HONOLULU AUTHORITY for RAPID TRANSPORTATION

Board of Directors Meeting
Ali'i Place, Suite 150
1099 Alakea Street
Honolulu, Hawaii 96813
Thursday, October 9, 2014 10:00 am

MINUTES

PRESENT:	Ivan Lui-Kwan	William "Buzz" Hong
	Donald G. Horner	Carrie Okinaga
	Michael Formby	Robert "Bobby" Bunda
	Keslie Hui	Damien Kim
	George Atta	Ford Fuchigami
ALSO IN ATTENDANCE: (Sign-In Sheet and Staff)	Daniel Grabauskas	Dan Purcell
	Brennon Morioka	Paul Migliorato
	Diane Arakaki	Lorenzo Garrido
	Michael McGrane	Russell Honma
	Gary Takeuchi	Gail Jennings
	Joyce Oliveira	Allison Gammel
	Tom Smyth	Cindy Matsushita
	Tim Mackin	Andrea Tantoco
	Brandon Elefante	Ron Amemiya
	Lori Hiraoka	

I. Call to Order by Chair

HART Board Chair Ivan Lui-Kwan called the meeting to order at 10:49 a.m.

II. Public Testimony on All Agenda Items

Mr. Lui-Kwan called for public testimony.

Russell Honma provided testimony regarding his concerns over the potential sale of Ansaldo Honolulu JV's (AHJV) parent company Finmeccanica.

III. Approval of the Minutes of the September 11, 2014 Board of Directors Meeting

Mr. Lui-Kwan asked if there were any suggested modifications to the minutes of the September 11, 2014 Board of Directors meeting. Hearing none, the minutes were approved as circulated.

IV. FY2016 Operating and Capital Budget and Six-Year Capital Program

Board member Keslie Hui reported that the Finance Committee had approved the Fiscal Year 2016 (FY 2016) Operating and Capital Budget and the Six-Year Capital Program, and was now bringing them before the full Board for consideration.

HART Chief Financial Officer Diane Arakaki made a presentation on the budget and the capital program; a copy of the presentation is attached hereto as Attachment A. She was joined by Michael McGrane, HART's Budget and Grants Manager.

Ms. Arakaki stated that the $21.2 million operating budget represented a 1.2% decrease from the previous fiscal year. She elaborated on the FY 2016 operating budget as compared to FY 2015 in detail.

The FY 2016 capital budget totals $422.2 million. Ms. Arakaki said that the requested FY 2016 capital budget consisted of $172 million in construction, consultant and Programmatic Agreement costs, $200 million in contingency, and $50 million in recertifications. She reminded the Board that use of the contingency amount was subject to Board approval for change orders exceeding $1 million.

She said that recertifications were formal approvals for internal transfers between accounts, and not additional expenditure requests.

Ms. Arakaki said that the re-appropriation amount of just over $1 billion represented amounts that had previously been appropriated, and had not yet been contractually obligated to date. She said that the re-appropriation request was being made in the interest of transparency, and in the event that the already appropriated amounts are not contractually obligated by June 30, 2015.

She outlined the $8 million request for debt service, for repayment of debt to be taken out during FY 2015.

Mr. Hui said the Finance Committee had taken up both the Operating and Capital Budgets and the Six-Year Capital Program, and held public hearings for both. He outlined the Board's budget approval process.

Mr. Hui moved for referral to and approval for the Finance Committee to transmit the proposed FY 2016 Operating and Capital Budget to the Mayor and City Council. Ms. Okinaga seconded the motion. All being in favor, the motion carried.

V. Rail Car Manufacturing Update

Mr. Grabauskas introduced AHJV's Enrico Fontana and HART's Deputy Director of Systems Justin Garrod, who would be updating the Board on the manufacturing of the rail cars. Their presentation is attached hereto as Attachment B.

Mr. Garrod introduced himself and briefly detailed his background working in Seattle at Sound Transit, most recently as Director of Systems Integration and Engineering, where he had been since 2003, and worked on six major capital program light rail extensions.

Mr. Fontana, managing director for AHJV, and Core Systems Project Manager outlined the design-build-operate-maintain core systems contract, of which 14% of the design-build portion was complete as of September 2014.

Mr. Fontana said that all of AHJV's subcontractors had been secured. He detailed a worldwide effort that includes various components from 21 American states, the People's Republic of China, Canada, and five countries in the European Union.

The first train was scheduled to be assembled in California in 2015, and arrive in Honolulu in mid-2016 for testing. Mr. Fontana outlined the steps to building the train cars, which include extruding the aluminum in Brescia, Italy. The aluminum will then be assembled and welded into the carshells in Reggio Calabria, Italy. From there the third step will occur in Pittsburg, California, where the vehicles will undergo final assembly.

Maintenance and recovery vehicles are also being manufactured in Minnesota, including the multi-purpose vehicle, tamper, high-lift truck, and rail grinder. These vehicles will be ready for shipment to Honolulu in a few months. Communications components will be manufactured by Alcatel Lucent in Plano, Texas, and will be ready for shipment this month. Train control equipment for Waipahu and West Loch will be manufactured and ready for shipment later this year. On-board train controls will be ready in 2016.

Platform screen gates are undergoing life-cycle testing, after which production will commence.

Mr. Fontana reported on AHJV's partnership with Leeward Community College in education and workforce development, in order to develop the next generation of transit professionals. The first program will commence in January 2015. In addition, AHJV is working with the University of Hawaii (UH) College of Engineering to develop candidates through internships, projects and theses. Ms. Okinaga asked about the students that would be involved. Mr. Fontana said that AHJV has interns from the UH College of Engineering and from Virginia Tech, and plans to involve more engineering students, as well as a law student in the future. Mr. Fontana also detailed AHJV's efforts to develop its current employees, many of whom are local.

Mr. Grabauskas said that the working relationship between AHJV and HART has been excellent. He complimented Mr. Garrod on getting up to speed on the global partners

involved in the core systems contract. He commended AHJV on their commitment to building a local staff. Mr. Fontana said that AHJV hopes to build a 300-person staff for the Maintenance and Storage Facility (MSF), which will be comprised of mainland staff at the outset, but will move towards local staffing.

Mr. Lui-Kwan asked about the commitments, guarantees or bonds by Finmeccanica to HART, in light of the impending acquisition of AHJV's parent companies. He also asked about any possible disruption to production. Lastly, he asked how the sale would impact AHJV's employees.

Mr. Fontana said that he was not authorized to provide any official statement on behalf of Finmeccanica, nor did he have any internal information aside from what was being publicly reported. However, he did say that whoever acquires Ansaldo STS and Ansaldo Breda would want to ensure their success, particularly in light of the number of ongoing projects. Bonds were in place, and provided by a third party through the end of the design-build phase. Mr. Fontana said that he did not see any impact to production, as the 50 to 60 subcontractors all wanted the project's success.

Board member Robert "Bobby" Bunda asked if Finmeccanica gave the AHJV employees any assurances for their positions. Mr. Fontana spoke of his commitment to the project, and said his deep knowledge of the project dating back to 2009 would make his removal unlikely.

Board member Damien Kim thanked Mr. Fontana, and said that in August he had toured the Piazzo factory to see high speed trains being manufactured. He had also ridden a driverless train in Rome, and toured a command center and maintenance yard. He said that he was confident in AHJV's ability to deliver a great product.

Board member William "Buzz" Hong asked about the durability of the aluminum extrusions. Mr. Garrod acknowledged that traditional American train cars were made from steel. Mr. Fontana said that Honolulu's system will be Ansaldo's 12th driverless system, and all have been built utilizing aluminum extrusion. He said that the Copenhagen system has been running reliably for 12 years. Mr. Garrod added that Spanish aluminum cars are used in Seattle, as they are in much of Europe, as part of a trend in American transit systems to move to lighter, more fuel efficient rail cars.

Board member Donald Horner asked about the use of flywheels in Europe and related power consumption. Mr. Fontana said he would look into it. Mr. Garrod said that Sound Transit tested flywheels on three rail cars, and remarked that high capacitors were very costly new technology. Mr. Horner asked AHJV to be open to more sustainable options that may affect the operating budget.

Mr. Hong asked whether HART should retain counsel versed in international law for advice regarding the acquisition. Deputy Corporation Counsel Gary Takeuchi said he would be happy to have a discussion about that with HART. Mr. Hong said that although HART had exercised much caution in acquiring bonds, perhaps it needed

guidance. Ms. Okinaga pointed out that the contract with AHJV was probably subject to Hawaii law, notwithstanding the fact that they are an international party.

Board member George Atta said that he had been receiving requests to explore renewable energy, and asked if the trains could be retrofitted without too much expense. Mr. Fontana said that Ansaldo would work with any available renewable energy sources. Mr. Grabauskas said that HART was looking at different power sources for the MSF and some stations, such as photovoltaic (PV) energy. Mr. Horner said that HART may operate off a lot of solar energy along the alignment. Mr. Atta said that he has even heard suggestions that HART start its own utility. Mr. Kim asked whether there was enough room at the MSF for PV equipment, and Mr. Grabauskas said the rooftops were designed to carry a PV load.

Mr. Hong asked whether it was possible for the system to switch between operating on and off the grid. Mr. Kim said it was, but that Hawaiian Electric had restrictions regarding such an arrangement, and that cost would probably be a factor.

Mr. Lui-Kwan suggested to Mr. Grabauskas that HART conduct its due diligence on Finmeccanica's buyer. Mr. Grabauskas agreed, and reminded the Board that he had requested that the Finmeccanica CEO provide assurances, and had also made the same request of Ansaldo STS and Ansaldo Breda.

Mr. Lui-Kwan introduced Councilmember elect Brandon Elefante, who was elected outright in the primary election to succeed Councilmember Breene Harimoto.

VI. Report of the Fare Policy Permitted Interaction Group

Ms. Okinaga said that coordination between the Department of Transportation Services (DTS) and Oahu Transit Services (OTS) was critical in establishing a fare policy. She made a PowerPoint presentation, a copy of which is attached hereto as Attachment C. She said that the draft report of the Fare Policy Permitted Interaction Group (Group) would be available to the public to comment on. She said that action on the report would be taken at the next Board meeting on October 23, 2014.

Ms. Okinaga said that the Group was formed the previous year by the HART Board of Directors. She detailed the four areas of inquiry charged to the Group, two of which it accomplished: exploring fare policies of other transit agencies, and fare collection and associated technologies. She said that the Group was recommending the formation of another Permitted Interaction Group at a later time, as the instant Group did not have updated financial or operating budget information on which to make recommendations regarding the other two tasks: farebox recovery ratio and the revenue split between the City and HART.

Ms. Okinaga said that the Group, which included HART Board members Mr. Bunda, Mr. Formby, Mr. Horner, Mr. Hui, and her, worked with various stakeholders in formulating their recommendations. These included the staff Steering Committee, comprised of

representatives from HART, DTS, OTS, the Department of Budget and Fiscal Services, and the Department of Information Technology, as well as CH2MHill the consultant retained by DTS. She stated that the HART Board had been provided with three briefings by the Steering Committee and CH2MHill, and the Group had met five times. The Steering Committee made recommendations on the technological aspects of the fare system. The Group was making two fare policy recommendations.

Mark Garrity, Deputy Director of DTS and Steering Committee Chair, introduced OTS President Roger Morton and HART Fare Collection System Project Manager Whitney Birch. He said that the Steering Committee had been meeting for over a year on a monthly basis. Other retail and institutional stakeholders had also been brought into the discussion.

Mr. Garrity outlined the overall project goals, which include designing a simple and convenient fare collection system that operates seamlessly between modes, and adopting proven fare technology based upon industry standards that reduces fraud and maximizes interoperability, and increasing distribution channels and fare purchasing options. Mr. Horner commented that the ability to offer different fares would contribute to revenue enhancement. Mr. Garrity agreed, and said that the system could have the option to offer different fares to visitors and local residents. He said that the system could allow partnerships with schools and institutions that utilize smart card technology for integration with employee badges or school identification cards. Mr. Horner said that the Department of Education (DOE) could benefit from such technology. Mr. Garrity said that the Steering Committee had been meeting with the DOE.

Ms. Okinaga remarked that the goals were shared with the Group. Mr. Horner commended the group for leveraging existing infrastructure to minimize capital costs. Mr. Garrity said that the Steering Committee had made certain determinations in its investigation. The Committee determined that smart card media that was account based would be advantageous, from the standpoint of providing data and convenience to the customer. Additionally, the flexibility of open architecture software would allow HART and DTS to work with different vendors. Mr. Garrity said that these determinations would provide the security of proven architecture, allow a smooth transition to future payment systems and integration with TheHandi-Van and other services, and provide the potential for differential and location-specific fares, and accommodate future payment types.

Ms. Okinaga clarified that the determinations were broad parameters, and were not meant to predispose any organization to any particular vendors. She outlined the recommendations of the Group as follows:

1. The design of the fare collection system should plan for operations that maximize the use of existing expertise and capacity at the City, OTS and HART in the interest of efficiency.

2. HART's fare collection system should include use of fare gates, which had been addressed by the Board two years prior.

3. Both recommendations are intended to provide general direction, and are subject to further appropriation and budgeting decisions by the City and HART.

Ms. Okinaga said that program and financial management would be performed by the City or HART. Mr. Horner added that the system would be hosted by the City and initially operated by a vendor. OTS would perform the functions of the fare system call center, special program and retail management, and bus equipment maintenance, utilizing current capabilities.

Mr. Horner made note of the outstanding cooperation amongst DTS, OTS and HART. Ms. Okinaga concluded with remaining tasks for the next Permitted Interaction Group, which include bus and rail farebox recovery ratios and possible alternative revenue sources.

Mr. Lui-Kwan invited Mr. Morton and Ms. Birch to comment on the recommendations. Ms. Birch gave a brief background of her experience working with approximately 10 to 12 Canadian and American transit authorities on fare systems. Mr. Morton said that although the fare system effort has not been easy, it has been a collaborative one. He said that the Steering Committee would do everything it could to deliver a fare system that would be seamless between modes, while keeping operating costs down.

Mr. Lui-Kwan emphasized the importance of the fare system to HART's future ridership. Mr. Grabauskas echoed Mr. Horner's and Mr. Morton's comments regarding collaboration. He acknowledged Mr. Formby's leadership in breaking down silos. He thanked Ms. Okinaga and the Group members, as well as HART, DTS and OTS staff for their work.

Mr. Lui-Kwan asked Mr. Atta and Mr. Formby to communicate the Board's appreciation for the Mayor's leadership in setting the tone of cooperation in building rail better. Mr. Formby acknowledged Mr. Garrity for his efforts. He complimented Ms. Okinaga on all the work she did for the Group. Mr. Lui-Kwan thanked Ms. Okinaga.

Mr. Horner noted that there was still much work to be done.

Mr. Formby acknowledged Trevor Findley and staff of CH2MHill for their assistance with the fare system. Mr. Horner suggested preparing a presentation for the City Council.

VII. HART's Annual Report

Mr. Lui-Kwan said that HART produced an annual report for submission to the Mayor and the City Council, which was compiled with the reports of other City departments and

semi-autonomous agencies. HART Board Administrator Cindy Matsushita said that the draft report, which was before the Board for its comment and review, detailed the authority's accomplishments in FY 2014. She solicited members' comments, which would be incorporated into the final draft of the report.

VIII. Executive Director and CEO's Report

Mr. Grabauskas said that HART staff had recently given the media a tour of the site previously known as the MSF, and recently renamed the Rail Operations Center. Two of the four planned buildings were shown to the media. He said that in a few weeks, the walls and roof of the Operations and Servicing Building would be raised.
Mr. Grabauskas said that a community meeting on the City Center section had been held the previous night. That night another community meeting would be held on the designs for the Kalihi, Kapalama, Iwilei and Chinatown stations. He said that HART had participated that month at the Children and Youth Day, the Annual Native Hawaiian Convention, and at various construction events.

IX. Executive Session

Ms. Okinaga moved that the Board enter into Executive Session pursuant to HRS Section 92-4 and subsections 92-5(a)(4) and 92-5(a)(2), to consider the contract for the Executive Director & CEO where consideration of matters affecting privacy would be involved, and to consult with the Board's attorney on questions and issues pertaining to the Board's powers, duties, privileges, immunities and liabilities. She said that the process of considering a new contract for the Executive Director & CEO had begun some time ago, and had allowed multiple opportunities for the public to comment. Mr. Bunda seconded the motion, which carried unanimously.

The Board of Directors entered into Executive Session at 12:29 p.m.

They re-entered public session at 1:09 p.m.

X. Executive Director & CEO's Contract

Ms. Okinaga said that HART was fortunate to have Mr. Grabauskas as its Executive Director & CEO. She moved that the Board of Directors reappoint Mr. Grabauskas for another three years, from April 2015 to 2018, upon the following terms: The base salary would increase 5% from the current contract, which provides for a flat base salary. (Ms. Okinaga also noted that Mr. Grabauskas had elected in his first year to take a voluntary 5% cut in his base salary to reflect the pay cuts experienced by other City and HART employees.) There would be two other changes to the contract terms: the annual bonus would be within a range of up to 15%, rather than being a set all-or-nothing amount, and an annual base salary increase would be provided for, within a range of up to 3.5%. The exact amount of any bonus or base salary increase would be based on the Board's evaluation of the Executive Director & CEO's performance. Ms. Okinaga said that the relocation payment would be deleted from the new contract, but that the housing and

transportation allowances would remain constant. Lastly, she said that a 90-day notice period for termination would be added to the new contract.

Mr. Hui seconded the motion.

Mr. Lui-Kwan noted that in his last performance evaluation, nearly all the Board members scored Mr. Grabauskas very high on management and leadership. He registered his support of the motion, as well as of Mr. Grabauskas' performance.

All being in favor, the motion carried unanimously.

Mr. Lui-Kwan thanked Ms. Okinaga and the Human Resources Committee for its work on the contract renewal.

XI. Adjournment

There being no further business before the Board, Mr. Lui-Kwan adjourned the meeting at 1:17 p.m.

