design anticipated for winter 2015-2016.
- Manufacture in spring 2016.
- System testing prior to pilot, fall 2016-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:**

- Funding approval completed and funds committed for Fare System Design Build.
- Funding approval completed and funds committed for Fare System Consultant Technical Support.
- MOU with City and County of Honolulu (DTS, BFS and DIT) signed committing to cost share central system elements and pay for TheBus equipment.

**WORK PROGRESS:**Activities this Month:

- Draft Report for circulation to PIG regarding Fare System Budget.
- Resolve joint ownership issues for MOU completion.
- Finalize funding approval for Technical Consultant Support RFQ.
- Complete review of Special Provisions for RFP with Procurement Department.
- Finalize Technical Specification.

Look Ahead:

- Completing General Terms and Conditions (GT) and Special Provisions (SP) for Fare System RFP.
- Meeting with Fare System RFP evaluation team to confirm evaluation criteria.
- Work with PIG to agree with Fare System vendor budget and recommend to HART Board at the March meeting.
- Finalize MOU terms and get signatures prior to RFP release at the end of March.

**KEY ISSUES:**

- Confirmation of cost sharing amounts and ownership arrangements for capital portion of the Fare system with the City and agreement by City to fund the project with HART in lead for procurement. See critical path MOU.
- Allocation of HART fare system capital budget in time for procurement in early 2015 to meet current schedule.
- Current fare system procurement plan includes interim opening inclusive of two deployments, two warranties and approximately 1 year of equipment storage (for remaining equipment) for rail. Budget and RFP structure would change if no revenue collection at rail stations during interim opening. The FFGA assumes \$2 million in revenue is captured from fare collection during interim opening.
- Governance for HART fare policy agreement is still to be determined. Any changes to current transit fare policy are required by the end of 2015 to meet system design and testing requirements for interim opening with revenue collection.

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 February 2015 Report, progress for utilities, shaft, column, segment casting, and span stressing have been updated. Key Issues from the previous period, like the balanced cantilever systems maintenance of traffic (MOT) conflicts with HDOT project, are no longer major issues as coordination is going well. Obtaining the 404 Permits for early construction work and drill shafts operations to begin in the Pearl Highlands Station area is becoming critical. The Project’s Key Quality Issues continue to focus on drilled shafts, segment repair and construction trends.

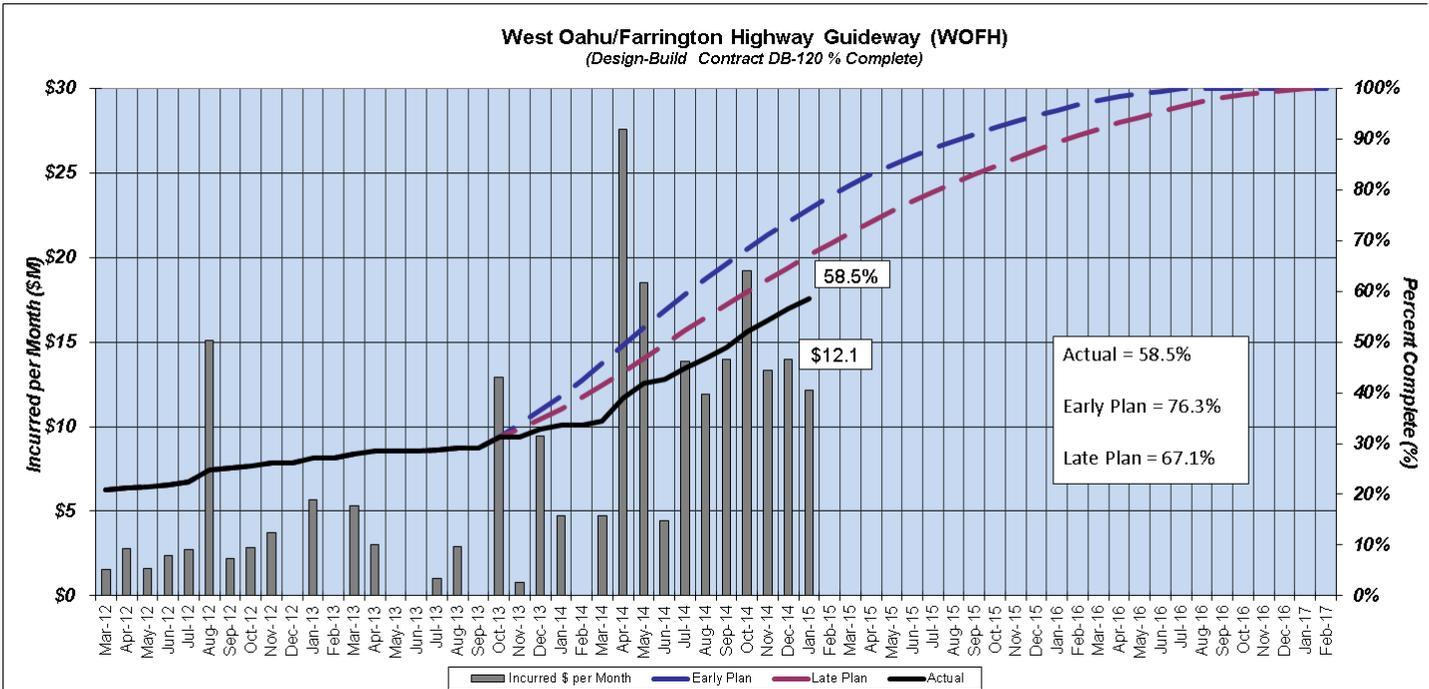
**COST INFORMATION:**

Original Contract:	\$482,924,000	Incurred-to-Date:	\$362,186,350
Current Contract Value <sup>1</sup> :	\$619,400,447	Incurred in Jan.:	\$12,125,770

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

DBE Participation	
Actual DBE Participation:	\$3,637,221
DBE % Attained:	0.75%

January Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$136,476,447</b>



Pay Application #60 for November 2014 and Pay Application #61 for December 2014 were submitted by KIWC and reviewed by HART this month. KIWC submitted Progress Payment #62 for January 2015 and this Pay Application review was completed at end of the month. Progress Payment #63 for February 2015 will be submitted in March.

**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 will be incorporated at the Balanced Cantilever System area in order to alleviate potential schedule concerns.

January 2015 Update		Data Date: 30-Jan-15, Printed On: 11-Feb-15 11:19												
Activity Name	Start	Finish	2014				2015				2016			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Total</b>	08-Mar-12 A	12-Sep-16												
<b>West Guideways &amp; Structures</b>	08-Mar-12 A	12-Sep-16	Contractors Forecast Dates - Dates Not Approved											
W. Oahu/Farrington Highway (WOFH) - Section 1	08-Mar-12 A	12-Sep-16												
W. Oahu/Farrington Highway Guideway	08-Mar-12 A	12-Sep-16												
<b>Kiewit WOFH Summary</b>	08-Mar-12 A	12-Sep-16												
<b>Foundations</b>	08-Mar-12 A	18-Sep-15												
Drilled Shafts	23-Apr-12 A	14-Sep-15												
Columns	21-May-12 A	18-Sep-15												
At Grade	08-Mar-12 A	08-Jul-15												
<b>Guideway</b>	29-Jan-14 A	01-Aug-16												
Precast Segment Erection	29-Jan-14 A	01-Aug-16												
Balanced Cantilever Segments	10-Sep-14 A	02-Oct-15												
<b>Trackwork</b>	17-Mar-15	12-Sep-16												
Direct Fixation Trackwork	17-Mar-15	11-Aug-16												
Third Rail	14-Oct-15	12-Sep-16												

**CRITICAL PATH ISSUES:**

- HART continues to work to resolve construction right of entry for the UH LCC campus.
- Production rates for span erection continue to reside near critical path. Since KIWC re-sequenced segment erection work in October 2014, planned rates are being met at an average of 5 spans per week.

**WORK PROGRESS:**

**WOFH Status as of 2/20/15**

Utility Status	Qty to Date	Final Qty	% Complete	Structure Element	Total to Date	Planned to Date*	Total Qty	% Complete
Water Line	8,418	9,348	90.1%	Shafts	201	221	266	75.6%
Sewer Line	550	570	96.5%	Columns	141	140	266	53.0%
Fuel Line	340	340	100.0%	Segment Casting	2,270	2,849	3,163	71.8%
Gas line	1,498	1,591	94.2%	Spans Stressed	89	112	266	33.5%
Drainage Line	3,325	5,166	64.4%	* The planned values are based on WOFH REVISED SCHEDULE REV C 2014.04.08 (with data date of October 25, 2013), which was Accepted as Noted on May 9, 2014.				
Elec/Telecom	14,791	21,374	69.2%					
Street Lights	5,850	8,357	70.0%					
Traffic Sig/ITS Duct bank	3,936	10,802	36.4%					
System Sites	-	7,046	0%					
ITS Systems Devices	821	4,121	19.9%					

Activities this Month:

**Earned Value: 60.4%** [(Total Achieved to January 2015 (\$359 million) + Projected February 2015 Period (\$16 million))/Total Contract Including Executed Change Orders (\$621 million)]. **Planned Value: 69.5%**

**Shaft/Column**

- Performed drilled shaft construction, drilling, and placed concrete for a total of 8 drill shafts. Placed concrete for 3 columns. Completed the drill shaft repair for Shaft 145.

**Guideway Segment Erection**

- Eastbound heading segments were erected for Span 107 through Span 113. Westbound heading segments were erected for Span 32 through Span 23.

**Utility Relocation**

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

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. KIWC will complete the Drill Shaft repair for 144 clearing the way for column construction.

**Guideway Segment Erection**

- Segment span erection will continue from Span 23 westbound towards East Kapolei Station and from Span 113 eastbound along Farrington Highway.

Activities this Month (continued):**Balanced Cantilever Structure**

- Completed installation of travelers at Pier Table 253 and installed initial formwork for cast in place segment. Placed concrete for Pier Table at Pier 254. Constructed Pier Table for Pier 255.

**Track Construction**

- Started welding of track rail adjacent to the Maintenance and Storage Facility (MSF). Completed construction of concrete plinths and installed rail for the Double Crossover at Spans 78 and 79.

**Precast Yard**

- Precast Yard performed daily segment and sound wall casting, averaging 12 segments per day or 60 segments per week.

**KIWC/Third-Party Coordination**

- Coordination continued with HECO and KIWC to resolve conflicts with utility relocation.
- Awaiting HART execution of Change Order 063 with Leeward Community College regarding the procurement of portable classrooms.

Looking 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 set formwork and cast-in-place segments for the balanced cantilever at Pier 253. Travelers will be assembled at Pier Table 254 and construction will continue for the Pier Table at Pier 255. KIWC will install formwork/rebar and will place concrete for Pier 256.

**Track Construction**

- KIWC will continue to weld track rail which will be stockpiled until track ballast is placed or track ties are installed.

**Precast Yard**

- Production of segment casting and sound walls are expected to continue at a rate of 12 segments per day. At this rate, 74% of the total segments should be cast by the end of March.

**KIWC/Third-Party Coordination**

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

**KEY ISSUES:**

- **Design Completion Schedule** – The Project’s design schedule continues to be tracked closely by HART. Comment Disposition and Over-the-Shoulder Meetings also continue to occur. As of mid-February, 104 of 127 design submittals have been submitted. HART will continue to facilitate the third-party review process and will track against KIWC’s design schedule.
- **Leeward Community College (LCC) Portables and Parking Lot Change Order** – In order for KIWC to begin work at the LCC Station Area, four (4) portable buildings need to be relocated to another location within the campus. Change Order 063, Procurement of LCC Portables, received conditional approval from the HART Board in January 2015. In February, additional pricing was received and the Board will be briefed on the results.
- **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 December 2014 showing more realistic construction durations. HART provided comments in January 2015 and KIWC is in the process of addressing those comments and resubmitting the schedule.
- **HDOT Traffic Signal Betterments** – HDOT has requested additional street light betterments beyond KIWC’s base scope of work. These requests have prevented KIWC from finalizing their design and obtaining approval from HDOT. HART is still working with HDOT to remove non-project critical items and it appears a positive compromise is near; betterments have been acknowledged.
- **Balanced Cantilever System Maintenance of Traffic (MOT) Conflicts with Hawaiian Dredging** – KIWC has assembled the first set of Upstream (eastbound) and Downstream (westbound) Travelers at Pier Table 253. To complete segment casting heading eastbound, KIWC will need one H1 westbound lane closure. HDOT simultaneously has a project which requires three H1 westbound lane closures. KIWC is currently working with HDOT and Hawaiian Dredging to implement an S-curve design where both parties can operate with the needed lane closures and where traffic is adequately directed. Coordination is going well and this is no longer an issue.
- **U.S. Army Corps of Engineers (Corps) Section 404 Permit**– In order for KIWC to begin early site access and drilled shaft work at the Pearl Highlands Station, HART will need to obtain a Section 404/401 Permit and a Hawaiian Coastal Zone Management (CZM) Permit. These permits will allow KIWC to impact certain Waiawa Stream Tributary and Waiawa Stream areas. The 401 Permit is currently in review by the State Department of Health and the CZM Permit will follow. HART has currently received a conditional 404 Permit. Attention to prioritize both permits has already been communicated to the permitting agencies. KIWC plans to begin Phase 1 (diversion of stormwater pipes into Waiawa Stream) work by March 2015 and drilling of guideway shafts at Pearl Highlands Station by May 2015.

**KEY QUALITY ISSUES:**

- **Span 67 Damage and Repair** – During the erection process of Span 67, the underside of Segments 67-11 and 67-12 were damaged due to unbalanced support from the temporary bearings. NCR 00144 was opened on June 17, 2014, to address this issue. In February 2015, KIWC completed the temporary falsework needed to support and slide Span 67 from its current position. The span is expected to be de-stressed and the segments replaced. Span 67 will be re-stressed and brought back into its original location in March 2015. The replacement is being done to ensure the segments meet HART’s high quality standards.
- **Drill Shaft Quality** – HART received four additional drill shaft Crosshole Sonic Logging (CSL) Reports in February 2015. Two 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, and two of the shafts had no issues. Of the 215 drilled shafts that have been tested to date, HART has requested that Kiewit provide additional testing and/or modifications to 40 shafts to ensure that the shafts meet the specifications. KIWC continues to have weekly Drill Shaft Quality Meetings with HART to discuss testing results, quality, the concrete mix, and methods for repair.
- **Drill Shaft Repairs** – Of the 40 drill shafts that are being reviewed in detail, two new NCRs have been opened and submitted to HART this month. HART will not close an NCR until KIWC completes another CSL test and demonstrates soundness of the concrete shaft as well as when all HART comments are responded to. KIWC completed repairs at Shaft 145 and began repair work at Shaft 144. The repair at Shaft 144 will

continue until the end of March 2015 and KIWC can continue with column construction as the span continues its approach eastbound on Farrington Highway toward West Loch Station.

- **Consistent Span Stressing Trends** – In mid-February, KIWC had stressed 10 spans. KIWC has maintained this positive trend and momentum from previous months, stressing 9-11 per month. KIWC has now left the Ho’opili area and has reached Farrington Highway in February as the span erection proceeds eastward towards West Loch Station. KIWC should reach East Kapolei Station by April 2015.
- **Pre-Cast Segment Progress/Quality** – The Casting Yard has been very consistent in producing approximately 60 segments per week and is currently 71.8% complete with segment production for the overall project. 2,270 segments have been cast to date. WOFH segment casting should be completed by June 2015. Although 93 of the total 296 NCRs (31.4%) 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 were 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 six NCRs have been closed in February 2015. Of the six, one was related to pre-cast segment issues, one was design related, one was for the superstructure, and three were related to drill shaft issues.
- **Concrete Plinth Quality** – KIWC completed work on the concrete plinths under the double crossover east of Ho’opili Station on Spans 78 and 79. This is the first of four double crossovers for this project. HART has inspected the quality of the work performed and no issues were found. The trackwork will continue to be surveyed and placed on its final alignment.
- **Flash Butt Track Welding Operations** – Work began on welding trackwork north of the Maintenance and Storage Facility where approximately 439 welds are to be completed. KIWC is currently achieving 20-25 welds per day and this is in-line with the current baseline schedule. KIWC will continue to report completed quantities to HART on a weekly basis.
- **Quality Assurance and Buy America Audit** – In mid-February, KIWC was audited by HART in areas of management responsibility, design control, purchasing, document/process control, product identification and traceability, inspection, handling and storage of equipment, non-conformance, corrective actions, quality record, and training. KIWC’s performance was found to be commendable and no major issues were found.

WOFH NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
296	211	85

**PROJECT PICTURES:**



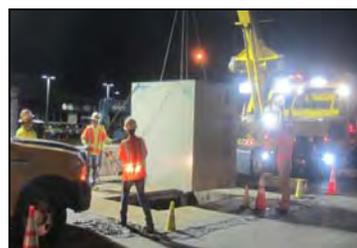
Falsework setup by Column 113, Work Area 2.



Erecting guideway segments for Span 26 (westbound).



Span 78 double crossover plinth concrete placement, Work Area 1.



Installation of manhole VMH 235-1 for Conflict 2-582-M1, Work Area 2.

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

**Contract No.:** FD-140

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

**Contract Start Date:** June 2012

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

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

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



**Project Overview:** The WOSG consultant is currently incorporating value engineering changes into the station designs as directed by HART. The consultant and HART are closing out remaining issues including design interfaces and third party approvals in preparation for an April 2015 construction advertisement.

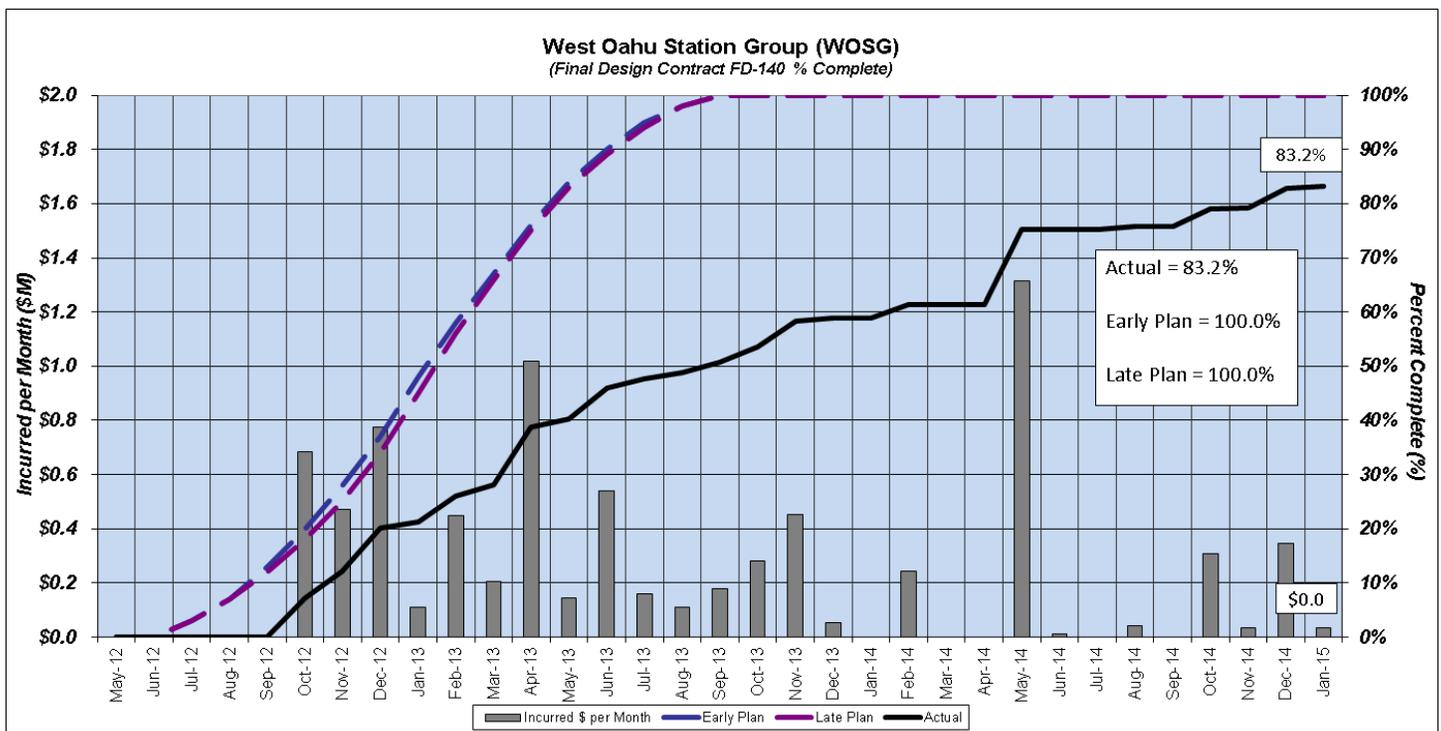
**COST INFORMATION:**

Original Contract:	\$7,789,000	Incurred-to-Date:	\$7,958,160
Current Contract Value <sup>1</sup> :	\$9,560,305	Incurred in Jan.:	\$33,055

<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%

January Change Orders/Amendment		
Change No./Amend	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$1,771,305</b>



The closeout of the WOSG contract is currently 14 months behind schedule due to design interfaces with other HART contracts, ongoing value engineering efforts, and a reorganization of the WOSG construction solicitation package. The schedule for the WOSG design has been extended to accommodate these additional efforts. Actions to minimize this delay are discussed below.

**SCHEDULE:**



**CRITICAL PATH ISSUES:**

- HART is overseeing and expediting value engineering design efforts to save construction costs on these three stations. These changes will be consistent with value engineering changes already incorporated into the FHSB bid documents.
- HART is accelerating URS' completion of the WOSG construction documents in anticipation of an April 2015 construction solicitation.
- HART is proactively facilitating interface resolution with the CSC, WOFH and E/E contracts to ensure consistency and integration of these designs.

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 90%.
- Interfacing design with CSC, WOFH and E/E contracts.
- Incorporating value engineering changes.
- Coordinating with private developer and utility companies to establish services to Ho'opili Station.

Look Ahead:

- Complete design and value engineering efforts.
- Document design interface agreements with CSC, WOFH and E/E contracts.
- Obtain third-party approvals.
- Finalize agreements with adjacent land owners.
- Implement any additional value engineering opportunities identified.
- Prepare construction solicitation package.

**KEY ISSUES:**

- Coordinating with HDOT to resolve significant policy level design review comments.
- Tracking resolution of interfacing designs and managing risks associated with misaligned design schedules.

**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

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



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

**Project Overview:** The FHSG construction package was issued for bid in December 2014. Bids are scheduled to be opened on March 3, 2015.

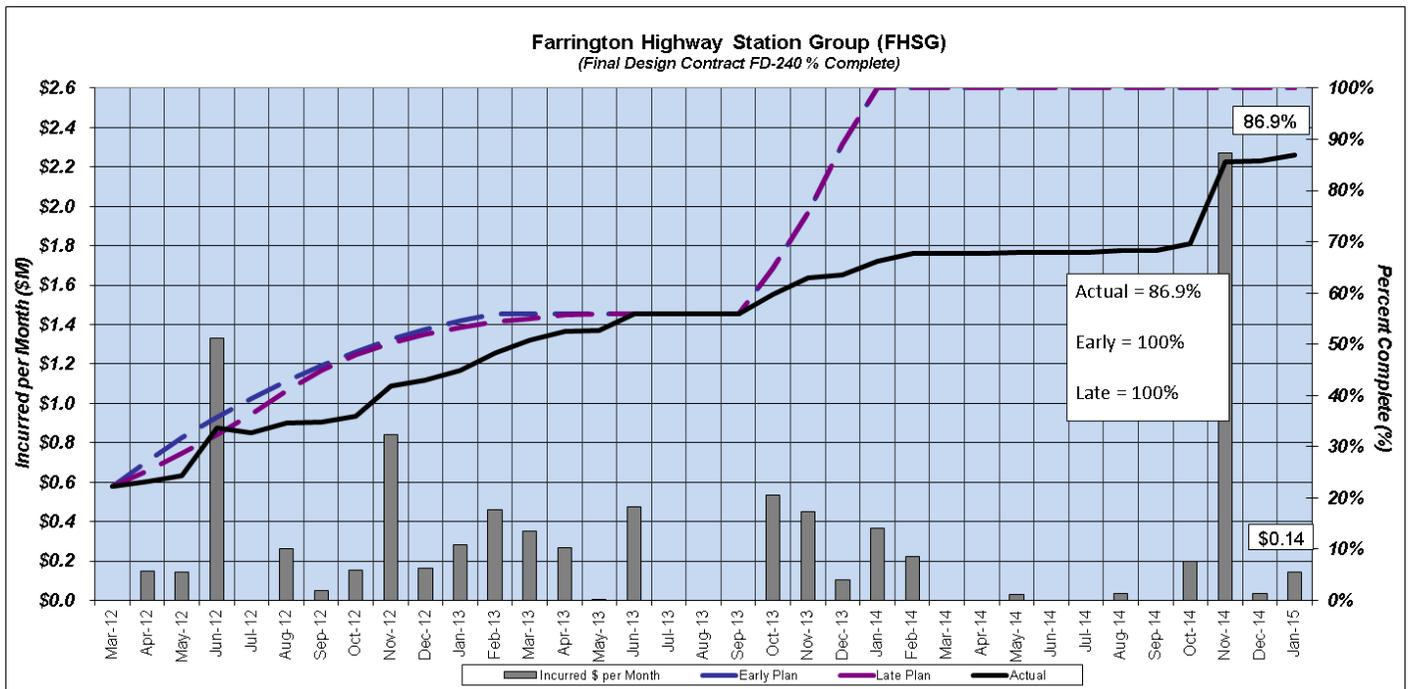
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$9,300,696</u>	<u>Incurred-to-Date:</u>	<u>\$12,332,344</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$14,198,045</u>	<u>Incurred in Jan.:</u>	<u>\$141,299</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%

January Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
CA005	Add'n of Bike Ramps	\$17,744
CA006	Add'n 30' Guideway Sec WL &W	\$57,000
CA007	Mod to WL and W Girder Design	\$38,000
<b>Cumulative to Date</b>		<b>\$5,010,093</b>



The FHSG contract is 10 months behind schedule due to a change in the final design consultant, design interface issues with other HART contracts, value engineering changes, and a reorganization of the active FHSG construction solicitation package. The schedule for the FHSG design has been extended to accommodate these additional efforts. Actions to minimize the impact of this delay are discussed below.

**SCHEDULE:**

January 2015 Update			Data Date: 30-Jan-15, Printed On: 11-Feb-15														
Activity Name	Start	Finish	2015				2016				2017				H8		
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3		Q4	
<b>W. Oahu/Farrington Highway (WOFH) - Section 1</b>	02-Oct-09 A	29-Aug-17															
<b>Farrington Highway Station Group</b>	02-Oct-09 A	29-Aug-17															
Design - Farrington Highway Station Group	02-Oct-09 A	21-Jun-17															
Construction - Farrington Highway Station Group	15-May-14 A	29-Aug-17															
West Loch Station	01-Jun-15	21-Jun-17															
Waipahu Transit Station	02-Mar-15	29-Aug-17															
Leeward Community College Station	15-May-14 A	15-Aug-17															

**CRITICAL PATH ISSUES:**

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

**WORK PROGRESS:**

Activities this Month:

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

Look Ahead:

- Bids for the FHSG construction contract are scheduled to be opened on March 3, 2015
- Obtain all third-party approvals.
- Obtain remaining construction permits and rights of entry.
- Document design agreements with interfacing partners.

**KEY ISSUES:**

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

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

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



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

**Project Overview:** The MSF contract substantial completion date has improved from a 10 calendar day slip to 6 calendar days late. Work is continuing to progress without CSC final design through HART direction and contractor cooperation.

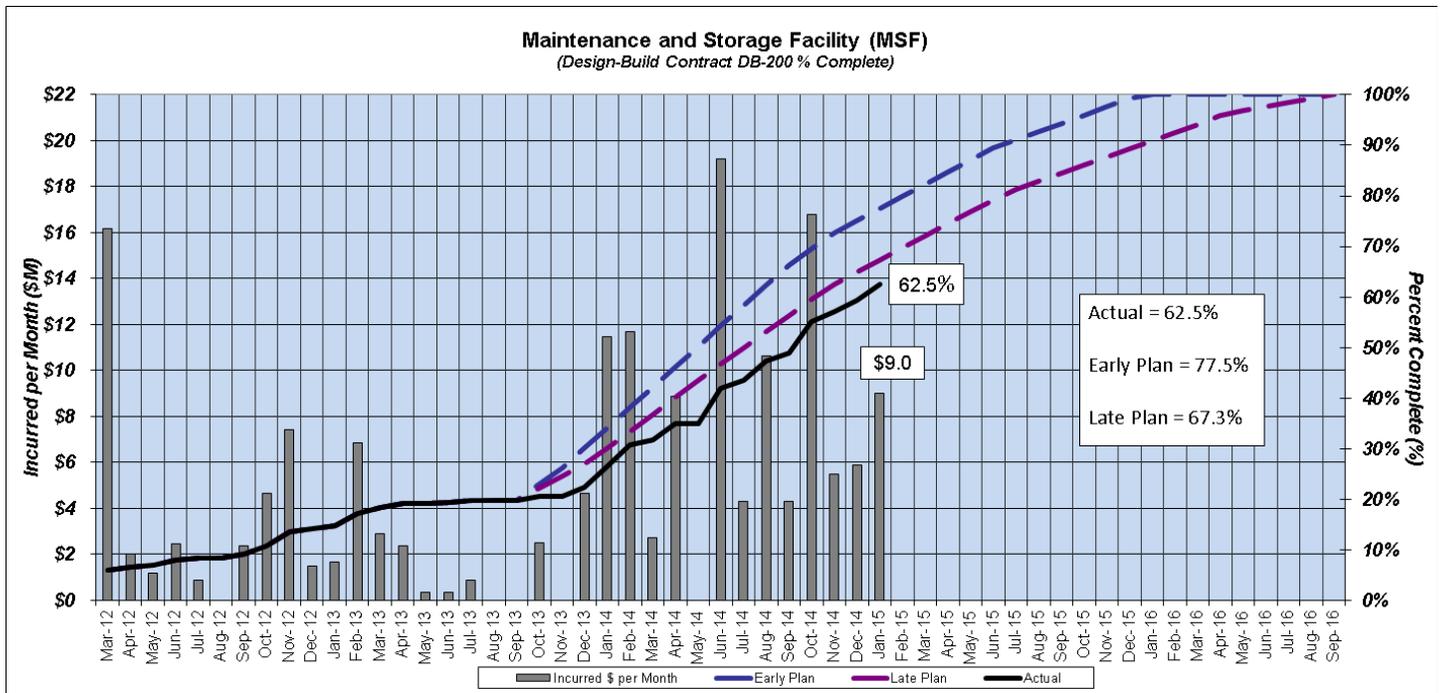
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$195,258,000</u>	<u>Incurred-to-Date:</u>	<u>\$171,594,297</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$274,358,008</u>	<u>Incurred in Jan.:</u>	<u>\$8,997,974</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%

January Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$79,100,008</b>



**SCHEDULE:**

- The MSF substantial completion has slipped from April 15, 2016 to April 21, 2016 (based on the January 2015 schedule update).

January 2015 Update			Data Date: 30-Jan-15, Printed On: 11-Feb-15 09:25											
Activity Name	Start	Finish	2015				2016							
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
<b>Total</b>	29-Aug-11 A	21-Apr-16												
<b>Maintenance &amp; Storage Facility (MSF)</b>	29-Aug-11 A	21-Apr-16	Contractor's Forecast Dates - Dates Not Approved											
<b>Design</b>	29-Aug-11 A	27-Jan-15 A												
Design & Engineering	29-Aug-11 A	27-Jan-15 A												
<b>Construction</b>	26-Jul-12 A	21-Apr-16												
Site Civil/Utilities	26-Jul-12 A	08-Mar-16											08-Mar-16	
Operations & Servicing Building	27-Nov-13 A	05-Feb-16											05-Feb-16	
Maintenance of Way Building	12-May-14 A	23-Nov-15											23-Nov-15	
Wheel Truing Building	18-Jul-14 A	25-Aug-15											25-Aug-15	
Yard Trackwork	30-Jan-15	17-Feb-16											17-Feb-16	
Train Wash Facility	02-Feb-15	05-Feb-16											05-Feb-16	
Third Rail	30-Jun-15	12-Feb-16											12-Feb-16	
Project Facility Commissioning, Closeout & Turnover	22-Sep-15	21-Apr-16											21-Apr-16	

**CRITICAL PATH ISSUES:**

- The MSF contract substantial completion date is indicating 6 calendar days late. This delay is due to weather that impacted construction operations. KKJV and HART are working to mitigate the impacts to the critical path.
- Addressing yard reconfiguration interface with Core Systems Contractor.
- Scheduling work related to test track and functional track to support program opening dates.
- Coordination with abutting 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 2/28/15	
Element	% Complete
OSB	50%
MOW Building	42%
WTB	45%
Rail Procurement	92%

**WORK PROGRESS:**

Activities this Month:

**Earned Value: 66.3%** [(Total Achieved to January 2015 (\$172.6 million) + Projected February 2015 Period (\$9.25 million))/Total Contract Including Executed Change Orders (\$274.3 million)]. Planned Value: 70%

**Yard/Utilities**

- Installing/testing site electrical, water, sewer and drainage systems.
- Installing conduit for systems, communications, train control, traction power, site electrical and exterior lighting.
- Commenced with installation of rail turnouts in the yard.
- Installing track subdrain and ballast material at west side of S1-10 track.
- Installing light pole foundations.

**Operations and Servicing Building (OSB)**

- Installing metal framing.
- Installing roof.
- Placing concrete for OSB elevated slabs.
- Installing rail car lifts.

**Maintenance of Way (MOW)**

- Installing roofing materials.
- Erected structural steel trusses between tilt-up panels.
- Installing interior concrete multiple unit (CMU) walls.
- Installing roof/floor pan decking.

**Wheel Truing Building (WTB)**

- Installing slab on grade.

**Look Ahead:**

- OSB and MOW elevated slab and roofing.
- Installation of traction power and system duct banks (phase 4).
- WTB structural steel and roofing.
- Metal framing/curtain wall at OSB and MOW.
- Erection of retaining walls.
- Site utilities installation/testing.
- Track subdrain.
- Track subballast/ballast.
- Track installation.

Activities this Month (continued):

- Commenced installation of structural steel for roof.

**Rail Procurement and Installation**

- Receiving materials and mobilizing crews for installation.
- Distributing rail materials to WOFH.
- Commenced installation of rail turnout SY-37.

**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 are being worked out through the Request for Interface Data process.
- **Joint Occupancy with Core Systems Contractor** – details are being worked out for systematic release of areas and infrastructure whereby the Core Systems Contractor can commence work in a safe and systematic manner.
- **Change Order Negotiation** – as stated above, late and changing requirements relative to infrastructure necessary to support Core Systems’ evolving design has created a back log of changes. HART is coordinating with interfacing contractors developing different options to mitigate potential cost and schedule impacts.
- **WOFH West Yard Lead Retaining Wall** – previous delay associated with ROW issues impacted the completion of yard grading and utility installation in support of track work and electrical service to the site. HART resolved the issue in December 2014 and gave the WOFH contractor clearance to start construction activities in early January 2015.
- **Design, Procurement, and Installation of Derailer** – This is a long lead item and has the potential to impact completion if pricing and technical issues are not resolved in a timely manner.
- Resolution of potential EMF interference between low voltage power and automatic train control systems within yard electrical trenches.
- Scheduling HECO incoming power duct bank inspection and installation of service cables.
- Defining access and internal movement requirements for rail car delivery, assembly, and transfer to storage.

**KEY QUALITY ISSUES:**

One NCR remains open concerning adhesive used for Thermoplastic Olefin (TPO) installation. Expected to be resolved in an “Accept As Is” disposition.

MSF NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
<b>24</b>	<b>23</b>	<b>1</b>

**PROJECT PICTURES:**



Placing concrete encasement for comm, train control and traction power duct bank at MOW.



Placing ballast material at western end S track.



Installing track subdrain at the midsection of S-1-10 track.



Installing hydraulic cart lift boxes at M 6 track.



Install No. 6 turnouts at storage track.



MOW CMU wall in progress.

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

#### A. Kamehameha Highway Guideway (KHG)

**Contract No.:** DB-320

**Contractor:** Kiewit Infrastructure West Company (KIWC)

**Contract Start Date:** June 2011

**Contract Substantial Completion:** September 2016

**Projected Substantial Completion:** April 2017

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



**Project Overview:** Construction right of entry access issues have been resolved at UH Urban Gardens and Aloha Stadium. Shaft installation along the KHG guideway alignment has resumed at two locations: Shaft 271 (Pearl Highlands) working eastward, and the group of shafts from 415 to 420 (Aloha Stadium) which will be completed as a group before working westward. Final Test Shaft, TS 15A, was installed and is pending CSL testing.

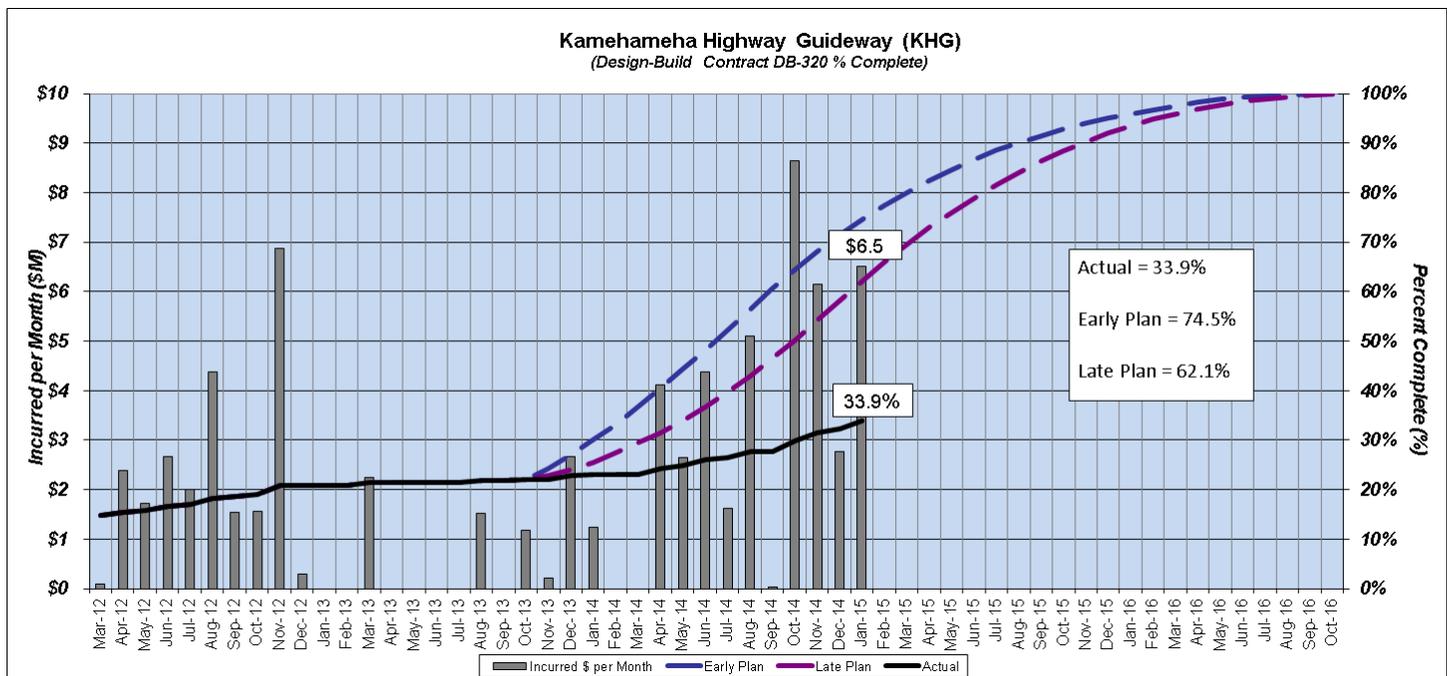
#### COST INFORMATION:

<u>Original Contract:</u>	<u>\$372,150,000</u>	<u>Incurred-to-Date:</u>	<u>\$131,817,119</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$388,515,363</u>	<u>Incurred in Jan.:</u>	<u>\$6,500,000</u>

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

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

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



- Progress #39 (October) and all schedules following this are on HOLD pending schedule and schedule of milestones revisions.

