

HART

HONOLULU AUTHORITY for RAPID TRANSPORTATION

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BUSINESS PLAN for FY2013

June 28, 2012

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HART Business Plan

INTRODUCTION

This document provides a second year Business Plan for the Honolulu Authority for Rapid Transportation (HART) covering fiscal year 2013 (July 1, 2012, through June 30, 2013). It is designed to describe HART's business activities and resource allocations during the agency's second year of operations in accordance with its responsibility for building and ultimately operating the Honolulu Rail Transit Project, from East Kapolei in West O'ahu to Ala Moana Center (HRTP).

The FY2013 HART Business Plan describes why HART exists as an organization, the goals and performance measures the agency has established, what it will seek to accomplish during the second year of operations, and how it will go about performing its responsibilities. The HART Board of Directors (BOD) will review and approve the FY2013 Business Plan in conjunction with its review and approval of a FY2013 Budget. In the future, it is envisioned that HART will prepare an annual Business Plan with a three-year moving timeframe. The annual Business Plan will provide a projection of key operating and financial information for the two years beyond the fiscal year which is the focal point of the Plan in order to provide a look-ahead for management planning and performance trend oversight purposes.

Summary of FY2012 Progress

FY2012 was HART's first year of existence. During the year, the HART BOD, staff, and consultant team made substantial progress toward achieving the vision of bringing rapid transportation to O'ahu. Shown below is a brief summary of what was accomplished during HART's first year:

- The HART BOD adopted a series of policies to guide agency activities including Board operating rules, a comprehensive Financial Policy, policies on ethics, procurement, change orders, Equal Employment Opportunity, and transparency as well as an Operating and Capital Budget and a Six-Year Capital Improvement Program.
- The BOD completed the recruitment of a permanent Executive Director/Chief Executive Officer (CEO), hiring Daniel Grabauskas, an experienced former CEO of the Massachusetts Bay Transportation Authority in Boston.
- HART recruited its Chief Financial Officer (CFO), Diane Arakaki, who has extensive experience in governmental financial management.
- Management developed and implemented a series of administrative policies and procedures to ensure that good business practices are being employed by HART.
- The agency received several key approvals from the Federal Transit Administration (FTA) for advancing the HRTP, including approval to enter Final Design and approval to begin construction on the first major components of the future rapid transit system, bringing the project closer to securing FTA Section 5309 New Starts Funding.

- Procurement of a contractor for systems and vehicles as well as future operations of the rapid transit line was completed and the contract awarded following a thorough financial and technical vetting of the selected contractor.
- The design contractor for the Airport guideway segment was selected.
- Continued Archaeological Inventory Survey work along the alignment with no *‘iwi kupuna* discovered to date.
- Commenced construction in April 2012 in the West O‘ahu /Farrington Highway section with the drilling of the first of approximately fifty structural columns in that 2.5 mile section of the project.
- The first completed column, located in East Kapolei, was unveiled on June 8, 2012.
- HART recently received reaffirmations of support from the highest levels of government, including President Barack Obama, U.S. Secretary of Transportation Ray LaHood, FTA Administrator Peter Rogoff, U.S. Senators Daniel Inouye and Daniel Akaka, and U.S. Representatives Mazie Hirono and Colleen Hanabusa.
- General Excise Tax Surcharge (GET) collections to date total \$858 million -- \$8 million more than forecast in the September 2011 Financial Plan, and 25% of total needed.
- Partnerships with stakeholders along the alignment have been forged, and include Leeward Community College, the Department of Hawai‘ian Homelands, and the Queen’s Medical Center.
- Public outreach in the form of Community Informational Meetings, HART informational booths at various public events, and “Walk the Line” events helped increase public awareness of the project.
- In its commitment to transparency, over 150,000 pages of project documents have been made available to the public on the HART website.
- HART, in coordination with FTA, worked to complete many items required for the Full Funding Grant Agreement (FFGA), and on June 29, 2012, submitted to FTA the request for an FFGA. This also included completion of the Financial Plan.

HART Business Strategy

Public transportation is a service business that utilizes both human and physical assets to deliver its product in the marketplace. A transit agency is in competition with the automobile to increase its share of the travel market. Success in achieving a greater market share requires that a transit agency have a clear and understandable strategy for how it will go about delivering its product to prospective consumers. As a public agency, HART's business strategy must not only be easily understandable to the agency's employees and contractors but must also be understandable to the general public.

This section of the FY2013 HART Business Plan describes the basic elements of the business strategy for the agency. These elements are described below and include statements on why the agency exists and what it is trying to achieve, as well as a framework for how HART will go about accomplishing what the public has asked it to do. This framework includes Goals and a "Balanced Scorecard" (BSC) for measuring and tracking over time how well HART is doing its job. (Note: A later section of the FY2013 Business Plan describes the organizational development strategy HART is utilizing to achieve its Mission and Vision and accomplish the Goals the BOD has established.)

Mission Statement *(why the agency exists)*

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

Vision Statement *(what HART is trying to achieve)*

In accomplishing its Mission, HART will contribute to the quality of life on O'ahu by:

- **Mobility**: Improving mobility for all residents, visitors, and businesses on O'ahu particularly in the densely populated and congested corridor along the urbanized southern shore of the island.
- **Reliability**: Improving the reliability of travel in the corridor by offering a travel choice that will not be subject to at-grade level traffic congestion.
- **Land Use**: Supporting the City's land development policy by providing access to an area targeted for development of a new urban center and helping create transit-oriented development along the rail line.
- **Equity**: Providing people who are dependent on public transportation with an improved means of accessing economic and social opportunities and activities.
- **Sustainability**: Protecting the environment and lessening dependence on non-renewable fossil fuels.

(Note: The above Vision Statement is based in part on the Environmental Impact Statement prepared for the HRTP.)

Goals (how HART will go about accomplishing the Vision and fulfilling the Mission)

In order to accomplish its Mission and realize the benefits described in the Vision, HART must accomplish the following goals:

1. **Project Delivery**: Complete the Project on time and within budget while:
 - Ensuring the safety and security of the public, HART employees, and construction workers;
 - Minimizing the impacts on adjacent natural, cultural, and built environments and communities; and
 - Fulfilling environmental mitigation commitments.
2. **Service Delivery**: Ensure that the design and actual construction of the project will facilitate the delivery of safe, high quality, and cost-efficient service in the future.
3. **Stewardship of Resources**: Maintain public trust through the prudent and transparent use of financial, human, and environmental resources.
4. **Livability**: Support the creation of mixed use, pedestrian-friendly, compact development along the rail line.
5. **Partnerships**: Pursue partnerships with the private sector to create economic opportunities and generate income and cost savings for the rail transit system.
6. **Agency Culture**: Foster an organization that is open, accountable, inclusive, and delivers better than promised results.

Performance Metrics

Performance expectations and metrics flow out of the Vision and Goals for the agency and are intended to help an organization measure its progress toward achieving the Vision and Goals. Performance metrics for HART will help the BOD and agency management, as well as the Authority's stakeholders and the general public, measure and evaluate the agency's progress and will aid in maintaining transparency on what HART is doing with taxpayer money. Management staff will compile and provide periodic reports to the BOD on the performance metrics. The information will also be reported to the City Council and the community in an annual report.

Performance metrics for HART have been incorporated into a BSC for the agency. The BSC establishes and will track over time metrics that measure performance in achieving the Goals which the BOD has established for the agency. The proposed HART BSC is shown in **Appendix A** to the Business Plan.

As shown in Appendix A, the HART BSC is structured to provide performance measures and metrics for each of the six Goals the BOD has approved. The BSC establishes the fiscal year targets or objectives for each measure. The BSC indicates whether a specific performance measure or metric is a "Lead" or "Lag" indicator¹. Space is provided for HART management to

¹ A "lead" indicator implies that the item being measured is intended to drive or create an end result whereas a "lag" indicator is intended to simply measure the end result from a particular activity.

provide information on actual results or status for each of the performance measures and metrics delineated in the BSC during its periodic reports to the HART BOD.

In 2013 and for the next several years HART will be engaged in completing the design and construction of the H RTP. Actual operation of rail service will not occur until 2016. As such, the BSC shown in Appendix A is heavily oriented toward project implementation. The BSC does include some measures dealing with Service Delivery as it relates to the current project implementation stage of the project. Additional metrics will become meaningful when actual revenue service begins; illustrative examples of such metrics include:

- Ridership level.
- Reliability measures including:
 - On-time departures/arrivals.
 - Miles between mechanical failures.
 - Elevator and escalator availability (% of time available during operating hours).
 - Fare collection equipment availability (% of time available during operating hours).
- Safety and Security measures including:
 - Accidents per 100,000 passengers.
 - Security incidents per 100,000 passengers.
 - Employee on-the-job injuries.
- Financial measures including:
 - Operating Ratio.
 - Cost per vehicle hour and vehicle mile.
 - Cost per passenger.
 - Accident Claims received/closed/outstanding.

Given the current project implementation of HART's business activities, it is envisioned that HART management will provide quarterly updates of the HART BSC in reports to the BOD and the public. When actual revenue service begins on the rail line, monthly BSC reports will become relevant.

Using a BSC which ties to the Goals that HART has established will enable the agency to evaluate its progress on achieving the agency's Mission and Vision and to report to its stakeholders and to the community.

FY2013 Work Program

Agency Business Operations

HART came into existence July 1, 2011, and has functioned to date as a semi-autonomous agency of the City & County of Honolulu government. During FY2013, HART will continue to use various City business systems and administrative practices when conducting the agency's business activities (e.g. Department of Transportation Services (DTS) procedures and the City's accounting and payroll systems). In addition, HART will continue to receive services provided by other City Departments (e.g. Budget and Fiscal Services, Information Technology, Corporation Counsel, and Human Resources). Memoranda of Understanding (MOU) or Memoranda of Agreement (MOA) with the City Departments set forth the scope and terms of the services to be provided. This support from the City will enable the agency to continue to concentrate its resources on the implementation of the HRTP. During FY2013 and beyond, HART will evaluate the extent to which it should develop its own business systems.