Respectfully Submitted,

Cindy Matsushita
Board Administrator

Approved:

Ivan Lui-Kwan, Esq.
Board Chair

OCT 23 2014
Date

ATTACHMENT A

Honolulu Authority for Rapid Transportation

FY 2016 Requested Capital and Operating Budgets, and Six-Year Capital Program

October 9, 2014

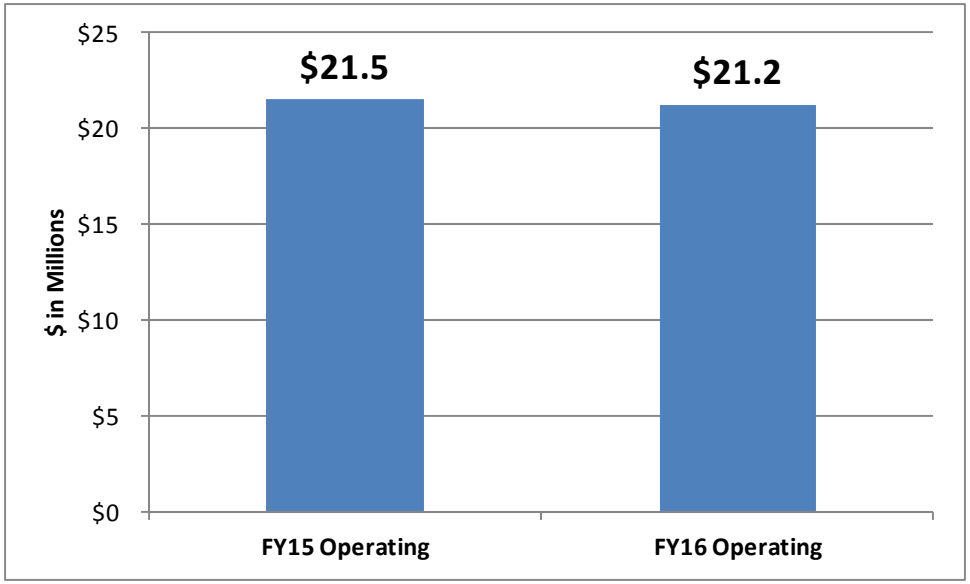
FY 2016 Budget Summary

- Requested FY 2016 Operating Budget
  - Totals $21.2 million, a 1.2% decrease from FY 2015
- Requested FY 2016 Capital Improvement Program
  - FY 2016 CIP Totals $422.2 million
  - CIP Re-Appropriation from FY 2015
- Budgets to be transmitted to the City by December 1, 2014

Today's Finance Committee Action:

- Conduct Public Hearing on the FY 2016 Operating & Capital Budgets
- Committee budget recommendations sent to the full HART Board
- Committee review and transmittal of 6-Year Capital Program to the Board
- Note: Full Budget schedule is listed on Page 2 of the Budget Submittal

Requested FY 2016 Operating Budget



- FY 2016 Operating decreases by 1.2% from FY 2015 Operating

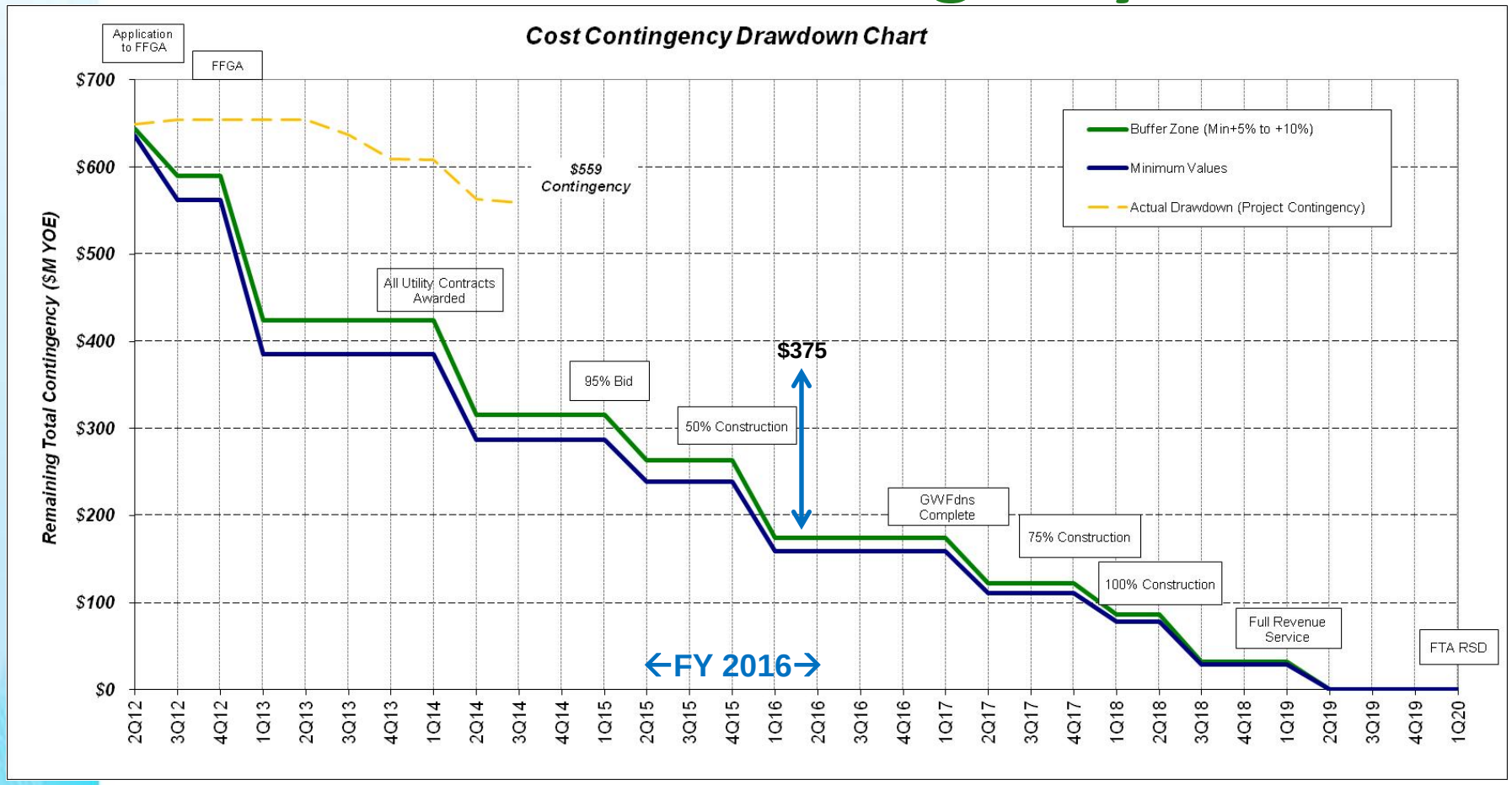
Comparison of the Approved FY 2015 and Requested FY 2016 Operating Budgets

	FY 2015	FY 2016	Change	% Change	Comment
Labor Costs:					
Salary & Benefits	13,747,425	14,228,000	480,575	3.5%	Contract Adjustment
OPEB Trust	0	195,000	195,000	N/A	Legal Mandate
All Other	96,000	96,000	0	0.0%	No Change
Total Labor	13,843,425	14,519,000	675,575	4.9%	
Other Costs:					
Legal Services	1,202,354	1,000,000	(202,354)	-16.8%	Legal expenses
City Prof. Services	2,044,307	2,031,500	(12,807)	-0.6%	Decrease due to lower Budget
Other Building Repairs	300,000	5,000	(295,000)	-98.3%	Repairs now in CIP Budget
Other Fixed Cost	500,000	0	(500,000)	-100.0%	No Stipend in FY 2016
Rentals	2,378,643	2,445,000	66,357	2.8%	Annual cost adjustment
Communication Svcs	170,000	128,000	(42,000)	-24.7%	Transfer to Software Maint.
Software Maintenance	58,000	100,000	42,000	72.4%	Transfer from above
All Other	984,300	984,300	0	0.0%	No Change
Total Other Costs	7,637,604	6,693,800	(943,804)	-12.4%	
Total Budget	**21,481,029**	**21,212,800**	**(268,229)**	**-1.25%**	**Net Decrease from FY 2015**

Requested FY 2016 CIP Projects

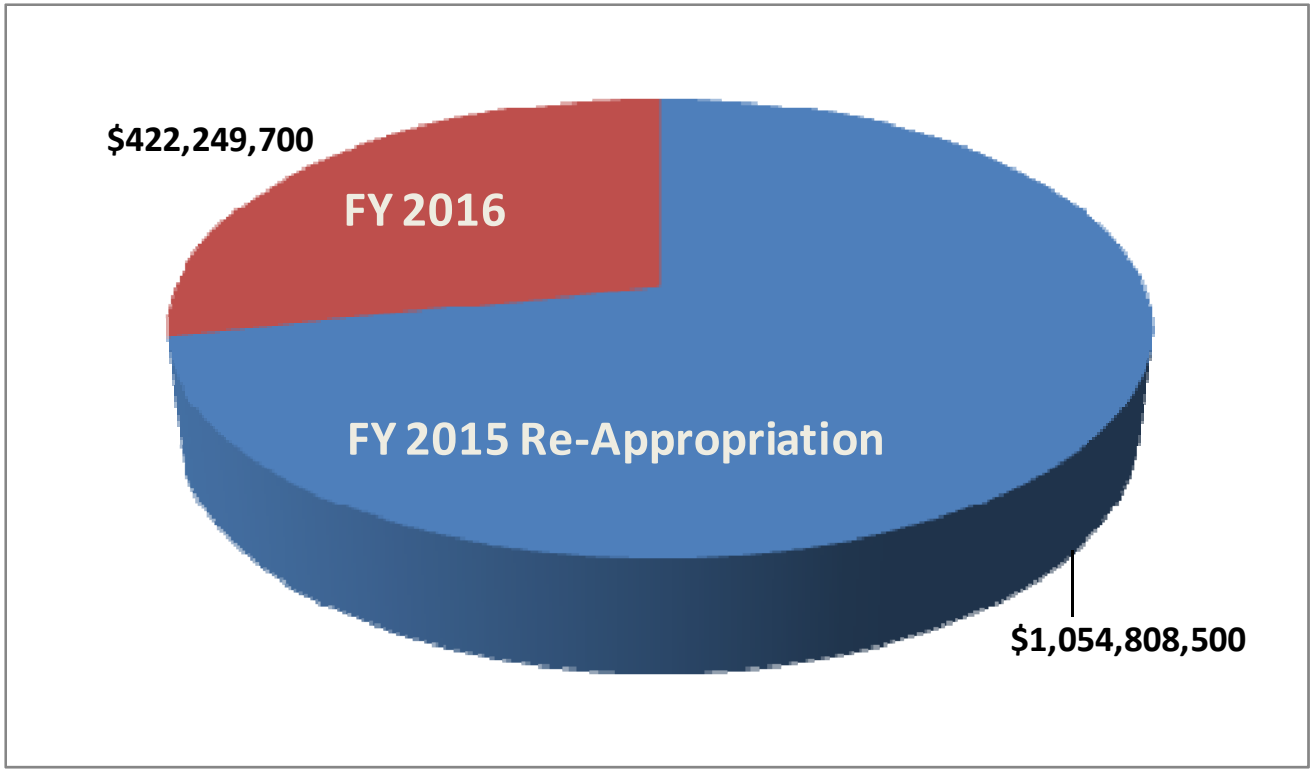
		Proposed FY 2016
Construction		**$143,976,100**
DBB-580	Dillingham SG, Kaka`ako SG Construction	$122,502,100
MI-930	Elevators and Escalators	$16,474,000
MM-951	Owner-Controlled Insurance Program (OCIP)	$5,000,000
Consultants		**$27,953,600**
MM-913	Gen Engineering Consultant	$8,233,500
MM-920	HDOT Coordination Consultant - West Oahu/Farrington Section	$5,613,000
MM-921	HDOT Coordination Consultant – Kamehameha Section	$2,600,000
MM-922	HDOT Coordination Consultant - Airport Section	$1,400,000
MM-930	HDOT State Safety Oversight Agency (SOA) Manager	$421,000
MM-950	Owner-Controlled Insurance Program (OCIP) Consultant	$208,100
MM-962	Core Systems Support	$8,078,000
MM-964	Safety and Security	$1,400,000
Programmatic Agreements		**$300,000**
MM-940	Kako'o Consultant	$100,000
PA-102	Programmatic Agreement– Historic Preservation Committee	$200,000
Quality Audits		**$20,000**
Subtotal		**$172,249,700**
Contingency		$200,000,000
Recertifications		$50,000,000
Total		**$422,249,700**

FY 2016 Contingency



- Contingency: Appropriation request reflects current contingency draw down schedule

Requested FY 2016 Capital Budget Summary



Total Requested CIP Budget = $1,477,058,200

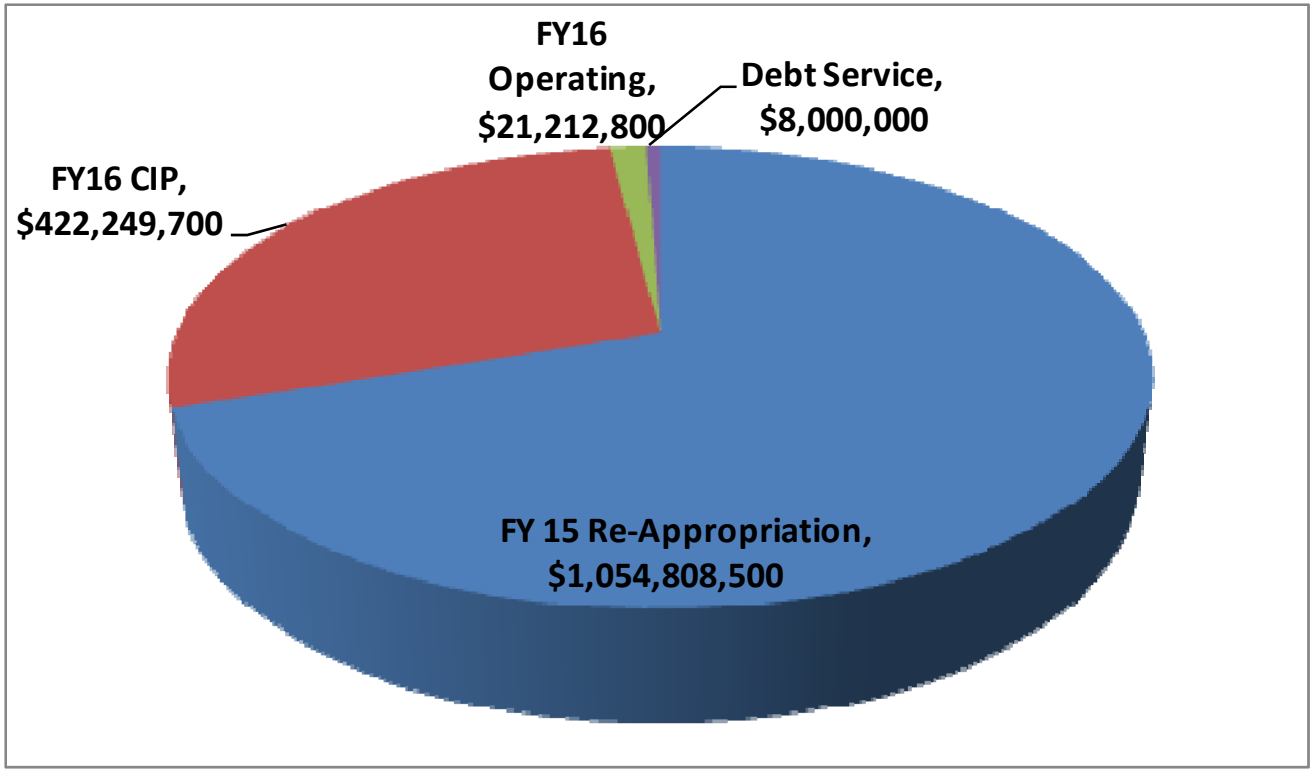
Debt Service Begins in FY 2016

($ in millions)	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total
Debt Proceeds	$370	$473	$248	$272	$0	$0	$0	$0	$0	$1,363*
Interest	$0	$8	$30	$38	$46	$35	$26	$15	$5	$203
Principal	$0	$0	$0	$0	$203	$291	$316	$290	$207	$1,307
	$0	$8	$30	$38	$249	$326	$342	$305	$212	$1,510

- Based on cash flow projections, debt service payments begin in 2016

* The difference between debt proceeds and principal repayment reflects premium pricing of bonds.

Requested FY 2016
Capital & Operating Budget



Total Requested Budget = $1,506,271,000

Requested 6-Year Capital Program

Requested 6-Year Capital Program

	Proposed FY 2016	Proposed FY 2017	Proposed FY 2018	Proposed FY 2019	Proposed FY 2020	Proposed FY 2021	Total 6 Year CIP
Construction	**$143,976,100**	**$27,380,200**	**$8,598,000**	**$0**	**$0**	**$0**	**$179,954,300**
Dillingham SG, Kaka`ako SG Construction	$122,502,100	$0	$0	$0	$0	$0	$122,502,100
UH West Oahu Park-and-Ride and Ho`opili Station	$0	$13,059,200	$0	$0	$0	$0	$13,059,200
Elevators and Escalators	$16,474,000	$14,321,000	$8,598,000	$0	$0	$0	$39,393,000
Owner-Controlled Insurance Program (OCIP)	$5,000,000	$0	$0	$0	$0	$0	$5,000,000
Consultants	**$27,953,600**	**$17,011,000**	**$16,311,000**	**$16,310,000**	**$0**	**$0**	**$77,585,600**
Gen Engineering Consultant FD-Construction	$8,233,500	$8,233,000	$8,233,000	$8,233,000	$0	$0	$32,932,500
HDOT Coordination Consultant - West Oahu/Farrington	$5,613,000	$0	$0	$0	$0	$0	$5,613,000
HDOT Coordination Consultant – Kamehameha Section	$2,600,000	$0	$0	$0	$0	$0	$2,600,000
HDOT Coordination Consultant - Airport Section	$1,400,000	$0	$0	$0	$0	$0	$1,400,000
HDOT State Safety Oversight Agency (SOA) Manager	$421,000	$0	$0	$0	$0	$0	$421,000
Owner-Controlled Insurance Program (OCIP) Consultant	$208,100	$0	$0	$0	$0	$0	$208,100
Core Systems Support	$8,078,000	$8,078,000	$8,078,000	$8,077,000	$0	$0	$32,311,000
Safety and Security	$1,400,000	$700,000	$0	$0	$0	$0	$2,100,000
Programmatic Agreements	**$300,000**	**$100,000**	**$100,000**	**$0**	**$0**	**$0**	**$500,000**
Kako'o Consultant	$100,000	$100,000	$100,000	$0	$0	$0	$300,000
Programmatic Agreement– Historic Preservation Com.	$200,000	$0	$0	$0	$0	$0	$200,000
Quality Audits	**$20,000**	**$20,000**	**$20,000**	**$0**	**$0**	**$0**	**$60,000**
Subtotal	**$172,249,700**	**$44,511,200**	**$25,029,000**	**$16,310,000**	**$0**	**$0**	**$258,099,900**
Contingency	$200,000,000	$53,000,000	$36,000,000	$86,000,000	$0	$0	$375,000,000
Recertifications	$50,000,000	$0	$0	$0	$0	$0	$50,000,000
Total FY 2016	**$422,249,700**	**$97,511,200**	**$61,029,000**	**$102,310,000**	**$0**	**$0**	**$683,099,900**
Re-Appropriations FY 2015	$1,054,808,500	$0	$0	$0	$0	$0	$1,054,808,500
Grand Total	**$1,477,058,200**	**$97,511,200**	**$61,029,000**	**$102,310,000**	**$0**	**$0**	**$1,737,908,400**

- Excluding Re-Appropriations from FY 2015, Six Year CIP totals $683 million of which $422 million is in FY 2016

Mahalo

Questions?