**SCHEDULE:**

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

January 2015 Update			Data Date: 30-Jan-15, Printed On: 11-Feb-15 11:22													
Activity Name	Start	Finish	2015				2016				2017					
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2			
<b>Total</b>	26-Dec-14 A	18-Jun-17														
<b>West Guideways &amp; Structures</b>	26-Dec-14 A	18-Jun-17	Contractor's Forecast Dates - Dates Not Approved													
<b>Kamehameha Highway (KH) - Section 2</b>	26-Dec-14 A	18-Jun-17														
<b>Kamehameha Highway Guideway</b>	26-Dec-14 A	18-Jun-17														
<b>Kiewit KHG Summary</b>	26-Dec-14 A	18-Jun-17														
<b>Foundations</b>	26-Dec-14 A	30-Nov-16														
Drilled Shafts	26-Dec-14 A	29-Sep-16														
Columns	05-Feb-15	30-Nov-16														
<b>Guideway</b>	05-Mar-15	11-Jan-17														
Precast Segment Erection	05-Mar-15	11-Jan-17														
Cast BC Segments	06-Jul-15	15-Aug-16														
<b>Trackwork</b>	23-Sep-15	06-Mar-17														
Direct Fixation Trackwork	23-Sep-15	17-Feb-17														
Third Rail	07-Oct-15	06-Mar-17														
<b>KHG Project Finish Work, Demob, Punchlist</b>	01-Apr-16	18-Jun-17														

**CRITICAL PATH ISSUES:**

- Third-party dry utility relocation durations and lack of schedule certainty continue to affect the critical path. Elevated meetings with HECO are helping to resolve some of the potential schedule issues previously identified.
- Utility easements: the Design-Builder has identified 14 locations that are believed to require permanent easements for relocated utilities. KIWC and HART are working together to resolve this issue.

**WORK PROGRESS:**

KHG Construction Status as of 2/27/15											
Utility Status	Qty to Date	Final Qty	% Complete	Structure Element	Total to Date	Planned to Date*	Total Qty**	% Complete			
Water Line	3,547	4,362	81%	Shafts	4	28	156	3%			
Gas Line	11,069	12,641	88%	Columns	0	4	156	0%			
Sewer Line	514	1,077	48%	Segment Casting	0	81	2,044	0%			
Drainage	536	2,081	26%	Segment Erection	0	69	2,044	0%			
Elec/Telecom	6,728	19,455	35%	Spans Stressed	0	4	155	0%			
Signals/ITS/Lights	8,115	18,486	44%	* The planned values are based on KHG Revised Schedule Rev E 2014-04-22, which was accepted as noted on April 22, 2014.							
				**Total Quantity based on KIWC interim plans. Final design has not been completed.							

Activities this Month:

**Earned Value: 34.7%** [(Total achieved to September 2014 (\$108.7 million) + projected October 2014 to February 2015 periods (\$25.1 million))/Total contract including executed Change Orders (\$385 million)]. Planned Value: 65.9%

**Shaft/Column**

- Test Shaft 15A is ongoing in Phase 9.
- Shaft access was installed in Phases 1 and 13 for shaft construction.

Look Ahead:

**Design Progress**

- HART and KIWC are working together to complete final design. To date, 24 of 46 drawing packages have been issued for construction.

**Utility Relocation**

- Elevated meetings with HECO are helping to resolve some of the potential schedule issues previously identified.

Activities this Month (continued):

**Utility Relocation Progress**

- Gas and water line relocations are ongoing in Phases 5, 6 and 12.
- The relocation of HECO electrical lines and Hawaiian Telcom, Oceanic Time Warner and Intelligent Transportation Systems (ITS) duct banks is occurring in Phases 4 through 8.
- Joint use poles are being installed in Phase 5.
- Conflict 872-V1 has been completed.

**Safety and Security Certification (CIL)**

- 682 of the expected 800 CILs have been submitted and verified to date.

**Roadway Widening**

- Roadway widening activities are ongoing in Phases 5 and 11.

Looking Ahead (continued):

**Drilled Shaft Installation**

- Shaft installation along the KHG guideway alignment is progressing from both ends of the project working towards the balanced cantilever at H-1.

**Roadway Widening**

- Roadway widening will continue throughout the alignment. The widening in front of UH Urban Gardens will follow the installation of shafts and columns in that location.

**KEY ISSUES:**

- **Permanent easements** – the Design-Builder has identified 14 locations that are believed to require permanent easements for relocated utilities. KIWC and HART are working together to resolve this issue.
- **HDOT betterments** – a meeting between HART and HDOT was held and betterments acknowledged by HDOT. HART and HDOT are working together to determine the path forward to resolve this issue while minimizing construction delays.
- **Schedule** – HART continues to work with KIWC to ensure a current project schedule is provided so that the project team is able to plan for and mitigate any critical path items. The revised schedule submitted on Dec. 5, 2014, was returned to KIWC with the request to re-submit as part of a change order asking for a modification to the substantial completion.

**KEY QUALITY ISSUES:**

- **Shafts** – As shaft construction resumes, the quality of the shafts will be closely monitored to ensure any quality issues are identified and resolved in a timely manner.
- **Sub-contractor Quality** – The Design-Builder has been asked to improve their QC/QA efforts as they relate to the work being performed by their sub-contractors.

KHG NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
40	32	8

**PROJECT PICTURES:**



LB-36 at Shaft 271, Phase 1.



Drill rig mobilizing for Shaft 271 at Pearl Highlands.



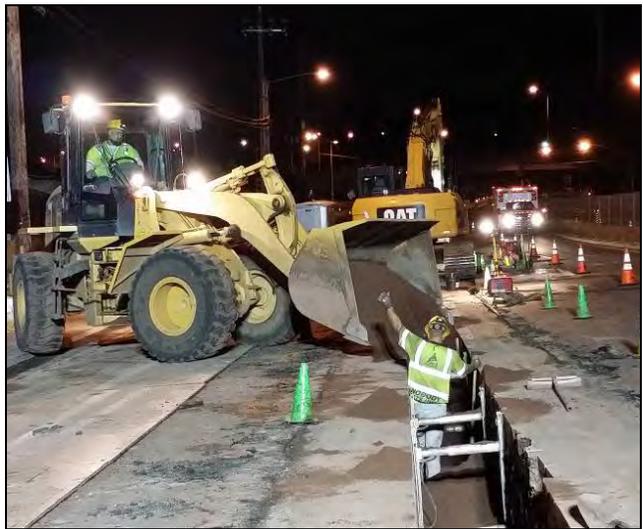
Subgrade compaction in Phase 5.



Widening in progress, Phase 5.



Structure Demo Phase 8.



Backfilling Sewer Line B in Phase 12.

**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

Kamehameha Highway Stations: August 2015

**Projected Substantial Completion (Construction):**

H2R2 Highway Ramp: May 2016

Kamehameha Highway Stations: August 2018



**Project Description:** The Kamehameha Highway Stations Group FD Contract (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 mid- to late-2015. In addition, the H2R2 Ramp was broken out and expedited under a separate Design-Bid-Build construction solicitation. The H2R2 Ramp is now in active procurement.

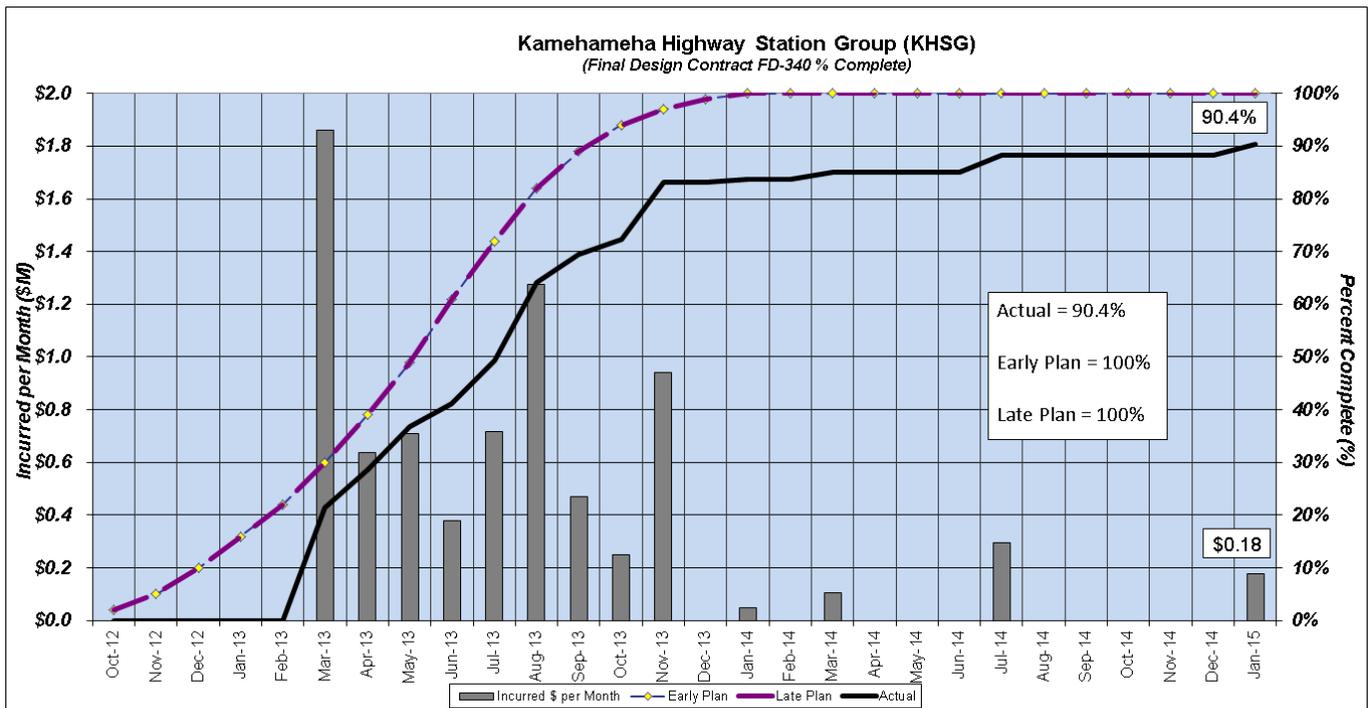
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$8,702,592</u>	<u>Incurred-to-Date:</u>	<u>\$7,866,141</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$8,702,592</u>	<u>Incurred in Jan.:</u>	<u>\$178,795</u>

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

DBE Participation	
Actual DBE Participation:	\$3,239,360
DBE % Attained:	37.22%

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



The closeout of the KHSG contract is currently 11 months behind its original schedule due to design interfaces with other HART contracts, ongoing value engineering efforts, and a reorganization of the KHSG construction solicitation package from its previous format in the canceled West Side Stations Group solicitation. The schedule for the KHSG design has been extended to accommodate these additional efforts.

**SCHEDULE:**

January 2015 Update			Data Date: 30-Jan-15, Printed On: 11-Feb-15														
Activity Name	Start	Finish	2015				2016				2017				2018		
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
<b>Kamehameha Highway (KH) - Section 2</b>	28-Jun-11 A	19-Dec-17															
<b>Kamehameha Highway Station Group</b>	28-Jun-11 A	19-Dec-17															
Design - Kamehameha Highway Station Group	28-Jun-11 A	05-Oct-17															
Construction - Kamehameha Highway Station Group	01-Sep-15	19-Dec-17															
Pearl Highlands - Station	01-Sep-15	10-Oct-17															
Pearl Ridge Station	01-Mar-16	19-Dec-17															
Aloha Stadium Station	01-Dec-15	01-Nov-17															

**CRITICAL PATH ISSUES:**

- HART is overseeing the final design consultant’s implementation of value engineering alternatives.
- HART is proactively facilitating interface resolution with the CSC, WOFH, KHG and E/E contracts to ensure consistency and integration of these designs.

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 91%.
- Interfacing design with the CSC, WOFH, KHG and E/E contracts.
- Incorporating value engineering directives from HART to save costs during construction.
- Resolving third-party comments.

Look Ahead:

- Document design interface agreements.
- Obtain third-party approvals.
- Finalize design and value engineering.
- Prepare construction bid packages.

**KEY ISSUES:**

- HDOT has accepted the Interstate Access Modification Report (IAMR) and has forwarded the IAMR to the Federal Highway Administration (FHWA) for approval.
- Pursuing 401/404 Permit approval from Hawai’i Department of Health (DOH) Clean Water Branch.

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

#### A. Airport Section Guideway and Utilities



Contract No.: FD-430

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

Contract Start Date: January 2012

Construction Docs Bid-Ready:

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

In Construction:

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

Projected Substantial Completion (Construction): June 2019

**Project Description:** The Airport Segment Guideway and Utilities contract consists of 5.32 miles of elevated transit guideway serving four (4) passenger stations, in addition to roadway widening, utility relocation, and other improvements to facilitate construction of the guideway. 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:** The delivery method for this contract is moving forward as a 2-step Design-Build (DB) procurement, which includes RFP Part 1 for Qualifications and RFP Part 2 for Proposals. A scope change is being discussed and finalized with AECOM, the final designer, to provide support in preparing the DB package. The Airport DB package is planned to include passenger stations, guideway elements, and remaining utilities within the Airport Section.

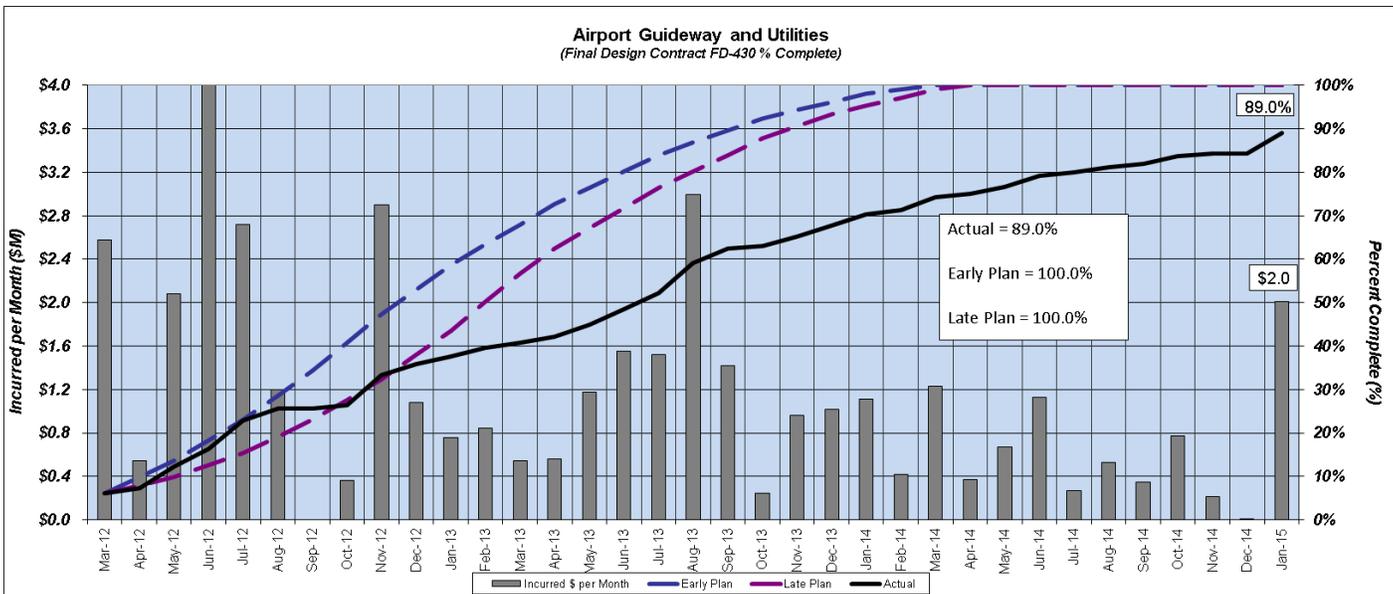
**COST INFORMATION:**

Original Contract: \$38,840,960	Incurred-to-Date: \$37,927,194
Current Contract Value <sup>1</sup> : \$42,610,832	Incurred in Jan.: \$2,011,458

<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%

January Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
CA 012	Contam Soil Wayside Lubricators	\$58,700
<b>Cumulative to Date</b>		<b>\$3,769,872</b>



Final Design was combined with the City Center Guideway and Utilities and was issued for bid in June 2014 to support the Airport and City Center Guideway and Utilities Construction solicitation in July 2014. This procurement was canceled in late 2014. Completion of the Airport Guideway and Utilities design is eight (8) months behind schedule due to interfaces with other HART contracts and coordination with third parties. Actions to mitigate this delay are discussed below. HART has decided to split the Airport and City Center Guideway packages, incorporate the respective stations into each package, and proceed with two DB packages with a potential partial DBB utility package for City Center.

**SCHEDULE:**

January 2015 Update			Data Date: 30-Jan-15, Printed On: 13-Feb-15 12:32																			
Activity Name	Start	Finish	2014				2015				2016				2017				2018			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
<b>Total</b>	09-Nov-11 A	02-Apr-18																				
<b>Airport Programmatic</b>	01-May-12 A	04-Feb-14 A																				
<b>Airport Permits</b>	09-Nov-11 A	11-Apr-16																				
<b>Design - Airport Guideway &amp; Utilities</b>	05-Jan-12 A	30-Jan-15																				
<b>Construction - Airport Guideway</b>	28-Apr-15	02-Apr-18																				

**CRITICAL PATH ISSUES:**

- HART is pursuing property rights to obtain all geotechnical data required to support a DB delivery.
- HART is working with AECOM to establish appropriate requirements and format for the DB bid documents.

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 93%.
- Coordinating 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.
- Completed geotechnical investigations on all properties, except for Navy-owned parcels.

Look Ahead:

- Coordinate utility relocations in advance of DB package.
- Obtain third-party approvals.
- Establish project-specific requirements for DB bid package.
- Develop DB bid documents.

**KEY ISSUES:**

- Assessing cost and schedule impacts associated with HECO’s potential requirement to reconstruct existing building electrical service connections.
- Assessing potential right-of-way impacts due to HECO requirement for additional transformers.
- Acquiring rights-of-way and rights of entry, and pursuing partial demolition of select properties.
- Coordinating with property owners and evaluating potential cost and schedule impacts to determine practicality of partial demolition and repair of select buildings.
- Finalize design for mitigation of Electromagnetic Interference (EMI) from AM radio tower near Middle Street Station.

**B. Airport Section Utilities Construction**

**Contract No.:** DBB-505

**Contractor:** Nan, Inc.

**Contract Start Date:** July 2014

**Contract Substantial Completion:** April 2016

**Projected Substantial Completion:** April 2016

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



**Project Overview:** Nan, Inc. has been performing potholing along Kamehameha Highway and ITS installation work along Kamehameha and Nimitz Highways. Their field office has been setup at the Aloha Stadium property. They are awaiting approval of their traffic control plan (TCP) to contra flow traffic prior to beginning utility work along Kamehameha Highway. Meanwhile, they continue to develop and submit outstanding submittals in preparation for planned construction activities.

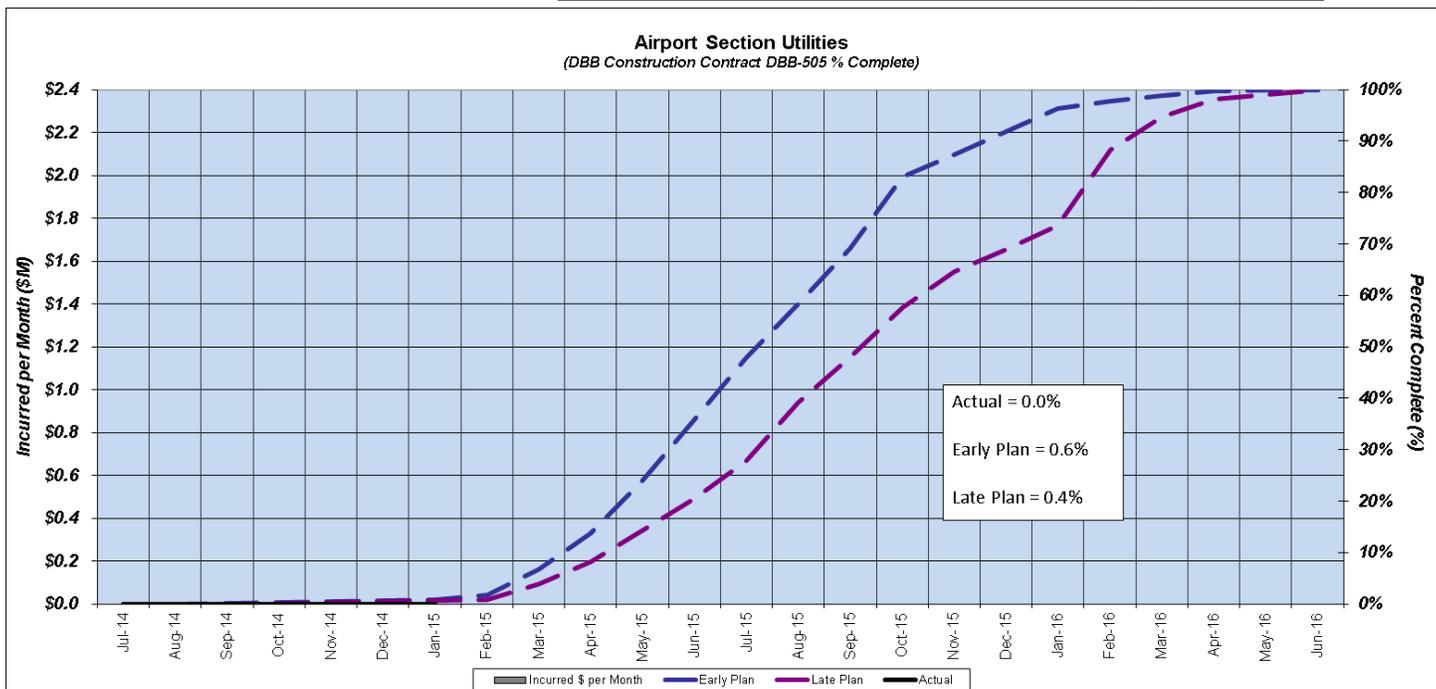
**COST INFORMATION:**

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

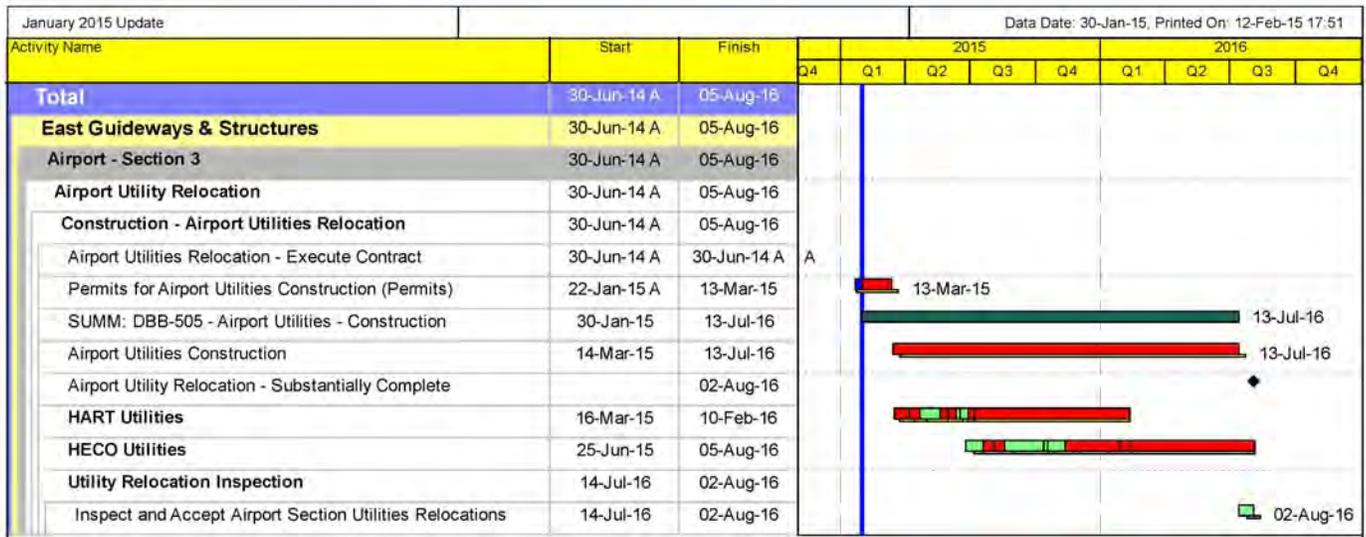
<sup>1</sup>Current Contract Value = Original contract value (not including contingency) + executed Change Orders

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

January 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: 0.01%**; 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 a RFCR that has been issued.
- Nan, Inc.'s Environmental Management Plan (EMP), Environmental Compliance Plan (ECP), and Public Awareness and Community Relations plan have been accepted.
- NPDES permit application (transferred to Nan) and Quality Management Plan (QMP) have been submitted and are under HART review.
- Nan, Inc. continues to submit RFI and shop drawings for approvals.
- Nan, Inc. continues to pothole and install license plate reader (LPR) cameras.

Look Ahead:

- The contractor is still working to provide a proposed cost for the changes identified in Rev 1 and Rev 2 drawing changes (anticipated net credit).
- Tree relocation scope to be removed from contract and to be performed by on-call contractor. (Pending cost proposal credit)
- Contractor pending approval of TCP to contra flow traffic to begin work along Kamehameha Highway.

**KEY ISSUES:**

- Navy right of entry to perform work
  - Ongoing coordination with HART ROW regarding access to Navy property for construction related work.
  - Potential construction delays if Right of Entry is not granted by the Navy by March.
- Nan, Inc. is behind schedule for beginning construction work. Scope of work is being reduced as a result of further coordination, such that schedule may be adjusted.

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

**Contract No.:** DBB-525

**Contractor:** HDCC/CJA JV

**Contract Start Date:** September 2014

**Contract Substantial Completion:** February 2015

**Projected Substantial Completion:** April 2015

**Project Description:** The Airport 7-piers contract consists of seven drilled shaft foundations to be installed within the HNL INTERIM CAR RENTAL FACILITY work area, which is currently in construction. This work needs to be completed in conjunction with the current construction of the HDOT Airport HNL INTERIM CAR RENTAL FACILITY; if not, the work area will not be available until early 2018, per HDOT Airport. The contractor will be installing seven pier foundations, No. 546, 547, 548, 549, 550, 551R and 552R. Construction of piers 546, 548, 549 and 550 requires relocating miscellaneous utilities. This work involves close coordination with the HDOT Airport and Kiewit, who is the contractor for the HNL INTERIM CAR RENTAL FACILITY.



**Project Overview:** HDCC/CJ has begun drilling operations and four (4) of the seven (7) drilled shafts were completed by the end of February. Coordination is ongoing with HDOT-A on adjusting BMPs and traffic controls based on coordination of activities with the CONRAC project. The added utility work has been negotiated and work is proceeding. The latest schedule indicates that the contract scope will be completed ahead of schedule.

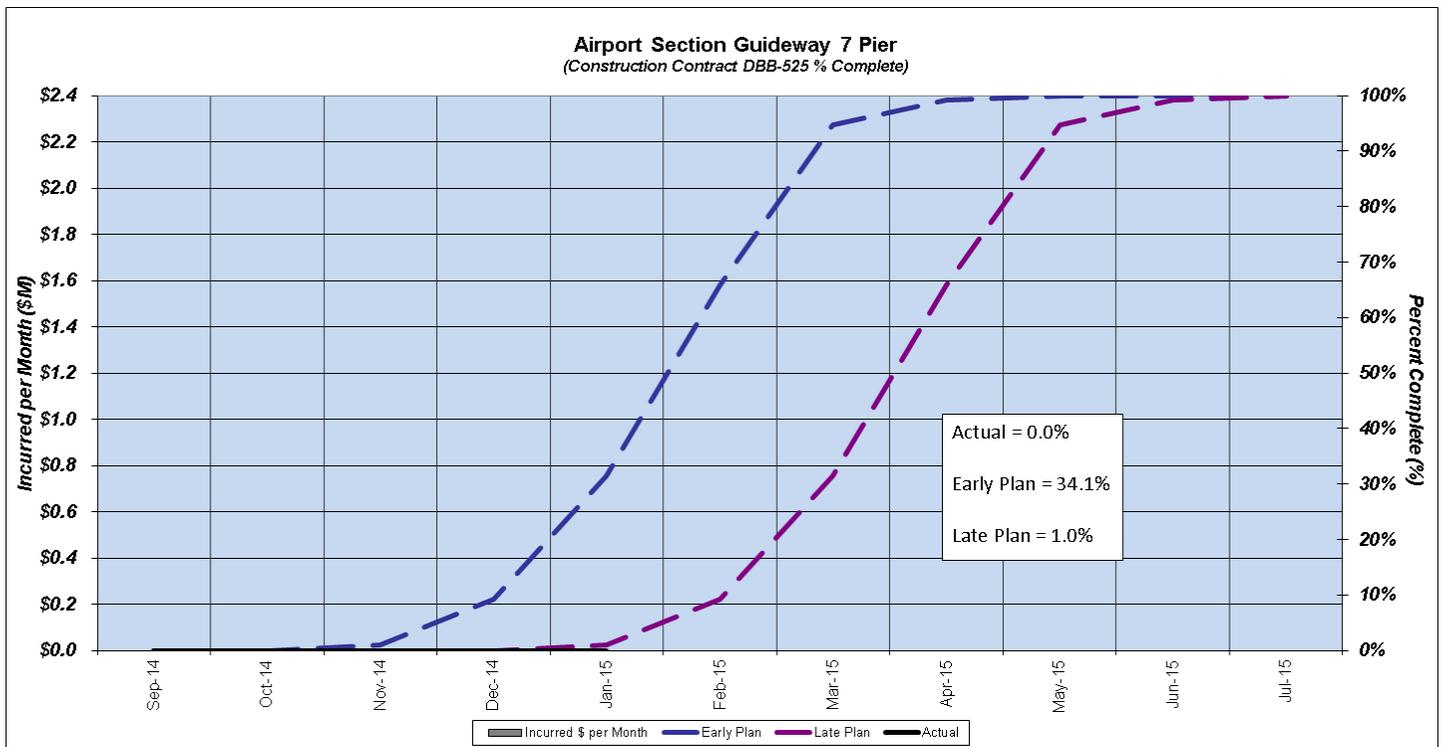
**COST INFORMATION:**

Original Contract:	\$3,973,000	Incurred-to-Date:	\$0
Current Contract Value <sup>1</sup> :	\$3,973,000	Incurred in Jan.:	\$0

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

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

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



**SCHEDULE:**

January 2015 Update			Data Date: 30-Jan-2015, Printed On: 11-Feb-2015 12:00											
Activity Name	Start	Finish	2015				2016							
			Q4	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												
Drilled Shafts	09-Feb-2015	17-Apr-2015												
Pour Foundation Piers	16-Feb-2015	24-Apr-2015												
Transition Zone Rebar Cages	23-Feb-2015	30-Apr-2015												

Contractor's Forecast Dates -  
 Dates Not Approved

28-Jan-2015 A

17-Apr-2015

24-Apr-2015

30-Apr-2015

**CRITICAL PATH ISSUES:**

- None.

**WORK PROGRESS:**

Activities this Month:

**Earned Value: 44.45%**; Planned Value: 44.45%

- Completed four (4) of the seven (7) pier foundations.
- Relocated utilities to allow for pier work.
- Attending weekly HDOT-Airport construction update meetings to monitor updates on Kiewit's construction progress (INTERIM CAR RENTAL FACILITY) at Honolulu Airport.
- Weekly meetings with HDOT-Airport INTERIM CAR RENTAL FACILITY project team to coordinate work scope and schedule access with the Kiewit INTERIM CAR RENTAL FACILITY team.
- Weekly meetings with HART/CE&I/ HDCC/CJ JV to discuss coordination and key issues.
- HDOT-A has signed off on the conformed set of A7 design drawings.
- Utility relocations and foundation work are ongoing in the field.

Look Ahead:

- Complete the remaining 3 (three) piers.
- CSL testing.
- CIL Certification.
- Responding to RFI's and submittal reviews.

**KEY ISSUES:**

- None.

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

**Contract No.:** FD-440

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

**Contract Start Date:** November 2012

**Construction Docs Bid-Ready:**

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

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

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

**Project Overview:** The recently selected delivery method for this contract is Design-Build (DB). HART intends to combine the ASG stations and Airport Section guideway into one DB construction package. Design efforts that will support a DB procurement are being prioritized, including the preparation of the DB bid package. Efforts that would support only a DBB procurement have been suspended to control costs. Work being advanced is discussed below.



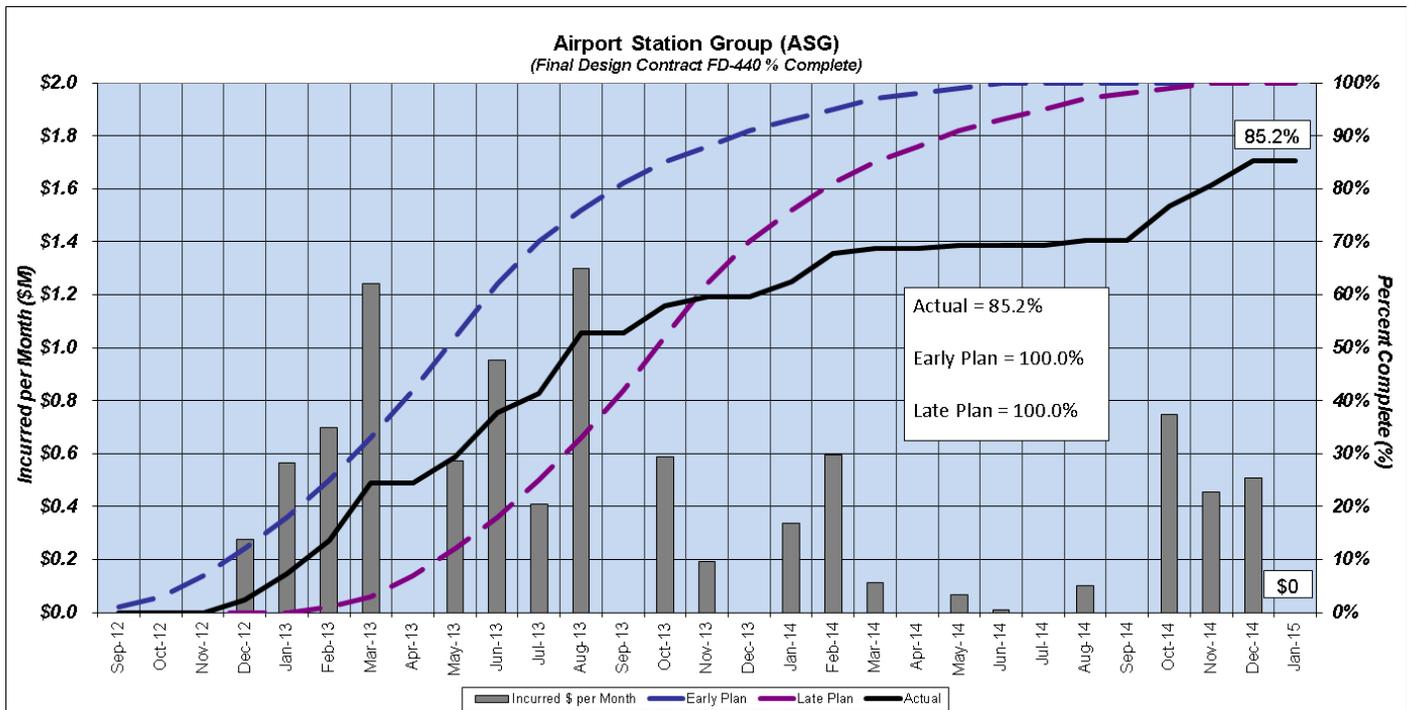
**COST INFORMATION:**

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

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



The closeout of the ASG contract is currently two (2) months behind schedule due to ongoing design coordination with third parties, pending rights of entry for design investigations, and design coordination with other HART contracts. Actions to mitigate this delay are outlined below.

**SCHEDULE:**

January 2015 Update			Data Date: 30-Jan-15, Printed On: 11-Feb-15															
Activity Name	Start	Finish	2015				2016				2017				2018			
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2				
<b>Airport - Section 3</b>	02-May-11 A	27-Feb-18																
<b>Airport Station Group</b>	02-May-11 A	27-Feb-18																
Design - Airport Station Group	02-May-11 A	01-May-15	█	█	█	█												
Construction - Airport Station Group	19-Oct-15	27-Feb-18																
Pearl Harbor Station	19-Oct-15	12-May-17								█	█	█	█	█	█	█	█	
HNL Airport Station	02-Jun-16	27-Dec-17																
Lagoon Drive Station	20-Oct-15	15-May-17								█	█	█	█	█	█	█	█	
Middle Street Station	02-Aug-16	27-Feb-18																

**CRITICAL PATH ISSUES:**

- HART is aggressively pursuing access to remaining properties.
- HART is working with the final design consultant to establish the requirements and format for a DB bid package.

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 88%.
- Kick-off meeting held to discuss potential contract constraints for the Design-Build package and consultant’s work tasks as a result of the change in procurement.

Look Ahead:

- Finalize geotechnical reports.
- Prepare DB bid package.

**KEY ISSUES:**

- Finalizing design options for mitigating Electromagnetic Interference (EMI) due to the proximity of the AM radio tower near the Middle Street Station.
- Acquiring parcel for the Pearl Harbor Station site by closely coordinating with U.S. Navy.

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

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

Contract No.: FD-530

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

Contract Start Date: July 2012

Construction Docs Bid-Ready:

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

Projected Substantial Completion (Construction): November 2019



**Project Description:** The City Center Guideway and Utilities final design contract consists of 4.47 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:** The delivery method for this contract is moving forward as a 2-step Design-Build (DB) procurement, which includes RFP Part 1 for Qualifications and RFP Part 2 for Proposals. A scope change is being discussed and finalized with AECOM, the final designer, to provide support in preparing the DB package. The City Center package is planned to include stations, guideway, and most utility relocations within the City Center section under a DB delivery, with a likely expedited package of utility work under a separate DBB delivery.

