



Board of Directors Meeting
Ali'i Place, Suite 150
1099 Alakea Street, Honolulu, Hawaii
(entrance on Richards Street)
Thursday, April 21, 2016, 10:30 a.m.

BOARD OF DIRECTORS

Damien T.K. Kim
VICE CHAIR

George I. Atta
Michael D. Formby
Ford N. Fuchigami
Terri Fujii
Colleen Hanabusa
William "Buzz" Hong
Terrence M. Lee
Ivan M. Lui-Kwan, Esq

Agenda

- I. Call to Order by Vice Chair
- II. Public Testimony on All Agenda Items
- III. Board Leadership Election
- IV. Financial Plan Update Permitted Interaction Group Membership
- V. Fiscal Year 2017 Capital Budget Re-Appropriation Request
- VI. Approval of Minutes
 - A. March 17, 2016 Meeting of the Board of Directors
 - B. March 28, 2016 Limited Meeting of the Board of Directors
- VII. Board Members' Report of Attendance
 - A. Charter Commission Meeting on March 4, 2016
 - B. Charter Commission Meeting on March 8, 2016
 - C. City Council Budget Committee Meeting on April 5, 2016
- VIII. Eminent Domain – Authorizing Acquisition
 - A. Resolution No. 2016-12 Authorizing the Acquisition of a Fee Simple Interest and Temporary Construction Easement in the Real Property Identified as Tax Map Keys 1-2-009-011 and 1-2-009-098 (Portions), Located at 2043 Dillingham Boulevard, and Owned by Blood Bank Real Property, Inc. by Eminent Domain
 - B. Resolution No. 2016-13 Authorizing the Acquisition of a Fee Simple Interest in the Real Property Identified as Tax Map Keys 2-3-004-029 and 2-3-004-079 (Portions), Located at 401 Kamakee Street and 1141 Waimanu Street Honolulu and Owned by Ka'a Limited Partnership by Eminent Domain
 - C. Resolution No. 2016-14 Authorizing the Acquisition of a Fee Simple Interest in the Real Property Identified as Tax Map Key 1-5-015-008 (Portion), Located at 1001 Dillingham Boulevard, and Owned by DTC Investments, LLC. by Eminent Domain
- IX. Resolution No. 2016-15 Regarding the Position of the Board of Directors of the Honolulu Authority for Rapid Transportation on Transit Oriented Development Legislation
- X. HART Testimony on HART-Related Council Measures

- XI. HART Testimony on HART-Related Charter Amendment Proposals
- XII. Update on First Rail Cars
- XIII. Limited Meeting for Unveiling of First Rail Cars on May 2, 2016
- XIV. Revision to Change Order Procedure
- XV. Archaeological Inventory Survey Provisional Sum Reconciliation Credit
- XVI. Construction and Traffic Update
- XVII. Right of Way Update
- XVIII. March Monthly Progress Report
- XIX. March Project Management Oversight Contractor Report
- XX. HART's Management Response to City Auditor's Report
- XXI. Discussion Regarding Pearl Highlands Parking Garage Request for Information
- XXII. Extension of Deadline to Evaluate Executive Director & CEO
- XXIII. Executive Director & CEO's Performance Evaluation and Upcoming Performance Objectives

Executive Session

Pursuant to Hawaii Revised Statutes Section 92-4 and Subsections 92-5(a)(4) and 92-5(a)(2), the Board may enter into Executive Session to consider the Annual Evaluation of the Executive Director/CEO where consideration of matters affecting privacy will be involved, and to consult with its attorneys on questions and issues pertaining to the Board's powers, duties, privileges, immunities and liabilities with regard to these matters.

XXIV. Executive Director & CEO's Report

XXV. Adjournment

Note: Persons wishing to testify on items listed on the agenda are requested to register by completing a speaker registration form at the meeting or online on the HART section of the www.honolulustransit.org website. Each speaker is limited to a **two-minute** presentation. Persons who have not registered to speak in advance should raise their hands at the time designated for public testimony and they will be given an opportunity to speak following oral testimonies of the registered speakers.

If you require special assistance, auxiliary aid and/or service to participate in this event (i.e. sign language interpreter; interpreter for language other than English, or wheelchair accessibility), please contact Cindy Matsushita at 768-6258 or email your request to cmatsushita@honolulu.gov at least three business days prior to the event.

Honolulu Authority for Rapid Transportation

RESOLUTION NO. 2016-12

AUTHORIZING THE ACQUISITION OF A FEE SIMPLE INTEREST AND TEMPORARY CONSTRUCTION EASEMENT IN THE REAL PROPERTY IDENTIFIED AS TAX MAP KEYS 1-2-009-011 AND 1-2-009-098 (PORTIONS), LOCATED AT 2043 DILLINGHAM BOULEVARD, AND OWNED BY BLOOD BANK REAL PROPERTY, INC. BY EMINENT DOMAIN

WHEREAS, the Honolulu Authority for Rapid Transportation (HART) has been established pursuant to Article XVII of the Revised Charter of the City and County of Honolulu 1973, as amended (Charter); and

WHEREAS, Section 17-103.2(b) of the Charter empowers HART "to acquire by eminent domain. . . all real property or any interest therein necessary for the construction, maintenance, repair, extension or operation of the fixed guideway system;" and

WHEREAS, the City Council approved or did not object to the acquisition of the real property identified as Tax Map Keys (TMKs) 1-2-009-011 and 1-2-009-098 (Portions) by eminent domain in fee simple and temporary construction easement after written notification by HART; and

WHEREAS, the acquisition by eminent domain in fee simple and temporary construction easement of the above- identified real property, which is more particularly described in the attached legal description marked as Exhibit A, is necessary for the Honolulu Rail Transit Project fixed guideway system, a valid public use and purpose;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of HART as follows:

1. That acquisition by eminent domain in fee simple and temporary construction easement of the real property identified as TMKs 1-2-009-011 and 1-2-009-098 (Portions) is hereby authorized and the Corporation Counsel of the City and County of Honolulu is empowered to institute eminent domain proceedings as provided by law for the acquisition thereof; and
2. That the acquisition of the above-identified property by eminent domain is determined and declared to be for a valid public use and purpose as aforesaid; and

3. That the acquisition of the above-identified property by eminent domain is determined and declared to be necessary for the aforesaid public use and purpose; and
4. That in the process of said proceedings in eminent domain, the Corporation Counsel is authorized and empowered to negotiate terms of settlement, subject to the approval of HART and/or the Court before which such proceedings are commenced; and
5. That the Board Administrator be directed to transmit copies of this resolution to HART and the Department of the Corporation Counsel.

ADOPTED by the Board of the Honolulu Authority for Rapid
Transportation on _____.

Board Chair

ATTEST:

Board Administrator

Exhibit A – Legal Description of TMKs 1-2-009-011 and 1-2-009-098 (Portions)

HONOLULU RAIL TRANSIT PROJECT

PARCEL 400-A

Being portions of Lot as shown on DPP 1969/SUB-231,
 Lots 7 and 9, Block 9 of "Kapiolani Tract",
 Being portions of Grant 3420 to Curtis P. Iaukea,
 Trustee for his Majesty Kalakaua and
 Land Patent 8194, Land Commission Award 6450,
 Apana 1 to Kaunuohua no Moehonua

Situate at Mokauea, Kalihi, Honolulu, Oahu, Hawaii

Beginning at the Southeast corner of this lot, being the North corner of Parcel 400-B of the Honolulu Rail Transit Project, being also along the South side of Dillingham Boulevard, the coordinates of said point of beginning referred to Government Survey Triangulation Station "MOKAUEA" being 6,189.98 feet North and 11,261.27 feet West thence running by azimuths measured clockwise from true South:

- | | | | | |
|----|--------------|--------|-------|---|
| 1. | 42° 20' | 10.90 | feet | along Parcel 400-B of the Honolulu Rail Transit Project; |
| 2. | 132° 20' | 98.14 | feet | along Remainder of Parcel 400-A of Honolulu Rail Transit Project; |
| 3. | 42° 20' | 2.00 | feet | along same; |
| 4. | 132° 20' | 10.57 | feet | along same; |
| | | | | Thence along same, on a curve to the left with a radius of 2,221.02 feet, the chord azimuth and distance being: |
| 5. | 130° 49' 18" | 117.18 | feet; | |
| | | | | Thence along same, on a curve to the left with a radius of 30.00 feet, the chord azimuth and distance being: |
| 6. | 115° 06' 12" | 14.73 | feet; | |



AUSTIN, TSUTSUMI & ASSOCIATES, INC.

501 SUMNER STREET, SUITE 521
 HONOLULU, HAWAII 96817-5031

CIVIL ENGINEERS - SURVEYORS
 1871 WILI PA LOOP, SUITE A
 WAILUKU, MAUI, HAWAII 96793

100 PALIARI STREET, SUITE 207
 HILO, HAWAII 96720

Thence along the South side of Puuhale Road, on a curve to the right with a radius of 50.00 feet, the chord azimuth and distance being:

7. 288° 52' 31.59 feet;

8. 307° 17' 9.02 feet along the West side of Dillingham Boulevard;

Thence along same, on a curve to the right with a radius of 1,797.29 feet, the chord azimuth and distance being:

9. 309° 48' 30" 158.36 feet;

10. 312° 20' 43.75 feet along same to the point of beginning and containing an area of 2,297 Square Feet.

Subject, However, to Easement 1 for sidewalk purposes.

AUSTIN, TSUTSUMI & ASSOCIATES, INC.

Description Prepared By:



Erik S. Kaneshiro exp 7/16

ERIK S. KANESHIRO
Licensed Professional Land Surveyor
Certificate No. 9826

Note: This description is for exhibit purposes and does not purport a legally subdivided lot.

Honolulu, Hawaii
July 16, 2015

TMK: (1) 1-2-009: 011
Y:\2014\14-068\SURVEY\Descriptions\PARCEL 400-A.docx



AUSTIN, TSUTSUMI & ASSOCIATES, INC.

501 SUMNER STREET, SUITE 201
HONOLULU, HAWAII 96817-6031

CIVIL ENGINEERS • SURVEYORS
1871 WIL PA LOOP, SUITE A
WAILUKU, MAUI, HAWAII 96793

100 PALIAHI STREET, SUITE 212
HILO, HAWAII 96720

HONOLULU RAIL TRANSIT PROJECT

PARCEL 400-B

Being a portion of Lot 11, Block 9 of "Kapiolani Tract"
 Being a portion of Land Patent 8194, Land Commission Award 6450,
 Apana 1 to Kaunuohua no Moehonua

Situate at Mokauea, Kalihi, Honolulu, Oahu, Hawaii

Beginning at the North corner of this lot, being the Southeast corner of Parcel 400-A of the Honolulu Rail Transit Project, being also along the South side of Dillingham Boulevard, the coordinates of said point of beginning referred to Government Survey Triangulation Station "MOKAUEA" being 6,189.98 feet North and 11,261.27 feet West thence running by azimuths measured clockwise from true South:

- | | | | | |
|----|----------|-------|------|---|
| 1. | 312° 20' | 50.00 | feet | along the South side of Dillingham Boulevard; |
| 2. | 42° 20' | 12.90 | feet | along Parcel 401-A of the Honolulu Rail Transit Project; |
| 3. | 132° 20' | 9.76 | feet | along Remainder of Parcel 400-B of the Honolulu Rail Transit Project; |
| 4. | 222° 20' | 2.00 | feet | along same; |
| 5. | 132° 20' | 40.24 | feet | along same; |



AUSTIN, TSUTSUMI & ASSOCIATES, INC.

CIVIL ENGINEERS • SURVEYORS

501 SUMNER STREET, SUITE 521
 HONOLULU, HAWAII 96817-5031

1871 WILI PA LOOP, SUITE A
 WAILUKU, MAUI, HAWAII 96793

100 PAUAHI STREET, SUITE 207
 HILO, HAWAII 96720

6. 222° 20' 10.90 feet along Parcel 400-A of the Honolulu Rail Transit Project, to the point of beginning and containing an area of 564 Square Feet.



AUSTIN, TSUTSUMI & ASSOCIATES, INC.

Description Prepared By:

A handwritten signature in black ink, appearing to read "Erik S. Kaneshiro", with "EXP 07/16" written to the right.

ERIK S. KANESHIRO
Licensed Professional Land Surveyor
Certificate No. 9826

Note: This description is for exhibit purposes and does not purport a legally subdivided lot.

Honolulu, Hawaii
July 16, 2015

TMK: (1) 1-2-009: 098
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HONOLULU RAIL TRANSIT PROJECT

**EASEMENT A
(FOR TEMPORARY CONSTRUCTION PURPOSES)**

Affecting Remainder of Parcel 400-A
of the Honolulu Rail Transit Project
Being portions of Lot as shown on DPP 1969/SUB-231,
Lots 7 and 9, Block 9 of "Kapiolani Tract",
Being portions of Grant 3420 to Curtis P. Iaukea,
Trustee for his Majesty Kalakaua and
Land Patent 8194, Land Commission Award 6450,
Apana 1 to Kaunuohua no Moehonua

Situate at Mokauea, Kalihi, Honolulu, Oahu, Hawaii

Beginning at the Northwest corner of this easement, being an azimuth and distance of 220°37' 33.95 feet from the Northwest corner of Remainder of Parcel 400-A of the Honolulu Rail Transit Project, being also along the Southeast side of Puuhale Road, the coordinates of said point of beginning referred to Government Survey Triangulation Station "MOKAUEA" being 6,319.06 feet North and 11,490.68 feet West thence running by azimuths measured clockwise from true South:

Along the Southeast side of Puuhale Road, on a curve to the right with a radius of 50.00 feet, the chord azimuth and distance being:

1. 245° 32' 42.13 feet;

Thence along Parcel 400-A of the Honolulu Rail Transit Project, on a curve to the right with a radius of 30.00 feet, the chord azimuth and distance being:

2. 295° 06' 12" 14.73 feet;

Thence along same, on a curve to the right with a radius of 2,221.02 feet, the chord azimuth and distance being:

3. 310° 49' 18" 117.18 feet;



AUSTIN, TSUTSUMI & ASSOCIATES, INC.

CIVIL ENGINEERS • SURVEYORS

501 SUMNER STREET, SUITE 521
HONOLULU, HAWAII 96817-5031

1871 WILI PA LOOP, SUITE A
WAILUKU, MAUI, HAWAII 96793

100 PAUJHI STREET, SUITE 207
HILO, HAWAII 96720

4.	312° 20'	10.57	feet	along same;
5.	42° 20'	4.00	feet	along remainder of Remainder of Parcel 400-A;
6.	131° 50'	56.93	feet	along same;
7.	42° 20'	26.18	feet	along same;
8.	132° 20'	6.14	feet	along same;
9.	222° 20'	3.83	feet	along same;
10.	132° 20'	18.22	feet	along same;
11.	222° 20'	21.73	feet	along same;
12.	129° 50'	48.81	feet	along same;
13.	42° 20'	6.53	feet	along same;
14.	132° 20'	8.02	feet	along same;
15.	42° 20'	9.18	feet	along same;
16.	132° 20'	8.68	feet	along same;
17.	42° 20'	16.53	feet	along same;

Thence along same, on a curve to the right with a radius of 5.00 feet, the chord azimuth and distance being:

18.	80° 44' 30"	6.21	feet;
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19. 119° 09'

7.98 feet along same, to the point of beginning and containing an area of 1,551 Square Feet.



AUSTIN, TSUTSUMI & ASSOCIATES, INC.

Description Prepared By:

A handwritten signature in black ink, appearing to read "Erik S. Kaneshiro", followed by the date "07/16".

ERIK S. KANESHIRO
 Licensed Professional Land Surveyor
 Certificate No. 9826

Note: This description is for exhibit purposes and does not purport a legally designated easement.

Honolulu, Hawaii
July 16, 2015

TMK: (1) 1-2-009: 011
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HONOLULU RAIL TRANSIT PROJECT

**EASEMENT B
(FOR TEMPORARY CONSTRUCTION PURPOSES)**

Affecting Remainder of Parcel 400-B
of the Honolulu Rail Transit Project
Being a portion of Lot 11, Block 9 of "Kapiolani Tract"
Being a portion of Land Patent 8194,
Land Commission Award 6450, Apana 1 to Kaunuohua for Moehonua

Situate at Mokauea, Kalihi, Honolulu, Oahu, Hawaii

Beginning at the Southeast corner of this easement, being the Southwest corner of Parcel 400-B of the Honolulu Rail Transit Project, the coordinates of said point of beginning referred to Government Survey Triangulation Station "MOKAUEA" being 6,146.77 feet North and 11,232.99 feet West thence running by azimuths measured clockwise from true South:

- | | | | | |
|----|----------|------|------|--|
| 1. | 42° 20' | 4.00 | feet | along Remainder of Parcel 401-A of the Honolulu Rail Transit Project; |
| 2. | 132° 20' | 9.76 | feet | along remainder of Remainder of Parcel 400-B of the Honolulu Rail Transit Project; |
| 3. | 222° 20' | 4.00 | feet | along same, |



AUSTIN, TSUTSUMI & ASSOCIATES, INC.

CIVIL ENGINEERS • SURVEYORS

501 SUMNER STREET, SUITE 521
HONOLULU, HAWAII 96817-5031

1871 WILIPA LOOP, SUITE A
WAILUKU, MAUI, HAWAII 96793

100 PAUHAU STREET, SUITE 207
HILO, HAWAII 96720

4. 312° 20'

9.76 feet along Parcel 400-B of the Honolulu Rail Transit Project, to the point of beginning and containing an area of 39 Square Feet.



AUSTIN, TSUTSUMI & ASSOCIATES, INC.

Description Prepared By:

Erik S. Kaneshiro Ex 07/16

ERIK S. KANESHIRO

Licensed Professional Land Surveyor
Certificate No. 9826

Note: This description is for exhibit purposes and does not purport a legally designated easement.

Honolulu, Hawaii
July 16, 2015

TMK: (1) 1-2-009: 098

Y:\2014\14-068\SURVEY\Descriptions\PARCEL 401 - Easement B.docx



AUSTIN, TSUTSUMI & ASSOCIATES, INC.

801 BUNGER STREET, SUITE 821
HONOLULU, HAWAII 96817-5031

CIVIL ENGINEERS • SURVEYORS

1871 WIL PA LOOP, SUITE A
WAILUKI, MAUI, HAWAII 96793

100 PALANI STREET, SUITE 213
HILG, HAWAII 96726

Honolulu Authority for Rapid Transportation

STAFF SUMMARY

TITLE: RESOLUTION NO. 2016-12 AUTHORIZING THE ACQUISITION OF A FEE SIMPLE INTEREST AND TEMPORARY CONSTRUCTION EASEMENT IN THE REAL PROPERTY IDENTIFIED AS TAX MAP KEYS 1-2-009-011 and 1-2-009-098 (PORTIONS) BY EMINENT DOMAIN	STAFF CONTACT: Jesse K. Souki Morris M. Atta	DATE: April 21, 2016
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Type:	Goal	Focus Area	Reference Notes
<input checked="" type="checkbox"/> Action/Approval	<input checked="" type="checkbox"/> Project Delivery	<input type="checkbox"/> Livability/Land Use	
<input type="checkbox"/> Information	<input type="checkbox"/> Service Delivery	<input type="checkbox"/> Partnerships	
<input type="checkbox"/> Follow-up	<input type="checkbox"/> Resource Stewardship	<input type="checkbox"/> Agency Admin.	

1. Purpose:
 Final action of the Board in authorizing the condemnation of the parcel identified as Tax Map Keys 1-2-009-011 and 1-2-009-098 situated at 2043 Dillingham Boulevard, Honolulu, Hawaii 96817 which is required for guideway construction of the Honolulu Rail Transit Project (HRTTP). The property is owned by Blood Bank Real Property, Inc.

2. Background/Justification
 Notification of the intent to exercise eminent domain had previously been sent to the Honolulu City Council along with HART Resolution 2016-4 on February 24, 2016. The City Council adopted Resolution No. 16-48 approving the action on March 16, 2016. Accordingly, under the Charter of the City and County of Honolulu section 17-103.2(b), HART may now properly proceed with the condemnation proceedings for this parcel.

3. Procurement Background
 N/A

4. Financial/Budget Impact
 The project budget includes an estimated cost for legal action associated with the condemnation of the property.

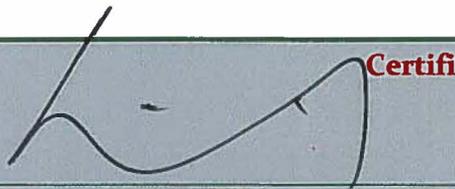
5. Policy Impact
 There is no policy impact since this action conforms to the requirement of the Uniform Relocation Act, FTA 5010.1D and Article XVII of the Charter of the City and County of Honolulu.

6. Public Involvement
 N/A

7. Alternatives
 There is no alternative given the proposed project schedule and the need to acquire the property as soon as possible in order to not delay the contractor in constructing the guideway.

8. Exhibits
 N/A

Certified and Recommended by:



Executive Director and CEO

4/11/16

Date

Honolulu Authority for Rapid Transportation

RESOLUTION NO. 2016-13

AUTHORIZING THE ACQUISITION OF A FEE SIMPLE INTEREST IN THE REAL PROPERTY IDENTIFIED AS TAX MAP KEYS 2-3-004-029 AND 2-3-004-079 (PORTIONS), LOCATED AT 401 KAMAKEE STREET AND 1141 WAIMANU STREET HONOLULU AND OWNED BY KA'A LIMITED PARTNERSHIP BY EMINENT DOMAIN

WHEREAS, the Honolulu Authority for Rapid Transportation (HART) has been established pursuant to Article XVII of the Revised Charter of the City and County of Honolulu 1973, as amended (Charter); and

WHEREAS, Section 17-103.2(b) of the Charter empowers HART "to acquire by eminent domain. . . all real property or any interest therein necessary for the construction, maintenance, repair, extension or operation of the fixed guideway system;" and

WHEREAS, the City Council approved or did not object to the acquisition of the real property identified as Tax Map Keys (TMKs) 2-3-004-029 and 2-3-004-079 (Portions) by eminent domain in fee simple after written notification by HART; and

WHEREAS, the acquisition by eminent domain in fee simple of the above-identified real property, which is more particularly described in the attached legal description marked as Exhibit A, is necessary for the Honolulu Rail Transit Project fixed guideway system, a valid public use and purpose;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of HART as follows:

1. That acquisition by eminent domain in fee simple of the real property identified as TMKs 2-3-004-029 and 2-3-004-079 (Portions) is hereby authorized and the Corporation Counsel of the City and County of Honolulu is empowered to institute eminent domain proceedings as provided by law for the acquisition thereof; and
2. That the acquisition of the above-identified property by eminent domain is determined and declared to be for a valid public use and purpose as aforesaid; and
3. That the acquisition of the above-identified property by eminent domain is determined and declared to be necessary for the aforesaid public use and purpose; and
4. That in the process of said proceedings in eminent domain, the Corporation Counsel is authorized and empowered to negotiate terms of

settlement, subject to the approval of HART and/or the Court before which such proceedings are commenced; and

- 5. That the Board Administrator be directed to transmit copies of this resolution to HART and the Department of the Corporation Counsel.

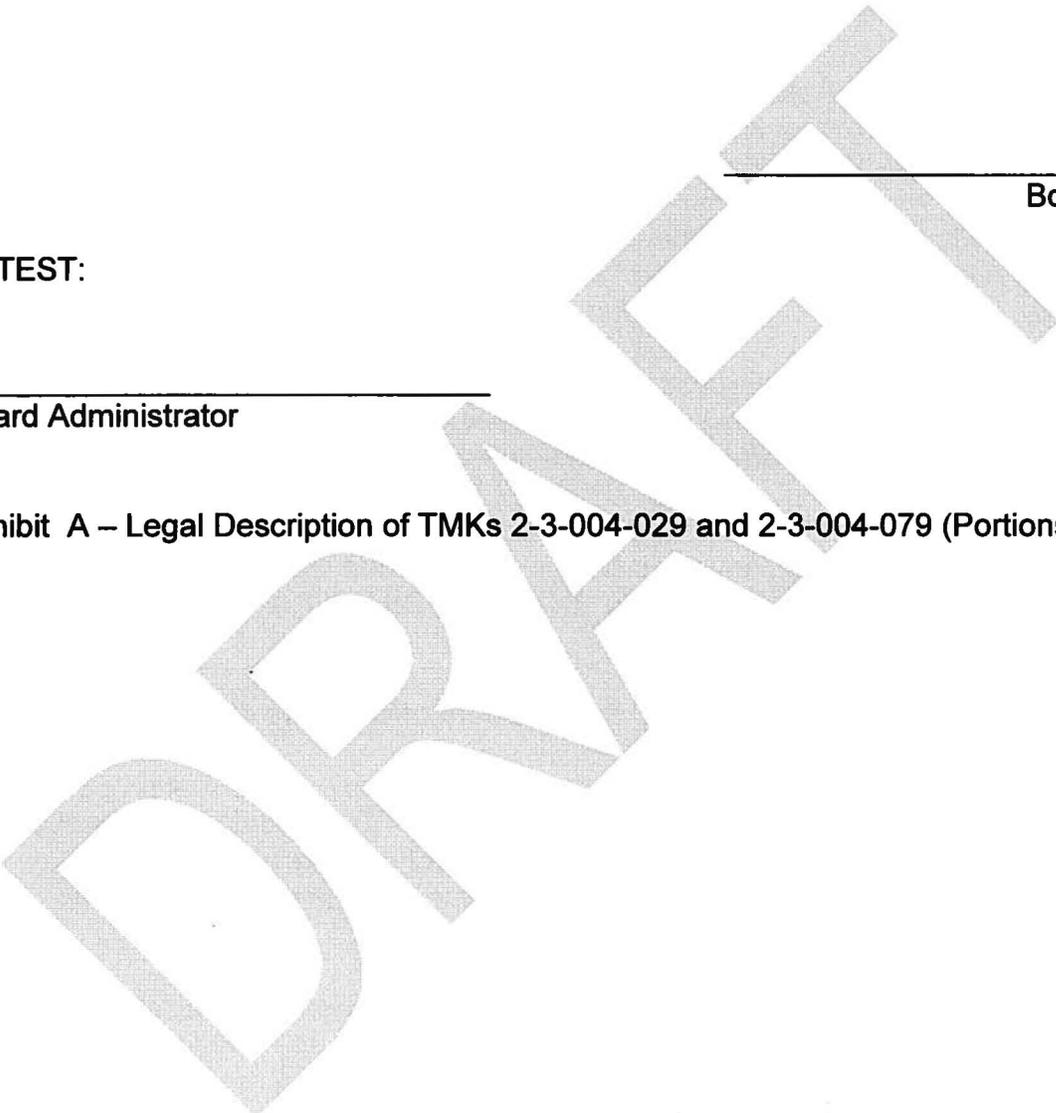
ADOPTED by the Board of the Honolulu Authority for Rapid Transportation on _____.

Board Chair

ATTEST:

Board Administrator

Exhibit A – Legal Description of TMKs 2-3-004-029 and 2-3-004-079 (Portions)



HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

PARCEL 474-A

Being all of Lot 456, as shown on Map 46 and Portions of Lot 452, as shown on Map 45, Lot 454 as shown on Map 46, and Lot 457, as shown on Map 47, Block 24, of Land Court Application 670.

Situate at Kewalo, Honolulu, Oahu, Hawaii

Beginning at the Southwest corner of this parcel of land, at the East intersection of Queen Street Extension and Kamakee Street, the coordinates of which referred to Government Survey Triangulation Station "PUNCHBOWL" being 6409.74 feet South and 865.68 feet West and running by azimuths measured clockwise from true South:

- | | | | |
|----|----------|-------------|--|
| 1. | 231° 52' | 25.38 feet | along the Easterly side of Kamakee Street: |
| 2. | 321° 52' | 9.60 feet | along remainder of Lot 452, (Map 42), Block 24, of Land Court Application 670; |
| | | | thence along remainders of Lot 454, (Map 46), and Lot 457 (Map 47), Block 24, of Land Court Application 670, on a curve to the left with a radius of 20.50 feet, the chord azimuth and distance being: |
| 3. | 6° 52' | 28.99 feet; | |
| 4. | 321° 52' | 69.90 feet | along remainder of Lot 457 (Map 47), Block 24, of Land Court Application 670; |
| 5. | 51° 52' | 4.89 feet | along Lot 1-A-2 (Map 24) of Land Court Consolidation 53 and along a jog on the Northerly side of Queen Street Extension; |

6. 141° 52' 100.00 feet

along the Northerly side of Queen Street Extension to the point of beginning and containing an area of 776 square feet.



1320 North School Street
Honolulu, Hawaii 96817

September 16, 2015

Tax Map Key: (1st Div.) 2-3-04: 29 Portion
14-73

Description Prepared By:
Engineers Surveyors Hawaii, Inc.

Miles S. Horie Exp. 4/30/16
Licensed Professional Land Surveyor
Certificate Number 10007

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

Parcel 474-B

Being a portion of Lot 1-A-2 as shown on Map 24 of Land Court Consolidation 53.

Situate at Kewalo, Honolulu, Oahu, Hawaii

Beginning at the West corner of this parcel of land, being also the South corner of Lot 457, (Map 47), Block 24, of Land Court Application 670 on the Northerly side of Queen Street Extension, the coordinates of which referred to Government Survey Triangulation Station "PUNCHBOWL" being 6488.09 feet South and 803.54 feet West and running by azimuths measured clockwise from true South:

- | | | | |
|----|----------|------------|---|
| 1. | 231° 52' | 4.39 feet | along Lot 457, (Map 47), Block 24, of Land Court Application 670; |
| 2. | 321° 52' | 10.42 feet | along remainder of Lot 1-A-2 (Map 24) of Land Court Consolidation 53; |
| 3. | 51° 52' | 3.72 feet | along Lot 1-A-1, (Map 24,) of Land Court Consolidation 53; |

thence along the Northerly side of Queen Street Extension, on a curve to the right with a radius of 392.00 feet, the azimuth to the radial center being 227° 27' 24", the chord azimuth and distance being:

4. 138° 13' 12" 10.44 feet to the point of beginning and containing an area of 43 square feet.



1320 North School Street
Honolulu, Hawaii 96817

September 16, 2015
Tax Map Key: (1st Div.) 2-3-04: 79 Portion

14.73

Description Prepared By:
Engineers Surveyors Hawaii, Inc.


Miles S. Horie Exp. 4/30/16
Licensed Professional Land Surveyor
Certificate Number 10007

Honolulu Authority for Rapid Transportation

STAFF SUMMARY

TITLE: RESOLUTION NO. 2016-13 AUTHORIZING THE ACQUISITION OF A FEE SIMPLE INTEREST IN THE REAL PROPERTY IDENTIFIED AS TAX MAP KEYS 2-3-004-029 AND 2-3-004-079 (PORTIONS) BY EMINENT DOMAIN	STAFF CONTACT: Jesse K. Souki Morris M. Atta	DATE: April 21, 2016
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Type:	Goal	Focus Area	Reference Notes
<input checked="" type="checkbox"/> Action/Approval	<input checked="" type="checkbox"/> Project Delivery	<input type="checkbox"/> Livability/Land Use	
<input type="checkbox"/> Information	<input type="checkbox"/> Service Delivery	<input type="checkbox"/> Partnerships	
<input type="checkbox"/> Follow-up	<input type="checkbox"/> Resource Stewardship	<input type="checkbox"/> Agency Admin.	

1. Purpose:
 Final action of the Board in authorizing the condemnation of the parcel identified as Tax Map Keys 2-3-004-029 and 2-3-004-079 situated at 401 Kamakee Street and 1141 Waimanu Street, Honolulu, Hawaii 96814 which is required for guideway construction of the Honolulu Rail Transit Project (HRTTP). The property is owned by Ka'a Limited Partnership.

2. Background/Justification
 Notification of the intent to exercise eminent domain had previously been sent to the Honolulu City Council along with HART Resolution 2016-2 on February 4, 2016. More than 45 days has elapsed since the notice. The City Council neither approved or adopted a resolution in objection of the action. Accordingly, under the Charter of the City and County of Honolulu section 17-103.2(b), HART may now properly proceed with the condemnation proceedings for this parcel.

3. Procurement Background
 N/A

4. Financial/Budget Impact
 The project budget includes an estimated cost for legal action associated with the condemnation of the property.

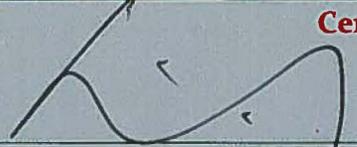
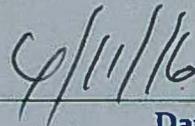
5. Policy Impact
 There is no policy impact since this action conforms to the requirement of the Uniform Relocation Act, FTA 5010.1D and Article XVII of the Charter of the City and County of Honolulu.

6. Public Involvement
 N/A

7. Alternatives
 There is no alternative given the proposed project schedule and the need to acquire the property as soon as possible in order to not delay the contractor in constructing the guideway.

8. Exhibits
 N/A

Certified and Recommended by:

 _____ Executive Director and CEO	 _____ Date
---	---

Honolulu Authority for Rapid Transportation

RESOLUTION NO. 2016-14

AUTHORIZING THE ACQUISITION OF A FEE SIMPLE INTEREST IN THE REAL PROPERTY IDENTIFIED AS TAX MAP KEY 1-5-015-008 (PORTION), LOCATED AT 1001 DILLINGHAM BOULEVARD, AND OWNED BY DTC INVESTMENTS, LLC. BY EMINENT DOMAIN

WHEREAS, the Honolulu Authority for Rapid Transportation (HART) has been established pursuant to Article XVII of the Revised Charter of the City and County of Honolulu 1973, as amended (Charter); and

WHEREAS, Section 17-103.2(b) of the Charter empowers HART "to acquire by eminent domain. . . all real property or any interest therein necessary for the construction, maintenance, repair, extension or operation of the fixed guideway system;" and

WHEREAS, the City Council approved or did not object to the acquisition of the real property identified as Tax Map Key (TMK) 1-5-015-008 (Portion) by eminent domain in fee simple after written notification by HART; and

WHEREAS, the acquisition by eminent domain in fee simple of the above-identified real property, which is more particularly described in the attached legal description marked as Exhibit A, is necessary for the Honolulu Rail Transit Project fixed guideway system, a valid public use and purpose;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of HART as follows:

1. That acquisition by eminent domain in fee simple of the real property identified as TMK 1-5-015-008 (Portion) is hereby authorized and the Corporation Counsel of the City and County of Honolulu is empowered to institute eminent domain proceedings as provided by law for the acquisition thereof; and
2. That the acquisition of the above-identified property by eminent domain is determined and declared to be for a valid public use and purpose as aforesaid; and
3. That the acquisition of the above-identified property by eminent domain is determined and declared to be necessary for the aforesaid public use and purpose; and
4. That in the process of said proceedings in eminent domain, the Corporation Counsel is authorized and empowered to negotiate terms of settlement, subject to the approval of HART and/or the Court before which such proceedings are commenced; and

5. That the Board Administrator be directed to transmit copies of this resolution to HART and the Department of the Corporation Counsel.

ADOPTED by the Board of the Honolulu Authority for Rapid Transportation on

_____.

Board Chair

ATTEST:

Board Administrator

Exhibit A – Legal Description of TMK 1-5-015-008 (Portion)

DRAFT

HONOLULU RAIL TRANSIT PROJECT

PARCEL 425

Being a portion of Lot 5 (Map 4) of
Land Court Consolidation 19

Situate at Kapalama, Honolulu, Oahu, Hawaii

Beginning at the Northwest corner of this lot, being the Northeast corner of Parcel 424-C of the Honolulu Rail Transit Project, being also along the South side of Dillingham Boulevard, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUNCHBOWL" being 3,343.81 feet North and 7,875.29 feet West thence running by azimuths measured clockwise from true South:

- | | | | | |
|----|----------|--------|------|--|
| 1. | 302° 04' | 352.85 | feet | along the South side of Dillingham Boulevard; |
| 2. | 32° 04' | 5.00 | feet | along Parcel 426 of the Honolulu Rail Transit Project; |
| 3. | 122° 04' | 224.53 | feet | along Remainder of Parcels 425 and 425-A of Honolulu Rail Transit Project; |
| 4. | 120° 38' | 128.36 | feet | along same; |



AUSTIN, TSUTSUMI & ASSOCIATES, INC.

CIVIL ENGINEERS • SURVEYORS

501 SUMNER STREET, SUITE 521
HONOLULU HAWAII 96817-5031

1871 WILI PA LOOP, SUITE A
WAIKIKI MAUI HAWAII 96703

100 PAUANI STREET, SUITE 207
HILO HAWAII 96720

5. 212° 04'

8.21 feet along Parcel 424-C of the Honolulu Rail Transit Project, to the point of beginning and containing an area of 1,970 Square Feet.



AUSTIN, TSUTSUMI & ASSOCIATES, INC.

Description Prepared By:

Erik S. Kaneshiro exp 04/16

ERIK S. KANESHIRO
Licensed Professional Land Surveyor
Certificate No. 9826

Note: This description is for exhibit purposes and does not purport a legally subdivided lot.

Honolulu, Hawaii
January 20, 2016

TMK: (1) 1-5-015: 008
Y:\2014\14-068\SURVEY\Descriptions\PARCEL 425.docx



HONOLULU RAIL TRANSIT PROJECT

PARCEL 425-A

Being a portion of Lot 5 (Map 4) of
Land Court Consolidation 19

Situate at Kapalama, Honolulu, Oahu, Hawaii

Beginning at the Northwest corner of this easement, being the Southwest corner of Parcel 425 of the Honolulu Rail Transit Project, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUNCHBOWL" being 3,336.85 feet North and 7,879.65 feet West thence running by azimuths measured clockwise from true South:

1. 300° 38' 35.89 feet along Parcel 425 of the Honolulu Rail Transit Project;
2. 32° 04' 22.70 feet along the remainder of Remainder of Parcels 425 and 425-A of the Honolulu Rail Transit Project;
3. 122° 04' 35.88 feet along same;



4. 212° 04' 21.80 feet along Remainder of Parcel 424-C of the Honolulu Rail Transit Project, to the point of beginning and containing an area of 798 Square Feet.



AUSTIN, TSUTSUMI & ASSOCIATES, INC.

Description Prepared By:

 EXP 04/16

ERIK S. KANESHIRO

Licensed Professional Land Surveyor
Certificate No. 9826

Note: This description is for exhibit purposes and does not purport a legally designated easement.

Honolulu, Hawaii
January 21, 2016

TMK: (1) 1-5-015: 008
Y:\2014\14-068\SURVEY\Descriptions\PARCEL 425 - Easement A.docx



Honolulu Authority for Rapid Transportation

STAFF SUMMARY

TITLE: RESOLUTION NO. 2016-14 AUTHORIZING THE ACQUISITION OF A FEE SIMPLE INTEREST IN THE REAL PROPERTY IDENTIFIED AS TAX MAP KEY 1-5-015-008 (PORTION) BY EMINENT DOMAIN	STAFF CONTACT: Jesse K. Souki Morris M. Atta	DATE: April 21, 2016
--	---	--------------------------------

Type:	Goal	Focus Area	Reference Notes
<input checked="" type="checkbox"/> Action/Approval	<input checked="" type="checkbox"/> Project Delivery	<input type="checkbox"/> Livability/Land Use	
<input type="checkbox"/> Information	<input type="checkbox"/> Service Delivery	<input type="checkbox"/> Partnerships	
<input type="checkbox"/> Follow-up	<input type="checkbox"/> Resource Stewardship	<input type="checkbox"/> Agency Admin.	

1. Purpose:
 Final action of the Board in authorizing the condemnation of the parcel identified as Tax Map Key 1-5-015-008 situated at 1001 Dillingham Boulevard, Honolulu, Hawaii 96817 which is required for guideway construction of the Honolulu Rail Transit Project (H RTP). The property is owned by DTC Investments, LLC.

2. Background/Justification
 Notification of the intent to exercise eminent domain had previously been sent to the Honolulu City Council along with HART Resolution 2016-1 on February 4, 2016. More than 45 days has elapsed since the notice. The City Council neither approved or adopted a resolution in objection of the action. Accordingly, under the Charter of the City and County of Honolulu section 17-103.2(b), HART may now properly proceed with the condemnation proceedings for this parcel.

3. Procurement Background
 N/A

4. Financial/Budget Impact
 The project budget includes an estimated cost for legal action associated with the condemnation of the property.

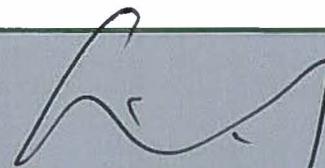
5. Policy Impact
 There is no policy impact since this action conforms to the requirement of the Uniform Relocation Act, FTA 5010.1D and Article XVII of the Charter of the City and County of Honolulu.

6. Public Involvement
 N/A

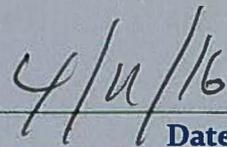
7. Alternatives
 There is no alternative given the proposed project schedule and the need to acquire the property as soon as possible in order to not delay the contractor in constructing the guideway.

8. Exhibits
 N/A

Certified and Recommended by:



Executive Director and CEO



Date

Honolulu Authority for Rapid Transportation

RESOLUTION NO. 2016-15

REGARDING THE POSITION OF THE BOARD OF DIRECTORS OF THE HONOLULU AUTHORITY FOR RAPID TRANSPORTATION ON TRANSIT-ORIENTED DEVELOPMENT LEGISLATION

WHEREAS, the Honolulu Authority for Rapid Transportation (HART) has been established pursuant to Article XVII of the Revised Charter of the City and County of Honolulu 1973 , as amended (RCH); and

WHEREAS, RCH Section 17-103 2(n) authorizes HART to “promote, create and assist transit-oriented development projects near fixed guideway system stations that promote transit ridership, and are consistent with the intent of the adopted community plans and zoning”; and

WHEREAS, the City and County of Honolulu, has begun establishing “special districts known as TOD zones around rapid transit stations to encourage appropriate transit-oriented development,” as provided in Ordinance 09-04 and codified in the Revised Ordinances of Honolulu 1990, as amended (ROH) , Section 21-9.100; and

WHEREAS, SB3077, SD1, HD1 Relating to Statewide Community Plan seeks to properly, effectively, and efficiently address the numerous issues facing transit-oriented (TOD) development statewide through a coordinated, intergovernmental, and interagency approach by establishing the Hawaii Interagency Council for TOD (Interagency Council) and appropriate funds for the creation and operations of the Interagency Council; and

WHEREAS, TOD provides a unique opportunity to foster more livable communities that take advantage of the benefits of transit, including reducing transportation costs for residents, businesses and workers while improving mobility and circulation in the station area for all modes of travel; and

WHEREAS, development projects within county-designated TOD zones can take advantage of direct pedestrian access to the rail system—leveraging the substantial public investment in the transit capacity and promoting more sustainable and healthier mobility options; and

WHEREAS, high density, mixed use development and improved multimodal access to stations, which are commonly associated with TOD, can contribute to HART’s farebox revenue and offset operational expenses; and

WHEREAS, the HART Board favors and supports legislative measures which maximizes the potential for TOD, promotes interagency collaboration and infrastructure development to facilitate TOD; and

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of HART supports the intent of SB3077,SD1, HD1, Relating to Statewide Community Plan which promote interagency collaboration and infrastructure development to facilitate TOD; however, respectfully requests amendments to SB33077, SD1, HD1 address the following comments:

1. Acknowledge the TOD planning and policy efforts currently underway at the county level; and
2. Limit its scope, jurisdiction and authority to primarily State projects and state lands in the TOD areas so as not to conflict with TOD planning and policy efforts at the county level; and
3. Clarify its review of future capital improvement projects for TOD on State lands to be only within county-designated TOD zones, rather than within a one-half-mile radius of public transit stations, and await final designated TOD zones at the county level; and
4. The HART Executive Director and CEO is authorized to submit testimony on pertinent legislation consistent with the overall policies set forth herein; and
5. This Resolution shall take effect immediately upon its adoption.

ADOPTED by the Board of the Honolulu Authority for Rapid Transportation on

_____.

Board Chair

ATTEST:

Board Administrator

ts: J.Oliveira/R.Tam/A.Marceau/J.Souki/C.Matsushita/B.Morioka/D.Grabauskas

HART

HONOLULU AUTHORITY for RAPID TRANSPORTATION

Construction and Traffic Update April 21, 2016

H O N O L U L U R A I L T R A N S I T P R O J E C T

WWW.HONOLULUTRANSIT.ORG

HART

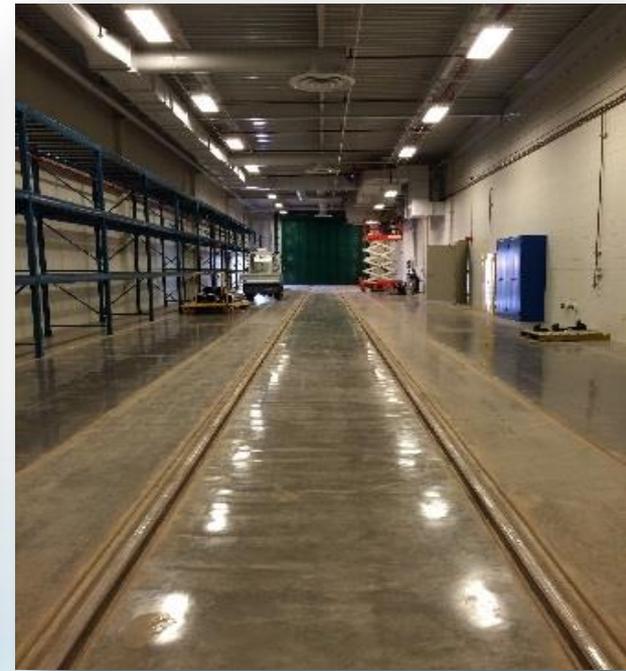
HONOLULU AUTHORITY for RAPID TRANSPORTATION

Project Map

20 Miles – 21 Stations



Rail Operations Center (ROC)



Physical Construction Completion	96%
Contract Billed to Date	93%
Contract Billing Planned Per Schedule	97%

- ROC construction currently tracking to the planned Substantial Completion date of May 2016 pending fire detection acceptance.

West Oahu Farrington HWY (WOFH)

Construction Completion 79.6%*

Contract Billed to Date 80.1%

Contract Billing Planned Per Schedule 91.9%

- *Contract Substantial Completion: July 2016*
- *Projected Completion-Guideway Structure, Track and Roadway Civil – July 2016, LCC Station At-grade Section – December 2016*
- *DOH has lifted equipment restrictions*
- *Traffic Signal work to proceed*

* Reduction in % due to mill & overlay roadway being added.



West Oahu Stations

Construction Completion 3%

Contract Billed to Date 0%

Contract Billing Planned Per Schedule 0%

- Contractor mobilized on Feb 29, 2016 at UH West Oahu and has set up field office and begun building formwork.
- Revised Baseline Schedule comments sent back to contractor; awaiting resubmission.
- Preconstruction and Pre-Activity in progress.
- Awaiting approvals for Right of Entry at Ho'opili. Contractor documentation to comply with Right of Entry submitted.
- Construction coordination continues with interfacing contractors.



Farrington HWY Stations

Construction Completion	0.1%
Contract Billed to Date	0%
Contract Billing Planned Per Schedule	15%

- Contractor received approval of Environmental Compliance Plan on 3/25/16 allowing construction to commence.
- Steel reinforcement work ongoing at West Loch for drilled shafts.
- Access to LCC still problematic.



Kamehameha Highway Guideway (KHG)

Physical Construction Completion 27.7%*
Contract Billed to Date 57.3%
Contract Billing Planned Per Schedule 95.9%

Contract Substantial Completion: September 2016

Projected Completion

- Guideway Structure and Track – April 2017
- Roadway Civil – September 2017

* Reduction in % due to tracking 3 additional items (track work, third rail, and mill & overlay roadway)



Kamehameha HWY Stations Group (KHSKG)

Construction Completion 0%
Contract Billed to Date 0%
Contract Billing Planned Per Schedule 0%

- *Administrative NTP issued April 1st, 2016*
- *Anticipated construction start is July 2016*



Moving Forward: The Next 10 Miles



Airport Advanced Utilities

Physical Construction Completion 48%

Contract Billed to Date 42%

- *Airport Section Utility Construction currently is tracking 2 months behind the planned Substantial Completion date based upon the contractors recent unapproved schedule update.*



Moving Forward: The Next 10 Miles

Airport Guideway and Stations D/B Contract

- Technical Proposals and Bids – received and under evaluation
- Anticipated Award – July 2016
- Anticipated NTP – September 2016

City Center Guideway and Stations D/B Contract

- Technical Proposals and Bids – due July 14, 2016
- Anticipated Award – October 2016
- Anticipated NTP – December 2016



Traffic Update



Farrington Highway in Waipahu



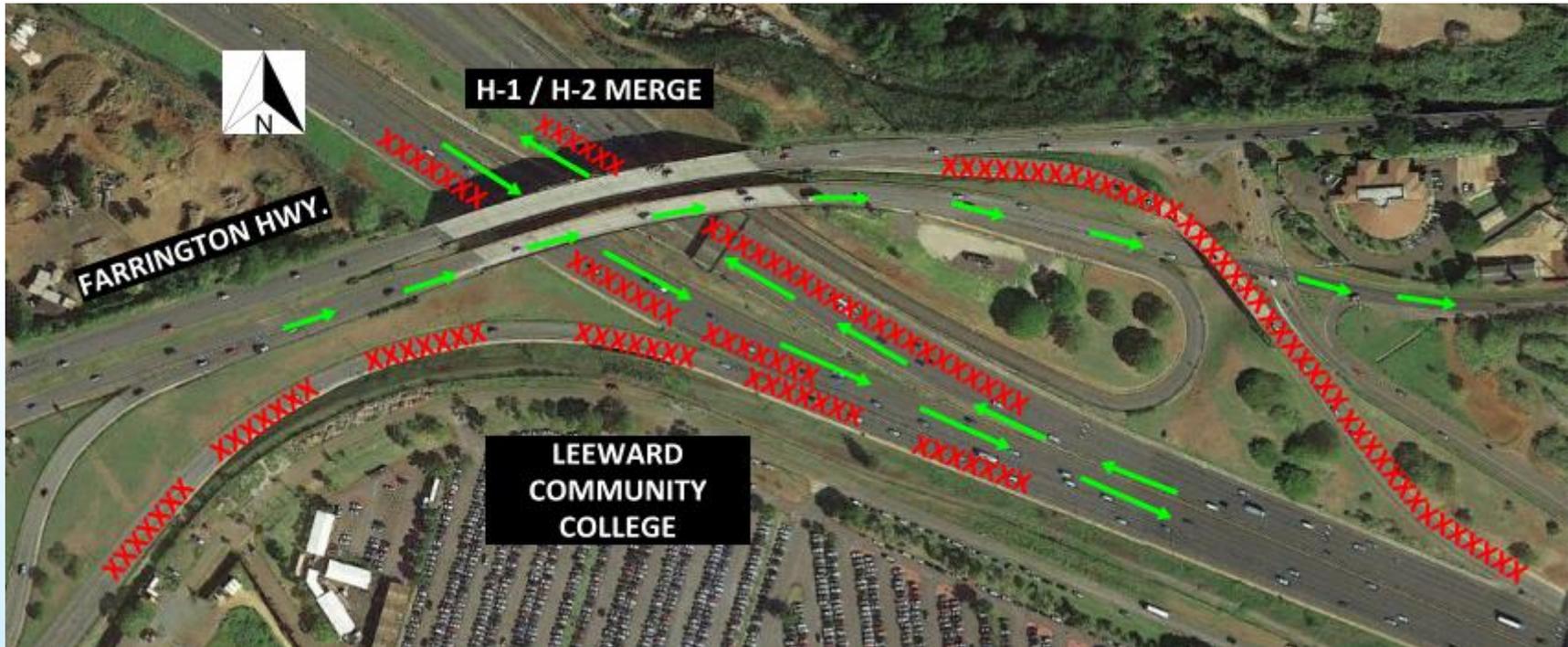
- Eastbound and westbound crossovers between Mokuola and Awamoku Streets for truss removal.
- Closures in place from 8:30 AM to 5:30 AM the following day.

Farrington Highway in Waipahu



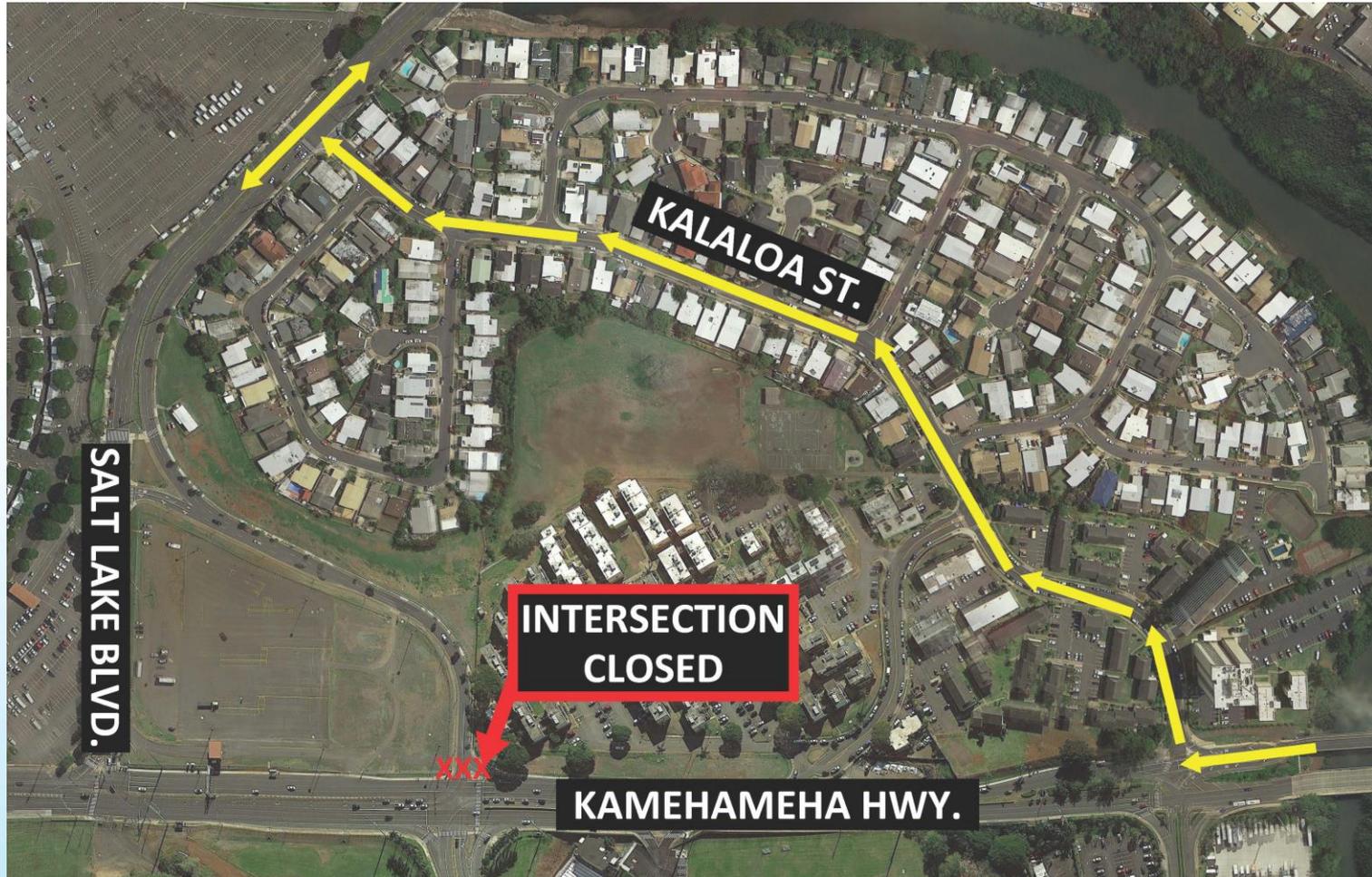
- Intersection closures at Kahualii Street for road restoration

Farrington Highway in Waipahu



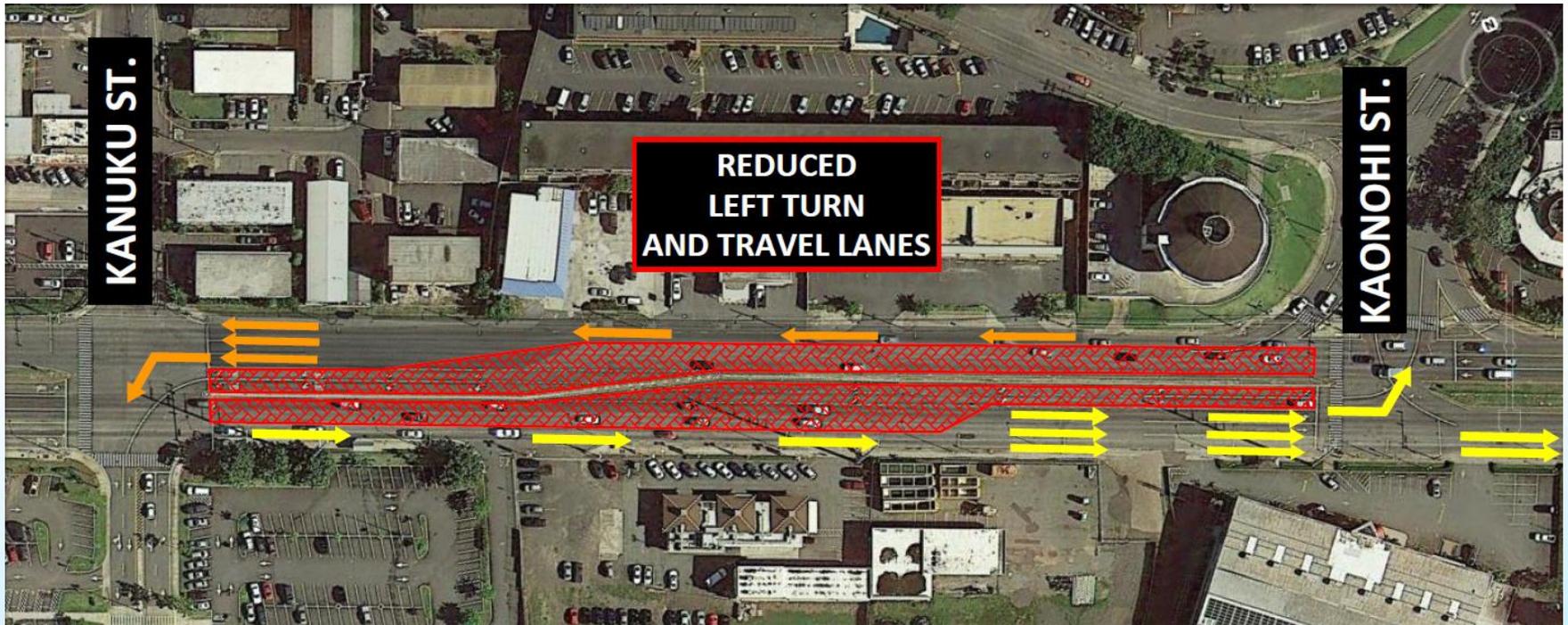
- Standard nightly closures at the H-1/H-2 merge

Kamehameha Highway – Pearl City



- Nightly Salt Lake Boulevard intersection closures for segment installation

Kamehameha Highway – Pearl City



- Eastbound and westbound inside lanes closed between Kanuku and Kaonohi Streets for equipment installation.
- All lanes will be open during peak travel times depending on direction.

Kamehameha Highway – Pearl City



- 24/7 eastbound and westbound inside lanes closed from Honomanu Street to the Moanalua Freeway merge
- First two phases of ultimate three-phased plan for drilled shaft work

Kamehameha Highway – Pearl City



- 24/7 westbound crossover between Honomanu Street and Moanalua Freeway merge
- Third phase for drilled shaft work

Stay Connected

- Monthly HART Facts Ad
- Public Access Television Program
- Weekly e-Blast
- Weekly Traffic Advisories
- Website and Social Media





HONOLULU AUTHORITY FOR RAPID TRANSPORTATION

HART FACTS—MARCH 2016

HART CEO Dan Grabauskas answers community questions about rail transit.

QUESTION:
What is the status of the production of HART's rail vehicles?

DAN GRABAUSKAS:
Our first four rail cars are in final assembly at the Hitachi plant in Pittsburg, California and are scheduled to be delivered here in Honolulu during the last week of this month. Our 4-car trains will be air conditioned, and passengers will have free Wi-Fi access. Trains will run from 4 a.m. to midnight and will arrive at stations every 5 minutes during the morning and evening rush hours, and every 11 minutes during the rest of the day. Each train will be equipped with safety and security features, including closed-circuit television cameras and call boxes. Passengers will be able to bring luggage, strollers, bicycles and surf boards aboard. The cars will undergo some initial testing at the Rail Operations Center in Waipahu.

PROJECT REVENUE STATUS As of February 1, 2016		Projections to Date ¹	Collected or Committed to Date	Percentage (of projections)
REVENUE SOURCE:		(in millions)	(in millions)	
Project Beginning Cash Balance (Dec. 2009)	\$ 298	\$ 298	\$ 298	100%
General Excise Tax (GET) Surcharge ²	3,291	1,259	1,259	38%
Federal New Starts Funds	1,550	1,056	1,056	68%
Other Federal Transportation Funds	214	4	4	2%
Interest Income	2	9	9	
TOTAL	\$5,355	\$2,626	\$2,626	49%

1 - Projections to date from the June 2012 Financial Plan.
2 - Total GET surcharge revenue collected since January 1, 2007, is \$1.59 billion (includes \$378 million collected before December 2009).

PROJECT COST STATUS As of February 1, 2016		Current Budget ¹	Amount Committed ²	Amount Expended ³
		(in millions)	(in millions)	(in millions)
Guideway & Track Elements	\$1,159	\$ 550	\$ 292	
Stations, Stops, Terminals, Intermodal Support Facilities, Yards, Shops, Admin	419	302	5	
Site/Work & Special Conditions	115	115	92	
Systems	1,007	730	569	
Vehicles	249	234	40	
SUB-TOTAL*	\$3,140	\$2,122	\$1,033	
Right-of-Way (ROW), Land, Existing Improvements	\$ 198	\$ 104	\$ 100	
Professional Services (e.g., Planning and Design)	1,123	1,049	787	
Contingency	487	7	1	
Finance Charges	215	0	0	
SUB-TOTAL*	\$2,024	\$1,160	\$ 888	
TOTAL*	\$5,164	\$3,282	\$1,921	

1 - Current Budget reflects the June 2012 Baseline Budget with executed Budget Transfers.
2 - Approved contract value. 3 - Portion of the work that has been paid.
* All costs are rounded to the millions therefore subtotals may not add up to the amounts shown.

DID YOU KNOW? HART has ordered a fleet of 80 rail cars.

HART Rapid Response:

- 24-Hour Project Hotline number 808-566-2299
- Email Inquiries: info@HonoluluTransit.org
- Website Inquiries

Mahalo!



HONOLULU RAIL TRANSIT

H O N O L U L U R A I L T R A N S I T P R O J E C T

www.HONOLULUTRANSIT.ORG

HART

HONOLULU AUTHORITY for RAPID TRANSPORTATION



HONOLULU AUTHORITY for RAPID TRANSPORTATION

Right-of-Way Status Update

April 21, 2016

H O N O L U L U R A I L T R A N S I T P R O J E C T
www.HONOLULUTRANSIT.ORG



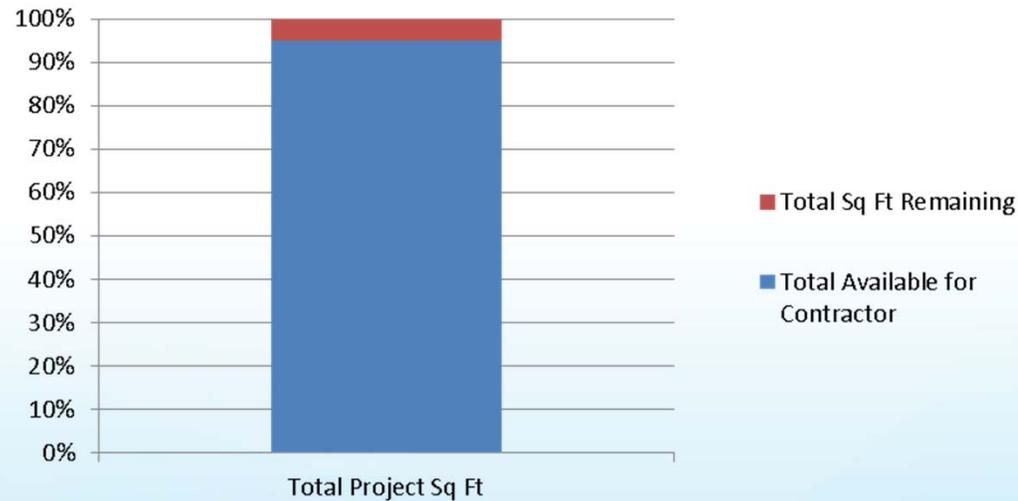
Meeting our Goals

- **Balance respect for property owner with schedule needs and project budget**
- **Balance responsibility of staying within the budget in a changing real estate market**
- **Continue to communicate and educate effectively**
- **Negotiate fairly**
- **Meet requirements of the Uniform Act**

Status Summary

- **ROW team continues to meet the schedule for City Center acquisitions relative to program procurement needs**
 - **Intense focus on Airport and Dillingham Parcels to support upcoming procurement**
- **Current total site access available for contractor is 95% of the total area needed**
- **Eminent Domain pending**
 - **50 prior requests for authorization from HART Board**
 - **2 parcels for resubmission to HART Board and City Council**
 - **1 parcel rejected by the City Council**
 - **5 cases filed**
 - **1 settled prior to trial**
 - **1 settled prior to trial, pending FTA approval**
 - **1 parcel disputed**
 - **2 condemnations to resolve title issues**
 - **34 properties in escrow**

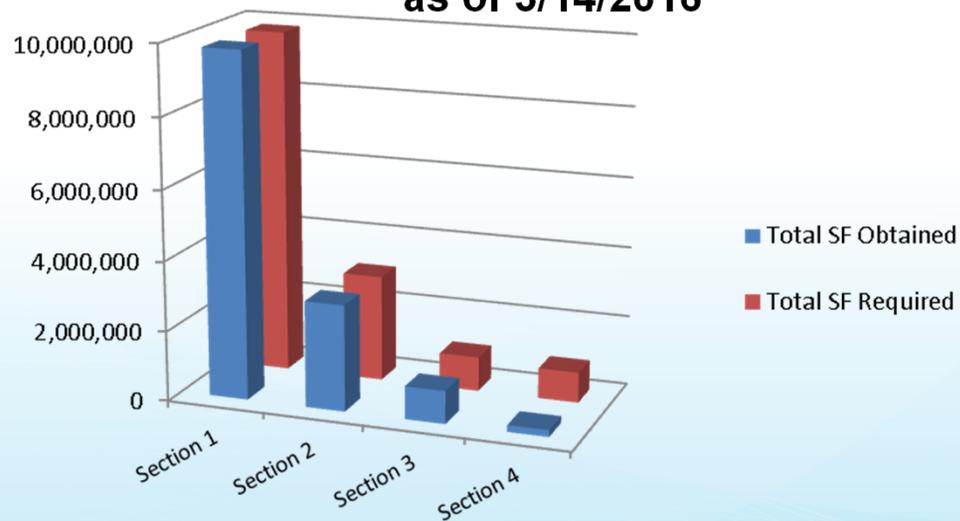
Progress Site Access Available by Land Area as of 3/14/2016



Total Project Sq Ft	Total Sq Ft Requirement	14,681,528
	Total Available for Contractor	13,916,732
	Total Sq Ft Remaining	764,796
	% Available for Contractor	95%
	Reported Last Month	95%

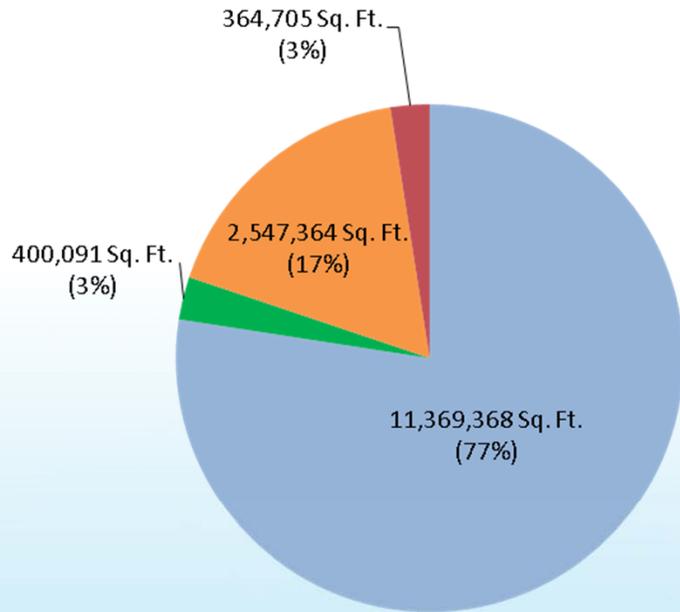
Progress Site Access Available to Contractors by Land Area by Section

as of 3/14/2016

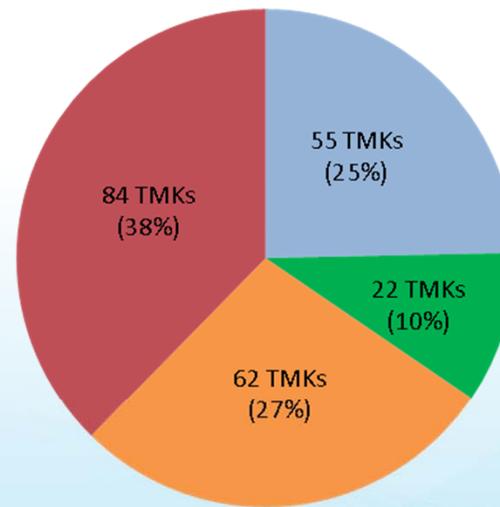


	Section 1	Section 2	Section 3	Section 4
Total SF Obtained	9,808,840	3,023,851	891,152	192,889
Total SF Required	9,808,840	3,027,319	979,875	865,494
% Progress	100.00%	99.89%	90.95%	22.29%

Parcel Site Control Status by Land Area and Parcels as of 3/14/2016



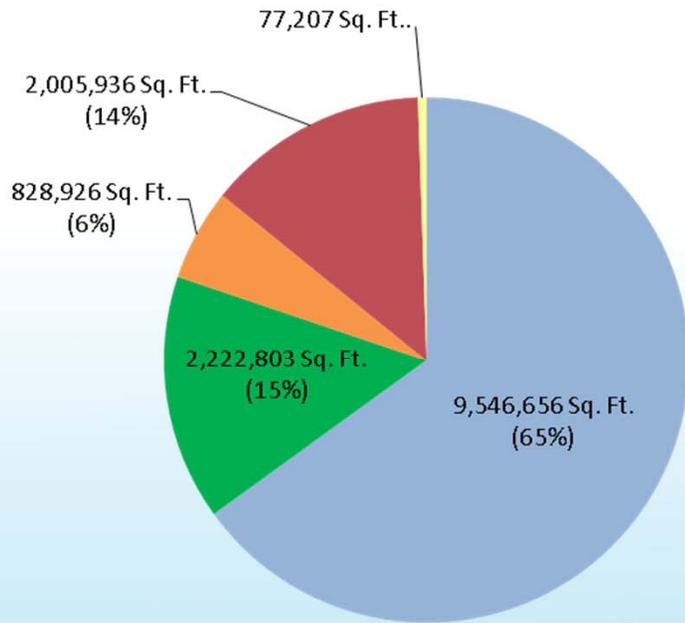
Square Footage



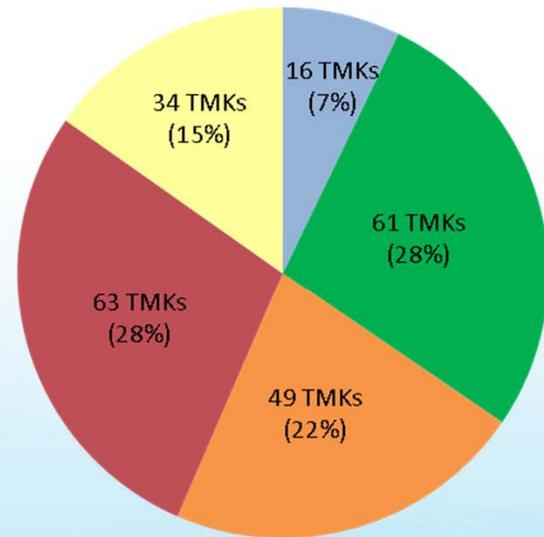
Tax Map Key

- Gov't Site Control Obtained
- Gov't Site Control not Obtained
- Private Site Control Obtained
- Private Site Control not Obtained

Acquisition Status by Land Area and Parcels as of 3/14/2016



Square Footage



Tax Map Key

- Gov't Acquisitions
- Gov't to be Acquired
- Private Acquisitions
- Private to be Acquired
- In Escrow

Right-of-Way Cost Estimate Update

as of 3/14/2016

	Budget	Expended	Remaining Budget Balance	Estimate to Completion	Forecast Variance
Acquisition	\$201.70	\$86.80	\$114.90	\$101.80	\$13.10
Relocation	\$20.50	\$10.60	\$9.90	\$15.90	(\$6.00)
Total (Million)	\$222.20	\$97.40	\$124.80	\$117.70	\$7.10

Notes:

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

Right-of-Way Risks to Budget

- **Volatility of Real Estate Market, especially in the Kakaako - Ala Moana area**
- **Conversions from partial acquisition to full acquisition**
- **Unanticipated relocation costs for complex relocations, particularly unexpected full takes**

Private Property Acquisition Summary as of 3/14/2016

No	TMK	Take	Address	Owner	Recordation Date	Total Acquisition (\$)	FFGA Budget	Note	Remaining Balance in Budget
1	1-1-016-005	Full	2676 Waiwai Loop	2676 Waiwai Loop LLC	7-Mar-14	4,924,144	6,173,973		1,249,829
2	1-1-016-006	Full	2668 Waiwai Loop	Alert Holding Group	28-Mar-14	3,918,089	4,648,445		730,356
3	1-1-016-014	Full	479 Lagoon Drive	Chevron USA Inc	21-Mar-14	3,042,274	3,930,328		888,055
4	1-1-016-015	Full	515 Lagoon Drive	Brewer Trust	3-Jun-13	3,551,508	5,067,659		1,516,151
5	1-1-016-016	Full	2613 Waiwai Loop	International Express Inc	5-Jan-16	6,062,548	472,448	2	-5,590,100
6	1-2-003-016	Full	1819 Dillingham Boulevard	Strain	21-Apr-14	1,106,416	1,741,689		635,273
7	1-2-003-017	Partial	1815 Dillingham Boulevard	Hernandez	11-May-15	151,758	111,258		-40,500
8	1-2-003-018	Partial	1803 Dillingham Boulevard	Rosebud Holdings Ltd	14-Aug-15	142,407	261,258		118,851
9	1-2-003-020	Partial	1727 Dillingham Boulevard	Elum Two LLC	7-Dec-15	220,540	364,465		143,925
10	1-2-003-082	Full	1825 Dillingham Boulevard	Nguyen	31-Jul-14	984,293	1,586,625		612,328
11	1-2-003-101	Partial	1701 Dillingham Boulevard	Fuji Trustee	16-Nov-15	453,234	463,178		4,944
12	1-2-009-001	Full	1901 Dillingham Boulevard	Sebastian LLC	16-Aug-12	2,805,135	2,814,000		8,865
13	1-2-009-100	Full	1953 Dillingham Boulevard	Sebastian LLC	16-Dec-14	2,257,353	436,620	2	-1,820,733
14	1-2-009-101		Subdivided TMK 1-2-009-017 into 100 and 101						
15	1-2-009-018	Full	1927 Dillingham Boulevard	Rodrigues/Hinch	18-Nov-14	804,686	261,258	2	-543,428
16	1-2-010-068	Full	1900 Dillingham Boulevard	Kam Trust	4-Dec-12	1,831,279	2,529,000		697,721
17	1-5-007-021	Full	545 Kaaahi Street	Nuuanu Auto	11-Oct-14	2,285,004	2,819,500		534,496
18	1-5-007-023	Full	533 Kaaahi Street	KWA/ Abrams	23-Apr-10	2,850,000	2,850,000	1	0
19	1-5-028-073	Partial	1617 Dillingham Boulevard	Fuji Trustee	13-Oct-19	258,433	179,373		-79,060
20	1-7-002-026	Full	902 Kekaulike Street	902 Partners Ltd	1-Nov-12	5,219,351	4,927,000	2	-292,351
21	2-1-030-050	Easement	573 Halekuwila Street	Henry Domen Trust	25-Feb-16	46,930		0	-46,930
22	2-1-031-002	Easement	536 Halekuwila Street	Kovrag Trust	19-Dec-15	122,408	179,517	3	77,111
23	2-3-004-048	Full	1156 Waimanu Street	Young	21-Mar-12	1,730,578	1,730,578		0
24	2-3-004-089	Full	1168 Waimanu Street	Cody Prop LLC	10-Feb-12	2,660,388	2,658,317		-2,081
25	2-3-007-033	Full	1169 Kona Street	Kakaako Associates	13-Oct-14	5,825,106	10,102,669		4,277,563
26	2-3-007-036	Full	1174 Waimanu Street	McArthur Trust/Hideko	8-Oct-14	1,407,845	1,951,386		543,541
27	2-3-007-039	Full	1163 Kona Street	Nelson Family Trust	1-Dec-15	3,010,960	2,644,402		-366,558
28	2-3-007-044	Full	1201 Kona Street	ROKH Holdings Inc	3-Oct-14	1,357,540	1,751,700		394,160
29	2-3-007-054	Full	1246 Kona Street	Taran Trust	15-May-15	1,105,634	1,439,263		333,629
30	9-4-017-011	Full	94-818 Moloalo Street	Okazaki	4-Aug-11	870,000	870,000	1	0
31	9-4-019-050	Full	94-819 Farrington Highway	Min	1-Aug-12	1,004,277	1,005,000		723
32	9-4-047-008	Partial	94-144 Farrington Highway	Robinson LLC	13-Mar-15	898,742	743,278		-155,464
33	9-4-048-046	Full	94-119 Farrington Highway	Cutter Dev.	25-Jul-11	3,159,142	3,159,142	1	0
34	9-4-048-047	Full	94-136 Leonui Street	Cutter Dev.	25-Jul-11	2,749,142	2,749,142	1	0
35	9-6-003-012	Full	96-171 Kamehameha Highway	Alpha Omega	29-Jun-11	287,030	287,030	1	0
36	9-6-003-013	Full	96-165/169 Kamehameha Highway	Reid	7-Sep-11	455,588	455,588	1	0
37	9-6-003-014	Full	96-157 Kamehameha Highway	Bala	27-Jun-11	1,216,787	1,216,787	1	0
38	9-6-003-015	Full	96-159 Kamehameha Highway	Bala	10-Aug-11	53,304	53,304	1	0
39	9-6-003-016	Full	96-149A Kamehameha Highway	Bala	10-Aug-11	22,304	22,304	1	0
40	9-6-003-017	Full	96-149 Kamehameha Highway	Farinas	15-Sep-11	559,914	559,914	1	0
41	9-6-003-018	Full	96-137 Kamehameha Highway	Alipio/Solmirin	25-Jan-12	1,017,915	1,017,915	1	0
42	9-6-004-002	Full	96-93 Kamehameha Highway	Kawano	5-May-11	790,000	790,000	1	0
43	9-6-004-017	Full	Kamehameha Highway	Suenaga	29-Jun-11	90,000	90,000	1	0
44	9-6-004-023	Partial	Waihona Street	Estate of Bernice Bishop	4-Aug-15	24,476	157,965		133,489
45	9-7-023-008	Partial	945 Kamehameha Highway	Stuart Plaza Inv	26-May-15	300,000	151,344		-148,656
46	9-7-024-034	Easement	1000 Kamehameha Highway	ABP Pearl Highlands LLC	19-Jan-16	42,837	679,106	3	636,269
47	9-8-009-017	Full	98-077 Kamehameha Highway	Continental Inv. Ltd	14-Jun-13	2,509,030	3,512,500		1,003,470
48	9-8-010-002	Full	98-080 Kamehameha Highway	50th State Prop.	1-May-12	6,027,024	6,027,024	1	0
49	9-9-003-068	Full	99-140 Kohomua Street	RCJ	13-Sep-11	993,783	993,783	1	0
						83,192,158	88,647,033		5,454,874

Notes:

- * Baseline assumes zero variance (budget = actual) during FFGA approval process.
- ** Cost exceeded budgeted amount due to conversion from partial to full acquisition. Bold print reflects most recent acquisition

Private Property Acquisition Cost as of 3/14/2016



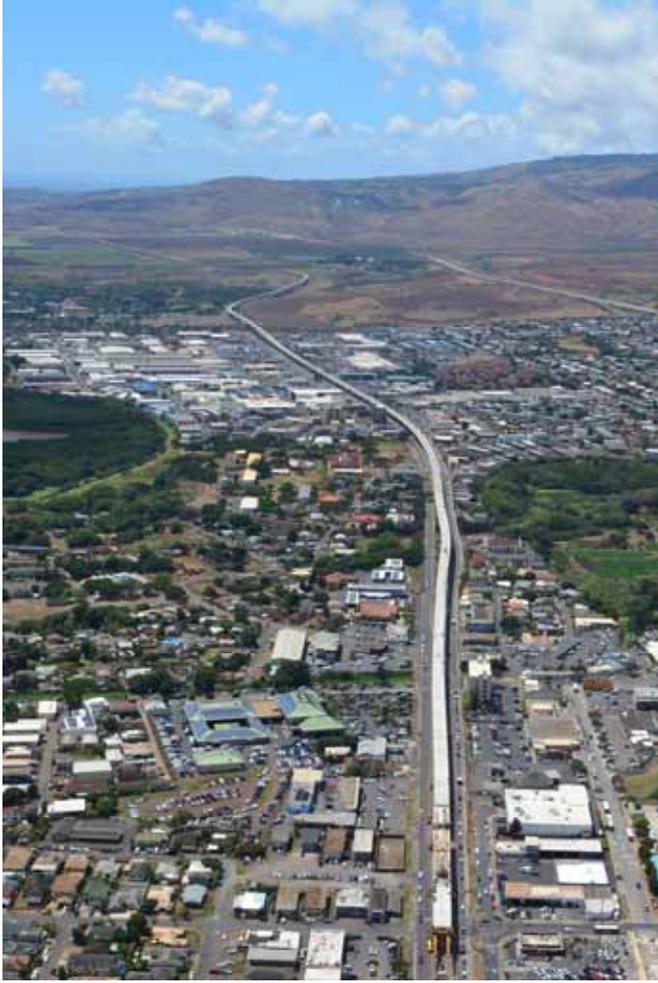
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March 2016 MONTHLY PROGRESS REPORT



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THIRD PARTY DISCLAIMER

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

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

REPORT FORMAT AND FOCUS

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

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

ON THE COVER:

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

Upper right: West O'ahu Farrington Highway Guideway along Farrington Highway near Waipahu High School.

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

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LIST OF ACRONYMS

AB	AnsaldoBreda	DHHL	Department of Hawaiian Homelands
ACHP	Advisory Council on Historic Preservation	DHR	Department of Human Resources
ACS	Access Control System	DIT	Department of Information Technology
AFE	Authorized for Expenditure	DKSG	Dillingham and Kaka’ako Station Group
AGS	Airport Guideway and Stations	DLIR	Hawai’i Department of Labor and Industrial Relations
AHJV	Ansaldo Honolulu Joint Venture	DLNR	Department of Land and Natural Resources
AIS	Archaeological Inventory Survey	DOE	Department of Education
APTA	American Public Transportation Association	DOH	Department of Health
ARRA	American Recovery and Reinvestment Act	DOL	Department of Labor
ASG	Airport Station Group	DPM	Deputy Project Managers
ASU	Airport Section Utilities	DPP	Department of Planning and Permitting
ATC	Automated Train Control	DPR	Department of Parks and Recreation
ATO	Automated Train Operation	DPS	Department of Public Safety
AVA	Anil Verma Associates, Inc.	DS	Downstream
BA	Buy America	DTS	Department of Transportation Services
BAC	Buy America Compliance	DVT	Design Verification Test
BACM	Buy America Compliance Matrix	ECP	Environmental Compliance Plan
BAFO	Best and Final Offer	E/E	Elevator/Escalator
BCS	Balanced Cantilever System	EK	East Kapolei
BFS	Budget and Fiscal Services	EMC	Electromagnetic Compatibility
BLS	Bureau of Labor Statistics	EMF	Electromagnetic Forces
BMP	Best Management Practice	EMI	Electromagnetic Interference
BOD	Board of Directors	EMP	Environmental Management Plan
BPS	Baseline Project Schedule	EOR	Engineer of Record
BUE	Bottom-Up Estimate	EOS	Electrically Operated Switch
BUEG	Back-up Emergency Generator	ESA	Engineering Services Agreement
CAM	Construction Access Milestone	FAA	Federal Aviation Administration
CAR	Corrective Actions	FAI	First Article Inspections
CCGS	City Center Guideway and Stations	FAT	Factory Acceptance Tests
CCO	Contract Change Order	FD	Final Design
CCTV	Closed Circuit Television	FDAS	Fire Detection Alarm System
CDC	Compendium of Design Criteria	FDC	Field Design Change
CE&I	Construction Engineering and Inspection	FEIS	Final Environmental Impact Statement
CEL	Certifiable Elements List	FFC	Fixed Facility Contractors
CIC	Communication Interface Cabinet	FFGA	Full Funding Grant Agreement
CIL	Certifiable Items List	FHSG	Farrington Highway Station Group
CM	Construction Manager	FLSWG	Fire Life Safety Working Group
CMP	Corrugated Metal Pipe	FOCN	Fiber Optic Communication Network
CMS	Contract Management System	FPO	Federal Preservation Officer
CMU	Concrete Masonry Unit	FTA	Federal Transit Administration
CNMMP	Construction Noise Mitigation and Monitoring Plan	FTE	Full-Time Equivalent
COI	Conflict of Interest	FWS	Fish and Wildlife Service
COMMs	Communications	GAT	Great Aleutian Tsunami
CONRAC	Consolidated Rental Car Facility	GBS	Gap Breaker Station
COR	Corporation Counsel	GDR	Geotechnical Data Report
CP	Consulting Party	GEC	General Engineering Consultant
CPM	Critical Path Method	GET	General Excise Tax
CPO	Chief Procurement Officer	GIS	Geographic Information System
CPP	Contract Packaging Plan	GSA	General Services Administration
CROE	Construction Right-of-Entry	GT	General Terms
CSC	Core Systems Contract	HA	Hazard Analysis
CSCC	Construction Specification Conformance Checklists	HABS	Historic American Buildings Survey
CSL	Cross Hole Sonic Logging	HAER	Historic American Engineering Record
CSOC	Core Systems Oversight Consultant	HALS	Historic American Landscape Survey
CSSP	Construction Safety & Security Plan	HART	Honolulu Authority for Rapid Transportation
CTS	Communications Transmission System	HCC	Honolulu Community College
CWRM	Commission on Water Resource Management	HCDA	Hawaii Community Development Authority
CZM	Coastal Zone Management	HCSO	Hawai’i Capital Special District
DAGS	Department of Accounting & General Services	HDCC	Hawaiian Dredging Construction Company
DB	Design-Build	HDOE	Hawai’i Department of Education
DBB	Design-Bid-Build	HDOH	Hawai’i Department of Health
DBE	Disadvantaged Business Enterprise	HDOT	Hawai’i Department of Transportation
DBEDT	Department of Business, Economic Development and Tourism	HDPE	High-density polyethylene
DBOM	Design-Build-Operate-Maintain	HECO	Hawaiian Electric Company
DCAB	Disability and Communication Access Board	HFD	Honolulu Fire Department
DCCC	Design Criteria Conformance Checklists	HHF	Historic Hawai’i Foundation
DCN	Design Change Notice	HHPRB	Hawai’i Historic Places Review Board
DDC	Department of Design and Construction	HIE	Hawaii Independent Energy
DES	Department of Environmental Services	HP	Historic Preservation
DFIM	Design Furnish Install Maintain	HPC	Historic Preservation Committee
DFM	Department of Facility Maintenance	HPCA	Historic Preservation Certification Application

HPD	Honolulu Police Department	P3	Public-private partnership
HPF	Historic Preservation Fund	PA	Programmatic Agreement
HRHP	Hawai'i Register of Historic Places	PAIS	Programmatic Agreement Implementation Schedule
HRI	Hitachi Rail Italy	PARs	Preventative Actions
HRTTP	Honolulu Rail Transit Project	PB	Parsons Brinckerhoff, Inc.
HTI	Hawaiian Telcom	PE	Preliminary Engineering
HTL	Hazard Tracking Log	PGC	Pacific Guardian Center
HVAC	Heating, Ventilation and Air Conditioning	PHA	Preliminary Hazard Analysis
I&T	Inspection & Testing	PICM	Project Interface Control Manual
IAMR	Interstate Access Modification Report	PIG	Permitted Interaction Group
ICCS	Integrated Communications Control System	PIM	Project Interface Manager
ICD	Interface Control Documents	PLA	Project Labor Agreement
ICE	Independent Cost Estimate	PLO	Priority-Listed Offerors
ICM	Interface Control Manual	PM	Project Managers
ICWG	Interim Certification Working Group	PMC	Project Management Consultant
IDS	Intrusion Detection System	PMIM	Project Management and Interface Management
IFB	Issued for Bid	PMOC	Project Management Oversight Contractor
IFC	Issued for Construction	PMSC	Program Management Support Consultant
IJ	Insolation Joint	PPE	Personal Protective Equipment
INMS	Integrated Network Management System	PRTCC	Pre-revenue Testing Conform Checklist
IP	Implementing Procedures	PSG	Platform Screen Gate
ITP	Inspection and Test Plan	PSGS	Platform Screen Gate System
ITS	Intelligent Transportation Systems	PUP	Property Utilization Plan
JTMS	Joint Traffic Management System	PV	Passenger Vehicle
JU&O	Joint Use & Occupancy	QA	Quality Assurance
JUOA	Joint Use and Occupancy Agreement	QAM	Quality Assurance Manager
KCDD	Kaka'ako Community Development District	QAP	Quality Assurance Plan
KCH	Kanehili Cultural Hui	QC	Quality Control
KHG	Kamehameha Highway Guideway	QMP	Quality Management Plan
KHSG	Kamehameha Highway Station Group	QMS	Quality Management System
KIWC	Kiewit Infrastructure West Company	QTF	Quality Task Force
KKJV	Kiewit/Kobayashi Joint Venture	R&R	Revise & Re-submit
LCC	Leeward Community College	RAC	Rail Activation Committee
LEED	Leadership in Energy and Environmental Design	RAMP	Real Estate Acquisition and Relocation Management Plan
LPR	License Plate Reader	RCMP	Risk and Contingency Management Plan
LRV	Light Rail Vehicle	RCP	Reinforced Concrete Pipe
MIM	Manufacture-Install-Maintain	RE	Resident Engineer
MMIS	Maintenance Management Information System	READ	Real Estate Acquisition Database
MMP	Mitigation Monitoring Program	RFC	Request for Change
MOT	Maintenance of Traffic	RFI	Request for Information
MOU	Memorandum of Understanding	RFID	Requests for Interface Data
MOW	Maintenance of Way	RFMP	Rail Fleet Management Plan
MPS	Master Project Schedule	RFP	Request for Proposals
MPSS	Master Project Schedule Summary	RFQ	Request for Qualifications
MPV	Multiple Purpose Vehicle	ROC	Rail Operations Center
MS4	Municipal Separate Storm Sewer System	ROD	Record of Decision
MSE	Mechanically Stabilized Earth	ROE	Right of Entry
MSF	Maintenance and Storage Facility	ROW	Right-of-Way
MTM	Modern Track Machineries	RR	Risk Register
NCE	Non-Conformance Evaluation	RSD	Revenue Service Date
NCR	Non-Conformance Report	RTM	Requirements Traceability Matrix
NDC	Notice of Design Change	RTSA	Regional Transit Stabilization Agreement
NEPA	National Environmental Policy Act	S1	Segment 1
NHL	National Historic Landmark	SAIS	Supplemental Archaeological Inventory Survey
NOI	Notice of Intent	SCADA	Supervisory Control and Data Acquisition
NPDES	National Pollutant Discharge Elimination System	SCAP	Stream Channel Alteration Permit
NPS	National Park Service	SCC	Standard Cost Category
NR	National Register	SHPD	State Historic Preservation Division
NRHP	National Register of Historic Places	SIC	Sandwich Isle Communications
NSM	Negotiation Strategy Memo	SIT	System Integration Testing
NTP	Notice to Proceed	SLAN	Station Local Area Network
NTS	Network Time Server	SOG	Slab on Grade
O&M	Operations and Maintenance	SOI	Secretary of the Interior
OCC	Operations Control Center	SOW	Scope of Work
OCIP	Owner-Controlled Insurance Program	SP	Special Provisions
OIBC	O'ahu Island Burial Council	SQP	Supplemental Quality Plan
OIL	Open Items List	SSC	Safety Security Certification
OMPO	Oahu Metropolitan Planning Organization	SSCP	Safety and Security Certification Plan
ORCC	Operational Readiness Conformance Checklists	SSCWG	Safety and Security Certification Working Group
OSB	Operations and Servicing Building	SSI	Sensitive Security Information
OSHA	Occupational Safety and Health Administration	SSMP	Safety and Security Management Plan
OTS	O'ahu Transit Services	SSRC	Safety and Security Review Committee
OTW	Oceanic Time Warner	SSSP	Site Safety Security Plan
OTWC	Oceanic Time Warner Cable	STCC	Specification/Testing Conform Checklists

SWPPP	Storm Water Pollution Prevention Plan	USACE	U.S. Army Corps of Engineers
T&M	Time and Material	USDOT	U.S. Department of Transportation
TCCR	Train Control and Communications Room	VE	Value Engineering
TCP	Traffic Control Plan	VRCS	Voice Radio Communication System
TCS	Train Control System	VRF	Variable Refrigerant Flow
TES	Traction Electrification System	WA	Work Area
TIGER	Transportation Investment Generating Economic Recovery	WHS	Waipahu High School
TIP	Transportation Improvement Program	WL	West Loch
TOC	The Outdoor Circle	WLO	West Loch
TOD	Transit-Oriented Development	WOEDA	West Oahu Economic Development Association
TPO	Thermoplastic Olefin	WOFH	West O'ahu/Farrington Highway
TPSS	Traction Power Sub-Station	WOSG	West O'ahu Station Group
TSA	Transportation Security Administration	WSS	West Side Stations
TSI	Transportation Safety Institute	WSSG	West Side Station Group
TVA	Threat & Vulnerability Assessments	WTB	Wheel Truing Building
TVM	Ticket Vending Machine	WTC	Waipahu Transit Center
TWF	Train Wash Facility	WYL	West Yard Lead
UCA	Utility Construction Agreement	YCB	Yard Control Bungalow
UFCRA	Utility Facilities Relocation and Cost Reimbursement Agreement	YOE	Year of Expenditure
UH	University of Hawai'i		
UHWO	University of Hawai'i West O'ahu		
UL	Underwriters Laboratories		
UPS	Uninterrupted Power Supply		

PROJECT MAP



PROGRESS REPORT SUMMARY OF CHANGES

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

Executive Summary

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

Project Progress

- The progress charts have been updated to reflect current program expectations. Please see pages 11 and 13-14.

Project Contingency

- The current contingency balance has decreased. Please see pages 15-16.

Project Funding

- The Section 5309 New Starts Revenue amount received has increased. Please see pages 17-18.
- The total amount of cash received has increased. Please see pages 17-18.

Schedule

- Based on the uncertainty related to the GET extension and availability of funds, the City Center Guideway and Stations project's request for proposal was postponed until early February 2016. Due to this action, along with the transfer of scope from the Dillingham Blvd. Utilities Contract (due to cancellation) and new scope mandated by the 138 kV circuits undergrounding going into the CCGS contract, a direct effect on the RSD forecast is expected with a new forecast in mid-to-late 2022. HART will attempt to mitigate this delay through future mitigation measures taken with the CCGS contractor and/or the Core Systems Contractor. Please see page 20.
- Contractor's forecasts have been added to the Master Project Schedule Summary (MPSS). Please see pages 20-22.
- Ramp H2R2 (DBB-385), WOSG (DBB-171) and FHSG (DBB-271) contractor schedules have been added to the MPSS. Please see pages 20-22.

