

HONOLULU RAIL TRANSIT PROJECT



June 2018 MONTHLY PROGRESS REPORT



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REPORT FORMAT AND FOCUS

This document 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 HART's technical capability and capacity to execute a project efficiently and effectively, and hence, whether HART continues to be ready to receive federal funds for further project development.

This document covers the project and quality management activities on the Honolulu Rail Transit Project managed by HART as the project sponsor and partially financed by the FTA under the Full Funding Grant Agreement (FFGA). Concurrent non-project activities and other items not covered by the FFGA may not be included.

INFORMATION REGARDING FORWARD-LOOKING STATEMENTS

This document includes forward-looking information. The words "believe", "anticipate", "expect", "intend", "aim", "plan", "predict", "continue", "assume", "positioned", "may", "will", "should", "shall", "risk" and any other similar expressions that are predictions of or indicate future events and future trends identifies forward-looking information. Forward-looking information includes all matters that are not historical facts. Readers should not place undue reliance on forward-looking information because it involves known and unknown risks, uncertainties and other factors that are in many cases beyond HART's control. By its nature, forward-looking information involves risks and uncertainties because it relates to events and depends on circumstances that may or may not occur in the future. Forward-looking information is not a guarantee of future performance, and HART's actual results of operations, financial condition, and the development of the industry in which it operates may differ materially from those made in or suggested by forward-looking information contained in this document. The cautionary statements set forth above should be considered in connection with any subsequent forward-looking information that HART, or persons acting on its behalf, may issue. Factors that may cause HART's actual results to differ materially from those expressed or implied by the forward-looking statements in this document include but are not limited to the risks described in HART's annual report. For projects funded through the FTA's New Starts program, the FTA and its PMOC use a risk-based assessment process to review and validate a project sponsor's budget and schedule. 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. Furthermore, any forward looking statements contained in this document are made as of the date of this report, and HART does not undertake any obligation to update publicly or to revise any of the included forward-looking statements, whether as a result of new information, future events or otherwise, except as expressly required by law.

ON THE COVER:

Left: West Loch Station construction.

Upper Right: Station construction at the Ho'opili Station site.

Lower Right: Construction at the Pearlridge Station site.

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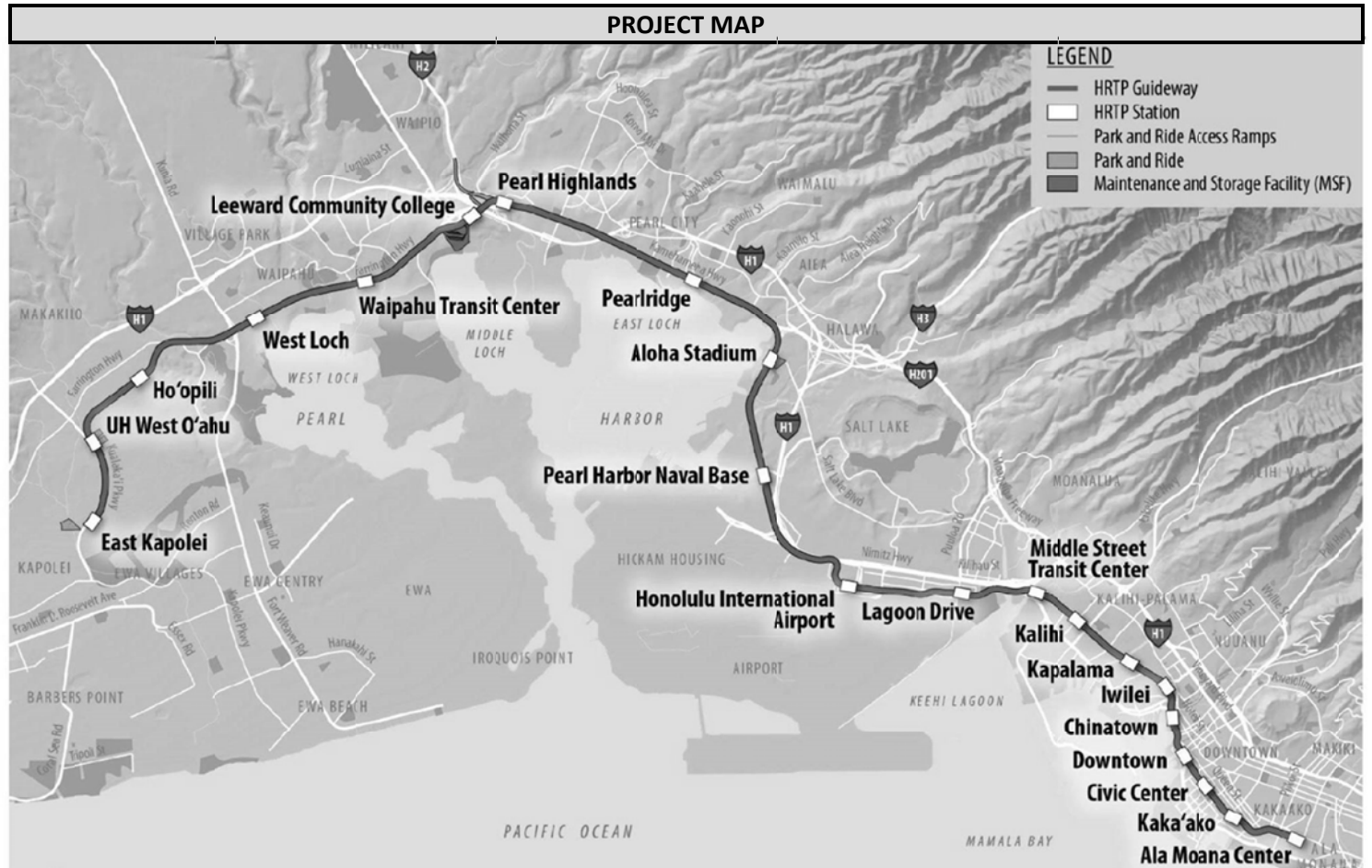
LIST OF ACRONYMS

A&E	Architect/Engineer	COI	Conflict of Interest
AAN	Accepted as Noted	COMMS	Communications
AANR	Accepted as noted, resubmit	CONRAC	Consolidated Rental Car Facility
AB	AnsaldoBreda	COR	Corporation Counsel
AC	Asphalt Concrete	CORP	Central Oahu Regional Park
ACHP	Advisory Council on Historic Preservation	CP	Consulting Party
ACS	Access Control System	CPC	Cost Proposals by Consultant
ADA	Americans with Disabilities Act	CPM	Critical Path Method
AFA	Air Force Association	CPO	Chief Procurement Officer
AFE	Authorized for Expenditure	CPP	Contract Packaging Plan
AGS	Airport Guideway and Stations	CRM	Comment Review Meeting
AHJV	Ansaldo Honolulu Joint Venture	CRMS	Customer Relational Management System
AIS	Archaeological Inventory Survey	CROE	Construction Right-of-Entry
AIT	Art-in-Transit	CRRB	Car Readiness Review Board
ALS	Aloha Stadium Station	CSC	Core Systems Contract
ANR	Accepted as Noted–Resubmit	CSCC	Construction Specification Conformance Checklists
API	Application Program Interface	CSDBOM	Core System Design-Build-Operate-Maintain
APS	Auxiliary Power Supply	CSL	Cross Hole Sonic Logging
APTA	American Public Transportation Association	CSOC	Core Systems Oversight Consultant
ARRA	American Recovery and Reinvestment Act	CSSC	Core System Support Consultant
ASG	Airport Station Group	CSSM	Construction Safety and Security Manager
ASI	Architectural Supplemental Information	CSSP	Construction Safety & Security Plan
ASU	Airport Section Utilities	CST	Customer Service Terminal
ATC	Automatic Train Control	CTS	Communications Transmission System
ATO	Automated Train Operation	CW	Corridor-Wide
ATS	Automatic Train Supervision	CWR	Continuous Welded Rail
AVA	Anil Verma Associates, Inc.	CWRM	Commission on Water Resource Management
BA	Buy America	CZM	Coastal Zone Management
BAC	Buy America Compliance	DAGS	Department of Accounting & General Services
BACM	Buy America Compliance Matrix	DAV	Disabled American Veterans
BAFO	Best and Final Offer	DB	Design-Build
BANCT	Best Available Noise Control Technology	DBB	Design-Bid-Build
BART	Bay Area Rapid Transit	DBE	Disadvantaged Business Enterprise
BCS	Balanced Cantilever System	DBEDT	Department of Business, Economic Development and Tourism
BFS	Budget and Fiscal Services	DBOM	Design-Build-Operate-Maintain
BIC	Ball in Court	DCAB	Disability and Communication Access Board
BLS	Blue Light Station	DCCC	Design Criteria Conformance Checklists
BMP	Best Management Practice	DCN	Design Change Notice
BOD	Board of Directors	DD	Definitive Design
BPS	Baseline Project Schedule	DDC	Department of Design and Construction
BUE	Bottom-Up Estimate	DDC-MED	Department of Design & Construction-Mechanical & Electrical Division
BUEG	Back-up Emergency Generator	DES	Department of Environmental Services
BWS	Board of Water Supply	DF	Direct Fixation
CAM	Construction Access Milestone	DFF	Direct Fixation Fastener
CAR	Corrective Actions	DFIM	Design Furnish Install Maintain
CC2	City Center Phase 2	DFM	Department of Facility Maintenance
CC3	City Center Phase 3	DHHL	Department of Hawaiian Homelands
CCGS	City Center Guideway and Stations	DHR	Department of Human Resources
CCH	City and County of Honolulu	DIT	Department of Information Technology
CCO	Contract Change Order	DKSG	Dillingham and Kaka'ako Station Group
CCTV	Closed Circuit Television	DLIR	Hawai'i Department of Labor and Industrial Relations
CCUG	City Center Utilities and Guideway	DLNR	Department of Land and Natural Resources
CCUR	City Center Utilities Relocation	DOE	Department of Education
CDC	Compendium of Design Criteria	DOH	Department of Health
CDL	Commercial Driver License	DOL	Department of Labor
CDR	Conceptual Design Review	DPM	Deputy Project Managers
CDRL	Contract Document Requirements List	DPP	Department of Planning and Permitting
CE&I	Construction Engineering and Inspection	DPR	Department of Parks and Recreation
CEB	Civil Engineering Branch	DPS	Department of Public Safety
CEL	Certifiable Elements List	DS	Downstream
CIC	Communication Interface Cabinet	DSDC	Design Services During Construction
CIL	Certifiable Items List	DTS	Department of Transportation Services
CIP	Cast-in-place	DTU	Dillingham Temporary Utilities
CJA	Condon-Johnson & Associates	DUF	Division of Urban Forestry
CLOMR	Conditional Letter of Map Revision	DVT	Design Verification Test
CLR	Cultural Landscape Report	E&O	Errors and Omissions
CLSM	Controlled Low-strength Material	EA	Environmental Assessment
CM	Construction Manager	EAC	Estimate at Completion
CMP	Construction Management Plan	EB	East Bound
CMS	Contract Management System	EC	Environmental Compliance
CMU	Concrete Masonry Unit	ECP	Environmental Compliance Plan
CNMMP	Construction Noise Mitigation and Monitoring Plan	E/E	Elevator/Escalator
CO	Certificate Occupancy		

EKP	East Kapolei	HILT	Hawaiian Islands Land Trust
EMC	Electromagnetic Compatibility	HIOSH	Hawaii Occupational Safety and Health Division
EMF	Electromagnetic Forces	HOP	Ho'opili
EMI	Electromagnetic Interference	HP	Historic Preservation
EMP	Environmental Management Plan	HPC	Historic Preservation Committee
EMR	Elevator Machine Room	HPCA	Historic Preservation Certification Application
EOR	Engineer of Record	HPCAT	Historic Preservation & Cultural Awareness Training
EOS	Electrically Operated Switch	HPD	Honolulu Police Department
ESA	Engineering Services Agreement	HPF	Historic Preservation Fund
EV	Expected Value	HPU	Hawai'i Pacific University
FAA	Federal Aviation Administration	HRHP	Hawai'i Register of Historic Places
FACI	First Article Configuration Inspection	HRI	Hitachi Rail Italy
FAI	First Article Inspection	H RTP	Honolulu Rail Transit Project
FAR	Floor Area Ratios	HRU	Hitachi Rail USA, Inc.
FAT	Factory Acceptance Tests	HSN WG	Hawaiian Station Naming Working Group
FCC	Federal Communications Commission	HTI	Hawaiian Telcom
FCN	Field Change Notice	HTL	Hazard Tracking Log
FD	Final Design	HV	High Voltage
FDAS	Fire Detection Alarm System	HVAC	Heating, Ventilation and Air Conditioning
FDC	Field Design Change	I&T	Inspection & Testing
FDR	Final Design Review	IAMR	Interstate Access Modification Report
FEIS	Final Environmental Impact Statement	IBEW	International Brotherhood of Electrical Workers
FEMA	Federal Emergency Management Agency	IC	Interim Certification
FFC	Fixed Facility Contractor	ICCS	Integrated Communications Control System
FFGA	Full Funding Grant Agreement	ICD	Interface Control Documents
FHB	First Hawaiian Bank	ICE	Independent Cost Estimate
FHSG	Farrington Highway Station Group	ICM	Interface Control Manual
FHWA	Federal Highway Administration	ICWG	Interim Certification Working Group
FISC	Fleet and Industrial Supply Center	IDS	Intrusion Detection System
FIT	Field Integration Test	IFB	Issued for Bid
FLSWG	Fire/Life-Safety Working Group	IFC	Issued for Construction
FM	Force Main	IJ	Isolation Joint
FOCN	Fiber Optic Communication Network	IMP	Interface Management Plan
FOM	Finding of Merit/No Merit	INMS	Integrated Network Management System
FPO	Federal Preservation Officer	IP	Implementing Procedures
FTA	Federal Transit Administration	ITP	Inspection and Test Plan
FTE	Full-Time Equivalent	ITS	Intelligent Transportation Systems
FUT	Factory Unit Testing	IVR	Interactive Voice Response
FWS	Fish and Wildlife Service	JTMC	Joint Traffic Management Center
FY	Fiscal Year	JTMS	Joint Traffic Management System
GAT	Great Aleutian Tsunami	JU&O	Joint Use & Occupancy
GBS	Gap Breaker Station	JUOA	Joint Use and Occupancy Agreement
GDR	Geotechnical Data Report	JV	Joint Venture
GEC	General Engineering Consultant	KCDD	Kaka'ako Community Development District
GER	Geotechnical Engineering Report	KCH	Kanehili Cultural Hui
GET	General Excise and Use Tax	KHG	Kamehameha Highway Guideway
GIS	Geographic Information System	KHSG	Kamehameha Highway Station Group
GPR	Ground Penetrating Radar	KIWC	Kiewit Infrastructure West Company
GSA	General Services Administration	KKJV	Kiewit/Kobayashi Joint Venture
GT	General Terms	KPI	Key Performance Indicator
GW	Guideway	L+E	Lea +Elliott
HA	Hazard Analysis	LCC	Leeward Community College
HABS	Historic American Buildings Survey	LD	Lagoon Drive
HACBED	Hawai'i Alliance for Community-Based Economic Development	LEED	Leadership in Energy and Environmental Design
HAER	Historic American Engineering Record	LF	Linear Feet
HALS	Historic American Landscape Survey	LOTB	Log of Test Borings
HART	Honolulu Authority for Rapid Transportation	LPR	License Plate Reader
HCC	Honolulu Community College	LRV	Light Rail Vehicle
HCDA	Hawaii Community Development Authority	LT	Load Test
HCS D	Hawai'i Capital Special District	LVPS	Low Voltage Power Supply
HDCC	Hawaiian Dredging Construction Company	MCY	Makai Casting Yard
HDOE	Hawai'i Department of Education	MIM	Manufacture-Install-Maintain
HDOH	Hawai'i Department of Health	MIP	Manufacturing and Inspection Plans
HDOT	Hawai'i Department of Transportation	MITT	Multimodal Integration Technical Team
HDOT-A	Hawai'i Department of Transportation Airports Division	MMIS	Maintenance Management Information System
HDPE	High-density polyethylene	MMP	Mitigation Monitoring Program
HECO	Hawaiian Electric Company	MOA	Memorandum of Agreement
HFD	Honolulu Fire Department	MOS	Minimum Operable Segment
HHC	Howard Hughes Corp	MOT	Maintenance of Traffic
HHF	Historic Hawai'i Foundation	MOU	Memorandum of Understanding
HHFDC	Hawaii Housing Finance & Development Corporation	MOW	Maintenance of Way
HHPRB	Hawai'i Historic Places Review Board	MPS	Master Project Schedule
HIA	Honolulu International Airport	MPSS	Master Project Schedule Summary
HIE	Hawaii Independent Energy	MPV	Multiple Purpose Vehicle

MPY	Makai Precast Yard	PSC	Personal Services Contract
MS4	Municipal Separate Storm Sewer System	PSG	Platform Screen Gate
MSE	Mechanically Stabilized Earth	PSGS	Platform Screen Gate System
MSF	Maintenance and Storage Facility	PSIT	Pre-shipment Inspection Test
MSTC	Middle Street Transit Center	PT	Post Tensioning
MTM	Modern Track Machineries	PTG	Parsons Transportation Group
NCE	Non-Conformance Evaluation	PUA	Possession and Use Agreement
NCR	Non-Conformance Report	PUC	Public Utilities Commission
NDC	Notice of Design Change	PUP	Property Utilization Plan
NEPA	National Environmental Policy Act	PV	Passenger Vehicle
NFPA	National Fire Protection Association	QA	Quality Assurance
NHL	National Historic Landmark	QAM	Quality Assurance Manager
NOI	Notice of Intent	QAP	Quality Assurance Plan
NPDES	National Pollutant Discharge Elimination System	QC	Quality Control
NPS	National Park Service	QMP	Quality Management Plan
NR	National Register	QMS	Quality Management System
NRHP	National Register of Historic Places	QTF	Quality Task Force
NSM	Negotiation Strategy Memo	R&A	Readiness and Activation
NTE	Not to Exceed	R&R	Revise & Re-submit
NTP	Notice to Proceed	RA	Risk Assessment
NTS	Network Time Server	RAC	Rail Activation Committee
O&M	Operations and Maintenance	RAMP	Real Estate Acquisition and Management Plan
OCC	Operations Control Center	RC	Reinforced Concrete
OCCL	Office of Conservation and Coastal Lands	RCMP	Risk and Contingency Management Plan
OCIP	Owner-Controlled Insurance Program	RCP	Reinforced Concrete Pipe
OHA	Office of Hawaiian Affairs	RE	Resident Engineer
OIBC	O'ahu Island Burial Council	READ	Real Estate Acquisition Database
OIC	Officer-in-Charge	RFB	Request for Bids
OIL	Open Items List	RFC	Request for Change
OIP	Order of Immediate Possession	RFHB	Request for High Bids
OMPO	Oahu Metropolitan Planning Organization	RFI	Request for Information
ORCC	Operational Readiness Conformance Checklists	RFID	Requests for Interface Data
OSB	Operations and Servicing Building	RFMP	Rail Fleet Management Plan
OSHA	Occupational Safety and Health Administration	RFP	Request for Proposals
OTR	One-Time Review	RFQ	Request for Qualifications
OTS	Oahu Transit Services	RFV	Request for Variance
OTW	Oceanic Time Warner	RLB	Rider Levett Bucknall
OTWC	Oceanic Time Warner Cable	RMS	Risk Management System
OWG	Operation Working Group (OWG)	RNR	Revise and Resubmit
P3	Public-private Partnership	ROC	Rail Operations Center
PA	Programmatic Agreement	ROD	Record of Decision
PAIS	Programmatic Agreement Implementation Schedule	ROE	Right of Entry
PARs	Preventative Actions	ROH	Revised Ordinances of Honolulu
PAT	Production Acceptance Test	ROM	Rough Order of Magnitude
PB	Parsons Brinckerhoff, Inc.	ROW	Right-of-Way
PCI	Payment Card Industry	RR	Risk Register
PCN	Potential Change Notice	RSD	Revenue Service Date
PD	Position Description	RTM	Requirements Traceability Matrix
PDR	Preliminary Design Review	RTSA	Regional Transit Stabilization Agreement
PE	Preliminary Engineering	S&S	Safety and Security
PGC	Pacific Guardian Center	S1	Segment 1
PHA	Preliminary Hazard Analysis	SAIS	Supplemental Archaeological Inventory Survey
PHGTC	Pearl Highlands Garage and Transit Center	SC	Substantial Completion
PHL	Pearl Highlands Station	SCADA	Supervisory Control and Data Acquisition
PHNB	Pearl Harbor Naval Base	SCAP	Stream Channel Alteration Permit
PHPR	Pearl Highlands Park and Ride	SCC	Standard Cost Category
PHS	Pearl Harbor Station	SHPD	State Historic Preservation Division
PI	Public Involvement	SHPO	State Historic Preservation Officer
PICM	Project Interface Control Manual	SIC	Sandwich Isle Communications
PID	Parcel Identification Number	SIT	System Integration Testing
PIG	Permitted Interaction Group	SL	Street Light
PIM	Project Interface Manager	SLAN	Secured Local Area Network
PLA	Project Labor Agreement	SOG	Slab on Grade
PLO	Priority-Listed Offerors	SOI	Secretary of the Interior
PLR	Pearlridge Station	SOP	Standard Operating Procedures
PM	Project Managers	SOW	Scope of Work
PMC	Project Management Consultant	SP	Special Provisions
PMIM	Project Management and Interface Management	SQP	Supplemental Quality Plan
PMOC	Project Management Oversight Contractor	SSC	Safety Security Certification
PMP	Project Management Plan	SSCP	Safety and Security Certification Plan
PMSC	Program Management Support Consultant	SSCWG	Safety and Security Certification Working Group
PPE	Personal Protective Equipment	SSI	Sensitive Security Information
PRS	Pearlridge Station	SSMP	Safety and Security Management Plan
PRTCC	Pre-revenue Testing Conform Checklist	SSRC	Safety and Security Review Committee

SSSP	Site Safety Security Plan
STATCOM	Static Synchronous Compensator
STCC	Specification/Testing Conformance Checklists
STG	Shimmick/Traylor/Granite, Joint Venture
SUE	Subsurface Utility Engineering
SWPPP	Storm Water Pollution Prevention Plan
T&M	Time and Material
TAP	Track Allocation Procedure
TAT	Transient Accommodation Tax
TC	Train Control
TCCR	Train Control and Communications Room
TCE	Temporary Construction Easement
TCO	Temporary Certificate Occupancy
TCP	Traffic Control Plan
TCS	Train Control System
TES	Traction Electrification System
TIA	Time Impact Analysis
TIGER	Transportation Investment Generating Economic Recovery
TIP	Transportation Improvement Program
TMK	Tax Map Key
TMP	Traffic Management Plan
TOC	The Outdoor Circle
TOD	Transit-Oriented Development
TPO	Thermoplastic Polyolefin
TPSS	Traction Power Sub-Station
TS	Traffic Signal
TSA	Transportation Security Administration
TSI	Transportation Safety Institute
TUT	Temporary Utility Take
TVA	Threat & Vulnerability Assessments
TVM	Ticket Vending Machine
TWF	Train Wash Facility
UCA	Utility Construction Agreement
UFR CRA	Utility Facilities Relocation and Cost Reimbursement Agreement
UG	Underground
UH	University of Hawai'i
UHPRB	UH West O'ahu Park and Ride & UHWO Campus Road "B"
UHWO	University of Hawai'i West O'ahu
UL	Underwriters Laboratories
UPS	Uninterrupted Power Supply
USACE	U.S. Army Corps of Engineers
USDOL	United States Department of Labor
USDOT	U.S. Department of Transportation
USN	United States Navy
USPS	U.S. Postal Service
UST	Underground Storage Tank
VAR	Volt-Ampere Reactive
VCR	Vertical Conduit Raceway
VE	Value Engineering
VECP	Value Engineering Change Proposal
VISTA	Volunteers in Service to America
VMS	Variable Message Sign
VRC	Vertical Raceway Column
VRCS	Voice Radio Communication System
VRF	Variable Refrigerant Flow
WA	Work Area
WHS	Waipahu High School
WKM	Walters, Kimoda, Motoda, Inc.
WL	West Loch
WLO	West Loch
WOEDA	West Oahu Economic Development Association
WOFH	West O'ahu/Farrington Highway
WOSG	West O'ahu Station Group
WQC	Water Quality Certification
WSS	West Side Stations
WSSG	West Side Station Group
WTB	Wheel Truing Building
WTC	Waipahu Transit Center
WTP	Wayside Test Procedure
WWPS	Wastewater pump station
WYL	West Yard Lead
YCB	Yard Control Bungalow
YOE	Year of Expenditure



1 SUMMARY

REPORTING DATE AND SUBSEQUENT EVENTS

This report was published on July 6, 2018, for the PMOC meeting scheduled for July 11, 2018. Most of the data is presented with a reporting cutoff date of May 25, 2018, unless otherwise noted.

The following is a disclosure of significant events that have occurred subsequent to the reporting cutoff date:

On July 2, 2018, HART received the final Risk Refresh report from the Project Management Oversight Consultant (PMOC), on behalf of the Federal Transit Administration. In this report, the PMOC suggests that HART should add \$134 million to the financial plan and nine months to the planned full Revenue Service date. The PMOC's estimate comes within 1.6% of HART's estimates. HART will continue to manage and execute the project based on a budget of \$8.165 billion with interim service planned for December 2020 and full service planned for December 2025.

KEY ACTIVITIES IN JUNE

Project Overview

The Honolulu Authority for Rapid Transportation (HART) and its Board of Directors sought public input as it considers engaging in a Public-Private Partnerships (P3) in delivering the remainder of the Honolulu Rail Transit Project (HRTTP). During its June meeting, the HART Board heard public testimony on the P3 proposal. HART staff is developing a white paper with a recommendation to proceed with a P3 or not. The HART Board is expected to vote on this matter at its July meeting.

HART Board

The HART Board of Directors is looking for a member of the community to become the ninth voting member of the Board. The vacancy has been created due to the expiration of the term of Board member Terri Fujii. Fujii was selected as the Board's "community member" to fill the remainder of a five-year term left vacant when former Board member Robert Bunda stepped down from the position.

HART Board members serve as part-time volunteers who have policy-making roles in the oversight of the HRTTP. The "community" Board seat is a voting member selected by the eight other voting members.

Other Developments

The PMOC in their monthly meeting with HART discussed details of the risk refresh workshop, and HART staff participated in providing its risk updates and also provided clarifications to its assumptions and data used in the risk analysis.

The Honolulu City Council approved HART's budget for Fiscal Year (FY) 2019.

The City Center Utilities Relocation (CCUR) first Task Order has been issued to Nan Inc. to provide cost, schedule and implementation details.

Negotiations are underway with the west-side guideways contractors to close out their contracts and settle claims; if any from both sides.

COST (as of May 25, 2018)

Project Cost Summary (\$ in millions)				
Description	Original FFGA Budget	Recovery Plan Budget*	Current Estimate at Completion (EAC)*	Incurred To Date
Project Capital Costs				
Base Cost without Contingency	\$4,305	\$7,303	\$7,261	\$3,170
Total Contingency	644	862	\$904	0
Total Project Capital Costs	4,949	8,165	8,165	3,170
FFGA Finance Charges	173	584	584	2
Total FFGA Project Costs	5,122	8,749	8,749	3,172
Post-RSD Finance Charges	42	271	271	0
Total Project Costs	\$5,164	\$9,020	\$9,020	\$3,172

*Total Project Costs excludes Operations and Maintenance.

Original FFGA Budget

The Original FFGA Budget reflects the full build-out of the project as executed by the Full Funding Grant Agreement in December 2012.

Recovery Plan Budget Total

The revised Basis of Estimate to support the Recovery Plan was submitted to FTA on Dec. 21, 2017. It is based on the additional local revenues generated by 2017 Special Session Act 1, which was signed into law on Sept. 5, 2017. Act 1 extends the General Excise and Use Tax (GET) surcharge for three additional years, through Dec. 31, 2030, and raises the Transient Accommodation Tax (TAT) from 9.25% to

10.25% for 13 years, until Dec. 31, 2030. These measures will provide financial capacity needed to complete the project as planned in the FFGA.

Current Estimate at Completion (EAC)

The current project capital Estimate at Completion (EAC) is \$8,749 million, including \$904 million in allocated and unallocated contingency and \$584 million in financing costs. The total project costs including post-Revenue Service Date (RSD) financing costs of \$271 million is \$9,020 million.

The total project contingency is based on a December 2025 RSD. Subsequent to the Basis of Estimate submitted to support the Recovery Plan in December 2017, the total contingency increased \$12 million to recognize potential savings to known risk exposures based on risk expected value.

Incurred to Date

The Incurred-to-date costs are cumulative through May 2018, and exclude third-party reimbursement costs. The \$3,172 million to date represents 43.6% of the base Current EAC. The Incurred-to-date costs increased by \$44 million for the period.

SCHEDULE

The progress reported in the table below provides percent complete based on construction and design contracts. The early and late plans are based on baseline schedules for active contracts and forecasts of future contracts.

Project Progress* Through May 25, 2018			
	Actual	Early Plan	Late Plan
Overall Project Progress	43.1%	48%	44.1%
Construction Progress	37.5%	42.7%	39%
Design Progress	74.5%	73.9%	68.9%
* Reported percentages complete are based on the revised Estimate at Completion for the Minimum Operable Segment (MOS) and revised Revenue Service Date (RSD).			

PROGRESS REPORT SUMMARY OF CHANGES

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

Contract Status

- Core Systems Contract (CSC)
 - Vehicles have been separated from the overall CSC design and construction percent complete to allow for better visibility of its progress. Please see page 19.
 - The incurred-to-date amount decreased due to a correction in an invoice by the contractor. Please see page 19.
- Elevators and Escalators Manufacture-Install-Maintain (MIM)
 - The contract substantial completion date has changed from May 2018 to May 2019. Please see page 22.
 - The current contract value amount has increased due to a change order. Please see page 22.
 - The incurred-to-date amount decreased due to a revised invoice. Please see page 22.
- Fare Collection System
 - The current contract value amount has increased due to a change order. Please see page 24.
- University of Hawai'i West O'ahu (UHWO) Station Temporary Park-and-Ride & UHWO Campus Road "B"
 - The projected substantial completion date has changed from July 2019 to September 2019. Please see page 28.
 - The schedule status has changed from "On time" to "2 months behind." Please see page 28.
- West O'ahu Station Group (WOSG)
 - The contract substantial completion date has changed from May 2018 to July 2018. Please see page 30.
 - The schedule status has changed from "13 months behind" to "11 months behind." Please see page 30.
 - The current contract value amount has increased due to a change order. Please see page 30.
- Kamehameha Highway Guideway (KHG)
 - The current contract value amount has decreased due to a change order. Please see page 36.
- Kamehameha Highway Station Group (KHSG)
 - The current contract value amount has increased due to a change order. Please see page 40.
- City Center Utilities Relocation (CCUR) Indefinite Delivery/Indefinite Quantity (IDIQ)
 - A contract page for CCUR has been included. Please see pages 48-49.
- Construction Engineering and Inspection (CE&I) West
 - The incurred-to-date amount decreased due to corrections in 2 invoices by HART and the contractor. Please see page 52.

2 OVERALL PROJECT PROGRESS AND FINANCIALS

2.1 Project Progress

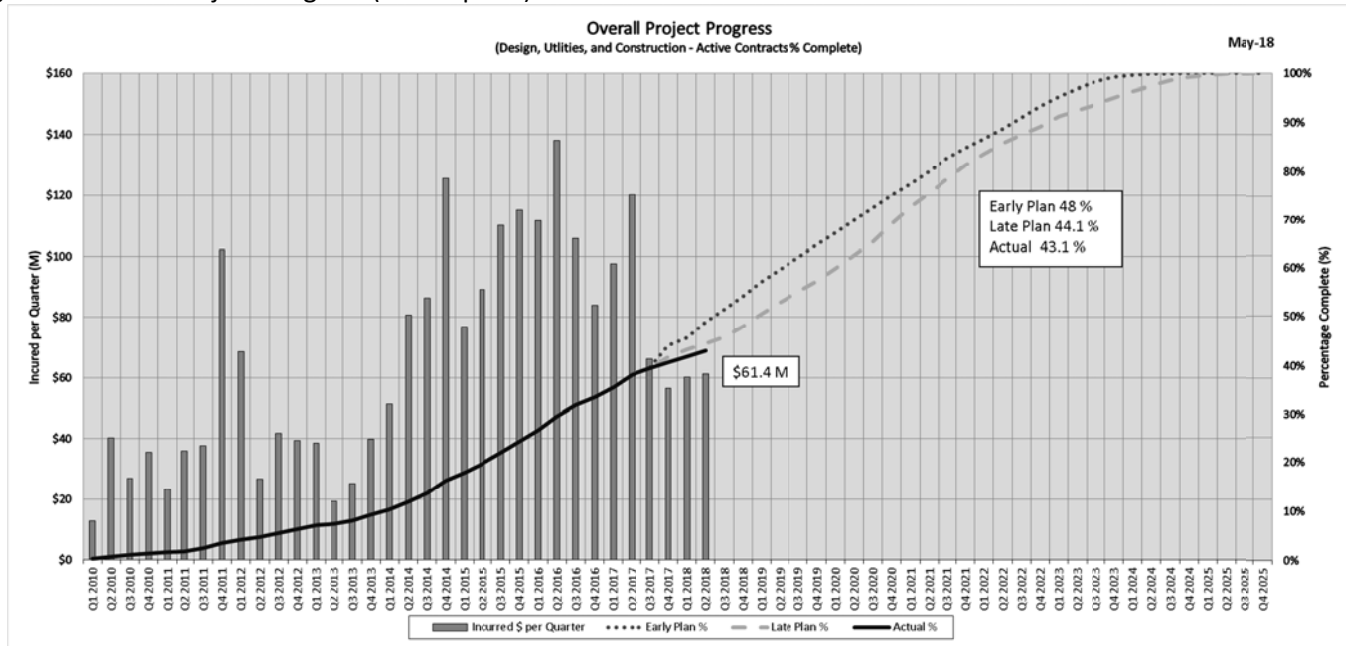
(data as of May 25, 2018)

Reported percentages complete are based on the revised Estimate at Completion for the Minimum Operable Segment (MOS) and revised Revenue Service Date (RSD). HART will revise its progress curves further when the in-process change orders are executed. This revision is expected to lower the plan values.

