Audit of the Honolulu Authority for Rapid Transportation: Report 1

A Report to the Governor
and the Legislature of
the State of Hawaiʻi

Report No. 19-03
January 2019

OFFICE OF THE AUDITOR
STATE OF HAWAIʻI

OFFICE OF THE AUDITOR
STATE OF HAWAI‘I

Constitutional Mandate

Pursuant to Article VII, Section 10 of the Hawai‘i State Constitution, the Office of the Auditor shall conduct post-audits of the transactions, accounts, programs and performance of all departments, offices and agencies of the State and its political subdivisions.

The Auditor’s position was established to help eliminate waste and inefficiency in government, provide the Legislature with a check against the powers of the executive branch, and ensure that public funds are expended according to legislative intent.

Hawai‘i Revised Statutes, Chapter 23, gives the Auditor broad powers to examine all books, records, files, papers and documents, and financial affairs of every agency. The Auditor also has the authority to summon people to produce records and answer questions under oath.

Our Mission

To improve government through independent and objective analyses.

We provide independent, objective, and meaningful answers to questions about government performance. Our aim is to hold agencies accountable for their policy implementation, program management and expenditure of public funds.

Our Work

We conduct performance audits (also called management or operations audits), which examine the efficiency and effectiveness of government programs or agencies, as well as financial audits, which attest to the fairness of financial statements of the State and its agencies.

Additionally, we perform procurement audits, sunrise analyses and sunset evaluations of proposed regulatory programs, analyses of proposals to mandate health insurance benefits, analyses of proposed special and revolving funds, analyses of existing special, revolving and trust funds, and special studies requested by the Legislature.

We report our findings and make recommendations to the Governor and the Legislature to help them make informed decisions.

For more information on the Office of the Auditor, visit our website:
http://auditor.hawaii.gov

COVER PHOTO: HONOLULU AUTHORITY FOR RAPID TRANSPORTATION

Foreword

Our audit of the Honolulu Authority for Rapid Transportation (HART) was conducted pursuant to Act 1, which the Hawai‘i State Legislature passed during the 2017 First Special Session. Act 1 requires the Auditor to conduct an audit of the financial records and an analysis of the financial management of HART. This audit report focuses on the background and issues relating to, among other things, the estimated project costs, construction schedules, and completion dates from 2014.

This audit was somewhat unique for us in that HART is a quasi-independent agency of the City and County of Honolulu and not an agency of the State of Hawai‘i. However, the State Constitution, Article VII, Section 10, empowers the Auditor to conduct audits of all departments, offices, and agencies of the State and its political subdivisions.

During the course of our audit work, we gained information about HART from the Office of the City Auditor (City Auditor), City and County of Honolulu. The City Auditor previously audited HART and is conducting another audit of HART concurrent with our audit. We appreciate the City Auditor's generous support of our work.

We also express our thanks to HART and members of its Board of Directors whom we contacted during the course of our audit for their assistance.

Leslie H. Kondo
State Auditor

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PHOTO: HONOLULU AUTHORITY FOR RAPID TRANSPORTATION

Report on Escalation of Costs and Delays in Estimated Completion Date of the Honolulu Rail Transit Project

Introduction

ON OCTOBER 29, 2009, Honolulu Mayor Mufi Hannemann told an audience assembled in the Mission Memorial Auditorium for a "State of Rail Transit" speech that the City and County of Honolulu's (City) goal for the "shovel-ready" project was to be on time, on budget, and on schedule. The Mayor's address came one week after the City awarded a $483 million contract to Kiewit Pacific Co. (Kiewit) for the design and construction of the first section of the guideway along Farrington Highway.

It did not take long for the goal and reality to diverge. Just four months after that contract was executed on November 11, 2009, delays in required federal approvals resulted in Kiewit starting to accrue delay costs that ultimately would be passed on to the City.

That speech was only the beginning of a pattern of rail officials pledging the Honolulu Rail Transit Project (Project) would be built cheaper and faster than was reasonably foreseeable at the time. These promises would be contradicted by delays and cost overruns, which would break the Project's budget and erode public confidence.

That 2009 "State of Rail Transit" speech was only the beginning of a pattern of rail officials pledging the Honolulu Rail Transit Project would be built cheaper and faster than was reasonably foreseeable at the time.

Our review of City and Federal Transit Administration (FTA) communications and other documents dating back to 2008 showed the City awarded that first contract with no real basis to believe the guideway's construction schedule was practical or predictable. Groundbreaking for utility relocations would not occur until February 2011, which was more than 15 months after the Kiewit contract was executed, followed by FTA approval for construction in February 2012, as the Project would undergo a prolonged environmental impact review process. Cost increases following those delayed federal approvals, higher-than-anticipated inflation, as well as a court-ordered injunction on construction resulting from a decision to short cut archaeological reviews, would result in the Project's first budget shortfall of $910 million, which was presented to the Honolulu Authority for Rapid Transportation (HART) Board of Directors (Board) in December 2014. Rail project officials would then seek legislative relief in the form of an extension in the general excise tax (GET) surcharge that funded rail. However, we found that HART's lack of transparency over project costs and schedule from 2014 through 2016 undermined its ability to secure money needed to complete the Project on time, which resulted in further delays and cost increases.

Since 2012, when the City pledged to the FTA that it would complete the Project by 2020 for $5.122 billion, the Project's price has risen 79.5 percent to $9.188 billion as of November 2018. Much of that increase results from low initial cost estimates, inflation, unanticipated costs, and costs associated with the Project's scheduled full opening date slipping to the end of 2025.

As the price for Hawai‘i's largest public works project has risen, the burden on Hawai‘i residents and visitors whose tax payments must fund all overages has nearly doubled. In 2012, the fixed federally funded share of the Project's cost was established at $1.55 billion, or 30 percent, of the total estimated cost at completion of $5.122 billion. However, since that total estimate has increased to $9.188 billion and federal funding remains fixed, the burden on State and local taxpayers as well as visitors has risen to $7.684 billion as of November 2018. By contrast, Hawai‘i's previously largest public works project was the H-3 Freeway, which cost $1.3 billion when it opened in 1997.

In this report, we examine some of the factors that led to the escalation of the estimated cost of completion and to the delays in the estimated opening date. We found that, from the beginning, unrealistic deadlines and revenue projections resulted from a desire to demonstrate that the Project was progressing satisfactorily and to minimize public criticism, which could have eroded support for the Project. As the Project progressed, the information disclosed to the public often contradicted internal projections, obscured the extent of the Project's financial problems, or was disclosed much later than known to rail officials. As a result, the costs have increased and the completion date has been delayed, and public confidence in the Project has deteriorated.

This is one of four reports relating to HART that we plan to issue pursuant to Act 1, which the Hawai‘i State Legislature passed during the 2017 First Special Session (Act 1). Other reports will present HART's organizational structure and management of its project management consultant; the processes HART and the Department of Accounting and General Services have implemented relating to the payment of "capital costs" from the Mass Transit Special Fund; and HART's invoice payment process for selected construction and consultant invoices.

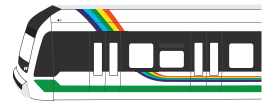
Overview of the Honolulu Rail Transit Project

The Honolulu rail transit project is a steel-wheel-on-steel-rail, elevated transit system extending from East Kapolei to Ala Moana Center via the Daniel K. Inouye International Airport. HART and City officials envision that the system's 21 rail stations will become hubs for housing, retail, and employment within "walkable" communities, the lifeblood of which will be an elevated guideway transporting thousands of passengers per hour.

Construction on that 20.1-mile elevated guideway was originally scheduled to begin in 2010 and end in 2019; however, the Project has been beset with delays and cost overruns, which have eroded public confidence and pushed its projected price tag to $9.188 billion, nearly double the 2009 forecast of $5.122 billion. Interspersed throughout this report is a selected chronology of the rail transit project's circuitous journey to completion.

Current Funding of the Honolulu Rail Transit Project

HART's major source of funding is a one-half percent GET surcharge on transactions in the City which commenced on January 1, 2007, and was originally set to be levied through December 31, 2022. The Legislature authorized extending the surcharge twice: the first time in 2015, extending the surcharge through December 31, 2027; and then in 2017, extending the surcharge through December 31, 2030. Additionally, in 2017, a new source of funding was established, increasing the statewide transient accommodations tax (TAT) by 1 percent (from 9.25 percent to 10.25 percent) beginning



July-August 2005

The Legislature authorizes (July) and the Honolulu City Council approves (August) a surcharge of one-half percentage point on the general excise tax (GET) to provide funding for a new rail transit system. The surcharge, which applies only to GET transactions in the City and County of Honolulu, starts in January 2007 and sunsets after almost 16 years. It is to be coupled with an unspecified level of FTA funding.

August 2005

The City awards the first transit-related contract of $10.2 million to Parsons Brinckerhoff Quade & Douglas, Inc. (Parsons Brinckerhoff) to help the City draft and report on the Alternatives Analysis and Draft Environmental Impact Statement. That is followed by an $11.5 million contract executed in April 2007 to InfraConsult LLC, which is formed by former Parsons Brinckerhoff employees. Then in August 2007, PB Americas Inc., formerly Parsons Brinckerhoff, wins the largest rail contract at the time – a 2.5 year, $86 million consulting contract to conduct preliminary engineering and final environmental impact studies.

January 1, 2018 through December 31, 2030, and directing those funds for the Project's "capital costs," broadly speaking, expenses directly related to construction of and land acquisition for the Project.

The other major component of funding is through the FTA, amounting to a total of $1.55 billion. Through November 2018, HART received FTA funds totaling $806 million; the remaining $744 million is awaiting FTA award.

The Feds are Watching … and Reporting.

HART's $1.55 billion in federal funding comes with federal oversight.

IN EXCHANGE for FTA's commitment to provide $1.55 billion in funding under the New Starts program, the City and HART committed to completing the Project on time, within budget, and in compliance with all applicable federal requirements. These mutual commitments are embodied in a binding contractual agreement – a Full Funding Grant Agreement, which was executed by the City and the FTA on December 19, 2012. The agreement places numerous conditions and requirements for the funding on HART. One of those requirements is participation in FTA project management oversight reviews and evaluations of the Project's various processes to ensure satisfactory progress is being made, as well as compliance with statutory, administrative, and regulatory requirements. The FTA or its project management oversight contractor evaluates a project to ensure project sponsors, in this case the City and HART, have the financial capacity to complete the project according to the terms of the Full Funding Grant Agreement.

As of November 2018, HART has received $806 million in FTA funding, with $744 million awaiting FTA approval for release of funds.

One of the Project's oversight reports, referred to as a "risk refresh," was released in October 2012, prior to the execution of the Full Funding Grant Agreement in December of that year. The report noted that the project cost was kept at $5.12 billion despite the emergence of multiple issues that pushed up costs. Among other issues, the report identified that the suspension of construction due to an August 2012 Hawai'i Supreme Court ruling could increase costs ranging between $64 million and $95 million, excluding escalation for future contracts and extended staffing costs.