Contract Status

- The Overview and Key Issues highlights for chapter 4's contract pages have been removed, as these details are within the respective contract pages.
- Contracts in Procurement
 - HART awarded the Fare Systems Design-Build-Operate-Maintain Contract. Please see page 23.
 - The deadline has been extended for the priority listed offerors to submit their proposals for the Airport Guideway and Stations Design-Build RFP. Please see page 23.
 - The Remaining Contracts table, which had previously been in the appendix, has been included with the Contracts in Procurement information. Please see page 23.
 - The Real Estate Contractor Contract "II," Outside Counsel for Land Court Petition Services, and On Call Appraisers contracts have been added to the Remaining Contracts table. Please see page 23.
- Core Systems Contract
 - The current contract value has increased. Please see page 24.
 - The incurred-to-date amount has decreased. Please see page 24.
 - The percentage complete has been adjusted. Please see page 24.
- Elevators and Escalators Manufacture-Install-Maintain (MIM)
 - The Elevators and Escalators schedule has been removed, as the Elevators' schedule for the first 9 stations will be published once FHSG, WOSG and KHSG baseline schedules are accepted. Elevators' schedule for the remaining 12 stations will be published when their contracts are awarded. Please see page 29.

- West O'ahu Farrington Highway Guideway (WOFH)
 - The current contract value has increased. Please see page 31.
 - Additional structure elements have been added to the Construction Status table. Please see page 32.
- Maintenance and Storage Facility (MSF)
 - The current contract value has been corrected. Please see page 39.
 - Additional elements have been added to the Construction Status table. Please see page 40.
- Kamehameha Highway Guideway (KHG)
 - The current contract value has increased. Please see page 43.
 - Additional utility and structure elements have been added to the Construction Status table. Please see page 44.
- Ramp H2R2
 - The projected substantial completion date has shifted to a later date. Please see page 47.
 - The incurred-to-date amount has decreased. Please see page 47.
 - The percentage complete has been adjusted. Please see page 47.
- Airport Section Utilities
 - The contract substantial completion date has shifted to a later date. Please see page 53.
 - The projected substantial completion date has been updated. Please see page 53.
 - The current contract value has increased. Please see page 53.
- Program Management Support Consultant-2 (PMSC-2)
 - The contract completion date has shifted to a later date. Please see page 63.

Overall Project-Wide Activities

- The Overview and Key Issues highlights for chapter 5 have been removed, as these details are within the respective sections in the chapter.

Management and Administrative Updates

- The Overview and Key Issues highlights for chapter 6 have been removed, as these details are within the respective sections in the chapter.

Safety & Security

- The Safety and Security section has been updated. Please see pages 78-85.

Appendices

- Appendix B. Project Contingency Management General Background and Clarifications
 - Background information on Known Changes Contingency has been removed, as there is no known changes contingency.
- Appendix C. Project Cost Reports
 - The Project Cost reports by SCC are being updated to be consistent with current program expectations and have been removed until the revised Project budget is approved by the HART Board of Directors and FTA. For current financial information, please refer to section 2, section 4, and appendix B of the report.
- Appendix D. Procurement and Contract Status
 - The contract substantial completion date for Program Management Support Consultant – 2 (PMSC-2) and Airport Section Utilities Construction has shifted to a later date. Please see page 109.
 - The Remaining Contracts table has been removed and is now included with the Contracts in Procurement information. Please see page 23.

1 EXECUTIVE SUMMARY

KEY ACTIVITIES THIS MONTH

Project Overview

The first 4-car passenger train arrived in Hawai'i in March, and has been delivered to the Maintenance and Storage Facility site. Meanwhile, final assembly activities are ongoing for the second 4-car passenger train in California. Each four-car train can carry more than 800 passengers, the equivalent of more than ten buses.



In March, the Honolulu Authority for Rapid Transportation (HART) held a ground breaking for the East Kapolei, UH West O'ahu and Ho'opili stations. These stations will be built by Nan, Inc.

HART also announced it has awarded Virginia-based INIT Innovations in Transportation, Inc. a \$31 million contract to design, build, operate and maintain a new smart card fare for Honolulu's rail transit system. The smart card readers will be used for ticket vending machines and fare gates at the rail stations.

Ala Moana Neighborhood TOD Plan

The Draft Final Ala Moana Neighborhood Transit-Oriented Development (TOD) Plan was presented at a community meeting in March. The plan is being finalized for review and adoption by the City Council, and addresses future land use and development, circulation, parking, pedestrian and bicycle facilities, historic and cultural resources, and public infrastructure within walking distance of the Ala Moana Center rail station.

Cost:

Project Costs Summary Through Feb. 26, 2016		
	Current Budget (\$M)	Incurred To Date (\$M)
Project Budget	\$4,473.5	\$1,955.4
Project Contingency	\$475.1	\$0.6
Finance Charges*	\$173.1	\$0.0
TOTAL	\$5,121.7	\$1,956

* \$173.1 million represents the project debt financing costs that are federally eligible. The total estimated debt financing costs of the project is \$215 million, per the FFGA Financial Plan.

Schedule:

Project Progress* Through Feb. 26, 2016				
	Actual		Early Plan	Late Plan
Overall Project Progress	44.9%		45.3%	44.4%
Overall Construction Progress	36.6%		37.2%	36.2%
Overall Design Progress	88.4%		99.8%	99.3%
Overall Utilities Progress	37.0%		38.4%	35.5%

* With the City Council decision to approve Bill 23 on Jan. 27, 2016 and the Mayor's signature on Feb. 1, 2016, progress charts have been updated to reflect current program expectations. HART will revise these charts pending the outcome of upcoming cost and schedule updates as a result of the FTA Risk Refresh.

Overview:Core Systems Contract (CSC)

The CSC contractor (AHJV) is continuing to progress through Final Design. Qualification and design verification tests are ongoing. Construction interface with the MSF contractor (KKJV) is ongoing. AHJV continues to install and test equipment in the Yard Control Bungalow (YCB). AHJV continues to install fire detection equipment at the MSF Operations and Servicing Building (OSB) and the Maintenance of Way (MOW) building. AHJV continues to pull Communications cables in the MSF OSB and MOW buildings. Site Acceptance Tests are being conducted at the MSF. The first 4-car passenger train has arrived in Honolulu. Final Assembly activities are ongoing for the second 4-car passenger train. (See Section 4.1.A for details)

Elevators and Escalators Manufacture-Install-Maintain Contract

The Elevator/Escalator contractor has completed final design for the WOSG, FHSG and KHSG stations. The contractors for FHSG, WOSG and KHSG must provide an acceptable schedule in order for the manufacturing of the equipment to be released. (See Section 4.1.B for details)

West O'ahu Farrington Highway (WOFH) Contract

The most recent progress schedule, through February 2016, reflects more than six month delay to the contractual substantial completion date for the LCC portables, parking lot, and access structure construction work activities. This schedule has not yet been accepted by HART and is under review. HART continues to monitor KIWC lower than planned production rates as it relates to potential schedule impacts, and both parties continue to work together to mitigate the impacts to the critical path activities associated with the LCC construction work. A revised baseline schedule was submitted via a contract Request for Change (RFC) by KIWC in August 2015 and is under review. (See Section 4.2.A for details)

Maintenance and Storage Facility (MSF) Contract

The first rail passenger vehicle was offloaded onto MSF tracks this month. The contractor completed paving of site driveways and parking areas. Installation of the three bridge cranes is complete in the OSB. Installation of roofing and Train Wash Equipment is complete in the Train Wash Facility (TWF). Coordination continues with WOFH, the abutting mainline contractor, for completion of site access in the east and west yards, including rail, vehicular access, and utility connections. Building finishes and mechanical, electrical and plumbing installations continue for all the buildings. Installation of rail continues for Phases 1 and 5. (See Section 4.2.D for details)

Kamehameha Highway Guideway (KHG) Contract

KIWC's February 2016 schedule reflects more than 12 months of delay to the contractual substantial completion date, with the guideway structure completion in April 2017 and the remaining roadway civil work being completed by September 2017. This schedule has not yet been accepted by HART and is under review. HART continues to monitor lower than planned KIWC production rates as it relates to potential schedule impacts and both parties continue to work together to mitigate the impacts to the critical path activities. (See Section 4.3.A for details)

Airport Section Utilities (ASU) Construction Contract

The Airport Section Utilities contract work is proceeding along Kamehameha Highway, the Airport area and the Nimitz Off-Ramp area. Probing along the proposed shaft locations has been conducted incidental to removing abandoned utilities which has resulted in the discovery of additional conflicts. Those unforeseen wet and dry utilities that have been encountered along Kamehameha Highway are being mitigated; RFI's have been prepared and answered and Requests for Proposals have been generated, necessary change orders and/or directives are being prepared or issued which will mitigate these conflicts. Nan continues to progress on utility relocation along Kamehameha Highway. (See Section 4.4.B for details)

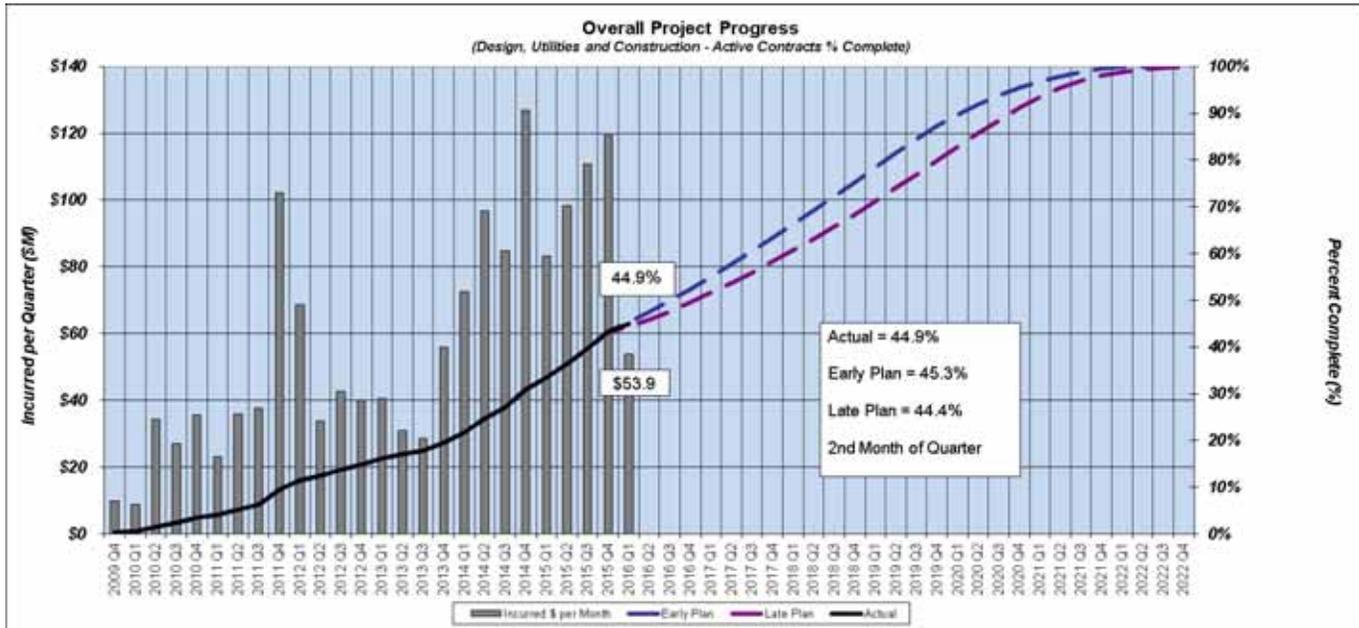
2 OVERALL PROJECT PROGRESS AND FINANCIALS

2.1 Project Progress (data as of Feb. 26, 2016)

With the City Council decision to approve Bill 23 on Jan. 27, 2016 and the Mayor’s signature on Feb. 1, 2016, progress charts have been updated to reflect current program expectations. HART will revise these charts pending the outcome of upcoming cost and schedule updates as a result of the FTA Risk Refresh.

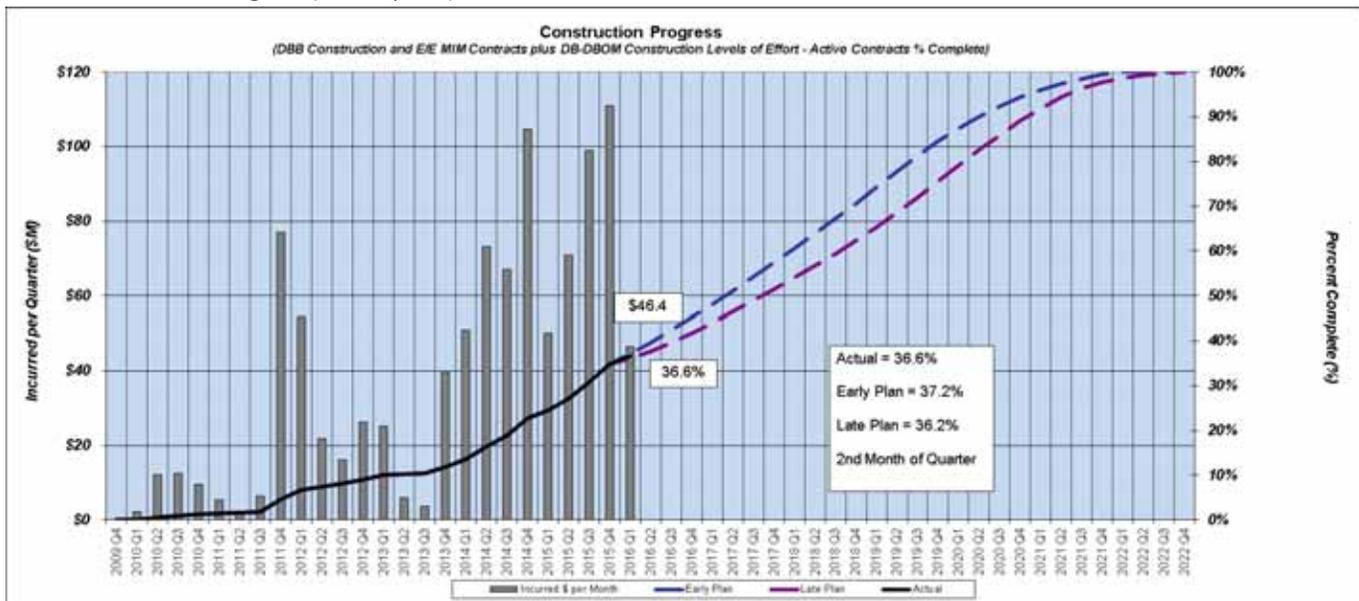
- Note:
- Actual = Actual cost of work performed, based on invoiced-to-date amount.
 - Early Plan = Earliest dates activities can begin and finish, based on logic and durations used in the schedule.
 - Late Plan = Latest dates activities can begin and finish and not have an impact on completion date,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

Figure 1. Overall Project Progress (% Complete)



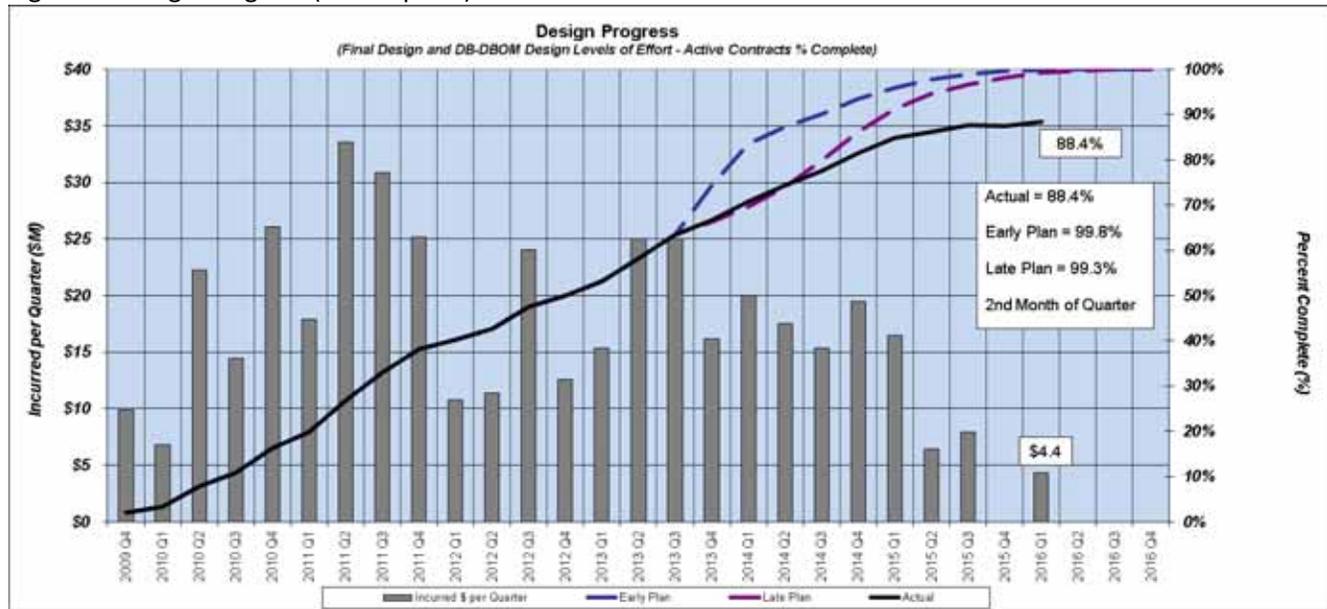
At present “overall” project progress is based on the weighted value progress of the individual construction and design contracts (Design-Build [DB], Design-Bid-Build [DBB], Design-Build-Operate-Maintain [DBOM], Elevator/Escalator Manufacture-Install-Test-Maintain [MIM], Final Design [FD] and DB-DBOM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

Figure 2. Construction Progress (% Complete)



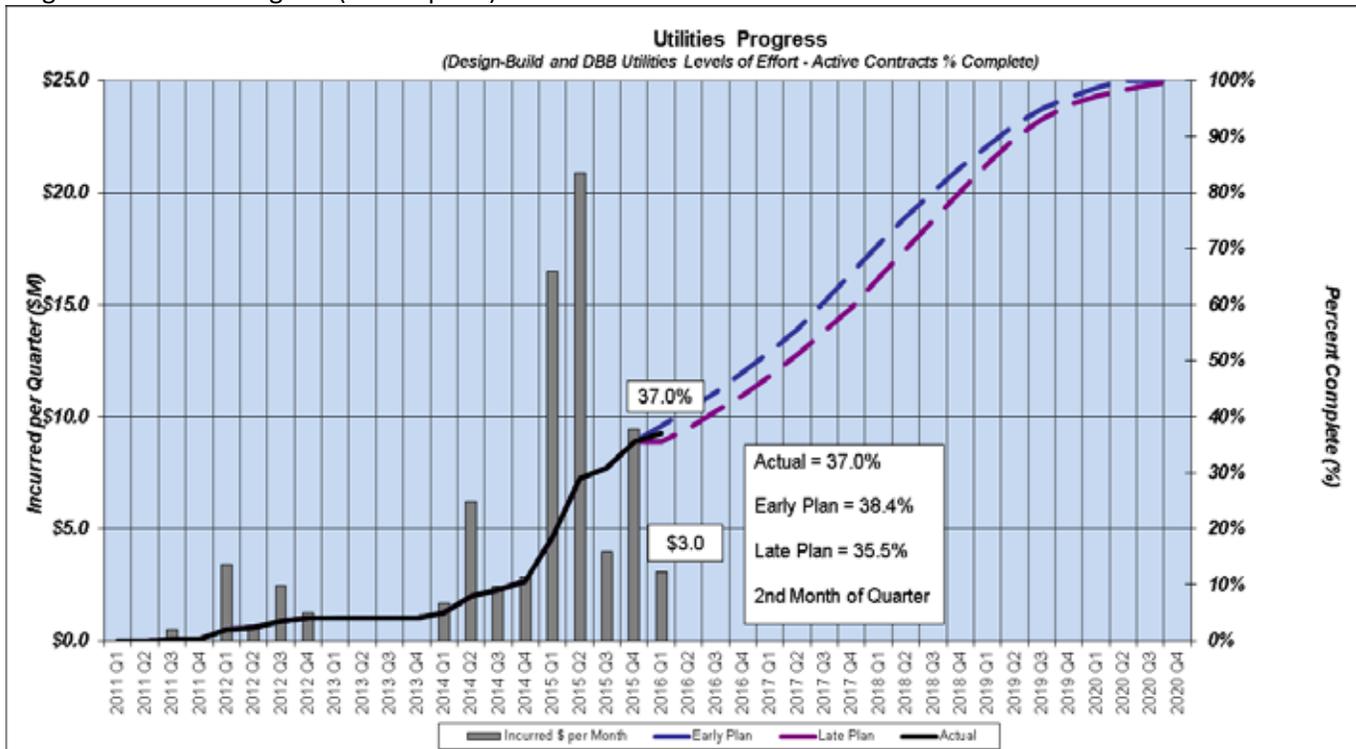
Overall construction progress is based on the weighted average progress of the individual DBB and E/E MIM construction contracts and the DB-DBOM construction levels of effort, not including consultant construction engineering and inspection (CE&I) services.

Figure 3. Design Progress (% Complete)



Overall design progress is based on the weighted average progress of the individual FD contracts and the design levels of effort of the DB and DBOM construction contracts, not including City or non-design consultant labor.
 Note: Design responsibility will be transferred to DB, once DB packages are awarded.

Figure 4. Utilities Progress (% Complete)



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

2.2 Project Budget (data as of Feb. 26, 2016)

- FFGA Project Budget = **\$5,121.7M**
 - Current Project Budget - \$4,473.5M
 - Current Project Contingency - \$475.1M
 - Project Finance Charges - \$173.1M

- Total Incurred Cost = **\$1,956M** (43.7% of current project budget)
 - February 2016 Incurred Cost = \$35.3M

*Total Incurred Cost = \$1,956M
(previous report = \$1,920.8M)*

2.3 Project Contingency (data as of Feb. 26, 2016)

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

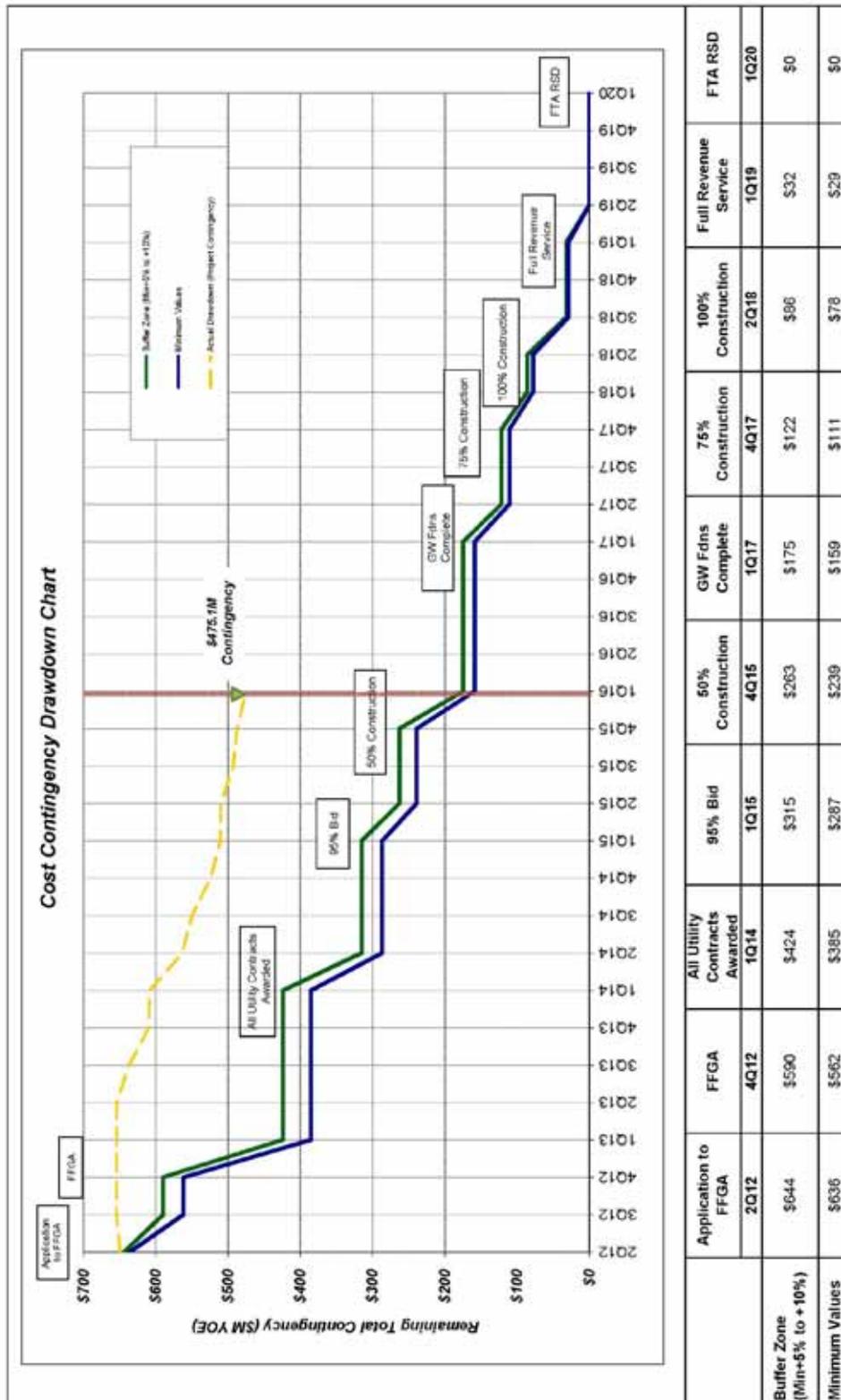
- Current Project Contingency Balance = **\$475.1M**
 - Contingency drawdown to date – \$168.5M (26.2% of baseline project contingency budget)
 - \$12.3M contingency drawdown during February 2016. Please see Appendix B for more details.

*Current Contingency Balance = \$475.1M
(previous report = \$487.4M)*

Figure 5. Project Contingency Budget

Project Contingency Budget		
Contingency	SCC Code	Budget (\$M)
Unallocated Contingency	90.01	\$101.9
Allocated Contingency	90.02	\$540.1
Allowances	90.03	\$1.6
Baseline FFGA Project Contingency Budget	90.01 - 90.03	\$643.6
Contingency drawdown through December 2015 Report	90.01 - 90.03	(\$155.4)
Contingency drawdown January 2016 Report	90.01 - 90.03	(\$0.9)
Contingency drawdown February 2016 Report	90.01 - 90.03	\$0.1
Contingency drawdown March 2016 Report	90.01 - 90.03	(\$12.3)
Contingency drawdown to date	90.01 - 90.03	(\$168.5)
Current FFGA Project Contingency	90.01 - 90.03	\$475.1

Figure 6. Draft Cost Contingency Drawdown Chart



Data as of 2/25/16 - Feb 15 Reporting Period

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

2.4 Project Funding (data as of Feb. 26, 2016)

Figure 7. Planned vs. Received Project Funding

Planned vs. Received Project Funding				
Funding Source	Pre-FFGA Project ¹	FFGA Project Period		Total Project
	2007 - 2009 Actuals Received	Planned ² (\$YOE M)	2009 - Present Actuals Received	2007 - Present Actuals Received
	[A]		[B]	[C] = A + B
Beginning Project Cash Balance ³	0	298	298	n/a
Interest Income on Cash Balance	7	3	2	9
FTA Section 5309 New Starts Revenue ⁴	0	1,550	515	515
FTA Section 5307 Formula Funds ⁵	0	210	0	0
ARRA Funds	0	4	4	4
Net General Excise Tax (GET) Surcharge revenues FY2010-FY2022 ⁵	378	3,291	1259	1,637
Total	385	5,356	2,078	2,165

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

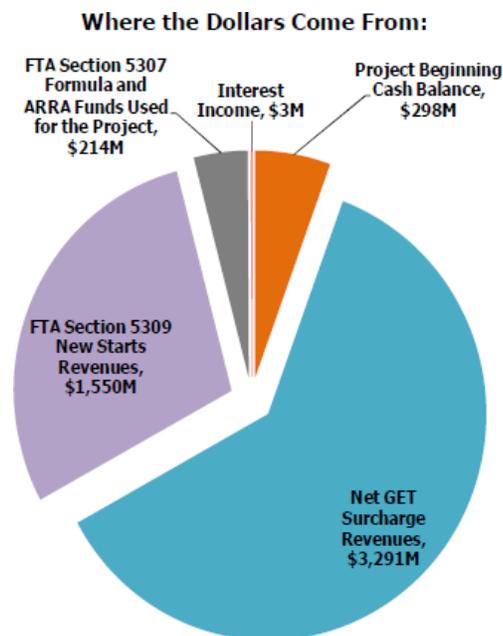
² FFGA Financial Plan, Table A-1 *Capital Plan Cash Flows*.

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 On January 27, 2016 the City Council of Honolulu passed Bill 23 which extended the GET surcharge to December 31, 2027. The planned amounts for funding will be adjusted in a future Monthly Progress Report to reflect the extension of the GET surcharge.

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



Source: FFGA Financial Plan, p. 2-1

- General Excise Tax (GET) Surcharge (data as of Feb. 26, 2016)
 - \$1,259M = amount received since the Project’s entry into FTA’s Preliminary Engineering phase of project development.
 - \$1,299M = Projected Net GET Surcharge Revenue for FYs 2010-3Q 2016, as stated in FFGA Financial Plan (Table A-1 *Capital Plan Cash Flows*)
 - GET receipts are currently running 3% short of Projections to date, or \$40M behind.
 - \$0 = GET surcharge received in February 2016.

Total Cash Received Since PE = \$2,078M
(previous report = \$2,066M)

GET Received Since PE = \$1,259M
(previous report = \$1,259M)

GET Received Since 2007 = \$1,637M
(previous report = \$1,637M)

- Full Funding Grant Agreement (FFGA)
 - \$12.2M = New Starts drawdown processed and received in February 2016.
- The §5307 funds for the Project, per the Financial Plan, are \$210M.
- HART presented the status of the program budget and schedule to the Board of Directors at the October and November monthly meetings. The financial plan is currently being updated.

Figure 9. New Starts Drawdown by Federal Fiscal Year (data date as of Feb. 29 2016)

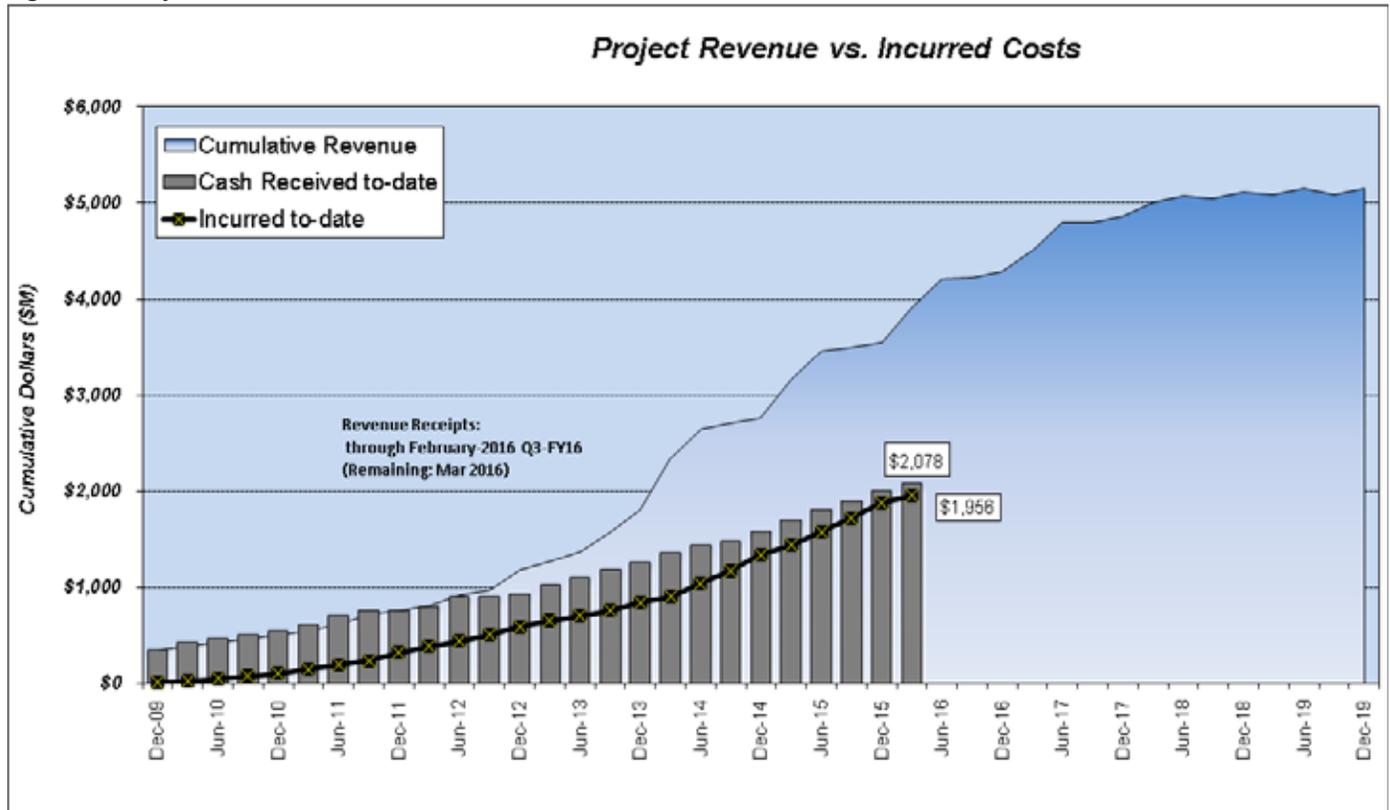
New Starts Grant Information by Federal Fiscal Year (Amounts in italics are pending)				
Federal Fiscal Year Allocation	FTA Obligated Amounts	Actual Drawdown Amounts to Date	Available Balance	FFGA Base Case Cash flow
2008	\$15,190,000	\$15,190,000	\$0	
2009	\$19,800,000	\$19,800,000	\$0	
2010	\$30,000,000	\$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	\$195,024,291	\$41,253,067	\$258,280,277
2014	\$250,000,000	\$0	\$250,000,000	\$441,719,724
<i>2015 (pending award of grant)</i>	<i>\$250,000,000</i>	<i>\$0</i>	<i>\$250,000,000</i>	<i>\$250,000,000</i>
<i>2016 (pending appropriation and award of grant)</i>	<i>\$250,000,000</i>	<i>\$0</i>	<i>\$250,000,000</i>	<i>\$250,000,000</i>
<i>2017 (pending appropriation and award of grant)</i>	<i>\$243,732,642</i>	<i>\$0</i>	<i>\$243,732,642</i>	<i>\$230,010,000</i>
Total	\$1,550,000,000	\$515,014,291	\$1,034,985,709	\$1,550,000,000

2.5 Project Revenue and Costs

(data as of Feb. 26, 2016)

Ending Cash Balance 2/29/16 = \$192.3M
(previous report = \$215.0M)

Figure 10. Project Revenue versus Incurred Costs



Planned Funding levels as per the June 2012 FFGA Finance Plan
Data date for Revenue & Incurred Cost = Feb. 26, 2016

Figure 11. Cash Balance Summary

FEBRUARY 2016 CASH BALANCE SUMMARY		
	FEBRUARY	FY16 YTD Cumulative
Beginning Cash Balance 02/01/16	215,029,818	293,010,823
Expenditures:		
Operating Expenditures	(1,065,334)	(10,260,458)
Capital Expenditures	(33,855,890)	(362,758,562)
Expenditures Total:	(34,921,225)	(373,019,020)
Receipts:		
GET Surcharge	0	168,374,947
FTA Drawdown	12,169,480	103,507,660
Interest	21,903	150,636
Other (rental, refunds, copy fees, etc.)	35,314	310,245
Receipts Total:	12,226,697	272,343,487
Ending Cash Balance 02/29/16	192,335,290	192,335,290

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

3 SCHEDULE

(data as of Feb. 26, 2016)

OVERVIEW

- HART presented the status of the program budget and schedule to the Board of Directors at the October and November monthly meetings. Forecasts indicated an increase to project costs and a completion in 2021. However, based on the uncertainty related to the GET extension and availability of funds, the City Center Guideway and Stations project's request for proposal was postponed until early February 2016. Due to this action, along with the transfer of scope from the Dillingham Blvd. Utilities Contract (due to cancellation) and new scope mandated by the 138 kV circuits undergrounding going into the CCGS contract, a direct effect on the RSD forecast is expected with a new forecast in mid-to-late 2022. HART will attempt to mitigate this delay through future mitigation measures taken with the CCGS contractor and/or the Core Systems Contractor.
- The City Council and the Mayor of Honolulu have agreed to extend the GET for five more years. The Master Project Schedule Summary reflects the new contract packaging plan forecasts.
- The Master Program Summary Schedule reflects currently approved schedule end dates for contracts that have been awarded, and planned dates for future contracts. Contractor's forecasts were added to the chart this month. The schedules in the Contract Status section (Section 4) will continue reflecting current contractor forecast end dates for contracts that have been awarded as well. Ramp H2R2 (DBB-385), WOSG (DBB-171) and FHSG (DBB-271) contractor schedules have been added to the MPSS.
- HART continues to closely monitor, review and manage all active construction packages. Previously reported delays continue to be addressed by the project teams. See contract pages for further details.

KEY ISSUES

- WOFH construction progress is behind the approved schedule for the LCC station area civil and structural work by approximately 6 months.
- KHG guideway construction progress is behind the approved schedule by approximately twelve months.
- Right-of-way acquisition, third-party interface and utility relocations continue to be areas of concern for program completion.
- WOSG and FHSG stations' construction has not yet begun due to various delays. HART is assessing the causes of said delays to allow construction to commence.

4 CONTRACT STATUS

Contracts in Procurement (For a list of awarded contracts, please see Appendix D)

OVERVIEW

- **Awarded Contracts:**
 - On March 18, 2016, HART awarded the Fare Systems Design-Build-Operate-Maintain Contract to INIT Innovations in Transportation, Inc.

- **Active Procurements:**
 - Art-in-Transit: HART is in negotiations or will commence negotiations with the highest-ranked artists for each of the stations. HART has begun award of the Art-in-Transit contracts.
 - Airport Guideway and Stations Design-Build RFP: HART extended the deadline for the priority listed offerors to submit their proposals from March 22, 2016 to April 5, 2016.
 - City Center Guideway and Stations (CCGS) Design-Build RFP: RFP Part 2 was issued on Feb. 2, 2016.
 - On-Call Construction Contractor Contract "III" RFP: The RFP was issued on Feb. 23, 2016. Proposals were received on March 31, 2016.
 - Complex Real Property Negotiations and Litigation Support RFP: The RFP was issued on Feb. 23, 2016. Proposals are due on April 4, 2016.
 - Outside Counsel for Land Court Petition Services RFP: The RFP was issued on March 4, 2016. Proposals are due on April 15, 2016.
 - Real Estate Contractor Contract "II" RFP: The RFP was issued on March 4, 2016. Proposals are due on April 15, 2016.
 - On Call Appraisers Contract RFP: The RFP was issued on March 18, 2016. Proposals are due on April 29, 2016.

- **Upcoming Procurements:**
 - Procurements for UH West O’ahu Temporary Park and Ride and UH West O’ahu Campus Road “B” Design-Bid-Build Contract, and Pearl Highlands Garage, Transit Center and Ramp H2R1 Design-Build Contract, are under evaluation.

- **Current plans for the remaining contracts are as follows:**

Remaining Contracts						
Contract Code	Contract Name	Advertise Date	Bids Due/Part 1 Proposals Due	RFP Part 2 Proposals Due	Issue NTP	Projected Contract Substantial Completion Date
AP00	Art-in-Transit	May 5 '13	-	-	TBD	TBD
DB-450	Airport Guideway and Stations	Apr 07 '15	Aug 11 '15	Apr 05 '16	TBD	NTP + 53 months
DB-550	City Center Guideway and Stations	Aug 04 '15	Nov 18 '15	Jul 14 '16	TBD	NTP + 50 months
MM-947	On-Call Construction Contract "III"	Feb 23 '16	Mar 31 '16	-	TBD	NTP + 84 months
MM-981	Complex Real Property Negotiations and Litigation Support Contract	Feb 23 '16	Apr 04 '16	-	TBD	NTP + 24 months + 2 year option
MM-936	Real Estate Contractor Contract "II"	Mar 04 '16	Apr 15 '16	-	TBD	NTP + 48 months
MM-983	Outside Counsel for Land Court Petition Services	Mar 04 '16	Apr 15 '16	-	TBD	NTP + 36 months
MM-982	On Call Appraisers	Mar 18 '16	Apr 29 '16	-	TBD	NTP + 48 months
DBB-600	East Kapolei and UH West O'ahu Park and Ride Lots	Nov 14 '16	Feb 15 '17	-	Apr 03 '17	Mar 01 '19

4.1 System-wide

A. Core Systems Contract (CSC)

Contract No.: DBOM-920
DBOM Contractor: Ansaldo Honolulu Joint Venture (AHJV)
Contract Start Date: January 2012
Contract Substantial Completion: March 2019
Projected Substantial Completion: December 2019



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

Project Overview: The CSC contractor (AHJV) is continuing to progress through Final Design. Qualification and design verification tests are ongoing. Construction interface with the MSF contractor (KKJV) is ongoing. AHJV continues to install and test equipment in the Yard Control Bungalow (YCB). AHJV continues to install fire detection equipment at the MSF Operations and Servicing Building (OSB) and the Maintenance of Way (MOW) building. AHJV continues to pull Communications cables in the MSF OSB and MOW buildings. Site Acceptance Tests are being conducted at the MSF. The first 4-car passenger train has arrived in Honolulu. Installation of cables/wires, exterior door thresholds, interior fixtures, roof-top equipment and other activities are ongoing for the second 4-car passenger train at the Final Assembly facility.

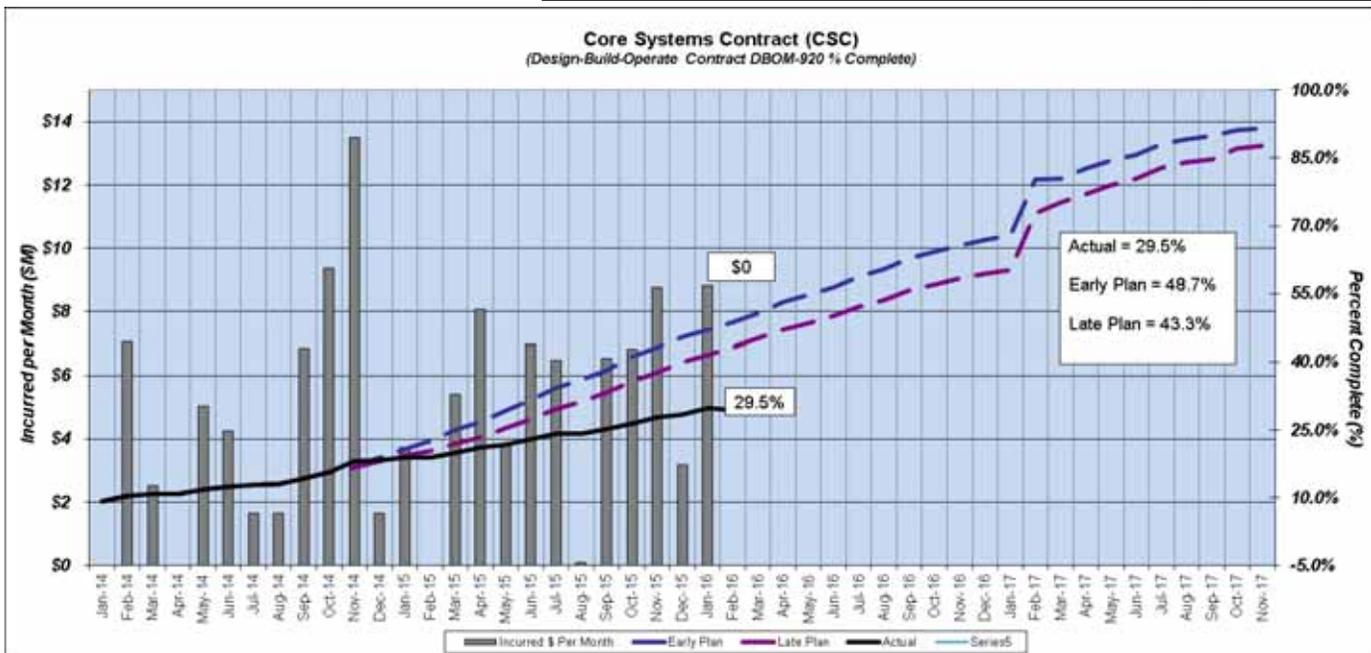
COST INFORMATION:

<u>Original Contract:</u>	<u>\$573,782,793</u>	<u>Incurred-to-Date:</u>	<u>\$176,833,628</u>
<u>Current Contract Value¹:</u>	<u>\$599,843,687</u>	<u>Incurred in February:</u>	<u>(\$939,154)</u>

¹Current Contract Value = Original contract value (excluding \$823.6M O&M budget) + executed Change Orders

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

February Change Orders		
Change No.	Description	Amount (\$)
0022	Obstruction Detection	\$330,000
0023	Removal of Station Fire Sprinklers	\$72,500
0024	TC Design for Future Platform TWF	\$355,000
0025	UPS Transformer Winding Temperature	(\$15,000)
Cumulative to Date		\$26,060,894



The progress chart reflects early program expectations. When the overall schedule is rebaselined and Construction Access Milestone dates are revised, the cost curve will be revised.

SCHEDULE:



	Final Design Submitted Documents	Final Design Approved Documents	Target Completion Date
Passenger Vehicles	89.8%	67%	2 nd Q 2016
Communications	45%	37.3%	4 th Q 2016
ATC/SCADA	99%	86%	2 nd Q 2016
TES	100%	100%	Completed
Fire Detection	58.3%	55.6%	2 nd Q 2016
PSG, UPS, MOW, YCB	62.7%	50.7%	2 nd Q 2016

CRITICAL PATH SUMMARY:

- Continue to oversee construction activities with the MSF contractor, the CSC installation subcontractor and the On-Call contractor.
- Passenger Vehicle final assembly continues on the second train.

WORK PROGRESS:

Activities this Month:

Earned Value: 29.5% [(Total Achieved thru February 2016 (\$173.36 million) + Projected March 2016 Period (\$3.52 million))/Total Contract Including Executed Change Orders (\$599.1 million)].

Design:

- ATC/SCADA – Documents Received: 9, Documents Returned: 9.
- Communications – Documents Received: 2, Documents Returned: 19.
- Traction Power – Documents Received: 6, Documents Returned: 5.
- Fire Detection – Documents Received: 0, Documents Returned: 3.
- Platform Screen Gates – Documents Received: 3, Returned: 1.
- Passenger Vehicles – Documents Received: 19, Documents Returned: 27.

Manufacturing:

- Performed manufacturing oversight work at Hitachi Rail factories. (For additional details, please see the Vehicle Car Shell Progress Tracker in Appendix E.)
- Performed final assembly oversight work at Pittsburg, CA including oversight of the shipment of the first train to Honolulu. Equipment installation work on the second train is ongoing.

Look Ahead:

Design:

- Continue Final Design of all subsystems.

Manufacturing:

- Passenger Vehicle Manufacturing – Continue car shell fabrication in Italy.
- Continue final assembly activities on Train 2.
- Conduct Car Shell 9 structural tests.
- Continue manufacturing of automated train control, traction power, and other systems equipment.

MSF:

- Train 1 assembly and coupling on-site.
- Continue installation of Train Control and COMMs cables in the track areas.
- Test Fire Detection Alarm System (FDAS) devices in the MSF OSB and MOW.
- Completion of OSB PA system conduit installation.
- Energization of the MSF Yard TPSS.
- Installation of the Fiber Optic Backbone in the MSF Yard.

Activities this Month (continued):

- Performed Truck Frame and Bolster Production oversight at Hitachi Rail Italy (HRI) supplier, DRS, in West Plains, Missouri.

MSF:

- Train 1 delivery to MSF Track M7.
- MOW vehicles (MPV, MPV trailer and Car Mover) dynamic site acceptance test are in-progress.
- Yard Control Bungalow – Installation of Train Control Racks.
- Construction of foundations for the Closed Circuit Television Cameras poles at the MSF perimeter is 75% complete.
- Foundation work for 16 Communication Interface Cabinets (CIC) in the yard is ongoing. 15 are complete and 1 is ongoing.
- Continue installation of Train Control devices in Phase 2.
- Communications Cable installation in the MOW 2nd floor is 35% complete.
- Installation of fire detection devices in the MOW and OSB are at 70% complete.
- Completed energization of the YCB.
- Completed testing of YCB UPS.

Look Ahead (continued):

- Conduct Type and Routine test on first train.
- Installation of Telecom cabling in the MOW.
- Installation of Train Control devices for phase 3 and phase 4.

KEY ISSUES:

- Revisions to the station and guideway Construction Access Milestone (CAM) dates require evaluation of interfacing work schedules.
- Vehicle Production and Testing is an ongoing monitored risk. HART continues to work closely with AHJV and Hitachi Rail to ensure good progress at Carshell Assembly and Final Assembly. Vehicle Testing has still not started and will require close monitoring and oversight.
- Communications System design completion is delayed. HART continues to work closely with AHJV to identify key issues and to implement the corrective action plan to bring design and qualification testing to closure.

QUALITY MANAGEMENT:

- HART QA completed review and approved the revised Quality Assurance Plans (QAP) including Implementing Procedures (IP) of AHJV, ASTS (Hitachi), Hitachi Rail Italy and Hitachi Rail USA.

Testing		
Subsystem	Test Completed	Date Completed
Vehicles	MOW vehicle Site Acceptance test	Feb. 25, 2016
UPS	YCB UPS Testing	March 18, 2016

Passenger Vehicle – Oversight		
Facility	Activity	Date Completed
Pittsburg, CA	On-site inspector in place to oversee and report on Hitachi Rail Final Assembly activities.	Ongoing

CSC NCR Log			
	TOTAL	CLOSED	OPEN
AHJV & Subs	27	23	4
Hitachi Rail	364	339	25
TOTAL	391	362	29

PROJECT PICTURES:



Bolting contact rail connection plates at the MSF Yard.



E-001 shrink-wrapped and loaded onto shipping trailer.



First two cars in transit from Hitachi Rail USA – Final Assembly Facility in Pittsburg, CA.

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

Contract No.: MI-930

Contractor: Schindler Elevator Corporation

Contract Start Date: August 2013

Contract Substantial Completion: May 2018

Projected Substantial Completion: The May 2018 completion date will change to a later date predicated on the award of the DB contracts for the east portion of the guideway.



Project Description: Furnish / install / test / maintain all elevator and escalator equipment located at the 21 stations.

Project Overview: The release to begin manufacturing of the FHSG, WOSG, and KHSG equipment will be scheduled once an approved construction schedule with the respective contractors has been completed.

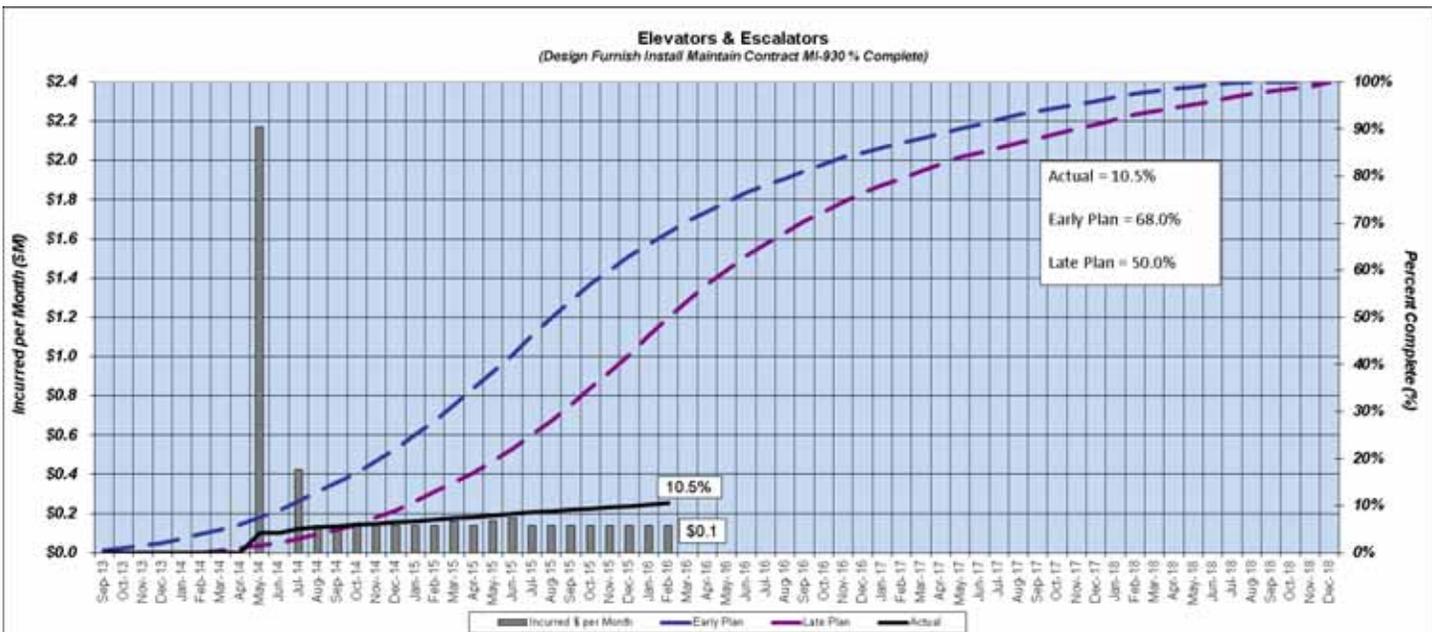
COST INFORMATION:

Original Contract:	\$50,982,714	Incurred-to-Date:	\$5,348,105
Current Contract Value ¹ :	\$50,982,714	Incurred in February:	\$140,824

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

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

February Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$0



The progress chart reflects early program expectations. When the overall schedule is rebaselined and Construction Access Milestone dates are revised, the cost curve will be revised.

SCHEDULE:

- Elevators' schedule for the first 9 stations will be published once FHSG, WOSG and KHSG baseline schedules are accepted. Elevators' schedule for the remaining 12 stations will be published when their contracts are awarded.
-

CRITICAL PATH ISSUES:

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

WORK PROGRESS:Activities this Month:

Earned Value: 10.5%; Planned Value: 50%

- Final Design is approximately 40% complete, as 9 of the 21 stations are ready to be released for manufacturing once the contractor's schedules are approved.
- All draft equipment drawings for the 21 stations have been submitted for review and have been accepted.
- Design is complete on the three FHSG stations, three WOSG stations, and the three KHSG stations.

Look Ahead:

- Release for manufacturing for the Farrington Highway Station Group and the West O'ahu Station Group elevators and escalators is expected to occur in May 2016.
-

KEY ISSUES:

- The release to allow manufacturing for FHSG and WOSG is expected to occur in May 2016. The release of the equipment required for KHSG will be dependent on the NTP of the KHSG contract. Final completion of the equipment requirements for the four stations included in the DB contract for Airport Guideway and Stations is on hold pending contract award. The eight stations included in the City Center Guideway and Stations contract is also on hold pending contract award of the DB contract for this work. Both of the DB solicitation packages contain the size and configuration of the elevators and escalators purchased for these twelve remaining stations.

C. Fare Collection System

Contract No.: TBD

Contractor: TBD

Contract Start Date: TBD

Contract Substantial Completion: TBD

Projected Substantial Completion: TBD

Project Description: The fare system is a joint HART and City and County of Honolulu (DTS, DIT, BFS) project that will consist of a multi-model, closed loop, account based smart card system. The Fare System Vendor will be responsible for design, manufacture, testing, 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 the transaction processing, fare equipment monitoring, customer service systems, as well as a Data Warehouse. TheBus equipment will consist of stand-alone smart card readers on board.

Project Overview: The Fare Systems RFP was released on Aug. 11, 2015 and an award was made on March 18, 2016 to INIT. NTP is anticipated in April 2016, provided there is not a protest. An MOU for capital cost sharing with the City was executed on July 11, 2015, and an MOU for Operations and Maintenance was executed on March 10, 2016. A Fare Systems technical consultant contract was awarded on Sept. 24, 2015, to CH2M Hill to support design review, testing and installation. The selected DBOM contractor is anticipated to start conceptual design 45 days after NTP.

COST INFORMATION: TBD

SCHEDULE:

- RFP released Aug. 11, 2015. Award made to INIT on March 18, 2016.
- System design anticipated to start in spring 2016.
- Manufacture in third quarter 2017.
- System testing for the back office functions and TheBus anticipated in fourth quarter 2017.
- Anticipated system pilot launch on TheBus in first quarter 2018, with full roll out on TheBus (including all central systems) in second quarter 2018.
- Interim roll out for rail in late 2018.
- Full roll out on rail in 2021.

CRITICAL PATH ISSUES:

- None at this time, provided there is no procurement protest.

WORK PROGRESS:

Activities this Month:

- Evaluated BAFO from three PLOs and awarded contract to INIT.
- Executed MOU for Operations and Maintenance cost sharing.

Look Ahead:

- Kick off fare modeling work in cooperation with OahuMPO, including completing grant sub-agreement.
- Issue NTP to INIT to start Fare System Design.
- Review INIT draft PMP, due 30 days from NTP.

KEY ISSUES:

- Confirming all contract terms and issuing NTP without protest.

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

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

Contract No.: DB-120

DB Contractor: Kiewit Infrastructure West Company (KIWC)

Contract Start Date: December 2009

Contract Substantial Completion: July 2016

Projected Substantial Completion: January 2017



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

Project Overview: In March, progress continues for span stressing, track installation and road restoration work. Segment erection from Waipahu Transit Center Station through East Kapolei Station has been completed. Heading #1 is erecting segments from Waipahu Transit Center Station, heading east. Heading #2 was demobilized and is moving to the KHG project. The project’s key quality issues continue to focus on segment repairs, span shear keys and column pedestal repairs.

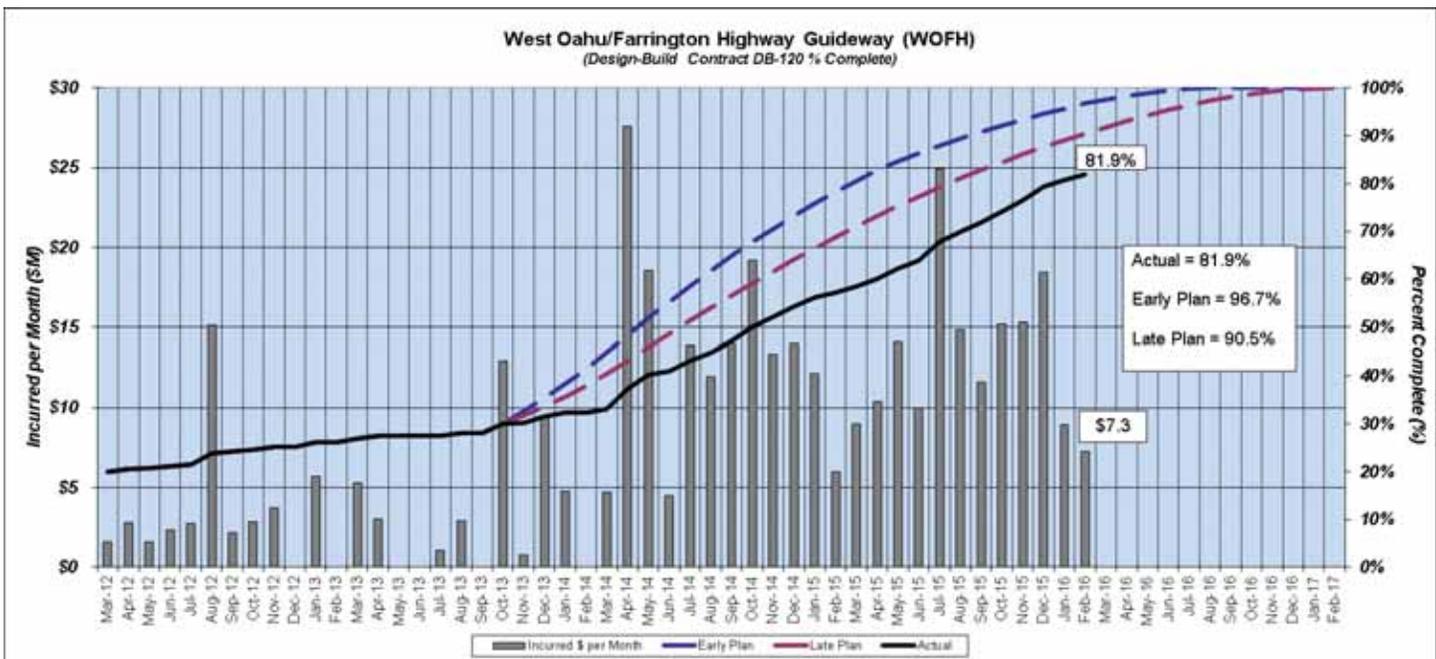
COST INFORMATION:

Original Contract:	\$482,924,000	Incurred-to-Date:	\$528,233,522
Current Contract Value ¹ :	\$644,688,593	Incurred in February:	\$7,282,685

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

DBE Participation	
Actual DBE Participation:	\$6,812,966
DBE % Attained:	1.41%

February Change Orders		
Change No.	Description	Amount (\$)
CCO0076	Add Demo of Existing Structures	\$245,000
CCO0077	Pre-Cast Yard Extended Lease	\$518,835
Cumulative to Date		\$161,764,593



In March, HART processed Pay Application #76 for the December 2015 billing, Pay Application #77 for the January 2016 billing, and Pay Application #78 for the February 2016 billing. KIWC submitted Pay Application Escalation Invoices #79, 80, and 81 to HART for review. All three Escalation Invoices are currently being processed.

SCHEDULE:

KIWC has notified HART that a 6 month time extension beyond substantial completion is needed due to the changes within the LCC work area. HART is reviewing the request and will relay its findings back to KIWC. KIWC submitted a revised baseline schedule via contract Request for Change (RFC) in August 2015. HART is currently reviewing the contract Time Related Overhead request for merit while working with KIWC to mitigate any further delays to the contract surrounding the LCC construction work activities.



CRITICAL PATH ISSUES:

- On Dec. 10, 2015, KIWC formally notified HART of a unilateral work stoppage of all LCC construction work activities currently being performed by KIWC until the LCC Parking Lot, Portables and Access Structure Construction Change Orders are finalized. In March 2016, KIWC resumed LCC construction work activities and their most recent progress schedule shows the project to be completed six months beyond contractual substantial completion.
- Work at the Balanced Cantilever System (BCS) area has slipped from the October 2014 schedule and is near critical path with minimal total float days available. HART continues to monitor the BCS work closely.

WORK PROGRESS:

WOFH Construction Status as of 3/9/16										
Utility Status	Qty to Date	Final Qty	% Complete	Structure Element	*** Total to Date	Planned to Date		Total Qty	% Complete	
						Accepted Schedule*	Revised Schedule**			
Water Line	9,028	9,348	97%	Shafts	309	309	309	309	100%	
Sewer Line	550	570	96%	Columns	283	283	283	283	100%	
Fuel Line	340	340	100%	Segment Casting	3,209	3,209	3,209	3,209	100%	
Gas line	1,591	1,591	100%	Spans Stressed	268	265	257	274	98%	
Drainage Line	4,191	5,166	81%	Trackwork	134	170	120	278	48%	
Elec/Telecom	16,889	21,374	79%	Third Rail	0	95	100	274	0%	
Street Lights	6,335	8,357	76%	Mill & Overlay	3,210	N/A	N/A	32,903	10%	
Traffic Sig/ITS Duct bank	8,552	10,802	79%	* Accepted Schedule was submitted in 2013.						
System Sites	1,683	7,046	24%	** The planned values are based on KIWC's pending July schedule revision dated August 24, 2015. Revised schedule reflects a 6-month delay in completion.						
ITS Systems Devices	821	4,121	20%	*** Total quantity for the construction items has been revised to reflect the latest Issued for Construction number of shafts, columns, segments and spans.						

Activities this Month:

Earned Value: 83.6% [(Total Achieved to February 2016 (\$516.3million) + Projected March 2016 Period (\$22.1 million))/Total Contract Including Executed Change Orders (\$644 million)]. Planned Value: 91.9%

Look Ahead:

Design Progress

- KIWC continues to work toward completing final design. Additional submittals are expected to be issued for construction, pending coordination with other parties and contracts.

Activities this Month (continued):**Shaft/Column**

- Completed.

Guideway Segment Erection

- Eastbound Heading #1 segments were erected from Span 208 through Span 218. Westbound Heading #2 segments were erected from Span 220 through 219, and was demobilized at Span 219.

Utility Relocation

- KIWC continues to relocate third party utilities. All shaft conflict relocation and guideway conflicts have been completed; only station conflicts and traffic signals are outstanding.

Balanced Cantilever Structure

- Cast one segment upstream at Pier 256.

Track Construction

- KIWC is installing track plates as well as continuing to lay track between Ho'opili and West Loch Station, and constructing concrete plinths for double crossovers at station locations. Anchors and expansion joints for contact rail are being completed by Ho'opili Station.

KIWC/Third-Party Coordination

- HECO and KIWC continued to resolve station utility conflicts relocations.

Civil Structures

- KIWC continued the installation of reinforcing for walkways and retaining wall footings. Mill and overlay operations commenced on Farrington Highway heading towards Leoku intersection.

Look Ahead (continued):**Shaft/Column**

- KIWC will pour and strip the remaining hammerheads at the station columns.

Guideway Segment Erection

- Segment span erection on Heading #1 is complete and the truss will be demobilized and moved to KHG.

Utility Relocation

- Work to relocate the remaining traffic signals along Farrington Highway.

Balanced Cantilever Structure

- Segments will be cast upstream from Pier 256. The Pier 255 and 256 closure pour segment will complete the BCS segments on the project.

Track Construction

- Align and final set of the rail will be performed by Ho'opili Station. Welding operations will continue at the BCS area. Concrete plinth construction to be installed east of East Kapolei Station. Contact rail operations will continue by Ho'opili Station.

KIWC/Third-Party Coordination

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

Civil Structures

- Retaining walls will be poured by System Site #1 (East Kapolei) and System Site #8 (Waipahu High School). KIWC will continue with road restoration and mill and overlay work along Farrington Highway.

KEY ISSUES:

- **Leeward Community College (LCC) Portables and Parking Lot Change Order** – KIWC has resumed construction work activities at the LCC Station area. The LCC Change Order was presented to the HART Board in February and is being processed.
- **Construction Production/Baseline Schedule** – A re-sequenced October 2014 baseline schedule was submitted to HART in December 2014, reflecting extended construction durations. KIWC submitted an updated schedule in August 2015 via an RFC containing significant changes in durations, logic, as well as activity modifications, which is in review with HART. Neither the 2014 nor the 2015 schedules are consistent with the originally submitted and accepted 2013 schedule, and contain unilateral and unacceptable logic and duration changes. No schedule updates have been accepted to date.
- **Night Noise Variance** – HART was notified by the Department of Health (DOH) that backhoes and excavators will no longer be allowed for nighttime work due to the contractor's improper use of equipment and receipt of complaints. HART has requested reconsideration on behalf of the contractor and the DOH response is forthcoming.
- **Intersection Closure for Span by Span** – KIWC has successfully completed span erection and post tensioning at multiple intersections. Temporary intersection closures were implemented at the Mokuola intersection through March, to support span operations. In addition, as a requirement for lane closure permits issuance, HART has requested that KIWC perform traffic analysis at intersections to determine the impact of full lane closures on the driving public and nearby businesses.
- **Design Completion Schedule** – As of mid-March, 132 of 134 design submittals have been accepted. The remaining design packages are not impacting construction.
- **Closeout and Coordination** – As the project approaches substantial completion, KIWC has continued coordination with station contractors and HART on project closeout documentation requirements including QA-QC final acceptance checklists. As-built and record drawings are currently being reviewed. KIWC and HART are also in discussions about partially accepting procedures to allow early access to follow-on contractors.
- **HDOT Roadway Restoration** – As the project nears completion, KIWC has begun road restoration work on the project including curb and gutter work, roadway subbase installation, and mill and overlay. KIWC, HART and HDOT bi-weekly construction coordination meetings continue to occur to resolve ongoing issues and ensure that the final product for the roadway restoration is acceptable to HDOT. Paving of Farrington Highway to Leoku Street continues.

- **HDOT Traffic Signal Improvements** – During the design coordination with KIWC for the traffic signal design packages, HDOT requested traffic signal upgrades, which are being processed through a change order. Delay in the completion of this change order and subsequent construction of the work may have an impact on the overall schedule of the project. The change order is being processed by HART.

QUALITY MANAGEMENT:

- KIWC continues to follow their established quality processes through quality monitoring and audits.
- **Pre-Cast Segment and Span Erection Progress/Quality** – 149 of the total 521 NCRs (28.6%) have been related to segmental casting issues like damaged shear keys, concrete voids, and spalls. Proper correction procedures have already been developed and are being implemented, and these issues are currently being resolved.
- **Closing Out NCRs** – Both KIWC and HART have been working together to promptly correct, validate, and close out NCR’s during this period. A total of 7 NCRs have been closed since last month.
- **Track Construction Operations** – HART and KIWC continue to have discussions on Direct Fixation Shim Tolerances. KIWC is working to resolve outstanding technical issues on the shim tolerances.
- **Finishing Work on Construction Items** – KIWC finishing crews have been working together with their quality team at progressing the finishing work on erected segment spans, resolving all outstanding issues, and preparing the final set spans for close out.
- **Span 258 – NCR 509** – A few strands of the 12-Strands Tendon T1L installed on Span 258 failed after post-tensioning. KIWC is preparing a Remediation Plan to replace the failed Tendon T1L. HART and KIWC will perform a postmortem of the Tendon T1L after its removal to determine the root cause of the failure and the corrective action to prevent recurrence.

WOFH NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
521	487	34

PROJECT PICTURES:



Pearl Highlands Station platform false work being installed, WA 7.



Placing fasteners for plinthless rail, WA 2.



Mill and overlay by Column 114, WA 2.



Span by span eastbound and westbound approaching each other, WA 3.

B. West O’ahu Station Group (WOSG)

Contract No.: DBB-171

Contractor: Nan, Inc.

Contract Start Date: October 2015

Contract Substantial Completion: March 2018

Projected Substantial Completion: TBD



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 (EK), UH West O’ahu (UHWO) and Ho’opili Stations. In addition to the transit stations, operational ancillary buildings, traction power substation and adjacent areas are included in this project.

Project Overview: The contractor was issued Notice-to-Proceed (NTP) on Oct. 13, 2015.

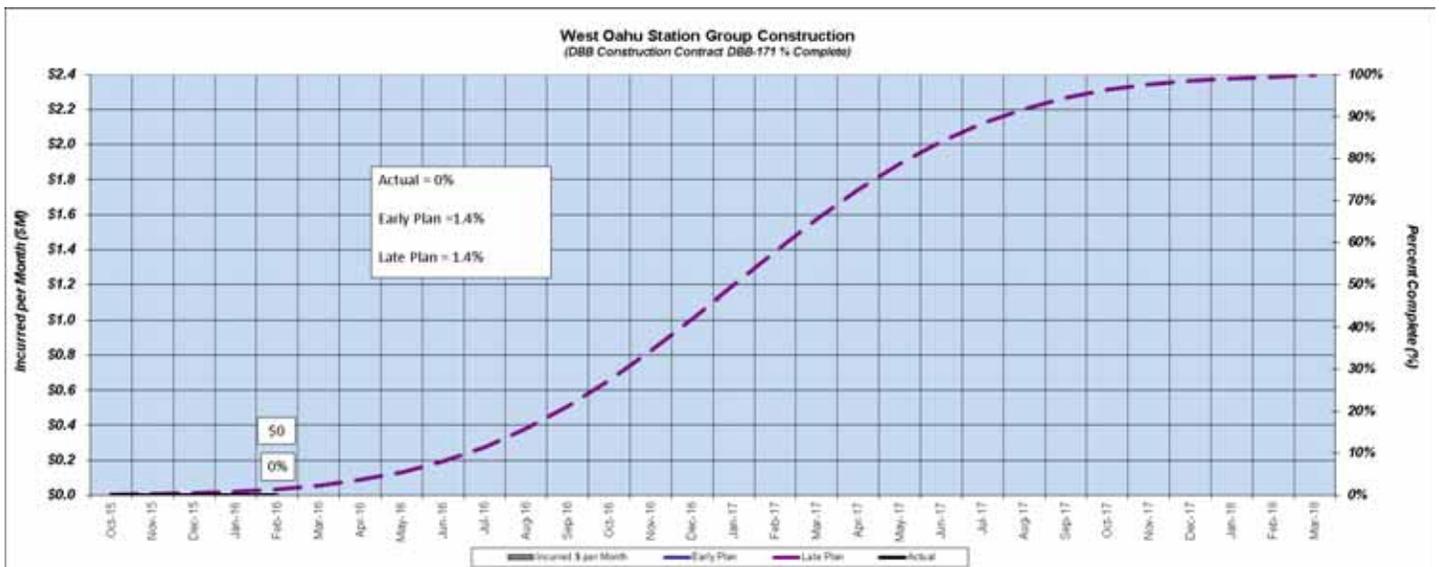
COST INFORMATION:

Original Contract:	\$56,088,470	Incurred-to-Date:	\$0
Current Contract Value ¹ :	\$56,088,470	Incurred in February:	\$0

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

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

February Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
None	---	---
Cumulative to Date		\$0



SCHEDULE:



CRITICAL PATH ISSUES:

- Baseline Schedule approval.
- Review and approval of the contractor’s Public Involvement Manager.
- Construction access from Kiewit to the Ho’opili site.
- Construction access to the platform.
- Contractor needs to comply with contractual “shared site access” provisions.

WORK PROGRESS:

Activities this Month:

Earned Value: 0%; Planned Value: 0%

- Draft Baseline Schedule revision. Review comments were provided; contractor to respond to comments and resubmit.
- The contractor has mobilized onto the UH West O’ahu Station site. They have cleared, installed fence and trailers, and prepared their lay down in the area adjacent to the station site.
- Ho’opili Right of Entry—Received Right of Entry from D.R. Horton.
- The contractor is coordinating with D.R. Horton to locate stockpile for the Ho’opili site.
- The contractor has proposed approval for a temporary waterline and construction signage for the Ho’opili site.
- The contractor has received the Issue for Construction (IFC) set of plans. The contractor has provided priority work tasks affected by the IFC set. The contract team is working on issuing a change to keep the contractor moving forward with their construction. The balance of work identified from the IFC set will be issued in a secondary change order.
- Access coordination is being pursued with the guideway contractor.
- The contractor is being directed to participate in shared access, per their contract.
- The contractor has submitted a resume for a Public Involvement Manager; Public Involvement is the lead reviewer.

Look Ahead:

- Baseline Schedule approval.
- Access coordination for the Ho’opili site.
- Mobilization at the Ho’opili site. Clearing and grubbing, fencing and installation of Best Management Practices (BMPs).

KEY ISSUES:

- Baseline Schedule.
- Construction access to Ho’opili.
- Evaluation of change work included in IFC versus Issued for Bid (IFB) plus addendum is being conducted. The most expeditious means to effectively incorporate the IFC set into the contract is being reviewed. Administrative processing time required to identify, quantify, negotiate and incorporate change formally into the contract is the greatest concern.

QUALITY MANAGEMENT:

WOSG NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
0	0	0

C. Farrington Highway Station Group (FHSG)

Contract No.: DBB-271

Contractor: Hawaiian Dredging Construction Company, Inc.

Contract Start Date: August 2015

Contract Substantial Completion: January 2018

Projected Substantial Completion: TBD



Project Description: The Farrington Highway Station Group construction contract includes services to build three (3) transit stations along Farrington Highway. The stations are West Loch (WLO), Waipahu Transit Center (WTC) and Leeward Community College (LCC) Station. In addition to the transit stations, operational ancillary buildings, kiss and ride lots, and parking lots servicing the West Loch and LCC stations and adjacent areas are included in this project.

Project Overview: The contractor was issued Notice-to-Proceed (NTP) on Aug. 17, 2015. Hawaiian Dredging Construction Company (HDCC) introduced one (1) Value Engineering (VE) concept– Augercast piles at the Waipahu Transit Station. HDCC has received HART’s feedback regarding the concepts and intends to submit a revised VE proposal to HART. HDCC is currently 80% complete with preconstruction activities at WLO and 60% complete at WTC. Acceptance of the Environmental Compliance Report is the only remaining submittal required prior to commencement of construction.

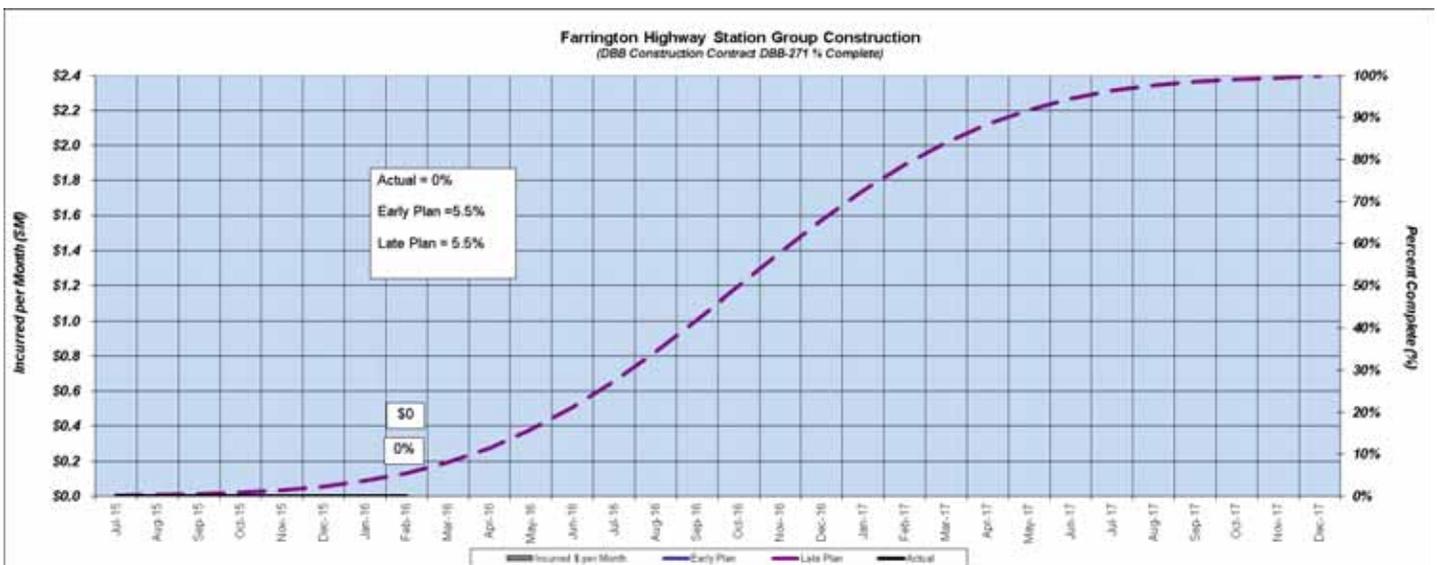
COST INFORMATION:

<u>Original Contract:</u>	<u>\$78,999,000</u>	<u>Incurred-to-Date:</u>	<u>\$0</u>
<u>Current Contract Value¹:</u>	<u>\$78,999,000</u>	<u>Incurred in February:</u>	<u>\$0</u>

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

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

February Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
None	---	---
Cumulative to Date		\$0



SCHEDULE:



CRITICAL PATH ISSUES:

- The Baseline Project Schedule (BPS) has not yet been accepted by HART. Awaiting HDCC’s resubmittal of the schedule (review cycle D) for review and approval.
- Environmental Compliance Plan (ECP) approval is pending. Approval of the ECP is required prior to start of construction activities.
- Revisions to the contract construction plans have been provided to the contractor.

WORK PROGRESS:

Activities this Month:

Earned Value: 0%; Planned Value: 0%

- Revised draft Baseline Schedule is in HDCC’s court to resubmit as review cycle D. ECP is under review by HART. Approval is contractually required prior to commencement of construction.
- HART is working with CE&I staff to quantify additional scope of work added in the IFC set of plans. The contractor has mobilized on the West Loch Makai site, in preparation for earthmoving activities.

Look Ahead:

- HART is still awaiting the Value Engineering proposals from HDCC.
- Baseline Schedule approval is pending HDCC response and resubmittal.
- Quantification of changes from the IFB set and addendum compared to the IFC set is ongoing.

KEY ISSUES:

- Quantification of change work included in IFC versus Issued for Bid (IFB) plus addendum and how those changes are incorporated into HDCC’s contract. Administrative processing time required to identify, quantify, negotiate and incorporate the changes formally into HDCC’s contract is the largest concern.
- Approval of Baseline Schedule and ECP.
- Access to the guideway will not occur as planned for West Loch Station. Access to the guideway and site for Leeward Community College Stations will also not occur as planned. HART is working to mitigate any potential delays that may result.

QUALITY MANAGEMENT:

FHSG NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
0	0	0

D. Maintenance and Storage Facility (MSF)

Contract No.: DB-200

Contractor: Kiewit/Kobayashi Joint Venture (KKJV)

Contract Start Date: July 2011

Contract Substantial Completion: May 2016

Projected Substantial Completion: May 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.



Project Overview: MSF substantial completion is May 2, 2016.

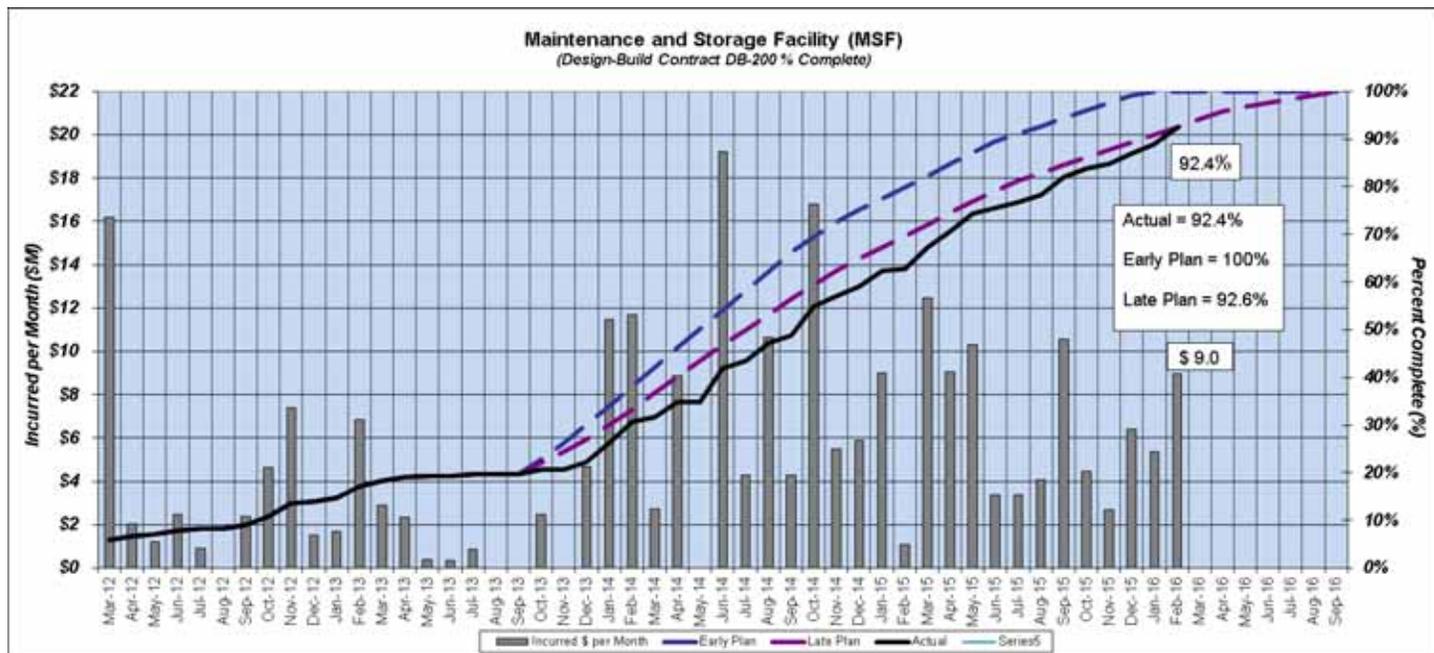
COST INFORMATION:

<u>Original Contract:</u>	<u>\$195,258,000</u>	<u>Incurred-to-Date:</u>	<u>\$253,763,288</u>
<u>Current Contract Value¹:</u>	<u>\$274,685,819</u>	<u>Incurred in February:</u>	<u>\$8,967,227</u>

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

DBE Participation	
Actual DBE Participation:	\$542,177
DBE % Attained:	0.28%

February Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$79,427,819



SCHEDULE:



CRITICAL PATH ISSUES:

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

MSF Construction Status	
91% Complete Overall as of 3/31/16	
Element	% Complete*
OSB	93%
MOW Building	96%
WTB	97%
TWF	70%
Rail	85%
Paving	100%

*Not including testing and commissioning.

WORK PROGRESS:

Activities this Month:

Earned Value: 96% [(Total Achieved to February (\$253 million) + Projected March 2016 Period (\$11.8 million))/Total Contract Including Executed Change Orders (\$275 million)]. Planned Value: 96%

Yard/Utilities

- Installation of traction power conduits is complete.
- Completed load testing of diesel generators.
- Installation of the conduit for systems, communications, train control, site electrical and exterior lighting is ongoing.
- Completed painting and stripping Driveways 'A', 'B', 'C', and 'D', and all parking areas and Basin Access driveway.
- Complete installation of sand silo.
- Complete railings and stairs for Hostler pads.

Operations and Servicing Building (OSB)

- Installation of the 2, 5 and 15-ton overhead bridge cranes is complete.
- Installation of utility stands on shop floor is complete.
- Installation of mechanical/electrical/plumbing is ongoing.
- Elevator installation continues.
- Installation of service and emergency lighting is complete.
- Installing interior and exterior building finishes is ongoing.
- Signage installation is complete.
- Completed installation of interior door hardware and glazing.
- Installing power distribution cabinets is complete.
- Continued installation of flooring.
- Continued installation of bathroom cabinets and fixtures.

Look Ahead:

Yard/Utilities

- Complete track installation.
- Complete contact rail installation and testing.
- Complete testing of running rail.
- Complete installation of exterior yard and perimeter lighting.
- Complete Signal and Control Raceway.
- Complete turnover of Phases 1 and 5 storage tracks to CSC.

OSB

- Installation of turntables and hydraulic lifts.
- Testing and commissioning of overhead bridge cranes.
- Completion of interior finishes.
- Complete bathroom cabinets and fixtures.
- Completion of main entry doorway.
- Installation of Shop Traction Power Substation.

MOW

- Completion of interior and exterior finishes, including office furniture.
- Completion of electrical, mechanical and plumbing.

Activities this Month (continued):

Maintenance of Way (MOW)

- Installation of mechanical/electrical/plumbing systems is ongoing.
- Installation of signage for the office and shop spaces is complete.
- Canopy installation is complete.
- Installation of shop equipment is complete.
- Completed installation of bathroom cabinets, partitions and fixtures.
- Completed lightning protection installation.
- Completed installation of lockers.

Wheel Truing Building (WTB)

- Completed plumbing and electrical trim out.
- Completed installation of ductwork.
- Extended power to building.
- Completed trim out of wheel truing machine.
- Completed touch up painting.

Train Wash Facility (TWF)

- Ongoing installation of Direct Fixation Track.
- Installation of recycle water/wash equipment is complete.
- Electrical installation is ongoing.
- Continued installing HVAC duct work.

Rail Procurement and Installation

- Track drain, sub-ballast, and ballast installation for East and West Yard Lead track as well as track east and west of the TWF is ongoing. Preparing for turnover of Phases 1 and 5 storage tracks to CSC.
- Continued testing of running rail.

Administration

- Continued working with the CSC to resolve design interface issues and turned over raceways and areas of the rail yard.
- Work with CSC to support assembly and movement of CSC Passenger Vehicles.

Look Ahead (continued):

- Installation and testing of telephones.
- Elevator Testing for Certification by State.
- Building Occupancy Certification.

WTB

- Testing of wheel lathe and wheel press.
- Training of personnel on use of wheel lathe and wheel press.
- Release Building Systems raceway to CSC.

Train Wash Facility

- Continue installation of Direct Fixation Track.
- Exterior canopies.
- Roll up doors.
- Complete HVAC.

KEY ISSUES:

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

QUALITY MANAGEMENT:

- Overall quality of the contract is good.

MSF NCR Log		
Total NCRs Issued to Date	CLOSED	OPEN
32	32	0

PROJECT PICTURES:



OSB parking lot – car charger footing placement.



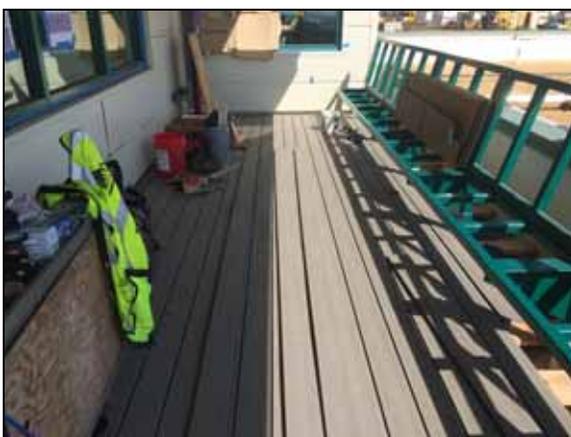
OSB TPSS room – epoxy flooring placement.



OSB electrical – Trans. & Distr. panel installation.



Truing Wheel Facility – HVAC dust work installation.



MOW – break area Trex installation.



Electrical testing – ground testing of Yard MHs.

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

A. Kamehameha Highway Guideway (KHG)



Contract No.: DB-320

Contractor: Kiewit Infrastructure West Company (KIWC)

Contract Start Date: June 2011

Contract Substantial Completion: September 2016

Projected Substantial Completion: September 2017

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

Project Overview: Construction of the drilled shafts continues east of the H-1 overpass. Column construction was completed from the WOFH project limits to Puu Poni Street, including the “C” piers at Acacia Road. Construction of columns in the Aloha Stadium Station area on the left side single track have been completed, along with two Aloha Stadium Station columns. Heading 2 truss is being erected around columns 420L to 422L and will begin heading west.

HART and KIWC continue to work at senior management levels to ensure current utility relocation schedules are being maintained.

Per KIWC’s progress schedule, the contract is twelve months behind schedule which includes the guideway structure completion in April 2017 and the remaining roadway/civil work being completed by September 2017.

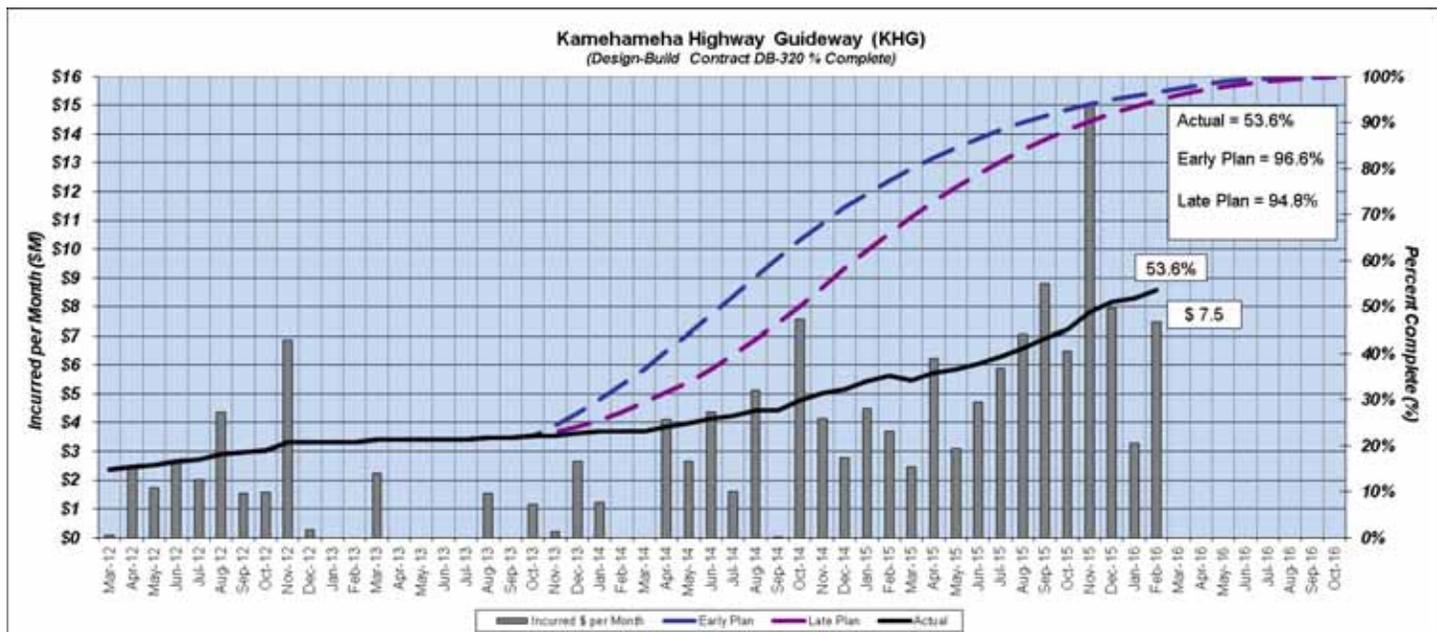
COST INFORMATION:

Original Contract:	\$372,150,000	Incurred-to-Date:	\$208,884,997
Current Contract Value ¹ :	\$389,456,410	Incurred in February:	\$7,480,037

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

DBE Participation	
Actual DBE Participation:	\$308,469
DBE % Attained:	0.08%

February Change Orders		
Change No.	Description	Amount (\$)
00021	HDOT Fence in Roadway Median	\$75,215
00022	HECO Single Line Diagrams	\$413,319
Cumulative to Date		\$17,306,410

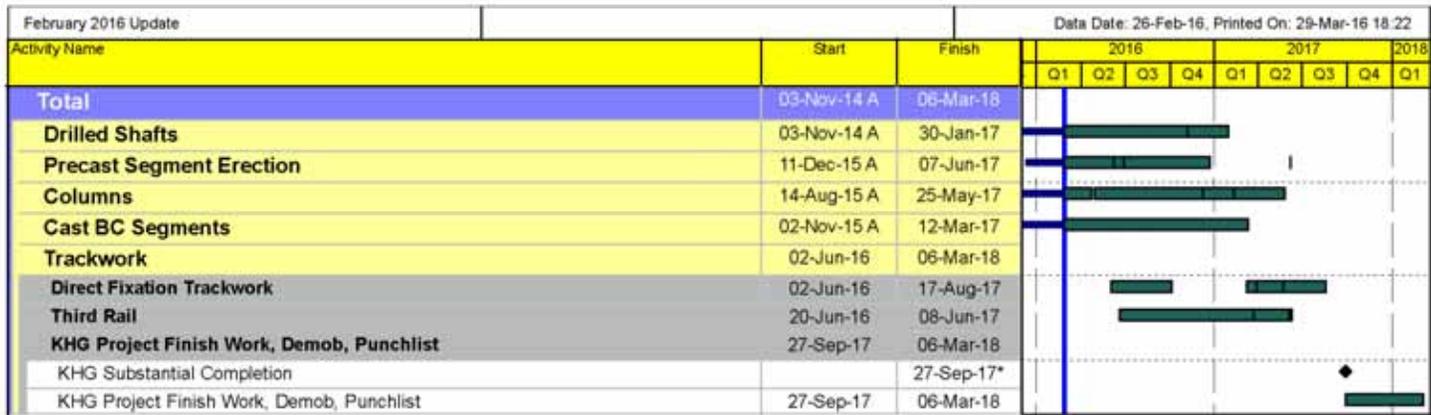


KIWC Pay Application #56 for the February 2016 billing was approved by HART.

SCHEDULE:

KIWC submitted a schedule revision in December 2014 with a data date of October 2014, which showed a revised Substantial Completion date of April 4, 2017. HART provided review comments to the schedule and has requested re-submittal via Request for Change (RFC) due to the change to the contractual substantial completion date. Until then, the schedule is deemed unaccepted. Subsequently, KIWC submitted a revised schedule in September 2015 via an RFC for contract time extension. The re-sequencing of the guideway and road work contains significant changes in durations, logic, as well as activity modifications, and is currently being reviewed by HART. The revised schedule shows the guideway structure forecasted to be complete in April 2017 with completion of the roadway civil construction and the overall project in September 2017; this reflects a potential 12 month delay to the contractual substantial completion date.