HART Requested FY 2016 Operating and Capital Budget Submittal

HART Requested Budget Detail Supporting Documents

FY 2016 Budget Process Schedule

Date	Meeting	Action
September 15, 2014	N/A	a. Requested FY 2016 Operating & Capital Budgets and Six-Year Capital Program submitted to Board of Directors by Executive Director b. Board Chair refers to Finance Committee
October 9, 2014	Finance Committee	a. Presentation of FY 2016 Operating & Capital Budgets and Six-Year Capital Program b. Public hearing c. Decisionmaking re: recommendation to Board that FY 2016 Operating & Capital Budgets be transmitted to Mayor and City Council for input
October 9, 2014	Board	a. Decisionmaking re: approval to transmit FY 2016 Operating & Capital Budgets to Mayor and City Council for input b. If approved, FY 2016 Operating & Capital Budgets referred back to Finance Committee for transmittal c. Adoption of Six-Year Capital Program
November 13, 2014	Finance Committee	a. Transmittal of the approved FY16 Operating & Capital Budgets to the City through the Executive Director **by December 1st**
January-June, 2015	City Council	a. City Council Budget Committee review of FY 2016 Operating & Capital Budgets b. City Council review of FY 2016 Operating & Capital Budgets completed by mid-June 2015
By June 30, 2015	Board	a. Public hearing on FY 2016 Operating & Capital Budgets b. Decisionmaking re: adoption of FY 2016 Operating & Capital Budgets via resolution

Requested FY 2016 Operating Budget

HONOLULU AUTHORITY FOR RAPID TRANSPORTATION
Requested Operating Expense Budget
For Fiscal Year 2016

Budget Description	2015 Budget	2016 Budget
Personnel		
Regular Pay	9,414,755	9,744,000
Overtime, Night Shift, Temp Assign Pay	95,000	95,000
Fringe Benefits	4,332,670	4,484,000
OPEB Mandatory Payment	0	195,000
Service or Merit Awards	1,000	1,000
Personnel Expense Subtotal	**13,843,425**	**14,519,000**
Current Expenses		
Office & Computer Supplies	147,000	147,000
Meals & Foods	6,500	6,500
Safety & Misc Supplies	9,300	9,300
Parts / Equip	210,000	210,000
Legal Services	1,202,354	1,000,000
Professional Svcs. Direct Reimb	2,044,307	2,031,500
Professional Svcs. Other	250,000	250,000
Postage & Shipping	9,000	9,000
Telephone	40,000	40,000
Communication Svcs	170,000	128,000
Relocation - New hires	30,000	30,000
Travel Expense - Out-of-State	95,000	95,000
Advertising, Publication of Notices	45,000	45,000
Insurance on Equip. & Gen. Liab.	18,000	18,000
Liability Insurance (Dir. & Off)	55,000	55,000
Printing & Binding	1,500	1,500
Other Repairs to Bldgs & structures	300,000	5,000
R&M - office furniture & equip	12,000	12,000
Rentals	2,378,643	2,445,000
Fees (memberships, Registration & parking)	50,000	50,000
Computer Software maintenance agreements	58,000	100,000
Other Fixed Charges	500,000	0
Current Expenses Subtotal	**7,631,604**	**6,687,800**
Equipment & Software	6,000	6,000
Total Before Debt Service	**21,481,029**	**21,212,800**
Interest Expense	0	8,000,000
Total Budget	**21,481,029**	**29,212,800**
Total Full-time Equivalent Positions	**139**	**139**

Requested FY 2016 Capital Budget

Honolulu Authority for Rapid Transportation

Requested Capital Improvement Budget for Fiscal Year Ending June 30, 2016

FY 2016

		Construction	Design	Planning	Inspection	Other	Total
Construction		**$143,976,100**					**$143,976,100**
DBB-580	Dillingham SG, Kaka`ako SG Construction	$122,502,100					$122,502,100
MI-930	Elevators and Escalators	$16,474,000					$16,474,000
MM-951	Owner-Controlled Insurance Program (OCIP)	$5,000,000					$5,000,000
Consultants		**$26,132,600**	**$1,400,000**	**$421,000**			**$27,953,600**
MM-913	Gen Engineering Consultant FD-Construction	$8,233,500					$8,233,500
MM-920	HDOT Coordination Consultant - West Oahu/Farrington	$5,613,000					$5,613,000
MM-921	HDOT Coordination Consultant – Kamehameha Section	$2,600,000					$2,600,000
MM-922	HDOT Coordination Consultant - Airport Section		$1,400,000				$1,400,000
MM-930	HDOT State Safety Oversight Agency (SOA) Manager			$421,000			$421,000
MM-950	Owner-Controlled Insurance Program (OCIP) Consultant	$208,100					$208,100
MM-962	Core Systems Support	$8,078,000					$8,078,000
MM-964	Safety and Security	$1,400,000					$1,400,000
Programmatic Agreements		**$200,000**		**$100,000**			**$300,000**
MM-940	Kako'o Consultant			$100,000			$100,000
PA-102	Programmatic Agreement– Historic Preservation Com.	$200,000					$200,000
Quality Audits		**$20,000**					**$20,000**
Total		**$170,328,700**	**$1,400,000**	**$521,000**			**$172,249,700**
Contingency							$200,000,000
Recertifications							$50,000,000
Total		**$170,328,700**	**$1,400,000**	**$521,000**	**$0**	**$0**	**$422,249,700**
Re-Appropriations FY 2015		$982,342,600	$2,465,900	$0	$0	$70,000,000	$1,054,808,500
Grand Total		**$1,152,671,300**	**$3,865,900**	**$521,000**	**$0**	**$70,000,000**	**$1,477,058,200**

Requested Six-Year Program FY 2016-2021

Honolulu Authority for Rapid Transportation Requested Six-Year Capital Program FY 2016 - FY 2021							
	Proposed FY 2016	Proposed FY 2017	Proposed FY 2018	Proposed FY 2019	Proposed FY 2020	Proposed FY 2021	Total 6 Year CIP
Construction	**$143,976,100**	**$27,380,200**	**$8,598,000**	**$0**	**$0**	**$0**	**$179,954,300**
Dillingham SG, Kaka`ako SG Construction	$122,502,100	$0	$0	$0	$0	$0	$122,502,100
UH West Oahu Park-and-Ride and Ho`opili Station	$0	$13,059,200	$0	$0	$0	$0	$13,059,200
Elevators and Escalators	$16,474,000	$14,321,000	$8,598,000	$0	$0	$0	$39,393,000
Owner-Controlled Insurance Program (OCIP)	$5,000,000	$0	$0	$0	$0	$0	$5,000,000
Consultants	**$27,953,600**	**$17,011,000**	**$16,311,000**	**$16,310,000**	**$0**	**$0**	**$77,585,600**
Gen Engineering Consultant FD-Construction	$8,233,500	$8,233,000	$8,233,000	$8,233,000	$0	$0	$32,932,500
HDOT Coordination Consultant - West Oahu/Farrington	$5,613,000	$0	$0	$0	$0	$0	$5,613,000
HDOT Coordination Consultant – Kamehameha Section	$2,600,000	$0	$0	$0	$0	$0	$2,600,000
HDOT Coordination Consultant - Airport Section	$1,400,000	$0	$0	$0	$0	$0	$1,400,000
HDOT State Safety Oversight Agency (SOA) Manager	$421,000	$0	$0	$0	$0	$0	$421,000
Owner-Controlled Insurance Program (OCIP) Consultant	$208,100	$0	$0	$0	$0	$0	$208,100
Core Systems Support	$8,078,000	$8,078,000	$8,078,000	$8,077,000	$0	$0	$32,311,000
Safety and Security	$1,400,000	$700,000	$0	$0	$0	$0	$2,100,000
Programmatic Agreements	**$300,000**	**$100,000**	**$100,000**	**$0**	**$0**	**$0**	**$500,000**
Kako'o Consultant	$100,000	$100,000	$100,000	$0	$0	$0	$300,000
Programmatic Agreement– Historic Preservation Com.	$200,000	$0	$0	$0	$0	$0	$200,000
Quality Audits	**$20,000**	**$20,000**	**$20,000**	**$0**	**$0**	**$0**	**$60,000**
Subtotal	**$172,249,700**	**$44,511,200**	**$25,029,000**	**$16,310,000**	**$0**	**$0**	**$258,099,900**
Contingency	$200,000,000	$53,000,000	$36,000,000	$86,000,000	$0	$0	$375,000,000
Recertifications	$50,000,000	$0	$0	$0	$0	$0	$50,000,000
Total FY 2016	**$422,249,700**	**$97,511,200**	**$61,029,000**	**$102,310,000**	**$0**	**$0**	**$683,099,900**
Re-Appropriations FY 2015	$1,054,808,500	$0	$0	$0	$0	$0	$1,054,808,500
Grand Total	**$1,477,058,200**	**$97,511,200**	**$61,029,000**	**$102,310,000**	**$0**	**$0**	**$1,737,908,400**

HART Requested

Budget Detail

Supporting Documents

Requested FY 2016 Capital Re-Appropriation Project Listing

Honolulu Authority for Rapid Transportation Re-Appropriations from FY 2015 to FY 2016		
	Approved FY 2015	**FY 2016 Re-Appropriations**
Construction		
Pearl Highlands Parking Structure/Bus Transit Center	$173,507,400	$173,507,400
Airport Station Group Construction	$63,346,900	$63,346,900
City Center Section Utilities Construction	$63,025,100	$63,025,100
Airport and City Center Sections Guideway	$682,463,200	$682,463,200
Construction Total	**$982,342,600**	**$982,342,600**
Design		
UH West Oahu Park-and-Ride and Ho`opili Station	$2,465,900	$2,465,900
Design Total	**$2,465,900**	**$2,465,900**
Utilities / Right of Way	**$233,200,000**	**$70,000,000**
Grand Total	**$1,218,008,500**	**$1,054,808,500**

Adopted FY 2015 Operating Budget

HONOLULU AUTHORITY FOR RAPID TRANSPORTATION Adopted Operating Expense Budget For Fiscal Year 2015		
Budget Description	**2014 Budget**	**2015 Budget**
Personnel		
Regular Pay	9,052,649	9,414,755
Overtime, Night Shift, Temp Assign Pay	84,480	95,000
Fringe Benefits	3,892,237	4,332,670
Service or Merit Awards	1,000	1,000
Personnel Expense Subtotal	**13,030,366**	**13,843,425**
Current Expenses		
Office & Computer Supplies	147,000	147,000
Meals & Foods	2,300	6,500
Safety & Misc Supplies	9,300	9,300
Parts / Equip	210,000	210,000
Legal Services	1,702,354	1,202,354
Professional Svcs. Direct Reimb	1,982,031	2,044,307
Professional Svcs. Other	280,000	250,000
Postage & Shipping	9,000	9,000
Telephone	32,000	40,000
Communication Svcs	170,000	170,000
Relocation - New hires	30,000	30,000
Travel Expense - Out-of-State	82,475	95,000
Advertising, Publication of Notices	14,474	45,000
Insurance on Equip. & Gen. Liab.	12,000	18,000
Liability Insurance (Dir. & Off)	62,000	55,000
Printing & Binding	1,500	1,500
Other Repairs to Bldgs & structures	300,000	300,000
R&M - office furniture & equip	5,000	12,000
Rentals	2,230,959	2,378,643
Fees (memberships, Registration & parking)	50,000	50,000
Computer Software maintenance agreements	48,500	58,000
Other Fixed Charges	500,000	500,000
Current Expenses Subtotal	**7,880,893**	**7,631,604**
Equipment & Software	6,000	6,000
Totals	**20,917,259**	**21,481,029**
Total Full-time Equivalent Positions	**139**	**139**

Adopted FY 2015 Capital Budget

Honolulu Authority for Rapid Transportation

Adopted Capital Improvement Budget for Fiscal Year Ending June 30, 2015

FY 2015

Pro / Phase	Planning	Design	Construction	Inspection	Land	Relocation	Grand Total
Construction							
Pearl Highlands Parking Structure/Bus Transit Center			$155,591,300				$155,591,300
Airport Station Group Construction			$63,346,900				$63,346,900
City Center Section Utilities Construction			$63,025,100				$63,025,100
Airport and City Center Sections Guideway			$682,463,200				$682,463,200
Elevators and Escalators			$6,148,000				$6,148,000
On-Call Hazardous Materials Removal Contractor			$1,000,000				$1,000,000
Owner-Controlled Insurance Program (OCIP)			$20,000,000				$20,000,000
Construction Total			**$991,574,500**				**$991,574,500**
Design							
Pearl Highlands Parking Structure/Bus Transit Ctr		$17,916,100					$17,916,100
UH West Oahu Park-and-Ride and Ho`opili Station		$2,465,900					$2,465,900
Design Total		**$20,382,000**					**$20,382,000**
Inspection							
Pearl Highlands Parking Structure/Bus Transit Center				$9,568,600			$9,568,600
Airport SG, Dillingham/Kaka`ako SG CE&I Services				$16,533,200			$16,533,200
Inspection Total				**$26,101,800**			**$26,101,800**
Programmatic Agreements							
Kako'o Consultant	$200,000						$200,000
Historic Preservation Committee (HPC)			$900,000				$900,000
Programmatic Agreements Total	**$200,000**		**$900,000**				**$1,100,000**
Consultants							
Program Management Support Consultant (PMSC-2)		$6,696,100					$6,696,100
Gen Engineering Consultant FD-Construction			$8,851,400				$8,851,400
HDOT Traffic Management Consultant		$200,000					$200,000
HDOT Coordination Consultant - West Oahu/Farrington		$1,750,000					$1,750,000
HDOT Coordination Consultant – Kamehameha		$2,000,000					$2,000,000
HDOT Coordination Consultant - Airport Section		$2,000,000					$2,000,000
HDOT Coordination Consultant - City Center Section		$4,314,800					$4,314,800
HDOT State Safety Oversight Agency (SOA)	$591,700						$591,700
Real Estate Consultant					$188,700	$188,700	$377,400
Owner-Controlled Insurance Program (OCIP) Consultant			$208,100				$208,100
Consultants Total	**$591,700**	**$16,960,900**	**$9,059,500**		**$188,700**	**$188,700**	**$26,989,500**
Right of Way					**$126,700,000**	**$11,500,000**	**$138,200,000**
Utility Work by Private Utility Owners			**$95,000,000**				**$95,000,000**
Quality Audits		**$56,600**					**$56,600**
Grand Total	**$791,700**	**$37,399,500**	**$1,096,534,000**	**$26,101,800**	**$126,888,700**	**$11,688,700**	**$1,299,404,400**
Allowance for Contingencies							**$161,000,000**
Allowance for Recertification							$100,000,000
Grand Total with Contingencies	**$791,700**	**$37,399,500**	**$1,096,534,000**	**$26,101,800**	**$126,888,700**	**$11,688,700**	**$1,560,404,400**

Operating Budget Comparison Between FY 2015 and FY 2016

HONOLULU AUTHORITY FOR RAPID TRANSPORTATION Comparison of Operating Budgets For Fiscal Year 2015 & 2016				
Budget Description	**2015 Budget**	**2016 Budget**	**Change From 2015**	**% Change**
Personnel				
Regular Pay	9,414,755	9,744,000	329,245	3.5%
Overtime, Night Shift, Temp Assign Pay	95,000	95,000	0	0.0%
Fringe Benefits	4,332,670	4,484,000	151,330	3.5%
OPEB Mandatory Payment	0	195,000	195,000	N/A
Service or Merit Awards	1,000	1,000	0	0.0%
Personnel Expense Subtotal	**13,843,425**	**14,519,000**	**675,575**	**4.9%**
Current Expenses				
Office & Computer Supplies	147,000	147,000	0	0.0%
Meals & Foods	6,500	6,500	0	0.0%
Safety & Misc Supplies	9,300	9,300	0	0.0%
Parts / Equip	210,000	210,000	0	0.0%
Legal Services	1,202,354	1,000,000	(202,354)	-16.8%
Professional Svcs. Direct Reimb	2,044,307	2,031,500	(12,807)	-0.6%
Professional Svcs. Other	250,000	250,000	0	0.0%
Postage & Shipping	9,000	9,000	0	0.0%
Telephone	40,000	40,000	0	0.0%
Communication Svcs	170,000	128,000	(42,000)	-24.7%
Relocation - New hires	30,000	30,000	0	0.0%
Travel Expense - Out-of-State	95,000	95,000	0	0.0%
Advertising, Publication of Notices	45,000	45,000	0	0.0%
Insurance on Equip. & Gen. Liab.	18,000	18,000	0	0.0%
Liability Insurance (Dir. & Off)	55,000	55,000	0	0.0%
Printing & Binding	1,500	1,500	0	0.0%
Other Repairs to Bldgs & structures	300,000	5,000	(295,000)	-98.3%
R&M - office furniture & equip	12,000	12,000	0	0.0%
Rentals	2,378,643	2,445,000	66,357	2.8%
Fees (memberships, Registration & parking)	50,000	50,000	0	0.0%
Computer Software maintenance agreements	58,000	100,000	42,000	72.4%
Other Fixed Charges	500,000	0	(500,000)	-100.0%
Current Expenses Subtotal	**7,631,604**	**6,687,800**	**(943,804)**	**-12.4%**
Equipment & Software	6,000	6,000	0	0.0%
Totals	**21,481,029**	**21,212,800**	**(268,229)**	**-1.2%**

Project Monthly Cost Report by Contract
As of August 31, 2014

HONOLULU AUTHORITY for RAPID TRANSPORTATION

Costs Reported as of Month Ending: August 2014

Project Monthly Cost Report by Contract - One Line Summary

		A	B	C=A+B	D	E	F
		COMMITTED			AFE	INCURRED	PERCENT
CPP No	Title	Original	Changes	Current *	AFE**	Incurred To Date	%
ART	Project Wide ART	0	0	0	0	0	0%
CCH-100	Inactive Hart/City CCH	15,348,443	0	15,348,443	0	14,925,228	97%
CCH-101	HART/ City Dept of BFS	105,092	0	105,092	0	0	0%
CCH-102	HART/ City DDC Land Division	256,201	0	256,201	0	173,182	68%
CCH-107	HART/ City Corporation Counsel (COR)	1,672,535	0	1,672,535	0	125,653	8%
CCH-108	Board of Water Supply (BWS)	928,325	0	928,325	0	928,325	100%
DB-120	West Oahu/Farrington Hwy Guideway	482,924,000	107,948,382	590,872,382	590,872,382	289,496,128	49%
DB-200	Maintenance & Storage Facility DB	195,258,000	69,488,008	264,746,008	197,776,742	130,133,101	49%
DB-320	Kamehameha Hwy Guideway DB	372,150,000	11,515,363	383,665,363	173,681,444	107,721,511	28%
DBB-185	West Side SG Construction	0	0	0	0	0	0%
DBB-275	Pearl Highlands Pkg. Str Cnstr. OLD	0	0	0	0	0	0%
DBB-470	Airport Station Group Cnstr.	0	0	0	0	0	0%
DBB-505	Airport Section Utilities Cnstr.	28,413,974	0	28,413,974	0	0	0%
DBB-510	City Center Section Utilities Cnstr.	0	0	0	0	0	0%
DBB-520	Airport-City Center Guideway Cnstr.	0	0	0	0	0	0%
DBB-580	Dillingham/Kaka'ako SG Contruction	0	0	0	0	0	0%
DBB-600	UHWO PnR/Hoopili Stn Finishes Cnstr.	0	0	0	0	0	0%
DBOM-920	Core Systems Design Build O/M	573,782,793	29,198,490	602,981,283	587,066,271	77,621,324	13%
FD-140	West Oahu Station Group Final Design	7,789,000	1,473,805	9,262,805	7,105,110	7,239,918	78%
FD-240	Farrington Highway Stations Group 2	9,300,696	2,907,349	12,208,045	9,971,999	9,686,879	79%
FD-245	Pearl Highlands Pkg. Str. FD OLD	0	0	0	0	0	0%
FD-340	Kamehameha Hwy Station Group H2R2 FD	8,702,592	0	8,702,592	7,875,760	7,687,346	88%
FD-430	Airport Sect. Guideway/Utilities FD	38,840,960	3,666,172	42,507,132	42,507,132	34,580,438	81%
FD-440	Airport Station Group FD	10,177,365	0	10,177,365	9,128,022	8,008,084	79%
FD-530	City Center Guideway/Utilities FD	43,948,220	1,210,803	45,159,023	42,542,702	31,530,995	70%
FD-550	Dillingham and Kaka'ako SG FD	18,321,918	0	18,321,918	11,662,752	7,864,923	43%
FD-600	UHWO Pkg-Hoopili Station Finishes FD	0	0	0	0	0	0%
HRT-200	HART Labor	30,451,942	0	30,451,942	0	29,890,927	98%
HRT-201	HART ODC	15,421,998	0	15,421,998	0	11,751,601	76%
MI-930	Elevators & Escalators Install/Maint	50,982,714	0	50,982,714	5,442,108	2,735,049	5%

* 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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HONOLULU AUTHORITY for RAPID TRANSPORTATION