Concerns about cost containment and schedule maintenance would persist in subsequent risk refresh reports in 2014 and 2016. For instance, in the 2016 report, the FTA's oversight contractor determined that HART's cost estimates of $6.43 billion fell short of the FTA's model by $1.19 billion. It estimated that the total cost to complete the Honolulu Rail Transit Project would range between $7.73 billion and $8.02 billion and the opening date would be delayed from December 2022 until December 2024. According to the report, HART did not provide evidence that it "fully evaluated the costs of design changes, the schedule implications, the effects on existing construction contracts, and the political will to entertain any such changes."

According to the FTA, if at any time during its efforts to complete the project HART determines that the total project cost will exceed the baseline cost estimate, HART must immediately notify the FTA of the amount of the difference and the reasons for the difference. Further, HART must provide the FTA with a "recovery plan" that demonstrates it is taking and will take every reasonable measure to eliminate [recover] the difference between the total project cost and the baseline cost estimate. Requiring the submittal of a recovery plan is an action that neither project sponsors nor the FTA wants to invoke.

In June 2016, the FTA directed HART to submit a recovery plan.

The City's and State's Growing Financial Obligation

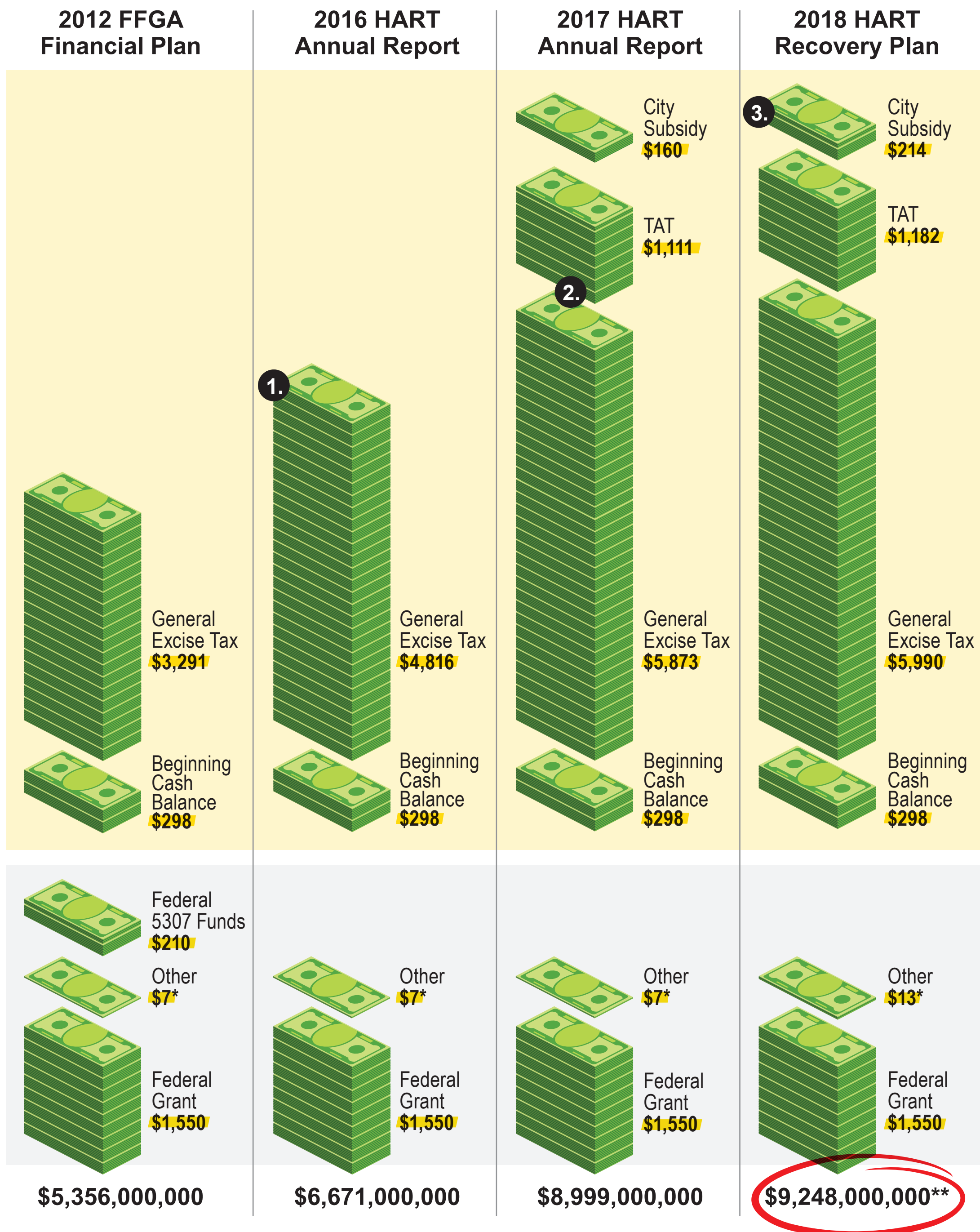
WITH FEDERAL FUNDING fixed at $1.55 billion, increases in the Honolulu Rail Transit Project's costs are borne by the State and City. The following are the funding sources from HART's various financial plans, along with brief descriptions of State and City efforts to fill the funding gaps.

1. In 2015, the Legislature authorized a 5-year extension of the GET surcharge – 1/1/23 to 12/31/27.

2. In 2017, the Legislature authorized an additional 3-year extension of the GET surcharge to 12/31/30. The TAT is increased from 9.25% to 10.25%. The 1% increase is dedicated to HART for 13 years – 1/1/18 to 12/31/30.

3. In 2018, the City committed to contribute $214 million to HART's administrative and operating expenditures.

Funding Sources (in millions)



*American Recovery and Reinvestment Act, interest income, and rent.
** Numbers may not match due to rounding.

Source: Office of the Auditor

Audit Objectives

1. Determine whether HART management provided accurate and timely project information, including costs, schedule, and estimated completion dates, to the Board, State and City officials, and the public beginning in 2014.
2. Review and analyze current project costs against the Full Funding Grant Agreement to identify areas of significant cost increases and schedule delays and the reasons for those increases and delays.

Audit Scope and Methodology

This audit was performed pursuant to Act 1, which the Hawaiʻi State Legislature passed during the 2017 First Special Session. Act 1 directs the Auditor to conduct an audit of HART that includes an examination of the financial records and an analysis of the financial management of HART. This is our first audit of HART.[1]

This audit focused primarily on fiscal years 2014 through 2016; however, we also reviewed HART activity and documents outside of that period when relevant, as they related to the activity leading up to the Full Funding Grant Agreement with the FTA. That agreement is a contract between the FTA and the City that ties the award of federal funds to the City's commitment to complete the Project on budget and on schedule. Under the agreement, the amount of federal contribution is capped; any subsequent project cost increases are the responsibility of the City. This report addresses whether HART management provided accurate and timely project information and provides our analysis of project costs against the Full Funding Grant Agreement.

We conducted interviews of the HART Chief Executive Officer (CEO) and other managers, HART staff, the Board Chair, and certain HART consultants. We reviewed applicable laws, policies and procedures, board minutes, and other documentation. In addition, we examined the Full Funding Grant Agreement, FTA oversight reports, recovery plans, HART monthly progress reports, and other relevant documents.

[1] HART has been audited numerous times, by the City and County of Honolulu Auditor, by the FTA via their project management oversight contractor, and other consultants. We reviewed their reports during the course of our fieldwork.

Difficulties with access to information.

Pursuant to Chapter 7, section 7.11 of *Government Auditing Standards* issued by the United States Government Accountability Office, "Reporting Standards for Performance Audits," auditors should report "information limitations . . . including denials or excessive delays of access to certain records or individuals."

HART management and the Board expressly pledged HART's full and complete cooperation with our audit. However, that promise was not kept, as we encountered numerous difficulties in obtaining cooperation and information during the course of our work.

HART initially represented that we would have full and unrestricted access to documents and other information maintained in HART's Contract Management System and Microsoft SharePoint platform. HART maintains the majority of its contract documents in this electronic document management platform; however, we were not given access to the Contract Management System for months after our initial requests, and the access we were finally given was limited. During the course of our audit, we repeatedly encountered areas in the system that we could not access, and despite repeated requests, HART refused to confirm that we had unrestricted access to its electronic records.

We also experienced significant delays in receiving documents from HART and never received some documents that we had requested, notwithstanding multiple follow-up requests. The minutes of the Board's executive sessions that we did receive were redacted so extensively as to render them indecipherable and meaningless. However, even then, HART only provided minutes of the Board's executive sessions held from June 8, 2016 to September 14, 2017. We had requested the minutes of the Board's executive sessions for the period January 2014 through December 2016. HART did not address or otherwise respond to our request for the minutes that it did not provide, i.e., from January 2014 through June 2016. Based on board meeting agendas posted on HART's website, the Board held numerous executive sessions during that period.

We were also informed by HART staff that management had instructed its employees and consultants to audio record the audit interviews. Because of that requirement, we were unable to obtain as complete and unfiltered responses to our questions and other information as we expected. Despite repeated objections to the Board and management about the audio recordings, we were informed that the CEO continued his direction that staff and consultants audio tape the interviews.

We report these challenges and limitations on our information gathering in accordance with applicable government auditing standards. Notwithstanding these challenges, we do believe that the evidence is sufficient and appropriate to support the findings and conclusions made in this report.

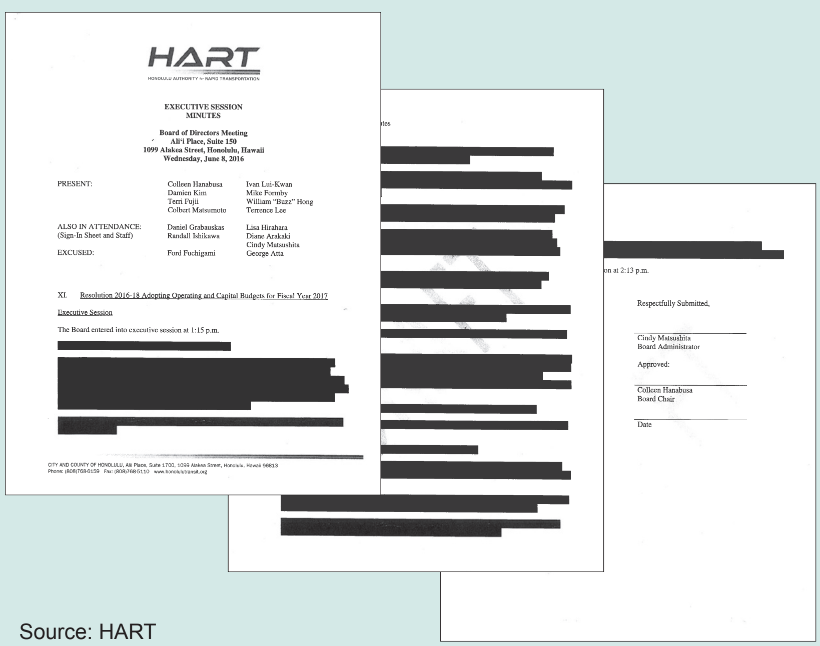
Our audit was performed from March 2018 through November 2018 and conducted in accordance with generally accepted government auditing

Black Out

WE REQUESTED copies of the minutes of the Board's executive sessions from January 2014 through December 2016. HART provided the minutes of 12 executive sessions held between June 8, 2016 and September 14, 2017, that HART redacted so extensively as to render them meaningless.