Note:

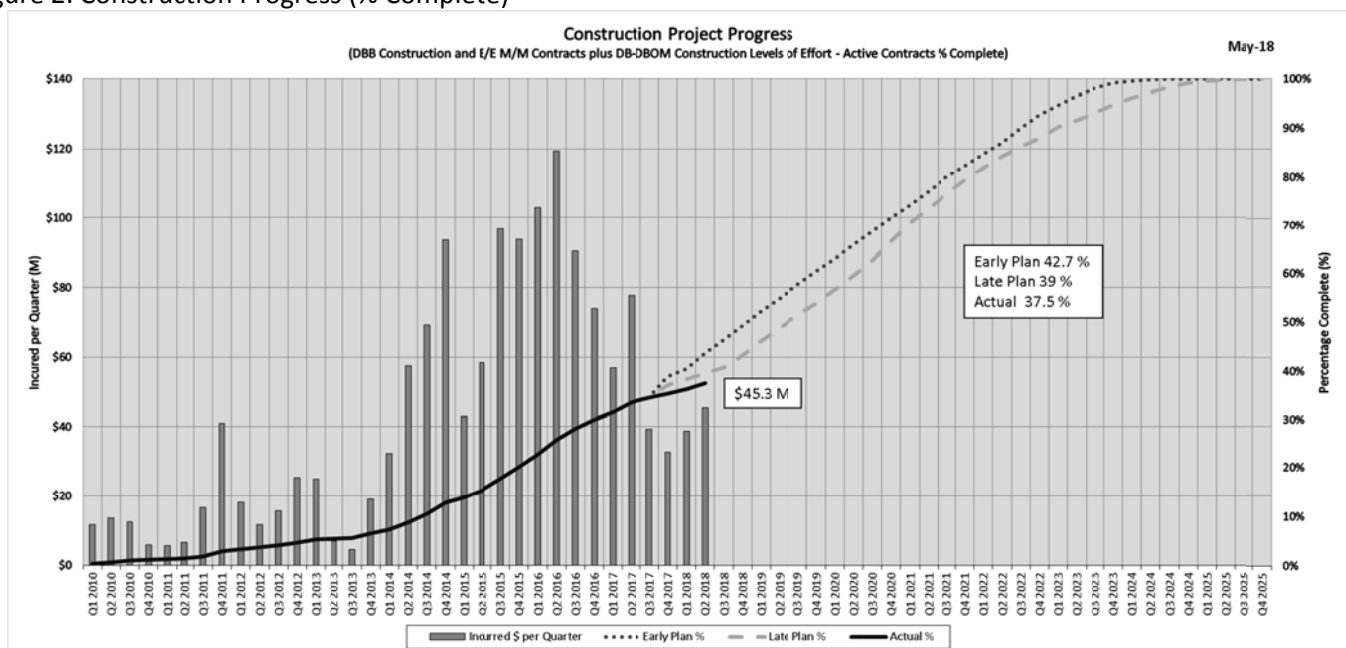
- Actual = Actual cost of work performed, based on reported work-in-place.
- Early Plan = Earliest dates activities can begin and finish, based on logic and durations used in the schedule.
- Late Plan = Latest dates activities can begin and finish and not have an impact on completion date, based on logic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

Figure 1. Overall Project Progress (% Complete)



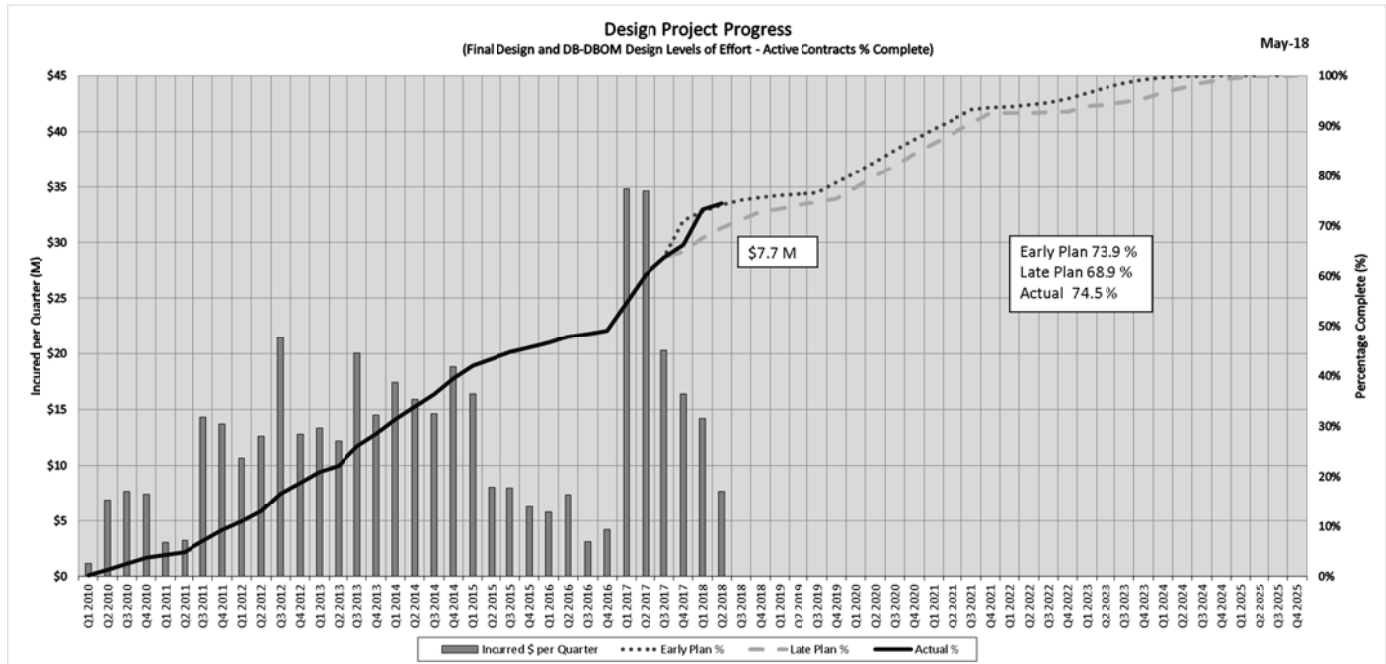
At present "overall" project progress is based on the weighted value progress of the individual construction and design contracts (Design-Build [DB], Design-Bid-Build [DBB], Design-Build-Operate-Maintain [DBOM], Elevator/Escalator Manufacture-Install-Test-Maintain [MIM], Final Design [FD] and DB-DBOM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

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.

2.2 Project Budget

(data as of May 25, 2018)

Project Cost Summary (\$ in millions)			
Description	Original FFGA Budget	Recovery Plan Budget*	Current Estimate at Completion (EAC)*
Project Capital Costs			
Base Cost without Contingency	\$4,305	\$7,303	\$7,261
Total Contingency	644	862	904
Total Project Capital Costs	4,949	8,165	8,165
FFGA Finance Charges	173	584	584
Total FFGA Project Costs	5,122	8,749	8,749
Post-RSD Finance Charges	42	271	271
Total Project Costs	\$5,164	\$9,020	\$9,020

*Total Project Costs excludes Operations and Maintenance.

Original FFGA Budget

The Original FFGA Budget reflects the full build-out of the project as executed by the Full Funding Grant Agreement in December 2012.

Recovery Plan Budget Total

The revised Basis of Estimate to support the Recovery Plan was submitted to FTA on Dec. 21, 2017. It is based on the additional local revenues generated by 2017 Special Session Act 1, which was signed into law on Sept. 5, 2017. Act 1 extends the General Excise and Use Tax (GET) surcharge for three additional years, through Dec. 31, 2030, and raises the Transient Accommodation Tax (TAT) from 9.25% to 10.25% for 13 years, until Dec. 31, 2030. These measures will provide financial capacity needed to complete the project as planned in the FFGA.

Current Estimate at Completion (EAC)

The current project capital Estimate at Completion (EAC) is \$8,749 million, including \$904 million in allocated and unallocated contingency and \$584 million in financing costs. The total project costs including post-Revenue Service Date (RSD) financing costs of \$271 million is \$9,020 million.

The total project contingency is based on a December 2025 RSD. Subsequent to the Basis of Estimate submitted to support the Recovery Plan in December 2017, the total contingency increased \$12 million to recognize potential savings to known risk exposures based on risk expected value.

2.3 Project Contingency

(data as of May 25, 2018)

Project Contingency (\$ in millions)			
Description	Original FFGA Budget	Recovery Plan Budget	Current Estimate at Completion (EAC)
Allocated Contingency	\$542	\$783	\$822
Unallocated Contingency	102	79	82 *
Total Contingency	\$644	\$862	\$904

*Note: Contingency Allocations under review to build up reserves.

Original FFGA Budget

The Original FFGA Budget reflects \$644 million.

Recovery Plan Budget Total

The Recovery Plan Budget reflects \$862 million of total contingency or 11% of the base cost estimate which reflects available funding capacity. Based on FTA requirements on contingency for the current phase of the project, the 11% is sufficient reserve to cover against the risk of cost increases during development of the project.

Current Estimate at Completion

The contingency is a reserve to cover known and unknown, but anticipated, project execution costs and uncertainty due to risk factors such as unresolved design issues, unknown site conditions, schedule impacts and market fluctuations. Cumulatively, there is \$904 million in Total Contingency remaining, of which, \$82 million is unallocated.

2.4 Project Funding

(data as of May 31, 2018)

Figure 4. Planned vs. Received Project Funding

Planned vs. Received Project Funding					
Funding Source	Pre-FFGA Project ¹	Project Funding		Total Project	Actuals Received in May 2018
	2007 - 2009 Actuals Received	Planned ² (\$YOE M)	2009 - Present Actuals Received	2007 - Present Actuals Received	
Beginning Project Cash Balance ³	0	298	298	0	0
Interest Income on Cash Balance ⁵	7	3	3	10	0
FTA Section 5309 New Starts Revenue ⁴	0	1,550	806	806	0
ARRA Funds	0	4	4	4	0
Net General Excise Tax (GET) Surcharge revenues FY2010-FY2030	378	5,873	1,807	2,185	0
Transient Accommodation Tax (TAT) revenue FY2018-FY2030	0	1,111	9	9	0
City Subsidy - HART Administration FY2018-FY2030	0	160	0	0	0
Additional Funds FY2018-FY2030	0	54	0	0	0
Total	385	9,053	2,928	3,015	0

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

² Updated to Chapter 6 - Project Finance, Figure 6-1 of HART's Recovery Plan submitted to the FTA on September 15, 2017.

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

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

⁵ Interest Income received in May 2018 \$103,336.71

Figure 5. New Starts Drawdown by Federal Fiscal Year

New Starts Grant Information by Federal Fiscal Year (Amounts in Italics are Pending)				
Federal Fiscal Year (FFY) Allocation	FTA Obligated Amounts	Actual Drawdown Amounts to Date	Available Balance	FFGA Base Case Cash Flow
2008	\$15,190,000	\$15,190,000	\$0	
2009	\$19,800,000	\$19,800,000	\$0	
2010	\$30,000,000	\$30,000,000	\$0	
2011	\$55,000,000	\$55,000,000	\$0	\$20,607,242
2012	\$200,000,000	\$200,000,000	\$0	\$99,382,758
2013	\$236,277,358	\$236,277,358	\$0	\$258,280,277
2014	\$250,000,000	\$249,991,376	\$8,624	\$441,719,724
2015*	\$250,000,000	\$0	\$250,000,000	\$250,000,000
2016*	\$250,000,000	\$0	\$250,000,000	\$250,000,000
2017*	\$243,732,642	\$0	\$243,732,642	\$230,010,000
Total	\$1,550,000,000	\$806,258,734	\$743,741,266	\$1,550,000,000
*HART submitted an updated Recovery Plan in September 2017; the FTA is evaluating the plan prior to awarding FFY 2015 - 2017 allocations to the Project.				

3 SCHEDULE

(data as of May 25, 2018)

Critical Path Analysis

- Interim Revenue Service Date is planned for December 2020.
 - The critical path for Interim Opening of the rail system from East Kapolei Station to Aloha Stadium includes work on Traction Power Service Stations, and Aloha Stadium Station platform finishes and canopy construction. Following facilities construction, the controlling critical path shifts to Core Systems installation, testing, and commissioning leading to pre-revenue and Interim Revenue Service Date.
- Revenue Service Date (RSD) is planned for December 2025.
 - The critical path for RSD of the rail system from East Kapolei Station to Ala Moana Station has been updated to include the completion of City Center Utilities Relocation contract, procurement of the City Center Guideway and Station contract (public-private partnership decision milestone, industry outreach, solicitation, evaluation, and award), followed by City Center guideway and Kapalama Station's superstructure completion. Following completion of station construction, the controlling work shifts to the Core Systems installation, integrated testing, and commissioning leading to full Revenue Service.

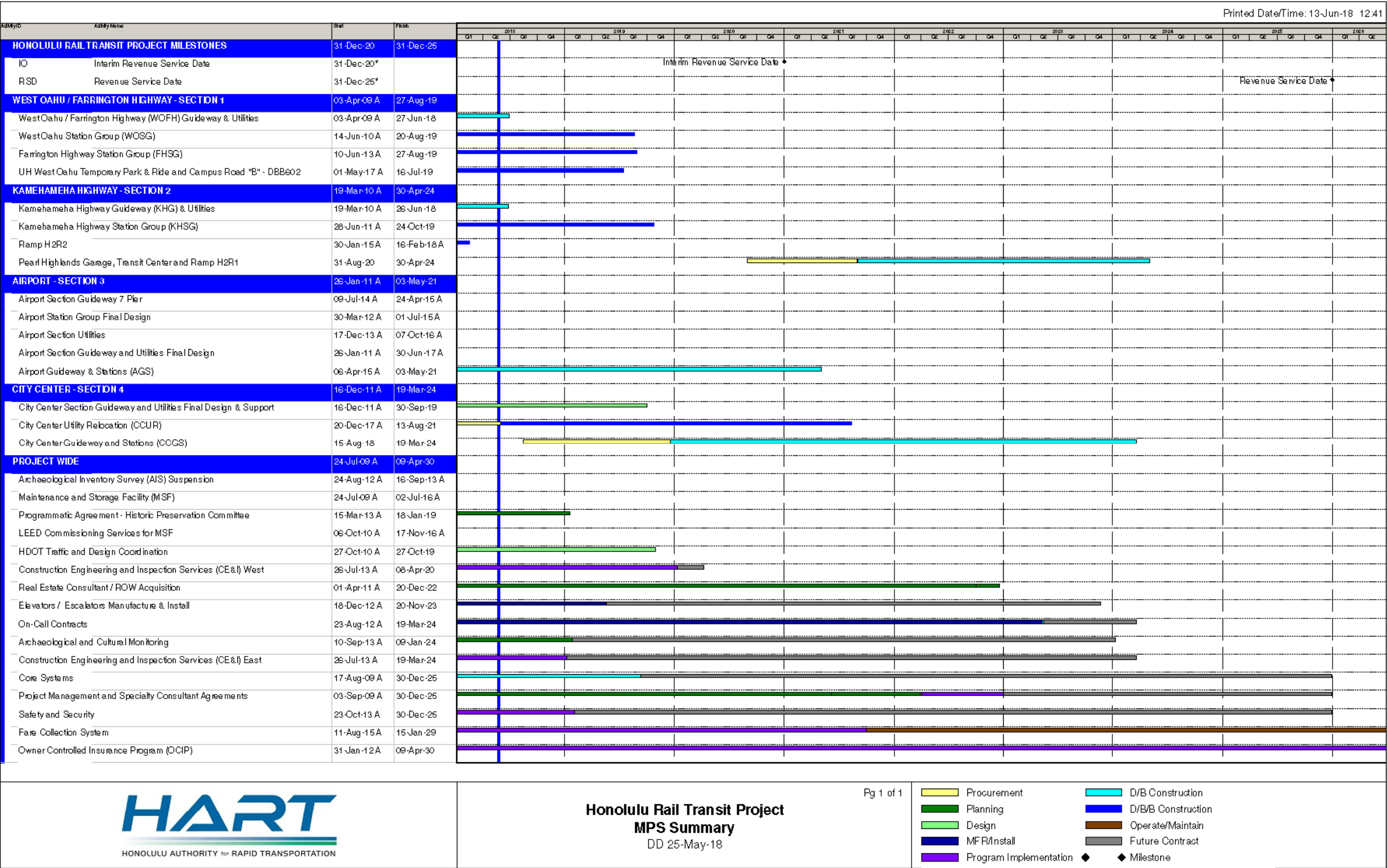
Three-Month Look Ahead

- For the Functional Track, access milestones planned to be handed over to the Core Systems Contractor.
 - Train Control and Communications Room (TCCR) and Balance of Building at Waipahu Transit Center Station
 - Balance of Building at West Loch Station
 - Balance of Building and Platform at Ho'opili Station
- Station construction for the west station groups continues to include the following:
 - Elevator and escalator installation at UH West O'ahu, Ho'opili, Waipahu Transit Center, and Leeward Community College Stations. Pearl Highlands Station is working towards being site ready.
 - East Kapolei, Waipahu Transit Center, and Pearl Highlands Stations to attain access to TCCR milestone.
 - All stations in West O'ahu Station Group to allow partial access to platform for systems installation. Plans for UH West O'ahu and Ho'opili Stations include installation of lighting and faregate module structural steel.
 - Procure station canopies for Farrington Highway Station Group. Station contractor to install electrical fixtures, ceiling panels, platform pavers, and variable refrigerant flow (VRF) systems.
 - Pearlridge Station install cast in place columns for walkway support frames. Set transformers at Pearl Highlands and Pearlridge Stations. Aloha Stadium Station to prepare building pad for foundations, erect falsework, form, rebar, and place box beam girders.
- UHWO Temporary Park-and-Ride and Road B to install wet utility work, gas lines, and electrical rough-ins.
- Design work, foundations, and casting segments are ongoing for the Airport Guideway and Stations contract.
- City Center Utilities Relocation to process submittals, material procurement, and mobilize.

Key Schedule Issues

- Production of the canopies' structural steel members for WOSG is underway. Timely fabrication and delivery of canopy framing and tension fabrics are critical.
- FHSG canopy shop drawing accepted as noted, further resolution required to start manufacturing of the structural steel members. This impacts the conduits for Core Systems closed circuit television (CCTV), signage and speakers. This key schedule issue continues to be evaluated for mitigating initiatives to not impact Interim Revenue Service.
- Pending Change Order for utility materials procurement is causing delay to installation of permanent power to UHWO Station and UHWO Park and Ride Road B substantial completion date. CE&I West is teaming with the contractor to mitigate the delays.

Figure 6. H RTP Master Project Schedule Summary (MPSS)
The Master Program Summary Schedule reflects currently approved schedule end dates for contracts that have been awarded, and planned dates for future contracts.



4 CONTRACT STATUS

Contracts in Procurement (data as of June 20, 2018)

Overview

- Awarded Contracts:
 - The contract for City Center Utilities Relocation and Roadway was awarded on May 4, 2018 to Nan, Inc. The Notice to Proceed was issued on May 31, 2018.
 - The contract for the Archival Cameras Request for Proposals (RFP) was awarded on June 18, 2018. The Notice to Proceed is pending contract execution for June 2018.
- Active Procurements:
 - Federal Government Liaison Services RFP was issued on April 13, 2018. Proposals were received on May 14, 2018. The procurement was cancelled on June 19, 2018 to allow for significant revisions to the RFP. A new solicitation was issued June 20, 2018. Proposals are due July 6, 2018.
 - The Request for Bids (RFB) for Kamehameha Highway Resurfacing was released on May 15, 2018. Bids are due on June 29, 2018.
 - Legal Services for Public-Private Partnership (P3) RFP was issued on April 26, 2018. Proposals were received on May 29, 2018.
 - Programmatic Agreement Historic Architecture Design Services Consultant "II" Request for Qualifications (RFQ) was issued on Sept. 13, 2017. Qualifications were received on Oct. 6, 2017. The process is ongoing.
 - Art-in-Transit: HART continues its negotiations with the highest-ranked artists for each of the stations. To date, twelve (12) contracts have been awarded.
 - Design Services for 138kV Utilities Relocation at KHG RFQ was issued on May 25, 2017. Statements of Qualifications were received on Aug. 2, 2017. The process is ongoing with the current highest-ranked offeror.

Active Procurements					
Contract Code	Contract Name	Advertise Date	Bids or Proposals Due	Issue NTP	Projected Contract Substantial Completion Date
AP-00	Art-in-Transit	May 09 '13	12 contracts awarded; active procurement for remaining stations	Staggered	Staggered
FD-700	Design Services for 138 KV Utilities Relocation at KHG	May 25 '17	Aug 02 '17	June '18	TBD
PA-102	Programmatic Agreement Historic Architecture Design Services Consultant "II"	Sep 13 '17	Oct 6 '17	Staggered Task Orders	As Indicated in Each Task Order
HRT	Federal Government Liaison Services	Jun 20 '18	Jul 6 '18	Upon completion of evaluation	NTP + 1 year + 4 year options
DBB-701	Kamehameha Highway Resurfacing	May 15 '18	Jun 29 '18	Sep 4 '18	Dec '19
	Legal Support for Public Private Partnership (P3)	Apr 26 '18	May 29 '18	TBD	TBD

New awards/ contracts/NTP issued

Contract Code	Contract Name	Advertise Date	Due Date	Contractor	Award	Issue NTP	Term/Substantial Completion	Award Amount
					Contract Date			
GB-DBB-511	City Center Utilities Relocation and Roadways (CCUR)	Dec 21 '17	Feb 23 '18	Nan, Inc.	May 4 '18	May 31 '18	TO #1 NTP + 1,408 days	NTE \$400,000,000
HRT	Archival Cameras	Mar 6 '18	Apr 5 '18	ICX Transportation Group, Inc.	June 18 '18	June '18	Dec 31 '25	\$531,480.00

Upcoming Procurement Under Evaluation

Contract Code	Contract Name	Issue Date
DBB-550	City Center Guideway and Stations	August 2018
DB-275 (DBB 275 & FD-245 combined)	Pearl Highlands Garage, Transit Center and Ramp H2R1 Design-Build	
AP-00	Art-in-Transit, Windscreen	
MI-940	Traction Power Backup Generators	June 2018
MI-950	VAR Equipment Design-Furnish-Install	
FD-600	Permanent Park & Ride Lots Final Design (UHWO & East Kapolei)	
DBB-600	UHWO Permanent Park & Ride DBB Construction	
DBB-600	East Kapolei Permanent Park & Ride DBB Construction	
MM-964	Safety & Security Support Consultant Services	July 2018

4.1 System-wide

A. Core Systems Contract (CSC)

CPP No.: DBOM-920

DBOM Contractor: Ansaldo Honolulu Joint Venture (AHJV)

Contract Start Date: January 2012

Contract Substantial Completion: June 2019

Projected Substantial Completion: July 2025

Project Description: A design, build, operate and maintain contract to provide rail passenger vehicles, automated train control system, traction electrification system (TES), communication systems, passenger platform screen gates (PSGs), and operation and maintenance of the Core Systems.

Design & Construction		Vehicles	Schedule Status
Physical % Complete	53.1%	50.3%	On time**
Early Plan*	59%	52.1%	
Late Plan*	49.3%	46.6%	
*Data as of May 25, 2018. The progress chart reflects early program expectations. Progress is being tracked against interim Construction Access Milestone dates, which show the project is "On-Time". Vehicles have been separated from the overall CSC design and construction percent complete to allow for better visibility of its progress.			
**Based on draft Re-baseline Rev K.			

COST INFORMATION:

Original Contract:	\$573,782,793	Incurred-to-Date:	\$332,333,206
Current Contract Value ¹ :	\$615,059,973	Incurred in May:	-\$383,703

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

Note: The incurred-to-date amount decreased due to a correction in an invoice by the contractor.

Disadvantaged Business Enterprise (DBE) Participation	
Actual DBE Participation:	\$408,365
DBE % Attained:	0.068%

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$41,277,180
None	N/A	---
Cumulative Current Report		\$41,277,180

SCHEDULE:

Upcoming Schedule Status per June 2018:

- AHJV to submit Baseline Project Schedule rev K4.
- Testing of Wayside Automatic Train Control (ATC) at West Loch started in May 2018 and is continuing in June.
- Testing of Wayside ATC at Ho'opili to start in August 2018.
- As of June 29, System Site #9 (LCC) Gap Breaker Station (GBS) scheduled for delivery June 30, 2018.
- Formal Passenger Vehicle (PV) tests for Train #1 at AW3 (car weight at Crush Load – 6 Passengers per m²) is anticipated to start in July 2018.
- Delivery of Train #3 to Honolulu is anticipated for July 2018.
- Train #2 dynamic testing anticipated to start in July 2018.

WORK PROGRESS:

	Base Design Percent Complete	East Kapolei – Aloha Stadium Design	Aloha Stadium – Middle Street Design
Passenger Vehicles	97%		
PSGS	100%		
Communications	82%	73%	0%
Fire Detection	100%	100%	N/A
ATC / SCADA	100%	100%	100%
TES	100%	100%	100%

Activities this Month:**Design:**

- Review of design submittals is ongoing.
- Continued coordination between AHJV and Airport Guideway and Stations (AGS) contractor for integration of core systems requirements.
- Review of CCGS contract for lesson's learned.

Manufacturing:

- Hitachi Rail USA, Inc. (HRU) is continuing with the final inspection of Train #3, and the production of Trains #4 through #9 in Pittsburg, CA.

Installation, Testing and Commissioning:

- Supervisory Control and Data Acquisition (SCADA) installation in the MSF Operations and Servicing Building (OSB) is 60% complete.
- Communications (COMMS) installation in the MSF buildings and yard continues. Restarted CAT6 connector installation.
- Testing on MSF PV Clearance and PV Shoe Test with 3rd power ON started.
- ATC Wayside testing of West Loch Train Control and Communications Room (TCCR) started.
- West Loch Traction Power Sub-Station (TPSS) Commissioning completed.
- MSF Secured Local Area Network (SLAN) and Onboard System on Train #2 provisioning test started.
- TES Feeder installation started at West Loch Station.
- Started installation of intrusion detection on MSF north perimeter fence.

Look Ahead:**Design:**

- Continue Final Design of all subsystems.
- Continue coordination between AHJV and WOSG/FHSG/KHSG/AGS.
- Finalize design of guideway internal cableway.
- Finalize design of TCCR cableways.
- CCGS contract review.

Manufacturing:

- Passenger Vehicle Truck Fabrication – Continue truck frame and bolster fabrication activities in Italy.
- Continue car shell fabrication activities in Italy.
- Continue manufacturing of communications, automated train control, traction power, and other subsystems equipment.

Installation, Testing and Commissioning:

- West Loch uninterrupted power supply (UPS) on-site inspection and testing to commence.
- Continue Comm equipment and cable installation at MSF.
- Commence installation of Insulated Joints at stations (East Kapolei Station to Aloha Stadium).
- PSGS installation at Ho'opili Station.
- Initiate formal Passenger Vehicle dynamic tests of Train #1 on powered guideway at AW3 (crush load).
- Obtain Train #2 Interim Certification to enter Dynamic Testing and initiate dynamic testing of Train #2 on powered guideway.
- Installation of UPS cabinets at Ho'opili.
- Continue TES cable installation from guideway to West Loch TPSS.
- Planning to pull Train Control (TC) cable from guideway to Ho'opili TCCR.
- Installation of TC cableways at East Kapolei single box girders at West Loch TCCR.
- Preparing East Kapolei TPSS for testing and energization.
- Installation of Communication Fiber in guideway.

KEY ISSUES:

- The revised Baseline Project Schedule (BPS) Rev K3 was returned to AHJV with a disposition of Revise & Resubmit. AHJV to submit the next revision and it must include the latest Construction Access Milestone (CAM) dates to provide an accurate schedule.
- The CSC's Communications System design continues to be late. The base design for the specification and selection of equipment has been submitted for the General Design, Onboard, MSF, and Segment 1 stations, but 17% of submittals require revision to be compliant and a further 52% require some form of updating. HART and the CSOC met with the CSC's Communication's team over the week of June 18, 2018 to discuss the steps to complete the design. In general, most of the remaining open items are related to a lack of documentation to demonstrate an acceptable design. A resolution to all has been discussed and an agreeable resolution with no impact to Segment 1 Issued for Construction (IFC) designs has been determined. The CSC is working to submit final revisions of all Segment 1 designs. HART is monitoring this subsystem delay as it is a key component needed for future signaling system qualification testing and can affect system wide integrated testing if it is not adequately addressed.
- HART continues to coordinate with HECO regarding analysis of the 12kV feeder's voltages and potential mitigations.
- Awaiting documentation from AHJV to complete design safety certification of the ten Maintenance of Way (MOW) Vehicles. AHJV continues to submit information for HART's review and certification. HART continues to work with AHJV to close open items. Safety certification will be completed prior to interim opening.
- Awaiting documentation from AHJV to complete safety certification of the Yard Control Bungalow (YCB) Construction Specification Conformance Checklist (CSCC) to move forward with ATC acceptance. This prerequisite item to be listed on the hold point document for the MSF ATC/SCADA. Awaiting complete Car History Book updates from AHJV for Train #3, scheduled for delivery July 2018.
- Fixed Facility Contractor undertook action to correct 800 feet of Dynamic Section Track #1 for out-of-tolerance condition. Train #1 was tested over the corrected track section with positive results. Root cause of out-of-tolerance condition is still under investigation.
- AHJV is lagging in submitting design criteria conformance requirements and verification documentation for Passenger Vehicles, COMM, ATC / SCADA, and Fire Detection Alarm System (FDAS). No timeline is given for resubmittal of Specification Testing Conformance Checklist items.
- HART continues discussions with AHJV regarding the acceptability of some of the train control cabling in the MSF.
- Ho'opili platform survey was handed from Fixed Facility Contractor (FFC) to AHJV. AHJV performed an independent survey and found the tolerances are not acceptable to AHJV for PSGS installation. Discussions are taking place between the fixed facility contractor, AHJV, and HART to resolve.

KEY MILESTONES:

- Ho'opili platform access to CSC.

QUALITY MANAGEMENT:

- Retrofit of car shells under frame continues in Italy. Six car shells are being retrofitted in Italy and one is completed.

CSC NCR Log			
	Total	Closed	Open
AHJV & Subs	49	41	8
Hitachi Rail	1,374	1,141	233
TOTAL	1,423	1,182	241

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

CPP No.: MI-930

Contractor: Schindler Elevator Corporation

Contract Start Date: August 2013

Contract Substantial Completion: May 2019

Projected Substantial Completion: May 2019 (see the Schedule section below)

Project Description: A contract to design, fabricate, install, test, commission, and maintain all elevators and escalators at all 21 stations.

Progress		Schedule Status
Physical % Complete	27%	Pending**
Early Plan*	TBD	
Late Plan*	TBD	
*Data as of May 25, 2018. Plans will be determined after the decision to award the CCGS contract.		
**The E&E schedule is dependent on other contractors' schedules. Actual release for manufacturing will be coordinated for a 'just in time' delivery.		

COST INFORMATION:

Original Contract:	\$50,982,714	Incurred-to-Date:	\$13,772,658
Current Contract Value ¹ :	\$53,471,922	Incurred in May :	-\$121,508

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

Note: The incurred-to-date amount decreased due to a revised invoice.

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

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$1,499,208
00012	RFCC 00018 – WSSG EEC Material Price Increase and RFCC 00020 – WSSG EEC Labor Price Increase	\$990,000
Cumulative Current Report		\$2,489,208

SCHEDULE:

- The Elevators and Escalators (E&E) contract substantial completion date of May 2018 has been extended under the change order for escalation recently agreed to due to the delay in the construction start for the nine western stations. The new date is May 2019. The project completion date will again change to a later date predicated on the recently approved baseline schedule for the AGS DB contract. The final completion date for the E&E contract will be based on the award of the CCGS contract.

