PMOC MINI-MONTHLY REPORT

Honolulu High-Capacity Transit Corridor Project
City and County of Honolulu
Honolulu, HI

January 2010 (FINAL)

PMOC Contract Number: DTFT60-09-D-00012
Task Order No. 2: Honolulu High-Capacity Corridor Project
Project No: DC-27-5140
Work Order No. 1
OPs Referenced: OP 1 and 25

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Length of Time Assigned: Five Years (November 18, 2009 through November 17, 2014)

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1.0 EXECUTIVE SUMMARY

1.1 Project Description

- **General Description:** The Project is a 20-mile elevated fixed guideway rail system along Oahu's south shore between East Kapolei and Ala Moana Center. This Project is based on the Airport Alignment, which includes 21 stations. The alignment is elevated, except for a 0.5-mile at-grade portion at the Leeward Community College station. The Project is planned to be delivered in four guideway segments.
- **Length:** 20 miles
- **No. of Stations:** 21
- **Additional Facilities:** Maintenance and Storage Facility (MSF) and parking facilities
- **Vehicles:** 76 vehicles
- **Ridership Forecast:** 97,500 weekday boardings in 2019; 116,300 weekday boardings in 2030

1.2 Project Status

- Project was approved to enter Preliminary Engineering (PE) on October 16, 2009.
- Publication of Final Environmental Impact Statement (FEIS) is pending resolution of the several key issues including:
    - Section 106 Programmatic Agreement (PA) has not yet been signed.
    - Section 4(f) parkland land issues and potential clearance problem with the project's alignment at and near the Lagoon Drive Station and bridge spanning Lagoon Drive.
    - Impacts at the Honolulu International Airport Runway Protection Zone (RPZ) avoidance and selection of airport alignment alternatives.
- General Engineering Consultant (GEC) II contract is on hold until after the Record of Decision (ROD) is issued. The GEC I contract will be extended until the GEC II contract is awarded after the ROD.
- A Design-Build (DB) Contract for the West Oahu/Farrington Highway (WOFH) Guideway was awarded to Kiewit Constructors on November 18, 2009. The City issued Notice to Proceed (NTP) #1 on December 1, 2009. The scope of work under NTP #1 is limited to the elements of PE whose principal purpose is refinement and validation of information supporting the environmental review process.
- Request for Proposal (RFP) Part 1 for the Kamehameha Highway Guideway DB Contract was issued on November 18, 2009, with responses received on January 5, 2010. RFP Part 2 will be issued on March 9, 2010.
- RFP Part 1 for the MSF was issued on May 28, 2009. RFP Part 2 was issued on July 24, 2009 and proposals were received on January 22, 2010. The City expects to make a selection on March 5, 2010 and issue NTP #1 following receipt of a ROD. The City is considering using multiple NTPs. The PMOC has recommended that the City share future NTPs with the FTA and PMOC in advance of their issuance. The purpose of this review is to ensure that the City remains within the constraints of the New Starts requirements.

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- RFP Part 1 for the Vehicles/Core Systems Design-Build-Operate-Maintain Contract was issued on April 8, 2009. RFP Part 2 was issued on August 17, 2009, with responses originally due in February 2010. However, the proposals are now due on March 19, 2010. The City expects to make a selection on June 2, 2010.

1.3 Technical Capacity Review

- **Project Management Plan (PMP):** Revision 2 of the PMP, dated March 1, 2009, was prepared to support the City's request to enter PE. Revision 3 is in final internal circulation and is anticipated to be submitted for review in February 2010. This update will address key items associated with management of the Project during PE. The PMP update will also address recommendations identified in the PE approval letter and all prior PMOC review comments.
- **Quality Management Plan (QMP):** Revision 1 of the QMP was issued on May 11, 2009 to support the City's request to enter PE. It is anticipated that Revision 2 of the QMP will be issued in April 2010. The update is to address the QA/QC procedures to be implemented by the design consultants and the GEC II, as well as DB and DBB contractors.
- **Rail Fleet Management Plan (RFMP):** An RFMP Draft, dated May 2009, was submitted to support the request to enter PE. The City will be required to submit a fully developed RFMP for review in support of entry into FD to ensure that the City will have adequate service to meet the transit demand for the years following construction of the New Starts project. The PMOC anticipates the City to submit an update of the RFMP in May 2010.
- **Bus Fleet Management Plan (BFMP):** Revision 0 of the BFMP, dated April 2008, was submitted to support the request to enter PE. The City will be required to submit a fully developed BFMP for review in support of entry into FD to ensure that the City will have adequate service to meet the transit demand for the years following construction of the New Starts project. The PMOC anticipates the City to submit an update in May 2010.
- **Real Estate Acquisition and Management Plan (RAMP):** Revision 3 RAMP, dated October 2009, was submitted to support the request to enter PE. The PMOC has provided high-level review comments on Revision 3 of the RAMP, and the City is in the process of updating the document. The PMOC anticipates the City to submit Revision 4 in February 2010.