KIWC continues to have challenges meeting schedule due to various factors including lower productivity and resource sharing between the KHG and WOFH projects.



CRITICAL PATH ISSUES:

- HECO schedule forecasts at utility conflicts 11-920-M1 and 8-860-M1 are affecting utility relocations work. HART is tracking this issue and notes that its criticality needs to be established.
- Production rate for truss 3, going from Segments 277 through 322, are on the longest critical path and will impact the overall schedule.

WORK PROGRESS:

KHG Construction Status as of 3/9/16									
Utility Status	Qty to Date	Final Qty	% Complete	Structure Element	Total to Date	Planned to Date		Total Qty	% Complete
						Accepted Schedule*	Revised Schedule**		
Water Line	4,362	4,362	100%	Shafts	130	165	141	186	70%
Gas Line	12,641	12,641	100%	Columns	54	126	67	169	32%
Sewer Line	492	492	100%	Segment Casting	1,221	1,528	1,395	2,075	59%
Drainage Line	710	1,469	48%	Spans Stressed	15	111	20	166	9%
Elec/Telecom	15,961	19,455	82%	Trackwork	0	0	0	166	0%
System Sites	0%	N/A	0%	Third Rail	0	0	0	166	0%
Signals/ITS/Lights	13,587	18,486	74%	Mill & Overlay Roadway	0	0	0	N/A	0%

* Accepted Schedule was submitted in 2013.
 ** These quantities are based on KIWC's pending August 2015 schedule revision dated Sept. 23, 2015. Revised schedule reflects a 12 month delay in completion.

Activities this Month:

Earned Value: 57.1% [(Total achieved to February 2016 (\$208.9 million) + March 2016 projection (\$13.2 million))/Total contract including executed Change Orders (\$389 million)]. Planned Value: 95.9%

Shaft/Column/Segments

- 130 of 186 shafts have been installed; 70% of all shafts have been completed on KHG.

Look Ahead:

Design Progress

- KIWC is working to complete final design. To date 42 of 49 drawing packages have been issued for construction.

Shaft/Column/Segments

- Construction of shafts will continue east of the H-1 overcrossing.

Activities this Month (continued):

- 54 of 169 columns have been constructed.
- 1,221 of 2,075 segments have been cast.
- Balanced Cantilever superstructure east of the H-1 overpass continues. Column 308 has been completed. Top deck on Column 307 is progressing.
- Structures access in front of Waimalu Shopping Center has been installed.
- Construction of Balanced Cantilever falsework is being removed at pier 306.
- “C” pier columns at Shafts 277, 278 and 279 have been completed.
- Shaft construction in front of Pearl Kai is in progress.

Utility Relocation Progress

- The relocation of HECO electrical lines and Hawaiian Telcom, Oceanic Time Warner and Intelligent Transportation Systems (ITS) duct banks is occurring in various phases along the alignment.
- Pile driving for traffic signal foundation has ceased pending contract change order (CCO) approval from the board.
- System site 10 work is continuing.

Roadway Widening

- Roadway widening continues to be placed on hold due to crews working on WOFH.
- Shaft construction west of Salt Lake Blvd should begin early April, moving westbound.

Look Ahead (continued):

Utility Relocation

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

Balanced Cantilever Structure

- Superstructure construction will continue at the BCS area.
- Area being prepared for traveler installation at Column 306.

Precast Yard

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

Roadway Widening

- HART has issued RFCRs to the contractor for identified HDOT additional work. Work is anticipated to begin after issuance of a memorandum of understanding and change orders.

KEY ISSUES:

- **Night Noise Variance** –Department of Health will no longer allow the use of backhoes and excavators for nighttime work due to improper use of the equipment at night and public complaints received. HART has requested reconsideration on behalf of the contractor and is awaiting a state DOH response. Additionally, permanent ITS work continues to be installed along the alignment, and traffic signal crews ceased construction due to nighttime noise restrictions.
- **HDOT Additional Work** –The traffic signals CCO received approval from the HART Board and will be issued unilaterally. HART and HDOT have finalized the Memorandum of Understanding. The remainder of the additional work RFCR are still pending negotiations with KIWC and coordination with HDOT.

KIWC notified HART on Dec. 10, 2015, that they have halted all construction work activities related to HDOT Additional work until HART issues an executed change order for the out of scope work.
- **Third Party Utility Impacts** – HART and KIWC continue to work at senior and executive management levels to ensure current utility relocation schedules are being maintained.

QUALITY MANAGEMENT:

- **Quality Process** – KIWC continues to follow an established quality process and have not encountered any significant new findings through quality audits.
- **Latest Construction Plans** – Current shaft, column, and footing construction is proceeding with only minor quality issues.
- **Drilled Shaft Quality** – KIWC currently has 9 open NCRs due to velocity reduction exceeding 20%. KIWC has been reviewing their means and methods for placing concrete to reduce the issue with velocity reduction.
- Segment 276 suffered a damaged end flange as it was being set; a repair program is being reviewed for this condition.

KHG NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
134	110	24

PROJECT PICTURES:



Launching truss to Span 278, Phase 1.



Pier Table 306, setting falsework beam removal system, Phase 4.



Preparing to drill Shaft 347, Phase 8.



Shaft 367, concrete placement, Phase 10.



Setting heading 1 Pier bracket, Phase 12.



Stripping decorative forms, Column 411, Phase 13.

B. Ramp H2R2

Contract No.: DBB-385
Contractor: Royal Contracting Co. Ltd.
Contract Start Date: May 2015
Contract Substantial Completion: June 2016
Projected Substantial Completion: January 2017



Project Description: Ramp H2R2 is a loop ramp which connects in-bound Farrington Highway to in-bound Kamehameha Highway. The loop terminates just west of the intersection of Kamehameha Highway and Waihona Street.

Project Overview: Royal Contracting was awarded this project on May 4, 2015, and issued NTP on May 18, 2015. Construction duration is anticipated to be 13 months. Royal was delayed in the start of construction due to additional HDOT required soil remediation and submittal of required documentation. The contractor has projected a substantial completion of January 2017. The contractor was formally notified to commence construction on March 21, 2016, however, they commenced construction on March 28, 2016.

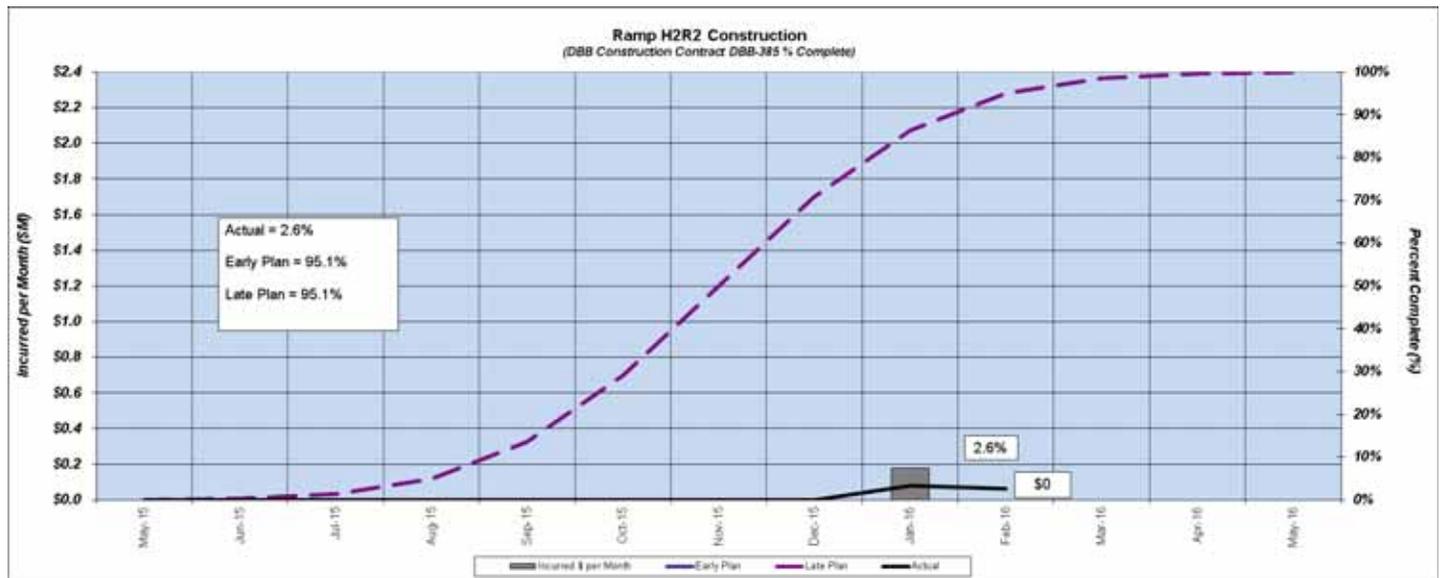
COST INFORMATION:

<u>Original Contract:</u>	<u>\$5,203,646</u>	<u>Incurred-to-Date:</u>	<u>\$136,850</u>
<u>Current Contract Value¹:</u>	<u>\$5,203,646</u>	<u>Incurred in February:</u>	<u>(\$40,495)</u>

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

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

February Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
None	---	---
Cumulative to Date		\$0



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

SCHEDULE:

February 2016 Update			Data Date: 26-Feb-16, Printed On: 22-Mar-16 17:29									
Activity Name	Start	Finish	2015			2016				2017		
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
Total	18-May-15 A	23-Jan-17										
West Guideways & Structures	18-May-15 A	23-Jan-17										
Construction - H2R2 Ramp	18-May-15 A	23-Jan-17										
Construction - H2R2 Ramp	18-May-15 A	23-Jan-17										23-Jan-17
Substantial Completion - H2R2 Ramp		23-Jan-17										

CRITICAL PATH ISSUES:

- Approval of Royal’s Environmental Compliance Plan (ECP) was provided in March.
- HART and HDOT have worked through their concerns of the contaminated soils discovered on site. On March 24, HART received formal written notification from HDOT that these issues have been resolved.

WORK PROGRESS:

Activities this Month:

Earned Value: 0%; Planned Value: 0%

- Royal continues to provide required submittals for review and acceptance.
- Royal continues to provide project baseline schedule updates as the project progresses.

Look Ahead:

- Mobilization, BMP installation, survey.
- Clear and grub, earth moving.
- Place surcharge, begin settlement monitoring.

KEY ISSUES:

- No critical issues.

QUALITY MANAGEMENT:

Ramp H2R2 NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
0	0	0

C. Kamehameha Highway Station Group (KHSG)

Contract No.: FD-340

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

Contract Start Date: November 2012

Construction Docs Bid-Ready:

Ramp H2R2: January 2015 (in construction)

Kamehameha Highway Stations: August 2015 (bids received)

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

Project Overview: The KHSG construction contract was awarded to Nan, Inc. on Jan. 27, 2016.

COST INFORMATION:

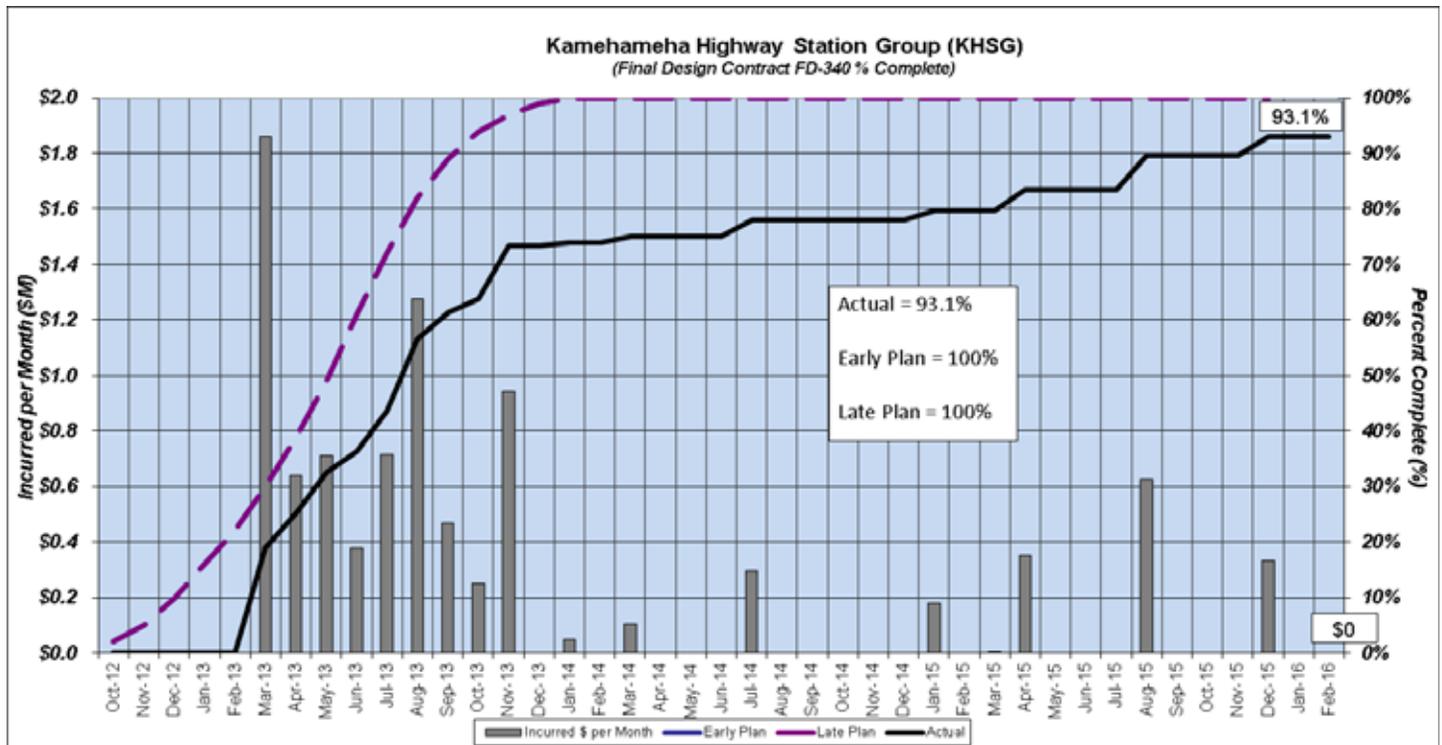
Original Contract: \$8,702,592	Incurred-to-Date: \$9,177,277
Current Contract Value ¹ : \$9,859,290	Incurred in February: \$0

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



DBE Participation	
Actual DBE Participation:	\$3,820,005
DBE % Attained:	43.9%

February Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
None	---	---
Cumulative to Date		\$1,199,698



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

The design phase of this contract is substantially complete.

SCHEDULE:



CRITICAL PATH ISSUES:

- N/A.

WORK PROGRESS:

Activities this Month:

- Current earned value is approximately 99%.
- Finalized construction documents.

Look Ahead:

- N/A.

KEY ISSUES:

- N/A.

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

A. Airport Section Guideway and Utilities

Contract No.: FD-430

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

Contract Start Date: January 2012

Currently in Construction:

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

Construction Completed:

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

Project Description: The Airport Segment Guideway and Utilities contract consists of 5.2 miles of elevated transit guideway serving four (4) passenger stations, in addition to roadway widening, utility relocation, and other improvements to create space for these transit facilities. Two construction contracts have been split out and expedited from the larger Airport Section package. These two contracts are the expedited Airport Section Utilities (ASU) and expedited Airport 7-Piers (A7). For both of these expedited contracts, the design has been completed and construction is in progress (ASU) or completed (A7). The remaining scope of design has been terminated and will be completed under a design-build procurement.



Project Overview: The services under this contract are now limited to engineering support during construction, and support to HART during the design-build procurement.

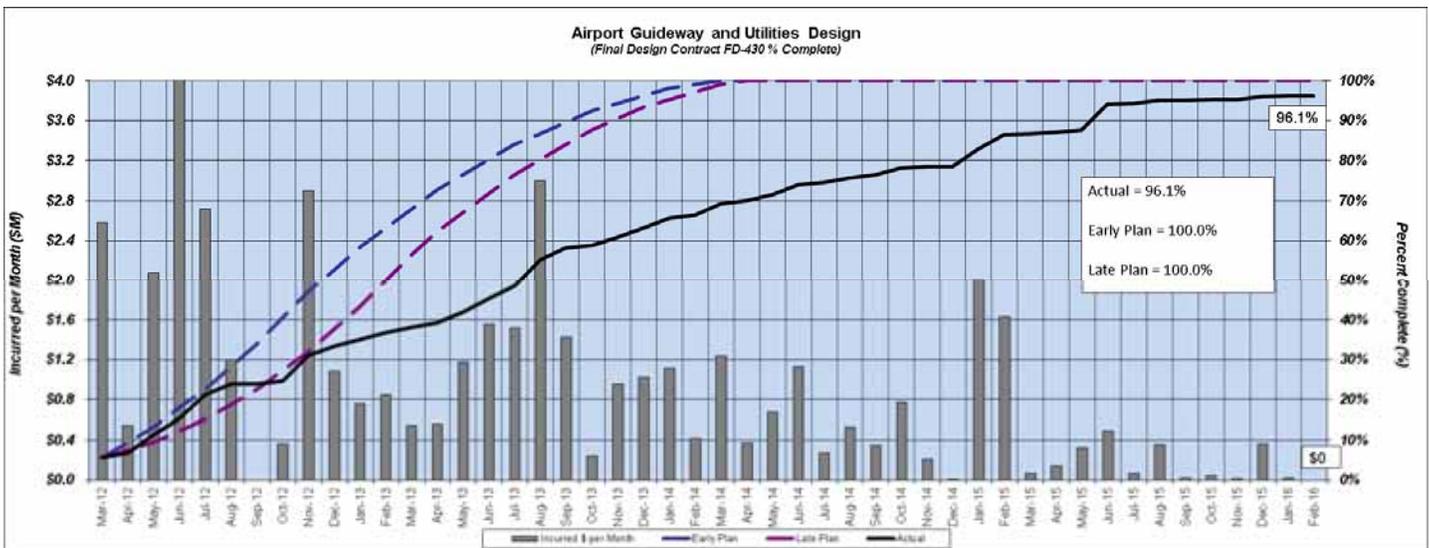
COST INFORMATION:

<u>Original Contract:</u> \$38,840,960	<u>Incurred-to-Date:</u> \$41,471,470
<u>Current Contract Value¹:</u> \$43,134,472	<u>Incurred in February:</u> \$0

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

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

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



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

Due to the change in delivery method from DBB to DB, the final design will not be completed under this contract.

SCHEDULE:

			Data Date: 28-Feb-16, Printed On: 23-Mar-16																				
Activity Name	Start	Finish	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014
			Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Airport Guideway & Stations (AGS)	07-Apr-15 A	20-Nov-20																					
Airport Guideway & Stations - Design Build Procurement Part 1	07-Apr-15 A	31-Aug-15 A																					
Airport Guideway & Stations - Design Build Procurement Part 2	25-Sep-15 A	20-May-16																					
DB-450 Airport Guideway & Stations - Design & Construction	20-Jun-16	20-Nov-20																					

CRITICAL PATH ISSUES:

- N/A.

WORK PROGRESS:

Activities this Month:

- Current earned value is approximately 97%.
- Supporting current construction contracts.
- Supporting AGS DB procurement.

Look Ahead:

- N/A.

KEY ISSUES:

- N/A.

B. Airport Section Utilities Construction

Contract No.: DBB-505

Contractor: Nan, Inc.

Contract Start Date: July 2014

Contract Substantial Completion: July 2016

Projected Substantial Completion: September 2016

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



Project Overview: Nan, Inc. continues with utility relocation work along Kamehameha Highway. A contract change order has been executed to extend the substantial completion date to July 13, 2016. Approval of a modified Traffic Control Plan allows the contractor to have additional time to perform work during the day. Nan is also working closely with the Navy in resolving various duct bank and utility issues discovered in the field, including unclaimed / unidentified power lines along Kamehameha Highway. Meanwhile, Nan, Inc. continues to develop and submit outstanding submittals.

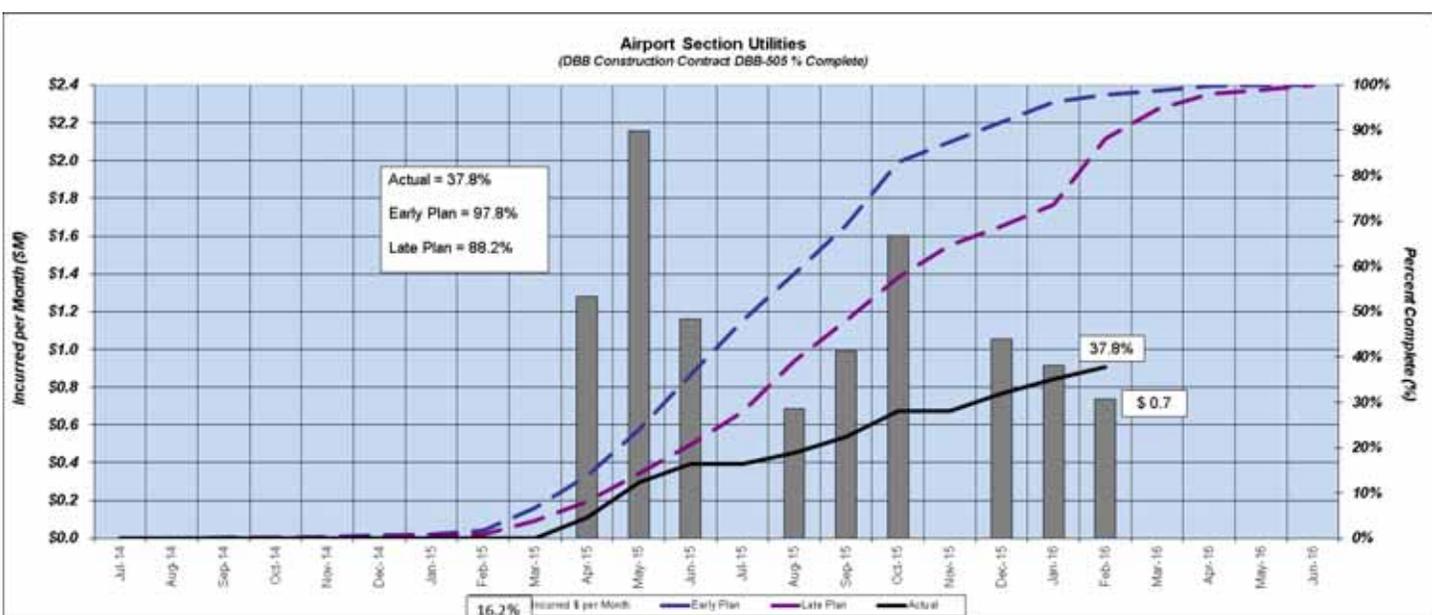
COST INFORMATION:

<u>Original Contract:</u>	<u>\$27,993,290</u>	<u>Incurred-to-Date:</u>	<u>\$10,580,738</u>
<u>Current Contract Value¹:</u>	<u>\$28,022,953</u>	<u>Incurred in February:</u>	<u>\$735,785</u>

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

DBE Participation	
Actual DBE Participation:	\$34,988
DBE % Attained:	0.12%

February Change Orders		
Change No.	Description	Amount (\$)
0001	Add Stub out for future Downspout.	\$4,600
0002	Potholing at Water Line JW1012 Conflict	\$25,063
Cumulative to Date		\$29,663



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

C. Airport Section Guideway Seven Pier Construction

Contract No.: DBB-525

Contractor: HDCC/CJA JV

Contract Start Date: September 2014

Contract Substantial Completion: April 24, 2015

Declared Substantial Completion: April 22, 2015

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



Project Overview: HDCC/CJA JV substantially completed the project on April 22, 2015. The site, along with maintenance of existing BMPs and traffic control measures were turned over to the HDOT-A. Generated punch list items were completed and accepted as of May 2, 2015, by HDOT-A/HART. The project is currently in a close out phase; final change orders have all been executed.

COST INFORMATION:

<u>Original Contract:</u>	<u>\$3,973,000</u>	<u>Incurred-to-Date:</u>	<u>\$4,027,843</u>
<u>Current Contract Value¹:</u>	<u>\$4,027,843</u>	<u>Incurred in February:</u>	<u>\$0</u>

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

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

February Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$54,843



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

CRITICAL PATH ISSUES:

- None - All construction work has been completed and Change Orders have recently been executed. Project close out and final invoicing (retention) has been submitted for processing.
-

WORK PROGRESS:

Activities this Month:

Earned Value: 100%; Planned Value: 100%

Look Ahead:

- HDCC/CJA JV has submitted their final invoice for Contract Closeout.
-

KEY ISSUES:

- None.

D. Airport Station Group (ASG)

Contract No.: FD-440

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

Contract Start Date: November 2012

Construction Docs Bid-Ready: N/A

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



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

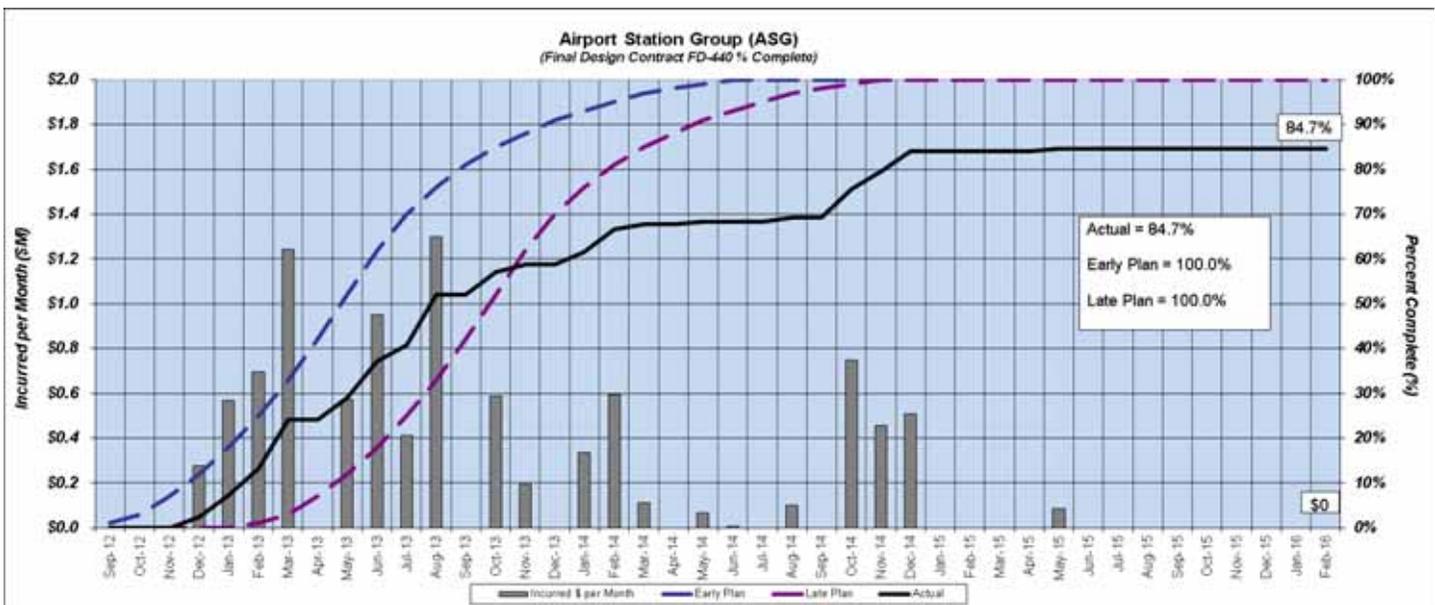
COST INFORMATION:

<u>Original Contract:</u>	<u>\$10,177,365</u>	<u>Incurred-to-Date:</u>	<u>\$9,801,978</u>
<u>Current Contract Value¹:</u>	<u>\$11,573,852</u>	<u>Incurred in February:</u>	<u>\$0</u>

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

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

February Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$1,416,487



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

Due to the change in procurement strategy from DBB to DB, the design of the Airport Stations Group will not be advanced to completion under this contract.

CRITICAL PATH ISSUES:

- N/A.
-

WORK PROGRESS:

Activities this Month:

- Current earned value is approximately 88% and is not anticipated to increase significantly due to the suspension of design activities.

Look Ahead:

- N/A.
-

KEY ISSUES:

- N/A.

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

A. City Center Section Guideway and Utilities

Contract No.: FD-530

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

Contract Start Date: July 2012

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



Project Overview: This section of the guideway has been combined with eight (8) stations into a single City Center Guideway and Stations (CCGS) Design-Build package. The services remaining under this contract include preparation of early utilities designs, and support to HART during design-build procurement.

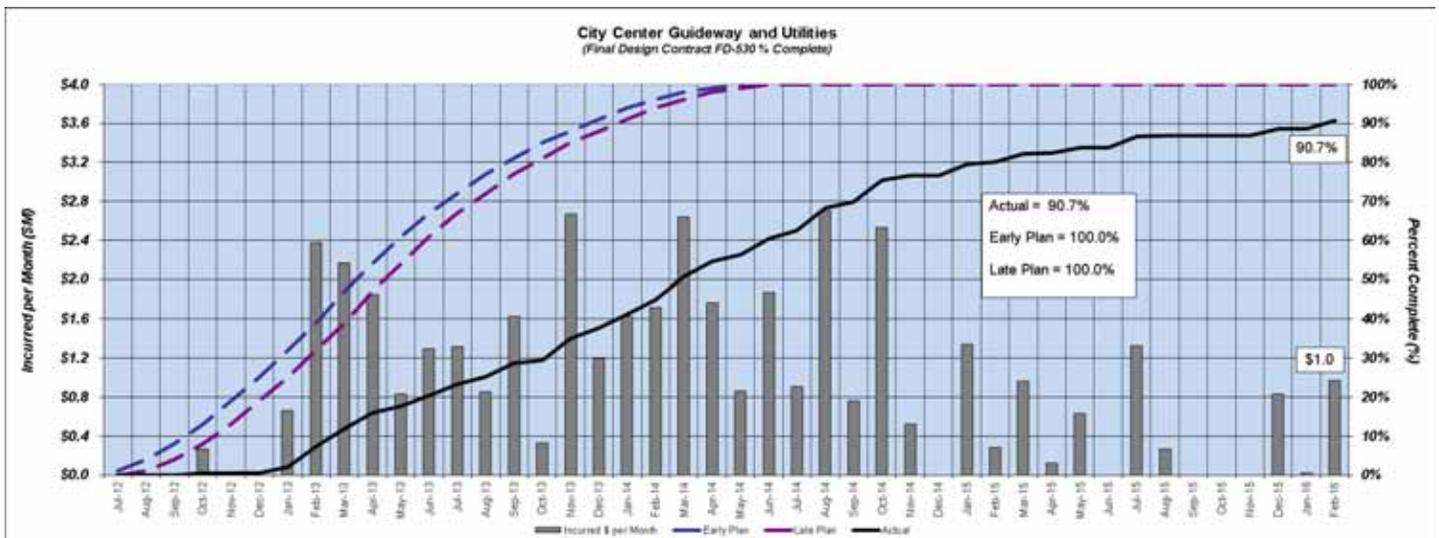
COST INFORMATION:

Original Contract:	\$43,948,220	Incurred-to-Date:	\$41,899,799
Current Contract Value ¹ :	\$46,197,562	Incurred in February:	\$969,296

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

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

February Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
None	---	---
Cumulative to Date		\$1,296,842



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

Due to the change in delivery method from DBB to DB, the final design will not be completed under this contract.

SCHEDULE:



CRITICAL PATH ISSUES:

- N/A.

WORK PROGRESS:

Activities this Month:

- Current earned value is approximately 92%.
- Supporting HART on DB procurement.

Look Ahead:

- N/A.

KEY ISSUES:

- N/A.

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



Contract No.: FD-550

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

Contract Start Date: August 2013

Construction Docs Bid-Ready: N/A

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

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

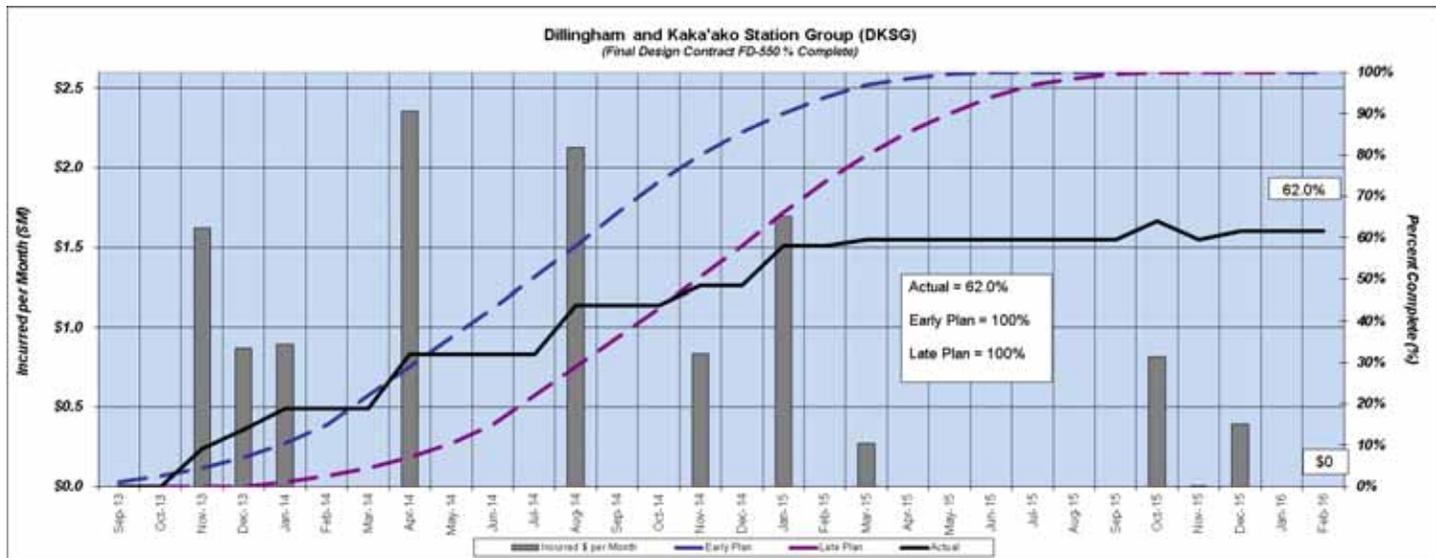
COST INFORMATION:

Original Contract:	\$18,321,918	Incurred-to-Date:	\$11,875,668
Current Contract Value ¹ :	\$19,308,042	Incurred in February:	\$0

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

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

February Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$1,046,743



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

Due to the change from a DBB to a DB delivery method, the design for these stations has been suspended and will not be completed under this contract.

CRITICAL PATH ISSUES:

- N/A.
-

WORK PROGRESS:

Activities this Month:

- Current earned value is approximately 68% and is not expected to increase significantly due to the suspension of design activities on this contract.

Look Ahead:

- N/A.
-

KEY ISSUES:

- N/A.

4.6 Project-Wide

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

Contract No.: MM-901

Contractor: InfraConsult LLC

Contract Start Date: March 8, 2012

Contract Completion: March 7, 2017

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

COST INFORMATION:

Original Contract:	\$33,376,897	Incurred-to-Date:	\$39,563,917
Current Contract Value ¹ :	\$40,993,274	Incurred in February:	\$1,267,356

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

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

February Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$7,616,377



KEY ISSUES:

- HART exercised its option to extend the PMSC contract for the remaining option year, effective March 8, 2016. The current contract will terminate upon award of contract to the successful offeror of the new Request for Qualifications that will be advertised or one year from March 8, 2016, whichever is earlier.

B. General Engineering Consultant III (GEC-3)

Contract No.: MM-913

Contractor: CH2M HILL

Contract Start Date: December 2013

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

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

Project Overview: The GEC III is supporting HART with procurement packages, review of independent cost estimates, evaluation of east segment schedules, and developing Hawaiian Electric Facility avoidance and minimization impact alternatives.

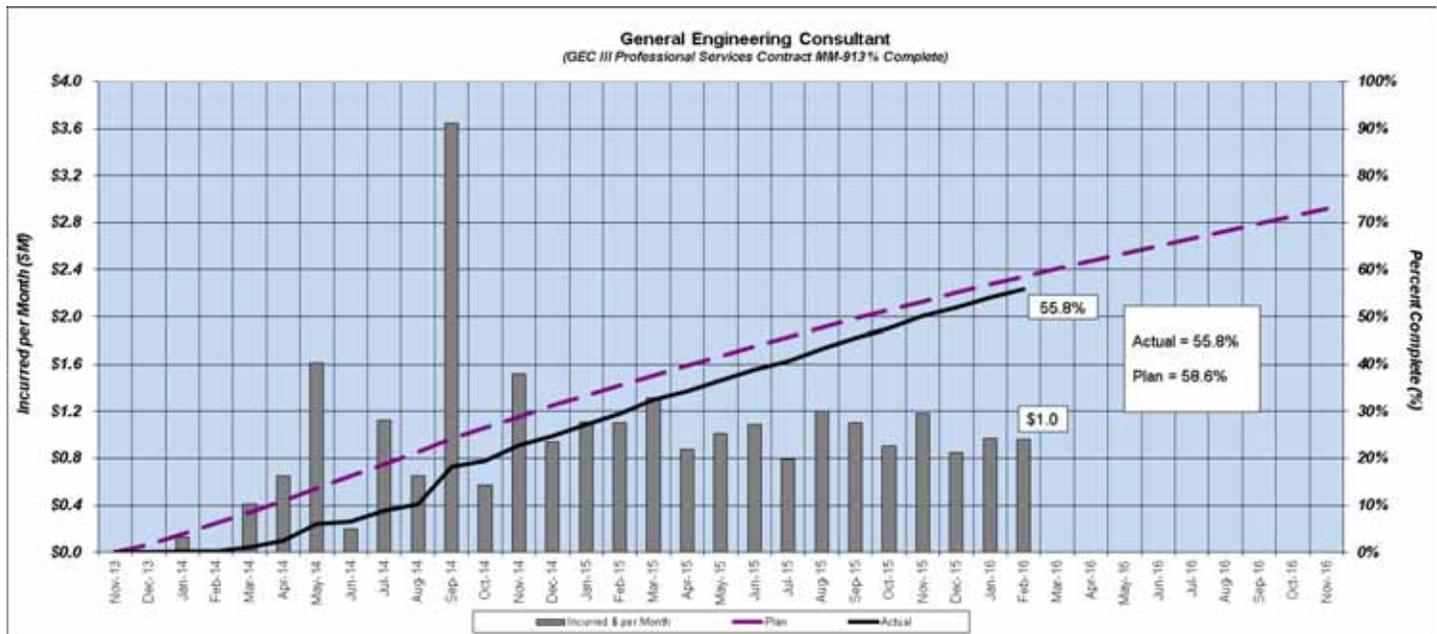
COST INFORMATION:

<u>Original Contract:</u>	<u>\$46,143,277</u>	<u>Incurred-to-Date:</u>	<u>\$25,915,917</u>
<u>Current Contract Value¹:</u>	<u>\$46,411,728</u>	<u>Incurred in February:</u>	<u>\$963,187</u>

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

DBE Participation	
Actual DBE Participation:	\$1,970,775
DBE % Attained:	4.27%

February Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$268,451



KEY ISSUES:

- Integrating schedule estimates for interim opening and revenue service opening with financial forecast and estimate to complete of contracted work.
- Participate in task force to develop alternatives to meet clearance requirements for Hawaiian Electric facilities.
- Continue progress on Historic Context Studies and permits.
- Provide support to procurement for KHSG, Airport Guideway and Stations (AGS), and City Center Guideway and Stations (CCGS).

C. Construction Engineering & Inspection West Side Sections

Contract No.: MM-290

Contractor: PGH Wong Engineering, Inc.

Contract Start Date: January 2014

Contract Completion: January 2020

Projected Substantial Completion: December 2018

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

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

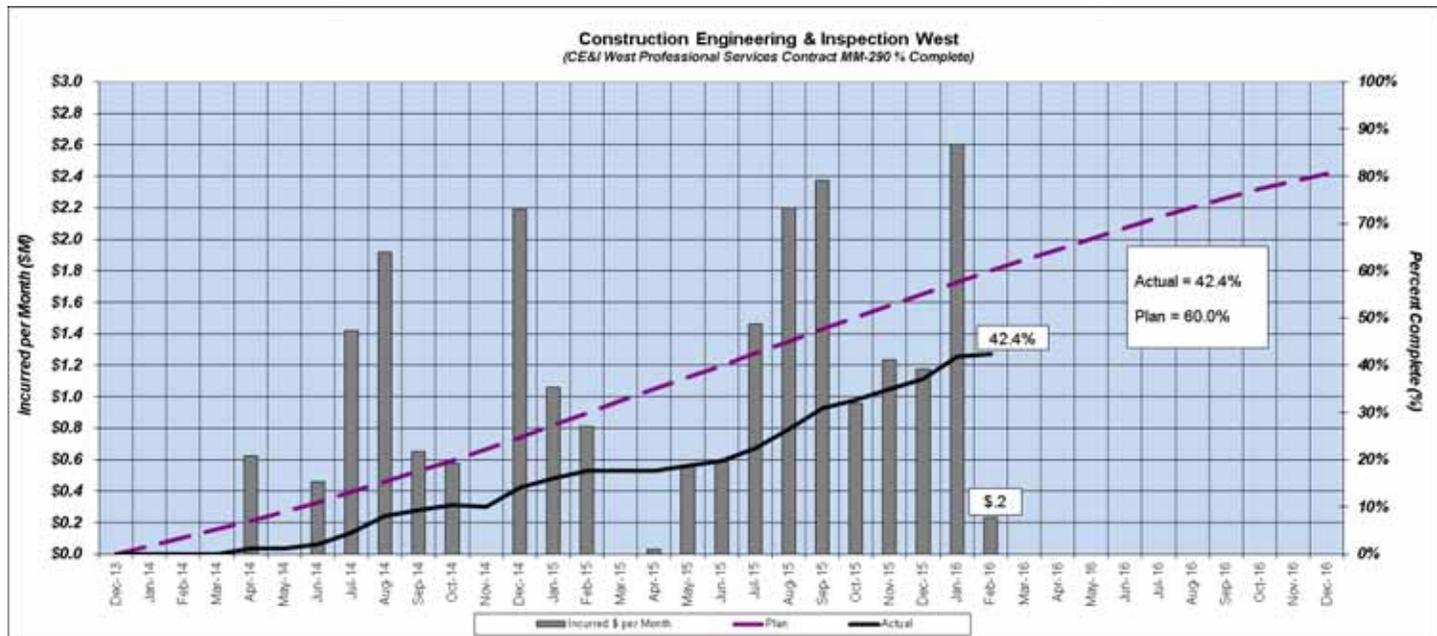
COST INFORMATION:

<u>Original Contract:</u>	<u>\$54,232,480</u>	<u>Incurred-to-Date:</u>	<u>\$22,969,732</u>
<u>Current Contract Value¹:</u>	<u>\$54,232,480</u>	<u>Incurred in February:</u>	<u>\$230,245</u>

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

DBE Participation	
Actual DBE Participation:	\$2,487,401
DBE % Attained:	4.59%

February Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$0



KEY ISSUES:

- In the process of establishing a combined field office space in the MOW building at MSF to support the staffing requirements for the west section station group’s multiple procurement contracts.
- Schedule durations for the guideway and stations contracts need to be aligned with anticipated West CE&I staffing durations.
- Continued to support staffing needs for West CE&I efforts.
- Continued to support process improvements for standardization and consistency.

D. Construction Engineering & Inspection East Side Sections

Contract No.: MM-595

Contractor: URS Corporation

Contract Start Date: January 2014

Contract Completion: December 2015 (MOD no. 1)

Substantial Completion: October 2015

Project Description: The URS team provided Construction Engineering and Inspection Services (CE&I) for the east section of the Honolulu Rail Transit Project (H RTP) for the Honolulu Authority for Rapid Transportation (HART).

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

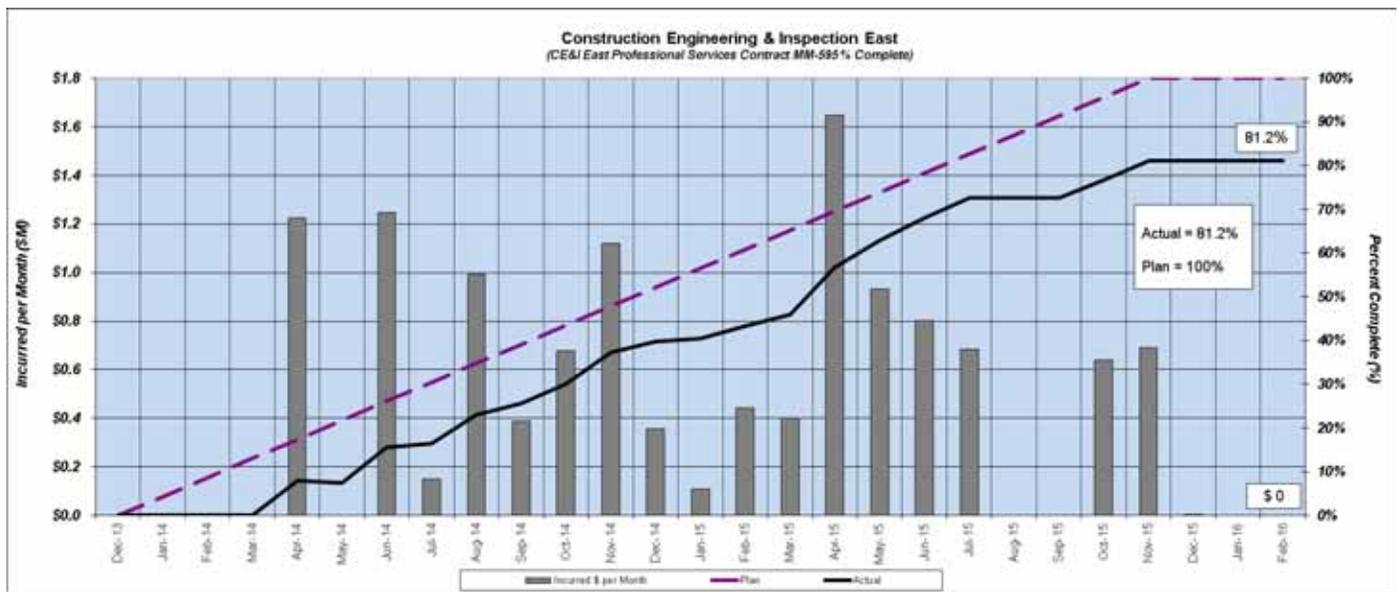
COST INFORMATION:

<u>Original Contract:</u>	<u>\$63,083,417</u>	<u>Incurred-to-Date:</u>	<u>\$12,382,150</u>
<u>Current Contract Value¹:</u>	<u>\$15,257,000</u>	<u>Incurred in February:</u>	<u>\$0</u>

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

DBE Participation	
Actual DBE Participation:	\$1,580,725
DBE % Attained:	10.36%

February Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		-\$47,826,417



KEY ISSUES:

- The new CE&I consultant for the East Section was issued NTP in September 2015. All URS field staff was successfully transitioned off of the project in October 2015, and the final closeout of the URS contract is ongoing. HART is awaiting final verification from URS regarding subcontractor invoices, claims and other dispositions. Once the contract is closed, this contract page will be removed from the Progress Report.

E. Construction Engineering & Inspection (CE&I) II Contract

Contract No.: MM-596

Contractor: Stantec Consulting Services Inc.

Contract Start Date: September 2015

Contract Completion: December 2019

Projected Substantial Completion: December 2019

Project Description: The Stantec team is responsible for the Construction, Engineering and Inspection (CE&I) services for the East Section of the Honolulu Rail Transit Project (H RTP) for the Honolulu Authority for Rapid Transportation (HART). The Stantec team is providing services from the preconstruction phase through construction closeout. CE&I II services include: constructability review, resident engineering, construction observation, project controls, scheduling, change management, cost control, document controls, contract administration, estimating, environmental monitoring, surveying, material testing, interface coordination, geographic information system (GIS) support, and claims analysis for the Airport Guideway and Stations design-build contract, City Center Guideway and Stations design-build contract, Airport Section Utilities Construction contract, Dillingham utilities, Elevators and Escalators Design-Furnish-Install-Maintain contract (construction phase only) and Construction On-Call II and III work. The primary role of the Stantec team is to inform the HART Project Manager of any significant omissions, substitutions, defects, and deficiencies noted in the work of the contractor and the corrective action that has been directed by HART to be performed by the contractor.

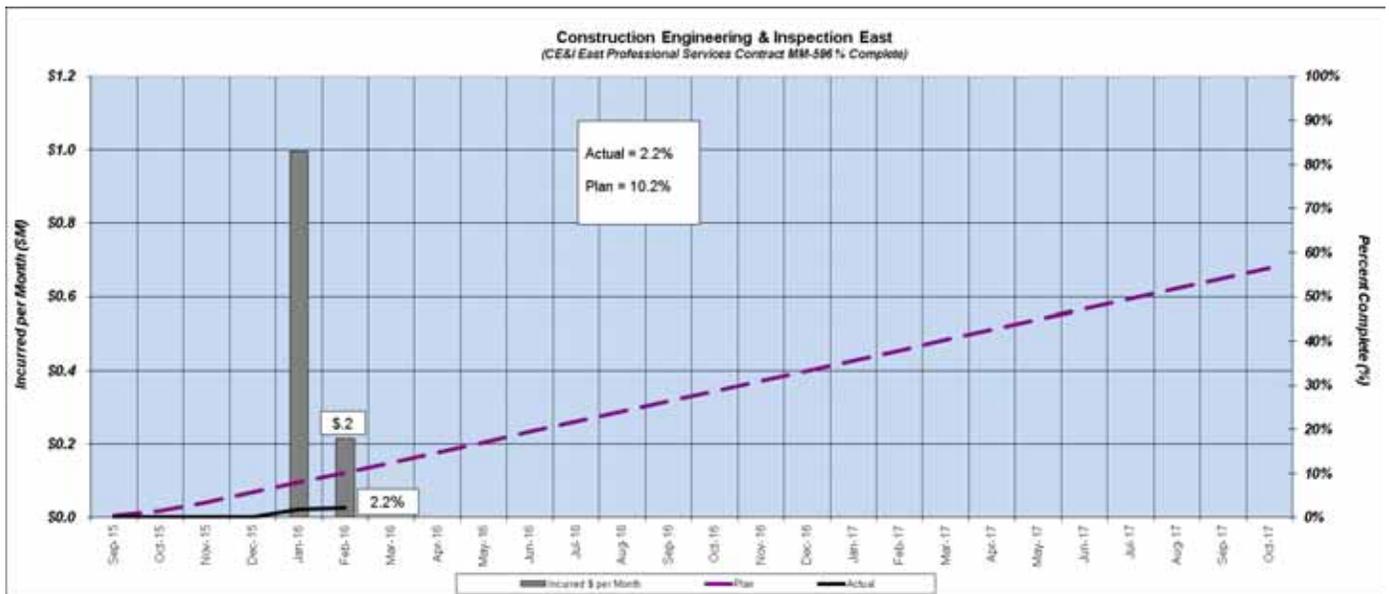
COST INFORMATION:

Original Contract:	\$55,036,130	Incurred-to-Date:	\$1,210,034
Current Contract Value ¹ :	\$55,036,130	Incurred in February:	\$215,225

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

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

February Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$0



KEY ISSUES:

- HART has requested an Independent Cost Estimate (ICE) and schedule analysis be performed on the Airport Guideway and Stations DB contract and the City Center Guideway and Stations DB contract. The Airport Guideway and Stations DB contract ICE and schedule analysis were delivered Feb. 15, 2016, and the City Center Guideway and Stations DB contract ICE and schedule analysis are scheduled to be delivered by June 30, 2016.
- HART has requested a summary schedule analysis of the HECO 138KV impact and overall utility trenching production levels in an effort to identify efficiencies and improvements that can be recognized on the East Section.

F. Core Systems Contract Oversight Consultant

Contract No.: MM-962

Contractor: Lea+Elliott, Inc.

Contract Start Date: February 2014

Contract Completion: August 2019

Projected Substantial Completion: N/A

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

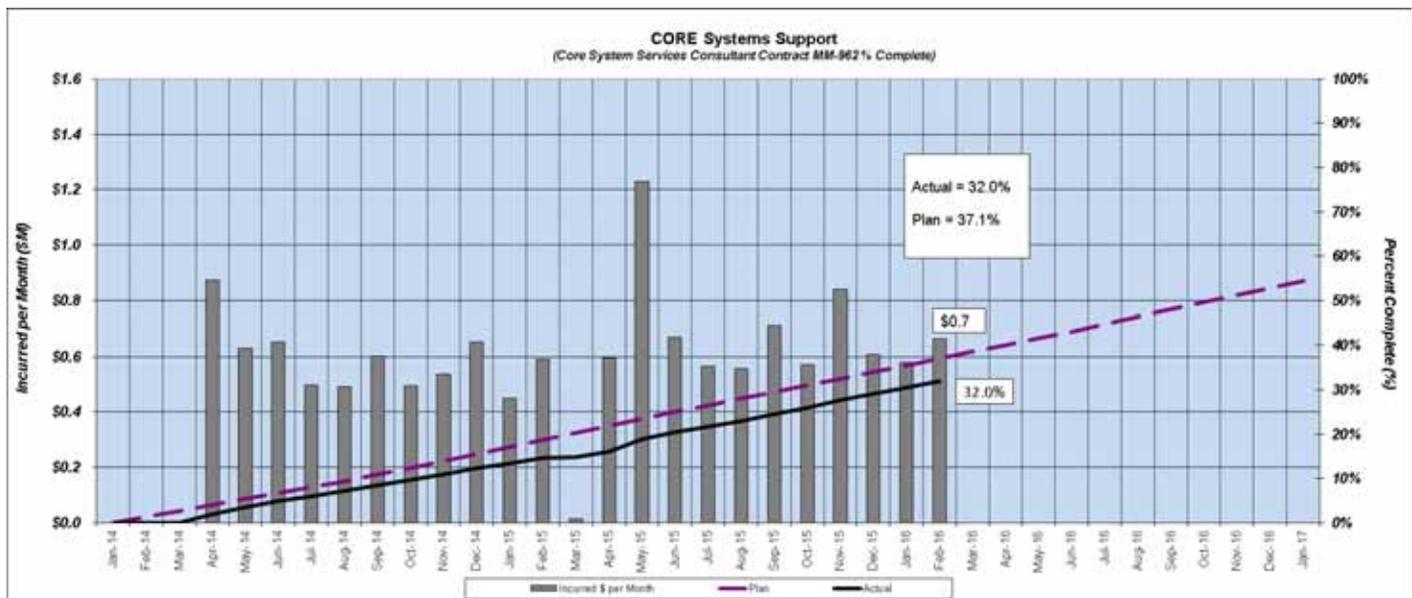
COST INFORMATION:

<u>Original Contract:</u>	<u>\$43,988,989</u>	<u>Incurred-to-Date:</u>	<u>\$14,071,868</u>
<u>Current Contract Value¹:</u>	<u>\$43,988,989</u>	<u>Incurred in February:</u>	<u>\$662,648</u>

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

DBE Participation	
Actual DBE Participation:	\$332,060
DBE % Attained:	0.76%

February Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$0



KEY ISSUES:

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

G. On-Call Construction Contractor

Contract No.: MM-945

Contractor: Royal Contracting Co. Ltd.

Contract Start Date: August 2014

Contract Completion: July 2019

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

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

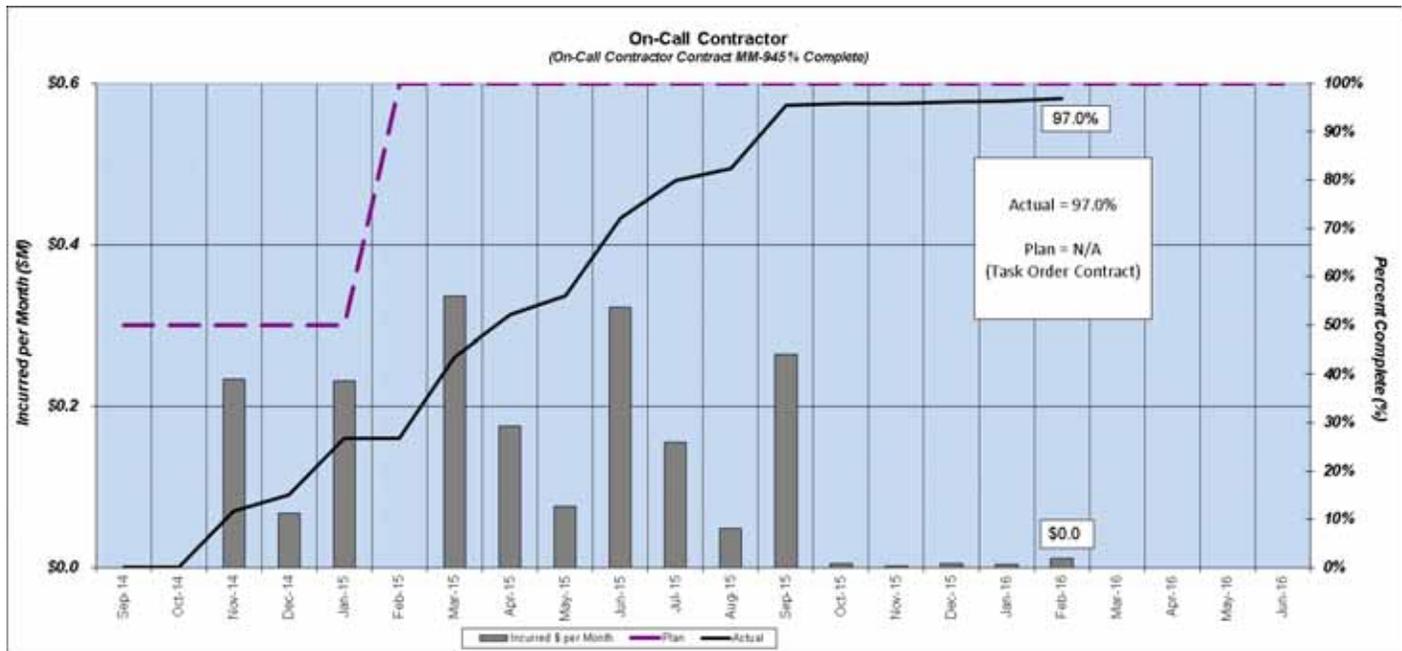
COST INFORMATION:

<u>Original Contract:</u> \$1,000,000	<u>Incurred-to-Date:</u> \$1,939,108
<u>Current Contract Value¹:</u> \$2,000,000	<u>Incurred in February:</u> \$11,800

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

DBE Participation	
Actual DBE Participation:	\$460,024
DBE % Attained:	23%

February Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$1,000,000



KEY ISSUES:

- To date, the On-Call Contractor has successfully:
 - Continued to relocate/remove trees along the Airport and City Center guideway.
 - Repaired/protected multiple facilities owned by HART.
- The On-Call Contractor is in the process of working with HART’s right-of-way group and owners in providing cost to cure solutions to properties which will need modification in achieving cleared right-of-way in the Airport and City Center sections of the guideway. Plans for some of these modifications are receiving permits, and initial work is expected to begin in June 2016.
- New buildings and structures are being identified that require demolition. All demolition work includes the abatement of any hazardous materials identified prior to demolition. Demolition is expected to resume in July 2016, once the current tenants have been relocated from the various buildings.
- Maintenance of landscaping along Kamehameha Highway continued during the month of March.
- Continued to support the Core Systems contractor for work at MSF.
- Continued to support the Airport Utility contractors work by performing asbestos abatement.

5 OVERALL PROJECT-WIDE ACTIVITIES

5.1 Permits

- **Permits Submitted and In-Progress**

- HART submitted the Stream Channel Alteration Permit extension for Waiawa Stream to the Department of Land and Natural Resources.
- HART is in the process of submitting the City Center Construction Noise Variance to construct the guideway at night.
- HART is in the process of submitting the Kamehameha Highway Construction Noise Variance to continue to construct the guideway at night.
- HART is in the process of submitting the Coast Guard Bridge Permit Advance Approval extension, which allows work in or around streams.

- **Look Ahead**

- Upcoming significant permit activity:
 - HART will begin preparing the Community Noise Permit continuance application for the West O'ahu Farrington Highway (WOFH) construction activities.
 - HART will begin preparing the Community Noise Permit continuance application for the Rail Operation Center (ROC) construction activities.

5.2 Hawai'i Department of Transportation (HDOT) Agreements

- **Activities this Month**

- An MOU with HDOT for highway improvements has been executed. Transfer of funds for a portion of the MOU has been included in the draft Transportation Improvement Program (TIP) Amendment #9 for FY16.
- Balanced cantilever construction will require height clearance considerations and waivers from DOT for the right shoulder lane in the eastbound direction.
- An amendment to the WOFH Master Agreement is being developed addressing maintenance responsibilities and reimbursements.

- **Look Ahead**

- Execution of the Airport and City Center Joint Use and Occupancy Agreements.
- Execution of the West O'ahu Farrington Highway Master Agreement Amendment 1.

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	5/11/11	12/20/11	5/18/12	Including with Airport	KHG, AP & City Center – Temp OH Draft sent to AT&T	12/26/13	Including with Airport		
	NTP	5/12/11	12/21/11							
	Amd 01	7/1/11	HRS Ch 104							
AT&T (Government Solutions)	Executed			12/26/13	Clarified to N/A	Combined with AT&T Corp	12/26/13	Combined with AT&T Corp		
	NTP									
Chevron	Executed	12/4/09		11/4/11						
	NTP	12/22/09		11/15/11						
	Amd 01	7/1/11								
Hawaiian Telcom	Executed	5/20/10	11/17/14	5/10/12	12/31/14	5/28/15	9/27/13	Draft sent to HTI for review		
	NTP	6/14/10	11/18/14							
	Amd 01	7/1/11		4/13/15		Drafted for add'l scope and HRS Ch 104 under review				
	Amd 02	5/10/12								
	Executed							Temp OH sent to HTI for signature		
	NTP									
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	HECO draft sent to HECO for review	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		
	Amd 01									
	Memorandums of Understanding	8/7/14 – Construction Drawings								
		5/1/15 - Access								
		5/15/15 - Derrick Truck								
		6/23/15 - Master Agreement								
		6/9/15 - MSF Advanced Construction								
		9/16/15 - Right of Entry								
10/12/15 – Clearance (West)				11/10/15 - Dillingham Blvd Materials						
Power Quality Pending										
Oceanic Time Warner Cable	Executed	12/8/09	12/21/11	1/9/12	6/2/14	12/19/14	4/3/13	Draft sent to OTWC for review		
	NTP	12/22/09					4/4/13			
	Amd 01	7/1/11	2/27/14		HRS Ch 104	HRS Ch 104				
	Amd 02	10/7/13	HRS Ch 104							
	Executed							Temp OH sent to OTWC for signature		
Pacific Lightnet/Wavecom	Executed	4/28/10	3/12/12	2/15/12						
	NTP	4/29/10	3/13/12	2/16/12						
	Amd 01	7/1/11	HRS Ch 104							
Sandwich Isle Communications	Executed	5/20/10		4/20/12						
	NTP	6/8/10								
	Amd 01	7/1/11								
Hawai'i GAS	Executed	12/18/09	6/30/11	6/1/12	4/14/14	8/19/14	9/27/13	5/8/15		
	NTP	12/22/09	7/12/11			8/20/14		5/11/15		
	Amd 01	7/1/11	10/17/14		8/28/14	HRS Ch 104		HRS Ch 104		

Utility Agreements Status Matrix

Utility Owner	Status	WOFH		KHG		Airport		City Center	
		ESA	UCA	ESA	UCA	UCA	COMBINED ESA	UCA	
	Amd 02		Draft for add'l 4" line relocation in median and HRS Ch 104 sent to HG for review		10/23/15				
	Amd 03				HRS Ch 104				
Level 3/TW telecom	Executed	12/2/09		2/14/12	Oceanic to relocate for TW telecom		10/11/12	Draft sent to TW telecom - includes Temp OH	
	NTP	12/22/09		2/16/12					
	Amd 01	7/1/11							
	Amd 02								
Tesoro	Executed			2/15/12	9/12/13		8/27/13		
	NTP			2/16/12			9/3/13		
	Amd 01				9/12/14				
	Amd 02				5/13/15				
	Amd 03				HRS Ch 104				

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

WOFH

- All WOFH agreements have been executed.

KHG

- All KHG agreements have been executed.

AIRPORT

- All engineering utility agreements for the Airport section have been executed.
- HART is reviewing AT&T comments to the draft Construction Agreement. It is not necessary for this agreement to be in place for the Airport Segment utility construction.

CITY CENTER

- All engineering utility agreements for the City Center section have been executed.
- HART reviewed AT&T comments and the revised draft Construction Agreement was sent back to AT&T for review.
- HART has submitted the Utility Construction Agreement for City Center to OTWC for review/comments.
- HART has submitted a draft of the Utility Construction Agreement to TW telecom for review/comments.
- Looking Ahead:
 - Execute Oceanic City Center UCA.
 - Execute Hawaiian Telcom City Center UCA.
 - Execute AT&T City Center UCA.

HECO

- **Davis-Bacon requirements** – HECO has an established collective bargaining agreement – which does not align with Davis-Bacon requirements – for which HART on behalf of HECO has submitted a conformance request to the U.S. Department of Labor; awaiting DOL decision.
- **HECO 46kV Substation near MSF area** – HECO indicates a need in the 2018-2019 timeframe for a new 46kV substation to feed the MSF area due to requirements in HECO Rule 13. Initial planning indicates that a currently un-used location near the MSF area may be suitable for this facility. HECO is investigating a ‘system’ substation, which would also feed other customers in the area surrounding the MSF.
- **Additional Clearances** – HECO requires the need for additional horizontal working clearances from overhead line conductors to the guideway for their 138kV and 46kV overhead lines along portions of all guideway segments.
 - **Horizontal Working Clearances Analysis** – For Airport and City Center, HART and HECO have agreed to relocate the overhead 138kV lines to underground, and together are progressing to a preliminary engineering design. For WOFH and KHG, HECO has completed a pole-by pole review of the current overhead 138kV and 46kV pole and line locations and have identified areas where alternative access may be used for future pole and line maintenance. HART’s Task Force continues to meet bi-weekly with HECO staff to identify and analyze all potential solutions to the working clearance issue including relocating to new overhead alignments, underground alignments, or attach to the guideway, and alternative equipment.

- o **Alternative Equipment** –HECO has stated that the telescoping Bronto manlift will not completely resolve the horizontal working clearance issue. HECO and HART are now researching with other equipment manufacturers to see if there is equipment (bucket trucks and cranes) that can work with less than the desired working clearance requirements.
- **New Service Connections** – HECO service requests are required for new electrical services for the MSF, Passenger Stations and Systems Sites (traction power facilities). The Passenger Station designers are providing the service request for the stations, and the Core Systems Contractor is providing the service request for the systems sites.
 - o **MSF** – Service request approved via receipt of HECO Final Cost Letter and HECO design drawings. Installation of the MSF service is complete; buildings are energized.
 - o **Passenger Stations and Systems Sites** – HECO service request reviews are in progress and approvals are anticipated for the west side stations and systems sites. HECO is working to finalize its designs and cost estimates.

5.4 Right-of-Way (data as of March 14, 2016)

BUDGET

	Baseline Budget	Expended	Remaining Budget Balance	Estimate to Completion	Forecast Variance
Acquisition	\$ 201.70	\$ 86.80	\$ 114.90	\$ 101.80	\$ 13.10
Relocation	\$ 20.50	\$ 10.60	\$ 9.90	\$ 15.90	\$ (6.00)
Total (Million)	\$ 222.20	\$ 97.40	\$ 124.80	\$ 117.70	\$ 7.10

Note

* Administrative overhead costs aggregated with the Acquisition and Relocation numbers

* Estimate to complete based on offers, appraisals or assessed values

ACQUISITIONS

Figure 13. Right-of-Way Status for the Parcels [data provided by Real Estate Acquisition database (READ)]

	(a) Current No. of Parcels Needed	Appraisals In Process	(b) Appraisals Completed	(c) Letters of Offer Sent	(c) Offers Accepted	Possession Granted For Condemnation	Agreements Completed	Site Control Obtained	Relocations Completed	Properties Available for Contractor	(d) Acquisitions Completed
Full Acquisition											
W.Oahu/Farrington	16		14	14	13	1	2	16	13	16	15
Kamehameha	3		3	3	3			3	1	3	3
Airport	6		5	6	5	1		6	3	4	5
City Center	19		17	17	16			16	14	16	16
TOTAL	44		39	40	37	2	2	41	31	39	39
Partial Acquisition											
W.Oahu/Farrington	3		2	2	2			3		3	2
Kamehameha	4		3	3	2	1		3		3	1
Airport	10		4	4	2		2	6		4	2
City Center	77		65	66	35	2		13		4	8
TOTAL	94		74	75	41	3	2	25		14	13
Easement											
W.Oahu/Farrington	16		1	1	1		6	16		16	7
Kamehameha	6						1	6		6	1
Airport	34		8	7	1		4	28		27	4
City Center	29		22	21	3		1	1		1	1
TOTAL	85		31	29	5		12	51		50	13
GRAND TOTAL	223		144	144	83	5	16	117	31	103	65

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) 'Current No. of Parcels Needed' includes 146 privately-owned parcels and 77 government-owned parcels.

(b) 'Appraisals Completed' primarily includes appraisals for privately-owned parcels.

(c) Offers primarily include privately-owned parcels.

(d) 'Acquisitions Completed' includes 49 privately-owned parcels, and 16 'Agreements Completed' for the transfer or joint use of government-owned parcels.

KAMEHAMEHA

- Priorities:
 - Supporting negotiations with Aloha Stadium Authority to obtain right of entry for the construction of the station park-and-ride. HART has obtained the right of entry to construct the guideway.
 - Working towards executing a document with the City to acquire TMK 9-8-009-005.
- Look Ahead:
 - In order to support the relocation of utility easements in the Kamehameha section, a settlement was reached for TMK 9-8-008-029. A right of entry is being approved and escrow is expected to open soon.

AIRPORT

- Priorities:
 - On-going negotiations with TMKs 1-1-002-001, 1-1-004-035 and 1-1-004-039.
 - Working with the Federal government to complete documentation for easements.
 - Closely monitoring the mapping process for Airport Station and for utility easements.
 - Design change pending for TMKs 1-5-015-010, 1-2-013-020 and 1-2-013-021.
 - In order to support the upcoming procurement for the Airport Guideway and Stations Design-Build contract and to maintain the project schedule, eminent domain proceedings were authorized by the HART Board and the Honolulu City Council for several parcels. However, negotiations are still continuing with all private property owners in the Airport section in an attempt to reach mutual agreement.
- Look Ahead:
 - Working towards completing Airport agreements and acquisition of TMK 1-1-002-001.
 - A settlement was reached for an eminent domain case, TMK 1-1-016-012, and escrow is expected to open soon.
 - Evaluate and address the need to advance additional recommendations for eminent domain to achieve the project’s schedule.

CITY CENTER

- Priorities:
 - Continuing to place priority on obtaining site control and acquiring parcels in the Dillingham section.
 - Supporting negotiations with UH Honolulu Community College to secure construction right of entry.
 - Working to resolve issues with TMKs 2-3-039-017, 1-5-007-016, 2-3-003-000, 1-2-009-011, 1-2-009-098, 1-5-027-028, 1-1-016-020 and 1-2-019-069.
 - Negotiating with the owner of fifteen parcels which have complex issues, as well as TMK 2-1-031-030.
 - In order to support the upcoming procurement for the City Center Guideway and Stations Design-Build contract and to maintain the project schedule, eminent domain proceedings were authorized by the HART Board and the Honolulu City Council for several parcels. However, negotiations are continuing with all private property owners in the City Center section in an attempt to reach mutual agreement.
- Look Ahead:
 - Evaluate and address the need to advance additional recommendations for eminent domain to achieve the project’s schedule.
 - Closely monitor the acquisitions in relation to construction schedules for City Center.
 - Offers will be rescinded since parcels are no longer needed due to design changes for TMKs 2-3-039-011, 2-3-039-004, 2-3-039-005 and 2-3-039-006.

RELOCATIONS

Figure 14. Relocation Status for the Occupants (data provided by READ)

Section	Residential Relocations (a)	Business Relocations (b)	Not-For-Profit Relocations (c)	Total Relocations (a+b+c)	Relocation Assessment Completed	90-Day Notice Sent	30-Day Notice Sent	Relocations Completed for Occupants
W.Oahu\Farrington	18	6	1	25	12	12	8	25
Kamehameha		4		4	4	3	3	4
Airport		13		13	5	10		7
City Center	18	66		84	31	55	23	53
Grand Total:	36	89	1	126	52	80	34	89

WEST O’AHU/FARRINGTON

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

AIRPORT

- Priority:
 - Ongoing relocation for TMKs 1-1-016-006 and 1-1-016-016.

CITY CENTER

- Priorities:
 - Continuing negotiations with TMK 2-3-002-059.
 - Seeking judicial means to vacate TMK 2-3-007-045.

THIRD-PARTY AGREEMENTS

Figure 15. Third-Party Agreement Status – Third Party Agreements include agreements between HART and other government entities, with the exception of D.R. Horton. Completed agreements are in grey, agreements to be executed are in white.

Third-Party Agreements				
Agreement	Status	Target	Section	Notes/Remarks
City Agreements				
City Joint Use Memorandum of Understanding	Pending	August 2016	WOFH, KHG, Airport, City Center	Being reviewed by Corporation Counsel.
DFM – Dept. of Facility & Maintenance (Kamehameha Hwy/Makalapa Manor)	Executed		Airport	Jurisdictional transfer from DFM to HART in place.
DPR - Dept. of Parks & Recreation (MSF drainage)	Executed		WOFH	Consent to construct in place.
State Agreements				
UH - University of Hawai’i Master Agreement	Pending	September 2016	WOFH, KHG, City Center	Final negotiations are ongoing. Will secure Right of Construction as not to delay the project.
UH -West O’ahu (UHWO) Pre-Construction Right of Entry	Executed		WOFH	Consent to construct in place.
UH - West O’ahu (UHWO) Construction Right of Entry for Station	Executed		WOFH	Consent to construct in place to be followed by execution of the UH Master Agreement.
UH - Leeward Community College (LCC) Pre-Construction Right of Entry	Executed		WOFH	Consent to construct in place.
UH - Leeward Community College (LCC) Construction Right of Entry for Guideway	Executed		WOFH	Consent to construct in place to be followed by execution of the UH Master Agreement.
UH - Leeward Community College (LCC) Construction Right of Entry for Station	Executed		WOFH	Consent to construct in place to be followed by execution of the UH Master Agreement.
UH - Urban Gardens Pre-Construction Right of Entry	Executed		KHG	Consent to construct in place.
UH - Urban Gardens Construction Right of Entry	Executed		KHG	Consent to construct in place to be followed by execution of the UH Master Agreement.
UH - Urban Gardens Kiewit Construction Right of Entry	Executed		KHG	Consent to construct in place.
UH - Honolulu Community College (HCC) Pre-Construction Right of Entry	Executed		City Center	Consent to construct in place.
UH - Honolulu Community College (HCC) Construction Right of Entry for Guideway & Station	Pending	September 2016	City Center	In negotiations. Concerted effort is being made to finalize.
DLNR – Dept. of Land and Natural Resources Kapolei Right of Entry	Executed		WOFH	Consent to construct in place to be followed by execution of the easement agreement.

Third-Party Agreements				
Agreement	Status	Target	Section	Notes/Remarks
DLNR – Kapolei Easement Agreement	Pending	January 2017	WOFH	Easement agreement in process.
DLNR – Keehi Lagoon Right of Entry	Executed		Airport	Consent to construct in place to be followed by execution of the easement agreement.
DLNR – Keehi Lagoon Easement Agreement	Pending	January 2017	Airport	Easement Agreement in process.
DOE – Dept. of Education Master Agreement and Consent to Construct (Waipahu H.S.)	Executed		WOFH	Consent to construct in place. Jurisdictional Transfer in process.
Aloha Stadium / Department of Accounting & General Services (DAGS) MOU for guideway & station	Executed		KHG	MOU in place.
Aloha Stadium / Department of Accounting & General Services (DAGS) Right of Entry for guideway (for Kiewit)	Executed		KHG	Limited ROE granted for staging for Kiewit for KHG contract.
Aloha Stadium / Department of Accounting & General Services (DAGS) Right of Entry for guideway	Executed		KHG	Consent to construct in place to be followed by execution of the easement agreement.
Aloha Stadium / Department of Accounting & General Services (DAGS) Easement Agreement for guideway	Pending	January 2017	KHG	Easement Agreement in process.
Aloha Stadium / Department of Accounting & General Services (DAGS) Right of Entry for station park and ride	Pending	June 2016	KHG	In negotiations.
Aloha Stadium / Department of Accounting & General Services (DAGS) Easement Agreement for station park and ride	Pending	January 2017	KHG	Process Easement Agreement.
HDOT(H) – Dept. of Transportation Highways Master Agreement	Executed		WOFH	Master Agreement in place.
HDOT(H) – Dept. of Transportation Highways Master Agreement - Amendment	Pending	May 2016	WOFH	In process.
HDOT(H) - Master Agreement for KHG, Airport and City Center	Executed		KHG, Airport, City Center	Master Agreement in place.
HDOT(H) – Joint Use & Occupancy (JU&O) Sub-agreement	Executed		WOFH	Consent to construct in place.
HDOT(H) – Joint Use & Occupancy (JU&O) Sub-agreement	Executed		KHG	Consent to construct in place.
HDOT(H) – Joint Use & Occupancy (JU&O) Sub-agreement	Pending	April 2016	Airport	In process.
HDOT(H) – Joint Use & Occupancy (JU&O) Sub-agreement	Pending	September 2016	City Center	In process.
HDOT(A) – Dept. of Transportation Airports Joint Use & Occupancy (JU&O) Sub-agreement for Airport Division parcels	Executed		Airport	Consent to construct in place.
HDOT(A) – Dept. of Transportation Airports Joint Use & Occupancy (JU&O) Sub-agreement for Airport leased/revenue parcels	Pending	August 2016	Airport	Sub-agreement in process for leased/revenue parcels.
HDOT(A) - Joint Use & Occupancy (JU&O) Sub-agreement	Pending	August 2016	City Center	Sub-agreement in process for leased/revenue parcels.
HDOT(A) - Easement Agreement for Airport Division parcel	Pending	January 2017	Airport	Process Easement Agreement.
HDOT(Har) – Dept. of Transportation Harbors Easement Agreement	Pending	January 2017	City Center	In process.
HDOT(Har) – Dept. of Transportation Harbors Right of Entry	Pending	August 2016	City Center	In process.

Third-Party Agreements				
Agreement	Status	Target	Section	Notes/Remarks
DHHL - Dept. of Hawaiian Home Lands Master Agreement	Executed		WOFH, MSF	Master Agreement in place.
DHHL – Dept. of Hawaiian Home Lands License	Executed		WOFH, MSF	Consent to construct in place.
OCCC - Dept. of Public Safety, Oahu Community Correctional Center, Dillingham Blvd., Easement Agreement	Pending	January 2017	City Center	Process Easement Agreement.
OCCC - Dept. of Public Safety, Oahu Community Correctional Center, Dillingham Blvd., Right of Entry	Pending	August 2016	City Center	Finalizing requirements.
HCDA -HI Community Development Easement Agreement	Pending	January 2017	City Center	Process Easement Agreement.
HCDA -HI Community Development Right of Entry	Pending	August 2016	City Center	Coordination is ongoing.
DAGS – Dept. of Accounting & General Services / HHFDC Easement Agreement	Pending	January 2017	City Center	Process Easement Agreement.
DAGS – Dept. of Accounting & General Services / HHFDC Right of Entry	Pending	August 2016	City Center	In process.
Federal Agreements				
U.S. Navy Licenses	Executed		WOFH, KHG, Airport	Consent to construct in place. Formal notification is forthcoming, however, immediate access is granted.
U.S. Navy Easements	Pending	August 2016	WOFH, KHG, Airport	Land court documents processed and awaiting recordation and filing.
U.S. Navy Pearl Harbor Station Acquisition of Fee Transfer	Executed		Airport	Quitclaim deed received.
U.S. Post Office Honolulu Processing Center acquisition	Pending	August 2016	Airport	In negotiations.
U.S. Gov't/GSA/Federal Courthouse Agreement & Landscape Plan	Pending	September 2016	City Center	Draft agreement is under review and discussions are ongoing.
Other Agreements				
D.R. Horton Agreement for Construction	Executed		WOFH	Consent to construct in place to be followed by execution of the easement agreement.
D.R. Horton Final Easement Agreement	Pending	January 2018	WOFH	Easement Agreement in process and subject to owner’s development plans.

6 MANAGEMENT AND ADMINISTRATIVE UPDATES

6.1 Safety and Security

6.1.1 S&S Certification Documents

<i>Key HART S&S Certification Documents Update & Approval Status</i>			
S&S Project Plans, PHAs, Core Systems SSHA and O&SHA, and TVA			
Documents	REV #	Date Approved	Comments
Documents Approved			
1. Safety & Security Management Plan (SSMP)	Rev 5	10/16/2015	SSRC approved and signed
2. Safety & Security Certification Plan (SSCP)	Rev 4.B	12/14/2015	SSRC approved and signed
3. WOFH SSCP	Rev 0	10/22/2014	SSRC approved - No future updates: HART SSCP is in affect
4. Construction S&S Plan (CSSP)	Rev 2	10/16/2015	SSRC approved and signed
5. Security Sensitive Information (SSI) Plan	Rev 0	12/15/2015	SSRC approved and signed
6. Project Preliminary Hazard Analysis (PHAs)	Rev 2.A	9/3/2015	Rev 2A - DRAFT annual update completed 9/3/2015
a. MSF – Yard and Shop	Rev 2.A	2/24/2016	SSRC approved
b. Alignment	Rev 2.A	3/23/2016	SSRC approved
c. Tracks	Rev 2.A	2/24/2016	SSRC approved
d. Stations	Rev 2.A	3/23/2016	SSRC approved
7. Central ATC O&SHA	Rev C	9/23/2015	SSRC approved
8. Wayside ATC O&SHA	Rev D	9/23/2015	SSRC approved
9. Vehicle/ATC SSHA	Rev E	2/24/2016	SSRC approved
10. Vehicle/ATC O&SHA	Rev F	2/24/2016	SSRC approved
11. UPS O&SHA	Rev C	2/24/2016	SSRC approved
12. FDAS SSHA	Rev C	3/23/2016	SSRC approved
13. FDAS O&SHA	Rev B	2/24/2016	SSRC approved
14. Threat & Vulnerability Assessments (TVAs)	Rev 1	1/16/2015	Update on hold - pending East Alignments re-design
Documents not Approved			
15. Project Preliminary Hazard Analysis (PHAs)	Rev 2.A	-	Rev 2A - DRAFT annual update completed 9/3/2015
e. Traction Power	Rev 2.A	-	Update on-hold - pending approval of TES SSHA and O&SHA
f. Train Control	Rev 2.A	-	Update on-hold - pending approval of ATC SSHA & O&SHA
g. Vehicles	Rev 2.A	-	Update on-hold - pending approval of PV SSHA & O&SHA
h. Communications	Rev 2.A	-	Update on-hold - pending approval of Comms SSHA and O&SHA
16. TES Back-Up Emergency Generator SSHA	Rev A	-	HART Safety developed and under review
17. Core Systems Contract (CSC) PHAs (DBOM)	Rev F	-	2/26/2016 - HART Accepted as Noted Re-submit (ANR)
18. Technologies PHAs	Rev C	-	10/29/2015 - CSC Revise & Re-submit (R&R)
19. Wayside ATC SSHA	Rev B	-	11/14/2014 - CSC R&R
20. Wayside/ATC SHA	Rev C	-	1/6/2015 - CSC R&R
21. SCADA O&SHA	Rev E	-	HART Accepted 2/9/2016 – Ready for SSCWG review
22. SCADA SSHA	Rev C	-	3/10/2015 - CSC R&R
23. Vehicle Fire Hazard Analysis (FHA)	Rev B	-	8/28/2015 - CSC R&R
24. Vehicle SSHA	Rev A	-	8/31/2015 - CSC R&R
25. Vehicle O&SHA	Rev A	-	10/26/2015 - CSC R&R
26. TES SSHA	Rev B	-	11/03/2015 - CSC R&R
27. TES O&SHA	Rev B	-	11/03/2015 - CSC R&R
28. PSGS SSHA	Rev B	-	10/05/2015 - CSC R&R
29. PSGS O&SHA	Rev B	-	2/2/2016 - Under HART Review
30. Communications SSHA	Rev B	-	01/7/2016 - CSC R&R
31. Communications O&SHA	Rec C	-	1/27/2016 - CSC R&R
32. MOW Support Vehicles O&SHA	Rev A	-	Under development

6.1.2 S&S Design Criteria Conformance Checklist (DCCC) – Civil Contracts

S & S Design Criteria Conformance Checklist (DCCC)						
Civil Contracts						
Verification Status						
Design Phase				Construction / Installation /Testing		
Contracts: FD, DB, DBOM	% Verified	+ / - % Change	Comments: Design SSRC Approval Date	% Verified	+ / - % Change	Comments: C/I/T SSRC Approval Date
Civil Contracts Under Construction						
FD-430, Airport Section 7-Piers	100%	N/A	6/17/2015	100%	N/A	8/26/2015
Yard Control Bungalow (YCB) CSC - Civil	60%	+12%	Verification underway	-	-	
DB-200, MSF	97%	+1	1/28/2015	31%	+10%	Verification underway
FD-430, Airport Utilities	100%	N/A	6/25/2014	51%	-	Verification underway
DB-120, WOFH Guideway - 38 total - Sub CEL/CIL Packages	99%	-	36 Sub - CELs/CILs SSRC approved	44%	+6%	Verification underway
DB-320, KHG Guideway - 40 total - Sub CEL/CIL Packages	98%	-	36 - Sub CELs/CILs, SSRC approved	9%	+2%	Verification underway
FD-140, West Oahu Station Group	99%	-	3 stations 12/09/2015	-	-	
FD-240, Farrington Hwy Station Group	100%	-	3- station- 12/09/2015	-	-	
FD-340, H2R2 Ramps	100%	N/A	5/27/2015	-	-	
Construction Contracts Awarded - Not Yet Started						
MI-930, Elevators & Escalators (Stations)	-	-	Base DCCC 8/26/15	-	-	
Civil Contracts Under Design / in Pre-bidding or Pre-award Phases						
FD-340, Kamehameha Highway Station Grp	100%	N/A	3 Stations – 8/26/2015	-	-	
AP00 Art-in-Transit, 23 artists/contracts	-	-	Base DCCC under review	-	-	
DB-275, Pearl Highlands PS/BTC	-	-	Base DCCC under review	-	-	
FD-600, West O’ahu Park & Ride	-	-	Base DCCC under review	-	-	
DB-450, AG & Stations Group (AGS)	-	-	Base DCCC being updated	-	-	
DB-550, CCG & Stations Group (CCGS)	-	-	Base DCCC being updated	-	-	
MI-900 Fare Collection System	N/A	N/A	CDRLS are being utilized	N/A	N/A	N/A

6.1.3 S&S Design Criteria Conformance Checklist (DCCC) – Core Systems Contracts

S & S Design Criteria Conformance Checklist (DCCC)						
Core Systems Contracts						
Verification Status						
Design Phase				Construction / Installation /Testing		
Contracts: FD, DB, DBOM	% Verified	+ / - % Change	Comments: Design SSRC Approval Date	% Verified	+ / - % Change	Comments: C/I/T SSRC Approval Date
DBOM-920 Core Systems Contracts Under Procurement - Production - Manufacture - Installation						
Passenger Vehicles (PV)	-	-	Designer input underway	-	-	
Traction Electrification System (TES)	93%	+3%	Verification underway	-	-	
MOW Vehicles – 8 support vehicles	-	-	Designer input underway	-	-	
DBOM-920 Core Systems Contracts Under Design						
Communication System	-	-	Designer input underway	-	-	
Fire Detection Alarm System (FDAS)	-	-	Designer input underway	-	-	
Train Control System (TCS)	-	-	Designer input underway	-	-	
Supervisory Control & Data Acquisition (SCADA)	-	-	Designer input underway	-	-	
Platform Screen Gate System (PSGS)	-	-	Designer input underway	-	-	
TES-Back-up Emergency Generator (BUEG)	N/A	N/A	No CDC Requirements	N/A	N/A	N/A

6.1.4 S&S Certification “Open Items List” Status

<i>HART S&S Certification “Open Items List”</i>						
<i>Last 4 Months Status</i>						
“Open Items” - Design/Construction and Verification Issues						
Month – 2015, 2016	Total #	Total # Open	Total # Closed	% Closed Overall	# closed In Month	% Closed In Month
December	205	48	157	77%	07	3%
January	211	41	170	81%	12	19%
February	215	30	185	86%	15	7%
March	215	24	191	89%	4	2%

Note: Total #s are carried over from month to month

6.1.5 S&S Construction Specification Conformance Checklists (CSCC) - Civil Contracts

<i>S & S Construction Specification Conformance Checklists (CSCC)</i>			
<i>Civil - Contracts</i>			
<i>Verification Status</i>			
Construction - Installation – Start-up & Testing Phases			
Contracts	% Verified	+ / - % Change	Comments
Civil Contracts Under Construction			
DBB-525, Airport Section, 7 - Drilled Shafts	100%	N/A	8/26/2015 SSRC approved –Certification Completed
Yard Control Bungalow (YCB) CSC Civil - Contract	43%	+26%	Base CSCC SSRC approved 3/23/2016, verification underway
DB-200, MSF and Rail Yard	44%	+3%	Verification underway
DBB-505, Airport Utilities - Construction	57%	-	Verification underway
DB-120, WOFH Guideway	53%	-	Verification underway
DB-320, KHG Guideway	17%	+1%	Verification underway
DBB-171, West O’ahu Station Group (WOSG)	-	-	Base CSCC SSRC approved 3/23/2016
DBB-271, Farrington Hwy Station Group (FHSG)	-	-	Base CSCC - SSRC approved, 7/22/2015
DBB-385, H2R2 Ramps	-	-	Base CSCC - SSRC approved, 5-27-2015
Construction Contracts Awarded – Not Yet Started – No Verification Effort			
MI-930, Elevators & Escalators, WOSG	-	-	Base CSCC - SSRC approved, 8/26/2015
MI-930, Elevators & Escalators, FHSG	-	-	Base CSCC - SSRC approved, 8/26/2015
MI-930, Elevators & Escalators, KHSG	-	-	Base CSCC - SSRC approved, 8/26/2015
Civil Contracts Under Design or in Pre-bidding or Pre-award Phases			
DBB-371, Kamehameha Hwy Stations Grp (KHSG)	-	-	Base CSCC SSRC approved 3/23/2016
MI-930, Elevators & Escalators, AP/CC Stations	-	-	Base CSCC - SSRC approved 8/26/2015
AP00 Art-in-Transit, 23 Artists/contracts	-	-	Draft Base CSCC under PM review
DBB-511, Dillingham Utilities & Road Widening	-	-	Draft Base CSCC needs updating - on hold – pending re-design
DB-275, Pearl Highlands PS/ Bus Transit Center	-	-	TBD – waiting for 100% conformed specifications
MI-900 Fare Collection System	-	-	Draft Base CSCC under PM review
DBB-600, West O’ahu Park & Ride	-	-	TBD – waiting for 100% conformed specifications
DB-450, AG & Stations Group (AGS)	-	-	Draft Base CSCC needs updating - on hold – pending re-design
DB-550, CCG & Stations Group (CCGS)	-	-	Draft Base CSCC needs updating - on hold – pending re-design

6.1.6 S&S Specification / Testing Conformance Checklists (STCC) - Core Systems

<i>S & S Specification / Testing Conformance Checklists (STCC)</i>			
<i>Core Systems – Contracts</i>			
<i>Verification Status</i>			
Procurement - Production - Manufacture - Installation - Start-up & Testing Phases			
Contracts	% Verified	+ / - % Change	Comments
DBOM-920 Core System Contracts under Procurement - Production - Manufacture - Installation - STCC			
MOW Vehicles (8-support vehicles)	27%	-	Base STCC SSRC approved 2/24/2016, verification underway
Passenger Vehicles/Cars			
1) General Requirements - Applies to all PVs	2%	-	Verification in process
2) PV-001- Interim Cert - for Dynamic Testing	-	-	Verification on hold pending truck design resolution
3) PV-002- Interim Cert - for Dynamic Testing	-	-	
4) Train/4-cars Cert for Pre-revenue Service	-	-	Base STCC under development
Traction Electrification System (TES)			
1) General Requirements - Project Wide	26%	-	Base STCC pending April SSRC approval, verification underway
2) MSF - Rail Yard	25%	-	Base STCC pending April SSRC approval, verification underway
3) Functional Track - WOFH Guideway	-	-	Base STCC pending April SSRC approval
4) WOFH and KHG Guideways	-	-	Base STCC pending April SSRC approval
5) Airport and City Center Guideways	-	-	Base STCC pending April SSRC approval
DBOM-920 Core Systems Contracts Under Design- STCC			
System Integration Testing (SIT)	-	-	Draft base SIT STCCs on hold – SIT Plan being revised
Uninterrupted Power Supply (UPS)	11%	+11%	Base STCC pending April SSRC approval, verification underway
Traction Power Generators Back-up System	-	-	SSRC approved 3/23/2016
Communication Systems			
1) Project Wide Communication Requirement	-	-	Base STCC pending April SSRC approval
2) MSF and Rail Yard Communications	-	-	Base STCC pending April SSRC approval
3) Segment 1 Communications (KHG / WOFH)	-	-	Base STCC pending April SSRC approval
4) Segment 2 Communications (Airport)	-	-	Base STCC pending April SSRC approval
5) Segment 3 Communications (City Center)	-	-	Base STCC pending April SSRC approval
Fire Detection Alarm System (FDAS)	15%	+15%	Base STCC pending April SSRC approval, verification underway
Train Control System (TCS)	-	-	Base STCCs under development
Supervisory Control & Data Acquisition (SCADA)	-	-	Base STCCs under development
Platform Screen Gate System (PSGS)	9%	+9%	Base STCC pending April SSRC approval, verification underway
Operational Requirements			
Ops Readiness Conform Checklists (ORCC)	6%	-	Base ORCC - SSRC approved 12/09/2015, verification underway
Pre-revenue Testing Conform Checklist (PRTCC)			Under development

6.1.7 Interim Certification Verification Status

<i>Interim Certification - Verification Status</i>			
Construction - Installation – Start-up & Testing Phases			
Contracts	% Verified	+ / - % Change	Comments
Interim Certification Requirements			
1. PV-001 Delivery - OSB, M-5 Track, ORCC, MOW-V	69%	+35%	Interim Checklists SSRC approved 2/24/2016
2. MOW Building Early Occupancy	26%	+4%	Interim checklist SSRC approved 3/23/2016 – Needs CO/TCO
3. Five (5) - MOW Vehicles Delivery	70%	-	SSRC approved checklist – 1/27/2016
4. Test Track - Rail Yard, TES/IT/ORCC/PV-002/ WOFH	-	-	IC checklists under Review – April 2016 SSRC approval
5. PV-002 Delivery	-	-	PV-002 IC checklist SSRC approved 1/27/2016
6. Functional Track - WOFH, PV-002, TES, ORCC, & IT	-	-	Interim Cert checklists under development

6.1.8 Twelve (12) Month Certification Projected Milestones

12 Month Certification Projected Milestones		
Milestones	Projected Contract and Interim Certifications	Comments
April/May	1. MOW Building Early Occupancy - Interim Certification	Civil / Systems
May 2016	2. YCB Civil Contract CSC Certification	Civil only
May 2016	3. DB-200, MSF Contract Certification	Civil / Systems
May 2016	4. Five (5) MOW Vehicles Delivery - Interim Certification	Vehicles only
Aug 2016	5. PV-002 Delivery - Interim Certification	Vehicle only
Sept 2016	6. Eight (8) MOW Vehicles Final Certification	All MOW vehicles
Sept 2016	7. FD-430 and DBB-505, Airport Utilities Contract Certification	Civil only
Sept 2016	8. Test Track - Rail Yard - Interim Certification	Civil / Systems
Sept 2016	9. PV-002, Interim Certification to enter Dynamic Testing	Vehicle only
Nov 2016	10. Functional Track - Interim Certification - Test Track	Civil / Systems
Dec 2016	11. FD-340 and DBB-385, H2R2 Contract Certification	Civil only
Dec 2016	12. DB-120, WOFH Guideway Contract Certification	Civil only

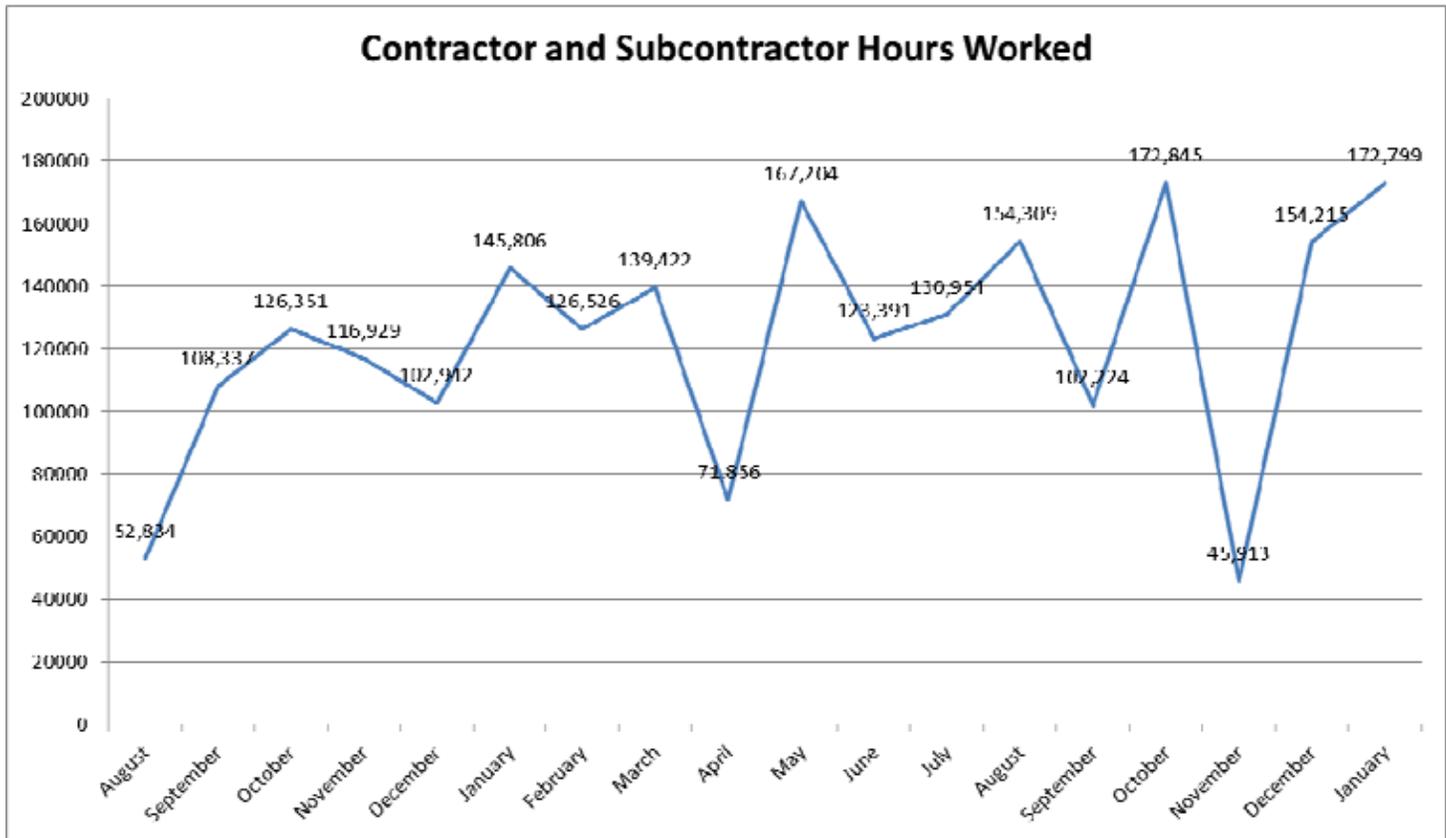
6.1.9 S&S Certification Certificates Issued to Date

S&S Certification Certificates Issued to Date		
Contracts / Interim Certification Certificates Issued	Date Signed	Comments
1. FD-430 / DBB-525 Airport 7-Piers Certifiable Element "Guideway" Cert Certificate	9/21/2015	No open items - SSRC approved
2. 3 - MOW Vehicles Delivery & M-7, M-2, M-1 MSF Tracks – Interim Cert Certificate	2/4/2016	No open items - SSRC approved
3. MSF Yard Tracks M-4 and M-6 Interim Cert Certificate	3/10/2016	No open items - SSRC approved
4. PV-001 Delivery, OSB, M-5/M-4 Tracks, ORCC, MOV MPV Interim Cert Certificate	3/24/2016	Open Items

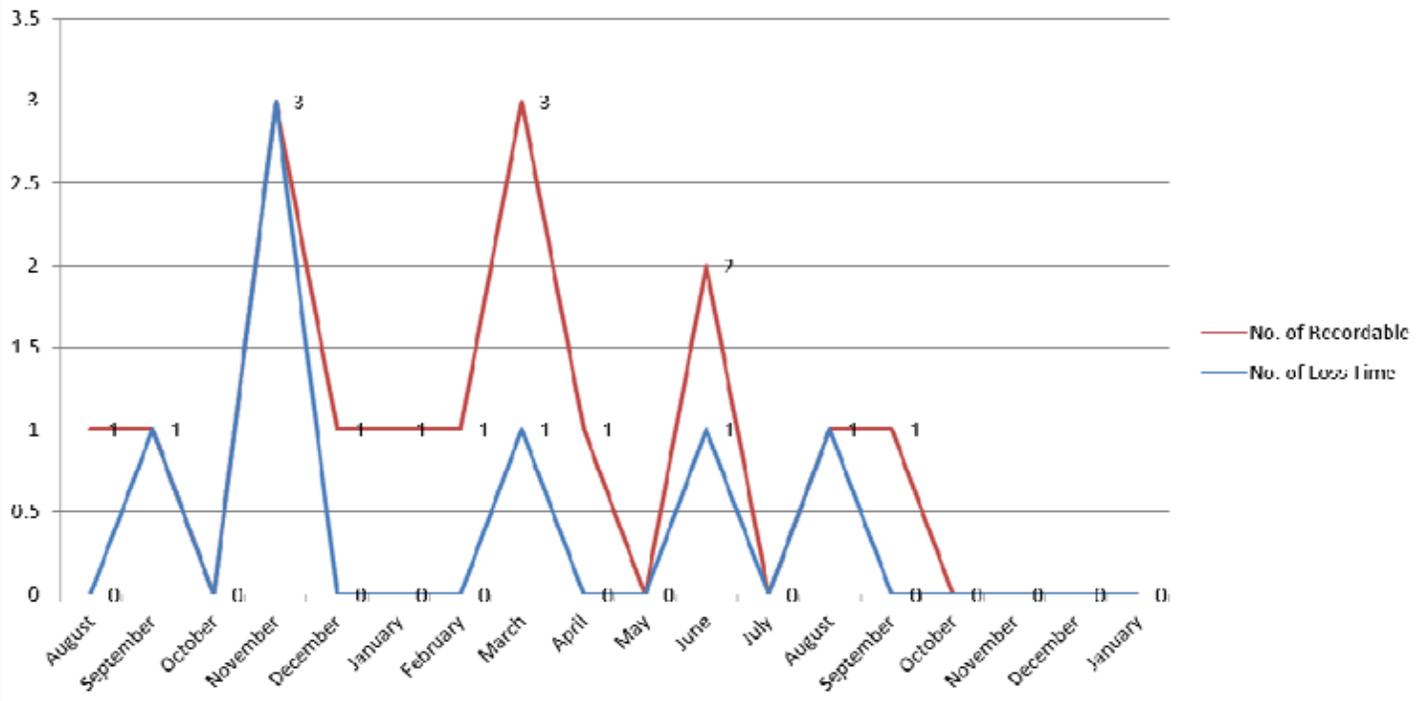
6.1.10 Construction Safety and Security

Project-Wide Incident Activity					
Event Type	Total Number of Events since 1/1/2007	Total Number of Events for Feb. 26, 2016-Mar. 24, 2016	Loss Type	Date	Event Description
Environment	15	0			
Loss or Damage	36	1	a) Minor Loss	a) 2/29/16	a) KHG: A metal lifting plate broke free from a wash basin as it was being moved which struck a 3rd party vehicle.
*Reportable Occupational Injury/Illness	0	0			
Security	58	1	a) Minor Loss	a) 3/3/16	a) AHJV: A WATTS storage container was broken into and equipment was stolen.
**Loss Time Occupational Injury/Illness	6	0			
Road/Vehicle - Driving	84	0			
Service Strike	81	3	a) Minor Loss b) Minor Loss c) Minor Loss	a) 3/10/16 b) 3/23/16 c) 3/23/16	a) ASU: An unidentified 7200V HECO line was hooked during a utility excavation. b) ASU: Irrigation conduit and wiring struck. c) ASU: 8" steel pipe struck during excavation activities.
*Reportable incidents: Requires OSHA to be notified within 8 hours, and includes the death of an employee or hospitalization of three or more employees.					
**Loss Time Injury: Time away from work due to injury.					