Based on the board meeting agendas that are accessible through HART's website, the Board convened many executive sessions during 2014, 2015, and 2016. We did not receive minutes of any executive sessions held in 2014 or 2015.

For many of the matters that the Board considered in executive sessions, it is unclear from the meeting agenda whether the Board had the legal authority to convene an executive session under the Sunshine Law, specifically, section 92-5(a), Hawai'i Revised Statutes, and therefore, even more unclear as to HART's basis for refusing to provide the unredacted documents.


HART

HONOLULU AUTHORITY for RAPID TRANSPORTATION

EXECUTIVE SESSION MINUTES

Board of Directors Meeting
Ali'i Place, Suite 150
1099 Alakea Street, Honolulu, Hawaii
Wednesday, June 8, 2016

PRESENT:	Colleen Hanabusa Damien Kim Terri Fujii Colbert Matsumoto	Ivan Lui-Kwan Mike Formby William "Buzz" Hong Terrence Lee
ALSO IN ATTENDANCE: (Sign-In Sheet and Staff)	Daniel Grabauskas Randall Ishikawa	Lisa Hirahara Diane Arakaki Cindy Matsushita
EXCUSED:	Ford Fuchigami	George Atta

XI. Resolution 2016-18 Adopting Operating and Capital Budgets for Fiscal Year 2017

Executive Session

The Board entered into executive session at 1:15 p.m.

[redacted]

CITY AND COUNTY OF HONOLULU, Alii Place, Suite 1700, 1099 Alakea Street, Honolulu, Hawaii 96813
Phone: (808)768-6159 Fax: (808)768-5110 www.honolulutransit.org

[redacted]

[redacted]

on at 2:13 p.m.

Respectfully Submitted,

Cindy Matsushita
Board Administrator

Approved:

Colleen Hanabusa
Board Chair

Date

Source: HART

standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence we obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Summary of Findings

1. The City prematurely entered into contracts under an artificial timeline and a fragile financial plan.

2. HART's inaccurate reporting of project cost and completion schedule undermined Board oversight and eroded public confidence.

The City prematurely entered into contracts under an artificial timeline and a fragile financial plan.

Before construction could begin in 2010, the City needed to obtain an approved environmental impact statement and a record of decision, which would conclude the environmental review process. The City also needed FTA approval to enter the final design phase of the federal grant process and the FTA to issue a letter of no prejudice to authorize pre-grant award construction activities. However, when the City executed the first construction contract with Kiewit in November 2009, it had not achieved any of those milestones.

Concerns about the Project's many barriers to beginning construction were communicated by the FTA to the City, both before and after the Kiewit contract award. The FTA approved the Project's entry into the preliminary engineering phase of the agency's grant process just two weeks prior to the Mayor's October 2009 speech. That October 16, 2009, letter from the FTA to the then-director of the City's Department of Transportation Services warned that such approval was not a federal commitment to fund construction. The FTA also cautioned that the Project's financial plan needed to be strengthened before construction could be approved. The FTA's concerns included insufficient GET surcharge revenue and reliance on $210 million in federal funds intended for the City's public bus transportation service referred to as "TheBus." Further, the FTA stated that it could not predict when approval to begin construction would be given. Exhibit 1 contains an excerpt of the FTA's October 16, 2009, letter.

2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

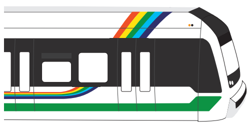
December 2006

The Honolulu City Council decides that the rail transit system will comprise a 34-mile, elevated fixed-guideway that will run from Kapolei to the University of Hawai‘i at Mānoa, with a connection to Waikīkī. The Council's decision is based on an evaluation that includes three other competing alternatives: building nothing; enhancing the existing bus system; and adding lanes for buses and high-occupancy vehicles.

February 2007

Recognizing that the GET surcharge funds are insufficient to build a 34-mile system, the Honolulu City Council decides that the Project should be limited to a 20-mile section extending from East Kapolei to Ala Moana Center, via Salt Lake Boulevard. However, in 2009, the Honolulu City Council votes to divert the route from Salt Lake to a Nimitz Highway route.

2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017



March 2007

The City starts the Project's environmental review process when it files a notice to complete an environmental impact statement with the FTA. The review is required as part of the City's effort to secure federal funds under the FTA's funding program. The draft environmental impact statement, which is completed in October 2008, estimates the system could cost as much $4.8 billion to build.

November 2008

O'ahu residents vote on whether to amend the City's Charter to authorize the establishment of a steel-wheel-on-steel-rail transit system. Advocating against the Project were those who contended that the Project cost too much and would not relieve traffic congestion. O'ahu residents vote 53 percent to 47 percent in favor of the charter amendment.

Exhibit 1
FTA adds warning to approval of transit project's entry to preliminary engineering phase.

> "Some elements of the current financial plan may not fare well in the stress tests that FTA will apply to evaluate robustness. These elements include the projected revenue stream from the General Excise Tax, the diversion of FTA … funds from ongoing capital needs of the bus system, and the increasing share of the City's annual budget that is required to fund the transit system. Were this plan submitted today in support of a request to advance the project into final design, its weaknesses would likely cause FTA to deny the request."
>
> *— October 16, 2009, letter from the FTA to Honolulu's then-director of Department of Transportation Services*

Source: FTA letter to Department of Transportation Services director stamped October 16, 2009.

The tension between the City and the FTA over the status of Hawai'i's pending environmental review was evident heading up to the October 29, 2009, speech by the Mayor. According to an October 27, 2009, email, the FTA warned its employees working on the Project against giving City officials any estimates or timeframes for resolving outstanding matters and approvals that were holding up construction. Then in December 2009, the month of the Project's originally scheduled groundbreaking, the Mayor wrote to the FTA claiming all outstanding environmental review issues were nearly resolved. However, the FTA's administrator would write back stating that the date of completion of the environmental review could not be predicted and that the FTA could not "allow those processes to be truncated to meet any artificial deadline."

By mid-January 2010, both the City and the FTA were anticipating change orders and schedule delays for the Kiewit contract, which was executed in November 2009. In March 2010, Kiewit notified the City that it would seek additional unspecified compensation because construction had not begun as scheduled under the contract. In October 2011, HART would execute a **$15 million change order** to Kiewit relating to that delay. Ultimately, delay-related change orders for that first contract to build the West O'ahu Farrington Highway guideway segment would equal **$108.32 million** as of June 2017, which was a 22 percent premium over the original contract award of $483 million.

In awarding that construction contract under an artificial timetable and financial plan, which the FTA characterized as too weak to begin construction, City officials neglected their responsibility to spend public money prudently. According to the United States Government

Accountability Office's *Government Auditing Standards*, which establish a framework for auditing agencies that receive government grants, officials entrusted with public resources are responsible for providing public functions and services in an effective, efficient, economic, equitable, and ethical manner.

Premature awarding of the initial $483 million contract was driven by concerns that rising costs and loss of tax revenue would derail the Project.

Kiewit's bid for the first construction contract was $90 million lower than the City had anticipated, which spurred an effort by the City to accelerate other planned contract procurements. At the time, Hawai'i's economy was experiencing a construction industry slowdown driven by low overall tourism demand and a tightening of credit markets. Hawai'i's commercial and industrial construction activity declined 33 percent in 2008 and 39 percent in 2009, according to a June 2010 cost forecast prepared by rail consultant PB Americas, Inc.

However, as early as 2008, the City was concerned that construction prices would soon escalate, which would impact the Project's cost estimates. According to a May 2008 letter from the then-director of the City's Department of Transportation Services to the FTA: "To minimize the impact of out-year inflation and to complete construction by the GET surcharge sunset date, the City intends to break ground on the First Project in 2009, as soon as the Record of Decision is issued." The City's former chief transportation engineer who later became HART's interim CEO, when interviewed for this audit, agreed that starting the Project as quickly as possible was seen as a means of saving money. According to the former chief transportation engineer, the timing was right to start, since Hawai'i's economy was experiencing a construction industry slowdown during that time.

There also was concern that if construction was delayed, money collected for rail could be raided by the Legislature. This was expressed by the Mayor in his speech on rail and in his correspondence to U.S. Senator Daniel K. Inouye, a key congressional ally of the Project. Excerpts of the address and letter follow in Exhibits 2 and 3.

October 2009

The FTA's preliminary engineering phase begins. During this phase, the City refines the design of the Project to identify all significant impacts relative to the National Environmental Policy Act process, costs of the Project, and the construction schedule. The City estimates the rail's initial 20-mile segment will cost $5.35 billion and be completed in 2019.

June 2010

The FTA approves the Project's final environmental impact statement. Governor Neil Abercrombie signs off on the document in December 2010. The FTA subsequently issues its record of decision in January 2011, which allows for utility relocation work and procurement of rail vehicles. The more than one-year delay between executing the Kiewit contract in November 2009 and obtaining required approvals occurs as the City struggles to resolve not just environmental impact concerns, but also impacts on locations identified as needing historic preservation under the National Historic Preservation Act.

Exhibit 2
Excerpt from the 2009 State of Rail Transit Address

> "... the longer we delay, the greater the chance the money will go away. The longer we delay, the greater the economic disarray."
>
> — *Honolulu Mayor Mufi Hannemann speech, October 29, 2009*

Source: October 29, 2009, State of Rail Transit address

Exhibit 3
Excerpt from Honolulu Mayor Mufi Hannemann's Letter to U.S. Senator Daniel K. Inouye

> "We are at the very sensitive point in time when the State legislators are once again seriously searching for additional funds for their budget and the City's transit fund is very tempting to them. They will try again in the coming session because the State's shortage is worse than the last session. I am convinced, as you are, that the State legislators will be successful in diverting the transit fund monies if we fail to demonstrate tangible progress with construction activities."
>
> — *Honolulu Mayor Mufi Hannemann to United States Senator Daniel K. Inouye, December 11, 2009*

Source: December 11, 2009, letter from Honolulu Mayor Mufi Hannemann to U.S. Senator Daniel K. Inouye.

HART's project director, who joined the agency in October 2014, acknowledged that the initial Kiewit contract was prematurely awarded, while simultaneously defending the move. "How could you award that contract?" he said, noting that various necessary utility and government agreements also had not been obtained at the time. "In retrospect, if they hadn't awarded that contract, maybe it would have never gotten done."

The City awarded nearly $2 billion more in contracts in 2010 and 2011 despite not achieving milestones needed to begin construction activities.

The City would not publish the Project's final environmental impact statement until June 2010, which was about six months later than predicted. Then, in January 2011, well over a year after the Kiewit contract was executed, the FTA issued a record of decision, which concluded the environmental review process.