WORK PROGRESS:Activities this Month:

- Initial elevator pit and elevator shaft steel is continuing to be erected at various western stations. Elevator and Escalator CE&I inspections are occurring to ensure that these elements constructed by others meet the required specifications for the elevator and escalator supplier.
- Installation of the two elevators at Ho'opili is continuing with an expected completion date of early July.
- The one elevator required for the Leeward Community College Station arrived at the site as scheduled and was installed. Work was completed this month.

Look Ahead:

- Elevators' schedule for the four stations in the AGS DB contract will be established now that the contractor's baseline schedule has been accepted. The E&E substantial completion date will be revised to incorporate the E&E equipment for the four stations included in the AGS DB contract. The remaining eight east-side stations will be established once the contract is awarded for the CCGS and the schedule for this contract is accepted.
- The two elevators required for Waipahu Station are expected to begin installation the first of July 2018.
- The escalator and elevator equipment for the Kamehameha Highway Station Group is expected to ship beginning in July.
- Once the station contractor has completed the necessary work elements to allow the work to go forward at UH West O'ahu, elevator installation will begin in early August.

KEY ISSUES:

- The release for manufacturing the E&E equipment is being coordinated for a 'just in time' delivery. The eight stations included in the City Center Guideway and Stations contract are on hold pending contract award for this work. The solicitation package contains the size and configuration of the elevators and escalators purchased for these remaining stations.
- The current completion date of the City Center section of guideway with stations will impact the completion of the Elevator and Escalator contract and will have cost impacts to the material and labor escalation.

KEY MILESTONES:

- Elevators for the Ho'opili Station are currently being installed with a scheduled completion date of July 2018.
- The elevator for Leeward Community College Station was installed and work was completed in June 2018.

QUALITY MANAGEMENT:

Elevators and Escalators NCR Log		
Total NCRs Issued To Date	Closed	Open
0	0	0

C. Fare Collection System

CPP No.: MI-900

Contractor: INIT, Innovations in Transportation, Inc.

Contract Start Date: April 2016

Contract Substantial Completion: January 2022

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

Project Description: The fare collection system is a joint HART and City and County of Honolulu [Department of Transportation Services (DTS), Department of Information Technology (DIT), Budget and Fiscal Services (BFS)] project that will consist of a multi-modal, closed loop, account based smart card system. The Fare System vendor, INIT Innovations in Transportation, Inc., is responsible for design, manufacture, testing, installation and operation of the entire system inclusive of hardware and software.

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

Progress		Schedule Status
Percent Complete	26.9%	On time
Early Plan*	TBD	
Late Plan*	TBD	
*Data as of May 25, 2018. Planned information is being evaluated based on the current (full-alignment) scope versus the revised requirements of the Interim Revenue Service completion date.		

COST INFORMATION:

Original Contract:	\$15,464,198	Incurred-to-Date:	\$4,156,881
Current Contract Value ¹ :	\$15,802,631	Incurred in May :	\$0

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

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

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$0
00002	Design Changes	\$338,433
Cumulative Current Report		\$338,433

SCHEDULE:

- The baseline schedule for the fare systems project has the following milestones and is currently tracking to schedule:
 - Field Integration Test (FIT) started end of April 2018 and is now anticipated to be completed end of July, due to delays in the Interactive Voice Response (IVR) testing and configuration. Additional employee testing will take place in the month of July in order to take advantage of this delay.

WORK PROGRESS:Activities this Month:

- Finalized draft Retail device, Pass office and Satellite City Hall Standard Operating Procedures (SOPs).
- Drafted Financial SOPs including exception account processes.
- Witnessed FIT accounting tests.
- Witnessed FIT Back Office and fail over tests.
- Provided comments and extensive feedback to vendor on Operations Plan. Continued work with vendor to add procedure and process to Operations Plan.
- Conducted load testing on websites for FIT.
- Began drafting Incident Reporting and Ransomware Procedures.
- Confirmed policy on credit limits with DTS.
- Demonstration of retail device and meeting to confirm participation of vendor for Pilot.
- Continued development of work-arounds for non-Architectural Supplemental Information (ASI) implemented conditions at West Loch and LCC.
- Continued cascading 6 week action plan for agency management leading up to Pilot.
- Briefed senior staff at HART and DTS on operations funding issues including white paper on impacts.
- Briefed Manoa Neighborhood Board on HOLO Project.
- Supported Audit of all Buses in Oahu Transit Services (OTS) fleet to confirm Trapeze software update.
- Completed installation of all bus equipment.
- SAGE training for accounting staff at OTS and BFS.

Look Ahead:

- Finalize additional FIT testing plans and include re-testing of remaining System Integration Testing (SIT) items.
- Finalize cash handling process for Pass Office.
- Finalize retail partner deployment for Pilot.
- Finalize Financial SOPs in draft for review by team.
- Finalize draft Network Security SOPs in draft for review by team.
- Confirm Deployment Plan and funding.
- Continue in field monitoring of TVM and fare gate stub ups at station entrances. Confirm conduit is correct.
- Transfer Operations and Maintenance portion of the Design-Build-Operate-Maintain (DBOM) contract to DTS.
- Continue finalization of MOU for roll out funding.
- Develop card use brochures for seniors and youth in addition to regular adult riders. Translate handouts in 7 languages for riders.
- Meetings with two senior centers and two high schools to sign up participants in youth and senior categories for the Pilot.

KEY ISSUES:

- No response to date from DTS on Pilot requirements letter or employee testing letter. Proceeding with Pilot with posting of draft Privacy Policy and Terms and Conditions on websites, until approval from COR. HART employees to undertake additional operational testing on TheBus using existing monthly paper passes as valid payment and taping test cards only.
- The DTS budget does not currently contain funds for daily operations scheduled to start in January 2019 with Final Acceptance of Bus and Back office milestone. Currently working on back up plans in case funds are not available.
- The DTS approved budget does not currently contain funds for card distribution and public information about the program on TheBus, which may hinder uptake of the program and weaken pilot results.
- Outstanding MOUs with the City for Retail Sales at Satellite City Halls remains mission critical for Pilot deployment.
- Secondary data center site planned for Joint Traffic Management Center (JTMC) remains on hold and based on the recent full scale network outage at DIT, Fare Systems will begin exploring set up of a secondary site at Kapolei with DIT.

KEY MILESTONES:

- FIT completed by July 31, 2018.
- Go-No-Go decision on Pilot Start for Sept. 1 is on July 20.

QUALITY MANAGEMENT:

Fare Collection NCR Log		
Total NCRs Issued To Date	Closed	Open
0	0	0

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

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

CPP No.: DB-120

DB Contractor: Kiewit Infrastructure West Company (KIWC)

Contract Start Date: December 2009

Contract Substantial Completion: March 2017

Projected Substantial Completion: TBD

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.

Progress		Schedule Status
Physical % Complete	99.9%	TBD**
Early Plan*	100%	
Late Plan*	100%	
* Data as of May 25, 2018.		
** Further explanation is provided in the Schedule section.		

COST INFORMATION:

Original Contract:	\$482,430,201	Incurred-to-Date:	\$665,954,894
Current Contract Value ¹ :	\$666,070,659	Incurred in May :	\$2,912

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

DBE Participation	
Actual DBE Participation:	\$17,119,976
DBE % Attained:	2.64%

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$183,640,458
None	N/A	---
Cumulative Current Report		\$183,640,458

SCHEDULE:

- Current contract completion is March 3, 2017.
- The contractor is scheduled to complete items of work in the punch list in July 2018.

WORK PROGRESS:

Activities this Month:

Traffic Signals

- KIWC continued punch list work for traffic signals this month. One Intelligent Transportation Systems (ITS) punch item remains. License Plate Readers (LPR) communication troubleshooting.

Look Ahead:

Traffic Signals

- KIWC looks to complete the remaining punch list item by July.

KEY ISSUES:

- Closeout– KIWC continues to submit all project closeout documents for HART review.
- Tendons –Kiewit and HART to brief HDOT on tendon mitigation in July.
- Contract settlement 3rd quarter 2018.

KEY MILESTONES:

- KIWC is working to complete the last HDOT punch list item by July.
 - KWIC has submitted all record drawings; currently under final review.
-

SUBSTANTIAL COMPLETION:

- No change to report this month.
-

QUALITY MANAGEMENT:

- **Closing Out NCRs** – KIWC has been working to correct, validate, and close out NCR's during this period. Totals are displayed in the table below.

WOFH NCR LOG		
Total NCRs Issued To Date	Closed	Open
586	578	8

B. University of Hawai'i West O'ahu (UHWO) Station Temporary Park-and-Ride & UHWO Campus Road "B"

CPP No.: DBB-602

Contractor: Nan, Inc.

Contract Start Date: December 2017

Contract Substantial Completion: July 2019

Projected Substantial Completion: September 2019

Project Description: The project consists of the construction of a temporary park & ride, Road "B" and associated site work in the vicinity of UH West O'ahu Station. The project includes clearing, grubbing, erosion and dust control, grading and hauling, drainage, installation of underground and overhead utilities, installation of traffic signal, street lighting, and park & ride area electrical and communication systems, concrete curbs, sidewalks and wheelchair ramps, asphalt and concrete pavement structures, signing and striping, bus shelters, landscaping including installation of an irrigation system, and other appurtenances associated with roadway and park & ride facilities.

Progress		Schedule Status
Physical % Complete	14.5%	2 months behind
Early Plan*	30.2%	
Late Plan*	19.4%	
*Data as of May 25, 2018. NTP issued Dec. 15, 2017.		

COST INFORMATION:

Original Contract:	\$11,589,300	Incurred-to-Date:	\$278,433
Current Contract Value ¹ :	\$11,589,300	Incurred in May :	\$278,433
¹ Current Contract Value = Original contract value + executed Change Orders			

DBE Participation	
Actual DBE Participation:	\$108,454
DBE % Attained:	0.94%

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$0
None	N/A	---
Cumulative Current Report		\$0

SCHEDULE:

- The contractor's progress schedule for April 2018 is in process.
- Projected completion extended due to material procurement. Anticipate schedule recovery.

WORK PROGRESS:Activities this Month:

- Completed mass grade for the Road B swale.
- Materials delivery is ongoing; non-potable, water main and drainage utilities.
- Continue drain line installation.
- Drainage headwall installation.
- Rough grading completed at Park-and-Ride area.

Look Ahead:

- Installation of water and gas lines.
- Installation of storm drains lines.
- Site electrical rough-in work.
- Mitigate schedule to recover delay.

KEY ISSUES:

- Cul-de-Sac bid option to be executed.
 - Civil Structures Materials on Hand will need to be re-procured.
 - Utility Materials on Hand will need to be re-procured.
 - Electrical Materials on Hand will need to be re-procured as some are determined to be unusable.
 - Traffic signalization at Road B to be de-scoped.
-

KEY MILESTONES:

- Completed mass grade for the Road B swale.
 - Rough grading completed at Park-and-Ride area.
-

QUALITY MANAGEMENT:

UHWO Station Temporary Park-and-Ride & UHWO Campus Road "B" NCR Log		
Total NCRs Issued to Date	Closed	Open
0	0	0

C. West O'ahu Station Group (WOSG)

CPP No.: DBB-171

Contractor: Nan, Inc.

Contract Start Date: October 2015

Contract Substantial Completion: July 2018

Projected Substantial Completion: June 2019

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

Progress		Schedule Status
Physical % Complete	50.9%	11 months behind**
Early Plan*	100%	
Late Plan*	100%	
*Data as of May 25, 2018.		
** Further explanation is provided in the Schedule section.		

COST INFORMATION:

Original Contract:	\$56,088,470	Incurred-to-Date:	\$29,365,660
Current Contract Value ¹ :	\$62,022,825	Incurred in May :	\$0
¹ Current Contract Value = Original contract value + executed Change Orders			

DBE Participation	
Actual DBE Participation:	\$78,952
DBE % Attained:	0.10%

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$4,974,355
00016	TIA No. 3 TCCR Design Delay	\$960,000
Cumulative Current Report		5,934,355

SCHEDULE:

- HART is continuing to work with the contractor to mitigate the previous delays and is evaluating the contract substantial completion date and warranted time extensions. Time Impact Analysis (TIA) #3 extended the substantial completion date from May 2018 to July 2018 (Design of TCCR Building Foundation).
- The contractor's progress schedule for March 2018 is in process.
- HART is coordinating with CSC and the contractor to meet Ansaldo's schedule for access turnover for functional testing and interim service milestones.

WORK PROGRESS:Activities this Month:**East Kapolei**

- Concourse level slab and column formwork, reinforcement and concrete pours continue.
- Work continues for the removal of Box Girder falsework.
- PSG Plate Concrete placed.

UH West O'ahu

- Elevator/escalator work continues.
- Roof conduit installation continues.
- Concourse level column pours underway.

Look Ahead:**East Kapolei**

- Start installation of surface mount conduits, per ASI0020.
- Concourse level structural and conduit installation.
- TCCR roof construction.

UH West O'ahu

- Pedestrian Bridge conduit installation.
- Concourse level column pours.
- Platform level roof construction.

Activities this Month (continued):

- Bridge Deck concourse pours underway.
- Bridge Roof drainage installation underway.
- PSG plate stud installation underway.

Ho'opili

- Elevator work continues.
- Ground level conduit installation continues.
- Ancillary Room interior fit out continues.
- Platform level turnover to Ansaldo complete.

Look Ahead (continued):

- TCCR building/variable refrigerant flow (VRF) installation.
- Entrance building elevator/escalator work.
- Entrance building construction.
- Site work power and utilities installation.

Ho'opili

- Balance of Structures work.
- VRF delivery and installation.
- TCCR work.

KEY ISSUES:

- Canopy completion at all stations.
- Ho'opili Station Balance of Structures full access was requested by Ansaldo to be provided by June 29, 2018. Partial access was provided and the schedule for the remaining items to be completed is pending resolution of RFIs, and issuance of change orders.

KEY MILESTONES:

- Platform turnover at HOP.

QUALITY MANAGEMENT:

- Conducted bi-weekly Quality Task Force Meetings.

WOSG NCR Log			
	NCRs Issued to Date	Closed	Open
East Kapolei	7	5	2
UH West O'ahu	27	12	15
Ho'opili	25	12	13
Contract Wide	8	8	0
TOTAL	67	37	30

D. Farrington Highway Station Group (FHSG)

CPP No.: DBB-271

Contractor: Hawaiian Dredging Construction Company, Inc. (HDCC)

Contract Start Date: August 2015

Contract Substantial Completion: January 2019

Projected Substantial Completion: March 2019

Project Description: The Farrington Highway Station Group construction contract includes services to build three (3) transit stations along Farrington Highway. The stations are West Loch (WLO), Waipahu Transit Center (WTC), and Leeward Community College (LCC) Stations. The station work includes operational ancillary buildings, a traction power substation at WLO, and a Kiss-and-Ride lot at WLO.

Progress		Schedule Status
Physical % Complete	65.8%	2 months behind
Early Plan*	78.2%	
Late Plan*	57.1%	
* Data as of May 25, 2018.		

COST INFORMATION:

Original Contract:	\$78,999,000	Incurred-to-Date:	\$52,079,697
Current Contract Value ¹ :	\$81,852,034	Incurred in May :	\$1,784,804
¹ Current Contract Value = Original contract value + executed Change Orders			

DBE Participation	
Actual DBE Participation:	\$2,730,301
DBE % Attained:	3.41%

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$2,853,034
None	N/A	---
Cumulative Current Report		\$2,853,034

SCHEDULE:

- CE&I and Resident Engineer (RE) are closely monitoring the critical schedule of Canopy production; there is no more float on this activity. Progress has been made. Shop drawings are with the contractor and production has begun. There are still minor issues that are being worked through. Production is critical.
- CE&I is coordinating with Core Systems on the Balance of Structures that is critical for Interim opening.
- Platform work for installation of PSG's is on schedule.

WORK PROGRESS:Activities this Month:**West Loch**

- Install electrical chase and conduit in Makai electrical room.
- Begin installation of electrical chase and conduit at Makai Station.
- Permanent power scheduled for August 2018. Received HECO survey comments June 11, 2018.
- Continue sidewalks and curbs Mauka Station.
- PSG Bolts and grout place of Topping and pavers.
- Begin installing balustrades and service/sign post at platform level.
- Working through equipment location clashes within the Ancillary buildings.

Look Ahead:**West Loch**

- Complete Bus Lane installation once permanent power is connected.
- Install FM200 system once equipment clashes are worked out.
- Install variable refrigerant flow (VRF) system.
- Install Glass Panels on the Elevator Towers.

Waipahu Transit Center

- Paint lantern structure.
- Install VCR columns and cladding.
- Install Ancillary building equipment.
- Procure and install canopies.

Activities this Month (continued):

- Install vertical conduit raceway (VCR) cladding.
- Install Glass Panels on the Elevator Towers.

Waipahu Transit Center

- Install Thermoplastic Polyolefin (TPO) roofing of Ancillary building and TCCR.
- Completed installation of structural steel on Makai side.
- Continue installation of electrical, fire-protection and mechanical.
- Installed precast stairways Makai side.
- Placed topping slabs on stair landings.

Leeward Community College

- Installed elevator.
- Completed lantern perforated panels.
- Installing cement wash inside tunnel area.
- Ansaldo pulled cables and terminated at panels in electrical room.
- Completed PSG bolts and grout plates, reworking some areas.
- Installed electrical on Mauka side platform for PSG's.
- Installed TPO roofing at station entrance.

All Stations

- Coordinating turnover of Balance of Structures with CSC.

Look Ahead (continued):

- Procure VCR cladding.
- Paint station entrance structure.

Leeward Community College

- Install stamped flooring.
- Install VRF system and other equipment.
- Canopy production.
- Install coil rollup door.

All Stations

- Installation dielectric topping and grout, platform topping and tile pavers.
- Monitor canopy production.

KEY ISSUES:

- Canopy shop drawings accepted as noted on May 30, 2018. The contractor's verbal schedule is to have all canopies fabricated by December 2018.

KEY MILESTONES:

- WTC: Ansaldo placed equipment rack anchors. The TPO roofing is back on schedule.
- LCC: Ansaldo working in TCCR and Electrical room.
- Center platform markers are installed at all stations.

QUALITY MANAGEMENT:

- CE&I are working with HDCC to ensure required submittals are approved prior to related construction activities.

FHSG NCR Log			
	NCRs Issued to Date	Closed	Open
West Loch	32	29	3
Waipahu Transit Center	7	3	4
Leeward Community College	14	8	6
Contract Wide	4	2	2
TOTAL	57	42	15

E. Maintenance and Storage Facility (MSF)

CPP No.: DB-200

Contractor: Kiewit/Kobayashi Joint Venture (KKJV)

Contract Start Date: July 2011

Actual Substantial Completion: July 2016

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

Progress		Schedule Status
Physical % Complete	100%	Substantial Completion Obtained*
Early Plan	100%	
Late Plan	100%	
* Further explanation is provided in the Schedule section.		

COST INFORMATION:

Original Contract:	\$195,258,000	Incurred-to-Date:	\$281,753,403
Current Contract Value ¹ :	\$281,775,032	Incurred in May :	\$0
¹ Current Contract Value = Original contract value + executed Change Orders			

DBE Participation	
Actual DBE Participation:	\$710,987
DBE % Attained:	0.26%

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$86,517,032
None	N/A	---
Cumulative Current Report		\$86,517,032

SCHEDULE:

- MSF contract closeout checklist was sent to HART management and acceptance was on June 7, 2018. On June 7, 2018, the signed documents were sent to HART management for their review and issuance of the final acceptance letter. Final acceptance is pending.

MSF Construction Status 100% Complete Overall as of 06/15/18	
Element	% Complete*
OSB	100%
MOW Building	100%
WTB	100%
TWF	100%
Rail	100%
Paving	100%

*Not including testing and commissioning.

WORK PROGRESS:Activities this Month:**Administration**

- HART signed the Construction Closeout Checklist on June 7, 2018 and final acceptance is currently under review with HART management.

Look Ahead:

- Processing final payment.

KEY ISSUES:

- **MSF Closeout/Final Acceptance.** MSF Contract Close-out Checklist was signed on June 7, 2018. On June 7, 2018, the signed documents were sent to HART management for review and issuance of the final acceptance letter. Final acceptance is pending.
-

KEY MILESTONES:

- KKJV's request for final acceptance is in review by HART. This contract is pending closure.
-

QUALITY MANAGEMENT:

- Overall quality of the contract is good.

MSF NCR Log		
Total NCRs Issued to Date	Closed	Open
34	34	0

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

A. Kamehameha Highway Guideway (KHG)

CPP No.: DB-320

Contractor: Kiewit Infrastructure West Company (KIWC)

Contract Start Date: June 2011

Contract Substantial Completion: September 2017

Projected Substantial Completion: TBD

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

Progress		Schedule Status
Physical % Complete	99.9%	TBD**
Early Plan*	100%	
Late Plan*	100%	
*Data as of May 25, 2018.		
** Further explanation is provided in the Schedule section.		

COST INFORMATION:

Original Contract:	\$372,150,000	Incurred-to-Date:	\$392,116,041
Current Contract Value ¹ :	\$392,320,216	Incurred in May :	\$73,768
¹ Current Contract Value = Original contract value + executed Change Orders			

DBE Participation	
Actual DBE Participation:	\$860,191
DBE % Attained:	0.22%

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$20,503,848
00049	CCO 00012 Insurance Cvg Req 9-1-2013 - Q2 2014 Provisional Sum Reconciliation	\$(333,632)
Cumulative Current Report		\$20,170,216

SCHEDULE:

- The contractor is scheduled to complete punch list work by July 2018.

WORK PROGRESS:

Activities this Month:

Median Restoration

- Punch list repairs and sign-off completed.

Traffic Signals

- Punch list repairs and sign-off on repairs continued.
- One License Plate Reader (LPR) issue and one HECO meter to install remaining.

Look Ahead:

- Traffic Signals:** Troubleshooting of LPR configuration and coordination with HDOT will continue. KIWC will continue to coordinate with HECO to install meters.
- Contract settlement 3rd quarter 2018.

KEY ISSUES:

- **Closeout-** KIWC is submitting all project closeout documents for HART review.
-

KEY MILESTONES:

- KWIC has submitted all record drawings; currently under final review.
-

QUALITY MANAGEMENT:

- **Quality Process** – KIWC continues to work to close open NCRs.

KHG NCR Log		
Total NCRs Issued to Date	Closed	Open
252	248	4

B. Ramp H2R2**CPP No.:** DBB-385**Contractor:** Royal Contracting Co. Ltd.**Contract Start Date:** May 2015**Contract Substantial Completion:** November 2017**Actual Substantial Completion:** February 2018

Project Description: The construction of Ramp H2R2 and associated roadway work within the Waiawa Interchange. The Ramp H2R2 will provide access to the Pearl Highlands Station from eastbound Farrington Highway and connects to eastbound Kamehameha Highway.

Progress		Schedule Status
Physical % Complete	100%	Change order pending to change completion date
Early Plan*	100%	
Late Plan*	100%	
* Data as of May 25, 2018. This project is not on the Critical Path.		

COST INFORMATION:

Original Contract:	\$5,203,646	Incurred-to-Date:	\$5,374,960
Current Contract Value ¹ :	\$5,689,485	Incurred in May :	\$0
¹ Current Contract Value = Original contract value + executed Change Orders			

DBE Participation	
Actual DBE Participation:	\$508,702
DBE % Attained:	9.70%

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$485,839
None	N/A	---
Cumulative Current Report		\$485,839

SCHEDULE:

- Project Closeout Checklist.

WORK PROGRESS:Activities this Month:

- Reviewing Contractor Claims for Merit.
- Final Officer-in-Charge (OIC) Inspection was done with the Director of Design and Construction.

Look Ahead:

- Negotiation of the execution of outstanding contract change orders.
- Issue Demobilization Letter.

KEY ISSUES:

- Contract completion is pending the conclusion of select commercial matters.
-

KEY MILESTONES:

- Site Visit was conducted on June 25, 2018.
-

QUALITY MANAGEMENT:

Ramp H2R2 NCR Log		
Total NCRs Issued To Date	Closed	Open
12	12	0

C. Kamehameha Highway Station Group (KHSG)**CPP No.:** DBB-371**Contractor:** Nan, Inc.**Contract Start Date:**

Notice to Commence Administrative Work: April 2016

Notice to Commence Investigative/Pre-Construction Work at Pearl Highlands: July 2016

Full Notice to Proceed (NTP): October 2016

Contract Substantial Completion: May 2019**Projected Substantial Completion:** September 2019

Project Description: The Kamehameha Highway Station Group construction contract includes services to build three (3) transit stations along Kamehameha Highway. The stations are Pearl Highlands Station (PHL), Pearlridge Station (PLR), and Aloha Stadium Station (ALS). Operational ancillary buildings, pedestrian crossing improvements, Train Control and Communications Rooms (TCCRs), and landscaping of the station sites are included in addition to the transit stations. The Pearl Highlands Station will include a transit center. The Pearl Highlands and Aloha Stadium Stations include both a Park-and-Ride lot and a Kiss-and-Ride lot.

Progress		Schedule Status
Physical % Complete	27.9%	4 months behind**
Early Plan*	78.7%	
Late Plan*	52.7%	
*Data as of May 25, 2018.		
** Further explanation is provided in the Schedule section.		

COST INFORMATION:

Original Contract:	\$115,805,845	Incurred-to-Date:	\$35,540,459
Current Contract Value ¹ :	\$118,618,349	Incurred in May :	\$3,302,250
¹ Current Contract Value = Original contract value with Design Allowance + executed Change Orders			

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

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$2,102,224
00014	Equipment Installation for CSC	\$710,280
Cumulative Current Report		\$2,812,504

SCHEDULE:

- The contractor has procured separate falsework in support of the ALS Station construction.
- Pearl Highlands – Complete electrical ductbank to support permanent power.
- Pearlridge – Complete mauka grade beams and slabs.
- Complete station slab on grade and falsework shoring pads.

WORK PROGRESS:Activities this Month:**Pearl Highlands**

- Continue station electrical and plumbing rough in.

Look Ahead:**Pearl Highlands**

- Continue station electrical and plumbing rough in.

Activities this Month (continued):

- Platform Box Beam Girders – Completed girders 2 and 4 structural concrete work. Poured walls/diaphragms and commenced forming/reinforcement of top slab at girders 1 and 3.
- Kamehameha Highway – Continued installation of electrical duct bank and vaults.

Pearlridge Station

- Makai Site – Completed remaining pile cap/tie beam/column work at Pedestrian Walkway and Escalator. Completed ancillary building roof.
- Mauka Site – Commenced pile cap/tie beam installation.
- Kamehameha Highway – Continued falsework erection and commence forming of box beam girders.

Aloha Stadium

- North Parking Lot – Continued electrical/irrigation rough-in, grading and curb and gutter installation for remaining 35% of lot.
- South Parking Lot – Completed paving.
- Station Site – Completed forming and pouring building footings, escalator, and elevator pits.

Look Ahead (continued):

- Platform Box Beam Girders – Begin Post Tensioning of girders 2 and 4. Pour top slab at girder 1 and pour walls/diaphragm/top slab at girder 3.
- Kamehameha Highway – Complete installation of electrical duct bank and vaults.

Pearlridge Station

- Makai Site – Commence pile cap/tie beam installations at TPSS and Entrance Module.
- Mauka Site – Continue pile cap/tie beam installation.
- Kamehameha Highway – Complete falsework erection. Forming of box beam girders continues to occur at backlot area.

Aloha Stadium

- North Parking Lot – Continue electrical/irrigation rough-in, grading and curb and gutter installation.
- Station Site – Continue work on underground water and electrical utilities. Begin forming building pad.

KEY ISSUES:

- Pearl Highlands Kamehameha Highway Traffic Control Plan (TCP) – The TCP isolating critical path permanent power duct bank work along the roadway has been implemented and duct bank excavation has commenced. HART continues to coordinate with the contractor to schedule the remaining civil roadway and utility work.
- Canopy Fabrication Coordination – HART is coordinating with the contractor to discuss contract canopy and Pearlridge entry module fabrication issues. A meeting is scheduled with the canopy designer.
- Pearlridge Kamehameha Highway Traffic Control Plan for Platform Falsework – The Traffic Control has been implemented and erection of falsework towers has commenced.
- Passenger Screen Gate Plate Coordination – Due to tight tolerances, coordination is ongoing between HART, the contractor and interface partners for an installation that achieves the required tolerances.
- Coordinating with the contractor in order to mitigate current delays and prioritize certain activities critical to the operability of the station and overall system.

KEY MILESTONES:

- Pearl Highlands Station TCCR and Uninterruptible Power Supply (UPS) Rooms – HART is facilitating conduit routing, cable trays, and Variable Refrigerant Flow (VRF) Heating, Ventilation and Air Conditioning (HVAC) coordination between the station contractor and Core Systems contractor within the TCCR room.
- Pearlridge Station TCCR and UPS Building – Installation of cast-in-place roof is complete. Electrical and communication conduit rough-in continues within the Ancillary Building.
- Pearlridge Station Platform – Falsework tower erection has commenced.
- Aloha Stadium Station TCCR and UPS Rooms – All station retaining walls and building footings have been completed.

QUALITY MANAGEMENT:

KHSG NCR Log			
	NCRs Issued to Date	Closed	Open
Pearl Highlands	17	16	1
Pearlridge	15	6	9
Aloha Stadium	0	0	0
Contract Wide	0	0	0
TOTAL	32	22	10

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

A. Airport Section Guideway and Stations (AGS)

CPP No.: DB-450

Contractor: Shimmick/Traylor/Granite, JV (STG)

Contract Start Date: December 2016

Contract Substantial Completion: May 2021

Projected Substantial Completion: May 2021

Project Description: The Airport Guideway and Stations Design-Build contract consists of the design and construction of 5.2 miles of elevated guideway, four (4) stations, and associated facilities between Aloha Stadium and the Middle Street Transit Center. The contractor will begin by interfacing with design disciplines, third-party stakeholders, and construction contracts within the corridor of the project to coordinate and resolve utilities conflicts. Design field verification efforts (potholing and geotechnical exploration) will be followed by construction activities once design packages have been approved.

Progress		Schedule Status
Physical % Complete*	23%	On time**
Early Plan*	30.4%	
Late Plan	19.5%	
* Data as of May 25, 2018.		
** Further explanation is provided in the Schedule section.		

COST INFORMATION:

Original Contract:	\$874,750,000	Incurred-to-Date:	\$230,538,988
Current Contract Value ¹ :	\$874,732,157	Incurred in May :	\$31,897,822
¹ Current Contract Value = Original contract value + executed Change Orders			

DBE Participation	
Actual DBE Participation:	\$21,764,313
DBE % Attained:	2.49%

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$(17,843)
None	N/A	---
Cumulative Current Report		\$(17,843)

SCHEDULE:

- April 2018 Schedule Update was returned to STG as Accepted as Noted. STG is preparing additional updates to reflect their current plan.

WORK PROGRESS:

AGS Construction Status as of 6/28/18			
Guideway Structure Element	Total to Date	Total Qty	% Complete
Shafts	77	225	34.2%
Columns	29	232	12.5%
Segment Casting	365	2,703	13.5%
Spans Stressed	0	211	0.0%
Trackwork	0	*	0.0%
Third Rail	0	*	0.0%
Mill & Overlay	0	*	0.0%
* Amounts to be determined.			

Activities this Month:

- Overall design is approximately 89% complete.
- Drilled shafts at Reach A and Reach B utilizing 3 drill rigs.
- Continued rebar fabrication and preparation for shafts and columns in Reaches A and B.
- Continued casting segments for Reach B spans.
- Potholing and boring activities at First Hawaiian Bank.
- Reach C – Early Construction – Request for Change (RFC) provided.
- Returned Third Party submissions: HDOT-A Comm Rev B Issued for Construction (IFC), HECO Zone 9 (IFC), and HDOT Irrigation Rev B (IFC).
- Received Utilities Conflict Matrix (4/27/18), HECO Elec Zones 3, 6, 7 Rev B (IFC).
- Process HDOT-A Communication coversheet for HART signature.
- Reach E – Middle Street Transit Center (MSTC) Station (FD) – 6/20/18.
- Return Reach E-Civil & Composite Utilities FD-6/15/18.
- Return Reach B-Civil & Composite Utilities IFC-6/20/18.
- Civil work: Install permanent street lighting between Pier 426 and 428; Pothole Lot J, Pothole Lagoon Drive (Night).
- Continue Soil Nail Wall construction (Piers 483, 484).
- Prepared new Honolulu International Airport (HIA) Station concept at the request of HDOT-A.

Look Ahead:

- Finish drilling Reach B shafts; begin 4th drill crew.
- Form/rebar/pour Reach A and B columns and segment casting.
- Pour first C-Bent and Straddle Bent Columns in Reach A.
- Design coordination meetings with third-parties (HDOT-A, HECO, Navy, Keehi Lagoon, Memorial Park, etc.).
- Reach E (P599-611) – Guideway (GW) Structures (FD) – 7/31/18.
- Reach A – Pearl Harbor Station IFC – 7/31/18.
- Reach C – HIA Station IFC – 9/30/18.
- Reach C – Civil & Composite Utilities IFC – 7/26/18.
- Community Meeting for Honolulu International Airport Station – tentatively scheduled for July 2018.
- Utility work has started in Zone 1 and continues in Zone 5.
- Pre-Activity Meeting for Stations (tentative).

