

FEDERAL TRANSIT ADMINISTRATION
PROJECT MANAGEMENT OVERSIGHT PROGRAM

Contract No. DTFT60-04-D-00013
Project No. DC-27-5041
Task Order No. 10

CLIN 0003: Monitoring of Grantee
Subtask 12B: Specialized Monitoring Deliverable

Grantee: City and County of Honolulu

Honolulu High-Capacity Transit Corridor
Project

Specialized Monitoring Deliverable
November 2007 - January 2008

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LIST OF ACRONYMS

AA	Alternatives Analysis
Booz Allen	Booz Allen Hamilton
BFMP	Bus Fleet Management Plan
DB	Design/Build
DEIS	Draft Environmental Impact Statement
DTS	City & County of Honolulu Dept. of Transportation Services
EIS	Environmental Impact Statement
FD	Final Design
FEIS	Final Environmental Impact Statement
FFGA	Full Funding Grant Agreement
FLSC	Fire/Life Safety Committee
FTA	Federal Transit Administration
GEC	General Engineering Consultant
GET	General Excise Tax
HCTCP	High-Capacity Transit Corridor Project
HDOT	State of Hawai'i Department of Transportation
LPA	Locally Preferred Alternative
MOS	Minimum Operating Segment
NEPA	National Environmental Policy Act
NTP	Notice to Proceed
PB	PB Americas, Inc.
PBQD	Parsons Brinckerhoff Quade & Douglas, Inc.
PE	Preliminary Engineering
PMO	Project Management Oversight
PMOC	Project Management Oversight Contractor
PMP	Project Management Plan
PMSC	Project Management Support Consultant
QA/QC	Quality Assurance / Quality Control
QMP	Quality Management Plan
RAMP	Real Estate and Acquisition Management Plan
RFI	Request for Information
RFQ	Request for Qualifications
ROD	Record of Decision
ROW	Right-of-Way
RTD	DTS Rapid Transit Division
SSCP	Safety and Security Certification Plan
SSMP	Safety and Security Management Plan
SSOA	State Safety Oversight Agency
SSOO	State Safety Oversight Office
SSORC	Safety and Security Oversight and Review Committee
SSPP	Safety and Security Program Plan
SSWG	Safety and Security Working Group
TOD	Transit Oriented Development
UH	University of Hawai'i

I. EXECUTIVE SUMMARY

The information provided in this report was obtained from phone conversations and e-mail correspondence during the months of *November 2007, December 2007 and January 2008*, as well as meetings, workshops and discussions held during the Project Management Oversight Contractor (PMOC) site visit with the City and County of Honolulu (the City) on *January 14-17, 2008*.

The City continues to actively pursue an aggressive project schedule. The proposed “First Project” constitutes the minimum operating segment (MOS) and is a 20-mile route between East Kapolei and Ala Moana Center via Salt Lake Boulevard with 19 stations. Phase I is approximately 6 miles long and includes 6 stations. The proposed limits of Phase I are from the future site of the Kroc Center development at North-South Road to the vicinity of Waipahu. Phase II encompasses the remaining 14 miles and 13 stations.

On July 1, 2007, the City created the Rapid Transit Division (RTD) within the Department of Transportation Services (DTS) through enactment of the City’s Fiscal Year 2008 Executive Operating Budget and Program. The RTD’s responsibilities will include project development, management and implementation. New staff members continue to be added to the City’s organization within RTD and through InfraConsult, the City’s Project Management Support Consultant (PMSC). The City is still planning to advertise the positions currently performed by InfraConsult, however, the PMOC has some concern that the City may encounter difficulty acquiring the experienced staff needed for the long-term assignment given Hawai`i’s cost of living and proximity to the mainland.

On August 24, 2007, the City executed a General Engineering Consultant (GEC) contract for \$85 million with PB Americas, Inc. (PB) to perform National Environmental Policy Act (NEPA) documentation and Preliminary Engineering (PE) activities. PB has started mobilization and all key managers are currently on site. *An updated organizational chart for the GEC was provided during the January 2008 site visit, along with a consolidated organizational chart for the project, including the RTD, PMSC and GEC staff, with all key personnel, titles and vacancies identified.*

The City has combined the activities needed to support NEPA and conduct PE into the GEC contract with separate Notices to Proceed (NTPs). NTP #1, issued on August 24, 2007, is for work required to prepare a Draft Environmental Impact Statement (DEIS) and the documents required by the Federal Transit Administration (FTA) to support the City’s application to advance to PE. NTP #2 would cover the PE effort needed once the FTA has approved entry into PE. NTP #3 would be issued for the remainder of the contract work not included in NTP #1 or NTP #2.

During the PMOC January site visit, the City stated that the Master Schedule for delivery of this project continues to remain in the development stage. A preliminary PE schedule was provided for review during the January 2008 site visit. The EIS section of the schedule was the most developed, however the remaining sections of the schedule require significant refinement for the schedule to be complete. The PMOC expressed concern that the Real Estate Acquisition and

Relocation schedule has not been defined and could potentially impact the current critical path identified. The Master Schedule should further define schedule activities and begin to identify critical path activities and associated milestone dates.

The City *maintains* that entry into PE is no longer a critical path item as the GEC can begin engineering in support of the DEIS process. *Based on the schedule reviewed, request to enter PE is currently anticipated the end of March or early April 2008, Record-of-Decision (ROD) on August 4, 2009, start of construction by December 31, 2009, and Revenue Service for Phase I by December 2012. The date for the transmittal of the request to enter PE from the City may slip to early March 2008 once all required FTA deliverables have been submitted and approved. This delay should not affect the ROD date as the City is continuing engineering efforts to support NEPA.*

The PMOC assessment is that the overall project schedule continues to be exceedingly optimistic. With the recent addition of GEC staff, it is possible for the City to achieve the dates provided. The City is contemplating implementing the project using an incremental approach. It is the City's intent to begin construction of Phase I after the ROD is issued using a Design/Build method of delivery with local funds. The City continues to evaluate its options regarding project delivery *for Phase II.*

During the January 2008 site visit, several workshops were held to address the PMOC's comments generated from the review of FTA deliverables transmitted from the City in December 2007 and January 2008. All of the workshops were informative and well received by the City. Additional observations from these workshops are detailed in Section III of this report.

The Mayor and the City Council have agreed that a Request for Information (RFI) approach is best to facilitate the selection of the Fixed Guideway Technology for the project. An RFI and accompanying evaluation criteria was issued and made available to all interested suppliers and technology manufacturers in December 2007, with response from all interested parties now due by January 24, 2008. The City, with assistance from the GEC, will analyze the RFI responses and prepare a report summarizing Technology Recommendations with all supporting data and information. This report will then be presented to the Technology Selection Panel, which will meet February 18-22, 2007 and select the Fixed Guideway Technology.