In March 2010, when the City was unable to give Kiewit approval to begin construction, it had the option to cancel the contract. Instead, the

City proceeded to award nearly $2 billion more in design, construction, and operations contracts in 2010 and 2011, despite not having received FTA approval to break ground on construction of the guideway, stations, or the train's maintenance and storage facility.

In June 2010, HART conditionally awarded a $195.3 million contract to Kiewit/Kobayashi, a Joint Venture (Kiewit/Kobayashi) for the design and construction of the train's maintenance and storage facility. The contract was awarded a year later, in June 2011. In November 2012, HART would execute a **$15.9 million change order** to Kiewit/Kobayashi relating to rising track material costs. Overall, the premature awarding of this contact would result in **$86.4 million in change orders**, as of June 30, 2017, representing a 44 percent increase over the original contract award. Nearly $50 million of that amount was associated with delay costs.

In June 2011, HART awarded Kiewit a $372.2 million contract for the construction of the Kamehameha Highway Guideway. Delays in issuing the notice to proceed under this contract resulted in change orders to Kiewit totaling $1.8 million. The premature awarding of this contract would generate **$30.7 million in change orders**, as of June 30, 2017, which included change orders relating to delays caused by the need to complete required archaeological surveys.

It was not until December 2011 that the FTA would approve the City's entry into the final design phase of the grant process, which allowed for demolition and other non-construction activities such as procurement of vehicles, rails, ties, commodities, and other specialized equipment. In February 2012, more than two years after the Kiewit contract was awarded, the FTA gave the Project approval to break ground and begin construction. An FTA agreement to secure an estimated $1.55 billion in federal funds had yet to be executed.

Overall, these prematurely awarded contracts resulted in **$354.4 million in change orders**, as of August 2017. That figure **excludes** significant change orders associated with the Ansaldo Honolulu JV's $1.39 billion contract to design, build, operate, and maintain the rail system, awarded in November 2011. However, the delay in the system's opening date to 2025 has resulted in major pending change orders for additional compensation that were unresolved as of November 2018.

Lawsuits Delay Construction

JUST AS HONOLULU'S rail project was ramping up construction efforts in 2012, the Project would suffer legal setbacks that would result in further delays. In an effort to expedite construction, the City opted to build the West O‘ahu section of the guideway [composed of West O‘ahu and Kamehameha Highway] prior to conducting archaeological surveys of the Middle Street-to-Ala Moana Center segment of the system. At the time, the City said it would consider moving rail guideway footings and altering utility relocation plans to avoid ‘iwi, or human remains, if they were discovered after the start of construction.

JANUARY 2011

A Native Hawaiian cultural practitioner sues the City and State, requesting declaratory and injunctive relief to delay the start of construction on the rail project. The plaintiff argues that the Project should be enjoined until an archaeological inventory survey identifying and documenting archaeological historic properties and burial sites in the project area is completed for all four project segments prior to construction.

The case is appealed to the Hawai‘i Supreme Court in 2012, which rules in favor of the plaintiff and construction is halted. Consultant Parsons Brinckerhoff estimates that a one-year delay in construction will cost the City $71 million. Construction on the West O‘ahu Farrington Highway section of the guideway resumes in September 2013, following the completion of required archaeological surveys.

MARCH 2011

Although unrelated to construction, a protest filed by an unsuccessful bidder for the Project's train and core systems design-build-operate-maintain contract would result in a nine-month delay in awarding the contract and an $8.7 million settlement of delay claims to the winning bidder Ansaldo Honolulu JV.

MAY 2011

In a separate case, Honolulutraffic.com vs. FTA, filed in in the U.S. District Court, District of Hawai‘i, the plaintiffs claim that there has been inadequate consideration of alternatives in the environmental impact statement with regard to environmental impact issues and cultural and historical sites. The court temporarily enjoins construction activities in the city center section of the Project and halts all real estate acquisition activities in that area. That injunction is in effect from November 2012 to June 2013.

The 2012 Full Funding Grant Agreement was based on a lower budget, despite rising construction costs, change orders, and delays.

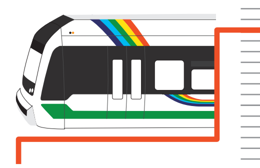
The Full Funding Grant Agreement ties federal funds to the City's commitment to complete the rail project on budget and on schedule. When the FTA approved Honolulu's entry into the preliminary engineering phase of the grant process, it noted that the Project's financial plan had very little capacity to absorb cost increases or funding shortfalls, and had significant potential revenue risks. At the time, HART estimated it would cost $5.35 billion to complete the Project, but by the time FTA funds were secured through the Full Funding Grant Agreement in late 2012, HART officials had reduced the estimated cost of completion to $5.12 billion, along with a corresponding reduction in anticipated funding needed from GET surcharge revenues from $3.52 billion to $3.36 billion.

The FTA uses project management oversight contractors to evaluate a project's management and technical capacity and overall capability. (See "The Feds are Watching…And Reporting" on page 4 for further discussion on federal oversight.) The FTA oversight contractors also monitor federally funded projects to determine whether they are progressing on time, within budget, and in accordance with approved plans and specifications. Prior to the execution of the Full Funding Grant Agreement in December 2012, the FTA oversight contractor assigned to Honolulu's rail project expressed concerns about HART's finances, staffing, and schedule.

In an October 2012 assessment of the City's readiness to execute a Full Funding Grant Agreement, the FTA oversight contractor noted that the project cost was kept at $5.12 billion despite multiple events that had occurred to push up costs. Among other things, the contractor noted that the cost of suspending construction due to an August 2012 Hawai'i Supreme Court ruling could range from $64 million to $95 million, excluding escalation for future contracts and extended staffing costs. The Project's opening target date remained at March 2019.

Low construction cost estimates, higher than anticipated inflation, and unanticipated issues also drive cost increases.

During the period of mid-2009 to 2011, when cost estimating for the Full Funding Grant Agreement was being completed, U.S. cities, including Honolulu, went through a period of relatively stable construction costs. However, in 2012, when construction on Honolulu's Rail Transit Project was to begin in earnest, construction costs had escalated significantly. HART's September 2017 Recovery Plan to



May 2011

The project is renamed the Honolulu Rail Transit Project as it enters its final design stage when the City makes final preparations for construction: acquiring rights of way, developing detailed construction plans, and refining the Project's cost and schedule.

November 2010

O'ahu voters pass an amendment to the Charter of the City and County of Honolulu that sets the framework for the creation of a semi-autonomous public transit authority, referred to as HART. HART is charged with the design, construction, operation, maintenance, and expansion of the fixed guideway mass transit system. HART begins operating on July 1, 2011.

December 2011

The FTA approves the Project's final design, which allows for non-construction activities including demolition and procurement of rail tracks, and other specialized equipment. It is not until February 2012 – more than two years later than anticipated when the first construction contract is awarded – that the Project receives FTA approval to begin construction on the first guideway segment and spend up to $184.7 million.

the FTA acknowledged that HART officials should have been more conservative in initial cost estimates and escalation projections. Exhibit 4 below includes an excerpt of that plan, which HART was required to provide to demonstrate the steps it is taking to address the budget shortfall.

Exhibit 4
Excerpt from the HART 2017 Recovery Plan

> "There is a fine balance in assessing this escalation rate projection during the execution of [a Full Funding Grant Agreement], trying to keep initial cost projections down while including some conservatism in case significant cost increases occur. Given the history of this program, along with other recent major capital programs in the US, it does appear that the best lesson is to be more conservative in initial [Full Funding Grant Agreement] cost estimates and escalation projections."
>
> — *HART 2017 Recovery Plan*

Source: HART 2017 Recovery Plan

The 2017 Recovery Plan further stated that project delays exposed a failure to sufficiently address the integration between the major contractors, such as those selected to build guideway sections, stations, and the rail cars. That, coupled with incorrect assumptions regarding future contracts, culminated in substantial negative consequences in the Project's cost and schedule, according to the plan.

In addition to those factors, HART's original construction plans failed to account for significant utility relocation costs, which jumped from $133 million to $391 million, a nearly 200 percent increase from 2012 to January 2017. HART was aware of a need to relocate certain overhead utility lines as early as 2008.

In August 2008, Hawaiian Electric Company, Inc. (HECO) warned the City that additional clearances would be required for operation and maintenance of existing overhead power lines along the guideway. However, these warnings went unheeded until February 2016 when the FTA oversight contractor stated the costs related to undergrounding or relocating the HECO lines was "the most significant risk to the project." In HART's *Report to the Governor of the State of Hawai'i and the 2016 Legislature*, released in December 2015, the total cost projection was raised to $6.477 billion, with some of the increase attributed to relocating HECO power lines in the airport and city center segment of the alignment.

Rising costs and revenue shortfall result in $700 million to $910 million budget gap.

The extent of HART's challenges became evident during the Board meeting in December 2014 when the then-CEO announced for the first time since the Full Funding Grant Agreement that the Project's estimated cost at completion could be 10 to 15 percent higher than planned. The total estimated impact was forecasted to be $550 million to $700 million.

The stated causes: notice to proceed delay claims of $190 million, rising construction costs, and less-than-anticipated tax revenue. In addition, according to the then-CEO, a substitute revenue source would need to be found to replace $210 million in federal funds intended for TheBus. This brought the total identified funding gap to as much as $910 million and increased the overall Project estimated cost to as much as $5.82 billion.

HART's plan to address the situation included repackaging contracts into smaller solicitations to engender competition, pursuing private partnerships, and seeking to extend, or eliminate, the sunset date for the GET surcharge.

Keeping Track

According to HART's 2018 Revised Recovery Plan, the Project is 45 percent complete.[1] Here are some halfway-point metrics:

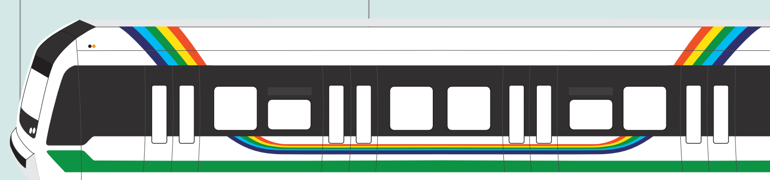
10.75
Miles of elevated guideway constructed from East Kapolei to just past Aloha Stadium

$4.8 billion
Value of major contracts completed or in progress

13
Number of stations currently under contract. The City Center Guideway section's eight stations have yet to be procured.

4
Number of trains delivered to Honolulu

20
Number of trains procured

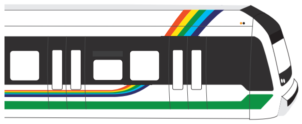


$457,114,427.86

Average cost of the entire Honolulu Rail Transit Project per mile

[1] As of August 31, 2018

Source: Office of the Auditor



April-May 2012

Construction on the West Oʻahu Farrington Highway guideway segment commences with the drilling of the first structural columns, followed by the pouring of the first guideway column the following month.

December 2014

Facing numerous cost overruns and higher-than-anticipated projected costs to build the system, HART extends the solicitation of a construction contract for the City Center Guideway and Stations group by six months following unexpectedly high bids for the construction of nine westside stations. HART cancels that station solicitation after bids come in $100 million higher than expected.