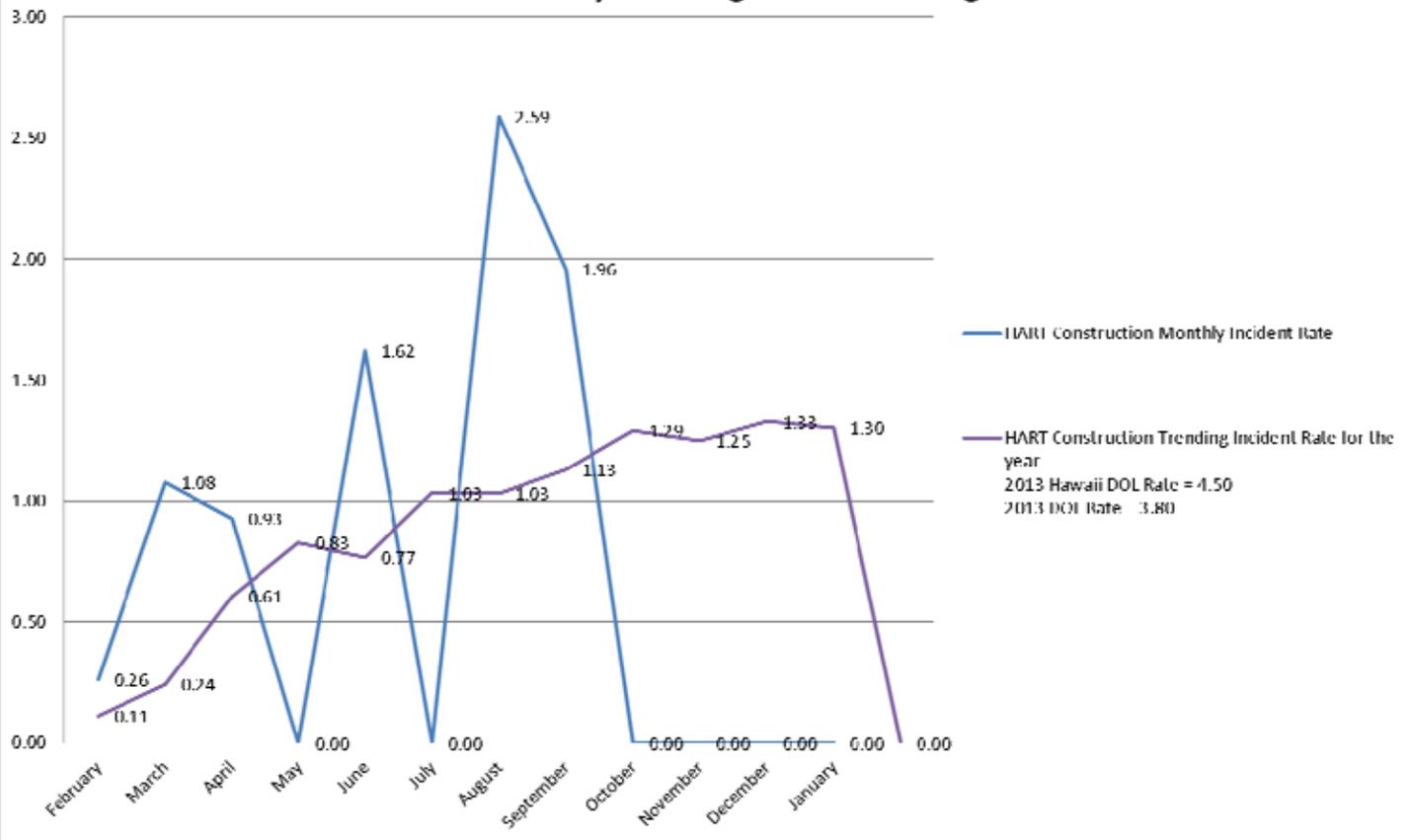
	2014			2015			2016		
	Hours worked	No. of Recordable	No. of Loss Time	Hours worked	No. of Recordable	No. of Loss Time	Hours worked	No. of Recordable	No. of Loss Time
January	/	/	/	145,806	1	0	172,799	0	0
February	/	/	/	126,526	1	0			
March	/	/	/	139,422	3	1			
April	/	/	/	71,856	1	0			
May	/	/	/	167,204	0	0			
June	/	/	/	123,391	2	1			
July	/	/	/	130,954	0	0			
August	52,834	1	0	154,381	1	1			
September	108,337	1	1	102,224	1	0			
October	126,351	0	0	172,845	0	0			
November	116,929	3	3	45,913	0	0			
December	102,942	1	0	154,215	0	0			
Total	507,393	6	4	1,534,735	10	3	172,799	0	0
OSHA Annual Incident Rate				1.3					
Work Hours for WOFH, KHG, MSF, Airport, CORE System, as reported to OCIP and certified.									



HART Contractor and Subcontractor Recordable and Loss Time Injuries as Reported to iSMS and OCIP



HART Construction Monthly and Progressive Trending Incident Rate



KEY ISSUES

- Core Systems losing their full-time Ansaldo/H-JV Safety and Security Certification point of contact in Honolulu poses a concern of certification expertise and experience at the Core Systems contactor level that will impose a hardship to the HART Safety and Security Department efforts until a full-time, qualified replacement is on board.
- The rail shims remain an outstanding issue. A proposed plan by the contractor was reviewed by HART Engineering. The contractor will proceed at risk for the work. The extended fasteners beyond the Compendium of Design Criteria (CDC) requirement must be approved and signed off by the RE's prior to HART Safety and Security acceptance.
- DB and DBOM contracts pose a significant challenge for the certification process where 100% design verification is not realized until sometime during or at the end of the construction phase. This delay is not consistent from one contract to another and is based on the complexity of the designs and contract submittal requirements.
- The specification and testing conformance checklist verification effort (% verified) will naturally lag behind construction completion percentage due to the fact that a significant percentage of the needed submittals are submitted at the end of the project; such as test reports, O&M manuals, training, and as-built drawings.
- Safety and Security is presently lacking one (1) position (Safety Specialist, OSHA). Staff has divided the work in the interim.

6.2 Quality Management

• Overview

- The HART QMP and HART-approved QAPs of contractors, consultants and suppliers have been assimilated by their respective employees and are being implemented as standard operating procedures. Therefore, less and less Nonconformance Reports (NCR) are reported or encountered internally and on existing contracts.
- Overall quality of the Project is good.
- Review and approve contractors, consultants and suppliers new and updated QAPs, including Inspection and Test Plans (ITP). Completed review and approved QAPs: ASTS (Hitachi), Hitachi Rail Italy, and Hitachi Rail USA.
- Conducted biweekly Quality Task Force (QTF) meetings with CE&I, contractors and consultants QA teams to discuss the status of: design and construction activities; procurement activities; inspection and testing; NCRs; Corrective Actions (CARs) and Preventative Actions (PARs); quality compliance; various process improvements; quality economics, and Buy America compliance.
- Participated in Pre-Activity Meetings for scheduled construction activities: CSC/MSF (delivery and receipt of the first train set and TC Cab Rack for Train 3); ASU (Fuel Line Removal and Parapet Street Lighting), and FHSG (Concrete, Drilled Shafts, and Drilled Shafts Reinforcing Steel).
- Closed PGH Wong (CE&I West) audit.
- Continue reviewing AHJV's additional responses to the audit findings for the Core System Configuration Management Plan.
- Performed a Combined QA, Buy America, and Environmental Audit of KKJV on the MSF contract on March 15-16, 2016. The audit report was issued on March 23, 2016.
- Prepared Management System Audits (QA, Environmental and Buy America) Schedule for 2016 as shown on the following pages:



HONOLULU AUTHORITY for RAPID TRANSPORTATION

COMBINED MANAGEMENT SYSTEM AUDIT SCHEDULE

YEAR: 2016 Rev 2

KEY	Local Audit	Remote Audit	Continental U.S. Audit	International Audit		
CONTRACT PACKAGE NUMBER	DESCRIPTION	CONTRACTOR / CONSULTANT / SUPPLIER	AUDIT NUMBER	DATE SCHEDULED	DATE PERFORMED	DATE CLOSED
SC-HRT-1400049	CSC Support Services	L + E	16-001 QA	2/9 - 2/10	2/9/16	2/19/16
CH-HRT-10H0449	Maintenance and Storage Facility Design-Build (MSF)	KKJV - HI	16-002 QA/BA/E	3/15 - 3/17	3/15-17/16	
CT-HRT-1200108	Core Systems Contract (CSC) & Hitachi Rail Design-Build-Operate-Maintain	Hitachi Rail USA	16-003 QA	5/3 - 5/5		
CT-HRT-10H0137	West O'ahu/Farrington Highway Guideway Design-Build (WOFH)	KIWC - HI	16-004 QA/BA/E	4/12 - 4/14		
CT-HRT-11H0195	Kamehameha Highway Guideway Design-Build (KHG)					
SC-HRT-1400027	General Engineering Consultant (GEC 3)	CH2M Hill	16-005 QA	5/10 - 5/12		
CT-HRT-1200108	Core Systems Contract (CSC)	AHJV - HI	16-006 QA	5/24 - 5/28		
CR-HRT-1500309	H2R2 Ramp Construction	Royal Contracting	16-007 QA/BA/E	6/28 - 6/30		
CT-HRT-11H0195	KHG Casting Facility	KIWC - HI	16-008 QA/BA	7/19 - 7/21		
CR-HRT-1500503	West Oahu Station Group Construction	NAN, Inc	16-009 QA/BA/E	7/26 - 7/28		
CT-HRT-1500238	Farrington Highway Station Group Construction FHSG	Hawaiian Dredging	16-010 QA/BA/E	8/09 - 8/11		
CT-HRT-11H0195	WOFH and KHG Surveying and Alignments	KIWC - HI	16-011 QA	8/16 - 8/18		
CT-HRT-10H0137						
SC-HRT-14000323	Airport Section Utilities Construction	NAN, Inc	16-012 QA/BA/E	8/30 - 8/31		
DB -	Airport Guideway and Station (Design)	TBD	16-013 QA	9/13 - 9/15		
DB-	City Center Guideway and Station (Design)	TBD	16-014 QA	9/27 - 9/29		
CT-HRT-1300318	Elevator and Escalator - Manufacture, Install and Maintain	US Schindler - HI	16-015 QA/BA	10/4 - 10/8		
		US Schindler - NJ				

Quality Assurance (QA); Buy America (BA); Environmental (E); Safety Security (SS)

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HONOLULU AUTHORITY for RAPID TRANSPORTATION

COMBINED MANAGEMENT SYSTEM AUDIT SCHEDULE

YEAR: 2016 Rev 2

KEY	Local Audit	Remote Audit	Continental U.S. Audit	International Audit		
CONTRACT PACKAGE NUMBER	DESCRIPTION	CONTRACTOR / CONSULTANT / SUPPLIER	AUDIT NUMBER	DATE SCHEDULED	DATE PERFORMED	DATE CLOSED
CT-HRT-10H0137	WOFH Public Information	KIWC - HI	16-016 QA	10/18 - 10/20		
CT-HRT-11H0195	KHG Public Information					
SC-HRT-1400050	West Side Station Group CE&I	PGH Wong - HI	16-017 QA	10/25 - 10/27		
	West Oahu Farrington Highway and Kamehameha Highway Guideways CE&I					
	Elevator and Escalator - CE&I					
	Pearl Highlands Parking Structure/Bus Transit Center CE&I					
	UH West O'ahu Park-and-Ride and Ho'opili Station Finishes CE&I					
CT-HRT-1200106	Configuration Management Plan (CMP)	AHJV - HI	16-018 QA	11/3 - 11/14		
DB	Kamehameha Highway Station Group Construction	NAN, Inc	16-019 QA/BA/E	11/15 - 11/17		
CCH-100	Honolulu Authority for Rapid Transportation (HART)	HART	16-020 QA/SS	12/06 - 12/13		
SC-HRT-1600008	Airport Section Guideway & Stations CE&I East	Stantec	TBD	TBD		
	City Center Section Guideway & Stations CE&I East'					
DB-	Pearl Highlands Garage Transit Center and H1R2 Ramp	TBD	TBD	TBD		
DB-	Airport Guideway and Stations (Construction)	TBD	TBD	TBD		
DB-	City Center Guideway and Stations (Construction)	TBD	TBD	TBD		
DB	UH West O'ahu Park-and-Ride and Campus Road 'B'	TBD	TBD	TBD		

Quality Assurance (QA); Buy America (BA); Environmental (E); Safety Security (SS)

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• Key Issues

HART NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
37 (Audits)	37	0
1 (Construction)	1	0

- Continue updating, reviewing and approval of appropriate HART Project Baseline Plans and Procedures due to new policies, re-organization, process improvement and lessons learned from the internal audits. Upon approval of revised plans and procedures, training of HART employees must be performed in order to assure competency and proficiency.
- Resolution of one (1) major WOFH 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:
 - **Span 258 – NCR 509:** a few strands of the 12-Strands Tendon T1L installed on Span 258 failed after post-tensioning. KIWC is preparing a Remediation Plan to replace the failed Tendon T1L. HART and KIWC will perform a postmortem of the Tendon T1L after its removal to determine the root cause of the failure and the corrective action to prevent recurrence.

Span 258 is a heavy curve span with a spiral surface profile, 4 inches eccentric from the center of gravity, and about 50 feet above ground. The span must be supported and stabilized prior to remediation work. The failed tendon is on the top and on the Mauka side of the span. Therefore, the entire span needs to be jacked-up about three feet to clear the tendon and provide adequate space for removal and replacement work.

- **Direct Fixation Shims Tolerances – NCR 398:** On March 3, 2016, HART issued a letter to KIWC regarding NCR 398: Direct Fixation Shims Tolerances with a condition that KIWC will give HART a credit, which will be negotiated later. Therefore, NCR 398 is considered closed.
- Resolution of two (2) major KHG NCRs that need to be addressed and corrected to prevent recurrence and to mitigate impact to the overall progress of the project. The following are the major NCRs identified:
 - **Drilled Shafts:** To date there are nine (9) Open NCRs (opened three) which are related to the CSL Reports, and 130 Drilled Shafts completed (added 9), which indicates that there were few CSL issues encountered lately and the process has improved. The CSL anomalies on the nine NCRs open were found to be 10”-24” on top of the shafts, therefore correction/fixing will be quicker and easier.
 - **Span 276 – NCR 113:** Damaged (Crack) at the end and Makai side of Segment 14. The crack is minor compared to cracks found on Span 17 and 67 NCRs. KIWC is preparing a Remediation Plan to repair the crack, which is similar to Span 17.

Span 276 is the first longer span with 14 segments erected in the project. KIWC is evaluating the procedure for lowering longer spans as a corrective action to prevent recurrence.

- Erection and finishing of spans, construction of “shear keys” between columns and spans, and construction of concrete walkways on WOFH and KHG guideways.
- Resolution of one (1) major WOFH NCR: replacement of Tendon T1L.
- Resolution of two (2) major KHG NCRs: Drilled Shafts (Cross Hole Sonic Logging Reports) quality and repair, and crack on Segment 14 of Span 276.
- Construction of MSF Yard Ballasted Track: Alignment, Profile, Geometry, Sub-ballast, Drainage, Ballast, Grade Crossings, Welding, Stress Relieving, Concrete Ties, Contact Rails, Switches, etc.
- Installation and welding of rails and turnouts on top of the WOFH guideway.
- Construction of the WOFH and KHG Balanced Cantilever segmental spans.
- Manufacturing of Carbody(s) at Hitachi Rail Italy and its subcontractor manufacturing facilities in Italy.
- Final Assembly of Passenger Vehicles in Hitachi Rail Italy facilities in Pittsburg, CA.
- Pre-shipment, I&T and FAI of wayside core system and passenger vehicles materials, parts and components.
- Perform Joint (HART, KKJV and AHJV) Final Walkdown of Phases 1 and 5 of the MSF Yard, OSB, WTB, and MOW buildings prior to turnover to HART/CSC.
- Perform a Combined QA, Buy America and Environmental Audit of KIWC on the WOFH and KHG contracts.

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

• **Overview and Key Issues**

- On Feb. 8, 2016, HART submitted a request for waiver of Buy America requirements for the variable refrigerant flow (VRF) HVAC system for the train control and communications rooms at the stations. We are awaiting FTA’s determination.

6.4 Disadvantaged Business Enterprise (DBE)

• **Activities this Month**

- \$33,528,303 = total dollar participation for all DBEs on all HART contracts from 9/24/07 to 3/31/16
 - 6.34% = DBE utilization on total disbursed FTA funds received to date (\$33,528,303 divided by \$528,991,194)
 - 1.90% = DBE utilization to date on total Project FTA funds (\$33,528,303 divided by \$1,763,903,901)

*Total DBE Participation = \$33.5M
(previous report = \$32.1M)*

Figure 16. DBE Participation this Month

DBE Participation in March		
DBE Firm	Contract Number	Participation
Lawson & Associates	SC-HRT-1400061 MM-964	\$77,054
ADS System Safety Consulting	SC-HRT-1400061 MM-964	\$71,793
Island Hauling	CT-HRT-10H0449 DB-200	\$47,203
LKG-CMC	SC-HRT-1400049 MM-962	\$12,111
Don’s Makiki	CT-HRT-10H0449 DB-200	\$7002
David’s Fencing	CT-HRT-10H0449 DB-200	\$5,681
Tech Inc.	CT-HRT-10H0449 DB-200	\$25,262
David’s Fencing	CT-DTS-1100195 DB-320	\$10,838
PSC Consultants	SC-HRT-1400050 MM-290	\$156,030
Element Environmental	SC-HRT-1400050 MM-290	\$158,283
Bow Construction	SC-HRT-1400050 MM-290	\$486
Amazon Construction	CT-HRT-1500297 MM-947	\$857,986
Aloha Steel	CT-HRT-1500297 MM-947	\$152
David’s Fencing	CT-HRT-1500297 MM-947	\$221
Carol Kwan	CT-HRT-1500297 MM-947	\$2,117
Pacific Preferred	CT-HRT-1500297 MM-947	\$3,840
TOTAL FOR THE MONTH		\$1,436,059

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

6.5 Planning and Environment

• Activities this Month

- Programmatic Agreement Activities:
 - HART's Programmatic Agreement (PA) team met with the Hawai'i State Historic Preservation Division (SHPD) on Tuesday, March 1, 2016, as part of ongoing consultation with the division.
 - HART's two Makalapa National Register of Historic Places (NRHP) nominations were transmitted to the USN Federal Preservation Officer (FPO) and Deputy FPO for comment via certified mail on Feb. 17, 2016. A response from the FPO is expected on or before Monday, May 23, 2016.
 - A fire of unknown cause occurred at the HART-owned Ai-Goto Building near the proposed Chinatown Station site on Feb. 23, 2016, resulting in damage that required the removal of additions and placement of the building under permanent closure. A proposal for the adaptive reuse of the Ai-Goto Building as a component of the Chinatown Station's multi-modal hub was under development by March 11, 2016, prompted in part by the fire.
 - The Pearl Harbor National Historic Landmark (NHL) Update was transmitted to NAVFAC as well as SPs and Historic Hawai'i Foundation (HHF) during the week of March 7-11, 2016.
 - The new Kāko'o II Programmatic Agreement Manager had its first of two introductory meetings with Consulting Party's (CPs) on March 10, 2016. The next introductory meeting with CPs will be the first week in April, exact day to be determined.
- Planning, Environmental, and Cultural Activities:
 - HART continues to assist the Oahu Metropolitan Planning Organization (OMPO) in updating the regional long-range travel demand forecasting model for the 2040 Oahu Regional Transportation Plan.
 - Continued coordination with stakeholder agencies regarding street tree transplanting and mitigation efforts.
 - HART relocated five Shower Trees from Aloha Stadium to Central Oahu Regional Park and Blaisdell Park.
 - HART had a final inspection with the Department of Parks & Recreation (DPR) for six Narra Trees that were transplanted from Keehi Lagoon Beach to Waikiki Shell in February 2015.
 - HART had a coordination meeting with DPR, Division of Urban Forestry, for tree maintenance and mitigation measures.
 - HART convened a kickoff meeting with the Hawaiian Station Naming Committee on Feb. 20, 2016.
 - Staff continued coordination with Leeward Community College, Waipahu High School, and community stakeholders regarding a multiuse path and emergency second access along the edge of the Rail Operations Center.
 - Convened the second meeting of the HART Property Utilization Group on Feb. 12, 2016 to determine optimal land use for various HART-owned properties. This group will develop a Property Utilization Plan (PUP).
 - Planning staff participated in a design charrette with other City agencies regarding a potential Pearlridge Bus Transit Center, on March 9, 2016.
 - Environmental staff participated in Quality, Environmental, and Buy America audits of the ROC on March 16, 2016.
 - Staff is developing a Request for Information (RFI) document for the construction of the Pearl Highlands Parking Garage for release to public on March 21, 2016. HART has conducted outreach to critical stakeholders, such as the Army Corps of Engineers, Department of Planning and Permitting, HART Board member and DTS Director Mike Formby, and the Federal Transit Administration for input and guidance.
 - HART staff is continuing to coordinate with the Department of Facility Maintenance on agency compliance requirements associated with the National Pollutant Discharge Elimination System permit.
- Sustainability:
 - Developed programming for Earth Day and a complete month of earth-friendly events.
 - Continuing to explore options for energy efficiency and renewable energy.

• Looking Ahead

- Ongoing coordination with DTS to ensure consistent planning of seamless bus and rail services focusing on rail's interim opening date.
- Refine and develop bus-rail integration needs for Lagoon Drive, Waimanu Street, and Ala Moana locations.

- The next consultation meeting with HART/SHPD is scheduled for April 12, 2016.
- Continue development of HART's sustainability program.
- Evaluation of RFI respondents.
- HART to develop Sustainability Focus Group with to-be-identified stakeholders.
- Continue coordination with DPP, the State, and HCDA regarding transit-oriented development.
- Continue to review and meet, if necessary, with contractors regarding submittals.
- Prepare and submit Post-ROD Documentation for FTA approval prior to need dates as indicated:
 - Emergency Backup Generators, second quarter 2016
 - City Center Realignment (including the Ala Moana Station relocation), second quarter 2016
 - Airport and City Center Casting Yards, third quarter 2016
 - Prepare and submit separate draft Post-RODs for the following topics for third quarter 2016 and beyond: Additional Project-Wide Right-of-Way, West O'ahu Park and Ride Lots (including interim Park and Ride at Ho'opili Station), Hōlau Market and Ai-Goto Parcels at Chinatown Station, and Phased Openings.

6.6 Risk Management

The primary strategy of risk management is to maintain a reserved contingency balance throughout the life of the Project that is acceptable to HART and the FTA. Effective management of project risks is necessary to significantly increase the likelihood of delivering a successful project. Risk management is the systematic process of identifying, analyzing, and responding to risk in a timely manner. Risk management is integral to all phases leading up to revenue service opening including: planning, design, construction, systems testing, system operation start up, safety and security certification, and ultimately to project construction closeout.

Risk assessment interviews are held on a regular basis 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.

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

NOTES OF SIGNIFICANCE

- There are a total of 133 risks in the March 2016 Risk Register, compared to 189 a year ago. There were 2 risks deleted and 0 new risks added for the month. During the month, risk reviews were focused on the west side projects and conducted for West O'ahu / Farrington Highway Guideway, Kamehameha Highway Guideway, West O'ahu Station Group, Farrington Highway Station Group, Kamehameha Highway Station Group, the Maintenance & Storage Facility, and the Ramp H2R2 contract.
- Additional focus continues to be placed on Hawaiian Electric Co. coordination and clearance issue resolution.
- Discussions of project schedule and estimated costs at completion are being evaluated to provide the most accurate information possible.
- A Risk Refresh Workshop was held on March 30, 2016 as the start of the risk and financial planning process. Completion of this process will occur when the FTA/PMOC and HART are in agreement that the budget and schedule approach are in alignment. This process will be used to identify and recommend appropriate budget contingency and schedule float for the revised Revenue Service Date.

AREAS OF FOCUS

A) Market Conditions – The construction market in Hawai'i continues to outpace other major metropolitan US cities. The years 2015 and 2016 are expected to set a new record for construction in the state. This translates to increased escalation of about 1% per month from late 2014 through the end of 2016, according to the Rider Levett Bucknall, Quarterly Construction Cost Report. These conditions may impact the supply of experienced craft labor which will in turn affect contractor productivity rates and traffic mobility issues.

Mitigation Progress:

- HART's continuous improvement in estimating methodology has led to more confidence in the likely construction pricing, but continued pricing pressures in the market could still lead to higher than expected price proposals and bids.
- The combined guideway and station packages on the East (Airport Guideway and Stations contract and City Center Guideway and Stations contract) are still in active procurement.

B) 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.
- Clearance of HECO overhead facilities and HART Guideway and Stations is undergoing evaluation for site specific solutions with respect to the 138kV, 46kV and 12kV transmission lines. The range of solutions to meet physical separation are extraordinary in cost, requiring further study prior to reaching an agreeable solution that is functional and affordable.

C) Right-of-Way – There are parcels on the east and west segments that are still in an active acquisition process. The goal is to provide site access to the contractors on the east to avoid associated inefficiencies related to re-sequencing the work plan which would have a negative impact to the revenue service date.**Mitigation Progress:**

- Nearly all west side property transactions have been accomplished.
- East side – there are a number of third-party agreements needed on the Airport Section and private parcels on the City Center Section. The revised Delivery and Procurement Plan takes into account the Right-of-Way Acquisition Plan. Cost-to-cure partial property improvement impacts have now been mostly resolved.

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

Figure 17. Risk Matrix

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

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

Figure 18. Top Project Risks

Top Risks March 2016									
Current Risk ID	Contract Package	Risk Description	Probability	Prob Rating	Cost Impact	Time Impact	Mar '16 Risk Rating	Feb '16 Risk Rating	
36.01	Project Wide	HECO Clearance - Cost & schedule exposure from unanticipated utility replacements. (Ex., overhead 138kV and 46kV circuits may require relocation, including undergrounding).	90%	5	5	5	25	25	
111.19	Airport Guideway and Stations	Cost estimate for remaining AGS guideway contract may be low compared to current market conditions.	90%	5	5	4	22.5	22.5	
111.06	City Center Guideway & Stations	Cost estimates for remaining CCGS guideway contract may be low compared to current market conditions.	90%	5	5	4	22.5	22.5	
184.17	Elevator/Escalator	There is a potential for cost escalation and extended OH for delay of manufacturing and installing elevator/escalator due to reprocurement of West Side Stations.	90%	5	4	5	22.5	18	
111.16	Pearl Highlands Garage	Cost estimates for Parking Structure and Transit Center FFCA Budget may be low compared to current market conditions.	90%	5	5	4	22.5	22.5	
68.14	City Center Guideway & Stations	Downtown Station planned to be integrated into Pacific Guardian Center. PGC position could extend negotiations and delay construction or increase construction costs.	90%	5	5	3	20	20	
193.08	Core Systems Contract	Delays in civil, guideway, and stations construction may cause Core Systems installation delay. Shared access to facilities needs to be coordinated.	90%	4	5	5	20	20	
110.06	City Center Guideway & Stations	Real Estate market could continue to increase rapidly before purchase of all needed properties, greatly increasing cost of property and delaying construction if legal actions are pursued.	75%	4	5	4	18	18	
6.06	City Center Guideway & Stations	Insufficient utility company resources available to resolve conflicts and meet the design, approvals, and/or construction schedule. (Dillingham bottleneck)	75%	4	4	5	18	18	
6.04	Kamehameha Highway Guideway	Insufficient utility company resources available to meet the design, approvals, and/or construction schedule.	75%	4	5	4	18	18	
37.06	City Center Guideway & Stations	Additional utility easements may be required for private utility companies or other project needs.	50%	3	5	5	15	15	
186.17	Elevator/Escalator	Increase in escalator requirements.	90%	5	3	3	15	15	
37.04	Kamehameha Highway Guideway	Additional utility easements may be required for private utility companies.	50%	3	5	5	15	15	
75.19	Airport Guideway and Stations	Late turnover of ROW and/or permit to contractor may result in claims (i.e., Alert Alarm, Waiwai Loop, Post Office).	75%	4	4	3	14	14	
178.03	West Oahu/Farrington Highway Guideway	Disputed items escalated for resolution results in overturning field determination.	75%	4	5	2	14	14	

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

Figure 19. Risks Deleted

Risks Deleted in March 2016					
Current Risk ID	Contract Package	Risk Description	Comments	Risk Rating	
				Mar. '16	Feb. '16
153.07	Maintenance & Storage Facility Contract	Track work may not be complete in time for AHJV to install equipment and start testing on test track.	3/16 - Risk eliminated and all required track has been installed, ready for trains by end of March.	0.5	0.5
180.03	West Oahu/Farrington Highway Guideway	Retainage recovery by contractor.	3/16 - Risk eliminated - retainage has been released.	3	3

6.7 Community Outreach

• Activities this Month

- HART Executive Director and CEO Dan Grabauskas, HART Board Chairman Don Horner and Mayor Kirk Caldwell talked with reporters when the first two of HART’s rail cars arrived in Honolulu from California.
- HART and its contractor held a ground breaking ceremony at the University of Hawai’i-West O’ahu to signal the commencement of construction for the rail stations that will be built in Kapolei and Ewa.
- HART participated in the First Hawaiian Bank International Auto Show as well as nearly two dozen other presentations to business organizations, schools and community groups.

Since the inception of HART, the outreach team has participated in:

- 948 Presentations and Events
- 521 Neighborhood Board Meetings

Prior to the inception of HART, the outreach team participated in:

- 1,001 Presentations and Events
- 541 Neighborhood Board Meetings

• Construction Outreach

- HART held two Business & Community meetings this month, one in Waipahu and a second one in the Pearl City area. These regular meetings are designed to provide businesses and community members along the rail corridor with updated information about construction work and upcoming traffic changes in their area. The meetings are also designed to provide businesses with the opportunity to provide feedback that helps shape some of HART’s business assistance programs.
- HART continues to provide weekly traffic updates, notifying motorists, elected officials and members of the public of upcoming lane closures due to rail construction. The advisories are posted on the project website and distributed via email to local media outlets.

Figure 20. First Train Cars Delivered



Photo Courtesy: Pasha Hawaii

HART’s first two train cars arrived March 24 at Pier 2 at Honolulu Harbor.

• **Community Input**

- HART’s public outreach team responded to more than 100 public inquiries this month. Inquiries were related to traffic, construction and business outreach programs.

• **Look Ahead**

Coming in April:

- HART plans to unveil its first four-car train.
- HART will hold two Business Alliance meetings in the Waipahu and Aiea /Pearl City areas.
- HART will make a presentation to the Kiwanis Club of Pearl Harbor.

6.8 Staffing

• **Overview**

- The West Area Construction Manager position was filled with an internal PMC employee who was overseeing Utilities and Traffic Engineering.
- The Utilities and Traffic Engineering Manager position was filled by the existing Traffic Engineer (PMC).
- The Director of Communications position interviews have been completed; selection has been made.
- The Chief Financial Officer position interviews have been completed.
- The Deputy Director of Construction position is to be removed from the organization and will be reflected in the next org chart.
- One HDR employee (Architecture and Arts Manager) departed the project in March; position will not be filled.

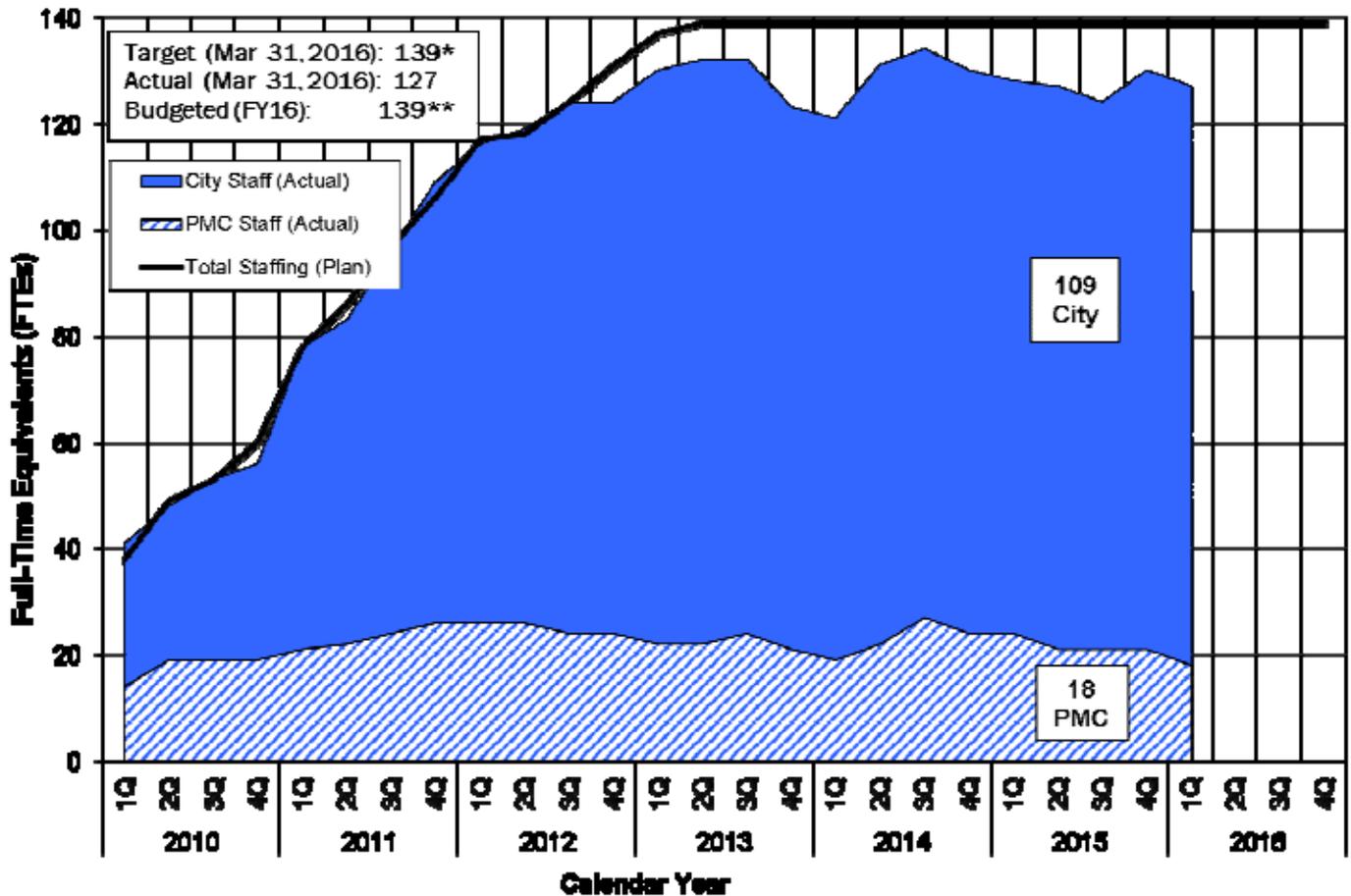
Figure 21. Staffing Activities

Staffing Activities				
Title	Group	New/Existing HART position (City or PMC)	Position Status	Start Month
Design and Construction				
West Area Construction Manager	Construction	Existing (PMC)	Filled	Mar
Assistant Project Manager (City Center DB)	Construction	New (City)	Selected	May
Project Manager (WOFH & KHG)	Construction	Existing (City)	Filled	Mar
Electrical Engineer	Core Systems	Existing (City)	Recruiting/Interviewing	
Utilities and Traffic Engineering Manager	Engineering & Design	Existing (PMC)	Filled	Mar
Utility Engineer	Engineering & Design	Existing (City)	Recruiting	
Planning, Permits and Right-of-Way				
Planner III* (Environmental)	Planning	Existing (City)	Recruiting	
Planner V	Planning	Existing (City)	Filled	Apr
Budget and Finance				
Chief Financial Officer	Budget and Finance	Existing (City)	Interviews complete	
Operations and Maintenance				
Director of Operations & Maintenance	Operations & Maintenance	Existing (PMC)	Filled	Mar
Quality Assurance				
Quality Assurance Engineer * (Civil)	Quality Assurance	Existing (City)	Recruiting	
Administrative Services				
Information Technology Support Technician	Administrative Services	Existing (City)	Filled	Apr
Information Technology Support Technician	Administrative Services	Existing (City)	Recruiting/Interviewing	
Public Information				
Director of Communications	Public Information	Existing (City)	Selected	
Project Controls				
Scheduler	Project Controls	Existing (City)	Recruiting/Interviewing	
CMS Trainer	Project Controls	Existing (City)	Recruiting	
Civil Rights				
Human Resources Specialist	Civil Rights	Existing (City)	Filled	Mar
Procurement				
HART Procurement & Contracts Clerk	Procurement & Specifications	Existing (City)	Recruiting	
Contract Administration and Change				
Contract Specialist	Contract Admin and Change	Existing (City)	Selected	Apr
Contract Specialist	Contract Admin and Change	Existing (City)	Selected	Apr
Contract Specialist	Contract Admin and Change	Existing (City)	Selected	Apr

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

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

Figure 22. Project Staffing (Actual vs. Planned)



* In accordance with Staffing and Succession Plan Rev 6 (Under Revision)
 ** 139 City positions authorized in FY 2016 HART Operating Budget

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

The current organizational chart dated Dec. 11, 2015, is being revised to reflect several personnel changes and some minor organizational structure changes. For the latest project organization chart, see Appendix H.

APPENDICES

Appendix A. Action Items

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

Item No.	Item	Responsible Party	Date Identified	Date Due	Date Completed	Status
1	Resolve HECO issue with Davis-Bacon requirements	HART/FTA	Mar-14	On-going		Open – HECO waiver is pending. HART provided MOU to PMOC.
2	Updates resulting from Risk Refresh:					
2a	Update the Contract Packaging Plan	HART	Aug-14	Dec-15		In progress – Draft provided to PMOC but changes may be incorporated on updated estimate and schedule
2b	Re-baseline Financial Plan	HART	Apr-14	TBD		Pending final update of budget and schedule
2c	Re-baseline budget	HART	Apr-14	TBD		In progress
2d	Re-baseline MPS	HART	Apr-14	TBD		In progress – HART has provided MPS update for review
2f	Update RCMP (including Hold Points and Secondary Mitigation Measures)	HART	Sept-13	TBD		In progress – PMOC provided review comments on early draft, but updated draft will be prepared to reflect revised budget and schedule.
3	HART to provide target date for Federal Courthouse resolution/sign-off	HART	Sep-15	Feb-16	Feb-16	
4	HART to monthly provide a matrix of ROW parcels	HART	Nov-15	Dec-15	Dec-15	
5	HART to provide Operational Readiness Checklist/Hold Points for MSF Certification	HART	Jan-16	Jan-16		
6	Provide HECO Agreement to PMOC	HART	Mar-16	Mar-16	Mar-16	
7	Provide updated Risk Register to PMOC	HART	Mar-16	Mar-16	Mar-16	
8	Provide response to SSMP and SSCP review comments	HART	Mar-16	Mar-16		
9	Schedule conference call to discuss responses to RFMP and O&M Plan review comments	PMOC	Mar-16	Mar-16		
10	Submit documentation to FTA for Post-ROD changes	HART	Mar-16	Apr-16		

Appendix B. Project Contingency Management General Background and Clarifications

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

Current Contingency Balance = \$475.1M

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

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

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

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

Changes Identified and Project Performance

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

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

HART Project Contingency Drawdown with Details

Data as of 2/26/16

#	Project No.	Project Desc.	Budget Transfer/Change Description		Contingency Drawdown Led	Contingency Code
			Beg. Balance:	March '14 Contingency Drawdown		
		March '14			\$688.2	
				March '14 Contingency Drawdown	\$0	
					\$0	
		April '14			\$688.2	
11	PD-510	West Oahu Stations Group PD		Executed Contract Amendment No. 04 - East Station site Remediation and Safety	\$688.2	60.00 - Contract Allowance
12	PD-410	Airport Section Quaiway, Utility PD		Executed Contract Amendment No. 00 - Notice-to-Proceed (NTP) Removal Form for Design Support during led	\$0	60.00 - Contract Allowance
13	PD-200	Jamlehama Highway, Quaiway, CB		Executed Change Order No. 018 - Rep Lacerations	\$0	60.00 - Allocated Contingency
14	PD-200	Maintenance & Storage Facility CB		Executed Change Order No. 017 - Venti Airflow Recirculation/Unattended Train Operation (UTAO)	\$0	60.00 - Allocated Contingency
15	PD-200	Maintenance & Storage Facility CB		Executed Change Order No. 018 - Rep Minimal Storage Plan	\$0	60.00 - Allocated Contingency
16	PD-200	Maintenance & Storage Facility CB		Executed Change Order No. 018 - Train Wash Facility, Stocking	\$0	60.00 - Allocated Contingency
17	PD-200	West Oahu Farmington Highway Quaiway, CB		Executed Change Order No. 040 - Revised Venti Alignment and Profile	\$0	60.00 - Allocated Contingency
18	PD-200	West Oahu Farmington Highway Quaiway, CB		Executed Change Order No. 042 - Station's Venti Communications Utility Relocation @ North Storm Rd	\$0	60.00 - Allocated Contingency
19	PD-200	Jamlehama Highway, Quaiway, CB		Executed Change Order No. 025 - Water Clear Spacing Change Criteria	\$0	60.00 - Allocated Contingency
				April '14 Contingency Drawdown	\$0	
					\$688.2	
		May '14			\$590.7	
1	PD-140	West Oahu Stations Group PD		Subject Transfer for Executed Contract Amendment No. 05 - Final Design for associated Hospital Station	\$590.7	60.00 - Allocated Contingency
2	PD-200	Jamlehama Highway, Quaiway, CB		Executed Change Order No. 026 - APEC work re-allocations/ordered cables removal	\$0	60.00 - Allocated Contingency
3	PD-200	Jamlehama Highway, Quaiway, CB		Executed Change Order No. 026 - Emergency railway/insurance cost Repartments, #113	\$0	60.00 - Allocated Contingency
4	PD-200	Core Systems, Contract Design Build DM		Executed Change Order No. 025 - Relocate IPSS to system site #3	\$0	60.00 - Allocated Contingency
5	MM-015	HOV Lanes Consultant		Budget Transfer for Executed Contract Amendment No. 007 - Increase TBM contract value	\$0	60.00 - Allocated Contingency
6	MM-015	HOV Lanes Consultant		Budget Transfer for Executed Contract Amendment No. 001 - IEEE measurement and verification plan	\$0	60.00 - Allocated Contingency
7	PD-200	Maintenance & Storage Facility CB		Executed Change Order No. 029 - CSC consolidated changes contribution	\$0	60.00 - Allocated Contingency
8	PD-200	Maintenance & Storage Facility CB		Executed Change Order No. 025 - DBB reconfiguration	\$0	60.00 - Allocated Contingency
				May '14 Contingency Drawdown	\$0	
					\$590.7	
		June '14			\$548.4	
1	PD-200	Maintenance & Storage Facility CB		Board Approval RFP-C-0010 - Amendment 1 Non-Rail Escalator	\$548.4	60.00 - Allocated Contingency
				June '14 Contingency Drawdown	\$0	
					\$548.4	
		July '14			\$563.4	
1	PD-200	Core Systems, Contract Design Build DM		Executed Change Order No. 028 - Platform Screen Doors Mitigation	\$563.4	60.00 - Allocated Contingency
2	PD-200	Rep Resilience of Way		Budget Transfer for Contract Award above the Rail Station Map & Survey budget	\$0	60.00 - Allocated Contingency
3	PD-200	Maintenance & Storage Facility CB		Budget Transfer to Project Contingency from remaining "know" Change balance	\$0	60.00 - Allocated Contingency
4	PD-200	West Oahu Farmington Highway, Quaiway, CB		Budget Transfer due to scope transfer from PD-200 Hazardous Materials	\$0	60.00 - Allocated Contingency
				July '14 Contingency Drawdown	\$0	
					\$563.4	
		August '14			\$563.7	
1	PD-200	Jamlehama Highway, Quaiway, CB		Executed Change Order No. 019 - Delay in issuance of RFP-C-0010 Proc 2 & 3	\$563.7	60.00 - Allocated Contingency
2	PD-200	Jamlehama Highway, Quaiway, CB		Executed Change Order No. 028 - Passenger service lifts	\$0	60.00 - Allocated Contingency
3	PD-200	Airport Section Utility, Construction CB		Budget Transfer for Contract Award above Airport Section Utility construction original budget	\$0	60.00 - Allocated Contingency
4	MM-045	ON Call Trained Removal contractor		Budget Transfer due to scope transfer from PD-200 Hazardous Materials	\$0	60.00 - Allocated Contingency
5	MM-045	ON Call Contractor		Budget Transfer for Contract Award above On Call Contractor original budget	\$0	60.00 - Allocated Contingency
				August '14 Contingency Drawdown	\$0	
					\$563.7	
		September '14			\$559.4	
1	MM-055	DOE Consultant Contract		Budget Transfer to Unallocated Contingency as estimate at completion is less than current budget	\$559.4	60.00 - Allocated Contingency
2	PD-200	Maintenance & Storage Facility CB		Executed Change Order No. 027 - Unallocated Cultural Properties (UCP) Surveys	\$0	60.00 - Allocated Contingency
3	PD-200	Maintenance & Storage Facility CB		Executed Change Order No. 028 - Insurance Coverage Requirements 2014	\$0	60.00 - Allocated Contingency
4	PD-200	Jamlehama Highway, Quaiway, CB		Executed Change Order No. 011 - Revised Vehicle Critical Contributions Safety Secure Plan	\$0	60.00 - Allocated Contingency
5	PD-200	Jamlehama Highway, Quaiway, CB		Executed Change Order No. 012 - Insurance Coverage Requirements 2013 - 2009/14	\$0	60.00 - Allocated Contingency
6	PD-200	West Oahu Farmington Highway, Quaiway, CB		Executed Change Order No. 045 - Standard specification Revisions 2014	\$0	60.00 - Allocated Contingency
7	PD-200	West Oahu Farmington Highway, Quaiway, CB		Executed Change Order No. 046 - Insurance Coverage Requirements 2014	\$0	60.00 - Allocated Contingency
8	PD-510	City Center Quaiway, Utility PD		Executed Contract Amendment 004 - Architect Station Columns	\$0	60.00 - Allocated Contingency
9	PD-510	City Center Quaiway, Utility PD		Executed Contract Amendment 005 - City Center Station Repair Cost Scope Impact	\$0	60.00 - Contract Allowance
10	PD-510	Jamlehama Highway, Stations Group PD		Executed Contract Amendment 001 - Special Provisions Update for Value Analysis	\$0	60.00 - Contract Allowance
11	PD-340	Jamlehama Highway, Stations Group PD		Executed Contract Amendment 003 - Historic Architectural Highway Sign	\$0	60.00 - Contract Allowance
12	PD-340	Jamlehama Highway, Stations Group PD		Executed Contract Amendment 006 - Added Bus Shelters at Aloha Station Station	\$0	60.00 - Contract Allowance
13	PD-410	Airport Section Quaiway, Utility PD		Executed Contract Amendment 010 - Architect Station Columns and Park Impact Station Redesign	\$0	60.00 - Allocated Contingency
14	PD-410	Airport Section Quaiway, Utility PD		Executed Contract Amendment 011 - Airport Section Vehicle Cost Scope Impact	\$0	60.00 - Allocated Contingency
15	PD-140	West Oahu Stations Group PD		Executed Contract Amendment 002 - Traffic Signal Control (Traffic Signal Access Risk)	\$0	60.00 - Contract Allowance
				September '14 Contingency Drawdown	\$0	
					\$559.4	
		October '14			\$550.1	
1	PD-200	Core Systems, Contract Design Build DM		Executed Change Order No. 028 - WPHU Quaiway Argument for CSC	\$550.1	60.00 - Allocated Contingency
2	PD-200	Maintenance & Storage Facility CB		Executed Change Order No. 025 - Escalator due to Schedule Impact	\$0	60.00 - Unallocated Contingency

HART Project Contingency Drawdown with Details

Date as of 3/26/16

#	Project ID	Project Description	Budget Transfer/Change Description	Contingency of Available FTA	Contingency Code
15	PO-530	City Center Gateway Station FID	Executed Change Order No. 001 - City Center Reproductio	147,930	16 02 - Allocated Contingency
			Dec '16 Contingency Drawdown	(19,929)	
			Dec '15 - Ending Contingency Balance	\$487.3	
			Beg. Balance	\$487.3	
1	DBS-170	West Oahu Farmington Highway Gateway DB	Executed Contract Change Order No. 010 - Equipment Estimation	1,539,374	16 01 - Unallocated Contingency
2	DBS-200	Maintenance & Storage Facility DB	Executed Contract Change Order No. 040 - Layout Direct For Bids/Noted Termination	4,272,534	16 02 - Allocated Contingency
3	DBS-200	Maintenance & Storage Facility DB	Executed Contract Change Order No. 042 - Material For Material Quantities	\$39,300	16 02 - Allocated Contingency
3	DBB-575	Airport Section Gateway 7 Year Construction	Executed Change Order No. 004 - Adjustment for Un-used Allowances	151,728	16 02 - Allocated Contingency
4	DBB-575	Airport Section Gateway 7 Year Construction	Executed Change Order No. 005 - Other Equipment Change - Access to Pier 54E-551E	148,300	16 02 - Allocated Contingency
			Jan '16 Contingency Drawdown	(148,300)	
			Jan'16 - Ending Contingency Balance	\$487.4	
			Beg. Balance	\$487.4	
1	DBS-170	West Oahu Farmington Highway Gateway DB	Executed Contract Change Order No. 073 - Erection Due to Schedule Impacts P1,2	1,111,900,000	16 01 - Unallocated Contingency
2	DBS-200	Core Systems Contract Design Build O&M	Executed Change Order No. 020 - August City Center Alignment	1,440,000	16 02 - Allocated Contingency
3	DBS-200	Core Systems Contract Design Build O&M	Executed Change Order No. 021 - FOC Package To D15 - Patch Panel	(447,450)	16 02 - Allocated Contingency
			Feb '16 Contingency Drawdown	(112,547,450)	
			Feb'16 - Ending Contingency Balance	\$475.1	
			Beg. Balance	\$487.4	
			January '16 - Board Approved Changes Only - Pending Execution		
1	DBS-170	West Oahu Farmington Highway Gateway DB	RFCC 00148 - LCC Station Access	(11,441,422)	16 01 - Unallocated Contingency
2	DBS-170	West Oahu Farmington Highway Gateway DB	RFCC 00148 - LCC Carport Impacts	(12,143,119)	16 01 - Unallocated Contingency
			School Board Approved Contingency Drawdown	(13,081,729)	
			Feb'16 - Ending Contingency Balance (Pending Execution)	\$471.5	

Appendix C. Project Cost Reports (data as of Feb. 26, 2016)

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

Project Costs by Contract



Costs Reported as of Month Ending: February 2016

Project Monthly Cost Report by Contract - One Line Summary
2/26/16

Page: 1 of 3

CPP No	Title	A		B		C=A+B		D		E		F
		Original	COMMITTED Changes	Current *	AFE **	INURRED Incurred To Date	PERCENT %					
ART	ART Contracts	124,000	0	124,000	0	0	0	0	0	0	0%	
CCH-100	Inactive HART/CHH CCH	15,348,443	0	15,348,443	0	0	14,925,228	0	0	97%		
CCH-101	HART/CHH Dept of BFS	105,092	0	105,092	0	0	0	0	0	0%		
CCH-102	HART/CHH DDC Land Division	256,201	0	256,201	0	0	173,182	0	0	68%		
CCH-107	HART/CHH Corporation Courses (COR)	1,816,253	250,000	1,866,253	2,500,000	2,500,000	133,823	0	0	10%		
CCH-108	HART / Board of Water Supply (BWS)	928,325	0	928,325	0	0	928,325	0	0	100%		
DB-120	West Oahu/Farrington Hwy Guideway DB	482,924,000	161,764,593	644,688,593	644,688,593	644,688,593	528,233,522	0	0	82%		
DB-200	Maintenance & Storage Facility DB	195,258,000	79,427,819	274,685,819	274,685,819	274,685,819	253,763,288	0	0	92%		
DB-320	Kamehameha Hwy Guideway DB	372,150,000	17,306,410	389,456,410	389,456,410	389,456,410	208,884,937	0	0	54%		
DBB-171	West Oahu Station Group DBB	56,088,470	0	56,088,470	0	0	0	0	0	0%		
DBB-185	SPCD - West Side SG Construction	0	0	0	0	0	186,850	0	0	0%		
DBB-271	Farrington Highway Station Group DBB	78,999,000	0	78,999,000	0	0	0	0	0	0%		
DBB-275	SPCD-Pearl Highlands Pkg. Str. Constr.	0	0	0	0	0	0	0	0	0%		
DBB-371	Kamehameha Hwy Stations Grp. DBB	115,805,845	0	115,805,845	0	0	0	0	0	0%		
DBB-385	Pamp H2R2	5,203,646	0	5,203,646	0	0	5,203,646	0	0	3%		
DBB-470	SPCD-Airport Station Group Constr.	0	0	0	0	0	0	0	0	0%		
DBB-505	Airport Section Utilities Constr. DBB	27,993,290	23,663	28,022,953	28,022,953	28,022,953	10,580,738	0	0	38%		
DBB-510	City Ctr. Section Util. Constr. DBB	0	0	0	0	0	0	0	0	0%		
DBB-520	SPCD-Airport-City Center Gateway Cntr.	0	0	0	0	0	0	0	0	0%		
DBB-525	Airport Section Guideway 7 Pier DBB	3,973,000	54,843	4,027,843	4,027,843	4,027,843	4,027,843	0	0	100%		
DBB-580	SPCD-Dillingham/Kaka'ako SG Cntr.	0	0	0	0	0	0	0	0	0%		
DBB-600	Park-and-Ride Lots Construction	0	0	0	0	0	0	0	0	0%		
DBO M-920	Core Systems Design Build O/M	573,782,793	26,060,894	599,843,687	599,843,687	599,843,687	176,833,628	0	0	29%		
FD-140	West Oahu Station Group FD	7,789,000	2,275,305	10,064,305	9,926,311	9,926,311	9,199,086	0	0	91%		
FD-240	Farrington Highway Stations Group FD	9,300,696	4,981,348	14,282,045	12,078,454	12,078,454	12,577,157	0	0	88%		
FD-245	SPCD-Pearl Highlands Pkg. Str. FD	0	0	0	0	0	0	0	0	0%		
FD-340	Kamehameha Hwy Station Group FD	8,702,592	1,156,698	9,859,290	9,829,016	9,829,016	9,177,277	0	0	93%		
FD-480	SPCD-Airport Sect. Guideway/Util. FD	38,840,960	4,293,512	43,134,472	48,134,472	48,134,472	41,471,470	0	0	96%		
FD-440	SPCD-Airport Station Group FD	10,177,365	1,396,487	11,573,852	10,635,793	10,635,793	9,801,978	0	0	85%		
FD-530	SPCD - City Center Guideway/Util. FD	43,948,220	2,249,324	46,197,562	48,581,241	48,581,241	41,899,799	0	0	91%		
FD-550	SPCD - Dillingham and Kaka'ako SG FD	18,321,918	986,124	19,308,042	15,732,737	15,732,737	11,875,668	0	0	62%		
FD-600	Park-and-Ride Lots Final Design	0	0	0	0	0	0	0	0	0%		
HRT-200	HART Labor	47,951,942	0	47,951,942	0	0	47,181,965	0	0	98%		

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* Current Committed = Original Contract + CCO /Amendment

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

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Costs Reported as of Month Ending: February 2016
Project Monthly Cost Report by Contract - One Line Summary
 2/26/16

CPP No	Title	A		B		C=A+B		D		E		F
		Original	COMMITTED Changes	Current *	AFE **	AFE **	Incurred To Date	PERCENT %				
HRT-201	HART ODC Contracts	15,391,154	141,092	16,072,246	271,192	19,684,481					122%	
MM-900	Fare Collection DFI	0	0	0	0	0					0%	
MM-930	Elevators & Escalators Install/Maint	50,982,714	0	50,982,714	5,442,108	5,348,105					10%	
MM-280	SPCD-WOFH/KHSG CE&I(REPA CKA GED)	0	0	0	0	0					0%	
MM-290	Construction Engrg & Insp CEI West	54,232,480	0	54,232,480	16,650,000	22,969,732					42%	
MM-385	SPCD-Pearl Highlands Garage Ramps CEI	0	0	0	0	0					0%	
MM-500	SPCD-By M959 CEI East	0	0	0	0	0					0%	
MM-525	SPCD-By M959 CEI East	0	0	0	0	0					0%	
MM-590	SPCD-By M959 CEI East	0	0	0	0	0					0%	
MM-595	SPCD - Const. Engrg & Insp. CEI East	63,083,417	-47,826,417	15,257,000	(32,569,417)	12,382,150					81%	
MM-596	Construction Engrg & Insp CEI East 2	55,036,130	0	55,036,130	55,036,130	1,210,034					2%	
MM-600	SPCD-UHWO Pkg-Hoopili Str Fresh CEI	0	0	0	0	0					0%	
MM-900	Program Mgt Support Const (PM SC-1)	15,952,569	0	15,952,569	20,700,000	0					0%	
MM-901	Program Mgt Support Const (PM SC-2)	33,376,897	7,616,377	40,993,274	34,237,167	39,563,917					37%	
MM-905	MM-905 Gen Engrg Const EIS/PE	0	78,564,942	78,564,942	78,564,942	74,157,822					94%	
MM-910	MM-910 Gen Engrg Const FD-Construct	150,000,000	0	150,000,000	150,000,000	149,446,962					100%	
MM-913	MM-913 Gen Engrg Re compete	46,143,277	268,451	46,411,728	312,143,951	25,915,917					56%	
MM-915	HDOT Traffic Mgmt. Consult.	1,600,000	2,400,000	4,000,000	7,000,000	3,111,497					78%	
MM-920	HDOT Coordination Const WOFH	3,000,000	7,500,000	10,500,000	11,750,000	6,685,914					64%	
MM-921	HDOT Coordination Const KHG	10,000,000	-1,400,000	8,600,000	7,600,000	4,062,710					47%	
MM-922	HDOT Coordination Const Airport	12,000,000	-5,600,000	6,400,000	4,400,000	2,610,134					41%	
MM-923	HDOT Coordination Const City Center	0	0	0	0	0					0%	
MM-925	HDOT Labor - WOFH/KHSG Agreements	550,000	1,265,633	1,815,633	3,081,266	1,715,004					94%	
MM-926	HDOT Labor - Airport Agreements	0	0	0	0	0					0%	
MM-930	HDOT State SOA Manager & Consultant	1,272,400	583,142	1,855,542	843,167	873,849					47%	
MM-935	Real Estate Consultant	3,000,000	4,227,665	7,227,665	7,227,165	6,041,572					84%	
MM-937	Real Estate Consultant - Maps/Surv.	2,998,000	0	2,998,000	1,500,000	679,108					23%	
MM-940	Kako'o Consultant	1,000,000	0	1,000,000	500,000	523,188					52%	
MM-941	Kako'o Consultant II	200,000	0	200,000	200,000	0					0%	
MM-945	On-Call Contractor	1,000,000	1,000,000	2,000,000	1,800,000	1,939,108					37%	
MM-946	On-Call Hazmat Removal Contractor	3,075,000	75,000	3,150,000	1,075,000	2,661,485					84%	
MM-947	On-Call Contractor 2	7,500,000	0	7,500,000	45,000,000	3,237,508					43%	
MM-950	OCIP Consultant	1,250,000	0	1,250,000	1,250,000	1,007,188					81%	

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* Current Committed = Original Contract + CCO/Amendment

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



Costs Reported as of Month Ending: February 2016
Project Monthly Cost Report by Contract - One Line Summary
 2/26/16

CPP No	Title	A		B		C=A+B		D		E		F
		Original	COMMITTED Changes	Current *	AFE **	AFE **	Incurred To Date	PERCENT %				
MM-951	Owner-Controlled Insurance Program	41,000,000	0	41,000,000	0	0	26,494,012	65%				
MM-960	Archaeological & Cultural Monitoring	1,658,474	0	1,658,474	1,658,474	1,362,160	82%					
MM-962	Core Systems Support	49,988,989	0	49,988,989	3,600,000	14,071,868	32%					
MM-964	Safety and Security Consultant	4,899,573	112,751	4,812,324	4,012,751	3,026,155	63%					
MM-970	Fare Collection Consultant	1,184,398	0	1,184,398	1,178,300	0	0%					
MM-975	LEED Commissioning Services for MSF	278,630	9,910	288,540	288,540	137,295	48%					
O&M	Operating/Maintenance Contracts	280,970	-58,970	222,000	141,000	199,030	90%					
OTHER	All Project Wide Documents	0	0	0	0	0	0%					
PA-101	Programmatic Agreement Humanities	0	0	0	0	0	0%					
PA-102	Programmatic Agreement HPC	400,000	0	400,000	200,000	176,809	44%					
PA-103	Programmatic Agreement HPC Park Impr	0	0	0	0	0	0%					
ROW	Real Estate / Right-of-Way	99,885,511	0	99,885,511	121,932	94,923,473	95%					
UTIL	Utility Company Contracts	95,526,631	-2,646,298	92,880,333	71,077,649	47,955,843	52%					
Total Project:		2,937,676,264	348,466,316	3,286,142,580	2,638,337,622	1,956,019,892						

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

Appendix D. Procurement and Contract Status

Awarded Contracts						
Contract Code	Contract Name	Contractor Name	Advertise Date	Contract Date	Issue NTP	Contract Substantial Completion Date
DB-120	West O'ahu Farrington Highway Guideway (WOFH)	Kiewit Infrastructure West Company (KIWC)	Apr 03 '09	Nov 11 '09	Dec 01 '09	Jul 04 '16
DB-200	Maintenance and Storage Facility (MSF)	Kiewit / Kobayashi Joint Venture (KKJV)	Jul 24 '09	June 30 '11	Jul 25 '11	May 02 '16
DB-320	Kamehameha Guideway (KHG)	Kiewit Infrastructure West Company (KIWC)	Mar 19 '10	June 30 '11	Jul 12 '11	Sep 16 '16
DBOM-020	Core Systems Contract	Ansaldo Honolulu JV	Aug 17 '09	Nov 28 '11	Jan 13 '12	Mar 31 '16
MI-930	Elevators and Escalators	Schindler Elevator Corporation	Dec 18 '12	Jul 31 '13	Aug 02 '13	May 31 '18
FD-140	West O'ahu Station Group Final Design and Support	URS Corporation	Jan 14 '10	Jan 14 '12	Jan 15 '12	Jun 30 '16
FD-240	Farrington Highway Station Group Final Design and Support -2	URS Corporation	Jan 10 '13	Sep 27 '13	Sep 30 '13	Nov 14 '16
FD-340	Kamehameha Highway Station Group Final Design (includes H2/R2 Ramp) and Support	Anil Verma Associates, Inc.	Jan 28 '11	Nov 16 '12	Nov 26 '12	Jun 14 '17
FD-430	Airport Section Guideway and Utilities Final Design and Support	AECOM Technical Services, Inc.	Jan 26 '11	Dec 22 '11	Jan 05 '12	Jun 30 '17
FD-530	City Center Section Guideway and Utilities Final Design and Support	AECOM Technical Services, Inc.	Dec 16 '11	Jul 30 '12	Jul 31 '12	Apr 30 '18
FD-440	Airport Station Group Final Design and Support	AECOM Technical Services, Inc.	Mar 30 '12	Nov 7 '12	Nov 14 '12	Jul 15 '17
FD-550	Dillingham and Kaka'ako Station Groups "East Side Stations" Final Design and Support	Perkins+Will	Nov 16 '12	Aug 15 '13	Aug 19 '13	Jul 30 '18
MM-290	Construction Engineering & Inspection West Side Sections	PGH Wong Engineering, Inc.	Jul 26 '13	Jan 9 '14	Jan 09 '14	Mar 01 '19
MM-595	Construction Engineering & Inspection East Side Sections	URS Corporation	Jul 26 '13	Jan 07 '14	Jan 09 '14	Oct 09 '15
MM-901	Program Management Support Consultant -2 (PMSC-2)	InfraConsult LLC	Aug 03 '11	Feb 28 '12	Mar 08 '12	Mar 07 '17
MM-910	General Engineering Consultant II (GEC-2) (Final Design and Construction)	Parsons Brinckerhoff	Sep 03 '09	Jun 30 '11	Aug 02 '11	Dec 31 '14
MM-913	General Engineering Consultant III (GEC-3)	CH2M HILL	Jul 26 '13	Dec 5 '13	Dec 05 '13	Apr 5 '19
MM-935	Real Estate Consultant	Paragon Partners, Ltd.	Apr 01 '11	Mar 14 '12	Mar 14 '12	Mar 13 '17
MM-937	Real Estate Mapping & Surveying	R.M. Towill Corporation	Nov 15 '13	May 22 '14	May 23 '14	Dec 30 '17
MM-940	Kāko'o Consultant	Pacific Legacy, Inc.	May 20 '11	Mar 29 '12	Mar 30 '12	Feb 14 '17
MM-941	Section 106 Programmatic Agreement Project Manager Kāko'o II	Honua Consulting	Jun 26 '15	Dec 08 '15	Jan 04 '16	2 years + option to extend up to 4 years
MM-950	Owner-Controlled Insurance Program (OCIP) Consultant	Marsh USA, Inc.	Jan 31 '12	May 10 '12	Jun 05 '12	May 09 '17
MM-951	Owner-Controlled Insurance Program (OCIP) Brokerage Services	Aon Risk Services, Inc., of Hawaii	Jun 04 '13	Apr 09 '14	Apr 09 '14	Mar 30 '19
MM-960	Archaeological & Cultural Monitoring	Cultural Surveys Hawai'i	Sep 10 '13	Jan 15 '14	Jan 15 '14	May 30 '18
MM-962	CORE Systems Support	Lea+Elliott, Inc.	Sep 13 '13	Feb 10 '14	Feb 11 '14	Mar 01 '19
MM-964	Safety / Security Support	Lawson & Associates, Inc.	Oct 23 '13	Apr 23 '14	May 01 '14	Dec 14 '17
MM-975	LEED Commissioning Services for the Maintenance and Storage Facility (MSF)	Enovity, Inc.		Oct 6 '10	Oct 07 '10	May 02 '16
PA-102	Historic Architecture Design Services	Fung Associates, Inc.	Mar 15 '13	Aug 1 '13	Aug 01 '13	May 01 '16
MM-915	HDOT Traffic Management Coordination Consultant	ICX Transportation Group, Inc.	Aug 15 '11	Jun 5 '12	Jun 12 '12	Jun 11 '17
MM-920	HDOT Design Coordination Consultant - West O'ahu/Farrington Highway	AECOM Technical Services, Inc.		Jun 7 '11	Jun 08 '11	Jun 07 '16
MM-921	HDOT Design Coordination Consultant - Kamehameha Highway Guideway Section	AECOM Technical Services, Inc.		Jun 28 '12	Jun 29 '12	Jun 28 '17
MM-922	HDOT Design Coordination Consultant - Airport and City Center Guideway	SSFM International, Inc.		Jun 8 '12	Jun 12 '12	Jun 11 '17
MM-925	HDOT Labor Master Agreement WOFH	HDOT		Oct 27 '10	Oct 27 '10	Oct 27 '19
MM-945	On-Call Construction Contractor	Royal Contracting Co. Ltd.	Jun 02 '14	Aug 6 '14	Aug 14 '14	Mar 03 '19
MM-946	On-Call Hazardous Materials (HazMat) Removal Contractor	CH2M HILL		Aug 23 '12	Sep 07 '12	Feb 15 '17
MM-947	On-Call Construction Contractor II	Royal Contracting Co. Ltd.	Mar 17 '15	May 21 '15	May 21 '15	May 21 '20
MM-596	Construction Engineering and Inspection (CE&I) "I" Contract	Stantec Consulting Services	Mar 25 '15	Sep 10 '15	Sep 14 '15	Dec 31 '19
MM-970	Fare Collection System Technical Support Consultant	CH2M HILL	Mar 24 '15	Oct 22 '15	Oct 23 '15	Dec 31 '19
MI-900	Fare Systems Contract	INIT Innovations in Transportation, Inc.	Aug 11 '15	-	TBD	NTP + 120 months + 2 year option
DBB-385	Ramp H2R2	Royal Contracting Co. Ltd.	Jan 30 '15	May 18 '15	May 18 '15	Jun 17 '16
DBB-505	Airport Section Utilities Construction	Nan, Inc.	Dec 17 '13	Jun 30 '14	Oct 6 '14	Jul 13 '16
DBB-525	Airport Section Guideway Seven (7) Pier Construction Contract	HDCC / CJA JV	Jul 09 '14	Sep 18 '14	Sep 18 '14	Apr 22 '15
DBB-271	Farrington Hwy Stations Group Construction	Hawaiian Dredging Construction Company, Inc.	Dec 19 '14	Jun 22 '15	Aug 17 '15	NTP+ 29 months
DBB-171	West O'ahu Stations Group Construction	Nan, Inc.	Apr 13 '15	Jul 20 '15	Oct 13 '15	NTP+ 29 months
DBB-371	Kamehameha Hwy Stations Group Construction	Nan, Inc.	Aug 18 '15	Nov 17 '15	TBD	NTP+ 32 months
	Independent Financial Auditor "II" Contract	KMH LLP	Oct 26 '15	Mar 15 '16	Mar 23 '16	Mar 22 '18

Appendix E. Vehicle Carshell Progress Tracker

HONOLULU AB R.C. FABRICATION TRACKER

CAR SHELL IDENTIFICATION	CENTER ROOF FLOOR JOIST & WELDING (IF APPLICABLE)	CENTER FLOOR JOIST & WELDING (IF APPLICABLE)	ROOF JOIST & WELDING	ROOF SHELLING PARTS	FINAL ROOF PROTECTION	UNDERFRAME ASY & WELDING	WHEELS/AXLE VALVING PARTS	UNDERFRAME PRODUCTION	UNDERFRAME CLEANING AND FINISHING	CAR SHELL JOINT & FINISHING	CAR SHELL ASSEMBLY TESTING	CAR SHELL COATED W/PT	PAINTING	INSULATION	FINISHING	POOR WORKS (IF ANY)	CAR SHELL FINAL INSPECTION	COMPLETION (EST DATE)	CHASSIS ASSEMBLY	DATE OF DELIVERY TO PORT	
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Appendix F. DBE Participation

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

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

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

DBE Participation (9/24/07 to 3/31/16)						
DBE Firm	NAICS Code	Race	Sex	Contract Number	Participation to Date	Total DBE Participation
David's Fencing	238990	APA	M	CT-HRT-10H0137 DB-120	\$6,800	
				CT-DTS-1100195 DB-320	\$140,654	
				CT-HRT-1500297 MM-947	\$221	
				CT-HRT-1000449 DB-200	\$75,020	\$222,695
Glad's Landscaping	561730	APA	M	CT-HRT-10H0137 DB-120	\$303,790	\$303,790
Don's Makiki	484110	APA	M	CT-HRT-10H0137 DB-120	\$537,031	
				CT-HRT-10H0449 DB-200	\$81,581	
				CT-DTS-1100195 DB-320	\$60,714	\$679,326
Pacific Preferred Contractors Corp.	237310	APA	M	CT-HRT-10H0137 DB-120	\$85,043	
				CT-HRT-1500297 MM-947	\$3,840	\$88,883
PAC Electric	238210	APA	F	CT-HRT-10H0137 DB-120	\$5,836,436	\$5,836,436
PMJ Builders	238310	APA	M	CT-HRT-10H0137 DB-120	\$43,866	
				CT-DTS-1100195 DB-320	\$107,100	\$150,966
Standard Sheetmetal & Mechanical	236220	APA	M	CT-HRT-10H0449 DB-200	\$6,105	\$6,105
LP&D Hawaii	541320	APA	M	SC-DTS-1100013 FD-240	\$219,911	\$219,911
Ace Land Surveying	541370	NA	M	SC-DTS-1100013 FD-240	\$38,700	\$38,700
Integrated Security Tech.	561621	O	F	CT-HRT-1200106 DBOM-920	\$105,180	\$105,180
LKG-CMC	541618	O	F	SC-HRT-11H0131 MM-905	\$2,600,462	
				SC-DTS-0700001 **** MM-910	\$2,783,277	
				SC-HRT-1400051 MM-595	\$271,047	
				SC-HRT-1400049 MM-962	\$332,060	\$5,986,846
Lawson & Associates	541690	O	F	SC-HRT-11H0131 MM-905	\$740,962	
				SC-DTS-0700001 **** MM-910	\$150,141	

DBE Participation (9/24/07 to 3/31/16)						
DBE Firm	NAICS Code	Race	Sex	Contract Number	Participation to Date	Total DBE Participation
				SC-HRT-1400061 MM-964	\$1,202,674	\$2,093,777
Gary K. Omori	541618	APA	M	SC-HRT-11H0131 MM-905	\$388,609	
				SC-DTS-0700001 **** MM-910	\$392,920	\$781,529
Pat Lee & Assoc.	541618	APA	M	SC-HRT-11H0131 MM-905	\$402,791	
				SC-DTS-0700001 **** MM-910	\$374,110	\$776,901
212 Harakawa	541430	APA	F	SC-HRT-11H0131 MM-905	\$358,141	
				SC-DTS-0700001 **** MM-910	\$354,758	\$712,899
JAD & Associates	541330	APA	M	SC-DTS-0700001 **** MM-910	\$508,355	\$508,355
Pacific Architects	541310	APA	M	SC-DTS-0700001 **** MM-910	\$39,273	\$39,273
Nagame Okawa*	541310	APA	M	SC-DTS-0700001 MM-910	\$67,014	\$67,014
Consulting Structural Hawaii	541330	APA	M	SC-DTS-0700001 **** MM-910	\$298,557	\$298,557
Bright Light Marketing Group	541613	APA	F	SC-HRT-1200038 FD-430	\$162,813	
				SC-HRT-1200149 FD-530	\$191,227	
				SC-HRT-1300022 FD-440	\$134,912	\$488,952
Ki Concepts	541320	APA	M	SC-HRT-1200077 MM-922/923	\$26,550	\$26,550
Miyabara Associates	541320	APA	M	SC-HRT-1300022 FD-440	\$99,850	\$99,850
Anil Verma Associates, Inc.**	541350	HA	M	SC-HRT-1200111 FD-340	\$3,820,005	\$3,820,005
AMR Estimating Services ***	541330	HA	M	SC-HRT-11H0131 MM-905	\$135,281	
				SC-HRT-1400027 MM-913	\$817,270	\$952,551
The Nakoa Companies	541620	NA	M	CT-HRT-1200106 DBOM-920	\$3,843	\$3,843
Hawaiya Technologies	238210	APA	F	CT-HRT-10H0449 DB-200	\$27,514	
				CT-HRT-1200106 DBOM-920	\$20,142	\$47,656
Element Environmental	541620	APA	M	SC-HRT-1400050 MM-290	\$1,506,887	\$1,506,887
PSC Consultants	541330	APA	M	SC-HRT-1400050 MM-290	\$700,213	
				SC-HRT-1400051 MM-595	\$10,197	\$710,410
Bow Construction Management	541330	APA	M	SC-HRT-1400050 MM-290	\$122,018	\$122,018
FIC, LLC	541611	APA	M	SC-HRT-1400051 MM-595	\$1,299,481	\$1,299,481
The Solis Group	541620	O	F	SC-HRT-1400027 MM-913	\$1,153,505	\$1,153,505
Island Hauling	484110	APA	M	CT-HRT-1000449 DB-200	\$319,693	\$319,693
ADS System Safety Consulting *****	541620	BA	M	SC-HRT-1400061 MM-964	\$1,666,203	\$1,666,203

DBE Participation (9/24/07 to 3/31/16)						
DBE Firm	NAICS Code	Race	Sex	Contract Number	Participation to Date	Total DBE Participation
Dovetail Consulting	541330	BA	F	MOU-11-SO-1 MM-930	\$847,741	\$847,741
Amazon Construction Co.	238990	APA	F	CT-HRT-1500056 MM-945	\$446,558	
				CT-HRT-1500297 MM-947	\$857,986	\$1,666,203
Aloha Steel	238120	APA	M	CT-HRT-1500056 MM-945	\$176	
				CT-HRT-1400323 DBB-505	\$34,988	
				CT-HRT-1500297 MM-947	\$152	\$35,316
Carol Kwan Consulting	561730	O	F	CT-HRT-1500056 MM-945	\$13,291	
				CT-HRT-1500297 MM-947	\$2,117	\$15,408
Total						\$33,528,303

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

Race Categories

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

Appendix G. Risk

Risk by Contract Package				
Contract Packages ^(Notes)	Feb. 2016 # of Risks	March 2016 Update		
		Total # of Risks	New Risks	Deleted Risks
Project Wide	6	6	0	0
West Oahu/Farrington Guideway ⁽¹⁾	11	10	0	1
Pearl Highlands Garage	4	4	0	0
Maintenance and Storage Facility ⁽²⁾	5	4	0	1
Kamehameha Highway Guideway	16	16	0	0
Core Systems Contract	10	10	0	0
Elevator/Escalator	4	4	0	0
Airport Utilities	4	4	0	0
Farrington Highway Stations	5	5	0	0
Ramp H2R2	1	1	0	0
West Oahu Stations	5	5	0	0
Kamehameha Highway Stations	4	4	0	0
Airport Guideway & Stations	26	26	0	0
City Center Guideway & Stations	34	34	0	0
Total	135	133	0	2
Notes:				
(1) - One risk (180.03) deleted from WOFH.				
(2) - One risk (153.07) deleted from MSF.				

Comparison of Risk Ratings								
Contract Package/Section	February 2016 # of Risks				March 2016 Update # of Risks			
	Total	High	Medium	Low	Total	High	Medium	Low
Project Wide	6	2	3	1	6	2	3	1
West Oahu/Farrington Guideway	11	1	8	2	10	1	8	1
Pearl Highlands Garage	4	1	3	0	4	1	3	0
Maintenance and Storage Facility	5	0	2	3	4	0	2	2
Kamehameha Highway Guideway	16	2	10	4	16	2	10	4
Core Systems Contract	10	1	7	2	10	2	6	2
Elevator/Escalator	4	2	2	0	4	2	2	0
Airport Utilities	4	1	2	1	4	1	2	1
Farrington Highway Stations	5	1	4	0	5	1	4	0
Ramp H2R2	1	0	1	0	1	0	1	0
West Oahu Stations	5	0	5	0	5	2	3	0
Kamehameha Highway Stations	4	0	3	1	4	1	2	1
Airport Guideway & Stations	26	4	20	2	26	4	20	2
City Center Guideway & Stations	34	10	21	3	34	10	21	3
Total	135	25	91	19	133	29	87	17

Appendix H. Project Organization Chart

December 11, 2015

HONOLULU AUTHORITY FOR RAPID TRANSPORTATION

Prepared by:

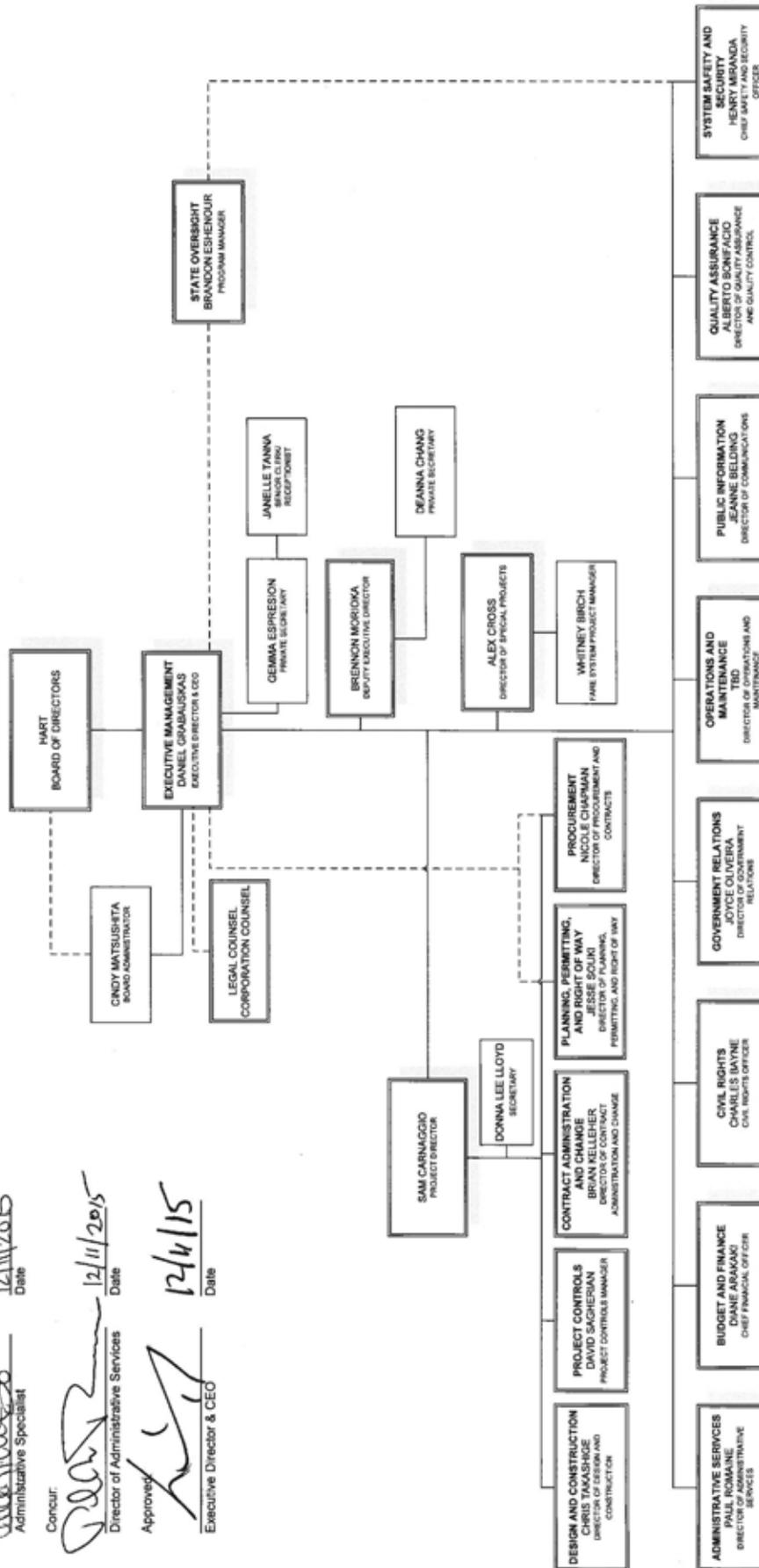
 Administrative Specialist
 Date: 12/11/2015

Concur:

 Director of Administrative Services
 Date: 12/11/2015

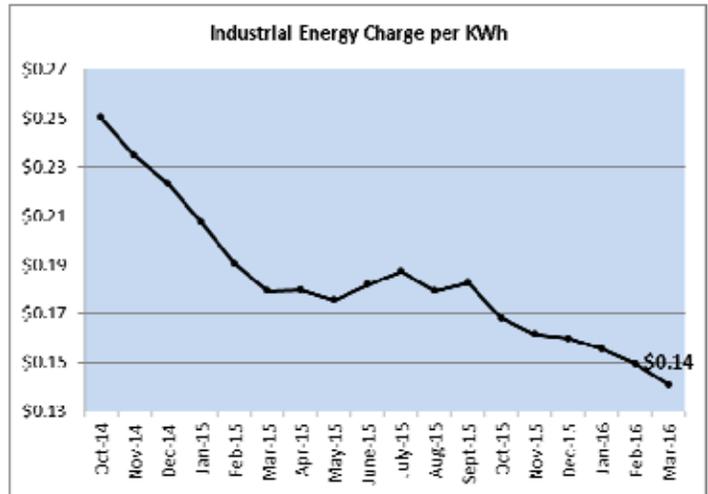
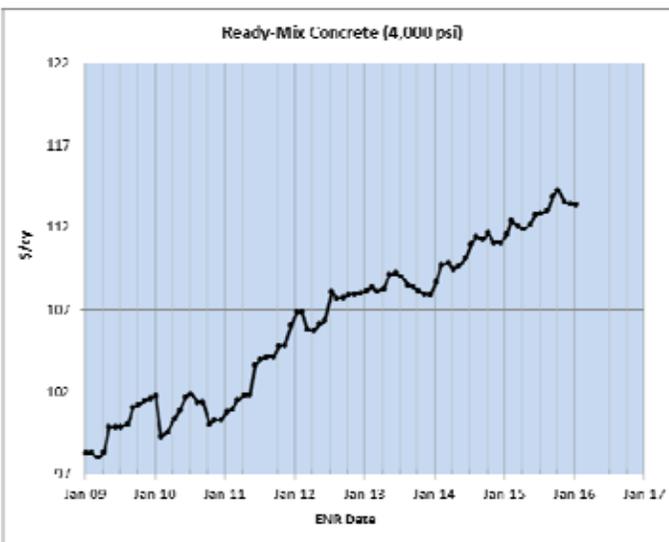
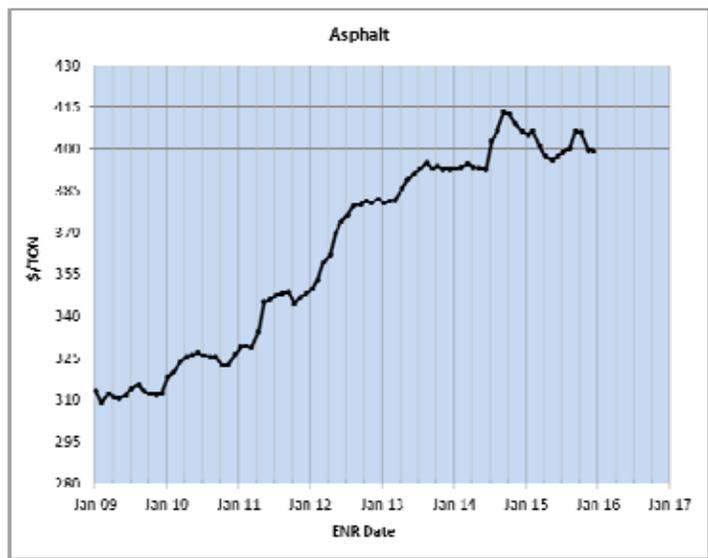
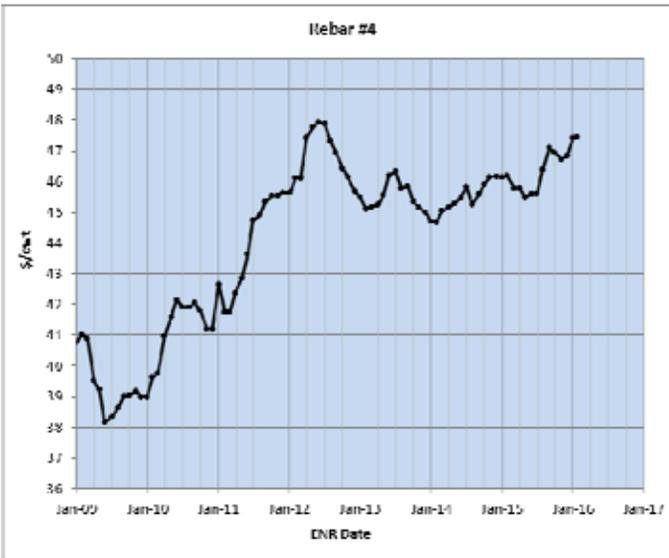
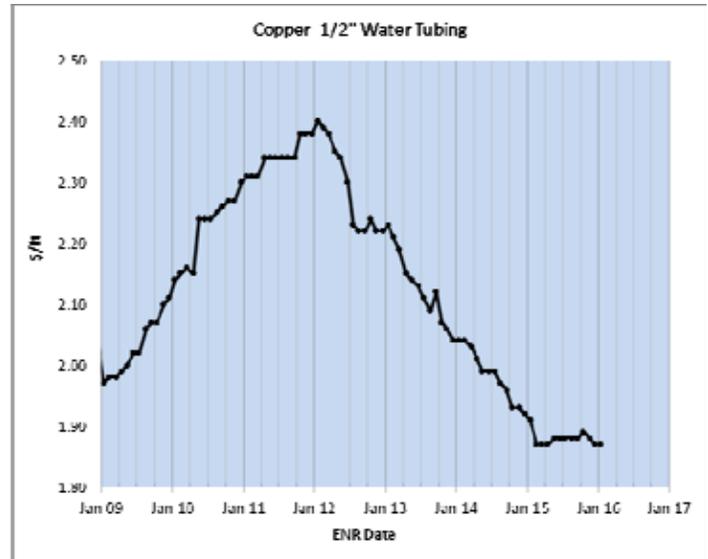
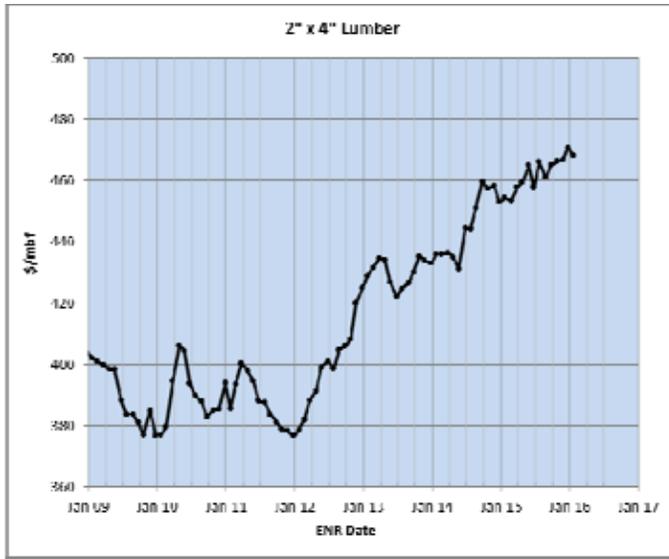
Approved:

 Executive Director & CEO
 Date: 12/4/15



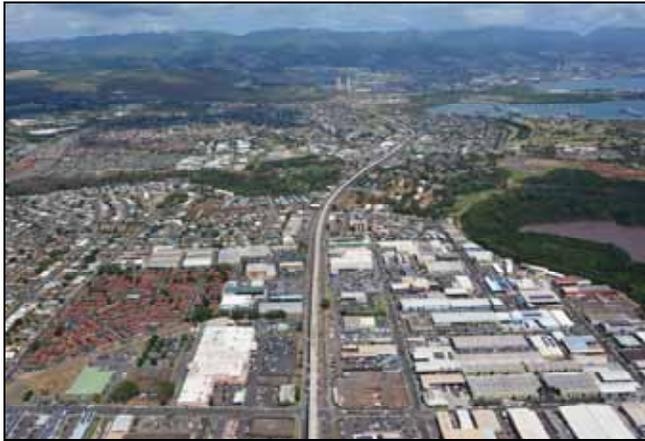
Appendix I. Indices on Key Commodities

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



Source: HECO: Effective Rate Summary for P Rate

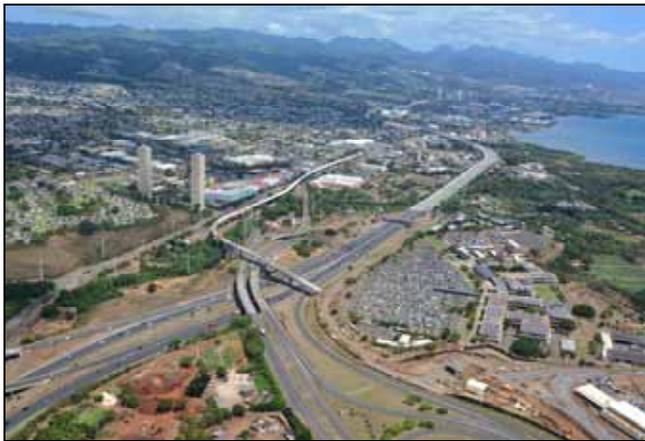
Appendix J. Project Photos



Guideway construction in West O'ahu.