II. PROJECT DESCRIPTION

The Honolulu High-Capacity Transit Corridor Project (HCTCP) is a twenty-nine (29) mile elevated fixed guideway rail system along O`ahu's south shore between Kapolei and the University of Hawai`i (UH) at Mānoa, including a spur to Waikīkī. The proposed "First Project" constitutes the minimum operating segment (MOS) and is a 20-mile route between East Kapolei and Ala Moana Center via Salt Lake Boulevard with 19 stations. Initial fleet size is anticipated to be 66 vehicles. There is currently no Full Funding Grant Agreement (FFGA) for this project.

The HCTCP serves to improve mobility in the corridor between Kapolei and the UH at Mānoa on the island of O`ahu. The City and County of Honolulu (the City) Department of Transportation Services (DTS), in coordination with the Federal Transit Administration (FTA), has performed an Alternatives Analysis (AA) to evaluate alternatives in this corridor, which serves the largest percent of population and employment in O`ahu. Four alternatives were evaluated in the AA process:

- No-Build
- Transportation System Management
- Managed Lanes
- Fixed Guideway

The AA report states the Managed Lane alternative studied two operational options, while the Fixed Guideway alternative reviewed several alignment options.

AA was initiated in August 2005 and the AA report was presented to the Honolulu City Council in October 2006. In November and December 2006, public meetings were held on the AA, and on December 22, 2006, the City Council selected the Fixed Guideway as the Locally Preferred Alternative (LPA). In selecting the Fixed Guideway as the LPA, the City Council left some areas/alignment open, to be decided on as the project progresses: West Kapolei, Salt Lake Boulevard vs. Airport alignment, and the Waikīkī/UH at Mānoa branches. The total LPA alignment is approximately 29-miles long.

The City Council also identified and selected a minimum operable segment, (hereinafter "the First Project"), which would be built first with the current funding/revenue available. This "First Project" is a 20-mile alignment from East Kapolei, through Salt Lake Boulevard and downtown, and with an eastern terminus at the Ala Moana (Shopping) Center. The "First Project" does not include the alignment from West Kapolei to East Kapolei, or from Ala Moana Center to Waikīkī or to the UH at Mānoa.

With regards to funding, the State enabled legislation for a 0.5% General Excise Tax (GET) Surcharge and the City Ordinance enacted the GET Surcharge in July and August 2005, respectively. The GET Surcharge will be a source of revenue to build the corridor project. The GET surcharge went into effect on January 1, 2007 and has a limited duration with an end date of December 31, 2022.

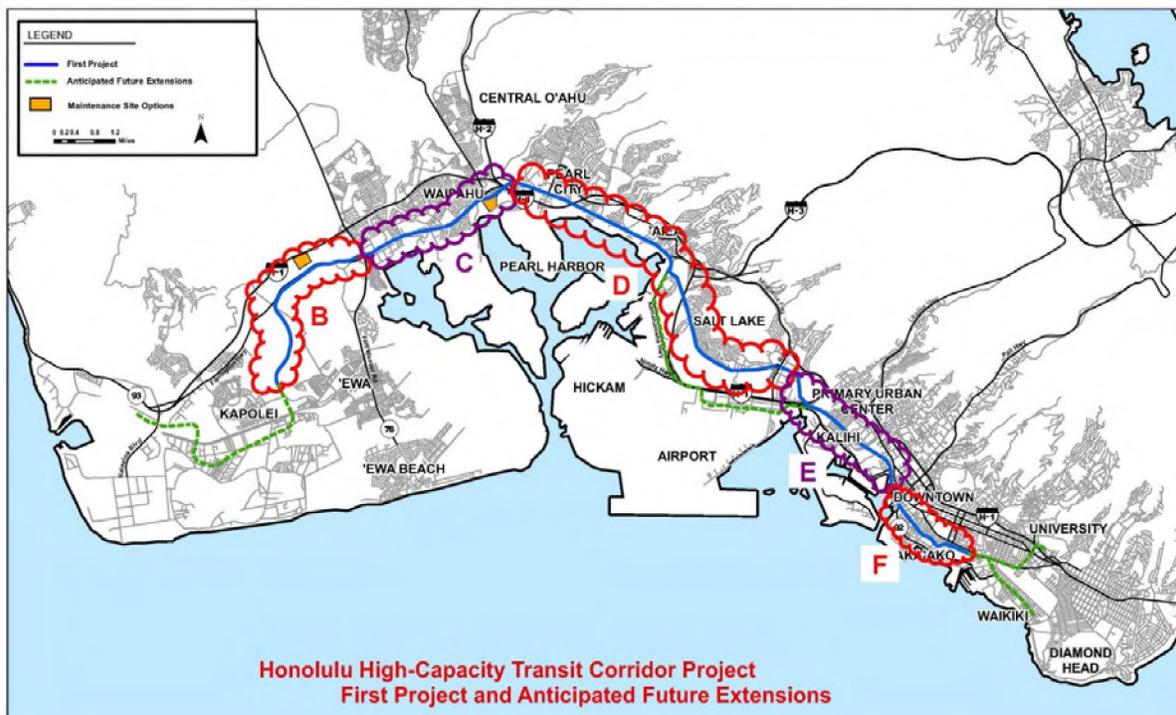
The assumptions made for the Fixed Guideway in the AA report were:

- System will operate from 4 a.m. to 12 a.m., with 3-10 minute headways.
- Maximum speed will be about 65 mph, in a fully dedicated right-of-way with dedicated vehicles, mainly on aerial/elevated guideway with columns in existing roadway medians, although at-grade may be possible in some areas.
- Guideway is less than 30 feet wide between stations, and approximately 50 feet plus vertical circulation at stations.
- Stations will be spaced approximately at every mile and approximately 270 feet long.
- Cost to ride will be the same as “TheBus” with transfer available from one to the other.

At present, the City is contemplating implementing the project using an incremental approach as shown in Figure 1 below. It is the City’s intent to perform the Final Design and begin construction of the initial phase of the “First Project” (Phase I) after the ROD is issued using a Design/Build method of delivery with local funds. Phase I is comprised of Segments B and C, and is approximately 6-miles long and includes 6 stations. The proposed limits of Phase I are from the future site of the Kroc Center development at North-South Road to the vicinity of Waipahu. Phase I is scheduled to be in operation at the end of 2012.