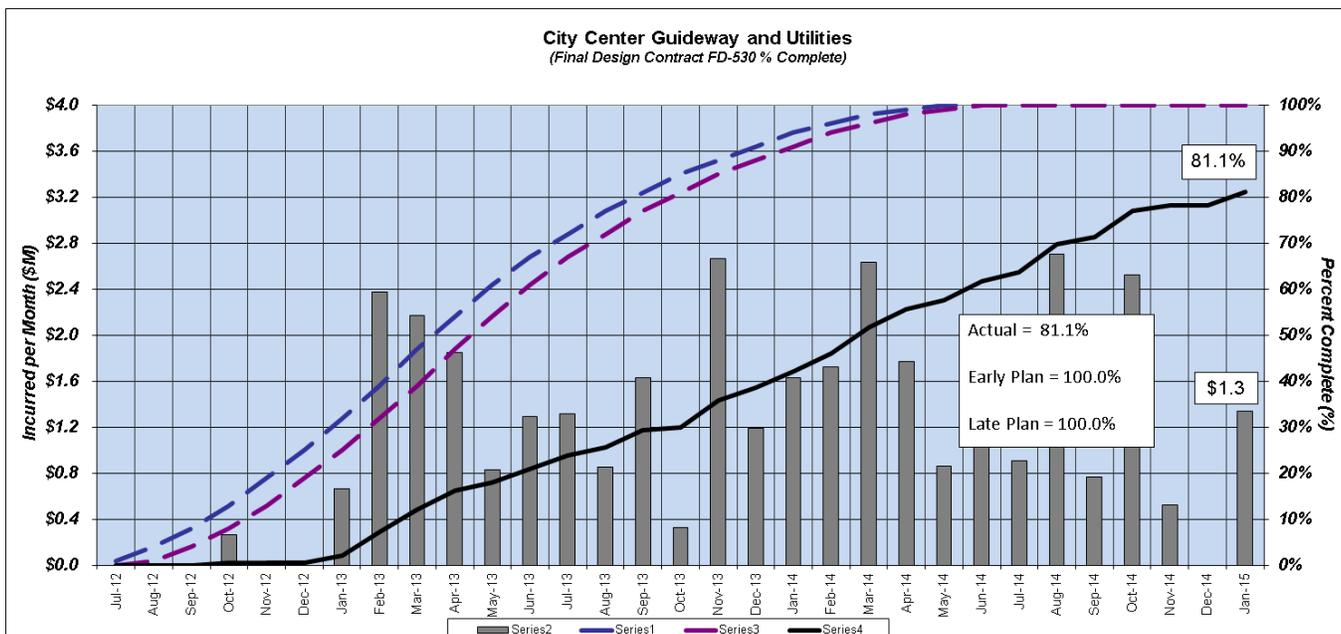
**COST INFORMATION:**

Original Contract: \$43,948,220	Incurred-to-Date: \$36,688,628
Current Contract Value <sup>1</sup> : \$45,231,023	Incurred in Jan.: \$1,342,824

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

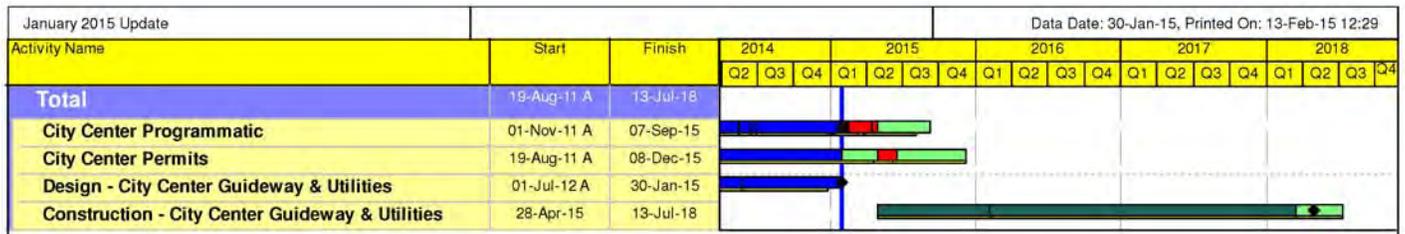
DBE Participation	
Actual DBE Participation:	\$191,227
DBE % Attained:	0.44%

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



Design was combined with the Airport Guideway and Utilities and was issued for bid in June 2014 to support the Airport and City Center Guideway and Utilities Construction solicitation in July 2014. This procurement was canceled on Dec. 2, 2014. The completion of the City Center Guideway and Utilities design is currently six (6) months behind schedule due to pending rights of entry on select properties, interfaces with other HART contracts, and ongoing coordination with third parties. Actions to mitigate these schedule challenges are discussed below. HART has decided to split the Airport and City Center Guideway packages, incorporate the respective stations into each package, and proceed with two DB packages with a potential partial DBB utility package for City Center.

**SCHEDULE:**



**CRITICAL PATH ISSUES:**

- HART is evaluating whether a portion of the civil work in this contract can be expedited in a separate DBB package.
- HART is overseeing coordination between final design consultant AECOM and critical third parties.
- HART is pursuing property rights to obtain all geotechnical data required to support a DB delivery.
- HART is working with AECOM to establish appropriate requirements and format for the DB bid documents.

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 86%.
- Coordinating with HDOT, HECO and other stakeholders.
- Pursuing rights-of-way and rights of entry.
- Completed geotechnical investigations at all locations, except for one parcel near Kaaahi Street.

Look Ahead:

- Obtain third-party approvals.
- Conclude geotechnical investigations for remaining properties that require right of entry.
- Determine appropriate scope to include in expedited utilities package.
- Develop requirements for DB bid package.

**KEY ISSUES:**

- Assessing cost and schedule impacts associated with HECO’s potential requirement to reconstruct existing building electrical service connections.
- Coordinating with HECO to establish minimum working clearance requirements for electrical lines.
- Assessing potential right-of-way impacts due to HECO requests for additional transformers.
- Acquiring rights-of-way and rights of entry, and pursuing partial demolition of select properties.
- Coordinating with property owners and evaluating potential cost and schedule impacts to determine practicality of partial demolition and repair of select buildings.

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



**Contract No.:** FD-550

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

**Contract Start Date:** August 2013

**Construction Docs Bid-Ready:**

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

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

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

**Project Overview:** The proposed delivery method for this contract has been changed from Design-Bid-Build (DBB) to Design-Build (DB). HART intends to combine the DKSG stations and City Center guideway into one DB construction package. Design efforts that would only support a DBB procurement have been suspended to control costs. HART is engaging the final design consultant for support on the preparation of a DB bid package.

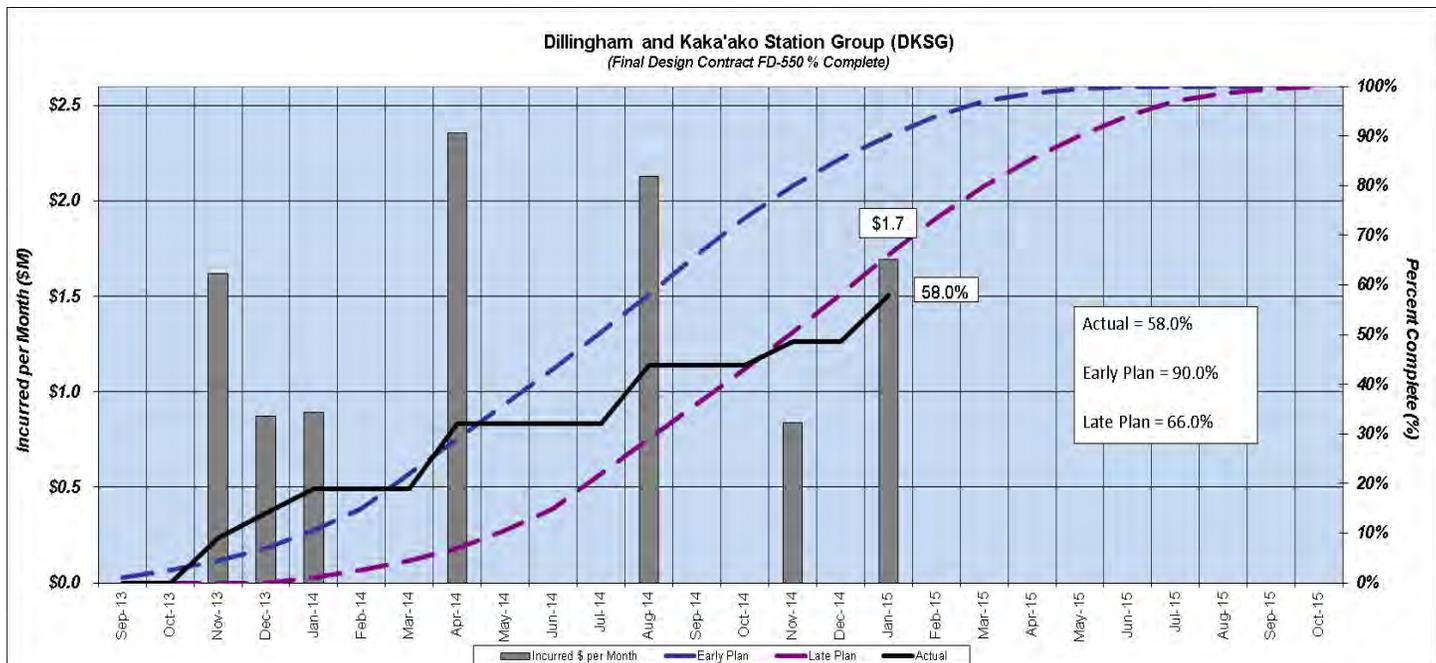
**COST INFORMATION:**

<u>Original Contract:</u> \$18,321,918	<u>Incurred-to-Date:</u> \$10,396,963
<u>Current Contract Value<sup>1</sup>:</u> \$18,974,447	<u>Incurred in Jan.:</u> \$1,694,647

<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%

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



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



### 4.6 Project-Wide

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

Contract No.: MM-901

Contractor: InfraConsult LLC

Contract Start Date: March 8, 2012

Contract Completion: March 7, 2015, with option to renew contract for up to two additional years

**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.

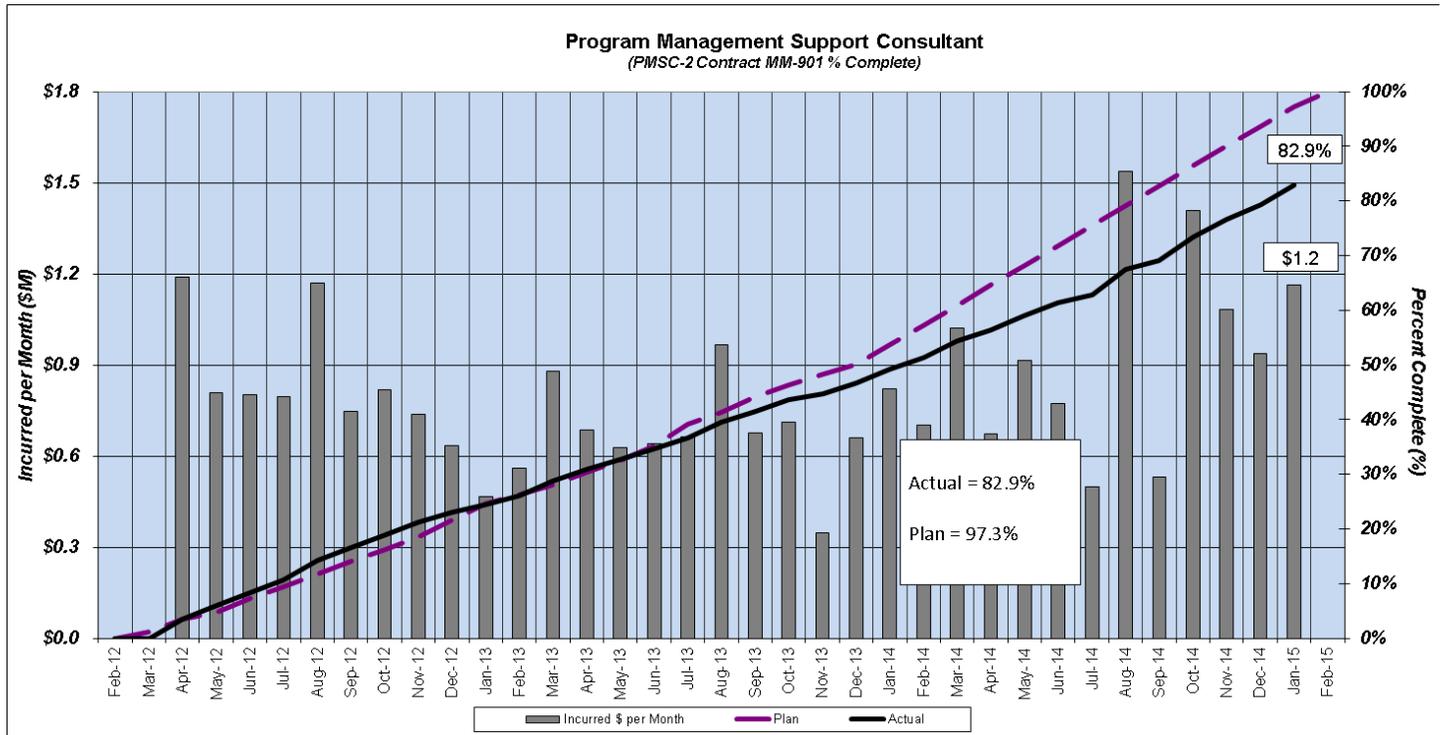
#### COST INFORMATION:

Original Contract:	\$33,376,897	Incurred-to-Date:	\$27,655,413
Current Contract Value <sup>1</sup> :	\$33,376,897	Incurred in Jan.:	\$1,163,753

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

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

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



#### KEY ISSUES:

- The original contract completion date is March 7, 2015. HART has elected to exercise its right to extend the contract, but for an additional one year only with an option to extend the contract for the additional remaining one year.

**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 evaluating the criteria to be used to develop the Airport and City Center Guideway and Station Design-Build procurements; this includes a review of the Contract General Terms and Conditions.

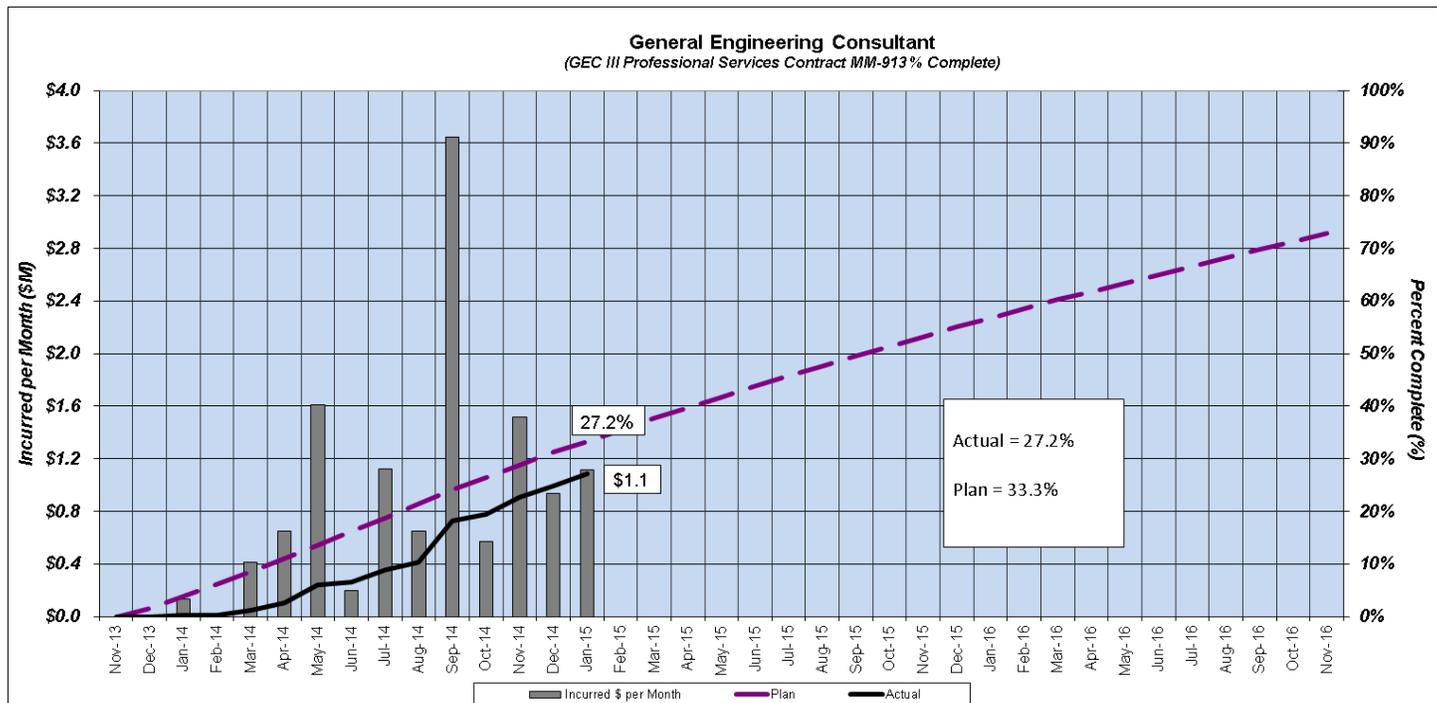
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$46,143,277</u>	<u>Incurred-to-Date:</u>	<u>\$12,555,166</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$46,143,277</u>	<u>Incurred in Jan.:</u>	<u>\$1,111,863</u>

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

DBE Participation	
Actual DBE Participation:	\$653,071
DBE % Attained:	1.42%

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



**KEY ISSUES:**

- Prepare the new baseline Master Project Schedule, incorporating west guideway re-sequencing and Airport and City Center Level 2 Schedules, and assist CE&I in developing West O’ahu Stations bottoms-up estimate.
- For the Farrington Highway Station Group, prepare draft interface risk assessment and solicit PM validation.
- Provide environmental and planning constraints for the design-build contracts. Complete current post-ROD documentation and complete the Programmatic Agreement Implementation Schedule (PAIS).
- Prepare constraints and recommendations for Airport and City Center DB contracts and review contract documents.
- Revised subconsultant contracts to revise scope of work and reflect 2015 rate structure.

**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.

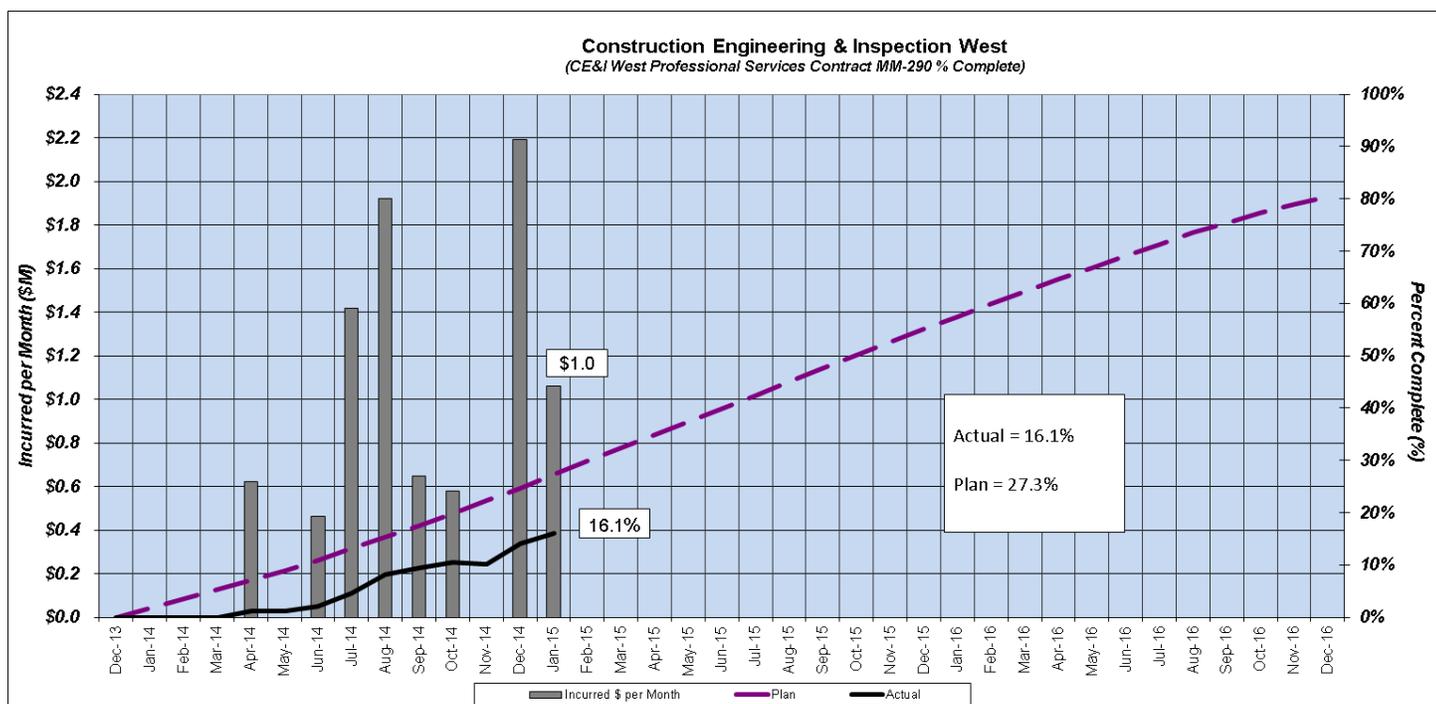
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$54,232,480</u>	<u>Incurred-to-Date:</u>	<u>\$8,732,010</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$54,232,480</u>	<u>Incurred in Jan.:</u>	<u>\$1,058,611</u>

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

DBE Participation	
Actual DBE Participation:	\$500,036
DBE % Attained:	0.92%

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



**KEY ISSUES:**

- No issues.

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

**Contract No.:** MM-595

**Contractor:** URS Corporation

**Contract Start Date:** January 2014

**Contract Completion:** December 2018

**Projected Substantial Completion:** August 2018

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

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

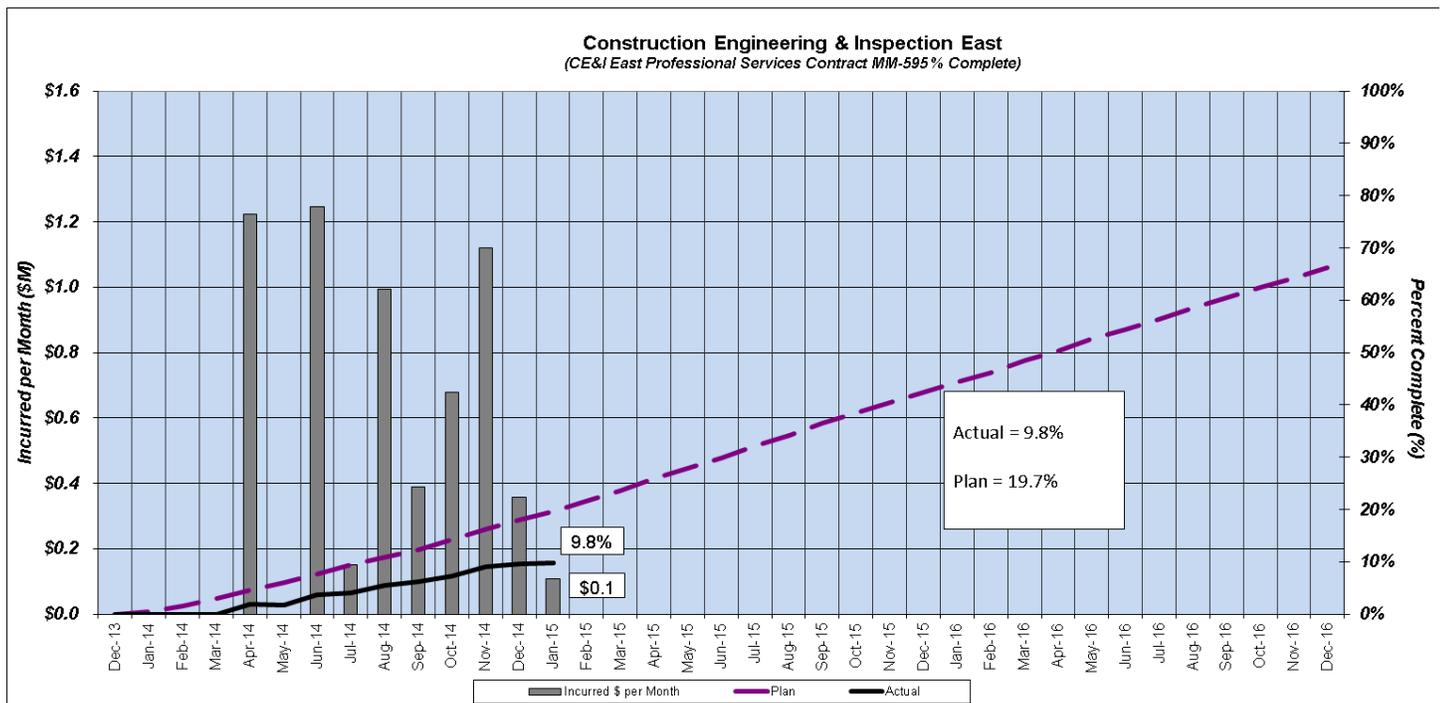
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$63,083,417</u>	<u>Incurred-to-Date:</u>	<u>\$6,165,986</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$63,083,417</u>	<u>Incurred in Jan.:</u>	<u>\$107,622</u>

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

DBE Participation	
Actual DBE Participation:	\$546,716
DBE % Attained:	0.87%

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



**KEY ISSUES:**

- HART has determined the AECOM acquisition of URS has created a Conflict of Interest (COI) that URS has been unsuccessful in resolving. As such, HART is in the process of termination of the URS East CE&I contract and expediting a new re-competed solicitation for CE&I professional services for the East construction contracts.

**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.

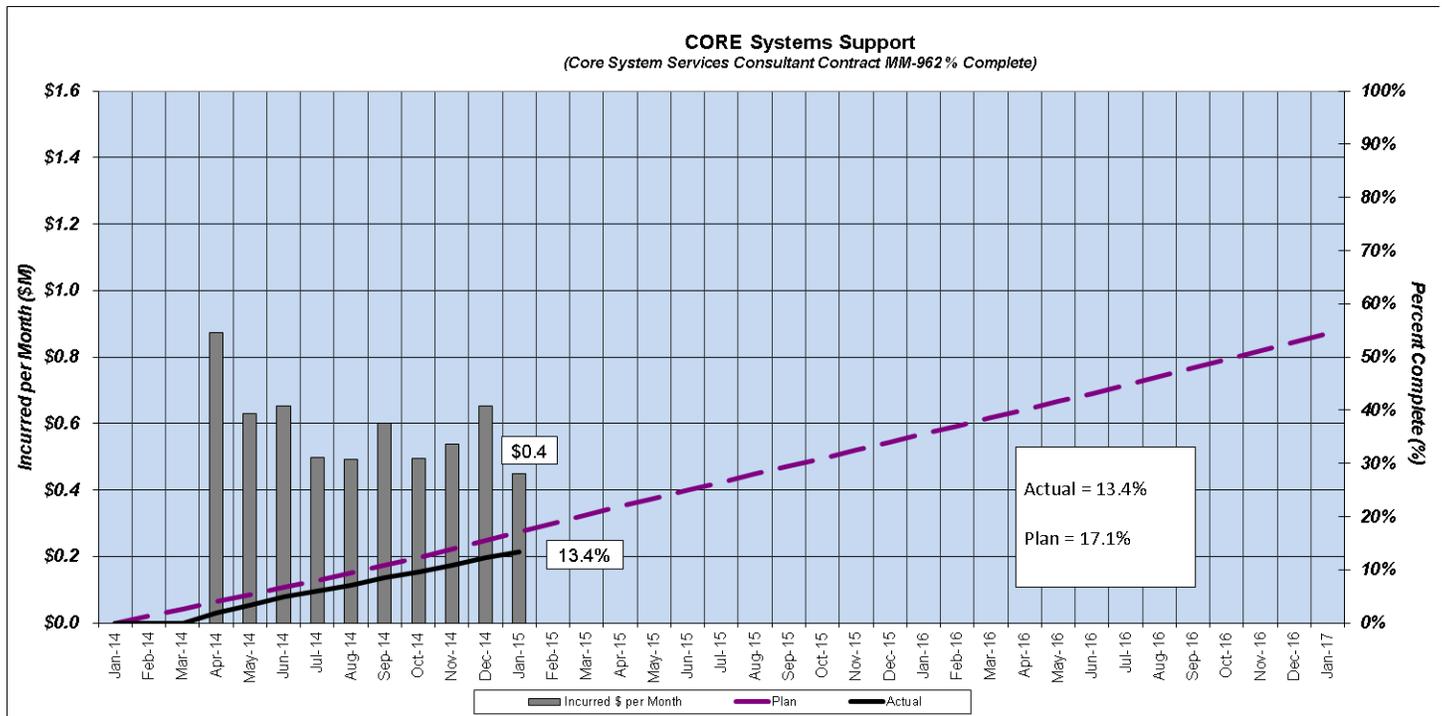
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$43,988,989</u>	<u>Incurred-to-Date:</u>	<u>\$5,883,474</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$43,988,989</u>	<u>Incurred in Jan.:</u>	<u>\$447,809</u>

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

DBE Participation	
Actual DBE Participation:	\$151,398
DBE % Attained:	0.34%

January 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.

## 5 OVERALL PROJECT-WIDE ACTIVITIES

### Permits (Section 5.1)

#### KEY ISSUES

- HART is focusing on increasing noise monitoring efforts with the Hawai'i Department of Health (HDOH) regarding noise levels along the Kamehameha Highway Guideway (KHG) section under construction. HDOH plans to defer approvals of currently submitted noise variances pending their approval of HART's active mitigation and management of construction noise.

#### KEY ISSUES

- HART continues to wait for approval of its Section 401 permit application for Waiawa Stream and Tributary from the Hawai'i Department of Health (HDOH). Construction at Waiawa Stream for WOFH guideway is now delayed. HART is actively and regularly communicating with HDOH to resolve this permitting issue as soon as possible, including elevating discussions to higher levels within both HART and HDOH.
- HART is waiting to receive approval of its Coastal Zone Management from the Department of Planning and Permitting for Waiawa Stream and Tributary. The Coastal Zone Management permit will be approved immediately when the Waiawa Section 401 permit is approved.
- HART is waiting to receive approval of its Airport Community Noise Variance from the Hawai'i Department of Health.
- HART is waiting to receive renewal of its WOFH Community Noise Variance from Hawai'i Department of Health, which will expire on April 12, 2015.

### HDOT Agreements (Section 5.2)

#### OVERVIEW

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

### Utility Agreements (Section 5.3)

#### OVERVIEW

- Reviewing comments from AT&T Corp. for Airport/City Center construction agreement.

#### KEY ISSUES

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

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

#### OVERVIEW

- Right-of-Way acquisitions is under budget by \$10.7M, as of Feb. 20, 2015.
- ROW has been working closely with design and construction staff, and has adjusted the anticipated acquisition dates to correspond with the revised timeline projected by the updated procurement strategy.
- HART has acquired nearly all needed property for the WOFH section.
- All private property site access for guideway is complete for Kamehameha. The contractor has identified locations that are believed to require permanent easements for utility relocation. ROW is working with KIWC to resolve.
- HART is working closely with the U.S. Navy to secure easements needed for construction in the Airport Section.
- Currently, there are no impacts to City Center construction work because of ROW.

#### KEY ISSUES

- Resolve third-party agreements with UH, the Navy and Post Office. These are all critical to allowing construction to proceed without delay.

## 5.1 Permits

### • Permits Submitted and In-Progress

- HART continues to wait for approval of its Section 401 permit application for Waiawa Stream and Tributary from the Hawai'i Department of Health (HDOH). Construction at Waiawa Stream for WOFH guideway is now delayed. HART is actively and regularly communicating with HDOH to resolve this permitting issue as soon as possible, including elevating discussions to higher levels within both HART and HDOH.
- HART submitted a draft Stream Channel Alteration Permit (SCAP) application request for Halawa, Moanalua and Kalihi streams to the Department of Land and Natural Resources, on Feb. 19, 2015.

### • Permits and Approvals Granted

- HART received approval of its Community Noise Permit for daytime work from the Hawai'i Department of Health on Feb. 10, 2015.
- HART received approval of the MS4 application for Airport Section construction from the Navy on Feb. 4, 2015.
- HART received approval from the Hawai'i Department of Health to have additional equipment added to the Airport Section Noise Permit, on Feb. 11, 2015.
- HART received approval of the Hawai'i Capital Special District permit from the Department of Planning and Permitting on Feb. 3, 2015.
- HART received approval of the Chinatown Special District permit from the Department of Planning and Permitting on Feb. 3, 2015.
- HART received MS4 approval to discharge into state airport drainage from the Hawai'i Department of Transportation on Jan. 27, 2015.

### • Look Ahead

- Upcoming significant permit activity:
  - HART will submit the Clean Water Act Section 404 permit application for Kapalama and Kalihi to the U.S. Army Corps of Engineers.
  - HART will submit the Clean Water Act Section 401 permit application for Kapalama and Kalihi to the Hawai'i Department of Health.
  - HART will submit a letter of Jurisdictional Determination to the U.S. Army Corps of Engineers for Aolele ditch.
  - HART will submit a letter requesting determination of permit required to the U.S. Army Corps of Engineers for Nu'uuanu stream.

## 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

- Airport Joint Use and Occupancy expected to be executed early 2015.
- City Center Joint Use and Occupancy expected to be executed mid-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		Reviewing comments to draft from AT&T (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	Submitted draft to HTI 1/20/15	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 is routing internally for review.
	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		Draft under review by Hawai'iGAS
	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  
 UFRCA = 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 and City Center sections have been executed.
- AT&T Corp. is reviewing HART comments to the draft Construction Agreement. It is not necessary for this agreement to be in place for the Airport Segment utility construction.
- HART has sent a draft of the Utility Construction Agreement to HTI for review/comments.
- Looking Ahead:
  - Execute HTI Airport UCA.
  - Execute HECO Airport UCA.

### CITY CENTER

- All engineering utility agreements for the Airport and City Center sections have been executed.
- AT&T Corp. is reviewing HART comments to the draft Construction Agreement.
- HART has sent a draft of the Utility Construction Agreement to Hawai'iGAS Utility for review/comments.
- HART has prepared a draft of the Utility Construction Agreement for OTWC and is routing internally for review/comments.
- HART has prepared a draft of the Utility Construction Agreement for tw telecom and is routing internally for review/comments.
- Looking Ahead:
  - Execute Hawai'iGAS City Center UCA.
  - Execute Oceanic 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 Q1 2015 for the west side stations. HECO is working to finalize its designs and cost estimates.

**5.4 Right-of-Way (data as of Feb. 20, 2015)**

**BUDGET**

- o The ROW budget continues to show a favorable trend. \$70.1M was spent to acquire 34 properties. The budgeted amount for the 34 parcels was \$80.8M, resulting in a budget underrun of \$10.7M for acquisitions.
- o \$4.7M has been expended to date for relocations.

**ACQUISITIONS**

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

	No. of Parcels Impacted	Current No. of Parcels Needed	Appraisals In Process	Appraisals Completed	Letters of Offer Sent	Offers Accepted	Possession Granted For Condemnation	Agreements Executed	Acquisitions Completed	Relocations Completed	Properties Available for Contractor
<b>Full Acquisition</b>											
W.Oahu\Farrington	16	16		14	14	13	1	4	15	10	16
Kamehameha	3	3		3	3	3			3	1	3
Airport	5	5	1	4	5	5			4	3	3
City Center	23	22		20	20	16			15	11	10
<b>TOTAL</b>	<b>47</b>	<b>46</b>	<b>1</b>	<b>41</b>	<b>42</b>	<b>37</b>	<b>1</b>	<b>4</b>	<b>37</b>	<b>25</b>	<b>32</b>
<b>Partial Acquisition</b>											
W.Oahu\Farrington	11	3		2	2	1		2	1		1
Kamehameha	19	4		3	3	1	1	1	1		3
Airport	8	8		3	3			1	1		1
City Center	88	77	7	39	29	5					0
<b>TOTAL</b>	<b>126</b>	<b>92</b>	<b>7</b>	<b>47</b>	<b>37</b>	<b>7</b>	<b>1</b>	<b>4</b>	<b>3</b>		<b>5</b>
<b>Easement</b>											
W.Oahu\Farrington	18	16	6		1			9	7		8
Kamehameha	6	6	1					8	5		5
Airport	44	41		7	6			26	22		26
City Center	44	36	16	2	2			1	1		1
<b>TOTAL</b>	<b>112</b>	<b>99</b>	<b>23</b>	<b>9</b>	<b>9</b>			<b>44</b>	<b>35</b>		<b>40</b>
<b>GRAND TOTAL</b>	<b>285</b>	<b>237</b>	<b>31</b>	<b>97</b>	<b>88</b>	<b>44</b>	<b>2</b>	<b>52</b>	<b>75</b>	<b>25</b>	<b>77</b>
<i>During design development, the real estate requirements have been adjusted to accommodate the design refinements. Parcel requirements are adjusted as design is finalized.</i>											

**WEST O'AHU/FARRINGTON**

- Issues:
  - o HART has acquired nearly all needed property for the WOFH section, for both guideway and the stations.
  - o HART is working to secure construction right of entry for the WOFH guideway at Leeward Community College.
  - o HART will close on a parcel needed for the Waipahu Station.

**KAMEHAMEHA**

- Issues:
  - o All private property site access for guideway is complete for Kamehameha. The contractor has identified permanent easement locations for relocated utilities. ROW is working with KIWC to resolve.

**AIRPORT**

- Issues:
  - o HART has several easements pending from the U.S. Navy for the Airport Section, particularly needed for the Airport Utility contractor. These easements are nearing critical and could impact construction work. HART is working closely with the U.S. Navy right-of-way personnel to complete the documentation as quickly as possible. HART also met with Navy executives in early February.

- On multiple TMK’s, HART is nearly complete with the mapping process. This is important so HART can complete several key partial acquisitions.
- HART made an offer to the Post Office for easement at Honolulu International Airport, which is pending and is being closely monitored. As of January, HART has heard that the offer has been reviewed and has been verbally accepted.
- Look Ahead:
  - Complete Post Office and Navy agreements.
  - On multiple TMK’s, HART has met with consultants to expedite appraisal reports. This allows offers to move forward on remaining airport parcels in anticipation of construction.

**CITY CENTER**

- Issues:
  - Currently, there are no impacts to City Center construction work because of ROW.
  - There continues to be a great deal of effort toward acquiring City Center ROW parcels. Prioritization is being given to the Dillingham section and resolving remaining full acquisitions.
  - As indicated in the table, there are a number of appraisals and offers in progress.
  - HART also continues to track potential eminent domain. Two parcels, which have been working through the required process visa via the HART Board of Directors and Honolulu City Council, was presented for the HART Board of Director’s final resolution. On Jan.29, the HART Board approved two resolutions which authorized the acquisition of the parcels by eminent domain. This will allow HART staff to proceed with filing in court. These items are considered “friendly” in that they will resolve title and other administrative issues. HART is actively reviewing other pending offers for consideration for eminent domain, which could go before the HART Board of Director’s in April.
- Look Ahead:
  - Continue with acquisitions in City Center.
  - Continued review of eminent domain needs.