HART's inaccurate reporting of project cost and completion schedule undermined Board oversight and eroded public confidence.

Under the Full Funding Grant Agreement with the FTA, the City is obligated to pay for cost overruns. If at any time the total project cost exceeds the agreed-upon 2012 project cost estimate, the City must notify the FTA of the reasons for the difference. Further, the City must provide the FTA with a recovery plan that demonstrates it is taking steps to address the budget shortfall.

HART's ability to accurately estimate its financial needs hinges on assumptions of cost, revenue, and schedule. HART had plans and procedures in place to guide the agency's compilation and reporting of cost and schedule during the period reviewed. However, we found that HART failed to follow this framework, which allowed its then-CEO wide discretion over how and when the Project would update costs and schedule. Our review of project cost estimates from 2014 through 2016 found that internal alarms of rising project costs and schedule delays were not shared in a timely manner by HART management with the Board, the Legislature, or the public.

Lack of funds delayed contract awards and the opening target date to 2025, which helped boost project costs by $1.24 billion.

Under State law and administrative rules, the City must have funding in place before it can award the city center or any other contract.[2] Procurement of the City Center Guideway and Stations section of the guideway, which will span from Kalihi to Ala Moana, started in 2014, but has been delayed several times because of a lack of funding.

The initial delay in that award occurred after HART received significantly higher-than-anticipated bids for the construction of the Project's nine western-most stations in August of 2014. That procurement was subsequently cancelled, then delayed while the nine-station contract was revised into three separate, three-station contracts. A separate solicitation of a design-bid-build airport and city center combined section guideway contract also was cancelled. This resulted in further delays as HART repackaged that work into two separate

[2] The Hawaiʻi Procurement Code, Chapter 103D, Hawaiʻi Revised Statutes, applies to the counties, including the City and County of Honolulu. Section 103D-102 states that "[t]his chapter shall apply to all procurement contracts made by governmental bodies…." The definition of "governmental body" contained in section 103D-104 of the Procurement Code includes "the several counties of the State."

ARTIST RENDERING: AUGUST 2014, CITY AND COUNTY OF HONOLULU, DEPARTMENT OF PLANNING AND PERMITTING

HART of the City

In the past five years, the construction costs of the City Center Guideway and Stations have more than doubled and the Project's opening date has been pushed back six times from March 2019 to December 2025.

THE AIRPORT/CITY CENTER GUIDEWAY originally stretched 9 miles from Aloha Stadium to Ala Moana Center, traveling through Kalihi, along Chinatown, and terminating at the outskirts of Waikīkī – some of the busiest, most densely populated areas of Honolulu. The combined City Center Guideway was budgeted at $511 million in 2012.

Concerns regarding the City's ability to pay for construction of this segment of the system surfaced as early as November 2014, when a HART consultant advised that "the most prudent path forward is to develop an East Corridor Guideway and Station package terminating the initial phase of the east guideway at a location short of the original terminus at Ala Moana Station, and to consider building fewer initial stations (deferrals) along that shortened alignment."

In December 2014, after encountering budgetary problems, the guideway was split into two separate contracts: the Airport Guideway and Stations, which included the four train stations from Aloha Stadium to Middle Street; and the City Center Guideway and Stations, with eight stations from Kalihi to Ala Moana Center. This repackaging of contracts resulted in the Project's opening date being moved to December 2019. Over the following year, the date would be pushed back three more times to January 2022. By April 2015, the estimated cost of just the City Center Guideway contract alone was $912 million.

In May 2016, HART received a preliminary cost estimate for the City Center Guideway and Stations in which the cost jumped to $1.3 billion. Because of a projected funding shortfall, the procurement was suspended, which pushed back the entire schedule by two years to 2024. Three months later, the estimated opening date was pushed back another year to December 2025.

In September 2018, the Board approved the solicitation of a public-private partnership, or "P3," to help pay the now $1.4 billion cost of the city center section of the rail project and build a Pearl Highlands Parking Garage and Transit Center.

According to an email from the then-Director of Project Controls, about $1.24 billion of the Project's cost increases relate to the delays in awarding construction contracts primarily due to a lack of funds. Of that total, $904.6 million arises from delays in awarding the City Center Guideway and Stations contract. However, delays in awarding the Pearl Highlands Parking Garage and Transit Center contract; the Airport Section Guideway and Stations contract; and the trains and core systems contract also contributed to those overall delay costs.

City Center Guideway and Stations By the Numbers

8
Number of stations, the most of any of the rail system's four segments

4
Miles from Middle Street to Ala Moana Center, one of the system's shortest segments

54
Number of parcels of land needed to be acquired to provide right-of-way for the rail

123
Total number of right-of-way parcel acquisitions needed for entire rail system

2020
Year construction work is set to begin

2025
Year the segment is expected to open for operations

Source: Office of the Auditor

design-build guideway and station contract packages: the Airport Guideway and Stations design-build contract and the City Center Guideway and Stations design-build contract.

Between 2012 and 2017, the estimated cost of building the eastern half of the guideway has soared by more than $1 billion. In 2012, the total cost for these east-side guideway and station contracts as well as related airport utility relocation work was estimated at $1.16 billion. However, by April 2015, that figure had climbed to $1.68 billion. As of May 2016, the estimated cost of the City Center Guideway and Stations contract alone had risen to an estimated $1.3 billion. The Airport Guideway and Stations contract was awarded in 2016 at a cost of $874.8 million. The Airport Guideway and Stations contract includes the design and construction of 5.2 miles of guideway and four stations between Aloha Stadium and the Middle Street Transit Center.

HART's public disclosures of cost and schedule changes did not reflect internal projections of rising costs and delays.

June 2015

The Legislature approves extending the GET surcharge by five years to 2027. The extension, which is anticipated to yield $1.8 billion in additional revenues, should have plugged HART's budget gap, but just two months later, HART's forecast to the FTA oversight contractor indicates that the Project will exceed the Full Funding Grant Agreement budget by $778 million, thereby increasing the project cost estimate to $5.90 billion.

HART meets with its FTA oversight contractor on a monthly and quarterly basis, where among other things, project costs and funding are discussed. HART provides both the oversight contractor and the Board monthly reports on cost and schedule as well as the Project's estimated cost at completion. HART's estimated cost at completion is the forecast of the total cost to complete all awarded contracts and includes the estimated cost of future unawarded contracts. The accuracy of the estimated cost at completion is dependent on the corresponding anticipated opening date, which is when the rail transit system is scheduled to begin service along the entire guideway. HART periodically updates both estimates to account for changes in the timing of contracts, individual contract costs, estimated costs for future contracts, and contingency available to cover unanticipated cost increases.

We found that, throughout 2015, when HART was grappling with major unanticipated cost increases, HART's monthly progress reports to the Board failed to include updated estimated cost at completion and updated opening date information that were reported in FTA oversight contractor meetings and documented in FTA monthly reports. HART's monthly progress reports to the Board should have included the status of project progress, costs and budget variances, and project schedule. The reports also should have described any project-related issues or concerns that may affect budget or schedule, as well as possible recovery plans to minimize any potential negative impacts to the cost or schedule.

We also found that HART prepared internal cost and schedule estimates during April and June 2015 that indicated the $910 million budget shortfall disclosed just a few months earlier in December 2014 might be significantly larger and the Project's opening date could be months, if not years later than the March 2019 date previously reported. These cost and schedule estimates were not shared by HART with the Board, the Legislature, or the public. However, our attempt to determine what information was shared with the Board was limited by HART's refusal to provide us with requested minutes of the Board's executive sessions from 2014 through 2016.

By mid-2015, internal HART estimates indicated that the Project could cost as much as $6.92 billion and completion delayed nearly two years.

During a presentation to HART staff on April 15, 2015, titled "*If can, can…If no can, how can?*" HART's then-deputy director disclosed that the Project's estimated cost at completion was potentially as high as $6.72 billion, if a January 2020 opening date were to be met. The forecasted opening date cited in the presentation was March 2021. However, two months later, HART reported to the Board that the opening date was December 2019 and the estimated cost at completion was $5.12 billion.

Also, apparently undisclosed to the Board was a May 2015 update by HART management in which the total project cost was raised to $6.05 billion, which resulted in a $927 million budget gap. However, just one month later in June, a set of white papers prepared by HART's cost and schedule consultant suggested that the revised May estimated cost at completion should be further raised to $6.92 billion based on a more realistic service date of November 2022. The papers warned "…it will be a challenge to deliver the project for the amount of money the GET extension will provide." Meanwhile, HART's July 2015 monthly report to the Board stated the Project's opening date was December 2019 and estimated cost at completion was $5.12 billion.

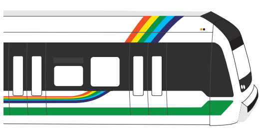
In its Fall 2015 updates, HART does not share concerns of revenue shortfall with Mayor and Council Chair.

HART forecasted increases to the Project's estimated cost at completion twice in the fall of 2015. The forecast in August raised the estimate by $778 million to $5.9 billion to reflect the costs of resolving HECO high-voltage power line conflicts, additional HART overhead and consultant expenses related to the delay in full operations, and expectations of further construction cost escalation. This estimate was increased again two months later after the FTA oversight contractor found that the revised August estimate was unrealistic, in part because it excluded

2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

October 2015

FTA expresses concerns about the veracity of HART's financial plan and schedule. The FTA warns that it will withhold $250 million in federal funds until HART submits a realistic budget and schedule.



May 2016

HART's updated business plan increases cost to $6.8 billion while pushing back the completion date to early 2022. The changes are prompted by rising change order costs and higher than anticipated bids for unawarded contracts. Other factors include unanticipated utility relocation costs, including undergrounding high-voltage power lines along the western portion of the guideway.

$274 million in construction costs for the parking garage at Pearl Highlands and was based on an overly optimistic opening date of June 2021. The increase to total project costs included costs to fund a portion of the parking garage and delayed the system opening date, among other things. In its *Report to the Governor of the State of Hawai'i and the 2016 Legislature*, released in December 2015, HART reported that the estimated cost at completion was $6.48 billion.

Between the August and October 2015 increases to the estimated cost at completion projections, the then-CEO and then-HART Board Chair wrote a letter updating the project costs to the Honolulu Mayor and Honolulu City Council Chair. The letter did not reflect HART's internal concerns that the Project may face a revenue shortfall, despite the additional funding revenue from the GET surcharge. The then-CEO stated that the Project's completion date would likely slip into 2021 and that costs were running $200 million higher than disclosed in December 2014.

Midway through the 2016 Legislative session, the Project's cost was increased to $6.83 billion and its opening date was delayed to late 2022.