Costs Reported as of Month Ending: August 2014

Project Monthly Cost Report by Contract - One Line Summary

		A	B	C=A+B	D	E	F
		COMMITTED			AFE	INCURRED	PERCENT
CPP No	Title	Original	Changes	Current *	AFE**	Incurred To Date	%
MM-280	WOFH/KHSG CE&I (REPACKAGED)	0	0	0	0	0	0%
MM-290	Construction Engrg & Inspection West	54,232,480	0	54,232,480	16,650,000	4,424,859	8%
MM-385	Pearl Highlands Garage and Ramps CEI	0	0	0	0	0	0%
MM-500	Repackaged into MM959 CEI East	0	0	0	0	0	0%
MM-525	Repackaged into MM959 CEI East	0	0	0	0	0	0%
MM-590	Repackaged into MM959 CEI East	0	0	0	0	0	0%
MM-595	Construction Engrg & Inspection East	63,083,417	0	63,083,417	15,257,000	3,515,461	6%
MM-600	UHWO Pkg-Hoopili Stn Finishes CEI	0	0	0	0	0	0%
MM-900	Program Mgt Support Consit (PMSC-1)	36,727,162	0	36,727,162	20,700,000	0	0%
MM-901	Program Mgt Support Consit (PMSC-2)	33,376,897	0	33,376,897	21,240,790	22,534,247	68%
MM-905	MM-905 Gen Engrg Consit EIS/PE	0	78,564,942	78,564,942	78,564,942	74,157,822	94%
MM-910	MM-910 Gen Engrg Consit FD-Construct	150,000,000	0	150,000,000	150,000,000	148,780,287	99%
MM-913	MM-913 Gen Engrg Recompete	46,143,277	0	46,143,277	4,359,403	4,769,048	10%
MM-915	HDOT Traffic Mgmt. Consult.	1,600,000	1,400,000	3,000,000	4,000,000	1,505,137	50%
MM-920	HDOT Coordination Consit WOFH	3,000,000	7,500,000	10,500,000	9,000,000	5,590,347	53%
MM-921	HDOT Coordination Consit KHG	10,000,000	-1,400,000	8,600,000	4,000,000	1,887,405	22%
MM-922	HDOT Coord. Consit. Airport	12,000,000	-5,600,000	6,400,000	3,000,000	1,601,324	25%
MM-923	HDOT Coordination Consit City Center	0	0	0	0	0	0%
MM-925	HDOT Labor - Highway Group	550,000	0	550,000	550,000	745,287	136%
MM-926	HDOT Labor - Airport Group	0	0	0	0	0	0%
MM-930	HDOT State SOA Manager & Consultant	1,272,400	583,142	1,855,542	322,293	470,507	25%
MM-935	Real Estate Consultant	3,000,000	0	3,000,000	5,654,892	955,546	32%
MM-937	Real Estate Consultant - Maps/Surv.	2,998,000	0	2,998,000	0	0	0%
MM-940	Kako'o Consultant	1,000,000	0	1,000,000	740,516	394,704	39%
MM-945	On-Call Contractor	1,000,000	0	1,000,000	383,011	0	0%
MM-946	On-Call Hazmat Removal Contractor	3,000,000	0	3,000,000	2,570,839	1,266,805	42%
MM-950	OCIP Consultant	1,250,000	0	1,250,000	833,750	695,000	56%
MM-951	Owner-Controlled Insurance Program	0	0	0	0	0	0%
MM-960	Archeological & Cultural Monitoring	459,517	0	459,517	417,826	42,277	9%
MM-962	CORE Systems Support	43,988,989	0	43,988,989	3,600,000	3,147,761	7%

* Current Committed = Original Contract + CCO/Amendment

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

m_cw_pmoc_monthly_contract_one_line

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HONOLULU AUTHORITY for RAPID TRANSPORTATION

Costs Reported as of Month Ending: August 2014

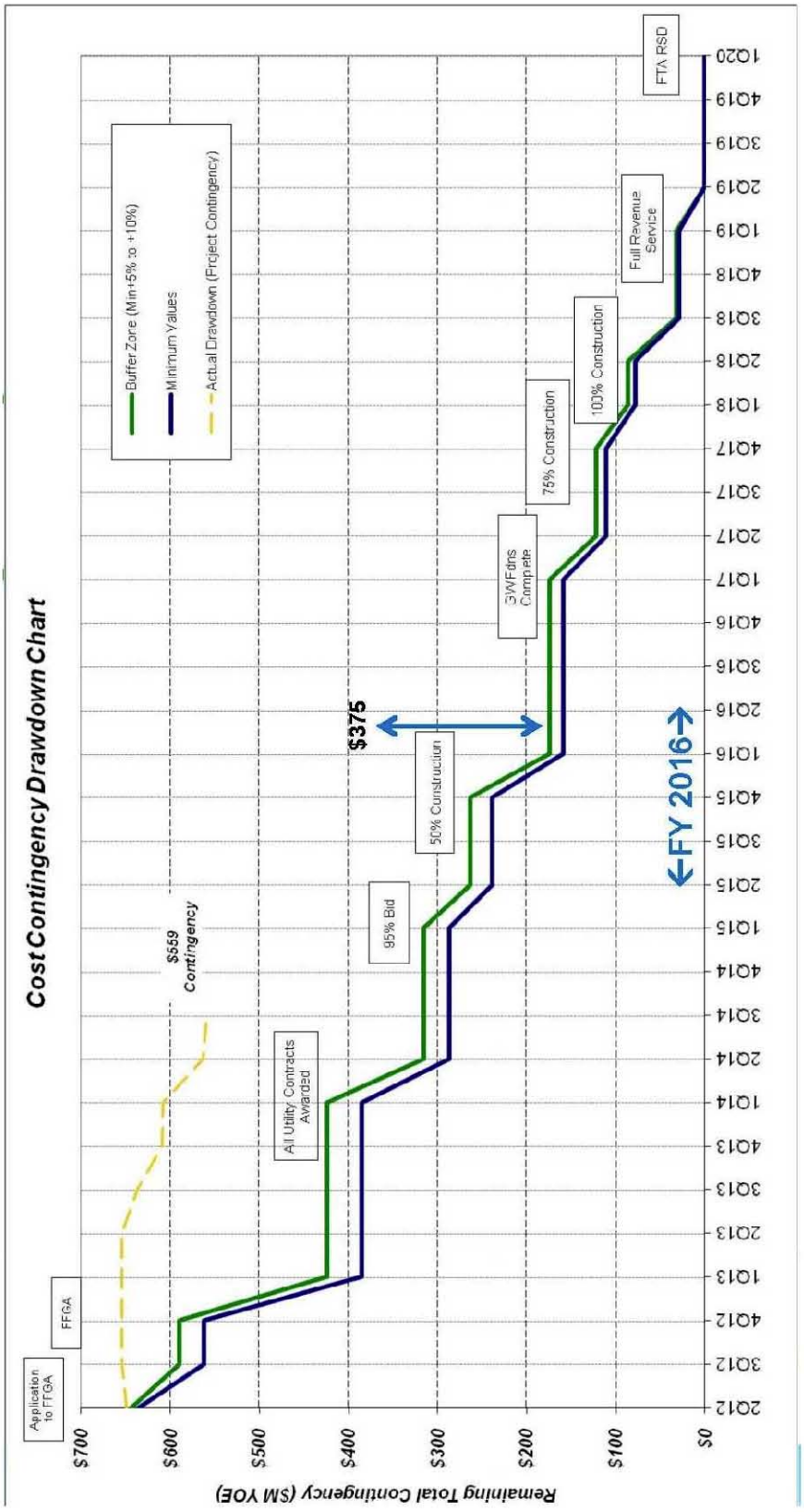
Project Monthly Cost Report by Contract - One Line Summary

		A	B	C=A+B	D	E	F
		COMMITTED			AFE	INCURRED	PERCENT
CPP No	Title	Original	Changes	Current *	AFE**	Incurred To Date	%
MM-964	Safety and Security	4,699,573	0	4,699,573	1,200,000	434,130	9%
MM-975	LEED Commissioning Services for MSF	278,630	9,910	288,540	288,540	58,660	20%
OTHER	Project Wide	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	355,911	44,032	11%
PA-103	Programmatic Agreement HPC Park Impr	0	0	0	0	0	0%
ROW	Real Estate / Right-of-Way	59,519,536	0	59,519,536	0	60,985,132	102%
UTIL	Utilities by Utility Companies	87,372,935	1,010,000	88,382,935	67,823,941	7,478,184	8%
Total Project:		2,525,729,580	309,476,367	2,835,205,947	2,097,146,077	1,117,584,573	

* Current Committed = Original Contract + CCO/Amendment

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

Cost Contingency Drawdown Chart
As of August 31, 2014



Updated Table A-1, Capital Plan Cash Flows

(Figures in $ millions)	*Prior to FY 2013*	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Updated Total
Beginning Project Cash Balance	$ 298	$ 418	$ 393	$ 239	$ 25	$ 25	$ 26	$ 25	$ 26	$ 25	$ 26	$ 45	$ 224	$ 298
Project Funding Sources														
Net GET Surcharge Revenues	$ 481	$ 170	$ 216	$ 227	$ 238	$ 250	$ 263	$ 276	$ 290	$ 305	$ 325	$ 251	$ -	$ 3,291
FTA Section 5309 New Starts Revenues	$ 65	$ 80	$ 291	$ 383	$ 321	$ 230	$ 181	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,550
FTA Section 5307 Formula Funds Used for the Project	$ -	$ -	$ -	$ -	$ -	$ 33	$ 34	$ 35	$ 36	$ 38	$ -	$ -	$ -	**$ 176**
ARRA Funds Used for the Project	$ 4	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 4
Bond Proceeds				$ 370	$ 473	$ 248	$ 272	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,363
Reserve Fund Release	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 140	$ -	$ 140
Interest Income	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funds														$ -
Total Project Sources of Funds	$ 551	$ 250	$ 507	$ 980	$ 1,032	$ 761	$ 750	$ 311	$ 326	$ 343	$ 325	$ 391	$ -	$ 6,525
Project Capital Costs														
Total Capital Cost	$ 431	$ 275	$ 661	$ 1,194	$ 1,024	$ 730	$ 572	$ 61	$ -	$ -	$ -	$ -	$ -	$ 4,949
Debt Service and Transfers														
Principal Payment	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 203	$ 291	$ 316	$ 290	$ 208	$ -	$ 1,308
Interest Payment	$ -	$ -	$ -	$ -	$ 8	$ 30	$ 38	$ 46	$ 35	$ 26	$ 15	$ 5	$ -	$ 203
Transfer to Reserve Fund	$ -	$ -	$ -	$ -	$ -	$ -	$ 140	$ -	$ -	$ -	$ -	$ -	$ -	$ 140
Transfer Project Cash Balance to Ongoing Rail Capital and O&M													$ 224	$ 224
Total Project Uses of Funds	$ 431	**$ 275**	**$ 661**	**$ 1,194**	**$ 1,032**	**$ 760**	**$ 750**	**$ 310**	**$ 326**	**$ 342**	**$ 305**	**$ 213**	**$ 224**	**$ 6,823**
Total Finance Charges		$ -	$ -	$ -	$ -	$ 2	$ 1	$ 1	$ 1	$ 1	$ 1	$ 1	$ -	$ 5
FFGA Eligible Finance Charges		$ -	$ -	$ -	$ -	$ 2	$ 1	$ 1	$ 1	$ -	$ -	$ -	$ -	$ 4
Net Cash	$ 120	$ (25)	$ (154)	$ (214)	$ -	$ 1	$ (1)	$ 1	$ (0)	$ 1	$ 20	$ 178	$ (224)	
Ending Project Cash Balance	$ 418	$ 393	$ 239	$ 25	$ 25	$ 26	$ 25	$ 26	$ 25	$ 26	$ 45	$ 224	$ -	$ -
Reserve Fund Balance														
Beginning Reserve Fund Balance	**$ -**	$ -	$ -	$ -	$ -	$ -	$ -	$ 140	$ 140	$ 140	$ 140	$ 140	$ -	$ -
Deposit to Reserve Fund	$ -	$ -	$ -	$ -	$ -	$ -	$ 140	$ -	$ -	$ -	$ -	$ -	$ -	$ 140
Interest Income on Reserve Fund	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Reserve Fund Release	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (140)	$ -	$ (140)

Adopted Six-Year Program FY 2015-2020

CPP #	Contract Name	Proposed FY 2015	Proposed FY 2016	Proposed FY 2017	Proposed FY 2018	Proposed FY 2019	Proposed FY 2020	Proposed 6 Year Total
Construction		**$991,574,500**	**$164,435,300**	**$22,321,000**	**$16,598,000**	**$1,200,000**	**$0**	**$1,196,128,800**
DBB-275	Pearl Highlands Parking Structure/Bus Transit Center Construction	$155,591,300	$0	$0	$0	$0	$0	$155,591,300
DBB-470	Airport Station Group Construction	$63,346,900	$0	$0	$0	$0	$0	$63,346,900
DBB-510	City Center Section Utilities Construction	$63,025,100	$0	$0	$0	$0	$0	$63,025,100
DBB-520	Airport and City Center Sections Guideway Construction	$682,463,200	$0	$0	$0	$0	$0	$682,463,200
DBB-580	Dillingham SG, Kaka`ako SG Construction	$0	$122,502,100	$0	$0	$0	$0	$122,502,100
DBB-600	UH West Oahu Park-and-Ride and Ho`opili Station Finishes Constr.	$0	$13,059,200	$0	$0	$0	$0	$13,059,200
MI-930	Elevators and Escalators	$6,148,000	$16,474,000	$14,321,000	$8,598,000	$0	$0	$45,541,000
MM-946	On-Call Hazardous Materials (HazMat) Removal Contractor	$1,000,000	$0	$0	$0	$0	$0	$1,000,000
MM-951	Owner-Controlled Insurance Program (OCIP)	$20,000,000	$12,400,000	$8,000,000	$8,000,000	$1,200,000	$0	$49,600,000
Consultants		**$26,989,500**	**$15,151,700**	**$8,983,500**	**$8,807,400**	**$8,718,800**	**$0**	**$68,650,900**
MM-901	Program Management Support Consultant (PMSC-2)	$6,696,100	$0	$0	$0	$0	$0	$6,696,100
MM-910	Gen Engineering Consultant FD-Construction	$8,851,400	$13,210,800	$8,832,500	$8,807,400	$8,718,800	$0	$48,420,900
MM-915	HDOT Traffic Management Consultant	$200,000	$0	$0	$0	$0	$0	$200,000
MM-920	HDOT Coordination Consultant - Consultant West Oahu/Farrington Se	$1,750,000	$0	$0	$0	$0	$0	$1,750,000
MM-921	HDOT Coordination Consultant – Consultant Kamehameha Section	$2,000,000	$600,000	$0	$0	$0	$0	$2,600,000
MM-922	HDOT Coordination Consultant - Consultant Airport Section	$2,000,000	$400,000	$0	$0	$0	$0	$2,400,000
MM-923	HDOT Coordination Consultant - City Center Section	$4,314,800	$0	$0	$0	$0	$0	$4,314,800
MM-930	HDOT State Safety Oversight Agency (SOA) Manager and Consultant	$591,700	$506,500	$0	$0	$0	$0	$1,098,200
MM-935	Real Estate Consultant	$377,400	$226,300	$151,000	$0	$0	$0	$754,700
MM-950	Owner-Controlled Insurance Program (OCIP) Consultant	$208,100	$208,100	$0	$0	$0	$0	$416,200
Design		**$20,382,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$20,382,000**
FD-245	Pearl Highlands Parking Structure/Bus Transit Center Final Design	$17,916,100	$0	$0	$0	$0	$0	$17,916,100
FD-600	UH West Oahu Park&Ride and Ho`opili Station Finishes Final Des.	$2,465,900	$0	$0	$0	$0	$0	$2,465,900
Quality Audits		**$56,600**	**$20,000**	**$20,000**	**$20,000**	**$0**	**$0**	**$116,600**
HART-201	HART ODC	$56,600	$20,000	$20,000	$20,000	$0	$0	$116,600
Inspection		**$26,101,800**	**$1,099,400**	**$0**	**$0**	**$0**	**$0**	**$27,201,200**
MM-385	Pearl Highlands Parking Structure/Bus Transit Center CE&I Svcs	$9,568,600	$0	$0	$0	$0	$0	$9,568,600
MM-590	Airport SG, Dillingham/Kaka`ako SG CE&I Services	$16,533,200	$0	$0	$0	$0	$0	$16,533,200
MM-600	UH West Oahu Park-and-Ride and Ho`opili Station Finishes CE&I Svs	$0	$1,099,400	$0	$0	$0	$0	$1,099,400
Programmatic Agreements		**$1,100,000**	**$300,000**	**$50,000**	**$50,000**	**$50,000**	**$25,000**	**$1,575,000**
MM-940	Kako'o Consultant	$200,000	$100,000	$50,000	$50,000	$50,000	$25,000	$475,000
PA-102	PA – Historic Preservation Committee (HPC)	$900,000	$200,000	$0	$0	$0	$0	$1,100,000
Right of Way		**$138,200,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$138,200,000**
ROW	Real Estate/Right-of-Way	$138,200,000	$0	$0	$0	$0	$0	$138,200,000
Utility Work by Private Utility Owners		**$95,000,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$95,000,000**
UTIL-500	New Utilities or Relocations by Private Utility	$95,000,000	$0	$0	$0	$0	$0	$95,000,000
Project Total		**$1,299,404,400**	**$181,006,400**	**$31,374,500**	**$25,475,400**	**$9,968,800**	**$25,000**	**$1,547,254,500**
Contingency		$161,000,000	$88,000,000	$53,000,000	$36,000,000	$86,000,000	$0	$424,000,000
Recertification		$100,000,000	$0	$0	$0	$0	$0	$100,000,000
Total		**$1,560,404,400**	**$269,006,400**	**$84,374,500**	**$61,475,400**	**$95,968,800**	**$25,000**	**$2,071,254,500**

ATTACHMENT B

Honolulu Rail Transit Project
Core Systems Status

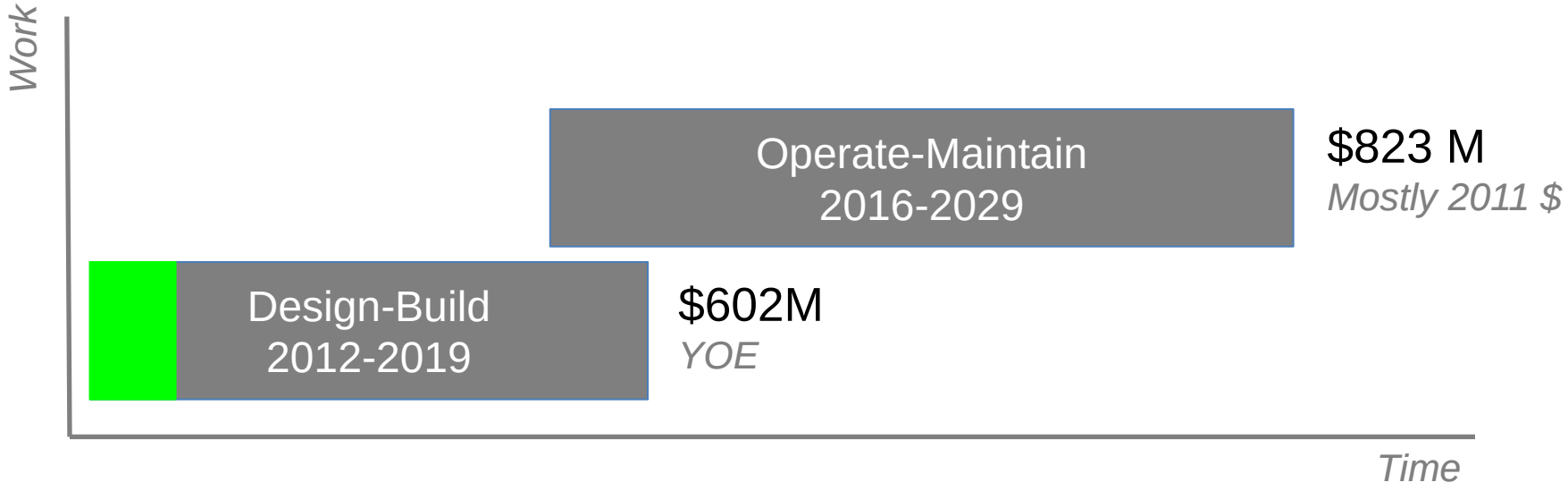
October 2014

Ansaldo Honolulu

An Ansaldo STS/Ansaldo Breda JV

Ansaldo Honolulu

Core Systems DBOM Contract - Progress



Design – Build Work

66% Ansaldo STS
34% Ansaldo Breda
High American Content

Operate-Maintain Work

100% Ansaldo STS
300 local jobs

14% Delivered as of September 2014

The Team

Ansaldo Honolulu

Ansaldo STS

Core Systems / Operation & Maintenance

- Alcatel·Lucent — Communications/Sec.
- mass. electric construction company — Installation – Guideway
- WATTS CONSTRUCTORS — Installation – Stations
- STANLEY Security — Platform Screen Gates
- GEISMAR MTM — Service Vehicles
- SIEMENS — Traction Electrification
- Johnson Controls — Fire Detection
- DRS Technologies A Finmeccanica Company — UPS
- To The Field LLC B-SAFE — Environment / Safety
- ELECOM — Installation Engineering