Phase II is comprised of the remaining limits of the “First Project”, Segments D, E and F, are from Waipahu through Salt Lake Boulevard and downtown, with an eastern terminus at the Ala Moana (Shopping) Center. Phase II consists of approximately 14 additional miles and includes 13 stations. Phase II could be opened in phases as construction is completed; the final section of the “First Project” is scheduled for operation in 2017, five years after Phase I is placed into service. The City is evaluating other options, such as Phase I operations on a demonstration basis during limited hours.

Figure 1. First Project and Anticipated Future Extensions



Project Management Oversight Contractor

In March 2007, FTA assigned Booz Allen Hamilton (BAH) to serve as the Project Management Oversight Contractor (PMOC). Key staff for this project are listed in the table below.

Name	Organization	Position/Title	Phone	Email
City and County of Honolulu				
Wayne Yoshioka	City – DTS	Director	808-768-8303	wyoshioka@honolulu.gov
Toru Hamayasu	City – RTD	Project Manager, Honolulu High-Capacity Transit Corridor Project.	808-768-8344	thamayasu@honolulu.gov
Phyllis Kurio	City – RTD	Transportation Planner	808-768-8347	pkurio@honolulu.gov
Faith Miyamoto	City – RTD	Environmental Planner	808-768-8350	fmiyamoto@honolulu.gov
FTA Region IX				
Leslie Rogers	FTA	Regional Administrator	415-744-3133	leslie.rogers@dot.gov
Ed Carranza	FTA	Deputy Regional Administrator	415-744-2741	edward.carranza@dot.gov
Nadeem Tahir	FTA	Director, Office of Program Management and Oversight	415-744-3113	nadeem.tahir@dot.gov
Catherine Luu	FTA	General Engineer	415-744-2730	catherine.luu@dot.gov
Booz Allen Hamilton (PMOC)				
Frank McCarron	BAH	PMOC Program Manager	703-625-9274	mccarron_francis@bah.com
Justine Belizaire	BAH	PMOC Task Order Manager	786-586-0026	belizaire_justine@bah.com

NOTE: On December 1, 2007, Mr. Wayne Y. Yoshioka was named as Director of the Department of Transportation Services in replacement of Mr. Mel Kaku, who was appointed as the Director of the Department of Emergency Management.

III. CURRENT REVIEW

The information provided in this report was obtained from e-mail correspondence with City staff regarding activities in the *months of November 2007, December 2007 and January 2008*. A full list of attendees to the PMOC site visit on *January 14-17, 2008* is included in **Appendix A – List of Meeting Attendees**. A summary of the Action Items is listed in **Appendix D – Action Item Summary**.

A. TECHNICAL CAPACITY AND CAPABILITY

Staffing

▶ *PMOC General Observations and Concerns*

- On July 1, 2007, the City formed the Rapid Transit Division (RTD) that falls under the Department of Transportation Services (DTS). The RTD is responsible for the management and oversight of the project from PE through Construction, including all actions and project deliverables required by the FTA New Starts Program. The RTD will be headed by Mr. Toru Hamayasu, who will direct the project staff consisting of full-time City employees supplemented with staff from the Project Management Support Consultant (PMSC), who will fill key project roles pending the hiring of full-time City staff. The RTD will interface with other City departments as needed.
- Additional PMSC staff members have been assigned to the Project. The following is a listing of new staff, and their respective titles, *since November 2007*:
 - Jurgen Sumann, Chief Systems Engineer.
 - *Terry Gruver, PMP Development*
- The City issued an RFQ for a General Engineering Consultant (GEC) for PE Services, including the NEPA work, on June 5, 2007. Statements of qualifications were received on July 5, 2007 and negotiations with PB began on July 26, 2007. The City executed the contract on August 24, 2007, and issued NTP #1 for work required to prepare a DEIS and the documents required by FTA to support the City's request to enter PE.
- *As of the January 2008 site visit, all key GEC key staff are now on site. The GEC has furnished an updated organizational chart, outlining the key personnel that will support the project. Several key GEC personnel that were new to the project since the last PMOC's visit in October 2007 were introduced to the PMOC team:*
 - *Mark Garrity - Transportation Planner*
 - *Art Borst - Chief of Civil Facilities Design*
 - *Martin Hall - Segment Lead for First Segment*
 - *Marcus Johnson - Chief Scheduler*
 - *Dennis Haskell - Chief Architect*
 - *Mike Becher - Chief of Systems Design*
 - *Aileen Read - QA/QC Manager*

- *The GEC advised that there are now a total of 76 subconsultants associated with the GEC, of which approximately 70 are local firms. There are signed agreements with 26 of the subconsultants, with 10 others in process.*
- *The PMOC remains concerned that the City may encounter difficulty acquiring the experienced staff needed for the long-term assignment, given Hawai'i's cost of living and distance from the mainland.*

Deliverables

*The overall list of documents required by the grantee to demonstrate technical capacity and capability and the current status of these documents is illustrated in **Appendix B – Grantee Deliverables for Technical Capacity and Capability.***

▶ PMOC Overall Observations and Concerns

- *The City continues to work with the PMOC to develop the deliverables required to demonstrate technical capacity and capability. The PMOC has transmitted examples of a Project Management Plan (PMP), Bus Fleet Management Plan (BFMP), Safety and Security Management Plan (SSMP) and Real Estate and Acquisition Management Plan (RAMP) from projects being developed by other city grantees as guides for the City. Workshops for the development and review of these deliverables have been held by the PMOC during its site visits to Honolulu in October 2007 and January 2008.*
- *The FTA PE Checklist was reviewed with the City in its entirety. The City is currently on schedule to complete the Technical Capacity and Capability requirements for Entry into PE by the end of March, early April 2008. The only area of uncertainty is the Risk Activities/Contingency Management Plan requirements. This is a major concern that needs to be addressed by FTA. The PMOC has encouraged the City to communicate directly with FTA to resolve some of the unknowns associated with the risk program.*
- *While there has been significant advancement of all FTA deliverables received, the plans should to be reviewed by the appropriate RTD Manager for content. In addition, a quality review needs to be performed prior to transmittal to the PMOC to ensure consistency with function, terminology and schedule.*
- *The PMOC has a significant concern regarding risk activities needed to enter into PE. FTA needs to clearly identify the risk products required to enter into PE. Continued delay in specifying the risk activities will significantly impact the critical path of the project.*

• Project Management Plan (PMP)

PMOC Observations and Concerns

*The third version of the PMP was transmitted to the PMOC for review on December 20, 2007. The PMOC reviewed the PMP and provided comments to the City during the PMP workshop held on January 15, 2008 (see **Appendix A** for a list of attendees.)*

- Overall, the PMP covers all the requirements to be included in the plan at this phase of the project. The PMSC advised that additional revisions have already been incorporated into the PMP and will be included in the next submittal issued for approval, along with responses to the PMOC's comments. The City anticipates that the fourth version of the PMP will be issued by mid February 2008.
- A consolidated organizational chart was provided during the January 2008 site visit that outlines the interfaces between the GEC and the RTD staff within the integrated project office. The City must establish the appropriate reporting relationships and protocol for communication within the RTD organization, including the PMSC and GEC organizations. The City must also establish the reporting and communication protocol for interaction between the RTD organization and other City organizations and departments.