KEY ISSUES:

- Obtaining ROW access to International Express.
- HECO Zone 8 IFC Design submittal completion.
- HECO Overlap Agreement still pending.
- Coordination with other City projects and agreements; including Kamehameha Highway Wastewater pump station (WWPS) 36" Force Main (FM) Replacement, and repair of a 6" sewerline at Keehi Lagoon Park.
- Finalize Reach A – Pearl Harbor Station makai side.
- Receive comments back from HDOT-A on new HIA Station design/Schedule Community Meeting for HIA Airport.

KEY MILESTONES:

- Finished last column (P456) for Early Foundations package on May 3, 2018.
- Poured 50th drilled shaft (P428) on May 11, 2018.
- Cast 270th segment (10% complete) on June 7, 2018.

QUALITY MANAGEMENT:

- Pre-Activity Meetings began.

AGS NCR Log		
Total NCRs Issued To Date	Closed	Open
65	33	32

B. Airport Section Utilities Construction**CPP No.:** DBB-505**Contractor:** Nan, Inc.**Contract Start Date:** July 2014**Actual Substantial Completion:** October 2016

Project Description: The Airport Utilities contract consisted of relocating utilities lines and facilities that have been determined to be impacted by the construction of the HART aerial guideway and associated facilities between Aloha Stadium and Middle Street Transit Center. The scope of utilities included underground communications lines, Navy-owned electrical lines, fuel lines, gas lines, water lines, storm sewer lines, sanitary sewer lines, and street light conduits and poles/fixtures. HECO work was excluded from this contract.

Progress		Schedule Status
Physical % Complete	100%	Substantial
Early Plan	100%	Completion
Late Plan	100%	Obtained

COST INFORMATION:

Original Contract:	\$27,993,290	Incurred-to-Date:	\$28,719,489
Current Contract Value ¹ :	\$28,975,545	Incurred in May :	\$0
¹ Current Contract Value = Original contract value + executed Change Orders			

DBE Participation	
Actual DBE Participation:	\$36,094
DBE % Attained:	0.13%

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$982,256
None	N/A	---
Cumulative Current Report		\$982,256

SCHEDULE:

- Nan, Inc. has completed the contract scope and substantial completion was obtained on Oct. 7, 2016.

WORK PROGRESS:Activities this Month:

- Final contract change order was executed on March 6, 2018 and was paid on June 4, 2018.
- Contract close out was completed this month - June 2018.

Look Ahead:

- As the contract has been closed out, this contract page will be removed from future Monthly Progress Reports.

KEY ISSUES:

- No issues to report this month.
-

KEY MILESTONES:

- Substantial completion occurred on Oct. 7, 2016.
-

QUALITY MANAGEMENT:

- Overall quality of the contract is good.

Airport Utilities NCR Log		
Total NCRs Issued To Date	Closed	Open
19	19	0

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

A. City Center Section Guideway and Utilities

CPP No.: FD-530

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

Contract Start Date: July 2012

Contract Substantial Completion: September 2019

Projected Substantial Completion: March 2019

Project Description: The City Center Section Guideway and Utilities final design contract consists of 4.12 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. Design of the City Center Guideway has been suspended under this contract and will be completed by the City Center Guideway and Stations (CCGS) contract. However, final designs for utilities and roadway are proceeding under this FD-530 Final Design contract in support of expedited utilities and roadway construction packages.

Progress		Schedule Status
Based on Expenditures*	86.5%	On time**
Early Plan*	98.9%	
Late Plan*	TBD	
*Data as of May 25, 2018.		
** Further explanation is provided in the Schedule section.		

COST INFORMATION:

Original Contract:	\$43,948,220	Incurred-to-Date:	\$50,067,966
Current Contract Value ¹ :	\$57,889,307	Incurred in May :	\$1,278,005
¹ Current Contract Value = Original contract value with Design Allowance + executed Change Orders			

DBE Participation	
Actual DBE Participation:	\$191,227
DBE % Attained:	0.41%

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$13,941,087
None	N/A	---
Cumulative Current Report		\$13,941,087

SCHEDULE:

- City Center Utilities Phase 3 final design is scheduled to conclude in March 2019.

WORK PROGRESS:

Activities this Month:

- City Center Phase 2 (CC2) Signed & Sealed (S&S) package (dated Jan. 3, 2018) review was received back from SSFM for Department of Transportation Services (DTS) comments. DTS comments require coordination for As-Built Drawings to address DTS comments.
- City Center Phase 3 (CC3) S&S Roadway Rev 1 (dated June 8, 2018) was released to Department of Planning and Permitting (DPP) Civil Engineering Branch (CEB) to address comments for final review and for One-Time Review (OTR) to initiate permit applications.

Look Ahead:

- CC2 S&S package will be deferred and put on hold if the review comments are relevant to the interim work since HART's focus is to eliminate CC2 interim work where CC3 permanent work in the area can be constructed.
- CC3 S&S Roadway Rev 1 is expected to receive OTR stamp from DPP. Transit-Oriented Development (TOD) comments will be addressed in the next package update.

Activities this Month (continued):

- CC3 Submittal #2 for 138kV – HECO comments are being addressed by the consultant.
- CC3 Submittal #3-Wet Utilities S&S Package (dated April 26, 2018) is being reviewed by DPP to receive OTR. DPP has indicated that the package will not be completed for review in 30 days. HART has submitted 4 smaller Task Orders (#1, #8, #3, #7) for DPP review. This will allow an earlier OTR to expedite receiving OTR and permit for construction. DPP granted OTR on Task Order #1 only. DPP will require the State Board of Water Supply (BWS) to also grant OTR before allowing HART to file for a permit. BWS would like to discuss the issues with HART before granting OTR for Task Order #1. Their concerns include the 42-inch main transmission line and the clearance they would require for HECO lines. A June 29, 2018 meeting was held with BWS. This is holding up the start of construction.
- CC3 S&S Pohukaina Area Dry Utility package addressed HECO comments. The drawing package was requested for early release from the consultant AECOM in order to provide to the HART contractor. HART received the submittal package on June 22, 2018 and is now routing it for approval to HECO, DPP and HDOT.
- CC3 Submittal #9 for Street Tree Plan – 90% OTR package was submitted to DPP for review.
- AECOM is waiting to receive the executed bilateral Contract Amendment 15 from HART to bill for final design packages that have been submitted to HART.
- HART guideway pier shafts are located at the site of Howard Hughes Corp (HHC) A’ali’i Tower condominium. Change order RFCC 00023 has been submitted to the Change Committee proposing for the HHC shaft to be designed and constructed to mitigate the impact of construction activities when the condominium is opened to the owners.
- HECO Ampacity Rating review has been completed and released to HART. Cable diameters are upsized, but should not impact the overall width of the main ductlines. Manhole sizes are increased from 6x11 to 6x14. It should minimize the impact by keeping the width the same and only increasing the lengths.
- HECO continues to analyze sizes and structural integrity of manhole interceptors with the consultant. This will impact Dry Utility submittals for Kaka’ako.

Look Ahead (continued):

- DPP’s CC3 Submittal #3-Wet Utilities review is expected to receive OTR for the 4 early Task Orders from DPP and BWS. The final review of the full package is expected to be complete from DPP and OTR.
- CC3 Submittal for Pohukaina Dry Utility packages is expected to be approved and will be routed for final signature sign-off.
- The consultant is expected to provide an assessment on the infrastructure redesign based on HECO’s findings and proposed mitigation measures regarding the Ampacity Rating. HART has given notice for the consultant to provide HART with an update on the Dry Utility package submittal for Dillingham area.
- HECO manhole interceptors on structural integrity and capacity continue to be reviewed with the consultant. HART has given notice for the consultant to provide HART with an update on the Dry Utility package submittal for Kaka’ako area.
- AECOM design will continue to seek variances from utility owners to allow reduced clearances between utilities, due to the high density of utilities proposed to be constructed in Dillingham Boulevard. Dry utilities will be identifying variance requests for high-level discussions.
- HART will be submitting the Scope of Work for Design Services during Construction (DSDC) for CCUR in RFCC 00021 for merit to the Change Order Committee for review and approval.
- HART will submit the Scope of Work for City Center Phase 3 – City Center Utility Relocation merit under Change Order RFCC 00022 for HECO Pole Loading & Foundation design.
- Change Committee is waiting for HHC executive approval and the HHC right-of-entry to be approved before proceeding with this change in RFCC 00023.

KEY ISSUES:

- HECO released their final results regarding the Ampacity Rating Analysis and have provided the acceptable mitigation measures with HART’s infrastructure design at the Dillingham area.
- HART/HECO/BWS had a meeting to discuss critical clearance issues. HART has since had a meeting with BWS, on June 29, 2018, to elevate conflict issues and to propose resolution measures.

KEY MILESTONES:

- City Center Utilities Phase 3 S&S Submittal #1 Roadway Package Rev 1 was submitted June 8, 2018 to DPP-CEB for OTR review.
- City Center Utilities Phase 3 S&S Submittal #3 Wet Utility Package Rev 0 was submitted May 4, 2018 and is being reviewed. To meet HART’s deadline, DPP has agreed to expedite 4 Task Orders from the package to grant OTR while continuing to review the full package.
- City Center Utilities Phase 3 S&S Submittal #6 Dry Utility Package Rev 0 for Pohukaina Task Order was submitted June 22, 2018 for review and approval.

B. City Center Utilities Relocation (CCUR) Indefinite Delivery/Indefinite Quantity (IDIQ)

CPP No.: DBB-511

Contractor: Nan, Inc.

Contract Start Date: May 2018

Contract Substantial Completion: TBD

Projected Substantial Completion: TBD

Project Description: The CCUR contract provides utility relocation construction services for a variety of utilities along the civil roadway construction throughout the City Center segment of the HRT. The construction services to be provided will include, but are not limited to, permanent and temporary wet and dry utility relocation work which will include miscellaneous, as-needed site work, installation of permanent/temporary utility poles, duct bank construction, and other utility installation support structures.

Progress		Schedule Status
Physical % Complete *	0%	On schedule
Early Plan *	0%	
Late Plan *	0%	
* Data as of May 25, 2018.		

COST INFORMATION:

Original Contract:	\$400,000,000	Incurred-to-Date:	\$0
Current Contract Value ¹ :	\$400,000,000	Incurred in May :	\$0
¹ Current Contract Value = Original contract value + executed Change Orders			

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

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$0
None	N/A	---
Cumulative Current Report		\$0

SCHEDULE:

- Contract schedule is 47 months - Administrative NTP issued on May 31, 2018.
- Contract NTP will be issued with the start of work estimated in July 2018.

WORK PROGRESS:Activities this Month:

- Prepared (9) initial draft Task Orders for review by Nan, Inc.
- Conducted pre-construction kickoff meeting on June 5, 2018.
- Various meetings conducted with third party stakeholders to discuss upcoming construction activities and schedule.
- Development of the CCUR Construction Management Plan (CMP) (distributed for review and comment).
- Receipt of large diameter water line material in advance of the start of the Water Line construction (pre-ordered due to 6-month lead time).

Look Ahead:

- Execute (3) permanent work Task Orders and start construction by July 31, 2018.
- Identify/setup multiple laydown yards and staging areas for use by Nan, Inc. throughout the City Center corridor.

KEY ISSUES:

- Start construction activities in July 2018.
 - Identify additional long lead material and issue a Task Order(s) to expedite acquisition.
 - Completion of Issued for Construction (IFC) drawings by AECOM.
 - Completion of the dry utility plans (HECO design) by AECOM, and approval by HECO.
-

KEY MILESTONES:

- Issuance of initial Task Order for utility work and start of NTP for the 47-month contract period.
-

QUALITY MANAGEMENT:

- No immediate quality issues identified this period.

CCUR NCR Log		
Total NCRs Issued To Date	Closed	Open
0	0	0

C. Dillingham and Kaka'ako Station Group (DKSG)**CPP No.:** FD-550**Contractor:** Perkins+Will (P+W), Final Design Consultant (Engineer of Record)**Contract Start Date:** August 2013**Actual Substantial Completion:** Work concluded May 2016

Project Description: Design of eight (8) stations for the fourth and final phase of the current project that will connect Dillingham Boulevard to Ala Moana Center. The DKSG stations have been combined with the City Center Guideway into a single City Center Guideway and Stations contract package. Due to the change in delivery method, the design for these stations has been suspended and will not be completed under this FD-550 contract.

Progress		Schedule Status
Earned Value*	100%	Substantial Completion Obtained
Early Plan*	100%	
Late Plan*	100%	
*Design for these stations has been suspended and will not be completed under this FD-550 contract.		

COST INFORMATION:

Original Contract:	\$18,321,918	Incurred-to-Date:	\$12,253,081
Current Contract Value ¹ :	\$19,740,336	Incurred in May :	\$0

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

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

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$1,418,418
None	N/A	---
Cumulative Current Report		\$1,418,418

SCHEDULE:

- Contract Amendment for contract close out went to the Board and was approved.
- HART is in the process of closing this contract.

WORK PROGRESS:Activities this Month:

- Administrative closeout activities are ongoing.
- HART is administering final closeout documentation and obtaining signatures from the final design consultant.

Look Ahead:

- Contract should be closed by July 2018.

KEY ISSUES:

- HART Board approved the final amendment.

KEY MILESTONES:

- HART expects the contract to be closed by July 2018.

4.6 Project-Wide

A. Program Management Contractor Contract

CPP No.: MM-902

Contractor: HDR Engineering, Inc.

Contract Start Date: January 2017

Contract Completion Date: December 2022

Description of Work: Oversee the successful design and construction of the full Honolulu Rail Transit Project (H RTP), which includes providing personnel with relevant transit design, construction and operations experience and leadership in the various areas, including construction management, design management, project controls, procurement and contracts, right of way, public and business outreach, safety and security, quality assurance, environmental planning, and federal programmatic compliance.

COST INFORMATION:

Original Contract:	\$63,522,953	Incurred-to-Date:	\$16,670,256
Current Contract Value ¹ :	\$63,522,953	Incurred in May :	\$876,315

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

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

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$0
None	N/A	---
Cumulative Current Report		\$0

WORK PROGRESS:

Activities this Month:

- 19 seconded HDR staff at HART.

Look Ahead:

- Continue to support the design and construction of the H RTP, including assessing management needs in Project Controls.

KEY ISSUES:

- Based on the average monthly burn rate, the current contract total will be exhausted by July 2022.
- Subcontractor charges paid to date (from beginning of contract) is \$3,294,000.04.

B. Construction Engineering and Inspection (CE&I) West

CPP No.: MM-290

Contractor: PGH Wong Engineering, Inc.

Contract Start Date: January 2014

Contract Completion Date: January 2020

Description of Work: Provides construction, engineering, and inspection services for construction contract compliance, construction scheduling, construction cost estimating, support, on-site field oversight, project controls and related construction support for the west section of the project.

COST INFORMATION:

Original Contract:	\$54,232,480	Incurred-to-Date:	\$64,909,669
Current Contract Value ¹ :	\$70,232,480	Incurred in May :	-\$22,876
¹ Current Contract Value = Original contract value + executed Change Orders			
Note: The incurred-to-date amount decreased due to corrections in 2 invoices by HART and the contractor.			

DBE Participation	
Actual DBE Participation:	\$8,515,679
DBE % Attained:	15.70%

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$16,000,000
None	N/A	---
Cumulative Current Report		\$16,000,000

WORK PROGRESS:Activities this Month:

- Resident Engineers (RE's) continued to provide the weekly project status and issues briefings at the weekly HART Project Managers (PM) meetings.
- RE's managed assigned projects as the key HART on-site field representatives for the Contractor, for issuing Field Change Notices and for overseeing work.
- Updated Monthly Progress Report Dashboards for all stations.
- Prepared the Transition Plan Update.
- Submitted updated CE&I Staffing Plan.
- Processed additional staffing requests.
- Completed platform construction at Ho'opili Station ahead of scheduled completion.

Look Ahead:

- Platform construction at all stations to continue on schedule to allow PSG installation work by Core Systems.
- Monitor progress on the continuing canopy production as a critical item.
- Present the Monthly Progress Report Dashboards for all projects.
- Implement recommendations to improve the change management process.
- Monitor and oversee Project construction of assigned projects.
- Work on close out activities of guideway projects.

KEY ISSUES:

- An amendment to fund the CE&I contract was approved by the HART Board of Directors to extend funding to contract completion.
- Resolving balance of structures conduit issues to expedite activities for follow on Core Systems work at stations.
- Monitor progress of canopy production.

C. Construction Engineering and Inspection (CE&I) East**CPP No.:** MM-596**Contractor:** Stantec Consulting Services Inc.**Contract Start Date:** September 2015**Contract Completion Date:** December 2019

Description of Work: Provides construction, engineering, and inspection services for construction contract compliance, construction scheduling, construction cost estimating, support, on-site field oversight, project controls and related construction support for the east section of the project.

COST INFORMATION:

Original Contract:	\$55,036,130	Incurred-to-Date:	\$30,669,331
Current Contract Value ¹ :	\$55,036,130	Incurred in May :	\$1,330,386
¹ Current Contract Value = Original contract value + executed Change Orders			

DBE Participation	
Actual DBE Participation:	\$6,902,887
DBE % Attained:	12.54%

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$0
None	N/A	---
Cumulative Current Report		\$0

WORK PROGRESS:Activities this Month:

- Performed CE&I services for the AGS DB, On-Call III, On-Call IV, CCGS DB, and CCUR projects throughout the East Section project limits.
- Supported procurement activities for the CCUR project, and prepared initial task orders for award/NTP along with the project kickoff on June 5, 2018.
- Supported HART's overall delivery of the East Section construction activities and projects in support of the overall H RTP.
- Supported HART with initial CCGS P3 procurement development and documentation.
- Supported HART with design solutions and resolution to issues at the Airport Station and HDOT requested changes.

Look Ahead:

- Monitor drilling activities of the foundations throughout the AGS DB project corridor.
- Monitor construction activities of the columns throughout the AGS DB project corridor.
- Monitor construction activities of pre-cast segments at the casting yard for the AGS DB guideway.
- Assist with resolution of the AGS DB station designs and support the overall internal review process for the issuance of IFC drawings in support of the construction schedule of August/September 2018.
- Provide additional support to HART for the On-Call and CCUR contractor invoicing.

KEY ISSUES:

- None outside of the normal project issues and risk management.

D. General Engineering

CPP No.: MM-913

Contractor: CH2M Hill, Inc.

Contract Start Date: December 2013

Contract Completion Date: April 2019

Description of Work:Task 01 – Scheduling and Estimating Support:

Task Order 01 provides staff augmentation to support scheduling and cost estimating services through the design and construction phase of the Project.

Task 02 – Interface Management and Coordination:

Provide oversight of technical coordination and interface management between contracts in accordance with HART's Interface Management Plan (IMP).

Task 03 – Environmental and Planning:

Provide environmental and planning support to ensure compliance with appropriate decision documents for the Project; integration with other applicable state or city entities for systems, station, land use, and operation planning.

Task 04 – Design Management Services:

Engineering and architectural design management services for the duration of the project.

Task 05 – Program Management and Deliverables:

Program Management services throughout the entire duration of the Project to include, but not limited to the Work Breakdown Structure, Budget Staffing Plan, Monthly Progress and Status Reports, and Contract Administration.

COST INFORMATION:**Overall Contract:**

Original Contract:	\$46,143,277	Incurred-to-Date:	\$48,615,398
Current Contract Value1:	\$63,773,658	Incurred in May :	\$824,270

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

Task	Description	Original Value	Current Value	Incurred-to-Date
01	Scheduling and Estimating Support	\$13,187,310	\$17,045,302	\$13,125,606
02	Interface Management and Coordination	\$5,644,829	\$3,304,849	\$2,818,286
03	Environmental and Planning	\$6,537,705	\$14,168,536	\$7,754,500
04	Design Management Services	\$16,986,250	\$26,728,817	\$22,885,866
05	Program Management and Deliverables	\$2,434,232	\$1,349,979	\$1,162,389
OD	Other Direct Expenses	\$1,352,951	\$1,176,175	\$868,750
Total		\$46,143,277	\$63,773,658	\$48,615,398

DBE Participation	
Actual DBE Participation:	\$6,233,149
DBE % Attained:	13.39%

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$17,630,381
None	N/A	---
Cumulative Current Report		\$17,630,381

WORK PROGRESS:Activities this Month:Task 01:

- Participated in monthly joint FTA/PMOC meetings to discuss cost and schedule updates and progress.
- Maintained Master Project Integrated Schedule.
- Produced Monthly Internal Schedule Progress Report.

Look Ahead:Task 01:

- Work with the Design and Construction East Area Manager to assist in prioritizing the CCUR task orders.

Activities this Month (continued):

- Provided inputs on Finding of Merits and Negotiation Strategy Memos.
- Prepared Independent Cost Estimates for various design and construction changes.

Task 02:

- The Project Interface Manager (PIM) pursued resolution of spotlighted issues as described below:
 - Conduit routing in box beams for canopy supports – facilitated workshops between AHJV and Fixed Facility Contractors.
 - Opening in steel canopy supports for conduit – pushing to resolution. Engineer of Record (EOR) to modify Request for Information (RFI) response and CE&I to issue an NCR to track change.
 - Insufficient space for fare gates at West Loch and Waipahu – Work in progress. NCR pending.
 - Ticket vending machine placement for Honolulu International Airport (HIA) Station – Pushing for resolution. Revised proposed locations and layout have been conceptually developed for presentation to the Airport Authority.
 - Scope gap: backup power for elevators – resolved that change order will be processed for Elevator/Escalator contractor.
 - Add SCADA for elevator sump alarms to MSF – pushed for executive decision.
 - Infrastructure needs for bike areas at two AGS stations – worked with AGS CE&I and others to push toward resolution.

Task 03:

- *Permits* – assisted HART in requesting two-year extension of the U.S. Coast Guard advanced approval.
- *Programmatic Environmental Compliance Plan (ECP)* – revised the draft CCUR ECP based on HART review comments.
- *Programmatic Agreement (PA) Compliance* – submitted the research design for the historic context studies and continued scoping for interpretive and educational materials to be delivered under PA Stipulation VII.
- *Design Reviews* – completed 5 design reviews of AGS submittals.
- *On-Call Support for Right of Way, Utilities, Environmental Planning* – submitted technical memo on methodology for the UH Benefits Study and began data collection.

Task 04:

- Reviewed construction documentation and participated in discussions with the contractor and material supplier regarding vertical offsets at contact rail splices. Drafted a memo summarizing the findings from the document review and field inspections.
- Continuing to work on LDS and Kahi Mohala 46kV relocation 90% Design.
- Manage/coordinate HDOT consultant contracts; progress reports/invoices, contract status, KHG and AGS/CCGS procurement and extension of contracts.
- Reviewed 40 design submittals, 9 NCR, 6 Request for Information's (RFIs), 4 Requests for Variation, and 1 Field Design Change for the Airport Guideway and Stations contract.

Look Ahead (continued):

- On-going support of ICE development or reviews of cost estimates prepared by the CE&I team for independent quality assessments.
- Continue updates of Monthly Schedule reports and analysis.
- Attend monthly joint FTA/PMOC meetings to discuss cost and schedule updates and progress.

Task 02:

- Continue to push toward resolution on:
 - Insufficient space for fare gates at two stations.
 - Ticket vending machine placement at HIA Station.
 - Rerouting sump alarms for elevators.
 - Missing sump pumps for future elevators.
 - Infrastructure needs for AGS bike areas.

Task 03:

- *Permits* – assist in reviewing the National Pollutant Discharge Elimination System (NPDES) permit application for City Center guideway (including coverage of advance drilled shaft construction in Kaka'ako).
- *Environmental Analyses & Documentation* – assist in responding to over-the-shoulder review comments from FTA regarding the Ka'aahi Substation & Specialized Vehicle Storage Parking Post-Record of Decision (ROD).
- *Priority PA Deliverables* – assist in documenting procedures to address the Secretary of the Interior's standards for treatment of historic properties which applies to five City Center stations, and incorporate them into the CCGS RFP.
- *On-Call Support for Right of Way, Utilities, Environmental Planning* – coordinate and support site visit by economists conducting the UH Benefits Study.

Task 04:

- Update and assemble procurement documents for the CCGS Design-Build contract.
- Complete 90% drawings for 46kV line relocation for LDS and Kahi Mohala.
- Provide technical support to close outstanding WOFH and KHG contractual issues to grant Kiewit substantial completion.
- Continue participation in third-party coordination meetings (technical meetings and management meetings) for various contracts. Third parties include HECO, HDOT, DOH, Airport, Navy and UH West O'ahu.

Activities this Month (continued):**Task 05:**

- Monitored contract labor and Other Direct Costs (ODC) expenditures, and updated monthly Estimate at Completion (EAC) projections.
- Reviewed and approved additional/new staff.
- Prepared monthly status reports.

Look Ahead (continued):**Task 05:**

- Monitor contract labor and ODC expenditures.
- Update monthly Expected at Completion projections.
- Oversee initiation of new subconsultant agreements to meet the increased subconsultant needs of Task 3.

KEY ISSUES:**Task 01:**

- No current contractual issues.

Task 02:

- No current contractual issues.

Task 03:

- No current contractual issues.

Task 04:

- No current contractual issues.

Task 05:

- No current contractual issues.

E. Core Systems Support

CPP No.: MM-962

Contractor: Lea+Elliott, Inc.

Contract Start Date: February 2014

Contract Completion Date: September 2019

Description of Work: Provide design and construction management oversight for the Core System Design-Build-Operate-Maintain (CSDBOM) Contract, to include system commissioning, passenger services start-up, and pre-revenue operations and maintenance activities.

COST INFORMATION:

Original Contract:	\$43,988,989	Incurred-to-Date:	\$30,830,781
Current Contract Value ¹ :	\$43,988,989	Incurred in May :	\$644,289
¹ Current Contract Value = Original contract value + executed Change Orders			

DBE Participation	
Actual DBE Participation:	\$754,033
DBE % Attained:	1.71%

Contract Changes in May		
Change No.	Description	Amount (\$)
Cumulative Previously Reported		\$0
None	N/A	---
Cumulative Current Report		\$0

WORK PROGRESS:Activities this Month:

- On-Going Activities:
 - Project management support
 - Construction management and installation oversight
 - Review and approve contractor's design, work plans, test procedures, technical notes, and other submittals
 - Changes and claims management support
 - Systems interface oversight on the stations and AGS project
 - Vehicle and system equipment manufacturing and assembly oversight
 - Testing, commissioning and operational readiness oversight and support
 - Operation and maintenance support
- Key Activities:
 - Continued to address and resolve outstanding design issues with the Core Systems Contractor (CSC) on the Communications system.
 - Worked with the CSC to energize the MSF Yard.
 - Continued to work with the CSC to address vehicle dynamic testing issue related to loss of contact rail power.
 - Continued to work with HECO to study voltage excursion issues and mitigation options.
 - Witnessed train testing, West Loch Wayside ATC testing, Ala Moana Wayside ATC Factory Acceptance Test (FAT), and Ho'opili TPSS testing.
 - Continued to work with the CSC to address open issues related to Train #3 prior to shipment.
 - Continued to work with HART Safety and the CSC to close out the Hazard Tracking Log and Conformance checklist.
 - Worked with HART's Quality Assurance (QA) and conducted Buy America Compliance (BAC) post-delivery audit.
 - Continued to implement HART's Track Allocation Procedure (TAP).
 - Worked with HART's QA and conducted Configuration Control audit.
 - Continue to work with HART and the CSC to address the PSG installation issues.
 - Conducted audit of TPSS/Gap Breaker Station (GBS) condition at Siemen's storage facility in California.

Look Ahead:

- Continue to work on completion of Buy America Post Delivery audit for rolling stock.
- Continue to monitor, observe, and report on the Core Systems Contractor's daily activities on-site and at the factory.
- Continue to assist HART with resolution of change and claim issues.
- Continue to assist HART with Track Allocation Procedure.
- Continue to support HART to address outstanding issues related to construction access at stations.
- Continue to work with the CSC to address outstanding issues to reach an acceptable Baseline Project Schedule.
- Continue to support HART to meet MSF Operational schedule objective.
- Support HART with Interim Opening activities.
- Support HART on P3 activities as required.
- Work on updating CCGS RFP documents.

KEY ISSUES:

- There are no issues related to scope and budget of the Core Systems Support Services contract to report this month.