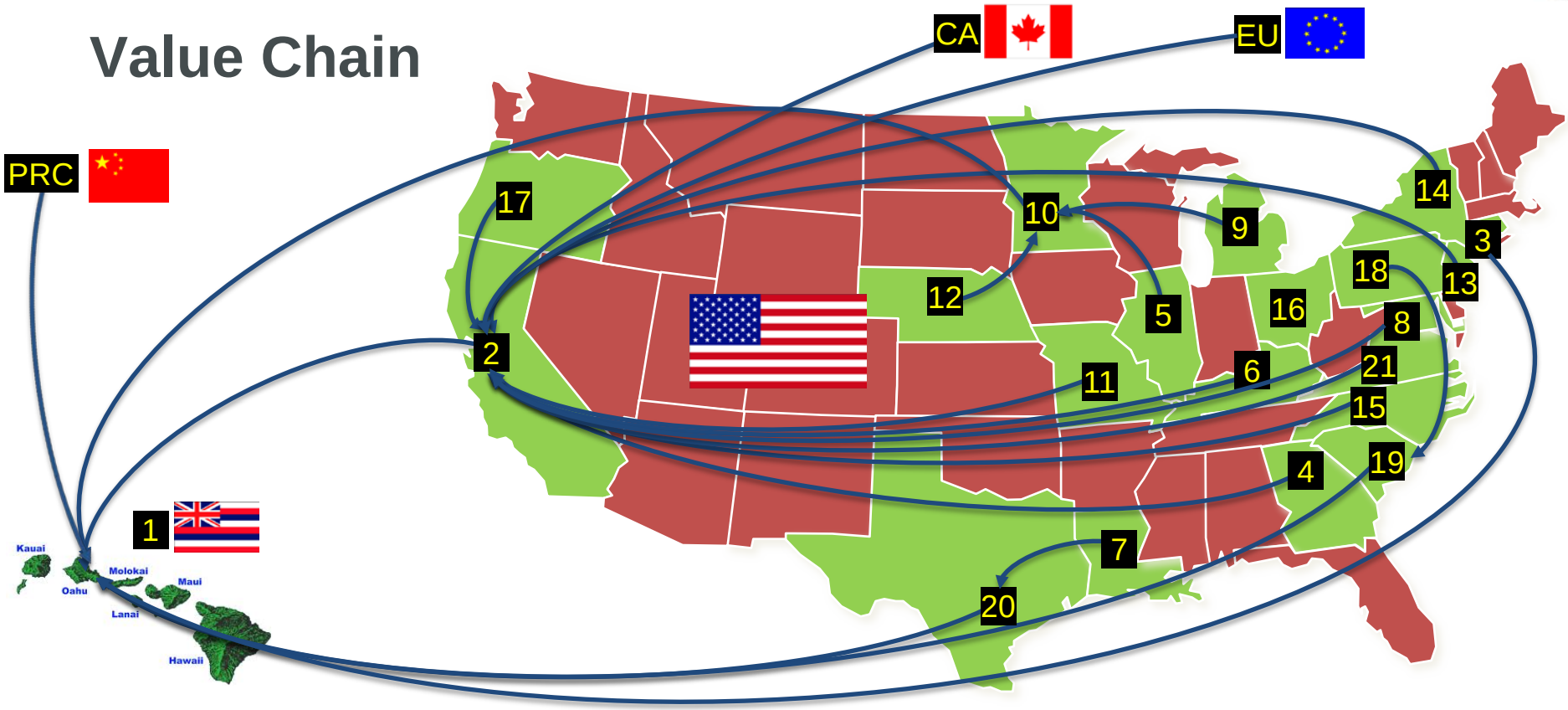
AnsaldoBreda

Passenger Vehicles

- Knorr-Bremse — Brakes/Doors/HVAC
- HÜBNER — Gangways
- MERSEN — Third-Rail Current Collectors
- DELLNER — Coupling
- DRS Technologies A Finmeccanica Company — Truck Frames/Bolster Beams
- SCHUNK — Current Grounding
- IECHOLDEN — Traction Motors
- ZF — Gearboxes
- Bach-Simpson A Division of Wabtec Canada, Inc. — Event Rercorders
- ULTIMATE — Interiors
- METRA — Carshells
- Sécheron — High-Speed Circuit Breakers
- refisa — Front End
- HOPPECKE — Batteries
- Other 10 Subcontracts

Ansaldo Honolulu

Value Chain



1	Hawai'I (Security, Installations)	9	Michigan (MRV Components)	17	Oregon (Electrical Substations Design)
2	California (Train and TPSS Assembly)	10	Minnesota (Maintenance & Recovery Vehicles)	18	Pennsylvania (Train Control/SCADA)
3	Connecticut (Platform Gates, FD, UPS)	11	Missouri (Train Truck Frames/Bolster Beams)	19	South Carolina (Train Control/SCADA)
4	Georgia (Train Gearboxes)	12	Nebraska (MRV Engines)	20	Texas (Communications)
5	Illinois (MRV Components)	13	New Jersey (Train Batteries)	21	Virginia (Electrical Transformers)
6	Kentucky (Train Brake Resistors)	14	New York(Train Traction Motors)	CA	Canada (Train Event Recorders)
7	Louisiana (Passenger Information)	15	North Carolina (Train Couplers)	EU	European Union (Train Parts)
8	Maryland (Train Brakes/Doors/HVAC)	16	Ohio (Train Switches, MRV Parts)	PRC	People's Republic of China (UPS)

Ansaldo Honolulu

Train #1 - Schedule

Activity	2014	2015	2016
Aluminum Extrusions BRESCIA, ITALY	NOV 2014		
Carshell/Floor Assembly REGGIO CALABRIA	JUN 2015		
Vehicle Final Assembly PITTSBURG, CA		DEC 2015	
Delivery at MSF and Testing HONOLULU, HI			JUN 2016

Train #1 – Step 1 – Aluminum Extrusions

Brescia

Ansaldo Honolulu

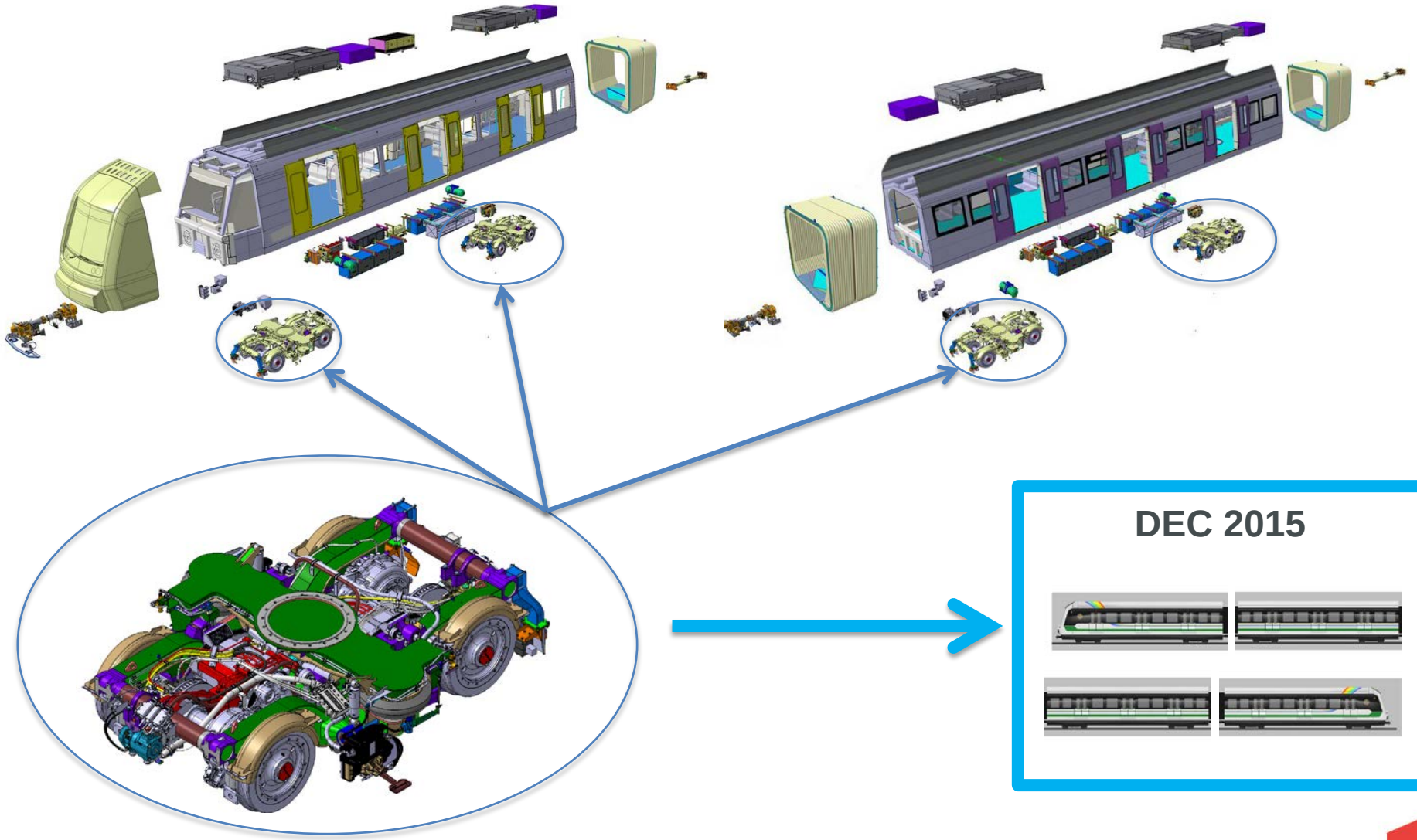
Train #1 – Step 2 – Carshell Assembly

Reggio Calabria

Ansaldo Honolulu

Train #1 – Step 3 – Vehicle Final Assembly

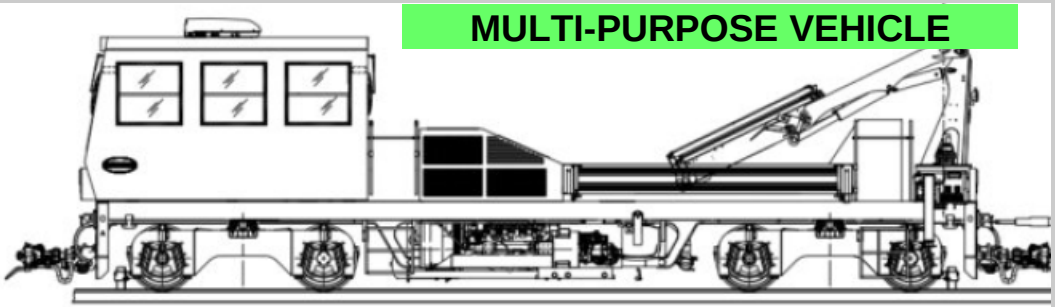
Pittsburg, CA



Ansaldo Honolulu

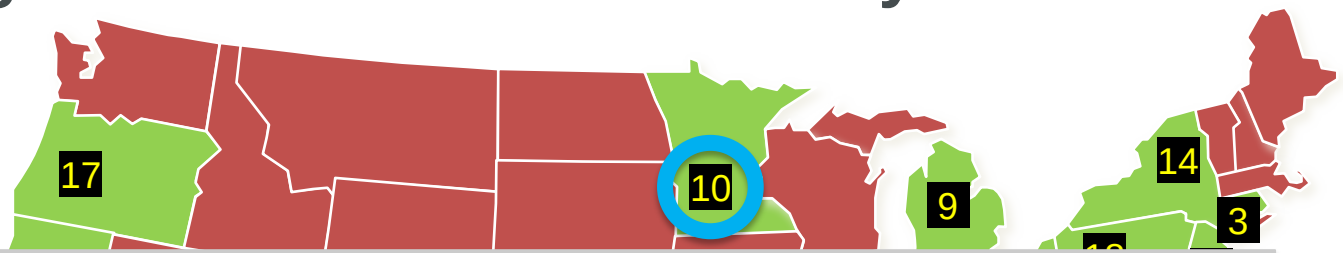
Manufacturing – Maintenance & Recovery Vehicles