Action Items

- The City needs to provide for PMOC review a revised draft PMP which reflects the recently submitted comments, includes the revised organizational charts that reflect the recent organizational changes, and provides detailed resumes for key personnel.
- **Safety and Security Management Plan (SSMP)**

PMOC Observations and Concerns

*The first version of the SSMP, dated December 28, 2007, was transmitted to the PMOC for review on January 3, 2008. The PMOC reviewed the SSMP and provided comments to the City during the SSMP workshop held on January 16, 2008 (see **Appendix A** for a list of attendees.) The GEC Safety and Security Manager and Design Manager were present to discuss the requirements and issues associated with the SSMP submittal.*

- *The City indicated that the Mayor of Honolulu will sign and approve the SSMP policy statement. By having the Mayor sign the policy statement, all City agencies will be committed to the provisions contained within the SSMP. In addition to the Mayor's sign-off on the policy statement, five City department heads will be required to sign a 'statement of commitment' to the SSMP. The signees are intended to be:*
 - *Project Executive Director, RTD*
 - *Fire Chief, Honolulu Fire Department*
 - *Chief of Police, Honolulu Police Department*
 - *Director, City of Honolulu Department of Emergency Management*
 - *Director, City of Honolulu Department of Emergency Services*

The Plan will be approved by the DTS Director.

- *A Safety and Security Oversight and Review Committee (SSORC) has been established for the project and held its first meeting on January 17, 2008. The primary purpose of the SSORC is to coordinate the activities of the SSMP and to*

provide oversight of the Safety and Security Certification Program. The PMOC attended this first meeting.

- *A detailed review of the SSMP and the schedule contained within the PMP was conducted. The following items were discussed during the review:*
 - *The SSMP scope section needs to be expanded to provide a brief discussion of the project.*
 - *Currently, the Safety and Security Manager function for the City is being filled by a member of the PMSC. The City is working to fill the position with a City employee.*
 - *The organization chart for the City needs to be updated to show that Safety and Security reports to the RTD Project Executive.*
 - *A State Safety Oversight Agency (SSOA) has not been identified by the State of Hawai'i. Discussions included the timing of the designation and whether FTA will inform the State.*
 - *The project schedule for safety and security was reviewed during the meeting. The City agreed to make suggested changes including adding a line for submittal of the Safety and Security Certification Plan (SSCP) and safety and security workshops.*
- *The submittal dates for safety and security submittals from the GEC through the City to the PMOC are planned as follows:*
 - *SSMP next revision, by February 1, 2008; and,*
 - *SSCP, by February 29, 2008.*
- *The contracting strategy for the project (e.g., design-build, design-bid-build, etc.) has an impact on the level of detail required for the safety and security planning and oversight requirements. The GEC Safety and Security Manager suggested that safety and security performance specifications will be developed for the project and provided to the design-build contractor to prepare its own plans, policies, and procedures that would be audited and monitored by the Construction Manager. However, there is a concern that if a design-bid-build or other contracting strategy is implemented for the project or parts of the project, these performance specifications may be insufficient. Design-bid-build contracting assumes that the owner maintains responsibility for design and construction management aspects of safety and security.*
- *The PMOC is concerned that the time required to establish an SSOA in the State of Hawai'i is undefined at this time. The process for establishing an SSOA has been identified by the City, however, the schedule for requesting the establishment of the oversight agency has not been determined. In addition, concerns were raised by the City about finding qualified individuals to fill both the City's Safety and Security Manager and the SSOA staff.*

Action Items

- *The City to submit the SSMP and SSCP as scheduled in February 2008.*

- **Real Estate Acquisition Management Plan (RAMP)**

PMOC Observations and Concerns

*The first version of the RAMP was transmitted for review to the PMOC on January 3, 2008. The PMOC reviewed the RAMP and provided comments to the City during the RAMP workshop held on January 16, 2008. The workshop was attended by individuals with the City, PMSC and GEC (see **Appendix A** for a list of attendees). There has been good progress on the develop of the RAMP, however, there is still a significant amount of work to completed. The PMOC and the attendees of the workshop had a good discussion about the RAMP and identified a number of issues and potential solutions. The City agreed to revise the RAMP to address the PMOC's comments.*

- *The City is currently proceeding to recruit a Right-of-Way (ROW) Coordinator. The ROW Coordinator will report to the RTD Project Executive. A revised organization chart was provided to reflect the addition of the ROW Coordinator; however, the organization chart should also indicate when vacant positions will be filled.*
- *The City's Chief of Land Division indicated that the Survey, Appraisal and Acquisition positions on the organization chart have been filled and the next version of the RAMP will include their resumes.*
- *A draft schedule detailing activities and durations for real estate acquisitions and relocations was provided to the PMOC during the workshop. Based on discussion with all workshop members, this new information will be incorporated into the RAMP to add more detail on anticipated durations and relocation activities.*
- *As the development of the RAMP progresses, the PMOC offered to review and comment on sections of the RAMP to ensure completeness of the resubmittal. The entire resubmittal of the RAMP should be sent to FTA/PMOC by the end of February 2008. It was acknowledged that the RAMP is a living document that will be supplemented with additional information as it becomes available.*
- *The PMOC expressed concern that once durations are added to the to the relocation activities, that the City may find that some of the activities should be starting now and could potentially impact the current critical path identified.*
- *The PMOC has concerns about the available resources to provide Relocation Advisory Services. Relocation planning is a requirement of the Uniform Act and should begin early enough in the process to identify potential issues and develop solutions.*
- *The City has not identified sufficient resources to begin the required Needs Assessment and development of the Relocation Plan.*

- *Until the receipt of a better defined organization chart including receipt of resumes for the acquisition and relocation positions, it remains a concern that the City has not adequately outlined the reporting and working relationships between the acquisition and relocation departments.*