**RELOCATIONS**

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

Section	Residential Relocations (a)	Business Relocations (b)	Not-For-Profit Relocations (c)	Total Relocations (a+b+c)	Relocation Assessment Completed	90-Day Notice Sent	30-Day Notice Sent	Relocations Completed for Occupants
W.Oahu\Farrington	18	6	1	25	11	12	8	25
Kamehameha		4		4	4	3	3	4
Airport		19		19	5	9		7
City Center	15	64		79	31	48	18	40
<b>Grand Total:</b>	<b>33</b>	<b>93</b>	<b>1</b>	<b>127</b>	<b>51</b>	<b>72</b>	<b>29</b>	<b>76</b>

**WEST O’AHU/FARRINGTON**

- Look Ahead:
  - There continues to be need for oversight of the remediation process for TMK 9-6-004-006.

**CITY CENTER**

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

**THIRD-PARTY AGREEMENTS**

Figure 16. Third-Party Agreement Status

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

Third-Party Agreements				
Agreement	Status	Target	Section	Notes/Remarks
DHHL Consent to Construct	Executed		WOFH, MSF	Consent to construct in place.
DHHL License	Executed		WOFH, MSF	
HDOT Master Agreement	Executed		WOFH	
HDOT Joint Use & Occupancy (JU&O) Sub-agreement	Executed		WOFH	
HDOT Master Agreement for KHG, Airport and City Center	Executed		KHG, Airport, City Center	
HDOT Joint Use & Occupancy (JU&O) Sub-agreement	Executed		KHG	
HDOT Joint Use & Occupancy (JU&O) Sub-agreement for Airport Division parcels	Executed		Airport	
HDOT Joint Use & Occupancy (JU&O) Sub-agreement for Airport leased/revenue parcels	Pending	April 2015	Airport	
HDOT Joint Use & Occupancy (JU&O) Sub-agreement	Pending	June 2015	City Center	
HDOT SOA MOU	Executed		Program	
OCCC/Hawai'i Department of Public Safety Agreement Dillingham Blvd	Pending	March 2015	City Center	Finalizing requirements.
HI Community Development Agreement (HCDA)	Pending	March 2015	City Center	Coordination is on-going.
Department of Accounting & General Services (DAGS)/HHFDC Right of Entry	Pending	March 2015	City Center	Processing.
Department of Accounting & General Services (DAGS)/HHFDC Easement	Pending	June 2015	City Center	Process Easement Agreement.
City Dept. of Transportation Services (DTS) Joint Use & Occupancy Agreement (Middle St.)	Pending	March 2015	Airport	Processing. Pending design.
U.S. Navy	Pending	March 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	March 2015	Airport	Offer tendered to the Post Master General. HART received verbal approval and awaiting formal response.
City Dept. of Transportation Services (DTS) (Kamehameha Hwy.)	Pending	June 2015	City Center	Jurisdictional Transfer in process.
City Dept. of Facility Maintenance (DFM) (N. King St.)	Pending	June 2015	City Center	Jurisdictional Transfer in process.
City Dept. of Transportation Services (DTS) (Kohou St.)	Pending	June 2015	City Center	Jurisdictional Transfer in process.
Federal Court House/GSA	Pending	March 2015	City Center	Draft agreement is under review and discussions on-going.
Pacific Guardian Center	Pending	December 2015	City Center	Awaiting final design requirements for the guideway and Downtown station.
Howard Hughes Corporation	Pending	December 2015	City Center	Appraisal and negotiations underway.
Sam House Development	Pending	December 2015	City Center	Appraisal and negotiations underway.
GGP Ala Moana LLC	Pending	December 2015	City Center	Appraisal and negotiations underway.

## 6 MANAGEMENT AND ADMINISTRATIVE UPDATES

### Safety and Security (Section 6.1)

#### OVERVIEW

- Significant progress continues on the Safety and Security Design Criteria (DC) Conformance checklists CIL/CEL design verification. HART Safety has maintained a detailed Design Criteria Conformance Checklist Status Report for all contracts along with detailed KHG and WOFH verification status sheets on their multiple sub-CEL/CIL packages. These verification status sheets outline the CEL/CIL packages approved by the SSRC, ready for SSRC approval, packages that are working between HART Safety and the designers, and CEL/CIL packages that have not been submitted to date.
- Construction Safety and Security Specification Conformance Checklists are under development and in the process of being reviewed with each contract Construction Manager (CM) Certification POC in preparation for SSRC final review and approval. HART Safety has also developed a detailed Specification Conformance Checklist Status Report by contract to track overall verification status. HART SSRC has approved the WOFH Construction Specification Conformance Checklist this month and is scheduled to review for approval KHG and MSF checklists in March 2015.
- Core Systems Contract (CSC) sub-systems Hazard Analysis (HAs) continue to be reviewed and updated as needed and outlined in the document status chart.

#### KEY ISSUES

- Interim Certification – While delivery dates of passenger vehicles are recorded on the Master Schedule, these dates do not reflect the actual dates needed to certify the elements associated with vehicles, tracks, third rail, facility, and power for commissioning the vehicle (testing and verification). These safety and security activities need to be inserted into the Master Schedule prior to the arrival of the vehicles.
- Specification Conformance Checklist continues to be a priority and is being developed.
- 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.
- HART QA reviewed and approved the revised QAP of CH2M (GEC III).

#### KEY ISSUES

- QA audits of WOSG (URS) and KHSG (AVA) Final Design prior to issuance for bid solicitation.
- QA Audit of Airport Guideway (AECOM) and ASG (AECOM) Final Design prior to issuance for bid solicitation.
- QA review of procurement document package for the Airport Segment and Station Group DB RFP.
- Replacement of Cracked Segments 11 and 12 of Span 67 (HART NCR No. 14-000-QA1); remedial work in progress.
- Construction of MSF Yard Ballasted Track: Alignment, Profile, Geometry, Sub-ballast, Drainage, Ballast, Grade Crossings, Welding, Stress Relieving, Concrete Ties, etc.
- Construction of WOFH Balanced Cantilever Segmental Span across H-1.
- Timely closeout of open NCRs (HART, WOFH, KHG and MSF).

### Buy America Compliance (Section 6.3)

#### OVERVIEW

- An interim Buy America audit will be conducted and is anticipated to commence in the first quarter 2015.
- No further or additional report on utilities' construction contracts since the last report.

- MSF: HART will be working with FTA Region 9 legal counsel in resolving or closing the Buy America issues for bridge crane and lockset door hardware.

### **Disadvantaged Business Enterprise (Section 6.4)**

#### OVERVIEW

- \$20,757,577 = total dollar participation for all DBEs on all HART contracts from 9/24/07 to 2/28/15.

### **Risk Management (Section 6.6)**

#### OVERVIEW

- There are a total of 192 risks in the February 2015 risk register. Sixteen risks have been deleted from January's risk register and two new risks have been added.
  - Risk reductions were a decrease in geotechnical risk and commodity prices.
  - Risk additions were related to noise permit conditions to KHG and likely timeliness of securing Navy easements for the Airport Utilities contract.

#### KEY ISSUES

- Risks associated with the market, right-of-way, utilities and third parties top the list of concerns; this is fairly typical of transit projects.
- The construction market represents a particularly challenging situation for HART.
  - Construction escalation is expected to continue to be high for 2015, as growth in island permitted work continues at a faster rate than construction completion of 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.

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

#### OVERVIEW

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

#### KEY ISSUES

- With construction well underway, HART's outreach team responded to more than 160 inquiries that came through the project's 24-hour hotline, the website and via email.
- HART's outreach efforts also continue to address the project's finances and how to reduce costs and secure additional revenue sources.

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

#### OVERVIEW

- All key positions are filled.
- HART prioritizes hiring city employees for vacant positions and supplements the city staff with a limited number of consultants where positions are difficult to fill at existing City & County of Honolulu salary levels.
- Interviews for the two vacant Transit Contracts Manger positions are complete. Two candidates have been selected, tentative offers have been extended and both candidates accepted. Hiring process is in progress and expected to be complete in March 2015.

#### KEY ISSUES

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

6.1 Safety and Security

HART Safety Certification Documents Status			
Documents	Revision #	Date Approved	Comments
Safety and Security Management Plan (SSMP)	Rev 5	02/25/2015	Pending signatures – SSRC approval 02/25/2015
Safety and Security Certification Plan (SSCP)	Rev 4	02/25/2015	Pending signatures – SSRC approval 02/25/2015
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 – SSRC approval 12/03/2014
Project Preliminary Hazard Analysis (PHAs)	Rev 1	6/6/2014	Finalizing PHAs is on-going
Core Systems Contract (CSC) PHAs (DBOM)	Rev C	-	Received 12/15/14 - CSC updating
- Wayside ATC SSHA	Rev B	-	Received 11/14/2014 - CSC updating
- Wayside ATC O&SHA	Rev B	-	Received 12/15/2014 - CSC updating
- Wayside/ATC SHA	Rev C	-	Received 1/6/2015 - CSC updating
- SCADA O&SHA	Rev B	-	Received 02/15/2015 - CSC updating
- SCADA SSHA	Rev B	-	Received 1/6/2015 - CSC updating
- Vehicle/ATC SSHA	Rev C	-	Received 12/15/2014 - CSC updating
- Vehicle/ATC O&SHA	Rev B	-	Received 02/4/2015 - CSC updating
- TES SSHA	Rev A	-	Received 11/17/2014 - CSC updating
- TES SHA	Rev A	-	Received 12/12/2014 - CSC updating
- PSGS O&SHA	Rev A	-	Received 12/8/2014 - CSC updating
- PSGS SSHA	Rev A	-	Received 02/2/2015 – CSC updating
Threat and Vulnerability Assessments (TVAs)			
- Project TVA	Rev 1	1/16/2015	

S & S Design Criteria (DC) Conformance Checklist			
Design Verification Status			
Contracts: DC Conformance Checklists (CEL/CILs)	% Design Verified	% Increase from last FTA Monthly Report	Comments:
<b>Under Construction</b>			
DB-200, MSF	99%	-	SSRC approved 1/28/2015
DB-120, WOFH Guideway	89%	+12%	<b>42 total – Sub CEL/CIL Packages</b> 16 - SSRC approved 1/28/2015 6 – SSRC approved 02/25/2015
DB-320, KHG Guideway	85%	+11%	<b>37 total – Sub CEL/CIL Packages</b> 21 - SSRC approved 1/28/2015 6 – SSRC approved 02/25/2015
FD-430, Airport Utilities	100%	-	SSRC approved – 6/25/2014
<b>Under Design</b>			
FD-140, West O’ahu Station Group	46%	-	Re-designed-CEL/CILs being updated
FD-240, Farrington Hwy Station Group	8%	+8%	Re-designed-CEL/CILs being re-submitted
DB-275, Pearl Highlands PS/Bus Transit Center	-	-	
FD H2R2 Ramps	-	-	
FD-340, Kamehameha Highway Station Group	83%	-	Re-designed-CEL/CILs being updated
DB-xxx, Airport Guideway and Stations Group	-	-	
FD-430, 7 - Shafts	88%	+88%	
DB-xxx, City Center Guideway & D&K Stations Grp	-	-	
FD-530, City Center Utilities	-	-	
FD-600, West O’ahu Park & Ride	-	-	
DBOM-920, Core Systems	-	-	
- Traction Electrification System CIL	-	-	
- Communication System CIL	-	-	
- Fire Detection Alarm System	-	-	
- Passenger vehicle CIL	-	-	
- Train Control CIL	-	-	
- Supervisory Control & Data Acquisition (SCADA)	-	-	
- Platform Screen Gate System	-	-	
- MOW Vehicles	-	-	
- Yard systems Bungalows	-	-	
MI-930, Elevators & Escalators	-	-	

S & S Construction Specification Conformance Checklists Construction Installation/Testing Verification Status			
Contracts	% Construction Installation Testing Verified	% Increase from last FTA Monthly Report	Comments
<b>Under Construction</b>			
DB-200, MSF	-	-	Draft spec conform checklist under review
DB-120, WOFH Guideway	-	-	SSRC approved base checklist 02/25/2015
DB-320, KHG Guideway	-	-	Draft spec conform checklist under review
DBB-505, Airport Utilities	-	-	Draft spec conform checklist under review
<b>Still under Design or in Pre-bidding Process</b>			
FD-430, 7 - Shafts	-	-	Draft spec conform checklist under review
DBB-171, West O'ahu Station Group	-	-	
DBB-271, Farrington Hwy Station Group	-	-	
DB-275, Pearl Highlands PS/ Bus Transit Center	-	-	
DBB-371, Kamehameha Hwy Stations Grp	-	-	
DBB-385, H2R2 Ramps	-	-	Draft spec conform checklist under review
DB-xxx, Airport Guideway & Stations Grp	-	-	
DBB-xxx, City Center Utilities	-	-	
DB-xxx, City Center Guideway & D&K Stations Grp	-	-	
DBB-600, West O'ahu Park & Ride	-	-	
DBOM-920, Core Systems	-	-	
MI-930, Elevators & Escalators	-	-	

Project-Wide Incident Activity					
Event Type	Total Number of Events since 1/1/2007	Total Number of Events for February 2015	Loss Type	Date	Event Description
Environment	12	1	No Loss	2/11/2015	WOFH - Noise complaint.
Loss or Damage	18	1	Minor damage	2/10/2015	WOFH - A hoisted beam struck the boom of the 3900 crane causing a dent and scratches.
*Reportable Occupational Injury/Illness	0	0			
Security	42	0			
**Loss Time Occupational Injury/Illness	6	0			
Road/Vehicle - Driving	43	8	Minor damage No Loss Minor Damage Minor Damage Minor Damage Minor Damage No Loss	a) 2/3/2015 b) 2/5/2015 c) 2/10/2015 d) 2/13/2015 e) 2/13/2015 f) 2/20/2015 g) 2/21/2015 h) 2/25/2015	a) KHG - Employee backed his truck into a trailer. b) KHG - Citizen drove through work area and abandoned the vehicle. c) KHG - Citizen drove his employers vehicle into a roadway attenuator. d) Airport - Excavator track struck a curb and caused minor damage. e) KHG - A citizen driving a vehicle struck 12 triton barriers. f) WOFH - Employee driving a forklift struck an overpass. g) WOFH - Employee set the blade of a front end loader down and struck the side of an excavator. h) WOFH - Citizen entered a workzone with a vehicle at a high rate of speed and wrecked into the K-Rail.
Service Strike	31	5	No Loss Minor Damage Minor Damage Minor Damage	a) 2/3/2015 b) 2/3/2015 c) 2/7/2015 d) 2/24/2015 e) 2/25/2015	a) Airport - Worker hit a 2" pvc conduit while hand digging. b) WOFH - Employee struck 4" pvc and 2" pvc conduit with excavator. c) WOFH - Employee struck overhead telecom line with excavator. d) KHG - Employee struck two unmarked Traffic Signal conduits. e) KHG - Water line broke due to age of the water line and hand digging.
*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.					

## 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; and Buy America compliance.
- Participated in Pre-Activity Meeting for scheduled construction activities on WOFH (Base Grouting of Spans), MSF (Surface Finishes and Painting, Thermoplastic Polyolefin Roofing and Wheel Truing Machine); and pre-shipment inspection and design verification testing of Transformers on CSC. QA Hold Points and Witness Points were assigned on contractor's Inspection and Test Plans (ITP), respectively.
- Performed Combined QA and Buy America Audit of KIWC (WOFH and KHG) and KKJV (MSF).
- 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 3

KEY	Local Audit	Remote Audit	Continental U.S. Audit	International Audit		
<b>CONTRACT PACKAGE NUMBER</b>	<b>DESCRIPTION</b>	<b>CONTRACTOR / CONSULTANT / SUPPLIER</b>	<b>AUDIT NUMBER</b>	<b>DATE SCHEDULED</b>	<b>DATE PERFORMED</b>	<b>DATE CLOSED</b>
CCH-100	Honolulu Authority for Rapid Transportation (HART) Honolulu Authority for Rapid Transportation (HART) -Security & Safety Only	HART	15-009	6/16 - 6/23		
CT-HRT-10HO137	West O'ahu/Farrington Highway Guideway Design-Build (WOFH)	KIWC - HI	15-001	2/17 - 2/19	2/17 - 2/18	
CT-HRT-11HO195	Kamehameha Highway Guideway Design-Build (KHG)	KIWC - HI				
CH-HRT-10HO449	Maintenance and Storage Facility Design-Build (MSF)	KKJV - HI	15-003	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		
CH-HRT-10HO449	MSF-Swanson Structural Steel	KKJV/Swanson	15-014	8/26 - 8/27		
CT-HRT-1200106	Core Systems Contract (CSC) Design-Build-Operate-Maintain	ASTS Italy R Calabria	TBD	TBD		
		AB Italy Pistoia	TBD	TBD		
		AB Italy Naples	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)	URS - HI	15-005	5/6 - 5/7		
SC-HRT-1400012	Farrington Highway Station Group Final Design (FHSG) Group 2	URS - HI	14-014	12/15	12/15	
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 3

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	4/29 -4/30		
		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	5/27 - 5/29		
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	15-018	11/23 - 11/24		
FD-600	UH West O'ahu Park-and-Ride and Ho'opili Station Finishes Final Design	TBD	TBD	TBD		
DBB-185	West O'ahu/Farrington Hwy/Kamehameha Hwy Station Groups "West Side Stations" Construction	TBD	TBD	TBD		
DBB-275	Pearl Highlands Parking Structure/Bus Transit Center Construction	TBD	TBD	TBD		
DBB-470	Airport Station Group Construction	TBD	TBD	TBD		
SC-HRT-1200038	Airport Section Utilities Construction	NAN, Inc	15-012	7/29 - 7/30		
CT-HTR-1500080	Airport Section Guideway Seven Pier Construction	HDCC/CJA JV	15-006	5/13 - 5/14		



HONOLULU AUTHORITY for RAPID TRANSPORTATION

## COMBINED MANAGEMENT SYSTEM AUDIT SCHEDULE

YEAR: **2015** Rev 3

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-510	City Center Section Utilities Construction	TBD	TBD	TBD		
DBB-520	Airport and City Center Sections Guideway Construction	TBD	TBD	TBD		
DBB-580	Dillingham/Kaka'ako Station Groups "East Side Stations" Construction	TBD	TBD	TBD		
DBB-600	UH West O'ahu Park-and-Ride and Ho'opili Station Finishes Construction	TBD	TBD	TBD		
CT-HRT-1300318	Elevator and Escalator - Manufacture, Install and Maintain	US Schindler - HI	15-016	9/8 - 9/10		
		US Schindler - NJ				
SC-HRT-1400050	West O'ahu, Farrington Highway, and Kamehameha Highway Station Groups "West Side Stations" CE&I	PGH Wong - HI	15-015	9/2 - 9/3		
	Pearl Highlands Parking Structure/Bus Transit Center CE&I		TBD	TBD		
	UH West O'ahu Park-and-Ride and Ho'opili Station Finishes CE&I		TBD	TBD		
SC-HRT-1400051	Airport and City Center Section Utilities CE&I	URS - HI	15-017	9/14 - 9/15		
	Airport and City Center Sections Guideway CE&I		TBD	TBD		
	Airport, Dillingham, and Kaka'ako Station Groups "East Side Stations" CE&I		TBD	TBD		
SC-HRT-1400027	General Engineering Consultant III for Final Design and Construction (GEC III)	CH2M Hill	15-007	5/20 - 5/21		

• **Key Issues**

HART NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
<b>31 (Audits)</b>	<b>30</b>	<b>1</b>
<b>1 (Construction)</b>	<b>0</b>	<b>1</b>

- Updating, reviewing and approval of appropriate HART Project Baseline Plans and Procedures due to new policies, re-organization, process improvement and lessons learned from the internal audits. Upon approval of revised plans and procedures, training of HART employees must be performed in order to assure competency and proficiency.
- Closing of QA audits performed, including NCRs and Observations in order to prevent recurrence and occurrence, respectively. See HART NCR Log above.
- QA audits of WOSG and KHSF Final Design prior to issuance for bid solicitation.
- QA audit of Airport Guideway and Station Group Final Design prior to issuance of DB RFP.
- Replacement of Cracked Segments 11 and 12 of Span 67 (HART NCR No. 14-000-QA1); remedial work in progress.
- 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 open NCRs (HART, WOFH, KHG and MSF).

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

- **Interim Buy America Audit**
  - An Interim Buy America audit is anticipated to commence in the first quarter and will be conducted by Raul v. Bravo + Associates, Inc., who has subject matter expertise in Buy America audits.
  
- **Utilities**
  - HART has entered into construction agreements with the following utility companies, under which each of the listed utility company has signed the Buy America compliance certification:
    - Hawaiian Electric Company
    - Oceanic
    - Hawaiian Telcom
    - Hawai'iGAS
    - Hawaii Independent Energy (formerly Tesoro)
  
- **Look Ahead**
  - Will provide updates on any new construction agreements HART enters into with a utility company.
  - Will provide updates on the Buy America Interim Audit for rolling stock.
  - Will provide updates on the outstanding Buy America issues involving the bridge crane and lockset door hardware.

### 6.4 Disadvantaged Business Enterprise (DBE)

- **Activities this month**
  - \$20,757,577 = total dollar participation for all DBEs on all HART contracts from 9/24/07 to 2/28/15
    - 6.04% = DBE utilization on total disbursed FTA funds received to date (\$20,757,577 divided by \$343,873,262)
    - 1.18% = DBE utilization to date on total Project FTA funds (\$20,757,577 divided by \$1,763,903,901)

*Total DBE Participation = \$20.8M  
(previous report = \$20.6M)*

Figure 17. DBE Participation this Month

DBE Participation in February		
DBE Firm	Contract Number	Participation
Lawson & Associates	SC-HRT-1400061 MM-964	\$53,222
ADS System Safety Consulting	SC-HRT-1400061 MM-964	\$91,488
LKG-CMC	SC-HRT-1400049 MM-962	\$13,964
<b>TOTAL FOR THE MONTH</b>		<b>\$158,674</b>

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

### 6.5 Planning and Environment

- **Activities this month**
  - Programmatic Agreement Activities:
    - HART’s Programmatic Agreement (PA) team met with the Navy on Feb. 19, 2015 to finalize comments on the two Makalapa National Register Nominations.
    - HART’s PA team convened a new monthly meeting with the State Historic Preservation Division (SHPD) on Feb. 3, 2015 to ensure ongoing Section 106 coordination and consultation.
    - HART participated in two meetings with FTA and the Kāko’o investigating two separate Consulting Parties’ claims of indirect and cumulative effects on Feb. 26, 2015.

- Planning, Environmental, and Cultural Activities:
  - HART continues to work with the City Department of Parks and Recreation (DPR), the State of Hawai'i Department of Transportation – Highways (HDOT), and other agencies to transplant trees which will be affected by project construction. Transplanted trees were moved into the Pearl Harbor Interchange at the end of February.
  - HART has received preliminary approval on the draft Project wide Additional Right-of-Way Acquisitions and the UHWO Interim Park-and-Ride Facility Post RODs. Both documents will be formally submitted in the first week of March for formal FTA approval.
- **Looking Ahead**
  - Participate in Programmatic Agreement Annual Meeting.
  - Conduct regular monthly O'ahu Island Burial Council (OIBC) and cultural descendant meetings.
  - Conduct regular monthly bus-rail integration planning meetings with city 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.
  - Continue resolution of Post ROD documentation.

## 6.6 Risk Management

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

The primary strategy of risk management is to maintain a reserved contingency balance throughout the life of the Project that is acceptable to HART and the FTA, and in turn reassures the public that the Project will be completed on time and on budget. Effective management of project risks is necessary to significantly increase the likelihood of delivering a successful project. Some risks are directly within HART's control while others are not.

Maintaining the RR includes assessing the potential for a risk to happen as well as the cost and schedule impacts should the risk occur in isolation. The cost and time impacts to the Project are assessed based on a "most likely scenario." Construction of the Project involves systematically using equipment and materials through a variety of means and methods to create a quality transit system. Therefore, not all risks (known and unknown) will occur with the same frequency or probability as estimated in isolation. In addition, risks can be eliminated due to design best practices as well as through the implementation of safe alternative means and methods of construction to avoid the occurrence.

This report includes a listing of the top program wide risks which is an aggregate of the individual contract risks of the same category. Key metrics are subject to change as more is learned about the risks while implementing mitigation of avoidance, minimization and transfer, and as additional expertise is brought in to implement various aspects of the Project. By actively managing the RR, HART is able to actively manage the Project.

### NOTES OF SIGNIFICANCE

- Kamehameha Highway Guideway production rates are behind schedule.
- Construction market escalation rates are exceeding forecast and FFGA budget. Cost containment is critical.
- Induced current from parallel high voltage power lines and associated risk to passengers has been mitigated with negative grounding device to be incorporated in the design.
- Securing Navy property is becoming critical.
- Securing a Section 401 from DOH is becoming critical for the Waiawa Stream crossing area on the WOFH Guideway project.

**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) University of Hawai'i, E) Kamehameha Guideway Production, F) Core Systems Interface, and G) 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:**
  - **Prepare General Terms and Conditions for the Design-Build guideway and station packages as part of feedback follow up to contracting industry. – March 2015.**
- Revise Contract Packaging Plan based on Contractor Industry feedback. **Actions:**
  - **Prepare update to CPP. – Date: Feb. 2015.**
  - **Determine package content (i.e. Reference or Record Drawings) and issue direction to Design and Construction to provide direction to designers. – Date: Feb. 2015.**
  - **Provide direction and change order to HART Designers to complete packages for bidding per the new procurement plan. – Date: Feb. 2015.**
- Refine list of primary and secondary mitigation measures. **Actions:**
  - **Update list for discussions with FTA. – Date: Jan. 21, 2015. Complete.**
  - **Finalize recommendations for primary and secondary mitigation measures and submit to "Project Director" for Action. – Mar. 2015.**
- Identify opportunities within project scope for alternative funding sources. **Actions:**
  - **Reach agreement on possible HDOT funding of utility, widening, ITS and Intersection Improvements. – Date: Feb. 2015.**
  - **Research State Law relative to Public Private Partnership funding relative to TOD and parking opportunities. – June 2015.**
- Seek additional GET extension of funding to close the gap for market conditions and delay beyond HART's control. **Actions:**
  - **Work with Board, City/County Honolulu and Legislative Committee members to develop proposed Legislative Bill to extend the GET and respond to frequently asked questions. – Complete.**
  - **Respond to Legislators and provide testimony. – Date: TBD and Ongoing throughout the session.**

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

Mitigation Plan:

- Resources to relocate HECO facilities are not readily available. HART is subject to availability of resources and schedules are frequently set for relocation contractors to be deployed on other islands. This has had an impact on cost and schedule. **Actions:**
  - **Seek commitment from HECO (senior, mid and front line management) to dedicate adequate resources for relocation work, design work to ensure opening. – Date: Mar. 2015.**
  - **Revise Utility Agreements accordingly. – Date: TBD.**
  - **Update CPP with accurate cost estimates. – Date: Mar. 2015.**
- Responses from HECO with respect to the 138kV vertical and horizontal clearance from HART fixed facilities are lagging HART's needs for information and specificity. Cost exposure could be \$60-150M to underground the 138kV line. Affected contracts are KHG, Airport Guideway and City Center Guideway. **Actions:**
  - **Coordinate with HECO regarding their operations and maintenance needs. Bring Bronto Truck to the island to demonstrate and evaluate the truck's performance while maintaining HECO facilities – Complete.**
  - **Secure DB Guideway design, define and evaluate remaining 138kV line undergrounding due to horizontal and vertical conflict resolution needs with HECO. – Date: Feb 2015.**
  - **Meet with HECO to finalize undergrounding plans for 138kV line. – Date: Mar. 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. **Actions:**
  - **Seek clarification on HECO safety and code requirements to resolve weatherhead to weatherhead service connections. – Feb 2014.**
  - **Coordinate design and construction requirements with HECO, HART designer and Right-of-Way to resolve issues for each site. – Feb 2014.**

**C) Right-of-Way** – There are a few parcels on the 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 Side – all remaining right-of-way issues have been escalated to HART Executives. All remaining parcels are on the critical path or near critical path and must be resolved as soon as possible. Parcels include: UH West O'ahu and Leeward Community College. **Action:**
  - **Issues have been escalated for property access issues for resolution. – Date: Mar. 2015.**
    - **UH West O'ahu**
    - **Leeward Community College**

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

**D) University of Hawai'i** – Ongoing coordination to fully resolve access issues has been escalated. There are a number of sites dependent upon a successful resolution to the agreement flow down of provisions from HART to the contractor that is acceptable to the University, the contractor and HART. Most critical is the LCC property on the WOFH project.

Mitigation Plan:

- Construction Right-of-Entry negotiations have been escalated to HART Executives and is being resolved. The flow through language has been discussed between the three parties; UH, HART and the Contractor. Once the initial agreement has been resolved at all levels, it will be used and tailored to each remaining site. **Action:**
  - **Issues have been escalated for property access issues for resolution. – Date: Mar. 2015.**
    - **UH West O'ahu**
    - **Leeward Community College**

**E) Kamehameha Highway Guideway 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 the KHG guideway and facilities. 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. **Actions:**
  - **Direct contractor to implement recovery plan. – Date: Jan. 2015 – Complete.**
  - **Provide Recovery Plan and initiate implementation of the plan upon approval. – Date: TBD.**

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

## Mitigation Plan:

- Efforts to minimize further delay to the Core Systems Contractor include: 1) Issuing revised access dates and requesting an updated baseline schedule. 2) Extend dates; need to define completion dates. 3) HART and AHJV will work to re-sequence activities to minimize overall cost impact to the project. 4) Joint HART/AHJV workshop to work out detail of schedule rebaseline. **Actions:**
  - **Implement four step mitigation plan to correctly understand the schedule implications of new station procurement and guideway/station procurement dates. Coordinate Core Systems schedule impacts and report results to Project Controls and Project Director. – Date: Mar. 2015.**
  - **Evaluate the need for going with a separate TPSS Bungalow to mitigate station access impacts and develop recommendation prior to the procurement of the next station package. – Date: Mar. 2015.**

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

## Mitigation Plan:

- Efforts to accelerate the process are underway through an increased number of meetings with the Navy at various levels to attempt to educate, learn and communicate at the multiple levels within each Agency. **Actions:**
  - **Meet with local command staff to review plans, purpose and need of the project as well as specific issues and property required. – Date: Mar. 2015.**
  - **Meet and resolve technical issues of reporting items of historic significance and other matters relating to Navy approvals of property access rights. – Date: Mar. 2015.**

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

Figure 18. Risk Matrix

Risk Matrix					
Legend	Low (1)	Med (2)	High (3)	Very High (4)	Significant (5)
Probability	< 10%	10><60%	> 60%	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 February 2015								
Current Risk ID	Contract Package	Risk Description	Probability	Prob Rating	Cost Impact	Time Impact	Feb. '15 Risk Rating	Jan. '15 Risk Rating
96.09	West Side Station Group	Market - Procurement results in higher pricing than FFGA estimate assumptions.	100%	5	5	4	22.5	22.5
111.05	Airport Guideway	Market - Estimates may be low for remaining guideway based on WOFH and KHG relative to construction market escalation.	90%	5	5	4	22.5	22.5
111.06	City Center Guideway	Market - Estimates may be low for remaining guideway based on WOFH and KHG relative to construction market escalation.	90%	5	5	4	22.5	22.5
20.08	Core Systems Contract	Interface - Delays in access milestones of MSF, stations, or guideway interfaces to systems results in delays to core systems contractor or substation completion milestones.	100%	5	5	4	22.5	22.5
110.06	City Center Guideway	Right of Way - 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
65.06	City Center Guideway	Third Party (HECO) - 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	10.5
20.04	Kamehameha Highway Guideway	Interface - Late delivery of/or acceptance of civils, stations, or systems interface to guideway results in change orders.	100%	5	3	4	17.5	17.5
170.04	Kamehameha Highway Guideway	Construction - Production rates of Fixed Facility contracts are lagging planned results.	75%	4	4	4	16	16
75.03	West O'ahu/ Farrington Highway Guideway	ROW - Late turnover of ROW to contractor may result in delays to interim opening.	90%	5	4	2	15	15
83.06	City Center Guideway	Utilities - Due to court case, 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 - Right-of-way acquisition at Pearl Harbor may take longer due to Navy NEPA/Section 10b process requirements.	75%	4	3	4	14	10
129.13	Airport Station Group	Third Party - Potential delays at Pearl Harbor Station due to community actions concerning historical site (Navy).	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 in the process of being mitigated.

Figure 20. Risks Added

Risks Added in February 2015							
Risk ID	Contract Package	Risk Description	Probability	Prob Rating	Cost Impact	Time Impact	Risk Rating
16.04	KHG	Permits and approvals by other agencies may not be provided in a timely manner and delay the project.	25%	2	1	2	3
37.15	Airport Utilities	Additional utility easements may be required for Military or private utility companies.	50%	3	3	2	7.5

Figure 21. Risks Deleted

Risks Deleted in February 2015					
Current Risk ID	Contract Package	Risk Description	Comments	Risk Rating	
				Feb. 15	Jan. 15
1.05	Airport Guideway	Escalation rates of commodities (concrete, freight, lumber and steel) may be higher than forecasted.	HART mitigation measures are limited to advance procurement of rail relative to commodities. Tracking commodities as an indicator of market conditions will continue to be monitored by HART.	10	10
1.06	City Center Guideway	Escalation rates of commodities (concrete, freight, lumber and steel) may be higher than forecasted.	HART mitigation measures are limited to advance procurement of rail relative to commodities. Tracking commodities as an indicator of market conditions will continue to be monitored by HART.	10	10
1.09	West Side Station Group	Escalation rates of commodities (concrete, freight, lumber and steel) may be higher than forecasted.	HART mitigation measures are limited to advance procurement of rail relative to commodities. Tracking commodities as an indicator of market conditions will continue to be monitored by HART.	10	10
1.16	Pearl Highlands Garage	Escalation rates of commodities (concrete, freight, lumber and steel) may be higher than forecasted.	HART mitigation measures are limited to advance procurement of rail relative to commodities. Tracking commodities as an indicator of market conditions will continue to be monitored by HART.	10	10
13.05	Airport Guideway	Ongoing/upcoming projects throughout the island may require modifications to utility relocation designs. (ie HDOT, HECO)	HART efforts with utility companies have led to successful mitigation of risk in coordination with utility companies through execution of agreements.	4	4
21.05	Airport Guideway	Strike by shipping contractors may impact delivery of materials.	HART risk has been transferred to the contractor who is in the best position to manage schedule and procurement of materials and shipment of equipment.	5	5
21.06	City Center Guideway	Strike by shipping contractors may impact delivery of materials.	HART risk has been transferred to the contractor who is in the best position to manage schedule and procurement of materials and shipment of equipment.	5	5
24.03	West Oahu/Farrington Highway Guideway	Insufficient HART resources to respond to contractors requests for change orders in a timely manner leads to force account and/or unilateral change orders.	HART roles and responsibilities have been clarified. Backlog of change orders have been caught up. Resources are adequate.	6	6
35.05	Airport Guideway	Due to court delays, limited geotechnical information available at PE level. Additional costs for redesign may be incurred.	Geotechnical data has been collected, designs were back checked and designs will be accessible to DB contractor.	9	9
35.13	Airport Station Group	Due to court delays, limited geotechnical information available at PE level. Additional costs for redesign may be incurred.	Geotechnical data has been collected, designs were back checked and designs will be accessible to DB contractor.	7.5	7.5
35.14	Dillingham Kaka'ako Stations	Due to court delays, limited geotechnical information available at PE level. Additional costs for redesign may be incurred.	Geotechnical data has been collected, designs were back checked and designs will be accessible to DB contractor.	1.5	1.5
122.01	Project wide	Breakdown of specialty equipment/ replacements not available locally.	HART has transferred risk to contractor who is in the best position to manage and control this risk.	4	4
133.13	Airport Station Group	Tolerance and/or dimension discrepancies between station structure and elevator/escalator requirements.	Issue was resolved through a workshop with E/E contractor.	7.5	7.5
134.13	Airport Station Group	Middle Street - Discrepancy in platform tolerance requirements for station construction in platform sections planned to be erected by the Guideway Contractor over Kalihi Stream.	Risk will be transferred to the DB contractor.	7.5	7.5
135.13	Airport Station Group	Incomplete construction scope and/or major discrepancies in station construction documents due to independent preparation by three different designers (station/ canopy/ median landscaping).	Risk will be transferred to the DB contractor either as reference drawings or as completed sealed plans or as unstamped completed plans.	6	6
168.18	Elevator/Escalator	Chinatown station configuration is not set and could pose an issue to the escalator/elevator contractor.	Workshop was held to resolve outstanding issues.	12.5	12.5

**6.7 Community Outreach**

**• Activities this month**

- HART’s public outreach team participated in 20 presentations, meetings and events this month, including meetings with businesses and residents along the rail route. In addition to business groups and community organizations, HART’s community outreach included meetings with local realtors, the Chamber of Commerce, rotary clubs and several Neighborhood Boards. Construction progress and information regarding the project’s finances were the key issues discussed.
- HART’s Executive Director and CEO Dan Grabauskas began a series of monthly appearances on Hawaii News Now’s Sunrise morning program, where he provided the latest information on construction progress and answered questions regarding the project’s finances. HART’s CEO will appear on the television morning show program every fourth Thursday of each month, where he will answer questions from the media and from the public.

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

- *1,765 presentations and events*
- *959 Neighborhood Board meetings*

Figure 22. HART’s public outreach team participated in a Saturday workshop offered to businesses along the route.



HART’s public outreach included the Small Business Fair, which drew more than 200 attendees. HART partners with the Small Business Administration, the Mink Center for Business & Leadership, and the City’s Office of Economic Development for its business outreach programs.

Figure 23. HART’s Executive Director and CEO Dan Grabauskas debuts his monthly appearance on a local morning television program.



HART Executive Director and CEO Dan Grabauskas appeared on Hawaii News Now’s Sunrise morning show in the first in a series of scheduled monthly appearances to provide information on the project’s progress and its finances.

**• Construction Outreach**

- HART was one of the featured exhibitors at this year’s Hawaii Small Business Fair held at Leeward Community College this month. More than 200 small businesses attended the event. As part of HART’s business outreach efforts, our outreach team met with business owners and managers to answer questions about the rail project and signed up businesses to receive HART’s weekly construction and traffic notices. We also provided information regarding the Rail Operations Center and HART’s work with Leeward Community College on a new job prep engineering curriculum. HART’s business resource partners also participated at the event, including Small Business Administration, Mink Center for Business & Leadership, Small Business Development Center, and the State Department of Transportation.
- Construction outreach this month included several meetings with businesses along the alignment, including businesses in the Aiea-Pearl City area, and in Kaka’ako. HART’s outreach team also held another Business Alliance meeting, to provide construction updates and information on traffic changes.
- Realizing traffic is an important concern HART’s efforts to keep the public informed through regular traffic updates are provided to the media, weekly press releases and providing real-time traffic updates using social media remains strong.