1.4 Schedule

- **Preliminary Engineering (PE):** FTA Approval to Enter PE on October 16, 2009
- **Record of Decision:** Publication of the FEIS, which must precede the Record of Decision, is pending
- **Revenue Operations Date (ROD):** Grantee Target is March 2019

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1.5 Cost Data

The Project Budget submitted with the City's request to enter PE is as follows:

Base Cost Estimate	$3.838 billion
Total Contingency	$1.219 billion (31.8% of Base Cost Estimate)
Finance Charges	$0.290 billion
Total Project Cost	**$5.348 billion**

Additional project costs include the following:

Pre-PE Expenditures	$0.082 billion
Financing Charges	$0.103 billion (post-revenue operations)
Grand Total Project Cost	**$5.532 billion**

With the following potential changes, the City feels the Total Project Cost could be reduced from $5.532 billion to $5.391 billion:

- Advancing the Kamehameha Highway Guideway & Utilities Contract through the use of DB procurement
- Incorporating costs from the accepted WOFH DB Contract price proposal

The City is preparing a bottoms-up cost estimate for the Project. It is anticipated that this estimate will be available for review by the PMOC in February or March 2010.

1.6 Issues or Concerns

The following key issues or concerns have been identified:

- The executed agreement for the WOFH DB Contract calls for issuance of all four NTPs within 120 calendar days of the December 1, 2009 NTP #1 date. If that does not occur, the City will review Kiewit's schedule of milestones and the baseline schedule to determine whether there has been a schedule or a cost impact. It is unlikely the 120 calendar day schedule for issuance of all NTPs will be met since a ROD has not yet been issued by the FTA.
- The City should share future NTPs with the FTA and PMOC for review in advance of their issuance. The purpose of this review is to ensure that the City remains within the constraints of the New Starts requirements.
- The PMOC is concerned that FTA and the PMOC have not been afforded an opportunity to review RFP Part II documents in advance of their issuance due to the City's confidentiality requirements for DB procurement.
- The City must sign a lease with the Department of Hawaiian Homelands (DHHL) to construct the MSF on the Navy Drum Site. To do so, it must first execute a Memorandum of Agreement (MOA). The MOA has been approved by the City Council, but has not been executed by DHHL. DHHL has reviewed the MOA and has begun its approval process, which takes approximately one month. The City has stated that it is not aware of any issues from the DHHL, that the Navy has cleaned the site and that there are no limitations to the site.

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- The City must populate the FTA Roadmap for Final Design with realistic dates, and conversely, incorporate key milestones from the Roadmap into its Master Project Schedule. The schedule should reflect realistic dates for resolution of all NEPA-related issues (Programmatic Agreement, Section 4(f), and Runway Protection Zone at the Honolulu International Airport). At this time, a date for the resolution of these issues and publication of the FEIS cannot be determined. The City must remain cognizant of the limits of the pre-award authority granted with the receipt of Record of Decision. The City intends to issue multiple NTPs for its DB contracts. However, as noted in a December 1, 2009 letter to the City, the FTA will consider LONPs for activities not covered by automatic pre-award authority on a case-by-case basis following completion of the NEPA process.

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2.0 BODY OF REPORT

2.1 Grantee's Capabilities and Approach

2.1.1 Technical Capacity and Capability

The PMOC has identified "capacity" issues as several key City and PMSC management positions remain vacant or vacated due to retention challenges stemming from the project's geographic location and other related issues. Several of the City positions are currently filled by "Acting" or "Interim" staff members from the PMSC team. While these temporary solutions may fill an immediate void, the PMOC believes the resource demands associated with the PE and Final design phases of an approximate $5 billion project require full time and concentrated attention and continuity within the Grantee's organization for smooth transition into future phases.

The City's long term strategy is to hire locally and have the Project Management Support Consultant (PMSC) train new City staff using the consultant's expertise in an effort to ensure that the new hires are capable of managing the City's consultants effectively. Although there is no set timetable for replacing the PMSC with City staff, the City has begun to advertise city positions currently filled by the PMSC. The need for PMSC staff will diminish as the City fills key management positions. Until such time, the City continues to supplement its staff with PMSC staff.

The City intends to add the following staff within the next 30 days:

- QA Manager
- Structural Engineer
- Assistant Project Officer for DB Contracts
- Lead Civil Engineer
- Civil Engineer – for Maintenance and Storage Facility (MSF)
- Secretary

It is the PMOC's professional opinion that the Project organization, staffing, and management approach meets the technical capability to support the City's continuance of project implementation into the PE phase. However, significant technical capacity issues remain as several key City management positions remain vacant or filled by interim City or PMSC employees sharing multiple duties. The PMOC recommends the City attempt to fill key management positions no later than issuance of the Record of Decision.