Action Items

- *The City needs to further develop the organization structure for the right-of-way and relocation activities that will ensure that there are clear lines of authority and clear definition of roles and responsibilities among all players – the City, the PMSC and the GEC.*
 - *The City needs to develop policies and procedures to implement right-of-way acquisitions and relocation activities in compliance with the U.S. Department of Transportation’s regulations implementing the Uniform Relocation and Real Property Acquisition Policies Act of 1970, as amended.*
 - *The City to resubmit the RAMP to FTA/PMOC by the end of February 2008.*
- **Bus Fleet Maintenance Plan (BFMP)**

PMOC Observations and Concerns

*The second version of the BFMP was transmitted to the PMOC for review on January 7, 2008. The PMOC provided a general overview of the document and then proceeded to review specific comments in detail with the City staff during the BFMP workshop held on January 16, 2008 (see **Appendix A** for a list of attendees.) The second version of the BFMP did not vary significantly from the initial version, with some sections still missing or not fully developed.*

- *The Bus Fleet Management Plan (BFMP) will require input from other stakeholders to complete the plan.*
- *The ability to accommodate current and projected ridership, and the scheduled and unscheduled maintenance cycles of the bus fleet need further discussion.*
- *While the current system level indicates that the existing fleet size can accommodate the current demand, additional vehicles may be needed to meet capacity demands during the peak of the peak. There needs to be an analysis of the peak vehicle demand because the majority of transit boardings throughout the year occur during the morning and evening peak hours. It is necessary to determine if the bus service schedule is sufficient to meet peak rider demands for current and proposed changes in ridership. The City needs to research and determine how peak vehicle assignments are made and incorporate an analysis of peak vehicle demand into the plan.*
- *The other areas of the BFMP require a basic understanding of the effects of required maintenance schedules on vehicle availability. There are routine scheduled*

maintenance activities and there are unscheduled maintenance activities. The plan should explain how scheduled maintenance on a daily basis is determined based on facilities, maintenance schedules and manpower.

Action Items

- *The City needs to determine the transit agency load factor policy and determine whether current headways are adequate to maintain and/or meet current and projected ridership figures.*
- *The City needs to verify if the current maintenance resources and cycles are realistic and adequate to meet current and projected changes in vehicle availability demands.*
- *The City to issue the third revision of the BFMP for review and approval by mid February 2008.*

• **Quality Management Plan (QMP)**

PMOC Observations and Concerns

*The first version of the QMP was transmitted to the PMOC for review on January 3, 2008. The PMOC reviewed the QMP and provided comments to the City during the QMP workshop held on January 16, 2008 (see **Appendix A** for a list of attendees.)*

- *The Quality Management Plan (QMP) as written is predominantly from the perspective of the GEC Quality Assurance / Quality Control (QA/QC) Manager. The QMP needs to address the requirements of the RTD Manager of Quality Assurance.*
- *The QMP should not include procedures but simply make reference to them. Not all procedures included in the plan provide the level of detail associated with procedures.*
- *The QMP should address any other quality requirements that apply in addition to those of the FTA (e.g., Internal communication; customer focus/customer satisfaction and continual improvement from ISO 9001:2000.)*
- *The QMP needs to address the records retention and management process.*
- *The QMP needs to clarify the process of updating Operating Procedures, preventive action based on audit observations and non-conformances, and the review of subconsultants.*
- *The QMP section in Project Quality Manual is intended to be a freestanding policy statement document. Quality procedures should be a separate section detailing the process. The lack of separation in existing document confuses the overall process. In addition, the QMP function is to demonstrate without a doubt the commitment to quality by RTD top management.*

Action Items

- *The City should issue a second revision for review and approval by the end of February 2008 that incorporates and addresses the comments provided by the PMOC:*
 - *The City needs to separate the procedures from the QMP, develop the procedures to a higher level of detail for PE and add more process-related detail the procedures.*
 - *The QMP should be revised and written from the point of view of the City instead of the GEC.*
 - *The QMP should provide references to the PMP, Configuration Management Plan (CMP), and record keeping.*
 - *The QMP should also clearly reflect the needs and responsibilities of the RTD Quality Assurance Managers.*

B. PROJECT SCHEDULE AND DELIVERY

Overall, the City continues to evaluate the project schedule and delivery method. The project completion date (**Appendix C** – Overall Project Schedule) has not changed since the first schedule delivered in April 2007.

The GEC contract covers the activities needed to support the NEPA process and also covers the required New Starts activities and deliverables. The contract is structured with three separate NTPs. NTP #1 was given to the GEC on August 24, 2007 and provides the City with the technical support for development of the DEIS and also covers development of the required deliverables needed for entry into PE. NTP #2, anticipated to be issued in 2008, will cover the PE effort needed once FTA has approved entry into PE. A third NTP for all work not covered by NTP #1 or NTP #2 will be issued when required.

The City is having the GEC develop a Project Master Schedule. A draft of the Master Schedule for the “First Project”, originally scheduled for November 2007, *has not been made available at this time. A specific time frame for delivering the Master Schedule was not established.*

► PMOC General Observations and Concerns

- *The City is still in the process of developing a Master Schedule for the “First Project”. The GEC provided a draft schedule for PE and EIS activities, which has a significant level of detail in the EIS and related preliminary design process areas, but lacks sufficient detail in most other areas, including Right-of-Way.*
- *The schedule for selecting the vehicle technology stills calls for the technology decision by late February or early March 2008. The information packages are now scheduled to be submitted by January 24, 2008, two weeks later than planned. More details on the technology decision are provided in a subsequent section of this report.*

- At this time, Phase I (Segments B and C) of the “First Project” is planned to be Design/Build (DB) using local funds only. Construction is scheduled to begin after the ROD is issued. The City wants something visible to happen on the project within five (5) years, including revenue operation by 2012. The City *continues to review* the phases and methods of design and construction with the GEC.
- The current schedule shows final phases of work to come online by mid 2016, starting with Segment D, followed by Segment E in January 2017 and Segment F by mid 2017, which is five (5) years after the first phase is operational.
- FTA advised the City that it takes approximately 3 to 4 months to receive approval to enter into PE from FTA Region IX.
- The PMOC still has concerns with regards to the overall project schedule. *To date a detailed project schedule, the Master Schedule, has not been developed in sufficient detail, covering many of the key project areas.* Overall, the schedule is optimistic, with groundbreaking by *December 31, 2009* and Phase I opening for revenue service by 2012.