4.7 Contract Status by CPP

Contract Summary by CPP

(data as of May 25, 2018)

		A	B	C = A + B	D	E = D / C			
CPP #	Contract Description	Original Contract Value	Change Orders	Current Contract Value	Incurred	% Exp.	Award Date	Original Completion Date	Revised Completion Date
DB120	West Oahu/Farrington Hwy Guideway	482,430,201	183,640,458	666,070,659	665,954,894	100.0%	11/11/2009	10/21/2013	3/3/2017
DB320	Kamehameha Hwy Guideway	372,150,000	20,170,216	392,320,216	392,116,041	99.9%	6/30/2011	10/15/2014	9/30/2017
DB200	Maintenance & Storage Facility	195,258,000	86,517,032	281,775,032	281,753,403	100.0%	6/30/2011	12/20/2014	7/2/2016
DB450	Airport Section Guideway/Stations	874,750,000	(17,843)	874,732,157	230,538,988	26.4%	9/20/2016	5/3/2021	5/3/2021
DBB171	West Oahu Station Group	56,088,470	5,934,355	62,022,825	29,365,660	47.3%	7/20/2015	3/12/2018	7/4/2018
DBB271	Farrington Highway Station Group	78,999,000	2,853,034	81,852,034	52,079,697	63.6%	6/22/2015	1/16/2018	1/28/2019
DBB371	Kamehameha Hwy Station Group	115,805,845	2,812,504	118,618,349	35,540,459	30.0%	1/27/2016	5/17/2019	5/17/2019
DBB385	Ramp H2R2	5,203,646	485,839	5,689,485	5,374,960	94.5%	5/18/2015	10/2/2016	11/15/2017
DBB505	Airport Section Utilities Construction	27,993,290	982,256	28,975,545	28,719,489	99.1%	6/30/2014	2/6/2016	10/7/2016
DBB511	City Center Utilities Relocation Construction	400,000,000	0	400,000,000	0	0.0%	5/4/2018	TBD	TBD
DBB525	Airport Section Guideway 7-Pier	3,973,000	54,843	4,027,843	4,027,843	100.0%	9/18/2014	2/28/2015	4/24/2015
DBB602	UHWO Temp PnR and Campus Rd B	11,589,300	0	11,589,300	278,433	2.4%	12/15/2017	7/16/2019	7/16/2019
DBOM920	Core Systems Design Build O/M	573,782,793	41,277,180	615,059,973	332,333,206	54.0%	11/28/2011	3/15/2019	6/1/2019
MI900	Fare Collection DFI	15,464,198	338,433	15,802,631	4,156,881	26.3%	3/18/2016	1/14/2029	1/14/2029
MI930	Elevators & Escalators Install/Maint	50,982,714	2,489,208	53,471,922	13,772,658	25.8%	7/31/2013	5/1/2018	5/17/2019
MM945	On-Call Construction I	1,000,000	1,000,000	2,000,000	1,993,468	99.7%	8/6/2014	7/6/2019	12/8/2016
MM947	On-Call Construction II	7,500,000	0	7,500,000	7,496,271	100.0%	5/21/2015	5/20/2020	5/20/2020
MM948	On-Call Construction III	20,000,000	6,000,000	26,000,000	22,249,344	85.6%	5/9/2016	5/12/2023	5/12/2023
MM949	On-Call Construction IV	46,000,000	0	46,000,000	661,621	1.4%	1/10/2018	11/30/2024	11/30/2024
DB550	City Ctr Section Guideway and Sta DB	100,000	134,000	234,000	193,981	82.9%	10/1/2014	9/30/2015	7/31/2017
FD140	West Oahu Station Group	7,789,000	5,612,095	13,401,095	11,428,198	85.3%	6/15/2012	6/21/2017	11/30/2019
FD240	Farrington Highway Stations Group	9,300,696	7,197,120	16,497,816	14,952,485	90.6%	1/12/2011	11/14/2016	11/30/2019
FD340	Kamehameha Hwy Station Group	8,702,592	4,174,428	12,877,020	10,951,969	85.1%	11/16/2012	6/30/2017	11/30/2019
FD430	Airport Sect. Guideway/Util	38,840,960	4,111,440	42,952,400	41,903,152	97.6%	12/22/2011	6/30/2017	6/30/2017
FD440	Airport Station Group	10,177,365	1,396,487	11,573,852	10,059,820	86.9%	11/7/2012	1/27/2014	7/1/2015
FD530	City Center Guideway/Util	43,948,220	13,941,087	57,889,307	50,067,966	86.5%	7/30/2012	4/30/2018	9/30/2019
FD550	Dillingham and Kaka'ako Station Group	18,321,918	1,418,418	19,740,336	12,253,081	62.1%	8/8/2013	11/1/2014	1/15/2016
FD701	KH Civil Design	60,000	0	60,000	60,000	100.0%	1/22/2018	1/15/2019	1/15/2019

Contract Summary by CPP
(data as of May 25, 2018)

		A	B	C = A + B	D	E = D / C			
CPP #	Contract Description	Original Contract Value	Change Orders	Current Contract Value	Incurred	% Exp.	Award Date	Original Completion Date	Revised Completion Date
MM290	Construction Engrg & Insp CEI West	54,232,480	16,000,000	70,232,480	64,909,669	92.4%	1/9/2014	1/8/2020	1/8/2020
MM595	Construction Engrg & Insp CEI East I	63,083,417	(50,377,317)	12,706,100	12,382,150	97.5%	1/7/2014	1/6/2019	1/6/2016
MM596	Construction Engrg & Insp CEI East II	55,036,130	0	55,036,130	30,669,331	55.7%	9/10/2015	12/31/2019	12/31/2019
MM901	Program Mgt Support Conslt II	33,376,897	18,444,023	51,820,920	49,739,335	96.0%	2/23/2012	3/7/2017	3/7/2017
MM902	Program Mgt Support Conslt III	63,522,953	0	63,522,953	16,670,256	26.2%	1/1/2017	12/31/2022	12/31/2022
MM905	MM-905 Gen Engrg Conslt EIS/PE	0	78,564,942	78,564,942	74,157,822	94.4%	8/24/2007	2/9/2010	2/26/2011
MM910	MM-910 Gen Engrg Conslt FD-Construct	150,226,265	0	150,226,265	150,226,026	100.0%	6/30/2011	12/31/2014	12/31/2014
MM913	MM-913 Gen Engrg Recompete	46,143,277	17,630,381	63,773,658	48,615,398	76.2%	12/5/2013	4/4/2019	4/4/2019
MM915	HDOT Traffic Mgmt. Consult.	1,600,000	3,350,000	4,950,000	4,934,122	99.7%	6/5/2012	6/6/2019	6/6/2019
MM920	HDOT Coordination Conslt WOFH	3,000,000	6,500,000	9,500,000	8,942,455	94.1%	6/7/2011	3/14/2015	12/17/2018
MM921	HDOT Coordination Conslt KHG	16,138,390	(1,400,000)	14,738,390	6,670,832	45.3%	6/29/2012	6/30/2017	12/27/2017
MM922	HDOT Coordination Conslt. East	17,560,000	(5,600,000)	11,960,000	4,411,500	36.9%	6/8/2012	6/13/2017	12/10/2017
MM925	HDOT - WOFH/KHG Imprv Agreements	550,000	2,865,633	3,415,633	2,372,974	69.5%	10/27/2010	12/31/2025	12/31/2025
MM930	HDOT State SOA Manager & Consultant	1,272,400	583,142	1,855,542	1,041,176	56.1%	2/3/2012	8/25/2017	8/25/2017
MM940	Kako'o Consultant I	1,000,000	0	1,000,000	537,125	53.7%	3/13/2012	3/29/2022	3/29/2022
MM941	Kako'o Consultant II	200,000	200,000	400,000	225,000	56.2%	12/8/2015	1/3/2018	1/3/2020
MM946	On-Call Hazmat Assessment Consultant	12,006,227	2,075,000	14,081,227	4,856,364	34.5%	2/23/2018	2/22/2023	2/22/2023
MM950	OCIP Consultant I	1,250,000	0	1,250,000	1,250,000	100.0%	5/10/2012	5/9/2017	5/9/2017
MM951	Owner-Controlled Insurance Program	55,870,308	0	55,870,308	39,366,993	70.5%	4/9/2014	4/9/2030	4/9/2030
MM953	OCIP Consultant II	415,000	0	415,000	165,864	40.0%	5/10/2017	11/1/2020	11/1/2020
MM960	Archeological & Cultural Monitoring	2,489,748	0	2,489,748	2,182,150	87.6%	1/15/2014	1/24/2019	1/24/2019
MM962	Core Systems Support	43,988,989	0	43,988,989	30,830,781	70.1%	2/10/2014	9/9/2019	9/9/2019
MM964	Safety and Security Consultant	4,699,573	5,602,596	10,302,170	8,183,605	79.4%	4/23/2014	1/31/2017	1/31/2019
MM970	Fare Collection Consultant	1,178,300	244,322	1,422,622	360,799	25.4%	9/24/2015	12/31/2019	12/31/2019
MM975	LEED Commissioning Services for MSF	278,630	7,845	286,475	286,475	100.0%	10/6/2010	8/13/2017	8/31/2017
PA102	Programmatic Agreement HPC	450,000	(150,000)	300,000	224,142	74.7%	7/12/2013	1/18/2019	1/18/2019
ART	ART Contracts	2,139,500	10,000	2,149,500	201,325	9.4%	1/26/2016	7/8/2019	7/8/2019
MM935	Real Estate Consultant	3,000,000	5,077,665	8,077,665	7,504,910	92.9%	3/14/2012	3/13/2017	3/13/2017
MM936	Real Estate Consultant II	8,190,000	0	8,190,000	2,197,158	26.8%	9/13/2016	9/12/2020	9/12/2020
MM937	Real Estate Consultant - Maps/Surv.	2,998,000	1,130,000	4,128,000	2,151,709	52.1%	5/22/2014	5/21/2017	5/22/2019
MM981	Complex Real Property Nego. Lit. Sup	600,000	0	600,000	473,731	79.0%	9/9/2016	9/8/2018	4/14/2017
MM982	On Call Appraiser	2,500,000	0	2,500,000	96,906	3.9%	6/23/2016	6/22/2020	12/20/2022
MM983	Land Court Petition Services	1,200,000	0	1,200,000	43,581	3.6%	10/17/2016	10/16/2019	10/16/2019
MM985	On Call Appraisers II	1,261,308	0	1,261,308	76,495	6.1%	4/10/2017	4/9/2022	4/9/2022
MM986	Real Estate Legal Services	5,800,000	0	5,800,000	14,437	0.2%	10/19/2017	12/26/2022	12/26/2022
MM990	Design Review Consultant	4,027,781	0	4,027,781	0	0.0%	3/21/2018	12/31/2024	12/31/2024
UTIL	Utility Contracts and Agreements	144,095,532	1,484,941	145,580,473	68,194,631	46.8%	12/2/2009	12/26/2018	6/30/2018
		4,281,592,313	494,765,763	4,776,358,076	2,905,451,197				

Source: HART CMS.

Note: Excludes Right-of-Way transactions, debt financing costs, and City/HART contract packages, which are included in Appendix A.

5 OVERALL PROJECT-WIDE ACTIVITIES

5.1 Permits

Permits Submitted and In-Progress

- On May 15 and 31, HART received approved Municipal Separate Storm Sewer System (MS4) permits from the Hawai'i Department of Transportation (HDOT) Highways and Harbors Division for utility relocation activities.
- On June 12, HART submitted the NPDES notification of the start of construction activities for CCUR permit HIR10F539.
- On June 17, HART submitted the Notice of Cessation for NPDES Permit HIS000248.

Look Ahead

- HART will be submitting stockpiling permits for stockpiling within the City Center segment of the Project.
- HART will resubmit the MS4 permit application to the University of Hawai'i for utility relocation activities at Honolulu Community College, due to the new format.
- The United States Coast Guard for the Advance Approval to construct over navigable waters notified HART that our permit will not expire until July, which is when they will send another Advanced Approval.

5.2 Hawai'i Department of Transportation (HDOT) Agreements

Activities this Month

- The WOFH Master Agreement and Joint Use and Occupancy Agreement (JUOA) Amendment 1 is with Corporation Counsel for review.
- Per Corporation Counsel, the KHG, AGS, CCGS Master Agreement Amendment 1 requires City Council approval. Ongoing internal HART discussions for review/approval of the Draft Resolution review/approval process.
- Tracking changes to the project list for the Highway Improvement Agreement and developed a draft Amendment #1. The project list was revised to reflect actual costs of the completed projects and to incorporate additional highway improvement projects. Internal HART discussions/reviews were initiated regarding a potential Amendment to the Highway Improvement Agreement, which would transfer additional Federal Highway Administration (FHWA) to FTA funds to the overall agreement.

Look Ahead

- Execution of the Highway Improvement Project MOU's \$10 million transfer from the Federal Highway Administration to the Federal Transit Administration, estimated third quarter 2018.
- Execution of the City Center Joint Use and Occupancy Agreement. Execution will be in conjunction with the start of CCUR construction on Nimitz Highway, estimated third quarter 2018.
- Route for execution of the West O'ahu Farrington Highway Master Agreement and Joint Use and Occupancy Agreement Amendment 1. Routing will commence upon concurrence from Corporation Counsel, estimated third quarter 2018.
- Route for execution of the Resolution and Amendment 1 to the Master Agreement for the sections to and from: Kamehameha Highway Guideway, Airport Guideway, and City Center Guideway. Routing will commence upon the Resolution approval, estimated third quarter 2018.
- Execution of Amendment #1 to the Highway Improvement Agreement, pending HART decision on the additional FHWA to FTA fund transfer. Execution of Amendment #1 is estimated to occur in the third quarter of 2018. An additional amendment with final costs incurred is estimated to be processed in 2025.

5.3 Utility Agreements

Utility Agreements Status Matrix										
Utility Owner	Status	WOFH		KHG		Airport		City Center		
		ESA	UCA	ESA	UCA	UCA	COMBINED ESA		UCA	
AT&T (Corporation)	Executed	05/11/11	12/20/11	5/18/12	Including with ESA	Not Required	12/26/13		05/03/17	
	NTP	05/12/11	12/21/11							
	Amd 01	07/01/11	HRS Ch. 104	11/22/16						
AT&T Corp. (Public Sector)	Executed			12/26/13		Execute Agreement	12/26/13			
	NTP									
Chevron	Executed	12/04/09		11/04/11						
	NTP	12/22/09		11/15/11						
	Amd 01	07/01/11								
Hawaiian Telcom	Executed	05/20/10	11/17/14	05/10/12	12/31/14	05/28/15	09/27/13		04/06/17	
	NTP	06/14/10	11/18/14							
	Amd 01	07/01/11		04/13/15		05/11/17	Amd 01 is being processed.		Draft agreement sent to HTI	
	Amd 02	05/10/12								
HECO		Design Services	Construction Services	Design Services	Construction Services	Design Services	Construction Services	Design Services	Construction Services	
	Executed	11/20/13	11/29/13	11/20/13	11/29/13	11/20/13		11/25/13	HECO revision to include Temp Poles	
	NTP	11/20/13	11/29/13	11/20/13	11/29/13	11/20/13		11/25/13		
	New					05/16/18				
	Change Order 01		06/30/17		02/22/18					
	Change Order 02		02/22/18							
	Memorandums of Understanding	08/07/14 – Construction Drawings								
		05/01/15 – Access								
		05/15/15 – Derrick Truck								
		06/23/15 – Master Agreement								
		06/09/15 – MSF Advanced Construction								
		09/16/15 – Right of Entry								
		10/12/15 – Clearance (West)					11/10/15 – Dillingham Blvd Materials			
		07/13/16 – KHG Vertical Clearance								
		Power Quality MOU (Working on MOU)								
		Airport Overlap MOU (Working on MOU)								
	Vehicle Storage MOU (Working on MOU)									
Oceanic Time Warner Cable	Executed	12/08/09	12/21/11	01/09/12	06/02/14	12/19/14	04/03/13		9/22/16	
	NTP	12/22/09					04/04/13		9/30/16	
	Amd 01	07/01/11	02/27/14		HRS Ch. 104	Agreement is being Executed.			Agreement being processed.	
	Amd 02	10/07/13	HRS Ch. 104							
Pacific Lightnet/ Wavecom	Executed	04/28/10	03/12/12	02/15/12						
	NTP	04/29/10	03/13/12	02/16/12						
	Amd 01	07/01/11	HRS Ch. 104							
Sandwich Isle Communications	Executed	05/20/10		04/20/12						
	NTP	06/08/10								
	Amd 01	07/01/11								
Hawai'i GAS	Executed	12/18/09	06/30/11	06/01/12	04/14/14	08/19/14	09/27/13		05/08/15	
	NTP	12/22/09	07/12/11			08/20/14			05/11/15	
	Amd 01	07/01/11	10/17/14		08/28/14	08/31/17			10/24/17	

Utility Agreements Status Matrix								
Utility Owner	Status	WOFH		KHG		Airport		City Center
		ESA	UCA	ESA	UCA	UCA	COMBINED ESA	UCA
	Amd 02		05/09/16		10/23/15			
	Amd 03				HRS Ch. 104			
Level 3/TW Telecom	Executed	12/02/09		02/14/12	Oceanic to relocate for TW Telecom		10/11/12	Oceanic to relocate for TW Telecom
	NTP	12/22/09		02/16/12				
	Amd 01	07/01/11						
	Amd 02							
Tesoro	Executed			02/15/12	09/12/13		08/27/13	
	NTP			02/16/12			09/03/13	
	Amd 01				09/12/14			
	Amd 02				05/13/15			
	Amd 03				HRS Ch. 104			
Legend		= Action this month	COR = Corporation Counsel		UCA = Utility Construction Agreement			
		= Not applicable	ESA = Engineering Services Agreement		UFRCA = Combined Engineering and Construction Utility Agreement			

Issues

- No issues to report this month.

HECO

- Davis-Bacon requirements** – The U.S. Department of Labor (USDOL) issued a letter to HECO on June 5, 2018, affirming its initial decision in 2015 denying the addition of multiple classifications of wages to conform to Davis-Bacon requirements. HECO replied to USDOL on June 8, 2018 requesting any submissions received from the International Brotherhood of Electrical Workers (IBEW) Local 1186 to review these submittals to determine if it will request a reconsideration of this latest USDOL ruling. HECO also asked for a 30-day extension to submit its request for reconsideration, should it decide to do so.
- Ka'aahi Substation near MSF area** – HART and HECO continue to meet regularly to negotiate terms and conditions for HECO's service proposal for the Ka'aahi Substation. Target completion date: August 2018.
- Mitigation of Horizontal Working Clearance Requirements** – HART and HECO continue to meet to negotiate a Vehicle Storage MOU and an Overlap MOU for the period of time when HART rail construction proceeds without the mitigation of clearance requirements in place.

5.4 Right-of-Way

(data as of June 4, 2018)

Key Issues

- In order to maintain the project schedule and to support the guideway and station Design-Build contracts, eminent domain remains an important tool for ROW to obtain access to the needed properties. Over the past several months, efforts have been made to move numerous eminent domain proceedings through the prescribed process. One of the largest efforts is in regards to the Howard Hughes property and we anticipate the new appraisal and subsequent FTA concurrence and Letter of Offer over the next few months. Recently, two new easements were identified in the Howard Hughes property and COR, outside counsel and ROW are preparing to take these two parcels to the HART Board of Directors in July for initial eminent domain approval.
 - West O'ahu/Farrington:
 - 1 case is filed with the court and is active (Parcel Identification Number [PID] 102 R. Lee)
 - Kamehameha:
 - 1 case is closed (PID 201 Stuart Plaza)
 - Airport:
 - 2 cases are filed with the court and are active (PID 302 -Kronick, PID 318 Masters, both have Order of Immediate Possession (OIP). Additionally, PID 318 Masters completed the Land Court process.

- 1 case is anticipated to be filed with the court (PID 306 and 319 –SCI. Partial fee and easement. HART has irrevocable Right of Entry [ROE]/Possession and Use Agreement [PUAs] dated March 18, 2016 and recorded Docs. # T-9573088 A & B and T-9573089.) New appraisal is complete and the packet is with the FTA for concurrence which is expected in early June.
- City Center:
 - 3 cases are filed with the court and are active (PID 400 Blood Bank, PID 429 Kalahiki, PID 472A Desky)
 - 1 case is complete and the Final Order of Condemnation (PID 483-Hardwoods) was recorded on April 27, 2018.
 - 10 cases were authorized by the City Council for eminent domain proceedings via resolution (36 TMKS) (Reso 2017-12 (VW),-14 (HECO),-15 (Four K),-16 (Otani),-17 (PGC),-18 (HECO),-19 (Wong),-20 (Servco),-21 (Fuji Sake),-23 (Sanno)).
 - 2 cases were referred to outside counsel for filing of eminent domain proceedings (PID 485 Scott Shoe and PID 439 Yamauchi)

Negotiations are still continuing with the private property owners with the goal of reaching mutual agreements. In support of these efforts, two additional appraisal contracts were awarded to Colliers Valuation & Advisory Services and Overland Pacific & Cutler to assist in updating our past appraisals to support new Letters of Offers to owners in the City Center Section.

The appraisals were split into two groups, CCGS Slate I and CCGS Slate II. All appraisals from CCGS Slate I are at the review appraisal stage and some final appraisals have been received. All appraisal site tours for CCGS Slate II are complete and some have been sent for review, the next step in the process.

New Letters of Offer processing through HART as of June 4, 2018: PID 430 Dela Cruz, PID 436 Four K Properties, PID 438 TSR Partners, PID 439 Yamauchi

ROW provided the FTA with a matrix outlining all parcels requiring FTA concurrence and an approximate timeline of when those would be delivered to the FTA. This matrix is updated on a bi-weekly basis.

Acquisitions:

- WOFH:
 - 1 parcel (PID 127 GO Financial) closed and recorded May 16, 2018 after completing the lengthy land court process.
- Negotiations are continuing with HECO regarding clearance requirements due to maintenance equipment staging needs for 138kV poles and lines located next to the HART guideway system. HART has more easements to be acquired for undergrounding 138kV electric lines and other utility related needs. Other easement relocations are required from public streets, and within HDOT Airport lands and HDOT Highway Right of Ways. These additional non-asset easements will eventually be assigned over to HECO or other utility agencies and/or companies.
- HART is currently updating its Real Estate Acquisition and Management Plan (RAMP) which will clarify and improve the document. Included in this update are: policy changes regarding Floor Area Ratios (FAR) such that ROW is in favor of a policy whereby any non-conformity created by voluntary settlement or eminent domain relative to floor area ratio may be deemed by the authorities having jurisdiction over FAR to be conforming to Code requirements by issuance of variance or similar instrument; updating the ROW acquisition list to include approved design changes that affect acquisition, and addition of Temporary Construction Easements (TCEs) and utility easements on behalf of third parties on private properties. HART's first review of its Version 7 draft of the RAMP was completed and sent for review by ROW consultants on Feb. 14, 2018. The consultant presented initial comments on the revised document and amendments to it are underway.
- The ROW budget was re-baselined within the recovery plan.
- Negotiations are continuing with UH, including securing a construction ROE Agreement with the Honolulu Community College.

- ROW and Construction are working collaboratively to mitigate any potential construction impacts arising from access availability to parcels. ROW's objective is to secure site access to properties identified by Construction via Rights of Entry or other arrangements. ROW has moved forward with condemnation and/or obtained legally enforceable possession of properties. These agreements will eventually require a final conveyance of the required estate in the real estate and for the establishing of valuation of real property interests being acquired.

Acquisitions

Figure 7. Right-of-Way Status for the Parcels

	TOTAL ACQUISITIONS REQUIRED (a)	TOTAL ACQUISITIONS COMPLETED (b)	ACQUISITIONS PENDING AND ACCESS OBTAINED (c)
	Current No. of Parcels Needed (TMKs)	No. of Parcels (TMKs)	No. of Parcels (TMKs)
W.Oahu/Farrington	35	26	9
Kamehameha	12	7	5
Airport	49	40	9
City Center	122	49	20
GRAND TOTAL	218	122	43

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

Footnotes:
 (a) Total Acquisitions Required - Parcels identified as needed by the project.
 (b) Total Acquisitions Completed - Acquisitions are completed and the right to access and construct is obtained for 75 private owners and agreements on 47 government parcels. While these parcels may be accessible at this time, further documentation may also be required.
 (c) Acquisitions Pending & Access Obtained - Acquisitions are pending, but the right to access and construct has been obtained.

Relocations

Figure 8. Relocation Status for the Occupants

	ACTIVE RELOCATIONS	RELOCATIONS COMPLETED	TOTAL RELOCATIONS
W.Oahu/Farrington	0	27	27
Kamehameha	0	5	5
Airport	1	10	11
City Center	6	63	69
GRAND TOTAL	7	105	112

• Relocations are pursuant to the Uniform Act.
 • Relocations are reported by the number of displacees.
 • During design development, the relocation requirements have been adjusted to accommodate the design refinements. Relocation requirements are adjusted as design is finalized.

Non-Right of Way

Figure 9. Temporary Construction Easements and Utility

Section	Required by TMK		Acquisition Status by TMK		Total No. of TMKs Required	Total No. of TCE/TUT Required
	Without Project Asset	With Project Asset	Completed	Active/Pending Acquisition		
1 (WOFH)	2	2	3	1	4	13
2 (KHG)	13	0	2	11	13	15
3 (AGS)	8	9	6	11	17	34
4 (CCGS)	15	21	5	31	36	55
GRAND TOTAL	38	32	16	54	70	117

Notes

- **TMKs Required:** Parcels identified as requiring a Temporary Construction Easement (TCE) or Temporary Utility Take (TUT) by the project. TUTs requires negotiation by HART for the benefit of the project, but are not permanent acquisitions.
- **TMK Acquisition Status:** Completed category represents those where the TCE Agreement and/or the Final Grant of Easement has been completed. The Active/Pending category are those where negotiations are active.

Status of Inter-Governmental Agreements**Figure 10.** Inter-Governmental Agreement Status

The status of agreements between HART and other government entities. Objectives are:

- 1) Obtain Construction Right of Entry, Executive Orders, Set asides, Jurisdiction Transfers, Joint Use Agreements, licenses, easements, Memorandum of Understanding (MOUs), Memorandum of Agreement (MOAs), etc. with impacted government agencies. Government agencies HART is working with include: Federal (GSA, Navy, USPS, Office of Interior), State (HDOT-Hwys & Air, DLNR, DAGS, HCDA, DOE, Aloha Stadium, UH), and County Agencies (DTS, DPP, DFM, BFS, DDC, Parks, DLM, ENV). Some government agencies may choose to issue the final documents after construction is substantially underway or near completion.
- 2) To help negotiate and/or obtain Rights of Entry for certain other construction related activities as requested by Design and Construction. Such agreements may include: geotechnical borings, soil testing, environmental surveys, bus stop agreements, construction lay down surveys, and other construction related needs. There may be other Rights of Entry and Agreements which may not involve ROW acquisition, nor relocation. ROW will assist other HART departments, should requests be authorized and funded.
- 3) Agreements to be executed are in white. Executed agreements are in grey at the end of the table, and while these parcels may be accessible at this time for construction, further documentation may also be required to complete the acquisition.

Inter-Governmental Agreements					
Agency	Pending Agreements (Executed Agreements are shaded grey)	Target	Section	Construction Right of Entry Obtained	Notes/Remarks
STATE AGREEMENTS					
UH – University of Hawai'i, West O'ahu (UHWO-125)	Construction Right of Entry and Occupancy & Use Agreement for East Kapolei Park & Ride	TBD/ Estimate 2021	WOFH	No	Continue to coordinate and work with UH to select a site for a park and ride. Waiting for direction and maps.
UH – Urban Gardens (201A)	Conveyance to HDOT (H) – Dept. of Transportation Highways	Jan 2020	KHG	Yes	In process. Royal Contracting in process of securing Right of Entry (ROE) for road, retaining wall, and concrete culvert improvements. Based on preliminary results received, HDOH has indicated they will issue a No Further Action letter. This will be confirmed when final report is generated (expected in late July). Construction completion date contingent upon Royal securing a ROE from UH.
UH – Honolulu Community College (HCC) (424A)	Construction Right of Entry for guideway & station	October 2018	City Center	No	Working with UH regarding ROE Agreement. Ongoing exchange of comments with UH. Recent meeting with UH representatives. ROE will be broken down into phases starting with least intrusive activity.
DLNR – Dept of Land & Natural Resources (124)	Kapolei Easement Agreement for overhead guideway and for park and ride facility	June 2019	WOFH	Yes	In process. Subdivision approved by DPP. Subdivision maps with DAGS for processing. Once processed, DLNR will submit an easement agreement for HART review and approval.
DLNR/C&C Wastewater Div (437B)	Easement Agreement	Jan 2019	City Center		In process. Waiting for DPP approval and work on easement document with DLNR.

Inter-Governmental Agreements					
Agency	Pending Agreements (Executed Agreements are shaded grey)	Target	Section	Construction Right of Entry Obtained	Notes/Remarks
DLNR/C&C Wastewater Div (437B)	Construction Right of Entry	Aug 2018	City Center	Yes	Construction ROE obtained from DLNR 10/21/17. Subdivision submitted with DPP 1/1/18.
DOE - Waipahu H.S. (118)	Permanent Easement (State owned portion)	May 2019	WOFH	Yes	In process. Construction is not impacted as the ROE for right to access and construct is executed. With DOE for review. Working with DLNR for permanent rights.
DOE – Waipahu H.S (117)	Memorandum of Understanding (City owned portion)	Aug 2018	WOFH	Yes	In process. Construction is not impacted as the ROE for right to access and construct is executed. Working with City for permanent rights.
DOE – Waipahu H.S. (117)	Permanent Easement (City portion)	May 2019	WOFH	Yes	Permanent easement from City in process. DLM has indicated they will delay the transfer of the City portion to the State until HART has permanent entitlements in place. Construction is not impacted as the Master/ Construction Agreement is executed. Working with BFS for permanent rights.
Aloha Stadium / Dept of Accounting & General Services (DAGS) (207A to C)	Easement Agreement for guideway	Jan 2020	KHG	Yes	In process. Construction is not impacted as the ROE for right to access and construct is executed. Working on permanent easement agreement.
Aloha Stadium/ DAGS (207B)	Easement Agreement for station park and ride	Jan 2020	KHG	Yes	In process. Construction is not impacted as the ROE for right to access and construct is executed. Working on permanent easement agreement.
HDOT(H) – Dept. of Transportation Highways (100,100-A, 304, 400-A, 400-B)	Master Agreement Amendment	Jan 2019	WOFH	Yes	Construction is not impacted as the Joint Use & Occupancy Agreement (JU&O) for right to access and construct is executed.
HDOT(H) and (A) – Dept of Transportation Highways & Airports (100,100-A, 301, 304, 304, 400-A, 400-B)	Master Agreement for KHG, Airport and City Center Amendment	Jan 2019	KHG, Airport, City Center	Yes for KHG & Airport	Construction is not impacted as the Joint Use & Occupancy Agreement (JU&O) for right to access and construct for City Center will be executed when the Notice to Proceed (NTP) is issued.
HDOT(H) (100,100-A, 304, 400-A, 400-B)	Joint Use & Occupancy (JU&O) Sub-agreement	Jan 2019	WOFH	Yes	In process. Construction is not impacted as the JU&O for right to access and construct is executed.
HDOT(H) (100,100-A, 304, 400-A, 400-B)	Joint Use & Occupancy (JU&O) Sub-agreement	Jan 2019	City Center		In process. Construction is not impacted as the JU&O will be executed when Notice to Proceed (NTP) is issued.

Inter-Governmental Agreements					
Agency	Pending Agreements (Executed Agreements are shaded grey)	Target	Section	Construction Right of Entry Obtained	Notes/Remarks
HCDA -HI Community Development Authority (444A, 450,463BE-5-B, 475)	Construction ROE, License Agreement, & Final Disposition	Jan 2019	City Center		Coordination is ongoing. HART expects ROE for pre-construction activities to be executed by late June 2018. The term of this agreement will be for 1 year. HART will need to appear before HCDA board for construction ROE (construction of guideway improvements and utility relocation) approval.
DAGS (441-A)	Construction Right of Entry for City Center for Liliha Civic Center.	Aug 2018	City Center		To be processed. Working with Department of Accounting and General Services. Ball in Court with DAGS. Provided amended maps and descriptions.
DAGS (441-A)	Easement Agreement for City Center for Liliha Civic Center.	Aug 2018	City Center		To be processed. Working with Department of Accounting and General Services on permanent easement document.
Kalihi Kai Elementary (501)	Right of Entry from DOE/DLNR	June 2019	City Center		ROE to be negotiated with DOE/DLNR. Requires HECO outreach to explain nature and extent of take.
Kalihi Kai Elementary (501)	Easement Agreement	Feb 2020	City Center		Once ROE is in place, subdivision map to be completed and submitted to DPP.
FEDERAL AGREEMENTS					
U.S. Gov't/General Services Administration (GSA)/Federal Courthouse (443C)	Master Agreement, Security & Landscape License Agreement, Utility License Agreement, Guideway License Agreement	March 2019	City Center		Under review. Master Agreement expected to be complete by June 2018, Landscaping and Security agreements by Sept. 2018, License to do work by Oct. 2018, utility agreements by Nov. 2018, final licenses by Feb. 2019.
GSA Federal Courthouse	Temporary Construction Easement (TCE)	May 2019	City Center		Under review.
GSA Federal Courthouse	Quitclaim Easement Document	May 2019	City Center		Under review.
OTHER AGREEMENTS					
D.R. Horton (101B)	Construction Right of Entry Amendment – D.R. Horton & HART	June 2018	WOFH	Yes	Amendment in process.
D.R. Horton	Final Easement Agreement	Jan 2020	WOFH	Yes	In process and subject to owner's development plans. Construction is not impacted.
EXECUTED AGREEMENTS					
CITY AGREEMENTS					
BFS – Dept. of Budget & Fiscal Svcs.(204A)	Intra-Agency Joint Use (Continental Investment)		KHG	Via intra-agency joint use	Ongoing intra-agency coordination. City purchased property 1/13/16. Emergency Generator required on property.

Inter-Governmental Agreements					
Agency	Pending Agreements (Executed Agreements are shaded grey)	Target	Section	Construction Right of Entry Obtained	Notes/Remarks
BFS (205A)	Jurisdictional transfer from DFM to HART of Kamehameha Hwy/Makalapa Manor		Airport	Yes	Jurisdictional Transfer from BFS Letter dated 8/26/11.
DPR - Dept. of Parks & Recreation (119)	Construction consent to construct for MSF drainage		WOFH	Yes	
STATE AGREEMENTS					
UH – University of Hawaii	Master Agreement is not needed as the ROE for right to access and construct will be executed separately by each campus.		WOFH, KHG, City Center	Will be executed by each campus	Construction is not impacted as the ROE for right to access and construct will be executed by each campus.
UH	Pre-Construction Right of Entry and Amendment		WOFH, KHG, City Center	Yes	
UH - West O'ahu (UHWO) (125)	Construction Right of Entry for Station, Temporary Park & Ride, and Amendment for Construction of Road B		WOFH	Yes	
UH - Leeward Community College (LCC) (122)	Construction Right of Entry for Guideway		WOFH	Yes	
UH – LCC (122)	Construction Right of Entry for Station		WOFH	Yes	
UH - Urban Gardens (201A)	Construction Right of Entry		KHG	Yes	
DLNR – Dept. of Land and Natural Resources (124)	Kapolei Construction Right of Entry for overhead guideway and for park and ride facility		WOFH	Yes	CROE has been granted once a year by letter. Working on permanent Easement with DLNR. Currently with DPP for subdivision.
DLNR (320)	Keahi Lagoon Construction Right of Entry		Airport	Yes	
DOE – Dept. of Education Waipahu H.S. (117, 118)	Master/Construction Agreement		WOFH	Yes	
DOE/DLNR for Waipahu H.S. (118)	Construction Right of Entry		WOFH	Yes	Executed by DLNR with DOE concurrence.
Aloha Stadium / Dept of Accounting & General Services (DAGS) (207)	MOU for guideway & station		KHG	Yes	
Aloha Stadium/DAGS	Construction Right of Entry for guideway		KHG	Yes	
Aloha Stadium/DAGS	Construction Right of Entry for station park and ride		KHG	Yes	
HDOT(H) – Dept. of Transportation Highways (100)	Master Agreement for HDOT Highways for WOFH		WOFH	Yes	
HDOT(H) and (A) – Dept. of Transportation Highways & Airports	Master Agreement for HDOT Highways and Airports, for KHG, Airport and City Center Sections		KHG, Airport, City Center	Yes except for City Center whose JU&O will be executed when the NTP is issued	

Inter-Governmental Agreements					
Agency	Pending Agreements (Executed Agreements are shaded grey)	Target	Section	Construction Right of Entry Obtained	Notes/Remarks
HDOT(H)	Joint Use & Occupancy (JU&O) Sub-agreement		WOFH	Yes	
HDOT(H)	Joint Use & Occupancy (JU&O) Sub-agreement		KHG	Yes	
HDOT(H)	Joint Use & Occupancy (JU&O) Sub-agreement		Airport	Yes	
HDOT (A) - Dept. of Transportation Airports	Airport Special Provisions for Right of Entry		Airport	Yes	
HDOT(A)	Joint Use & Occupancy (JU&O) Sub-agreement for Airport Division parcels		Airport	Yes	
HDOT(A) (301A)	Easement document for Airport Division parcel (Main guideway easement)		Airport	Yes	Ongoing intra-agency coordination. Construction is not impacted as the Special Provisions and the JU&O for right to access and construct is executed.
DHHL - Dept. of Hawaiian Home Lands (Exchange w/ Varona Village) (115A)	MOA, License/ROE from DHHL, City Council Resolution		WOFH, MSF	Yes	DLNR approves withdraw from GEO 571 7/14/17. DFM accepts road widening and now City jurisdiction.
OSCC - Dept. of Public Safety, Oahu Community Correctional Center (400A)	Memorandum of Understanding (MOU)		City Center	Yes	
OSCC/DLNR	Construction Right of Entry		City Center	Yes	
DLNR/OSCC	Letter of Responsibility from City-DFM/Road		City Center	Yes	
HCDA -HI Community Development Authority (444A, 450, 463B, E-5-B, 475)	Pre-construction Right of Entry		City Center	Yes, effective upon request	Verbal approval granted by the HCDA Board in 6/2016.
FEDERAL AGREEMENTS					
U.S. Navy (116A)	Grant of Easements for Maintenance & Storage Facility (MSF)/Rail Operations Center (ROC) offsite drainage and sewer easements		WOFH	Yes	Per Letter #N62478-12-RP00011 dated 6/28/12 confirming easement from Navy.
U.S. Navy (300)	Licenses/Construction Right of Entry		WOFH, KHG, Airport	Yes	6/22/15 – 5 Yrs. License ends in 2020. All utility work needs to be completed by then.
U.S. Navy	Easement Agreements		WOFH, KHG, Airport	Yes	Grant of Easement executed. Grant of Easement 8/22/16.
U.S. Navy	Pearl Harbor Station Acquisition of Fee Transfer		Airport	Yes	Quitclaim deed executed 2/25/16.
U.S. Post Office (USPS) (301)	Honolulu Processing Center acquisition		Airport	Yes	Acquisition completed in regular system. Need to process through Land Court to complete process. Funds already paid. USPS Land Court share to complete process is in escrow.