Equipment storage site.



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



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



Construction along Kamehameha Highway.



Future Aloha Stadium Station.



Operations and Servicing Building (OSB).



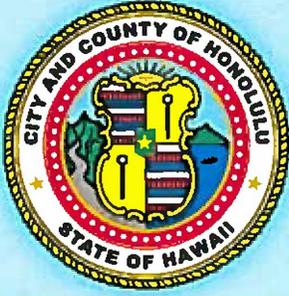
Wheel Truing Building and OSB.



Maintenance of Way Building.



Casting Yard.



OFFICE OF THE CITY AUDITOR
City and County of Honolulu
State of Hawai'i

Audit of the Honolulu Authority For Rapid Transportation (HART)



Audit of the Honolulu Authority For Rapid Transportation (HART)

A Report to the
Mayor
and the
City Council
of Honolulu

Submitted by

THE CITY AUDITOR
CITY AND COUNTY
OF HONOLULU
STATE OF HAWAII

Report No. 16-03
April 2016



**OFFICE OF THE CITY AUDITOR
CITY AND COUNTY OF HONOLULU**

1001 KAMOKILA BOULEVARD, SUITE 216, KAPOLEI, HAWAII 96707 / PHONE: (808) 768-3134 / FAX: (808) 768-3135

EDWIN S.W. YOUNG
CITY AUDITOR

April 15, 2016

The Honorable Ernest Y. Martin, Chair
and Members
Honolulu City Council
530 South King Street, Room 202
Honolulu, Hawai'i 96813

Dear Chair Martin and Councilmembers:

A copy of our final report on the *Audit of the Honolulu Authority for Rapid Transportation (HART)* is attached. City Council Resolution 15-90 requested a performance audit of HART to determine the adequacy of the HART's processes to ensure that the rail project is constructed and completed economically, effectively, and efficiently.

Per the resolution, the audit sub-objectives were to examine the HART financial and contingency plans; contract awards, expenditures, and subcontractor costs; and evaluate the project cost increases and shortfalls. Other sub-objectives were to review rail project revenues and expenditures from 2007 through 2014; determine when HART was aware of the financial shortfalls; and to assess the potential for additional cost overruns. The resolution requested our office to evaluate the potential continuing costs after the project is completed and operational.

This audit was performed in accordance with generally accepted government auditing standards from May 2015 to April 2016.

Background

The city voters approved a fixed guideway system for the City and County of Honolulu in 2008 and approved an amendment to the city charter in the 2010 general election that established the Honolulu Authority for Rapid Transportation. HART was formed on July 1, 2011.

HART is a semi-autonomous agency of the City and County of Honolulu government. HART is responsible for completing a 20-mile fixed rail system that will run from Kapolei in the Western end of the city to Ala Moana Shopping Center. Despite having a goal of completing the project on time and on budget. HART project costs have increased \$1.3 billion (25 percent) from the original estimate of \$5.2 billion to an estimated \$6.5 billion.

Project construction started in 2012. The project was originally to be completed by January 2020 with interim rail service beginning in June 2016 and full service starting in March 2019. Project delays and recent estimates indicate rail service will not begin on time and may be delayed to late 2018 for interim service and late 2021 for full service operations.

Audit Results

HART's processes can be improved to construct and complete the project more economically, effectively, and efficiently. Specifically, we found that HART's financial and subsidiary plans are not reliable or current, and HART's financial plan has not been updated to reflect the rail project's most current financial condition in spite of the significant cost increases. HART needs to strengthen its controls over financial information reporting to ensure data is complete and readily available from its Contract Management System (CMS); delay claims are adequately tracked, monitored, and reported; and pending utility agreements, contingency allowance figures, and general excise tax (GET) county surcharge receipts are complete and accurate.

Project management and contract administration controls can be improved. More specifically, HART's Project Management Plan (PMP) and Operations and Maintenance Plan (OMP) are outdated and unreliable as decision-making tools. HART made concessions to a single contractor; did not perform quantitative analysis to justify a major decision to repackage a bid for nine stations in the Westside Stations Group; and paid \$1.5 million in stipends to unsuccessful bidders without knowing the bidders' actual costs. HART is also paying for vacant office space. Contract administration controls need to address invoice payments, procurement file documentation, and prevent improper payments.

Better planning is needed to address and manage future rail project costs. Subsidies will be needed to fund rail operations and maintenance costs after the rail is constructed. HART needs to improve planning and oversight to effectively address and manage future operations and maintenance needs; maximize fare box recoveries and ridership; and minimize city subsidies.

Absent the improvements, we anticipate additional cost overruns will occur. More specifically, project cost estimates, details, methodologies, and cost assumptions are unsubstantiated and project managers are not managing actual costs against their budgets.

Management Response

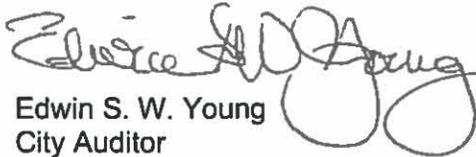
HART is staffed with many dedicated individuals who are striving to successfully complete the rail project. We are therefore disappointed by the HART responses which mischaracterize and misrepresent the audit discussions and the history of the audit. HART had over five weeks to respond to the draft reports. Distribution of the confidential drafts was limited to only authorized HART and city officials. HART requested and received early distribution of the drafts and conceded it distributed the confidential drafts within its organization without our permission. HART's attempts to discredit the audit work and attempts to intimidate the auditors were unprofessional.

In its response to the management discussion draft, HART disagreed with the audit findings and recommendations and provided additional documents and data which we closely examined. Based on our analysis and verification of the additional information, we modified the report and updated the findings. However, our analysis and verification of the additional information reaffirmed our audit results. Based on our audit work and supporting work papers, we stand by our audit findings, conclusions, and recommendations. It is our hope that HART will reconsider and implement the recommendations needed to improve its financial management, planning, project management, contract administration and other operations to ensure the rail project costs are minimized.

The Honorable Ernest Y. Martin, Chair
and Members
April 15, 2016
Page 3 of 3

We express our appreciation for the cooperation and assistance provided us by the staffs of HART, its consultants, and the many others who provided inputs for this review. If you have any questions regarding the audit report, please call the auditor-in-charge, Amy Cheung, at 768-9233 or me at 768-3130.

Sincerely,



Edwin S. W. Young
City Auditor

c: Dan Grabauskas, Executive Director and CEO, HART
Kirk Caldwell, Mayor
Roy Amemiya, Jr., Managing Director
Diane Arakaki, Program Administrator, HART
Nelson Koyanagi, Jr., Director, Department of Budget and Fiscal Services
HART Board of Directors

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Chapter 1

Introduction and Background

Introduction

This audit was conducted pursuant to City Council Resolution 15-90, *Requesting the City Auditor to Conduct a Performance Audit of the Honolulu Rail Transit Project*, to determine the adequacy of the Honolulu Authority for Rapid Transportation's (HART) processes to ensure that the rail project is constructed and completed economically, effectively and efficiently.

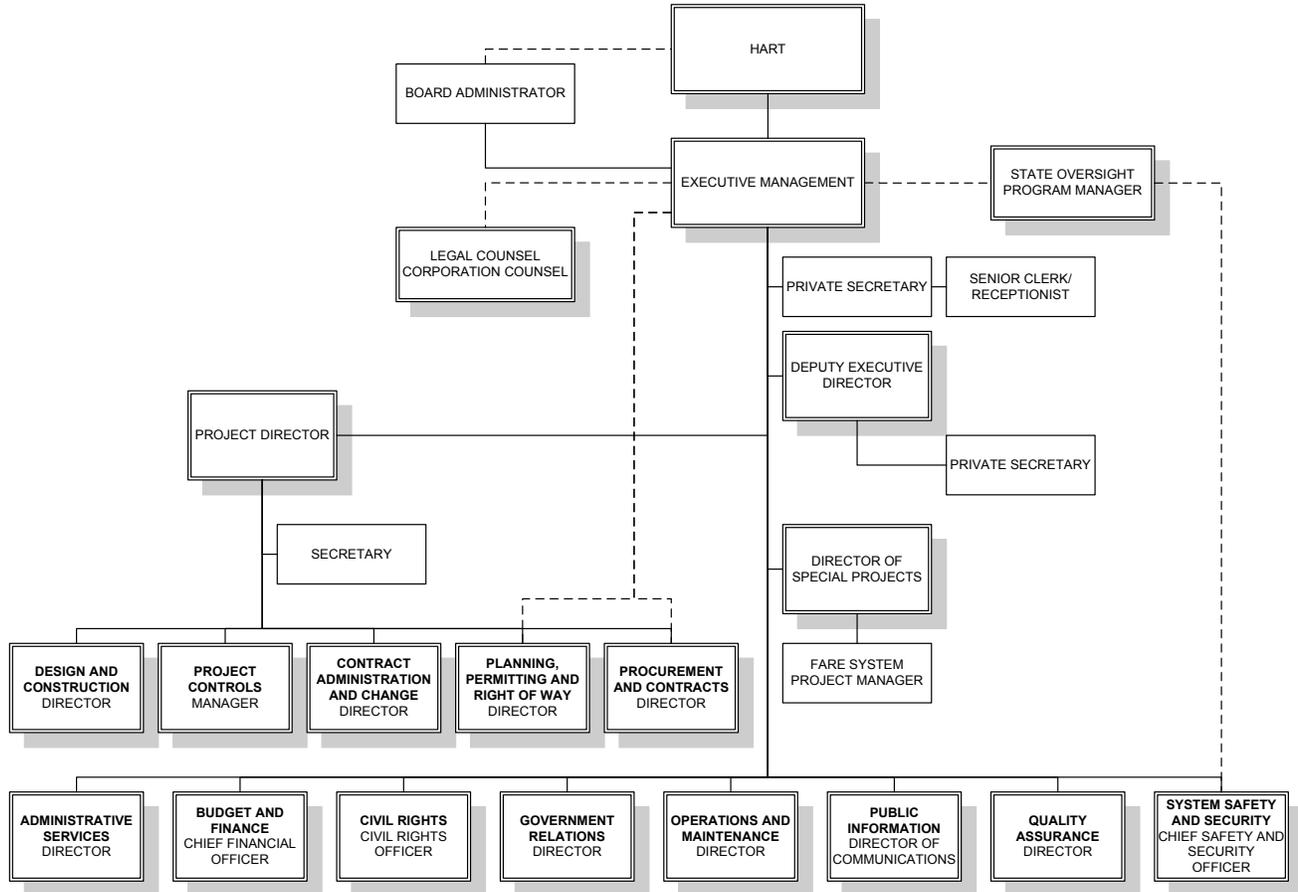
Per the resolution, the audit sub-objectives were to examine the HART financial and contingency plans; contract awards, expenditures, and subcontractor costs; and evaluate the project cost increases and shortfalls. Other sub-objectives were to review rail project revenues and expenditures from 2007 through 2014; determine when HART was aware of the financial shortfalls; and to assess the potential for additional cost overruns. The resolution requested our office to evaluate the potential continuing costs after the project is completed and operational.

Background

HART is a semi-autonomous local government agency established in July 2011 by a charter amendment, after voters approved a fixed guideway system in 2010. HART's mission is to plan, design, construct, operate, and maintain Honolulu's high-capacity, fixed guideway rapid transit system.

HART is governed by a 10-member board consisting of 3 members appointed by the mayor, 3 members appointed by the city council, 3 ex-officio members, and 1 member appointed by the board. Board members serve five-year staggered terms and are not compensated during their terms. The board meets monthly and establishes HART's overall policy for the development, operation, and maintenance of the public transit system. In 2012, the board appointed a chief executive officer (CEO) to manage and provide leadership to HART.

**Exhibit 1.1
HART Organization Chart**



Source: OCA based on HART information as of December 11, 2015.

The Honolulu Rail Transit Project

The \$5.2 billion Honolulu Rail Transit Project (rail project) is the largest, most expensive public works project in the State of Hawai`i's history. The project is intended to mitigate traffic congestion between O`ahu's east to west transportation corridors, and will consist of 21 stations that will connect the East Kapolei station to the Ala Moana Center station.

Exhibit 1.2 Map of the Honolulu Fixed Rail System



Source: HART

Project Schedule

The project was originally to be completed by January 2020 with interim rail service beginning in June 2016 and full service projected to start in March 2019. Project delays and recent estimates indicate rail service will not begin on time and may be delayed to late 2018 for interim service and late 2021 for full service operations.

Funding Sources

HART's operational and capital costs for the project are funded through various federal, state, and local monies.

- Federal funding comes from a \$1.55 billion grant from the Federal Transit Administration (FTA) Section 5309 New Starts Fund¹. As of November 27, 2015, HART received \$472.5 million of the federal grant.
- The State of Hawai`i imposed a half percent (0.5 percent) General Excise Tax (GET) surcharge for the City and County of Honolulu to fund the project. The county surcharge was to expire on December 31, 2022. It has since been extended to 2027.
- The City and County of Honolulu will issue general obligation bonds (debt financing) to fund construction of the rail project. In November 2015, the city council approved legislation that enabled the city to issue up to \$350 million in general obligation commercial paper to fund the public improvements and equipment related to the rail project.

¹ The Federal Transit Administration New Starts program is the federal government's primary financial resource for locally planned, implemented, and operated major transit capital investments. The New Starts program funds new projects and extensions to existing fixed guideway transit systems in every area of the country.

Chapter 2

HART Needs to Improve Financial Management and Planning

Summary

Despite having a goal of completing the project on time and on budget, Honolulu Authority for Rapid Transportation's (HART) project costs have increased \$1.3 billion (25 percent) from the original estimate of \$5.2 billion to an estimated \$6.5 billion.

HART's processes can be improved to construct and complete the project more economically, effectively, and efficiently. Specifically, we found that HART's financial and operating plans are not reliable or current; and HART's financial plan has not been updated to reflect the rail project's most current financial condition in spite of the significant cost increases. HART needs to strengthen its controls over financial information reporting to ensure data is complete and readily available from its Contract Management System (CMS); delay claims are adequately tracked, monitored, and reported; and pending utility agreements, contingency allowance figures, and general excise tax (GET) county surcharge forecasts are accurately reported. Absent the improvements, we anticipate additional shortfalls and cost overruns will occur.

Background

HART's mission is to plan, design, construct, operate, and maintain Honolulu's high-capacity, fixed guideway rapid transit system. To fulfill its mission, HART is responsible for completing the project on time and within budget and ensuring the design and actual construction of the project will facilitate the delivery of a safe, high quality, and cost-efficient service in the future. HART is also responsible for maintaining public trust through prudent and transparent use of financial, human, and environmental resources.

Other HART responsibilities are to support the creation of mixed use, pedestrian-friendly, compact development along the rail line; pursuing partnerships with the private sector to create economic opportunities and generate income and cost savings for the rail transit system; and fostering an organization that is open, accountable, inclusive, and delivers better than promised results.

As of November 2015, HART received \$472.5 million of the \$1.5 billion federal grant for the rail project. Per the 2012 *Full Funding*

Grant Agreement (FFGA), HART and the city had to comply with the grant terms to receive the remaining balance of \$1 billion. The exhibit below details the allocations by federal fiscal year.

Exhibit 2.1 New Starts Grant Allocation (by Federal Fiscal Year)¹

Federal Fiscal Year Allocation	FTA Obligated Amounts	Actual Drawdown Amounts to Date	Available Balance
2008	\$ 15,190,000	\$ 15,190,000	\$ -
2009	19,800,000	19,800,000	-
2010	30,000,000	30,000,000	-
2011	55,000,000	55,000,000	-
2012	200,000,000	200,000,000	-
2013	236,277,358	152,519,166	83,758,192
2014	250,000,000	-	250,000,000
2015	250,000,000	-	250,000,000
2016	250,000,000	-	250,000,000
2017	243,732,642	-	243,732,642
Total	\$ 1,550,000,000	\$ 472,509,166	\$ 1,077,490,834

Source: HART data as of November 27, 2015

¹ The federal fiscal year runs from October 1 to September 30. The table covers federal funding only. Total rail project funding includes federal, state, and local funding sources.

Federal funding includes \$4 million of the American Recovery and Reinvestment Act (ARRA) funds out of \$214 million of FTA Section 5307 Formula.

State funding includes the state half percent (0.5 percent) General Excise Tax (GET) county surcharge to fund the rail project. The GET county surcharge originally was to expire December 31, 2022, but was extended through December 31, 2027 to cover the additional project cost increases and revenue shortfall. HART estimates the five-year extension will generate revenue in the range of \$1.2 billion to \$1.8 billion. GET collections from FY 2007 to FY 2015 totaled \$1.522 billion.

City funding includes general obligation bonds (debt financing) to fund construction of the rail project. In November 2015, the city council approved legislation that allowed the city to issue up to \$350 million in general obligation commercial paper to fund rail project related improvements and equipment. HART also anticipates using the funds to cover its short-term cash flow needs.

In 2015, city council resolution 15-18 eliminated the use of \$210 million of FTA Section 5307 grant monies in the project's financial plan to ensure the funds were only used for city transportation services (i.e. TheBus and Handi-Van services).

PMOC Expressed Issues and Concerns in 2012

The FTA hired an independent consultant to monitor the construction project, identify problems, and to report deficiencies or concerns. The HART project management oversight consultant (PMOC) monthly reports discussed issues and concerns over the viability of HART's operations. In the monthly reports, the PMOC questioned the following:

- The adequacy of HART's ability to "forecast costs for the existing design-build contracts." It emphasized that it is critical that this issue be quickly corrected to demonstrate that the grantee has the technical capacity and capability going forward.²
- The lack of "technical capacity and capability specific to project controls."³
- The sufficiency of contingency reserves; and
- The need to develop, update, and implement secondary risk mitigation measures.

In December 2014, the HART's chief executive officer (CEO) stated that the agency was facing a \$600 million cost overrun and a \$310 million revenue shortfall. The public statement notified the city council that project costs had increased and revenues were less than projected.

Actions to resolve the shortfalls: In January 2015, the Hawai'i State Legislature introduced bills to extend the rail project GET county surcharge from December 2022 to December 2027. HART and city officials lobbied in support of the GET extension and the legislature passed the bill in May 2015.

² In the October 2012 monthly report, the PMOC noted that HART and the PMOC have held monthly breakout sessions to review the status of the forecast costs, schedule management, risk management, and cost containment measures. The report noted that these breakout sessions have resulted in increased confidence by the PMOC of the grantee's ability to manage the project budget and schedule.

³ Project Controls are acts of project management staff in all aspects of cost, schedule, contract administration, and configuration management. In the February 2013 PMOC monthly report, HART acknowledged the situation and hired a new Project Controls Manager.

After the governor signed the bill in July 2015, HART reported to the HART Board of Directors on October 15, 2015 that the cost overruns had increased an additional \$714 million, for a total of \$1.3 billion.

The exhibit below details the changes in estimated project costs and revenues.

Exhibit 2.2
Estimated Project Cost Increases and Revenue Shortfalls (Dollars in Thousands)

Description	Cost Estimates		Change	
	December 2014 HART Board Meeting	October 2015 HART Board Meeting	\$	%
Estimated Costs Increase:				
Lawsuits and Delay Claims	\$190,000	\$190,000		
Utility Relocations	50,000	120,000		
Project Enhancements	75,000	130,000		
Cost Escalation	45,000	240,000		
Allocated Contingency	240,000	240,000		
Unallocated Contingency	--	299,000		
Debt Financing Costs	--	95,000		
Total Estimated Costs Increase	\$600,000	\$1,314,000	\$714,000	54%
Estimated Revenue Shortfall:				
GET Projected Shortfall	\$100,000	\$100,000		
FTA 5307 Fund Reduction	210,000	210,000		
Total Estimated Revenue Shortfall	\$310,000	\$310,000		
Total	\$910,000	\$1,624,000	\$714,000	44%

Source: Office of the City Auditor (OCA) analysis based on HART Project Risks Update, December 18, 2014 and Project Cost Update, October 15, 2015.

Impact of shortfalls: HART subsequently came under increasing scrutiny by policy makers, the local media, and the public. Throughout the project, local news reports drew public attention on the credibility of HART's project cost information, and policy makers expressed concerns over the lack of detailed financial information provided by HART for decision-making purposes.

The city council also expressed concerns related to the HART data, financial management and planning, decision making, contract administration, and post-construction costs. As a result, the city council delayed approving the GET surcharge extension.

After the Federal Transit Administration (FTA) issued a warning related to the lack of project funding, members of the city council approved the county surcharge in January 2016. The FTA stated, in a letter to the mayor, the next \$250 million federal installment will not be released until the city and HART provided a revised cost estimate and schedule, an updated financial plan, and a commitment of local funds to cover the increased cost estimates.

The exhibit below details the timeline.

Exhibit 2.3 Funding Milestones

- **December 2014** HART announced a \$600 million projected capital costs increase and a \$310 million revenue shortfall.
- **January 2015** Hawai'i State Legislature circulated senate and house bills regarding the GET county surcharge extension.
- **April 2015** FTA confirmed the need to repay funds spent in full to the federal government if the rail project is cancelled.
- **May 2015** Hawai'i State Legislature passed House Bill 134, extending the GET county surcharge extension from December 31, 2022 to December 31, 2027.
- **July 2015** Governor signed GET county surcharge extension bill into law (Act 240). Approval to adopt the ordinance (Bill 23) by the City Council must be decided by June 30, 2016.
- **October 2015** HART projected an additional \$714 million in project cost increases.
- **November 2015** FTA issued a letter expressing concern that the city has not yet completed the actions needed to extend the GET surcharge that is critical to completing the project.
- **January 2016** City Council adopted city ordinance 16-1 supporting the 5-year extension of the GET county surcharge.
- **February 2016** Mayor signed bill into law.

Source: OCA analysis based on various sources

HART's Processes Can Be Improved to More Economically, Effectively, and Efficiently Report Project Costs

Regular reporting provides management with information necessary to make sound decisions and to be transparent and accountable to key stakeholders and the public.

Our review found that HART can improve its financial management and planning by retaining and providing reliable project cost information to policy makers and decision makers. Despite significant changes, HART has not regularly updated and reported accurate and reliable project cost information. As a result, HART reports contain inconsistent project cost data which limit the overall usefulness of its financial planning, project cost, and funding information. More specifically, HART needs to:

- Regularly update financial and operating information and plans;
- Provide reliable and consistent project cost information;
- Effectively track, monitor, and report on delay claims and related costs;
- Document and support utility cost increases and estimated cost overruns for project enhancements;
- Use specific and consistent factors in calculating and estimating escalation costs; and
- Properly report on GET county surcharge forecasts.

Financial and operating plans are not regularly updated

An FTA grantee must demonstrate financial management and capacity to match and manage FTA grant funds and to cover cost increases and operating deficits.

To ensure compliance with the FTA requirements, HART should follow best practices that ensure its financial and operating plans are regularly updated and are accurately reflected in its rail project financial reports. In the FTA 2015 triennial review⁴, the FTA reported deficiencies in the project's financial management and capacity. Specifically, HART's financial plan did not demonstrate sufficient financial capacity to complete the project as currently planned. HART did not update its financial plans in light of the recent cost projections and current shortfall of GET surcharge receipts.

More specifically, updating the financial plan was not identified until April 2014. HART delayed communicating the potential cost increases to the city council until March 2015 after HART's CEO announced a \$910 million project deficit to the board in December 2014. The \$910 million project deficit consisted of \$600 million in increased costs, a \$210 million reallocation of federal FTA Section 5307⁵ funding to TheBus operations, and a \$100 million GET county surcharge revenue shortfall.

While there were indicators that led to the project deficit, project managers and staff in key positions stated they were unaware of HART's fiscal condition until the December 2014 public announcement. As a result, corrective actions were not taken to ensure the FTA financial management and capacity concerns were satisfied.

⁴ The United States Code, Chapter 53 of Title 49, requires the FTA to perform reviews and evaluations of Urbanized Area Formula Grant activities at least every three years. The site visit to the city occurred February 2 through 5, 2015. The final report was issued on April 9, 2015. As a corrective action to the finding, the FTA requested an updated financial plan by July 13, 2015. The plan should identify all funding sources for funding the HART project through completion within the FFGA scope and budget. HART submitted a draft financial plan to the FTA on August 14, 2015. The FTA closed the outstanding finding under the triennial review cycle on October 20, 2015. According to HART, the financial plan is being revised in light of the GET surcharge extension as of April 2016.

⁵ Federal Section 5307 (49 U.S.C. § 5307) is a formula grant program for urbanized areas that provides capital, operating, and planning assistance for mass transportation. This program was initiated by the Surface Transportation Act of 1982 and became FTA's primary transit assistance program. The federal funds are apportioned to urbanized areas utilizing a formula based on population, population density, and other factors associated with transit service and ridership. Section 5307 is funded from both federal general revenues and trust funds, and is available for transit improvements for urbanized areas.

At the October 2015 board meeting, HART reported the project cost overrun had increased to \$1.3 billion. The cost overruns are detailed in the exhibit below.

Exhibit 2.4
Project Cost Estimates (Dollars in Thousands)
(As of June 2012, December 2014, and October 2015*)

<i>Description</i>	<i>Original Estimates</i>	<i>Cost Estimates</i>		<i>Change from Original Estimates</i>	
	<i>June 2012 FFGA Financial Plan</i>	<i>December 2014 HART Board Meeting</i>	<i>October 2015 HART Board Meeting</i>	<i>\$</i>	<i>%</i>
Project Capital Costs	\$4,949,000	\$4,948,000	\$4,948,000		
Lawsuits and Delay Claims	--	190,000	190,000		
Utility Relocations	--	50,000	120,000		
Project Enhancements	--	75,000	130,000		
Cost Escalation	--	45,000	240,000		
Allocated Contingency	--	240,000	240,000		
Unallocated Contingency	--	--	299,000		
Total Project Capital Costs	\$4,949,000	\$5,548,000	\$6,167,000	\$1,218,000	25%
Debt Financing Costs	215,000	215,000	310,000	\$95,000	44%
Total Project Costs**	\$5,163,000	\$5,763,000	\$6,477,000	\$1,314,000	25%

(*) This table excludes revenue shortfall of \$210 million in New Starts Fund reduction and shortfall of \$100 million in general excise tax (GET) county surcharge receipts.

(**) Numbers may not add up due to rounding.

Source: OCA analysis based on the FFGA financial plan, June 2012; HART Project Risks Update, December 18, 2014 and Project Cost Update, October 15, 2015.

Our analysis indicates the latest cost overrun figures are not reliable and will likely increase because the HART financial data and plans have not been updated to reflect the changes in the project costs.

Reliable and consistent project cost information is lacking

Reporting inconsistent information can cause confusion for policy makers and the public. During our review of HART reports, we found reports that contained missing, outdated, and incomplete information. According to HART, not all contract information is populated in the HART contract management system (CMS). As a result, HART management and staff relied on CMS reports⁶ that were missing project cost information. For example, we found:

- Contract numbers in different reports contained different amounts. For example, in Exhibit 2.5, the contract balances in four different reports ranged from \$2.6 million to \$3.5 million.
- CMS data was inaccurate. For example, HART executed a \$100,000 professional services contract, but the expenditure report we reviewed indicated HART paid over \$146,000 under the contract. HART staff later confirmed that there was a CMS error which excluded two contract amendments that totaled \$250,000 from the CMS report.
- Invoice data was incomplete. For instance, we found a missing invoice for \$11,344 was not properly uploaded into CMS.
- Delay claim data was incomplete. More specifically, delay claims totaling nearly \$64.2 million were not reported. Most notably, the \$8.7 million delay claim⁷ filed by Ansaldo Honolulu Joint Venture⁸ (eventually settled in October 2015) was not reported. Other delay claim data was outdated and not updated for two months. (See Exhibit 2.6, pending and possible changes).

⁶ HART information system staff reported that the CMS is a virtual, real time system, and reports extracted from the CMS will never be the same because the database contains real time changes. HART does not have any policies or practices to ensure HART data are consistent in all reports or that data are reconciled.

⁷ According to HART, the \$8.7 million delay claim filed by Ansaldo Honolulu Joint Venture (See Exhibit 2.6, Core Systems Design Build O&M Contract pending claim) was included in the \$10-\$20 million escalation costs increase (See Exhibit 2.7). However, HART was unable to provide details to support the \$10-\$20 million cost estimate.

⁸ AnsaldoBreda and Ansaldo STS became a part of the Hitachi Group Company on November 2, 2015 and November 3, 2015, respectively. AnsaldoBreda is now Hitachi Rail Italy.

- The number of executed and pending utility agreements were inconsistent and unreconciled. More specifically, the CMS report showed a total of 48 utility contracts. In contrast, the tracking spreadsheet identified 54 contracts (including 40 active utility contracts, 7 closed contracts, and 7 pending contracts).
- Six utility agreements were missing in a key report. Six pending contracts valued at \$107.9 million were excluded from the HART CMS forecast report.
- Differences in the contingency balance did not match external PMOC monthly reports. HART balances were higher than the figures reported by the PMOC. Appendix D compares the differences between HART's contingency balances with the figures reported by the PMOC. The differences between the HART balances and the PMOC balances ranged from \$149 million to \$254 million.
- State of Hawai'i GET balances did not match PMOC monthly reports. Appendix E compares the differences between the actual quarterly GET receipts with amounts reported by the PMOC. Although there may have been a timing difference between collection and reporting, the variances we found were significant. Reporting differences between the HART GET receipts and the PMOC reports ranged from \$25 million to \$492 million.

Exhibit 2.5 Contract Balance Comparison (Dollars in Millions)

Description	List of Awarded Contracts Summary as of June 22, 2015		Forecast Report for June 2015	HART Facts as of June 30, 2015
	Run Date: 8/13/15	Run Date: 11/5/2015		
Total Contract Award	\$3,506	\$3,496	\$2,620	\$3,083
Total Executed Changes	391	356	376	N/A
Total Contract Amount	\$3,897	\$3,852	\$2,995	\$3,083

Source: OCA analysis of HART's List of Awarded Contracts Summary as of June 22, 2015, Forecast Report for June 2015, and HART Facts as of June 30, 2015.

Exhibit 2.6 Incomplete Delay Claims Summary (Dollars in Thousands)

Contract	Description	Executed Claims	Pending Changes	Possible Changes
West O'ahu/Farrington Highway (WOFH) Guideway Design-Build (DB) Contract	Delay of Notice to Proceed (NTP) 2, 3, and 4 – CMC Escalation	\$6,228		
WOFH Guideway DB Contract	LCC Delay-Time Related Overhead			\$8,000
WOFH Guideway DB Contract	Utility Delays			5,275
Maintenance & Storage Facility DB	Archaeological Inventory Survey (AIS) Suspension Part 2	3,000		
Kamehameha Highway Guideway (KHG) DB Contract	Delay to Method Shaft 6	121		
KHG Guideway DB Contract	Delay, Right-of-Way (ROW)			25,000
KHG Guideway DB Contract	Escalation Due to Schedule Impacts			4,500
Airport Section Utilities Construction Design-Bid-Build Contract	Time Impact Delay – Navy ROW			802
Core Systems DB O&M Contract	9-Month Delay Claim		\$8,700	
Farrington Stations Group	NTP 1B Delay – Duration, Station Module Design	2,207		
Farrington Stations Group	NTP 2 Delay – Project & Interface Management Costs	400		
Total*		\$11,957	\$8,700	\$43,577

(*) Numbers may not add up due to rounding.

Source: OCA analysis based on HART *Project Delays Cost Summary Spreadsheet*, August 28, 2015, June 26, 2015, January 31, 2015, and December 18, 2014; CMS forecast report, September 25, 2015.

Project Cost Estimates Lacked Supporting Documentation

Cost estimating, by nature, is imprecise. Therefore, it is important to develop cost estimating methodologies and document key assumptions for the estimates. The *Guide to the Project Management Body of Knowledge* (PMBOK Guide) states that supporting documentation should provide a clear and complete understanding of how the cost estimate was derived. Supporting detail should include:

- A description of the project's scope of work;
- Documentation of the basis of the estimate (i.e., how it was developed);
- Documentation of all assumptions made;
- Documentation of any known constraints; and
- An indication of the range of possible estimates.

We did not find documentary evidence to support \$450 million of the additional cost increases as it relates to the above basic requirements.

HART cannot demonstrate it has an effective method of tracking, monitoring, and reporting on delay claim costs

In December 2014, HART stated delay claims totaled \$190 million and were attributed to lawsuits, escalation costs, and other delays. Of the \$190 million, \$146 million were executed through change orders funded by the project contingency reserves. We found that the remaining costs of approximately \$44 million were either unsupported or the claim amount changed because HART does not have an effective method in tracking, monitoring, and reporting on delay claim costs. Exhibit 2.7 quantifies the delay claim costs.

**Exhibit 2.7
Reporting Comparison of Delay Claim Costs**

	December 2014 and October 2015 HART Board Meetings	HART Project Delays Cost Summary	Difference
Total Legal Delay Costs	\$45,902,918	\$39,039,250	(\$6,863,668)
Total Other Delay Costs	\$77,126,198	\$77,126,198	\$0
Escalation (Combination of Notice to Proceed & Legal)	\$49,106,403	\$30,078,065	(\$19,028,338)
Total Delay Claims Cost	\$172,135,519	\$146,243,513	(\$25,892,006)
Plus Several Remaining Claims and Escalation Actuals	\$10-20 million	\$0	\$10-20 million
Estimated Total Impact Up To	\$190 million	\$146,243,513	\$44 million

Source: OCA analysis based on HART Project Risks Update, December 18, 2014; Project Cost Update, October 15, 2015; and HART Project Delays Cost Summary, August 2015

In the December 2014 board meeting, HART provided a one-page Project Delays Cost Summary (spreadsheet) in support of the \$190 million in delay claim costs. As of October 2015, HART's spreadsheet remained unchanged. However, we identified changes that were not updated because HART does not separately track and monitor delay claim costs. By updating the claim information, we found:

- \$12.2 million in additional potential delay costs related to the West O`ahu/Farrington Highway Guideway Design-Build contract⁹ that increased the delay claim from \$6.8 million to \$19 million.

⁹ West Oahu/Farrington Highway Guideway Design-Build contract (Delay of NTP 2, 3, & 4 – Escalation Costs)

- \$1 million in additional potential delay costs related to the Kamehameha Highway Guideway Design Build contract (Escalation Due to Schedule Impacts) that increased the delay claim from \$3.5 million to \$4.5 million.
- \$825,000 in overstated delay claims related to the CMS forecast report. The report removed an \$825,000 delay escalation claim for the maintenance and storage facility, but the update was not reflected in the tracking spreadsheet and not entered for two months.
- \$670,184 in overstated delay claims in the tracking spreadsheet. The tracking spreadsheet identified a \$7.5 million delay escalation claim for the West O`ahu Farrington Highway Guideway Design-Build contract, but the forecast report showed \$6,829,816.
- We also did not find details to support litigation costs of approximately \$6.9 million because HART tracks them separately as ineligible project costs.

Despite our finding, the manager of Project Controls stated that the spreadsheet was never intended to be used as a management tracking tool. The Project Controls manager also stated that HART tracks and monitors delay claim costs using CMS and C2HERPS. HART provided CMS forecast reports to show how delay claims are tracked and monitored. We found that these reports are inclusive of all contracts and change orders. In one report, we identified over 490 line items that consisted of contracts with executed change orders; pending, probable, and possible changes; and claims in dispute. We question how HART can accurately identify, track, monitor, and report on total delay claim costs when these reports do not track them as separate costs.

HART lacked adequate support for \$120 million in utility costs

Utility relocation costs were not included in the \$910 million project deficit reported by HART in December 2014. In October 2015, however, HART provided project cost updates that showed utility costs increased from \$50 million to \$120 million. See Exhibit 2.8.

Exhibit 2.8 Utility Costs Increase (Dollars in Millions)

Utility Work Description	Cost Estimates		Change	
	December 2014 HART Board Meeting	October 2015 HART Board Meeting	\$	%
Additional Clearance Conflicts with HEI High Voltage Lines	\$20	\$88	\$68	77%
HEI Utility Relocations in the City Center Segment	25	25	0	0%
Service Connection for Permanent Power	5	7	2	29%
Total	\$50	\$120	\$70	58%

Source: OCA analysis based on HART Project Risks Update, December 18, 2014 and Project Cost Update, October 15, 2015.

HART explained that they used the Rough Order of Magnitude (ROM)¹⁰ methodology to value the utility cost estimates. Although projects in the early phase generally have limited information to produce quality cost estimates, at a minimum, we expected a description of the estimate, scope and assumptions, data sources, estimating methodology and rationale, risk analysis results, and a conclusion about whether the cost estimate was reasonable.

When we requested supporting documentation for how HART reached the total cost estimates, we were told that detailed estimates were still being developed and were not available for review. HART eventually provided a draft three-page document that listed five options that totaled \$99 million. The cost estimates did not provide detailed documentation describing how it was derived; showed no evidence of any review or approval; and did not identify the factors used to estimate the \$120 million in utility costs. As a result, we question the credibility of the estimate.

¹⁰According to HART's Cost Estimating Procedure, a Rough Order of Magnitude Estimate (ROM) is an estimate developed to facilitate project budget and feasibility determinations. The order of magnitude estimate information is based on parametric units (e.g. route feet, lane miles, gross square feet, number of parking stalls) and other quantifiable data. Pricing is based on historical cost caps that are adjusted for project location, size or capacity differences, and cost escalations. The GAO Cost Estimating and Assessment Guide states that a ROM is developed when a quick estimate is needed and few details are available. Based on historical information, it is typically developed to support what-if-analyses, and can be developed for a particular phase or portion of an estimate to the entire cost estimate. The analysis is helpful for examining differences in alternatives to see which are the most feasible. Because it is developed from limited data and in a short time, a ROM analysis should never be considered a budget-quality cost estimate.

We subsequently discovered the project manager responsible for the utility contracts did not know about the \$120 million cost increase.

\$46 million in estimated cost overruns for project enhancements were not supported

Like the utility relocation costs, project enhancements were not discussed when HART reported the \$910 million cost overrun and revenue shortfall in December 2014. In October 2015, however, HART reported project enhancements costs that increased from \$75 million to \$130 million. The additional \$55 million cost estimate increase included \$35 million in public highway improvements and \$20 million in additional escalators. The HART project controls manager told us that project enhancements were created to present change orders differently to stakeholders and the public. (See Exhibit 2.9 below.)

**Exhibit 2.9
Project Enhancement Costs Increase (Dollars in Millions)**

Description	Project Status	Cost Estimates		Change	
		December 2014 HART Board Meeting	October 2015 HART Board Meeting	\$	%
Platform Safety Gates	Executed Change Order	\$28	\$28	--	--
Additional Seats	Executed Change Order	2	2	--	--
Fare Collection Systems	Solicitation	15	15	--	--
Emergency Backup Generators	Solicitation Preparation	15	15	--	--
Public Highway Improvements	Change Orders Preparation	15	50	35	233%
Additional Escalators	Solicitation Preparation	0	20	20	100%
Total		\$75	\$130	\$55	73%

Source: OCA analysis based on HART Project Risks Update, December 18, 2014; Project Cost Update, October 15, 2015; and CMS forecast report, September 2015.

We found that HART could not support \$46 million of the \$130 million in project enhancement cost estimates. Discrepancies existed between the cost estimates presented to the HART board and the documentation supporting the estimates because HART did not follow its cost estimating procedures. For example, we did not find detailed descriptions or support for:

- \$18.1 million for public highway improvements
- \$5.2 million for the emergency backup generators
- \$2.7 million for fare collection

We questioned the estimated \$20 million for additional escalators. HART provided a handwritten proposed costs document that showed two estimates which varied by roughly \$8 million with a low of \$17 million and a high of \$25 million. Higher estimates can overstate the total project costs while lower estimates can potentially result in cost overruns.

According to the *GAO Cost Estimating and Assessment Guide*, it is imperative that all assumptions are documented so that management fully understands the conditions the cost estimate was structured on. The GAO further states that failing to do so can lead to overly optimistic assumptions that heavily influence the overall cost estimate, to cost overruns, and to inaccurate estimates and budgets.

While cost estimates are only estimates, absent detailed information, we were unable to identify all the cost elements included in the total amount. More importantly, we could not assess the reasonableness and appropriateness of the methodology and assumptions used to develop some of the cost estimates.

Escalation cost¹¹ estimates were not calculated by using a specific factor

HART increased its escalation cost estimates by \$195 million, from \$45 million in December 2014 to \$240 million in October 2015. HART attributed the increase to extraordinary market conditions. During the audit, HART staff was unable to explain the methodology used to support these cost estimates. We were told that HART did not use a specific factor to calculate the \$240 million in escalation costs and that these costs are subsets of the total escalation within the project costs.

HART claims that it has procedures and methodologies in place to forecast escalation that is based upon historical data as well as using the latest bid results, other agency procurement results, market studies, and independent economic reports, etc. When we asked for evidence to substantiate the \$240 million escalation cost estimates, however, there was no documentation to support how the \$240 million was derived. HART was also unable to provide a detailed breakdown of escalation costs for the total \$6.5 billion project cost.

¹¹ Escalation costs represent cost increases projected by a contractor or HART when estimating work to be completed at a time in the future.

Consequently, we were unable to verify HART's methodology to forecast escalation costs and the reasonableness of the additional escalation costs because the amounts were not calculated by using a consistent and specific factor. The exhibit below shows the unsupported cost increase.

Exhibit 2.10
Escalation Costs Increase (Dollars in Millions)

Description	Cost Estimates		Change	
	December 2014 HART Board Meeting	October 2015 HART Board Meeting	\$	%
Cost Escalation	\$45	\$240	\$195	433%

Source: OCA analysis based on HART Project Risk Update, December 18, 2014; and Project Cost Update, October 15, 2015.

***HART underreported
GET county surcharge
forecasts***

In 2014, HART projected a GET revenue shortfall in the range of \$80 to \$100 million and attributed the shortfall to a coding error by the State of Hawai'i Department of Taxation. The error resulted in a \$9.9 million distribution error which was compounded annually over 10 years for a total of \$100 million.

We requested information related to the \$100 million GET revenue shortfall and analyzed the spreadsheets provided by HART. The HART spreadsheets showed how GET county surcharge receipts were tracked and how revenues were projected. We found that HART's revenue forecasts were higher than reported. Consequently, HART underreported its projected shortfall amount by approximately \$41 million.

HART executive management knew the amount was higher than the \$100 million reported, but did not report its projections accurately to the board in December 2014.

**Improved Financial
Management and
Planning Are
Needed**

While the FTA does not require submittal of updated financial and operating plans after the award of a full funding grant agreement, it does retain the right to ask for updated financial and operating plans if any significant changes to the project occur after the funding grant agreement is signed.

According to the *FTA Guidance for Transit Financial Plans*, sound financial planning ensures the financial health of transit agencies and affects the quality of service provided. Financial and operating plans serve as a fundamental tool for management and policy makers to make critical decisions, especially for a project of this magnitude. Consistent with best practices, the plans should therefore be regularly updated to reflect the most current financial condition of the project.

A HART executive stated that the outdated plans are not an impediment to HART operations. According to the executive, HART is fulfilling its reporting requirements; updating the financial and operating plans are contingent upon the passage of the GET county surcharge extension¹² by the city; and that FTA has not established a specific timeframe requirement for the financial updates.

Another HART executive stated a formal update requires HART to go through a lengthy process that is subject to the review and approval of key stakeholders, including the HART Board of Directors, the project management oversight consultant, and the FTA.¹³ We believe this reasoning should not delay HART's efforts to update its financial and operating plans. Without current financial and operating plans, HART management, policy makers, and decision makers will be unable to make cost-effective decisions to ensure the project is completed efficiently, effectively, and economically.

¹² At the time of our interview, the GET county surcharge extension was still subject to the adoption of bill 23 by the city council.

¹³ According to HART, the FTA instructed the agency to submit a revised financial plan because of a deficiency related to the lack of projected funds. In order to revise the plan, HART noted that it sought to extend the GET surcharge as a viable finding source. HART also noted that the FTA held off any further action until HART could demonstrate that it had the financial capacity to complete the project. As a result of the GET extension, the FTA has scheduled a full budget review of HART's updated financial plan at the next risk refresh meeting on March 30, 2016.

Recommendations

HART should:

1. Increase efforts to regularly update its financial plan. The cost changes and adjustments are necessary to reflect the current financial condition of the project. Updates should be supported by detailed, source documentation.
2. Update its Operations and Maintenance Plan (OMP) to address funding, management, and other transit needs.
3. Consistently and accurately report on project cost information, identify and explain variances if internal and external reports are intended to be different so that policy makers and the public receive consistent and reliable project cost information.
4. Develop methods to ensure data used in HART, PMOC, and other reports are consistent, accurate, reliable, and can be reconciled among all the reports using the data.
5. Develop a process for tracking and monitoring all costs, including the status of delay claim costs.
6. Support its cost estimates with consistent, reliable and sufficient information. To do so, HART should thoroughly document details, including any forecasting methodology and assumptions made to support its cost estimates.
7. Replace the contract management system (CMS) with a system that is more user friendly and more appropriate to managing the HART construction project. If the CMS system is retained, HART should define which CMS data elements, data fields, and functions should be used and which parts should be deactivated or eliminated.
8. Use the city's C2HERPS enterprise resource planning system to develop, monitor, track, and report budget, financial, and accounting data. The CMS system should not be used for these purposes.
9. Develop a forecasting model to best predict escalation costs and support it with documentation.

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Chapter 3

HART Needs to Improve Project Management and Contract Administration

Summary

Project management and contract administration controls can be improved. More specifically, Honolulu Authority for Rapid Transportation's (HART) Project Management Plan (PMP) and its subsidiary plans are outdated and unreliable as decision-making tools. HART made concessions to a single contractor; did not perform quantitative analysis to justify a major decision to repackage a bid for nine stations in the Westside Stations Group; and paid \$1.5 million in stipends to unsuccessful bidders without knowing the bidders' actual costs. HART is also paying for vacant office space. Contract administration controls need to address invoice payments, procurement file documentation, and prevent improper payments.

Background

On December 18, 2014, HART's chief executive officer (CEO) reported to the HART Board of Directors that the total project costs will increase to \$5.8 billion, an increase of \$600 million in additional costs and a \$310 million funding shortfall. HART attributed project cost increases to three separate events: lawsuits that resulted in delay claims, higher than expected bid for the construction of the nine Westside stations, and the unfavorable general excise tax (GET) county surcharge revenue receipts.

Ten months later, on October 15, 2015, total project costs increased to \$6.5 billion. Exhibit 3.1 provides details.

Exhibit 3.1**Factors that Contributed to the Project Cost Increase and Revenue Shortfall
(Dollars in Thousands)**

Description	Original Estimates	Cost Estimates	
	June 2012 FFGA Financial Plan	December 2014 HART Board Meeting	October 2015 HART Board Meeting
Project Capital Costs	\$4,949,000	\$4,948,000	\$4,948,000
Estimated Costs Increase:			
Lawsuits and Delay Claims	--	\$190,000	\$190,000
Utility Relocations	--	50,000	120,000
Project Enhancements	--	75,000	130,000
Cost Escalation	--	45,000	240,000
Allocated Contingency	--	240,000	240,000
Unallocated Contingency	--	--	299,000
Debt Financing Costs	215,000	215,000	310,000
Total Estimated Costs Increase*	\$5,163,000	\$5,763,000	\$6,477,000
Estimated Revenue Shortfall:			
GET Projected Shortfall	--	\$100,000	\$100,000
FTA 5307 Fund Reduction	--	210,000	210,000
Total Estimated Revenue Shortfall	\$0	\$310,000	\$310,000

(*) Numbers may not add up due to rounding

Source: Office of the City Auditor (OCA) analysis based on HART Project Risks Update, December 18, 2014 and Project Cost Update, October 15, 2015.

Construction Cost Overruns Are Not Unusual

Our comparison of construction costs for other capital rail projects indicated cost overruns frequently occur. The following data table features a comparison of capital costs among 20 heavy and light rail projects.

- The first 8 services (Atlanta, Baltimore, Buffalo, Miami, Pittsburgh, Portland, Sacramento, and Washington, D.C.) were rail projects that initially established heavy and light rail services in the respective urban areas. While one project was completed under budget, the others had cost overruns that ranged from 13 percent to 83.1 percent.
- The remaining 12 heavy and light rail projects were extensions and built to integrate the new projects into already established heavy rail transit services. One heavy rail project was completed under budget. The other 11 projects had cost overruns that ranged from 3.3 percent to 35.8 percent.

Exhibit 3.2 Capital Costs Comparison of Heavy and Light Rail Projects

Project	Year Project Completed	Total Capital Cost (dollars in millions)*		Cost Overruns (%)
		Original FFGA	At Completion	
1990 FTA Report**				
Heavy Rail				
Atlanta	1979	\$1,723	\$2,720	57.9%
Baltimore	1983	\$804	\$1,289	60.3%
Miami	1984	\$1,008	\$1,341	33.0%
Washington, D.C.	1976	\$4,352	\$7,968	83.1%
Light Rail				
Buffalo	1984	\$478	\$722	51.0%
Pittsburgh	1984	\$699	\$622	-11.0%
Portland	1986	\$172	\$266	55.0%
Sacramento	1987	\$165	\$188	13.0%
2003 FTA Report				
Heavy Rail				
Baltimore-Johns Hopkins	1994	\$311	\$353	13.7%
Chicago-SW Transitway	1993	\$438	\$522	19.1%
San Francisco-Colma	1996	\$172	\$180	4.9%
Light Rail				
Baltimore-BWI Hunt Valley	1997	\$110	\$116	6.2%
Portland-Westside Hillsboro	1998	\$887	\$964	8.7%
St. Louis-MetroLink	1993	\$456	\$464	1.8%
2007 FTA Report				
Heavy Rail				
Chicago-Douglas Branch	2005	\$473	\$441	-6.8%
San Francisco-SFO	2003	\$1,186	\$1,552	30.9%
Washington-Largo	2004	\$413	\$426	3.3%
Light Rail				
Minneapolis-Hiawatha	2004	\$513	\$697	35.8%
Pittsburgh-Stage II Reconstruction	2004	\$363	\$385	6.0%
San Diego-Mission Valley East	2005	\$427	\$506	18.7%

(*) All dollar amounts shown represent adjusted real values.

(**) The FFGA program was established after the projects featured in the 1990 study.

Source: Office of the City Auditor (OCA) analysis based on information obtained from the *Urban Transit Rail Projects: Forecast Versus Actual Ridership and Cost*, 1990, prepared by Dr. Don H. Pickrell for the Urban Mass Transit Administration and the FTA's *Predicted and Actual Impacts of New Starts Projects, 2003 and 2007*.

Additional HART Rail Project Cost Overruns and Shortfalls Are Likely

One of HART's stated goals is to preserve the stewardship of resources by maintaining public trust through the prudent and transparent use of financial, human, and environmental resources. HART can demonstrate good public stewardship by well-supporting its management decisions.

In addition to deficiencies in financial management and planning, we found shortcomings that could impact the project's long-term financial viability, increase the likelihood of additional

cost overruns, and reduce the funds available to the rail project. Specifically, we found:

- HART does not have an adequate contingency reserve.
- Cost controls were insufficient to control cost increases.
- Updating the project management plan, including the subsidiary plans, was never made a priority.
- Inappropriate concession (retainage payments) with a contractor was made.
- Cost estimates and potential savings were lacking in the decision to repackage the Westside Stations Group.
- HART lacks policy and procedures on administering stipends and has paid \$1.5 million without documentation of unsuccessful bidders' actual costs.
- HART is paying for vacant office space.
- Contract administration needs to be improved.

The project management oversight consultant (PMOC) meets with HART management and staff monthly to discuss increased costs and to ensure that cost issues are proactively addressed. In December 2014, the PMOC reported it provided numerous cost mitigation recommendations that HART should consider implementing. Despite the recommendations, PMOC noted that minimal cost containment measures had been accomplished by HART and the trend of minimal cost containment was alarming.

HART does not have an adequate contingency reserve

Normally, the amount of contingency required for a project decreases with the project's progress. Over time, as costs become more definitive, the contingency amount should decrease. However, HART increased its allocated and unallocated¹ contingency funds by \$539.4 million because it does not have an adequate contingency reserve.

- In June 2012, HART reduced its original \$866 million contingency by \$222 million to \$644 million after it submitted its 2012 *Full Funding Grant Agreement* (FFGA) financial plan to the Federal Transit Administration (FTA).
- In July 2012, HART established a \$76.1 million Known Changes² contingency account to separately fund costs that would have been covered by unallocated contingency reserves.
- In October 2012, the PMOC noted that "significant contingency reduction occurred, to a point where contingency was below accepted control levels" (vs. HART's submittal of the updated cost estimate in 2012 to support the FFGA application). Subsequently, the PMOC acknowledged that HART "has implemented efforts to recover contingency levels through cost reduction measures, value engineering, and revised project delivery strategies."
- From May 2013 through July 2013, the PMOC expressed concerns "with the adequacy of the remaining contingency given the anticipated costs due to the project delays." In August 2013, the PMOC noted a concern on "whether there is sufficient contingency remaining, given the status of the project."

¹ Unallocated contingency provides a funding source to cover unknown but anticipated additional project execution costs and uncertainty due to risk factors such as unresolved design issues, market fluctuations, unanticipated site conditions and change orders. It also covers unforeseen expenses and variances between estimates and actual costs.

² HART tracks Known Changes separately from the Project contingency established under the FFGA. Known Changes are executed through budget transfers. According to HART, Known Changes are recognized as project scope and not contingency. HART management explained that the Known Changes were identified as pending changes that were subject to final negotiations with contractors. Upon our review of Known Changes, we found that HART used these reserves to fund change orders that included a \$20.1 million delay claim, \$6.8 million in non-rail escalation and rail mark-up costs, and \$2.6 million budget transfer into allocated contingency, contrary to the intended use of this fund.

- In the September 2014 PMOC monthly report, the PMOC recommended that “strong controls must be put in place immediately to avoid future rapid contingency reductions.” It also added “the frequency and the levels of project management to which these statistics are reported should be improved and monitored monthly.”
- In the December 2015 PMOC monthly report, the PMOC estimates \$303 million remaining in total contingency. HART’s forecast report, as of December 2015, identifies \$330 million in executed change orders and projects \$301 million in pending, probable, and possible changes.

HART did not communicate the need for additional contingency until December 2014. In December 2014, HART increased the underfunded contingency reserves to \$884 million. In October 2015, HART increased its reserves to \$1.18 billion.

The HART contingency increases from \$644 million (13 percent) in June 2012 to \$884 million (15.9 percent) in December 2014 to \$1.18 billion (19.2 percent) in October 2015 were part of the reported project shortfalls (See Exhibit 3.3). The last increase of \$539.4 million (allocated and unallocated) was more than the allocated contingency under the final FFGA, and may have been excessive.

Exhibit 3.3 Contingency Reserves Increase (Dollars in Thousands)

Description	Original Estimates	Cost Estimates		Change from Original Estimates	
	June 2012 FFGA Financial Plan	December 2014 HART Board Meeting	October 2015 HART Board Meeting	\$	%
Allocated Contingency	\$540,100	\$782,000	\$782,000		
Unallocated Contingency	\$101,900	\$102,000	\$401,000		
Allowance	\$1,600	--	--		
Total Contingency*	\$643,600	\$884,000	\$1,183,000	\$539,400	84%
Contingency Percentage of Total Project Capital Costs	13.0%	15.9%	19.2%		

(*) Numbers may not add up due to rounding

Source: OCA analysis based on the FFGA financial plan, June 2012; HART Project Risks Update, December 18, 2014; and Project Cost Update, October 15, 2015; PMOC Monthly Report, May 2013.

Cost controls were insufficient to control cost increases

We found deficiencies related to HART's cost controls³ that, in our opinion, partly contributed to the significant cost increases. In March 2014, the PMOC performed an initial review of information provided by HART and suggested a possible recommendation for HART to develop aggressive cost containment measures. In December 2014, HART announced the \$910 million project cost overrun and revenue shortfall. The PMOC reported that, in February 2015, HART started implementing some cost containment measures. Although HART claims that evaluating and developing cost containment opportunities and cost reduction strategies were ongoing activities, we believe that HART could have taken a more proactive approach in implementing cost containment measures. Instead, HART reacted by requesting more funding.

³ According to the PMBOK guide, control costs is the process of monitoring the status of the project, to update the project budget, and managing changes to the cost baseline.

We also found that not all project managers compare actual costs against their budgets even though this comparison is an important cost control mechanism. One project manager said that she relies on project controls to monitor her contract costs. The project is at risk of additional cost overruns when project managers do not pay attention to project costs and budgets. In our opinion, project managers should continuously compare actual costs against budget amounts, should analyze any variances, and take corrective actions before costs go higher than expected.

Updating the project management plan, including subsidiary plans, was never made a priority

A Project Management Plan (PMP) is a formal, approved document that guides how a project is to be executed, monitored, and controlled. It includes subsidiary plans that provide guidance and direction for cost management planning and control. According to the FTA *Project and Construction Management Guidelines*, a PMP is required by statute for major capital projects, provides a functional, financial, and procedural route map for the grantee to effectively and efficiently manage on-time, within-budget, and at the highest quality level in its unique project environment. The FTA requires the PMP to be submitted prior to preliminary engineering and updated through subsequent project phases.

Moreover, best practice recommends continuous updates to the PMP because it can provide greater precision with respect to schedule, costs, and resource requirements to meet the defined project scope. We found that HART has not updated its PMP, including the subsidiary plans, despite considerable changes in project schedule, costs, and staffing since the federal FFGA was issued by the FTA in December 2012.

Updating the PMP and its subsidiary plans⁴ has not been a high priority for HART. According to the PMOC, the PMP update has been in progress prior to March 2013. The PMOC indicated that it was critical for HART to update the PMP and its subsidiary plans. We believe that an outdated PMP and its subsidiary plans could hinder management's ability to effectively guide the project to completion in an economical, effective, and efficient manner.

⁴ Subsidiary plans include the quality management plan; real estate acquisition and management plan; bus fleet management plan; rail fleet management plan; safety and security management plan; safety and security certification plan; configuration management plan; staffing and succession plan; risk and contingency management plan; operating plan; force account plan; mitigation monitoring program; interface management plan; contract packaging plan; claims avoidance plan; construction management plan; contract resident engineer manuals; and project procedures.

Exhibit 3.4 Key Management Plans

Plan	Description	Original Issue or Last Update	Date Identified as an Update Item	Status as of December 2015
Contract Packaging Plan (CPP)	The CPP describes each third party contract which will be undertaken by HART to implement the Project.	Approved for FFGA (2012)	August 2014	Updating
Financial Plan	This document provides a summary of the capital costs and funding sources associated with both the Project and the city's ongoing capital needs for its existing public transportation system, including the results of three sensitivity analyses and potential mitigation strategies. It also describes the city's plan to fund the operations and maintenance costs associated with the Project, TheBus, and TheHandi-Van services.	June 2012	August 2014	Updating
Master Project Schedule (MPS)	The MPS is the primary schedule developed by the Project team which includes and coordinates the work of the various project segments and contractors.	Approved for FFGA (2012)	August 2014	Updating
Operations and Maintenance Plan (OMP)	The OMP presents the capacity of the city to operate and maintain the integrated transit system.	June 2012	August 2014	Updating
Project Management Plan (PMP)	The PMP establishes the framework for administering implementation of the Project. It describes and documents the overall management approach for the Project and is used both as a management tool to guide HART and as an informational overview for project participants and interested parties.	July 17, 2012	Not Identified	Updating
Risk and Contingency Management Plan (RCMP)	The RCMP describes the approach that the project will adapt to identify risk, assign the likelihood of occurrence of each risk, and quantify the associated potential impact on project delivery objectives if it occurs. It provides senior management with a systematic process for identifying, assessing, evaluating, managing, and documenting risks that could jeopardize the success of the project.	September 26, 2011	September 2013	Updating

Source: HART Standard Terms Definitions and Acronyms, April 19, 2012; HART Monthly Progress Report, December 2015; and PMOC Monthly Report, December 2015.

Waiver concessions were made

Pursuant to the Hawai'i Revised Statutes §103-32.1, city contracts allow HART and the city to withhold up to 5 percent of a contract amount to ensure that the contractor's performance is satisfactory and acceptable. Once the city is satisfied with the project or is satisfied with any re-work the contractor is asked to do, the city will release the retained amount (retainage) to the contractor.

For one contract, the rail prime contractor, Kiewit, requested a partial release of the retained amount. On March 6, 2013, HART waived the five percent *retainage* for three construction contracts with Kiewit⁵.

This concession was made for three specific change orders totaling \$26 million and the total amount waived was about \$1.3 million. Actual expenditures totaled \$23 million, of which the total amount actually waived was \$1.1 million.

According to HART managers, they approved the waiver as an incentive for Kiewit to stay on the job. The approval reduced Kiewit costs during the period when the rail project work was suspended. The suspension occurred after an August 2012 Hawaii Supreme Court decision caused the project work to halt so archaeological surveys could be completed. In September 2013, project work restarted.⁶

By waiving the 5 percent *retainage*, HART and the city lost some leverage to ensure Kiewit performed satisfactorily under its contracts. The city also risked being accused of favoritism or bias towards one contractor.

Cost estimates and potential savings were lacking in the decision to repackage the Westside Stations Group⁷

HART was unable to demonstrate that it prepared a reasonable level of cost-benefit analysis to justify its decision to repackage the Westside Stations Group prior to the rebid. Our review of the Westside Stations Group repackage strategy found that HART lacked sufficient documentation to quantify the expected costs and potential savings when the decision was made to cancel the original bid. Consequently, HART assumed significant risks that could have driven contract costs higher and made future savings unattainable.

⁵ The contract documents indicate Kiewit requested a partial release of retainage on only one contract prior to HART issuing the approval memorandum for all 3 Kiewit contracts.

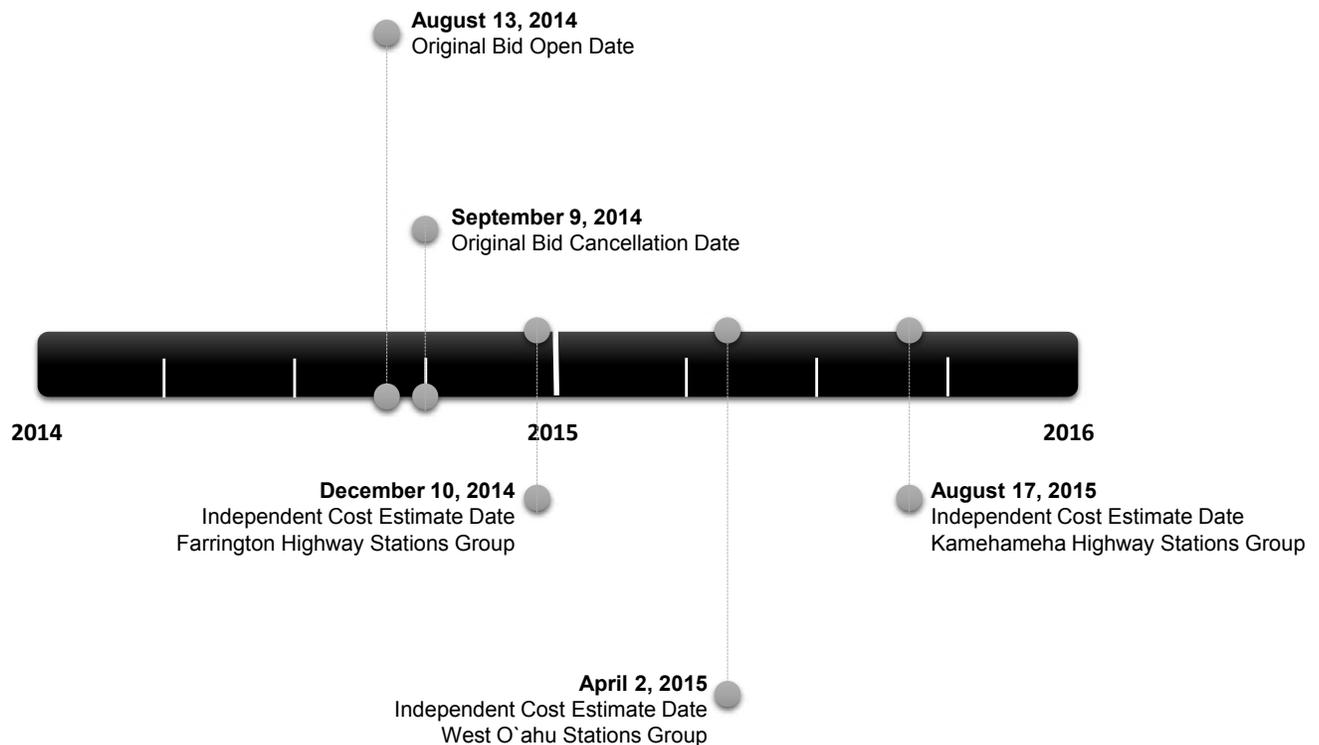
⁶ According to HART managers, the term waived was an error and the wording should have been “retention will not be withheld.”

⁷ The Westside Stations Group consists of the first nine stations along the rail route. HART repackaged the Westside Stations Group into three rail station groups: Farrington Highway Stations, West O`ahu Stations and Kamehameha Highway Stations.

During our audit, we asked HART to provide cost estimates and to identify its expected savings from the repackage. After opening the packages of the three station bids, HART executive management claimed a potential cost savings of \$31 million on the decision to divide the nine stations into three packages of three stations. According to HART, the sum of the independent cost estimates totaled \$263 million, \$31 million less than the original low three bid of \$294 million for the nine station package. We found that HART lacked sufficient time to fully evaluate and quantify any potential savings.

On September 9, 2014, HART's CEO, who also serves as the chief procurement officer, authorized HART staff to cancel the nine stations group construction bid prior to the receipt of all independent cost estimates for the three rail station packages, including a \$5.2 million contract for a H2R2 ramp that was originally part of the Kamehameha Highway Stations Group. See Exhibit 3.5 for the timeline.

**Exhibit 3.5
Westside Stations Group Bid Cancellation Timeline**



Source: OCA analysis of independent cost estimates and HART Monthly Progress Report, November 2015.

According to HART, its consultants performed quantitative analysis to support its decision to repackage the Westside Stations Group bids and provided two whitepapers to substantiate its cost-benefit analysis. While there were discussions of market factors and different procurement strategies, we did not find any quantitative analysis to show the potential costs or savings for the decision to rebid. One of the whitepapers included several pages on value engineering, scope reduction and scope transfer ideas. For the first three stations, a Rough Order of Magnitude (ROM) for cost savings were notated next to each idea. These ROM for cost savings were extrapolated to the remaining six stations. HART was unable to provide how the ROM figures were derived.

The independent cost estimates for the three packages totaled \$263 million which was \$79 million higher than the engineer's original estimates. Nevertheless, HART reported in its August 2014 Monthly Report that the overall cost of the \$5.2 billion project would not change and that additional costs could be covered using a combination of contingency funds and adjusting the contract scope to reduce costs.

Contrary to the August 2014 Monthly Report, HART announced in December 2014 that the cost for all the stations to be constructed and the remaining guideway will exceed the contingency reserves, off-sets, and other funds available by several hundreds of millions of dollars.

Fortunately, the actual outcome reduced the original, nine station group bid by \$31 million. If the strategy had failed, the decision could have driven contract costs higher than the original nine station bid. Because of the fiscal situation confronting the agency, the CEO told us that he had to make it work. He relied on his professional judgment and consultant's opinions when he canceled the nine station bid and repackaged the contract into three rail station groups. While professional judgment is important, critical decisions should be supplemented by quantitative analysis and documented analysis, as well as past experience, and current or historical data.

HART paid \$1.5 million to unsuccessful bidders without documenting their actual costs

According to a HART officer, issuing stipends to unsuccessful bidders is a common practice, is allowed under state law, and is accepted by the Federal Transit Administration (FTA). According to the FTA, this practice gives the grantee title to the proposed

design concepts. The stipend payment covers all or part of the cost of preparing bid proposals and encourages competition although the practice is an added cost to the grantee.

While there is no specific evidence that firms would not submit bids if no stipend was provided, HART offered \$3.5 million to compensate unsuccessful bidders for three design-build contracts⁸. The stipends were to be divided equally and not to exceed \$500,000 for each unsuccessful bidder. HART's records show that \$1.5 million⁹ was paid to three unsuccessful bidders as of June 30, 2015.

Exhibit 3.6 Stipend Payments

Contract	Stipend Payment		
	Date	Offered	Amount
West O`ahu/Farrington Highway Guideway	02/11/10	\$1,000,000	\$500,000
West O`ahu/Farrington Highway Guideway	05/26/10	\$1,500,000	\$500,000
Kamehameha Highway Guideway	12/07/11	\$1,000,000	\$500,000
Total		\$3,500,000	\$1,500,000

Source: OCA analysis based on C2HERPS data provided by the HART.

We were, consequently, unable to assess whether the stipend payments were excessive or if the stipends covered the unsuccessful bidder's actual costs because HART had not established any written policy or procedures related to administering the stipend payments. Effective policy and procedures provide staff guidance for issuing proposal stipends to unsuccessful bidders. Without any policies or procedures, it is unclear how HART was able to determine the compensation amount for each of the unsuccessful bidders; assess the documentation needed to support their actual costs; or determine the value or usefulness of the unsuccessful bidders' proposals.

⁸ West O`ahu/Farrington Highway Guideway, Kamehameha Highway Guideway, and Airport Guideway and Stations Design-Build Contracts.

⁹ According to HART, all 3 stipends were paid on city procured contracts. In connection with the Kamehameha Highway contract, the stipend payment was issued subsequent to the establishment of HART. According to a HART executive, HART plans to continue the practice of issuing stipend payments.

HART is paying for vacant office space

HART leases four floors of office space. During our on-site visit at HART, we identified one leased floor of 16,182 rentable square feet that had 12 vacant offices and 15 empty workstations. About 41 percent of the offices and workstations were unoccupied on this floor when we conducted a physical inventory count in July 2015.

Although HART stated it has plans to occupy the empty space, the offices and workstations sat vacant throughout our six-month audit. While it was empty, we requested a current inventory listing of its leased offices and workstations. It took HART staff five weeks to provide us this information. Review of its inventory listing revealed that the vacancy rate increased to 44 percent.

As of April 2016, HART reported a vacancy rate of 27 percent on the floor in question. Upon verification, we found that the vacancy rate is closer to 32 percent¹⁰.

HART should evaluate and document its office space requirements and minimize HART operating costs by subletting its surplus office space or renegotiating its leases so that it only pays for space that is needed.

Exhibit 3.7 Office and Workstation Vacancy Rates

Total Offices and Workstations		Count as of July 2015			Count as of November 2015		
		Occupied	Unoccupied	Vacancy Rate	Occupied	Unoccupied	Vacancy Rate
Offices	46	34	12	26%	34	12	26%
Workstations	20	5	15	75%	3	17	85%
Total	66	39	27	41%	37	29	44%

Source: OCA physical count of leased office space and HART *Work Space Inventory Listing*, November 30, 2015

¹⁰ As of April 2016, HART reported an aggregate occupancy rate of 88 percent. The aggregate amount included three floors that were 93 percent to 96 percent occupied and one floor that was 73 percent occupied. The audit discusses the 23rd floor that is currently 32 percent vacant.

Exhibit 3.8
Photos of Vacant Offices and Workstations



Source: OCA

**Contract
Administration
Needs to Be
Improved**

Current and complete policies and procedures are necessary to provide clear and effective guidance to staff regarding contract management. Strong recordkeeping practices serve to ensure compliance with federal, state, and local laws.

We sampled 25 contracts during our audit and found several deficiencies. We found that HART has not developed written policies related to contract administration and invoice payment practices, and procedures were incomplete and not regularly updated. These deficiencies could lead to noncompliant and questionable practices.

Exhibit 3.9 Summary of Contract Types Reviewed

Contract Type	No of Contracts Reviewed
Firm Fixed Price	8
Cost Reimbursement	4
Time and Materials	3
Legal Contract	3
Lease Agreement	2
Cost Plus Fixed Fee	2
Combination Firm Fixed Price & Time and Materials	1
Intergovernmental Agreement	1
Task Order Time and Materials	1
Total	25

Source: OCA sample selection

Contract administration policies and procedures were incomplete and outdated

We found HART has not developed written policies related to contract administration and invoice payment practices. Policies and procedures were also needed for capital project monitoring and reporting. HART contract administration procedures were last updated in 2012 and need to be updated to reflect current policies and procedures. Out-of-date policies and procedures increase the risk of contract mismanagement if guidance is incorrect.

Contract administration roles and responsibilities were confusing

We found that HART's contract administration procedures defined confusing roles and responsibilities for its project managers, contract managers, and contract administrators. HART's project managers acted as contract managers until August 2015. In a separate updated procedure manual, HART delineated the positions into two distinct roles. In addition, the terms contract administrator and contract manager are used interchangeably at HART even though procedures define them differently. As a result, changes to contract administration procedures are confusing.

Until August 2015, the project manager filled both the project manager and the contract manager roles. The dual role increased the risk of contract mismanagement between 2012 and 2015.

Other contract file deficiencies

For the sample of 25 contract files, we found:

- Contract files had missing documentation. Documentation deficiencies included no complete listings of contract modifications and supporting documentation in the files;

8 files which grant HART access to only prime contractor records; no files with access to sub-contractor records; 3 contract files that did not include the Scope of Work¹¹; and 2 contract files missing a Letter or Notice of Award.

- Financial disclosures and conflicts of interest certifications were missing. We found no evidence to show that HART required financial disclosures for prime contractors or subcontractors; 7 contract files where the prime contractors did not certify they had no real or apparent conflicts of interest¹², and no evidence of subcontractor's conflicts of interest certifications. HART maintained subcontractors were required to file conflicts of interest statements as part of the solicitation process.
- Excluded contractor checks were missing. Two contract files lacked evidence that an Excluded Parties List System (EPLS)/System for Award Management (SAM) check was performed prior to award to ensure the contractor was not suspended or debarred by the Federal government. These checks may have been made, but were not documented in the procurement files. Although HART maintains that EPLS/SAM checks were not put into routine practice at HART until 2012, our review of contract files suggests these checks were being performed as early as 2007. The compliance requirement with 2 CFR 180.300 was met because HART demonstrated that it had obtained certification from these 2 respective contractors regarding debarment, suspension and other ineligibility and voluntary exclusion from transactions financed in part by the U.S. Government.

¹¹ Subsequent to our review, HART presented Statements of Work for 2 contract files. HART noted that the third had been electronically filed, but would be included as a hard copy in the contract file.

¹² Subsequent to our review, HART presented Conflict of Interest certifications for 4 contract files. HART contends that one contract was procured prior to its inception, and that the two remaining contracts were funded by HART, but were procured by Corporation Counsel.

- No evidence that contract managers conducted performance reviews; 22 contract files did not have designated contract managers; 1 contract file lacked the independent evaluations and scores of the evaluation committee related to the contract award¹³; and 3 files had no evidence of a cost or price analysis by HART for the intended award¹⁴. A cost or price analysis should be performed for every contract so that the essential objective of a reasonable price is assured.

Invoice payment procedures do not address all contract types

We found that HART's invoice payment procedures do not address all contract types, such as cost reimbursement, and time and materials contracts, because there were no defined policies and only one procedure¹⁵ related to contract payments.

HART's invoice payment procedure was developed in 2012 and was limited in scope to only Firm Fixed Price contracts which uses a Schedule of Milestones to determine monthly progress payments by milestone achieved. Because HART has a variety of contracts and invoices which are not paid based on milestones, we believe that this procedure is insufficient to fully support HART's invoice payment process.

Furthermore, we found that HART's procedure had not been updated to reflect its current practices with respect to invoices. If practices for paying invoices for contracts and goods and services are not adequately conveyed in guidance, policies, and procedures, it can lead to invoices being paid in spite of insufficient support and questionable expenses.

Invoice payments had unsupported and unallowable costs

A strong invoice payment process prevents improper payments from being made. HART risks making improper payments when there is a lack of proper review and documentation to support the work or services billed. Our review of 50 HART invoices revealed instances of incomplete and improper payments or authorizations.

¹³Subsequent to our review, HART presented independent evaluations and scores of the evaluation committee related to this contract award.

¹⁴Subsequent to our review, HART presented cost or price analysis for 2 contract files. HART produced a waiver for cost or price analysis being performed for the third contract; however, the waiver states that no prices had been submitted. No further analysis was performed.

¹⁵Contractor Progress Payments, 5. CA-03, Rev. 1.0 - April 19, 2012.

We also found unsupported and unallowable costs. Specifically, our review showed HART paid:

- 3 invoices, valued at \$8,670,112, where checklists and forms were being used by HART which were not described in the invoice payment procedure. No amounts were improperly paid.
- 3 invoices that lacked the required payment review checklist. The invoices totaled \$6,292,325. No amounts were improperly paid.
- 2 invoices, valued at \$18,607,656, had narrative descriptions attached to invoices which were incorrect. No amounts were improperly paid.
- 2 invoices that had management approvals that totaled \$23,288 although the work was performed prior to the execution of the contract agreements and constituted procurement violations. No amounts were improperly paid.
- \$11,344 for on-call contractor work performed for the Pig & the Lady restaurant (83 N. King Street), even though the work on the City Center had not officially started. HART contends the work was necessary, supported, and allowable under the terms of the contract.
- \$1,863 for unallowable travel agent fees. This was due to a conflict between HART and the City's respective travel policies.
- \$740 for vacation travel expense paid for by HART. HART contends the work was allowable under the terms of the contract.

Recommendations

HART should:

10. Make it a priority to analyze significant changes to the project, determine how it will affect the project's overall costs and schedule, and regularly update key management plans to reflect those changes to ensure that stakeholders and the public are informed of significant changes in a timely manner.
11. Ensure project managers prioritize budget management, compare actual costs to cost estimates, analyze any differences

and make adjustments as necessary to prevent or minimize cost overruns.

12. Not make concessions on *retainage* to contractors, as it diminishes HART's ability to ensure proper performance and could be misconstrued as favoritism or biased.
13. Document its cost-saving strategies and to the extent possible, quantify and document the amount of potential cost savings.
14. Develop and implement written internal policies and procedures that will address stipend payments, including requirements for supporting documentation of unsuccessful bidders' actual costs, determination of compensated value, and limit payment to no more than the unsuccessful bidders' actual costs or the stipend amount, whichever is less.
15. Better document its office space requirements and regularly review its office lease agreements to identify any unoccupied usable area. To reduce current operational costs so that it only pays for space that is needed and to find potential future savings, if space is unoccupied, HART should consider renegotiating the lease, subleasing the space, or allowing other city agencies to use or rent the space until HART actually needs the space.
16. Develop written policies and update procedures for contract administration. Clearly distinguish the roles and responsibilities of project managers, contract managers, and contract administrators in contract administration policies and procedures. Promote increased awareness of procurement and contract administration file recordkeeping by providing additional training to staff, and develop more robust guidance, policies, and procedures that address the variety of contracts and associated invoices HART receives in order to help standardize the invoice payment process and prevent improper payments.

Chapter 4

Better Planning Is Needed to Address and Manage Future Rail Project Costs

Summary

Once the rail system is completed and operational, other rail systems indicate annual and ongoing operations and maintenance costs must be addressed. Other rail systems in the nation indicate subsidies will be needed to fund rail operations and maintenance costs after the rail is constructed. HART has not planned for the operations and maintenance of the rail system or the costs of operating the system after it is completed. HART needs to improve planning and oversight to effectively address and manage future operations and maintenance needs; maximize fare box recoveries and ridership; minimize city subsidies; and fill operations and maintenance positions.

Background

Due to project delays, HART reports interim rail service will begin in late 2018 and full service operations are projected to begin in 2021. The original and updated time schedule is shown below.

Exhibit 4.1 Project Schedule



June 2016	June 2017	Late 2018	March 2019	January 2020	Late 2021
Original Interim Passenger Opening Date	Revised Interim Passenger Opening Date No.1	Revised Interim Passenger Opening Date No.2	Projected Completion and Revenue Service Date	Original Project Completion Date	Revised Project Completion Date

Source: Office of the City Auditor (OCA) analysis based on HART documents

HART Needs to Plan for Annual Operations and Maintenance of the Rail System

HART reports it is only responsible for constructing the rail project and is not responsible for the ongoing, annual operations and maintenance of the rail system. As a result, we found HART plans were outdated and did not adequately address how to operate and maintain the rail system once it is completed. We also did not find plans that addressed the ongoing costs of operating the system.

According to HART, however, the board and HART are committed to fulfilling its charter responsibilities for the operations and maintenance for the rail system.

Other Rail Systems Indicate Annual and Ongoing Operations and Maintenance Costs Must Be Addressed

Our city comparisons indicated that all rail services throughout the nation require some form of subsidy to make up for the costs of operating and maintaining the rail. Our comparisons showed that fares paid by riders were insufficient to cover the entire cost of operating and maintaining the rail systems. (See Exhibit 4.2)

Exhibit 4.2
Subsidy Comparisons (Dollars in Millions)

Rail Transit Service City	Fare Revenues	Annual O&M Costs	Subsidy	
			\$	%
Heavy Rail				
Atlanta	\$75.6	\$208.1	\$132.5	63.67%
Baltimore	\$12.9	\$51.7	\$38.8	75.05%
Boston	\$191.9	\$315.5	\$123.6	39.18%
Chicago	\$278.2	\$513.6	\$235.4	45.83%
Los Angeles	\$34.8	\$117.0	\$82.2	70.26%
Miami	\$22.8	\$77.7	\$54.9	70.66%
New York	\$3,030.7	\$4,763.5	\$1,732.8	36.38%
Philadelphia	\$95.7	\$186.7	\$91.0	48.74%
San Francisco	\$406.1	\$525.0	\$118.9	22.65%
Washington, D.C.	\$605.5	\$909.5	\$304.0	33.42%
Light Rail				
Charlotte	\$4.4	\$13.1	\$8.7	66.41%
Cleveland	\$3.0	\$11.7	\$8.7	74.36%
Denver	\$49.4	\$87.1	\$37.7	43.28%
Houston	\$4.5	\$18.4	\$13.9	75.54%
Phoenix-Mesa	\$12.8	\$28.7	\$15.9	55.40%
Portland	\$46.4	\$99.3	\$52.9	53.27%
Sacramento	\$14.7	\$50.0	\$35.3	70.60%
Salt Lake	\$19.0	\$45.5	\$26.5	58.24%
Seattle-Puget Sound	\$14.8	\$52.9	\$38.1	72.02%
St. Louis	\$18.6	\$64.8	\$46.2	71.30%

Source: OCA analysis based on data obtained from the National Transit Database (NTD), 2013

The comparisons indicated that fixed guideway projects often resulted in significant transit service realignments, such as the creation of a transit agency to oversee and administer the operations of rail and other modes of public transit. To ensure a smooth transition from construction to operations, HART needs to update its operations and maintenance plan, establish operations and maintenance policies, develop fare policy details, identify subsidy sources, determine ridership and sources of revenues, and fill critical positions related to the operations and maintenance of the system after it is completed.

Subsidies Will Be Needed to Fund Rail Operations and Maintenance Costs

Fare revenues are earned through carrying riders through regularly scheduled rail service. While fare revenues will cover a portion of the operations and maintenance costs, our comparison of other systems showed that the fare revenues will not be sufficient to fully support total operating and maintenance costs.

According to HART's chief executive officer (CEO), fare revenues will cover about 30 percent of the operations and maintenance costs. The remaining 70 percent will require subsidies from the city. Although city subsidies will be needed, HART has not clearly defined how rail operations and maintenance will be subsidized in its 2012 *Full Funding Grant Agreement* (FFGA) financial plan.

Our comparison of other cities showed that other revenue sources¹ are available to offset the cost of operating the rail system. For example, operating costs not funded by fare revenues can be supported by a combination of federal, state, and local government taxes. Exhibit 4.3 identifies state, federal assistance, and other fund sources for other cities.

¹ Excise taxes, special assessments for cities and towns, and property taxes.

Exhibit 4.3**Sources of Operating Funds by Transit Agency***

Transit Agency City	Fare Revenues**	Local Funds	State Funds	Federal Assistance	Other Funds
Atlanta	27%	53%	0%	14%	6%
Baltimore	23%	0%	75%	1%	1%
Boston	35%	8%	53%	1%	4%
Charlotte	22%	58%	10%	5%	5%
Chicago	42%	33%	20%	1%	3%
Cleveland	22%	0%	72%	6%	1%
Denver	23%	55%	0%	15%	7%
Houston	17%	66%	0%	16%	1%
Los Angeles	24%	48%	7%	18%	2%
Miami	23%	60%	5%	10%	2%
New York	41%	16%	39%	1%	2%
Philadelphia	37%	7%	47%	6%	3%
Phoenix-Mesa	45%	34%	0%	19%	3%
Portland	27%	45%	0%	23%	5%
Sacramento	23%	51%	6%	17%	2%
Salt Lake	17%	0%	65%	15%	3%
San Francisco	65%	22%	3%	4%	6%
Seattle Puget Sound	23%	72%	1%	0%	5%
St. Louis	20%	70%	0%	8%	2%
Washington, D.C.	46%	27%	17%	2%	8%

(*) Percentages do not total 100 percent due to rounding.

(**) Fare revenues based on the farebox recovery rate for entire transit agency in addition to rail service, often including but not limited to the following services: bus, commuter bus, commuter rail, light rail, heavy rail, ferry boat, and paratransit.

Source: OCA analysis based on information from the NTD, 2013

Other forms of funding include parking fees, selling surplus land and property, retail space rental to vendors, utility company rentals of rights of ways, and advertising.

Although these alternative sources of funds exist, HART has not identified other revenue sources for its rail operations and maintenance in its financial plan. As a result, HART and the city cannot ensure the city subsidies are minimized.

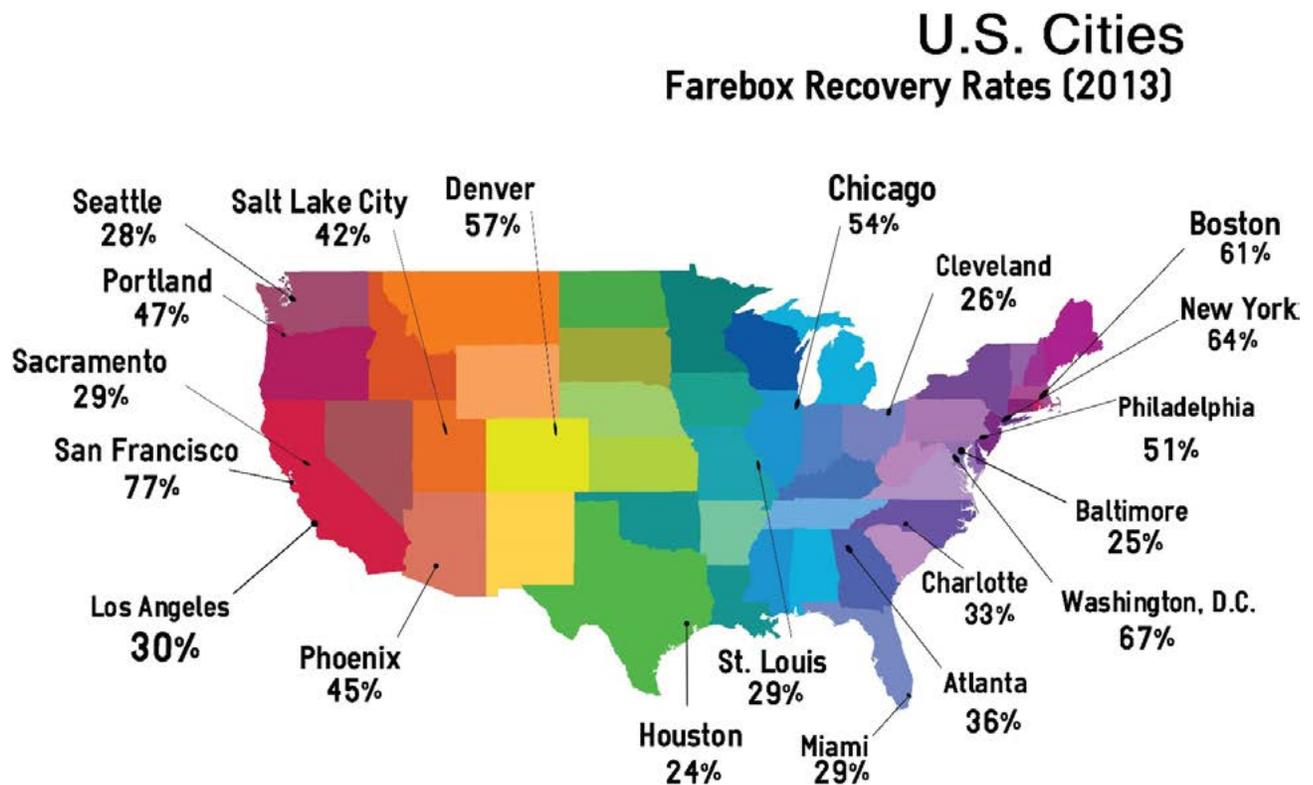
HART Needs to Improve Planning to Maximize Fare Box Recoveries

The farebox recovery rate is the percentage by which the fare revenues collected account for the total operating costs of the service. It is calculated by dividing the total fare revenue by its total operating costs. Our city comparison of farebox recovery

rates of other transit agencies showed that fare revenues alone will not be sufficient to fund all rail operations and maintenance costs.

Exhibit 4.4 shows selected rail services across the metropolitan areas of the United States. All of these rail services had farebox recovery rates which varied greatly and were consistently less than 100 percent. Fares were either variable² or flat rate³. Of the selected rail comparisons, farebox recovery rates ranged from 77 percent for San Francisco’s Bay Area Rapid Transit (BART) service to 24 percent for Houston. The average farebox recovery rate for all selected rail services for 2013 was 43 percent.

**Exhibit 4.4
Rail Farebox Recovery Rates Comparison**



Source: OCA analysis of farebox recovery rates based on information from the National Transit Database (NTD), 2013

² A fare cost that varies in relation to the level of operational activity (time of day, distance travelled).

³ A fare cost that remains fixed irrespective to the level of operational activity.

Our comparison indicated HART needs to plan for potential fare revenues, farebox recovery rates, and anticipated ridership levels to ensure the rail operations and maintenance costs are covered.

HART Needs to Improve Planning to Maximize Ridership

Our nationwide comparison of comparable rail systems indicated ridership levels have generally fallen short of forecasted levels. As part of the application process for the federal FFGA, HART developed ridership estimates and forecasts which were incorporated into the 2012 operations and maintenance plan (OMP). Our nationwide comparison indicated, however, that actual ridership fell short of the forecasted levels. (See Exhibit 4.5)

Exhibit 4.5 Ridership Forecast vs. Actual

City	Forecasted Year	Ridership		Percentage of Actual vs. Forecasted
		Forecasted	Actual	
1990 FTA Report*				
Heavy Rail				
Baltimore	1987	103,000	42,600	41.36%
Miami	1988	239,900	35,400	14.76%
Washington	1986	569,600	411,600	72.26%
Light Rail				
Buffalo	1989	92,000	29,200	31.74%
Portland	1989	42,500	19,700	46.35%
Sacramento	1989	50,000	14,400	28.80%
2003 FTA Report**				
Heavy Rail				
Atlanta North Line	2005	57,120	20,878	36.55%
LA Red Line	2000	297,733	134,555	45.19%
Chicago Orange Line	2000	118,760	54,986	46.30%
Baltimore Johns Hopkins	2005	13,600	10,128	74.47%
San Francisco Colma	2000	15,200	13,060	85.92%
Light Rail				
Dallas South Oak Cliff	2005	34,170	26,884	78.68%
Denver Southwest	2015	22,000	19,083	86.74%
Portland Westside	2005	49,448	43,876	88.73%
Salt Lake South	2010	23,000	22,100	96.09%
2007 FTA Report**				
Heavy Rail				
San Francisco SFO	2010	68,600	26,284	38.31%
Washington Largo	2020	14,270	6,361	44.58%
Chicago Douglas Branch	2020	33,000	25,106	76.08%
Light Rail				
Denver Southeast	2020	38,100	22,545	59.17%
Portland Interstate MAX	2015	18,860	12,785	67.79%
Sacramento South	2015	12,550	8,734	69.59%

(*) The federal FFGA program was established after the projects featured in the 1990 study.

(**) As some forecasted years were beyond the scope of the 2003 and 2007 FTA reports, "actual ridership" figures represent most recent numbers at the time the report was conducted.

Sources: OCA analysis based on information from the *Urban Transit Rail Projects: Forecast Versus Actual Ridership and Cost* (1990), prepared by Dr. Don H. Pickrell for the Urban Mass Transit Administration; *Predicted and Actual Impacts of New Starts Projects: Capital Cost, Operating Cost, and Ridership Data* (2003), prepared by the FTA; *The Predicted and Actual Impacts of New Starts Projects: Capital Cost and Ridership* (2007), prepared by the FTA.