HART will need to complete a number of steps during FY2013 to further develop the organizational capacity and capability to fulfill its Mission as described in the preceding section. Several of the actions that will be taken are designed to ensure that HART will be able to establish and maintain eligibility to receive Federal funding for the HRTP. A preliminary listing of the tasks that will be undertaken in FY2013 is as follows:

- Continue to update BOD operating procedures and practices.
- Recruit key management, technical, and support staff.
- As required, adopt or modify BOD and HART policies guiding the agency business activities (e.g. financial policy and procurement policy).
- Continue to add and modify administrative procedures and practices that are specific to a transit agency in areas such as procurement and contract administration, safety and security, employee relations, and management reporting.
- Develop a management reporting system on key performance metrics.
- Prepare within the first six months of FY2013 a six-year capital improvement plan for the agency.
- Begin development of a brand identity for HART.
- Regularly update and communicate with stakeholders, including the Mayor and City Council, to ensure a flow of information regarding the progress of the Project.
- Continue the creation of an organizational structure and culture that will enable the fulfillment of the agency's Mission and Vision.

HRTTP Project Implementation

Project Description:

The HRTTP is a proposed 20-mile light metro rail line in an exclusive right-of-way with fully automatic (driverless) train operation. All of the alignment, with the exception of the access and egress from the Maintenance and Storage Facility and the Leeward Community College Station, is elevated above existing highways and arterial roadways. The rail line includes 21 stations from East Kapolei, in West O‘ahu, to Ala Moana Center. Initial service is scheduled to start in 2016 from the western end of the alignment at the East Kapolei Station to the Aloha Stadium Station with full service operations to Ala Moana Center starting in 2019. Full service is anticipated to operate 20 hours per day, with 3-minute headways during peak periods and 6-minute headways in the midday. End-to-end travel time is estimated to be 42 minutes. Service will be provided by 2-car trains. Average weekday rail boardings in 2030 are projected to be about 116,000 passengers. A peak hour directional maximum load of about 8,000 passengers per hour is anticipated in 2030.

The rail line will serve the urbanized southern shore of O‘ahu, a narrow corridor between the Pacific Ocean and two mountain ranges. The rail line will serve key employment centers including Downtown Honolulu, Joint Base Pearl Harbor-Hickam, Honolulu International Airport, and Ala Moana Center. The area served by the rail line includes ‘Ewa, a portion of Central O‘ahu, and the Primary Urban Center, having a population of about 700,000 or approximately 80 percent of O‘ahu’s total. About 40 percent of this population is in the Primary Urban Center area. These areas also include about 440,000 employment opportunities or about 88 percent of O‘ahu’s total. Over 60 percent of this employment is in the Primary Urban Center area.

Appendix C provides a more detailed description of the Project along with background on the planning for the Project.

Project Status:

- Currently HRTTP is in final design phase of project development. An FFGA with the FTA for \$1.55 billion of New Starts funding is expected in the second quarter of FY2013. As part of the documentation required for the FFGA, the Project cost estimate has been updated to reflect the status of design and contracts awarded to date. The Financial Plan for the Project was revised to reflect the updated cost estimate and the latest projections for project funding sources. The Contract Packaging Plan, Master Project Schedule, and Risk Analysis have also been updated.
- Contracts for Program Management Support and General Engineering services are continuing. The HART Operating Budget provides funding for 142 positions for the Project.
- A contract has been awarded to the right-of-way consultant to assist HART staff with continuing property acquisition and relocation activities primarily for Airport and City Center sections.
- Environmental permitting and compliance work is continuing for all construction contracts.

- For the Design-Build (DB) contracts:
 - The West O‘ahu /Farrington Highway Guideway design is essentially complete. Utility relocations, shafts, and columns are underway. At the end of FY2013 overall construction is scheduled to be 50% complete.
 - The Kamehameha Highway Guideway contract design will be completed by the end of FY2013 with construction scheduled to be 20% complete.
 - Supporting the guideway construction is the essential guideway deck section casting yard which will be operational in FY2013.
 - The Maintenance and Storage Facility design will be completed and construction is scheduled to be 50% complete at the end of FY2013.

- The Design-Build-Operate-Maintain (DBOM) Core Systems contract for train control, communications, operations and maintenance, and Revenue Vehicles is in the design phase and this effort will continue throughout FY2013 with contract completion at that time estimated at 15%.

- For the Design-Bid-Build (DBB) contracts:
 - The Airport Guideway and Utilities design is underway and will continue throughout FY2013.
 - The City Center Guideway and Utilities design will begin in August 2012 and continue throughout FY2013.
 - The Farrington Highway Station Group design is underway and will be completed in FY2013.
 - The West O‘ahu Station Group design has been initiated and will be substantially complete at the end FY2013.

Land Use Connection: Transit-Oriented Development

The Revised Charter of Honolulu (Charter or RCH) authorizes HART “to promote, create and assist transit oriented development projects near fixed guideway system stations that promote transit ridership, and are consistent with the intent of the adopted community plans and zoning.” RCH 17-103.2(n). Likewise, the Charter mandates that the Executive Director “administer programs promoting appropriate developments near transit stations, including compilation of city incentive programs,” and “review development projects having significant impact on the operation of the fixed guideway system.” RCH 17-104(m) and (n).

HART is the steward of a large-scale public investment, which includes important real property assets essential to HART’s operation. These assets can also contribute to the ongoing financial viability of the transit system. Federal, State, and regional policy direction to concentrate growth around transit stations further enhances the value of these assets. By promoting high quality, more intensive development on and near transit properties purchased or created by HART, the agency can increase ridership, support long-term system capacity and generate new revenues for transit, such as increased fare collection from increased ridership and changes in the fare policy, and joint development (JD) of transit properties, not anticipated during project planning. Also, such development creates attractive investment opportunities for the private sector and facilitates local economic development goals.

The State and City control the planning and permitting authority for most of the land along the 20-mile corridor. Coordination of these activities between the respective agencies is necessary to successfully leverage public and private investment in the corridor. In coordination with HART, both the State and City are preparing station area plans and revisions to the land use regulatory

requirements, which will provide the policy framework for private development. In this regard, HART will assist in the development of a program to implement a transit-oriented redevelopment district by working with the City (including City Council and the Department of Planning and Permitting (DPP)), related State entities (including the Hawai'i Community Development Authority), and private developers for planning districts located in and around rail transit stations. The program would redevelop the surrounding area into a vibrant mixed-use neighborhood consisting of workforce and affordable housing, retail shopping locations, and other infrastructure improvements necessary to improve safety, promote healthy lifestyle habits such as walking and biking, and increase rail ridership.

For the City, DPP is responsible for developing transit-oriented development (TOD) neighborhood plans and zoning regulations for station TOD areas for the eventual adoption by the City Council. During FY2013, HART planning staff will continue to provide technical support in areas such as system description, modal connectivity, station access, and safety and security to DPP in its planning efforts, which will include coordination with other cognizant City and State agencies, special interest groups (e.g. disabled, and elderly), the private sector, and the public at community meetings to develop the TOD plans for the areas surrounding the transit stations.

In addition to providing TOD planning support, HART planning staff will focus efforts on identifying opportunities for JD near to or integrated with stations. This work will build upon TOD planning currently underway or planned, and will conform to the community plans and zoning proposed by DPP and adopted by the City Council. HART planning staff will seek advice, planning, urban design support, and targeted recommendations from DPP in an effort to explore potential JD opportunities (transit agency owned land within an easy walk to transit) at various stations. HART could also look for the assistance of the State's Public Land Development Corporation (PLDC) in identifying potential private and public partners in the joint development of HART right-of-way. In the event that HART decides to partner with the PLDC, an MOU or MOA that outlines the responsibilities of each entity shall be executed.

During FY2013, HART staff will actively pursue, develop, and execute MOUs and MOAs with public and/or private owners of land within close proximity of each planned transit station to directly access the station from their proposed development. The DPP will be a critical partner in developing these connections, but need not be a signatory to the MOUs and MOAs.

Procurement Plan

Agency Business Operations

HART will conduct routine procurements for needed services, equipment, and supplies related to support the conduct of agency business operations utilizing City procedures and group discount opportunities.

Two information technology acquisitions will be undertaken in FY2013 to improve the efficiency of agency business operations:

- Creation of a project-wide network for the Contract Management System using new local servers housed in rented space at the DRFortress facility near the Honolulu Airport.
- Acquisition of AutoCAD[®] equipment.

Project Implementation

The current Contract Packaging Plan for the H RTP includes 49 separate contracts. Of these contracts, 18 were awarded and notices to proceed (NTP) were issued through the end of FY2012. The awarded contracts include three DB contracts and one DBOM contract, along with multiple smaller contracts. The total value of all contracts awarded to date is approximately \$3.3 billion including the \$823 million Operate & Maintain (O&M) portion of the DBOM contract. All of the awarded contracts are in various stages of implementation and will be subject to contract administration and oversight by HART staff and support consultants during FY2013.

During FY2013, the following H RTP contracts will be in procurement with key milestones in the FY2013 quarter (Q) shown:

Construction & Installation:

MI-930	Elevators & Escalators Furnish & Maintain	Award 4Q
DBB-505	Airport Section Utilities Construction	Advertise 3Q

Final Design:

FD-440	Airport Section Stations	Award & NTP 2Q
FD-530	City Center Section Guideway & Utilities	Award & NTP 1Q
FD-540	Dillingham Section Stations	Award & NTP 4Q
FD-545	Kakaako Section Stations	RFQ issued 2Q

Construction Engineering & Inspection Services:

MM-180	W. O'ahu & Farrington Highway Stations	Award & NTP 2Q
MM-380	Kamehameha Highway Stations	RFQ issued 3Q
MM-500	Airport & City Center Utilities	Award & NTP 2Q

H DOT Consultant Services & Other Agreements:

MM- 945	On-Call Construction Contractor	RFQ issued 3Q
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HART Organizational Development Strategy

Background

Planning and development of the H RTP was the responsibility of DTS for six years. The H RTP was managed through DTS' Rapid Transit Division (RTD). DTS/RTD managed the completion of the required planning, economic, engineering, and environmental studies needed to advance the Project through the stages of the FTA's New Starts project development process including: analysis of alternatives; technology and alignment selection; conceptual and preliminary engineering (PE) work; the preparation of a Final Environmental Impact Statement (FEIS); and the development of a contracting strategy for actually constructing the Project.