• **Community Input**

- HART’s public information team responded to more than 165 inquiries and requests in February that came in via the agency’s website, email and 24-hour hotline. Inquiries this month primarily focused on construction activities, including traffic and questions about the project’s finances.

• **Look Ahead**

Coming in March:

- Meetings for businesses and the community along the rail alignment to provide construction and traffic updates.
- Presentations and community events to provide construction updates and reports on the project’s finances.

**6.8 Staffing**

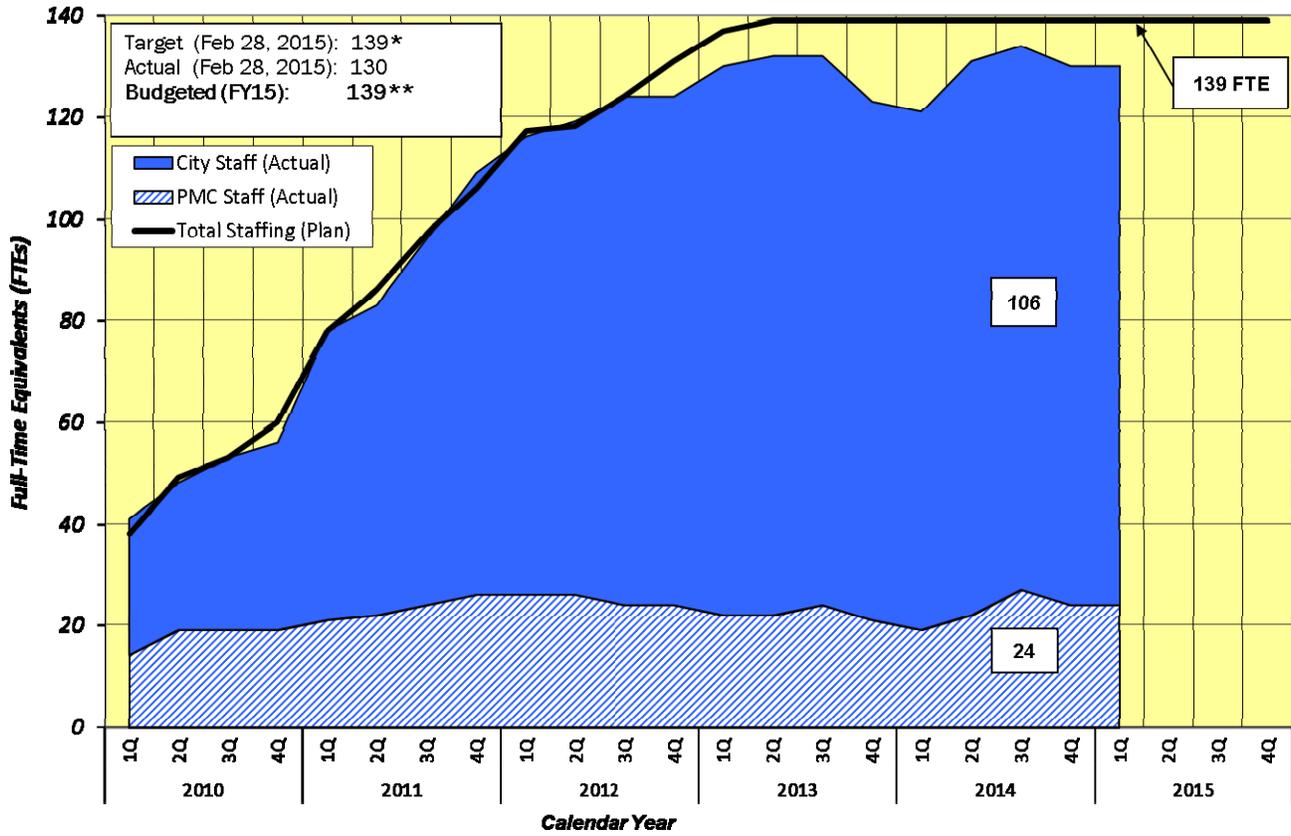
Figure 24. Staffing Activities

Staffing Activities				
Title	Group	New/Existing HART position (City or PMC)	Position Status	Start Month
<b>Executive Management</b>				
Senior Clerk (Receptionist)	Executive Management	Existing (City)	Recruiting via Civil Service	
<b>Design and Construction</b>				
Assistant Project Manager	Construction (KHG)	New (City)	Recruiting	
Assistant Project Manager	Construction (WOFH)	New (City)	Recruiting	
HECO Coordinator	Design & Construction	Existing (City)	Creating Position/Recruiting	
Electrical Engineer	Core Systems	Existing (City)	Recruiting	
<b>Budget and Finance</b>				
Budget Analyst	Budget and Finance	New (City)	Recruiting/Interviewing	
<b>Procurement</b>				
Deputy Director of Procurement & Contracts	Procurement & Contracts	Existing (City)	Recruiting	
<b>Contract Administration and Change</b>				
Transit Contracts Manager* (2)	Contract Administration and Change Management	Existing (City)	Tentative offers accepted	Mar
<b>Planning, Permits &amp; Right-of-Way</b>				
Planner V* (Land Use)	Planning	Existing (City)	Recruiting via Civil Service	
Planner III* (Environmental)	Planning	Existing (City)	Recruiting	
Right-of-Way Agent/Planner	Right-of-Way	PMSC temp, transition to City in Mar 2015	Filled	Mar
<b>Administrative Services</b>				
Personnel Clerk	Administrative Services	New (City)	Recruiting via Civil Service	

\*Per qualifications.

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

Figure 25. Project Staffing (Actual vs. Planned)



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

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

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

# APPENDICES

## Appendix A. Action Items

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

Action Items						
Item No.	Item	Responsible Party	Date Identified	Date Due	Date Completed	Status
1	Provide information and resolution on HECO's 50-foot offset requirement	HART	Mar-14	Mar-15		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.
2	Resolve issue with AHJV regarding cost savings associated with change to 4-car trains	HART	Mar-14	May-15		Open – on-going
3	Resolve HECO issue with Davis-Bacon requirements	HART/FTA	Mar-14	Mar-15		Open – HECO waiver is pending. HART provided MOU to PMOC.
3	<b>Updates resulting from Risk Refresh:</b>					
4a	Update the Contract Packaging Plan	HART	Aug-14	Feb-15		In progress. Draft circulating for internal HART review
4b	Re-baseline Financial Plan	HART	Apr-14	Mar-15		In progress
4c	Re-baseline budget	HART	Apr-14	Apr-15		In progress
4d	Re-baseline MPS	HART	Apr-14	Apr-15		In progress
4f	Update RCMP (including Hold Points and Secondary Mitigation Measures)	HART	Sept-13	Mar-15		In progress – Conference call to be scheduled following receipt of updated RCMP
5	HART to implement plan to address conflict of interest with AECOM acquisition of URS	HART	Jul-14	Mar-15		Open
6	HART to provide to PMOC letters regarding contract status	HART	Dec-14	Mar-15		Pending
7	Prepare a Decision Matrix to track key milestone events	HART	Jan-15	Feb-15		In progress – Matrix was discussed at Feb 2015 meeting
8	Track Cost Containment measures each month at the Cost Containment workshops to evaluate/measure proposed cost containment measures	HART	Jan-15	On-Going		In progress – Matrix was discussed at Feb 2015 meeting
9	Prepare a Vehicle Status Chart to track the production status of all 80 rail transit vehicles	HART	Jan-15	Feb-15		In progress
10	Provide confirmation of the status of the approval of the Interstate Access Management Report (activity includes HDOT/FHWA action)	HART	Jan-15	Prior to Bid of applicable elements		
11	MPS Workshop	HART/PMOC	Feb-15	Mar-15		To be scheduled when Preliminary Update of MPS is available.
12	Provide General Condition and Special Provisions prior to RFP issuance for Airport Guideway and Stations DB Contract	HART	Feb-15	Mar-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 = \$519.8M*

*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 changes being considered for each contract. Changes are tracked by four 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) is complete. It is consistent with the FFGA submittals, including the CPP, MPS, Project Budget and Financial Plan. The RCMP includes 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, the majority of the change orders executed since the BUE draws against this contingency since these were partially defined already.

# HART Project Contingency Drawdown with Details

Data as of 01/29/15

Proposee No.	Project Desc.	Bidder Transfer/Change Description	Contingency Drawdown (F+J)	Contingency Blank
<b>July '12 (Bottoms-Up Estimate)</b>				
1)	FD-240 Farrington Highway Stations Group FD	Budget Transfer to Contract Award less the AGSU FD contract budget	\$58,443	00 03 - Contract Allowance
2)	FD-430 Airport Station Guideway Utilities FD	Budget Transfer to Contract Award less the AGSU FD contract budget	\$2,054,108	00 02 - Allocated Contingency
3)	MM-816 LEED Commissioning Services	Budget Transfer for Contract Award above the LEED Comm. Services contract budget	\$36,013	00 02 - Allocated Contingency
4)	DB-320 Kamehameha Highway Guideway DB	Budget Transfer for Contract Award above the KHS DB contract budget	\$17,000,000	00 02 - Allocated Contingency
5)	DB-120 West Oahu Farrington Highway Guideway DB	Budget Transfer for Ins. Covg per executor CO No. 004	\$3,946,331	00 02 - Allocated Contingency
		July '12 Contingency Drawdown	\$5,881,273	
		<b>July '12 - Ending Contingency Balance</b>	<b>\$649,4</b>	
<b>August '12</b>				
1)	FD-140 West Oahu Stations Group FD	Budget Transfer for Contract Award under WOSC FG contract budget	\$1,808,200	00 02 - Allocated Contingency
2)	FD-330 City Center Guideway Utilities FD	Budget Transfer for Contract Award under COGU FD contract budget	\$5,917,945	00 02 - Allocated Contingency
3)	DB-120 West Oahu Farrington Highway Guideway DB	Excise Change Order No. 17 - Procure and Install Portable Buildings	\$2,800,000	00 02 - Allocated Contingency
		August '12 Contingency Drawdown	\$5,096,145	
		<b>August '12 - Ending Contingency Balance</b>	<b>\$654.5</b>	
<b>September '12</b>				
	N/A	No Contingency Drawdown	\$0	
		<b>September '12 - Ending Contingency Balance</b>	<b>\$654.5</b>	
<b>October '12</b>				
1)	DB-120 West Oahu Farrington Highway Guideway DB	Excise Change Order No. 21 - Builders Risk Insurance Coverage	\$30,000	00 02 - Allocated Contingency
		October '12 Contingency Drawdown	\$46,899	
		<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 the contract budget	\$227,784	00 03 - Contract Allowance
2)	FD-340 Kamehameha Highway Stations Group FD	Budget Transfer for Contract Award under NKS FD the contract budget	\$209,489	00 03 - Contract Allowance
3)	MM-805 General Engineering Consultant	Budget Transfer to align contract budget with committed value	\$1,20,930	00 02 - Allocated Contingency
		November '12 Contingency Drawdown	\$308,623	
		<b>November '12 - Ending Contingency Balance</b>	<b>\$654.7</b>	
<b>December '12</b>				
1)	FD-430 Airport Station Guideway Utilities FD	Excise Contract Amendment No. 01 - Design & Engineering Cost Estimates	\$276,300	00 02 - Allocated Contingency
		December '12 Contingency Drawdown	\$276,000	
		<b>December '12 - Ending Contingency Balance</b>	<b>\$654.4</b>	
<b>January '13</b>				
1)	DB-320 Kamehameha Highway Guideway DB	Excise Change Order No. 01 - Asada Rd alternate analysis	\$4,187	00 02 - Allocated Contingency
		January '13 Contingency Drawdown	\$6,983	
		<b>January '13 - Ending Contingency Balance</b>	<b>\$654.4</b>	
<b>February '13</b>				
1)	DB-120 West Oahu Farrington Highway Guideway DB	Excise Change Order No. 25 - Ins. Covg requirement Andricha BOOV B-1 Weaver FD	\$3,810,119	00 02 - Allocated Contingency
		February '13 Contingency Drawdown	\$1,670,179	
		<b>February '13 - Ending Contingency Balance</b>	<b>\$652.8</b>	
<b>March '13</b>				
1)	FD-240 Farrington Highway Stations Group FD	Excise Contract Amendment No. 08 - Waipahu Station sewer	\$3,350	00 03 - Contract Allowance
2)	DB-200 Maintenance & Storage Facility DB	Excise Change Order No. 06 - Ins. Covg requirements for Crossovers Isolated Joints	\$48,470	00 02 - Allocated Contingency
		March '13 Contingency Drawdown	\$48,820	
		<b>March '13 - Ending Balance</b>	<b>\$652.3</b>	
<b>April '13</b>				
1)	FD-140 West Oahu Stations Group FD	Excise Contract Amendment No. 01 - Second elevator provider	\$31,113	00 03 - Contract Allowance
2)	DB-120 West Oahu Farrington Highway Guideway DB	Budget Transfer to offset Ins. Covg Requirement for Change Order No. 28	\$1,870,730	00 02 - Allocated Contingency
3)	DB-200 Maintenance & Storage Facility DB	Budget Transfer to offset Ins. Covg Requirement for Change Order No. 30	\$434,300	00 02 - Allocated Contingency
4)	DB-320 Kamehameha Highway Guideway DB	Budget Transfer to Align current budget to contract Schedule of Milestones	\$300	00 02 - Allocated Contingency
		April '13 Contingency Drawdown	\$2,028,765	
		<b>April '13 - Ending Contingency Balance</b>	<b>\$654.3</b>	
<b>May '13</b>				
	N/A	No Contingency Drawdown	\$0	
		<b>May '13 - Ending Contingency Balance</b>	<b>\$654.3</b>	
<b>June '13</b>				
		<b>June '13 - Ending Contingency Balance</b>	<b>\$654.3</b>	

# HART Project Contingency Drawdown with Details

Data as of 01/29/15

Project No.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (M\$)	Continuity Code
N/A	N/A	No Contingency Drawdown	\$0	
<b>June '13 Contingency Drawdown</b>				
<b>June '13 - Ending Contingency Balance</b>			<b>\$654.3</b>	
<b>July '13</b>				
FD-430	Airport Section Guideway Utilities FD	Executed Contract Amendment No. 04 - Antenna Engineering Design Services	(\$484,113)	80.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 07 - Archeological Inventory Survey (AIS) Provisional Sum Part 2	(\$100,000)	80.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 08 - Maintenance & Storage Facility Yard Switch Machines	(\$563,000)	80.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 09 - Yard Layout Revisions	(\$514,426)	80.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 10 - Train Configuration	(\$217,000)	80.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 11 - Preliminary Design & Supplemental Project Mgt	(\$894,866)	80.02 - Allocated Contingency
<b>July '13 Contingency Drawdown</b>			<b>(\$5,264,106)</b>	
<b>July '13 - Ending Contingency Balance</b>			<b>\$649.1</b>	
<b>August '13</b>				
DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 30 - Archeological Inventory Survey (AIS) Provisional Part 2	(\$4,800,000)	80.02 - Allocated Contingency
DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 32 - Kalo Channel Station Mod Concept	(\$72,381)	80.02 - Allocated Contingency
DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 34 - Traditional Cultural Property Construction Partial Suspension	(\$1,196,093)	80.02 - Allocated Contingency
DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 36 - Hoopu Station Relocation Design	(\$460,813)	80.02 - Allocated Contingency
DB-320	Maintenance & Storage Facility DB	Executed Change Order No. 06 - Archeological Inventory Survey (AIS) Provisional Part 2	(\$1,500,000)	80.02 - Allocated Contingency
FD-140	West Oahu Stations Group FD	Executed Contract Amendment No. 02 - Canopy Redesign	(\$504,386)	80.02 - Contract Allowance
MM-900	Elevator & Escalator Installment	Budget Transfer for Contract Awarded under EBE IM contract budget	\$3,738,472	80.02 - Allocated Contingency
<b>August '13 Contingency Drawdown</b>			<b>(\$5,824,004)</b>	
<b>August '13 - Ending Contingency Balance</b>			<b>\$643.2</b>	
<b>September '13</b>				
DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 33 - Provisional Sum HDOT Joint Use and Occupancy	(\$4,900,000)	80.02 - Allocated Contingency
DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 35 - Aesthetic Column Design Conflict	(\$120,812)	80.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 12 - HNTB Design Escalator	(\$823,500)	80.02 - Allocated Contingency
FD-240	Farmington Highway Stations Group FD	Executed Contract Amendment No. 10 - NTP 2 Delay/Design Delay from Core Systems Contract & West Oahu Farmington Highway DB Contract	(\$270,865)	80.02 - Allocated Contingency
<b>September '13 Contingency Drawdown</b>			<b>(\$5,116,297)</b>	
<b>September '13 - Ending Contingency Balance</b>			<b>\$637.1</b>	
<b>October '13</b>				
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 13 - Ins. Covg Requirements/Roof Access Modification	(\$282,155)	80.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Budget Transfer for Change Order No. 13 for Ins. Covg Requirements	\$286,500	80.02 - Allocated Contingency
DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 37 - Ala Ike Street Mod/W/36 at DR Horton & Farmington HWY	\$24,815	80.02 - Allocated Contingency
DEOM-920	Core Systems Design Build O&M	Executed Change Order No. 05 - Platform Screen Gates Systems	(\$23,301,657)	80.02 - Unallocated Contingency
FD-530	Dillingham and Kakaako Stations Group FD	Budget Transfer for Contract awarded under DKSG FD contract budget	\$1,157,760	80.01 - Unallocated Contingency
<b>October '13 Contingency Drawdown</b>			<b>(\$22,184,737)</b>	
<b>October '13 - Ending Contingency Balance</b>			<b>\$615.0</b>	
<b>November '13</b>				
DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 38 - Insurance Coverage Requirement Q4 2013	(\$1,800,000)	80.02 - Allocated Contingency
DB-120	West Oahu Farmington Highway Guideway DB	Budget Transfer for Change Order No. 038 for Ins. Covg. Requirements	\$1,800,000	80.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 014 - Preliminary Design & Supplemental Project Management 2	(\$214,840)	80.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 015 - Yard Layout Revisions/RFF Structural Steel Modification	(\$1,723,000)	80.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Budget Transfer for Change Order No. 015 for Ins. Covg. Requirements	\$223,000	80.02 - Allocated Contingency
FD-530	City Center Guideway Utilities FD	Executed Contract Amendment No. 01 - Archeological Inventory Survey (AIS) Suspension	(\$532,800)	80.02 - Allocated Contingency
FD-240	Farmington Highway Station Group FD	Budget Transfer for Contract Award for FHSG FD II	(\$2,700,205)	80.01 - Unallocated Contingency
<b>November '13 Contingency Drawdown</b>			<b>(\$4,947,851)</b>	
<b>November '13 - Ending Contingency Balance</b>			<b>\$610.0</b>	
<b>December '13</b>				
FD-430	Airport Section Guideway Utilities FD	Executed Contract Amendment No. 05 - Ulena St. redesign scope impact	(\$248,353)	80.02 - Allocated Contingency
FD-140	West Oahu Station Group FD	Executed Contract Amendment No. 03 - Design relocation of HECO 48kV and fiber optic lines	(\$23,828)	80.02 - Allocated Contingency
<b>December '13 Contingency Drawdown</b>			<b>(\$272,886)</b>	
<b>December '13 - Ending Contingency Balance</b>			<b>\$609.8</b>	
<b>January '14</b>				
FD-430	Airport Section Guideway Utilities FD	Executed Contract Amendment No. 06 - Archeological Inventory Survey (AIS) Suspension	(\$2,308,450)	80.02 - Allocated Contingency
FD-530	City Center Guideway Utilities FD	Executed Contract Amendment No. 02 - Soil Resistance Test and Max Sag Calculation	(\$406,153)	80.02 - Allocated Contingency
MM-290	Construction Engineering & Inspection West	Budget Transfer for Contract Award less than CE&I West contract budget	\$181,068	80.02 - Allocated Contingency
MM-595	Construction Engineering & Inspection East	Budget Transfer for Contract Award less than CE&I East contract budget	\$1,102,817	80.02 - Allocated Contingency
<b>January '14 Contingency Drawdown</b>			<b>(\$3,428,718)</b>	
<b>January '14 - Ending Contingency Balance</b>			<b>\$608.3</b>	

# HART Project Contingency Drawdown with Details

Date as of 01/28/15

PRJBL No.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (YTD)	Contingency Code
<b>February '14</b>				
		<b>Beg. Balance:</b>	<b>\$608.3</b>	
17	FD-431 Airport Station Guideway Utilities FD	Executed Contract Amendment No. 07 - Restit & Sun, Seebach Investigation	(17,373.00)	01.02 - Allocated Contingency
31	HART ODC	Budget Transfer for Contract Award - Archeological & Cultural Monitoring contract	(511,437.71)	01.02 - Allocated Contingency
32	MM-810 GECII	Budget Transfer for Contract Award - Archeological & Cultural Monitoring & Core Systems Support contracts	(5,426.73)	01.02 - Allocated Contingency
41	MM-981 Archeological & Cultural Monitoring	Budget Transfer for Contract Award - Archeological & Cultural Monitoring contract	36,781.11	01.02 - Allocated Contingency
51	MM-982 Core Systems Support	Budget Transfer for Contract Award - Core Systems Support contract	\$4,398,389	01.02 - Allocated Contingency
		<b>February '14 Contingency Drawdown</b>	<b>(1,132,900)</b>	
<b>February '14 - Ending Contingency Balance</b>				
		<b>Beg. Balance:</b>	<b>\$608.2</b>	
17A	17A	17A Contingency Drawdown	\$0	
		<b>March '14 Contingency Drawdown</b>	<b>\$0</b>	
<b>March '14 - Ending Contingency Balance</b>				
		<b>Beg. Balance:</b>	<b>\$608.2</b>	
17	FD-431 West Oahu Stations Group FD	Executed Contract Amendment No. 04 - East Kapolei Staff Room Pre-Final Submittal	(800,243.81)	01.03 - Contract Allowance
31	FD-433 Airport Station Guideway Utilities FD	Executed Contract Amendment No. 05 - Notice-to-Proceed 435/Provisional Sum for Design Support during bid	(1,530,114)	01.03 - Contract Allowance
32	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 015 - Rail Lubricators	(1,029,000)	01.02 - Allocated Contingency
41	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 017 - Rail Layout Reconfiguration/Automated Train Operation Design	(2,125,000)	01.02 - Allocated Contingency
51	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 018 - Rail Material Storage Plan	(1,200,000)	01.02 - Allocated Contingency
61	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 019 - Train Wash Facility Siting	\$0	01.02 - Allocated Contingency
71	DB-120 West Oahu F Arranger Highway Guideway DB	Executed Change Order No. 040 - Precast Yard Alternative Site	(12,400,330)	01.02 - Allocated Contingency
81	DB-120 West Oahu F Arranger Highway Guideway DB	Executed Change Order No. 041 - Revised Track Alignment and Profile	(448,338)	01.02 - Allocated Contingency
91	DB-120 West Oahu F Arranger Highway Guideway DB	Executed Change Order No. 042 - Sanitary Sewer Communications Utility Relocation @ North South Rd	(17,468,343)	01.02 - Allocated Contingency
101	DB-320 Kamehameha Highway Guideway DB	Executed Change Order No. 005 - Repair Clear Spacing Design Criteria	\$0	01.02 - Allocated Contingency
		<b>April '14 Contingency Drawdown</b>	<b>(17,468,343)</b>	
<b>April '14 - Ending Contingency Balance</b>				
		<b>Beg. Balance:</b>	<b>\$599.7</b>	
17	FD-140 West Oahu Stations Group FD	Budget Transfer for Executed Contract Amendment No. 05 - Final Design for relocated Parcel at Station	(220,231)	01.02 - Allocated Contingency
31	DB-520 Kamehameha Highway Guideway DB	Executed Change Order No. 008 - APEX work restrictions and/or under utility removal	(626,974)	01.02 - Allocated Contingency
32	DB-320 Kamehameha Highway Guideway DB	Executed Change Order No. 009 - Emergency walkway/insurance covd - Requirements 2013	(520,000)	01.02 - Allocated Contingency
41	DBOM-820 Core Systems Contract, Design & Build CIM	Executed Change Order No. 007 - Relocate TPSS to system 5 w #3	\$387,054	01.02 - Allocated Contingency
51	MM-915 HOOT MOT Contract	Budget Transfer for Executed Contract Amendment No. 002 - Increase TAM Contract Value	\$297,381	01.02 - Allocated Contingency
61	MM-975 WSF LEED Consultant	Budget Transfer for Executed Contract Amendment No. 001 - LEED measurements and verification plan	(50,000)	01.02 - Allocated Contingency
71	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 020 - CSC consolidated changes construction	(322,500,000)	01.01 - Unallocated Contingency
81	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 025 - O&M reconfiguration	(170,000)	01.02 - Allocated Contingency
		<b>May '14 Contingency Drawdown</b>	<b>(162,210,919)</b>	
<b>May '14 - Ending Contingency Balance</b>				
		<b>Beg. Balance:</b>	<b>\$568.4</b>	
17	DB-200 Maintenance & Storage Facility DB	Board Approved RFCC 00010 - Amendment 1 Non-Rail Expiration	(56,000,000)	01.02 - Allocated Contingency
		<b>June '14 Contingency Drawdown</b>	<b>(56,000,000)</b>	
<b>June '14 - Ending Contingency Balance</b>				
		<b>Beg. Balance:</b>	<b>\$563.4</b>	
17	DBOM-820 Core Systems Contract, Design & Build CIM	Executed Change Order No. 008 - Platform Screen Doors Modification	(7,068,000)	01.02 - Allocated Contingency
31	DB-200 Maintenance & Storage Facility DB	Budget Transfer for Contract Award above the Real Estate Map & Survey budget	(1,342,123)	01.02 - Allocated Contingency
41	DB-200 Maintenance & Storage Facility DB	Budget Transfer to Project Contingency from remaining amount - Changes balance	\$1,007,393	01.02 - Allocated Contingency
51	DB-120 West Oahu F Arranger Highway Guideway DB	Budget Transfer to Project Contingency from remaining amount - Changes balance	\$1,538,191	01.02 - Allocated Contingency
		<b>July '14 Contingency Drawdown</b>	<b>\$321,161</b>	
<b>July '14 - Ending Contingency Balance</b>				
		<b>Beg. Balance:</b>	<b>\$563.7</b>	
17	DB-520 Kamehameha Highway Guideway DB	Executed Change Order No. 010 - Delay in issuance of NCE-500-510-see 2 & 3	(11,209,300)	01.02 - Allocated Contingency
31	FD-140 West Oahu Stations Group FD	Executed Amendment No. 006 - Passenger screen gates	(600,233)	01.02 - Allocated Contingency
41	DBB-505 Airport Station Utility Construction DBE	Budget Transfer for Contract Award above Airport Station Utility Construction original budget	(2,555,323)	01.02 - Allocated Contingency
51	MM-946 On Call Hazmat Removal Consultant	Budget Transfer due to scope transfer from RCM to Hazmat consultant	\$470,323	01.02 - Allocated Contingency
61	MM-946 On Call Contract	Budget Transfer for Contract Award above On Call Contractor original budget	(17,304,351)	01.02 - Allocated Contingency
		<b>August '14 Contingency Drawdown</b>	<b>(14,338,186)</b>	
<b>August '14 - Ending Contingency Balance</b>				
		<b>Beg. Balance:</b>	<b>\$559.4</b>	
17	DB-950 O&P Consultant Contract	Budget Transfer to unallocated contingency as estimate at completion is less than current budget	(750,000)	01.02 - Allocated Contingency
31	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 027 - Traditional Cultural Properties (TCP) Suspension	(4,793,537)	01.02 - Allocated Contingency
41	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 028 - Insurance Coverage Requirements 2014	(1,120,300)	01.02 - Allocated Contingency
51	DB-520 Kamehameha Highway Guideway DB	Executed Change Order No. 011 - Revised Vehicle Criteria/Construction Safety Security Plan	(2,211,500)	01.02 - Allocated Contingency
61	DB-520 Kamehameha Highway Guideway DB	Executed Change Order No. 012 - Insurance Coverage Requirements 8/17/13 - 8/30/14	(1,400,000)	01.02 - Allocated Contingency
71	DB-120 West Oahu F Arranger Highway Guideway DB	Executed Change Order No. 045 - Standard Specification Revision 2.0	(3,950,000)	01.02 - Allocated Contingency
81	DB-120 West Oahu F Arranger Highway Guideway DB	Executed Change Order No. 048 - Insurance Coverage Requirements 2014	(3,540,000)	01.02 - Allocated Contingency
91	FD-533 Core System Guideway Utilities FD	Executed Contract Amendment 004 - Aesthetic Station Column	(1,271,330)	01.02 - Allocated Contingency
		<b>September '14</b>		
		<b>Beg. Balance:</b>	<b>\$559.4</b>	
17	DB-200 Maintenance & Storage Facility DB	Budget Transfer to unallocated contingency as estimate at completion is less than current budget	(750,000)	01.02 - Allocated Contingency
31	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 029 - Traditional Cultural Properties (TCP) Suspension	(4,793,537)	01.02 - Allocated Contingency
41	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 028 - Insurance Coverage Requirements 2014	(1,120,300)	01.02 - Allocated Contingency
51	DB-520 Kamehameha Highway Guideway DB	Executed Change Order No. 011 - Revised Vehicle Criteria/Construction Safety Security Plan	(2,211,500)	01.02 - Allocated Contingency
61	DB-520 Kamehameha Highway Guideway DB	Executed Change Order No. 012 - Insurance Coverage Requirements 8/17/13 - 8/30/14	(1,400,000)	01.02 - Allocated Contingency
71	DB-120 West Oahu F Arranger Highway Guideway DB	Executed Change Order No. 045 - Standard Specification Revision 2.0	(3,950,000)	01.02 - Allocated Contingency
81	DB-120 West Oahu F Arranger Highway Guideway DB	Executed Change Order No. 048 - Insurance Coverage Requirements 2014	(3,540,000)	01.02 - Allocated Contingency
91	FD-533 Core System Guideway Utilities FD	Executed Contract Amendment 004 - Aesthetic Station Column	(1,271,330)	01.02 - Allocated Contingency

# HART Project Contingency Drawdown with Details

Data as of 01/28/15

#	Project No.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (+/-)	Contingency Code
8)	FD-630	City Center Guideway Utilities FD	Executed Contract Amendment 005 - City Center Section Rescue Cart Scope Impact	(\$72,000)	90.02 - Allocated Contingency
9)	FD-630	City Center Guideway Utilities FD	Executed Contract Amendment 001 - Special Provisions Update/Shear Wave Analysis	(\$27,930)	90.03 - Contract Allowance
10)	FD-340	Kamehameha Highway Stations Group FD	Executed Contract Amendment 003 - Historic Archibed/Replace Highway Sign	(\$71,911)	90.03 - Contract Allowance
11)	FD-340	Kamehameha Highway Stations Group FD	Executed Contract Amendment 005 - Aided Bus Shelters at Aloha Station	(\$28,893)	90.03 - Contract Allowance
12)	FD-340	Kamehameha Highway Stations Group FD	Executed Contract Amendment 010 - Aesthetic Station Column and Peel Parlor Station Redesign	(\$238,760)	90.02 - Allocated Contingency
13)	FD-430	Airport Section Guideway Utility FD	Executed Contract Amendment 011 - Airport Section Rescue Cart Scope Impact	(\$45,000)	90.02 - Allocated Contingency
14)	FD-430	Airport Section Guideway Utility FD	Executed Contract Amendment 017 - Traffic Signal Control UH/WH/Honolulu Access Road	(\$67,727)	90.03 - Contract Allowance
15)	FD-140	West Oahu Stations Group FD	Executed Contract Amendment 007 - Traffic Signal Control UH/WH/Honolulu Access Road	(\$9,338,161)	90.03 - Contract Allowance
<b>September '14 Contingency Drawdown</b>					
<b>September '14 - Ending Contingency Balance</b>				<b>\$550.1</b>	
<b>October '14</b>				<b>Beg. Balance</b>	
1)	DBOM-920	Core Systems Contract Design Build O/M	Executed Change Order No. 008 - WOPH Guideway Alignment for CSC	(\$145,000)	90.02 - Allocated Contingency
2)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 028 - Escalator due to Schedule Impacts	(\$8,500,000)	90.01 - Unallocated Contingency
3)	DB-920	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)	90.02 - Allocated Contingency
5)	FD-440	Airport Stations Group FD	Executed Contract Amendment No. 002 - Extension of PM Services	(\$730,000)	90.02 - Allocated Contingency
6)	FD-440	Airport Stations Group FD	Executed Contract Amendment No. 003 - Add Pedestrian Bridges to H/A Stations	(\$434,840)	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	(\$763,760)	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	(\$248,530)	90.01 - Unallocated Contingency
11)	FD-140	West Oahu Stations Group FD	Executed Contract Amendment No. 010 - Temporary Parking Lot Near UH/WH/OHWO & Honolulu Sewerage Holding Tank	(\$109,200)	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>October '14 - Ending Contingency Balance</b>				<b>\$531.8</b>	
<b>November '14</b>				<b>Beg. Balance</b>	
1)	DBOM-920	Core Systems Contract Design Build O/M	Executed Change Order No. 012 - Delete Ticket Vending Machines	\$10,350,000	90.02 - Allocated Contingency
2)	FD-650	Billingham Kaka'ia Stations Group FD	Executed Contract Amendment No. 002 - General Excise Tax credit	(\$255,586)	90.02 - Allocated Contingency
<b>November '14 Contingency Drawdown</b>					
<b>November '14 - Ending Contingency Balance</b>				<b>\$542.49</b>	
<b>December '14</b>				<b>Beg. Balance</b>	
1)	DBOM-920	Core Systems Contract Design Build O/M	Executed Change Order No. 010 - HRT Train Mockup Shipment/Delivery	(\$63,715)	90.02 - Allocated Contingency
2)	DBOM-920	Core Systems Contract Design Build O/M	Executed Change Order No. 013 - HECC Connection Charges	(\$150,000)	90.02 - Allocated Contingency
3)	DB-320	Kamehameha Highway Guideway DB	Executed Change Order No. 014 - Escalator due to Schedule Impacts	(\$3,500,000)	90.02 - Allocated Contingency
4)	DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 048 - Escalator due to Schedule Impacts	(\$15,000,000)	90.01 - Unallocated Contingency
<b>December '14 Contingency Drawdown</b>					
<b>December '14 - Ending Contingency Balance</b>				<b>\$523.78</b>	
<b>January '15</b>				<b>Beg. Balance</b>	
1)	DBOM-920	Core Systems Contract Design Build O/M	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 - Escalator due to Schedule Impacts Subcontractor Ameron Aggregate	(\$264,413)	90.01 - Unallocated Contingency
3)	DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 051 - Escalator due to Schedule Impacts Subcontractor Artu/Graffi Paint	(\$14,476)	90.01 - Unallocated Contingency
4)	DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 052 - Escalator due to Schedule Impacts Subcontractor HPD Spec Duty Officer	(\$156,123)	90.01 - Unallocated Contingency
5)	DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 053 - Escalator due to Schedule Impacts Subcontractor MESA Blocks	(\$71,683)	90.01 - Unallocated Contingency
6)	DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 054 - Escalator due to Schedule Impacts Subcontractor Road Builder	(\$716,655)	90.01 - Unallocated Contingency
7)	DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 055 - Escalator due to Schedule Impacts Subcontractor Post Tension Strand Accessories	(\$75,177)	90.01 - Unallocated Contingency
8)	DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 056 - Escalator due to Schedule Impacts Subcontractor Ameron Rolled Drilled Shaft Castings	(\$102,675)	90.01 - Unallocated Contingency
9)	DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 057 - Escalator due to Schedule Impacts Subcontractor PAC Electric	(\$777,863)	90.01 - Unallocated Contingency
10)	DBOM-920	Core Systems Contract Design Build O/M	Executed Change Order No. 014 - Eliminate Secondary Emergency Access at MSF	\$50,000	90.02 - Allocated Contingency
11)	FD-430	Airport Section Guideway Utilities FD	Executed Contract Amendment No. 012 - Contaminated Soil, 7 Piers Wayside Lubricators	(\$59,700)	90.02 - Allocated Contingency
12)	FD-550	Billingham Kaka'ia Stations Group FD	Executed Contract Amendment No. 003 - Scope for Downtown Star/Civic Center Sta/Kaka'ia Sta & Bike Ramps	(\$480,174)	90.02 - Allocated Contingency
13)	FD-550	Billingham Kaka'ia Stations Group FD	Executed Contract Amendment No. 004 - Ala Moana Transit Ctr-Chinatown Sta Geotech Expedited Station Loads	(\$816,177)	90.02 - Allocated Contingency
14)	FD-240	Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 005 - Addition of Bike Ramps to FHSG Stations	(\$17,744)	90.02 - Allocated Contingency
15)	FD-240	Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 006 - Addition of 30 Guideway Section West Loch and Wai'anae Stations	(\$57,000)	90.02 - Allocated Contingency
16)	FD-240	Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 007 - MODS to West Loch and Wai'anae Stations	(\$38,000)	90.02 - Allocated Contingency
<b>January '15 Contingency Drawdown</b>					
<b>January '15 - Ending Contingency Balance</b>				<b>\$519.79</b>	
<b>*January '15 - Board Approved Changes Only - Pending execution</b>					
1)	DBOM-920	Core Systems Contract Design Build O/M	Test and Storage Track Changes at MSF	(\$2,510,000)	90.02 - Allocated Contingency
2)	DB-120	West Oahu Farrington Highway Guideway DB	Procure & deliver Modular Buildings to LCC (Conditionally Approved)	(\$1,919,021)	90.01 - Unallocated Contingency
<b>Subtotal Board Approved Contingency Drawdown</b>					
<b>February '15 - Ending Contingency Balance (Pending Execution)</b>				<b>\$515.4</b>	

Appendix C. Project Cost Reports (data as of Jan. 30, 2015)