Inter-Governmental Agreements					
Agency	Pending Agreements (Executed Agreements are shaded grey)	Target	Section	Construction Right of Entry Obtained	Notes/Remarks
OTHER AGREEMENTS					
D.R. Horton	Construction Right of Entry - D.R. Horton & HECO		WOFH	Yes	Executed 5/11/2018.

6 MANAGEMENT AND ADMINISTRATIVE UPDATES

6.1 Safety and Security (S&S)

Key Issues

- The Core Systems AHJV Safety and Security Certification point of contact is on island part-time. This issue will be ongoing and monitored by HART Executive Management, Safety and Security, and Core Systems.
- The Core Systems AHJV Construction Safety Manager position has been filled with a conditional acceptance for 90 days.
- Awaiting closure of WOFH tendon NCR to complete civil certification certificate.
- MSF Blue Light Station (BLS) wiring redesign has been completed and tested. HART is expecting test reports to be submitted officially through the Contract Management System (CMS).
- Ensuring touch potential between passenger/passenger vehicle interface meets the code requirements. Design, Core Systems, and HART Safety are currently in discussion with our consultants and contractors regarding this issue. The applicable requirement for passenger vehicles is listed in National Fire Protection Association (NFPA) 130. A decision will be made after tests have been conducted and test reports have been reviewed.
- Completed Scope of Work with the Procurement Department for the upcoming procurement process for the Safety & Security Support Consultant Services contract. RFQ was released.
- Awaiting AHJV to produce documentation for MSF YCB - Open Construction Specification Conformance Checklist Items.
- Awaiting AHJV to produce documentation for MOW Vehicles Design Criteria Conformance Checklists and Specification Testing Conformance Checklists.
- Awaiting two (2) As-Built Documents to close out H2R2 Contract Civil Certification. Site visit occurred in June 2018, final acceptance of the as-built documents is pending.

6.1.1 S&S Twelve (12) Month Certification Projected Milestones and Work Priority

12 - Month Certification Projected Milestones												
Contract and Interim Certificates (IC)	Next 30-90 days			Next 90-180 days			Next 180-270 days			Next 270-365 days		
X – Projected Month, TBD – To be Determined – Pending Documentation	July 2018	Aug 2018	Sept 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019
1. PT-003, Delivery IC												
2. PV Manual Operations IC / Track to ROW / Test Track												
3. PT-004, Delivery IC												
4. PT-005, Delivery IC												
5. MSF/Alignment/Trackwork PHAs final acceptance "UD												
6. PT-003, IC to enter Dynamic Testing												
7. PT-006 Delivery IC												
8. PT-004 to Enter Dynamic Testing												
9. PT-005 to Enter Dynamic Testing												
10. MSF ATC/SCADA Operational IC												
11. PT-006 IC to enter Dynamic Testing												
12. Functional Track IC – TES/ATC/SCADA/PSGS/Comm												
13. MSF Systems IC Fully Operational												

6.1.2 S&S Certification Documents

Key HART S&S Certification Documents - Status			
S&S Project Plans, PHAs, Core Systems SSHA and O&SHA, and TVA			
Documents	REV #	Date Approved	Comments
Documents Approved			
HART SAFETY AND SECURITY			
1. Safety & Security Management Plan (SSMP)	Rev 7	05/22/2018	Rev 7 - SSRC approved and signed
2. Safety & Security Certification Plan (SSCP)	Rev 6	05/22/2018	Rev 6 - SSRC approved and signed
3. WOFH SSCP	Rev 0	10/22/2014	SSRC approved - No future updates: HART SSCP is in affect
4. Construction Safety and Security Plan (CSSP)	Rev 3	10/06/2015	SSRC approved and signed

Key HART S&S Certification Documents - Status			
S&S Project Plans, PHAs, Core Systems SSHA and O&SHA, and TVA			
Documents	REV #	Date Approved	Comments
Documents Approved			
HART SAFETY AND SECURITY			
5. Security Sensitive Information (SSI) Plan	Rev 0	12/15/2015	SSRC approved and signed
6. Project Preliminary Hazard Analysis (PHAs)	Rev 3.0	11/27/2017	SSRC Accepted / New PHA format - data base - under development
a. MSF – Yard and Shop	Rev 3.0	11/27/2017	SSRC approved
b. Alignment	Rev 3.0	11/27/2017	SSRC approved
c. Tracks	Rev 3.0	11/27/2017	SSRC approved
d. Stations	Rev 3.0	11/27/2017	SSRC approved
7. TES Back-Up Generator System HA	Rev A	11/27/2017	SSRC Approved
8. Threat & Vulnerability Assessments (TVAs)	Rev 2	11/27/2017	Rev 2 Approved
HART CORE SYSTEMS			
9. Core Systems Contract (CSC) PHAs (DBOM)	Rev G	9/1/2016	SSRC Approved (CMS # 575)
10. Central ATC O&SHA	Rev C	9/23/2015	SSRC approved (CMS # 874)
11. Wayside/ATC System HA	Rev C	6/22/2016	SSRC approved (CMS# 835)
12. Wayside ATC SSHA	Rev B	6/22/2016	SSRC approved (CMS# 836)
13. Wayside ATC FMECA	Rev A	6/22/2016	SSRC approved in Wayside ATC SSHA CMS # 836
14. Wayside ATC O&SHA	Rev D	9/23/2015	SSRC approved (CMS # 850)
15. Passenger Train ATC System HA	Rev C	5/22/2017	SSRC approved (CMS # 751)
16. Passenger Train ATC SSHA	Rev E	2/24/2016	SSRC approved (CMS # 853)
17. Passenger Train ATC FMECA	Rev A	2/24/2016	SSRC Approved in ATC SSHA CMS # 853
18. Passenger Train ATC O&SHA	Rev F	2/24/2016	SSRC approved (CMS # 873)
19. Passenger Train O&SHA	Rev E	5/22/2018	SSRC approved (CMS # 1320)
20. UPS O&SHA	Rev C	2/24/2016	SSRC approved (CMS # 1092)
21. TES SSHA	Rev B	11/30/2016	SSRC approved (CMS # 884)
22. TES O&SHA	Rev E	5/22/2018	SSRC approved (CMS # 1099)
23. TES Arc Flash Hazard Analysis (HA)	Rec C	5/22/2018	SSRC approved (CMS # 1780)
24. FDAS SSHA	Rev C	4/27/2016	SSRC approved (CMS # 1216)
25. FDAS FMECA	Rev A	4/27/2016	SSRC approved in FDAS SSHA CMS # 1216
26. FDAS O&SHA	Rev B	2/24/2016	SSRC approved (CMS # 1217)
27. SCADA SSHA	Rev C	6/22/2016	SSRC approved (CMS# 854)
28. SCADA FMECA	Rev A	6/22/2016	SSRC approved in SCADA SSHA CMS # 854
29. SCADA O&SHA	Rev E	5/25/2016	SSRC Approved (CMS # 00887)
30. PSGS O&SHA	Rev D	3/22/2017	SSRC Approved (CMS # 880)
31. Communications O&SHA	Rec C	1/25/2017	SSRC Approved (CMS # 1206)
32. UPS SSHA	REV C	6/27/2018	SSRC Approved (CMS # 1720)
33. UPS FMECA	Rev A	6/27/2018	SSRC Approved As part of UPS SSHA CMS # 1720
34. PSGS SSHA	Rev F	6/27/2018	SSRC Approved (CMS # 938)
Documents Pending Approval			
HART SAFETY AND SECURITY			
35. Project Preliminary Hazard Analysis (PHAs)	Rev 3		Rev 3 Accepted 11/27/2017
e. Traction Power	Rev 3		Update on-hold - pending approval of TES SSHA and O&SHA
f. Train Control	Rev 3		Update on-hold - pending approval of ATC SSHA & O&SHA
g. Vehicles	Rev 3		Update on-hold - pending approval of PT SSHA & O&SHA
h. Communications	Rev 3		Update on-hold - pending approval of COMM SSHA and O&SHA
36. Elevator/Escalators System HA	Rev A		Under Development
37. Project OHAs	Rev A		Under development
HART CORE SYSTEMS and Other Contracts			
38. Technologies PHAs	Rev H		05/24/2018 - ANR (CMS # 545)
39. Passenger Train Fire Hazard Analysis (FHA)	Rev D		11/22/2016 - AAN Re-submit (CMS# 749)
40. Passenger Train SSHA	Rev D		03/28/2018 - AAN Re-submit (CMS # 1273)
41. Passenger Train FMECA	Rev A		HNL-DO279
42. TES FMECA	Rev A		HNL-50407
43. PSGS FMECA	Rev B		01/11/2018 – R&R (CMS # 1900)
44. Communications SSHA	Rev F		11/15/2017 - CSC R&R, (CMS # 1205)
45. Communications FMECA	Rev A		11/13/2017 CSC R&R (CMS# 01844)
46. MOW Support Vehicles O&SHA	Rev B		12/18/2017 – R&R (CMS # 1752)

6.1.3 Project Overall Certification Status

<i>Project Overall Certification Status - Progress</i>			
Historical Record	Apr/18	May/18	Jun/18
Final Revenue Overall %	31%	35%	35%
- Interim Revenue Service - 12/2020	54%	52%	52%
- Phase II Revenue Service - 12/2025	7%	17%	17%

6.1.4 Interim Revenue Service Date Certification Status

<i>Interim Revenue Service (2020) Certification Status - Progress</i>			
Historical Record	Apr/18	May/18	Jun/18
Major Components			
- MSF (Civil & Systems)	86%	86%	86%
- Guideway (Civil & Systems)	96%	96%	96%
- Stations & Parking (Civil & Systems)	74%	74%	75%
- Passenger Train (PT 1-20)	14%	15%	15%
- Fare Vending	9%	9%	9%
- Traction Electrification System (TES)	56%	56%	56%
- ATC / SCADA	79%	79%	79%
- Communication	67%	67%	67%
- System Integration Testing (SIT)	37%	37%	37%
- Operational Readiness	15%	15%	15%
- Risk Management	27%	28%	28%

6.1.5 Phase II Revenue Service Date Certification Status

<i>Phase II Revenue Service (2025) Certification Status - Progress</i>			
Historical Record	Apr/18	May/18	Jun/18
Major Components			
- Guideway (Civil & Systems)	8%	8%	8%
- Stations & Parking (Civil & Systems)	0%	1%	1%
- Fare Vending	7%	7%	7%
- Traction Electrification System	0%	0%	0%
- ATC / SCADA	48%	48%	48%
- Communication	13%	13%	13%
- System Integration Testing	0%	0%	0%
- Operational Readiness	0%	0%	0%
- Risk Management	27%	28%	28%

6.1.6 Certification Base Checklists not yet SSRC Approved

<i>Certification - Base DCCC / CCCC / STCC not yet SSRC Approved</i>	
Contracts – Checklist Types	Status
1. DB-450, AGS Guideway – Base CCCC	Under final review
2. DB-450, AGS Stations – Base CCCC	Under final review
3. PT Cert for Pre-revenue Service – Base STCC	Under final review
4. DB-275, Pearl Highlands PS/BTC – Base CCCC	To be developed - need 100% specs
5. FD/DBB UH WO Permanent P&R Base DCCC	To be developed
6. FD/DBB UH WO Permanent P&R Base CCCC	To be developed - need 100% specs
7. East Kapolei Permanent P&R Base DCCC	To be developed
8. East Kapolei Permanent P&R Base CCCC	To be developed - need 100% specs
9. Pre-revenue Testing Conform Checklist (PRTCC)	To be developed
10. DBB-505 Dillingham Utilities Road – Base CCCC	To be developed - need 100% specs
11. DB-550, City Center Guideway – Base CCCC	To be developed - need 100% specs
12. DB-550, City Center Stations – Base CCCC	To be developed - need 100% specs

6.1.7 S&S Open Items List Status

<i>"Open Items List"</i>						
<i>"Open Items" - Design/Construction and Verification Issues</i>						
Month 2018	Total #	Total # Open	Total # Closed	% Closed Overall	# Closed In Month	% Closed In Month
Mar	294	24	270	92%	1	0%
Apr	294	21	273	93%	3	1%
May	295	22	273	92%	0	0%
Jun*	295	22	273	92%	0	0%
*Data date as of June 29, 2018						

6.1.8 Certification Certificates Issued to Date

<i>S&S Certification Certificates Issued to Date</i>		
Contracts / Interim Certification (IC) Certificates Issued	Date Signed	Comments
1. FD-430 / DBB-525 Airport 7-Piers Civil Cert Certificate	9/21/2015	SSRC Approved
2. Three (3) – MOW Vehicles Delivery & M-7, M-2, M-1 MSF Tracks – IC Certificate	2/4/2016	SSRC Approved
3. MSF Yard M-4 and M-6 Tracks – IC Certificate	3/10/2016	SSRC Approved
4. PT-001 Delivery, OSB, M-5/M-4 Tracks, ORCC, MOW MPV - IC Certificate	3/29/2016	SSRC Approved
5. Five (5) – MOW Vehicles Delivery – IC Certificate (Vehicles Only)	5/20/2016	SSRC Approved
6. MOW Facility Early Occupancy – IC Certificate (Administrative Areas Only)	5/23/2016	SSRC Approved
7. MSF Civil IC Certificate - Tracks and Facilities	7/6/2016	SSRC Approved
8. PT-001 Truck (Bogies) Delivery #1 IC, 1 set of bogies – two (2) wheel Sets	11/10/2016	SSRC Approved
9. PT-001 Truck (Bogies) Delivery #2 IC, 7-sets of bogies – fourteen (14) wheel sets	12/01/2016	SSRC Approved
10. PT-001 Dead Car Pull IC - PT-001, MPV, WOFH	5/30/2017	SSRC Approved
11. Dynamic Section Test Track – TES, WOFH Civil, MPV acceptance	10/06/2017	SSRC Approved
12. PT-001 IC to Enter Dynamic Testing	10/06/2017	SSRC Approved
13. DB-200 MSF Civil Contract Final Certification	10/09/2017	SSRC Approved
14. FD-430, DBB-505 Airport Section Utilities Civil Contract Final Certification	10/09/2017	SSRC Approved

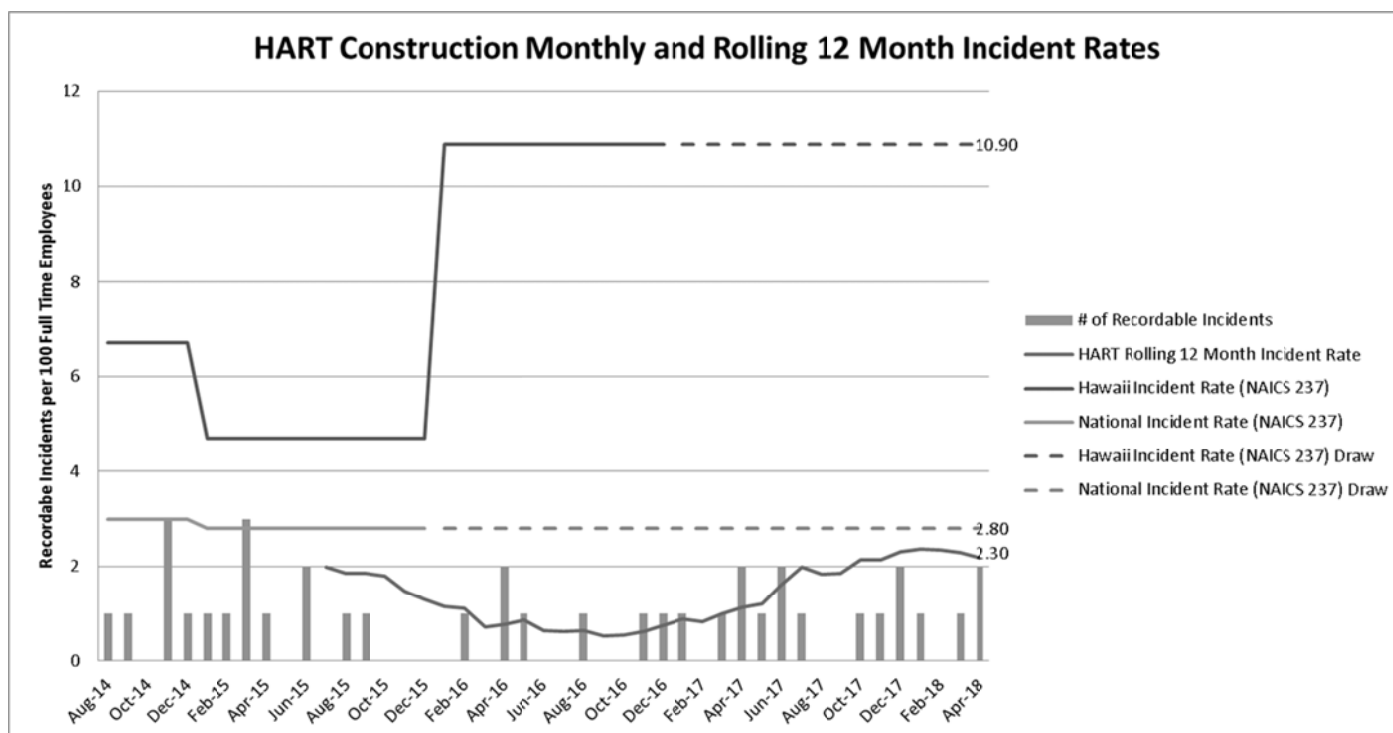
6.1.9 Construction Safety and Security:

Safety and Security Incidents

Incidents for May 24, 2018 – June 21, 2018:

- KHSB: A worker punctured his hand with a nail while removing column forms. He was taken to urgent care where he received a tetanus shot and was released for work.
- KHSB: A storage container was broken into and tools were stolen at the Aloha Stadium work site.
- FHSG: The jobsite at the Waipahu Transit Center Station was broken into and a forklift window was broken by vandals.
- AGS: A worker fractured his finger with a chipping gun while trying to inspect it for a malfunction.

	2017			2018		
	Hours worked	No. of Recordable	No. of Loss Time	Hours worked	No. of Recordable	No. of Loss Time
January	105,639	1	1	84,805	1	1
February	82,068	0	0	85,187	0	0
March	91,567	1	0	117,641	1	1
April	45,603	2	0	105,981	2	0
May	85,744	1	0			
June	76,754	2	1			
July	49,055	1	0			
August	105,613	0	0			
September	99,671	0	0			
October	86,442	1	0			
November	90,101	1	0			
December	118,340	2	1			
Total	1,036,597	12	3	393,614	4	2
				12 Month Rolling Rate		
OSHA Annual Incident Rate	2.32			2.30		



6.2 Quality Management

Key Issues

HART NCR Log		
Total NCRs Issued To Date	Closed	Open
82 (Audits)	65	17
1 (Construction)	1	0

- One major issue remains along the WOFH alignment and needs to be addressed and resolved:
 - Tendons:** Kiewit and HART to brief HDOT on tendon mitigation in July.
- Resolution of a major CSC NCR that needs to be addressed and corrected to prevent recurrence, and to mitigate impact on the overall progress of the project. The major NCR is described below:
 - Retrofit of **Car Shells** under frame continues in Italy. Six car shells are being retrofitted in Italy and only one is completed to date.

Audit Look Ahead

- Updated (Revision 3) the Project Combined Management System Audit Schedule for 2018 to HART and all contractors, consultants and suppliers.
- Performed Quality Assurance (QA) Follow-up Audit of AHJV on the CSC Configuration Management Plans (Systems, Subsystems and Passenger Vehicles) on June 25-27, 2018.
- Issued QA Audit Report to CH2M on the GEC-3 contract on May 31, 2018.
- Performed Combined QA and Buy America Audit of Schindler Elevator Corporation on the MIM contract for Elevators and Escalators on June 13-14, 2018.

Oversight and Monitoring

- Conducted Bi-weekly Quality Task Force Meetings including review of NCRs and Corrective Actions to prevent their recurrence.
- Attended and participated in contractors/subcontractors scheduled Pre-activity Meetings.
- Attended and participated in the Safety and Security Review Committee (SSRC), Rail Activation Committee (RAC), Car Readiness Review Board (CRRB), and Operation Working Group (OWG) meetings.
- Performed Bi-weekly QA/Quality Control (QC) surveillance of construction sites.
- Started revising the Project Management Plan (PMP) and HART Baseline Plans and Procedures to incorporate the latest approved (April 4, 2018) Project Organization Chart, which is depicted in Appendix C of this Monthly Progress Report.
- Prepared and issued Project NCRs Trend Analysis from July 2017 to June 2018.

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

Overview and Key Issues

- Inquiring with vehicle manufacturers HECO identified regarding Buy America requirements.
- The Buy America post-delivery audit of the first rail vehicle is being conducted.

6.4 Disadvantaged Business Enterprise (DBE)

Activities this Month

- \$93,471,724 = total dollar participation for all DBEs on all HART contracts from 9/24/07 to 6/30/18
 - 11.59% = DBE utilization on total disbursed FTA funds received to date (\$93,471,724 divided by \$806,258,734)
 - 5.30% = DBE utilization to date on total Project FTA funds (\$93,471,724 divided by \$1,763,903,901)

6.5 Art-in-Transit (AIT) Program

The Honolulu Rail Transit Project's December 2012 FFGA grant (Sitework and Special Conditions) includes a public art program. In addition, the Revised Ordinances of Honolulu (ROH) Section 3-2.7, "Art in City Buildings," provides for the inclusion of art in city-owned buildings frequented by the public. For the rail project, the AIT staff negotiates and manages contracts for the west-side stations and AGS. AIT contracts are managed in five Notice to Proceed (NTP) phases:

- NTP1 - Conceptual design
- NTP2 - Design development, final design, and construction documents
- NTP3 - Mobilization
- NTP4 - Fabrication, transportation, and installation
- NTP5 - Final acceptance

Conceptual and final designs are presented to the Mayor's Commission on Culture and the Arts for review and comment. The Transit Art Committee evaluates and makes the final recommendation and approval.

Station / Facility Name	Artist Name	NTP Phase	Comments
East Kapolei Station	Robert Flint	NTP2	Revising final design, working on color test tiles, 3-D model.
University of Hawai'i West O'ahu Station	Satoru Abe	NTP2	Technical integration of artwork; working on final design construction documents, and Safety and Security Certification.
Ho'opili Station	Karen Lucas	NTP2	Revising final design.
West Loch Station	Hans Ladislaus	NTP2	Revising final design.
Waipahu Transit Center Station	John Koga	NTP1	Revising conceptual design.
Rail Operations Center – Operations & Servicing Building	Shigeru Miyamoto	NTP2	Revising final design.
Leeward Community College	Donald Lipski	NTP1	Conceptual design.
Pearlridge Station	Robert Kushner	NTP2	Technical integration of artwork; working on construction documents.
Aloha Stadium Station	Jay Wilson	NTP1	Revising conceptual design.
Pearl Harbor Naval Base Station	Carol Bennett	NTP1	Conceptual design. Working with STG and the artist on technical integration of artwork on pedestrian bridge.
Honolulu International Airport Station	Mamoru Sato	NTP1	Conceptual design. Working with STG and the artist on technical integration of artwork on concourse.
Lagoon Drive Station	Carol Yotsuda	NTP1	Revising conceptual design.

6.6 Planning and Environment

Activities this Month

- Programmatic Agreement (PA) Activities:
 - The 2018 Q1 Mitigation Monitoring report was finalized and submitted to the appropriate agencies.
 - Developing standard protocols for the application of Secretary of the Interior (SOI) standards relative to stations near or adjacent to historic properties.
 - Planning conducted an informational briefing and site visits to key historic properties along the alignment for the Advisory Council on Historic Preservation, a Signatory Party to the PA.
 - Planning is assisting with the response to Request for Information (RFI) regarding column wrap placement at Pearl Harbor Station. The decision has been made to change the C bent column to a standard round column which will accommodate the column wrap.
 - Planning is assisting with the strategy meetings regarding the re-design of elevator support columns on the makai side at Pearl Harbor Station. The new design removes the future elevator and leaves only one support column in the existing bus stop.
 - On June 14, three Planning staff attended National Historic Preservation Act Section 106 Advanced Training conducted by the Advisory Council on Historic Preservation and held in Honolulu.
 - Planning is assisting with the response to Request for Variance (RFV) regarding column placement near Aolele Ditch and the proposal to convert Pier 575 from a straddle bent to an L-bent.
 - Planning staff reviewed design submittals for Honolulu International Airport Station. Review has been completed and the required 2nd Neighborhood Design Workshop required by the PA is in its early planning stages.
 - Planning is assisting STG and their design team with the Airport Segment Corridor Wide Landscape Plan review process with the State Department of Land and Natural Resources (DLNR), the Navy, Keehi Lagoon Memorial Park, and Keehi Lagoon Beach Park.
 - On June 7, Planning staff participated in a comment resolution meeting with STG to address comments from HART and other agencies on the Corridor Landscape Plan.
 - On June 14, Planning staff attended the CCUR Task Order workshop to inform contractors of task order expectations and procedures.
 - Planning is assisting STG with coordinating Tree Disposition procedures at Honolulu International Airport.
 - The Programmatic Agreement Implementation Schedule (PAIS) is being updated to reflect current activities.
 - Staff continued its review of the Queen Street Bridge draft National Register of Historic Places (NRHP) nomination.
 - Staff completed comment review matrices for the Irwin Park Cultural Landscape Report (CLR) and Dillingham Transportation Building NRHP.
 - On June 5, Planning staff met with STG's landscape architect and Keehi Memorial Organization to discuss landscape mitigation within Keehi Lagoon Memorial Park.
 - Planning staff met with Makalapa Manor administration staff to address their concerns regarding existing trees within HART ROW.
 - Planning staff met with a UH Urban Garden Center representative to discuss tree mitigation efforts within their property to compensate for 10 Geiger trees that are to be removed by HART.
 - On June 8, Planning staff met with a Department of Parks and Recreation representative to discuss tree relocation procedures.
 - On June 18, HART started transplanting work for 3 large Monkeypod trees from the Airport to Waiau District Park.
 - On June 20, Planning staff attended a TOD public hearing for SKY Ala Moana development.
- Planning, Environmental, and Cultural Activities:
 - Planning staff submitted the first quarter 2018 submittal to the Environmental Protection Agency for HART's Brownfields' grants.
 - Planning staff updated Phase I Environmental Site Assessments for new acquisitions.
 - Planning staff remediated the UH Urban Garden Center site and sampled soil for reuse at the site for construction.

- Planning staff provided edits to the Kamehameha Highway Resurfacing contract to comply with programmatic requirements.
- Planning staff met with the Hawai'i Department of Health to provide a status update on the Project.
- Planning staff reviewed the Phase I Environmental Site Assessment for the Servco property.
- Planning's On-Call Hazardous Material Contractors completed the field work for the Phase II Site Assessment at the UH Urban Garden Center.
- Planning staff attended the CCUR Preconstruction meeting to discuss programmatic requirements.
- Planning staff continues to review contractor submittals for adherence to appropriate contract requirements.
- HART continues to update the Tree Relocation Plan for Airport Segment, per the latest Tree Disposition Plan and input from HDOT Airports Division.
- On June 1, Planning staff attended the Code for America summit on the applications of technology to achieve more inclusiveness in government services.
- On June 8, Planning staff participated in planning for technology and TOD related grants with stakeholders from partner agencies and other city and county agencies such as DPP, DTS and HDOT.
- On June 12, the HART CEO presented energy and sustainability aspects of the Honolulu Rail Transit Project (H RTP) to the VERGE conference with the support of Planning staff.
- On June 12, Planning staff moderated a panel on Transit Oriented Land Use and Transportation Electrification at the VERGE Energy Conference.
- On June 12, Planning staff, Public Involvement (PI) staff, and the HART CEO participated in a working lunch to develop a roadmap to 100% renewable ground transportation.
- On June 13, Planning staff participated in Elemental Excelsior's Marketplace, providing industry expertise and learning about innovative companies in the energy, mobility and technology fields.
- On June 20, Planning staff responded to peer review comments for American Public Transportation Association (APTA) Sustainability Bronze recognition.
- Staff continued work on Historic Preservation Certification Application (HPCA) and NRHP nomination for the Wo Fat Chop Sui House in the Chinatown Historic District.
- On June 7, Planning staff convened a meeting with the Hawaiian Station Naming Working Group (HSNWG) to start discussion of identifying potential Hawaiian names for 6 stations (Pearl Harbor, Airport, Lagoon Drive, Middle Street, Kalihi and Ala Moana).
- On June 22, the Emergency Generator Post-ROD was approved by the FTA which was revised to clarify pertinent mitigation measures and the definition of BANCT (best available noise control technology).

Look Ahead

- Prepare and submit final Post-ROD Documentation to FTA for approval:
 - City Center Makai Casting Yard (MCY), pending FTA concurrent review on Over-the-Shoulder draft version of Post-ROD while HART is working on obtaining a State Historic Preservation Division (SHPD) concurrence letter of no adverse effect.
 - Revise FTA's submittal to SHPD in accordance to SHPD's guidance for MCY proposed action.
- Additional Right-of-Way, awaiting potential project refinements.
- West O'ahu Park-and-Ride Lots, on hold pending identification of potential Park-and-Ride sites.
- Hōlau Market/Ai-Goto, NRHP nominations and Historic American Buildings Survey (HABS) documentation.

6.7 Risk Management

The HART program's Risk Management System focuses on mitigation strategies to assist the project teams in successful project delivery. The bottoms-up risk assessment for all projects in the program are updated monthly by the project teams. A network model is then updated to evaluate the cost and schedule contingencies of the program, including relationships between each of the individual projects and contracts. Risk assessment discussions with the project teams are held periodically 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 individual project risks are now updated monthly and input into the RR. Outputs from the RR are now being transitioned as a batch input to the overall cost forecasting reports.

The risk management system quantifies each risk as a schedule impact or as a direct cost impact independently. The schedule impact is then monetized if it is a critical-path risk, based in the model and based upon the contracts impacted. The top risks to the program are then evaluated on both schedule and cost.

As HART implements the risk management system focused on mitigation, monitoring, and control, the PMOC had requested to work with HART to develop a new tracking mechanism or data reporting set to better assist in the oversight of the program. As a result, the HART risk manager reports risk updates by project on a monthly basis and performs a model update of the program on a quarterly basis. The latest quarterly update was in March 2018, and the latest monthly update was in June 2018 drawing on the May 2018 risk data.