Because of the uncertainty surrounding whether the City would receive the funding and approvals needed to advance the Project, the strategy DTS/RTD employed was to maintain a relatively small staff and hire consultants to provide the expertise necessary to perform various aspects of the required work. The City Project staff was supplemented by a Program Management Support Consultant (PMC) that has provided experienced and technically proficient personnel to fill key positions and roles in the Project organization. PMC provided services have included professional, technical, managerial and other support services to initiate and complete the PE/EIS phase of the Project and initiation of final design and construction. PMC personnel have functioned as staff embedded within the DTS/RTD assisting City employees in managing and overseeing the work.

In addition, DTS/RTD retained the services of a General Engineering Consultant (GEC) to undertake the planning, economic, engineering, and environmental work that was required to advance the Project through FTA's New Starts process. As part of this effort, the GEC conducted engineering and technical studies, including conceptual engineering, to support the preparation of the EIS, and PE work to support the City's request to advance to final design. The GEC assisted the DTS/RTD with preparing competitive procurement documents for the various DB contracts and the Core Systems DBOM contract.

The Project has passed the critical milestone of completing the FEIS and obtaining a Record of Decision (ROD) issued by the U.S. Department of Transportation in accordance with the National Environmental Policy Act (NEPA) and Hawai'i State law. With the issuance of the ROD, FTA provided authority to begin property acquisition and undertake utility relocation work. As noted in the FY2013 Work Program section, DB contracts for initial phases of the Project have already been awarded and construction work has started on the initial phases. HART has now begun final design on other elements of the Project.

With the start-up of HART on July 1, 2011, RTD ceased to exist and the RTD staff, including the embedded PMC staff, was transitioned to become the core staff of HART. In addition, the GEC continued to perform its scope of work under the auspices of HART.

FTA Requirements

Because the HRTP will be funded in part with Federal dollars through the FTA, HART must demonstrate that it meets FTA requirements for grantees pursuing a major investment project like the HRTP. Principal among these requirements is that the grantee must exhibit the “technical capacity and capability to efficiently and effectively” carry out the project. The FTA conducts an assessment of a grantee’s technical capacity and capability by looking at a number of things including the following:

- Organizational structure.
- Staff qualifications and experience.
- Roles, responsibilities, and interfaces among key project team members laid out in a responsibility matrix.
- Staffing plan showing labor distribution over the life of a project.
- Copies of various key procurement documents.
- Description of management processes and procedures including the division of decision-making authority between the BOD and management staff; financial and procurement policies and procedures; and community outreach and relations efforts.
- Resumes of project team members.

The above information is embodied in a Project Management Plan (PMP). The PMP is periodically updated as a project moves through the various stages of project development. The current PMP for the HRTP is in the process of being updated for the next project milestone, the FFGA. With each successive update of the PMP, the expectations for the technical capacity and capability of the grantee increases. In other words, the grantee must demonstrate a growing capacity and capability to match the increasing scope, complexity, and magnitude of the work to be performed in the next project phase in order to receive FTA approval to proceed. HART is scheduled to be in position to receive an FFGA in the second quarter of FY2013 assuming everything is in order.

As a result, ensuring that HART will meet the FTA’s technical capacity and capability requirements is a major factor in the formulation of the organizational development strategy embodied in the PMP and described herein.

HART Organization

Work on the Project is now in the final design phase of FTA’s New Starts process. Work continues on property acquisitions and owner/tenant relocations and utility relocation. Limited construction work authorized by FTA through Letters of No Prejudice on DB portions of the Project has begun.

The organizational approach embodied in the PMP for FFGA includes an expansion of staff to 142 positions and continues the role of the PMC as seconded staff within HART. **Appendix B**

provides an organizational chart that depicts what the Authority's functional structure will look like as a semi-autonomous agency within the structure of the City and County of Honolulu. Also provided is a series of staff organization charts which shows the 139 positions that make up the proposed FY2013 HART staff. Of these positions, 30 or roughly 20% of them are expected to be PMC provided staff.

The GEC's role has evolved to reflect the start of final design and construction work. The GEC will oversee final design efforts and provide construction management and oversight services including resident engineering, office engineering, and inspection. This includes performing quality assurance inspections of all contractor activities; reviewing all contract document submittals including shop drawings and specifications; reviewing contractor invoices; reviewing requests for information; reviewing requests for change; conducting inspections, value engineering, and reviewing change order estimates. The GEC will provide Construction Engineering and Inspection services for HART's DB contracts.

The PMP calls for retaining the services of engineering design consultants (EDCs) to develop final detailed designs of the remaining Project elements that will be procured through open competitive bidding. This does not include the three DB contracts or the Core Systems and Vehicles contract since final design is a function within the scope of those contracts. This does include stations, the Airport and City Center guideway phases and various fixed facilities. Fixed facilities design includes the design of civil and structural facilities, trackwork, utilities, the Pearl Highlands parking structure and access ramps, landscaping and some systemwide elements. The GEC will oversee the final design work of the EDCs. The GEC also continues to provide technical studies and management support for implementation of the Section 106 Programmatic Agreement 2nd Mitigation Support for the ROD.

Future Organizational Development

At present and for the next three to four years, HART is a project development agency with no daily operating or service delivery responsibilities. This, of course, will change as the rail transit project gets completed and actual revenue service begins operating initially in 2016 with full service along the entire alignment starting in 2019. The staffing needs and business systems needs of the agency will evolve over time as the change from project development to operations and service delivery occurs. How well this transformation is accomplished will be important to the success of the agency in accomplishing its Mission and Vision. The strategy for managing this evolution is outlined below:

- Phase out use of PMC and build HART staff capability.
 - Identify those positions that HART will need long term for operations and the planning of extensions and seek to fill these positions with direct hires.
 - Examples: Deputy CEO, Chief Operating Officer, Chief Engineer, Internal Audit, Marketing, Planning, Property Management.
 - Use PMC to temporarily fill these roles when recruitment is unsuccessful or cannot be completed in a timely fashion.
 - PMC employees will mentor and help train HART staff and new hires; this may require some overlapping of positions.
 - Retain the services of the City's Department of Human Resources to develop an organizational development plan for HART including phases of organizational development, a classification and compensation structure, and recruitment and employee development strategies.

- Current PMC contract expires in February 2015; the contract may need to be extended for an additional period depending on HART's success in staff recruitment.
- GEC and EDCs will continue their roles/scope until the project construction, system integration and testing, and start-up work is completed.
- Develop internal business processes and systems that fit the needs of the transit system. Move away from using City processes and systems wherever it makes the most sense for HART to achieve its Mission, Vision, and Goals.
- Develop a seamless multi-modal (bus and rail) transit system.
 - Engage in joint planning with DTS and "TheBus" management (O'ahu Transit Services) for reconfiguration of the bus system to complement rail.
 - Establish a joint bus-rail fare collection system (hardware and software) and a revenue processing set-up to reduce interface problems and achieve economy of scale cost savings.
 - Encourage DTS to update /improve the bus fare collection system prior to the start of rail operations.
- Future issues that will need to be addressed:
 - Programming of bus fare collection system improvements to interface with rail fare collection needs to be pursued in the very near future.
 - The process for setting fares between the HART BOD and City Council will need to be addressed.
 - Operating support from the City for the rapid transit operation will be required as delineated in the Financial Plan.
 - The possibility of extending the GET surcharge to cover all transit system operating subsidy needs (bus and rail) may warrant exploration.
 - Development of operating policies and rules and the identification of any implications for project design and the operating and capital improvement budget.
 - Pursuing opportunities to make joint use of transit facilities and assets to generate income.

FY2013 Operating and Capital Budgets

HART staff prepared and submitted preliminary FY2013 Operating and Capital Budgets to the HART BOD Finance Committee in November 2011. On December 1, 2011, the HART Interim Executive Director transmitted the proposed FY2013 budgets to the Mayor and the City Council. This section of the FY2013 Business Plan describes in summary form the Operating and Capital Budgets. An original request was presented to the City Council Budget Committee on March 17, 2012. The Operating Budget portion of this request was subsequently amended by the HART Finance Committee on May 3, 2012, based upon recommendations of the new Chief Executive Officer and re-submitted to City Council. The final version of the FY2013 Business Plan will reflect the final FY2013 Operating and Capital Budgets adopted by the HART BOD.

The total budget request for FY2013 approved by the HART BOD Finance Committee on June 28, 2012, was as follows:

Operating Budget	\$ 21,069,193
Capital Improvements	<u>491,584,960</u>
Total FY 2013 Budget Request	\$512,654,153

FY2013 Operating Budget

The FY2013 Operating Budget has three major expense categories: Personnel, Current Expenses, and Equipment/Software (unit cost of \$5,000 or more and a useful service life of less than 5 years). The table below provides a breakdown of these three cost components for FY2013 and a comparison against the budgeted amounts for FY2012. The FY2012 expended/encumbered amounts presented in the table are preliminary; there will be adjustments made through August 2012 to record payable amounts.