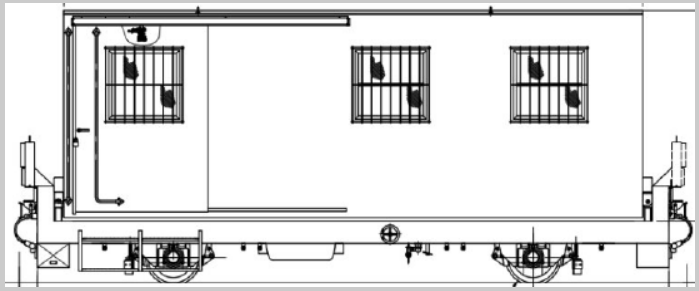
MULTI-PURPOSE VEHICLE



Ansaldo Honolulu

Manufacturing – Maintenance & Recovery Vehicles

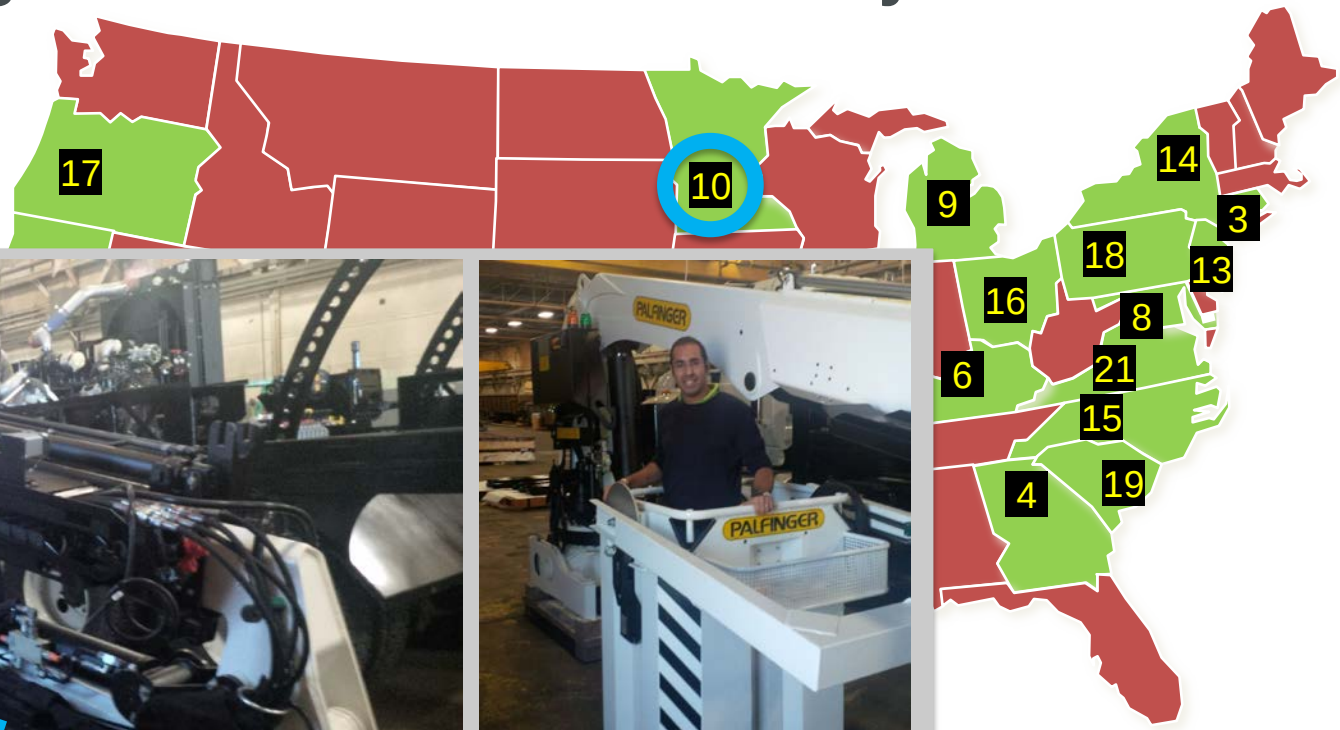


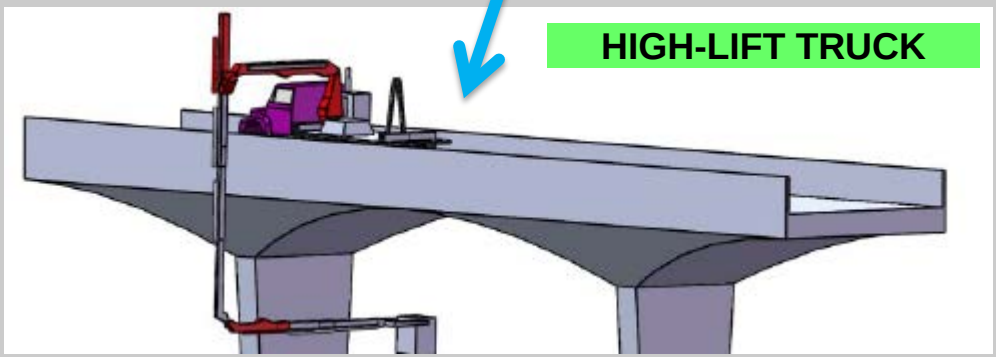


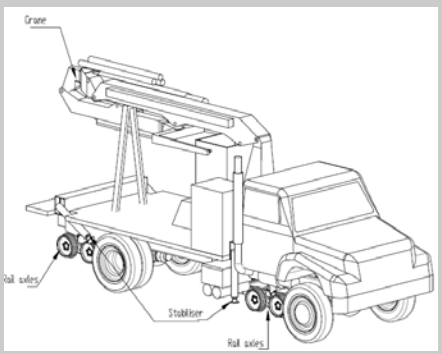
ENCLOSED TRAILER

Ansaldo Honolulu

Manufacturing – Maintenance & Recovery Vehicles

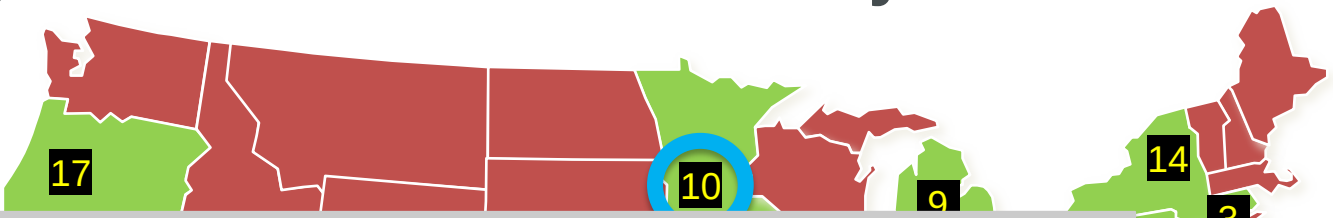


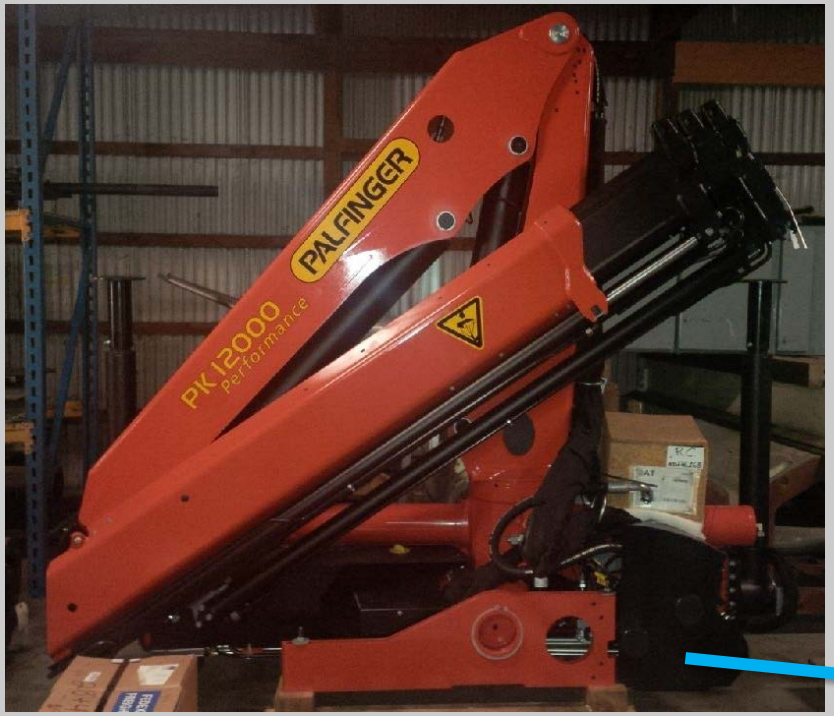


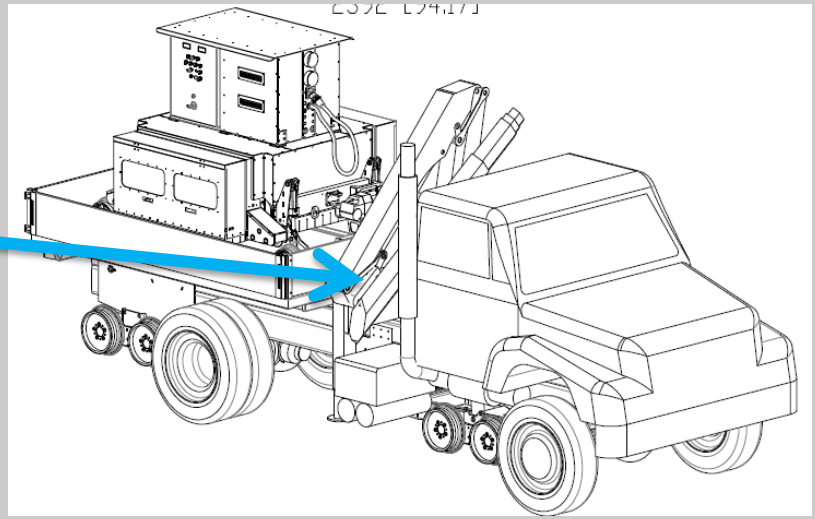


Ansaldo Honolulu

Manufacturing – Maintenance & Recovery Vehicles



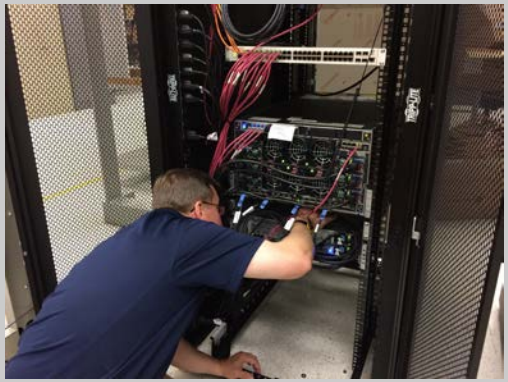


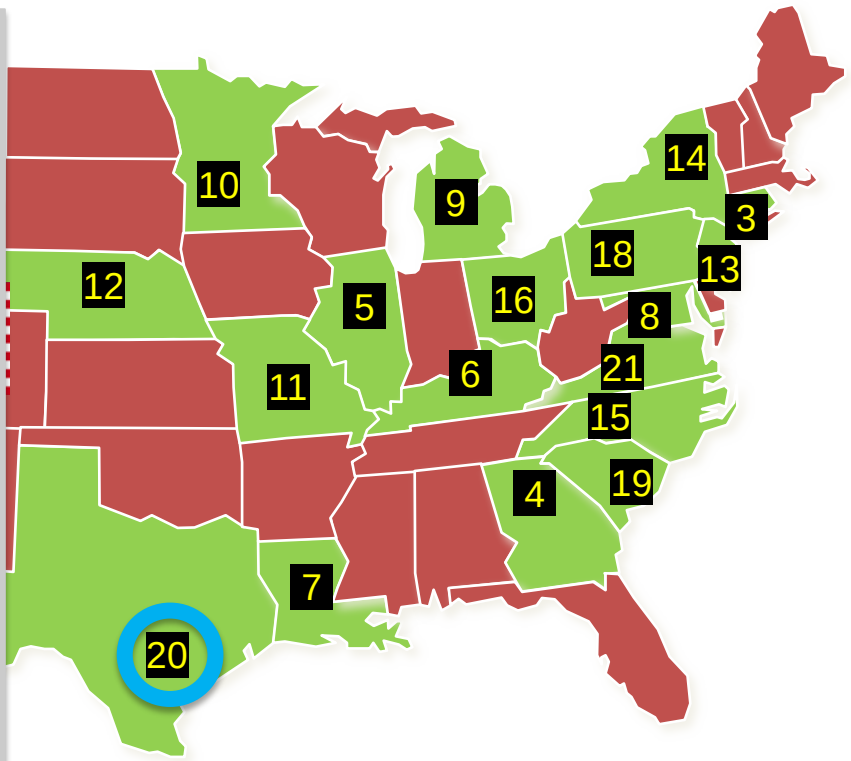


RAIL GRINDER

Ansaldo Honolulu

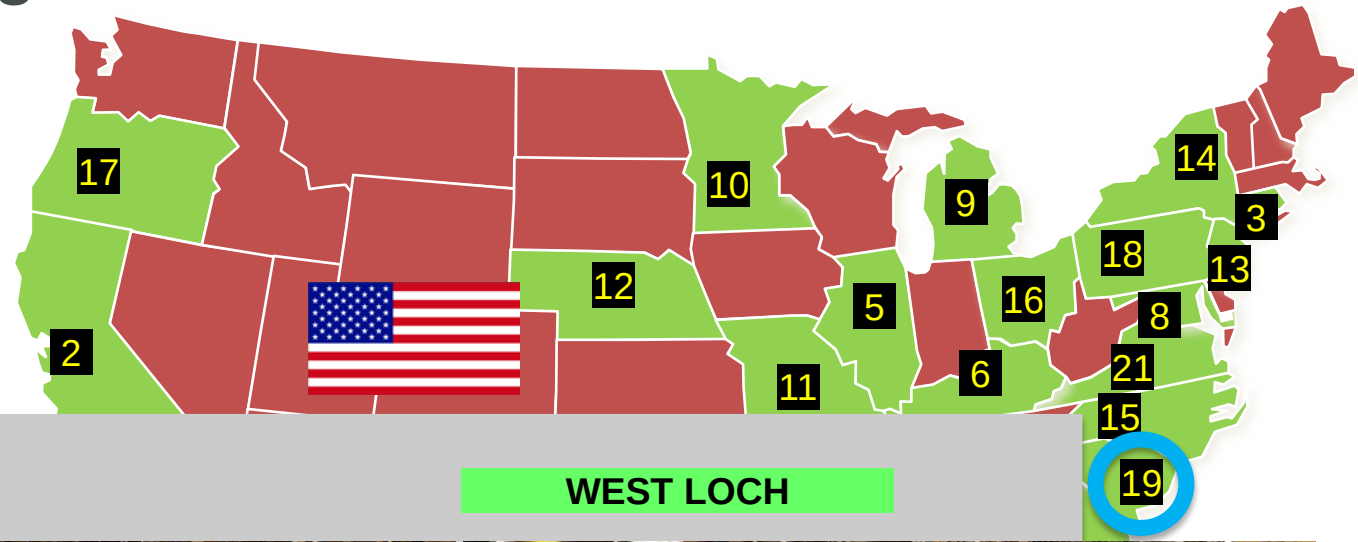
Manufacturing – Communications





Ansaldo Honolulu

Manufacturing – Train Control



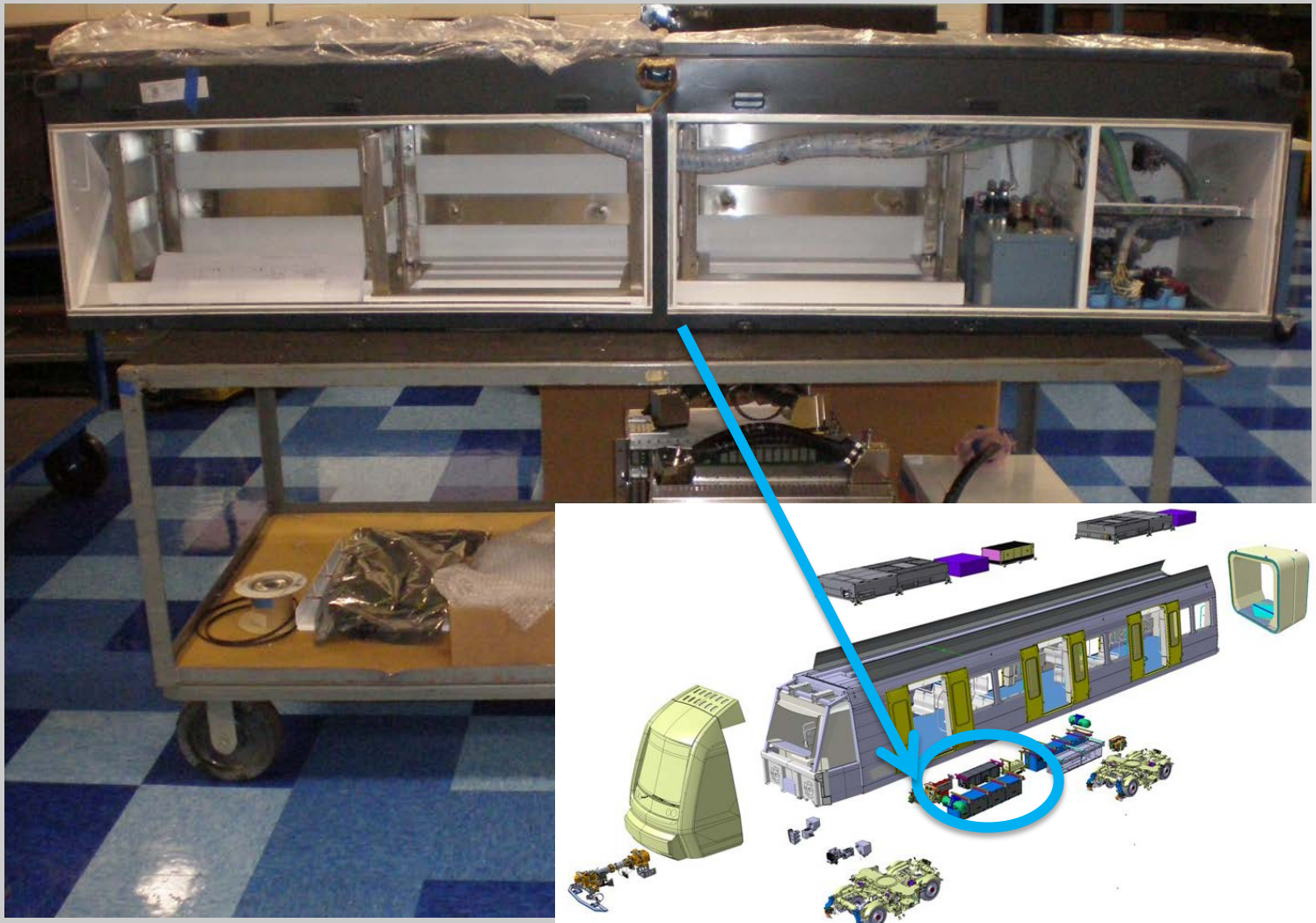
WAIPAHU

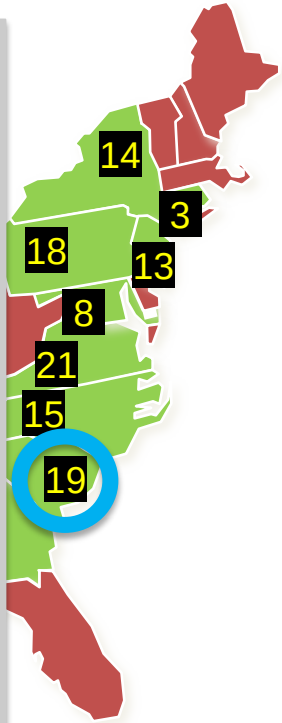
WEST LOCH

Ansaldo Honolulu

Manufacturing – Train Control

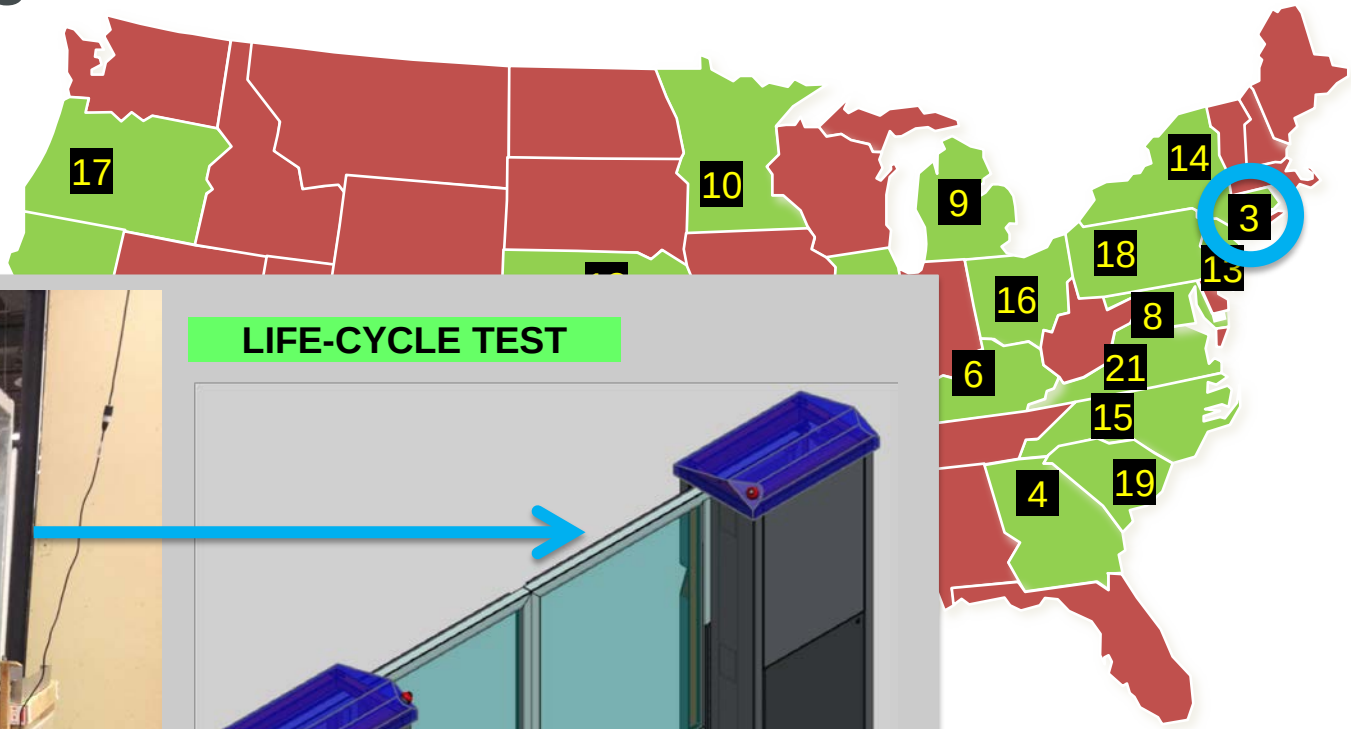
ON-BOARD



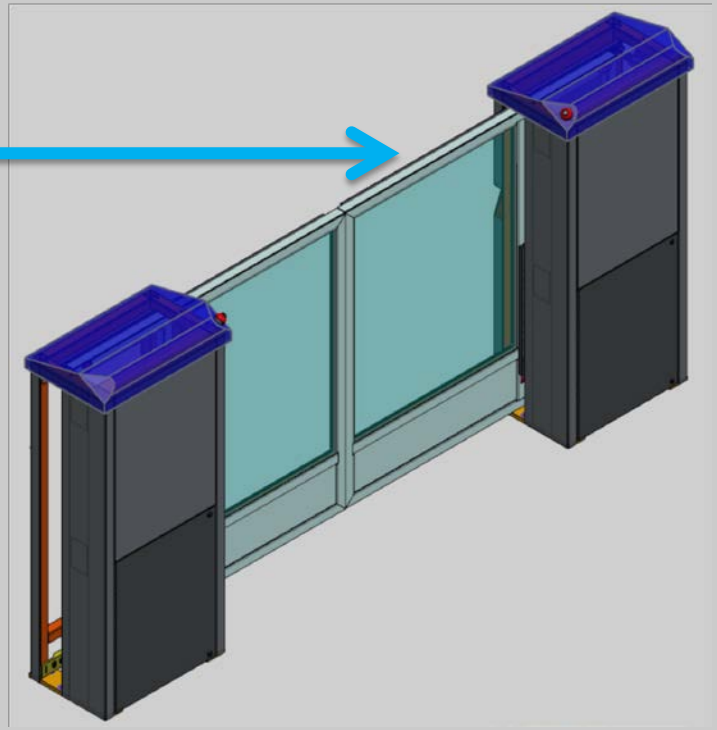


Ansaldo Honolulu

Manufacturing – Platform Screen Gates



LIFE-CYCLE TEST



Education and Workforce Development at LCC

- **Leeward Community College** Office of Continuing Education and Workforce Development (OCEWD) is the non-credit, workforce development division of Leeward Community College.

· **Program development Funding** Leeward CC OCEWD received a $357,000 capacity building grant to develop curriculum, purchase training equipment, retrofit lab spaces, and develop programs to specifically address local workforce requirements in rail and similar occupations.

· **Ansaldo Honolulu** has been meeting **since 2012 with OCEWD** to discuss specific skill requirements for the Operations and Maintenance workforce.

· **HART** and **Ansaldo Honolulu** have assigned in June 2014 representatives to meet biweekly with the **OCEWD program developer** at LCC. The draft Operations and Maintenance staffing plan is being used as the template to establish specific program objectives and outcomes. Timelines for employment and manning levels in the phased startup are being reviewed to determine the start date and duration of the training program.

· **January 2015** Leeward Community College intends to start the first cohort of the **"Mechatronics-Transit Operations"** workforce training program.

LEEWARD COMMUNITY COLLEGE
OCEWD
CONTINUING EDUCATION & WORKFORCE DEVELOPMENT
Ansaldo Honolulu
HART
HONOLULU AUTHORITY for RAPID TRANSPORTATION

JAN 2015 – MAR 2016

15 Students

Projects with UH College of Engineering

- AHJV and the College of Engineering are willing to plan Internships, Course Project, Bachelor/Master Thesis

- Focus will be on the **optimization of the design process for a multi-technology complex system** like a railway system.

- Ideal candidates have a background in Computer Science, Operations Research, Process Management

- Ansaldo will be at the College of Engineering Career Fair on October 15, 2014.