In March 2016, midway through the 2016 Regular Session of the Hawai'i State Legislature and one month after the Mayor approved use of funds from the extension to the GET surcharge, HART increased the Project's estimated cost at completion to $6.83 billion, and the opening date was delayed one year to December 2022. We could find no Board presentation related to these changes. According to HART, the cost increases were needed to address unanticipated change order costs on existing contracts, higher than anticipated bids received for unawarded contracts, and revised cost projections to move high-voltage power lines on the western part of the alignment. The opening date delay was due to a lack of funds to award the City Center Guideway and Stations contract, which under a revised estimate, was projected to cost $400 million more than HART had budgeted.

At this point, the estimated cost at completion of $6.83 billion, which was not shared in a public Board presentation, apparently exceeded the Project's December 2015 projected funding of $6.61 billion, which included an estimated $1.88 billion in revenue from the GET surcharge extension. In its April 2016 monthly report, the FTA oversight contractor expressed concern that HART had insufficient funds to complete the Project. However, it is unclear whether the Board was informed of the updated estimated cost at completion and funding at that time. We found records that indicated a Permitted Interaction Group of the Board, formed to review HART's updated financial plan, met in February, March, and April of 2016, and may have been informed of HART's March 2016 budget gap, which ranged from $206 million to

$900 million. By May 2016, in HART's annual business plan covering fiscal year 2017, the estimated cost at completion is reported at $6.8 billion with an opening date of early 2022. At this point, the Project's cost and schedule mimicked HART's internal estimates.

In June 2016, one month after the Hawai'i State Legislature had adjourned its Regular Session, HART reported to the Board that the estimated revenues from the extension of the GET surcharge were insufficient and that the Project had a more than $1 billion budget shortfall. According to that update, the Project's estimated cost at completion was $7.97 billion and the opening date was December 2024. However, projected funding revenue at that point was just $6.83 billion. Therefore, the Project as defined by the Full Funding Grant Agreement had a potential funding deficit of $1.14 billion. At this time, HART, after consultation with the FTA, began considering build-to-budget options that included deferring certain guideway sections and stations.

HART's senior advisor, who joined HART in December 2016 as its interim CEO, explained that when he arrived, it was apparent that HART's cost reporting function was broken. "When I started, HART was having difficulty generating firm cost and schedule data," he said. "That was very frustrating, rightfully so, to everybody. There was not an analytical approach that I had seen in putting up the numbers."

HART updates, featuring unrealistic opening dates and inadequate contingency funds, obscured a rising cost at completion.

The FTA recommends setting aside a certain percentage of estimated project costs, or contingency, to account for unanticipated future expenses, such as change orders, delays, or rising costs of materials. This recommended reserve amount is expected to be reduced as project progress is made. When the Full Funding Grant Agreement was executed in 2012, HART's project budget of $5.122 billion included a total project contingency of $644 million, which was quickly consumed by change orders and project delays.

We found that, from 2014 to 2016, the Project's contingency reserves fell significantly below FTA-recommended levels. And, as early as April 2014, HART began reporting different contingency amounts to different audiences. This asymmetrical reporting obscured the extent of the Project's financial problems to the Board and would be a continual cause for concern for the FTA.

May 2016

HART receives a preliminary estimate for construction of the City Center Guideway and Stations contract that is $719 million higher than anticipated. Facing a projected funding shortfall, HART suspends the procurement of the City Center Guideway and Stations design-build contract, which pushes the completion date out to the end of 2024.

June 2016

Spiraling costs and numerous delays prompt the FTA to require HART to submit a "recovery plan" by August, which demonstrates that the agency is capable of mitigating further cost overruns and project delays. That deadline is later extended to April 2017. HART's subsequent recovery plan estimates that the Project's 20-mile segment would cost $9.02 billion and be completed in 2025.

"...the agency has eroded the project's contingency without making significant progress in the work, contract awards, acquisition of right of way, or lessening of the project's risks."

– FTA's oversight contractor

In its April 16, 2014, quarterly meeting report to the FTA, HART reported a contingency balance of $423.8 million; however, in its monthly report to the Board that same month, HART claimed a contingency of $608.2 million. The FTA noted the disparity; nevertheless, HART continued to report contingency numbers that were well-above the amount of contingency that the FTA estimated HART had remaining.

In July 2014, HART reported a contingency of $563 million to the FTA; however, the FTA oversight contractor in its July 2014 Risk Refresh reported HART's contingency was actually down to $323.5 million, which was $265 million below the then-recommended level of $588 million. The FTA's oversight contractor observed that "the agency has eroded the project's contingency without making significant progress in the work, contract awards, acquisition of right of way, or lessening of the project's risks." Since HART would not provide us with the complete minutes from board meetings during this time period, we could not determine if the FTA's concerns about an inadequate contingency were shared with the Board.

How Much Contingency Is Enough?

DETERMINING AN APPROPRIATE contingency is an ongoing process during the construction of a project. At different points, some risks will become improbable while others, unanticipated at the outset, will emerge. In addition, existing risks must be reassessed for both probability and impact as the project proceeds.

To help gauge and mitigate risk, the FTA uses a risk assessment that is based on a "risk register," a list of a project's identified risks, and corresponding risk mitigation measures. Because the number and nature of risk factors change, the FTA guidelines require that the risk register be periodically reviewed and updated. For HART, these factors are guided by its Risk and Contingency Management Plan, which is part of its efforts to deliver the Project on time and on schedule. It establishes minimum required levels of contingency at various project stages. The plan is augmented monthly by a risk report that includes a risk register with updated risk mitigation actions, along with a current contingency use and tracking report.

The FTA's oversight contractor periodically reviews the risk register and the corresponding project contingency and makes recommendations in its risk refresh reports. In 2016, the oversight contractor found HART's risk management efforts had decreased substantially since 2014. For instance, HART could not provide any evidence that it had updated its Risk and Contingency Management Plan, and the risk register it did provide "did not conform to the level of sophistication of risk registers expected for a project of this complexity." According to current staff, HART did not use its risk register to calculate project cost estimates. The Risk and Contingency Management Plan called for HART to utilize a Risk Assessment Committee, composed of senior HART personnel, to evaluate and rank risks to ensure contingency remained above the minimum levels set out in the plan. According to HART's Project Management Plan, the Risk Assessment Committee was the only entity that could change a risk's likelihood and potential cost. However, the committee was not used for this purpose. Additionally, we found that HART's Contingency Management Procedure, which outlines how cost and schedule contingencies should be maintained, had not been updated since April 2012.

Erosion of contingency flagged by the FTA, acknowledged by HART.

As previously reported, during the December 2014 Board meeting, the then-CEO presented to the Board that the Project's estimated cost at completion could be 10 to 15 percent higher than the original $5.12 billion estimated project cost, with an estimated impact of $550 million to $700 million. The FTA's oversight contractor noted in its December 2014 report, "[t]here is concern that the current estimated contingency is not sufficient, which will impact the project budget."

Despite the FTA oversight contractor's concern, in a January 2015 letter, the then-CEO represented to the Honolulu City Council that project costs were over budget by $550 million to $700 million. However, monthly progress reports to the Board continued to report an estimated cost at completion of $5.12 billion. During the January 2015 quarterly meeting with the FTA oversight contractor, "HART acknowledged the Project may exceed the FFGA (Full Funding Grant Agreement) budget by $594 million or more due to project delays, lawsuits, contingency erosion, and changing market condition."

The FTA again expressed concerns about HART's artificially low contingency amounts. In a letter dated October 14, 2015, the FTA wrote:

> FTA remains concerned that the total contingency may be underestimated, the current schedule has a low probability for success, and delays associated with the final adoption of the extension of the General Excise Tax (GET) may lead to further cost increases and slippage in the Schedule.
>
> Specifically, HART presented information that its Estimate at Completion would exceed the Full Funding Grant Agreement (FFGA) budget by $778 million not including financing costs. The new estimate cost at completion provided by HART did not apply contingency across all standard cost categories, which suggests that the identified 13 percent overall contingency may be underestimated. Additionally, the revised Master Project Schedule presented by HART indicated an approximate 18 months delay until June 2021 from the original Revenue Service Date of January 31, 2020, with only an eight percent probability of commencing service by that date, which is unrealistic.

A 2005 internal FTA study on risk management performance concluded that only 50 percent of the cost overruns in selected projects were related to risk factors; the rest was due to systematic underestimation, including the failure to adequately assess risks, failure to identify and confront foreseeable adverse conditions, and the full range of project cost components.

Contingency in the Hole

In 2016, the FTA's oversight contractor recommended $1.141 billion in total project contingency. HART claimed to have $613 million; however, the oversight contractor found that HART was actually running a $48 million deficit.

ILLUSTRATION: ISTOCK.COM

Again, because we did not have access to the complete board minutes during this time period, we were unable to determine if the FTA's growing concerns with project finances were communicated to the Board. However, two months later, in its December 2015 monthly progress report, HART reported an unadjusted total budget of $5.122 billion, which featured a contingency of $488.2 million.

HART's contingency data may have been tainted.

Because contingency is intended to cover unanticipated or unknown costs, a budget that lacks an adequate contingency reserve provides the false appearance of financial sufficiency. We found that the contingency amounts HART reported in its monthly progress reports did not accurately reflect the forecasts it shared with the FTA oversight contractor. For instance, in April 2014, at its quarterly meeting with the FTA oversight contractor, HART forecasted $423.8 million remaining in contingency; however, that same month it reported $608.2 million in project contingency and $542.5 million later that December to the Board.

The gap between what HART was reporting to the FTA and what it was telling the Board continued to grow. The following year, at its January and August 2015 quarterly meetings with the FTA oversight contractor, HART forecasted that the Project had $303.3 million in remaining contingency. In contrast, HART reported contingency balances of $523.8 million and $500.7 million in its corresponding monthly progress reports to the Board, respectively. In addition, HART's misreporting was not exclusive to the Board. In its *Report to the Governor of the State of Hawai'i and the 2016 Legislature*, released in December 2015, HART claimed a total project contingency of $539 million. As previously mentioned, the FTA had corrected a similar level of contingency claimed by HART two years before.

Six months later, in June 2016, the FTA oversight contractor issued the 2016 Risk Refresh, which recommended **$1.141 billion** in total project contingency. The report further noted that "this amount is higher than other projects at this level of completion due to significant remaining project risks and as evidenced by project experience so far." **According to the report, HART's latest estimated cost at completion falls short of the FTA's recommended estimate by $1.189 billion**, which included $528 million in additional recommended contingency. The report further noted that, with adjustments, HART's current contingency is reduced to a **deficit of $48 million** when compared against HART's current estimated cost at completion. The FTA oversight contractor recommended the agency take steps to ensure that cost and contingency data reported by HART was not tainted, noting in the report that "independent reporting of project cost and contingency levels should be at a management level and should not be subject to politically-driven bias."

HART's misreporting of project contingency levels may have distorted the Project's financial picture and delayed the triggering of a recovery plan.

It is essential that contingency is monitored to prevent a draw down below specific "check points" to ensure sufficient amounts of contingency are maintained throughout a project's duration. However, we found that as early as 2014, as project costs increased due to delays, change orders, and other issues, HART's methodology for reporting of contingency became opaque and inconsistent, obscuring the need for a recovery plan, which the FTA eventually requested in June 2016. Under the *Risk and Contingency Management Plan for the Honolulu High-Capacity Transit Corridor Project*, dated September 26, 2011, the Project was to maintain contingency levels, drawn down at specified benchmarks. Under this plan, reduction of contingency below these levels triggers the preparation of a "Recovery Plan" within 30 days of becoming aware of the situation. However, HART's method of reporting contingency may have obscured the need for such a plan much earlier.