Expense Category	FY2012 Budget	FY2012 Exp/Enc ¹	FY2013 Budget
Personnel	\$13,302,491	\$ 7,681,905	\$12,971,682
Current Expenses	7,280,135	4,371,588	8,081,511
Equipment & Software	--	--	16,000
TOTAL	\$20,582,626	\$12,053,493	\$21,069,193

¹Unadjusted expended/encumbered amounts as of 6/30/2012 (Accounting Period 12)

The Personnel category of the FY2013 Operating Budget includes funding for 139 positions. This compares to 136 positions authorized in the FY2012 Budget and 110 positions in 2011. As described in the Organizational Development Strategy section, the staffing level proposed is designed to ensure that HART has the technical capacity and capability to manage the implementation of the H RTP and meet the requirements of the FTA for managing major “New Starts” projects that are receiving FTA funding. The following chart provides a summary breakdown of the positions reflected in the FY2013 Budget by major job category along with comparable information for the approved FY2012 Budget staffing plan:

Job Category	FY2012	FY2013
Executive Management	3	4
Engineering/Design/Construction Management	43	43
Project Control, Configuration and Real Estate	39	33
Budget, Finance and Procurement	--	15
Other Professional	19	16
Administration and Support	32	28
TOTAL	136	139

In FY2012, the office of the Executive Director/Chief Executive Officer was established consistent with the Charter Amendment that created HART. In addition, the CFO will oversee a new division within HART that will initially include the budget, finance, and procurement functions for the agency.

The following table provides a breakdown of the reimbursements to other City departments included in the proposed FY2013 Budget:

City Department/Purpose	Amount
Corporation Counsel – Staff Salaries	\$ 546,763
Corporation Counsel – Current Expenses	37,500
Design & Construction – Staff Salaries	151,017
Budget & Financial Services – Staff Salaries	61,946
Fringe Benefits Associated with Above Salary Items	322,276
5% Reduction to Salaries and Fringe Benefits	(54,100)
CASE – Central Administrative Services Expenditure	1,014,467
TOTAL	\$ 2,079,869

FY2013 Capital Budget

The FY2013 Capital Budget is made up primarily of expenses related to the design and construction of the H RTP consistent with the work planned for the year as described in the Work Program section of this Business Plan. The table below compares the FY2013 planned expenditures by project budget component against the FY2012 budget. The FY2012 expended/encumbered amounts presented in the table are preliminary; there will be adjustments made through August 2012 to record payable amounts.

Capital Budget Elements	FY2012 Budget	FY2012 Exp/Enc¹	FY2013 Request
Consultant Services	\$ 41,188,800	\$ 22,363,290	\$ 64,593,540
Design Services	91,541,904	93,085,529	72,673,230
Programmatic Agreement	2,850,000	100,000	100,000
Utility Relocation	7,454,710	22,787,313	17,342,190
Construction	127,843,243	64,841,133	211,402,500
Construction Mgmt./Inspection	7,301,000	0	32,563,920
Equipment	10,558,000	80,200,000	55,556,510
Land Acquisition	63,546,105	10,887,005	34,181,200
Relocation	2,352,518	1,429,566	3,171,870
TOTAL	\$ 354,636,280	\$295,693,836	\$ 491,584,960

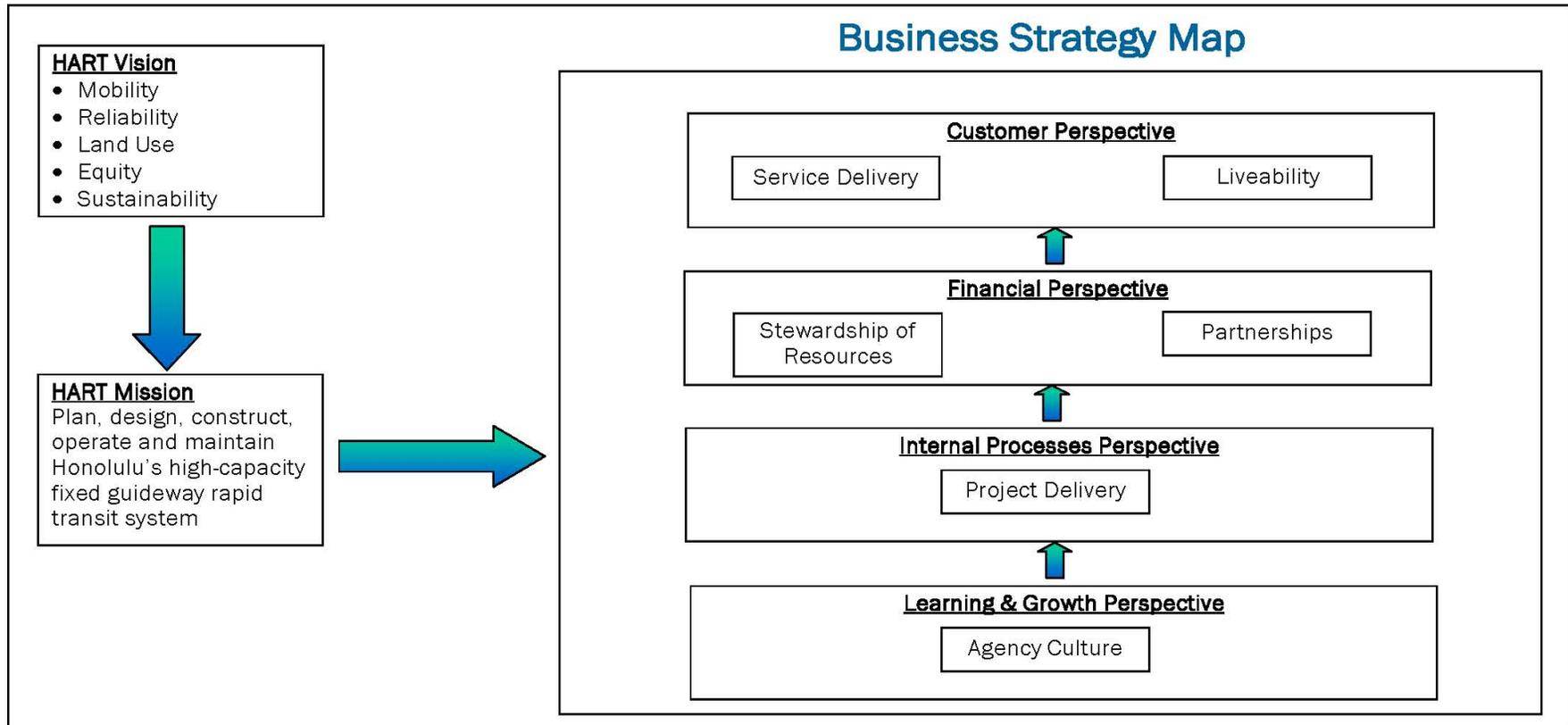
¹Unadjusted expended/encumbered amounts as of 6/30/2012 (Accounting Period 12)

While the purposes of most of the elements listed in the above table are self-explanatory, three of the budget elements shown in the above table are further described below:

- The Consultant Services expense category includes costs (\$44 million) for various GEC work activities including planning activities (i.e. update of the Financial Plan and the O&M Plan), construction management and oversight of DB and DBOM contracts, and project management and support activities. This category also includes costs for: the PMC that is providing experienced personnel in various specialized and technical areas to augment agency staff (\$10.4 million); consultant services to conduct design reviews for Hawai'i Department of Transportation (\$8.9 million); management of the Project's Owner Controlled Insurance Program (\$0.4 million); a Right-of-Way Support Consultant (\$0.6 million); and a Federal Government Liaison (\$0.3 million).
- The Design Services line item is for final design services related to various DBB contracts including the station groups for West O'ahu /Farrington Highway, Airport, and Kaka'ako; Airport Guideway; City Center Guideway; Quality Audit Expenses; and allocated contingency for the three DB contracts.
- The Programmatic Agreement (PA) category covers funding for the Kako'o (independent PA Project manager).

Appendix A

HART Balanced Scorecard





BALANCED SCORECARD

Project Implementation/Pre-Revenue Operation

APPENDIX A
Q3 FY12
Data Date: March 31, 2012

Goal	Current Quarter (Q3 FY12)				Inception to Date (YTD)				Comments and Legend
	Jan, Feb, Mar 2012				October 2009 - March 2012				
	Plan	Actual	Variance	Status	Plan	Actual	Variance	Status	
SERVICE DELIVERY									
Customer Perspective	Platform Gates								To be determined - Projected for FY13
	Fare Collection System								To be determined - Projected for FY13
	Bus-Rail Integration Plan								To be determined - Projected for FY14
	HART Operating Organization Plan								To be determined - Projected for FY14
	HART Service Policy/Standards								To be determined - Projected for FY15
LIVABILITY									
	HART TOD Policy								To be determined - Projected for FY13
STEWARDSHIP OF RESOURCES									
Archaeological									
	Archaeological Finds	----	1	----		2	----		# Finds (No iwi kupuna have been identified in the 2 archaeological finds to date.)
	AIS Progress	20	20	-0-	165	165	-0-		# Archaeological Inventory Surveys Completed vs Planned (WOPH and KHG Sections trenching completed; City Center: 20 trenches completed; Airport: 0 trenches completed.)
Historic									
	Traditional Cultural Properties (TCP)	----	0	----		0	----		# Affected Areas of Potential Effect (No TCPs were identified within the project Area of Potential Effect for Honolulu Ahupuaa (WOPH). Documentation was under SHPD review by the end of March.)
	HPC and PA Consulting Party Meetings	2	2	-0-	10	10	-0-		# Quarterly Historic Preservation Committee (HPC) [5 to date] and Consulting Party Meetings [5 to date] conducted vs required
Environmental									
	Permit Violations	----	0	----		0	----		# Permit Violations
	Mitigation Measures	----	208	----		208	----		# Mitigation Measures Implemented vs Measures (MM/IDs) Identified in the Mitigation Monitoring Plan (MMP)
	Regulatory Actions	----	0	----		0	----		# Regulatory Actions Taken
Operating Budget									
	Operating Expenditures	----	0	----	\$20.58	\$7.72	(\$12.86)		\$M Actual Expenditures/Encumbrances vs FY2012 Annual Appropriations
	Staffing Level	136	116	(20)	136	116	(20)		# Full-Time Equivalents (FTEs) Actual vs Planned. [The HART FY12 Operating Budget authorized 136 FTEs. As of March 31, HART had 116 FTEs (90 HART/City + 26 Consultant).]
Capital Budget									
	Capital Expenditures	----	0	----	\$354.74	\$213.31	(\$141.43)		\$M Actual Expenditures/Encumbrances vs FY2012 Annual Appropriations
Revenues									
	GET Surcharge Receipts	----	\$49	----	\$3,452	\$730	(\$2,722)		\$M GET Surcharge Receipts Received vs Total Projected in Sept 2011 Financial Plan (Total Revenues includes \$432.1M received to date + Beginning Cash Balance of \$298M at entry into Prelim Engrg phase)
	Federal Grant Funds	----	\$1	----	\$1,798	\$66	(\$1,732)		\$M Actual FTA Funds Received [5309 (\$62M) + 5307 (\$4)] vs Total Projected in Sept 2011 Financial Plan [5309 (\$1,550M) + 5307 (\$248M)]
PARTNERSHIPS									
	HART Joint Development Projects	----	1	----		1	----		# Joint Development Projects in Progress (Discussions in progress with one interested party; currently exploring other public/private ventures.)
	TOD Projects	----	1	----		1	----		# Transit-Oriented Development (TOD) Projects in Process of Development (Department of Planning and Permitting (DPP) following up on 1 inquiry.)