In our opinion, HART should prepare for a scenario in which actual ridership, or the number of passengers actually using rail, falls short of forecasted estimates. Its operations and maintenance plan is outdated and may result in inadequate revenues to cover the annual rail operating and maintenance costs.

HART Needs to Fill a Critical Operations and Maintenance Position

HART's Operations and Maintenance (O&M) director provides oversight related to the operations and maintenance of the rail system. The director is required to work closely with capital programs to provide operational and technical guidance during the design and construction phases. HART has not filled its O&M director position since the last occupant left the agency in August 2015.

The city contract with Hitachi Rail Italy authorizes the company to operate and maintain the rail system and its passenger trains. According to HART, the Operations and Maintenance director will be responsible for administering the \$1.4 billion operations and maintenance contract. The director will also be in charge of hiring a team of consultants to support the operations and maintenance function. Currently, no staff positions are assigned to support the operations and maintenance division. The vacant position⁴ and lack of support staff could leave HART unprepared when the rail becomes operational.

Recommendations

HART should:

17. Develop plans for annual and ongoing operations and maintenance of the rail system once it is completed and operational. The plan should address subsidies needed to fund rail operations and maintenance costs, maximize fare box recoveries and ridership; minimize city subsidies; address operations and maintenance (O&M) policies, subsidy sources, and alternative revenues.
18. Fill the operations and maintenance position and other key vacancies. The recruitment should include a succession plan to fill key positions in the event of any unexpected departures.

⁴ Subsequent to the audit, HART stated that it has filled this position.

Chapter 5

Conclusions and Recommendations

The Honolulu Authority for Rapid Transportation (HART) is a semi-autonomous local government agency established in July 2011 by charter amendment after voters approved a fixed guideway rail system. HART's mission is to plan, design, construct, operate, and maintain Honolulu's high-capacity, fixed guideway rapid transit system.

HART's processes have impeded its ability to construct and complete the project economically, effectively, and efficiently. Despite having a goal of completing the project on time and on budget, HART project costs have increased \$1.3 billion, or 25 percent, from an estimated \$5.2 billion at inception to an estimated \$6.5 billion as of FY 2016.

We found that the HART's financial plan and Operations and Maintenance Plan (OMP) were not consistent, reliable or current. HART's financial plan was not updated to reflect the rail project's most current financial condition in spite of the significant cost changes. We found that HART's Project Management Plan (PMP) and its subsidiary plans were also outdated, and unreliable as decision-making tools.

HART needs to strengthen its controls over financial information reporting. For example, data was missing, incomplete, and not readily available from HART's contract management system (CMS). Delay claims were inadequately tracked and monitored and may go unreported. We identified reporting discrepancies in pending utility agreements, differences in contingency allowance figures, and differences in general excise tax (GET) county surcharge receipts.

In our opinion, additional cost overruns are likely. Rail project cost estimates consistently lacked sufficient detail and methodologies for underlying cost assumptions and were not documented. For example, delay claims were not updated to reflect the most current cost information, utility relocation costs increased by \$120 million without this figure being fully supported, project enhancement costs of \$46 million were not fully supported, and cost escalation increased by \$240 million without using a specific factor.

HART does not have adequate allocated and unallocated contingency reserves. HART underreported its projected shortfall

amount related to a \$9.9 million GET coding error. We also found that project managers were not adequately managing their budget by comparing actual costs against their respective budgets.

HART needs to improve project management and contract administration controls. We found HART made questionable concessions to a single contractor, and failed to perform quantitative analysis to justify a major decision to repackage a bid for 9 stations on the westernmost portion of the fixed guideway transit system (Westside Stations Group). HART lacked policies and procedures for approving and paying stipends to unsuccessful bidders and paid \$1.5 million in legal stipends without knowing the actual costs incurred by the bidders. We also found that HART has been paying for vacant office space. Stronger controls over contract administration practices and invoice payment practices are needed. Specifically, guidance for contract administration is unclear, procurement file documentation controls had weaknesses, and the invoice payment process is inadequate to prevent improper payments from being made.

We determined that HART needs better planning and oversight to effectively address and manage future needs. Subsidies will be needed to fund rail operations and maintenance costs after the rail is constructed. The amount of subsidy needed will depend on several variable factors, such as fares and the number of riders.

Recommendations

HART should:

1. Increase efforts to regularly update its financial plan. The cost changes and adjustments are necessary to reflect the current financial condition of the project. Updates should be supported by detailed, source documentation.
2. Update its Operations and Maintenance Plan (OMP) to address funding, management, and other transit needs.
3. Consistently and accurately report on project cost information, identify and explain variances if internal and external reports are intended to be different so that policy makers and the public receive consistent and reliable project cost information.
4. Develop methods to ensure data used in HART, PMOC, and other reports are consistent, accurate, reliable, and can be reconciled among all the reports using the data.

5. Develop a process for tracking and monitoring all costs, including the status of delay claim costs.
6. Support its cost estimates with consistent, reliable and sufficient information. To do so, HART should thoroughly document details, including any forecasting methodology and assumptions made to support of its cost estimates.
7. Replace the contract management system (CMS) with a system that is more user friendly and more appropriate to managing the HART construction project. If the CMS system is retained, HART should define which CMS data elements, data fields, and functions should be used and which parts should be deactivated or eliminated.
8. Use the city's C2HERPS enterprise resource planning system to develop, monitor, track, and report budget, financial, and accounting data. The CMS system should not be used for these purposes.
9. Develop a forecasting model to best predict escalation costs and support it with documentation.
10. Make it a priority to analyze significant changes to the project, determine how it will affect the project's overall costs and schedule, and regularly update key management plans to reflect those changes to ensure that stakeholders and the public are informed of significant changes in a timely manner.
11. Ensure project managers prioritize budget management, compare actual costs to cost estimates, analyze any differences and make adjustments as necessary to prevent or minimize cost overruns.
12. Not make concessions on retainage to contractors, as it diminishes HART's ability to ensure proper performance and could be misconstrued as favoritism or biased.
13. Document its cost-saving strategies and to the extent possible, quantify and document the amount of potential cost savings.
14. Develop and implement written internal policies and procedures that will address stipend payments, including requirements for supporting documentation of unsuccessful bidders' actual costs, determination of compensated value, and limit payment to no more than the unsuccessful bidders' actual costs or the stipend amount, whichever is less.

15. Better document its office space requirements and regularly review its office lease agreements to identify any unoccupied usable area. To reduce current operational costs so that it only pays for space that is needed and to find potential future savings, if space is unoccupied, HART should consider renegotiating the lease, subleasing the space, or allowing other city agencies to use or rent the space until HART actually needs the space.
16. Develop written policies and update procedures for contract administration. Clearly distinguish the roles and responsibilities of project managers, contract managers, and contract administrators in contract administration policies and procedures. Promote increased awareness of procurement and contract administration file recordkeeping by providing additional training to staff, and develop more robust guidance, policies, and procedures that address the variety of contracts and associated invoices HART receives in order to help standardize the invoice payment process and prevent improper payments.
17. Develop plans for annual and ongoing operations and maintenance of the rail system once it is completed and operational. The plan should address subsidies needed to fund rail operations and maintenance costs, maximize fare box recoveries and ridership; minimize city subsidies; address operations and maintenance (O&M) policies, subsidy sources, and alternative revenues.
18. Fill the operations and maintenance position and other key vacancies. The recruitment should include a succession plan to fill key positions in the event of any unexpected departures.

Management Response

HART is staffed with many dedicated individuals who are striving to successfully complete the rail project. We are therefore disappointed by the HART responses which mischaracterize and misrepresent the audit discussions and the history of the audit. HART had over 5 weeks to respond to the draft reports. Distribution of the confidential drafts was limited to only authorized HART and city officials. HART requested and received early distribution of the drafts and conceded it distributed the confidential drafts within its organization without our permission. HART's attempts to discredit the audit work and attempts to intimidate the auditors were unprofessional.

In its response to the management discussion draft, HART disagreed with the audit findings and recommendations and provided additional documents and data which we closely examined. Based on our analysis and verification of the additional information, we modified the report and updated the findings. However, our analysis and verification of the additional information reaffirmed our audit results. Based on our audit work and supporting work papers, we stand by our audit findings, conclusions, and recommendations.

In the formal, management response, HART states the audit did not conform to generally accepted government auditing standards, the auditor's independence was impaired, and timeline changes were not communicated. HART states the findings were not supported, not sufficiently documented, the auditors lacked technical expertise, and did not follow AICPA standards. HART disagreed with 11 draft recommendations and partially agreed with 10 draft recommendations.

It is our hope that HART will reconsider and implement all the recommendations needed to improve its financial management, planning, project management, contract administration and other operations to ensure the rail project costs are minimized. We believe the recommendations will help HART to successfully complete the new rail project.

Nominal changes and edits were made to this report to enhance the report format and to better communicate the audit results. The substance of the findings and recommendations remain substantively unchanged. A copy of the HART executive director and CEO's response is provided in Appendix H.

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Appendix A

Audit Objectives, Scope, and Methodology

City Council Resolution 15-90 authorized the City Auditor to conduct a performance audit of HART to determine the adequacy of its processes to ensure that the rail project is constructed and completed economically, effectively, and efficiently. The resolution asked for an examination of seven inter-related areas. We organized the audit to address those areas through the following objectives:

- Assess the reliability of HART's financial information provided to government decision makers and the public about the project's fiscal challenges.
- Determine whether HART has a reasonable subsidy plan to fund future operational and maintenance costs.
- Assess compliance of HART's procurement and contract management practices for its contracts awards and associated expenditures.
- Evaluate the project's financial viability and the likelihood of other factors that could potentially increase the project's revenue shortfall and cost overruns.

To meet our objectives, we reviewed applicable city, state, and federal laws, and rules and regulations. These included city and the State of Hawai'i procurement policies and procedures; FTA requirements; and contract and project management general guidance and best practices. We reviewed HART's policies and procedures; and conducted interviews with key management, staff, and consultants to obtain information about HART's current fiscal condition and financial plans for the future. We did not review the most current financial plan because it was being updated at the time of our audit. HART referred us to the original 2012 *Full Funding Grant Agreement* (FFGA) financial plan and PowerPoint slides for project cost updates. We relied on information provided by HART.

We examined records stored in the city's Financial Management System (C2HERPS) and Document Management System (DocuShare); and HART's Contract Management System (CMS). These records included budget documents from fiscal year (FY)

2011 through FY 2015, annual financial statements, revenues and expenditures reports¹, and various correspondence for the period of July 1, 2007 through June 30, 2015.

We assessed the reliability of HART's financial information by tracing records in C2HERPS, CMS, and internal and external reports to source documents. Although we questioned the completeness and accuracy of some data, we relied on documents and reports provided by HART because they were the only information available at the time of our audit. These documents and reports included HART's *Full Funding Grant Agreement* (FFGA) financial plan, the FFGA, current and past business plans, HART Monthly Progress Reports, Project Management Oversight Consultant (PMOC) Monthly Reports from October 2011 through December 2015, Monthly HART Facts, HART board meeting minutes, and other correspondence. We did not test HART's financial statement information, which is audited by independent auditors.

On a test basis, we examined 25 construction and professional services contract files (including contract solicitation, bid, and award documents) based on contracts awarded as of June 22, 2015. The majority of the contracts we reviewed were awarded by HART using competitive sealed bidding, competitive sealed proposal, professional services procurement, or sole source procurement methods. We did not examine the procurement process as part of our review. We also selectively reviewed procurement file documentation. We conducted interviews with key staff and consultants to obtain an understanding of HART's contracts and its invoice payment process. We also interviewed project managers who directly managed the contracts we reviewed.

We examined, on a test basis, 50 construction, professional services, and operational invoices paid during the period of July 1, 2007 through June 30, 2015. For each invoice, we evaluated whether these invoices were properly reviewed and approved, adequately documented to support construction and consulting activities, and consistent with the contract terms before payment authorization. We also evaluated whether the payment practices complied with city policies and procedures, and if industry best practices were in effect during the audit period.

¹ The forecast reports were titled Forecast Costs by Contract with Details.

We compared HART's project cost management practices to best practices in the Project Management Institute's *Guide to the Project Management Body of Knowledge* (PMBOK Guide) with a focus on project cost management; the Government Finance Officers Association (GFOA) guidance on capital project monitoring and reporting; and the U.S. Government Accountability Office's (GAO) *Cost Estimating and Assessment Guide* and *Schedule Assessment Guide*.

We identified other localities that have design-build-operate-maintain rail systems. Based on the availability of information, we compared forecasted and actual capital costs; operation and maintenance costs; forecasted and actual ridership data; subsidy sources; and farebox recovery rates with each capital project. We visited HART's leased office space and calculated the office vacancy rate as part of our review of non-project costs.

In 2012, the Office of the City Auditor issued an audit report, *Audit of the Honolulu Authority for Rapid Transportation (HART) Public Involvement Programs*, which identified several areas for improvements. The report stated HART routinely paid consultant and sub-consultant invoices despite minimal documentation; the agency's CMS lacked sufficient data; and that consultant performance and work products were not formally monitored and evaluated. During the audit, we assessed whether these concerns were resolved.

We performed this audit from May 2015 to April 2016 in accordance with generally accepted government auditing standards (GAGAS). These standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We obtained evidence that provides a reasonable basis for our findings and conclusions based on our audit objectives.

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Appendix B

Glossary of Acronyms

ARRA	American Recovery and Reinvestment Act
C2HERPS	City and County of Honolulu Enterprise Resource Planning System
CEO	Executive Director and Chief Executive Officer
CFO	Chief Financial Officer
CMS	Contract Management System
EPLS	Excluded Parties List System
FFGA	Full Funding Grant Agreement
FTA	Federal Transit Administration
FY	Fiscal Year
GEC	General Engineering Consultant
GET	General Excise Tax
HART	Honolulu Authority for Rapid Transportation
HR	Heavy Rail
HRTTP	Honolulu Rail Transit Project
LR	Light Rail
NTP	Notice to Proceed
O&M	Operations and Maintenance
OCA	Office of the City Auditor
OMP	Operations and Maintenance Plan
PM	Project Manager
PMOC	Project Management Oversight Consultant
PMP	Project Management Plan
PMSC	Project Management Support Consultant
RFC	Request for Change
ROM	Rough Order of Magnitude
SAM	System for Award Management

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Appendix C

Glossary of Terms and Definitions

Change Orders are written orders or alterations within the scope of the contract that direct the contractor to make changes authorized by the contract with or without the consent of the contractor. Contract changes within the scope of the contract may relate to specifications, delivery point, rate of delivery, period of performance, price, quantity, or other provisions of the contract.

Chief Procurement Officer is Honolulu Authority for Rapid Transportation's (HART) Executive Director or designee.

City and County of Honolulu Enterprise Resource Planning System (C2HERPS) is an Oracle based enterprise resource management and reporting system for the City and County of Honolulu.

Contingency is an allowance in cost estimate and schedule for unknowns, typically based on the lack of detail in the construction documents, unknowns anticipated during construction, and based on the difficulty level of the work.

Contract Administrator is the person identified in a Contract's Special Provisions who is designated to manage the various facets of the contract to ensure satisfactory performance in accordance with the contractual commitments and that obligations to HART are fulfilled.

Contract Amendment is one type of formal contract modification. It must be in writing.

Contract Management System (CMS) is HART's Oracle Primavera document management system and contract control software for the project. HART uses CMS to track and store all pertinent documents related to the project, including but not limited to, contracts, submittals, request for information, meeting minutes, transmittals, purchase orders, cost worksheets, change orders, and invoices.

Contract Manager coordinates with the Project Manager regarding Contract Change Orders for compliance with HART policy and procedures and compliance with contract terms and conditions. The Contract Manager will review merit determination and Negotiation Strategy Memos and provide recommendations to the Project Manager.

Contract Modifications are any written alteration within the scope of the contract to specifications, delivery point, rate of delivery, period of performance, price, quantity, or other provisions in the contract executed between the government and the contractor. This includes contract amendments, change orders, and task orders.

Design-Build is a contract delivery methodology under which HART contracts with a single entity that has responsibility for the design and construction of the project.

Estimate at Completion (EAC) is the forecast total cost of completing the work package scope by contract, as well as the total project scope.

Excluded Parties List System (EPLS) was a web-based system that identified those parties excluded from receiving federal contracts, certain subcontracts, and certain types of federal financial and non-financial assistance and benefits.

Fare Revenue is revenue earned from carrying passengers in regularly scheduled service. Passenger fares include the base fare, zone premiums, and peak period premiums.

Farebox Recovery Rate of a passenger transportation system is the proportion of the amount of revenue generated through fares by its paying customers as a fraction of the cost of its total operating and maintenance expenses.

Financial Plan documents the recent financial history of the transit agency, describes its current financial health, documents projected costs and revenues, and demonstrates the reasonableness of key assumptions underlying these projections.

Firm Fixed Price Contract includes a price that remains fixed irrespective of the contractor's cost experience in performing the contract. A firm fixed price contract may include an economic price adjustment provision, incentives, or both.

Full Funding Grant Agreement (FFGA) is an agreement between the federal government FTA and HART as a semi-autonomous agency of the city and county of Honolulu that sets forth the scope of the project that will be constructed using federal and non-federal funds, establishes a financial ceiling with respect to FTA's participation in the project, establishes a time for completion and specifies the mutual understanding, terms and conditions relating to the construction and management of the project.

Heavy Rail is defined as a mode of transit service (also called metro, subway, rapid transit, or rapid rail) operating on an electric railway with the capacity for a heavy volume of traffic. It is characterized by high-speed and rapid acceleration passenger rail cars operating singly or in multi-car trains on fixed rails; separate rights-of-way from which all other vehicular and foot traffic are excluded; sophisticated signaling, and high platform loading.

Invoice is the contractor's request for compensation for services provided based on the contract for the project.

Light Rail is defined as a mode of transit service operating passenger rail cars singly (or in short, usually two-car or three-car, trains) on fixed rails in shared or right-of-way that is often separated from other traffic for part of the way. Light rail vehicles are typically driven electrically with power being drawn from an overhead electric line via a trolley or a pantograph; driven by an operator on board the vehicle; and may have either high platform loading or low level boarding.

National Transit Database (NTD) is a federally mandated database reporting system, established by Congress to be the Nation's primary source for information and statistics on the transit systems of the United States. Recipients or beneficiaries of grants from the FTA under the Urbanized Area Formula Program or Other than Urbanized Area (Rural) Formula Program are required by statute to submit data to the NTD. Over 660 transit providers in urbanized areas currently report to the NTD through the Internet-based reporting system. Each year, NTD performance data are used to

apportion over \$5 billion of FTA funds to transit agencies in urbanized areas. Annual NTD reports are submitted to Congress summarizing transit service and safety data.

Notice to Proceed is the official notification to the contractor that they may proceed with the work based on the conformed documents issued to the contractor at the time of notification.

Operating and Maintenance Cost is the recurring costs of providing public transportation service. They include: all employees' wages and salaries; fringe benefits; operating supplies such as fuel, and oil; contractors' charges for services; taxes; repair and maintenance services, parts, and supplies; equipment leases and rentals; marketing; lease or rental costs; and insurance. Operating expenses include administrative expenses. Operating costs exclude fixed costs such as depreciation on plant and equipment, costs of providing transportation services not available to the general public, and interest paid on loans on capital equipment.

Operations and Maintenance Plan documents five years of historical data and presents 20 years of projected system operating revenues and O&M costs to demonstrate the capability of the agency to operate and maintain the proposed project while providing existing levels of transit service.

Project Controls are acts of the project management staff assisting the project controls manager in all aspects of cost, schedule, contract administration, and configuration management.

Project Manager is responsible for managing scope, schedule, and budget. The Project Manager has authority to initiate, negotiate, and process changes. The Project Manager determines merit, oversees and monitors contract changes, leads negotiations and prepares Contract Change Order documents. The Project Manager may delegate responsibility.

Project Management Oversight Consultant (PMOC). The Federal Transportation Agency (FTA) hires a consultant to provide oversight of the HART rail project. The consultant provides continuous review and evaluation of the rail project to ensure compliance with federal requirements and to monitor project progress in areas such as time, budget, plans, and specifications.

Ridership is the number of passengers using a form of public transportation.

Rough Order of Magnitude (ROM) is an estimate provided by the contractor or general engineering consultant (GEC) for a request for change (RFC) prior to the RFC having authorization from HART for final pricing. The ROM will include schedule changes based in weeks and costs based on \$10,000 increments.

Subsidy is an allocated amount of financial assistance from the government.

System for Award Management (SAM) is the official U.S. government system that combines federal procurement systems and the Catalog of Federal Domestic Assistance into an e-procurement system.

Transit Agency (also called transit system) is an entity (public or private) responsible for administering and managing transit activities and services. Transit agencies can directly operate transit service or contract out for all or part of the total transit service provided.

Utility Agreement is a contract with a utility company which defines the scope of a relocation, including reimbursement, liability, right-of-entry, insurance, and schedule to complete the work.

Westside Stations Group consists of the first nine stations along the rail route.

Appendix D

Contingency Balance Comparison (by Month), (Dollars in Millions)

No.	Month	PMOC Monthly Reports			HART Contingency Drawdown Spreadsheet	
		Contingency			Ending Balance	Difference
		Allocated ¹	Unallocated ²	Balance		
1	Oct 2011	N/A	N/A	N/A	N/A	-
2	Nov 2011	N/A	N/A	N/A	N/A	-
3	Dec 2011	N/A	N/A	N/A	N/A	-
4	Jan 2012	N/A	N/A	N/A	N/A	-
5	Feb 2012	N/A	N/A	N/A	N/A	-
6	Mar 2012	N/A	N/A	N/A	N/A	-
7	Apr 2012	N/A	N/A	N/A	N/A	-
8	May 2012	N/A	N/A	N/A	N/A	-
9	Jun 2012	N/A	N/A	N/A	N/A	-
10	Jul 2012	N/A	N/A	N/A	\$649.4	-
11	Aug 2012	N/A	N/A	N/A	\$654.5	-
12	Sep 2012	N/A	N/A	N/A	\$654.5	-
13	Oct 2012	N/A	N/A	N/A	\$654.4	-
14	Nov 2012	N/A	N/A	N/A	\$654.7	-
15	Dec 2012	N/A	N/A	N/A	\$654.4	-
16	Jan 2013	N/A	N/A	\$478.0	\$654.4	(\$176.40)
17	Feb 2013	N/A	N/A	\$476.0	\$652.8	(\$176.80)
18	Mar 2013	N/A	N/A	\$467.8	\$652.3	(\$184.50)
19	Apr 2013	N/A	N/A	\$441.5	\$654.3	(\$212.80)
20	May 2013	N/A	N/A	\$447.4	\$654.3	(\$206.90)
21	Jun 2013	N/A	N/A	\$400-\$430	\$654.3	(\$224.3-\$254.3)
22	Jul 2013	N/A	N/A	\$413-\$439	\$649.1	(\$210.1-\$236.1)
23	Aug 2013	N/A	N/A	\$415-\$443	\$643.2	(\$200.2-\$228.2)
24	Sep 2013	N/A	N/A	\$433.0	\$637.1	(\$204.10)
25	Oct 2013	N/A	N/A	\$440.0	\$615.0	(\$175.00)
26	Nov 2013	N/A	N/A	\$444.0	\$610.0	(\$166.00)
27	Dec 2013	N/A	N/A	\$460.0	\$609.8	(\$149.80)
28	Jan 2014	N/A	N/A	\$444.0	\$608.3	(\$164.30)
29	Feb 2014	\$367.0	\$61.0	\$428.0	\$608.2	(\$180.20)
30	Mar 2014	\$362.0	\$60.8	\$422.8	\$608.2	(\$185.40)
31	Apr 2014	**	N/A	N/A	\$590.7	-
32	May 2014	\$352.6	\$63.8	\$416.4	\$568.4	(\$152.00)
33	Jun 2014	\$331.1	\$66.3	\$397.4	\$563.4	(\$166.00)
34	Jul 2014	\$323.8	\$66.3	\$390.1	\$563.7	(\$173.60)
35	Aug 2014	**	N/A	N/A	\$559.4	-
36	Sep 2014	\$324.6	\$66.3	\$391.0	\$550.1	(\$159.10)
37	Oct 2014	\$281.0	\$67.0	\$348.0	\$531.8	(\$183.80)
38	Nov 2014	\$274.1	\$56.1	\$330.2	\$542.5	(\$212.30)
39	Dec 2014	\$267.5	\$66.5	\$334.0	\$523.8	(\$189.80)
40	Jan 2015	**	N/A	N/A	\$519.8	-
41	Feb 2015	\$291.8	\$11.5	\$303.3	\$515.6	(\$212.30)
42	Mar 2015	\$291.8	\$11.5	\$303.3	\$510.7	(\$207.40)
43	Apr 2015	**	N/A	N/A	\$510.4	-
44	May 2015	\$291.8	\$11.5	\$303.3	\$509.8	(\$206.50)
45	Jun 2015	\$291.8	\$11.5	\$303.3	\$501.7	(\$198.40)
46	Jul 2015	\$291.8	\$11.5	\$303.3	\$500.7	(\$197.40)
47	Aug 2015	**	N/A	N/A	\$492.9	-
48	Sep 2015	\$291.8	\$11.5	\$303.0	\$492.8	(\$189.80)
49	Oct 2015	\$291.5	\$11.5	\$303.0	\$492.8	(\$189.80)
50	Nov 2015	\$291.5	\$11.5	\$303.0	\$489.0	(\$186.00)
51	Dec 2015	\$291.5	\$11.5	\$303.0	\$488.2	(\$185.20)

(**) Some quarterly reports do not contain contingency balance information.

Source: Office of the City Auditor (OCA) comparison of PMOC Monthly and Quarterly Reports from October 2011 through December 2015 and HART Contingency Drawdown Spreadsheet

¹ Allocated contingency is allocated to each work package to address potential uncertain changes within each respective work package.

² Unallocated contingency funds unknown changes to the project and not currently allocated to a particular work package.

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Appendix E

General Excise Tax (GET) Receipts Comparisons (by Quarter), (Dollars in Millions)

<i>Year</i>	<i>Quarter</i>	<i>PMOC Monthly Reports</i>	<i>HART Internal Spreadsheet</i>	<i>Difference</i>
		<i>GET Surcharge Receipts Received To Date Since 2007</i>	<i>Actual GET Surcharge Receipts</i>	
2011	4	\$746	\$810	(\$64)
2012	1	\$796	\$859	(\$63)
2012	2	\$859	\$906	(\$47)
2012	3	\$907	\$932	(\$25)
2012	4	\$554	\$974	(\$420)
2013	1	\$554	\$1,029	(\$475)
2013	2	\$651	\$1,080	(\$429)
2013	3	\$651	\$1,143	(\$492)
2013	4	\$1,140	\$1,187	(\$47)
2014	1	\$1,180	\$1,248	(\$68)
2014	2	\$1,180	\$1,298	(\$118)
2014	3	\$1,480	\$1,346	\$134
2014	4	\$1,480	\$1,404	\$76
2015	1	\$1,404	\$1,469	(\$65)
2015	2	\$1,469	\$1,522	(\$53)

Source: OCA comparison of PMOC Monthly and Quarterly Reports from October 2011 through November 2015 and HART GET Collection Schedule as of November 2, 2015.

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Appendix F

Procurement Documentation File

Where appropriate, the procurement documentation file should contain:

1	Purchase request, acquisition planning information, and other pre-solicitation documents
2	Evidence of availability of funds
3	Rationale for the method of procurement (negotiations, formal advertising)
4	List of sources solicited
5	Independent cost estimate
6	Statement of work/scope of services
7	Copies of published notices of proposed contract action
8	Copy of the solicitation, all addenda, and all amendments
9	Liquidated damages determination
10	An abstract of each offer or quote
11	Contractor's contingent fee representation and other certifications and representations
12	Source selection documentation
13	Contracting Officer's determination of contractor responsiveness and responsibility
14	Cost or pricing data
15	Determination that price is fair and reasonable including an analysis of the cost and price data, required internal approvals for award
16	Notice of award
17	Notice to unsuccessful bidders or offerors and record of any debriefing
18	Record of any protest
19	Bid, Performance, Payment, or other bond documents, and notices to sureties
20	Required insurance documents, if any
21	Notice to proceed

Source: FTA *Best Practices Procurement Manual*, November 2001

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Appendix G

City Council Resolution 15-90



CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

No. 15-90

RESOLUTION

REQUESTING THE CITY AUDITOR TO CONDUCT A PERFORMANCE AUDIT OF THE HONOLULU RAIL TRANSIT PROJECT.

WHEREAS, at a cost of \$5.2 billion and rising, the Honolulu Rail Transit project ("project") represents the largest and most expensive capital project in the history of the City and County of Honolulu; and

WHEREAS, on July 1, 2011, the Honolulu Authority for Rapid Transportation ("HART") was established through an amendment to the Revised Charter of the City and County of Honolulu and is authorized to develop, operate, maintain and expand the project; and

WHEREAS, the plan to pay for this project has always centered on federal funding of \$1.55 billion that is being awarded to HART in phases over time, as well as a half-percent general excise tax ("GET") surcharge for rail that has been collected since 2007; and

WHEREAS, with construction underway, budgetary, financial, funding and cost concerns threaten the continued viability of the rail transit project, reflected in a growing shortfall of almost \$1 billion due to reported factors such as project delay costs, contract bid escalations, and low GET surcharge revenues, as well as the need to cover future operating and maintenance costs, and extend the rail line to areas such as Manoa and West Kapolei; and

WHEREAS, these budgetary, financial, funding and cost concerns have resulted in HART appealing to both the City Council and the State Legislature for financial assistance, including asking the City Council to adopt Resolution 15-7, which would authorize the issuance of City general obligation bonds and notes up to \$1.9 billion, and asking the State Legislature to extend the GET surcharge in perpetuity; and

WHEREAS, both City councilmembers and State legislators have expressed continuing frustration over the lack of detailed financial information, definitive construction costs, and solid financial plans with which to base decision-making for a project with the size, projected growth and uncertain final funding needs that the rail project represents; and

WHEREAS, the Council finds that, given the scope of the project and the unknown magnitude of the funding needed in the future, a performance audit is warranted in order to provide accountability and public transparency, particularly at a time when public and government discussion, deliberation, and decision-making are



CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

No. 15-90

RESOLUTION

focused on the soundness and continued viability of the project and its impact upon the residents of Honolulu; now, therefore,

BE IT RESOLVED by the Council of the City and County of Honolulu that the City Auditor is requested to investigate and conduct a performance audit of the Rail Project to determine the adequacy of its processes to ensure the Rail Project is constructed and completed economically, effectively and efficiently; and

BE IT FURTHER RESOLVED that with an audit objective of providing government decision-makers with sufficient information to form the basis for legislative decisions that provide appropriate and justified funding, while also remaining careful stewards of taxpayer dollars, the Council requests the City Auditor to examine, at a minimum, the following:

- (1) HART's financial plan, including any and all contingency financial plans and updates filed subsequent to the establishment of the initial financial plan;
- (2) Contract awards and associated expenditures (including subcontractor costs), as well as details regarding what the expenditures are being used for;
- (3) The amount of cost increases, over and above projections in financial plans, and details on cost containment measures and the effectiveness of these measures to mitigate increasing costs and growing shortfalls;
- (4) A detailed accounting of all revenues and expenditures for the rail project from 2007 through the end of 2014;
- (5) The point at which HART should have known or became aware of the potential shortfall;
- (6) The likelihood and potential for additional cost overruns exceeding the current shortfall being reported by HART; and
- (7) The potential continuing costs after construction is completed and the Rail Project is operational;

and

CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII
CERTIFICATE

RESOLUTION 15-90

Introduced: 03/31/15

By: ERNEST MARTIN

Committee: TRANSPORTATION

Title: RESOLUTION REQUESTING THE CITY AUDITOR TO CONDUCT A PERFORMANCE AUDIT OF THE HONOLULU RAIL TRANSIT PROJECT.

Voting Legend: * = Aye w/Reservations

04/30/15 TRANSPORTATION CR-159 – RESOLUTION REPORTED OUT OF COMMITTEE FOR ADOPTION.

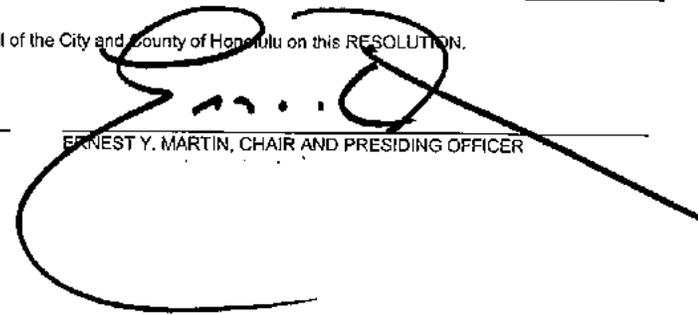
05/06/15 COUNCIL CR-159 AND RESOLUTION 15-90 WERE ADOPTED.

7 AYES: ANDERSON, ELEFANTE, FUKUNAGA, KOBAYASHI, MARTIN, MENOR, OZAWA.

2 ABSENT: MANAHAN, PINE.

I hereby certify that the above is a true record of action by the Council of the City and County of Honolulu on this RESOLUTION.


GLEN TAKAHASHI, ACTING CITY CLERK


ERNEST Y. MARTIN, CHAIR AND PRESIDING OFFICER

Appendix H

Management Response

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IN REPLY REFER TO:
CMS-AP00-01653

HONOLULU AUTHORITY for RAPID TRANSPORTATION

Daniel A. Grabauskas
EXECUTIVE DIRECTOR AND CEO

BOARD OF DIRECTORS

Damien T.K. Kim
VICE CHAIR

George I. Atta
Michael D. Formby
Ford N. Fuchigami
Terri Fujii
Colleen Hanabusa
William "Buzz" Hong
Terrence M. Lee
Ivan M. Lui-Kwan

April 14, 2016

Mr. Edwin S. W. Young, City Auditor
Office of the City Auditor
City and County of Honolulu
1001 Kamokila Boulevard, Suite 216
Kapolei, Hawaii 96707

Dear Mr. Young:

Subject: Audit of the Honolulu Authority for Rapid Transportation (HART) Report Dated April 2016

Enclosed please find HART's response to the audit report. As an organization, HART welcomes critical, vigorous, and healthy oversight and, therefore, takes the work of the Office of the City Auditor (OCA) seriously, as it does with all federal, state and local oversight, reviews, and audits. Accordingly, it is discouraging when a report is written in a fashion to intentionally mislead, is issued in an improper manner, and conceded to politically motivated pressure.

As a result of the improprieties and irregularities noted during the audit and with this report, HART cannot say with any degree of certainty that this audit was performed in accordance with auditing standards or that the associated report is free from bias.

This correspondence provides HART's comprehensive response to this audit report, questions the auditing standards applied, responds to the report's recommendations, and addresses the report's content point by point. See Attachment 1.

Background

The OCA conducted this audit from May 2015 to April 2016. During this period, HART spent significant time and resources to respond to a large number of OCA requests, provided extensive information and documents, arranged interviews with HART personnel, and answered all questions regarding the project.

On March 3, 2016, HART received a draft audit report. Upon review, HART found that the report contained factual errors, misleading statements, and unsupported conclusions. On March 28, 2016, HART provided the OCA a comprehensive written response to the draft audit report. On March 31, 2016, the OCA met with HART staff at the exit conference and notified HART that the final report would be released on April 15th with or without HART's management response.

Mr. Edwin S. W. Young, City Auditor
Page 2
April 14, 2016

On April 8, 2016, HART received the final audit draft. The OCA incorporated some of HART's comments and clarifications into the final version. Unfortunately, errors still remain in the final audit report. Statements made in the audit report are not supported by relevant or directly applicable facts, resulting in misleading assertions and incorrect conclusions.

Purpose and Applicability of Generally Accepted Government Auditing Standards (GAGAS)

GAGAS provide a framework for conducting high-quality audits with competence, integrity, objectivity, and independence. This framework outlines requirements and guidance related to ethics, independence, auditors' professional judgment and competence, quality control, performance of the audit, and reporting.

Because auditing is essential to government accountability to the public, the public expects auditors who conduct their work in accordance with GAGAS to follow ethical principles. Ethical principles apply in preserving auditor independence, taking on only work that the auditor is competent to perform, performing high-quality work, and following the applicable standards cited in the auditors' report.

HART cannot reasonably conclude this audit was performed in accordance with these standards as outlined in the deficiencies below.

1. Auditor's Independence Was Impaired

HART disagrees with many of the audit report's findings and recommendations as the auditor's independence was impaired. Integrity and objectivity are maintained when auditors perform their work and make decisions that are consistent with the public interest and those relying on the auditors' report.

On June 22, 2015, the auditor originally informed HART, the Managing Director, and the Director of the Department of Transportation Services that the audit report deadline was July 1, 2016. However, after City Council passed Bill 23 – the General Excise Tax (GET) Surcharge Extension, the auditor pushed to complete fieldwork as quickly as possible. When HART pointed out errors and misrepresentations of facts in the original discussion draft, the auditor responded by cutting 2 ½ months off the reporting deadline. Due to the new deadline, the OCA had only one week to review HART's responses and additional documentation. There was not sufficient time to ensure that due professional care was taken to review the documentation and correct the number of errors that HART had highlighted.

Mr. Edwin S. W. Young, City Auditor
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Additionally, the final draft report was released prematurely to the City Council and subsequently the news media. This final draft report was incomplete as it did not include HART's management response. Under Government Auditing Standards, the auditor is required to allow HART a reasonable amount of time to provide comments to the final draft before it is released to those charged with governance such as City Council. The premature release of the draft audit report does not support an audit environment free from undue influence and bias.

In a letter from the City Council Chair, dated April 7, 2016, addressed to the Mayor, the Chair refers to the results of the audit report. HART analyzed the document properties of the .pdf uploaded on the Star-Advertiser website and found that the letter was scanned at 1:59 pm, which was two hours before HART received the final draft report. This calls into question the integrity and independence of the auditor and others who released confidential material.

2. Significant Change in Reporting Timeline Was Not Communicated

GAGAS states that the Auditor should communicate an overview of the objectives, scope, methodology, and timing of the performance audit and planned reporting to management of the audited entity. At the audit entrance conference held on June 22, 2015, the Auditor communicated to HART, the Managing Director, and the Director of the Department of Transportation Services, the timing of the performance audit. The official start date of the audit was July 1, 2015, and the reporting deadline for the final audit report was July 1, 2016.

Prior to the exit conference held on March 31, 2016, the OCA requested a private meeting with HART's CEO. During this meeting, the OCA informed HART's CEO that he was under a great deal of pressure by members of the City Council to release the final audit report in the following two weeks.

During the exit conference, the OCA informed HART that the report would be issued with or without HART's management response in mid-April. The deadline was later confirmed to be April 15, 2016. This represented a significant change in the timing of the audit report and was not communicated verbally or in writing to HART prior to the meeting on March 31, 2016.

Additionally, the fact that the OCA was under extreme pressure to move up the reporting deadline is of serious concern because in doing so did not allow the auditor sufficient time to complete the audit with due professional care. The auditor did not maintain his independence and, thus, failed to follow the professional standards set forth in GAGAS.

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April 14, 2016

3. Report Missing Sufficient Appropriate Evidence to Support Findings

According to GAGAS Reporting Standards, audit reports should clearly communicate the results of audits to those charged with governance and the audit entity. Standards prescribe that the audit report should contain sufficient and appropriate evidence to support the findings and conclusions as they relate to the audit objectives. Moreover, findings should be clearly developed in order to assist management and oversight officials in understanding the need and so that they take corrective action.

The audit report was written in a manner that included statements and conclusions without any supporting details or references. It appears that the conclusions were written and then the evidence gathered to support it. Evidence gathered to the contrary was labeled insufficient, none, or simply ignored. As such, HART remains unclear on what basis the report's conclusions were drawn.

During the exit conference, HART asked the OCA to provide the basis for some of the statements and conclusions contained in the draft audit report. The OCA failed to provide further information and said HART was not allowed to "audit the auditor". Therefore, HART is not in a position to understand what the conclusions were based on and was left to respond, in general, to the report's errant assertions.

4. Findings Were Not Sufficiently Documented in the Report

Auditors should plan and perform audit procedures to develop the elements of a finding necessary to address the audit objectives. Per GAGAS, the elements include Criteria, Condition, Cause, Effect, and Recommendation. The standards further state that audit evidence that supports the findings, conclusions, and recommendations should be documented before the report is issued. This information was not provided in the report as required nor to HART. As a result, HART believes the findings are not sufficiently documented.

5. Audit Team Lacked Technical Expertise

HART's initial response to the draft audit report pointed out that the audit team lacked the technical expertise in engineering, project management, procurement, and Information Technology (IT) systems to perform its evaluation. In some instances, the auditors ignored documentation because they didn't understand it. Without the required technical knowledge, the auditors' judgment was insufficient. The auditors were looking for absolute assurance because they lacked the knowledge base to make a judgment on what was reasonable

Mr. Edwin S. W. Young, City Auditor
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 April 14, 2016

documentation. As a result, many of the findings in the report reflect the auditor's lack of knowledge in these areas.

Furthermore, most of the items that the auditors took issue with had been previously audited or reviewed by technical experts without the same findings. Government Auditing Standards require auditors to consider whether the reason for this difference in audit results is due to a lack of technical knowledge. The auditors failed to request to review other auditors' work that overlapped with their own as encouraged in the auditing standards (e.g. Triennial, Procurement Review, Single Audit, Improper Payment Elimination Recovery Act (IPERA) Audit, Annual Independent Financial Audit, Financial Management Oversight Review).

6. Audit Report Did Not Follow American Institute of Certified Public Accountants (AICPA) Attestation Standards

The City Council Resolution requested the auditor to perform an examination in addition to a performance audit. GAGAS standards require examinations to follow AICPA attestation standards. AICPA attestation standards require the auditor to render an opinion on whether the assertion in the items examined is presented, in all material respects, based on the criteria. The auditor's report does not express an opinion on any items examined. Furthermore, since the auditor never obtained written assertions from HART, the report should be restricted in accordance with the AICPA's attestation standards.

HART's Responses to Audit Report Recommendations

1. Increase efforts to regularly update its financial plan. The cost changes and adjustments are necessary to reflect the current financial condition of the project. Updates should be supported by detailed, source documentation.

Response: HART disagrees with this recommendation in that the Auditor's report fails to distinguish between a "formal" update that is the basis for the full funding grant agreement and regular ongoing updates of the financial plan that compare the approved plan to actual and updated information. The Auditor's report assumes that if the formal plan is not updated, then there has been no update to the financial plan. This assumption is incorrect and is not supported by the evidence and public record.

The Federal Transit Administration (FTA) has requested a "formal" updated financial plan. A formal plan will be the basis for any revision to the full funding grant agreement. The updated "formal" financial plan update could not be completed until: (1) the full passage of the GET surcharge extension; and (2) a full risk refresh by the FTA is completed.

Mr. Edwin S. W. Young, City Auditor

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April 14, 2016

The GET surcharge extension was enacted on February 1, 2016. HART and the FTA began the risk refresh on March 30, 2016. The risk refresh examines the scheduling and potential cost of the project based on the most current cost and schedule information. The "formal" financial plan update is expected to be completed in approximately four months following this risk refresh process.

Although the formal updated financial plan will not be available until the end of the year, the current financial plan is and has been continuously updated and reviewed by HART since its initial completion in June 2012. These updates have been shared with the HART Board of Directors, City Administration, City Council, State Legislature, and the State Department of Budget & Finance several times since 2014 after resuming construction and overcoming legal challenges in state and federal court.

The following is a summary of updated financial plan reports:

- June 2014: Updated financial plan relative to the Debt Management Plan update
- December 2014: Project Cost Update
- January 2015: City Council Approval of Debt Financing Resolution with updated financial plan attached
- February 2015: Updated Financial Plan in Response to several detailed questions from the State Budget & Finance Director
- August 2015: FTA review of "draft" financial plan update
- October 2015: Project Cost Update
- November 2015: Letter to City Council reflecting October 2015 Update in Financial Plan
- January - April 2016: Monthly financial plan cash flow updates to City Treasurer
- February 2016: HART Permitted Interaction Group established to review assumptions to formal updated to the financial plan

The Auditor's report also recommends that updates should be supported by detailed source documentation. The updates to the financial plan are reviewed by transportation financial experts who are the most experienced and technically qualified to review financial plans. In August 2015, the FTA reviewed a "draft" financial plan with the extended GET figures and the updated project costs. Based on the FTA's expert review, the FTA took an extraordinary step of accepting the "draft" as fulfilling of a triennial review action, even though the GET surcharge extension had not been enacted.

In addition to FTA experts, the State Department of Budget & Finance (B&F) has also reviewed an update to the financial plan. B&F reviewed the plans revenue assumptions, project cost, and operating cost assumptions in February 2015, and validated and confirmed HART's financial revenue and cost assumptions to several legislative committees during the 2015 Legislative Session that resulted in granting a five-year extension of the GET Surcharge to complete the project in May 2015.

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HART's financial updates are sound, and are well documented in that they have met the review and scrutiny of both federal and state financial reviews.

2. Update its Operations and Maintenance Plan (OMP) to address funding, management, and other transit needs.

Response: HART disagrees with the auditor's assertion that the OMP is outdated and unreliable as a decision-making tool. The OMP has been updated and has been submitted to the Project Management Oversight Contractor (PMOC) in September of 2015, prior to the date of the audit report.

During the audit, the auditor interviewed the Core System's Design-Build-Operate-Maintain (DBOM) Contract Project Manager. However, the auditors did not discuss operating costs or the OMP plan with him. The OMP was already updated, reviewed internally and is currently under review with the FTA/PMOC. HART is awaiting their response.

The plan was updated to incorporate the operational shift from 2-car consists to 4-car consists. The previous version was still in an acceptable format for use as a decision-making tool. While plans will be updated following significant changes in key system elements the plan serves as a tool for defining the system operations, system elements, plan for operations and maintenance of the system and staffing.

Exhibit 3.4 Key Management Plans - this table should be updated to reflect that the OMP plan has been updated and submitted to the PMOC.

3. Consistently and accurately report on project cost information, identify and explain variances if internal and external reports are intended to be different so that policy makers and the public receive consistent and reliable project cost information.

Response: HART disagrees with the assertion in this recommendation. HART does consistently and accurately report on project cost information.

HART regularly updates and reconciles critical financial data consistent with procedures. Examples include and are not limited to: project cost expended, pstimate-at-completion projections, project contingency drawdown, overall project progress, contractor notice-to-proceed values, executed change orders, contracts awarded, and others.

Also, HART provides extensive, consistent and reliable project cost information through many formats available to all stakeholders, policy makers, and decision makers. Project cost data is directly provided to the HART Board of Directors, FTA, PMOC, and is published in the local press on a monthly basis. Further, the Monthly Progress Report,

Mr. Edwin S. W. Young, City Auditor

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April 14, 2016

Balanced Scorecard, and other presentations made at public meetings are available on the HART website.

4. Develop methods to ensure data used in HART, PMOC, and other reports are consistent, accurate, reliable, and can be reconciled among all the reports using the data.

Response: HART disagrees with the assertion that project data represented in our reports are inconsistent or unreliable. HART consistently updates and reconciles critical financial information in line with procedures. The auditor's finding seems to be based on faulty analysis as detailed in the HART responses provided in the attachment.

For example, the auditor is misrepresenting the consistency of the reports reflected in Exhibit 2.5. As HART staff explained to the auditors it is not reasonable to compare reports that exclude FTA ineligible cost (e.g. Forecast Cost Report, HART Facts report) to reports that include FTA ineligible cost (e.g. List of Awarded Contracts Summary) as of June 22, 2015 because the data is filtered differently.

Cost reports provided to FTA excludes ineligible costs, therefore many cost reports by default, filters those costs out. HART explained on multiple occasions to the auditors that because HART's Contract Management System (CMS) is a live database comparing two reports run on different dates will not tie out/be equal since it's highly likely the information will have changed during that timeframe. Despite being informed otherwise, the auditors are comparing four reports that have different data fully aware the reports will not match.

Another example of the auditor's misunderstanding of HART's data is provided in Exhibit 2.7 and the subsequent bulleted items highlighting the variances in delay costs. This entire section, including sub-bullets are irrelevant because they are mischaracterizing a working spreadsheet they were provided as a management tracking tool and identifying variances from HART's CMS database. The auditors requested support for the cost impact of the delays highlighted in the December 18, 2014 Risk presentation. HART staff provided said spreadsheet, a working document tracking delay costs as snapshot at a particular point in time. However the auditor insisted on viewing this as a management tool. All projected changes and claim values are tracked via CMS which is HART's management tracking tools for cost data and updated monthly.

5. Develop a process for tracking and monitoring all costs, including the status of delay claim costs.

Response: HART disagrees with this recommendation as it already has a process for tracking and monitoring all costs, including the status of delay claim costs. All projected changes, claim values, and costs are tracked in CMS which is HART's management tracking tool for cost data and is updated monthly.

Mr. Edwin S. W. Young, City Auditor
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 April 14, 2016

Every delay claim is fully supported and documented through the entire change order process. The auditors wanted to see a separate report for tracking and monitoring delay costs. HART understands the information contained in its reports and is able to extract information as necessary.

6. Support its cost estimates with consistent, reliable and sufficient information. To do so, HART should thoroughly document details, including any forecasting methodology and assumptions made to support of its cost estimates.

Response: Every estimate that HART has produced in the recent past and will produce for the remainder of the project will be accompanied with a Basis of Estimate report. For larger estimates this can be many pages documenting the assumptions, inclusions, exclusions and methodology. For smaller estimates the basis of estimate report can take the form of a memorandum. The purpose of this report is to state the estimating methodology used for the development of costs, provide the accuracy range that anticipated bids could be received within, reference the scope included, and scope excluded. Samples containing the above methodology have been provided.

Our recent track record with the stations packages has been accurate usually within low single percentage points of the final contractors' bids.

	Engineers' Estimates.	Lowest Bid		Second Lowest Bid	
FHSG	\$ 76,211,602	\$ 77,726,000	-1.9%	\$ 84,254,238	-9.5%
WOSG	\$ 74,077,000	\$ 56,088,470	32.1%	\$ 66,543,692	11.3%
KHSG	\$ 108,106,000	\$ 112,719,789	-4.1%	\$ 115,805,845	-6.6%

Note: Chart's negative number represents an estimate lower than contractors' bids. Positive number reflects an estimate higher than contractors' bids.

7. Replace the contract management system (CMS) with a system that is more user friendly and more appropriate to managing the HART construction project. If the CMS system is retained, HART should define which CMS data elements, data fields, and functions should be used and which parts should be deactivated or eliminated.

Response: HART strongly disagrees with the recommendation. The HART project is a **\$6.5 Billion** project, with more than \$4.5 Billion scheduled for expenditures in the next 5 years, equivalent to almost a billion dollars expenditures per year in the coming five years. There are only a handful of systems that can handle such enormous amounts of construction-related data, and they all follow similar architecture and organization, namely Oracle CMS, Meridian's Prolog, Bentley EADOC and Autodesk Constructware.

All these software packages are appropriate for managing the HART construction project, and all require extensive training and commitment. HART implemented a training program and continues implementing it for its selected software.

Mr. Edwin S. W. Young, City Auditor
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In the past several years, HART has invested thousands of hours in training and mentoring thousands of users.

Current HART CMS Users with Login	396
Overall HART CMS users from beginning of program (includes personnel turnover)	>850
CMS Classes for all HART, Contractor and Consultant Users	454 classes
Number of students attending	2401 people

User friendliness cannot be considered a relevant criteria as all these software programs require advanced staff proficiency in construction concepts and management processes which is several steps above basic computer applications literacy. A multi-billion dollar construction program cannot be managed with basic spreadsheets, user-created databases and/or similar basic documents and it is a fundamental error when one fails to estimate the complexity of a system that deals with tens of terabytes of data and attempts to use inadequate tools to manage it. None of these systems mentioned allows the proper processes to be followed, nor are they geared to handle size and complexity of the records. They do not provide date-stamping, records of exchange between entities, and archival records maintenance that are required for auditing purposes.

After thorough evaluation, CMS was chosen as the centralized project management and document control system aimed at creating and tracking all documents related to the project. It provides one centralized database, paperless routing using workflows, and access to real-time data 24/7 via the Internet. Its benefits include:

1. Bringing hundreds of users together in a real-time, online construction project management environment where data is recorded and tracked.
2. Automating construction processes to ensure consistency in data preparation, collection, processing and archiving.
3. Reducing project cost, schedule risk and exposure by enabling teams to collaborate on critical information made readily available on a 24/7 basis.

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4. Facilitating user adoption within HART through a construction-specific solution and role-based user interfaces aimed at recording all relevant and required data at each step of construction processes.
5. Bringing extended project teams together across geographical locations, in online and offline environments, and across desktop, browser and mobile technology and devices.
6. Managing all HART's construction data, from the field to the office.
7. Tracking key performance indicators to monitor all levels of project performance using metrics and dashboards
8. Viewing and managing selected projects or groups of projects; create multi-project reporting, and access charts showing project budget, costs and contract status
9. Manage budgets, commitments, costs, savings and overruns with detailed cost control functionality
10. Track change orders and see their impact on budgets and costs
11. Effectively manage daily work journals, crews, inspections, punch lists and other quality control tasks in a centralized tracking system

The following are the different modules established within CMS to track data:

Design And Construction Documents

- | | | |
|-------------------------------|-----------------------|-----------------------------|
| 1. RFIs | 8. Memos | 15. Specifications |
| 2. Submittals | 9. Daily Logs | 16. Drawings |
| 3. Change Orders | 10. Meeting Scheduler | 17. Schedules |
| 4. Extra Work Orders | 11. Meeting Agendas | 18. Job Site Photos |
| 5. Design Clarification Memos | 12. Meeting Minutes | 19. Environmental Documents |
| 6. Quality Inspections | 13. Action Items | 20. Custom Documents |
| 7. Punch Lists | 14. T&M Tags | 21. Correspondence |

Financial Module Features

- | | | |
|--|-----------------------|------------------------------|
| 1. Funding Sources | 4. Budgets | 7. Pay Requests |
| 2. Division, Program and Project Financial Reports | 5. Contract Tracking | 8. Contract Change Proposals |
| 3. Management Processes | 6. Schedule of Values | 9. Change Orders |

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All of the above are set with active processes meant to manage project delivery. There are no modules that can be eliminated to “simplify or make system use easier”. All data input is through role based entry points which are specific to each user.

HART expects the volume of documents to quadruple by the end of the project. Oracle CMS is the leading solution provider in the industry and best suited to handle such volume of document.

Regarding the matter of CMS data elements, data fields, and functions that should be used and which should be deactivated or eliminated, HART notes all viable software choices presented common business processes and workflows to help user implementation for the following goals:

1. Project Delivery
2. Cost Controls
3. Standard Reports

As such, and to enable the generation of management reports and forecasts, there are no data fields, or modules or data elements that can be arbitrarily eliminated. Nor does elimination make the basic use of the CMS any easier.

Finally, any discrepancies and inaccuracies within the database as mentioned in the recent audit report are due either to

1. timing of data entry
2. reports that are tailored to specific needs of departments which cause various filter implementations (such as for example maintaining or removing ineligible costs)
3. timing of report (since the database is always live, a report run at different dates will most likely show different results even if filtered to the same data date (as credits and debits are added or processed into the record)
4. stage at which data is reported (some output include forecasts which are of the rough order of magnitude type, whereas other exclude them due to the fact that have not been validated)
5. backlogged or missing scans and./or attachments
6. user errors in data recording or data processing such as missing steps or entering information prematurely in a final stage, which can be resolved by additional training.
7. entry errors such as inaccurate figures entry, which are rare but can happen

Items 6 and 7 are specific issues that HART CMS trainers are on the lookout for and address regularly to prevent their reoccurrence. HART believes that its efforts have led

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to the establishment of an accurate, complete and functioning database properly serving the needs of the program.

8. Use the city's C2HERPS enterprise resource planning system to develop, monitor, track, and report budget, financial, and accounting data. The CMS system should not be used for these purposes.

Response: HART uses the city's C2HERPS system as its official financial system of record. All items of revenue and expenditures are recorded in C2HERPS, and that information is used to prepare HART's annual audited financial statements. The information recorded in C2HERPS is also used to prepare HART's annual budget and cash flow projections, as well as various reports provided to the Mayor and City Council, HART's monthly progress report, FTA grant reimbursement requests, and FTA quarterly reports.

HART's Contract Management System (CMS) supplements the city's C2HERPS system and includes more detailed contract information and documents that cannot be recorded in the City's financial system, C2HERPS. CMS is used to internally review and approve construction contract invoices, and also includes documentation of the process and the approvals of all other documents that are required for the efficient and effective completion of the project. Also refer to HART's response to recommendation #7 above regarding the use of CMS.

The City's C2HERPS system only allows access to city employees and access to reports are further restricted by the employee's title and classification. This would limit the effectiveness of the C2HERPS as the automated system to manage the rail project as many of the project managers and executive management team are not city employees and would not be allowed to have access.

9. Develop a forecasting model to best predict escalation costs and support it with documentation.

Response: As the OCA audit report indicates on page 13, "Cost estimating, by nature, is imprecise." HART has established procedures and has methodologies in place to prepare cost estimates based upon historical data as well as using the latest bid results, other agency procurement results, market studies, and independent economic reports (e.g., Rider Levett Bucknall Quarterly Reports).

All of HART's Independent Cost Estimates (ICE) prepared for all upcoming contracts are based upon sound, detailed estimating techniques, including a description of the estimated scope of work, a basis of the estimate, estimating assumptions, and an indication of the range of possible results. These "estimating essentials" are also bullet-listed in the OCA audit report on page 14. HART agrees with this guidance and provided several completed ICEs to the auditor that comply with these requirements.

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Predicting escalation is even more imprecise and HART relies upon independent economic data sources to use within its estimates (depending on the type of estimate and the type of project being developed) as HART explained several times to the OCA auditors. In addition, HART explained to the auditors that there is no specific factor used that can be attributed directly to “escalation” alone. Rather, as HART prepares its estimates (ICEs) and summarizes several cost estimates into its budget forecast updates, there are items that can be readily identified to a specific cause, but for those costs that cannot (market conditions, contractor risk assessments, building type risks, schedule risks, third party risks), HART assigns to “escalation.”

In comparing budget forecasts (made up of several cost estimates) prepared at different times, it is not unusual that these two budget forecasts be different because more is known about the project at the later timeframe. Therefore, the escalation category is expected to change over time as well, depending on the events occurring between these two time periods, and is driven by differences in the totals of the cost estimates, not by a specific escalation factor.

For the specific escalation issue highlighted in the OCA audit report (Cost Escalation line item increasing from \$45 million at the December 2014 HART Board Meeting to \$240 million at the October 2015 HART Board Meeting), HART explained that the \$195 million increase was not calculated by a specific rate (as detailed above), but that the Cost Escalation was a subset of several factors within the project cost estimates that made up the total budget forecasts.

HART explained that the known events that occurred between the two budget forecasts included impacts due to past and potential lawsuits and delays, utility relocations, and overhead costs. The remaining difference between the detailed cost estimates prepared during each time period (December 2014 and October 2015) that made up the total budget forecasts were therefore attributed to escalation. HART agrees that this response may give an impression that all HART escalation forecasting is done in a way that groups several unknown or unforeseen conditions and places them in one cost category without considering (or detailing) a specific escalation rate. We understand the OCA audit report’s point for that specific case and will take prudent measures to ensure that these costs are presented in a more transparent way.

As stated previously, the HART methodology involves using multiple independent sources to apply market factors and escalation rates to unique situations and construction scope along the alignment.

10. Make it a priority to analyze significant changes to the project, determine how it will affect the project’s overall costs and schedule, and regularly update key management plans to reflect those changes to ensure that stakeholders and the public are informed of significant changes in a timely manner.

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HART's response is broken down into the following parts:

Part 1 – Make it a priority to analyze significant changes to the project, determine how it will affect the project's overall costs and schedule

Part 2 – regularly update key management plans to reflect those changes

Part 3 – ensure that stakeholders and the public are informed of significant changes in a timely manner

Part 1

HART does make it a priority to analyze all changes to the project in a timely manner. The project controls department receives and reviews cost and schedule reports monthly from all design and construction contracts.

Many of the plans identified in the audit report were identified to be updated in August 2014. This happened to be right before the 9 station bid package bid proposals were received and greatly exceeded the original estimates. At this time HART, working with its partners, had to analyze and restructure the program execution method in order to contain cost. Re-structuring the Contract Packaging Plan (one 9-station package into three 3-station packages) resulted in numerous changes including re-organization of staffing and consultant services to manage the separate contracts, re-allocation of funding to cover higher costs, update of the master schedule and the risk and contingency management plan. It was also during the 2015 year that the FTA performed the Triennial Review of HART and DTS. Also, during this time, City Council took up a resolution to remove Section 5307 monies from the HART project funding.

Part 2

Staff has been working to update the program plans and keep up with the changes. Draft revisions have been created and shared with the PMOC and FTA, but are awaiting final sign-off for a variety of measures. For example, the Financial Plan update was on-hold until it became apparent the GET would be extended. The update of the financial plan impacted the contract packaging plan as HART was now facing a budget deficit that would require major scope reductions had the GET not been extended. Staff created numerous draft schedules to match the contract packaging plan options along with estimated costs. The project management plan has been updated in draft form, but pending the update to the CPP and Financial Plan, the draft is waiting for final approval. HART will be entering the Risk Refresh Workshop with the FTA at the end of March and believes that comments and reports resultant of that workshop will help finalize the plans.

Part 3

HART agrees that stakeholders and the public should be informed of significant changes and works hard through various channels to do so. The following is a list of the various ways in which HART strives to keep our project partners up to date:

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Written correspondence and presentations to the State Legislature and City Council

1. HART Board Meetings
2. Monthly Reports
3. Monthly HART Facts Ad
4. Public Access Television Program
5. HART Business Outreach Programs
6. Town Hall meeting series
7. Weekly E-blasts and Traffic Advisories
8. The HART Website and Social Media

The HART Board had tasked the Executive Director and CEO to make transparency a primary concern for the agency. The agency received and adopted the recommendation from a City Council member to televise HART Board meetings.

11. Ensure project managers prioritize budget management, compare actual costs to cost estimates, analyze any differences and make adjustments as necessary to prevent or minimize cost overruns.

Response: HART agrees that effective project management should focus on effective budget management and HART Project Managers do monitor and manage contract costs (budgets) through the monitoring of actual costs to contract amounts, identification of issues that may have a cost impact, and managing contract contingency and the change process.

HART concurs there is room to improve and initiated a global approach to project management, starting with contract administration training for the PM's scheduled for June 2015. Concurrently, HART is realigning on-site construction oversight and contract administration between consultant Resident Engineers who have the in-depth knowledge and skills in working on large, complex transit systems projects, with the City project managers who have the local, City, HART knowledge and background, to better balance responsibilities and control.

12. Not make concessions on *retainage* to contractors, as it diminishes HART's ability to ensure proper performance and could be misconstrued as favoritism or biased.

Response: All required retainage amounts are determined by the terms of the contract. HART does not make or grant any concessions that may be misconstrued as favoritism or bias.

13. Document its cost-saving strategies and to the extent possible, quantify and document the amount of potential cost savings.

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Response: HART provided several documents to the auditor containing hundreds of pages of information to support the decision to repackage the Westside Stations Group (WSSG) into three separate 3-station packages: Farrington Highway Station Group (FHSG); West Oahu Station Group (WOSG); and Kamehameha Highway Station Group (KHSG). These documents included:

- GEC's Bid Assessment and Path Forward / Recommendation, dated 8/20/2014
- HART's Request to Cancel WSSG Solicitation, dated 9/9/2014
- Value Engineering, Scope Reduction, and Scope Transfer Ideas for each individual west side station, with varying dates from 9/4/2014 through 9/26/2014
- FHSG Scope Revision – document used to direct the designer of record to implement various design changes, dated 9/4/2014
- Contemporaneous Meeting Notes summarizing meetings with various WSSG contractors, dated 9/11/2014 through 9/15/2014
- White Paper on Delivery and Procurement Strategy for Upcoming Contracts, dated 11/7/2014
- FHSG Independent Cost Estimate (ICE) - \$76M, dated 12/10/2014
- H2R2 Ramp ICE - \$5M, dated 1/13/2015
- WOSG ICE - \$74M, dated 4/2/2015
- KHSG ICE - \$108M, dated 8/17/2015

HART did perform quantitative analysis to justify a major decision to repackage a bid for the 9 stations in the Westside Stations Group. There is no other recent event on the program that required more internal scrutiny, analysis, and debate than the decision to repackage the nine stations into three 3-station packages. HART provided the documentation listed above to illustrate the steps taken to solve the ongoing budget concerns, with Rough Order of Magnitude (ROM) estimates included that were based on our consultants' value engineering, estimating, and risk management expertise.

HART pointed out to the auditors that one of the most significant steps towards potential lower construction bids was to understand the contractor's perspectives, information that could not have been solicited during an active procurement, thus HART cancelled the original bid process on 9/9/2014 to allow HART to meet with and gather feedback from contractors. HART provided the auditors with resultant lists of information gathered from the conversations held with general contractors (both those that did and those that did not bid the WSSG package) and subcontractors. HART also took prudent non-quantitative steps to simplify drawings and specifications, modify contract terms and conditions, and ease schedule restraints to make the three packages more attractive to potential bidders. It is apparent that the auditors did not take the entirety of this complex information into consideration to reach their conclusions.

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In the end, the actual bids received for these station packages and the H2R2 Ramp were \$38 million below the previously submitted \$294 million low bid for the WSSG contract. HART believes that this outcome was predicted, using "...qualitative analysis and documented analysis, as well as past experience, and current or historical data." The ICEs prepared prior to bidding each of the three station packages and the Ramp H2R2 project totaled \$263 million, or \$31 million below the original \$294 million low bid amount and very close to the actual \$38 million savings realized.

HART also objects to the OCA auditor's assertion that the August 2014 Monthly Report indicated that the overall cost of the \$5.2 billion project would not change. The auditor's assertion is tied to the independent cost estimates that were prepared over the following year (ICEs: 12/10/14; 1/13/15; 4/2/15; and 8/17/15 as listed previously), information that was not known at the time of the August 2014 Monthly Report. It is disingenuous to state that HART knew something based on information that was developed after the fact.

14. Develop and implement written internal policies and procedures that will address stipend payments, including requirements for supporting documentation of unsuccessful bidders' actual costs, determination of compensated value, and limit payment to no more than the unsuccessful bidders' actual costs or the stipend amount, whichever is less.

Response: Stipends are only provided for certain large and complex design-build (DB) contracts as authorized under HRS Sec. 103D-303(i). The stipend amount set by HART (at the time, Rapid Transit Division of City's Department of Transportation Services (DTS)) is based on industry estimates for the cost to prepare proposals. The industry estimate for preparing proposals is between .5% and 1% of the construction costs. For a \$500M contract, the cost for preparing proposals is estimated between \$2.5M-\$5M. HART/RTD has never paid more than \$500,000 stipend to an unsuccessful offeror, which is well below the actual costs for preparing proposals. A uniform stipend amount is also consistent with Federal Transit Administration's (FTA) Best Procurement Practices on the subject matter. Furthermore, HART's solicitation documents expressly stated the terms under which an unsuccessful offer would be entitled to stipends and the not-to-exceed amount to be paid to each unsuccessful offeror; that is, a minimum 41% overall qualitative score was required to receive a stipend. HART agrees to memorialize its policies and procedures into a "policies and procedures" manual.

15. Better document its office space requirements and regularly review its office lease agreements to identify any unoccupied usable area. To reduce current operational costs so that it only pays for space that is needed and to find potential future savings, if space is unoccupied, HART should consider renegotiating the lease, subleasing the space, or allowing other city agencies to use or rent the space until HART actually needs the space.

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Response: HART currently leases 63,927 sq. ft. (55,110 useable sq. ft.) of office space at Ali'i Place. HART conducted a physical inventory on 3/15/2016 and determined its occupancy rate to be 88% comprised of the following breakdown:

- Suite 150: 31.5 of 34 available workstations in use = 93% Occupancy Rate
- 11th floor: 63 of 68 available workstations in use = 93% Occupancy Rate
- 17th floor: 65 of 68 available workstations in use = 96% Occupancy Rate
- 23rd floor: 48 of 66 available workstations in use = 73% Occupancy Rate
- Overall: 207.5 of 236 available workstations = 88% Total Occupancy Rate

Note: Workstations include locations designed for someone to sit and work on a full time basis. This includes offices, cubicles, desk/work areas, etc.

The vacant space is necessary and reasonable given that, as of February 23, 2016, HART had (11) vacant positions and is contractually required to provide office space for multiple contractor/consultant firms; HART currently houses employees from the following firms: HDR (InfraConsult), CH2M Hill, Paragon Partners Ltd., Lea+Elliot, PGH Wong, RM Towill, SSFM, Stantec, Lawson & Associates, and the Solis Group. HART also hires local college students as Engineering and Student Interns on a part time basis in accordance with the City & County of Honolulu Department of Human Resources policies when office space is available and we have substantive work appropriate for Interns. Additionally, it should be pointed out that the practice of providing office space to consultants was a recommendation in a prior City Auditor audit – reference City Auditor report 13-03, recommendation #8 – Lease all office space to reduce consultant overhead rate charges.

The numbers reported in the audit appear to have focused solely on the 23rd floor, which is the least occupied floor. The recommendation that HART renegotiates its lease “so that it only pays for space that is needed” is an oversimplified view of how long term leasing works and is not practicable for an organization such as HART. HART is currently responsible for overseeing the construction of the Honolulu Rail Transit Project. As an organization, HART functions differently from a regular City Department and the personnel needs in terms of both quantity and areas of expertise needed vary significantly over time as opposed to an established City Department. Specifically the personnel/workstation needs evolve and change throughout the project lifecycle depending on which phase of the project we are in. A project’s staffing level is dynamic and is directly related to the type and amount of work going on at any given time. In order to accommodate the project’s personnel needs, HART has taken great effort to structure and negotiate the current leases to meet current and future office space requirements. HART’s approach considered the number of personnel required as the project progresses towards completion and optimizes the office space requirement and the resulting cost to the project. Starting in 2018, the office leases begin a structured reduction of office space over the remainder. All while being

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cognizant that long-term leasing of office space yields the best rates for the lessee and ultimately benefitting the taxpayer.

Therefore the recommendation that HART only lease office space it needs implies that HART change the amount of leased space depending on how many people are onboard at any given time. This is an impractical view of office leasing practices and would result in drastically increased costs as well as inefficiencies that would affect the overall project in a negative way.

16. Develop written policies and update procedures for contract administration.

Response: HART agrees and has initiated updating all contract administration procedures. An updated Contract Change Procedure (5.CA-11) was issued in September 2015. Revisions to the remaining procedures are developed and under review. The target date for updating contract procedures is August 2016.

17. Clearly distinguish the roles and responsibilities of project managers, contract managers, and contract administrators in contract administration policies and procedures.

Response: HART agrees and has already initiated efforts to update procedures and clarify roles & responsibilities. The updated procedures will reflect current roles & responsibilities for project managers and contract managers. The target date for updating contract procedures is August 2016.

18. Promote increased awareness of procurement and contract administration file recordkeeping by providing additional training to staff.

Response: HART believes in continued training of staff and intends to continue with this practice.

19. Develop more robust guidance, policies, and procedures that address the variety of contracts and associated invoices HART receives in order to help standardize the invoice payment process and prevent improper payments.

Response: HART agrees and has initiated updating its Contractor Progress Payment procedure (5.CA-03) and is preparing a draft contractor invoice procedure that will standardize the invoice payment process. The target date for updating contract procedures is August 2016.

20. Develop plans for annual and ongoing operations and maintenance of the rail system once it is completed and operational. The plan should address subsidies needed to fund rail operations and maintenance costs, maximize fare box recoveries

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and ridership; minimize city subsidies; address operations and maintenance (O&M) policies, subsidy sources, and alternative revenues.

Response: HART is actively planning and continuing to develop O&M cost estimates per updated OMP now being reviewed by FTA.

Rail fare policy is being discussed at HART, and note that farebox recovery planning efforts are underway and these are concurrent with efforts to create an integrated multi-modal fare system that will work on bus and rail. HART believes it would have been premature to begin farebox recovery ratio planning efforts until the fare system was determined and the agreements for its funding and operation in place.

The HART Fare PIG decided to explore farebox recovery options using the most up to date ridership estimates (as previous ridership estimates were developed using land use, population and employment data that were available prior to 2010) working in tandem with the update of the regional transportation planning model efforts currently being led by Oahu Metropolitan Planning Organization (OMPO). In this way, the ridership estimates used by HART for revenue planning purposes will match those used by the City and the OMPO for transportation planning and funding purposes. Those ridership estimates will be available in the spring of 2016. At that time, microeconomic modeling that considers the impact of fare prices by market segment in comparison to historical elasticity of demand, transit competition such as parking pricing, taxi pricing, bike and care share pricing will be undertaken. Options for actual fare revenue recovery potential will be developed for the HART Board's consideration with recognition of the FFGA constraints. Options will include potential fare products and pricing. Once the HART Board recommended farebox recovery rate is determined, revenue estimates will be incorporated in the latest version of the operations and maintenance financial plan.

A source of funding whatever the rail O&M subsidy is determined to be has not been identified as yet, and will be done collaboratively between the HART Board, Mayor and Council before any decision regarding fare policy/subsidy is made, and there is ample time to do so.

The following table is a partial listing of various Board (and Staff activities) related to rail operations, fare policies, and subsidy reduction measures. This illustrates HART's commitment and actions regarding rail O&M costs and fare policy.

Date	Description	Group
7/1/2011	HART Board sworn in	Board
7/7/2011	Financial Plan Discussed	Finance
9/8/2011	DBOM Core Systems Contractor Capacity	Finance/POC
9/29/2011	Safety and Security Presentation	POC
10/6/2011	Update on DBOM Core Systems Contract	Board
10/13/2011	DBOM Core Systems Contract Discussion	Board

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Date	Description	Group
11/3/2011	Presentation on Scope of DBOM Core Systems	Board
11/17/2011	Update on DBOM Core Systems Contract	Board
12/1/2011	Update on DBOM Core Systems Contract	Board
3/16/2012	Bus and Handi-Van Operating Costs	Finance
6/28/2012	FFGA Financial Plan Update	Board
8/9/2012	Discussion on Fare Gates	Finance
8/9/2012	Discussion on Rail/Bus Synergies	Finance
8/9/2012	Discussion on Train Seating	Finance
8/9/2012	Discussion on Financial Plan Operating Budget	Finance
8/9/2012	FFGA Financial Plan Update	Finance
8/30/2012	Fare Gates	Board
8/30/2012	Train Seating	Board
10/4/2012	FFGA FCA Update / Operating Budget Discussion	Finance
11/29/2012	FFGA Financial Plan Discussion	Board
12/6/2012	FFGA Financial Plan Discussion	Finance/POC
12/6/2012	Review of HART Operating Statement	Finance/POC
12/6/2012	Discussion of DBOM Core Systems	Finance/POC
2/7/2013	Update on DBOM Core Systems Contractor Capacity	Finance/POC
10/17/2013	Discussion on Maintenance Yard Automation	Finance/POC
12/19/2013	Discussion of Operating Budget Admin Costs	HR
12/19/2013	DTS presentation on Fare Collection Study	Board
12/19/2013	Formation of Fare Policy Permitted Interaction Group	Board
12/19/2013	Four-Car train Presentation	Board
1/16/2014	Update on HART/DTS/OTS/Ansaldo Working Group	Board
1/16/2014	Fare Study Workshop Presentation	Board
2/13/2014	Automated Maintenance Yard Configuration change order	Finance/POC
2/13/2014	Fare Study Workshop Presentation	Board
4/24/2014	Presentation on Safety and Security	Board
8/14/2014	HART/Ansaldo/DTS/OTS Working Group Update	Board
10/9/2014	Report on Fare Policy Permitted Interaction Group	Board
10/23/2014	Report on Fare Policy Permitted Interaction Group	Board
11/13/2014	Core Systems Fare Vending Machines	Finance/POC
3/12/2015	Interim Report of the Fare Policy Permitted Interaction Group	Board
5/21/2015	Update on HART/DTS/OTS/Ansaldo Working Group	Board
11/24/2015	Presentation on Sustainability and Photovoltaic Programs	Board
11/24/2015	Update on Integrated Fare Systems	Board

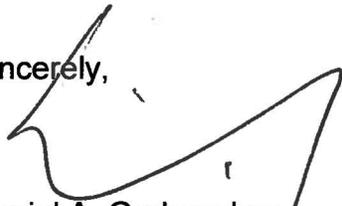
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Date	Description	Group
2/18/2016	Formation of Financial Plan Permitted Interaction Group	Board

21. Fill the operations and maintenance position and other key vacancies. The recruitment should include a succession plan to fill key positions in the event of any unexpected departures.

Response: HART conducted a very diligent and extensive search for the candidate with the required high level experience and background to fill this position. This thorough search has paid off and HART has hired an individual with outstanding credentials, who started on March 28, 2016, as the HART Director of Operations and Maintenance. Additionally, HART will be modifying the organizational structure to include a Deputy Director position under the Director of Operations and Maintenance. The expansion of this area and the reduction of other areas have already been identified in the staffing and succession planning since the beginning of the project.

Sincerely,



Daniel A. Grabauskas
 Executive Director and CEO

Attachment: HART's Response to Audit Report Content – Chapters 2, 3 & 4

HART's Response to Audit Report Content – Chapters 2, 3, & 4

Note: Areas of the draft audit report highlighted in yellow are followed by HART responses in red text.

Chapter 2: HART Needs to Improve Financial Management and Planning

Summary

Despite having a goal of completing the project on time and on budget, Honolulu Authority for Rapid Transportation's (HART) project costs have increased \$1.3 billion (25 percent) from the original estimate of \$5.2 billion to an estimated \$6.5 billion.

HART's processes can be improved to construct and complete the project more economically, effectively, and efficiently. Specifically, we found that HART's financial and operating plans are not reliable or current; and HART's financial plan has not been updated to reflect the rail project's most current financial condition in spite of the significant cost increases.

RESPONSE: HART is in the process of revising its Financial Plan in light of the extension of GET Surcharge through 2027. Prior to this, HART has continuously monitored, estimated and projected changes/updates to the plan. HART also regularly updates and reconciles its financial records and information. This includes but is not limited to:

- GET revenue received and projected
- New Starts funding Drawdown
- Project cash balance
- Project cost and cash flow projections
- Project cost expended
- Estimate-at-completion projections
- Project contingency drawdown
- Project risk register
- Overall project progress
- Contractor Notice-to-proceed values
- Executed change orders
- Contracts awarded
- And others

HART needs to strengthen its controls over financial information reporting to ensure data is complete and readily available from its Contract Management System (CMS); delay claims are adequately tracked, monitored, and reported; and pending utility agreements, contingency allowance figures, and general excise tax (GET) county surcharge forecasts are accurately reported. Absent the improvements, we anticipate additional shortfalls and cost overruns will occur.

Response: The reality is external factors beyond anything under HART's control are what caused HART's revenue shortfalls and cost overruns. All the financial information

reporting in the world would not have prevented external factors that caused the project's funding deficit. HART does not agree with many of the assertions that the auditor made throughout this chapter to support the conclusions above. The OCA provides no data in its findings showing that the recommended improvements would prevent additional shortfalls and cost overruns.

Background

HART's mission is to plan, design, construct, operate, and maintain Honolulu's high-capacity, fixed guideway rapid transit system. To fulfill its mission, HART is responsible for completing the project on time and within budget and ensuring the design and actual construction of the project will facilitate the delivery of a safe, high quality, and cost-efficient service in the future. HART is also responsible for maintaining public trust through prudent and transparent use of financial, human, and environmental resources.

Other HART responsibilities are to support the creation of mixed use, pedestrian-friendly, compact development along the rail line; pursuing partnerships with the private sector to create economic opportunities and generate income and cost savings for the rail transit system; and fostering an organization that is open, accountable, inclusive, and delivers better than promised results.

As of November 2015, HART received \$472.5 million of the \$1.5 billion federal grant for the rail project. Per the 2012 *Full Funding Grant Agreement* (FFGA), HART and the city had to comply with the grant terms to receive the remaining balance of \$1 billion. The exhibit below details the allocations by federal fiscal year.

Exhibit 2.1**New Starts Grant Allocation (by federal fiscal year)¹**

Federal Fiscal Year Allocation	FTA Obligated Amounts	Actual Drawdown Amounts to Date	Available Balance
2008	\$ 15,190,000	\$ 15,190,000	\$ -
2009	19,800,000	19,800,000	-
2010	30,000,000	30,000,000	-
2011	55,000,000	55,000,000	-
2012	200,000,000	200,000,000	-
2013	236,277,358	152,519,166	83,758,192
2014	250,000,000	-	250,000,000
2015	250,000,000	-	250,000,000
2016	250,000,000	-	250,000,000
2017	243,732,642	-	243,732,642
Total	\$ 1,550,000,000	\$ 472,509,166	\$ 1,077,490,834

Source: HART Monthly Progress Report, December 2015 based on data as of November 27, 2015

PMOC expressed issues and concerns in 2012

The FTA hired an independent consultant to monitor the construction project, identify problems, and to report deficiencies or concerns. The HART project management oversight consultant (PMOC) monthly reports discussed issues and concerns over the viability of HART's operations. In the monthly reports, the PMOC questioned the following:

- The adequacy of HART's ability to "forecast costs for the existing design-build contracts." It emphasized that it is critical that this issue be quickly corrected to demonstrate that the grantee has the Technical Capacity and Capability going forward."²

¹ The federal fiscal year runs from October 1 to September 30. The table covers federal funding only. Total rail project funding includes federal, state, and local funding sources.

Federal funding includes \$4 million out of \$214 million of FTA Section 5307 Formula and American Recovery and Reinvestment Act (ARRA) funds.

State funding includes the state half percent (0.5 percent) General Excise Tax (GET) county surcharge to fund the rail project. The GET county surcharge originally was to expire December 31, 2022, but was extended through December 31, 2027 to cover the additional project cost increases and revenue shortfall. HART estimates the five-year extension will generate revenue in the range of \$1.2 billion to \$1.8 billion. GET collections in FY 2015 totaled \$1.522 billion.

City funding includes general obligation bonds (debt financing) to fund construction of the rail project. In November 2015, the city council approved legislation that allowed the city to issue up to \$350 million in general obligation commercial paper to fund rail project related improvements and equipment. HART also anticipates using the funds to cover its short-term cash flow needs.

In 2015, city council resolution 15-18 eliminated the use of \$210 million of Federal Section 5307 grant monies in the project's financial plan to ensure the funds were only used for city transportation services (i.e. TheBus and Handi-Van services).

² In the October 2012 monthly report, the PMOC noted that HART and the PMOC have held monthly breakout sessions to review the status of the forecast costs, schedule management, risk management, and cost containment measures. The report noted that these breakout sessions

- The lack of “technical capacity and capability specific to project controls.”³
- The sufficiency of contingency reserves; and
- The need to develop, update, and implement secondary risk mitigation measures.

Response: Throughout this report the OCA pulls little snippets out of thousands of pages of PMOC monthly reports to support claims about the PMOC’s opinion at the time. However, these snippets did not include the whole story conveyed in the PMOC’s reports. The OCA did not interview the PMOC and failed to gain an understanding of the purpose of the different types of PMOC reports.

The PMOC’s role is to provide project oversight on behalf of the FTA. Thus expressing their concerns, on any aspect of the project, is part of their job. In 2012, the City was on the path to obtaining a FFGA. The PMOC issues OP reports prior to entering into a major phase of the project, which supersedes any information in the monthly reports. In OP 52, the PMOC expressed its professional opinion that HART demonstrated technical capacity to enter into a FFGA and specifically recommended including \$644 million in total contingency. The FFGA was signed in December of 2012 and would not have resulted if not for their affirmation on the project’s readiness.

OCA added footnote’s #2 and #3 in response to HART’s comments in the discussion draft rather than presenting all of the relevant facts in the body of the report.

In December 2014, the HART’s chief executive officer (CEO) stated that the agency was facing a \$600 million cost overrun and a \$310 million revenue shortfall. The public statement notified the city council that project costs had increased and revenues were less than projected.

Actions to resolve the shortfalls: In January 2015, the Hawai`i State Legislature introduced bills to extend the rail project GET county surcharge from December 2022 to December 2027. HART and city officials lobbied in support of the GET extension and the legislature passed the bill in May 2015.

After the governor signed the bill in July 2015, the HART CEO reported to the HART Board of Directors on October 15, 2015 that the cost overruns had increased an additional \$714 million, for a total of \$1.3 billion.

The exhibit below details the changes in estimated project costs and revenues.

have resulted in increased confidence by the PMOC of the grantee’s ability to manage the project budget and schedule.

³ Project Controls are acts of project management staff in all aspects of cost, schedule, contract administration, and configuration management. In the February 2013 PMOC monthly report, HART acknowledged the situation and hired a new Project Controls Manager.

Exhibit 2.2**Estimated Project Cost Increases and Revenue Shortfalls (dollars in thousands)**

Description	Cost Estimates		Change	
	December 2014 HART Board Meeting	October 2015 HART Board Meeting	\$	%
Estimated Costs Increase:				
Lawsuits and Delay Claims	\$190,000	\$190,000		
Utility Relocations	50,000	120,000		
Project Enhancements	75,000	130,000		
Cost Escalation	45,000	240,000		
Allocated Contingency	240,000	240,000		
Unallocated Contingency	--	299,000		
Debt Financing Costs	--	95,000		
Total Estimated Costs Increase	\$600,000	\$1,314,000	\$714,000	54%
Estimated Revenue Shortfall:				
GET Projected Shortfall	\$100,000	\$100,000		
FTA 5307 Fund Reduction	210,000	210,000		
Total Estimated Revenue Shortfall	\$310,000	\$310,000		
Total	\$910,000	\$1,624,000	\$714,000	44%

Source: Office of the City Auditor (OCA) analysis based on HART Project Risks Update, December 18, 2014 and Project Cost Update, October 15, 2015.

Impact of shortfalls: HART subsequently came under increasing scrutiny by policy makers, the local media, and the public. Throughout the project, local news reports drew public attention on the credibility of HART's project cost information, and policy makers expressed concerns over the lack of detailed financial information provided by HART for decision-making purposes.

The city council also expressed concerns related to the HART data, financial management and planning, decision making, contract administration, and post-construction costs. As a result, the city council delayed approving the GET surcharge extension.

After the Federal Transit Administration (FTA) issued a warning related to the lack of project funding, members of the city council approved the county surcharge in January 2016. In the Federal Transportation Agency letter to the Mayor, FTA stated the next \$250 million federal installment will not be released until the city and HART provided a revised cost estimate and schedule, an updated financial plan, and a commitment of local funds to cover the increased cost estimates.

The exhibit below details the timeline.

Exhibit 2.3

Funding Milestones

- **December 2014** HART announced a \$600 million projected capital costs increase and a \$310 million revenue shortfall.
- **January 2015** Hawai'i State Legislature circulated senate and house bills regarding the GET county surcharge extension.
- **April 2015** HART confirmed need to repay funds spent in full to Federal government if rail project cancelled.
- **May 2015** Hawai'i State Legislature passed House Bill 134, extending the GET county surcharge extension from December 31, 2022 to December 31, 2027.
- **July 2015** Governor signed GET county surcharge extension bill into law (Act 240). Approval to adopt the ordinance (Bill 23) by the City County must be decided by June 30, 2016.
- **October 2015** HART announced additional project costs increase of \$714 million.
- **November 2015** FTA issued a letter expressing concern that the city has not yet completed the actions needed to extend the GET surcharge that is critical to completing the project.
- **January 2016** City Council adopted city ordinance 16-1 supporting the 5-year extension of the GET county surcharge.
- **February 2016** Mayor signed bill into law.

Source: OCA analysis based on various sources

HART's processes can be improved to more economically, effectively, and efficiently report project costs

Regular reporting provides management with information necessary to make sound decisions and to be transparent and accountable to key stakeholders and the public.

Our review found that HART can improve its financial management and planning by retaining and providing reliable project cost information to policy makers and decision makers.

Response: HART provides extensive project cost information through many formats available to all stakeholders, policy makers, and decision makers. Project cost data is directly provided to the HART Board of Directors, FTA, PMOC, and local news outlets

on a monthly basis. Further, the Monthly Progress Report, Balance Scorecard, and any other presentations made at public meetings are available on the HART website.

Despite significant changes, HART has not regularly updated and reported accurate and reliable project cost information.

Response: The consistency and reliability of HART's financial data is validated by an independent financial audit conducted on HART's financial statements annually which have resulted in an "unqualified opinion", for the last 4 years. This means that the independent auditors' have judged HART's financial records and statements are fairly and appropriately presented.

As a result, HART reports contain inconsistent project cost data which limit the overall usefulness of its financial planning, project cost, and funding information. More specifically, HART needs to:

- Regularly update financial and operating information and plans;
- Provide reliable and consistent project cost information;
- Effectively track, monitor, and report on delay claims and related costs;
- Document and support utility cost increases and estimated cost overruns for project enhancements;
- Use specific and consistent factors in calculating and estimating escalation costs; and
- Properly report on GET county surcharge forecasts.

Response: HART is in the process of revising its Financial Plan in light of the extension of GET Surcharge through 2027. Prior to this, HART has continuously monitored, estimated and projected changes/updates to the plan. HART also regularly updates and reconciles its financial records and information. This includes but is not limited to:

- GET revenue received and projected
- New Starts funding Drawdown
- Project cash balance
- Project cost and cash flow projections
- Project cost expended
- Estimate-at-completion projections
- Project contingency drawdown
- Project risk register
- Overall project progress
- Contractor Notice-to-proceed values
- Executed change orders
- Contracts awarded
- And others

Financial and operating plans are not regularly updated.

An FTA grantee must demonstrate financial management and capacity to match and manage FTA grant funds and to cover cost increases and operating deficits.

To ensure compliance with the FTA requirements, HART should follow best practices that ensure its financial and operating plans are regularly updated and are accurately reflected in its rail project financial reports. In the FTA 2015 triennial review⁴, FTA reported deficiencies in the project's financial management and capacity. Specifically, HART's financial plan did not demonstrate sufficient financial capacity to complete the project as currently planned. HART did not update its financial plans in light of the recent cost projections and current shortfall of GET surcharge receipts.

Response: The Triennial Review was conducted during the week of February 2 – 5, 2015 and the final report was issued on April 9, 2015. The final report noted a deficiency for insufficient financial capacity based on the recent cost projections and current shortfall of GET surcharge receipts. The report also states that “HART will be revising its financial plan based on the current cost projections, updated revenue forecast, and local funding increase decisions by the State Legislature and City Council to be made this spring.”

At the time of the triennial review, the State Legislature had not passed House Bill 134 extending the GET surcharge for five years. House Bill 134 was passed in May 2015 and signed into law as Act 240 on July 14, 2015. The Honolulu City Council did not pass City Council Bill 23 to adopt the GET surcharge extension until January 27, 2016.

The triennial review team has been advised of the enactment of both Act 240 and Bill 23 and the noted deficiency has been cleared.

More specifically, updating the financial plan was not discussed until April 2014. HART delayed communicating the potential cost increases to the city council until March 2015 after HART's CEO announced a \$910 million project deficit to the board in December 2014. The \$910 million project deficit consisted of \$600 million in increased costs, a

⁴ The United States Code, Chapter 53 of Title 49, requires the FTA to perform reviews and evaluations of Urbanized Area Formula Grant activities at least every three years. The site visit to the city occurred February 2 through 5, 2015. The final report was issued on April 9, 2015. As a corrective action to the finding, the FTA requested an updated financial plan by July 13, 2015. The plan should identify all funding sources for funding the HART project through completion within the FFGA scope and budget. HART submitted a draft financial plan to the FTA on August 14, 2015. The FTA closed the outstanding finding under the triennial review cycle on October 20, 2015. According to HART, the financial plan is being revised in light of the GET surcharge extension as of April 2016.

\$210 million reallocation of federal FTA Section 5307⁵ funding to the Bus operations, and a \$100 million GET county surcharge revenue shortfall.

While there were indicators that led to the project deficit, project managers and staff in key positions stated they were unaware of HART's fiscal condition until the December 2014 public announcement. As a result, corrective actions were not taken to ensure the FTA financial management and capacity concerns were satisfied.

At the October 2015 board meeting, the HART CEO subsequently reported the project cost overrun had increased to \$1.3 billion, and asked the city council and other policy makers to extend the GET county surcharge. The cost overruns are detailed in the exhibit below.

Exhibit 2.4

Project Cost Estimates (dollars in thousands)
(As of June 2012, December 2014, and October 2015*)

Description	Original Estimates	Cost Estimates		Change from Original Estimates	
	June 2012 FFGA Financial Plan	December 2014 HART Board Meeting	October 2015 HART Board Meeting	\$	%
Project Capital Costs	\$4,949,000	\$4,948,000	\$4,948,000		
Lawsuits and Delay Claims	--	190,000	190,000		
Utility Relocations	--	50,000	120,000		
Project Enhancements	--	75,000	130,000		
Cost Escalation	--	45,000	240,000		
Allocated Contingency	--	240,000	240,000		
Unallocated Contingency	--	--	299,000		
Total Project Capital Costs	\$4,949,000	\$5,548,000	\$6,167,000	\$1,218,000	25%
Debt Financing Costs	215,000	215,000	310,000	\$95,000	44%
Total Project Costs**	\$5,163,000	\$5,763,000	\$6,477,000	\$1,314,000	25%

Source: OCA analysis based on the FFGA financial plan, June 2012; HART Project Risks Update, December 18, 2014 and Project Cost Update, October 15, 2015.

(*) This table excludes revenue shortfall of \$210 million in New Starts Fund reduction and shortfall of \$100 million in general excise tax (GET) county surcharge receipts.

(**) Numbers may not add up due to rounding.

Our analysis indicates the latest cost overrun figures are not reliable and will likely increase because the HART financial data and plans have not been updated to reflect the changes in the project costs.

⁵ Federal Section 5307 (49 U.S.C. § 5307) is a formula grant program for urbanized areas that provides capital, operating, and planning assistance for mass transportation. This program was initiated by the Surface Transportation Act of 1982 and became FTA's primary transit assistance program. The federal funds are apportioned to urbanized areas utilizing a formula based on population, population density, and other factors associated with transit service and ridership. Section 5307 is funded from both federal general revenues and trust funds, and is available for transit improvements for urbanized areas.

Reliable and consistent project cost information is lacking

Reporting inconsistent information can cause confusion for policy makers and the public. During our review of HART reports, we found reports that contained missing, outdated, and incomplete information. According to HART, not all contract information is populated in the HART contract management system (CMS). As a result, HART management and staff relied on CMS reports⁶ that were missing project cost information. For example, we found:

Response: The auditor never obtained written assertions from HART on the subject matter included in their review. The auditor did not design the review with the proper level of assurance to come to this conclusion. Rather, the auditor audited for absolute assurance and the scope went from reviewing financial reports presented to government decision makers and the public, to covering internal ad hoc management reports.

To meet the reporting requirements and needs of different HART departments and roles on the project several different CMS cost reports have been developed with different filters applied to the costing data. For example, many of the project controls reports are intended to report costs to the FTA, these reports do not include costs that are not eligible under the terms of the FFGA. The finance department requires reports of all contracts and agreements within the fiscal year, and Project Managers reports are limited to show only costs for contracts they have access to in the database. The reports are intended to be different and only the titles of the reports described their function.

Most contract costs are directly entered by HART into CMS based on awarded contracts and agreements. However, the auditor selected several contracts that were not procured or administered by HART but paid with HART funds under MOU's with other city departments. These contract costs and other Indirect Costs which are captured by the City accounting system and HART performs a reconciliation and true-up in CMS on a monthly basis to provide a complete as possible report of all HART costs.

- Contract numbers in different reports contained different amounts. For example, in Exhibit 2.5, the contract balances in four different reports ranged from \$2.6 million to \$3.5 million.

Response: HART's Contract Management System (CMS) is a live database. Therefore the same report run at different times may yield different results if the underlying data had any changes to it. HART further advised the auditor not to compare two reports ran on different dates because it's highly likely the data will have changed.

⁶ HART information system staff reported that the CMS is a virtual, real time system, and reports extracted from the CMS will never be the same because the database contains real time changes. HART does not have any policies or practices to ensure HART data are consistent in all reports or that data are reconciled.

Additionally, HART explained to the auditor that it is not reasonable to compare reports that have different data criteria. In other words, the Forecast Cost Report and the HART Facts report exclude ineligible costs. The List of Awarded Contracts Summary as of June 22, 2015 includes ineligible costs. Cost reports provided to FTA excludes ineligible costs, therefore many cost reports by default filters those costs out.