College of ENGINEERING
UNIVERSITY OF HAWAI'I AT MĀNOA

Ansaldo Honolulu

2015-2016

2-3 Students

Professional Development for Team Ansaldo

PMI®
HONOLULU, HAWAII CHAPTER

"Make A Difference
- People, Processes, and Outcomes"

September 17, 2014
Ala Moana Hotel

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Ansaldo Honolulu

An Ansaldo STS/Ansaldo Breda JV

ATTACHMENT C

Permitted Interaction Group
Fare System Recommendations for the Board

The Permitted Interaction Group: Four Areas of Inquiry

- Fare policies of other transit agencies
- Bus and rail farebox recovery ratios
- Possible alternative revenue sources
- Fare collection and associated technologies

Participants

- Staff Steering Committee
  - HART/DTS/OTS/BFS/DIT
- Consultant: CH2M Hill
- HART Permitted Interaction Group
  - (“Group” = Bunda, Formby, Horner, Hui, Okinaga)

Process

- Meetings
  - 3 Board Briefings
  - 4 Group Meetings
- Interagency Steering Committee determined optimal fare media and system options
- Group makes 2 main fare policy recommendations to the Board

Steering Committee

- A Steering Committee has been meeting since Fall 2013 to discuss design directions and potential operating models
- The Steering Committee is comprised of key stakeholders from:
  - Honolulu Authority for Rapid Transportation (HART)
  - Department of Transportation Services (DTS)
  - Department of Information Technology (DIT)
  - Budget and Fiscal Services (BFS)
  - Oahu Transit Services (OTS)

Project Goals by Steering Committee

- Design a simple and convenient fare collection system that operates seamlessly between modes
- Adopt proven fare technology based upon industry standards that reduces fraud and maximizes interoperability
- Enables enhanced data collection for improved customer service
- Increase distribution channels and fare purchasing options
- Increase participation in instructional programs and facilitate new transit partnerships e.g. bike share
- Minimize capital and operating costs

Interagency Steering Committee made several key fare system determinations

- Smart card media
- Account based
- Open architecture

These features provide:

- Security of proven IT architecture
- Transition path to new payment systems in the future
- Greatest potential for integration with Handi-Van and other non-transit services
- Potential for differential and location-specific fares
- Accommodates new payment systems in the future

Group Policy Recommendations

- 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
- Both recommendations are intended to provide general direction, and are subject to further appropriation and budgeting decisions by the City and HART

Operations Strategy

- City/HART
  - Program and Financial Management
  - Central System Hosting (DIT)
- OTS
    - Fare system call center
    - Special Program/Retail Management
    - Bus equipment maintenance

Remaining Issues for Next Permitted Interaction Group

- Bus and rail farebox recovery ratios
- Possible alternative revenue sources

Permitted Interaction Group for HART Fare Collection System
Final Report

1.0 Executive Summary

The cooperation and coordination of City & County of Honolulu (City), Oahu Transit Services (OTS), and the Honolulu Authority for Rapid Transportation (HART) are critical in order to meet the goal of having a seamless and cost-effective public transit system. Each of the above three entities have their respective policymakers and staff, and the HART Board of Directors created the Permitted Interaction Group, the "Group" to dialogue amongst all three entities in order to provide recommendations to the full Board regarding fare policies that are the most friendly to customers and therefore, most likely to maximize coordination amongst these entities to conserve taxpayer dollars.

The stated 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. Fare policies and technologies of other transit agencies were discussed, and technical staff working with an experienced consultant determined the fare media and technology options best suited for Honolulu's transit system following rail's completion, as described in Section 3 herein. Building on the fare media and technology selections made by staff, the Group has provided for the full Board's consideration specific policy recommendations summarized below, and described more fully in Sections 4 and 5 herein:

(1) In designing the fare collection system, operation of the system should maximize use of existing expertise and capacity at the City, OTS and HART;

(2) Subject to future budget appropriation and approvals by the HART Board, HART's fare collection system should include use of fare gates.

The Group deferred recommendations decisions on the bus and rail farebox recovery ratios and possible alternative revenue sources, until after the HART staff updates HART's financial plans and the board with anticipated operating budgets in years of operation. The Group respectfully recommends that another permitted interaction group be formed in the near future to address these remaining issues.

2.0 Background and Process

In August 2013, the City procured the services of CH2M Hill to assist in the design of an electronic fare collection system to support the future operation of the rail system, as well as TheBus and TheHandi-Van. In September of the same year, a project Steering Committee was formed with staff from the City (Department of Transportation Services (DTS), Department of Information Technology (DIT), and Department of Budget and Fiscal Services (BFS)), HART, OTS, and CH2M Hill in order to assess options for the design, procurement, and operation of the new fare collection system. Coordination amongst these agencies is critical in order to meet the goal of having a seamless public transit system once rail is in operation, where riders will be able to transfer between bus and rail without having to stop and physically purchase a separate fare.

Section 17-103.2(e) of the Revised Charter of the City and County of Honolulu (RCH) empowers HART to establish all fares, fees, and charges for the fixed guideway rail system, and HART's Board (Board) is tasked by RCH Section 17-106 to fix and adjust reasonable rates and charges for the rail system.

Therefore, to allow the Board to guide and inform the work of the Steering Committee, on December 19, 2013, at a duly noticed meeting, the Board established a permitted interaction group (Group) 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 Audit and Legal Matters Committee Chair (Bobby Bunda), and ex-officio Board member and DTS Director (Mike Formby).

The Steering Committee made presentations to the Board on December 19, 2013, January 16, 2014 and February 13, 2014, and met with the Group on April 3, 2014, May 15, 2014 and July 24, 2014 to review potential electronic fare collection system strategies. The Steering Committee has been meeting with the Group to help develop the public transit system's fare system design, operation and maintenance. The following goals have been used by the Group to help guide decision making:

- Design a simple and convenient system that operates seamlessly between modes;
- Adopt a proven fare technology based upon industry standards that reduces fraud and maximizes interoperability;
- Enable enhanced data collection for improved operations and customer service;
- Increase distribution channels and fare purchasing options;
- Increase participation in instructional programs and facilitate new transit partnerships, e.g., bike share; and
- Minimize capital and operating costs.

Through this process, the Steering Committee made technical decisions (Section 3) regarding fare media and system options strategies, with the input of CH2M Hill regarding, among other things, the experiences of other transit systems. And the Group has proposed recommendations (Sections 4 and 5) for the Board's consideration based upon the Steering Committee findings and briefings. The Group's recommendations are subject to approval of necessary City and/or HART budget appropriations and additional City, HART and OTS approvals if necessary.

It is understood that this Report does not complete the work of the Group, and that additional fare policies will need to be determined in concert with the City Administration and the City Council, as well as OTS. The intent of this Report is not to determine at this time cost allocation for the fare collection system as between the City and HART, or fare recovery ratios for rail; instead, its intent is to seek HART Board approval of broad parameters for a joint fare collection system to allow staff of DTS/OTS and HART to pursue acquisition of a fare collection system in time for the start of rail operations, as well as to fully integrate the bus fare collection system with the rail collection system. And while this may seem a HART deadline-driven effort, HART will only have 21 collection points at its 21 stations, while DTS/OTS will have a collection point on every bus in its fleet, and so the effort is also driven by a longstanding desire by DTS/OTS to upgrade its fare collection system to a more efficient, "smart" technology which is less dependent on cash and therefore less costly to administer.

3.0 Steering Committee Determinations

3.1 Determinations Regarding Fare Media and System Options

First, the Steering Committee reviewed several fare media and systems in order to determine which one would meet the goals as outlined above. Figure 1 below provides an overview of the fare media considered and the strengths and weaknesses of each.

Figure 1: Fare Media Options

	Flexibility	Security	Data / Reporting	Media Cost	Maint. Cost
Paper Media	◔	◔	○	●	●
Magnetic Media	◑	◑	◑	◕	◔
Traditional (Card-Based) Smart Cards	◕	◕	●	◔	◑
Next-Generation (Account-Based) Smart Cards	●	●	●	◑	◑

○ = Least Desirable ● = Most Desirable

3.2 Determinations Regarding Fare System Technology Options

The Steering Committee considered fare system technology options based upon:

- peer proven;
- flexibility of customer use and purchase options;
- flexibility for operation with both existing fare policy and changes;
- operational and maintenance costs;
- implementation timeframes;
- operational flexibility and cost;
- enhanced data collection capabilities;
- potential for non-transit use; and
- ability to migrate to future payment methods (such as open payment and NFC enabled smart phones).

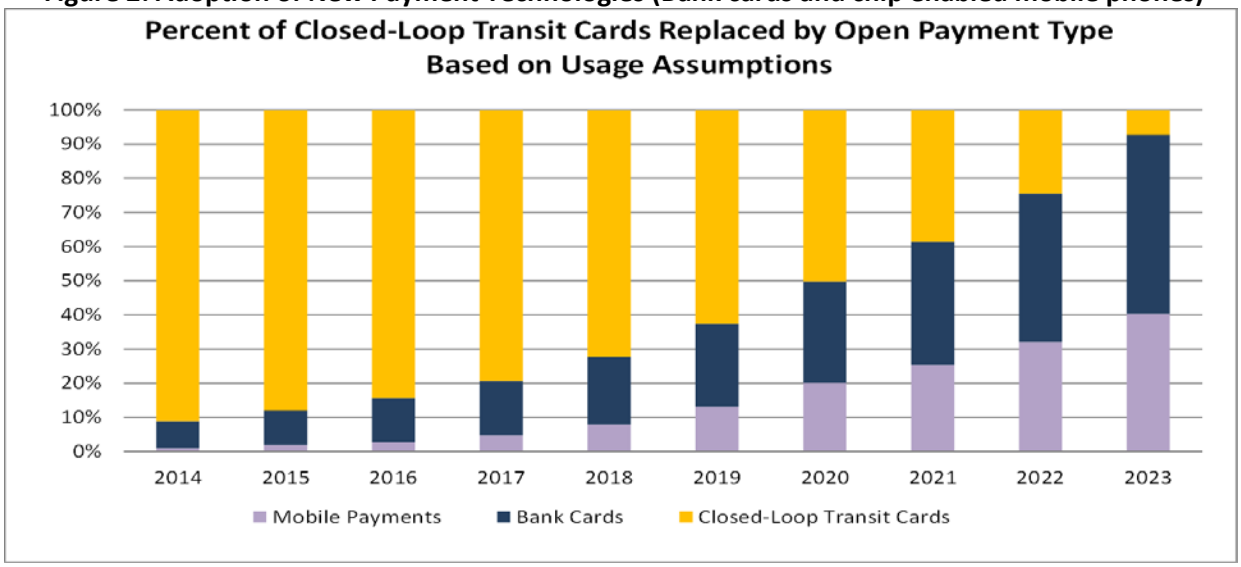
The Steering Committee reviewed the following fare system options:

- **Card-based** – Information is stored on the card, which interacts with complex fare payment devices responsible for reading and writing to the card and includes software. Processing is completed offline. Several North American agencies are using this type of system usually deployed in combination with a closed-loop system.
- **Closed-loop** – Uses proprietary format and protocols with limited fare media options usually deployed where real time or close to real time processing is not possible.
- **Account-based** – Information is stored in a back office account; off-the-shelf fare payment devices with centralized fare calculation and online processing are used. Several systems currently in the implementation phase are using this approach as it accommodates a path to open payment and allows for more complex payment calculations including non-transit payments.

- **Open Payments** – Standardized card formats with credit and debit and mobile payment options.
- **Open Architecture** – Agency-controlled interfaces with flexible procurement options and the potential for enhanced interoperability.

Figure 2 below outlines the conflicts in choosing the fare system that meets the goals outlined above and minimizes implementation schedule and cost risks. As the chart demonstrates, predictions for the adoption of Open Payment and NFC enabled chip cards and phones when joint TheBUS and HART plans to start full seamless revenue service indicate that these technologies will represent less than 50% of HART's ridership market in 2019. While some predictions do indicate that 5 years after opening, these technologies could represent greater than 80% of the market, DTS/OTS and HART need to ensure the majority of customers can pay for their fares on opening day. As a result, closed-loop smart cards represent the least risk for procurement at this time and the account-based back end systems will accommodate a transition to Open Payment and NFC phone payment in the future, if desired.

Figure 2: Adoption of New Payment Technologies (Bank cards and chip enabled mobile phones)



Source: BOG Fed Reserve System, March 13; Neilson, February 2012;
Berg Insight, March 2012; Fed. Reserve Bank of Boston, 2011 & EMV Co Jan. 2012

The Steering Committee determined that account based, smart card fare media represented the best option for Honolulu and provided additional functionality including:

- potential for differential fares;
- potential for location specific fares;
- potential to reduce transfer fraud and still provide a seamless transfer;
- greatest potential for integration with The Handi-Van and other non-transit services; and
- greatest potential to migrate to new technologies such as open payment and mobile payment in the future as their adoption becomes widespread enough for ubiquitous use.

Based upon the review of options and peer adoption, the Steering Committee also determined that a closed loop system deploying open architecture as much as possible would provide the security of proven technology while still allowing for a transition path to future new payment systems. The Group supports the determinations.

4.0 Group Recommendations

4.1.a. Fare Collection Operations Design

Assuming, then, that TheBus and the rail fare collection systems will be integrated, the Group determined as a preliminary matter that HART's fare policies should be based on maximizing use of existing expertise and capacity that may exist at the City, OTS or HART. Instead of building "Noah's Ark" where there are "two of everything," the Group recommends strongly that existing expertise and capacity should be utilized to maximize efficiency in operations.

In applying this principle, the Group made more detailed recommendations. First, peer review of fare collection systems by the Group members indicated that there are several aspects of system operation that must be considered in the initial fare system design and included in the technical specifications for vendors. These include:

- Transaction processing, data transmission and equipment monitoring (central system management);
- Hosting for the central system software;
- Customer service account creation and management; and
- Equipment monitoring and maintenance.

Initially, the expertise for the day to day operation of transaction processing, clearing, and data storage tends not to be housed within transit agencies that have not had smart cards before. Most of HART's and DTS/OTS' peers that have implemented smart card systems have selected to have both the central system and financial management system designed, hosted and operated for them by a third party. During Steering Committee and Group meeting discussions, the City DIT staff noted that they will have the capability to host the central management and financial management systems using "hot to hot" (immediate back up rather than delayed back up with traditional disaster recovery) site switching so that the data is the secure and available should a back up be needed. As a result, it was determined that the design of the central management and financial management system should be procured and initially operated by a vendor and hosted by the City, assuming appropriate Service Level Agreements are put in place by HART and agreed to by DTS/OTS, and subject to budget appropriation. The City is currently exploring design options for these services to be linked via application programming interfaces (APIs) to existing City systems as well.

Next, during similar discussions about the customer service system and customer service database operation and management, OTS staff noted that their staff has the local geographic, cultural and language knowledge and capacity to supply these services on behalf of HART and OTS. Given the expertise and capacity that OTS has in this area and the potential for these services to be offered more cost-efficiently by OTS, Group members agreed that OTS should be responsible for these functions.

OTS also noted that it currently undertakes preventative and both Level 1 (swap out of equipment components for new ones) and 2 maintenance (electrical and mechanical work to fix broken components) on all bus components including electronics. OTS has found that there is a need to have local expertise in all areas of equipment maintenance as response times from mainland suppliers can be too slow to support the "up time availability" required in transit operations. With OTS existing maintenance capabilities supplemented by training and test bed equipment (duplicate real system equipment that is housed for testing and maintenance purposes) from the fare system vendor, OTS

believes it has the physical and staff capacity to provide fare system maintenance for the rail equipment. As a result, the Group agrees that DTS/OTS should be responsible for these services provided the appropriate Service Level Agreements are put in place by HART and agreed to by DTS/OTS, and subject to budget appropriation.

The Group is, therefore, recommending that the system design include vendor design and provision of the central and financial management systems with hosting to be provided by the City. Further, the Group is recommending that system design reflect DTS/OTS responsibility for fare system customer service and equipment maintenance.

5.0 Faregates

Since the initial design of the fare system for the Light Rail Transit (LRT) program, several HART and DTS/OTS peers have implemented faregates at their rail stations and incorporated newer smart card payment technology at the same time. Faregates for HART are considered a feasible option for the following reasons:

- Reduction in revenue lost due to fare evasion (increased revenue capture);
- Reduction in potential system vandalism within the station and in accessing the guideway via stations;
- Reduction in vagrancy within the stations by patrons who are not riding the system; and
- Enhanced data collection capabilities in support of more cost effective service planning and provision.

5.1 Reduction in Revenue Lost

Peer reviews indicate that revenue lost to fare evasion is reduced with the installation of fare gates, as noted in Table 1 below:

Table 1: Peer Faregate Study Findings

System\Agency	Findings
Brisbane, AUS	The transit agency reported an additional $2 million in annual revenue after gating its LRT system in 2008.
London Underground, UK	An analysis in 1989 of the effect on fare evasion after the installation of faregates at 63 stations on London Underground found a reduction in fare evasion of 67%.
LA Metro, CA	An analysis by LA Metro in 2011 after faregates were turned on in a grouping of 10 select stations saw an average increase in revenue of 18-20% per station and an increase of ticket vending machine (TVM) use in the station of 68%.
Atlanta, GA	Between 2005 and 2010 MARTA installed new fare gates that were also designed to stand higher to reduce evasion due to jumping over the gates. As a result of the change, MARTA experienced a clear reduction in fare evasion according to their CEO, who reported in 2012 that the evasion rate for Fiscal Year 2005 was 4.1% and 1.8% for Fiscal Year 2012.

A review of the most recent National Transit Database data (2012) also shows a trend towards higher farebox recovery ratios for gated versus Proof of Payment (POP) systems. Table 2 below outlines this trend. The average for gated systems is over 50% whereas the average for POP systems is under 30%.

Table 2: Farebox Recovery Ratios for Gated Versus POP Systems

Legend: POP Systems in yellow. Gated systems in green.

State	Name	UZA	Population	Mode	Fare Revenues per Total Operating Expense (Recovery Ratio)
AZ	Valley Metro Rail, Inc.(VMR)	Phoenix-Mesa, AZ	2,907,049	LR	21.5
CA	San Francisco Bay Area Rapid Transit District(BART)	San Francisco-Oakland, CA	3,228,605	HR	65.6
CA	Los Angeles County Metropolitan Transportation Authority(LACMTA)	Los Angeles-Long Beach-Santa Ana, CA	11,789,487	LR	20.7
CA	North County Transit District(NCTD)	San Diego, CA	2,674,436	LR	15.1
CA	Sacramento Regional Transit District(Sacramento RT)	Sacramento, CA	1,393,498	LR	31.9
CA	San Diego Metropolitan Transit System(MTS)	San Diego, CA	2,674,436	LR	47.6
CA	San Francisco Municipal Railway(MUNI)	San Francisco-Oakland, CA	3,228,605	LR	18.7
CA	Santa Clara Valley Transportation Authority(VTA)	San Jose, CA	1,538,312	LR	14.8
CO	Denver Regional Transportation District(RTD)	Denver-Aurora, CO	1,984,889	LR	44.5
FL	Hillsborough Area Regional Transit Authority(HART)	Tampa-St. Petersburg, FL	2,062,339	LR	27.0
GA	Metropolitan Atlanta Rapid Transit Authority(MARTA)	Atlanta, GA	3,499,840	HR	30.1
IL	Chicago Transit Authority(CTA)	Chicago, IL-IN	8,307,904	HR	49.9
MA	Massachusetts Bay Transportation Authority(MBTA)	Boston, MA-NH-RI	4,032,484	HR	53.8
MA	Massachusetts Bay Transportation Authority(MBTA)	Boston, MA-NH-RI	4,032,484	LR	53.3
MD	Maryland Transit Administration(MTA)	Baltimore, MD	2,076,354	HR	21.3
MD	Maryland Transit Administration(MTA)	Baltimore, MD	2,076,354	LR	21.5
MN	Metro Transit	Minneapolis-St. Paul, MN	2,388,593	LR	39.5
MO	Bi-State Development Agency(METRO)	St. Louis, MO-IL	2,077,662	LR	30.6
NC	Charlotte Area Transit System(CATS)	Charlotte, NC-SC	758,927	LR	19.0
NJ	New Jersey Transit Corporation(NJ TRANSIT)	New York-Newark, NY-NJ-CT	17,799,861	HR	23.5
NJ	New Jersey Transit Corporation(NJ TRANSIT)	New York-Newark, NY-NJ-CT	17,799,861	LR	16.8
NJ	Port Authority Transit Corporation(PATCO)	Philadelphia, PA-NJ-DE-MD	5,149,079	HR	49.8
NY	MTA New York City Transit(NYCT)	New York-Newark, NY-NJ-CT	17,799,861	HR	67.8
OH	The Greater Cleveland Regional Transit Authority(GCRTA)	Cleveland, OH	1,786,647	HR	20.5
OH	The Greater Cleveland Regional Transit Authority(GCRTA)	Cleveland, OH	1,786,647	LR	18.6
OR	Tri-County Metropolitan Transportation District of Oregon(TriMet)	Portland, OR-WA	1,583,138	LR	35.0
PA	Port Authority of Allegheny County(Port Authority)	Pittsburgh, PA	1,753,136	LR	15.2
PA	Southeastern Pennsylvania Transportation Authority(SEPTA)	Philadelphia, PA-NJ-DE-MD	5,149,079	LR	44.1
TX	Dallas Area Rapid Transit(DART)	Dallas-Fort Worth-Arlington, TX	4,145,659	LR	12.9
TX	Metropolitan Transit Authority of Harris County, Texas(Metro)	Houston, TX	3,822,509	LR	44.4
UT	Utah Transit Authority(UTA)	Salt Lake City, UT	887,650	LR	33.3
WA	Central Puget Sound Regional Transit Authority(ST)	Seattle, WA	2,712,205	LR	13.6

5.2 Potential Payback Period for HART

A POP system, as was originally proposed for HART, controls fare evasion based upon staff checks of a percentage of total riders' tickets entering the system. The cost for staff inspection is generally based upon the amount of coverage desired which is associated with a concomitantly required number of staff. For HART in 2012, the FFGA estimated that the required number of staff was 13 Fare Inspectors. Ticket vending machine (TVM) purchase and maintenance was also assumed in the FFGA as both a capital cost for the system and an ongoing operating cost.