Notes of Significance

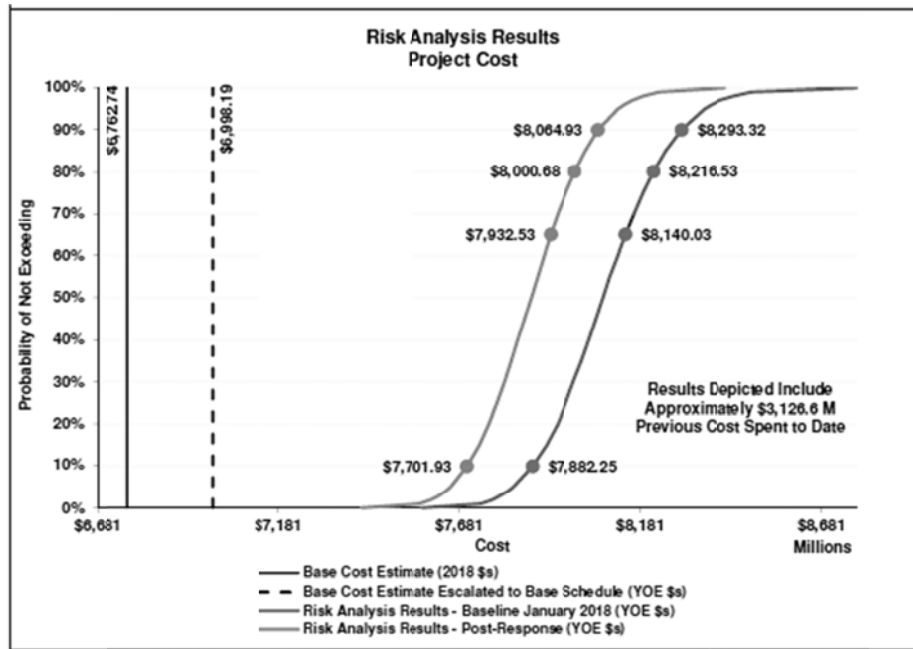
- HART provided the Risk Register with data through December 2017 to the PMOC, to assist with the PMOC's preparations for an independent Risk Refresh in late February 2018.
- FTA staff from Washington, D.C. and Region 9 from San Francisco along with their PMOC consultant conducted a Risk Refresh workshop on HART's project. The workshop, field visits, and meetings with HDOT (regarding safety) were held on Feb. 26 through Feb. 28, 2018. HART staff continued to provide additional information for evaluation by FTA. For example, HART's update to the PMOC on March 13, 2018 demonstrated risk reductions of \$129 million in the February 2018 risk update compared to the January 2018 risk update. Note that this value has improved to \$177 million in risk reductions (expected value) when comparing the April 2018 risk update to the January 2018 risk update.
- The procurement for the combined guideway and station package on the City Center Guideway and Stations (CCGS) contract was cancelled by HART on Aug. 24, 2017. HART has now evaluated options for a new procurement with input from Risk Management. A risk model was run on the new City Center procurement strategy, with an advance utility package (unit rate contract), followed by a separate guideway and stations package (Design-Build or Public-Private Partnership [P3]), which showed a significant reduction in risk compared to the option of a Design-Build package for utilities as well as the guideway and stations.
- HART is currently reviewing soft cost budgets, including Professional Services contracts. The Risk Management System (RMS) provides forecasts of extended soft costs based on risks within projects and overall project progress. The Risk Manager continues to meet with contract managers and Project Controls to compare forecast information to identify any significant differences and to ensure a reasonable degree of accuracy in overall risk reporting.
- At the June 5-6, 2018 meeting, PMOC suggested that HART should undertake a special Risk Assessment (RA) of the differences between a Design-Build (DB) and P3 project delivery methodology for the CCGS project, as well as for the Pearl Highlands Garage and Transit Center (PHGTC) project. The HART Board of Directors also requested a similar analysis. Direction was then given to HART Risk Management to facilitate this workshop, which was conducted in June 2018. The results of this RA will be discussed with the PMOC in July 2018, and will also be included in the P3 project delivery "white paper" to be presented to the HART Board of Directors.

Areas of Focus

A) Quarterly Risk Refresh – The risk manager facilitated meetings with each of the project teams in March 2018 for the Quarterly Risk Refresh. A kick-off meeting was held with the Risk Management Committee. Risk refresh sessions were held with ROW, Utilities, Core Systems, CCGS, AGS, station groups (WOSG, FHSG and KHSG), WOFH, KHG, Pearl Highlands Garage, Elevators/Escalators, and several of the consulting contracts. The most significant findings and results were summarized in the Monthly Progress Report for April 2018. An important update includes the addition of risks for project issues that the Risk Manager and Core Systems are concerned could potentially result in affecting Interim Revenue Service (December 2020) if these risks are not appropriately managed and mitigated.

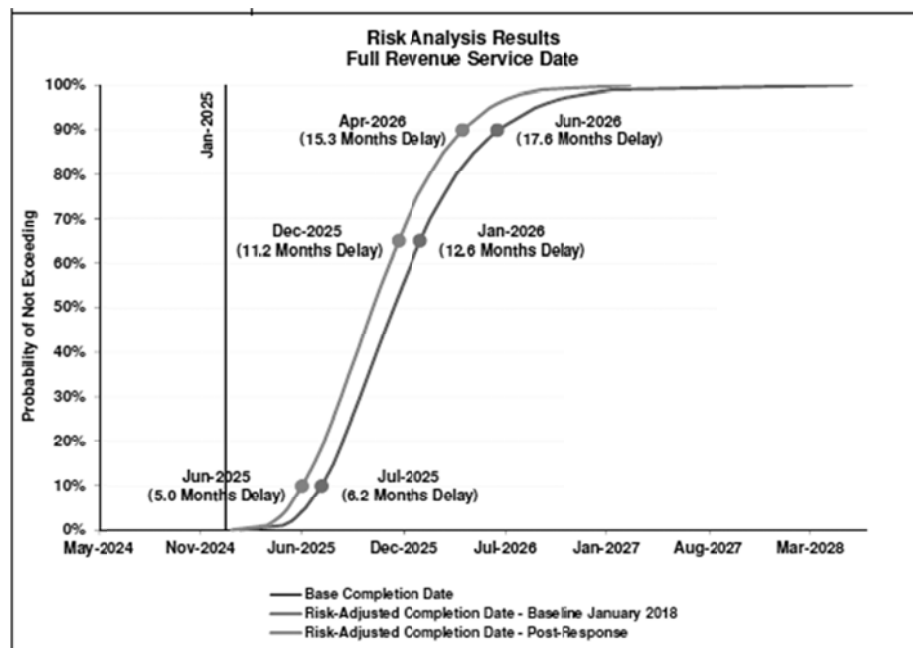
B) May 2018 Risk Update – The cost and schedule probability curves are now updated monthly. The May 2018 update was presented to HART management and PMOC on June 5-6, 2018 (see the figures below). The update resulted in exceeding the FTA benchmark with over a 90% level of confidence of completing the Project within the budget stated in the Recovery Plan of \$8.165 billion (excluding finance charges), and the FTA benchmark 65% level of confidence of a project completion date for Revenue Service by Dec. 31, 2025.

Figure 11. Cost Probability Curve, May 2018 Risk Data



The cost probability curve forecasts that there is an 80% level of confidence that the project will be completed at or below \$8.001 billion, which is within the overall project budget of \$8.165 billion. (Note that this curve also shows a 90% level of confidence of completing the project at or below \$8.065 billion, which is also within HART's overall budget of \$8.165 billion.) The May 2018 Report is nearly the same as (\$6 million higher than) the April 2018 Report, due to recent risk adjustments discussed below.

Figure 12. Schedule Probability Curve, May 2018 Risk Data



The schedule probability curve forecasts that the FTA benchmark 65% probability of completing the Project by the Full Revenue Service Date of December 2025 will be met. The current update with May 2018 risk data shows a 65% probability of completing the project in December 2025 which is a one-month change from the April 2018 Report which forecast completion in November 2025.

Note that the Pre- and Post-Mitigated Critical Path Schedules (red and green curves) no longer overlap. This is because PMOC had asked HART to reestablish the specific pre-mitigated baseline that HART's post-mitigated responses can be measured against on an ongoing (monthly) basis. HART has therefore inserted the January 2018 pre-mitigated risk curve (the red curve) which represents the new baseline established after separating the City Center Utilities Relocation (CCUR) procurement from the CCGS procurement. Previously, when the City Center utilities were part of the Guideway and Stations planned DB package, the pre-mitigated risks were much higher for reasons discussed in prior reports, resulting in more significant separation between the red and green cost and schedule curves. Currently, the red curve from the January 2018 update more appropriately reflects the pre-mitigated values considering the separation of the two contracts, with the green curve showing post-mitigated improvements to the new plan. HART's new plan is a significant improvement from several months ago before CCUR was separated out from CCGS as a separate contract, allowing HART to get a good start on utility relocation work within City Center and remain on schedule.

HART's Cost and Schedule Contingency:

- Remaining Contingency as of April 27, 2018 is \$904.4 million, of which \$822.6 million is allocated contingency, and \$81.8 million is unallocated contingency.

The value referenced above is the Project's Available Contingency as calculated by Project Controls from HART's May 2018 Monthly Progress Report. Risk Management holds a modestly higher contingency value, but that is because fully committed changes are still held in the Risk column (versus the budgeted column) until such time as the changes are fully executed.

- There is one year of float time in the project schedule, from December 2024 to December 2025. Risk Management projects this float time will be needed in order to complete on time in December 2025 for Full Revenue Service.

Most Recent Risks Retired or Reduced:

- As reported in last month's (May 2018) Report, HART has fully mitigated or reduced \$177 million in Risks from January to April 2018, as follows:
 - Reduced risks at the Airport Guideway and Stations project for:
 - Utility relocations (mitigated by potholing with limited interferences found)
 - Interferences at drilled shaft locations for the guideway structure work (mitigated by site investigations, resulting in the slight shifting of two shafts to avoid having to relocate utilities)
 - Moving an AM Antenna (mitigated through an interim move away from the guideway work)
 - HECO power lines (reduced risk with an On-Call contractor reframing the poles allowing expedient power line relocation and staying ahead of the AGS contractor)
 - Miscellaneous utility relocations being done by On-Call for expediency, and which were removed from Airport Section Utilities scope
 - Casting Yard Availability (mitigated through close coordination with the property owner allowing sufficient access for the AGS contractor at the site)
 - Access delay to Lagoon Station (reduced risk exposure through close coordination by HART with the AGS contractor in the sequencing of work through the area)
 - Reduced probability of the delay to obtain property because existing ROW issues for AGS are under some form of mitigation
 - Pearl Harbor Station foundation landings – resolution of possible schedule delays
 - Reduced Resources and Processes risk due to change in leadership with AGS contractor resulting in improved resolutions to project issues
 - Reduced probability of Pearl Harbor Station delays due to positive status of community reviews of station designs

- Reduced risk for undergrounding of HECO high voltage lines (mitigated from recent HART Board approval of the purchase of specialized bucket trucks for HECO that allow the overhead power lines to remain in an overhead condition versus having to underground)
- Change in net expected values for KHG and WOFH due to ongoing project closeout negotiations
- Modest decreases in risks for WOSG and KHSB based on progress of the work
- Modest reduction in Risk Expected Value (EV) for ASU based on final negotiations for contract closeout
- In addition to the risk reductions listed above, HART continues to add or increase risks where appropriate.
 - Increased risk for CCUR by \$9.4 million in case of utility unknowns that might not be fully handled with the unit rate approach.
- As noted previously, the overall change in Risk Expected Value between the May and April 2018 Reports is an increase of \$6 million. Many of the individual project risk forecasts remained the same or very nearly the same from April to May 2018. The \$6 million difference is due to the way the Risk Model forecasts overall expected values through escalation of costs to anticipated year of expenditures, extension of monetized overhead costs from minor schedule adjustments within the projects, and the overall risk management forecasts which can project differing results based on statistical evaluations from the input risk data. In other words, there were essentially no significant cost risk changes from April to May 2018.

C) Adjustments to the Baseline for Cost and Schedule Risk Curves – At the Jan. 16, 2018 meeting, PMOC asked that HART revise the cost and schedule probability curves to fully reflect the current risk mitigation strategies for the separate CCGS Utilities (unit rate by task order), and the Guideway & Stations (design-build) contracts moving forward. Updates from the summer of 2017 through December 2017 depict the value of the current project delivery strategy with its potential of keeping the project on budget and on schedule. The earlier strategy of having the utility relocations and the guideway and stations work all in one design-build package resulted in a pre-mitigated approach that would have placed the project over budget and behind schedule. PMOC advised that the December 2017 probability curves are appropriate to reflect the advantages and value of the new contracting strategy, but new cost and schedule curves in future months should be reflective strictly of the new plan itself. The Project Director and Risk Manager agreed that the new curves for pre-mitigated responses will be adjusted to become the new basis for comparison against the post-mitigated responses pertaining to the CCGS Utilities (unit rate by task order), and the Guideway & Stations (design-build) procurement approach. These adjustments were reflected in the January 2018 risk update and in the reports provided to HART Management and PMOC in February, March and April 2018.

D) Risk Expected Value Report – The Risk Manager began preparing the monthly Risk EV Report in December 2017. An updated report with data through December 2017 was presented to HART management and PMOC from January through the current time. (The May 2018 report has been produced, but its distribution is delayed due to the change in the CMS system which has resulted in a longer time requirement to produce the report with May 2018 data.) This detailed report includes all budgets from the Contract Packaging Plan (CPP), all anticipated changes to budgets, approved change orders, pending change orders, merit items heading to change orders, claims that may become change orders, all active forecast risks, and escalations for delay or year of implementation. In prior months, the Risk Manager was providing only the forecast risks to Project Controls, with Project Controls producing the Risk EV report. In HART's current approach, the Risk Manager is producing the overall Risk EV Report independently from Project Controls, to provide an independent view of the project cost at completion and schedule completion, in order to inform HART management of the health of the project. Project Controls utilizes this information and compares it to their own projection of project cost and schedule completion, and necessary use of allocated and unallocated contingency on the project.

E) Risk Comparison Reports – The Risk Manager is producing a report comparing the summation of cost and schedule risks by project, from one month to the next. The latest reports were presented to HART management and PMOC in June 2018 reflecting data from the May 2018 risk update compared to April 2018 risk data. Prior comparison reports focused on individual risk changes, but that report was too detailed. The current format provides a broader view of risk changes by project, and summarizes the reasons for the changes. PMOC indicated that the current format is more meaningful.

F) Risk “Hit List” Reports – The Risk Manager is producing Risk “Hit List” reports, which provides tornado diagrams for the top ten cost and schedule risks for each project. The tornado diagrams compare the pre-mitigated strategy (red bar) to post-mitigated strategy (green bar) for each risk. These reports are provided to HART construction management teams for their information as to how the Risk Management System views the risks on their projects. The initial data is organized and input into the RMS by the risk and change specialists within the project teams, but the Risk Manager felt it would be beneficial to provide the resulting summary reports back to the project teams’ management representatives to make sure that the risks are fully communicated and understood by those who are responsible for on time and on budget delivery of each project.

G) Cost Containment/Cost Reduction Workshops including Secondary Mitigations – The Risk Manager facilitated a cost containment/cost reduction workshop with numerous HART project team members on Sept. 21, 2017. Rough Order of Magnitude (ROM) estimates were prepared. A summary report was presented to the HART management and the PMOC. Another workshop focusing on further Secondary Mitigations was held on May 2, 2018 with the Risk Management Committee and additional participants representing planning, environmental, design, construction and estimating. The goal of the May 2 workshop was to be sure that HART has developed enough cost-saving proposals through primary and secondary mitigation measures to ensure that the project remains within budget. A list of 21 cost containment/cost reduction ideas with ROM estimates was presented to FTA and PMOC on May 10, 2018, and more recent updates to the proposals were discussed again with PMOC on June 5-6, 2018. Many of the ideas would necessitate further environmental review and approval of a change to the FFQA. HART has developed the target dates by which decisions need to be made, many of which would need to be by July 2018 to be in time for description within the CCGS procurement documents for pricing by the Design-Build firms. The status of the latest list of cost containment/cost reduction proposals will continue to be discussed in the forthcoming Risk Management Committee meetings.

H) Decision Milestone Matrix – The Risk Manager updated the Tier 1 decisions in the Decision Milestone Matrix and presented an update to HART management and PMOC on Feb. 14, 2018. Another update will be prepared for the next PMOC meeting in July 2018.

I) Market Conditions

Mitigation Progress:

- HART's continuous improvement in estimating methodology has led to more confidence in the likely construction pricing, with a current cost escalation of 2.5% per year based on more recent economic reports including the Rider Levett Bucknall (RLB) 4th Quarter 2017 construction cost index, which shows Hawai'i with a stagnant or negative escalation over the last 18 months. Continued pricing pressures in the market could still lead to higher than expected price proposals and bids. HART's estimators continue to monitor the escalation data in preparation of remaining project estimates including CCGS.
- In spite of the RLB reports showing lower escalation, within the Risk Management System, an escalation assumption of 4% per year is used for all risks on remaining work, in order to be even more conservative in our forecasts.
- Special focus will be on the procurement of the City Center guideway and stations contract given that it is a significant contract affected by market conditions. The CCUR project has now been awarded, so the effects of market escalation have now been reflected within this competitive award.

J) Utilities – Utilities continue to be an issue for the project, as they are for most transit and rail projects.

Mitigation Progress:

- Resources to relocate HECO facilities are now keeping up with scheduled requests to resolve utility conflicts through improved coordination efforts between agencies at all levels from project management to executive levels. One example is the HART Board's approval in February 2018 of the purchase of specialized lift vehicles for HECO to maintain overhead power lines in closer proximity to the guideway, thus avoiding having to place the powerlines underground at a much higher cost to HART.
- Identifying existing utilities along the City Center corridor.
- Resolve utility conflicts prior to construction contracts being issued.
- Sign construction agreements with utilities for the Dillingham Temporary Utility work as well as the City Center construction area.

- Evaluated and now implementing the advancing of the City Center utilities relocation package as an early contract (bids were evaluated in March to May, with project award in May 2018). The CCUR work will be followed by the procurement for the City Center Guideway and Stations project.

K) Right-of-Way – While construction access for nearly all west-side acquisitions is complete, progress is being made on east-side acquisitions with numerous properties still in active negotiations for construction access and acquisition. The goal is to provide site access to the contractors for the entire project to avoid or mitigate against associated inefficiencies related to re-sequencing the work plan which would have a negative impact to the revenue service date. A new risk added to the Risk Register in April 2018 pertains to possible delays in acquiring necessary properties from the University of Hawai'i. This topic will be the focus of further risk reviews in the coming month. Refer to the Right-of-Way section of the Monthly Progress Report for current status of Right-of-Way activities.

6.8 Construction Claims

Pursuant to FTA Circular 4220.1F, HART is obligated to notify the FTA and PMOC about third-party claims and litigation with which it is involved. HART considers a "claim" to arise when a third-party contractor submits a request for a final written decision by the Contracting Officer. Pursuant to Hawai'i Revised Statutes Section 103D-711 and Hawai'i Administrative Rules Section 3-126-28, the Contracting Officer's decision is deemed final and the basis on which the aggrieved party can initiate an action in Circuit Court within six (6) months of receipt of the Contracting Officer's decision.

Contract	Contractor	Claim Description	Claim Amount	Status
WOSG	Nan, Inc.	Nan claims that the difference between a July 8, 2015 "anticipated" Notice to Proceed (NTP) and the October 13, 2015 actual NTP resulted in 97 days of compensable delay at a daily rate of \$20,000.	\$1,940,000	The Contracting Officer issued a written decision on December 28, 2017. The Contracting Officer denied Nan's claim after having determined that: (a) the issuance of the NTP after the "anticipated" NTP date does not give rise to a compensable delay claim, (b) Nan's claim was untimely, (c) Nan cannot claim compensable delay for a time period falling before the NTP was issued, and (d) Nan cannot submit a delay claim because there was no impact to the substantial completion date. On June 21, 2018, Nan withdrew its claim.
KHSG	Nan, Inc.	Nan claims 161 days of compensable delay based on a rate of \$30,000/day due to alleged design changes at the Pearl Highlands Station.	\$4,830,000	Nan submitted a request for a final written decision by the Contracting Officer on April 3, 2018. A decision by the Contracting Officer is pending.
FHSG	Hawaiian Dredging Construction Co.	HDCC seeks 482 days of compensable delay based on a rate of \$30,000/day due to alleged delays in the issuance of the Issued For Construction drawings and access to LCC Station site.	\$14,460,000	HDCC submitted a request for a final written decision by the Contracting Officer on April 18, 2018. A decision by the Contracting Officer is pending. The parties have agreed to enter mediation.

6.9 Community Outreach

Overview

- Since the inception of HART, the outreach team has participated in:
 - 1,232 Public Presentations and Events
 - 13 Events and Presentations in June 2018. HART Executive Director & CEO Andrew Robbins participated as a featured speaker on two panels at the VERGE Hawaii Conference. The HART Public Involvement team answered questions to those in attendance at the VERGE conference as well as at ESPN Sports Festival. The HART team also met with the Downtown-Chinatown and Ala Moana Neighborhood Boards, the Hawai'i Community Development Authority (HCDA) and the administration at Oahu Community Correctional Center (OCCC) about upcoming utility relocation work in the City Center Section of the rail project.
 - 733 Neighborhood Board Meetings
 - 6 Neighborhood Board Meetings in June 2018.

Community Input

- HART's public outreach team responded to dozens of public inquiries and comments this month. Inquiries were related to maintenance issues along the rail corridor, and the schedule and location of upcoming rail construction work.

6.10 Staffing

Overview

- Organization: The latest organizational chart is dated April 3, 2018.
- Project Staffing:
 - Target (current organization): 135 Full-Time Equivalent (FTE) City Staff
 - Actual City Staff Total: 112 Employees (5 Civil Service and 107 Personal Services Contract [PSC] Employees)
 - Project Management Support Consultant (HDR) Staff Total: 18 Employees
 - Combined Project Staff (City plus HDR): 130 Personnel (reflects current month arrivals and departures)
- Positions Filled:
 - Senior Cost Analyst, Project Controls (City – PSC)
 - Information Specialist, Construction and Community Relations, Public Information
- Positions Vacated:
 - Information Specialist, Public Information
 - Procurement and Specifications Specialist, Procurement & Consultant Contracts
 - Planner III, Planning
 - Hart Board Staff Assistant

Figure 13. Staffing Activities

Staffing Activities				
Title	Group	New/Existing HART Position (City or PMC)	Position Status*	Start Month
Project Controls				
Director of Project Controls	Project Controls	Existing HDR	Recruiting - HDR	
Fiscal Analyst	Project Controls	New (City)	Recruiting/Interviewing - PSC	
Senior Cost Analyst	Project Controls	New (City)	Filled - PSC	June
Computer Programmer	Controls – Business Systems	Existing (City)	Selected - PSC	Jul
Records Management Analyst	Project Controls	Existing (City)	Recruiting - PSC	
Procurement, Contracts & Construction Claims				
Procurement & Specifications Specialist	Procurement & Consultant Contracts	Existing (City)	Selected – PSC (Internal Fill)	Jul
Procurement & Specifications Specialist	Procurement & Consultant Contracts	Existing (City)	Recruiting/Interviewing - PSC	
Procurement & Specifications Specialist	Procurement & Consultant Contracts	Existing (City)	Recruiting/Interviewing - PSC	
Contract Manager	Construction Claims, Utility, & Third Party Contracts	New (City)	Recruiting/Interviewing - PSC	
Construction Claims Manager	Construction Claims, Utility, & Third Party Contracts	New (City)	Recruiting/Interviewing - PSC	
Construction Claims Specialist	Construction Claims, Utility, & Third Party Contracts	New (City)	Recruiting/Interviewing - PSC	
Deputy Director of Contract Administration	Contract Administration	Existing PMC New (City)	Recruiting/Interviewing - PSC	
Planning, Permitting, & ROW				
Planner II	Right-of-Way	Existing (City)	Selected - PSC	Jul
Planner III	Planning	Existing (City)	Recruiting - PSC	
Public Information				
Information Specialist II (Construction and Community Relations)	Public Information	New (City)	Filled - PSC	Jun
Information Specialist II (Business Outreach)	Public Information	New (City)	Selected - PSC	Jul
Information Specialist II	Public Information	Existing (City)	Recruiting/Interviewing - PSC	
Budget & Finance				
Accountant	Budget & Finance	Existing (City)	Recruiting/Interviewing - PSC	
Internal Controls Analyst	Budget & Finance	Existing (City)	Selected – PSC (Internal Fill)	Jul
Accountant	Budget & Finance	Existing (City)	Recruiting/Interviewing - PSC	
Design & Construction				
Civil Engineer (Assistant Area Manager)	East Area Construction	Existing (City)	Recruiting - PSC	
Readiness and Activation				
Project Manager (Transit Assets)	Readiness and Activation	New (City)	Recruiting/Interviewing - PSC	
Quality Assurance				
Quality Assurance Engineer (Civil)	Quality Assurance	Existing (City)	Recruiting - PSC	
HART Board Support				
HART Board Staff Assistant	HART Board Support	Existing (City)	Selected – PSC (Internal Fill)	Jul
HART Board Clerk	HART Board Support	Existing (City)	Recruiting - PSC	

*Personal Services Contracts are limited to one year per the Revised Charter of the City and County of Honolulu, Sec. 6-1103(g).

For the latest project organization chart, see Appendix C.

6.11 HART Baseline Plans and Procedures Status List

The status of the Baseline Plans and Procedures is shown below:

Owner	Plan/Procedure	Revision Level	Date Approved	Status
Project Management (Sam Carnaggio)	Project Management Plan (PMP)	6.0	February 28, 2018	Approved/Baselined
Safety and Security (Ralph McKinney)	Construction Safety and Security Plan (CSSP)	4.0	December 7, 2017	Approved/Baselined
	Safety and Security Certification Plan (SSCP)	6.0	January 11, 2018	Approved/Baselined
	Safety and Security Management Plan (SSMP)	7.0	February 28, 2018	Approved/Baselined
	Sensitive Safety Information Plan	1.0	December 13, 2017	Approved/Baselined
	Preliminary Hazard Analysis (PHA)	3.0	December 7, 2017	Approved/Baselined
Quality Assurance (Alberto Bonifacio)	1.PP-02, Project Procedure and Plan Revision and Control Procedure	3.0	January 4, 2018	Approved/Baselined
	1.PP-03, Standard Terms, Definitions, and Acronyms Procedure	2.0	January 4, 2018	Approved/Baselined
	3.PM-05, Meeting Minutes Procedure	3.0	January 4, 2018	Approved/Baselined
	6.CM-01, Submittal Processing Procedure	3.0	January 12, 2018	Approved/Baselined
	Quality Management Plan (QMP)	3.0	February 23, 2018	Approved/Baselined
Procurement, Contracts, and Construction Claims (Nicole Chapman)	2.PA-09, Procurement Standards of Conduct Procedure	1.0	May 29, 2015	Approved/Baselined
	2.PA-10, Procurement Methods Procedure	0.0	February 2, 2015	Approved/Baselined
	2.PA-11, Procurement Full and Open Competition Procedure	0.0	February 2, 2015	Approved/Baselined
	2.PA-12, Procurement Federal Compliance Procedure	0.0	February 2, 2015	Approved/Baselined
	2.PA-13, Procurement Protests Procedure	1.0	May 29, 2015	Approved/Baselined
	2.PA-14, Procurement Record-keeping Procedure	0.0	June 12, 2015	Approved/Baselined
	2.PA-15, Stipend Payment Procedure	0.0	July 15, 2016	Approved/Baselined
	5.CA-06, Project Closeout Procedure	2.0	June 9, 2016	Approved/Baselined
	5.CA-11, Contract Changes Procedure	3.0	July 12, 2017	Approved/Baselined
	Buy America Plan (BAP)	2.0	December 6, 2017	Approved/Baselined
	HART Procurement Manual	0.0	December 13, 2017	Approved/Baselined

Owner	Plan/Procedure	Revision Level	Date Approved	Status
Project Controls (Doug Cullison)	2.PA-04, Project-wide Document Control and Project Library Procedure	2.0	February 27, 2016	Pending Rev. 3.0 Under Review
	3.PM-01, Contract Management System Procedure	2.0	April 7, 2016	Approved/Baselined
	4.PC-03, Project Progress Report Procedure	2.0	August 25, 2016	Approved/Baselined
	4.PC-04, Project Scheduling Procedure	3.0	September 21, 2016	Approved/Baselined
	4.PC-06, Cost Estimating Procedure	3.0	December 13, 2017	Approved/Baselined
	4.PC-07, Cost Control Procedure	2.0	April 20, 2016	Approved/Baselined
	4.PC-09, Contingency Management Procedure	1.0	May 8, 2012	Pending Rev. 2.0 Under Review
	Contract Packaging Plan (CPP)	5.0	December 13, 2017	Approved/Baselined
Budget and Finance (Robert Yu)	5.CA-03, Contractor Payment Application Procedure	2.0	February 19, 2018	Approved/Baselined
	5.CA-10, Consultant Invoice Payment Procedure	0.0	January 12, 2018	Approved/Baselined
	7.GA-04, Petty Cash Procedure	2.0	May 9, 2016	Approved/Baselined
	7.GA-06, Travel Procedure	2.0	May 1, 2017	Approved/Baselined
	Project Financial Plan (PFP)	0.0	December 24, 2012	Pending Rev. 1.0 Under Review
Planning, Permitting, and Right of Way (Richard Lewallen)	6.CM-08, Environmental Procedure	0.0	June 27, 2017	Approved/Baselined
	Before-and-After Study Plan	0.0	January 4, 2018	Approved/Baselined
	Bus Fleet Management Plan (BFMP)	4.0	January 4, 2018	Approved/Baselined
	Mitigation Monitoring Plan (MMP)	2.0	January 4, 2018	Approved/Baselined
	Real Estate Acquisition Management Plan (RAMP)	6.0	March 14, 2016	Pending Rev. 7.0 Under Review
Public Information (Bill Brennan)	2.PA-06, Community Relations and Media Contacts Procedure	2.0	January 29, 2016	Approved/Baselined
	3.PM-04, Public Involvement Communications Procedure	2.0	January 29, 2016	Approved/Baselined
	Public Involvement Plan (PIP)	1.0	December 6, 2017	Approved/Baselined
Design and Construction (Frank Kosich)	6.CM-02, Request for Information (RFI) Processing Procedure	2.0	December 7, 2017	Approved/Baselined
	CADD Procedures	1.0	August 4, 2015	Approved/Baselined
	Configuration Management Plan (CFMP)	3.0	February 28, 2018	Approved/Baselined
	Construction Management Plan (CMP)	3.0	December 11, 2017	Approved/Baselined
	Force Account Plan	2.0	December 7, 2017	Approved/Baselined

Owner	Plan/Procedure	Revision Level	Date Approved	Status
	Interface Management Plan (IMP)	3.0	January 12, 2018	Approved/Baselined
	Rail Activation Plan	1.0	January 4, 2018	Approved/Baselined
	System Integration and Test Plan (SITP)	1.0	December 7, 2017	Approved/Baselined
Operation and Maintenance (Stuart Jackes)	Rail Fleet Management Plan (RFMP)	1.0	December 11, 2017	Approved/Baselined
	Operation and Management Plan (OMP)	1.0	February 28, 2018	Approved/Baselined
Administrative Services (Paul Romaine)	1.PP-05, Identification Badge Procedure	2.0	August 17, 2017	Approved/Baselined
	2.PA-03, Email Management Procedure	2.0	May 1, 2017	Approved/Baselined
	2.PA-07, Training Procedure	2.0	December 2, 2015	Approved/Baselined
	Staffing and Succession Plan	5.0	May 25, 2012	Pending Rev. 6.0 Under Review
Risk Management (Paul Johnson)	4.PC-08, Risk Management Procedure	2.0	February 20, 2018	Approved/Baselined
	Risk and Contingency Management Plan (RCMP)	2.0	March 6, 2018	Approved/Baselined

6.12 Readiness and Activation (formerly Operations and Maintenance)

Overview

- Performing a comprehensive review of Core Systems design, planning, development, and contract changes in coordination with Project Delivery, Integration, Testing, and Safety and Security.
- Advising DTS on operations policies, rules, procedures and legislation that are necessary to ensure system security and passenger safety.
- Supporting and preparing DTS for operations and maintenance responsibilities, including organizational development, staffing requirements, knowledge transfer, and operational readiness.

Ongoing Activities

- Fare Systems Field Integration Testing is anticipated to be completed by the end of July. Preparing for Pilot (Beta testing with Public).
- Operations and Maintenance (O&M) policies, plans, and procedures in preparation for manual train operation.
- Developing O&M Responsibilities Traceability Matrix
 - Identified tasks under current O&M contracts
 - Tracking MOU's that have O&M implications/obligations
 - Developing list of Construction changes/additions with maintenance implications
- Provided updated Rail Activation Plan task list to DTS for revenue service transition/preparation.
- Overseeing the Core System Contractor O&M team development and progress
 - Developed master schedule and Key Performance Indicators (KPIs)
 - Reviewing development of key AHJV O&M documents
 - Roadway Worker Protection
 - Rule Book
 - Operations Plan (service planning, daily routines)
 - Maintenance Plan (including spares and consumables plan)
 - Incident Investigation Plan (emergency plans)

- O&M Mobilization and staffing plan
- Finalizing Rail Operations Center (ROC) Transfer of Assets.
- Develop asset management cost estimates by third quarter 2018.
- Asset Management Program Development
 - Recruiting HART Project Manager
 - Kick-off Maximo development, discovery and definitions phase with stakeholders (third quarter 2018)
 - Initiate Transit Asset Management Plan requirements and outline
- Revise HART Rail Activation Plan and Rail Fleet Management Plan by third quarter 2018.
- Planning for WOFH and KHG Transfer of Assets.
- Assisting with H2R2 final acceptance, turnover, maintenance and security.
- Developing guideway maintenance documents by third quarter 2018.
- Developed quarterly inspection of guideway dynamic testing section procedure.
- Reviewing safety incident reporting and emergency notification system.
- Updating and finalizing Pre-Revenue Operations Plan by third quarter 2018.
- Requesting to create a position for a Transit Planning Analyst.

Look Ahead

- Data retention policy
 - Long-term data maintenance and organization plan
 - Knowledge transfer to DTS/DIT and City & County of Honolulu
 - Meet with stakeholders to determine requirements (e.g. document retention).