▶ **Action Items**

- The City is developing a Master Schedule *for the “First Project”*. Delivery of the schedule needs to be established.
- The City will *continue to refine the PE/EIS schedule and include the Real Estate acquisitions process.*

C. NEW STARTS SUBMITTAL

▶ **General Observations**

- FTA indicated that the City is not required to complete the New Starts submittal in September 2007 for inclusion in the FTA New Starts report to be issued in February 2008 because the project is not in PE. Nevertheless, the City has submitted most of the elements to support a rating, with the exception of the Financial Plan, patronage forecasting, and the “Make the Case” documentation. FTA has also requested additional land use information to support the New Starts documentation, which has been completed by the City and transmitted to FTA for review.
- The City advised that they are in the \$18 range for cost effectiveness for the HCTCP.

D. ENVIRONMENTAL IMPACT STATEMENT (EIS) / ALTERNATIVES ANALYSIS (AA)

The GEC has initiated the activities necessary for the development of the EIS. As stated in the Project Schedule and Delivery section of this report, the schedule for development of the EIS is very aggressive.

► **General Observations and PMOC Concerns**

- The City indicated that they have satisfied all the requirements for the Alternative Analysis (AA) to FTA. The City is currently awaiting concurrence from FTA that the AA submittal has been received and approved.
- The GEC has developed a detailed draft schedule for entry into PE and delivery of the Environmental Impact Statement (EIS). This schedule has the DEIS being available in *September 2008* and the Final Environmental Impact Statement (FEIS) in *June 2009*.
- *The PMOC remains concerned that the schedule for the EIS is very aggressive, particularly in the timeframe between the DEIS and FEIS, where public hearings are held and comments are generated and incorporated into the FEIS documentation.*
- *As previously discussed, the GEC has developed a detailed schedule outlining the activities required for the development of the EIS. This schedule also includes the design elements required to support development of the EIS.*
- *In support of the development of the EIS, the GEC is currently preparing plan and profile drawings, identifying Right-of-Way takes for the guideway, stations and ancillary facilities, and identifying traffic lane impacts on roadways adjacent to the proposed alignment.*
- *The GEC has conducted environmental, planning, station area interface, financial and structural workshops since the October 2007 PMOC visit. The Structural and Geotechnical workshop was held January 7-10, 2008 and covered several key areas including discussion of the superstructure standard guideway types, identifying “long span” alternatives, reviewing foundation issues and alternatives, discussion of construction packaging and staging, discussion of design criteria and a review of the project schedule.*
- *The GEC has also undertaken and completed several environmental studies, studied alignment refinements, and is currently assisting the City in the technology selection process.*
- *The City has begun to hold coordination meetings with Hawaiian Electric Company and is currently working on the Utility Master Agreement.*
- To meet the PE/EIS schedule, the City will be developing the DEIS documentation by building on work previously done on prior projects in the 1990s. The PMOC acknowledges the benefits of building on past documentation. However, the PMOC *remains concerned that the schedule is very aggressive.*

The PMOC is also concerned that the City has underestimated the review time that will be required for the review of the FEIS by FTA prior to issuance of the Record-of-Decision

► Action Items

- The City has requested that FTA acknowledge that all submittals for AA have been received and approved.

E. TECHNOLOGY SELECTION PROCESS – REQUEST FOR INFORMATION

▶ General Observations

- *The Mayor and the City Council have agreed that a Request for Information (RFI) approach is best to facilitate the selection of the Fixed Guideway Technology for the project. An RFI and accompanying evaluation criteria was issued and made available to all interested suppliers and technology manufacturers in December 2007, with response from all interested parties originally due January 11, 2008. Based on information requests on the RFI, the due date has been shifted to January 24, 2008. This shift will not impact the overall schedule for selecting the technology.*
- *The City, with assistance from the GEC, will analyze the RFI responses and prepare a report summarizing Technology Recommendations with all supporting data and information. This report will then be presented to the Technology Selection Panel, which will meet February 18-22, 2007 and select the Fixed Guideway Technology.*
- *The Technology Selection Panel will be comprised of 5 members, 2 of whom will be selected by the Mayor and 2 of whom will be selected by the City Council.*
 - *The panel must meet predetermined criteria, with members having experience in at least two different types of fixed guideway systems, and at least one with civil/construction experience, at least one with operations and maintenance experience, at least one with vehicles and systems experience and at least one with experience or advanced degree in public policy.*
 - *All potential panel members must also meet predetermined conflict of interest criteria. RTD has provided both the Mayor and City Council a list of qualified potential panel members for consideration.*
- *On January 23, 2008, Mayor Hannemann introduced a proposal to create the Technology Selection Panel, which the City Council voted 6-3 to approve a measure that authorized the experts to select the technology for the HCTCP. The City Council chose four of the five members; the fifth, who will serve as its chairman, will be selected by the panel. The following is a list of the four members chosen:*
 - **Ken Knight**, consultant, deputy project manager for the Washington, D.C., Metro system. Recently worked with the World Bank to assess transit projects in Europe and Asia.
 - **Henry Kolesar**, group manager for vehicle engineering with the San Francisco Bay Area Rapid Transit District.
 - **Steve Barsony**, retired Federal Transit Administration official. He was director of the FTA Office of Engineering.
 - **Panos Prevedourous**, University of Hawai`i at Mānoa engineering professor and long-time critic of the city's fixed guideway system.