BALANCED SCORECARD

Project Implementation/Pre-Revenue Operation

Goal	Current Quarter (Q3 FY12)				Inception to Date (YTD)				Comments and Legend
	Jan, Feb, Mar 2012				October 2009 - March 2012				
	Plan	Actual	Variance	Status	Plan	Actual	Variance	Status	
PROJECT DELIVERY - OVERALL									
Project Budget									
Committed	---	\$8	---	●	\$2,057	\$2,057	-0-	●	\$M Committed (Awarded Contracts + Approved Changes + Other 3rd Party Agreements) versus Project Budget (minus Contingencies and Financing)
	---	0.2%	---	●	41.6%	41.6%	---	●	% of Project Budget (as adjusted) Committed
Incurred	---	\$63	---	●	\$434	\$434	-0-	●	\$M Incurred (Expenditures + Requests Approved for Payment) vs Project Budget (minus Contingencies and Financing)
	---	1.3%	---	●	8.8%	8.8%	---	●	% of Project Budget (as adjusted) Incurred
Estimate at Completion (EAC) vs Project Budget	\$5,122	\$5,122	-0-	●	\$5,122	\$5,122	-0-	●	\$M Estimate at Completion vs Total Project Budget (as submitted to the FTA for the FFGA)
Project Progress									
Overall Project Progress	3.1%	1.2%	(1.9%)	●	8.5%	8.5%	-0-	●	% Complete Actual vs Planned
Total Design Progress	25.9%	21.1%	(4.8%)	●	25.9%	21.1%	(4.8%)	●	% Complete Actual vs Planned
Total Construction Progress	---	0.0%	---	○	0.0%	0.0%	-0-	○	% Complete Actual vs Planned
Major Milestones									
FTA Approval of Entry into Final Design	---	---	---	○	Oct 15 '11	Dec 29 '11	(75 days)	●	Actual vs Planned Date of Federal Transportation Administration (FTA) Approval for HART to enter the Final Design phase.
FTA LONP2	Feb 06 '12	Feb 06 '12	0 days	●	Feb 06 '12	Feb 06 '12	0 days	●	Actual vs Planned Date of FTA Letter of No Prejudice #2 authorizing Final Design/Construction actions.
FFGA Request to FTA	---	---	---	○	Jun 29 '12			○	Actual vs Planned Date of HART letter to the FTA requesting a Full Funding Grant Agreement (FFGA).
Start of Congressional Review	---	---	---	○	Aug 15 '12			○	Actual vs Planned Date start of Congressional Review of FFGA request.
FFGA Approval	---	---	---	○	Oct 15 '12			○	Actual vs Planned Date HART receives FTA approval of FFGA request.
Contingency									
Available Cost Contingency	\$644	\$644	-0-	●	\$644	\$644	-0-	●	Total Budgeted Contingency (Allocated + Unallocated) in \$M - Basis: Risk and Contingency Management Plan (RCMP), Revision 3, June 2012
Drawdown from Starting Balance	---	-0-	-0-	●	---	-0-	-0-	●	Actual = Drawdown to Date (\$M) and Variance = % from Available Contingency
Available Schedule Contingency	21	21	-0-	●	21	21	-0-	●	Total Buffer Float in Months - Basis: Risk and Contingency Management Plan (RCMP), Revision 3, June 2012
Drawdown from Starting Balance	---	-0-	-0-	●	---	-0-	-0-	●	Actual = Drawdown to Date (Months) and Variance = % from Starting Balance
PROJECT DELIVERY - SPECIFICS									
Contracting - Construction (DB, DBOM, Intal/Maintain, On-Call Construction)									
Contracts Awarded	0	0	-0-	●	4	4	-0-	●	# Actual vs Planned Contract Awards; Remaining: 1 (one) Install/Maintenance Contract planned for FY13.
Commitments this Quarter (Contract Values + Executed Changes)	---	93%	---	●	---	93%	---	●	% Committed vs Budgeted (\$1,643M committed vs \$1,772M)
Contracts Completed	0	0	-0-	○	0	0	-0-	○	# Actual vs Planned Contract Completions
Contracting - Construction (DBB)									
Contracts Awarded	0	0	-0-	●	0	0	-0-	●	# Actual vs Planned Contract Awards; Remaining: 11 (eleven) DBB Contracts and two (2) On-Call Construction Contracts; 1 (one) DBB Contracts and two (2) On-Call Contracts planned for FY13.
Commitments (Contract Values + Executed Changes)	---	0%	---	●	---	0%	---	●	No DBB Construction Contracts scheduled for execution until 4Q13/1Q14. (Budget = \$1,297M)
Contracts Completed	0	0	-0-	○	0	0	-0-	○	# Actual vs Planned Contract Completions
Contracting - Final Design Consultants									
Contracts Awarded	0	0	-0-	●	2	2	-0-	●	# Actual vs Planned Contract Awards
Commitments (Contract Values + Executed Changes/Amendments)	---	0%	---	●	---	27%	---	●	% \$Committed vs \$Budgeted (\$45M committed vs \$164M)
Contracts Completed	0	0	-0-	○	0	0	-0-	○	# Actual vs Planned Contract Completions



BALANCED SCORECARD
Project Implementation/Pre-Revenue Operation

APPENDIX A
Q3 FY12
Data Date: March 31, 2012

Goal	Current Quarter (Q3 FY12)				Inception to Date (YTD)				Comments and Legend
	Jan, Feb, Mar 2012				October 2009 - March 2012				
	Plan	Actual	Variance	Status	Plan	Actual	Variance	Status	
Contracting - Other Consultants									
Contracts Awarded	0	0	-0-	○	13	9	(4)	●	# Actual vs Planned Contract Awards; Remaining: 4 (four) Other Consultant Agreements
Commitments (Contract Values + Executed Changes/Amendments)	----	0%	----	○	----	65%	----	●	% \$Committed vs \$Budgeted (\$333M committed vs \$513M)
Contracts Completed	2	2	-0-	●	2	2	-0-	●	PMSC-1 and GEC-1 Agreements complete and being closed out
Change Orders and Claims									
Change Orders Executed (# and \$M)	----	0	----	●	----	4	----	●	# Executed Change Orders: 3 Construction, 1 Final Design
	----	\$0.0	----	●	----	\$19.1	----	●	\$M of Executed Change Orders to date: \$19 Construction, \$0.1M Final Design
Claims Filed	0	0	----	●	0	0	----	●	# Claims Filed
Claims Resolved	0	0	----	●	0	0	----	●	# Claims Resolved
Utility Agreements									
Utility Agreements completed	26	21	(5)	●	26	21	(5)	●	# Agreements Completed vs Required. HECO signed WOFH utility agreement. 45 agreements planned to be signed as of end Q1 FY13.
HDOT Agreements									
HART-HDOT Agreements completed	13	3	(10)	●	13	3	(10)	●	# Agreements Completed vs Required. Remaining: 3 (three) of 4 Required Master Agreements; 3 (three) of 4 Required Joint Use and Occupancy Agreements.
Real Estate/Right-of-Way (ROW)									
Full Acquisitions	38	5	(33)	●	38	10	(28)	●	# Properties Ready for Construction vs Plan. 38 parcels needed (vs original FEIS plan of 40). 4 (four) relocations underway.
Partial Acquisitions	133	3	(130)	●	133	6	(127)	●	
Safety									
Performance against Standard	4.3	0.24	(4.1)	●	4.3	0.24	(4.1)	●	Actual Rate (%) vs Hawaii 2010 TRIR (%). [Incidence Rate = # of recordable injuries and illnesses occurring among a given # of full-time workers (usually 100) over a given period of time (usually 1 year); a Recordable Incident = a work-related injury or illness that results in: death, loss of consciousness, days away from work, restricted work activity or job transfer, or medical treatment beyond first aid. [29 CFR 1904]]
OSHA Reportable Injuries	----	1	----	●	----	3	----	●	# Actual Occupational Safety and Health Agency (OSHA) reportable injuries
OSHA Violations	----	0	----	●	----	0	----	●	# Actual Occupational Safety and Health Agency (OSHA) violations
Quality Assurance (QA)									
QA Audits	4	4	-0-	●	8	8	-0-	●	# Completed vs Planned QA Audits of HART, GEC, Contractors and Suppliers
Design NCRs	7	6	(1)	●	7	6	(1)	●	# Closed (Actual) vs Issued (Plan) Non-Conformance Reports (NCRs)
Construction NCRs	----	----	----	●	----	----	----	●	# Closed (Actual) vs Issued (Plan) Non-Conformance Reports (NCRs)
DBE/SBE Participation	3.8%	0.1%	(3.7%)	●	3.8%	0.1%	(3.7%)	●	% Actual vs Target Participation of Disadvantaged/Small Business Enterprises (DBE/SBE)
Direct Jobs Created	----	----	----	○	----	----	----	○	# Direct Jobs Created: Projections and criteria to be developed
Public Outreach									
Public Meetings	----	37	----	●	----	645	----	●	# Public Meetings Conducted
Presentations/Presence at Events	----	89	----	●	----	1,173	----	●	# Events with HART Participation
AGENCY CULTURE									
Staff Training and Career Development									
Training Opportunities				○				○	Training opportunities provided vs Planned; Annual Training Plan to be Developed
Employees Trained				○				○	# of Employees Receiving Training; Objective to be Established
Internal Promotions									
Internally-Filled Positions				○				○	# of Positions filled internally divided by the Total # of Positions to be filled; Objective to be Established
PMSC/GEC Phase-Out									
Positions Transitioned to HART				○				○	# Positions and Timing to be Transitioned from PMSC to HART in accordance with the Business Plan
Employee Satisfaction									