APPENDICES

Appendix A. Project Costs by SCC – Level 2 (data as of May 25, 2018)

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

SCC	SCC Description	FPGA Budget	Recovery Plan Budget	Current Committed	Estimate At Completion	Incurred
10	GUIDEWAY & TRACK ELEMENTS	1,275,328,962	1,720,058,939	1,342,475,314	1,608,481,675	608,103,776
10.02	Guideway: At-grade semi-exclusive	0	17,378	17,378	17,378	17,378
10.04	Guideway: Aerial structure	1,175,328,184	1,584,204,230	1,258,502,442	1,457,838,664	518,987,085
10.05	Guideway: Built-up fill	0	5,071,625	0	0	5,054,744
10.06	Guideway: Underground Cut & Cvr	0	0	(1,228,000)	0	(1,228,000)
10.08	Guideway: Retained cut or fill	8,077,393	0	6,436,256	0	0
10.09	Track: Direct fixation	86,332,027	126,832,461	74,518,487	150,625,633	81,347,320
10.11	Track: Ballasted	3,550,634	2,402,369	2,697,875	0	2,394,373
10.12	Track: Special (switches, turnouts)	2,040,724	1,530,876	1,530,876	0	1,530,876
20	STATIONS, STOPS, TERMINALS, INTERMODA	506,165,689	921,846,974	391,235,619	831,702,074	98,084,385
20.01	At-grade station, stop, shelter, mall, terminal, platform	7,333,599	13,461,506	9,411,189	13,461,506	4,770,184
20.02	Aerial station, stop, shelter, mall, terminal, platform	353,476,148	649,076,822	328,782,508	602,715,461	79,541,543
20.04	Other stations, landings, terminal	0	42,838,547	0	0	0
20.06	Automobile parking multi-story structure	79,690,518	149,186,940	0	148,241,948	0
20.07	Elevators, escalators	65,665,424	67,283,159	53,041,922	67,283,159	13,772,658
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	99,425,456	120,015,787	115,973,478	100,806,854	120,036,063
30.01	Administration Building: Office, Sales	0	231,250	231,250	0	231,250
30.02	Light Maintenance Facility	8,161,279	7,582,704	7,582,704	3,057,240	7,582,704
30.03	Heavy Maintenance Facility	40,906,889	46,317,810	43,704,819	64,479,556	46,317,810
30.04	Storage or Maintenance of Way Building	8,382,270	8,892,739	8,819,133	8,619,230	8,892,739
30.05	Yard and Yard Track	41,975,018	56,991,284	55,635,572	24,650,828	57,011,560
40	SITEWORK & SPECIAL CONDITIONS	1,103,867,264	2,068,965,383	1,286,346,110	2,550,503,750	802,472,009
40.01	Demolition, Clearing, Earthwork	34,695,802	49,484,327	16,819,157	34,484,029	23,340,249
40.02	Site Utilities, Utility Relocation	350,694,801	659,014,057	605,031,536	888,886,675	181,315,197
40.03	Haz. Mat'l, contam'd soil removal/mitigation, ground water treatments	7,228,935	32,550,018	16,793,503	33,935,883	7,230,252
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks	30,841,906	11,391,873	16,557,672	5,518,864	11,391,864
40.05	Site structures including retaining walls, sound walls	8,637,582	111,382,013	13,318,696	28,649,496	14,345,087
40.06	Pedestrian / bike access and accommodation, landscaping	48,262,816	20,369,398	5,429,936	15,185,686	2,090,207
40.07	Automobile, bus, van accessways including roads, parking lots	212,536,181	123,104,472	42,641,984	274,224,302	48,320,943
40.08	Temporary Facilities and other indirect costs during construction	410,969,241	1,061,669,225	569,753,626	1,269,618,815	514,438,210
50	SYSTEMS	247,460,781	324,229,314	262,128,842	330,017,607	116,424,762
50.01	Train control and signals	91,492,532	163,646,144	107,583,005	164,834,254	37,909,134
50.02	Traffic signals and crossing protection	12,524,011	98,000	2,982,131	3,770,856	98,000
50.03	Traction power supply: substations	32,873,934	34,734,752	32,970,806	32,396,808	13,396,109
50.04	Traction power distribution: catenary and third rail	36,426,286	32,475,378	33,029,111	37,120,977	26,486,531
50.05	Communications	59,889,234	66,771,070	66,016,646	65,390,742	32,564,984
50.06	Fare collection system and equipment	10,221,753	22,693,627	16,093,352	22,693,627	3,385,779
50.07	Central Control	4,033,031	3,810,343	3,453,791	3,810,343	2,584,225
	Construction Subtotal (10 – 50)	3,232,248,152	5,155,116,397	3,398,159,363	5,421,511,960	1,745,120,996

SCC	SCC Description	FFGA Budget	Recovery Plan Budget	Current Committed	Estimate At Completion	Incurred
60	ROW, LAND, EXISTING IMPROVEMENTS	222,188,386	363,943,207	214,127,858	363,625,464	156,900,955
60.01	Purchase or lease of real estate	201,658,907	272,939,015	179,626,453	272,900,000	136,857,338
60.02	Relocation of existing households and businesses	20,529,479	91,004,192	34,501,405	90,725,464	20,043,617
70	VEHICLES	208,501,186	211,756,171	191,968,221	211,389,952	88,646,506
70.01	Light Rail	0	190,383,694	172,568,577	190,383,694	76,263,682
70.02	Heavy Rail	186,061,066	0	0	0	0
70.05	Other	0	494,919	493,700	128,700	493,700
70.06	Non-revenue vehicles	16,011,166	14,371,344	13,026,548	14,371,344	11,889,124
70.07	Spare parts	6,428,954	6,506,214	5,879,396	6,506,214	0
80	PROFESSIONAL SERVICES	1,183,826,026	2,355,028,148	1,317,912,719	2,086,719,692	1,178,284,655
80.01	Preliminary Engineering	95,120,484	142,876,132	109,567,127	57,162,769	132,021,974
80.02	Final Design	257,934,908	531,016,329	243,215,746	608,896,269	255,046,468
80.03	Project Management for Design and Construction	385,825,694	712,877,359	524,055,004	698,409,758	442,235,151
80.04	Construction Administration & Management	218,155,752	556,319,745	152,091,185	306,860,428	157,853,039
80.05	Professional Liability and other Non-Construction Insurance	52,138,030	104,040,500	59,959,965	103,340,000	43,246,057
80.06	Legal; Permits; Review Fees by other agencies, cities, etc.	76,135,125	101,873,363	68,203,654	107,273,363	32,243,489
80.07	Surveys, Testing, Investigation, Inspection	24,955,327	143,211,399	102,074,319	141,963,784	67,883,920
80.08	Start up	73,560,706	62,813,321	58,745,719	62,813,321	47,754,557
90	Subtotal (10 – 80)	4,846,763,750	8,085,843,923	5,122,168,161	8,083,247,068	3,168,953,112
	UNALLOCATED CONTINGENCY	101,871,170	79,210,269		81,807,124	0
100	Subtotal (10 – 90)	4,948,634,920	8,165,054,192	5,122,168,161	8,165,054,192	3,168,953,112
	FINANCE CHARGES	173,058,242	583,707,000	11,807,165	583,707,000	1,807,165
	Total Project Cost (10 – 100)	5,121,693,162	8,748,761,192	5,133,975,326	8,748,761,192	3,170,760,277
	Provisional Request for Payment					
	Total FFGA Project Cost (10 – 100)	5,121,693,162	8,748,761,192	5,133,975,326	8,748,761,192	3,170,760,277

Appendix B. Vehicle Car Shell Progress Tracker

HONOLULU HRI R.C. FABRICATION TRACKER

TRAIN NUMBER	CAR SHELL SERIAL NUMBER	CENTER ROOF ASSY & WELDING	CENTER FLOOR ASSY & WELDING (2 PANEL SET)	CENTER ROOF MACHINING	CENTER FLOOR MACHINING (2 PANEL SET)	ROOF ASSY & WELDING	ROOF WELDING PARTS	FINAL ROOF INSPECTION	UNDER FRAME ASSY & WELDING	UNDERFRAME WELDING PARTS	UNDERFRAME INSPECTION	UNDER FRAME CLEANING AND PAINTING	CAR SHELL ASSY & WELDING Station #7	CAR SHELL ASSY & WELDING Station #8	CAR SHELL CALIBRATIO N & TESTING	WATER TEST	PAINTING	INSULATION	FLOORING	FRONT MASK (E CAR ONLY)	CAR SHELL FINAL INSPECTION	COMPLETED CAR SHELL	FAI	CRADLES INSTALLED	DATE SHIPPED FROM RC	DATE OF PORT DEPARTURE	DATE OF ETA TO PITTSBURG	CAR SHELL SERIAL NUMBER composition after problem extrusion METRA (Progressive Shipping)	TRAIN NUMBER	
#1	M/001 (CAR 1)															N/A				N/A								M/001 (CAR 1)	#1	
	E/001 (CAR 2)															N/A					N/A							E/001 (CAR 2)		
	M/002 (CAR 3)															N/A				N/A	PARTIAL		N/A					M/002 (CAR 3)		
	E/002 (CAR 4)	E/003		E/003												N/A							N/A					E/002 (CAR 4)		
#2	M/003 (CAR 5)															N/A				N/A								M/003 (CAR 5)	#2	
	E/003 (CAR 6)	USED FOR E/2		USED FOR E/2												N/A					N/A							E/003 (CAR 6)		
	M/004 (CAR 7)															N/A				N/A								M/004 (CAR 7)		
	E/004 (CAR 8)															N/A												E/004 (CAR 8)		
#3	M/005 (CAR 10)															N/A				N/A								M/005 (CAR 10)	#3	
	E/006 (CAR 11)															N/A					N/A							E/006 (CAR 11)		
	M/006 (CAR 12)															N/A					N/A							M/006 (CAR 12)		
	E/007 (CAR 13)															N/A					N/A							E/007 (CAR 13)		
#4	M/007 (CAR 14)															N/A	05/10/16	05/16/16	05/18/16	04/28/16	04/28/16	04/29/16	N/A	04/29/16	04/29/16	04/29/16	06/06/16	07/11/16	M/007 (CAR 14)	#4
	E/008 (CAR 15)												05/02/16	05/06/16	05/10/16	05/13/16	N/A	05/25/16	05/30/16	05/31/16	05/30/16	05/31/16	N/A	05/31/16	05/31/16	06/06/16	07/11/16	E/008 (CAR 15)		
	M/008 (CAR 16)											05/02/16	05/06/16	05/10/16	05/13/16	N/A	06/13/16	06/16/16	06/22/16	N/A	06/23/16	06/24/16	N/A	06/27/16	07/09/16	08/03/16	M/008 (CAR 16)			
	E/009 (CAR 17)								05/09/16	05/13/16	05/16/16	05/20/16	05/27/16	06/13/16	06/16/16	N/A	06/23/16	06/27/16	06/28/16	06/27/16	06/29/16	06/29/16	N/A	06/30/16	06/30/16	07/09/16	08/03/16	E/009 (CAR 17)		
#5	M/009 (CAR 18)								06/09/16	06/16/2016	06/17/2016	06/24/16	07/01/16	07/07/16	07/08/16	N/A	07/25/16	07/27/16	07/28/16	N/A	07/29/16	07/29/16	N/A	07/29/16	07/29/16	08/13/16	09/19/16	M/009 (CAR 18)	#5	
	E/005 (CAR 9)											07/08/16				N/A	07/16/16	07/21/16	07/25/16	07/22/16	07/26/16	07/26/16	N/A	07/26/16	07/27/16	08/13/16	09/19/16	E/005 (CAR 9)		
	M/010 (CAR 20)				05/27/16				06/24/16	06/30/16	07/01/16	07/13/16	07/15/16	07/22/16	07/25/16	N/A	08/05/16	08/05/16	08/29/16	N/A	08/30/16	08/30/16	N/A	08/30/16	08/31/16	09/10/16	10/20/16	M/010 (CAR 20)		
	E/010 (CAR 19)					04/29/16	05/11/16	05/12/16	06/17/16	06/24/16	06/27/16	07/04/16	07/11/16	07/15/16	07/18/16	N/A	07/29/16	08/01/16	08/03/16	07/30/16	08/04/16	08/04/16	N/A	08/04/16	08/05/16	08/13/16	09/19/16	E/010 (CAR 19)		
#6	M/011 (CAR 21)		05/31/16		06/24/16	06/06/16	06/13/16	07/19/16	07/07/16	07/10/16	07/11/16	07/22/16	07/29/16	08/26/16	08/30/16	N/A	09/19/16	09/22/16	09/24/16	N/A	09/26/16	09/26/16	N/A	09/26/16	09/26/16	10/23/16	11/21/16	M/011 (CAR 21)	#6	
	E/011 (CAR 22)		05/11/16		06/30/16	05/20/16	05/26/16	09/09/16	07/26/16	07/29/16	08/26/16	09/06/16	09/09/16	09/16/16	09/19/16	N/A	09/22/16	09/24/16	09/27/16	09/28/16	09/29/16	09/29/16	N/A	09/29/16	09/30/16	10/23/16	11/21/16	E/011 (CAR 22)		
	M/012 (CAR 23)	04/29/16	06/27/16	06/01/16	07/04/16	06/17/16	06/24/16	07/13/16	07/14/16	07/19/16	07/22/16	07/25/16	08/30/16	09/06/16	09/09/16	N/A	09/22/16	09/26/16	09/27/16	N/A	09/28/16	09/29/16	N/A	09/29/16	09/30/16	10/23/16	11/21/16	M/012 (CAR 23)		
	E/012 (CAR 24) *		06/16/16	04/29/16	06/30/16	06/22/16	06/27/16	09/06/16	08/30/16	09/09/16	09/13/16	09/19/16	09/15/16	09/22/16	09/26/16	N/A	10/10/16	10/13/16	10/19/16	10/17/16	10/19/16	10/20/16	N/A	10/20/16	10/21/16	05/19/17	06/21/17	E/012 (CAR 24)		
#7	M/013 (CAR 25) *	05/31/16	07/05/16	06/24/16	09/02/16	07/14/16	07/21/16	09/07/16	09/07/16	09/22/16	09/23/16	09/26/16	09/29/16	10/03/16	10/06/16	N/A	10/19/16	10/21/16	10/24/16	N/A	10/25/16	10/25/16	N/A	10/25/16	10/26/16	05/19/17	06/21/17	M/013 (CAR 25)	#7	
	E/013 (CAR 26) *	05/23/16	07/19/16	06/24/16	09/02/16	07/01/16	07/08/16	07/25/16	09/26/16	09/29/16	09/30/16	10/06/16	10/17/16	10/22/16	10/25/16	N/A	04/03/17	04/05/17	04/11/17	04/12/17	04/13/17	N/A	04/13/17	04/18/17	06/06/17	07/14/17	E/013 (CAR 26)			
	M/014 (CAR 27) *	06/10/16	08/23/16	07/08/16	09/09/16	07/29/16	08/23/16	09/08/16	09/16/16	09/23/16	09/26/16	09/30/16	10/08/16	10/13/16	10/15/16	N/A	04/19/17	04/20/17	04/26/17	N/A	04/27/17	04/27/17	N/A	04/27/17	04/28/17	06/06/17	07/14/17	M/014 (CAR 27)		
	E/014 (CAR 28) *	06/10/16	09/09/16	06/24/16	10/03/16	08/29/16	09/05/16	09/06/16	10/03/16	10/11/16	10/13/16	10/18/16	10/28/16	11/03/16	02/06/17	N/A	05/17/17	05/19/17	05/26/17	06/24/17	05/30/17	N/A	05/30/17	05/31/17	07/09/17	08/04/17	E/014 (CAR 28)			
#8	M/015 (CAR 29) *	06/30/16	09/09/16	09/09/16	10/03/16	09/15/16	09/22/16	09/23/16	10/24/16	10/28/16	02/10/17	11/09/16	03/23/17	03/31/17	04/05/17	N/A	05/04/17	05/11/17	05/16/17	N/A	05/22/17	05/24/17	N/A	05/25/17	05/26/17	07/09/17	08/07/17	M/015 (CAR 29)	#8	
	E/015 (CAR 30) *	06/24/16	09/30/16	07/21/16	10/19/16	10/07/16	10/13/16	10/14/16	10/13/16	10/21/16	10/22/16	10/26/16	03/03/17	03/10/17	03/15/17	N/A	05/31/17	05/06/17	06/09/17	06/12/17	06/12/17	06/13/17	N/A	06/13/17	06/14/17	07/09/17	08/04/17	E/015 (CAR 30)		
	M/016 (CAR 31)	07/11/16	09/30/16	09/09/16	10/19/16	10/13/16	10/17/16	10/18/16	02/28/17	03/06/17	03/11/17	03/16/17	04/07/17	04/14/17	04/18/17	N/A	06/12/17	06/14/17	06/21/17	N/A	06/22/17	06/22/17	N/A	06/22/17	06/22/17	11/08/17	09/14/17	M/016 (CAR 31)		
	E/016 (CAR 32)	07/12/16	10/07/16	09/09/16	01/27/17	10/21/16	10/27/16	10/28/16	02/10/17	02/15/17	02/16/17	02/22/17	04/18/17	04/27/17	05/04/17	N/A	06/17/17	06/19/17	06/23/17	06/19/17	06/26/17	06/26/17	N/A	06/26/17	06/27/17	11/08/17	09/14/17	E/016 (CAR 32)		
#9	M/017 (CAR 33)	09/09/16	10/11/16	10/05/16	01/27/17	10/27/16	11/03/16	11/07/16	03/09/17	03/16/17	03/22/17	03/28/17	05/15/17	05/22/17	05/24/17	N/A	07/04/17	07/06/17	07/20/17	N/A	07/21/17	07/24/17	N/A	07/25/17	07/26/17	11/08/17	09/25/17	M/017 (CAR 33)	#9	
	E/017 (CAR 34)	09/20/16	10/14/16	10/05/16	01/27/17	11/15/16	11/22/16	11/23/16	03/20/17	03/29/17	03/31/17	04/07/17	05/02/17	05/12/17	05/16/17	N/A	07/01/17	07/04/17	07/14/17	07/10/17	07/17/17	07/18/17	N/A	07/19/17	07/20/17	12/08/17	09/25/17	E/017 (CAR 34)		
	M/018 (CAR 35)	10/18/16	10/20/16	11/07/16	01/27/17	11/10/16	11/17/16	11/18/16	04/07/17	04/10/17	04/11/17	04/28/17	06/12/17	06/17/17	06/20/17	N/A	07/14/17	07/17/17	07/24/17	N/A	07/25/17	07/26/17	N/A	07/28/17	07/31/17	09/22/2017	10/20/17	M/018 (CAR 35)		
	E/018 (CAR 36)	10/07/16	12/07/16	11/07/16	01/27/17	11/24/16	11/29/16	11/30/16	03/30/17	04/06/17	04/10/17	04/18/17	05/24/17	05/29/17	05/31/17	N/A	07/26/17	07/28/17	08/02/17	08/02/17	08/03/17	08/03/17	N/A	08/03/17	08/03/17	09/22/2017	10/20/17	E/018 (CAR 36)		
#10	M/019 (CAR 37)	10/26/16	12/15/16	11/07/16	01/27/17	11/21/16	11/28/16	11/29/16	05/05/17	05/12/17	05/16/17	05/19/17	06/16/17	06/22/17	06/26/17	N/A	07/28/17	08/01/17	08/04/17	N/A	08/28/17	08/29/17	N/A	08/29/17	08/29/17	09/22/2017	12/07/17	M/019 (CAR 37)	#10	
	E/019 (CAR 38)	10/26/16	02/09/17	11/11/16	02/27/17	12/07/16	12/14/16	12/15/16	04/07/17	04/13/17	04/18/17	04/21/17	06/05/17	06/12/17	06/14/17	N/A	08/03/17	08/04/17	08/28/17	08/29/17	08/30/17	08/30/17	N/A	08/31/17	08/31/17	10/17/2017	11/13/17	E/019 (CAR 38)		
	M/020 (CAR 39)	11/14/16	02/09/17	11/11/16	02/27/17	11/30/16	12/05/16	12/06/16	05/16/17	05/22/17	05/24/17	05/25/17	06/30/17	07/06/17	07/07/17	N/A	09/01/17	09/04/17	09/07/17	N/A	09/09/17	09/10/17								

Date: 06/18/2018

COMPLETE

IN-PROCESS OR NEXT STATION

CHANGED

TEST UNIT

DATES

ESTIMATED TIME OF COMPLETION OR SHIPPING

*=Notes:

Notes: Project must be deeply scheduled due to extrusions defects caused by supplier Metra (impacts under investigation)
For problem supply REFISA Car M/23 substitution E/23

TRAIN NUMBER	CAR SHELL SERIAL NUMBER	CENTER ROOF ASSY & WELDING	FLOOR ASSY & WELDING (2 PANEL SET)	CENTER ROOF MACHINING	CENTER FLOOR MACHINING (2 PANEL SET)	ROOF ASSY & WELDING	ROOF WELDING PARTS	FINAL ROOF INSPECTION	UNDER FRAME ASSY & WELDING	UNDERFRAME WELDING PARTS	UNDERFRAME INSPECTION	UNDER FRAME CLEANING AND PAINTING	CAR SHELL ASSY & WELDING Station #7	CAR SHELL ASSY & WELDING Station #8	CAR SHELL CALIBRATION N & TESTING	WATER TEST	PAINTING	INSULATION	FLOORING	FRONT MASK (E CAR ONLY)	CAR SHELL FINAL INSPECTION	COMPLETED CAR SHELL	FAI	CRADLES INSTALLED	DATE SHIPPED FROM RC	DATE OF PORT DEPARTURE	DATE OF ETA TO PITTSBURG	CAR SHELL SERIAL NUMBER competition after problem extrusion METRA (Progressive Shipping)	TRAIN NUMBER
#11	M/021 (CAR 41)	11/16/16	01/12/17	01/25/17	02/27/17	12/16/16	12/23/16	01/09/17	05/30/17	06/06/17	06/09/17	06/15/17	07/05/17	07/11/17	07/12/17	N/A	09/04/17	09/06/17	09/18/17	N/A	09/19/17	09/20/17	N/A	09/21/17	09/25/17	10/17/2017	11/13/17	M/023 (CAR 40)	#11
	E/021 (CAR 42)	11/17/16	02/13/17	11/11/16	03/09/17	01/19/17	01/26/17	01/27/17	05/15/17	05/22/17	05/23/17	05/30/17	07/11/17	07/19/17	07/20/17	N/A	09/08/17	09/12/17	09/25/17	09/26/17	09/27/17	09/28/17	N/A	09/28/17	09/28/17	11/14/2017	12/06/17	E/024 (CAR 42)	
	M/022 (CAR 43)	11/23/16	02/13/17	01/25/17	03/09/17	01/23/17	01/30/17	01/31/17	06/10/17	06/16/17	06/20/17	06/30/17	07/28/17	08/03/17	08/04/17	N/A	09/11/17	09/13/17	09/27/17	N/A	09/28/17	09/29/17	N/A	09/29/17	09/30/17	11/14/2017	12/06/17	M/024 (CAR 43)	
	E/022 (CAR 44)	11/18/16	02/16/17	01/25/17	03/09/17	01/30/17	02/06/17	02/07/17	05/22/17	05/26/17	05/27/17	06/07/17	07/21/17	07/28/17	07/31/17	N/A	10/03/17	10/05/17	10/16/17	10/17/17	10/18/17	10/18/17	N/A	10/18/17	10/19/17	11/14/2017	12/06/17	E/025 (CAR 44)	
#12	M/023 (CAR 45)	12/01/16	02/16/17	01/25/17	03/09/17	02/17/17	02/27/17	02/28/17	06/22/17	06/28/17	07/04/17	07/14/17	08/30/17	09/06/17	09/08/17	N/A	10/04/17	10/06/17	10/18/17	N/A	10/19/17	10/20/17	N/A	10/20/17	10/23/17	11/29/2017	01/08/18	M/025 (CAR 45)	#12
	E/023 (CAR 46)	11/29/16	02/16/17	01/25/17	03/09/17	02/10/17	02/15/17	02/16/17	06/14/17	06/21/17	06/23/17	07/07/17	08/03/17	08/31/17	09/04/17	N/A	10/05/17	10/07/17	10/19/17	10/20/17	10/23/17	10/23/17	N/A	10/24/17	10/25/17	11/29/2017	01/08/18	E/026 (CAR 46)	
	M/024 (CAR 47)	12/07/16	02/16/17	02/10/17	03/09/17	03/06/17	03/13/17	03/17/17	07/12/17	07/25/17	07/21/17	08/30/17	09/18/17	09/25/17	09/26/17	N/A	10/13/17	10/17/17	10/30/17	N/A	11/02/17	11/02/17	N/A	11/03/17	11/04/17	11/29/2017	01/08/18	M/026 (CAR 47)	
	E/024 (CAR 48)	12/14/16	02/27/17	01/25/17	06/09/17	02/24/17	03/03/17	03/06/17	07/01/17	07/05/17	07/07/17	07/21/17	09/11/17	09/18/17	09/20/17	N/A	10/12/17	10/13/17	10/25/17	10/26/17	10/27/17	10/27/17	N/A	10/30/17	10/31/17	04/12/17	01/19/18	E/027 (CAR 48)	
#13	M/025 (CAR 49)	12/22/16	03/20/17	02/10/17	06/09/17	03/22/17	03/27/17	03/28/17	07/28/17	09/01/17	09/04/17	09/19/17	10/02/17	10/09/17	10/11/17	N/A	10/25/17	10/27/17	11/10/17	N/A	11/13/17	11/13/17	N/A	11/13/17	11/14/17	12/22/2017	01/26/18	M/027 (CAR 49)	#13
	E/025 (CAR 50)	12/20/16	03/20/17	02/10/17	06/09/17	03/09/17	03/16/17	03/21/17	07/25/17	08/02/17	08/04/17	09/08/17	09/25/17	10/02/17	10/04/17	N/A	11/06/17	11/08/17	11/17/17	11/21/17	11/22/17	11/22/17	N/A	11/22/17	11/23/17	12/22/2017	01/26/18	E/014 (CAR 50)	
	M/026 (CAR 51)	01/12/17	03/20/17	02/10/17	06/09/17	03/31/17	04/07/17	04/10/17	09/08/17	09/14/17	09/19/17	10/03/17	10/05/17	10/11/17	10/13/17	N/A	11/08/17	11/10/17	11/20/17	N/A	11/24/17	11/24/17	N/A	11/24/17	11/27/17	12/22/2017	02/03/18	M/028 (CAR 51)	
	E/026 (CAR 52)	01/12/17	05/02/17	02/10/17	06/09/17	03/24/17	03/29/17	03/30/17	09/01/17	09/08/17	09/12/17	09/26/17	10/09/17	10/16/17	10/18/17	N/A	11/10/17	11/14/17	11/22/17	11/27/17	11/28/17	11/28/17	N/A	11/28/17	11/29/17	02/05/18	02/25/18	E/028 (CAR 52)	
#14	M/027 (CAR 53)	01/23/17	03/21/17	02/10/17	06/09/17	04/20/17	04/27/17	04/28/17	09/22/17	09/29/17	10/03/17	10/19/17	10/19/17	10/25/17	10/30/17	N/A	11/13/17	11/15/17	11/23/17	N/A	11/29/17	11/29/17	N/A	11/29/17	11/30/17	02/05/18	02/25/18	M/029 (CAR 53)	#14
	E/027 (CAR 54)	01/18/17	05/02/17	02/10/17	06/09/17	04/11/17	04/19/17	04/21/17	09/15/17	09/22/17	09/26/17	10/11/17	10/13/17	10/19/17	10/23/17	N/A	11/27/17	01/22/18	01/29/18	01/31/18	01/30/18	01/30/18	N/A	01/30/18	01/30/18	08/03/18	04/05/18	E/012 (CAR 54)	
	M/028 (CAR 55)	01/20/17	05/22/17	02/10/17	06/09/17	05/05/17	05/11/17	05/12/17	10/04/17	10/10/17	10/12/17	10/26/17	11/02/17	11/09/17	11/13/17	N/A	11/30/17	01/18/18	01/26/18	N/A	01/29/18	01/29/18	N/A	01/29/18	01/29/18	12/05/18	06/05/18	M/014 (CAR 55)	
	E/028 (CAR 56)	01/24/17	06/27/17	02/10/17	08/30/17	05/18/17	05/25/17	05/27/17	09/29/17	10/06/17	10/10/17	10/24/17	11/13/17	11/20/17	11/22/17	N/A	12/04/17	02/14/18	02/21/18	02/19/18	02/22/18	02/23/18	N/A	02/26/18	02/27/18	05/12/18	06/05/18	E/029 (CAR 56)	
#15	M/029 (CAR 57)	03/09/17	06/27/17	05/18/17	10/09/17	06/09/17	06/15/17	06/19/17	10/18/17	10/24/17	10/27/17	11/10/17	11/09/17	11/16/17	11/20/17	N/A	02/20/18	02/22/18	03/05/18	N/A	03/06/18	03/07/18	N/A	03/08/18	03/09/18	05/12/18	06/05/18	M/030 (CAR 57)	#15
	E/029 (CAR 58)	01/31/17	07/03/17	05/18/17	10/09/17	05/29/17	06/07/17	06/09/17	10/11/17	10/19/17	10/23/17	11/06/17	11/20/17	11/27/17	11/29/17	N/A	02/23/18	02/27/18	03/09/18	03/12/18	03/14/18	03/15/18	N/A	03/16/18	03/19/18	Antwerp 06/09/18	ETA HOU 06/28/18	E/030 (CAR 58)	
	M/030 (CAR 59)	03/09/17	07/14/17	05/18/17	10/09/17	06/19/17	06/23/17	06/26/17	11/08/17	11/15/17	11/17/17	11/30/17	12/07/17	12/14/17	12/18/17	N/A	03/02/18	03/06/18	03/19/18	N/A	03/20/18	03/21/18	N/A	03/22/18	03/23/18	Antwerp 06/09/18	ETA HOU 06/28/18	M/031 (CAR 59)	
	E/030 (CAR 60)	03/09/17	07/14/17	05/18/17	10/09/17	06/30/17	07/06/17	07/07/17	10/31/17	11/03/17	11/07/17	11/21/17	11/30/17	12/07/17	12/12/17	N/A	03/06/18	03/08/18	03/21/18	03/22/18	03/23/18	03/26/18	N/A	03/27/18	03/28/18	Antwerp 06/09/18	ETA HOU 06/28/18	E/031 (CAR 60)	
#16	M/031 (CAR 61)	11/08/17	07/14/17	11/20/17	10/09/17	11/17/17	11/24/17	11/27/17	11/20/17	11/27/17	11/29/17	12/21/17	01/11/18	01/17/18	01/19/18	N/A	03/19/18	03/27/18	04/09/18	N/A	04/10/18	04/11/18	N/A	04/12/18	04/13/18	Antwerp 06/22/18	ETA HOU 07/10/18	M/013 (CAR 61)	#16
	E/031 (CAR 62)	03/15/17	07/25/17	05/18/17	10/09/17	07/13/17	07/17/17	07/18/17	12/06/17	12/12/17	12/13/17	12/19/17	12/27/17	01/10/18	01/12/18	N/A	03/21/18	03/29/18	03/30/18	04/04/18	04/13/18	04/16/18	N/A	04/17/18	04/18/18	Antwerp 06/22/18	ETA HOU 07/10/18	E/032 (CAR 62)	
	M/032 (CAR 63)	11/10/17	07/25/17	11/20/17	11/24/17	12/13/17	12/20/17	12/21/17	12/01/17	12/11/17	12/13/17	03/02/18	03/15/18	03/22/18	03/27/18	N/A	04/05/18	04/06/18	04/17/18	N/A	04/19/18	04/20/18	N/A	04/23/18	05/11/18	Gioia T. 06/30/18	ETA HOU 07/27/18	M/032 (CAR 64)	
	E/032 (CAR 64)	06/01/17	08/30/17	11/20/17	11/24/17	01/17/18	01/24/18	01/25/18	12/14/17	12/20/17	12/21/17	02/23/18	03/02/18	03/09/18	03/13/18	N/A	04/09/18	04/10/18	04/19/18	04/18/18	04/20/18	04/23/18	N/A	04/24/18	05/16/18	Antwerp 06/22/18	ETA HOU 07/10/18	E/013 (CAR 63)	
#17	M/033 (CAR 65)	11/10/17	09/07/17	11/20/17	11/24/17	01/23/18	01/30/18	01/31/18	12/18/17	01/11/18	01/12/18	03/20/18	04/04/18	04/13/18	04/17/18	N/A	05/16/18	05/22/18	06/07/18	N/A	06/11/18	06/12/18	N/A	06/13/18	06/25/18	Gioia T. 07/24/18	ETA HOU 08/18/18	M/034 (CAR 66)	#17
	E/033 (CAR 66)	11/13/17	09/26/17	11/20/17	11/24/17	02/06/18	02/13/18	02/14/18	01/11/18	01/18/18	01/22/18	03/12/18	03/22/18	03/29/18	04/03/18	N/A	04/30/18	05/04/18	05/15/18	05/14/18	05/16/18	05/17/18	N/A	05/18/18	05/21/18	Gioia T. 06/30/18	ETA HOU 07/27/18	E/034 (CAR 65)	
	M/034 (CAR 67)	12/14/17	09/26/17	12/20/17	11/24/17	01/30/18	02/06/18	02/02																					

Appendix C. Project Organization Chart

APRIL 3, 2018

HONOLULU AUTHORITY FOR RAPID TRANSPORTATION