APPENDIX A – LIST OF MEETING ATTENDEES

Name	Organization/Title	Phone	Email	Attendance							
				A	B	C	D	E	F	G	
Wayne Yoshioka	DTS / Director	808-768-8303	wyoshioka@honolulu.gov		X						X
Richard Torres	DTS / Deputy Director		rtorres@honolulu.gov		X						
Toru Hamayasu	RTD / Project Manager, Honolulu High-Capacity Transit Corridor Project	808-768-8344	thamayasu@honolulu.gov	X	X						X
Kenneth Banao	RTD / Transportation Planner	808-768-8352	kbanao@honolulu.gov			X					
Phyllis Kurio	RTD / Transportation Planner	808-768-8347	pkurio@honolulu.gov	X	X		X	X			X
Faith Miyamoto	RTD / Environmental Planner	808-768-8350	fmiyamoto@honolulu.gov	X			X				X
Bruce Nagao	RTD / Transportation Planner	808-768-8351	bnagao@honolulu.gov								
Mary (Dodie) Browne	DDC / Acquisition Officer	808-768-8733	mbrowne@honolulu.gov				X				
Milton Watanabe	DDC / Land Survey Chief	808-768-8732	mwatanabe1@honolulu.gov								
Scott Shigeoka	DDC / Real Estate Property Appraisal Officer	808-768-8737	sshigeoka@honolulu.gov								
Thomas Miyata	DDC / Division Chief	808-768-8736	tmiyata@honolulu.gov				X				
Diane Murata	BFS / Property Management Officer	808-768-3950	dmurata@honolulu.gov								
May Whitten	BFS / Property Management Specialist – Relocation	808-768-3946	mwhitten@honolulu.gov				X				
Michael Hiu	BFS / Assistant Purchasing Administrator	808-768-3940	mhiu@honolulu.gov				X				
Wendy Imamura	BFS / Chief Purchasing Administrator	808-768-3938	wimamura@honolulu.gov								
Mike Schneider	RTD / Project Principal	808-536-6610	schneider@infraconsultllc.com								X
Simon Zweighaft	RTD / Project Manager	808-536-6610	zweighaft@infraconsultllc.com	X	X					X	X
Carol Webb	RTD / Project Controls Analyst	808-536-6610	webb@infraconsultllc.com				X				
Doug Tilden	RTD / Architect Manager	808-536-6610	dtilden@infraconsultllc.com								
Elisa Yadao	RTD / Chief Public Information Officer	808-536-6610	sistu@lava.net	X							
Harvey Berliner	RTD / Chief Facilities Engineer	808-768-6123	berliner@infraconsultllc.com	X		X					X
Jurgen Sumann	RTD / Systems Engineer			X		X					
Robert Badelbau	RTD / Chief of Project Controls	808-536-6610	Rbadelbou@gfnet.com	X	X						
Sue Tilden	RTD / Chief of Land Use Planning	808-536-6610	stilden@infraconsultllc.com	X							
Susan Robbins	RTD / Chief of Environmental Planning	808-536-6610	robbins@infraconsultllc.com								
Terry Gruver	RTD / PMP Development	480-272-6497	gruver@infraconsultllc.com	X	X						
Wes Mott	RTD / Chief Administration Officer	808-768-6155	mott@infraconsultllc.com	X	X					X	
Tad Ono	GEC / Principal in Charge	808-566-2208	ono@pbworld.com								X

Name	Organization/Title	Phone	Email	Attendance						
				A	B	C	D	E	F	G
Jim Van Epps	GEC / Project Manager	808-566-2230	vanepps@pbworld.com	X	X		X			X
Mark Scheibe	GEC / Deputy Project Manager	808-768-6156	scheibe@pbworld.com	X				X		X
Aileen Read	GEC / QA/QC Manager	415-243-4730	read@pbworld.com						X	
Art Borst	GEC / Civil Facilities Design Manager	808-694-3225	borst@pbworld.com	X					X	
Gerard (Jerry) Gill	GEC / Project Controls		gill@pdworld.com							
Harry Saporta	GEC / Safety and Security Manager	240-506-1822	saporta@pbworld.com			X				
Jim Dunn	GEC / Design Manager	808-694-3220	dunnj@pbworld.com	X		X				
Kevin Wong	GEC / Survey/Mapping/ROW	808-694-3223	wongk@pbworld.com				X			
Lawrence Spurgeon	GEC / Environmental Planning	808-566-2226	spurgeon@pbworld.com							
Marcus W. Johnson	GEC / Lead Scheduler	808-694-3203	johnsonmarc@pbworld.com	X						
Marie Walton	GEC / Senior Contracts Manager	801-288-3281	walton@pbworld.com				X			
Martin Hall	GEC / Segment Lead Manager	808-694-3226	hallmark@pbworld.com	X						
Mike Becher	GEC / System Design Manager	808-694-3222	becher@pbworld.com	X					X	
Stephanie Roberts	GEC / Public Involvement Manager		robertsste@pbworld.com							
Steve Hogan	GEC / Planning Manager	808-566-2247	hogan@pbworld.com	X						
Frank McCarron	PMOC / Program Manager	703-625-9274	mccarron_francis@bah.com			X				X
Justine A. Belizaire	PMOC / Task Order Manager	786-586-0026	belizaire_justine@bah.com	X	X		X			X
A. Scott Kiefer, PE	PMOC	703-579-7738	Kiefer a. scott@bah.com	X	X				X	X
Robert Mowry	PMOC	410-986-3416	Mowry_robert@bah.com	X	X			X		X
John Simon	PMOC	714-287-7095	Simon_john@bah.com	X	X	X				X
Dana Tokioka	PMOC	808-545-6810	Tokioka_dana@bah.com	X	X			X		X
Margie Newman	PMOC	303-548-1991	Pnewman214@msn.com	X	X		X			X
Gary Touryan, PE	PMOC	212 685 0578	gtouryan@pacogroup.com	X	X				X	X

Meeting Attendance Legend:

- A. January 15, 2008 – Project Status Update and Technical Capacity and Capability Review
- B. January 15, 2008 – PMP Review Workshop
- C. January 16, 2008 – SSMP Review Workshop
- D. January 16, 2008 – RAMP Review Workshop
- E. January 16, 2008 – BFMP Review Workshop
- F. January 16, 2008 – QMP Review Workshop
- G. January 17, 2007 - Exit Discussion

APPENDIX B – GRANTEE DELIVERABLES FOR TECHNICAL CAPACITY AND CAPABILITY

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR Technical Capacity and Capability To Enter PE – Grantee Checklist							
Activity / Deliverable	Delivery Dates						
	April 2007 Submittal Date	Planned Submittal Date	Actual Submittal Date	FTA Review Comments Due	Revised Submittal Date	FTA Accepted	
	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy
1	Project Management Plan (PMP)	06/01/07	11/15/07*	12/20/07	01/23/08	02/15/08	
2	Bus Fleet Management Plan (BFMP)	06/01/07	12/15/07	01/03/08	01/23/08	02/29/08	
3	Quality Management Plan (QMP)	06/18/07	12/01/07	01/03/08	01/23/08	02/29/08	
4	Real Estate Acquisition Management Plan (RAMP)	06/01/07	01/01/08	01/03/08	01/23/08	02/29/08	
5	Third-Party Agreement Plans	(included in the PMP)	(included in the PMP)	(included in the PMP)	(included in the PMP)	(included in the PMP)	
6	Safety and Security Management Plan (SSMP)	TBD	12/15/07	01/03/08	01/23/08	02/01/08	
7	Safety and Security Certification Plan (SSCP)	TBD	2/29/08				
8	Risk Assessment (<i>To Be Determined</i>)	TBD	TBD	TBD	TBD	TBD	
9	Financial Plan		11/15/07	12/04/07			
10	Request to Enter Preliminary Engineering (PE)	07/01/07	TBD				
11	PMOC Readiness Report		03/15/08				
12	Establish a State Safety Oversight Office (SSOO)		TBD				
13	Safety and Security Program Standard (SSPS)	TBD	TBD				