In June 2016, the FTA required HART to prepare a recovery plan on or before August 7, 2016, "which demonstrates HART is taking every reasonable measure to mitigate the cost overruns and minimize the delay in opening the Project to revenue operations" and citing costs and

The Budgeted Contingency: Expecting the Unexpected

IT IS IMPOSSIBLE to predict all the variables that may be encountered during a project the size and complexity of the Honolulu Rail Transit Project. Lawsuits, property acquisition, utility relocation, market fluctuations – potential roadblocks and their related risks are myriad.

A means of mitigating such challenges – expecting the unexpected – is to build an analysis-based contingency into the project's budget, adding moneys to the estimated project cost to absorb the impacts of risks and to cover cost overruns. An effectively managed contingency helps ensure that cost adjustments associated with risk can be covered without having to seek additional or new funding.

The amount of project contingency is directly related to the risk associated with completing a particular scope of work. In the case of the Honolulu Rail Transit Project, the original budget of $5.122 billion included $644 million in contingency funding.

Contingency moneys would be tapped early and often. In November 2009, the City executed a $482.9 million contract with Kiewit to design and build the West Oʻahu Farrington Highway portion of the guideway, the system's first 6.5 miles, from East Kapolei to Pearl Highlands. In June 2011, Kiewit was also awarded a $372.2 million contract for the construction of the 3.9-mile Kamehameha Highway guideway, which stretched from Pearl Highlands to Aloha Stadium. Also, that month, the City awarded a $195.3 million contract for the train's maintenance and storage facility to Kiewit/Kobayashi.

Construction of the West Oʻahu Farrington Highway guideway did not start until April 2012. The "unexpected" – for example, lengthy environmental review, lawsuits and an unfavorable court decision, and poor planning – contributed to $312.3 million in change orders, eating up nearly half of the Project's original contingency budget.

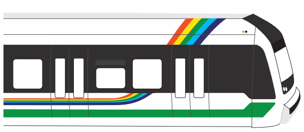
schedule overruns "far beyond the costs and schedule set forth in the December 2012 Full Funding Grant Agreement":

> As you are aware, the recent Risk Report for the Honolulu Rail Transit Project ("Project") indicates the total cost to complete the Project will range between $7.73 billion and $8.01 billion, with an estimated completion date of December 2024. These costs and the schedule extend far beyond the costs and schedule set forth in the December 2012 Full Funding Grant Agreement (FFGA) between the Federal Transit Administration (FTA) and grant recipient, the City and County of Honolulu. In accordance with the terms and conditions of the FFGA, I write today to require the City and County of Honolulu and the Honolulu Authority for Rapid Transportation (HART) to submit a Recovery Plan for completion of the Project which demonstrates HART is taking every reasonable measure to mitigate the cost overruns and minimize the delay in opening the Project to revenue operations.

In response, HART requested an extension of the recovery plan submittal date from August 2016 to mid-2017. In its letter granting the extension, the FTA insisted that the City and HART provide a plan "no later than the end of [the 2016] calendar year," subject to a meeting with the FTA and submission of an interim plan on how the Project will move forward by the end of September 2016. Subsequently, the FTA further extended the deadline for submission of the recovery plan to April 30, 2017. Pursuant to the FTA's requirement, HART submitted the interim plan dated September 30, 2016, followed by the Recovery Plan on April 28, 2017, which included two options for completion of the Project. In addition, HART submitted yet another draft version of the Recovery Plan on September 15, 2017, more than one year after the original deadline.

HART's Recovery Plan acknowledges that the Project failed to set aside adequate contingency. According to the Recovery Plan, the Project's estimated cost at completion now includes $1.1 billion in contingency. The plan states, "One of the lessons learned by HART from the earlier stages of the Project is the critical importance of sufficient project contingency to address changing market conditions, the cost impact of schedule delays, and other project risk factors."

By September 2018, the FTA required that HART submit yet another revised recovery plan by November 20, 2018, with a financial plan sufficient to cover the total estimated project cost. Exhibit 5 is the September 21, 2018 letter from the FTA describing the requirement to revise HART's recovery plan. On November 1, 2018,



September 2017

During the First Special Session of 2017, the Hawai'i State Legislature approves Act 1, a rail bailout measure that extends the GET surcharge for an additional three years. Act 1 also increases the TAT from 9.25 percent to 10.25 percent for 13 years. The extended GET surcharge and TAT revenue are projected to raise $2.51 billion by the time they sunset in 2030.

Exhibit 5
Letter from the FTA to HART requiring a revised recovery plan

U.S. Department of Transportation
Federal Transit Administration

Administrator

1200 New Jersey Avenue, SE
Washington, DC 20590

SEP 21 2018

Mr. Andrew S. Robbins
Executive Director and Chief Executive Officer
Honolulu Authority for Rapid Transportation
1009 Alakea Street, Suite 1700
Honolulu, HI 96813

Dear Mr. Robbins:

On June 29, 2018, the Federal Transit Administration (FTA) transmitted to you the Final Risk Refresh Report on the Honolulu Authority for Rapid Transportation's (HART) Honolulu Rail Transit Project. The report provided recommendations to HART for adjustments to scope, cost, schedule and project management activities to respond promptly to project risks. The report recommended a cost estimate of $8.299 billion (excluding finance costs), which is $134 million greater than HART's cost estimate of $8.165 billion (excluding finance costs). The report also recommended a Revenue Service Date of September 2026 compared to HART's forecast of December 2025.

The FTA directed HART to revise its Recovery Plan, including the financial plan, to reflect the report's recommendations as well as the final selection of a procurement strategy for the City Center Guideway and Stations (CCGS) segment. The HART has not provided the revised Recovery Plan, nor has HART committed to a date by which it will deliver the revised plan.

The FTA has exercised considerable patience since requesting in August 2015 that HART provide additional information about the project budget and schedule in light of then-apparent problems. The FTA repeatedly has highlighted the need for action while working with HART to identify potential solutions. However, HART's repeated difficulties with identifying cost savings or sufficient funding have led to significant, recurring project schedule delays and cost increases. An illustrative example is that a year after HART's previous financial plan dated September 15, 2017 identified $44 million in City of Honolulu funding for fiscal years 2018 and 2019, the steps to fully commit those funds remain incomplete.

Decisive and expeditious action is needed to prevent further cost escalation. First, FTA asks that a decision on the procurement method for the CCGS segment be made within 30 days of the date of this letter. Second, FTA asks that the revised Recovery Plan—with a financial plan sufficient to cover the total estimated project cost—be provided to FTA no later than 60 days from the date of this letter. Third, FTA asks that the $44 million identified in HART's previous financial plan of September 15, 2017 be fully committed towards the project within 60 days.

Absent receipt of a suitable and timely response, FTA may proceed with the remedies set forth in the Full Funding Grant Agreement for this project.

Please contact acting Regional Administrator Ed Carranza (415-734-9490) in FTA's Region IX Office if you have any questions. As a courtesy, I am also copying Mayor Caldwell on this letter.

Sincerely,

K. Jane Williams

K. Jane Williams
Acting Administrator

Source: HART, highlights added by Office of the Auditor the draft Revised Recovery Plan of 2018 was presented to the Board and subsequently approved on November 15, 2018. The plan includes an updated financial plan as well as the FTA's recommended cost estimate of $9.188 billion, opening date of September 2026, and contingency of $986 million.

HART, however, continues to report conflicting financial information. In the Revised Recovery Plan, HART includes the FTA's estimated cost to complete construction of the Project, but continues to present its own estimates: "Although the Recovery Plan utilizes the cost estimate recommended by FTA, HART intends to meet its commitment to the citizens of Honolulu to complete the Project within the $8.165 billion cost estimate." In the project cost summary of its November 2018 monthly progress report, HART includes the financials from the "2018 Recovery Plan Budget" as well as an alternative set from the "Current Estimate at Completion," HART's own estimates: Total Project Costs – $9.020 billion; Opening Date – December 2025, and a Total Contingency of $853 million.

Some lessons are harder to learn than others.

Conclusion

Over-promise, under-deliver. It has been the hallmark of the Honolulu Rail Transit Project's near-decade long, stop-and-go journey. From Mayor Mufi Hannemann's October 29, 2009, announcement of a "shovel-ready" project that would be on time and on budget to HART's 2014 – 2016 monthly progress reports that the FTA felt may have contained tainted data, the City's optimistic projections eventually met cold, hard reality, which resulted in delays, change orders, cost overruns, and budget shortfalls.

We found that, as the Project progressed and costs swelled from $5.122 billion in 2012 to $9.188 billion in 2018, HART began reporting information to the public that often contradicted its own internal projections or differed from what it was telling the FTA. After years of monitoring the Project and noting resolved deficiencies in HART's planning and budgeting processes, in June 2016, the FTA directed HART to submit a recovery plan to demonstrate that it was taking and will continue taking every reasonable measure to eliminate [recover] the difference between the total project cost and its baseline cost estimate.

HART's September 2017 Recovery Plan featured a cost estimate of $8.165 billion with a revenue service date (opening date) of December 2025 – six years beyond HART's original forecast of March 2019. Subsequently, the FTA directed HART to revise its plan; among the changes it required was that HART use FTA cost and opening date estimates.

HART complied. In its 2018 revised recovery plan, released on November 19, 2018, HART wrote: "Consistent with FTA direction, the Project will be completed at a cost of under $8.299 billion excluding financing costs with a Revenue Service Date (RSD) for the full system no later than September 2026."

But then it continued: "HART's commitment to the residents of Honolulu is to complete the Project at a cost no greater than $8.165 billion and open for full revenue service by December 2025."

Another promise made.

Light at the end of the tunnel?

As of late 2018, the Project was about 46 percent completed, with roughly 10 miles of the elevated guideway in West Oʻahu built and a maintenance and storage facility constructed near Leeward Community College completed. As of late 2018, $3.32 billion has been spent on the Project. The airport segment of the guideway that includes four stations remains under construction; however, two major construction projects remain unawarded.

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Office of the Auditor's Comments on the Honolulu Authority for Rapid Transportation's Response to the Audit Report

WE PROVIDED A DRAFT OF THIS REPORT to the Honolulu Authority for Rapid Transportation (HART) and discussed the report at an exit conference attended by the Chairperson and Vice Chairperson of HART's Board of Directors (Board) as well as the Chief Executive Officer, the First Deputy Executive Director, the Chief Financial Officer, and the Deputy Executive Director of Government Relations. HART provided a written response to the draft report, which is included in its entirety as Attachment 1.[1]

HART does not disagree with or dispute any of the audit findings. HART states that its response "is intended to clarify HART's current or future actions relating to each item." However, the actions described by HART occurred **after** the period of our audit. For that reason, we did not assess any of the actions HART represents it has taken that address or otherwise relate to our findings.