Project Costs by Contract

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



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

CPP No.	Title	A		B		C=A+B		D		E		F	
		Original	Changes	COMMITTED	Changes	Current*	AFF	AFF**	INCURRED	To Date	INCURRED	PERCENT	
													%
A RT	Project Wide A RT	0	0	0	0	0	0	0	0	0	0	0	0%
CCH-100	Inactive HART/Qty.CCH	15,348,443	0	0	0	15,348,443	0	14,325,228	0	0	0	0	37%
CCH-101	HART/Qty Dept of BFS	105,092	0	0	0	105,092	0	0	0	0	0	0	0%
CCH-102	HART/Qty DDC Land Division	256,201	0	0	0	256,201	0	173,182	0	0	0	0	68%
CCH-107	HART/Qty Corporation Counsel (CCO R)	1,692,366	0	0	0	1,692,366	0	149,466	0	0	0	0	9%
CCH-108	Board of Water Supply (BWS)	928,325	0	0	0	928,325	0	928,325	0	0	0	0	100%
DB-120	West Oahu/Farrington Hwy Guideway	482,924,000	166,476,447	649,400,447	0	649,400,447	0	362,186,350	0	0	0	0	56%
DB-200	Maintenance & Storage Facility DB	185,238,000	79,100,008	274,338,008	0	274,338,008	0	171,394,237	0	0	0	0	63%
DB-320	Kamehameha Hwy Guideway DB	372,150,000	16,362,363	388,512,363	0	388,512,363	0	131,817,119	0	0	0	0	34%
DBB-185	West Side SG Construction	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-275	Pearl Highlands Pkg. Str. Constr. OLD	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-470	Airport Station Group Constr.	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-505	Airport Section Utilities Constr.	28,416,974	0	28,416,974	0	28,416,974	0	0	0	0	0	0	0%
DBB-510	City Center Section Utilities Constr.	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-520	Airport-City Center Guideway Constr.	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-525	Airport Section Guideway 7 Pier Const.	3,973,000	0	3,973,000	0	3,973,000	0	0	0	0	0	0	0%
DBB-580	Dillingham/Kaka'ako SG Construction	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-600	UHWD Pkg/Hoopili Str Finishes Constr.	0	0	0	0	0	0	0	0	0	0	0	0%
D80 M-9-20	Core Systems Design Build O/M	573,782,793	21,357,205	595,139,998	0	595,139,998	0	112,785,639	0	0	0	0	19%
FD-140	West Oahu Station Group Final Design	7,788,000	1,771,305	9,559,305	0	9,559,305	0	7,368,160	0	0	0	0	83%
FD-240	Farrington Highway Stations Group 2	9,300,636	4,897,349	14,198,045	0	14,198,045	0	12,332,344	0	0	0	0	87%
FD-245	Pearl Highlands Pkg. Str. FD OLD	0	0	0	0	0	0	0	0	0	0	0	0%
FD-340	Kamehameha Hwy Station Group FD	8,702,532	0	8,702,532	0	8,702,532	0	7,866,141	0	0	0	0	90%
FD-430	Airport Sect. Guideway/Utilities FD	38,840,960	3,769,872	42,610,832	0	42,610,832	0	37,327,164	0	0	0	0	88%
FD-440	Airport Station Group FD	10,177,365	1,224,840	11,402,205	0	11,402,205	0	9,718,742	0	0	0	0	85%
FD-530	City Center Guideway/Utilities FD	48,948,220	1,282,803	50,231,023	0	50,231,023	0	36,888,628	0	0	0	0	81%
FD-550	Dillingham and Kaka'ako SG FD	18,321,818	652,529	18,974,347	0	18,974,347	0	10,386,863	0	0	0	0	55%
FD-600	UHWD Pkg-Hoopili Station Finishes FD	0	0	0	0	0	0	0	0	0	0	0	0%
HRT-200	HART Labor	35,851,942	0	35,851,942	0	35,851,942	0	34,646,052	0	0	0	0	96%
HRT-201	HART DDC	15,759,154	0	15,759,154	0	15,759,154	0	13,330,136	0	0	0	0	85%
M-800	Project Wide Fare Collection DFJ	0	0	0	0	0	0	0	0	0	0	0	0%
M-830	Elevators & Escalators Install/Maint	50,982,714	0	50,982,714	0	50,982,714	0	3,463,172	0	0	0	0	7%
MM-280	WOPR/HSG CE&I(REPA CKR/GED)	0	0	0	0	0	0	0	0	0	0	0	0%

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



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

CPP No	Title	A		B		C=A+B		D		E		F	
		Original	Changes	COMMITTED	Changes	Current*	AFE	AFE**	Incurred To Date	Incurred To Date	PERCENT	PERCENT	
MM-290	Construction Engng & Inspection West	CPFF	54,232,480	0	54,232,480	0	16,650,000	8,732,010	0	0	0	0	16%
MM-385	Pearl Highlands Garage and Ramps CEI	CPFF	0	0	0	0	0	0	0	0	0	0	0%
MM-500	Repackaged into MM959 CEI East	CPFF	0	0	0	0	0	0	0	0	0	0	0%
MM-525	Repackaged into MM959 CEI East	CPFF	0	0	0	0	0	0	0	0	0	0	0%
MM-590	Repackaged into MM959 CEI East	CPFF	0	0	0	0	0	0	0	0	0	0	0%
MM-595	Construction Engng & Inspection East	CPFF	63,083,417	0	63,083,417	15,257,000	6,165,986	0	0	0	0	0	10%
MM-600	UHWD Pkg. Hoopili Stn Finishes CEI	CPFF	0	0	0	0	0	0	0	0	0	0	0%
MM-900	Program Mgt. Support Consult (PM 9C-1)	CPFF	36,727,162	0	36,727,162	20,700,000	0	0	0	0	0	0	0%
MM-901	Program Mgt. Support Consult (PM 9C-2)	CPFF	33,376,897	0	33,376,897	26,680,790	0	0	0	0	0	0	83%
MM-905	MM-905 Gen Engng Consult EIS/PE	CPFF	0	78,564,942	78,564,942	78,564,942	0	0	0	0	0	0	34%
MM-910	MM-910 Gen Engng Consult FD-Construct	CPFF	150,000,000	0	150,000,000	150,000,000	0	0	0	0	0	0	100%
MM-913	MM-913 Gen Engng. Reocomplete	CPFF	46,143,277	0	46,143,277	13,078,208	0	0	0	0	0	0	27%
MM-915	HDOT Traffic Mgmt. Consult.	T&M	1,600,000	1,400,000	3,000,000	3,000,000	0	0	0	0	0	0	67%
MM-920	HDOT Coordination Const. WDRH	T&M	3,000,000	7,500,000	10,500,000	10,500,000	0	0	0	0	0	0	57%
MM-921	HDOT Coordination Const. KHIS	T&M	40,000,000	-1,400,000	38,600,000	38,600,000	0	0	0	0	0	0	30%
MM-922	HDOT Coord. Const. Airport	T&M	12,000,000	-5,600,000	6,400,000	6,400,000	0	0	0	0	0	0	28%
MM-923	HDOT Coordination Const. City Center	T&M	0	0	0	0	0	0	0	0	0	0	0%
MM-925	HDOT Labor - Highway Group	T&M	550,000	0	550,000	815,633	0	0	0	0	0	0	210%
MM-926	HDOT Labor - Airport Group	T&M	0	0	0	0	0	0	0	0	0	0	0%
MM-930	HDOT State SOA Manager & Consultant	T&M	1,272,400	583,142	1,855,542	843,167	0	0	0	0	0	0	34%
MM-935	Real Estate Consultant	T&MTz	3,000,000	3,327,665	6,327,665	4,817,665	0	0	0	0	0	0	46%
MM-937	Real Estate Consultant - Maps/Surv.	CPFF	2,998,000	0	2,998,000	1,500,000	0	0	0	0	0	0	15%
MM-940	Kakao Consultant	T&MTz	1,000,000	0	1,000,000	500,000	0	0	0	0	0	0	43%
MM-945	On-Call Contractor	T&MTz	1,000,000	1,000,000	2,000,000	1,800,000	0	0	0	0	0	0	27%
MM-946	On-Call Hazmat Removal Contractor	T&MTz	3,075,000	0	3,075,000	1,000,000	0	0	0	0	0	0	57%
MM-950	OCIP Consultant	FFF	1,250,000	0	1,250,000	833,750	0	0	0	0	0	0	63%
MM-951	Owner-Controlled Insurance Program	FFF	41,000,000	0	41,000,000	41,000,000	0	0	0	0	0	0	48%
MM-960	Archaeological & Cultural Monitoring	T&M	459,517	0	459,517	417,426	0	0	0	0	0	0	13%
MM-962	CORE Systems Support	CPFF	43,888,989	0	43,888,989	3,600,000	0	0	0	0	0	0	13%
MM-964	Safety and Security	FFF	4,699,573	0	4,699,573	1,200,000	0	0	0	0	0	0	25%
MM-975	LEED Commissioning Services for MS F	T&M	278,680	3,910	282,590	282,540	0	0	0	0	0	0	20%
OTHER	Project Wide		0	0	0	0	0	0	0	0	0	0	0%
PA-101	Programmatic Agreement Humanities	PA	0	0	0	0	0	0	0	0	0	0	0%

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



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

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CPP No	Title	A		B		C=A+B		D		E		F	
		Original	Changes	COMMITTED	Current*	AFE	AFE**	INCURRED	INCURRED To Date	PERCENT	PERCENT		
PA-102	Programmatic Agreement HPC	400,000	0	0	400,000	2,000,000					-44,032		-11%
PA-103	Programmatic Agreement HPC Park Ingr	0	0	0	0	0					0		0%
ROW	Real Estate / Right-of-Way	81,254,663	0	0	81,254,663	121,982					78,773,347		86%
UTIL	Utilities by Utility Companies	80,580,619	4,530,107	4,530,107	85,080,727	71,404,049					14,341,671		15%
<b>Total Project:</b>		<b>2,611,557,379</b>	<b>366,813,467</b>	<b>366,813,467</b>	<b>2,968,370,866</b>	<b>2,403,866,744</b>					<b>1,388,307,046</b>		

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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)

Project Costs by SCC – Summary

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

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



SCC	Title	A		B		C=A+B		D	E	F	G	H=C-G	I
		Baseline	Transfers	Current	Current	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	39,357,877	1,153,572,824	539,777,407	30,086,846	0	1,153,572,824	0	1,153,572,824	0	131,790,527	
20.	Stations, Stops, Terminals, Intermodal	421,804,740	(25,138,472)	396,666,268	50,982,714	0	0	396,666,268	0	396,666,268	0	3,439,172	
30.	Support Facilities: Yards, Shops, Admin	32,535,015	21,771,122	114,306,137	114,306,137	17,962,473	0	114,306,137	0	114,306,137	0	54,745,769	
40.	Sitework & Special Conditions	983,178,121	50,250,666	1,033,428,787	717,671,904	158,317,796	3,106,244	1,033,428,787	0	1,033,428,787	0	388,169,360	
50.	Systems	221,284,301	25,296,231	246,580,532	232,420,319	27,088,089	0	246,580,532	0	246,580,532	0	15,952,818	
60.	ROW, Land, Existing Improvements	197,997,947	528,621	197,926,568	94,584,489	329,820	5,000,000	197,926,568	0	197,926,568	0	81,946,203	
70.	Vehicles	186,829,020	4,713,997	191,543,017	181,543,017	1,514,720	(68,486)	181,543,017	0	181,543,017	0	21,203,394	
80.	Professional Services	1,087,830,119	6,976,145	1,094,806,264	1,015,358,152	118,709,136	(12,538,238)	1,094,806,264	0	1,094,806,264	0	651,455,688	
A.C.	Provisional Pay Requests	0	0	0	0	0	0	0	0	0	0	59,035,394	
<b>Subtotal:</b>		4,305,074,410	123,755,987	4,428,830,397	2,356,644,134	353,910,890	(4,500,510)	4,428,830,397	0	4,428,830,397	0	1,387,738,325	
<b>2. NTP</b>													
NTP	Authorized For Expenditure	0	0	0	0	2,043,356,615	0	0	0	0	0	0	
<b>Subtotal:</b>		0	0	0	0	2,043,356,615	0	0	0	0	0	0	
<b>3. Contingency</b>													
CNTF	Allocated Contingency	541,689,343	(70,266,787)	471,422,556	11,728,732	6,601,239	206,642,545	471,422,556	0	471,422,556	0	568,121	
PRJ	Unallocated Contingency	101,871,170	(59,489,200)	48,381,970	0	0	0	48,381,970	0	48,381,970	0	0	
<b>Subtotal:</b>		643,560,513	(129,755,987)	519,804,526	11,728,732	6,601,239	206,642,545	519,804,526	0	519,804,526	0	568,121	
<b>4. Finance Charges - Eligible</b>													
DTH	Finance Charges	173,058,243	0	173,058,243	0	0	0	173,058,243	0	173,058,243	0	0	
<b>Subtotal:</b>		173,058,243	0	173,058,243	0	0	0	173,058,243	0	173,058,243	0	0	
<b>ETA TOTAL PROJECT COSTS 5,124,693,166</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	42,000,000	0	0	
<b>Subtotal:</b>		42,000,000	0	42,000,000	0	0	0	42,000,000	0	42,000,000	0	0	
<b>INELEGIBLE COSTS 42,000,000</b>													
<b>Total Project:</b>		5,163,693,166	(9)	5,163,693,166	2,968,370,866	2,403,866,744	202,142,035	5,163,693,166	0	5,163,693,166	0	1,388,307,046	

\* 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

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

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

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SCC	Title	BUDGET		D	E	F	G	H=C-G	I	
		Baseline	Transfers							COMMITTED
		A	B	C=A+B	D	E	F	G	H=C-G	I
		Current	Current	Current*	AFE**	Changes ID's***	Est. At Completion****	Variance	Incurred To Date	
<b>1. Subtotal 10 - 80 SCC Costs</b>										
10.00	Guideway & Track Elements	1,114,215,147	39,337,677	1,153,572,824	539,777,407	30,036,846	0	1,153,572,824	0	131,790,627
10.04	Guideway: Aerial Structure	1,022,380,871	36,381,516	1,058,762,387	454,474,570	20,375,119	0	1,058,762,387	0	82,854,750
10.08	Guideway: Retained Cut or Fill	7,492,344	(1,056,888)	6,436,256	6,436,256	0	0	6,436,256	0	0
10.09	Track: Direct Fixation	79,347,205	3,097,822	82,445,027	74,637,831	9,630,851	0	82,445,027	0	38,935,777
10.11	Track: Ballasted	3,293,724	(335,849)	2,957,875	2,697,875	0	0	2,697,875	0	0
10.12	Track: Special (Switches, turnouts)	1,700,603	1,530,876	3,231,479	1,530,876	30,876	0	3,231,479	0	0
20.00	Stations, Shops, Terminals, Intermodal	421,804,740	(20,000,000)	401,804,740	50,982,714	0	0	386,666,268	0	3,439,172
20.01	At-grade station, stop, shelter,...	6,111,332	0	6,111,332	0	0	0	6,111,332	0	0
20.02	Aerial Station, stop, shelter, mall	294,663,457	(21,400,000)	273,163,457	0	0	0	273,163,457	0	0
20.06	Automobile parking multi-story str	66,408,765	0	66,408,765	0	0	0	66,408,765	0	0
20.07	Elevators, Escalators	54,721,186	(3,738,472)	50,982,714	50,982,714	0	0	50,982,714	0	3,439,172
30.00	Support Facilities: Yards, Shops, Admin	32,636,015	21,771,122	114,306,137	17,966,473	0	0	114,306,137	0	54,745,769
30.02	Light Maintenance Facility	7,591,888	(3,095)	7,588,793	7,588,793	0	0	7,588,793	0	929,461
30.03	Heavy Maintenance Facility	38,089,138	4,895,614	42,984,752	42,984,752	4,837,922	0	42,984,752	0	15,554,303
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	1,899,490
30.05	Yard and Yard Track	39,046,529	16,215,832	55,262,361	55,262,361	12,038,430	0	55,262,361	0	36,962,575
40.00	Sitework & Special Conditions	983,178,121	50,250,666	1,033,428,787	717,871,504	158,317,796	3,106,244	1,033,428,787	0	388,169,380
40.01	Demolition, Clearing, Earthwork	29,980,158	(1,741,039)	28,239,099	8,589,446	632,302	0	28,239,099	0	241,537
40.02	Site Utilities, Utility Relocation	299,449,756	8,893,545	308,343,301	200,229,191	11,140,627	3,497,546	308,343,301	0	33,150,453
40.03	Haz. mat'l, contain'd soil removal	9,199,237	(5,421,634)	3,777,603	3,091,085	16,085	(391,304)	3,777,603	0	1,759,424
40.04	Environmental Mitigation	26,879,122	4,976,801	31,855,923	16,543,497	2,689	0	31,855,923	0	6,836,821
40.05	Site structures, retaining walls,	7,998,960	1,134,077	9,133,037	8,974,511	71,663	0	9,133,037	0	1,195,689
40.06	Pedestrian/bike access/landscaping	41,073,897	741,177	41,815,074	4,991,868	(4,566)	0	41,815,074	0	50,000
40.07	Auto, bus, van accessways	181,979,367	(10,796,832)	171,182,535	36,270,071	1,501,555	0	171,182,535	0	3,345,146
40.08	Temporary Facilities/Indirect Cost	386,517,624	52,464,611	438,982,235	438,982,235	144,897,440	0	438,982,235	0	321,590,690
50.00	Systems	221,284,391	25,296,231	246,580,622	332,420,315	27,088,089	0	246,580,622	0	15,952,818
50.01	Train control and signals	81,862,556	23,381,140	105,363,696	106,363,696	23,961,050	0	105,363,696	0	2,250,972
50.02	Traffic signals and crossing prot.	10,458,226	(206,890)	10,251,336	0	0	0	10,251,336	0	0
50.03	Traction power supply: substation	29,500,926	1,379,880	30,880,806	30,880,806	(97,485)	0	30,880,806	0	342,747
50.04	Traction power distribution: cat	32,878,150	5,059,838	37,937,988	39,029,111	7,941,115	0	37,937,988	0	8,018,935
50.05	Communications	53,691,339	6,133,477	59,824,816	59,824,816	5,573,419	0	59,824,816	0	6,472,065

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\* Current Committed = Original Contract + CCO / Amendment  
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 \*\*\* Changes Identified= Pending + Probable + Potential Changes  
 \*\*\*\* Est. At Completion = Original Contract + CCO/Amendments + Changes Identified

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



SCC	Title	BUDGET		C=A+B	D	E	F	G	H=C-G	I
		Baseline	Transfers							
<b>1. Subtotal 10 - 80 SCC Costs</b>										
80 - Systems	221,284,301	25,236,231	246,680,532	232,420,319	27,038,089	0	246,360,532	0	15,952,818	0
50.06	Fare collection system and equipment	9,159,277	(10,389,178)	(1,131,901)	(1,131,901)	(10,390,000)	0	(1,131,901)	0	(1,131,901)
50.07	Central Control	3,613,827	(160,036)	3,453,791	3,453,791	0	3,453,791	0	0	0
80 - ROW, Land, Existing Improvements	197,397,547	529,621	197,926,568	94,584,488	323,820	5,000,000	157,926,568	0	81,946,203	0
90.01	Purchase or lease of real estate	179,360,664	250,821	179,611,485	87,628,735	52,020	179,611,485	0	75,096,819	0
90.02	Relocation of existing households	18,037,283	277,800	18,315,083	6,953,748	277,800	18,315,083	0	6,849,384	0
70 - Vehicles	196,829,020	4,713,937	191,543,017	191,543,017	1,514,720	(68,480)	191,543,017	0	21,203,334	0
70.01	Light Rail	166,721,386	5,915,687	172,637,073	172,637,073	1,514,720	172,637,073	0	14,473,908	0
70.06	Non-revenue vehicles	14,346,323	(1,320,375)	13,026,548	13,026,548	0	13,026,548	0	6,729,486	0
70.07	Spare parts	5,760,711	115,685	5,876,396	5,876,396	0	5,876,396	0	0	0
80 - Professional Services	1,087,830,119	6,976,145	1,094,806,264	1,015,358,152	118,703,136	(12,436,268)	1,094,806,264	0	651,455,688	0
80.01	Preliminary Engineering	94,055,262	24,644,185	118,699,447	109,567,127	20,905,682	0	118,699,447	0	101,098,184
80.02	Final Design	228,321,632	(10,200,580)	218,121,072	200,019,090	25,104,663	2,646,756	218,121,072	0	144,458,731
80.03	Project Management Design & Cons	363,849,769	(44,051,182)	319,798,586	354,680,099	63,946,774	(17,323,901)	319,798,586	0	270,478,015
80.04	Constr. Admin. & Management	139,656,728	(37,880,893)	101,775,835	156,511,375	2,126,743	1,919,021	101,775,835	0	61,234,118
80.05	Professional Liability & other Ins	46,549,724	28,781,938	75,331,662	43,174,657	700,500	75,331,662	0	21,315,763	0
80.06	Legal; Permits/Review Fees ect..	67,641,005	(121,086)	67,420,919	35,364,005	2,516,420	67,420,919	0	16,670,297	0
80.07	Surveys, Testing, Investigation, I	21,759,336	48,124,427	67,883,763	66,772,822	446,446	67,883,763	0	19,850,159	0
80.08	Startup	65,996,664	(230,695)	65,765,969	48,868,377	961,909	(776,908)	65,765,969	0	16,230,421
A.C. Provisional Pay Requests	0	0	0	0	0	0	0	0	59,035,994	0
ACR Provisional Request For Payment	0	0	0	0	0	0	0	0	59,035,994	0
<b>Subtotal:</b>	4,305,074,410	123,755,987	4,428,830,397	2,956,644,134	363,908,890	(4,500,510)	4,428,830,397	0	1,387,738,923	0
<b>2. NTP</b>										
NTP Authorized For Expenditure	0	0	0	0	2,043,356,815	0	0	0	0	0
NTP Notice To Proceed	0	0	0	0	2,043,356,815	0	0	0	0	0
<b>Subtotal:</b>	0	0	0	0	2,043,356,815	0	0	0	0	0
<b>3. Contingency</b>										
ENR Allocated Contingency	541,889,343	(70,886,787)	471,002,556	11,726,732	6,601,239	206,642,545	471,002,556	0	588,121	0
90.02 Allocated Contract Contingency	540,101,329	(73,163,677)	466,937,652	6,601,239	6,601,239	198,514,312	466,937,652	0	588,121	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 January 2015  
**Project Monthly Cost Report by SCC Details**

SCC	Title	A		B		C-A+B		D		E		F		G		H-C-G		I	
		Baseline	Transfers	BUDGET	Current	COMMITTED	AFE**	Changes ID'd***	Est. At Completion****	Variance	Incurred To Date								
<b>3. Contingency</b>																			
	DMR Unallocated Contingency	541,888,345	(70,266,787)	471,621,558	471,622,536	471,622,536	0	471,622,536	0	588,121	0	0	0	0	0	0	0	0	588,121
	90.03 Allowances	1,588,014	2,902,479	4,490,493	4,490,493	4,490,493	0	4,490,493	0	(0)	0	0	0	0	0	0	0	0	0
	90.07 Known Change Contingency	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PRJ Unallocated Contingency	101,871,170	(55,483,200)	46,387,970	46,381,970	46,381,970	0	46,381,970	0	0	0	0	0	0	0	0	0	0	0
	90.01 Unallocated Project Contingency	101,871,170	(53,489,200)	48,381,970	48,381,970	48,381,970	0	48,381,970	0	0	0	0	0	0	0	0	0	0	0
	<b>Subtotal:</b>	643,469,519	(123,755,987)	519,713,532	519,804,526	519,804,526	0	519,804,526	0	588,121	0	0	0	0	0	0	0	0	588,121
<b>4. Finance Charges - Eligible</b>																			
	OTH Finance Charges	173,058,243	0	173,058,243	173,058,243	173,058,243	0	173,058,243	0	0	0	0	0	0	0	0	0	0	0
	100.1 Finance Charges-Project-Eligible	173,058,243	0	173,058,243	173,058,243	173,058,243	0	173,058,243	0	0	0	0	0	0	0	0	0	0	0
	<b>Subtotal:</b>	173,058,243	0	173,058,243	173,058,243	173,058,243	0	173,058,243	0	0	0	0	0	0	0	0	0	0	0
	<b>FTA TOTAL PROJECT COSTS</b>	5,121,693,166	0	5,121,693,166	2,968,370,866	2,403,166,744	2,403,166,744	202,142,035	5,121,693,166	0	1,388,307,046	0	0	0	0	0	0	0	1,388,307,046
<b>4. Finance Charges - Ineligible Costs</b>																			
	FINC Finance Charges	42,000,000	0	42,000,000	42,000,000	42,000,000	0	42,000,000	0	0	0	0	0	0	0	0	0	0	0
	100.2 FTA Non-Eligible Costs	42,000,000	0	42,000,000	42,000,000	42,000,000	0	42,000,000	0	0	0	0	0	0	0	0	0	0	0
	<b>Subtotal:</b>	42,000,000	0	42,000,000	42,000,000	42,000,000	0	42,000,000	0	0	0	0	0	0	0	0	0	0	0
	<b>INELIGIBLE COSTS</b>	42,000,000	0	42,000,000	42,000,000	42,000,000	0	42,000,000	0	0	0	0	0	0	0	0	0	0	0
	<b>Total Project:</b>	5,163,693,166	0	5,163,693,166	2,968,370,866	2,403,866,744	2,403,866,744	202,142,035	5,163,693,166	0	1,388,307,046	0	0	0	0	0	0	0	1,388,307,046

\* 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 01 '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)	Anil Verma Associates, Inc.	Jun 28 '11	Nov 16 '12	Nov 26 '12	Oct 31 '16
FD-430	Airport Section Guideway and Utilities Final Design and Support	AECOM Technical Services, Inc.	Jan 26 '11	Dec 22 '11	Jan 05 '12	Jun 30 '17
FD-530	City Center Section Guideway and Utilities Final Design and Support	AECOM Technical Services, Inc.	Dec 16 '11	Jul 30 '12	Jul 31 '12	Apr 30 '18
FD-440	Airport Station Group Final Design and Support	AECOM Technical Services, Inc.	Mar 30 '12	Nov 7 '12	Nov 14 '12	Jul 15 '17
FD-550	Dillingham and Kaka'ako Station Groups "East Side Stations" Final	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 9 '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 '15
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	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	AECOM Technical Services, Inc.		Jun 7 '11	Jun 08 '11	Jun 15 '18
MM-921	HDOT Design Coordination Consultant - Kamehameha Highway	AECOM Technical Services, Inc.		Jun 28 '12	Jun 29 '12	Jul 15 '15
MM-922	HDOT Design Coordination Consultant - Airport and City Center	SSF International, Inc.		Jun 8 '12	Jun 12 '12	Jun 15 '18
MM-945	On-Call Construction Contractor	Royal Contracting Co. Ltd.	Jun 02 '14	Aug 6 '14	Aug 14 '14	Mar 03 '19
MM-946	On-Call Hazardous Materials (HazMat) Removal Contractor	CH2M HILL		Aug 23 '12	Sep 07 '12	Feb 15 '17
DBB-505	Airport Section Utilities Construction	Nan, Inc.	Dec 17 '13	Jun 30 '14	Oct 6 '14	Dec 22 '15
DBB-525	Airport Section Guideway Seven (7) Pier Construction Contract	HDCC / CJA JV	Jul 09 '14	Sep 18 '14	Sep 18 '14	TBD

Remaining Contracts						
Contract Code	Contract Name	Advertise Date	Bids Due/Part 1 Proposals Due	RFP Part 2 Proposals Due	Issue NTP	Projected Substantial Completion Date
AP00	Art-in-Transit	May 9 '13	-	-	TBD	TBD
DB-275	Pearl Highlands Parking Structure / Bus Transit Center	Mar 03 '14	Jun 03 '14	TBD	TBD	TBD
DBB-271	Farrington Hwy Stations Group Construction	Dec 19 '14	Mar 03 '15	-	Apr 06 '15	Aug 31 '17
DBB-385	Ramp H2R2	Jan 30 '15	Mar 24 '15	-	Apr 27 '15	May 31 '16
MM-970	Fare Collection System Technical Support Consultant	Mar 11 '15	Apr 17 '15	-	TBD	TBD
DB-450	Airport Guideway and Stations	Apr 02 '15	Jun 02 '15	Dec 15 '15	Feb 1 '16 May 2 '16	Jun 28 '19
DBB-171	West O'ahu Stations Group Construction	Apr 13 '15	Jun 16 '15	-	Jul 08 '15	Nov 30 '17
DBB-510	City Center Utilities	Jun 01 '15	Aug 20 '15	-	Oct 01 '15	Mar 31 '17
DB-550	City Center Guideway and Dillingham Kaka'ako Stations	Aug 04 '15	Oct 01 '15	Apr 15 '16	Jun 1 '16 Nov 1 '16	Nov 29 '19
DBB-371	Kamehameha Hwy Stations Group Construction	Aug 18 '15	Nov 03 '15	-	Dec 01 '15	Aug 31 '18
MM-xxx	Core Systems Back-up Generators	Jan 01 '16	TBD	-	TBD	TBD
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
	Faregate Systems	TBD	TBD	TBD	TBD	TBD
	Photovoltaic	TBD	TBD	TBD	TBD	TBD
MM-947	On-Call Construction Contractor II	TBD	TBD	TBD	TBD	TBD

## Appendix E. DBE Participation

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

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

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

DBE Participation (9/24/07 to 2/28/15)						
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	\$15,456	\$15,456
PAC Electric	238210	APA	F	CT-HRT-10H0137 DB-120	\$2,730,278	\$2,730,278
PMJ Builders	238310	APA	M	CT-HRT-10H0137 DB-120	\$43,866	
				CT-DTS-1100195 DB-320	\$107,100	\$150,966
Standard Sheetmetal & Mechanical	236220	APA	M	CT-HRT-10H0449 DB-200	\$6,105	\$6,105
LP&D Hawaii	541320	APA	M	SC-DTS-1100013 FD-240	\$219,911	\$219,911
Ace Land Surveying	541370	NA	M	SC-DTS-1100013 FD-240	\$38,700	\$38,700
Integrated Security Tech.	561621	O	F	CT-HRT-1200106 DBOM-920	\$105,180	\$105,180
LKG-CMC	541618	O	F	SC-HRT-11H0131 MM-905	\$2,600,462	
				SC-DTS-0700001 **** MM-910	\$2,783,277	
				SC-HRT-1400051 MM-595	\$92,562	
				SC-HRT-1400049 MM-962	\$151,398	\$5,627,699
Lawson & Associates	541690	O	F	SC-HRT-11H0131 MM-905	\$740,962	
				SC-DTS-0700001 **** MM-910	\$150,141	
				SC-HRT-1400061 MM-964	\$478,998	\$1,370,101
Gary K. Omori	541618	APA	M	SC-HRT-11H0131 MM-905	\$388,609	
				SC-DTS-0700001 **** MM-910	\$392,920	\$781,529
Pat Lee & Assoc.	541618	APA	M	SC-HRT-11H0131 MM-905	\$402,791	
				SC-DTS-0700001 **** MM-910	\$374,110	\$776,901
212 Harakawa	541430	APA	F	SC-HRT-11H0131 MM-905	\$358,141	

DBE Participation (9/24/07 to 2/28/15)						
DBE Firm	NAICS Code	Race	Sex	Contract Number	Participation to Date	Total DBE Participation
				SC-DTS-0700001 **** MM-910	\$354,758	\$712,899
JAD & Associates	541330	APA	M	SC-DTS-0700001 **** MM-910	\$508,355	\$508,355
Pacific Architects	541310	APA	M	SC-DTS-0700001 **** MM-910	\$39,273	\$39,273
Nagame Okawa*	541310	APA	M	SC-DTS-0700001 MM-910	\$67,014	\$67,014
Consulting Structural Hawaii	541330	APA	M	SC-DTS-0700001 **** MM-910	\$298,557	\$298,557
Bright Light Marketing Group	541613	APA	F	SC-HRT-1200038 FD-430	\$162,813	
				SC-HRT-1200149 FD-530	\$191,227	
				SC-HRT-1300022 FD-440	\$134,912	\$488,952
Ki Concepts	541320	APA	M	SC-HRT-1200077 MM-922/923	\$25,020	\$25,020
Miyabara Associates	541320	APA	M	SC-HRT-1300022 FD-440	\$99,850	\$99,850
Anil Verma Associates, Inc.**	541350	HA	M	SC-HRT-1200111 FD-340	\$3,239,360	\$3,239,360
AMR Estimating Services ***	541330	HA	M	SC-HRT-11H0131 MM-905	\$135,281	
				SC-HRT-1400027 MM-913	\$287,479	\$422,760
The Nako Companies	541620	NA	M	CT-HRT-1200106 DBOM-920	\$3,843	\$3,843
Hawaiya Technologies	238210	APA	F	CT-HRT-10H0449 DB-200	\$27,514	\$27,514
Element Environmental	541620	APA	M	SC-HRT-1400050 MM-290	\$387,544	\$387,544
PSC Consultants	541330	APA	M	SC-HRT-1400050 MM-290	\$4,477	\$4,477
Bow Construction Management	541330	APA	M	SC-HRT-1400050 MM-290	\$108,015	\$108,015
FIC, LLC	541611	APA	M	SC-HRT-1400051 MM-595	\$454,154	\$454,154
The Solis Group	541620	O	F	SC-HRT-1400027 MM-913	\$365,592	\$365,592
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	\$531,221	\$531,221
<b>Total</b>						<b>\$20,757,577</b>

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

**Race Categories**

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

**Appendix F. Risk**

<b>Risk by Contract Package</b>				
Contract Packages	Jan. 2015 # of Risks	February 2015 Update		
		Total # of Risks	New Risks	Deleted Risks
Project Wide	5	4	0	1
WOFH Guideway	22	21	0	1
Pearl Highlands	6	5	0	1
Maintenance and Storage Facility	5	5	0	0
Kamehameha Highway Guideway	23	24	1	0
Core Systems Contract	10	10	0	0
Elevator/Escalator	3	2	0	1
Airport Utilities	2	3	1	0
West Side Stations	16	15	0	1
Airport Guideway	31	27	0	4
City Center Guideway	43	41	0	2
Airport Section Stations	26	22	0	4
City Center Section Stations	14	13	0	1
<b>Total</b>	<b>206</b>	<b>192</b>	<b>2</b>	<b>16</b>

**Notes of Significance:**

- 1) Contract Packaging Plan allows for design completion and/or risk transfer of several design issues to the contractor.
- 2) Geotechnical data collection risk has been back checked.
- 3) Commodity pricing is not being tracked as a project risk per discussions with PMOC. Prices will be tracked and reported to the HART Board.

<b>Comparison of Risk Ratings</b>								
Contract Package/Section	January 2015				February 2015 Update			
	# of Risks				# of Risks			
	Total	High	Medium	Low	Total	High	Medium	Low
Project Wide	5	1	3	1	4	1	2	1
WOFH Guideway	22	4	11	7	21	4	10	7
Pearl Highlands	6	1	5	0	5	0	5	0
Maintenance and Storage Facility	5	0	4	1	5	0	4	1
Kamehameha Highway Guideway	23	2	16	5	24	3	15	6
Core Systems Contract	10	1	4	5	10	1	4	5
Elevator/Escalator	3	1	2	0	2	0	2	0
Airport Utilities	2	0	2	0	3	0	3	0
West Side Stations	16	5	10	1	15	3	11	1
Airport Guideway	31	7	22	2	27	3	21	3
City Center Guideway	43	14	24	5	41	9	27	5
Airport Stations	26	4	20	2	22	4	17	1
City Center Stations	14	1	11	2	13	0	11	2
<b>Total</b>	<b>206</b>	<b>41</b>	<b>134</b>	<b>31</b>	<b>192</b>	<b>28</b>	<b>132</b>	<b>32</b>

**Notes:**

- 1) Risks associated with the market, right-of-way, utilities and third parties top the list of concerns. There is a tradeoff in time to clear out issues verses going to market through procurement.
- 2) Kamehameha Highway Guideway production rates are behind schedule.
- 3) Construction market escalation rates are exceeding forecast and FFGA budget. Cost containment is critical.