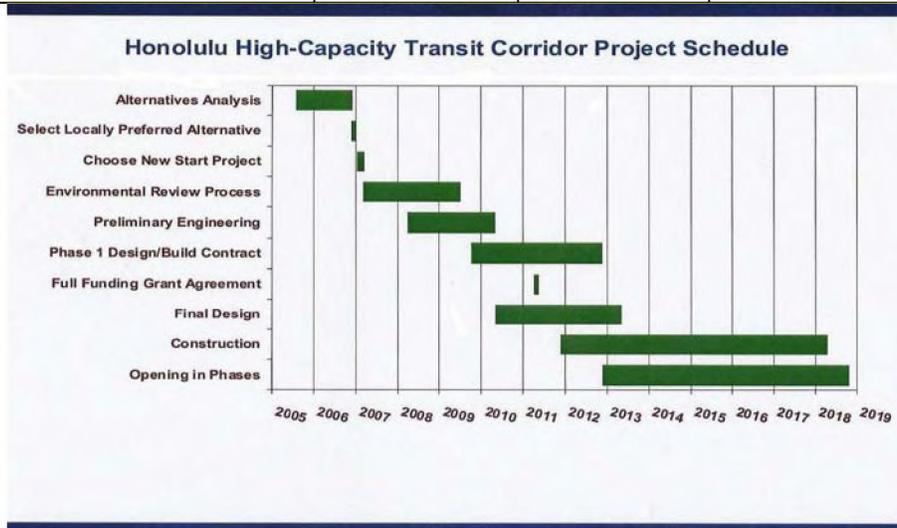
Revised 01/17/2008

NOTES:

- * *Initial submittals provided by the City on 06/12/07. Comments provided by PMOC during meeting on 06/13/07. Resubmittal issued on 09/14/07 and reviewed by the PMOC. Comments provided during PMP Workshop on 10/16/07.*

APPENDIX C – OVERALL PROJECT SCHEDULE

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR Project Schedule Analysis				
Activity Description	SCHEDULE DATES			
	April 2007 Schedule	June 2007 Schedule	January 2008 Schedule	Actual
RFQ – Advertise	06/01/2007	06/05/2007	06/05/2007	06/05/2007
RFQ – Contract Award (NTP#1)	08/01/2007	08/15/2007	08/24/2007	08/24/2007
Start Vehicle Procurement	4 th Qtr 2008	08/15/2007	12/05/2007	12/05/2007
Select Vehicle Technology	Mid 2007	Mid 2008	03/12/2008	
Start Preliminary Engineering (NTP #2)	Mid 2007	10/2007	06/01/2008	
Release DEIS			09/19/2008	
Start Utility Relocation		Mid 2009	Mid 2009	
Start Right-of-Way Relocation and Acquisition	4 th Qtr 2007	Mid 2009	Mid 2009	
Issue Procurement - Phase I Design/Build	4 th Qtr 2009	3 rd Qtr 2009	10/2008	
Release FEIS			06/22/2009	
Record of Decision (ROD)	Mid 2009	Mid 2009	08/04/2009	
Issue NTP for Phase I Design/Build			10/2009	
Start Phase I Construction	4 th Qtr 2009	1 st Qtr 2010	12/31/2009	
NTP for Transit Vehicles			02/2010	
Enter FD - Phase II	1 st Qtr 2009	3 rd Qtr 2010	2 nd Qtr 2010	
FFGA		3 rd Qtr 2011	2 nd Qtr 2011	
Start Remaining Construction	N/A	3 rd Qtr 2012	3 rd Qtr 2012	
Complete Phase I Construction	Mid 2012	Mid 2013	Mid 2013	



APPENDIX D – ACTION ITEM SUMMARY

Action Item	Responsible	Date of Completion			Status
		Planned	Currently Projected	Actual	
<i>Produce a Master Project Schedule detailed for the current phase that includes the appropriate timelines for requesting entry into PE and producing the required technical capacity deliverables.</i>	<i>City</i>	<i>03/31/08</i>			
<i>Determine the process for establishing an SSOA in the State of Hawai'i. Waiting for the FTA to transmit letter to the State</i>	<i>FTA</i>	<i>Ongoing</i>			
<i>Elevate the position of Safety and Security Manager in the GEC organization.</i>	<i>GEC</i>	<i>11/01/07</i>		<i>11/01/07</i>	<i>CLOSED</i>
<i>Pursue the establishment of the SSWG and FLSC by preparing memorandums to the various emergency response agencies.</i>	<i>City</i>	<i>12/01/07</i>		<i>01/17/08</i>	<i>CLOSED - First SSORC Meeting held on 01/17/08.</i>
<i>Provide a integrated project-related organization chart with City (RTD), PMSC and GEC staff. This organizational chart should be included in the draft PMP to be submitted by the City.</i>	<i>City</i>	<i>12/01/07</i>		<i>01/17/08</i>	<i>CLOSED</i>
<i>Confirm acceptance of the AA documentation received from the City.</i>	<i>FTA</i>	<i>Ongoing</i>			
<i>Resubmittal of FTA Deliverables for final review and acceptance (PMP, QMP, BFMP, RAMP)</i>	<i>City</i>	<i>02/29/08</i>			
<i>Provide comments from review of the Financial Plan submitted by the City</i>	<i>FTA</i>	<i>Ongoing</i>			
<i>Clearly identify the risk products required to enter into PE.</i>	<i>FTA</i>	<i>Ongoing</i>			
<i>Transmit Draft Readiness Report to FTA for Entry into PE</i>	<i>PMOC</i>	<i>03/15/08</i>			

APPENDIX E - PMOC 90-DAY LOOK AHEAD SCHEDULE

Date	Event/ Topic	Location	Attendees		
			FTA	PMOC	Grantee
<i>March 10-13, 2008</i>	<i>March 2008 Monitoring Meeting (Project Schedule and Delivery Method Update)</i>	<i>San Francisco, CA</i>		<i>Belizaire</i>	<i>Hamayasu, RTD, GEC</i>
<i>TBD, April 2008</i>	<i>April 2008 Monitoring Meeting (Project Schedule and Delivery Method Update)</i>	<i>Honolulu, HI</i>		<i>Belizaire</i>	<i>Hamayasu, RTD, GEC</i>