Internal Processes Perspective (Continued)

Professional Growth Perspective



BALANCED SCORECARD
Project Implementation/Pre-Revenue Operation

APPENDIX A
Q3 FY12
Data Date: March 31, 2012

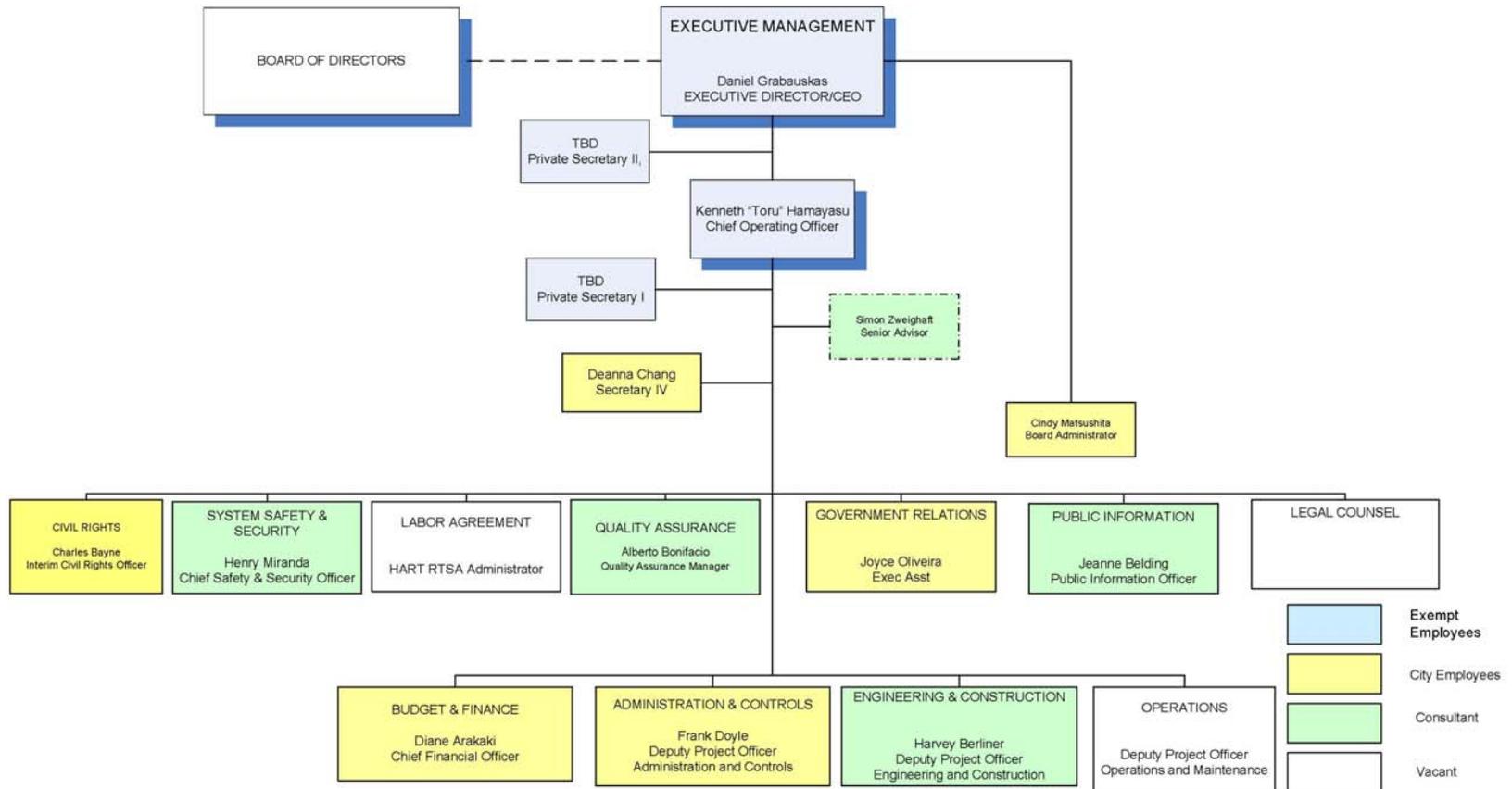
Goal	Current Quarter (Q3 FY12)				Inception to Date (YTD)				Comments and Legend
	Jan, Feb, Mar 2012				October 2009 - March 2012				
	Plan	Actual	Variance	Status	Plan	Actual	Variance	Status	
Surveys				○				○	Plan to be Developed

Appendix B

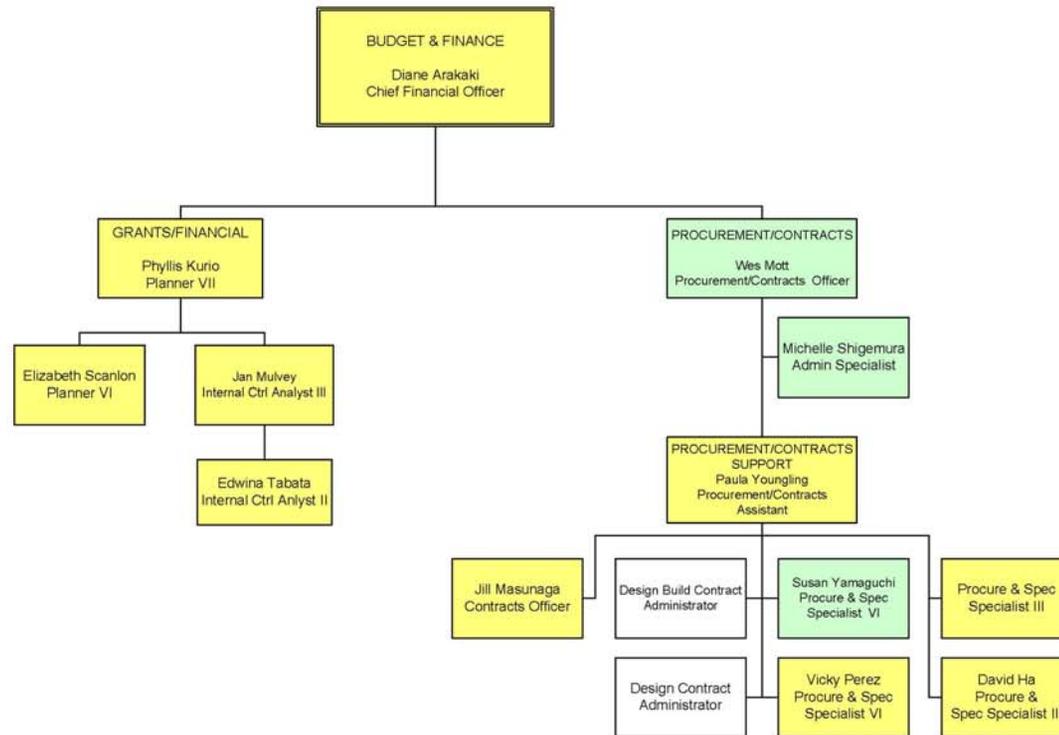
HART Organizational Structure – Final Design/Construction