In a faregate system, there are some incremental costs over the POP system that would include the capital cost of the faregates and the annual cost to maintain these gates. The TVM capital cost and maintenance would be the same as both systems would use the TVMs. Reductions can be assumed in the annual fare inspection staff as only a minimal coverage would be required with faregates and these staff would also be performing other station duties as well.

Evidence in transit studies and system reviews similar to those noted in Table 1 indicate that fare evasion rates are generally higher with POP systems versus gated systems. Rationale for installing fategates is generally based upon the reduction in annual revenue lost as a result of fare evasion and reduction in annual staff inspection costs. For the purposes of evaluating the payback period for faregates installed in the HART system, Table 3 outlines the estimated incremental 10 year revenue, revenue savings and costs associated with a POP versus a faregate system for HART. The numbers are in 2014 dollars.

Table 3: Potential Payback Period and Revenue Savings

Incremental Revenue and Cost Items	Over 10 Years in 2014$	Assumptions
Total Cost for Inspection in POP Environment	$20,915,877	From 2012 FFGM; Assumes 13 FTE at 21 stations for 16 hours a day for 365 days a year at a cost of $86,035 per Fare Police
Total Revenue Collected	$448,017,048	Based on Revenue as projected in FFGM inflated to 2014 dollars at 2%
Total Estimated Leakage @ 5%	$ 22,764,992	Sum of annual leakage in 2014 dollars with inflation at 2%
Total Cost for Faregate Maintenance	$7,065,517	Based on consultant estimate of $530,000 per year inflated annually at 2% in 2014 dollars
Total Cost for Station Inspection	$5,365,363	Based on assumption of 7 staff at a cost of $70,000 per Fare Inspector at 2% inflation over 10 years
Total Capital Cost (inclusive of software and installation but not debt servicing)	$4,935,000	Based on consultant estimates
Total Cost of Ownership over 10 years	$17,365,880	
Total Estimated Revenue	$ 448,017,048	As above
Total Estimated Leakage @ 2%	$ 8,960,341	Sum of annual leakage in 2014 dollars with inflation at 2%

Differential In Leakage	$13,804,651	
Payback Period	1.20	Total operating in POP divided by total operating and capital with faregates

5.3 Reduction in System Vandalism and Vagrancy

While there is an inherent logic to reductions in crimes due to barriers to entry to transit systems without a paid ticket, there is a paucity of data on this topic. Many of HART's peers who have made the decision to gate their systems do, however, note that justification for doing so is to reduce both the perception and the reality of crimes within the system. These include most recently Vancouver, BC and LA Metro. In addition, Cubic Transportation Systems (CTS), one of the larger fare collection vendors, notes that for the systems where they have installed gates, which include Brisbane, Sydney, London, LA Metro, PATCO, and several properties in China, these properties report on average a 34% reduction in crimes after the installation of gates.

5.4 Enhanced Data

Understanding where and when transit patrons want to go helps to provide service where and when it's needed in the most cost efficient manner. Historical trend data can assist with helping to predict these trends and deploy the transit service efficiently. Traditionally, historical trip data by type of mode, time of day and type of ticket has been obtained by either deploying staff to count or by estimating through predictive models (which themselves have tended to be based partially on historical observations for validation purposes). Data captured through a smart card fare system through tapping on and off at a faregate and a bus card reader can capture usage accurately without the need for staff. In addition, the mining and analytics of this data can be completed in close to real time. As a result, transit planners have access to data that supports timely decision making around service provision and changes for a minimal expense.

Access to this type of data not only assists with the provision of cost-effective transit service but also assists in the pricing of discounted services more accurately. For example, if a day pass is priced as the cost of five rides in order to eliminate transfers and a transit agency is able to verify that on average customers tap their smart card this many times during a 24 hour period then the transit agency has a fairly accurate estimate that service is matching revenue collection. However, if a transit agency notes that the pass is being tapped over 7 times in a 24 hour period, then the price is not reflecting the service provision and either the pass is priced too cheaply and \or customers are required to make too many transfers to complete their trips.

As a result of the potential cost efficiencies, and safety and security benefits provided by faregates, subject to future budget appropriation and approvals by the HART Board, the Group recommends HART's fare collection operations should include use of fare gates.

ATTACHMENT D

Honolulu Authority for Rapid Transportation
Annual Report for Fiscal Year 2014

POWERS, DUTIES AND FUNCTIONS

The Honolulu Authority for Rapid Transportation (HART) is authorized to develop, operate, maintain, and expand the high-capacity fixed guideway rapid transit system of the City and County of Honolulu. Among its responsibilities are directing the planning, design, and construction of the fixed guideway system, and operating and maintaining the system; preparing and adopting annual operating and capital budgets; applying for and receiving grants of property, money and services, and other assistance for capital or operating expenses; making administrative policies and rules to effectuate its functions and duties; and to promote, create, and assist transit-oriented development (TOD) projects near fixed guideway system stations that promote transit ridership.

HART is governed by a ten-member Board of Directors that directs the organization's policy. The administration of the authority is overseen by its Executive Director and CEO.

MISSION

HART's mission is to plan, design, construct, operate and maintain Honolulu's high-capacity, fixed guideway rapid transit system.

ACCOMPLISHMENTS

OVERVIEW

During Fiscal Year 2014 (FY 2014), HART's third year of existence, the agency achieved several significant milestones, including the resolution of all lawsuits the

resumption of construction. During the year, the HART Board of Directors, staff, and consultant team made significant progress toward achieving the vision of bringing a quality rail transit system to Oahu.

Most notably, HART overcame all legal challenges, which cleared the path to resuming construction. The August 2012 Hawaii Supreme Court judgment in *Kaleikini v. Yoshioka*, which temporarily suspended all construction activities on the rail project (Project), was satisfied with the completion of the Archaeological Inventory Survey (AIS) in a remarkable 13 months. Construction resumed on September 16, 2013. Likewise, both federal challenges were successfully resolved on February 18, 2014 when both the U.S. Ninth Circuit Court of Appeals and the U.S. District Court for the District of Hawaii issued favorable decisions, bringing all outstanding federal litigation to a conclusion. The rulings lifted the injunction against real estate activities in the City Center section with compliance of the District Court's mandate to complete the City Center Traditional Cultural Properties report, analyses of the Beretania Street Tunnel alternative, and the impacts to Mother Waldron Park

With legal challenges out of the way, HART hit the ground running on construction. Since September, more than 100 columns have been constructed in the west side of the alignment; more than 700 concrete guideway segments have been cast at HART's Kalaeloa Precast Yard; and 10 guideway spans between columns were in place in the Hoopili area.[1]

HART, Ansaldo Hawaii Joint Venture (AHJV), the City Department of Transportation Services (DTS), and Oahu Transit Services (OTS) continued their work in exploring synergies and efficiencies in building, maintaining, and operating the HRTP, as well as bus/rail multimodal opportunities.

BUDGET AND FINANCE

Budget

The FY 2015 Operating and Capital Budgets were submitted to the Mayor and the City Council for their consideration and input. The budgets did not include any request for City general fund monies. However, the Operating Budget included funds for reimbursement to the City's general fund for staff support from various city departments and Central Administrative Services expense. The budgets were adopted by the Board on June 19, 2014 in the following amounts:

Operating Budget	$21,481,029
Capital Improvement Budget	$1,560,404,400
Total FY 2015 Approved Budget	$1,581,885,429

[1] As of July 15, 2014

Funding

Local funding for the Project from the one-half percent (0.5 percent) General Excise and Use Tax (GET) county surcharge totaled $1.25 billion from January 2007 through April 2014. GET surcharge revenues from the Full Funding Grant Agreement (FFGA) Financial Plan start date of October 2009 through June 2014 were $870 million of the $3,291 million total expected for the entire Project.

Federal Section 5309 New Starts revenue appropriated for HART is $806 million. President Obama incorporated an additional $250 million for HART in his Fiscal Year 2015 (FY 2015) budget in March. If that sum is appropriated by Congress, Federal funding for HART will be $1,056,267,358 against a total of $1.55 billion in the Full Funding Grant Agreement.

HART staff, HART Vice Chair, City Budget and Fiscal Services, and Honolulu Mayor Kirk Caldwell worked together to improve the debt financing plan of the project by decreasing the total amount to be borrowed at lower cost, and improving the access and timeliness to debt financing going forward.

PLANNING, UTILITIES, PERMITS, RIGHT-OF-WAY

Planning and Environmental

The Planning and Environmental division again played a critical role in FY 2014, particularly in complying with the decisions in the *Kaleikini* and *Honolulutraffic.com* lawsuits. The division submitted the voluminous AIS report to the State Historic Preservation Division (SHPD) on a highly accelerated schedule. Their close collaboration with SHPD resulted in SHPD's expedited acceptance of the report, which cleared the path for the return to construction.

HART continued to coordinate with and support other entities with regard to TOD, including the Department of Planning and Permitting (DPP), which has primary responsibility for developing TOD neighborhood plans and zoning regulations for station TOD areas. HART also participated in the City Managing Director's TOD group – part of the Mayor's initiative to "build rail better". In addition, the Board convened the TOD Stakeholders Advisory Group to facilitate information exchange related to TOD and offer guidance in advancing TOD.

Utilities and Permits

During FY 2014, the division executed all utilities engineering services agreements for the entire project. Utility construction agreements for the West Oahu/Farrington Highway (WOFH) and Kamehameha Highway Guideway (KHG) segments have been executed with the exception of Hawaiian Telcom, who has been performing construction work as needed while negotiations continue. All construction agreements are Buy America compliant. HART has continued construction agreement negotiations for the remaining segments.

Right of Way

Following the lifting of the federal injunction against real estate acquisition activities in the City Center section of the Project in February, the Right-of-Way division was tasked with a critical component in HART's efforts to deliver the project on time and within budget. Challenged with obtaining 152 full and partial acquisitions within an extremely compressed timeframe, the Right-of-Way division began efforts to bolster its resources to complete this critical path task.

ENGINEERING, DESIGN AND CONSTRUCTION

Core Systems

Ansaldo Honolulu Joint Venture (AHJV) is responsible for the design, construction, and delivery of 20 four-car vehicles and a train control system, which it will also operate and maintain over a 10-year period. The design is 49% complete, with AHJV interfacing with the other fixed facility contractors on the Maintenance and Storage Facility (MSF), alignment, and station issues. HART and AHJV are working on a revised schedule based on the recent restart of construction. The contract calls for the delivery of the first vehicle beginning in 2016.

Elevators & Escalators Manufacture-Install-Maintain

Schindler Elevator Corporation has completed 3.5% of the design. The contractor worked with AHJV and final designers on coordination and interface issues. Substantial completion is scheduled for May 2018.

WOFH Guideway

The westernmost section of the Project alignment has seen the most visible construction progress. Following the return to construction, column erection resumed, with 107 columns completed. The Precast Yard, responsible for manufacturing guideway segments, became fully operational, and has cast 702 segments. Segment erection began in the Hoopili area, with 96 segments placed atop columns[2]. The North Access Road underpass was completed in June. Substantial completion of the WOFH section is expected in June 2016.

[2] As of July 15, 2014

West Oahu Station Group
URS Corporation completed design in FY 2014 of the East Kapolei, UH West Oahu, and Hoopili stations. The West Oahu Station Group, along with the Kamehameha Highway Station Group and the Farrington Highway Group, and are currently out to bid.

Farrington Highway Station Group
HDR completed the design of the West Loch, Waipahu Transit Center, and Leeward Community College stations. The Farrington Highway Station Group, along with the Kamehameha Highway Station Group and West Oahu Station Group are currently out to bid.

Maintenance and Storage Facility
Kiewit/Kobayashi Joint Venture, the design-build contractor for the MSF, completed mass grading, and has begun construction on the Operations and Servicing Building and the Maintenance of Way Building. The MSF will be substantially complete in April 2016.

Kamehameha Highway Guideway
Kiewit Infrastructure West Co. (KIWC) has completed 54% of the design for the Kamehameha Highway Guideway. Work on utility relocations, foundation test and method shafts, and road widening have recommenced, with a focus on maintenance of traffic along busy Kamehameha Highway. The KHG section is scheduled to be substantially complete by September 2016.

Kamehameha Station Group
Anil Verma Associates completed the design of the Pearl Highlands, Pearlridge and Aloha Stadium stations. The Kamehameha Highway Station Group, along with the Farrington Highway and West Oahu Station Groups, are currently out to bid.

Airport and City Center Sections Guideway and Utilities
AECOM Technical Services, Inc. (AECOM), continued its design efforts for the Airport and City Center Sections Guideway and Utilities, and is substantially complete. Coordination with stakeholders such as the State Department of Transportation, utility companies, U.S. Navy, and developers continued.

Airport Station Group
AECOM substantially completed design of the Pearl Harbor, Airport, Lagoon and Middle Street stations.

Dillingham and Kakaako Station Group
Final design consultant Perkins+Will completed 40% of the design. The design is expected to be bid-ready in July 2015.

OPERATIONS AND MAINTENANCE

The Operations and Maintenance Department continued to review all aspects of the Project from the operations and maintenance perspective to make recommendations on ways to improve service, operability, maintainability, customer service, and cost effectiveness. This includes coordination, interface, and review of core systems, stations, rail vehicles, MSF, fixed facilities, and design and construction. The department also worked with DTS, OTS, and the HART Board of Directors on developing a fare policy.

SYSTEM SAFETY AND SECURITY

The System Safety and Security Department continued to focus its efforts in FY 2014 on developing a Safety and Security Certification Plan, which is required for certification by the Federal Transit Administration (FTA) prior to revenue operation. Additionally, the Safety and Security Team collaborated with several law enforcement entities, HDOT, and the State Oversight Manager to enhance security through design for the project.

QUALITY ASSURANCE

The HART-established Quality Assurance (QA) system was effectively implemented by the Quality Assurance Department during the past year. The Quality Management Plan, which establishes and documents the guidelines and goals of the QA system, was revised to describe the transition from the City Rapid Transit Division of the DTS to HART, and to incorporate the Federal Transit Administration's comments for the FFGA.

The major focus of QA activities included performing audits and surveillances, mentoring and training appropriate staff to ensure that suitable proficiency is achieved and maintained, and participating in Quality Task Force meetings with stakeholders. The Quality Assurance team also reviewed, approved, and monitored the Quality Assurance Plans required of all contractors, consultants and suppliers.

PUBLIC INFORMATION & COMMUNITY OUTREACH

Continuing its ongoing commitment to transparency, the Public Information and Outreach Department participated in more than 300 community meetings, workshops, presentations and events in FY 2014, connecting with businesses and residents islandwide. The department also maintained its strong construction outreach program, partnering with project contractors to educate the public about field work, public safety during construction and traffic impacts on the surrounding communities. HART's communications team sponsored media tours of the casting yard and the maintenance and storage facility, and on-site construction visits to explain to the media and the public how the guideway will be built. Efforts to inform and engage the public also included two Industry Day events, which brought together large contractors with smaller contractors;unveiling a life-sized model of the train, which had more than 7,000 visitors;

and launching a successful anti-graffiti project in partnership with more than 20 schools and community groups. .

CIVIL RIGHTS

In FY 2014, the Civil Rights Department staff focused on emphasizing HART's full commitment to a successful Disadvantaged Business Enterprise (DBE) effort by working directly with contractors and prospective DBE participants and monitoring DBE participation. HART actively ensures that no person shall, on the grounds of race, color, creed, national origin, sex, disability, or age, be excluded from participation in, or denied the benefits of, or be subject to discrimination under any project, program, or activity funded in whole or in part through federal assistance. HART employs a proactive approach to recruiting by attending and sponsoring job fairs, posting job openings on the appropriate websites, and disseminating employment-related information to minority and female community organizations. HART will continue to actively solicit and encourage female and minority individuals to apply for open positions in anticipation of future hiring needs.

GOVERNMENT RELATIONS

During the 2014 State legislative session, the Government Relations Department tracked nearly 50 legislative initiatives of interest to HART relating to the general excise tax surcharge, transit oriented development, economic development, affordable housing requirements near transit stations, Smart Growth public infrastructure policies, procurement requirements relating to public works contracts, infrastructure capacity building construction loans for counties, Native Hawaiian burials, historic preservation projects, and civil service exemption process relating to public employees.

The department also worked closely with the City Council and its committees to provide Project development updates relating to construction timelines, traffic advisories, interagency coordination to minimize impacts on traffic flow, contract issuances and change orders, transit station development, supplemental environmental impact statement efforts, as well as coordinated on legislation that impacted the Project, including, but not limited to, HART's operating and capital budgets, issuance of general

obligation bonds, revised debt financing plan, appointment of HART Board of Directors and neighborhood transit-oriented development plans.

ADMINISTRATIVE SERVICES

In FY 2014, the Administrative Services Department worked to fill vacant positions with new employees; reassign existing employees to areas where needed; make adjustments in employee duties and responsibilities to meet the needs of the Project; and make adjustments in the organizational structure of HART to meet the evolving requirements of the Project. The department also continued to provide support to the Project in the areas of information technology and overall office management services, including the assumption of new roles in project network administration and multi media management. At the end of FY 2014, HART had 131 positions filled out of the 139 positions authorized in the Annual Operating Budget. Out of the 131 positions filled, 107 of them were City employees and another 24 of them were filled by the Project Management Support Consultant. The staffing level is designed to ensure that HART has the technical capacity and capability to manage the implementation of the HRTP and meet the requirements of the FTA for managing major New Starts projects.

CONCLUSION

With the support of many partners, FY 2014 was a year of significant progress: All legal challenges were successfully resolved; more than 100 columns were constructed and 700 segments cast; and design work on our train vehicles was well underway. The project's financing remains sound, with more than half of the project's contracts issued and the agency's budget successfully passed by the Board of Directors.

Community outreach and engagement remains strong, with more HART participating in more than 300 presentations, meetings and events; construction outreach in full swing; and the successful launch of community initiatives to enhance transparency and understanding of Oahu's first rail transit system.

Safety and Security remained a top priority, with HART's safety team working with federal and state officials to ensure all certifications and plans were in place.

HART is well positioned to deliver on its promise to build a safe, top-quality transit system for Oahu that will enhance our transportation network for generations to come.