Despite being informed otherwise, the auditors are comparing four reports that have different data, fully aware the reports will not match. The auditor did not understand and is misrepresenting the consistency of the reports reflected in Exhibit 2.5.

The table below summarizes the differences in the four reports being referenced:

CMS Report Referenced:	Report Run Date:	FTA Ineligible Cost Included:
List of Awarded Contracts Summary as of June 22,2015	8/13/2015	Yes
List of Awarded Contracts Summary as of June 22,2015	11/5/2015	Yes
Forecast Report to June 2015	7/2/2015	No
HART Facts as of June 30, 2015	7/10/2015	No

The auditors should acknowledge the reports contain distinctly separate data due to the reasons stated above or remove the statements and Exhibit 2.5 from the report.

- CMS data was inaccurate. For example, HART executed a \$100,000 professional services contract, but the expenditure report we reviewed indicated HART paid over \$146,000 under the contract. HART staff later confirmed that there was a CMS error which excluded two contract amendments that totaled \$250,000 from the CMS report.

Response: The two (2) amendments were in CMS. They were only attached as files and HART inadvertently missed updating the costing fields which revises the contract sum. HART has since made the corrections in CMS.

HART will also make the following improvement: All contracts, PO's, agreements, change orders, amendments or any other cost documents will be given to HART Document Control to be filed and reconciled with CMS at the end of the departments workflow process. If the document has not been entered into CMS as required for reporting, the document will be returned to the department to enter it into CMS and distribute so everyone knows the action is completed and in CMS. Additional CMS training will be completed for Contract Managers and reports will be created and reviewed monthly.

- Invoice data was incomplete. For instance, we found a missing invoice for \$11,344 was not properly uploaded into CMS.

Response: The report states that the invoice was missing from CMS and that the invoice data was incomplete. However, HART informed OCA this was not correct and OCA didn't fix the error.

The original invoice data was "posted" into CMS on 6/30/2015 and the contract administrator initiated a short pay on 8/28/2015. The amounts on the short pay form came directly from the amounts posted in CMS. As such, it would be impossible to process the short pay if the invoice data was not in CMS.

The final signed (HART reviewed) invoice was not scanned into CMS. This was due to the urgency HART put on pulling the hard copies of the invoices for the auditors review in September 2015, just days after the invoice was paid. The .pdf of the original invoice was attached and HART's review comments were electronically entered in the review tab of the invoice in CMS. Although the pdf of the final HART reviewed invoice was not attached into CMS, the data was "posted" in CMS and the hard copy was signed out to HART's Internal Controls Analysts for the OCA team to review. The invoice was never missing.

- Delay claim data was incomplete. More specifically, delay claims totaling nearly \$64.2 million were not reported. Most notably, the \$8.7 million delay claim⁷ filed by Ansaldo Honolulu Joint Venture⁸ (eventually settled in October 2015) was not reported. Other delay claim data was outdated and not updated for two months. (See Exhibit 2.6, pending and possible changes).

Response: This statement is inaccurate. HART tracks all change order and delay impacts via CMS and CHERPS. The auditor is characterizing a spreadsheet, which is a working document that was provided to them as backup for the delay cost impacts outlined in the December 18, 2014 cost update presented to the HART Board of Directors, as a management tool and comparing it against updated data out of CMS. This delay claim spreadsheet was never intended nor was it characterized to be used as a HART management tool to track any and all delay claims so it is incorrect to comment on the incompleteness of a working spreadsheet at a specific point in time.

- The number of executed and pending utility agreements were inconsistent and unreconciled. More specifically, the CMS report showed a total of 48 utility contracts. In contrast, the tracking spreadsheet identified 54 contracts (including 40 active utility contracts, 7 closed contracts, and 7 pending contracts).

⁷ According to HART, the \$8.7 million delay claim filed by Ansaldo Honolulu Joint Venture (See Exhibit 2.6, Core Systems Design Build O&M Contract pending claim) was included in the \$10-\$20 million escalation costs increase (See Exhibit 2.7). However, HART was unable to provide details to support the \$10-\$20 million cost estimate.

⁸ AnsaldoBreda and Ansaldo STS became a part of the Hitachi Group Company on November 2, 2015 and November 3, 2015, respectively. AnsaldoBreda is now Hitachi Rail Italy.

Response: Due to the departure of several key personnel previously tasked with managing utilities contracts, HART was in the process of verifying and reviewing all utility contract information. This review has since been completed and the CMS will be updated. The tracking spreadsheet was a working tool that was used to reconcile the data and not an official reporting tool.

- Six utility agreements were missing in a key report. Six pending contracts valued at \$107.9 million were excluded from the HART CMS forecast report.

Response: The key report referred to is the Forecast Costs by Contract. The Forecast Costs by Contract report contains only executed contracts and pending changes on the executed contracts. The six pending contracts were not executed and therefore were properly excluded from the Forecast Costs by Contract report.

- Differences in the contingency balance did not match external PMOC monthly reports. HART balances were higher than the figures reported by the PMOC. Appendix D compares the differences between HART's contingency balances with the figures reported by the PMOC. The differences between the HART balances and the PMOC balances ranged from \$149 million to \$254 million.

Response: The auditor is comparing (2) distinctly different contingency balances represented in the HART Monthly Progress Report and the PMOC Monthly Report. The HART Monthly Progress Report provides an actual remaining balance of contingency which takes the original contingency allocation of \$644M and subtracts all reductions of contingency due to executed change orders or transfers of contingency into project scope. The details of these transfers are provided in Appendix B of the report. The PMOC Monthly Report provides a projected remaining balance of contingency which takes the actual remaining balance of contingency then subtracts all changes identified on the Forecast Cost report which results in a forecasted contingency balance.

The auditor is misrepresenting the delta between the HART contingency balance and the PMOC contingency balance as inconsistent project cost information. The auditors should not be comparing an actual value to a projected value and making a conclusion about the consistency of the data because they are different. This comment should be removed and Appendix C should be supplemented with context that describes the two balances are different representations.

- State of Hawai'i GET balances did not match PMOC monthly reports. Appendix E compares the differences between the actual quarterly GET receipts with amounts reported by the PMOC. Although there may have been a timing difference between collection and reporting, the variances we found were significant. Reporting differences between the HART GET receipts and the PMOC reports ranged from \$25 million to \$492 million.

Response: HART disagrees with this assertion for the following reasons:

- All GET surcharge receipts have been properly and accurately reported in the City’s financial accounting system and agree to the amounts remitted by the State of Hawaii Department of Taxation. These receipts have been correctly reported on HART’s Monthly Progress Reports.
- GET surcharge receipts are remitted by the State Department of Taxation (DoTAX) on a quarterly basis, and is received on the last day of the month following the end of each quarter. Appendix E is incorrect since it does not properly align the quarterly reports to the quarter when the GET surcharge is actually received and reported. The GET Surcharge revenue information in the PMOC reports lag what is received and recorded in the City’s financial system C2CHERPS. To illustrate: the GET surcharge for the quarter ending June 30, 2013 would be received on July 31, 2013 and would be reported in the quarter ending September 30, 2013.
- The Project Management Oversight Committee (PMOC) is an independent entity which prepares its own monthly reports for the Federal Transit Administration. The GET surcharge information reported by the PMOC in their independent monthly report was compiled by the PMOC and may not reflect what HART has been reporting on its monthly progress reports. Any errors in the PMOC’s monthly report should be directed to the PMOC and not to HART.

Exhibit 2.5

Contract Balance Comparison (dollars in millions)

Description	List of Awarded Contracts Summary as of June 22, 2015		Forecast Report for June 2015	HART Facts as of June 30, 2015
	Run Date: 8/13/15	Run Date: 11/5/2015		
Total Contract Award	\$3,506	\$3,496	\$2,620	\$3,083
Total Executed Changes	391	356	376	N/A
Total Contract Amount	\$3,897	\$3,852	\$2,995	\$3,083

Source: OCA analysis of HART’s List of Awarded Contracts Summary as of June 22, 2015, Forecast Report for June 2015, and HART Facts as of June 30, 2015.

Exhibit 2.6**Incomplete Delay Claims Summary (dollars in thousands)**

Contract	Description	Executed Claims	Pending Changes	Possible Changes
West O`ahu/Farrington Highway (WOFH) Guideway Design-Build (DB) Contract	Change Order 068 - Delay of NTP 2, 3, and 4 – CMC Escalation	\$6,228		
WOFH DB Contract	LCC Delay-Time Related Overhead			\$8,000
WOFH DB Contract	Utility Delays			5,275
WOFH DB Contract	AIS Suspension Part 2	3,000		
Kamehameha Highway Guideway (KHG) DB Contract	Delay to Method Shaft 6	121		
KHG DB Contract	Delay (ROW)			25,000
KHG DB Contract	N/A			4,500
Airport Section Utilities Construction Design-Bid-Build Contract	Time Impact Delay – Navy ROW			802
Core Systems Design Build O&M Contract	9-Month Delay Claim		\$8,700	
Farrington Stations Group	NTP 1B Delay – Duration, Station Module Design	2,207		
Farrington Stations Group	NTP 2 Delay – Project & Interface Management Costs	400		
Total*		\$11,957	\$8,700	\$43,577

Source: OCA analysis based on HART *Project Delays Cost Summary Spreadsheet*, August 28, 2015, June 26, 2015, January 31, 2015, and December 18, 2014; CMS forecast report, September 25, 2015. (*) Numbers may not add up due to rounding.

Project cost estimates lacked supporting documentation

Cost estimating, by nature, is imprecise. Therefore, it is important to develop cost estimating methodologies and document key assumptions for the estimates. The *Guide to the Project Management Body of Knowledge* (PMBOK Guide) states that supporting documentation should provide a clear and complete understanding of how the cost estimate was derived. Supporting detail should include:

- A description of the project's scope of work.
- Documentation of the basis of the estimate (i.e., how it was developed);
- Documentation of all assumptions made;
- Documentation of any known constraints; and
- An indication of the range of possible estimates.

We did not find documentary evidence to support \$450 million of the additional cost increases as it relates to the above basic requirements.

Response: Per the auditor's request, HART staff provided supporting documents including but not limited to; Forecast and cost reports from our Contract Management System, Independent Cost estimates (ICE), Change Order reports, market analysis, and other documents which supports the Project Cost Estimate presented in October 2015 to the HART Board of Directors. While it is unclear how the auditor comes up with their \$450 million value, HART contends the report does not fairly represent the supporting documentation provided.

HART staff found the auditors struggled to understand that in addition to definitive cost estimates and budget estimates, Rough Order of Magnitude (ROM) estimates are also utilized in developing the overall Project Cost Estimate. ROM estimates, due to the lack of details available are not expected to have the same level of documentation provided with an ICE for example; however they seem to characterize any value with less supporting documentation than would be expected for a definitive estimate as insufficient to support a cost projection which demonstrates their limited understanding of sound Project Management practices. Utilization of ROM estimates are considered a best practice in Project Management for establishing a cost basis for scopes of work that are early in the stages of development or roughly defined. There are several elements of the Project Cost estimate where limited information was available and ROM estimates were provided such as; cost escalation caused by prior delays and related to future construction packages, alternative resolutions to relocate 138kV HECO lines, and various project enhancements being contemplated just to name a few. HART did communicate to the auditors which cost elements were based off ROM estimates, definitive cost estimates, or were budget estimates. HART can only assume the utilization of ROM values in the Project Cost Estimate is the basis for their statement because they did not provide any details in the report nor did they communicate anything to HART to substantiate their finding regarding the \$450M being referenced.

HART cannot demonstrate it has an effective method of tracking, monitoring, and reporting on delay claim costs

HART stated delay claims totaled \$190 million and were attributed to lawsuits, escalation costs, and other delays. Of the \$190 million, \$146 million were executed through change orders funded by the project contingency reserves. We found that the remaining costs of approximately \$44 million were either unsupported or the claim amount changed because HART does not have an effective method in tracking, monitoring, and reporting on delay claim costs. Exhibit 2.7 quantifies the delay claim costs.

Response: HART has been consistent and clear that the \$190M for delays attributed to lawsuits, escalation, and other delays is an estimate and negotiations to settle these costs with the contractors are ongoing. The escalation element remains the most variable factor in the overall estimate for delay cost. Negotiations to come to an agreed upon settlement for escalation with the contractor were unsuccessful so HART proceeded with executing a

“Provisional” change to the contractor where HART will pay only on actual escalation incurred on eligible cost. The benefit to HART is that the agency will pay only what the contractor is owed for escalation as opposed to a settlement value that could have potentially been higher than actual escalation incurred. However, until all of these costs are approved there will be a potential for the total claim amount to change.

Exhibit 2.7

Reporting Comparison of Delay Claim Costs

	December 2014 and October 2015 HART Board Meetings	HART Project Delays Cost Summary	Difference
Total Legal Delay Costs	\$45,902,918	\$39,039,250	(\$6,863,668)
Total Other Delay Costs	\$77,126,198	\$77,126,198	\$0
Escalation (Combination of Notice to Proceed & Legal)	\$49,106,403	\$30,078,065	(\$19,028,338)
Total Delay Claims Cost	\$172,135,519	\$146,243,513	(\$25,892,006)
Plus Several Remaining Claims and Escalation Actuals	\$10-20 million	\$0	\$10-20 million
Estimated Total Impact Up To	\$190 million	\$146,243,513	\$44 million

Source: OCA analysis based on HART Project Risks Update, December 18, 2014; Project Cost Update, October 15, 2015; and HART Project Delays Cost Summary, August 2015

In the December 2014 board meeting, HART provided a one-page *Project Delays Cost Summary* (spreadsheet) in support of the \$190 million in delay claim costs. As of October 2015, HART’s spreadsheet remained unchanged. However, we identified changes that were not updated because HART does not separately track and monitor delay claim costs. By updating the claim information, we found:

- \$12.2 million in additional potential delay costs related to the West O`ahu/Farrington Highway Guideway Design-Build contract⁹ that increased the delay claim from \$6.8 million to \$19 million.
- \$1 million in additional potential delay costs related to the Kamehameha Highway Guideway Design Build contract (Escalation Due to Schedule Impacts) that increased the delay claim from \$3.5 million to \$4.5 million.
- \$825,000 in overstated delay claims related to the CMS forecast report. The report removed an \$825,000 delay escalation claim for the maintenance and storage facility, but the update was not reflected in the tracking spreadsheet and not entered for two months.
- \$670,184 in overstated delay claims in the tracking spreadsheet. The tracking spreadsheet identified a \$7.5 million delay escalation claim for the West O`ahu Farrington Highway Guideway Design-Build contract, but the forecast report showed \$6,829,816.

⁹ West Oahu/Farrington Highway Guideway Design-Build contract (Delay of NTP 2, 3, & 4 – Escalation Costs)

- We also did not find details to support litigation costs of approximately \$6.9 million because HART tracks them separately as ineligible project costs.

Response: HART updates its project cost information monthly to reflect the most current information. This entire section, including sub-bullets, mischaracterizes a spreadsheet that was identified as a working document as a management tracking tool and identifying variances from the CMS.

The auditor requested support for the cost impact of delay claims highlighted in the December 18, 2014 presentation. HART provided a spreadsheet which is a working document that tracks delay costs as a snapshot at a particular point in time. That spreadsheet was never intended to be used as a HART management tool to track all delay claims. All projected changes and claim values are tracked via CMS and CHERPS which are the agency's management tracking tools for cost data and are updated monthly.

Despite our finding, the manager of Project Controls stated that the spreadsheet was never intended to be used as a management tracking tool. The Project Controls manager also stated that HART tracks and monitors delay claim costs using CMS and C2HERPS. HART provided CMS forecast reports to show how delay claims are tracked and monitored. We found that these reports are inclusive of all contracts and change orders. In one report, we identified over 490 line items that consisted of contracts with executed change orders; pending, probable, and possible changes; and claims in dispute. We question how HART can accurately identify, track, monitor, and report on total delay claim costs when these reports do not track them as separate costs.

Response: HART clearly understands the information as presented in CMS and C2HERPS reports. HART acknowledges the auditor needed further explanation. The documentation should not be disregarded simply because it was not understood by and not in a format desired by the auditor.

HART lacked adequate support for \$120 million in utility costs

Utility relocation costs were not included in the \$910 million project deficit reported by HART in December 2014. In October 2015, however, HART provided project cost updates that showed utility costs increased from \$50 million to \$120 million. See Exhibit 2.8.

Exhibit 2.8

Utility costs increase (dollars in millions)

Utility Work Description	Cost Estimates		Change	
	December 2014 HART Board Meeting	October 2015 HART Board Meeting	\$	%
Additional Clearance Conflicts with HEI High Voltage Lines	\$20	\$88	\$68	77%
HEI Utility Relocations in the City Center Segment	25	25	0	0%
Service Connection for Permanent Power	5	7	2	29%
Total	\$50	\$120	\$70	58%

Source: OCA analysis based on HART Project Risks Update, December 18, 2014 and Project Cost Update, October 15, 2015.

HART explained that they used the Rough Order of Magnitude (ROM)¹⁰ methodology to value the utility cost estimates. Although projects in the early phase generally have limited information to produce quality cost estimates, at a minimum, we expected a description of the estimate, scope and assumptions, data sources, estimating methodology and rationale, risk analysis results, and a conclusion about whether the cost estimate was reasonable.

When we requested supporting documentation for how HART reached the total cost estimates, we were told that detailed estimates were still being developed and were not available for review. HART eventually provided a draft three-page document that listed five options that totaled \$99 million. The cost estimates did not provide detailed documentation describing how it was derived; showed no evidence of any review or approval; and did not identify the factors used to estimate the \$120 million in utility costs. As a result, we question the credibility of the estimate.

Response: The auditors were informed that the \$120M (increase of \$70 million) for utility costs was based off of rough order of magnitude (ROM) estimates and that detailed estimates are still being developed. Subsequent to providing that information, HART provided limited details in draft form to support the cost for relocating the high voltage HECO lines which represents most of the \$120M cost, but was never intended to support the full value. For example, the ROM estimates were developed and carried in the budget to indicate the expected resolution value of HECO clearance issues, but do not specify whether the solution will be to relocate all aerial overhead transmission lines on new poles or to underground these same transmission lines. As of the date of

¹⁰ According to HART's Cost Estimating Procedure, a Rough Order of Magnitude Estimate (ROM) is an estimate developed to facilitate project budget and feasibility determinations. The order of magnitude estimate information is based on parametric units (e.g. route feet, lane miles, gross square feet, number of parking stalls) and other quantifiable data. Pricing is based on historical cost caps that are adjusted for project location, size or capacity differences, and cost escalations. The GAO *Cost Estimating and Assessment Guide* states that a ROM is developed when a quick estimate is needed and few details are available. Based on historical information, it is typically developed to support what-if-analyses, and can be developed for a particular phase or portion of an estimate to the entire cost estimate. The analysis is helpful for examining differences in alternatives to see which are the most feasible. Because it is developed from limited data and in a short time, a ROM analysis should never be considered a budget-quality cost estimate.

this response, negotiations continue with HECO to determine the most appropriate and economical solution. Further, HART never characterized this cost as anything more than ROM estimates, yet the auditor is representing their findings as if they were definitive estimates. The definition of a ROM estimate, as provided in their footnote, is to facilitate the project budget and determine feasibility, and to examine alternative approaches to an issue. In short, these are costs identified in the relatively early stages of development. It is premature to characterize these ROM values as “not credible” before they have been fully developed into a definitive cost estimate. The auditors should revise their statement to be reflective of the level of estimate that was provided.

We subsequently discovered the project manager responsible for the utility contracts did not know about the \$120 million cost increase.

Response: The increase was actually \$70 million (the change is from \$50 million to \$120 million as stated in this same section of the report, three paragraphs earlier and shown in Exhibit 2.8 above as well). HART informed the OCA of this error in the first draft, however, OCA never made corrections as requested.

Secondly, in the statement above, the auditor infers that the PM didn't know about the \$70 million cost increase based on a single interview with a project manager (PM) because she wouldn't express an off-the-cuff opinion based upon the contents of a presentation to the HART Board in which she did not attend nor prepare.

During the interview, on November 24, 2015, the auditor asked the PM if she agreed with the contents of the Project Cost Update Presentation to the board in October 2015. The PM explained that she hadn't attended the board meeting and was not sure what numbers or budget had been presented to the board. The auditor relied upon the oral questioning without providing documentation for the PM to review prior to opining whether she agreed with the details of a presentation to the Board.

\$46 million in estimated cost overruns for project enhancements were not supported

Like the utility relocation costs, project enhancements were not discussed when HART reported the \$910 million cost overrun and revenue shortfall in December 2014. In October 2015, however, HART reported project enhancements costs that increased from \$75 million to \$130 million. The additional \$55 million cost estimate increase included \$35 million in public highway improvements and \$20 million in additional escalators. The HART project controls manager told us that project enhancements were created to present change orders differently to stakeholders and the public. (See Exhibit 2.9 below.)

Exhibit 2.9**Project Enhancement Costs Increase (dollars in millions)**

Description	Project Status	Cost Estimates		Change	
		December 2014 HART Board Meeting	October 2015 HART Board Meeting	\$	%
Platform Safety Gates	Executed Change Order	\$28	\$28	--	--
Additional Seats	Executed Change Order	2	2	--	--
Fare Collection Systems	Solicitation	15	15	--	--
Emergency Backup Generators	Solicitation Preparation	15	15	--	--
Public Highway Improvements	Change Orders Preparation	15	50	35	233%
Additional Escalators	Solicitation Preparation	0	20	20	100%
Total		\$75	\$130	\$55	73%

Source: OCA analysis based on HART Project Risks Update, December 18, 2014; Project Cost Update, October 15, 2015; and CMS forecast report, September 2015.

We found that HART could not support \$46 million of the \$130 million in project enhancement cost estimates. Discrepancies existed between the cost estimates presented to the HART board and the documentation supporting the estimates because HART did not follow its cost estimating procedures. For example, we did not find detailed descriptions or support for:

- \$18.1 million for public highway improvements
- \$5.2 million for the emergency backup generators
- \$2.7 million for fare collection

We questioned the estimated \$20 million for additional escalators. HART provided a handwritten proposed costs document that showed two estimates which varied by roughly \$6 million with a low of \$17 million and a high of \$25 million. Higher estimates can overstate the total project costs while lower estimates can potentially result in cost overruns.

Response: All of the costs on the ROM were broken down by component of cost and the ROM was reviewed by the General Engineering Consultant. The ROM met all of the documentation requirements. It was hand written because it was a preliminary estimate of cost (which is what a ROM really is), required for budgeting purposes. The document cannot be considered wrong merely because it was not in the format that the auditor wanted to see it in.

According to the GAO *Cost Estimating and Assessment Guide*, it is imperative that all assumptions are documented so that management fully understands the conditions the cost estimate was structured on. The GAO further states that failing to do so can lead to overly optimistic assumptions that heavily influence the overall cost estimate, to cost overruns, and to inaccurate estimates and budgets.

While cost estimates are only estimates, absent detailed information, we were unable to identify all the cost elements included in the total amount. **More importantly, we could**

not assess the reasonableness and appropriateness of the methodology and assumptions used to develop some of the cost estimates.

Response: For budgeting purposes, some of the estimates were adjustments to the EAC calculation which requires minimal documentation as recommended in the GAO Best Practice Manual. The PMBOK actually allows EAC to be formulaically driven and requires no formal documentation. As HART identifies the contracting mechanism in which to solicit services to design and/or build these particular components of work (highway improvements, emergency backup generators, escalators, fare collection, etc.), detailed estimates (Independent Cost Estimates (ICEs)) are generated prior to the release of that particular solicitation (future work) or negotiated change order (current work). The auditor was provided several examples of HART's ICE format and the level of detail provided meets industry-standard estimating procedures and quality standards. Because these components of work are included in a contract package (the Airport Guideway and Stations contract or the West Oahu Farrington Highway contract for example), the detailed ICEs are included within those packages.

Escalation cost¹¹ estimates were not calculated by using a specific factor

HART increased its escalation cost estimates by \$195 million, from \$45 million in December 2014 to \$240 million in October 2015. HART attributed the increase to extraordinary market conditions. During the audit, HART staff was unable to explain the methodology used to support these cost estimates. We were told that HART did not use a specific factor to calculate the \$240 million in escalation costs and that these costs are subsets of the total escalation within the project costs.

HART claims that it has procedures and methodologies in place to forecast escalation that is based upon historical data as well as using the latest bid results, other agency procurement results, market studies, and independent economic reports, etc. When we asked for evidence to substantiate the \$240 million escalation cost estimates, however, there was no documentation to support how the \$240 million was derived. HART was also unable to provide a detailed breakdown of escalation costs for the total \$6.5 billion project cost.

Consequently, we were unable to verify HART's methodology to forecast escalation costs and the reasonableness of the additional escalation costs because the amounts were not calculated by using a consistent and specific factor. The exhibit below shows the unsupported cost increase.

¹¹ Escalation costs represent cost increases projected by a contractor or HART when estimating work to be completed at a time in the future.

Exhibit 2.10**Escalation Costs Increase (dollars in millions)**

Description	Cost Estimates		Change	
	December 2014 HART Board Meeting	October 2015 HART Board Meeting	\$	%
Cost Escalation	\$45	\$240	\$195	433%

Source: OCA analysis based on HART Project Risk Update, December 18, 2014; and Project Cost Update, October 15, 2015.

Response: HART has procedures and methodologies in place to prepare cost estimates and forecast escalation (a difficult task given ongoing construction market fluctuations in Honolulu), based upon historical data as well as using the latest bid results, other agency procurement results, market studies, and independent economic reports (e.g., Rider Levett Bucknall Quarterly Reports).

The statement that “HART staff was unable to explain the methodology used to support these cost estimates” is not a true statement. HART provided detailed explanations and extensive documentation to the auditor.

HART underreported GET county surcharge forecasts

In 2014, HART projected a GET revenue shortfall in the range of \$80 to \$100 million and attributed the shortfall to a coding error by the State of Hawai'i Department of Taxation. The error resulted in a \$9.9 million distribution error which was compounded annually over 10 years for a total of \$100 million.

We requested information related to the \$100 million GET revenue shortfall and analyzed the spreadsheets provided by HART. The HART spreadsheets showed how GET county surcharge receipts were tracked and how revenues were projected. We found that HART's revenue forecasts were higher than reported. Consequently, HART underreported its projected shortfall amount by approximately \$41 million.

HART executive management knew the amount was higher than the \$100 million reported, but did not report its projections accurately to the board in December 2014.

Response: HART disagrees with this statement.

The spreadsheet HART provided to the City Auditor was a comparison of actual GET surcharge receipts to the amounts per the financial plan of the Full Funding Grant Agreement. The City Auditor's recalculation of the “plan” amount based upon corrected information received from the Hawaii State Department of Taxation (DoTAX) resulted in a reduction of \$141 million to the original “plan” amount.

In HART's analysis of the impact of the DoTAX error to the planned GET surcharge receipts, it reviewed the actual GET amounts received to date, which were increasing year-over-year. It also considered economic information on Hawaii's economy as

reported by the Council of Revenues, State Department of Economic Development and Tourism, and the Hawaii Tourism Authority which all indicated that Hawaii's economy was strong and tax revenues would continue to grow going forward.

Based on its analysis, executive management conservatively reduced the estimated impact of the DoTAX error by \$41 million, which represented only 1.2% of the original \$3.291 billion plan amount. Therefore, the decision by HART executive management was a financially prudent updated estimate of GET Surcharge revenue going forward.

Improved Financial Management and Planning Are Needed

While the FTA does not require submittal of updated financial and operating plans after the award of a full funding grant agreement, it does retain the right to ask for updated financial and operating plans if any significant changes to the project occur after the funding grant agreement is signed.

According to the FTA *Guidance for Transit Financial Plans*, sound financial planning ensures the financial health of transit agencies and affects the quality of service provided. Financial and operating plans serve as a fundamental tool for management and policy makers to make critical decisions, especially for a project of this magnitude. Consistent with best practices, the plans should therefore be regularly updated to reflect the most current financial condition of the project.

A HART executive stated that the outdated plans are not an impediment to HART operations. According to the executive, HART is fulfilling its reporting requirements; updating the financial and operating plans are contingent upon the passage of the GET county surcharge extension¹² by the city; and that FTA has not established a specific timeframe requirement for the financial updates.

Another HART executive stated a formal update requires HART to go through a lengthy process that is subject to the review and approval of key stakeholders, including the HART Board of Directors, the project management oversight consultant, and the FTA.¹³ We believe this reasoning should not delay HART's efforts to update its financial and operating plans. Without current financial and operating plans, HART management, policy makers, and decision makers will be unable to make cost-effective decisions to ensure the project is completed efficiently, effectively, and economically.

Response: The FTA instructed HART to update the Financial Plan. The deficiency related to the lack of projected funds. Therefore, the FTA wanted a revised Financial

¹² At the time of our interview, the GET county surcharge extension was still subject to the adoption of bill 23 by the city council.

¹³ According to HART, the FTA instructed the agency to submit a revised financial plan because of a deficiency related to the lack of projected funds. In order to revise the plan, HART noted that it sought to extend the GET surcharge as a viable finding source. HART also noted that the FTA held off any further action until HART could demonstrate that it had the financial capacity to complete the project. As a result of the GET extension, the FTA has scheduled a full budget review of HART's updated financial plan at the next risk refresh meeting on March 30, 2016.

Plan. In order to revise the financial plan, HART needed a viable funding source. HART sought to extend the GET and informed the FTA of this. The GET extension would provide sufficient funding to complete the project. The process of getting the extension was lengthy and final city approval took nearly a year from City Council introduction on 3/12/2015 (City Council approved the extension on 1/28/2016) through Mayoral approval on 2/1/2016.

FTA held off of any further action until HART could demonstrate that it had the financial capacity to complete the project. As a result of the extension being approved, the FTA has scheduled its next risk refresh (that includes a full budget review) for March 30, 2016 and HART is able to submit for review an updated Financial Plan.

Chapter 3: HART Needs to Improve Project Management and Contract Administration

Summary

Project management and contract administration controls can be improved. More specifically, Honolulu Authority for Rapid Transportation's (HART) Project Management Plan (PMP) and its subsidiary plans are outdated and unreliable as decision-making tools. HART made concessions to a single contractor; did not perform quantitative analysis to justify a major decision to repackage a bid for nine stations in the Westside Stations Group; and paid \$1.5 million in stipends to unsuccessful bidders without knowing the bidders' actual costs. HART is also paying for vacant office space. Contract administration controls need to address invoice payments, procurement file documentation, and prevent improper payments.

Background

On December 18, 2014, HART's chief executive officer (CEO) reported to the HART Board of Directors that the total project costs will increase to \$5.8 billion, an increase of \$600 million in additional costs and a \$310 million funding shortfall. HART attributed project cost increases to three separate events: lawsuits that resulted in delay claims, higher than expected bid for the construction of the nine Westside stations, and the unfavorable general excise tax (GET) county surcharge revenue receipts.

Ten months later, on October 15, 2015, total project costs increased to \$6.5 billion. The exhibit below provides details.

Exhibit 3.1

Factors that Contributed to the Project Cost Increase and Revenue Shortfall (dollars in thousands)

Description	Original Estimates	Cost Estimates	
	June 2012 FFGA Financial Plan	December 2014 HART Board Meeting	October 2015 HART Board Meeting
Project Capital Costs	\$4,949,000	\$4,948,000	\$4,948,000
Estimated Costs Increase:			
Lawsuits and Delay Claims	--	\$190,000	\$190,000
Utility Relocations	--	50,000	120,000
Project Enhancements	--	75,000	130,000
Cost Escalation	--	45,000	240,000
Allocated Contingency	--	240,000	240,000
Unallocated Contingency	--	--	299,000
Debt Financing Costs	215,000	215,000	310,000
Total Estimated Costs Increase*	\$5,163,000	\$5,763,000	\$6,477,000
Estimated Revenue Shortfall:			
GET Projected Shortfall	--	\$100,000	\$100,000
FTA 5307 Fund Reduction	--	210,000	210,000
Total Estimated Revenue Shortfall	\$0	\$310,000	\$310,000

Source: Office of the City Auditor (OCA) analysis based on HART Project Risks Update, December 18, 2014 and Project Cost Update, October 15, 2015.

(*) Numbers may not add up due to rounding.

Construction cost overruns are not unusual

Our comparison of construction costs for other capital rail projects indicated cost overruns frequently occur. The following data table features a comparison of capital costs among 20 heavy and light rail projects.

- The first 8 services (Atlanta, Baltimore, Buffalo, Miami, Pittsburgh, Portland, Sacramento, and Washington, D.C.) were rail projects that initially established heavy and light rail services in the respective urban areas. While one project was completed under budget, the others had cost overruns that ranged from 13 percent to 83.1 percent
- The remaining 12 heavy and light rail projects were extensions and built to integrate the new projects into already established heavy rail transit services. One heavy rail project was completed under budget. The other 11 projects had cost overruns that ranged from 3.3 percent to 35.8 percent.

Exhibit 3.2**Capital Costs Comparison of Heavy and Light Rail Projects**

Project	Year Project Completed	Total Capital Cost (dollars in millions)*		Cost Overruns (%)
		Original FFGA	At Completion	
1990 FTA Report**				
Heavy Rail				
Atlanta	1979	\$1,723	\$2,720	57.9%
Baltimore	1983	\$804	\$1,289	60.3%
Miami	1984	\$1,008	\$1,341	33.0%
Washington, D.C.	1976	\$4,352	\$7,968	83.1%
Light Rail				
Buffalo	1984	\$478	\$722	51.0%
Pittsburgh	1984	\$699	\$622	-11.0%
Portland	1986	\$172	\$266	55.0%
Sacramento	1987	\$165	\$188	13.0%
2003 FTA Report				
Heavy Rail				
Baltimore-Johns Hopkins	1994	\$311	\$353	13.7%
Chicago-SW Transitway	1993	\$438	\$522	19.1%
San Francisco-Colma	1996	\$172	\$180	4.9%
Light Rail				
Baltimore-BWI Hunt Valley	1997	\$110	\$116	6.2%
Portland-Westside Hillsboro	1998	\$887	\$964	8.7%
St. Louis-MetroLink	1993	\$456	\$464	1.8%
2007 FTA Report				
Heavy Rail				
Chicago-Douglas Branch	2005	\$473	\$441	-6.8%
San Francisco-SFO	2003	\$1,186	\$1,552	30.9%
Washington-Largo	2004	\$413	\$426	3.3%
Light Rail				
Minneapolis-Hiawatha	2004	\$513	\$697	35.8%
Pittsburgh-Stage II Reconstruction	2004	\$363	\$385	6.0%
San Diego-Mission Valley East	2005	\$427	\$506	18.7%

Source: Office of the City Auditor (OCA) analysis based on information obtained from the *Urban Transit Rail Projects: Forecast Versus Actual Ridership and Cost*, 1990, prepared by Dr. Don H. Pickrell for the Urban Mass Transit Administration and the FTA's *Predicted and Actual Impacts of New Starts Projects, 2003 and 2007*.

(*) All dollar amounts shown represent adjusted real values.

(**) The FFGA program was established after the projects featured in the 1990 study.

Additional HART rail project cost overruns and shortfalls are likely

One of HART's stated goals is to preserve the stewardship of resources by maintaining public trust through the prudent and transparent use of financial, human, and environmental resources. HART can demonstrate good public stewardship by well-supporting its management decisions.

In addition to deficiencies in financial management and planning, we found shortcomings that could impact the project's long-term financial viability, increase the likelihood of additional cost overruns, and reduce the funds available to the rail project. Specifically, we found:

- HART does not have an adequate contingency reserve.
- Cost controls were insufficient to control cost increases.

- Updating the project management plan, including the subsidiary plans, was never made a priority.
- Inappropriate concession (*retainage* payments) with a contractor was made.
- Cost estimates and potential savings were lacking in the decision to repackage the Westside Stations Group.
- HART lacks policy and procedures on administering stipends and has paid \$1.5 million without documentation of unsuccessful bidders' actual costs.
- HART is paying for vacant office space.
- Contract administration needs to be improved.

The project management oversight consultant (PMOC) meets with HART management and staff monthly to discuss increased costs and to ensure that cost issues are proactively addressed. In December 2014, the PMOC reported it provided numerous cost mitigation recommendations that HART should consider implementing. Despite the recommendations, PMOC noted that minimal cost containment measures had been accomplished by HART and the trend of minimal cost containment was alarming.

Response: Regarding the implementation of primary and secondary mitigation measures, HART and the PMOC have discussed dozens of options each and every month and continue to do so as a matter of standard practice. The audit report cites the December 2014 PMOC Report wherein it says “the PMOC reported that it provided numerous cost mitigation recommendations that HART should consider implementing.” HART agrees that the PMOC and HART discussed several cost mitigation measures during the fall of 2014 after the WSSG bid, most of which had already been developed by HART before the PMOC provided their renewed list of items. However, many of these items were discounted or eliminated due to several reasons (a deletion of scope, e.g., deleting Ho’opili Station, is considered a breach of the FFGA contract; eliminating architectural features, e.g., the embossed guideway columns at the stations would be a violation of the promises made during public design outreach sessions; or removing all escalators at all stations was considered too great of an impact to the traveling public to have been worth the cost savings).

The PMOC Report did not cite specific cost mitigation measures that HART refused to implement – because this never happened. To the contrary, even now HART and the PMOC continue to look for ways to mitigate rising costs even after the approval and implementation of the GET extension.

HART does not have an adequate contingency reserve

Normally, the amount of contingency required for a project decreases with the project’s progress. Over time, as costs become more definitive, the contingency amount should

decrease. However, HART increased its allocated and unallocated¹⁴ contingency funds by \$539.4 million because it does not have an adequate contingency reserve.

- In June 2012, HART reduced its original \$866 million contingency by \$222 million to \$644 million after it submitted its 2012 *Full Funding Grant Agreement (FFGA)* financial plan to the Federal Transit Administration (FTA).

Response: When HART reviewed the first draft of this report HART informed the auditor that this statement mischaracterized the change in contingency in June 2012. However, the auditor refused to incorporate HART's corrections.

Normally, the amount of contingency required for a project decreases with the project's progress. The \$222 million reduction in contingency that the auditor mentioned was actually a routine reduction in contingency required in line with the normal evolution of a New Starts project moving from Final Design to entering an FFGA where a reduction of contingency is expected. As required of a potential new starts grantee the FTA will perform a risk refresh to review the scope, schedule, and cost documentation to assess their ability to manage the budget and schedule of the project before entering into a FFGA. This process took place from April 2012 through September 2012, as required by the FTA the PMOC provided a comprehensive Risk and Contingency Report under Operating Procedure (OP) 40 where the PMOC states among many other instances supporting HART's cost estimate, "The grantee's total project estimate of \$5,122 million, including \$644 million in total contingency and \$173 million in finance charges, is acceptable to support an FFGA."

- In July 2012, HART established a \$76.1 million *Known Changes*¹⁵ contingency account to separately fund costs that would have been covered by unallocated contingency reserves.
- In October 2012, the PMOC noted that "significant contingency reduction occurred, to a point where contingency was below accepted control levels" upon HART's submittal of the updated cost estimate in 2012 to support the FFGA application. Subsequently, the PMOC acknowledged that HART "has implemented efforts to recover contingency levels through cost reduction measures, value engineering, and revised project delivery strategies."

¹⁴ Unallocated contingency provides a funding source to cover unknown but anticipated additional project execution costs and uncertainty due to risk factors such as unresolved design issues, market fluctuations, unanticipated site conditions and change orders. It also covers unforeseen expenses and variances between estimates and actual costs.

¹⁵ HART tracks *Known Changes* separately from the Project contingency established under the FFGA. *Known Changes* are executed through budget transfers. According to HART, *Known Changes* are recognized as project scope and not contingency. HART management explained that the *Known Changes* were identified as pending changes that were subject to final negotiations with contractors. Upon our review of *Known Changes*, we found that HART used these reserves to fund change orders that included a \$20.1 million delay claim, \$6.8 million in non-rail escalation and rail mark-up costs, and \$2.6 million budget transfer into allocated contingency, contrary to the intended use of this fund.

Response: When HART reviewed the first draft of this report HART informed the auditor that this statement mischaracterized the PMOC's comments made in the October 2012 Monthly Report. However, the auditor refused to incorporate HART's corrections.

The auditor is misrepresenting the PMOC's comments made in the October 2012 Monthly Report and inaccurately describing the genesis of the "known" changes contingency.

In the October 2012 Monthly Report the PMOC states "Upon submittal of the updated cost estimate by the grantee in spring 2012 to support the FFGA application, it was observed that significant contingency reduction occurred, to a point where contingency was below accepted control levels." As required of a potential new starts grantee the FTA will perform a risk refresh to review the scope, schedule, and cost documentation to assess their ability to manage the budget and schedule of the project before entering into a FFGA. This process took place prior to April 2012 even though the auditors are characterizing these comments as being made in October 2012. Subsequent to this Risk Refresh, HART implemented cost containment strategies, value engineering measures, and improved project controls relating to cost and schedule as noted in the same October 2012 PMOC Monthly report. Prior to this report, in September 2012, as required by the FTA the PMOC provided a comprehensive Risk and Contingency Report under Operating Procedure (OP) 40 where the PMOC states among many other instances supporting HART's cost estimate, "The grantee's total project estimate of \$5,122 million, including \$644 million in total contingency and \$173 million in finance charges, is acceptable to support an FFGA." The auditor's allegation that HART's contingency reserve was insufficient at the time the FFGA was executed is false and any comments made implicating otherwise should be removed from the report.

- From May 2013 through July 2013, the PMOC expressed concerns "with the adequacy of the remaining contingency given the anticipated costs due to the project delays." In August 2013, the PMOC noted a concern on "whether there is sufficient contingency remaining, given the status of the project."

Response: When HART reviewed the first draft of this report HART informed the auditor that this statement mischaracterized the PMOC's comments made in the Monthly Reports referenced. However, the auditor refused to incorporate HART's corrections and changed the dates of the reports referenced in the final report draft to make it more difficult for HART to respond to the final draft.

The auditor is misrepresenting the statements made from the various PMOC Monthly Reports from April 2013 to August 2013 and the recommendation referenced from the November 2014 as support for their assertion HART underfunded contingency in 2012. The auditor correctly points out the PMOC's concern with contingency however they misrepresent these comments by ignoring the context in which these statements were made in the PMOC Monthly

Report. The implication that HART underfunded contingency in 2012 is false and that point has been addressed in responses provided in other areas of this report. The reality is during the referenced time frame of these comments HART experienced some unforeseen issues with significant cost implications that are relevant to the comments made by the PMOC at those times.

Prior to the April 2013 report, HART was suspended from all ground disturbing activities in order to complete the Archeological Inventory Survey (AIS) along the alignment of the Project. This caused a significant delay to the Project that was unanticipated and not accounted for in the baseline budget established under the FTA. As mentioned in the PMOC Monthly Reports from April 2013 through August 2013, the PMOC is stating concerns with the adequacy of the remaining contingency with regards to the anticipated cost due to project delays. Quantifying the cost impact of the AIS delay was a complicated endeavor because ultimately HART had very little control on when the suspension would be lifted as that authority resided with the State Supreme Court. This was a significant risk item during that time period that the PMOC and HART appropriately address this in their Monthly Reports respectively. It is also clear the PMOC comments are not related to an alleged funding shortfall in the contingency level in 2012.

The auditors should revise their statement in order to not misrepresent the PMOC's comments and remove any implication that contingency was underfunded in 2012.

- In the September 2014 PMOC monthly report, the PMOC recommended that "strong controls must be put in place immediately to avoid future rapid contingency reductions." It also added "the frequency and the levels of project management to which these statistics are reported should be improved and monitored monthly."

Response: When HART reviewed the first draft of this report HART informed the auditor that this statement mischaracterized the PMOC's comments made in the Monthly Reports referenced. However, the auditor refused to incorporate HART's corrections and changed the dates of the reports referenced in the final report draft to make it more difficult for HART to respond to the final draft.

The recommendation made by the PMOC in September 2014 is also unrelated to contingency established in 2012. In August 2014, the FTA completed their 2014 update Risk Refresh report and according to their risk model they concluded the Project would end up approximately 5% over budget. One of their recommendations as a result of their risk modeling was to implement strong controls to mitigate against rapid contingency usage. This recommendation is repeated in the November 2014 PMOC Monthly Report and 2014 Risk Refresh is cited in the as origin of this recommendation. Further, in August 2014, the Westside Station Group construction bids came in over 60% higher than budgeted. This signaled there had been significant changes in the construction

bidding market that would potentially impact the remaining construction work to be procured. The PMOC also notes this as a key issue in the November 2014 report specifically with regards to contingency.

- In the December 2015 PMOC monthly report, the PMOC estimates \$303 million remaining in total contingency. HART's forecast report, as of December 2015, identifies \$330 million in executed change orders and projects \$301 million in pending, probable, and possible changes.

Response: This analysis of the PMOC's December 2015 monthly report was not included in the OCA's first draft of this report. It was added in the final report draft to make it more difficult for HART to respond to the final draft.

In addition to improperly adding the new analysis, the OCA has repeatedly misunderstood and misquoted data in other PMOC reports. The OCA is comparing the PMOC's reported contingency to HART's internal management reports without understanding the basis of either report or explaining how the two reports should be related.

HART did not communicate the need for additional contingency until December 2014. In December 2014, HART increased the underfunded contingency reserves to \$884 million. In October 2015, HART increased its reserves to \$1.18 billion.

The HART contingency increases from \$644 million (13 percent) in June 2012 to \$884 million (15.9 percent) in December 2014 to \$1.18 billion (19.2 percent) in October 2015 were part of the reported project shortfalls. The last increase of \$539.4 million (allocated and unallocated) was more than the allocated contingency under the final FFGA, and may have been excessive.

Response: There are several errors in the audit report when characterizing the Contingency Percentage of Project Capital Costs. The statement with regards to the "last increase of \$539.4M" being more than the contingency under the FFGA is false. Further, the statement is inaccurate and contradictory to other statements weaved throughout the report regarding contingency.

The report acknowledges, in several sections including in Exhibit 3.3, the contingency under the FFGA Financial Plan is \$643.6M. Then the report states the additional contingency budgeted in the last cost update of \$539.4M is more than the contingency under the FFGA.

Statements regarding contingency and Exhibit 3.3 should be revised to be factually accurate or removed.

Exhibit 3.3**Contingency Reserves Increase (dollars in thousands)**

Description	Original Estimates	Cost Estimates		Change from Original Estimates	
	June 2012 FFGA Financial Plan	December 2014 HART Board Meeting	October 2015 HART Board Meeting	\$	%
Project Capital Costs	\$4,949,000	\$4,948,000	\$4,948,000		
Lawsuits and Delay Claims	--	190,000	190,000		
Utility Relocations	--	50,000	120,000		
Project Enhancements	--	75,000	130,000		
Cost Escalation	--	45,000	240,000		
Allocated Contingency	--	240,000	240,000		
Unallocated Contingency	--	--	299,000		
Total Project Capital Costs*	\$4,949,000	\$5,548,000	\$6,167,000	\$1,218,000	25%
Allocated Contingency	\$540,100	\$782,000	\$782,000		
Unallocated Contingency	\$101,900	\$102,000	\$401,000		
Allowance	\$1,600	--	--		
Total Contingency	\$643,600	\$884,000	\$1,183,000	\$539,400	84%
Contingency Percentage of Total Project Capital Costs	13.0%	15.9%	19.2%		

Source: OCA analysis based on the FFGA financial plan, June 2012; HART Project Risks Update, December 18, 2014; and Project Cost Update, October 15, 2015; PMOC Monthly Report, May 2013. (*) Numbers may not add up due to rounding.

Cost controls were insufficient to control cost increases

We found deficiencies related to HART's cost controls¹⁶ that, in our opinion, partly contributed to the significant cost increases. In March 2014, the PMOC performed an initial review of information provided by HART and suggested a possible recommendation for HART to develop aggressive cost containment measures. In December 2014, HART announced the \$910 million project cost overrun and revenue shortfall. The PMOC reported that, in February 2015, HART started implementing some cost containment measures. Although HART claims that evaluating and developing cost containment opportunities and cost reduction strategies were ongoing activities, we believe that HART could have taken a more proactive approach in implementing cost containment measures. Instead, HART reacted by requesting more funding.

Response: The auditor provides no proof that cost reduction efforts were not in place. The auditor did not review any of HART's cost containment documents. The recommendation is quite broad and unsupported by evidence. Instead, the auditor is misrepresenting the comments made by the PMOC in the February 2015 Monthly Report and states an objectionable position that HART sought more funding instead of being proactive in cost containment.

In the February 2015 PMOC report referenced, the PMOC states cost containment and cost reductions measures were "recently implemented" and they continue with providing

¹⁶ According to the PMBOK guide, control costs is the process of monitoring the status of the project, to update the project budget, and managing changes to the cost baseline.

a bulleted list of said cost containment measures. This should not be interpreted as a complete list of all cost containment measures implemented but what the PMOC states are recently implemented measures that were developed, some of which in coordination with PMOC. The PMOC's decision to provide the list of cost containment measures recently implemented in the February 2015 report should not suggest there was a delay in implementing other cost containment prior to that report. By stating the PMOC reported HART "started" implementing cost containment measures is untrue and the auditor should remove this comment from the report.

HART has been and continues to be very proactive in evaluating and implementing cost containing and cost mitigating measures on the Project. For example, the PMOC states in their Monthly Reports as early as 2012, "...the grantee has implemented efforts to recover contingency levels through cost reduction measures, value engineering, and revised project delivery strategies. In addition, strong controls have been put in place to avoid future rapid contingency loss". In 2013, in the midst of the AIS delay, the PMOC acknowledges in their Monthly Report HART's efforts to maximize economies of scale and reduce interface needs to achieve cost and schedule benefits by repackaging contract packages. HART's decision to cancel and repackage the Westside Stations Group procurement in August 2014 was a repackaging strategy that resulted in over \$40M in savings to the project that would not have been realized had HART proceeded with the award of the original contract package. In September 2014 HART provided a comprehensive response to the FTA's 2014 Risk Refresh update detailing a number of cost and risk mitigation actions HART has taken, cost containment measures implemented or to be implemented, and provided a response to each of FTA's recommendations with an action plan. Despite any of the previously mentioned points, this disputes the implication HART has not taken a proactive approach to cost containment and cost mitigation, the auditors are entitled to their opinion. However, it is erroneous and deceitful to suggest HART's primary reaction to address the Project's cost increases was to request more funding. The auditor should remove this assertion from the report.

We also found that not all project managers compare actual costs against their budgets even though this comparison is an important cost control mechanism. **One project manager said that she relies on project controls to monitor her contract costs.** The project is at risk of additional cost overruns when project managers do not pay attention to project costs and budgets. In our opinion, project managers should continuously compare actual costs against budget amounts, should analyze any variances, and take corrective actions before costs go higher than expected.

Response: Project Controls provides support to the Project Managers through preparation and issuance of various cost reports which the Project Managers use to manage contract costs. Management of contract costs includes monitoring actual costs to contract amounts, identification of issues that may have a cost impact, and managing the change process. **The auditor is using evidence obtained from a single interview with one project manager to support this claim.** The auditor inappropriately asserts that this issue applies to more than one project manager although the issue was not investigated further.

Updating the project management plan, including subsidiary plans, was never made a priority

A Project Management Plan (PMP) is a formal, approved document that guides how a project is to be executed, monitored, and controlled. It includes subsidiary plans that provide guidance and direction for cost management planning and control. According to the FTA *Project and Construction Management Guidelines*, a PMP is required by statute for major capital projects, provides a functional, financial, and procedural route map for the grantee to effectively and efficiently manage on-time, within-budget, and at the highest quality level in its unique project environment. The FTA requires PMPs to be submitted initially prior to preliminary engineering and updated through subsequent project phases.

Moreover, best practice recommends continuous updates to the PMP because it can provide greater precision with respect to schedule, costs, and resource requirements to meet the defined project scope. We found that HART has not updated its PMP, including the subsidiary plans, despite considerable changes in project schedule, costs, and staffing since the federal FFGA was issued by the FTA in December 2012.

Response: When HART reviewed the first draft of this report HART informed the auditor that this statement was not accurate regarding the FTA's Best Practices. However, the auditor refused to incorporate HART's corrections.

The FTA best practice doesn't recommend continuous updates to the PMP. The FTA best practice is to update the PMP as the project enters a new phase (i.e. from final design into FFGA).

Updating the PMP and its subsidiary plans¹⁷ has not been a high priority for HART. According to the PMOC, the PMP update has been in progress prior to March 2013. The PMOC indicated that it was critical for HART to update the PMP and its subsidiary plans. We believe that an outdated PMP and its subsidiary plans could hinder management's ability to effectively guide the project to completion in an economical, effective, and efficient manner.

Response: Many of the plans identified in the audit report were identified to be updated in August 2014. This happened to be right before the 9 station bid package bid proposals were received and greatly exceeded the original estimates. At this time HART, working with its partners, had to analyze and restructure the program execution method in order to contain cost. Re-structuring the Contract Packaging Plan (one 9-station package into three 3-station packages) resulted in numerous changes including

¹⁷ Subsidiary plans include the quality management plan; real estate acquisition and management plan; bus fleet management plan; rail fleet management plan; safety and security management plan; safety and security certification plan; configuration management plan; staffing and succession plan; risk and contingency management plan; operating plan; force account plan; mitigation monitoring program; interface management plan; contract packaging plan; claims avoidance plan; construction management plan; contract resident engineer manuals; and project procedures.

re-organization of staffing and consultant services to manage the separate contracts, re-allocation of funding to cover higher costs, update of the master schedule and the risk and contingency management plan. It was also during the 2015 year that the FTA performed the Triennial Review of HART and DTS. Also, during this time, City Council took up a resolution to remove section 5307 monies from the HART project funding.

Staff has been working to update the program plans and keep up with the changes. Draft revisions have been created and shared with the PMOC and FTA, but are awaiting final sign-off for a variety of measures. For example, the Financial Plan update was on-hold until it became apparent the GET would be extended. The update of the financial plan impacted the contract packaging plan as HART was now facing a budget deficit that would require major scope reductions had the GET not been extended. Staff created numerous draft schedules to match the contract packaging plan options along with estimated costs. The project management plan has been updated in draft form, but pending the update to the CPP and Financial Plan, the draft is waiting for final approval. HART will be entering the Risk Refresh Workshop with the FTA at the end of March and believes that comments and reports resultant of that workshop will help finalize the plans.

Exhibit 3.4 Key Management Plans

Plan	Description	Original Issue or Last Update	Date Identified as an Update Item	Status as of December 2015
Contract Packaging Plan (CPP)	The CPP describes each third party contract which will be undertaken by HART to implement the Project.	Approved for FFGA (2012)	August 2014	Updating
Financial Plan	This document provides a summary of the capital costs and funding sources associated with both the Project and the city's ongoing capital needs for its existing public transportation system, including the results of three sensitivity analyses and potential mitigation strategies. It also describes the city's plan to fund the operations and maintenance costs associated with the Project, TheBus, and TheHandi-Van services.	June 2012	August 2014	Updating
Master Project Schedule (MPS)	The MPS is the primary schedule developed by the Project team which includes and coordinates the work of the various project segments and contractors.	Approved for FFGA (2012)	August 2014	Updating
Operations and Maintenance Plan (OMP)	The OMP presents the capacity of the city to operate and maintain the integrated transit system.	June 2012	August 2014	Updating
Project Management Plan (PMP)	The PMP establishes the framework for administering implementation of the Project. It describes and documents the overall management approach for the Project and is used both as a management tool to guide HART and as an informational overview for project participants and interested parties.	July 17, 2012	Not Identified	Updating
Risk and Contingency Management Plan (RCMP)	The RCMP describes the approach that the project will adapt to identify risk, assign the likelihood of occurrence of each risk, and quantify the associated potential impact on project delivery objectives if it occurs. It provides senior management with a systematic process for identifying, assessing, evaluating, managing, and documenting risks that could jeopardize the success of the project.	September 26, 2011	September 2013	Updating

Source: HART Standard Terms Definitions and Acronyms, April 19, 2012; HART Monthly Progress Report, December 2015; and PMOC Monthly Report, December 2015.

Waiver concessions were made

Pursuant to the Hawai'i Revised Statutes §103-32.1, city contracts allow HART and the city to withhold up to 5 percent of a contract amount to ensure that the contractor's performance is satisfactory and acceptable. Once the city is satisfied with the project or is satisfied with any re-work the contractor is asked to do, the city will release the retained amount (*retainage*) to the contractor.

For one contract, the rail prime contractor, Kiewit, requested a partial release of the retained amount. On March 6, 2013, HART waived the five percent *retainage* for three construction contracts with Kiewit¹⁸.

This concession was made for three specific change orders totaling \$26 million and the total amount waived was about \$1.3 million. Actual expenditures totaled \$23 million, of which the total amount actually waived was \$1.1 million.

According to HART managers, they approved the waiver as an incentive for Kiewit to stay on the job. The approval reduced Kiewit costs during the period when the rail project work was suspended. The suspension occurred after an August 2012 Hawaii Supreme Court decision caused the project work to halt so archaeological surveys could be completed. In September 2013, project work restarted.¹⁹

By waiving the 5 percent *retainage*, HART and the city lost some leverage to ensure Kiewit performed satisfactorily under its contracts. The city also risked being accused of favoritism or bias towards one contractor.

Response HART did not make concessions to a single contractor.

In the examples cited, HART determined that retention did not apply.

AIS Suspension Delay Change Orders

During the court-ordered suspension, no construction work could be performed. HART paid the contractor for only actual, incurred costs for them to remain mobilized during the suspension.

Notice-to-Proceed Delay – Cost Escalation Change Orders

HART withheld retention for the work completed in accordance with the General Conditions. The value of that work completed was then subject to cost escalation. The escalated costs did not represent payment for work completed and was therefore not subject to retention.

¹⁸ The contract documents indicate Kiewit requested a partial release of *retainage* on only one contract prior to HART issuing the approval memorandum for all 3 Kiewit contracts.

¹⁹ According to HART managers, the term *waived* was an error and the wording should have been *retention will not be withheld*.

Per HART General Conditions, 5% retainage is required to be withheld for progress payments to the Contractor for work completed up to 50% of the value of the contract. As of this date, HART has retained over \$15.7 million on invoices submitted by Kiewit. That is almost 15 times more than the \$1.1 million retainage that the city auditor cites. The \$15.7 million retainage will only be released when the Kiewit contract has been satisfactorily completed and contract final acceptance is achieved. HART determines whether the contract has been satisfactorily completed and controls when the retained amounts will be released.

HART erred when using the term “waived” in the change order. The wording that should have been used is - “retention will not be withheld.”

Retainage payments are mandated and controlled by contract terms and conditions. Retainage amounts and subsequent release of retainage (payments) are made to protect the City from being in a position of having insufficient funds to have a complete and usable facility, when the contract terms are fulfilled.

Cost estimates and potential savings were lacking in the decision to repackage the Westside Stations Group²⁰

HART was unable to demonstrate that it prepared a reasonable level of cost-benefit analysis to justify its decision to repackage the Westside Stations Group prior to the rebid. Our review of the Westside Stations Group repackage strategy found that HART lacked sufficient documentation to quantify the expected costs and potential savings when the decision was made to cancel the original bid. Consequently, HART assumed significant risks that could have driven contract costs higher and made future savings unattainable.

Response: HART provided extensive documentation to support the fact that quantitative analysis was performed within the legal constraints required at each stage of the bid cancellation. However, the auditor lacked the technical knowledge to apply the judgment required to conclude there was a finding.

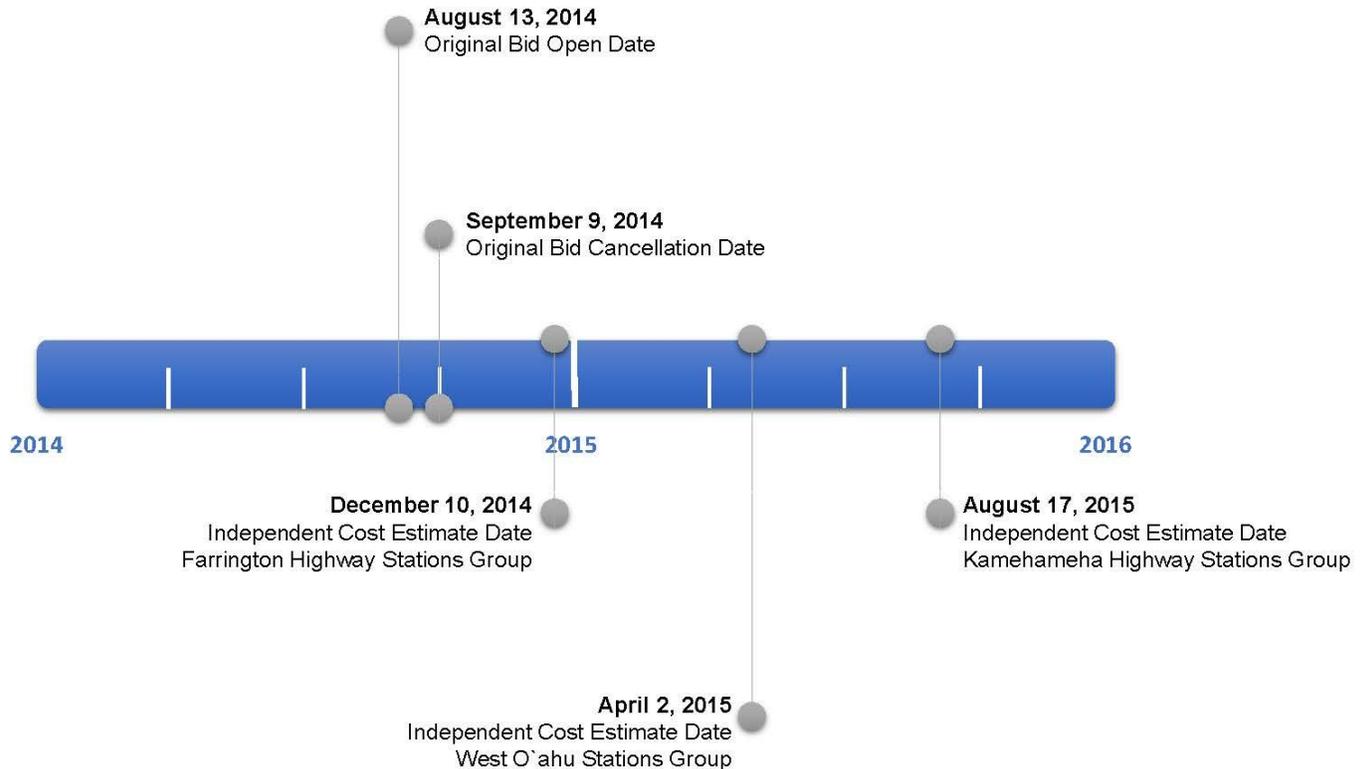
During our audit, we asked HART to provide cost estimates and to identify its expected savings from the repackage. After opening the packages of the three station bids, HART executive management claimed a potential cost savings of \$31 million on the decision to divide the nine stations into three packages of three stations. According to HART, the sum of the independent cost estimates totaled \$263 million, \$31 million less than the original low three bid of \$294 million for the nine station package. We found that HART lacked sufficient time to fully evaluate and quantify any potential savings.

On September 9, 2014, HART’s CEO, who also serves as the chief procurement officer, authorized HART staff to cancel the nine stations group construction bid prior to the

²⁰ The Westside Stations Group consists of the first nine stations along the rail route. HART repackaged the Westside Stations Group into three rail station groups: Farrington Highway Stations, West O’ahu Stations and Kamehameha Highway Stations.

receipt of all independent cost estimates for the three rail station packages, including a \$5.2 million contract for a H2R2 ramp that was originally part of the Kamehameha Highway Stations Group. See Exhibit 3.5 for the timeline.

Exhibit 3.5.
Westside Stations Group Bid Cancellation Timeline



Source: OCA analysis of independent cost estimates and HART Monthly Progress Report, November 2015.

According to HART, its consultants performed quantitative analysis to support its decision to repackage the Westside Stations Group bids and provided two whitepapers to substantiate its cost-benefit analysis. While there were discussions of market factors and different procurement strategies, we did not find any quantitative analysis to show the potential costs or savings for the decision to rebid. One of the whitepapers included several pages on value engineering, scope reduction and scope transfer ideas. For the first three stations, a Rough Order of Magnitude (ROM) for cost savings were notated next to each idea. These ROM for cost savings were extrapolated to the remaining six stations. HART was unable to provide how the ROM figures were derived.

The independent cost estimates for the three packages totaled \$263 million which was \$79 million higher than the engineer's original estimates. Nevertheless, HART reported in its August 2014 Monthly Report that the overall cost of the \$5.2 billion project would not change and that additional costs could be covered using a combination of contingency funds and adjusting the contract scope to reduce costs.

Contrary to the August 2014 Monthly Report, HART announced in December 2014 that the cost for all the stations to be constructed and the remaining guideway will exceed the contingency reserves, off-sets, and other funds available by several hundreds of millions of dollars.

Response: Both of the preceding two paragraphs are factually inaccurate in that the August 2014 Monthly Report is based upon July 2014 information, prior to the August 2014 WSSG bid opening. To compare the July 2014 information to the information known in December 2014 is misleading. In addition, the \$263 million independent cost estimates for the three new station packages were prepared after the WSSG bid opening. To compare the total of those estimates to the information in the August 2014 Monthly Report, as is stated above, is an inaccurate comparison.

Fortunately, the actual outcome reduced the original, nine station group bid by \$31 million. If the strategy had failed, the decision could have driven contract costs higher than the original nine station bid. Because of the fiscal situation confronting the agency, the CEO told us that he had to make it work. He relied on his professional judgment and consultant's opinions when he canceled the nine station bid and repackaged the contract into three rail station groups. While professional judgment is important, critical decisions should be supplemented by quantitative analysis and documented analysis, as well as past experience, and current or historical data.

Response: The audit report is misrepresenting what the CEO actually said. The auditor took pieces from a conversation and does not portray the full context of what was discussed.

It is misleading to imply that the CEO relied only upon professional judgment. He explained, in great detail, the analytical process that HART undertook in responding to the WSSG bid opening. This event started an entire effort to analyze and evaluate the situation. It was only at the end of this topic's discussion that professional judgment was mentioned. The entire decision-making process did not rely solely on professional judgment, yet required detailed analysis, active discussion and debate among HART staff, and engineering judgment.

HART paid \$1.5 million to unsuccessful bidders without documenting their actual costs.

According to HART managers, issuing stipends to unsuccessful bidders is a common practice, is allowed under state law, and is accepted by the Federal Transit Administration. According to HART, this practice gives the owner title to the proposed design concepts. The stipend payment covers all or part of the cost of preparing bid proposals and encourages competition although the practice is an added cost to the owner.

While there is no specific evidence that firms would not submit bids if no stipend was provided, HART offered \$3.5 million to compensate unsuccessful bidders for three

design-build contracts²¹. The stipends were to be divided equally and not to exceed \$500,000 for each unsuccessful bidder. HART's records show that \$1.5 million was paid to three unsuccessful bidders as of June 30, 2015.

Exhibit 3.6 Stipend Payments

Contract	Stipend Payment		
	Date	Offered	Amount
West O`ahu/Farrington Highway Guideway	02/11/10	\$1,000,000	\$500,000
Kamehameha Highway Guideway	05/26/10	\$1,500,000	\$500,000
Airport Guideway and Stations	12/07/11	\$1,000,000	\$500,000
Total		\$3,500,000	\$1,500,000

Source: OCA analysis based on C2HERPS data provided by the HART.

Response: HART previously informed the auditor that stipends were not paid in connection to the Airport Guideway and Stations procurement. However, the auditor did not correct this error in the final draft.

We were, consequently, unable to assess whether the stipend payments were excessive or if the stipends covered the unsuccessful bidder's actual costs because HART had not established any written policy or procedures related to administering the stipend payments. Effective policy and procedures provide staff guidance for issuing proposal stipends to unsuccessful bidders. Without any policies or procedures, it is unclear how HART was able to determine the compensation amount for each of the unsuccessful bidders; assess the documentation needed to support their actual costs; or determine the value or usefulness of the unsuccessful bidders' proposals.

Response Summary:

1. All 3 stipends were paid on City-procured contracts – WOFH and KHG.
2. No stipend has been paid on AGS because it's an active solicitation.
3. HRS Section 103D-303(i) permits the use of stipends on design-build construction contracts over \$1M.
4. Payment based on actual costs would violate FTA Best Practices, which provides that the amount of the stipend is to be "uniform for all competitors."
5. Payment based on actual costs would likely result in higher stipend payments.

As a rule, HART does not pay offerors for the cost of preparing their proposals and bids; stipends are only provided for certain large and complex design-build (DB) contracts as authorized to do so under HRS Sec. 103D-303(i). The stipend amount set by HART (at the time, Rapid Transit Division of City's Department of Transportation Services (DTS)) is based on industry estimates for the cost to prepare proposals. The industry estimate for preparing proposals is between .5% and 1% of the construction costs. That is, for a \$300M contract, the cost for preparing proposals is typically between \$1.5M-\$3M. Both of the contracts that stipends that had stipend payments were in excess of \$300M and

²¹ West O`ahu/Farrington Highway Guideway, Kamehameha Highway Guideway, and Airport Guideway and Stations Design-Build Contracts.

HART/RTD has never paid more than \$500,000 stipend to an unsuccessful offeror, which is well below the actual costs for preparing proposals. A uniform stipend amount is also consistent with Federal Transit Administration's (FTA) Best Procurement Practices on the subject matter. Furthermore, HART's solicitation documents expressly stated the terms under which an unsuccessful offer would be entitled to stipends and the not-to-exceed amount to be paid to each unsuccessful offeror; that is, a minimum 41% overall qualitative score was required to receive a stipend. HART agrees to memorialize its policies and procedures into a "policies and procedures" manual.

HART is paying for vacant office space

HART leases four floors of office space. During our on-site visit at HART, we identified one leased floor of 16,182 rentable square feet that had 12 vacant offices and 15 empty workstations. About 41 percent of the offices and workstations were unoccupied on this floor when we conducted a physical inventory count in July 2015.

Although HART stated it has plans to occupy the empty space, the offices and workstations sat vacant throughout our six-month audit. While it was empty, we requested a current inventory listing of its leased offices and workstations. It took HART staff five weeks to provide us this information. Review of its inventory listing revealed that the vacancy rate increased to 44 percent.

As of April 2016, HART reported a vacancy rate of 27 percent on the floor in question. Upon verification, we found that the vacancy rate is closer to 32 percent²².

HART should evaluate and document its office space requirements and minimize HART operating costs by subletting its surplus office space or renegotiating its leases so that it only pays for space that is needed.

Summary: HART does regularly review its office space requirements and negotiates lease agreements to ensure that both current and future needs are in alignment with the project's current status.

HART currently leases 63,927 sq. ft. (55,110 useable sq. ft.) of office space at Ali'i Place. HART conducted a physical inventory on 3/15/2016 and determined its occupancy rate to be 88% comprised of the following breakdown:

- Suite 150: 31.5 of 34 available workstations in use = 93% Occupancy Rate
- 11th floor: 63 of 68 available workstations in use = 93% Occupancy Rate
- 17th floor: 65 of 68 available workstations in use = 96% Occupancy Rate
- 23rd floor: 48 of 66 available workstations in use = 73% Occupancy Rate

²² As of April 2016, HART reported an aggregate occupancy rate of 88 percent. The aggregate amount included three floors that were 93 percent to 96 percent occupied and one floor that was 73 percent occupied. The audit discusses the 23rd floor that is currently 32 percent vacant.

Overall: 207.5 of 236 available workstations = 88% Total Occupancy Rate

Note: Workstations include locations designed for someone to sit and work on a full time basis. This includes offices, cubicles, desk/work areas, etc.

The vacant space is necessary and reasonable given that, as of February 23, 2016, HART had (11) vacant positions and is contractually required to provide office space for multiple contractor/consultant firms; HART currently houses employees from the following firms: HDR (InfraConsult), CH2M Hill, Paragon Partners Ltd., Lea+Elliot, PGH Wong, RM Towill, SSFM, Stantec, Lawson & Associates, and the Solis Group. HART also hires local college students as Engineering and Student Interns on a part time basis in accordance with the City & County of Honolulu Department of Human Resources policies when office space is available and we have substantive work appropriate for Interns. Additionally, it should be pointed out that the practice of providing office space to consultants was a recommendation in a prior City Auditor audit – reference City Auditor report 13-03, recommendation #8 – Lease all office space to reduce consultant overhead rate charges.

The numbers reported in the audit appear to have focused solely on the 23rd floor, which is the least occupied floor. The recommendation that HART renegotiates its lease “so that it only pays for space that is needed” is an oversimplified view of how long term leasing works and is not practicable for an organization such as HART. HART is currently responsible for overseeing the construction of the Honolulu Rail Transit Project. As an organization, HART functions differently from a regular City Department and the personnel needs in terms of both quantity and areas of expertise needed vary significantly over time as opposed to an established City Department. Specifically the personnel/workstation needs evolve and change throughout the project lifecycle depending on which phase of the project we are in. A project’s staffing level is dynamic and is directly related to the type and amount of work going on at any given time. In order to accommodate the project’s personnel needs, HART has taken great effort to structure and negotiate the current leases to meet current and future office space requirements. HART’s approach considered the number of personnel required as the project progresses towards completion and optimizes the office space requirement and the resulting cost to the project. Starting in 2018, the office leases begin a structured reduction of office space over the remainder. All while being cognizant that long-term leasing of office space yields the best rates for the lessee and ultimately benefitting the taxpayer.

Therefore the recommendation that HART only lease office space it needs implies that HART change the amount of leased space depending on how many people are onboard at any given time. This is an impractical view of office leasing practices and would result in drastically increased costs as well as inefficiencies that would affect the overall project in a negative way.

Exhibit 3.7

Office and workstation vacancy rates

	Total Offices and Workstations	Count as of July 2015			Count as of November 2015		
		Occupied	Unoccupied	Vacancy Rate	Occupied	Unoccupied	Vacancy Rate
Offices	46	34	12	26%	34	12	26%
Workstations	20	5	15	75%	3	17	85%
Total	66	39	27	41%	37	29	44%

Source: OCA physical count of leased office space and HART *Work Space Inventory Listing*, November 30, 2015

Exhibit 3.8

Photos of Vacant Offices and Workstations



Source: OCA

Contract administration needs to be improved

Current and complete policies and procedures are necessary to provide clear and effective guidance to staff regarding contract management. Strong recordkeeping practices serve to ensure compliance with federal, state, and local laws.

We sampled 25 contracts during our audit and found several deficiencies. We found that HART has not developed written policies related to contract administration and invoice payment practices, and procedures were incomplete and not regularly updated. These deficiencies could lead to noncompliant and questionable practices.

Response: HART does have written contract administration and invoice payment practices. As mentioned in the response on the next page. Auditor should revise this statement.

Exhibit 3.9**Summary of Contract Types Reviewed**

Contract Type	No of Contracts Reviewed
Firm Fixed Price	8
Cost Reimbursement	4
Time and Materials	3
Legal Contract	3
Lease Agreement	2
Cost Plus Fixed Fee	2
Combination Firm Fixed Price & Time and Materials	1
Intergovernmental Agreement	1
Task Order Time and Materials	1
Total	25

Source: OCA sample selection

Contract administration policies and procedures were incomplete and outdated

We found HART has not developed written policies related to contract administration and invoice payment practices. Policies and procedures were also needed for capital project monitoring and reporting. HART contract administration procedures were last updated in 2012 and need to be updated to reflect current policies and procedures. Out-of-date policies and procedures increase the risk of contract mismanagement if guidance is incorrect.

Response: HART does have written contract administration procedures and invoice payment practices. HART is in the process of updating existing procedures and has initiated an effort to update contract administration procedures. In September 2015, HART updated the Contract Change Procedure 5.CA-11.

Contract administration roles and responsibilities were confusing

We found that HART's contract administration procedures defined confusing roles and responsibilities for its project managers, contract managers, and contract administrators. HART's project managers acted as contract managers until August 2015. In a separate updated procedure manual, HART delineated the positions into two distinct roles. In addition, the terms contract administrator and contract manager are used interchangeably at HART even though procedures define them differently. As a result, changes to contract administration procedures are confusing.

Until August 2015, the project manager filled both the project manager and the contract manager roles. The dual role increased the risk of contract mismanagement between 2012 and 2015.

Response: HART has initiated an effort to update its Contract Administration procedures. A key focus of the update is to clarify and reflect current roles & responsibilities for project managers and contract managers.

HART has taken proactive steps to address this issue through the establishment of a contract administration team in 2014, clarifying roles and responsibilities and updating of existing procedures and policies.

For the sample of 25 contract files, we found:

Response Summary:

1. **Of the 25 contract files reviewed by the auditor, 2 were not HART contracts and 8 were procured prior to HART's inception.**
2. **Of the 50 contract issues identified by the auditor, 48 were deemed to be unfounded for one or more of the following reasons:**
 - a. **the alleged missing document was, in fact, properly filed in the contract file;**
 - b. **the contract was not a HART contract,**
 - c. **the issue raised by the auditor was not a contract requirement; and**
 - d. **HART had an electronic copy of the document, but a hard copy was not placed in the contract file.**
3. **HART acknowledges that there are 2 issues which are outstanding and which HART will remedy.**

HART informed the OCA that 2 of the legal services contracts included in the OCA's sampling were procured by the City and, as such, were not HART contracts. Despite HART's confirmation that they were not contracts procured or administered by HART, the OCA elected to keep the contracts in its sampling. Accordingly, HART respectfully takes exception to any deficiencies identified for contracts that are not HART contracts.

Of the remaining 23 contracts, HART notes that 8 were procured prior to HART's inception. Although HART understands that the scope of the audit includes expenditures that pre-date HART's inception, it is factually inaccurate to attribute contract deficiencies to HART for contracts which were not procured by HART. Accordingly, HART respectfully takes exception to any deficiency findings attributed to HART for contracts that were procured prior to HART's inception. When HART brought this issue up with the auditor's they brushed HART's concern aside with the claim that "every agency has legacy issues". With that argument the auditor acknowledges that the problems were not caused by HART's actions, however, the auditor failed to disclose the fact and extent that the issues that were noted found were just "legacy issues" and not extraordinary or unreasonable problems.

Contract files had missing documentation

Documentation deficiencies included no complete listings of contract modifications and supporting documentation in the files; 8 files which grant HART access to only prime

contractor records; no files with access to sub-contractor records; 3 contract files that did not include the Scope of Work²³; and 2 contract files missing a Letter or Notice of Award.

HART respectfully takes exception to the OCA's finding that there were "no files with access to sub-contractor records." The OCA's finding suggests that such access is a contract file requirement when, in fact, it is not a contract file requirement.

In footnote 24, the OCA indicates that subsequent to its review, HART presented "Statements of Work for 2 contract files." HART respectfully takes exception to this finding and footnote because the scope of work was properly filed in the respective contract files at the time of the OCA's initial review.

HART respectfully takes exception to the OCA's finding that "2 contract files [were] missing a Letter or Notice of Award." Although HART acknowledges that one of the notifications was filed electronically rather than in the hard copy file, the other contract file properly documented the notification of award. The OCA's finding that the notification was missing appears to be based on its mistaken belief that there needs to be a document specifically entitled, "Notice of Award." HART respectfully disagrees that a document title is dispositive of whether its contents provide adequate notification of award. HART's contract file included a letter transmitting the contract to the successful offeror for execution, notification letters to the unsuccessful offerors that the contract had been awarded to another firm, and documentation of the posting of the award on the City's website. HART's contract file therefore included more than adequate documentation of the notification of award.

Financial disclosures and conflicts of interest certifications were missing

We found no evidence to show that HART required financial disclosures for prime contractors or subcontractors; 7 contract files where the prime contractors did not certify they had no real or apparent conflicts of interest²⁴, and no evidence of subcontractor's conflicts of interest certifications. HART maintained subcontractors were required to file conflicts of interest statements as part of the solicitation process.

HART respectfully takes exception to the OCA's finding that there was "no evidence to show that HART required financial disclosures for prime contractors or subcontractors." The OCA's finding suggests that financial disclosures are necessary to meet the conflict of interest certification requirement when, in fact, they are not necessary. As such, the condition that the auditor observed should not have been a finding based on the criteria that should have been tested.

²³ Subsequent to our review, HART presented Statements of Work for 2 contract files. HART noted that the third had been electronically filed, but would be included as a hard copy in the contract file.

²⁴ Subsequent to our review, HART presented Conflict of Interest certifications for 4 contract files. HART contends that one contract was procured prior to its inception, and that the two remaining contracts were funded by HART, but were procured by Corporation Counsel.

Excluded contractor checks were missing

Two contract files lacked evidence that an Excluded Parties List System (EPLS)/System for Award Management (SAM) check was performed prior to award to ensure the contractor was not suspended or debarred by the Federal government. These checks may have been made, but were not documented in the procurement files. Although HART maintains that EPLS/SAM checks were not put into routine practice at HART until 2012, our review of contract files suggests these checks were being performed as early as 2007. The compliance requirement with 2 CFR 180.300 was met because HART demonstrated that it had obtained certification from these 2 respective contractors regarding debarment, suspension and other ineligibility and voluntary exclusion from transactions financed in part by the U.S. Government.

It is unclear why the OCA asserts that the “excluded contractor checks were missing” when the OCA expressly acknowledges that HART met the compliance requirements. As pointed out by the OCA, the Code of Federal Regulations provides that the compliance requirement is satisfied if contractor certifications are obtained. HART therefore respectfully takes exception to the OCA’s finding when the OCA, itself, acknowledges that the compliance requirement was met and the stated objective of this area of the audit was to “*assess compliance of HART’s procurement and contract management practices*”. As such, the condition that the auditor observed should not have been a finding based on the criteria that should have been tested.

Other contract file deficiencies included no evidence that contract managers conducted performance reviews; 22 contract files did not have designated contract managers; 1 contract file lacked the independent evaluations and scores of the evaluation committee related to the contract award²⁵; and 3 files had no evidence of a cost or price analysis by HART for the intended award²⁶. A cost or price analysis should be performed for every contract so that the essential objective of a reasonable price is assured.

HART respectfully takes exception to the OCA’s findings that there was “no evidence that contract managers conducted performance reviews” and that “22 contract files did not have designated contract managers.” The OCA’s findings suggest that such performance reviews and designations were contract file requirements when, in fact, they are not contract file requirements.

In footnote 26, the OCA indicates that subsequent to its review, HART presented the independent evaluations and scores of the evaluation committee. HART respectfully takes exception to this finding and footnote because the evaluations and scores were

²⁵ Subsequent to our review, HART presented independent evaluations and scores of the evaluation committee related to this contract award.

²⁶ Subsequent to our review, HART presented cost or price analysis for 2 contract files. HART produced a waiver for cost or price analysis being performed for the third contract; however, the waiver states that no prices had been submitted. No further analysis was performed.

properly filed in the contract file at the time of the OCA's initial review. The auditor simply overlooked the documentation in the files and never asked for help locating the documentation.

In footnote 27, the OCA indicates that subsequent to its review, HART produced the cost/price analysis for 2 contract files. HART respectfully takes exception to this finding and footnote because the cost/price analyses were properly filed in the respective contract files at the time of the OCA's initial review. The auditor simply overlooked the documentation in the files and never asked for help locating the documentation.

The auditor did not inform HART of the contract file deficiencies until after the first draft of the report was given to HART. After receiving the first draft, HART provided the documentation to the auditor to correct factual misstatements in the report. It is improper for the auditor to insert HART's corrections in footnotes rather than correcting the errors in body of the report.

Invoice payment procedures do not address all contract types

We found that HART's invoice payment procedures do not address all contracts types, such as cost reimbursement, and time and materials contracts, because there were no defined policies and only one procedure²⁷ related to contract payments.

HART's invoice payment procedure was developed in 2012 and was limited in scope to only Firm Fixed Price contracts which uses a Schedule of Milestones to determine monthly progress payments by milestone achieved. Because HART has a variety of contracts and invoices which are not paid based on milestones, we believe that this procedure is insufficient to fully support HART's invoice payment process.

Furthermore, we found that HART's procedure had not been updated to reflect its current practices with respect to invoices. If practices for paying invoices for contracts and goods and services are not adequately conveyed in guidance, policies, and procedures, it can lead to invoices being paid in spite of insufficient support and questionable expenses.

Response: HART concurs with this statement. HART Contractor Progress Payments procedure (5.CA-03 dated 4/19/2012) is limited in scope to only Firm, Fixed-Price (FFP) contracts which use a Schedule of Milestone. However, appropriate HART staff and management reviewed invoices before payment was approved in every case. Invoice review is detailed and includes review for compliance with contract terms, billing rates and appropriateness of supporting documentation. A draft contractor invoice procedure (Procedure no. 5.CA-10) has been prepared to formalize the review process for payments under contracts other than FFP contracts and is under management review.

²⁷ Contractor Progress Payments, 5. CA-03, Rev. 1.0 - April 19, 2012

Invoice payments had unsupported and unallowable costs

A strong invoice payment process prevents improper payments from being made. HART risks making improper payments when there is a lack of proper review and documentation to support the work or services billed. Our review of 50 HART invoices revealed instances of incomplete and improper payments or authorizations. We also found unsupported and unallowable costs. Specifically, our review showed HART paid:

- 3 invoices, valued at \$8,670,112, where checklists and forms were being used by HART which were not described in the invoice payment procedure. No amounts were improperly paid.

Response: HART used a more detailed checklist than the example included in the approved procedure. HART is in the process of updating procedures with the new checklists.

- 3 invoices that lacked the required payment review checklist. The invoices totaled \$6,292,325. No amounts were improperly paid.

Response: The required checklists were missing, however, HART did have the required routing sheets documenting that the required staff reviewed the invoices.

- 2 invoices, valued at \$18,607,656, had narrative descriptions attached to invoices which were incorrect. No amounts were improperly paid.

Response: The errors were typos in the narratives that did not affect the amount paid in any way. A typo is not a reasonable basis to support the finding that the payment was unsupported or unallowable.

- 2 invoices that had management approvals that totaled \$23,288 although the work was performed prior to the execution of the contract agreements and constituted procurement violations. No amounts were improperly paid.

Response: The invoices pertain to utility relocation work performed by two utility companies: Oceanic Time Warner Cable (\$14,513.08) and Tesoro Hawaii Corporation (\$8,775). Utility relocation work is sole source and not a competitive procurement because only the utility company can perform the relocation of its own property/utilities. HART was in the process of negotiating utility relocation agreements with Oceanic and Tesoro when they decided to commence work. HART informed both Oceanic and Tesoro that such work would be performed at risk should negotiations fail, but both utility companies did so in good faith support of the Project because they understood that their cooperation was vital to maintaining the Project schedule. Because work was performed prior to the execution of the utility relocation agreements, HART's policies and procedures required the documentation and acknowledgement of the circumstances leading

to Oceanic and Tesoro commencing work during negotiations via a “Request for Approval of Procurement Violation.” Thus, HART properly implemented its procedures regarding work performed prior to contract execution.

- \$11,344 for on-call contractor work performed for the Pig & the Lady restaurant (83 N. King Street), even though the work on the City Center had not officially started. HART contends the work was necessary, supported, and allowable under the terms of the contract.

Response: The work was necessary, supported, and allowable under the contract. The work performed at the 83 N. King Street is part of the HART Historic Preservation Committee (HPC) 2014 Funding. The HPC permits owners of historic buildings near the Chinatown station to apply for minor repairs and upgrades to building facades. Pacific Gateway (the owner of 83 N. King Street) applied for and was approved for removal of piping on front façade and the replacement of an awning. This work is done in advance of Guideway construction.

- \$1,863 for unallowable travel agent fees. This was due to a conflict between HART and the City’s respective travel policies.

Response: The \$1,863 in “travel agent fees” was actually 50 individual pcard transactions with booking fees paid to various online vendors such as Expedia from 2008 – 2014. HART is confused by this finding because it is not related to any of the stated objectives of the audit. This was allowable under HART’s travel policy at the time and it is an ordinary and customary business practice to use sites like Expedia to book travel. The condition observed should not have been a finding as it was not related to the criteria tested during the audit.

- \$740 for vacation travel expense paid for by HART. HART contends the work was allowable under the terms of the contract.

Response: The auditor says that HART contends that the work was allowable under the terms of the contract as if the fact is disputable. HART provided documentation to the auditor supporting that the fact that the terms of contract allowed a certain number of trips per year to include travel for holidays. It was necessary because HART had to import real estate professionals from the mainland with considerable experience with relocations and acquisitions under the uniform act.

Chapter 4: Better planning is needed to address and manage future rail project costs

Summary

Once the rail system is completed and operational, other rail systems indicate annual and ongoing operations and maintenance costs must be addressed. Other rail systems in the nation indicate subsidies will be needed to fund rail operations and maintenance costs after the rail is constructed. HART has not planned for the operations and maintenance of the rail system or the costs of operating the system after it is completed. HART needs to improve planning and oversight to effectively address and manage future operations and maintenance needs; maximize fare box recoveries and ridership; minimize city subsidies; and fill operations and maintenance positions.

Background

Due to project delays, HART reports interim rail service will begin in late 2018 and full service operations are projected to begin in 2021. The original and updated time schedule is shown below.

Exhibit 4.1

Project Schedule



June 2016	June 2017	Late 2018	March 2019	January 2020	Late 2021
Original Interim Passenger Opening Date	Revised Interim Passenger Opening Date No.1	Revised Interim Passenger Opening Date No.2	Projected Completion and Revenue Service Date	Original Project Completion Date	Revised Project Completion Date

Source: Office of the City Auditor (OCA) analysis based on HART documents

HART needs to plan for annual operations and maintenance of the rail system

HART reports it is only responsible for constructing the rail project and is not responsible for the ongoing, annual operations and maintenance of the rail system. As a result, we found HART plans were outdated and did not adequately address how to operate and maintain the rail system once it is completed. We also did not find plans that addressed the ongoing costs of operating the system.

Response: HART is responsible for ongoing operations and maintenance for the rail system. The Charter of the City & County of Honolulu states “The public transit

authority shall have the authority to develop, operate, maintain, and expand the city guideway system”. Moreover, the core systems contract is a design, build, operate and maintain contract (DBOM) that details the operations of the rail system.

HART records show the audit work related to operating costs consisted of (1) interview with the Core Systems Project Manager and (1) email information request.

A review of HART Board minutes, available on the website, evidences HART and its Board’s commitment in fulfilling its Charter responsibilities for operations and maintenance for the rail system. The following table is a partial listing of various Board (and Staff activities) related to rail operations, fare policies, and subsidy reduction measures. This illustrates HART’s actions, thus far, regarding rail O&M costs and fare policy.

Date	Description	Group
7/1/2011	HART Board sworn in	Board
7/7/2011	Financial Plan Discussed	Finance
9/8/2011	DBOM Core Systems Contractor Capacity	Finance/POC
9/29/2011	Safety and Security Presentation	POC
10/6/2011	Update on DBOM Core Systems Contract	Board
10/13/2011	DBOM Core Systems Contract Discussion	Board
11/3/2011	Presentation on Scope of DBOM Core Systems	Board
11/17/2011	Update on DBOM Core Systems Contract	Board
12/1/2011	Update on DBOM Core Systems Contract	Board
3/16/2012	Bus and Handi-Van Operating Costs	Finance
6/28/2012	FFGA Financial Plan Update	Board
8/9/2012	Discussion on Fare Gates	Finance
8/9/2012	Discussion on Rail/Bus Synergies	Finance
8/9/2012	Discussion on Train Seating	Finance
8/9/2012	Discussion on Financial Plan Operating Budget	Finance
8/9/2012	FFGA Financial Plan Update	Finance
8/30/2012	Fare Gates	Board
8/30/2012	Train Seating	Board
10/4/2012	FFGA FCA Update / Operating Budget Discussion	Finance
11/29/2012	FFGA Financial Plan Discussion	Board
12/6/2012	FFGA Financial Plan Discussion	Finance/POC
12/6/2012	Review of HART Operating Statement	Finance/POC
12/6/2012	Discussion of DBOM Core Systems	Finance/POC
2/7/2013	Update on DBOM Core Systems Contractor Capacity	Finance/POC
10/17/2013	Discussion on Maintenance Yard Automation	Finance/POC
12/19/2013	Discussion of Operating Budget Admin Costs	HR
12/19/2013	DTS presentation on Fare Collection Study	Board
12/19/2013	Formation of Fare Policy Permitted Interaction Group	Board
12/19/2013	Four-Car train Presentation	Board

1/16/2014	Update on HART/DTS/OTS/Ansaldo Working Group	Board
1/16/2014	Fare Study Workshop Presentation	Board
	Automated Maintenance Yard Configuration change	
2/13/2014	order	Finance/POC
2/13/2014	Fare Study Workshop Presentation	Board
4/24/2014	Presentation on Safety and Security	Board
8/14/2014	HART/Ansaldo/DTS/OTS Working Group Update	Board
10/9/2014	Report on Fare Policy Permitted Interaction Group	Board
10/23/2014	Report on Fare Policy Permitted Interaction Group	Board
11/13/2014	Core Systems Fare Vending Machines	Finance/POC
	Interim Report of the Fare Policy Permitted Interaction	
3/12/2015	Group	Board
5/21/2015	Update on HART/DTS/OTS/Ansaldo Working Group	Board
	Presentation on Sustainability and Photovoltaic	
11/24/2015	Programs	Board
11/24/2015	Update on Integrated Fare Systems	Board
2/18/2016	Formation of Financial Plan Permitted Interaction Group	Board

According to HART, however, the board and HART are committed to fulfilling its charter responsibilities for the operations and maintenance for the rail system.

Other rail systems indicate annual and ongoing operations and maintenance costs must be addressed.

Our city comparisons indicated that all rail services throughout the nation require some form of subsidy to make up for the costs of operating and maintaining the rail. Our comparisons showed that fares paid by riders were insufficient to cover the entire cost of operating and maintaining the rail systems. (See Exhibit 4.2)

Exhibit 4.2

Subsidy Comparisons (dollars in millions)

Rail Transit Service City	Fare Revenues	Annual O&M Costs	Subsidy	
			\$	%
Heavy Rail				
Atlanta	\$75.6	\$208.1	\$132.5	63.67%
Baltimore	\$12.9	\$51.7	\$38.8	75.05%
Boston	\$191.9	\$315.5	\$123.6	39.18%
Chicago	\$278.2	\$513.6	\$235.4	45.83%
Los Angeles	\$34.8	\$117.0	\$82.2	70.26%
Miami	\$22.8	\$77.7	\$54.9	70.66%
New York	\$3,030.7	\$4,763.5	\$1,732.8	36.38%
Philadelphia	\$95.7	\$186.7	\$91.0	48.74%
San Francisco	\$406.1	\$525.0	\$118.9	22.65%
Washington, D.C.	\$605.5	\$909.5	\$304.0	33.42%
Light Rail				
Charlotte	\$4.4	\$13.1	\$8.7	66.41%
Cleveland	\$3.0	\$11.7	\$8.7	74.36%
Denver	\$49.4	\$87.1	\$37.7	43.28%
Houston	\$4.5	\$18.4	\$13.9	75.54%
Phoenix-Mesa	\$12.8	\$28.7	\$15.9	55.40%
Portland	\$46.4	\$99.3	\$52.9	53.27%
Sacramento	\$14.7	\$50.0	\$35.3	70.60%
Salt Lake	\$19.0	\$45.5	\$26.5	58.24%
Seattle-Puget Sound	\$14.8	\$52.9	\$38.1	72.02%
St. Louis	\$18.6	\$64.8	\$46.2	71.30%

Source: OCA analysis based on data obtained from the National Transit Database (NTD), 2013

The comparisons indicated that fixed guideway projects often resulted in significant transit service realignments, such as the creation of a transit agency to oversee and administer the operations of rail and other modes of public transit. To ensure a smooth transition from construction to operations, HART needs to update its operations and maintenance plan, establish operations and maintenance policies, develop fare policy details, identify subsidy sources, determine ridership and sources of revenues, and fill critical positions related to the operations and maintenance of the system after it is completed.

Subsidies will be needed to fund rail operations and maintenance costs

Fare revenues are earned through carrying riders through regularly scheduled rail service. While fare revenues will cover a portion of the operations and maintenance costs, our comparison of other systems showed that the fare revenues will not be sufficient to fully support total operating and maintenance costs.

According to HART's chief executive officer (CEO), fare revenues will cover about 30 percent of the operations and maintenance costs. The remaining 70 percent will require subsidies from the city. Although city subsidies will be needed, HART has not clearly defined how rail operations and maintenance will be subsidized in its 2012 *Full Funding Grant Agreement* (FFGA) financial plan.