Appendix G. Project Organization Chart

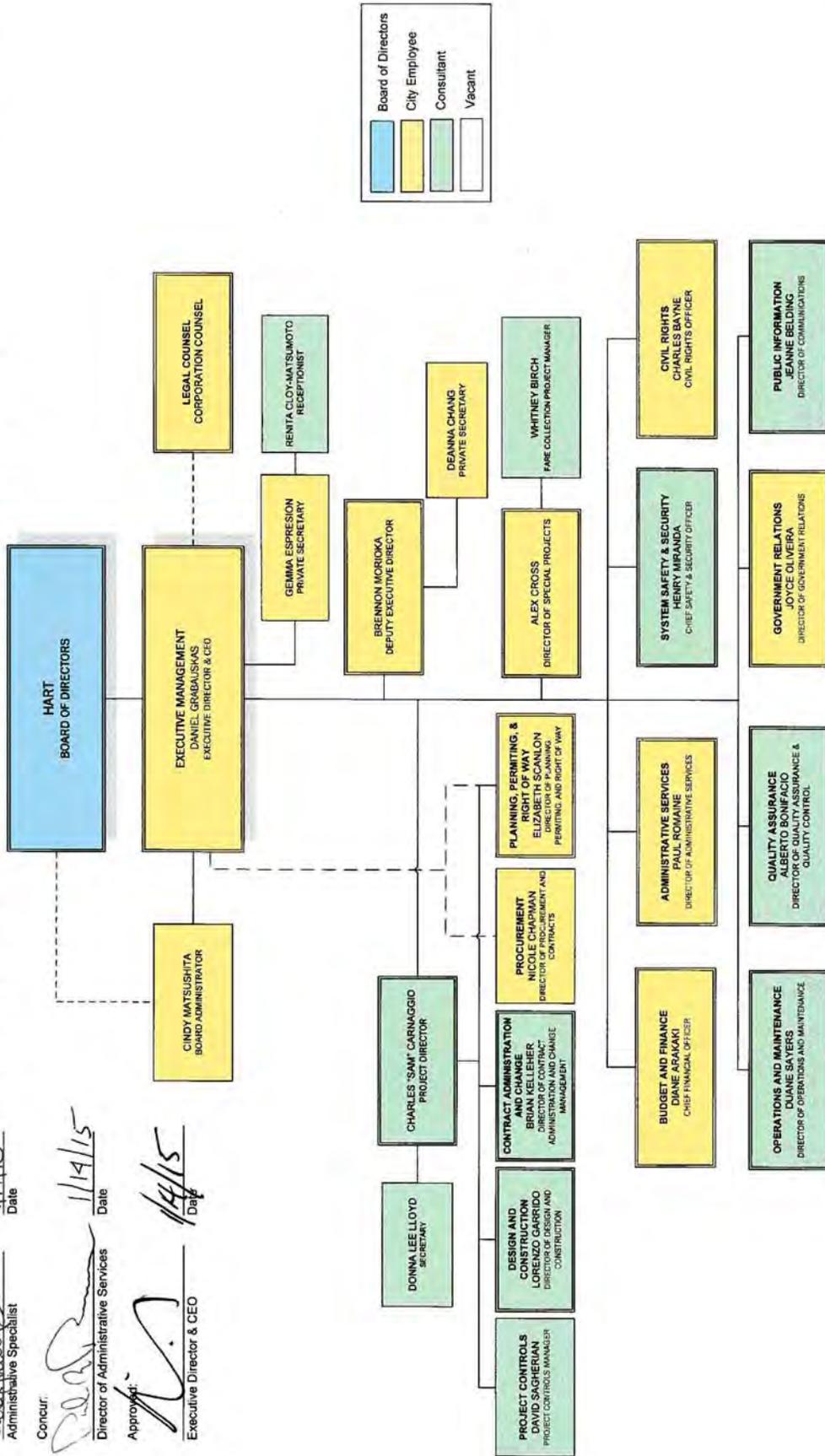
January 14, 2015

HONOLULU AUTHORITY FOR RAPID TRANSPORTATION (HART)

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

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

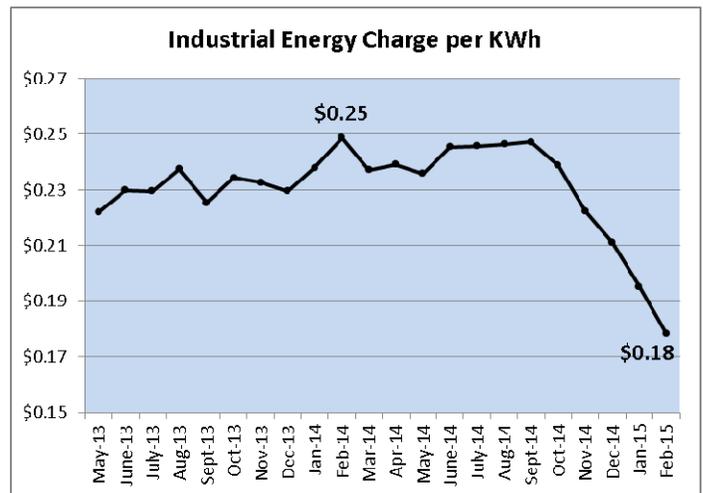
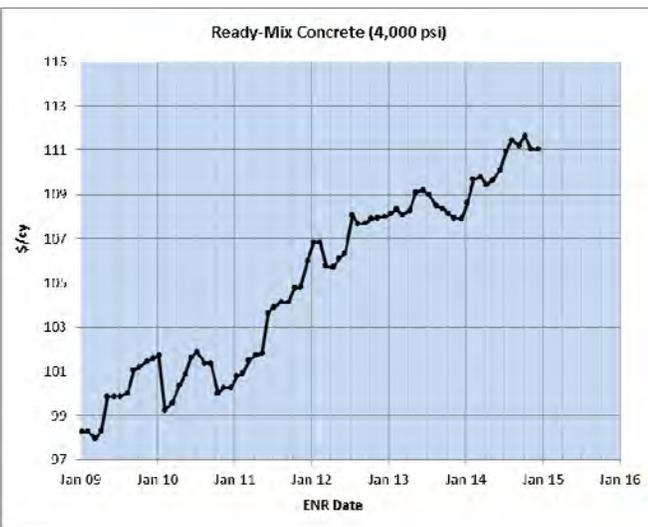
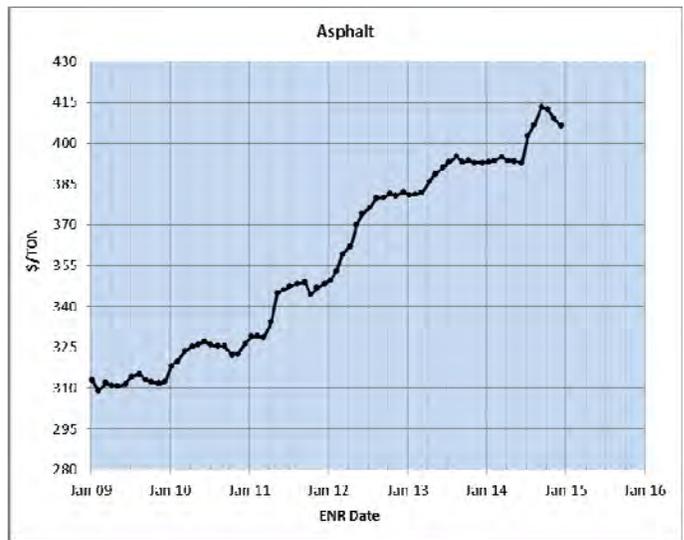
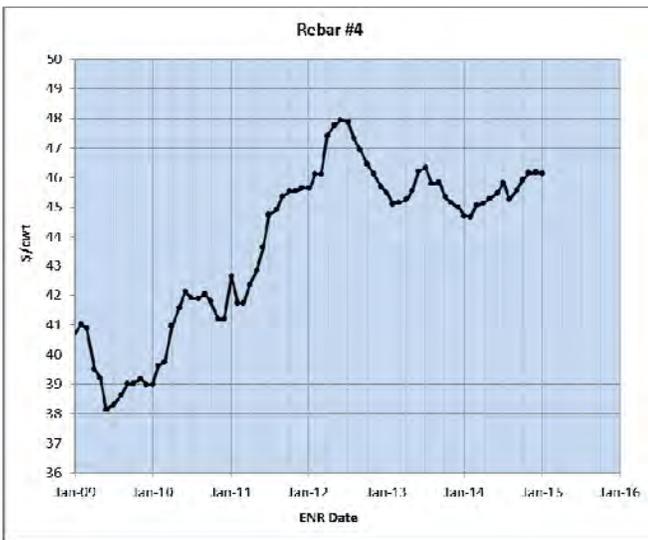
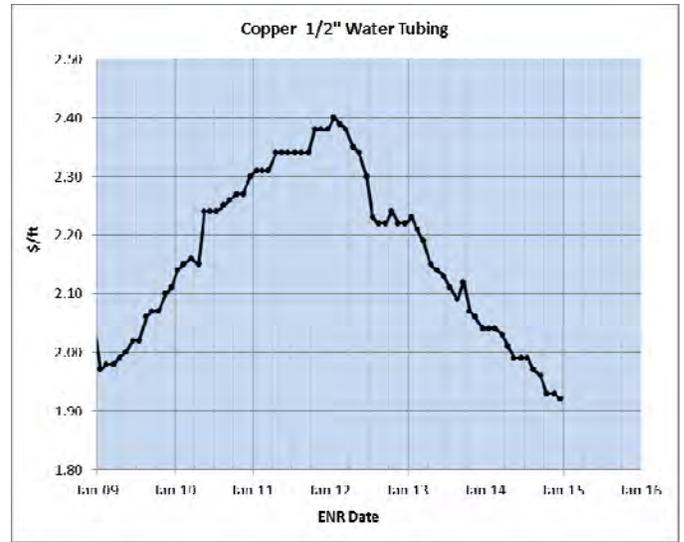
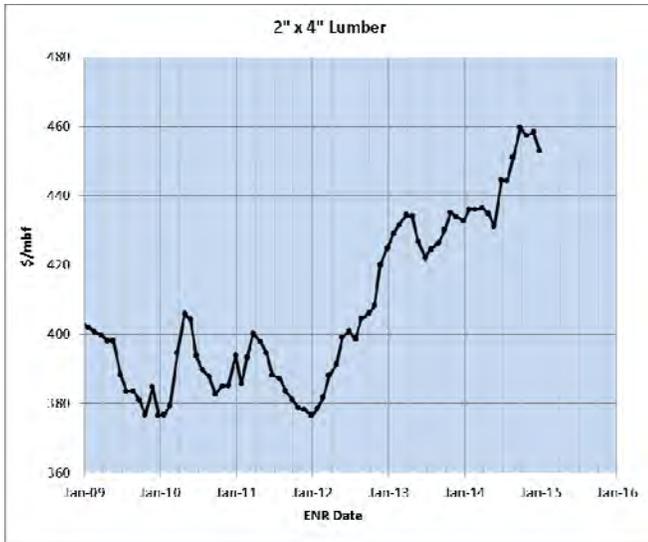
Approved: *[Signature]*  
 Executive Director & CEO  
 Date: 1/14/15



	Board of Directors
	City Employee
	Consultant
	Vacant

### Appendix H. Indices on Key Commodities

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



Source: HECO: Effective Rate Summary for DS Rate

### Appendix I. 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.

## **PMOC MONTHLY REPORT**

### **Honolulu Rail Transit Project**

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

December 2014 (FINAL)

PMOC Contract Number: DTFT60-09-D-00012  
Task Order No. 2: Honolulu Rail Transit Project  
Project No: DC-27-5140  
Work Order No. 1  
OPs Referenced: OP 1 and 25

**Jacobs Engineering Group, Inc., 501 North Broadway, St. Louis, MO63102**  
Tim Mantych, P.E., (314) 335-4454, [tim.mantych@jacobs.com](mailto:tim.mantych@jacobs.com)  
Length of Time Assigned: Five Years (November 18, 2009 through November 17, 2014)

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- Appendix A: Acronym List
- Appendix B: Contract Status
- Appendix C: Bidding Schedule
- Appendix D: Project Overview and Map (Transmitted as a separate file)
- Appendix E: Safety and Security Checklist (Transmitted as a separate file)

## 1.0 EXECUTIVE SUMMARY

### 1.1 Project Description

- **General Description:** The Project is a 20-mile-long elevated fixed guideway rail system along Oahu's south shore between East Kapolei and Ala Moana Center. The Project will include 21 stations. The alignment is elevated, except for a 0.6-mile at-grade portion at the Leeward Community College station. The Project is planned to be delivered in four guideway segments.
  - Segment I (West Oahu/Farrington Highway) – East Kapolei to Pearl Highlands (7 miles/7 stations)
  - Segment II (Kamehameha Highway) – Pearl Highlands to Aloha Stadium (4 miles/2 stations)
  - Segment III (Airport) – Aloha Stadium to Middle Street (5 miles/4 stations)
  - Segment IV (City Center) – Middle Street to Ala Moana Center (4 miles/8 stations)
- **Length:** 20 miles
- **No. of Stations:** 21
- **Additional Facilities:** Maintenance and Storage Facility and parking facilities
- **Vehicles:** 80 vehicles
- **Ridership Forecast:** Weekday boardings – 99,800 (2020); 114,300 (2030)

### 1.2 Project Status

- Primary construction activities include:
  - West Oahu /Farrington Highway (WOFH) Design-Build (DB) Contract – Contract is approximately 3 months behind schedule. HART is working with contractor to mitigate this delay. Approximately 1 mile of guideway has been erected. Installation of rail on guideway began in November 2014.
  - Kamehameha Highway Guideway (KHG) DB Contract – Contract is approximately 7 months behind schedule. HART received a recovery schedule from the contractor, but it was rejected. HART will continue working with the contractor to mitigate the delay.
  - Maintenance and Storage (MSF) DB Contract – Contract is approximately 55% complete with no issues. Building structures are moving along well with installation of tilt-up wall panels having begun.
  - Core Systems Design-Build-Operate-Maintain (DBOM) Contract – Contract is approximately 16% complete. Limited construction work (MSF signal house) anticipated beginning in December 2014; significant construction activity will not begin until summer 2015. AHJV revised their baseline contract schedule, and it has been approved. However, re-procurement of Westside Stations Group will result in revisions to CSC schedule at a later date.
  - Airport Advanced Utilities Design-Bid-Build (DBB) Contract – Work is scheduled to begin in January 2015.
- Appendix B of this report provides the status of the current design and construction contracts.

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

Contract Number	Final Design Contracts	Contractor/ Consultant	Percent Complete
DB-120	WOFH	KIWC	97%
DB-320	KHG	KIWC	95%
DB-200	MSF	KKJV	100%
DBOM-920	CSC	AHJV	53%
MI-930	Elevators and Escalators	Schindler	10%
FD-140	West Oahu Station Group (WOSG)	URS	100%
FD-240	Farrington Highway Station Group (FHSG) 1 & 2	HDR/URS	100%
FD-245	Pearl Highlands Parking Structure/Bus Transit Center	DB procurement ongoing*	10%
FD-340	Kamehameha Highway Station Group (KHSG)	Anil Verma	100%
FD-430	Airport Segment Guideway and Utilities Final Design	AECOM	90%
FD-440	Airport Station Group Design	AECOM	95%
FD-530	City Center Segment and Utilities Final Design	AECOM	85%
FD-550	Dillingham & Kaka'ako Station Group Design	Perkins & Will	45%
FD-600	University of Hawaii (UH) West Oahu Park and Ride/Ho'opili Station Design	URS	10%

\*Note: GEC 2 completed 10% drawings.

The Total Design Percent Complete is approximately 80.1% as of October 2014.

### 1.3 PMOC Issues or Concerns

The following key issues or concerns have been identified:

- The PMOC and HART held a workshop in December 2014 to review the current Estimate at Complete. HART's current Estimate at Complete (EAC) indicates that the Project will exceed the FFGA budget unless HART receives extremely favorable bids on the remaining contract packages and continues implementing valid cost mitigation measures successfully. The current overrun is estimated at \$500-600 million. This EAC takes into consideration the most recent cost estimates for the Westside Stations and the Airport/City Center Guideway, which have increased primarily due to the AIS and federal lawsuit delays. However, this number has not yet been validated.

The PMOC has reviewed and discussed the project cost on a monthly basis with HART in an effort to ensure that cost issues are proactively addressed, and PMOC has provided numerous cost mitigation recommendations that HART should give consideration to implement. However, since completion of the 2014 Risk Assessment Refresh effort, minimal cost containment measures have been accomplished by HART. This unfavorable trend of minimal cost containment is alarming. The PMOC will continue to hold Cost Containment Workshops with HART on a monthly basis to ensure HART begins properly implementing significant cost containment measures.

- Procurement –
  - Westside Stations Group – Since the procurement was cancelled, HART is repackaging these nine stations into three separate packages:

- Farrington Highway Stations Group – Invitation for Bids (IFB) in December 2014
- West Oahu Stations Group – IFB in March 2015
- Kamehameha Highway Station Stations Group – IFB in May 2015

The current Engineers Estimate exceeds the FFGA budget for the FHSG. The PMOC has provided some recommendations and suggested procurement strategy that HART should consider for the Waipahu Station, which could result in cost savings.

- Airport/City Center Guideway and Utilities Contract – HART is revising their procurement strategy and may now utilize Design-Build contract package(s).
  - Design Contracts – HART issued stop work notices to the designers for the Airport/City Center Guideway and Utilities Contract and Eastside Stations Group since these contract packages will now be DB.
  - Pearl Highlands Parking Structure DB Contract – HART issued an addendum extending the due date of qualifications until March 2015 and may extend this due date further. HART may consider a different contracting strategy to help mitigate costs.
  - HART is reviewing their packaging strategy for all remaining contracts. This strategy will impact numerous aspects of the project including the schedule.
- Funding – HART may have a shortfall of available funding due to limitations on the use of Section 5307 funds and GET revenues that are less than planned. HART will address this shortfall in an update of their Financial Plan, which will be available in February 2015.
  - Project Controls
    - Budget – There is concern that the current estimated contingency is not sufficient, which will impact the project budget. HART is currently assessing the remaining contract strategy including implementation of primary risk mitigations measures and value engineering to reduce project cost impacts. However, HART must review their Secondary Mitigation Measures and consider implementation of any valid measures to help reduce pressure on the project budget.
    - Contingency – HART's current assessment indicates a balance of uncommitted contingency of \$334 million (\$66.5M in unallocated and \$267.5M in allocated). However, this does not reflect impacts of the WSSG bids on the stations contracts or the updated cost estimate for the Airport/City Center Guideway Contract, which will now be delivered using DB contracting.
    - Schedule – It is anticipated that the Master Project Schedule will require revision as a result of the re-packaging of the remaining contracts. MPS must be updated to assess the impacts of these changes on the RSD. HART has indicated that this will be completed in February 2015.
  - Buy America – There is a possible issue with Buy America content as a result of the change to End (E) cars and M (Middle) cars since the M cars do not have some of the higher value components (e.g. propulsion). HART will perform a Buy America Audit of the M (Middle) car in January 2015.

- HART intends to build an interim park-n-ride facility at the University of Hawaii West Oahu Station. This facility will be in use until the developer completes the structure over the Kaloi Channel that allows for access to the permanent location of the park-n-ride facility. HART is evaluating the issue of either using federal funds or local funds to build the interim facility. However, the PMOC has cautioned HART about the use of federal funds to build an interim facility that will be replaced by a permanent facility constructed using federal funds. Clarification by HART on the use of funds for this work is needed. UH-West Oahu intends to use the interim facility for campus parking after HART no longer has need for the facility. However, it is not known how long the interim facility will be in use before the permanent facility can be constructed.
  
- Hawaiian Electric Companies (HECO)
  - HECO has a collective bargaining agreement that has different wage scales and allows payment to its labor forces biweekly, which does not satisfy Davis-Bacon. HECO has requested a waiver at the state and federal level on this requirement. HECO has made substantial progress and continues to move forward to meet all requirements of Davis-Bacon. Currently, HECO is in the process of finalizing additional written information/documents requested by the US Department of Labor (DOL) and Hawaii Department of Labor and Industrial Relations (DLIR) to support their waiver request.
  - HART is working with HECO to determine if/when a substation near the West Loch Station will be required. HART, HECO and their consultants are completing more detailed consumption analyses. One option is the use of wayside or on-board energy storage. This was considered previously, but the technology has advanced considerably since it was first reviewed.
  - The cost for activation of the Traction Power Substations was not initially included in the project estimate. A change order will be required to address this cost, which is still being assessed. This issue has now been nominally captured in HART's EAC.
  - 50-foot Offset Issue – Testing of the telescoping bucket truck continues, and HECO has indicated that initial results are favorable. HART is still working with HECO on the mechanism to acquire the truck.
  - HART has acknowledged that under-grounding of portions of the overhead power lines will likely be required along limited lengths of the guideway. HECO is awaiting a report from their consultant that has reviewed the alignment to determine the extent of these locations. Costs related to the under-grounding have not been included in HART's EAC.
  - HECO is being acquired by Florida-based NextEra Energy. It is anticipated that the sale will be finalized in late 2015.

## 1.4 Core Accountability Items

<b>Project Status: FFGA</b>		<b>Original at FFGA</b>	<b>Current Estimate</b>
<b>Cost</b>	Cost Estimate	\$5,122,000,000	\$5,122,000,000
<b>Contingency</b>	Unallocated Contingency	\$101,900,000	\$56,100,000
	Total Contingency (Allocated plus Unallocated)	\$643,600,000	\$334,000,000
<b>Schedule</b>	Revenue Service Date (RSD)	1/31/2020	1/31/2020
<b>Total Project Percent Complete</b>	Based on Expenditures	28.4% (October 2014)	
	Based on Earned Value*	28.4%	

\*Overall project progress is based on the weighted value progress of the individual construction and design contracts.

Major Issues	Status	Comments/Planned Action
Technical Capacity and Capability (TCC) Issues	The PMOC has expressed concern with the number of vacant key positions within HART.	<p>Following are the status of key positions:</p> <ul style="list-style-type: none"> <li>HART has indicated that additional Assistant Deputy Director positions will be created. The PMOC has recommended that the project organization be streamlined to be more effective. At a minimum, HART must update its management plans to include these additional positions.</li> <li>AECOM and URS – HART has reconsidered their packaging strategy for Airport/City Center contracts. If DB is utilized, HART believes it may be possible to retain URS since any contractual relationship with AECOM would be terminated under the DB scenario. HART is developing a plan that includes the timing for elimination of this Conflict of Interest.</li> </ul>
Potential Cost & Schedule Delays	HART has experienced delays and has incurred costs as a result of both the state and federal lawsuits.	<ul style="list-style-type: none"> <li>The PMOC and HART held a workshop in December 2014 to review the current Estimate at Complete. HART’s current EAC indicates that the Project will exceed the FFGA budget unless HART receives extremely favorable bids on the remaining contract packages and continues implementing valid cost mitigation measures successfully. The current overrun is estimated at \$500-600 million. This EAC takes into consideration the most recent cost estimates for the Westside Stations and the Airport/City Center Guideway, which have increased primarily due to the AIS and federal lawsuit delays. However, this number has not yet been validated.</li> <li>Contingency – HART’s current assessment indicates a balance of uncommitted contingency of \$334 million (\$66.5M in unallocated and \$267.5M in allocated). However, this does not reflect impacts of the WSSG bids on the stations contracts or the updated cost estimate for the Airport/City Center Guideway Contract, which will now be delivered using DB contracting.</li> <li>Schedule – It is anticipated that the Master Project Schedule will require revision as a result of the re-packaging of the remaining contracts. MPS must be updated to assess the impacts of these changes on the RSD. HART has indicated that this will be completed in February 2015.</li> </ul>
General Excise Tax (GET)	GET receipts continue to be an issue.	HART has requested monthly updates from the state on the GET revenues. HART received \$49.5M in GET funds for quarter ending September 30, 2014, which is \$5.2M under plan for this quarter. Overall, the GET total is \$40.8M under plan overall.
Post-Rod Changes	HART is considering several proposed design changes that may require additional environmental review.	FTA and HART hold bi-weekly meetings to discuss the status of any potential changes. HART has submitted or will submit information on each proposed change for FTA to determine the level of documentation required to assess impacts and subsequent mitigation measures.

<b>Major Issues</b>	<b>Status</b>	<b>Comments/Planned Action</b>
Hawaii Electric Company (HECO)	50-foot offset requirement	<ul style="list-style-type: none"> <li>• 50-foot Offset Issue – Testing of the telescoping bucket truck continues, and HECO has indicated that initial results are favorable. HART is still working with HECO on the mechanism to acquire the truck.</li> <li>• HART has acknowledged that under-grounding of portions of the overhead power lines will likely be required along limited lengths of the guideway. HECO is awaiting a report from their consultant that has reviewed the alignment to determine the extent of these locations. Costs related to the under-grounding have not been included in HART's EAC.</li> <li>• HECO is being acquired by Florida-based NextEra Energy. It is anticipated that the sale will be finalized in late 2015.</li> </ul>
<b>Date of Next Quarterly Meeting:</b>	January 22, 2015	

## 2.0 BODY OF REPORT

### 2.1 Grantee's Capabilities and Approach

#### 2.1.1 Technical Capacity and Capability (TCC)

HART has gone through a considerable number of organizational changes since the FFGA was executed in December 2012. Project staff has begun reviewing the project's numerous plans and procedures to determine whether updates are required to reflect these changes. The PMOC met with HART to discuss the timing of each plan that will require updating as a result of the organization and procedural changes that have occurred.

HART has identified additional Assistant Deputy Director positions since the FFGA. The PMOC has recommended that the project organization be streamlined to be more effective. At a minimum, HART must update its management plans to include these additional positions.

The acquisition of URS by AECOM was finalized October 17, 2014. This resulted in a conflict of interest since AECOM is the designer for the Airport and City Center Guideway and URS has been awarded the CE&I contract for those segments. HART issued a cure notice to URS on October 20, 2014. HART has reconsidered their packaging strategy for Airport/City Center contracts. If DB is utilized, HART believes it may be possible to retain URS since any contractual relationship with AECOM would be terminated under the DB scenario. HART is developing a plan that includes the timing for elimination of this Conflict of Interest.

#### 2.1.2 Project Controls for Scope, Quality, Schedule, Cost, Risk, and Safety

##### Schedule

- **Preliminary Engineering (PE):** FTA approved entrance into PE on October 16, 2009
- **Record of Decision (ROD):** ROD was issued on January 18, 2011.
- **Final Design (FD):** FTA approved entrance into FD on December 29, 2011.
- **Full Funding Grant Agreement (FFGA):** Executed on December 19, 2012.
- **Grantee Target Start of Revenue Operations for Full Alignment:** March 2019
- **FFGA Revenue Service Date (RSD):** January 31, 2020

##### Cost

- There is concern that the current estimated contingency is not sufficient, which will impact the project budget. HART is currently assessing the remaining contract strategy including implementation of primary risk mitigations measures and value engineering to reduce project cost impacts. However, HART must review their Secondary Mitigation Measures and consider implementation of any valid measures to help reduce pressure on the project budget.
- The PMOC and HART have engaged in a focused "cost containment workshop" on a monthly basis. The discussions focus on opportunities to reduce costs and accelerate

contract-scheduled activities to attain key milestones earlier than targeted and to contain cost. However, HART’s current Estimate at Complete (EAC) indicates that the Project will exceed the FFGA budget unless HART receives extremely favorable bids on the remaining contract packages and continues implementing valid cost mitigation measures successfully.

Quality

- The contractor damaged (cracked) two precast segments during erection of the WOFH guideway structure. These segments were incorporated into a single span of the structure, but a review and analysis must be completed to determine whether repairs can be completed or if the segments must be replaced. HART indicated that KWIC will replace the two precast segments instead of repairing them.
- Following is a summary of Non-Conformance Reports that have been issued on the project:

Contract	Description	NCRs		
		Issued	Closed	Open
DB-120	West Oahu/Farrington Highway	227	159	68
DB-200	Maintenance and Storage Facility	21	18	3
DB-320	Kamehameha Highway Guideway	36	30	6
DBOM-920	Core Systems Contract	13	13	0

System Safety and Security

- HART has held workshops with Engineering & Construction staff to address conformance checklists.
- HART is in the process of updating SSMP, SSCP and CSP to conform to pending update of the PMP.
- The PMOC expressed significant concern with the lack of progress made on the Certifiable Elements Lists (CELs) and Certifiable Items Lists (CILs). There are a number of outstanding CELs and CILs for design, and there are open CELs/CILs for some ongoing construction work. This must be a priority for HART.
- Ford Fuchigami was appointed by Governor elect David Ige to return to the state Department of Transportation as director. He started in this new role on December 1, 2014. The new HDOT Director appointed Ed Sniffen as the new Deputy Director of Transportation. The PMOC does not know how this affects Brandon Eshenour in his role as HDOT SOA PM.

Real Estate

The PMOC had identified some issues regarding progress of HART’s real estate activities:

- The number of outstanding parcels remains significant:
  - HART has closed 72 of 279 properties needed.
  - HART has completed 77 of 279 appraisals.
- Sufficient legal support had been an issue. However, Corporation Counsel has now assigned appropriate staff to support HART with real estate activities.
- HART submitted a revised RAMP to the FTA and PMOC for review. The updated RAMP provides for concepts to gain access to the parcels when needed.

- While there is some improvement between engineering and real estate coordination, HART must continue to develop a priority list of parcels to be acquired.

### **2.1.3 Compliance with Applicable Statutes, Regulations, Guidance and FTA Agreements**

#### National Environmental Policy Act (NEPA)

- Proposed Design Changes – HART is considering several proposed design changes that may require additional environmental review. FTA and HART hold bi-weekly meetings to discuss the status of any potential changes. HART has submitted or will submit information on each proposed change for FTA to determine the level of documentation required to assess impacts and subsequent mitigation measures.

## **2.2 Project Scope**

The Project is a 20-mile fixed guideway rail system along Oahu’s south shore between East Kapolei and Ala Moana Center. This Project is based on the Airport Alignment, which includes 21 stations. The alignment is elevated, except for a 0.6-mile at-grade portion at the Leeward Community College Station. The Project is planned to be delivered in four guideway segments:

- Segment I (West Oahu/Farrington Highway) – East Kapolei to Pearl Highlands (7 miles/7 stations)
- Segment II (Kamehameha Highway) – Pearl Highlands to Aloha Stadium (4 miles/2 stations)
- Segment III (Airport) – Aloha Stadium to Middle Street (5 miles/4 stations)
- Segment IV (City Center) – Middle Street to Ala Moana Center (4 miles/8 stations)

The alignment will average a total of 99,800 weekday boardings at the RSD in the year 2020 and 114,300 weekday boardings in the year 2030. It will provide two significant areas with potential for Transit-Oriented Development, one near the Airport and one in the surrounding industrial areas. The initial fleet will include 80 “light metro” rail vehicles.

### **2.2.1 Status of Design/Construction Documents**

The status of each contract is provided in Appendix B. The table in Section 1.2 provides a summary of Design Percent Complete on all contracts provided for the project. Final Design work and engineering activities are still proceeding on all other contracts that have been awarded to date. The Total Design Percent Complete is approximately 80.1%.

### 2.2.2 Status of Third-Party Agreements

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

Agreement	Status	Target	Section	Notes/Remarks	Purpose/Description
University of Hawaii (UH) Master Agreement	Pending	September 2014	WOFH, KHG, City Center	Final negotiations are underway. Will secure Right of Construction as not to delay the project.	Needed for columns located on UH property; the master agreement will encompass all campuses that HART project interfaces with
UH -West O'ahu (UHWO) Pre-Construction Right of Entry	Executed		WOFH		Column construction for the WOFH D/B contract within the West Oahu campus. Sub-agreement will also include the UHWO park-and-ride
UH - West O'ahu (UHWO) Construction Right of Entry	Pending	November 2014	WOFH	In negotiations.	
Leeward Community College (LCC) Pre-Construction Right of Entry	Executed		WOFH		Column construction for the WOFH D/B contract within the LCC campus
Leeward Community College (LCC) Construction Right of Entry	Pending	November 2014	WOFH	In negotiations.	
UH Urban Garden Pre-Construction Right of Entry	Executed		KHG		Column construction for the KHG D/B contract
UH Urban Garden Construction Right of Entry	Executed		KHG	Follow-up action required for contractor access	
DR Horton Agreement for Construction	Executed		WOFH	Allows for construction to proceed	Column construction for the WOFH D/B contract in the Ho'opili area
DR Horton Final Easement Agreement	Pending	December 2014	WOFH	Document in process with DR Horton	
Honolulu Community College (HCC) Pre-Construction Right of Entry	Executed	April 2014	City Center		Column construction for the City Center section
Honolulu Community College (HCC) Construction Right of Entry	Pending	December 2014	City Center	In negotiations.	
Department of Land and Natural Resources (DLNR) Right of Entry	Executed		WOFH	Right of entry is in place	Column construction for the WOFH D/B contract
Department of Land and Natural Resources (DLNR) Easement	Pending	January 2015	WOFH	Easement documents in process	
Department of Education Master Agreement and Consent to Construct	Executed	May 2014	WOFH	ROE is pending to allow entry for work to proceed; Master Agreement is pending	For site improvements related to the construction of the Guideway at Waipahu High School
Aloha Stadium / Department of Accounting & General Services (DAGS) Right of Entry	Pending	November 2014	KHG	Limited ROE granted for staging for Kiewit for KHG Contract	Column construction for the KHG D/B contract

<b>Agreement</b>	<b>Status</b>	<b>Target</b>	<b>Section</b>	<b>Notes/Remarks</b>	<b>Purpose/Description</b>
Aloha Stadium / Department of Accounting & General Services (DAGS) Easement	Pending	January 2015	KHG	Easement in process	Column construction for the KHG D/B contract and the construction of the park-and-ride lot
DHHL Master Agreement	Executed		WOFH, MSF		Column construction on the WOFH section and the construction of the Maintenance and Storage Facility
DHHL Consent to Construct	Executed		WOFH, MSF	Consent to construct in place.	
DHHL License	Executed		WOFH, MSF		
HDOT Master Agreement	Executed		WOFH		Joint Use & Occupancy for Farrington and Kamehameha Highways for the construction of the Guideway from Kapolei to Pearlridge
HDOT Joint Use & Occupancy (JU&O) Sub-agreement	Executed		WOFH		
HDOT Master Agreement for KHG, Airport and City Center	Executed		KHG, Airport, City Center		Joint Use & Occupancy for Kamehameha and Nimitz Highways for the construction of the Guideway from Pearlridge to downtown Honolulu.
HDOT JU&O Sub-agreement	Executed		KHG Airport City Center		Joint Use & Occupancy for construction of the Guideway for the KHG D/B contract
HDOT SOA MOU	Executed		Program		Provides funding for HDOT personnel/support to implement the required State Safety Oversight Program
OCCC/Hawaii Department of Public Safety Agreement Dillingham Blvd	Pending	January 2015	City Center	Finalizing requirements.	Required due to parking space reduction at OCCC for roadway widening.
HI Community Development Agreement (HCDA)	Pending	December 2014	City Center	Awaiting final design requirements for the guideway.	Required for the column construction for City Center Guideway
DAGS	Pending	Oct 2014	City Center	Awaiting final design requirements for the guideway.	
U.S. Navy / General Services Administration (GSA)	Pending	December 2014	Airport	Easements and fee taking are being processed by the Navy. Under new directive Navy will charge for all licenses and easements.	For column construction of the Airport section and the Pearl Harbor Station
U.S. Post Office Honolulu Processing Center	Pending	December 2014	Airport	In negotiations.	Easement needed for column construction of the Guideway in the Airport
Federal Court House/GSA	Pending	Oct 2014	City Center	Awaiting final design requirements for the guideway	Easement needed for column construction of the Guideway in the Airport

<b>Agreement</b>	<b>Status</b>	<b>Target</b>	<b>Section</b>	<b>Notes/Remarks</b>	<b>Purpose/Description</b>
Pacific Guardian Center	Pending	Dec 2015	City Center	Awaiting final design requirements for the guideway and Downtown station.	Required for the column construction for City Center Guideway and Downtown station
Howard Hughes Corporation – Joint Development Agreement	Pending	Dec 2015	City Center	Awaiting final design requirements for the guideway and Kakaako station.	Required for the column construction for City Center Guideway and Kakaako station
Sam House Development LLC – Joint Development Agreement	Pending	Dec 2015	City Center	Awaiting final design requirements for the guideway and Ala Moana Center station.	Required for the column construction for City Center Guideway and Ala Moana Center station
GGP Ala Moana LLC – Joint Development Agreement	Pending	Dec 2015	City Center	Awaiting final design requirements for the guideway and Ala Moana station.	Required for the column construction for City Center Guideway and Ala Moana Center station

NOTE: ROW – Right of way  
ROE – Right of entry

Pending Third Party Agreements are not currently having an effect on the MPS. However, the following agreements are becoming critical and will impact the project if not completed in the near term:

- University of Hawaii (UH) Master Agreement / Right of Entry (ROE) – HART’s ROE for the UH Urban Gardens was executed in October 2014. However, UH requires that the contractor receive their own ROE. Kiewit is working with UH to execute the ROE. The ROE for the UH Urban Gardens will serve as the template for Leeward Community College and the UH-West Oahu campuses.
- Aloha Stadium / Department of Accounting & General Services (DAGS) – Right of Entry for KHG is pending. DAGS has presented a ROE document that would require HART provide compensation for loss of parking. HART does not agree with this clause and is continuing discussions with DAGS.
- U.S. Navy / General Services Administration – Easements are in progress, and HART is still targeting end of December 2014.

### 2.2.3 Delivery Method

As a result of project delays, HART revised the Contract Packaging Plan (CPP). Several contract packages were combined (Airport/City Center Guideway Construction/City Center Utilities, West Oahu/Farrington/Kamehameha Station Group, Dillingham/Kaka'ako Station Group) to maximize economies of scale and reduce interface needs between design and construction contractors to achieve both cost and schedule benefits. However, subsequent to cancellation of the Westside Stations Group (West Oahu/Farrington/Kamehameha Station Groups), HART is reviewing their packaging strategy for all remaining contracts. This strategy will impact numerous aspects of the project including the schedule.

- Westside Stations Group – Bids for the Westside Stations Group construction contract were significantly higher than the engineer's estimate and the procurement was cancelled. HART is repackaging these nine stations into three separate packages:
  - Farrington Highway Stations Group – Invitation for Bids (IFB) in December 2014
  - West Oahu Stations Group – IFB in March 2015
  - Kamehameha Highway Station Stations Group – IFB in May 2015
- Procurement –
  - Westside Stations Group – Since the procurement was cancelled, HART is repackaging these nine stations into three separate packages:
    - Farrington Highway Stations Group – Invitation for Bids (IFB) in December 2014
    - West Oahu Stations Group – IFB in March 2015
    - Kamehameha Highway Station Stations Group – IFB in May 2015The current Engineers Estimate exceeds the FFGA budget for the FHSG. The PMOC has provided some recommendations and suggested procurement strategy that HART should consider for the Waipahu Station, which could result in cost savings.
  - Airport/City Center Guideway and Utilities Contract – HART is revising their procurement strategy and may now utilize Design-Build contract package(s).
  - Design Contracts – HART issued stop work notices to the designers for the Airport/City Center Guideway and Utilities Contract and Eastside Stations Group since these contract packages will now be DB.
  - Pearl Highlands Parking Structure DB Contract – HART issued an addendum extending the due date of qualifications until March 2015 and may extend this due date further. HART may consider a different contracting strategy to help mitigate costs.
  - HART is reviewing their packaging strategy for all remaining contracts. This strategy will impact numerous aspects of the project including the schedule.
- Kako'o Consultant (Programmatic Agreement) Contract – Because of performance issues, HART intends to terminate this contract for convenience. They will then re-procure the contract with revisions to the scope of work with the concurrence of the consulting parties.

#### **2.2.4 Core Systems and Vehicle Status**

AHJV will design, furnish, install, test, and commission passenger vehicles, operating systems, auxiliary vehicles and equipment, and appurtances, in support of incremental opening of the System. The following table provides a status of the Core Systems and Vehicle activities associated with the project:

Core System Description	Status
<b>General</b>	
Staffing	Vacant AHJV positions include Lead Engineer for LRVs, O&M Manager, and Construction Manager (temporarily filled).
Schedule	AHJV revised baseline contract schedule has been approved. However, re-procurement of Westside Stations Group and Airport City Center Guideway will result in revisions to CSC schedule at a later date. It is possible this will affect the CSC schedule.
Design Status	<p>Interim Design will be complete by the end of December 2014. Final Design has begun for most systems elements. Following are the approximate levels of design completion:</p> <ul style="list-style-type: none"> <li>• LRVs – 71% (Interim Design), 0% (Final Design)</li> <li>• Train Control – 93% (Interim Design), 78% (Final Design)</li> <li>• Traction Power – 100% (Interim Design), 69% (Final Design)</li> <li>• Communications – 100% (Interim Design), 14% (Final Design)</li> <li>• Fire Detection – 100% (Interim Design), 41% (Final Design)</li> </ul>
NTP Delay Claim	AHJV has asserted that it has had a 9-month delay in starting work due to CSC protest. This issue was to go to mediation, but the mediation has been postponed.
Fare Collection System	HART is coordinating with DTS to establish a city-wide fare system. HART intends to utilize fare gates (closed transit system). HART anticipates issuing RFP in January 2015 for the fare collection system. A preliminary cost estimate is less than the EAC, but the detailed cost estimate will be available in January 2015. The PMOC recommended that HART consider implementing cost containment measure on fare gate system to reduce potential cost overruns.
System Performance Design	There are some concerns with AHJV’s method for calculating headways and round-trip times. HART received updated System Performance Documents and continues discussions with AHJV. Alignment changes from Airport and City Center Fixed Facility Contractors may affect system performance. A full analysis should be available by the end of 2014.
Safety and Security	Open safety items issues log must continue to be maintained.
<b>Hawaiian Electric Companies (HECO)</b>	
Estimated Traction Power Demand	HART is to provide HECO with AHJV simulations to estimate power demand based on actual operation scenarios. AHJV submitted revised simulations for fail over criteria and discussions with HECO are ongoing.
Activation Dates	HART and HECO are coordinating project schedule and HECO activation start dates for power. The cost for activation of the Traction Power Substations was not included in the project estimate. A change order will be required to address this cost, which is still being assessed. This issue has not been captured in HART’s forecast but has been identified in the Risk Register.
Service Requests	AHJV has submitted HECO service requests for all system sites. Design coordination is progressing.
Additional HECO Substation	HART is working with HECO to determine if/when a substation near the West Loch Station will be required. HART, HECO and their consultants are completing more detailed consumption analyses. One option is the use of wayside or on-board energy storage. This was considered previously, but the technology has advanced considerably since it was first reviewed.