Honolulu Authority for Rapid Transportation

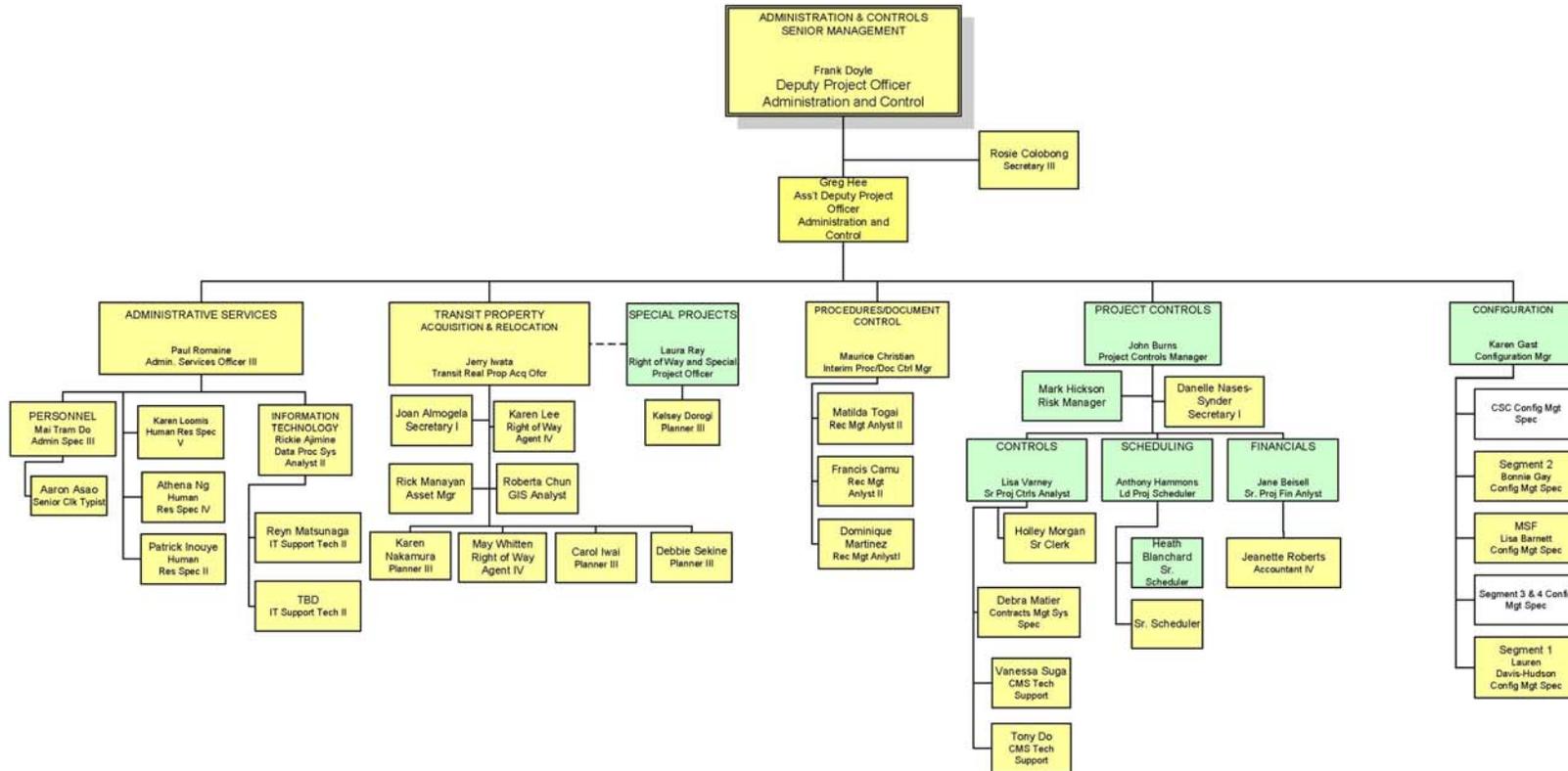
6/26/2012



Honolulu Authority for Rapid Transportation Budget and Finance

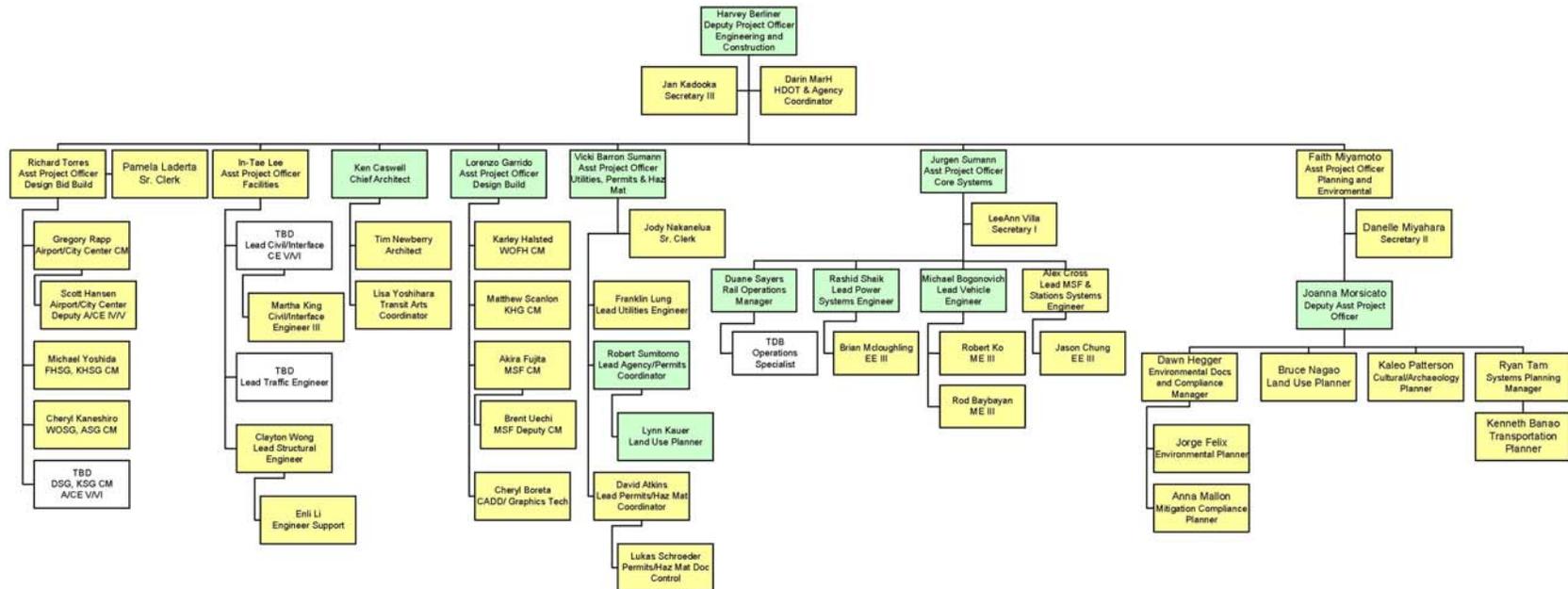


Honolulu Authority for Rapid Transportation Administration and Control

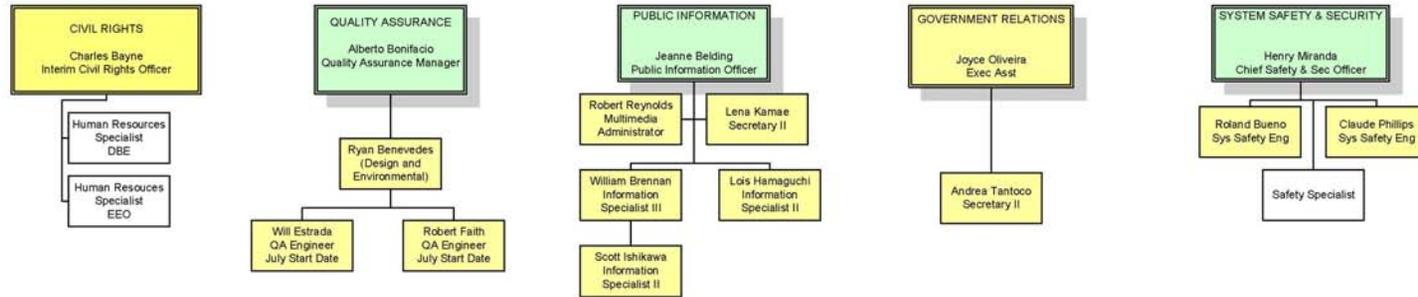


Honolulu Authority for Rapid Transportation Engineering and Construction

6/26/2012



Honolulu Authority for Rapid Transportation
Civil Rights, Labor Relations, Quality Assurance, Public Information, Government Relations, and System Safety & Security



Appendix C

Project Background and Planning

The Alternatives Analysis (AA) for the Project was initiated in August 2005 and the *Honolulu High-Capacity Transit Corridor Project Alternatives Analysis Report* was presented to the Honolulu City Council in November 2006. The purpose of the report was to provide the City Council with the information necessary to select a mode and general alignment for high-capacity transit service on O‘ahu. The report summarized the results of the AA that was conducted following the FTA’s planning guidance. It also provided information on the costs, benefits, and impacts of four alternatives: No Build Alternative, Transportation System Management Alternative, Managed Lane Alternative, and Fixed Guideway Alternative.

During November and December 2006, public meetings were held on the AA. On December 22, 2006, the Honolulu City Council enacted Ordinance No. 07-001, which selected a fixed guideway alternative from Kapolei to the University of Hawai‘i at Mānoa with a connection to Waikīkī as the Locally Preferred Alternative (LPA) for the Project. Ordinance 07-001 identified a specific alignment for the majority of the corridor but left options open in two locations. At the western end of the corridor, the LPA selection identified two alignments (described in the AA Report as Section I – Saratoga Avenue/North-South Road and Kamokila Boulevard/Farrington Highway), with the notation “*as determined by the city administration before or during preliminary engineering.*” In the center of the corridor, the LPA selection also identified two alignments (described in the AA Report as Section III – Salt Lake Boulevard and Aolele Street), also with the notation “*as determined by the city administration before or during preliminary engineering.*”

The LPA selection was made recognizing that currently-identified revenue sources, including revenues from the 0.5 percent county GET surcharge in place from January 1, 2007, through December 31, 2022, and a reasonable expectation of FTA New Starts funds, would not be sufficient to fund the capital cost of the LPA. Thus, a financially feasible project needed to be identified. On February 27, 2007, the Honolulu City Council initially selected a segment of the LPA from East Kapolei to Ala Moana Center, via Salt Lake Boulevard (Resolution 07-039, FD1(c)). However, on January 28, 2009, the Honolulu City Council, under Resolution 08-261, recommended replacing the Salt Lake portion of this initial alignment with a route that includes direct service to Pearl Harbor and the Airport. This section of the LPA, from East Kapolei to Ala Moana Center, which serves the Airport is referred to as “the Project” and is shown in **Figure 1** and described in Project Description, both following.

Figure 1: The Project



Honolulu Rail Transit Project
 Corridor and Contracts Map
 June 2012



Project Description

Alignment

The Project is an approximately 20-mile portion of the LPA extending from East Kapolei in the west to Ala Moana Center in the east (**Figure 1**). The alignment is elevated, with the exception of 3,175 linear feet (0.6 mile) that is at-grade near the Leeward Community College Station.

The Project is planned to be delivered in four design and construction sections, as described below.