In numbered section 5 of its response, HART noted two factual errors in the report regarding project delays caused by legal challenges. We have revised the report to correct the inaccuracies. Those inaccuracies are part of the factual background material; they are unrelated to the basis for our audit findings, and, therefore, the findings remain unchanged.

Most of HART's response attempts to play down the difficulties that we report encountering in performing our audit work. It would be unfair to conclude that HART did not cooperate at all. HART provided us with access to its Contract Management System (CMS), which is the electronic depository for most of HART's contracts and other related documents; HART management, including the Chief Executive Officer, made themselves available for interviews at our request. However, HART's attempt to characterize the difficulties we report as a difference of "expectations" is untrue and disingenuous.

[1] HART provided a written response to the draft report on January 4, 2019, and a second response on January 7, 2019. The second response states that it "includes input from HART staff and some of the HART Board Members," and the email transmitting the second response says that it "supersede[s]" the earlier response.

We expected full and complete access to HART – including to documents, staff, and consultants. That is the same expectation for every agency that we audit; that expectation is grounded in the Auditor's statutory authority to "examine and inspect **all accounts, books, records, files, papers, and documents** and all financial affairs of every department, office, agency, and political subdivision." (emphasis added).[2] Those expectations were conveyed to management and the Board during our entrance conferences; both pledged HART's full and complete cooperation. Those promises were not kept.

We report many of the difficulties we encountered in accessing information from HART starting on page 7 of the report. Our description of those issues is accurate and, frankly, understated. In addition to the Board's executive session minutes that we never received, there are other documents and information requests that remain unfulfilled and ignored. Even when HART provided documents, in many instances, it took **more than two months** to do so – that delay in providing documents is patently unreasonable, even more so given the limited time in which we had to complete our audit. We reported these issues to HART management and the Board during our audit work.

HART's reference to the number of files and pages of documents to which we had access is also misleading. HART provided us with access – i.e., passwords – to CMS. That access allowed us to search for and copy documents without HART staff having to do that work for us. However, as we report, we encountered files and documents in CMS which we could not access, despite HART's representations that our access to documents was unrestricted. We also never received access that we requested to certain files and documents in HART's computer network drive.

HART – both management and the Board – were well-aware of the difficulties we experienced soon after we encountered them. For that reason, HART's attempt to deflect and discount those problems by characterizing them as efforts that fell short of "the Auditor's expectations" is both misleading and disingenuous.

Simply put, we requested and were promised the full cooperation by and complete access to HART. We expected HART to be good to its word. It was not.

[2] Section 23-5 (a), Hawai'i Revised Statutes.

HART

HONOLULU AUTHORITY for RAPID TRANSPORTATION

IN REPLY REFER TO:
CMS-AP00-03383

January 7, 2019

VIA EMAIL:
lao.auditors@hawaii.gov

Mr. Leslie H. Kondo, State Auditor
Office of the Auditor
State of Hawaii
465 South King Street, Room 500
Honolulu, Hawaii 96813-2917

Dear Mr. Kondo:

Subject: Audit of the Honolulu Authority for Rapid Transportation (HART) – Part 1

Enclosed is HART's Response dated January 7, 2019, which includes comments from the HART Board of Directors, to the Draft Audit Report Part 1 entitled "Report on Escalation of Costs and Delays in Estimated Completion Date of the Honolulu Rail Transit Project" received on December 20, 2018. Please include these comments when you issue your Final Report. HART looks forward to receiving your recommendations associated with this report and providing comments, if any, as we have been able to do with your draft audit report.

Should you have any questions on our Response, please feel free to contact me directly.

Very truly yours,

Andrew S. Robbins
Executive Director and CEO

Enclosure

CITY AND COUNTY OF HONOLULU, Alii Place, Suite 1700, 1099 Alakea Street, Honolulu, Hawaii 96813
Phone: (808)768-6159 Fax: (808)768-5110 www.honolulutransit.org

Responses to State Audit Report Part 1 – Historical Review

January 7, 2019

HART acknowledges the receipt of the Draft Audit Report Part 1 – Historical Review of HART pursuant to Act 1, First Special Session 2017 in a document dated December 21, 2018. HART welcomes the State's constructive, vigorous and healthy oversight and will strive its best to incorporate suggested recommendations within the constraints established by its Board and their policies. We are consistent in our approach to all federal and local oversight, reviews, and audits. This response includes input from HART staff and some of the HART Board Members. It is intended to clarify HART's current or future actions related to each issue.

The report received is a historical review of FY2014-2016 entitled "*Report on Escalation of Costs and Delays in Estimated Completion Date of the Honolulu Rail Transit Project*" (Part 1).

This response document is laid out in multiple parts. Section 1 is an overview of the Audit Reports scope and findings. Section 2 is a response to statements in the Audit Report.

Section 1. Audit Report Scope and Findings

Report on Escalation of Costs and Delays in Estimated Completion Date of the Honolulu Rail Transit Project (Part 1)

We acknowledge the receipt of Audit Report Part 1 on December 21, 2018, covering the period FY2014-2016. The objectives of this audit were described by the State:

1. Determine whether HART management provided accurate and timely Project information, including costs, schedule, and estimated completion dates, to the HART Board of Directors (Board), State and County officials, and the public beginning 2014.
2. Review and analyze current project costs against the Full Funding Grant Agreement to identify areas of significant cost increases and schedule delays and the reasons for those increases and delays.

The Report's findings as stated in the document are:

- The City prematurely entered into contracts under an artificial timeline and fragile financial plan.
- HART's inaccurate reporting of Project cost and completion schedule undermined Board oversight and eroded public confidence.

HART's responses to these findings are in Section 2 below.

Section 2. Responses to Statements Made in the Audit Report

In response to these findings, HART notes that since January of 2017, under the leadership of the interim CEO and now the current CEO, we have applied and practiced prudent accounting through a system that tracks all financial costs. Using this information, the HART Board is provided and updated with financial reports on a monthly basis. HART has established and enforced a robust risk assessment and management system, developed a well-documented and a participatory change order management system, and has applied best practices and effective front-line construction management. In addition, the Board has established several committees to provide direction and evaluate functions of HART.

1. **Introduction (Page 2)**

The Audit Report asserts that City opted to "short-cut" archaeological reviews. This is an inaccurate characterization – the City did not decide to short-cut archaeological reviews. Rather, the State agency charged with interpreting and implementing the historic preservation laws and rules determined, and the First Circuit Court agreed, that a phased AIS approach satisfied legal requirements. Given both SHPD's agreement and the First Circuit Court's award of summary judgment in the City's favor, the decision to proceed with a phased approach to the AIS was undeniably reasonable and sound. The fact that the Hawaii Supreme Court later determined that the lower court, the State, and the City had all erred does not detract from the legitimacy of that initial decision when made.

The City did not decide to short-cut archaeological reviews. Rather, the State agency charged with interpreting and implementing the historic preservation laws and rules determined, and the First Circuit Court agreed, that a phased AIS approach satisfied legal requirements.

2. **Current Funding of the Honolulu Rail Transit Project (Page 3)**

The Audit Reports assert that the GET and TAT can only be used for "capital costs" characterized as "expenses directly related to construction or land acquisition for the Project." HART would like to clarify that HRS §46-16.8 specifically includes in the definition of "capital costs," for counties with a population greater than 500,000 "non-recurring personal services and other overhead costs that are not intended to continue after completion of construction of the minimum operable segment of the locally preferred alternative for the mass transit project." This was not repealed by Act 1 and remains the statutory definition of "capital costs."

3. **Scope & Methodology (Page 6)**

The audit focused on FY2017-2018. Auditors conducted interviews with HART management, staff, the Board chair, and certain consultant contractors. HART questions if the Auditors also took the opportunity to interview past Board Members and past Board Chairs for a wider picture of past activities.

4. **Difficulties with access to information (Page 7)**

While carrying out their mandate of designing and constructing a rail system, HART staff worked with the Auditors to accommodate their requests. HART believes that it was cooperative although it is acknowledged that timeliness of response was an issue and is an area of improvement in the future. Regrettably, HART's overall efforts fell short of the Auditor's expectations. However, this was not because of a deliberate refusal to provide the full cooperation pledged to the Auditor by the Board and HART.

Responses to State Audit Report Part 1 – Historical Review

January 7, 2019

During the Audit process, the Audit Team had access to over 1,600 electronic files consisting of 36,400 pages to the audit teams. These files included 472 emails, over 5,000 pages of Excel data, 350 pages in Word, and over 30,000 PDF pages. HART also provided numerous hard copy documents for the audit staff to review, in addition to the electronic documents.

> While carrying out their mandate of designing and constructing a rail system, HART staff worked with the Auditors to accommodate their requests, although it is acknowledged that timeliness of responses was an issue.

Colocation

Auditors and their consultants were provided office space and a computer with internet access within the HART offices from inception of audit to December 2018 (end of audit).

> HART provided access to:
> *over 1,600 electronic files consisting of 36,400 pages*
> including:
> *472 emails*
> *5,000 pages of Excel data*
> *350 pages in Word*
> *30,000 PDF pages*
> *35 interviews with 23 staff*

Interviews

HART participated in over 35 interviews with 23 staff, in addition to follow-up discussions and impromptu questions.

Executive Session Meeting Minutes

HART provided the publicly available Board meeting minutes as
HART provided the publicly available Board meeting minutes as
requested by the auditors. With respect to the non-disclosure of Board Executive Session minutes, legal impediments posed a challenging dilemma to the Board in preserving its attorney-client privilege and honoring certain contractual and legal obligations of confidentiality and privacy.

CMS

The HART CMS Support Team was tasked to provide access to all auditors from DAGS, State Office of the Auditor and consultants, City and County of Honolulu Auditors, and FTA. While every effort was made to provide full access to the system, we encountered unknown technology barriers; this was a great frustration to the CMS Support Team, HART management and to auditors. The issues experienced were technical (IT) in nature and affected both HART staff and auditors alike. Electronic access to HART's records is imperfect due to difficulties with the non-supported Oracle Contract Management System. HART is taking action in this area in early 2019 to help correct these issues. There was no intent to keep the auditors from accessing files.

> Despite the difficulties mentioned above as well as shortcomings in the timeliness of cooperation, the Auditor concluded that they believe the evidence obtained by them was sufficient and appropriate to support their findings and conclusions in the report.

Conclusion

Despite the difficulties mentioned above as well as shortcomings in the timeliness of cooperation, the Auditor concluded that they believe the evidence obtained by them was sufficient and appropriate to support their findings and conclusions made in the report.

5. **Lawsuits Delay Construction call out box (Page 13)**

In the section headed "January 2011," there is an erroneous referenced to "…the Intermediate Court of Appeals upholds the lower court's ruling." There was no ICA decision and the case was transferred to the Hawaii Supreme Court.

In the section headed "May 2011," HART believes that the Auditors statement about a lawsuit filed by an unsuccessful bidder is in fact, in reference to delays caused by bid protests. If so, the statement should be expressed differently.