Our comparison of other cities showed that other revenue sources²⁸ are available to offset the cost of operating the rail system. For example, operating costs not funded by fare revenues can be supported by a combination of federal, state, and local government taxes. Exhibit 4.3 identifies state, federal assistance, and other fund sources for other cities.

Exhibit 4.3

Sources of Operating Funds by Transit Agency*

Transit Agency City	Fare Revenues**	Local Funds	State Funds	Federal Assistance	Other Funds
Atlanta	27%	53%	0%	14%	6%
Baltimore	23%	0%	75%	1%	1%
Boston	35%	8%	53%	1%	4%
Charlotte	22%	58%	10%	5%	5%
Chicago	42%	33%	20%	1%	3%
Cleveland	22%	0%	72%	6%	1%
Denver	23%	55%	0%	15%	7%
Houston	17%	66%	0%	16%	1%
Los Angeles	24%	48%	7%	18%	2%
Miami	23%	60%	5%	10%	2%
New York	41%	16%	39%	1%	2%
Philadelphia	37%	7%	47%	6%	3%
Phoenix-Mesa	45%	34%	0%	19%	3%
Portland	27%	45%	0%	23%	5%
Sacramento	23%	51%	6%	17%	2%
Salt Lake	17%	0%	65%	15%	3%
San Francisco	65%	22%	3%	4%	6%
Seattle Puget Sound	23%	72%	1%	0%	5%
St. Louis	20%	70%	0%	8%	2%
Washington, D.C.	46%	27%	17%	2%	8%

Source: OCA analysis based on information from the NTD, 2013

(*) Percentages do not total 100 percent due to rounding.

²⁸ Excise taxes, special assessments for cities and towns, and property taxes.

(**) Fare revenues based on the farebox recovery rate for entire transit agency in addition to rail service, often including but not limited to the following services: bus, commuter bus, commuter rail, light rail, heavy rail, ferry boat, and paratransit.

Other forms of funding include parking fees, selling surplus land and property, retail space rental to vendors, utility company rentals of rights of ways, and advertising.

Although these alternative sources of funds exist, HART has not identified other revenue sources for its rail operations and maintenance in its financial plan. As a result, HART and the city cannot ensure the city subsidies are minimized.

HART needs to improve planning to maximize fare box recoveries.

The farebox recovery rate is the percentage by which the fare revenues collected account for the total operating costs of the service. It is calculated by dividing the total fare revenue by its total operating costs. Our city comparison of farebox recovery rates of other transit agencies showed that fare revenues alone will not be sufficient to fund all rail operations and maintenance costs.

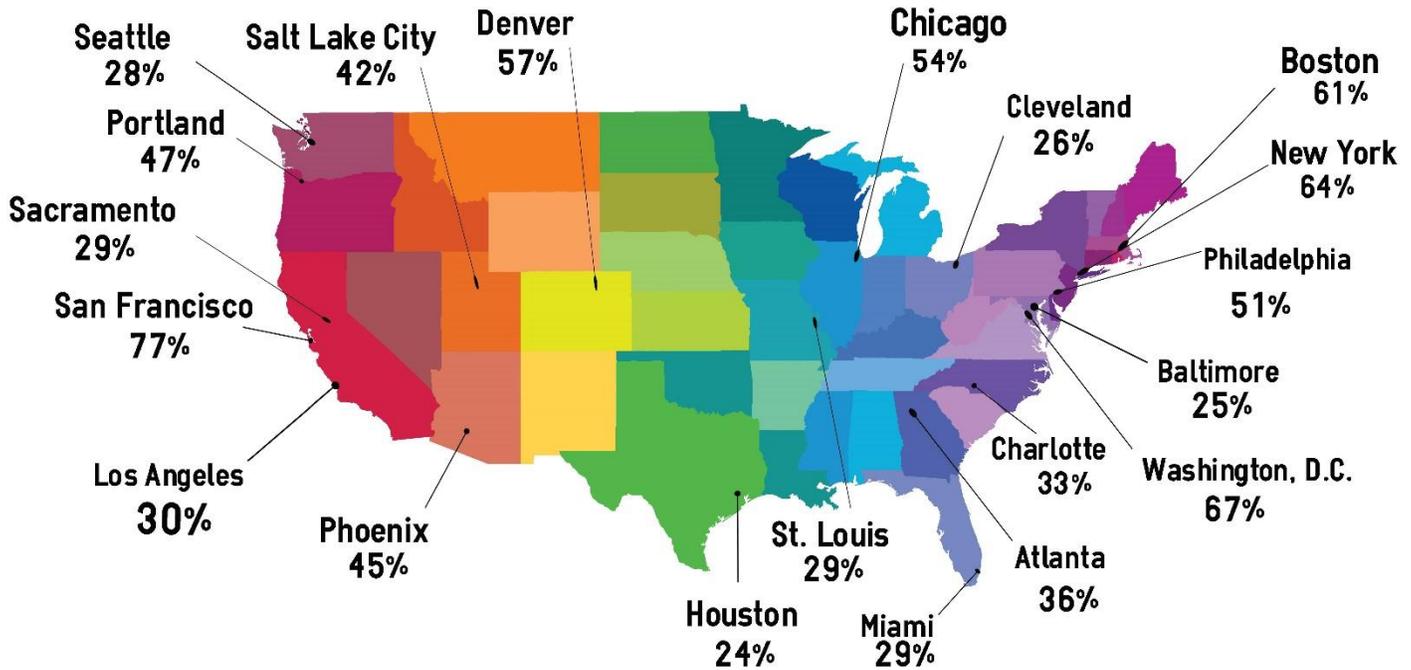
Exhibit 4.4 shows selected rail services across the metropolitan areas of the United States. All of these rail services had farebox recovery rates which varied greatly and were consistently less than 100 percent. Fares were either variable²⁹ or flat rate³⁰. Of the selected rail comparisons, farebox recovery rates ranged from 77 percent for San Francisco's Bay Area Rapid Transit (BART) service to 24 percent for Houston. The average farebox recovery rate for all selected rail services for 2013 was 43 percent.

²⁹ A fare cost that varies in relation to the level of operational activity (time of day, distance travelled).

³⁰ A fare cost that remains fixed irrespective to the level of operational activity.

Exhibit 4.4
Rail Farebox Recovery Rates Comparison

U.S. Cities Farebox Recovery Rates (2013)



Source: OCA analysis of farebox recovery rates based on information from the National Transit Database (NTD), 2013

Our comparison indicated HART needs to plan for potential fare revenues, farebox recovery rates, and anticipated ridership levels to ensure the rail operations and maintenance costs are covered.

HART needs to improve planning to maximize ridership.

Our nationwide comparison of comparable rail systems indicated ridership levels have generally fallen short of forecasted levels. As part of the application process for the federal FFGA, HART developed ridership estimates and forecasts which were incorporated into the 2012 operations and maintenance plan (OMP). Our nationwide comparison indicated, however, that actual ridership fell short of the forecasted levels. (See Exhibit 4.5 below.)

Exhibit 4.5 Ridership Forecast vs. Actual

City	Forecasted Year	Ridership		Percentage of Actual vs. Forecasted
		Forecasted	Actual	
1990 FTA Report*				
Heavy Rail				
Baltimore	1987	103,000	42,600	41.36%
Miami	1988	239,900	35,400	14.76%
Washington	1986	569,600	411,600	72.26%
Light Rail				
Buffalo	1989	92,000	29,200	31.74%
Portland	1989	42,500	19,700	46.35%
Sacramento	1989	50,000	14,400	28.80%
2003 FTA Report**				
Heavy Rail				
Atlanta North Line	2005	57,120	20,878	36.55%
LA Red Line	2000	297,733	134,555	45.19%
Chicago Orange Line	2000	118,760	54,986	46.30%
Baltimore Johns Hopkins	2005	13,600	10,128	74.47%
San Francisco Colma	2000	15,200	13,060	85.92%
Light Rail				
Dallas South Oak Cliff	2005	34,170	26,884	78.68%
Denver Southwest	2015	22,000	19,083	86.74%
Portland Westside	2005	49,448	43,876	88.73%
Salt Lake South	2010	23,000	22,100	96.09%
2007 FTA Report**				
Heavy Rail				
San Francisco SFO	2010	68,600	26,284	38.31%
Washington Largo	2020	14,270	6,361	44.58%
Chicago Douglas Branch	2020	33,000	25,106	76.08%
Light Rail				
Denver Southeast	2020	38,100	22,545	59.17%
Portland Interstate MAX	2015	18,860	12,785	67.79%
Sacramento South	2015	12,550	8,734	69.59%

Sources: OCA analysis based on information from the *Urban Transit Rail Projects: Forecast Versus Actual Ridership and Cost* (1990), prepared by Dr. Don H. Pickrell for the Urban Mass Transit Administration; *Predicted and Actual Impacts of New Starts Projects: Capital Cost, Operating Cost, and Ridership Data* (2003), prepared by the Federal Transit Administration; *The Predicted and Actual Impacts of New Starts Projects: Capital Cost and Ridership* (2007), prepared by the Federal Transit Administration.

(*) The federal FFGA program was established after the projects featured in the 1990 study.

(**) As some forecasted years were beyond the scope of the 2003 and 2007 the FTA reports, "actual ridership" figures represent most recent numbers at the time the report was conducted.

In our opinion, HART should prepare for a scenario in which actual ridership, or the number of passengers actually using rail, falls short of forecasted estimates. Its operations and maintenance plan is outdated and may result in inadequate revenues to cover the annual rail operating and maintenance costs.

HART needs to fill a critical operations and maintenance position.

HART's Operations and Maintenance (O&M) director provides oversight related to the operations and maintenance of the rail system. The director is required to work closely with capital programs to provide operational and technical guidance during the design and construction phases. HART has not filled its O&M director position since the last occupant left the agency in August 2015.

The city contract with Hitachi Rail Italy³¹ authorizes the company to operate and maintain the rail system and its passenger trains. According to HART, the Operations and Maintenance director will be responsible for administering the \$1.4 billion operations and maintenance contract. The director will also be in charge of hiring a team of consultants to support the operations and maintenance function. Currently, no staff positions are assigned to support the operations and maintenance division. The vacant position and lack of support staff could leave HART unprepared when the rail becomes operational.

Response: HART conducted a very diligent and extensive search for the candidate with the required high level experience and background to fill this position. This thorough search has paid off and HART has hired an individual with outstanding credentials who started on March 28, 2016, as the HART Director of Operations and Maintenance. Additionally, HART will be modifying the organizational structure to include a Deputy Director position under the Director of Operations and Maintenance. The expansion of this area and the reduction of other areas have already been identified in the staffing and succession planning since the beginning of the project.

There is no "city contract" with Hitachi Rail Italy. HART's contract continues to be with AHJV.

NOTE: the footnote #31 below is incorrect: AHJV continues to be AHJV; "formerly", therefore, is not correct.

³¹ Formerly Ansaldo Honolulu Joint Venture

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Pearl Highlands Parking Garage &
Transit Center
Public Private Partnership
Request for Information

March 17, 2016

Why an RFI?

- July 1, 2015
 - HART cancels Design Build (DB) solicitation for Pearl Highlands Garage and Transit Center
 - Deferred as “Secondary Mitigation” against cost over runs
- October 15, 2015 HART Board Meeting
 - Reintroduce DB for transit center
 - Develop parking garage as P3



Data S0ESTUHM
Image USGS
Data S01Y2AA US Navy, NSA, GEBCO
Data L030 Columbia NSF, NOAA

Google earth

HONOLULU RAIL TRANSIT PROJECT

WWW.HONOLULUTRANSIT.ORG

HART

HONOLULU AUTHORITY FOR RAPID TRANSPORTATION



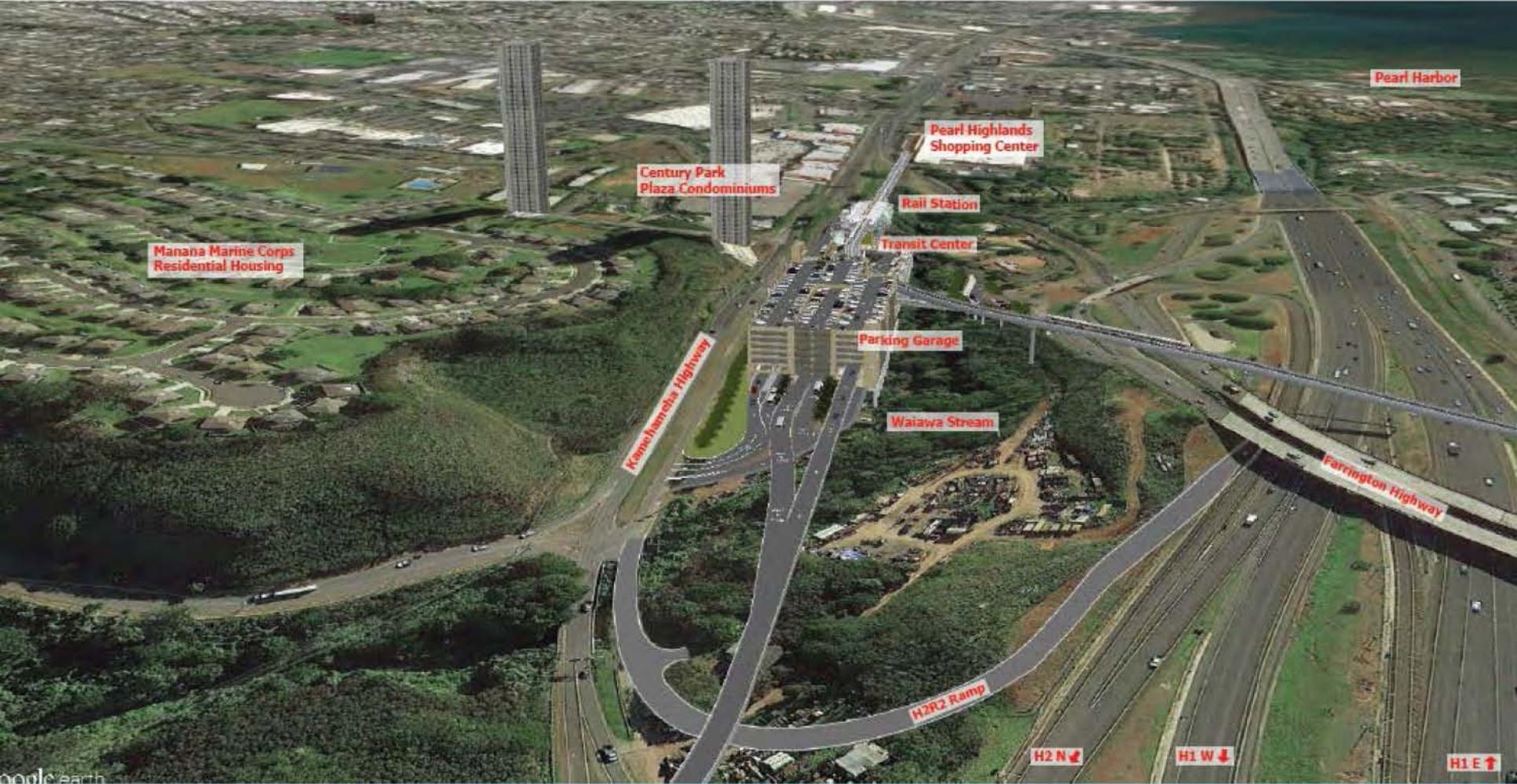
Google earth

HONOLULU RAIL TRANSIT PROJECT

www.HONOLULUTRANSIT.ORG

HART

HONOLULU AUTHORITY — RAPID TRANSPORTATION



Pearl Harbor

Pearl Highlands Shopping Center

Century Park Plaza Condominiums

Rail Station

Transit Center

Manana Marine Corps Residential Housing

Parking Garage

Kamehameha Highway

Waiawa Stream

Farrington Highway

H2R2 Ramp

H2 N ↓

H1 W ↓

H1 E ↑

google earth

HONOLULU RAIL TRANSIT PROJECT

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HONOLULU AUTHORITY FOR RAPID TRANSPORTATION



Data SOEST/UHM
Image USGS
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

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HONOLULU AUTHORITY FOR RAPID TRANSPORTATION

RFI Overview

- Purpose
 - Solicit input that will inform P3 RFP
 - Resolve “go/no go” decision for P3
 - Signal to development community interest in HART P3
- Components
 - 1600 parking stalls
 - Bus Transit Center
 - H2R1 Ramp
- Financing
 - Lease vertical space
 - Future parking revenue in coordination with HART
- Schedule
 - Completion by Revenue Service

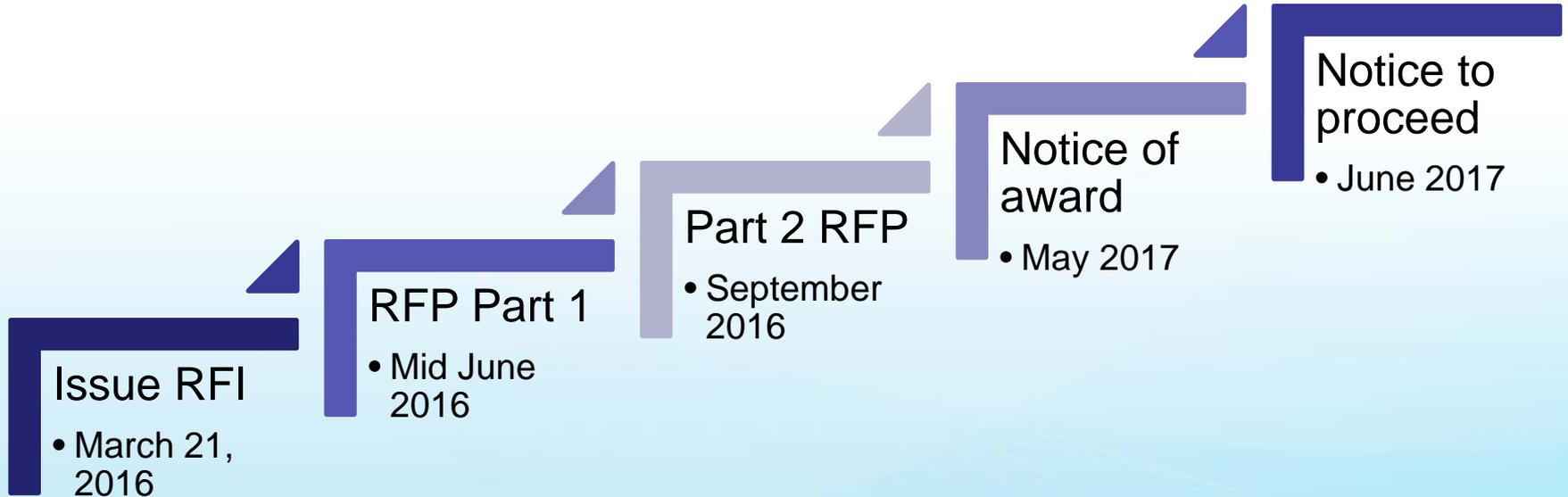
Critical Stakeholder Coordination

- Department of Planning and Permitting Zoning
 - Zoning
 - Conditional Letter of Map Revision (FEMA)
- US Army Corp 404 Permit for Waiawa Stream and Tributary Mitigation
 - Prescribes shaft locations
 - Requires mitigation and conservation
- Federal Transit Administration Joint Development Circular

Proposed Phasing: Two Scenarios



RFI + RFP TIMELINE



Mahalo!



Performance Evaluation Report
Executive Director and Chief Executive Officer
Honolulu Authority for Rapid Transportation
April 2014 – March 2015

Introduction

Appointed by the Board of Directors (Board) of the Honolulu Authority for Rapid Transportation (HART), the Executive Director and Chief Executive Officer (Executive Director) receives policy direction from the Board and is responsible for planning, directing, and administering all of the affairs of HART, including running the day-to-day operations of the Authority. The Executive Director makes recommendations to the Board on budgets, policies, plans, and rules, and reports regularly on the performance of the agency.

Pursuant to Section 17-103.3(d) of the Revised Charter of the City and County of Honolulu 1973 (2000 ed.), the Board shall "[e]valuate the performance of the executive director at least annually; and submit a report thereon to the mayor and council."

Daniel A. Grabauskas was appointed by the Board as Executive Director and Chief Executive Officer of HART and began service on April 9, 2012. This is the third annual evaluation of Executive Director Grabauskas.

Methodology

In evaluating the Executive Director, the Board considered the following performance factors: Leadership Qualities (effectiveness and competence; positive attitude and morale; personal and agency integrity; creativity; relationships; and openness and transparency) and Managerial Skills (organizational structure; delegation; personnel and staffing; budget and fiscal matters; communication skills; training and development; and community relations).

The following evaluation components were then applied to the performance factors:

FAILS TO MEET EXPECTATIONS	-	Results achieved do not meet required expectations and objectives
IMPROVEMENT REQUIRED	-	Results achieved do not meet required expectations and require improvement
MEETS EXPECTATIONS	-	Results achieved meet required expectations and objectives
EXCEEDS EXPECTATIONS	-	Results achieved exceed required expectations and objectives consistently
EXEMPLARY	-	Results achieved surpass required expectations and objectives without exception

The Board also considered the Executive Director’s performance in meeting the annual performance objectives agreed to by the Board and the Executive Director for his third year in office.

Evaluation

Overall, the Board was very favorable in its evaluation of the Executive Director. Members noted his exceptional leadership skills, as well as his diligence and educational efforts with policymakers during the fiscal challenges faced by the agency this past year.

The Board’s evaluation of the Executive Director for the period April 2014 to March 2015 is as follows:

A. **Leadership Qualities.** The leadership qualities assessed by the Board are Effectiveness and Competence; Positive Attitude and Morale; Personal and Agency Integrity; Creativity; Relationships; and Openness and Transparency.

The Board scored Executive Director Grabauskas very high in each of these leadership qualities, with most Board members rating the Executive Director’s performance as achieving either “exceeds expectation” or “exemplary.” Board members noted Executive Director Grabauskas’ strengths in this category, remarking upon his dedication, tenacity, and integrity. Members described him as an “effective leader,” a “great cheerleader,” and having a “perfect” positive attitude. Under his leadership, progress has been made in the areas of the General Excise Tax (GET) surcharge extension, construction, and changes in key partners, i.e., a key leadership

change at Kiewit, the AECOM/URS conflict of interest, and a change in Ansaldo Breda and AnsaldoSTS ownership. One member stated that Mr. Grabauskas' request to decline his annual bonus was an example of his outstanding leadership. All believe Mr. Grabauskas is working very hard to advance the project in a responsible manner.

Many members noted his sincerity, skill and effectiveness in interfacing with members of the Honolulu City Council and State Legislature, particularly during the current legislative session with regards to the GET surcharge extension, and with the current City budget cycle. Members also observed that Mr. Grabauskas displayed exceptional skill in communicating project information to the media and the community.

While there was ample praise for Mr. Grabauskas' communication skills and transparency, one member pointed out that this was also an area requiring improvement, and that the general reaction to the announcement about major concerns regarding project finances demonstrated a need for even more effective and clear communication with the public and project stakeholders. Many other members rated Mr. Grabauskas as "exemplary" or "exceeds expectations" in this category, underscored by the voluminous materials provided to lawmakers and the public in the past several months. Another suggestion for improved communication was to refocus and adapt public communication efforts so that potential areas of concerns are more easily identified.

Another area in which the Board felt there could be improvement was in communication with Board members, particularly regarding potential problems, and thereby engaging the Board sooner in issue resolution. In this regard, one Board member commented that "If appropriate Board members know about the problems early, we can help HART staff come up with more solutions... [t]he Board is there to help." Another member noted that communications with the Board, as well as presentations to the Board, should be re-focused on future challenges, instead of primarily emphasizing current matters such as change orders and delays.

B. Managerial Skills. The managerial skills assessed by the Board are as follows: Organizational Structure; Goals and Objectives; Delegation; Personnel and Staffing; Budget and Fiscal Matters; Communication Skills; Training and Development; and Community Relations.

As was the case with leadership qualities, Executive Director Grabauskas received high ratings from the Board for his managerial skills. Board members generally rated his performance in this area as "exceeds expectation." Board members noted that the good work done by the HART staff was reflective of the managerial skill displayed by Mr. Grabauskas. One member observed that "Dan hires

good people and gives them the necessary freedom and authority to do their job.” Another member commented that staff had “great respect for his fairness and managerial skills.”

Members also noted Mr. Grabauskas’ proficiency in maintaining positive relationships, and his knowledge of community concerns.

However, it was noted by a few members that financial oversight could be improved upon, and that budget increases should have been anticipated. In the category “budget and fiscal matters,” one member commented that Mr. Grabauskas needs improvement, and that priority should be given to providing a greater degree of transparency and clarity to the complex financials of the project. Another member indicated that the Executive Director could have a better sense of construction costs and change orders.

In the area of personnel and staffing, one member noted that more HART staff should be converted to civil service. Another member commented that operational staffing plan updates are needed.

One member pointed out that the Board could use more training and development.

C. Performance Objectives. As noted previously, the Board and Executive Director Grabauskas agreed to annual performance objectives for his third year in office. These objectives, attached to this report as Exhibit A, encompassed numerous specific items in the categories of organizational development, project delivery, project finances, stakeholder interactions and community leadership, and Board interaction.

On March 31, 2015, the Executive Director submitted his self-evaluation report on his efforts over the past year to meet the agreed-to annual performance objectives for the 2014-2015 time period. (See Exhibit B.) The Executive Director had previously submitted a semi-annual report to the Board on October 31, 2014, as specified in the performance objectives. (See Exhibit C.) The Executive Director’s assessment clearly explains how he met the objectives articulated for his third year on the job. Through the Executive Director’s efforts, and the dedicated efforts of his entire HART team, to whom he gives well-deserved credit, great accomplishments have been achieved in the past year, despite numerous challenges.

In his self-evaluation report, Mr. Grabauskas clearly identifies HART’s anticipated budget shortfall as his chief area of focus in the previous year, which came in the form of both revenue shortfalls and rising costs. However, he goes on to

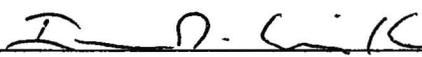
outline the various steps taken to mitigate those impacts, which include cost containment as well as pursuing a secure and reliable revenue source going forward. In addition, Mr. Grabauskas outlined other achievements in the defined areas outlined in the performance objectives.

Lastly, Mr. Grabauskas identified areas of focus for the coming year. These include continuing to make project safety a top priority. Also, a concerted effort will be made to ensure adequate project revenues – federal, state, and debt financing – as well as to closely monitor project expenditures. Mr. Grabauskas also included a goal of maintaining transparency, and providing financial details. Other goals include working to lessen the impacts of construction, resetting the master project schedule according to the new contract packaging plans, and continuing fare policy development and bus-rail integration, along with TOD efforts.

Conclusion

The past evaluation period has been a challenging one, but Executive Director Grabauskas has continued to demonstrate that he is a capable, hard-working, effective, and responsive leader. Although many of the challenges will continue into the next evaluation period, an improved degree of communication with greater clarity will ensure the continued success of both Mr. Grabauskas and the Honolulu rail project. For the next review period, the Board will base its evaluation in part upon the new annual performance objectives agreed upon by the Board and the Executive Director.

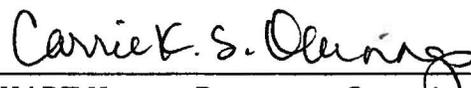
DATED THIS 25th DAY OF JUNE, 2015.



HART Board Chair

JUN 25 2015

Date



HART Human Resources Committee Chair

JUN 25 2015

Date

MEMORANDUM

TO: Board of Directors,
Honolulu Authority for Rapid Transportation (HART)

Carrie Okinaga,
Chair, Human Resources Committee

FROM: Daniel A. Grabauskas,
Executive Director and CEO

SUBJECT: Annual Performance Objectives Review
April 2014 –March 2015

DATE: March 31, 2015

EXECUTIVE SUMMARY

On December 18th of last year, I reported to the HART Board and to the public that the remaining 40% of our construction contracts, comprising chiefly the final 10 miles of the guideway and all 21 stations, are projected to exceed our available budget by \$550M to \$700M. In addition, I informed the board that a substitute revenue source for the 5307 federal formula funds that are in the project financial plan but have been used for TheBus should be part of the overall discussion of the financial challenges facing the project.

I highlighted the fact that the costs of past delays and delay claims can now be estimated at approximately \$190M; that costs for the remaining construction contracts will likely exceed the FFGA budget amounts by at least 35% to 45%; that General Excise and Use Tax (GET) surcharge revenues are lagging by approximately \$40M, the greatest cumulative amount since we entered into the Full Funding Grant Agreement (FFGA); and that \$210M of project income, which was expected to be derived through 5307 funds, must either be available to the project to close the projected gap or be substituted with another revenue source.

Since that time, we have been working diligently on cost reduction and solutions to these financial challenges. As directed by the HART Board, and as advocated by Mayor and the City Council, we have begun the discussion with State Legislators and the Governor about extending the GET surcharge as the best way to complete the project as planned, begin planning and building the extensions to complete the Locally Preferred Alternative route further into downtown Kapolei and to UH Manoa, and as a possible source of long-term funding for operations and capital maintenance of the system.

In light of these challenges our first order of business has been cost containment. To immediately address the issue, we announced an Action Plan at the December HART Board meeting that included:

- Repackaging the solicitation for the first 9 stations into three packages
- Reducing projected costs of future contracts through value engineering and scope reductions
- Providing contractors more time to complete their work and relieve schedule compression to further reduce costs, and delaying interim opening of the project to 2018
- Repackaging the remaining 12 stations
- Cancellation of the solicitation for the final 10-miles of guideway to repackage and refine it to further reduce costs

- Utilizing the design-build (DB) method in appropriate circumstances, in addition to the design-bid-build (DBB) method, in response to industry feedback and analyzing the impact of this change on the project schedule
- Taking advantage of low interest rates and an improved borrowing plan to save an estimated \$60M to \$75M in borrowing costs
- Exploring alternative financing options for project components, such as the Pearl Highlands Parking Garage
- Using the extra time to market this desirable property and examine additional public-private partnerships
- Exploring new partnerships with private and public entities, such as the Hawaii State Department of Transportation, for federal monies
- Leveraging transit-oriented development opportunities to offset costs and/or obtain the benefits of value capture mechanisms

We are working hard to achieve these goals. We are also working hard throughout this legislative session to supply lawmakers with all the information they require to assess HART's financial situation and make decisions regarding tax policy and the future of the rail project.

As I reported to the Board last year, HART comprises an exceptional group of talented people who are creating a brighter future for generations of Honolulu's citizens through construction of a safe, reliable and efficient transit system that will serve our community for 100 years and more. They are up to the challenges we are facing and are working together to build the project as quickly and safely as possible, and with the highest quality. We are focused on cost containment and establishing new budget benchmarks based on the fiscal realities brought on by lawsuits, delays, and now a construction market that is rapidly escalating construction costs beyond our current budget. You have my pledge that I am working diligently along with our HART team to address the issues we face and successfully manage these challenges in cooperation with all of our partners and stakeholders.

As directed by the HART Board's Human Resources Committee, this document serves as a yearly report on the goals, milestones, and achievements *vis-à-vis* the evaluation criteria established by the Board. I describe the status of ongoing construction-related activities, completed tasks, and significant accomplishments during the past 12 months that have advanced the mission of the organization and that address the specific goals I was given by the Board of Directors in July 2014.

I look forward again to a dialogue with the Human Resources Committee and the Board of Directors regarding my performance this past year and setting goals and priorities for next year.

Mahalo.

STATUS OF MAJOR GOALS, MILESTONES AND ACHIEVEMENTS

“Now that construction has fully resumed, of course, priorities for the H RTP overall include safety as well as keeping the project on-time and within budget. In addition...the priorities for the H RTP now include updating the financial plans, and developing a sound fare policy in concert with the Board, the Mayor, and the City Council... continuing priority will be to maintain transparency and communication with the public and key stakeholders...”

This past year was a very busy year and one of the most challenging for the project. After successfully weathering political and legal challenges that beset the first several years of the project and mobilizing the significant efforts required to resume construction in the fall of 2013, a series of events came together at the end of 2014 that brought forward a new fiscal reality for the project. These events have required a reassessment of our schedule for the interim opening, a repackaging of plans for the remaining construction contracts, a thorough review of the project’s scope, implementation of aggressive value engineering of our station designs, and ultimately a reassessment of our overall project budget.

At the same time we are encouraged by the excellent progress we have made this past year on the design and manufacturing of the first rail cars and look forward to the delivery of the first rail car on island next year. Our construction of the new Rail Operations Center (formerly known as the Maintenance and Storage Facility) is progressing well and is now more than 65 percent complete. And we also celebrated the completion of more than two-and-a-half miles of guideway in West Oahu.

In last year’s self-assessment, the Board proposed a number of project delivery milestones. Reviewing these goals, I am highlighting for you the following specific areas of progress:

WE REDEDICATED OURSELVES TO SAFETY AS OUR #1 PRIORITY

With the increasing amount of construction now taking place in ever more densely populated areas and in our busiest roadways, safety is the #1 priority for all HART staff and our contractors. Safety for our workers and for the traveling public as our workers perform heavy, complex construction is our daily concern. Since the first days when we resumed construction, I have personally visited worksites numerous times and always talk about safety with our contractors’ staff, and our own staff. Our public outreach team worked with our contractors and other stakeholders on a series of public safety awareness announcements, alerting motorists of key traffic changes related to our Balanced Cantilever work as the elevated guideway crosses the freeway. Our safety and security officer, Henry Miranda, and I continue to meet weekly at a minimum, focusing on a safe workplace and how we can build a safe and secure transit system, along with our partners Kiewit and Kiewit/Kobayashi Joint Venture, Nan Inc., Royal Contracting Co. Ltd., Hawaiian Dredging/Condon Johnson JV and Ansaldo Honolulu Joint Venture (AHJV).

I am proud of our safety record: We continue to be an extremely safe workplace. A project of our size and complexity could typically expect upwards of 3.8 injuries per 100,000 hours worked. Our current rate of injuries is .6 injuries per 100,000 hours worked with 1.3 million reported man hours worked.

WE WORKED TO MITIGATE TRAFFIC IMPACTS FROM CONSTRUCTION

This past year HART worked collaboratively with the State of Hawaii Department of Transportation (HDOT) and the City and County of Honolulu Department of Transportation Services (DTS), as well as with private companies doing work along the rail corridor, to better coordinate our construction activities to reduce traffic impacts. While we made good progress in many areas, we acknowledge

that we have much more to do to address the public's dissatisfaction with the interim condition of many roads where we are relocating utilities and the nightly impact to traffic congestion at key intersections and along the business parts of Farrington and Kamehameha Highways. We issue weekly traffic advisories to the media, meet regularly with traffic reporters to provide an early look at what traffic changes are ahead, and issue traffic notifications as part of our weekly eBlast newsletters to the public. Based on feedback from the public, we also push out key traffic notifications on social media through Facebook and Twitter. In addition, we also hold media construction site tours to help the media to better understand the type of work we are doing and the reasons behind the lane closures and traffic changes. We pledge to re-double our efforts in this area, while recognizing, that there will be limits on meeting the public's expectations due to the fact that we must maintain a steady pace of work if we are to achieve our strict schedule for completion.

WE RE-EVALUATED AND CHANGED OUR CONTRACT PACKAGING PLANS

We have revamped our contract packaging plans for the remaining construction contracts primarily in response to extensive outreach we have conducted with the construction industry as we examined ways reduce costs in this new, aggressive construction market. Deputy Executive Director Brennon Morioka, Project Director Sam Carnaggio, Director of Design and Construction Lorenzo Garrido and Deputy Director of Design and Construction Dave Conover did an excellent job of reaching out to the construction industry and refining our contract packaging plans. The most significant changes to our contract packaging plans include shifting the final 10 miles of guideway construction from design-bid-build to design-build. We have also decided to package guideway segments and their associated stations into a single package, rather than as separate contracts, in order to reduce the contractor's site risk and consequently further reduce costs. We have also elected to break the large 10-mile final guideway segment into two smaller segments to foster greater competition and to offer better opportunities for local on-island prime and sub-contractors to compete for the work. Finally, we have carved out utility relocations into their own contracts as advance work so that utilities can be removed or relocated ahead of the construction activities. This is meant to reduce the risk to contractors who indicated they are wary of unknown subsurface conditions and undocumented utilities, particularly in the city center.

WE MADE PROGRESS IN RIGHT-OF-WAY AND REMAIN UNDER BUDGET

With access to nearly 90 percent of all land needed for the project secured, we remain approximately \$10M under budget in this critical area. To date we have successfully negotiated with owners to mutual satisfaction in all but a handful of cases. The progress here continues to be a hallmark of excellent work, with HART working with, not against, property owners as we advance the project. Our Director of Planning, Permitting and Right-of-Way Liz Scanlon and Deputy Director of Right-of-Way Morris Atta and their team did an excellent job in this regard.

OUR RAIL CAR MANUFACTURING REMAINS ON SCHEDULE

After achieving the significant milestone of completion of interim design in June of last year, extrusions of the first parts of our rail car began according to schedule. Last November, assembly of those parts to form the first car body shell began. Then in December, our HART team toured the various facilities manufacturing the first rail cars for our project to ensure production was on schedule and manufacturing was being done to meet HART's quality standards.

Our overall findings were:

- AnsaldoBreda is utilizing processes and procedures in compliance with their approved Quality Assurance Plan.
- The carshell assembly has started on schedule and is progressing towards meeting key milestones.
- The audit team found high quality workmanship at each of the 3 facilities we visited.
- We are on target to deliver the first completed rail cars on island in the first quarter of 2016.

Deputy Director of Systems Justin Garrod in partnership with our Director of Operations and Maintenance Duane Sayers is working hard to ensure production remains on schedule.

WE ARE MANAGING THE CORE SYSTEMS CONTRACT AND THE OWNERSHIP TRANSITION

Last year, as speculation over the sale of Finmeccanica's interests in AnsaldoBreda and AnsaldoSTS intensified, I reminded the companies involved that HART would take firm and proactive steps to protect its interests on behalf of Honolulu's citizens. We received strong written assurances from Finmeccanica's top executives that they stood behind our project and that any sale would be directed at strengthening these two company's positions.

In late February it was announced that Finmeccanica had entered into an agreement that would result in the sale of AnsaldoBreda and Ansaldo STS to Hitachi. Given Hitachi's world-recognized position in transportation generally, and in rail specifically, we are hopeful that this will indeed solidify HART's position. I have reached out to Hitachi asking them to provide concrete assurances of commitment to Honolulu's rail project as soon as the sale is finalized. I have also requested a meeting with the company's new leadership as it pertains to our project. I will report back to the Board once the sale is completed.

WE HAVE NO NEW LEGAL CHALLENGES

Oftentimes the absence of things can be as important as the presence of things. I am pleased to report that there are no new legal challenges to the project at this time. We have continued to maintain positive working relationships with Native Hawaiian organizations and interest groups, the Oahu Island Burial Council (OIBC), the State Historic Preservation Division (SHPD), numerous consulting parties who are signatories to the comprehensive Programmatic Agreement, among others at the local, state, and federal levels. These positive relationships do not imply that we have no disagreements, but rather that concerns are addressed face-to-face amicably and forthrightly at community meetings in open dialogue rather than through litigation. We have an excellent team from Corporation Counsel in Gary Takeuchi, Reid Yamashiro, Lisa Hirahara and most recently, Ivan Torigoe.

I would add as an update that we have finalized the burial treatment plans for the remains found during the Archeological Inventory Survey and Data Recovery efforts. Those plans have been presented to OIBC and SHPD for review and approval.

WE RECEIVED AN ANNUAL FINANCIAL AUDIT WITH NO FINDINGS

The Board's audit contract with PKF was assigned seamlessly to the KMH firm in June 2014. This transition was required when PKF informed HART that it could no longer perform the audit functions as required under their contract. KMH's independent financial audit of HART for FY 2014 resulted in another unqualified opinion, as in the two previous fiscal years of HART's existence. Of particular note, there were no findings of any kind for FY 2014 audit. That success was due to our finance

team, including Chief Financial Officer Diane Arakaki, Budget and Grants Planner Mike McGrane and Fiscal Officer Bruce Sakihama.

WE RECEIVED A POSITIVE FIRST TRIENNIAL REVIEW BY THE FTA

In February 2015 the Federal Transit Administration (FTA) conducted its first Triennial Review of HART. This comprehensive review evaluates grantees in 17 different subject areas, including procurement, financial capacity, Americans with Disabilities Act (ADA) compliance, operations and maintenance, planning, and more. For HART, the review largely focused on technical capacity, financial capacity, and procurement. HART spent two full days with the federal review team. I am pleased to report we did extremely well.

FEDERAL FINANCIAL COMMITMENT CONTINUES AS PER PLAN

In September 2013, the FTA recommended \$250M be allotted to the project. Due to Sequestration, in early 2014 the Congress passed a budget including \$236M for Honolulu. While it was less than FTA's recommended amount, it was the largest single amount appropriated for any project in the United States. The FTA recommended the full \$250M per the FFGA for federal fiscal years 2014 and 2015, which Congress has enacted. These significant milestones bring the federal allocation to our project to \$1.056B—approximately two-thirds of the \$1.55B committed to the project in our FFGA. The federal fiscal year 2016 budget includes another \$250M increment, which is pending enactment by Congress.

We want to thank our Congressional Delegation, once again, for their support and for succeeding in this vital effort.

PERMITTED INTERACTION GROUPS WORKING TO SET FARE POLICY

In order to effectively implement a fare policy for the rail system and to proceed with the acquisition of a fare media system, including fare gates and fare vending machines, we hired Whitney Birch as fare system manager. She comes to Honolulu with an impressive background in the establishment of fare systems in the United States and Canada over the past 22 years in transit planning and policy. She is charged with working with HART, DTS, OTS and our Ansaldo Honolulu Joint Venture partners to implement a system that will be utilized by TheBus, HandiVan, and rail customers in a way that is seamless and simple to use. She is also staffing the Board's fare policy permitted interaction groups. Joining her in making this effort a success this past year is HART's Director of Special Projects Alex Cross.

Section 17-103.2(e) of the Revised Charter of the City and County of Honolulu (RCH) empowers the Honolulu Authority for Rapid Transportation (HART) to establish all fares, fees, and charges for the fixed guideway rail system. HART's Board of Directors is tasked by RCH Section 17-106 to fix and adjust reasonable rates and charges for the rail system. Therefore, to allow the Board of Directors to guide and inform the work of the project steering committee, on December 19, 2013, at a duly noticed meeting of the Board of Directors, the Board established a Permitted Interaction Group (PIG) pursuant to Section 92-2.5(b) of the Hawaii Revised Statutes, consisting of the Human Resources (HR) Committee Chair (Carrie Okinaga), the HR Committee Vice Chair (Don Horner), the Finance Committee Chair (Keslie Hui), the Government Affairs, Audit and Legal Matters Committee Chair (Bobby Bunda), and ex-officio Board member and Department of Transportation Services Director (Mike Formby). The purpose of the Group was to investigate the fare policies of other transit

agencies, bus and rail farebox recovery ratios, possible alternative revenue sources, and fare collection and associated technologies.

FIG I (Recommendations to the HART Board)

FIG recommendations to the Board on October 9, 2014, which were subsequently confirmed by the Board on November 13, 2014, included:

- Design of the fare collection system should plan for operations that maximize use of existing expertise and capacity at the City, OTS and HART
- HART's fare collection system should include use of fare gates
- Recommendations are intended to provide general direction, and are subject to further appropriation and budgeting decisions by the City and HART

FIG II (Establishment)

On December 18, 2014 the HART Board created a new Permitted Interaction Group (FIG) with a scope of work that includes matters remaining for investigation and action after the report of the first FIG, including but not limited to:

- Farebox recovery ratios
- Possible alternative sources of revenue

WE CONTINUED THE PROJECT'S ENHANCED TRANSPARENCY

HART continued our efforts to be the most transparent public works project in the State. These efforts, led by Communications Director Jeanne Mariani-Belding and our public outreach team, continue to disburse timely, accurate, useful information to the public and to our key stakeholders.

Among the major efforts designed to provide timely project information are:

- Monthly "HART FACTS" published in the *Star-Advertiser* and *Pacific Business News*.
- Comprehensive Monthly Reports issued to the FTA and the Board of Directors, and made available to the media and the public on HART's website
- Weekly e-Blast with project updates and traffic information
- Frequent website updates with news and pertinent project information in an easy-to-find, easy-to-read format
- Monthly 'Olelo broadcasts discussing key project topics and construction information
- Our Balanced Scorecard, distributed quarterly, with key metrics regarding every aspect of our project's progress
- Nearly 80 press releases, media advisories, construction notices, and community updates

From January 2014 to date, we participated in more than 200 presentations, workshops and events plus more than 140 Neighborhood Board meetings to provide project information and address public questions and concerns.

HART organized more than several dozen significant media events, construction site tours, and press conferences to keep the public informed of project construction activities and progress as well as to engage businesses and citizens in our decision-making process. Highlights include:

- *Star-Advertiser* Editorial Board to provide a construction and financial update (Feb. 5, 2014)
- Unveiling of train car model at Kapolei Hale (Feb. 13, 2014)
- News conference on federal court ruling (Feb. 18, 2014)
- Hawaii News Now Sunrise morning show interview (Feb. 28, 2014)

- Tour of casting yard in Kalaeloa to explain how segments are cast (April 16, 2014)
- Industry Day (May 5, 2014)
- *Star-Advertiser* editorial board tour of casting yard to discuss upcoming construction work (May 14, 2014)
- Anti-graffiti community painting project at future Pearlridge station (May 17, 2014)
- Media tour of guideway construction in East Kapolei (June 5, 2014)
- Airport station news conference with project stakeholders to unveil station renderings and public meeting schedule (July 16, 2014)
- Press conference to discuss West Side Station contracts coming in over budget (Sept. 9, 2014)
- Hawaii News Now Sunrise morning show to talk about contracts and progress (Sept. 16, 2014)
- KITV This Morning show to talk about contracts and construction progress (Sept. 16, 2014)
- Media tour of Rail Operations Center to provide construction information (Sept. 25, 2014)
- Rail Operations Center news conference with APTA president to provide construction update (Oct. 28, 2014)
- News conference on balanced cantilever work (November 25, 2014)
- Media Tour on top of elevated guideway in East Kapolei to provide project update (Dec. 3, 2014)
- Hawaii Public Radio “Town Square” appearance with Mayor Caldwell to provide project update and discuss finances (Jan. 15, 2015)
- Hawaii News Now Sunrise morning show filmed live on top of the guideway to discuss construction and the project’s finances (Jan.29, 2015)
- Hawaii News Now Sunrise interview to discuss the project’s construction, traffic and general update (Feb. 26, 2015)
- *Star-Advertiser* editorial board to provide updated information on the project’s finances (March 5, 2015)

With construction in full swing, HART’s outreach team has organized more than a dozen meetings specifically designed for businesses along the rail alignment that are impacted by the project’s construction work. This provides opportunities for businesses to share their concerns about the impact of our construction work, and partner with us to find solutions where possible. It also allows business owners and managers to ask specific questions of our construction, design and traffic engineering team – all of whom participate in these business meetings with our outreach team. In addition HART has created several programs to assist businesses throughout the construction process, and has partnered with agencies such as the Mayor’s Office of Economic Development, the Small Business Administration, the Mink Center for Business Leadership and the Hawaii Small Business Development Center to provide additional resources for businesses along the route to help lessen the impact of our construction work.

A very high priority is placed on enhanced transparency and communication with the general public and key stakeholders in order to build and to maintain confidence in the management of and support for the rail project. I can say confidently that HART’s enhanced transparency continues to be one of the hallmarks the project. As I stated last year, I remain fully cognizant that the Board pronounced transparency a top priority when I was hired, and I have worked diligently and creatively with our staff to make HART a more open and accessible organization to elected officials, to the media, and ultimately to the people of the City and County of Honolulu.

WE HIRED A RAPID TRANSIT STABILIZATION AGREEMENT ADMINISTRATOR

Following extensive outreach and many discussions with unions represented on our project, HART reached out nationally to find a firm to manage our project labor agreement, also known as the rapid transit stabilization agreement (RTSA). We selected the Solis Group. This company started working on with us in January 2015 and has completed its initial outreach to our contractors and labor unions.

WE CONTINUED CREATING JOBS

Last year I reported that the project employed just over 1,000 people. This year the number has climbed to nearly 1,400 people directly working on the project. About 63% of those jobs are local jobs. The trajectory is on track to achieve the goal of 4,000 direct jobs during what will be the height of construction in 2016-2018.

WE CONTINUED RAIL-BUS COLLABORATION EFFORTS

Once again during the past year, in close collaboration with DTS, OTS, HART, AHJV and our City and County partners we tackled such issues as fare collections system selection and fare policy development.

HART's Planning staff participates in regular coordination meetings with our DTS partners. Our monthly HART, DTS, and OTS stakeholder coordination meetings address our efforts in Honolulu to ensure an integrated transit system with seamless connections between bus, rail, and paratransit. In these meetings, we address the customer experience with fare collection and website information access. Communication links between HART and DTS, as well as their operations and maintenance contractors OTS and AHJV, are strengthened and developed in these meetings.

HART and DTS also meet quarterly to plan efficient and effective bus-rail connections. This Bus-Rail Integration Planning meeting contemplates providing the best service during the construction of rail moving forward into the full implementation scenario of rail upon completion of the 20-mile line.

HART and DTS also meet monthly in a bus-focused Service Review Committee. This committee addresses operations and planning concerns related to the current service with a look-ahead to potential future changes to bus routes.

WE EXPANDED OUR DISADVANTAGED BUSINESS ENTERPRISE (DBE) OUTREACH AND REPORTING ACCOUNTABILITY

Our DBE program, under the leadership of Civil Rights Officer Chuck Bayne, continues to progress. Some highlights this past year include:

- Successful DBE and small business forums in May 2014 and March of 2015, with more than 200 participants each
- DBE participation has increased from \$12.9M, or 5.93% on total disbursed FTA funds in January of 2014 to \$20.4M, or 6.46% as of December 2014.

WE COLLABORATED ON TRANSIT-ORIENTED DEVELOPMENT (TOD) PLANS

Working with the Mayor's point person on TOD, Harrison Rue, we participate weekly in the TOD sub-cabinet meetings. Our participation is led by Deputy Executive Director Brennon Morioka; Planning, Permitting and Right-of-Way Director Liz Scanlon; and Sustainability Coordinator Aki Marceau. In addition, I participate regularly in various state and City and County TOD forums, and HART's public outreach team also staffs an informational booth at all TOD community meetings and workshops, to answer questions and provide information about the rail project.

HART continues to be a key player in deliberations concerning TOD around our stations and places a high priority on maximizing future smart development along the rail corridor.

HART PREPARED FOR INITIAL INTERIM BORROWING ALONG WITH BUDGET AND FISCAL SERVICES (BFS) AND THE CITY COUNCIL BUDGET COMMITTEE

We have made several debt financing improvements including taking advantage of current low variable interest rates; minimizing total borrowing by interest only payments during construction (paying principal payments during construction exacerbates cash flow needs); increased debt flexibility with the use of commercial paper that allows for quick access to funds at lowest cost; and improved debt coverage ratios.

We are taking advantage of low interest rates and an improved borrowing plan to borrow less and save on principal, interest and other borrowing costs over the original debt financing plan.

We also worked with the City's Budget and Fiscal Services Department on drafting a Memorandum of Understanding (MOU) that incorporates these debt financing improvements. All of these efforts position HART well for future borrowing in accordance with our Financial Plan.

In the coming year, we will work closely with the City as the project moves forward with its initial borrowing as outlined in the Financial Plan.

EVALUATION PRIORITY AREAS UPDATE

"To assess whether or not the Executive Director & CEO has accomplished these goals and successfully executed the duties and responsibilities of his position, the Board will evaluate performance in the following high priority areas..."

In October 2014, as directed by the Board, I submitted a semiannual progress report. Below please find that report on organizational development, project delivery, project finances, stakeholder interactions and community leadership, and board interaction, which I have updated for the full year.

I. ORGANIZATIONAL DEVELOPMENT

HART has made significant strides in our organizational development. We have hired several new key staff members, including:

- Change Order Manager
- Director of Procurement
- Project Director [New Position]
- Transit Grants Manager

- Deputy Director of Planning
- Deputy Director of Construction
- Assistant Deputy Director of Construction
- Transit Contracts Manager
- Director of Special Projects
- Fare System Project Manager

Director of Administrative Services Paul Romaine and his staff continue to facilitate hiring and our IT efforts and do an excellent job.

Last October we hired Sam Carnaggio as Project Director. This position was discussed with the FTA as a proven method to break down silos so that large construction programs can be more efficient and effective. In his new role, Sam has management responsibility for design and construction, procurement, change management, project controls, and environmental and right-of-way activities. He comes to our project with extensive experience as a professional engineer and senior construction manager, including working for the last 10 years as project director of Washington, D.C.'s recently opened Dulles Metro extension. Prior to that, he served as chief engineer for the Federal Transit Administration (FTA) and worked on numerous construction projects around the country.

A draft Human Resources staffing plan was presented in December and we will continue to work with the Board and Human Resources Committee of the Board to refine the plan as we approach revenue service.

Staff training continues with this year's emphasis on ethics awareness. And staff continues, as it did last year, with training on our Contract Management System (CMS), various computer-related trainings, and construction site safety. Specific training is made available (or in some cases required) for more specialized work in departments such as procurement, quality assurance and quality controls, safety and security, civil rights, environmental planning, and human resources.

Weekly senior staff meetings for enhanced communication and coordination continued this past year. We also continue to hold All-Staff Meetings. These meetings are designed to bring everyone working on the project together to provide accurate and timely information, highlight the project's progress and discuss some of the challenges we face as a team. Once again this past year HART took solid, positive strides forward as an integrated, highly functioning organization.

In addition, the HART business strategy was adopted this past year by the Board through the business plan, which is currently being updated for fiscal year 2016. The business plan strategy continues to guide our overall approach to the organization's management and mission definition.

II. PROJECT DELIVERY

HART conducted a Risk Refresh in partnership with the Federal Transit Administration (FTA) and the results were presented to the Board in July. Areas of risk were identified, along with mitigation strategies. We continue to proactively track and mitigate project risks and outline them in the Monthly Progress Report. The Risk and Contingency Management Plan is also being updated.

We continue to emphasize safety by partnering with our contractors and subcontractors, including partnering with Kiewit on a public safety awareness campaign to keep both the public and our workers safe in our construction zones.

Since resuming construction, we have made significant progress. As of mid-March 2015, we have constructed:

- More than 145 columns
- More than 210 foundations
- More than 2,400 segments cast
- 100 spans erected, which is equivalent to more than 2.5 miles of guideway
- First rail installed on guideway and at the Rail Operations Center

The Rail Operations Center made tremendous progress this past year. The main buildings on site have rapidly taken shape, with more than 4 miles of utilities in place to prepare the facility for operations testing next year.

After receiving bids for the Westside Station Group that exceeded estimates, we canceled the solicitation and conducted an analysis to determine how we could reduce costs, while maintaining the project's 2019 opening date. Accordingly, we have suspended procurement for the Pearl Highlands Parking Garage, which is currently under review for further action. Extensive contractor interviews have taken place and after issuing the solicitation for the first three stations in the Westside group, we recently received five bids. The lowest bid was within the neighborhood of our revised estimates and the fact that we had five bidders indicates a positive response to our strategy to break up the larger contract into three smaller ones.

We are also repackaging construction contract packages and re-evaluating our schedule for all the project's remaining construction contracts. Solicitations for those contracts will be issued by the end of the year and are expected to be executed by mid-2016. Key remaining construction contracts include:

- Airport Guideway and Stations
- City Center Guideway and Stations
- City Center Utilities and Civil Work
- West Oahu Station Group
- Kamehameha Highway Station Group
- Ramp H2R2

HART continues to develop bus-rail integration plans in coordination with DTS and OTS, including working on the request for information (RFI) and request for proposals (RFP) for the procurement of a joint bus-rail smart card fare system. In addition, we worked with the Board of Directors' Permitted Interaction Group on fare policy to conclude the initial policy direction for this effort.

HART has continued to communicate frequently and effectively with Core Systems contractor AHJV. The contractor is currently on schedule with design and initial manufacturing of our rail vehicles. The first rail car is scheduled for delivery as planned in 2016. HART also continues its proactive approach regarding ownership changes to ensure accountability.

We continue to facilitate efforts being made by the State and City and County governments in partnership with developers and landowners to advance TOD that maximizes ridership and generates the highest return on investment to further the project and the City's development plans. In particular, we continue to develop and execute Memorandums of Understanding (MOU) and Memorandums of Agreement (MOA) with public and/or private landowners within close proximity of each planned transit station to access the station from their proposed development.

Over the past year our team has negotiated hard, settling changes and claims when we received favorable and fair offers. Where we have not, we have held the line on firm language to protect the agency, and held out the prospects of unilateral change orders and prepared for legal action, if necessary.

Despite being previously enjoined from construction for nearly 13 months, we have made good, steady progress in a number of key program areas. Key metrics we track and report to the Board and to the public on a monthly basis are:

Overall:

- Percentage of overall project completed in April 2013 = 11.9%
- Percentage of overall project completed in February 2014 = 21.8%
- **Percentage of overall project completed in February 2015 = 32.0%**

Design:

- Percentage of design completed in April 2013 = 42.0%
- Percentage of design completed in February 2014 = 63.0%
- **Percentage of overall project completed in February 2015 = 83.4%**

Construction:

- Percentage construction completed in April 2013 = 7.8%
- Percentage construction completed in February 2014 = 9.8%
- **Percentage of overall project completed in February 2015 = 24.1%**

Utilities:

- Percentage of utilities progress completed in April 2013 = 4.9%
- Percentage of utilities progress completed in February 2014 = 5.5%
- **Percentage of overall project completed in February 2015 = 12.2%**

HART's Quality Assurance team, led by Director of Quality Assurance and Quality Control Alberto Bonifacio, continues to hold Kiewit, AHJV and all of our contractors accountable to meet the agency's high quality standards.

III. PROJECT FINANCES

The project's overall fiscal situation has previously been discussed in great detail. In addition to the current challenges, the following are important milestones or factors that affect the project's financial well-being:

- Our staff-proposed operating budget for the next year is 1.5% less than last year despite all of the increasing work as the project grows to full activity across the entire corridor.
- We successfully procured an owner-controlled insurance program (OCIP) for the project through completion of the program. This establishes a good business practice that assists in controlling costs.
- GET surcharge revenues are being closely tracked and monitored. Since 2007, \$1.346 billion has been collected, with a current cash balance of

\$391.6 million. As of the most recent reporting by the State Department of Taxation, disbursements are approximately \$40M behind projections.

- The project's contingency balance is at \$550 million and remains within the buffer zone for existing contracts.
- Change orders continue to be monitored closely; this was identified as a risk in FTA's Risk Refresh report.
- We successfully resolved all significant delay claims, including negotiation of claims arising from notice-to-proceed delays and lawsuits with Kiewit and Kiewit-Kobayashi for the West Oahu/Farrington Highway, Kamehameha Highway, and Maintenance and Storage Facility construction contracts.
- We continued to develop an updated financial plan (expected to be required by FTA around July of 2015). The plan will include updated information on areas of cost reductions as well as debt financing.
- We continued to effectively manage the FFGA process and continued to push for full federal funding as per the FFGA through communications and meetings with congressional leadership and staff.
- We have worked collaboratively with the Board Vice Chairman, the Mayor, BFS, and the City Council to develop a debt financing plan that is both fiscally prudent and meets the project's needs.
- In addition, we worked with government officials, commercial and residential real estate developers, other businesses, and the public to develop initiatives for new revenue sources and minimize use of real property taxes for operation of the mass transit system in the future.

IV. STAKEHOLDER INTERACTIONS & COMMUNITY LEADERSHIP

“Work effectively and persuasively with elected officials, local, state and federal agencies, the U.S. House of Representatives, the U.S. Senate, U.S. DOT/FTA, Transportation Security Administration (TSA), the governments of City and County of Honolulu and State of Hawaii and the local business community, organized labor, public constituencies, NGOs, the press and other stakeholders—develop an understanding, appreciation, sensitivity and commitment to the social, cultural, economic, political and environmental needs of HART and the unique city it serves.”

We continued to build and maintain relationships with City, State and Federal elected officials and agencies through written communications and in-person meetings. *Mahalo* to Mayor Kirk Caldwell, for championing this project and pushing us to do better, and to his team from various departments, my sincere gratitude for the cooperation and unwavering collaboration and assistance. And *mahalo* for the support of Honolulu City Council Chair Ernie Martin and the members of the City Council, it is a privilege to work with them. Along with our congressional delegation, our support from Washington, D.C. continues to stand firm and we thank U.S. Senators Schatz and Hirono, and U.S. Representatives Hanabusa and Gabbard for their continued highly successful efforts on behalf of the project. We look forward to working closely with U.S. Representative Mark Takai in the coming year as well. Government Relations Director Joyce Oliveira and her staff are doing an outstanding job of providing accurate information to our stakeholders in a timely manner.

With negotiations led by Deputy Executive Director Morioka, we have been working collaboratively with the University of Hawaii system to conclude negotiations on rights of entry for construction at various campus and university-controlled locations. We also recently hosted a symposium with university officials who presented to the UH Board of Regents Committee on Planning and Facilities on their universities' experiences with rail.

We continued to engage the local business community through community briefings, presentations and meetings. We are also meeting with businesses in the City Center area, in advance of our upcoming construction work to proactively address some of their concerns. We understand that the construction work will be disruptive, but we are committed to reducing the impact of construction where possible.

We continue to keep the community informed through construction outreach meetings, station design community meetings, Neighborhood Board meetings, regular media traffic briefings, weekly e-blasts, news releases and social media updates. HART also sponsors a monthly "HART Facts" ad published in two local newspapers to provide a transparent look at the project's finances.

We enhanced our transparency efforts by keeping the public informed and engaged through several media and community events, including: a tour of the casting yard; an anti-graffiti community mural-painting project; a media tour of the installation of our first guideway segments; a public unveiling of our Airport station designs; and a tour of our Rail Operations Center. These events keep the public updated on our progress and enhance accountability.

Regular communication is ongoing with City, State, and Federal agencies and elected officials. HART continues to host a weekly maintenance of traffic meeting to coordinate construction activities among City, State, and other significant entities in order to mitigate potential impacts to traffic and promote public safety.

We are fostering sustainability efforts throughout the Authority, including working on a power purchase agreement for photovoltaics at the Rail Operations Center. Also, HART has signed the American Public Transportation Association's (APTA's) sustainability commitment to position itself at the forefront of sustainability efforts among transit systems in the United States.

We maintain ongoing communication with HDOT and DTS regarding the alignment of the fixed guideway system as it relates to crossings and intensive construction phases.

V. BOARD INTERACTION

We continued to foster a productive and positive working relationship with our 10-member Board of Directors through frequent communication and providing relevant, timely information to help inform the Board's policy-making decisions. Leading our efforts is Board Administrator Cindy Matsushita, who continues to do excellent work.

We provided opportunities for Board involvement, including collaborative efforts with stakeholders and outreach events. And we continue to provide detailed construction updates monthly to the Board, as well as our detailed project monthly report.

On behalf of our staff, let me also thank the Board for your continued support and service to HART and to the community through the many hours of volunteer time you give to our project. A very special *mahalo nui loa* to Board Chairman Ivan Lui-Kwan for his dedication and hard work in his

second year of attending dozens of evening and weekend community meetings, City Council and legislative meetings and formal sessions. Also, congratulations on the re-appointment of William “Buzz” Hong and Damien Kim to the Board of Directors and welcome back to Ford Fuchigami, HDOT Director who returns to his ex-officio seat on the Board.

Finally, my sincere *mahalo* to Human Resources Committee Chair Carrie Okinaga for leading this review process.

Daniel A. Grabauskas
Executive Director & CEO

Proposed Goals for 2015-2016

- Maintain the safest workplace, work zones, and construction sites
- Continue to push for full federal funding per project plan
- Continue to work with state Department of Taxation to improve state GET surcharge disbursements
- Assist in providing information and financial details in order to help secure additional revenue to meet the project's current financial challenges
- Continue to monitor project budget with a careful eye on contingency drawdowns and change orders
- Review and reset master project schedule milestones for design and construction based upon new contract packaging plans
- Develop recommendation for fare policies to be presented to the Board of Directors, Mayor, and City Council
- Maintain project transparency
- Work closely with businesses and communities along the alignment to provide information regarding construction work and to collaboratively to help lessen the impact of construction and traffic disruptions
- Facilitate with CFO the first City and County borrowings, and develop a cost-effective borrowing plan working collaboratively with BFS and City Council
- Keep on schedule to have six miles of guideway completed by the end of 2015
- Work with contractors to achieve 300 columns constructed by end of 2015
- Maintain schedule for the new contract packaging plans and work to enhance competition and interest in bidding for work on our project
- Continue to foster TOD-related efforts
- Foster and maintain excellent Board-Staff relationships
- Continue Bus-Rail integration and cooperation

ANNUAL PERFORMANCE OBJECTIVES
for
Daniel A. Grabauskas, Executive Director & CEO
Honolulu Authority for Rapid Transportation (HART)
Evaluation Period: April 2014 - March 2015

Powers, Duties and Functions of the Executive Director:

As defined in the Revised Charter of the City and County of Honolulu Section 17-104, the Executive Director shall:

- a) *Administer all affairs of the authority, including rules, regulations and standards adopted by the board.*
- b) *Have at least five years of fixed guideway system experience.*
- c) *Sign all necessary contracts for the authority, unless otherwise provided by this article.*
- d) *Recommend to the board the creation or abolishment of positions.*
- e) *Enforce the collection of fares, tolls, rentals, rates, charges, and other fees.*
- f) *Prepare payrolls and pension rolls.*
- g) *Maintain proper accounts in such manner as to show the true and complete financial status of the authority and the results of management and operation thereof.*
- h) *Prepare annual operating and capital budgets.*
- i) *Prepare and maintain a six-year capital program.*
- j) *Prescribe rules and regulations as are necessary for the organization and internal management of the authority.*
- k) *Recommend rules and regulations for adoption by the board.*
- l) *Request, and accept appropriations from the city, and request and accept grants, loans and gifts from other persons and entities.*
- m) *Administer programs promoting appropriate developments near transit stations, including compilation of city incentive programs.*
- n) *Review development projects having significant impact on the operation of the fixed guideway system.*
- o) *Plan, administer and coordinate programs and projects of the fixed guideway system that are proposed to be funded, wholly or partially, under federal or state law and required to be transmitted to the Oahu metropolitan planning organization.*
- p) *Attend all meetings of the Board unless excused.*
- q) *In addition to the general powers under this section, other general or specific powers may be conferred upon the executive director by ordinance, so long as the powers are consistent with the article of this Charter.*

OVERALL PRIORITIES FOR THE COMING YEAR

Mr. Grabauskas demonstrated again during his second year as Executive Director and CEO that he is capable of and focused on keeping the Honolulu Rail Transit Project (HRTTP) on track; the Board continues to have high expectations.

Now that project construction has fully resumed, of course, priorities for the H RTP overall include safety as well as keeping the project on-time and within budget. In addition, we are a year closer to the Q2 2017 interim revenue service date, and the priorities for the H RTP now include updating financial plans, and developing a sound fare policy in concert with the Board, the Mayor, and the City Council, and more detailed operational plans, including staffing plans. A continuing priority will be to maintain transparency and communication with the public and key stakeholders to build and to maintain the public's confidence in the management of and support for the H RTP. To assess whether or not the Executive Director and CEO has accomplished these goals and successfully executed the duties and responsibilities of his position, the Board will evaluate performance in the following high priority areas.

ORGANIZATIONAL DEVELOPMENT

- Develop and implement a Human Resources staffing plan, which shall include projections for the years of operation starting in 2017, and present to the Board by the end of 2014;
- Ensure successful succession and employee development plans across all functions of the Authority, including continuing to identify current opportunities for training of our employees by experienced consultants, and encouraging employees to take initiative and develop within the organization;
- Coach, train, and motivate staff; manage employee relations; manage the workflow and prioritization of projects and measure the performance of the agency and direct staff and take appropriate corrective action when necessary; review the work of staff and make positive suggestions and recommendations; recommend and implement corrective actions, discipline and termination procedures as appropriate/necessary;
- Ensure that processes, policies and practices are interpreted and applied consistently and effectively and that the Authority is accountable and compliant with all current and applicable HART, City, state and federal policies;
- Manage a capital project-oriented organization with an emphasis on financial management, safety, security, and public awareness as to the impacts that construction will have on residents, visitors, the environment and other stakeholders;
- Empower senior management and employees to lead their departments and functions effectively and efficiently; encourage senior management and employees to work together and across all functions of the organization, avoiding "stove-piping" and "choke points"; provide an environment where managers from each department are encouraged to work together and present directly to executive leadership;
- Ensure that effective cost-control measures are in place at all levels of the Authority; and
- Invite and encourage Board member participation in community and stakeholder meetings and events and senior staff meetings as appropriate.

PROJECT DELIVERY – CONSTRUCTION AND OPERATIONS

- Implement the HART business strategy adopted by its Board and in accordance with HART's mission to achieve the vision for the H RTP through the successful accomplishment of HART's goals, including construction of the entire fixed guideway system on time and within budget;
- Maintain strong safety records within workplaces, work zones and construction sites;
- Responsibly schedule, authorize, and manage the physical development of the H RTP, including,
 - Meet schedule to place first pre-cast segment on the columns in 2014,
 - Construct 220+columns by the end of 2014, and
 - Release RFPs and award 4 major contracts for construction by the end of 2014:
 - (1) Guideway and utility relocations for second 10 miles
 - (2) West Station Group (9 stations)
 - (3) Airport Station Group (4 stations)
 - (4) Pearl Highlands Parking Garage and H2 Off-Ramp;
- Develop recommendations for fare policies, including fare gates, to be presented to the Board, the Mayor and the City Council;
- Develop plans for bus-rail integration in continued cooperation with the Department of Transportation Services and Oahu Transit Services;
- Facilitate efforts being made by the State and City and County governments in partnership with developers and landowners to advance transit oriented development that maximizes ridership and generates the highest return on investment, in furtherance of the H RTP and the City's development plans. In particular, develop and execute MOUs and MOAs with public and/or private land owners within close proximity of each planned transit station to access the station from their proposed development;
- Make satisfactory progress in the Disadvantaged Business Enterprise program;
- Maintain strong and consistent communication with and oversight over the DBOM contractor; and
- Balance the focus on on-time/within-budget construction milestones, with the long term vision of delivering future operation and maintenance of the system in a safe, clean, courteous, timely, dependable, and cost-effective manner.

PROJECT FINANCES

- Responsibly manage HART's assets and budget, keeping a close eye on contingency drawdowns and change orders;
- Identify areas for cost reduction and increased efficiencies and communicate those recommendations and creative solutions effectively to the Board and management via updated financial plans;

- Continue to effectively manage the FFGA process and continue to push for full federal funding as per the FFGA;
- Continue to work with State of Hawaii Department of Taxation to improve State GET surcharge disbursements;
- Facilitate with the Chief Financial Officer, working collaboratively with the Mayor, the Department of Budget and Fiscal Services, and the City Council, the first City and County borrowings, and develop a cost-effective borrowing plan;
- Work with government officials, commercial and residential real estate developers and other businesses, and the public to develop initiatives to develop new revenue sources and minimize use of real property taxes for operation of the mass transit system in the future; and
- Identify and proactively manage areas of risk, including developing and implementing an action plan.

STAKEHOLDER INTERACTIONS & COMMUNITY LEADERSHIP.

- Continue to listen to, and work effectively and persuasively with elected officials, local, state and federal agencies, the U.S. House of Representatives, the U.S. Senate, U.S. DOT/FTA, Transportation Security Administration (TSA), the governments of City and County of Honolulu and State of Hawaii, the University of Hawaii system, and the local business community, organized labor, public constituencies, NGOs, the media and other stakeholders;
- Remain ever vigilant regarding the effectiveness of communications with the public and other stakeholders regarding traffic impacts due to HART design and construction activities.
- Attend and/or participate in professional group meetings and maintain awareness of new trends and developments impacting the agency's business activities;
- Further develop an understanding, appreciation, sensitivity and commitment to the social, cultural, economic, political and environmental needs of HART and the unique city it serves;
- Advocate for sustainable development and economic growth for the City and County of Honolulu and increased revenue for HART, government and local businesses;
- Maintain on-going communication with the State of Hawaii's Department of Transportation and the City and County of Honolulu's Department of Transportation Services regarding the alignment of the fixed guideway system as it relates to crossings and intensive construction phases;

BOARD INTERACTION

- Further develop a strong collaborative working relationship with an engaged 10-member Board of Directors; assist the Board in its policy-making duties by

providing relevant information in a timely manner; assist the Board in short and long-term planning objectives; furnish information to include options and potential consequences, enabling the Board and its Committees to make informed decisions;

- Provide a semi-annual report to the Board and/or its Committees regarding progress made towards meeting these goals.
- Ensure materials for Board meetings are provided in a timely manner and in advance of Board meetings, and where possible, posted for public review; and
- Communicate regularly with the Board of Directors about internal operations, reports and external stakeholder communications, updating the "balanced scorecard" and "HART Facts" every three (3) months.

Acknowledged

Daniel A. Grabauskas
Executive Director & CEO

Date

8/1/14



Board of Directors Semiannual Progress Report
 Daniel A. Grabauskas, Executive Director & CEO
 Honolulu Authority for Rapid Transportation (HART)
 October 30, 2014

ORGANIZATIONAL DEVELOPMENT

- HART has made significant strides in our organizational development. We have hired several new key staff members, including:
 - Change Order Manager
 - Director of Procurement
 - Project Director
 - Transit Grants Manager
 - Deputy Director of Planning
 - Deputy Director of Construction
 - Assistant Deputy Director of Construction
 - Transit Contracts Manager
 - Director of Special Projects
 - Fare System Project Manager

- The development of our Human Resources staffing plan is underway and we are currently on target to present this plan to the Board at the end of 2014.

PROJECT DELIVERY: CONSTRUCTION AND OPERATIONS

- HART conducted a risk refresh in partnership with the Federal Transit Administration (FTA) and the results were presented to the Board in July. Areas of risk were identified, along with mitigation strategies. We continue to proactively track and mitigate project risks and outline them in the Monthly Progress Report. The Risk and Contingency Management Plan is also being updated.
- We continue to emphasize safety (.4 incidents per 100,000 hours of work)¹ by partnering with our contractors and subcontractors, including participating in a public safety awareness campaign with Kiewit.
- Since resuming construction, we have made significant progress. As of October 23, 2014, constructed:
 - More than 130 columns
 - More than 165 foundations
 - More than 1,485 segments cast
 - More than 37 spans put in place²

¹ September 11, 2014 Board of Directors meeting minutes, Executive Director/CEO's report

² October 23rd construction update presentation to Board of Directors

- After receiving bids for the Westside Station Group that exceeded estimates, we canceled the solicitation and conducted an analysis to determine how we could reduce costs, while maintaining the project's 2019 opening date. Extensive contractor interviews have taken place and repackaging efforts are underway for the first three stations in this group. It is expected that the bid package will go out in late November or early December.
- We are also repackaging construction contract packages and re-evaluating our schedule for the four major construction contracts scheduled for procurement by the end of 2014:
 - (1) Guideway and utility relocations for second 10 miles (and 8 stations)
 - (2) West Station Group (9 stations)
 - (3) Airport Station Group (4 stations)
 - (4) Pearl Highlands Parking Garage and H-2 Off-Ramp
- Accordingly, we have suspended procurement for the Pearl Highlands Parking Garage, which is currently under review for further action.
- HART continues to develop bus-rail integration plans in coordination with the Department of Transportation Services (DTS) and Oahu Transit Services (OTS), including working on the request for information (RFI) and request for proposals (RFP) for the procurement of a joint bus-rail smart card fare system. In addition, we worked with the Board of Directors' Fare Permitted Interaction Group (PIG) on fare policy to conclude the initial policy direction for this effort.
- DBE participation has increased from \$15.8 million, or 6.41% on total disbursed FTA funds received to date, to \$19.2 million, or 7.37%.³
- HART has continued to communicate frequently and effectively with DBOM contractor, Ansaldo Honolulu Joint Venture (AHJV). The contractor is currently on schedule with design and initial manufacturing of our rail vehicles. The first rail car is scheduled for delivery as planned in 2016.
- We continue to facilitate efforts being made by the State and City and County governments in partnership with developers and landowners to advance transit-oriented development (TOD) that maximizes ridership and generates the highest return on investment, to further the project and the City's development plans. In particular, we continue to develop and execute MOUs and MOAs with public and/or private land owners within close proximity of each planned transit station to access the station from their proposed development.

PROJECT FINANCES

- We successfully procured owner-controlled insurance program (OCIP) for the project through completion of the program.

³ April and September 2014 Monthly Progress Reports

- GET surcharge revenues are being closely tracked and monitored. Since 2007, \$1.346 billion has been collected, with cash balance of \$391.6 million⁴. As of the most recent reporting by the State Department of Taxation, disbursements are approximately \$40M behind projections.
- The project's contingency balance is at \$559.4 million and remains within the buffer zone⁵.
- Change orders continue to be monitored closely; this was identified as a risk in FTA's Risk Refresh report.
- Successfully resolved all known contingency changes, including negotiation of claims arising from notice-to-proceed delays and lawsuits with Kiewit and Kiewit-Kobayashi for the WOFH, KHG, and MSF construction contracts.
- We continued to develop an updated financial plan, with expected completion by the end of the calendar year. The plan will include updated information on areas of cost reductions as well as debt financing.
- We continued to effectively manage the FFGA process and continued to push for full federal funding as per the FFGA through communications and meetings with congressional leadership and staff.
- We have worked collaboratively with the Board Vice Chair, the Mayor, Budget and Fiscal Services (BFS), and the City Council to develop a debt financing plan that is both fiscally prudent and meets the project's needs.
- In addition, we worked with government officials, commercial and residential real estate developers, other businesses, and the public to develop initiatives for new revenue sources and minimize use of real property taxes for operation of the mass transit system in the future.

STAKEHOLDER INTERACTIONS & COMMUNITY LEADERSHIP.

- We continued to build and maintain relationships with City, State and Federal elected officials and agencies through written communications and in-person meetings.
- We have been working collaboratively with the University of Hawaii system to conclude negotiations on rights of entry for construction at various campus and university-controlled locations. We also recently hosted a symposium, with university officials who presented to the UH Board of Regents Committee on Planning and Facilities on their university's experiences with rail.
- We continued to engage the local business community via briefings, presentations and meetings.

⁴ As of August 29, 2014 per September Monthly Progress Report

⁵ As of August 29, 2014 per September Monthly Progress Report

- We continue to keep the community informed through construction outreach meetings, station design community meetings, Neighborhood Board meetings, regular media traffic briefings, weekly e-blasts, news releases and social media updates. HART also sponsors a monthly “HART Facts” ad published in two local newspapers to provide a transparent look at the project’s finances.
- We continued our transparency efforts by keeping the public informed and engaged through several media and community events, including: a tour of the casting yard; an anti-graffiti community mural-painting project; a media tour of the installation of our first guideway segments; a public unveiling of our Airport station designs; and a tour of our Rail Operations Center. These events keep the public updated on our progress and enhance accountability.
- Regular communication is ongoing with City, State, and Federal agencies and elected officials. HART continues to host a weekly maintenance of traffic meeting to coordinate construction activities among city, county, state, and other significant entities in order to mitigate potential impacts to traffic and promote public safety.
- As the executive director and CEO, I continue to further develop an understanding, appreciation, sensitivity and commitment to the social, cultural, economic, political and environmental needs of HART and the unique city it serves.
- We are fostering sustainability efforts throughout the Authority, including working on a power purchasing agreement for photovoltaics at the Rail Operations Center (previously known as the Maintenance and Storage Facility). Also, HART has signed the American Public Transportation Association’s (APTA’s) sustainability commitment to position itself at the forefront of sustainability efforts among transit systems in the United States.
- We maintain ongoing communication with the State of Hawaii's Department of Transportation (HDOT) and the City and County of Honolulu's Department of Transportation Services (DTS) regarding the alignment of the fixed guideway system as it relates to crossings and intensive construction phases.

BOARD INTERACTION

- We continued to foster a productive and positive working relationship with our 10-member Board of Directors through frequent communication and providing relevant, timely information to help inform the Board’s policy-making decisions.
- We provided opportunities for Board involvement, including collaborative efforts with stakeholders and outreach events.
- We continue to provide monthly reports at Board meetings.

EMPLOYMENT AGREEMENT

This Employment Agreement (“Employment Agreement”) is entered into this 29th day of October, 2014, by and between Daniel A. Grabauskas, whose address is c/o Alii Place Suite 1700, 1099 Alakea Street, Honolulu, Hawaii 96813 (“Grabauskas”), and the Honolulu Authority for Rapid Transportation, whose address is Alii Place Suite 1700, 1099 Alakea Street, Honolulu, Hawaii 96813 (“HART”), by and through its Board of Directors (“Board”). Grabauskas and HART are collectively referred to hereinafter as the “Parties”.

WITNESSETH THAT:

WHEREAS, HART is a semi-autonomous public transit authority established by Article XVII of the Revised Charter of the City and County of Honolulu (“Charter”) to develop, operate, maintain and expand the City’s fixed guideway rapid transit system; and

WHEREAS, pursuant to Section 17-103.3(c) of the Charter, the Board shall appoint an Executive Director, who shall be the chief executive officer (“CEO”) of HART; and

WHEREAS, pursuant to Section 17-103.3(c) of the Charter, the Board shall establish the qualifications, powers, duties, functions and compensation of the Executive Director/CEO of HART; and

WHEREAS, on March 1, 2012, the Board in a duly noticed and convened public meeting appointed Grabauskas to the position of Executive Director/CEO of HART; and

WHEREAS, pursuant to the Employment Agreement entered into between HART and Grabauskas on March 16, 2012, his appointment as Executive Director/CEO of HART was effective April 9, 2012, for an at-will term of three (3) years; and

WHEREAS, on October 9, 2014, the Board in a duly noticed and convened public meeting reappointed Grabauskas to the position of Executive Director/CEO of HART for a further at-will term of three (3) additional years; and

WHEREAS, the Parties desire to set forth the terms of employment for Grabauskas as Executive Director/CEO of HART for the new term of appointment;

NOW, THEREFORE, in consideration of the foregoing and of the mutual promises hereinafter set forth, the sufficiency and adequacy of which are hereby acknowledged, and intending to be legally bound, the Parties hereby mutually agree as follows:

1. **DUTIES AND RESPONSIBILITIES:** The duties and responsibilities of the Executive Director/CEO position shall be as set forth in the Position Description attached hereto and incorporated herein as Exhibit "A".

2. **TERM:** Grabauskas is reappointed as Executive Director/CEO of HART for an at-will term of three (3) years, to serve at the pleasure of the Board and effective as of April 9, 2015, continuing to April 8, 2018.

3. **ANNUAL COMPENSATION:** Grabauskas' annual compensation shall be TWO HUNDRED NINETY-NINE THOUSAND TWO HUNDRED FIFTY AND NO/100 DOLLARS (\$299,250.00), payable semimonthly in accordance with standard City and County of Honolulu procedures, consisting of the following items:

A. **BASE SALARY:** The base salary shall be TWENTY ONE THOUSAND FOUR HUNDRED THIRTY-SEVEN AND 50/100 DOLLARS (\$21,437.50) per month (TWO HUNDRED FIFTY-SEVEN THOUSAND TWO HUNDRED FIFTY AND NO/100 DOLLARS (\$257,250.00) per year).

B. **HOUSING ALLOWANCE:** There shall be a housing allowance of THREE THOUSAND AND NO/100 DOLLARS (\$3,000.00) per month (\$36,000.00/year).

C. **TRANSPORTATION ALLOWANCE:** There shall be a transportation allowance of FIVE HUNDRED AND NO/100 DOLLARS (\$500.00) per month (\$6,000.00/year).

4. **ANNUAL BONUS AND ADJUSTMENT:** There shall be an Annual Bonus of up to fifteen percent (15%) of the Base Salary amount set forth above in subparagraph 3.A., to be payable upon the successful achievement of annual performance objectives to be mutually agreed upon by Grabauskas and the Board each year. The Board will determine whether or not Grabauskas has successfully achieved the applicable annual performance objectives, and what percentage of the Base Salary amount, up to fifteen percent (15%), shall be paid to Grabauskas as an Annual Bonus, within 30 days of Grabauskas's submittal to the Board of an annual executive report on the one-year period in question. Upon the Board's determination that Grabauskas has successfully achieved the annual performance objectives, the Board shall also consider an upward adjustment of his Base Salary amount of up to three and one half percent (3.5%) for the next year. In the event Grabauskas is terminated from employment for any reason other than for cause, assuming satisfactory performance, the Annual Bonus amount as determined by the Board will be pro-rated on a monthly basis from the start of the then-current year, and a pro-rated amount of the Annual Bonus up to and including the month of termination will be paid for that year. As used in this Employment Agreement, "for cause" shall mean actions involving gross and deliberate malfeasance, gross negligence, repeated or willful failure to perform services satisfactorily hereunder or follow established policies of HART, or final conviction of a felony crime or crime of moral turpitude.

5. **BENEFITS:** Grabauskas shall be entitled to all standard City and County of Honolulu benefits (generally, 21 days per year vacation leave; 21 days per year sick leave; 13 State holidays per year (14 holidays in an election year); Hawaii Employer-Union Health Benefits Trust Fund (EUTF) medical, drug, vision, and dental program options (employee-paid premiums may be deducted from pay before taxes); Hawaii EUTF no cost life insurance coverage (currently \$38,361.00 benefit); deferred compensation program available).

6. **SEVERANCE PAYMENT:** Grabauskas shall be entitled to a severance payment of one year's Base Salary amount (\$257,250.00 for the first year of this Employment Agreement, subject to adjustment as provided for herein), to be payable in the event he is terminated from employment prior to the end of the term of appointment for any reason other than for cause.

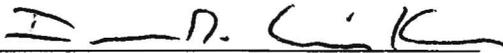
7. **NOTICE OF TERMINATION:** Grabauskas shall give the Board a minimum of sixty (60) days prior written notice in the event he intends to terminate this Employment Agreement. The Board shall give Grabauskas a minimum of sixty (60) days' prior written notice in the event it intends to terminate this Employment Agreement for any reason other than for cause. If the Board intends not to reappoint Grabauskas at the end of the term of this Employment Agreement, the Board shall give Grabauskas a minimum of ninety (90) days' prior written notice.

8. **LEGAL REPRESENTATION:** Pursuant to Section 17-112 of the Charter, the Corporation Counsel of the City and County of Honolulu shall serve as the legal adviser of HART and shall institute and defend, as the Board may require, any and all actions involving matters under the jurisdiction of the Board. Grabauskas shall be entitled to legal representation by the Corporation Counsel (or by Special Counsel when the Corporation Counsel is disqualified) in matters relating to his official powers and duties as Executive Director/CEO of HART.

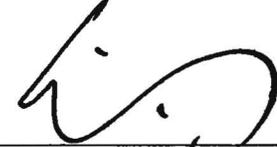
9. **SEVERABILITY:** If any provision(s) of this Employment Agreement is held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

IN WITNESS WHEREOF, Grabauskas and HART have executed this Employment Agreement individually or by their duly authorized representative on the day and year first above written.

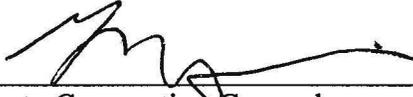
HONOLULU AUTHORITY FOR RAPID
TRANSPORTATION:


Ivan Lui-Kwan, Chair
Board of Directors

DANIEL A. GRABAUSKAS:


Date: 10/20/14

APPROVED AS TO FORM
AND LEGALITY:



Deputy Corporation Counsel

GARY Y. TAKEUCHI

ANNUAL PERFORMANCE OBJECTIVES
for
Daniel A. Grabauskas, Executive Director & CEO
Honolulu Authority for Rapid Transportation (HART)
Evaluation Period: April 2015 - March 2016

Powers, Duties and Functions of the Executive Director:

As defined in the Revised Charter of the City and County of Honolulu Section 17-104, the Executive Director shall:

- a) *Administer all affairs of the authority, including rules, regulations and standards adopted by the board.*
- b) *Have at least five years of fixed guideway system experience.*
- c) *Sign all necessary contracts for the authority, unless otherwise provided by this article.*
- d) *Recommend to the board the creation or abolishment of positions.*
- e) *Enforce the collection of fares, tolls, rentals, rates, charges, and other fees.*
- f) *Prepare payrolls and pension rolls.*
- g) *Maintain proper accounts in such manner as to show the true and complete financial status of the authority and the results of management and operation thereof.*
- h) *Prepare annual operating and capital budgets.*
- i) *Prepare and maintain a six-year capital program.*
- j) *Prescribe rules and regulations as are necessary for the organization and internal management of the authority.*
- k) *Recommend rules and regulations for adoption by the board.*
- l) *Request, and accept appropriations from the city, and request and accept grants, loans and gifts from other persons and entities.*
- m) *Administer programs promoting appropriate developments near transit stations, including compilation of city incentive programs.*
- n) *Review development projects having significant impact on the operation of the fixed guideway system.*
- o) *Plan, administer and coordinate programs and projects of the fixed guideway system that are proposed to be funded, wholly or partially, under federal or state law and required to be transmitted to the Oahu metropolitan planning organization.*
- p) *Attend all meetings of the Board unless excused.*
- q) *In addition to the general powers under this section, other general or specific powers may be conferred upon the executive director by ordinance, so long as the powers are consistent with the article of this Charter.*

OVERALL PRIORITIES FOR THE COMING YEAR

Mr. Grabauskas demonstrated again during his third year as Executive Director and CEO that he is focused on the sound program management of the Honolulu Rail Transit Project (HRTTP), including seeking an extension of GET revenue

given impacts of increasing construction costs and declining revenue. The Board continues to have high expectations of Mr. Grabauskas. Priorities for the H RTP overall continue to include safety, cost containment, budget and schedule adherence, project transparency, traffic mitigation and effective public communications. . In addition, we are a year closer to the interim revenue service date, and the priorities for the H RTP include updating financial plans, and developing a fiscally prudent and equitable intermodal fare policy in concert with the Board, the Mayor and the City Council, and more detailed operational plans, including staffing plans and revenue plans to cover anticipated operation and maintenance costs. A continuing priority will be to maintain transparency and communication with key stakeholders to build and to maintain confidence in the management of and support for the H RTP and to effectively coordinate with other key third-party stakeholders, including but not limited to the U.S. Navy, the University of Hawaii, the Aloha Stadium Authority, the Department of Hawaiian Home Lands and the Hawaii Department of Transportation. To assess whether or not the Executive Director and CEO has accomplished these goals and successfully executed the duties and responsibilities of his position, the Board will evaluate performance in the following high priority areas.

ORGANIZATIONAL DEVELOPMENT

- Manage a capital project organization with an emphasis on financial management, safety, schedule, technical proficiency, transparency, security, and public awareness and mitigative measures as to the foreseeable impacts construction will have on residents, visitors, the environment and other stakeholders;
- Ensure that effective cost-control measures are in place at all levels of the Authority;
- Revise Human Resources staffing plan, which shall include projections for the years of operation starting in 2018, and present semi-annual updates to the Board;
- Ensure successful succession and employee development plans across all functions of the Authority, including continuing to identify current opportunities for training of our employees by experienced consultants, and encouraging employees to take initiative and develop within the organization;
- Coach, train, and motivate staff; manage employee relations; manage the workflow and prioritization of projects and measure the performance of the agency and direct staff and take appropriate corrective action when necessary;
- Ensure that processes, policies and practices are interpreted and applied consistently and effectively and that the Authority is accountable and compliant with all current and applicable HART, City, state and federal policies and regulations; and
- Empower senior management and employees to lead their departments and functions effectively and efficiently; encourage senior management and employees to work together and across all functions of the organization,

avoiding "stove-piping" and "choke points"; provide an environment where managers from each department are encouraged to work together and present directly to executive leadership;

PROJECT DELIVERY – CONSTRUCTION AND OPERATIONS

- Review and reset master project schedule milestones for design and construction based upon new contract repackaging plans and cost containment measures;
- Implement the HART business strategy adopted by its Board and in accordance with HART's mission to achieve the vision for the HRTP through the successful accomplishment of HART's goals in constructing the project on-time and within the revised budget;
- Maintain strong safety records within workplaces, work zones and construction sites;
- Responsibly schedule, authorize, and manage the physical construction of the HRTP, including but not limited to,
 - Meet schedule to construct 6 miles of guideway by the end of 2015,
 - Construct 300 columns by the end of 2015, and
 - Maintain schedule for the new contract packaging plans and work to enhance competition and interest in bidding.
- Develop recommendations for rail fare policies, including fare gates, to be presented to the Board, the Mayor and the City Council in the development of the City's bus-rail intermodal fare policy;
- Develop plans for bus-rail intermodal operations in continued cooperation with the Department of Transportation Services and Oahu Transit Services, including but not limited to development of a common fare media card;
- Facilitate efforts being made by the State and City and County governments in partnership with developers and landowners to advance transit oriented development that maximizes ridership and generates the highest return on investment, in furtherance of the HRTP and the City's development plans. In particular, develop and execute MOUs and MOAs with public and/or private land owners within close proximity of each planned transit station to access the station from their proposed development;
- Make satisfactory progress in the Disadvantaged Business Enterprise program;
- Maintain strong and consistent communications with and oversight over the DBOM contractor; and
- Balance the focus on on-time/within-budget construction milestones, with the long term vision of delivering future operation and maintenance of the system in a safe, clean, courteous, timely, dependable, and cost-effective manner.
- Maintain strong oversight of Project Labor Agreements and resolution of disputes and contested practices.

PROJECT FINANCES

- Update financial plans and assist in providing information and financial details in order to help secure additional revenue to meet the project's current financial challenges;
- Develop recommendation for rail fare policies for approval by the Board of Directors, Mayor, and City Council in the development of the City's bus-rail intermodal fare policy;.
- Facilitate with the HART Chief Financial Officer the first City and County borrowings, and develop a cost-effective borrowing plan, working collaboratively with the HART Finance Committee, the Mayor, the Department of Budget and Fiscal Services, and the City Council;
- Responsibly manage HART's assets and budget, actively monitoring contingency drawdowns and change orders;
- Continue to identify areas for cost reduction/containment and increased efficiencies and communicate those recommendations and creative solutions effectively to the Board and management via updated financial plans;
- Continue to effectively manage the FFGA process and advocate for full federal funding as per the FFGA;
- Continue to work with State of Hawaii Department of Taxation to improve State GET surcharge disbursements; and
- Work with government officials, commercial and residential real estate developers and other businesses, and the public to develop initiatives to develop sustainable revenue sources for the operation and maintenance of the mass transit system in the future.

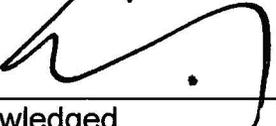
STAKEHOLDER INTERACTIONS & COMMUNITY LEADERSHIP

- Maintain highest levels of project transparency;
- Continuously assess and improve the effectiveness of communications with the public and other stakeholders regarding financial challenges, traffic impacts due to HART design and construction activities, on-going traffic mitigation and business disruption mitigation efforts, as well as revenue, TOD, and other public-private partnership opportunities;
- In collaboration with our contractors, work closely with business and communities along the alignment to provide information regarding construction work and take all reasonable steps to mitigate the impact of construction on traffic and businesses;
- Continue to listen to, and work effectively and persuasively with elected officials, local, state and federal agencies, the U.S. House of Representatives, the U.S. Senate, U.S. DOT/FTA, Transportation Security Administration (TSA), the governments of City and County of Honolulu and State of Hawaii, the University of Hawaii system, and the local business community, organized labor, public constituencies, NGOs, the media and other stakeholders;

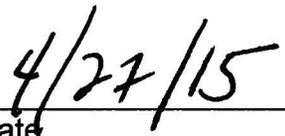
- Attend and/or participate in professional group meetings and maintain awareness of new trends and developments impacting the agency's business activities; and
- Advocate for sustainable development and economic growth for the City and County of Honolulu and increased revenue for HART, government and local businesses.

BOARD INTERACTION

- Further develop a strong collaborative working relationship with an engaged 10-member Board of Directors; assist the Board in its policy-making duties by providing relevant information in a timely manner; assist the Board in short and long-term planning objectives; furnish information to include options and potential consequences, enabling the Board and its Committees to make informed decisions;
- Provide a semi-annual report to the Board and/or its Committees regarding progress made towards meeting these goals;
- Ensure materials for Board meetings are provided in a timely manner and in advance of Board meetings, and where possible, posted for public review; and
- Communicate regularly with the Board of Directors about internal operations, reports and external stakeholder communications with summary reports at meetings, in addition to written materials.



Acknowledged
Daniel A. Grabauskas
Executive Director & CEO



Date