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

East Kapolei is the western terminus of the Project. The alignment begins at Kualaka‘i Parkway (North-South Road) north of Kapolei Parkway. The alignment follows Kualaka‘i Parkway in a northerly direction to the entrance to UH West O‘ahu where it turns east and continues south of Farrington Highway and then onto Farrington Highway and crosses Fort Weaver Road. The alignment is elevated along this length.

The alignment continues in a north-easterly direction following Farrington Highway in an elevated structure. Alongside Waipahu High School, the alignment descends to grade as it enters the Maintenance & Storage Facility (the former Navy Drum site). The alignment continues at grade to Leeward Community College and then returns to an elevated configuration to cross the H-1 Freeway. North of the Freeway, the alignment turns eastward along Kamehameha Highway.

Table 1: Section I Stations – East Kapolei to Pearl Highlands

Station No.	Name/Planned Location	Planned Station Type	Planned Station Features
1.	East Kapolei: Kualaka‘i Parkway @ East – West Road	Center Platform Concourse	Park-and-Ride lot: 900 spaces
2.	UH West O‘ahu : Kualaka‘i Parkway @ Campus Drive	Side Platform Concourse	Park-and- Ride lot: 1,000 spaces Major bus interface
3.	Ho‘opili: Future minor east-west street approximately 300' south of Farrington Highway	Side Platform No concourse	
4.	West Loch: Farrington Highway @ Leoku Street	Side Platform Concourse	Major bus interface with Bus Transit Center
5.	Waipahu Transit Center: Farrington Highway @ Mokuola Street	Side Platform Concourse	Major bus interface with Bus Transit Center
6.	Leeward Community College: Leeward CC parking lot	Center Platform At grade	Community college interface Access from below platform circulation space

Section II – Kamehameha Highway: Pearl Highlands to Aloha Stadium (Airport)

The alignment continues in an elevated structure and continues in the median of Kamehameha Highway, crossing H-1 and continuing to where the Moanalua Freeway extension joins Kamehameha Highway at Aiea Stream. The route then crosses the westbound lane of Kamehameha Highway past a section with a pocket track and continues to the Aloha Stadium Station.

Section II includes three stations: Pearl Highlands, Pearlridge, and Aloha Stadium, and two park-and-ride lots.

Table 2: Section II Stations – Pearl Highlands to Aloha Stadium

Station No.	Name/Planned Location	Planned Station Type	Planned Station Features
7.	Pearl Highlands: Kamehameha Highway @ Kuala Street	Side Platform Concourse	Park-and-Ride multi-level structure: 1,600 spaces Major bus interface
8.	Pearlridge: Kamehameha Highway @ Kaonohi Street	Side Platform Concourse	Major bus interface to be provided in the future as a separate project when funds become available
9.	Aloha Stadium: Kamehameha Highway @ Salt Lake Boulevard	Side Platform No Concourse	Major bus interface Park-and-Ride lot: 600 spaces

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

Past Aloha Stadium Station, the elevated route reenters the median of Kamehameha Highway continuing to its intersection with Nimitz Highway. The route then runs along Nimitz Highway turning *makai* into Aolele Street. The route then follows Aolele Street (Koko Head) transitioning to Ualena Street and Waiwai Loop to reconnect to Nimitz Highway along the *makai* frontage road and continues to the Middle Street Transit Center, after crossing Nimitz Highway. Section III includes four stations: Pearl Harbor Naval Base, Honolulu International Airport, Lagoon Drive, and Middle Street Transit Center.

Even though the Middle Street Transit Center Station is planned to open at the same time as the Pearl Harbor, Honolulu International Airport, and Lagoon Drive Stations, it will be constructed in a different station construction contract which also includes the Kalihi and Kapālama Stations which are in Section IV. Thus the Middle Street Transit Center Station is included in **Table 3** below.

Table 3: Section III Stations – Airport

Station No.	Name/Planned Location	Planned Station Type	Planned Station Features
10.	Pearl Harbor Naval Base: Kamehameha Highway @ Radford Drive	Side Platform Concourse	
11.	Honolulu International Airport: Aolele Street @ Ala 'Auana Street	Side Platform No Concourse	Pedestrian walkways to Airport Terminal
12.	Lagoon Drive: Ualena Street @ Lagoon Drive	Side Platform No concourse	Two entrances
13.	Middle Street Transit Center: Dillingham Boulevard @ Middle Street	Side Platform Concourse	Major bus interface with Bus Transit Center Pedestrian Bridge to Transit Center

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

The elevated alignment continues southeast following Dillingham Boulevard and crosses Kapālama Canal, leaving Dillingham Boulevard at Ka'aahi Street, and crosses Iwilei Road. After crossing Iwilei Road, the alignment follows Nimitz Highway to Halekauwila Street and continues southeast along Halekauwila Street past Ward Avenue, where it transitions onto Queen Street. At the end of Queen Street, the alignment crosses Waimanu Street and crosses over to Kona Street. The alignment then goes into Ala Moana Center and ends with a tail track along Kona Street.

Section IV includes eight stations: Kalihi, Kapālama, Iwilei, Chinatown, Downtown, Civic Center, Kaka'ako, and Ala Moana Center. There are no park-and-ride lots planned in this section.

The Middle Street Transit Center Station in Section III is planned to be constructed as part of a station construction package which also includes the Kalihi and Kapālama Stations, hence it is included in **Table 3**.

Table 4: Section IV Stations – City Center

Station No.	Name/Planned Location	Planned Station Type	Planned Station Features
14.	Kalihi: Dillingham Boulevard @ Mokauea Street	Side Platform Concourse	Two entrances
15.	Kapālama: Dillingham Boulevard @ Kokea Street	Side Platform No concourse	Two entrances
16.	Iwilei: Ka'aahi Street @ Dillingham Boulevard	Side Platform Concourse	
17.	Chinatown: Nimitz Highway @ Kekaulike Street	Side Platform Concourse	

Station No.	Name/Planned Location	Planned Station Type	Planned Station Features
18.	Downtown: Nimitz Highway @ Alakea Street	Side Platform Concourse	Two entrances
19.	Civic Center: Halekauwila Street @ South Street	Side Platform No Concourse	Two entrances
20.	Kaka`ako: Halekauwila Street @ Ward Avenue	Side Platform No Concourse	
21.	Ala Moana Center: Kona Street <i>mauka</i> of shopping center	Center/Side Platform Adjacent to shopping center	Major bus interface

System-wide Elements

The selected transit technology is electrically powered, industry-standard steel wheel on steel rail powered from a third-rail system. The selected vehicle is to be capable of a top speed greater than 50 mph. The vehicles will be fully automated and driverless although train attendants are anticipated to be on the train during an initial burn-in period to provide the possibility of manual intervention in response to malfunctions. The driverless option is possible because the fixed guideway will operate in exclusive right-of-way with no automobile or pedestrian crossings. The system is being designed so that vehicles from more than one supplier could operate on the guideway once they are integrated with the train control system. To this degree, it is intended to be a non-proprietary system.

The traction power distribution system consists of about 14 substations and main line track power distribution facilities. The substations are spaced at approximately one and one-half mile intervals along the alignment. The exact number of substations will be determined during final design.

Train signaling uses automatic train control and automatic train operations technology. The communications and security facilities include emergency phones, closed-circuit television, and public address and information display systems.

There will be 80 guideway vehicles to accommodate 6,280 passengers per hour per direction in the initial years of operations. Additional vehicles will be added to the fleet as passenger demands require in the future.

The Maintenance & Storage Facility will be constructed on 43 acres of land at the former Navy Drum site, *makai* of Farrington Highway to the west of Leeward Community College, to service and store the transit vehicles. Up to 150 vehicles may be accommodated at the Maintenance & Storage Facility.

Fare Collection

A unified fare structure is planned, which will be integrated with the City's existing bus system, TheBus. The HRTTP is contemplated to be barrier-free. Fare vending machines are to be placed in all stations and continued use of standard fare boxes is assumed for TheBus. Fare collection for the fixed guideway system involves proof of payment procedures. Under the barrier-free concept, no gate or fare inspection points are to be installed at the stations. Part of the station including the platform is designated by signage and floor markings as a fare paid area. Persons

entering fare paid areas will need to have proof of having paid a valid fare. Fare inspectors will ride the system and randomly check to verify that passengers have valid tickets or transfers. Violators will be cited and fined as determined by future policies set by City ordinance. As of January 2012, studies have not been completed to determine whether the fare inspectors will be City Police, other City employees or contractor employees. These decisions will be made by the City at least 18 months prior to initial operations. Stations are also being designed so that fare gates may be installed in the future with little or no disruption if a different fare collection method is desired at any time after systems operations have begun. Conduits and cable raceways are planned to be installed in the system at this time to cover the possibility of future fare gates and related communications (including additional video monitoring, if deemed necessary).

The following assumptions were made for the fixed guideway system:

- Fares for the fixed guideway system will be consistent with the fare structure for TheBus. Pass products will work interchangeably on both modes and transfers between modes will be seamless and at no additional fare.
- Current City policy requires that the bus fares be adjusted so that the farebox recovery ratio does not fall below 27% or exceed 33%. It is assumed that future fare increases will be consistent with this policy.

Operating Plan

The H RTP is planned to operate in revenue service seven days a week. Weekday service will operate between 4 a.m. and midnight. Saturday service will run from 5 a.m. to midnight, and Sunday service will run from 6 a.m. to midnight. Vehicle headways in each direction will range from 3 minutes during peak periods to 10 minutes from 8 p.m. to midnight. A train will arrive in each direction at the station every 6 minutes during base periods. The system is planned to operate with multi-car vehicles at a maximum train length of 240 feet with each train able to carry a minimum of 300 passengers. The peak capacity in the opening year will be 6,280 passengers per hour per direction. The system will be expandable to allow for a 50% increase in capacity.

Ridership Estimates

2030 travel forecasts for the Project anticipate about 116,000 daily transit boardings. In the initial year of full operations, the Project anticipates approximately 97,500 daily boardings.