<b>Core System Description</b>	<b>Status</b>
<b>Vehicle Subsystem</b>	
Vehicle Schedule	AHJV is restructuring baseline schedule to include vehicle related activities, including change to 4-cars trains, Platform Screen Gates, and safety activities.
Car Production	Car shell assembly began in November 2014. Delivery of first car is scheduled for January 2016, but there is concern that this date cannot be met.
4-car Trains	<p>HART now plans to start revenue service with 4-car trains in place of the initial plan of 2-car trains based on FTA's acceptance in December 2013. There is still a disagreement between HART and AHJV on the magnitude of the cost savings associated with this change to 4-car trains. At this time, the issue has not been resolved. It is anticipated that HART and AHJV will resolve the commercial terms for change to 4-car trains in December 2014.</p> <p>There is a possible issue with Buy America content as a result of the change to End (E) cars and M (Middle) cars since the M cars do not have some of the higher value components (e.g. propulsion). HART will perform a Buy America Audit of the M (Middle) in January 2015.</p>
<b>Traction Electrification Subsystem</b>	
Uninterruptible Power Supply (UPS)	UPS loads are under discussion between HART and AHJV.
Middle Street AM Antenna	Civil team is progressing with mitigation design.
<b>Communication Subsystems</b>	
Obstacle Detection	Obstacle Detection via on-board CCTV under discussion. Pending design solution from AHJV.
<b>O&amp;M Subsystem</b>	
MSF Yard Configuration	AHJV core systems interface delaying civil construction.
MSF O&M	AHJV needs to submit Operations and Maintenance (O&M) procedures.
Guideway	AHJV core system design schedule is not currently in alignment.
<b>Fire Detection Subsystems</b>	
Fire Detection	Fire Detection configuration is needed for the Operations Service Building (OSB).

It should be noted that Finmeccania, the parent company of Ansaldo Breda and Ansaldo STS, is considering offers for the sale of both companies. It is not anticipated that the sale will have a negative impact on the project. HART has not had discussions with AHJV regarding the pending sale.

## 2.3 Project Management Plan and Sub-Plans

HART is in the process of updating several of its procedures and management plans including the PMP. These updates are necessary due to the organizational changes enacted by the Executive Director and the contract packaging changes that are being planned. It is critical for HART to update these plans and procedures soon.

The following table presents the status of each of the grantee's current management deliverables.

Sub-Plan	Revision No.	Date	Notes
Project Management Plan (PMP)	5.0	29-Jun-12	Update pending
Quality Management Plan (QMP)	2A	31-Jan-14	Update pending
Real Estate Acquisition and Management Plan (RAMP)	5	01-Jun-12	Update pending
Bus Fleet Management Plan (BFMP)	3	Mar-12	
Rail Fleet Management Plan (RFMP)	0.1	Mar-12	Update pending
Safety and Security Management Plan (SSMP)	4	05-Jun-13	
Safety and Security Certification Plan (SSCP)	3	28-Jun-13	
Configuration Management Plan	2A	07-Mar-14	Update pending
Staffing and Succession Plan	6A	31-Jan-14	Update pending
Risk and Contingency Management Plan (RCMP)	0	29-Jun-12	Update pending
Operating Plan	0.2	29-Jun-12	
Force Account Plan	0.3	05-Jan-12	Will be incorporated into PMP
Mitigation Monitoring Program	0	15-Mar-12	
Interface Management Plan	0.1	17-Jan-12	
Contract Packaging Plan	4B	28-Jan-14	Update pending
Claims Avoidance Plan	0.1	24-Jan-12	
Construction Management Plan (CMP)	2A	07-Mar-14	Update pending
Contract Resident Engineer Manuals (DB & DBOM)	2	26-Jul-13	Update pending
Contract Resident Engineer Manuals (DBB)	1.0	28-Jan-14	Update pending
Project Procedures			Updates pending

## 2.4 Project Schedule Status

HART directed the Design-Build (DB) contractors to re-baseline/revise their Critical Path Method (CPM) schedules after the 2013 construction suspension period and federal court case delays were resolved. HART has accepted the West Oahu/Farrington Highway Guideway (WOFH), Maintenance and Storage Facility (MSF), and CSC contractor "re-baseline/revise" schedules and the new milestone dates have been incorporated into the Master Program Schedule (MPS). However, it is anticipated that the CSC and Master MPS will require another revision as a result of the re-packaging of the WSSG contract and the Airport/City Center Guideway Project.

The PMOC has stressed the importance of validating all major interface logic connections between the individual contractor schedules in lieu of solely focusing on each schedule separately. The PMOC has recommended HART be more proactive with the schedule review process to ensure that the HART management team can effectively manage critical construction interface.

HART has engaged the new GEC III consultant and the new CE&I consultants during the MPS refinement process and has received valuable input and validation thus far. Furthermore, the PMOC provided HART a forensic schedule analysis report that indicated various errors, warnings, and general “housekeeping” corrections needing correction. HART project control staff has addressed most of the comments although this process will need to be conducted again after the easterly alignment contract delivery methods are determined and HART revises the MPS accordingly.

The RSD identified in the FFGA is January 30, 2020. HART’s current MPS identifies the target date for the start of interim revenue service as June 2018 and revenue service as July 2019. The interim service date has now been pushed almost two years from the original June 2016 date. The PMOC continues to question HART about the political sensitivities and economic feasibility of pursuing an interim opening. HART and the PMOC do agree that certain risks can be mitigated or greatly reduced through the interim opening trial period though the PMOC is suspect of the financial risk/reward by doing so. The table below provides a comparison of key milestone dates at time of FFGA application and the current MPS.

Milestone Description	Activity ID	Finish Date		Variance (Days)
		FFGA Application Baseline	Current MPS	
Interim Revenue Service	MM-0100	29-Jun-16	22-Jun-18	(719)
Target for Full Revenue Service	DBOM-9270	12-Mar-19	31-Jul-19	(81)

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

Period: January 2015 – March 2015		
Activity	Responsibility	Date
Monthly Progress Meeting (Conference Call)	FTA, HART and PMOC	January 07, 2015
Quarterly Meeting	FTA, HART and PMOC	January 22, 2015
Monthly Progress Meeting	FTA, HART and PMOC	February 11, 2015
Cost and Schedule Containment Meeting	FTA, HART and PMOC	February 11, 2015
Monthly Progress Meeting	FTA, HART and PMOC	March 11, 2015
Cost and Schedule Containment Meeting	FTA, HART and PMOC	March 11, 2015

## 2.5 Project Cost Status

The grantee’s Base Cost Estimate (BCE) dated March 19, 2012 is \$5.122 billion in Year-of-Expenditure (YOE) dollars, including \$644 million in allocated and unallocated contingency (or 15.0% of the BCE) and \$173 million in financing costs. Of the \$644 million in total contingency, \$101 million is unallocated. The current Project Budget is as follows:

Source	Amount
Base Cost Estimate	\$4,305 billion
Total Contingency	\$0.644 billion
Finance Charges	\$0.173 billion
<b>Total Project Cost</b>	<b>\$5.122 billion</b>

**Total Expenditures to Date – \$1.252 billion (through October 2014)**

### **2.5.1 Standard Cost Category (SCC)**

The FFGA SCC Workbook is submitted as a separate electronic file. The following table presents the FFGA budget, expenditures to date, and Estimate at Completion (EAC) for each SCC.

SCC	SCC Description	FFGA Budget	Base Cost	Allocated Cont.	Incurred
<b>10</b>	<b>GUIDEWAY &amp; TRACK ELEMENTS</b>	<b>1,275,328,962</b>	<b>1,114,305,144</b>	<b>161,023,818</b>	<b>111,149,499</b>
10.04	Guideway: Aerial structure	1,175,328,184	1,022,380,670	152,947,514	76,934,788
10.08	Guideway: Retained cut or fill	8,077,393	7,492,943	584,450	0
10.09	Track: Direct fixation	86,332,027	79,437,204	6,894,823	34,214,711
10.11	Track: Ballasted	3,550,634	3,293,724	256,910	0
10.12	Track: Special (switches, turnouts)	2,040,724	1,700,603	340,121	0
<b>20</b>	<b>STATIONS, STOPS, TERMINALS, INTERMODA</b>	<b>506,165,689</b>	<b>421,804,742</b>	<b>84,360,947</b>	<b>3,016,698</b>
20.01	At-grade station, stop, shelter, mall, terminal, platform	7,333,599	6,111,333	1,222,266	0
20.02	Aerial station, stop, shelter, mall, terminal, platform	353,476,148	294,563,457	58,912,691	0
20.06	Automobile parking multi-story structure	79,690,518	66,408,765	13,281,753	0
20.07	Elevators, escalators	65,665,424	54,721,187	10,944,237	3,016,698
<b>30</b>	<b>SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS</b>	<b>99,425,456</b>	<b>92,535,013</b>	<b>6,890,443</b>	<b>44,762,412</b>
30.02	Light Maintenance Facility	8,161,279	7,591,887	569,392	840,288
30.03	Heavy Maintenance Facility	40,906,889	38,099,138	2,807,751	13,456,144
30.04	Storage or Maintenance of Way Building	8,382,270	7,797,460	584,810	1,329,637
30.05	Yard and Yard Track	41,975,018	39,046,528	2,928,490	29,136,343
<b>40</b>	<b>SITWORK &amp; SPECIAL CONDITIONS</b>	<b>1,103,867,264</b>	<b>980,569,426</b>	<b>123,297,838</b>	<b>341,372,730</b>
40.01	Demolition, Clearing, Earthwork	34,695,802	29,980,157	4,715,645	241,537
40.02	Site Utilities, Utility Relocation	350,694,801	299,449,755	51,245,046	28,855,869
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	7,228,935	6,590,542	638,393	69,843
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks	30,841,906	26,979,122	3,862,784	6,836,521
40.05	Site structures including retaining walls, sound walls	8,637,582	7,998,960	638,622	885,463
40.06	Pedestrian / bike access and accommodation, landscaping	48,262,816	41,073,897	7,188,919	50,000
40.07	Automobile, bus, van accessways including roads, parking lots	212,536,181	181,979,369	30,556,812	2,723,037
40.08	Temporary Facilities and other indirect costs during construction	410,969,241	386,517,624	24,451,617	301,710,460
<b>50</b>	<b>SYSTEMS</b>	<b>247,460,781</b>	<b>221,284,483</b>	<b>26,176,298</b>	<b>10,375,849</b>
50.01	Train control and signals	91,492,532	81,982,556	9,509,976	1,197,986
50.02	Traffic signals and crossing protection	12,524,011	10,458,227	2,065,784	0
50.03	Traction power supply: substations	32,873,934	29,500,927	3,373,007	342,747
50.04	Traction power distribution: catenary and third rail	36,426,286	32,878,150	3,548,136	3,120,123
50.05	Communications	59,889,234	53,691,339	6,197,895	5,714,993
50.06	Fare collection system and equipment	10,221,753	9,159,277	1,062,476	0
50.07	Central Control	4,033,031	3,614,007	419,024	0
<b>Construction Subtotal (10 - 50)</b>		<b>3,232,248,152</b>	<b>2,830,498,808</b>	<b>401,749,344</b>	<b>510,677,188</b>

SCC	SCC Description	FFGA Budget	Base Cost	Allocated Cont.	Incurred
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>	<b>222,188,386</b>	<b>197,397,947</b>	<b>24,790,439</b>	<b>75,939,316</b>
60.01	Purchase or lease of real estate	201,658,907	179,360,664	22,298,243	71,879,497
60.02	Relocation of existing households and businesses	20,529,479	18,037,283	2,492,196	4,059,819
<b>70</b>	<b>VEHICLES</b>	<b>208,501,186</b>	<b>186,829,020</b>	<b>21,672,166</b>	<b>11,714,780</b>
70.02	Heavy Rail	186,061,066	166,721,385	19,339,681	8,420,146
70.06	Non-revenue vehicles	16,011,166	14,346,923	1,664,243	3,294,634
70.07	Spare parts	6,428,954	5,760,712	668,242	0
<b>80</b>	<b>PROFESSIONAL SERVICES</b>	<b>1,183,826,026</b>	<b>1,090,438,814</b>	<b>93,387,212</b>	<b>610,660,655</b>
80.01	Preliminary Engineering	95,120,484	94,055,262	1,065,222	101,098,184
80.02	Final Design	257,934,908	228,321,632	29,613,276	129,560,863
80.03	Project Management for Design and Construction	385,825,694	366,458,463	19,367,231	258,515,007
80.04	Construction Administration & Management	218,155,752	199,656,728	18,499,024	55,917,579
80.05	Professional Liability and other Non-Construction Insurance	52,138,030	46,549,724	5,588,306	18,988,608
80.06	Legal; Permits; Review Fees by other agencies, cities, etc.	76,135,125	67,641,006	8,494,119	14,972,076
80.07	Surveys, Testing, Investigation, Inspection	24,955,327	21,759,335	3,195,992	17,709,483
80.08	Start up	73,560,706	65,996,664	7,564,042	13,898,855
<b>90</b>	<b>Subtotal (10 - 80)</b>	<b>4,846,763,750</b>	<b>4,305,164,589</b>	<b>541,599,161</b>	<b>1,208,991,939</b>
	<b>UNALLOCATED CONTINGENCY</b>	101,871,170	0	101,871,170	0
<b>100</b>	<b>Subtotal (10 - 90)</b>	<b>4,948,634,920</b>	<b>4,305,164,589</b>	<b>643,470,331</b>	<b>1,208,991,939</b>
	<b>FINANCE CHARGES</b>	173,058,242			0
	<b>Total Project Cost (10 - 100)</b>	<b>5,121,693,162</b>	<b>4,305,164,589</b>	<b>643,470,331</b>	<b>1,208,991,939</b>
	<b>Provisional Request for Payment</b>				39,399,589
	<b>Total Project Cost (10 - 100)</b>	<b>5,121,693,162</b>	<b>4,305,164,589</b>	<b>643,470,331</b>	<b>1,248,391,528</b>

## 2.5.2 Contingency

HART's current assessment indicates a balance of uncommitted contingency of \$334 million (\$66.5M in unallocated and \$267.5M in allocated). However, this does not reflect impacts of the WSSG bids on the stations contracts or the updated cost estimate for the Airport/City Center Guideway Contract, which will now be delivered using DB contracting.

## 2.5.3 Funding Sources

The following are the project capital revenue (funding) sources:

Source	Amount
General Excise Tax (GET)	\$3.358 billion
Section 5309	\$1.550 billion
Section 5307	\$0.210 billion
American Recovery and Reinvestment Act (ARRA)	\$0.004 billion
<b>Total</b>	<b>\$5.122 billion</b>

The GET surcharge receipts received to date are approximately \$1.48 billion. HART received \$49.5 million in GET funds for quarter ending September 30, 2014, which is \$5.2 million under plan for this quarter. Overall, the GET total is \$40.8 million under plan overall.

HART may have a shortfall of available funding due to limitations on the use of Section 5307 funds and GET revenues that are less than planned. HART will address this shortfall in an update of their Financial Plan, which will be available in February 2015.

## 2.6 Project Risk

A Risk Refresh Workshop was performed the week of April 11, 2012 to address the Preliminary PMOC findings from a scope, schedule, and cost review, Risk Register and Action Items, and Path Forward.

A second Risk Refresh Workshop was performed on April 15, 2014. Based on the PMOC's initial review of the information provided to date, it is possible that a recommendation for HART to develop aggressive cost containment measures may be made.

The PMOC has emphasized the need for HART to revisit both its primary and secondary mitigation measures. HART engaged its new GEC and CE&I consultants to see if they have any new ideas that have not been considered for primary or secondary mitigation. PMOC and HART held a breakout session in February 2014 to discuss these measures. HART must still develop robust secondary mitigation strategies.

A second Risk Refresh Workshop was performed on April 15, 2014. FTA submitted the PMOC Risk Refresh Report to HART on August 14, 2014. HART's formal response to FTA/PMOC recommendations was provided on September 4, 2014. The PMOC report included the following conclusions and recommendations:

- HART's estimate falls short of the predicted FTA cost risk model outcome by \$265 million. HART should review its project estimate and determine how to reduce costs to

close this gap. It should be noted that this gap was identified prior to bids being received for the WSSG contract. It is anticipated this gap will change but will not be known until updated estimates of the remaining contracts are available.

- The PMOC-recommended amount of secondary mitigation is \$195.5 million.
- Strong controls must be put in place immediately to avoid future rapid contingency reduction. The frequency and the levels of project management to which these statistics are reported should be improved and monitored monthly.
- The PMOC and HART should engage in a focused “cost containment workshop” on a monthly basis to monitor the efforts taken to avoid rapid contingency usage.
- The FFGA RSD of January 2020 can be achieved; however, HART must implement strong schedule and contract management throughout the remainder of the project.

The PMOC and HART held a workshop in December 2014 to review the current Estimate at Complete. HART’s current Estimate at Complete (EAC) indicates that the Project will exceed the FFGA budget unless HART receives extremely favorable bids on the remaining contract packages and continues implementing valid cost mitigation measures successfully. The current overrun is estimated at \$500-600 million. This EAC takes into consideration the most recent cost estimates for the Westside Stations and the Airport/City Center Guideway, which have increased primarily due to the AIS and federal lawsuit delays. However, this number has not yet been validated.

The PMOC has reviewed and discussed the project cost on a monthly basis with HART in an effort to ensure that cost issues are proactively addressed, and PMOC has provided numerous cost mitigation recommendations that HART should give consideration to implement. However, since completion of the 2014 Risk Assessment Refresh effort, minimal cost containment measures have been accomplished by HART. This unfavorable trend of minimal cost containment is alarming. The PMOC will continue to hold Cost Containment Workshops with HART on a monthly basis to ensure HART begins properly implementing significant cost containment measures.

## 2.7 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	Jan-15		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.
2	Process Kiewit submission of first claim for materials escalation due to AIS/NTP delay	HART	Mar-14	Aug-14	Nov-14	Closed – HART settled basis for paying escalation costs and received Board of Director's approval for change orders in November 2014.
3	Resolve issue with AHJV regarding cost savings associated with change to 4-car trains	HART	Mar-14	Dec-14		Open – in progress.
4	Resolve HECO issue with Davis-Bacon requirements	HART/FTA	Mar-14	Dec-14		Open – HECO waiver is pending. HART provided MOU to PMOC.
5	HART to provide updated Cost Estimates: - WSSG - Airport/City Center GW	HART	Oct-14	Dec-14		Open
6	Updates resulting from Risk Refresh:					
	PMOC to schedule a conference call with HART to discuss RCMP	PMOC	Oct-14	Dec-14		Open
	Risk Register Breakout Session	HART	Jul-14	Dec-14		Open– Scheduled for December 2014
	Procurement strategy	HART	Aug-14	Dec-14		
	Re-baseline MPS	HART	Apr-14	Feb-15		Open
	Update the RCMP (including Hold Points and Secondary Mitigation Measures)	HART	Sept-13	Feb-15		Open
	Re-baseline budget	HART	Apr-14	Feb-15		Open
	Re-baseline Financial Plan	HART	Apr-14	Feb-15		Open
7	HART to provide plan to address conflict of interest with AECOM acquisition of URS	HART	Jul-14	Dec-14		Open -
8	HART QAM to review constructability and design QA of remaining bid packages	HART	Jul-14	Dec-14		Open – In progress
9	HART to provide response letter to HDOT letter regarding safety and security CELs/CILs	HART	Oct-14	Nov-14		Open
10	Provide updates on Buy America status with Utility contracts	HART	Nov-14	Jan-15		

<b>Item No.</b>	<b>Item</b>	<b>Responsible Party</b>	<b>Date Identified</b>	<b>Date Due</b>	<b>Date Completed</b>	<b>Status</b>
11	Provide partial termination letters for Airport/City Center Guideway Design Project and East Side Station Design packages	HART	Dec-14	Jan-15		Open
12	PMOC to schedule a follow-up discussion of the CPP	PMOC	Dec-14	Jan-15		Open
13	HART to provide General Conditions/Special Conditions for FHSG IFB	HART	Dec-14	Dec-14		Open

## APPENDICES

### Appendix A: Acronym List

AHJV	▪ Ansaldo Honolulu Joint Venture
AIS	▪ Archeological Inventory Survey
APS	▪ Adjusted Project Schedule
ARRA	▪ American Recovery and Reinvestment Act
ASG	▪ Airport Station Group
ATC	▪ Alternative Technical Concept
AUG	▪ Airport Utilities Group
AVI	▪ Automatic Vehicle Indication
AVL	▪ Automatic Vehicle Location
BCE	▪ Base Cost Estimate
BFMP	▪ Bus Fleet Management Plan
CCUG	▪ City Center Utilities Group
CE&I	▪ Construction Engineering and Inspection
CMP	▪ Construction Management Plan
CPM	▪ Critical Path Method
CPP	▪ Contract Packaging Plan
CSC	▪ Core Systems Contract
CSSO	▪ Chief Safety and Security Officer
DAGS	▪ Department of Accounting & General Services
DB	▪ Design-Build
DBB	▪ Design-Bid-Build
DBOM	▪ Design-Build-Operate-Maintain
DCCA	▪ Department of Commerce and Consumer Affairs
DHHL	▪ Department of Hawaiian Home Lands
DLIR	▪ Department of Labor and Industrial Relations
DLNR	▪ Department of Land and Natural Resources
DOE	▪ Department of Education
DOT	▪ Department of Transportation
EAC	▪ Estimate at Completion
EIS	▪ Environmental Impact Statement
FD	▪ Final Design
FEIS	▪ Final Environmental Impact Statement
FFGA	▪ Full Funding Grant Agreement
FHSG	▪ Farrington Highway Station Group
FHWA	▪ Federal Highway Administration
FTA	▪ Federal Transit Administration
FY	▪ Fiscal Year
GEC	▪ General Engineering Consultant
GET	▪ General Excise Tax
GSA	▪ General Services Administration
HART	▪ Honolulu Authority for Rapid Transportation
HCC	▪ Honolulu Community College
HCDA	▪ Hawaii Community Development Authority
HDOT	▪ Hawaii Department of Transportation
HECO	▪ Hawaiian Electric Company
HNTB	▪ Howard, Needles, Tammen & Bergendoff
IFB	▪ Invitation to Bid
ITP	▪ Inspection Test Plans
JU&O	▪ Joint Use & Occupancy
KHG	▪ Kamehameha Highway Guideway
KHSG	▪ Kamehameha Highway Stations Group

KIWC	▪ Kiewit Infrastructure West Company
KKJV	▪ Kiewit Kobayashi Joint Venture
LCC	▪ Leeward Community College
LEED	▪ Leadership in Energy and Environmental Design (LEED)
MMP	▪ Mitigation Monitoring Program
MOA	▪ Memorandum of Agreement
MOT	▪ Maintenance of Traffic
MOW	▪ Maintenance of Way
MPS	▪ Master Project Schedule
MSF	▪ Maintenance and Storage Facility
NCR	▪ Non-Compliance Report
NEPA	▪ National Environmental Policy Act
NTP	▪ Notice to Proceed
OCCC	▪ Oahu Community Correctional Center
OCIP	▪ Owner Controlled Insurance Program
OP	▪ Oversight Procedure
PA	▪ Programmatic Agreement
PE	▪ Preliminary Engineering
PM	▪ Project Manager
PMC	▪ Project Management Consultant
PMOC	▪ Project Management Oversight Contractor
PMP	▪ Project Management Plan
PSG	▪ Platform Screen Gate
PW	▪ Project-wide
QA	▪ Quality Assurance
QAM	▪ Quality Assurance Manager
QAP	▪ Quality Assurance Plan
QMP	▪ Quality Management Plan
RAMP	▪ Real Estate Acquisition and Management Plan
RCMP	▪ Risk and Contingency Management Plan
RFMP	▪ Rail Fleet Management Plan
RFB	▪ Request for Bids
RFP	▪ Request for Proposals
RFQ	▪ Request for Qualifications
ROD	▪ Record of Decision
ROE	▪ Right of Entry
ROW	▪ Right of Way
RSD	▪ Revenue Service Date
SCC	▪ Standard Cost Category
SHPD	▪ State Historic Preservation Division
SOA	▪ State Oversight Agency
SS	▪ Safety and Security
SSCM	▪ Safety and Security Certification Manager
SSCP	▪ Safety and Security Certification Plan
SSMP	▪ Safety and Security Management Plan
SSPP	▪ System Safety Program Plan
SSSPS	▪ System Safety and Security Program Standards
TCC	▪ Technical Capacity and Capability
UH	▪ University of Hawaii
UPS	▪ Uninterruptible Power Supply
VE	▪ Value Engineering
WOFH	▪ West Oahu/Farrington Highway
WOSG	▪ West Oahu Stations Group
WSSG	▪ Westside Stations Group
YOE	▪ Year of Expenditure

## Appendix B: Contract Status

The following table provides the status of various ongoing contracts within this Project:

Contract	Description	Contractor	Base Contract Value	Change Orders	Change Order %	Current Contract Value	Expended	% Exp.	DBE	Award Date	Compl. Date
MM-901	Program Management Support Consultant (PMSC-2)	HDR/InfraConsult LLC	\$33,376,897			\$36,500,000	\$24,472,532	73.3%	0%	Mar 2012	Feb 2015
Notes/Issues:											
MM-910	General Engineering Consultant (GEC II)	Parsons Brinkerhoff	\$300,000,000				\$132,000,000		0%	Jun 2011	Pending
Notes/Issues:		Contract closeout is pending.									
MM-913	General Engineering Consultant (GEC III)	CH2M Hill	\$46,143,277			\$46,143,277	\$8,987,669	19.5%	1.32%	Dec 2013	Mar 2019
Notes/Issues:		<ul style="list-style-type: none"> <li>▪ None at this time</li> </ul>									
MM-290	Construction Engineering and Inspection (West)	PGH Wong Engineering, Inc	\$54,232,480			\$54,232,480	\$5,651,907	10.4%	0.92%	Jan 2014	Jan 2020
Notes/Issues:		<ul style="list-style-type: none"> <li>▪ None at this time.</li> </ul>									
MM-595	Construction Engineering and Inspection (East)	AECOM/URS Corporation	\$63,083,417			\$63,083,417	\$4,582,059	7.3%	0.87%	Jan 2014	Dec 2018
Notes/Issues:		<ul style="list-style-type: none"> <li>▪ Conflict of Interest. HART. However, HART is reconsidering packaging strategy for Airport/City Center contracts. If DB is utilized, HART believes it may be possible to retain URS since any contractual relationship with AECOM would be terminated under DB scenario.</li> </ul>									
MM-962	Core System Contract Oversight Consultant	Lea + Elliott, Inc	\$43,988,989			\$43,988,989	\$4,245,367	9.7%	0.25%	Feb 2014	Aug 2019
Notes/Issues:		<ul style="list-style-type: none"> <li>▪ None at this time.</li> </ul>									
DB-120	West Oahu/Farrington Highway DB	KIWC	\$482,924,000	\$113,998,382	23.6%	\$596,922,382	\$322,704,037	53.7%	0.78%	Nov 2009	Jul 2016
Notes/Issues:		<ul style="list-style-type: none"> <li>▪ Ongoing activities include utility relocations; construction of drilled shafts and columns; fabrication of precast segments; and erection of precast segments.</li> <li>▪ Agreement called for issuance of all four NTPs within 120 calendar days of December 1, 2009.</li> <li>▪ CCO has been approved by HART Board to resolve compensation associated with NTP and AIS Delays. Resolution does not include some components of escalation, which will be settled on case-by-case basis.</li> <li>▪ Contract is approximately 3 months behind schedule. HART is working with the contractor to mitigate delay.</li> </ul>									

Contract	Description	Contractor	Base Contract Value	Change Orders	Change Order %	Current Contract Value	Expended	% Exp.	DBE	Award Date	Compl. Date
DB-200	Maintenance and Storage Facility DB	Kiewit/Kobayashi JV	\$195,258,000	\$70,600,008	36.1%	\$265,858,008	\$151,214,117	55.1%	0.07%	Jun 2011	Apr 2016
Notes/Issues:		<ul style="list-style-type: none"> <li>Ongoing activities include retaining wall construction; utility installation; installation of building foundations, and steel erection.</li> <li>CCO has been approved by HART Board to resolve compensation associated with NTP and AIS Delays. Resolution does not include some components of escalation, which will be settled on case-by-case basis.</li> </ul>									
DB-320	Kamehameha Highway Guideway DB	KIWC	\$372,150,000	\$11,515,363	3%	\$383,665,363	\$116,390,828	30.2%	0.08%	Jun 2011	Sep 2016
Notes/Issues:		<ul style="list-style-type: none"> <li>Ongoing activities include design; utility relocations; and method and test shafts.</li> <li>CCO has been approved by HART Board to resolve compensation associated with NTP and AIS Delays. Resolution does not include some components of escalation, which will be settled on case-by-case basis.</li> <li>Contract is currently 7 months behind primarily as a result of using lower actual productivity rates from WOFH than was planned for KHG.</li> </ul>									
DBOM-920	Core Systems Contract	Ansald/Honolulu JV	\$573,782,793	\$29,198,490	5%	\$602,981,089	\$93,845,951	15.6%	0.025%	Nov 2011	Mar 2019
Notes/Issues:		<ul style="list-style-type: none"> <li>Ongoing activities include design; and vehicle manufacturing.</li> <li>AHJV revised baseline schedule is approved. However, re-procurement of Westside Stations Group and Airport/City Center Guideway will result in revisions to CSC schedule at a later date.</li> </ul>									
MI-930	Elevators and Escalators Install & Maintain	Schindler Elevator Corporation	\$50,982,714	\$0	0%	\$50,982,714	\$3,016,698	6.0%	0%	May 2013	Jul 2018
Notes/Issues:		<ul style="list-style-type: none"> <li>None at this time.</li> </ul>									
FD-140	West Oahu Station Group Construction FD	URS, Inc.	\$7,789,000	\$1,473,805	19%	\$9,262,805	\$7,546,546	78.9%	0%	Jun 2012	Dec 2016
Notes/Issues:		<ul style="list-style-type: none"> <li>Westside Stations Group construction package includes Farrington Highway Station Group, West Oahu Station Group, and Kamehameha Station Group. Procurement was cancelled due to higher than anticipated bids.</li> <li>Revised engineer's estimate exceeds the FFGA budget.</li> </ul>									
FD-240	Farrington Highway Station Group FD	HDR, Inc. / URS	\$9,300,696	\$2,907,349	31%	\$12,208,045	\$9,885,212	69.6%	4.7%	Jan 2011	Dec 2016
Notes/Issues:		<ul style="list-style-type: none"> <li>See FD-140</li> </ul>									
FD-340	Kamehameha Highway Station Group Construction FD	Anil Verma, Inc.	\$8,702,592	\$0	0%	\$8,702,592	\$7,687,346	90%	35.76%	Nov 2012	Dec 2016
Notes/Issues:		<ul style="list-style-type: none"> <li>See FD-140</li> </ul>									

Contract	Description	Contractor	Base Contract Value	Change Orders	Change Order %	Current Contract Value	Expended	% Exp.	DBE	Award Date	Compl. Date
FD-430	Airport Section Guideway and Utilities FD	AECOM	\$38,840,960	\$3,711,172	9.5%	\$42,052,132	\$35,700,077	83.9%	0.42%	Dec 2011	Jun 2017
Notes/Issues:		<ul style="list-style-type: none"> <li>▪ Ongoing activities include completion of design and preparation of bid package.</li> <li>▪ Airport and City Center Guideway Construction Packages will be combined. Request for Bids to be issued July 2014. HART to review timing of Geotechnical Data Report (GDR) in relation to the anticipated bid due date.</li> <li>▪ Revised engineer's estimate exceeds the FFGA budget.</li> </ul>									
FD-440	Airport Station Group Construction FD	AECOM	\$10,177,365	\$0	0%	\$10,177,365	\$8,756,369	76.8%	2.31%	Nov 2012	Jul 2017
Notes/Issues:		<ul style="list-style-type: none"> <li>▪ Final design activities ongoing.</li> </ul>									
FD-530	City Center Section Guideway and Utilities FD	AECOM	\$43,948,220	\$1,282,803	2.9%	\$45,231,023	\$34,820,966	77.0%	0.44%	Jul 2012	May 2018
Notes/Issues:		<ul style="list-style-type: none"> <li>▪ See FD-430.</li> </ul>									
FD-550	Dillingham and Kaka'ako Station Group Construction FD	Perkins & Will	\$18,321,918	\$0	0%	\$18,321,918	\$7,864,923	42.9%	0%	Jun 2013	Jul 2018
Notes/Issues:		<ul style="list-style-type: none"> <li>▪ Final design activities ongoing.</li> </ul>									
DBB-505	Airport Section Utilities Construction	Nan	\$28,413,973	\$0	0%	\$28,413,973	\$0.00	0%	0%	Jul 2014	Jun 2016
Notes/Issues:		<ul style="list-style-type: none"> <li>▪ Construction activities ongoing.</li> </ul>									
DBB-525	Airport Section Guideway Seven Pier Construction	HDCC/CJA JV	\$3,973,000	\$0	0%	\$3,973,000	\$0.00	0%	0%	Sep 2014	Feb 2015
Notes/Issues:		<ul style="list-style-type: none"> <li>▪ Construction activities ongoing.</li> </ul>									

## Appendix C: Procurement Schedule

Contract No.	Segment	Type Service	Description	Status	Advertise	NTP	Complete
DBB-185	WOFH/ KHG	Construction	West Oahu / Farrington Highway and Kamehameha Station Groups Construction	Cancelled			
DB-275	KHG	Design/Build	Pearl Highlands Parking Structure/Bus Transit Center	Suspended	3/3/2014	12/28/14	4/29/2018
DBB-520	Airport	Construction	Airport and City Center Guide Guideway Construction/City Center Utilities	Suspended	7/1/2014	12/15/2014	4/29/2018
DBB-271	WOFH	Construction	Farrington Highway Station Group	Pending	Dec 2014	Mar 2105	Jul 2017
DBB-171	WOFH	Construction	West Oahu Station Group	Future	TBD	TBD	TBD
DBB-371	KHG	Construction	Kamehameha Station Group	Future	TBD	TBD	TBD
DBB-470	Airport	Construction	Airport Station Group	Future	TBD	TBD	TBD
DBB-580	City Cen	Construction	Dillingham / Kaka'ako Station Group	Future	TBD	TBD	TBD
FD-600	WOFH	Design	UH West Oahu Park-and-Ride and Ho'opili Station Finishes	Future	TBD	TBD	TBD
DBB-600	WOFH	Construction	UH West Oahu Park-and-Ride and Ho'opili Station Finishes	Future	TBD	TBD	TBD

Note: PW indicates "Project Wide".

## Appendix F: Project Overview and Map

**Date:** December 2014  
**Project Name:** Honolulu Rail Transit Project  
**Grantee:** City and County of Honolulu  
**FTA Regional contact:** Catherine Luu  
**FTA HQ contact:** Kim Nguyen

### SCOPE

**Description** The proposed Project is an approximately 20-mile rail alignment extending from East Kapolei to Ala Moana Center.

**Guideway** The majority of the Project is to be built on aerial structure, but the Project also includes a short at-grade section (0.6 miles).

**Stations** 21 stations (20 aerial and 1 at-grade)

**Support Facility** Maintenance and Storage Facility (located near Leeward Community College)

**Vehicles** 80 light metro rail

**Ridership** 99,800 weekday boardings in 2019; 114,300 weekday boardings in 2030

### SCHEDULE

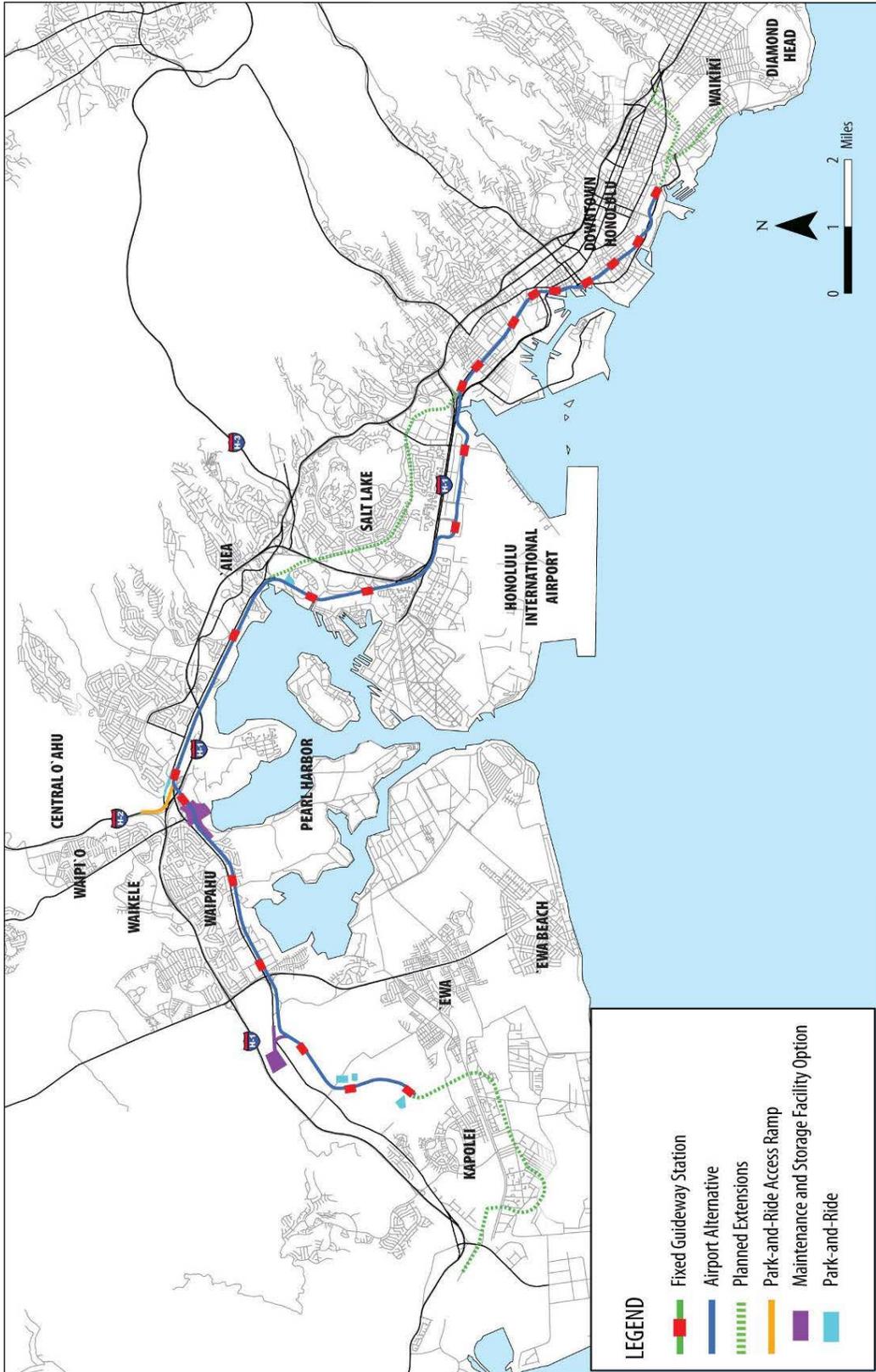
10/09 Approval Entry to PE	03/19 Estimated RSD at Entry to PE
12/11 Approval Entry to FD	03/19 Estimated RSD at Entry to FD
06/12 Request for FFGA	03/19 Estimated RSD at Request for FFGA
12/12 FFGA	01/20 RSD at FFGA

### COST

\$5.348 B Total Project Cost (\$YOE) at Approval Entry to PE  
\$5.126 B Total Project Cost (\$YOE) at Approval Entry to FD  
\$5.122 B Total Project Cost (\$YOE) at request for an FFGA  
\$5.122 B Total Project Cost (\$YOE) at FFGA

\$1.252B Amount of Expenditures at date of this report  
29.0% complete (Total Project Expenditures/Total Project Cost)

# Honolulu Rail Transit Project Map



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# Honolulu Rail Transit Project Map