2.1.2 Project Controls for Scope, Quality, Schedule, Cost, Risk and Safety

<u>System Safety</u>

- The City indicated that Revision 2 of the Safety and Security Management Plan (SSMP) will likely be submitted for review in February 2010.
- The PMOC intends to hold a safety and security workshop that could include representatives from FTA Region IX as well as FTA Headquarters. However, it is likely that this workshop will be deferred until after the Governor formally establishes a State

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Safety Oversight Agency (SSOA). It was noted that a letter from FTA to the Governor is pending regarding the need to establish the SSOA early in the Project.

2.1.3 Compliance with Applicable Statutes, Regulations, Guidance and FTA Agreements

National Environmental Policy Act (NEPA)

- Section 106 Programmatic Agreement (PA) was submitted to the FTA and minor comments were provided in December 2009. The City will review the comments and present the PA to designated signatories.
- Airport Runway Protection Zone (RPZ) – In a December 11, 2009 letter to FTA, the FAA expressed an interest in becoming a cooperating agency in the development of the HHCTC project Environmental Impact Statement. The FTA welcomed FAA as a Federal Agency with jurisdiction by law to the HHCTC environmental process as a cooperative agency. Under the procedural provisions of NEPA and administration of the NEPA process, the FAA has special expertise regarding environmental matters at Honolulu International Airport. The FAA is aware of the sensitivity of the schedule and has committed to providing timely comments. The FAA regional office in Los Angeles received the Administrative Draft of the FEIS for review on December 13, 2009. The City is awaiting comments. The FTA has requested a copy of the backup information to support the City's assertion of cost impacts if the alignment is modified to mitigate the RPZ issue and 4(f) issue associated with Ke'Ehi Lagoon Park.
- The City included a new Chapter 5 in the Final Environmental Impact Statement (FEIS) to address Section 4(f) comments from the FTA.
- The City has indicated that it may delete the Pearl Harbor Naval Base Station from the scope due to issues with respect to State Historic Preservation Office's (SHPO) concerns over adjacent sites. The City and the Navy are continuing to communicate with the SHPO in an attempt to mitigate the SHPO's concerns. The City has noted that this station accounts for 1% of the daily ridership.
- The City's schedule for receiving a ROD by March 2010 is not realistic due to the issues mentioned above.

Letters of No Prejudice (LONP)

- The City is still developing an LONP approach for the Project and will send a letter when ready. In a December 1, 2009 letter to the City, the FTA clarified its policies and procedures related to LONPs. The letter states, "After completion of NEPA, FTA will consider LONPs for activities not covered by automatic pre-award authority on a case by case basis. Absent of pre-award authority or an LONP, no project cost can be incurred and be eligible for reimbursement or as local matching for any portion of the entire 20 mile alignment."

2.2 Project Scope

The Project is a 20-mile fixed guideway rail system along Oahu's south shore between East Kapolei and Ala Moana Center. This Project is based on the Airport Alignment, which currently includes 21 stations. The alignment is elevated, except for a 0.5-mile at-grade portion at the Leeward Community College Station. The Airport alignment will average a total of 97,500

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weekday boardings at the Revenue Operations Date in the year 2019 and 116,300 weekday boardings in the year 2030. It will provide two significant areas with potential for Transit Oriented Development, one near the Airport and one in the surrounding industrial areas. It is anticipated that the initial fleet will include 76 "light metro" rail vehicles.

2.2.1 Status of Design/Construction Documents

The City has developed a Compendium of Design Criteria for all design elements along with its standard specification and standard and directive drawings. The PMOC's initial review finds these documents to be well prepared. However, the PMOC has yet to complete a thorough review of all design and design support documents. This review is ongoing and will be completed in advance of the City's request to enter Final Design.

2.2.2 Status of Third-Party Agreements

The following is a summary of utility coordination efforts ongoing by the City:

- Utility Design Coordination
  - Agencies: Navy, Air Force, DOIM, HDOT, City Departments
  - Companies: HECO, Chevron, Tesoro, TGC, HTI, OTWC, AT&T, SIC, TWTC, PNLI
- Attend Regular Utility Meetings
  - City Monthly Government and Public Utility Task Force Meeting
  - HDOT Bi-Monthly Utility Coordination Meeting
  - Hawaii Pipeline Corrosion Control Coordination Committee Quarterly Meeting

The following is the status of the Utility Engineering Service Agreements:

- Being circulated within the City for signature:
  - AT&T Corporation
  - Chevron Products Company
  - Oceanic Time Warner Cable
  - The Gas Company
  - TW Telecom Inc
  - Sandwich Isles Communications Inc.
- Comments being resolved with Utility Company:
  - Hawaiian Electric Company, Inc
  - Hawaiian Telecom, Inc
- Not yet returned by Utility:
  - Pacific LightNet Inc
  - Tesoro Hawaiian Corporation

The following is the status of the Intergovernmental Agency Agreements that the City has identified:

- Hawaii Department of Transportation – undergoing final review
- Hawaii Department of Education (for Waipahu High School) – draft agreement and Consent to Construct are under internal review

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- University of Hawaii (West Oahu Campus) and Leeward Community College – draft agreements under internal review

2.2.3 Delivery Method

In accordance with the Contract Packaging Plan developed by the City, the project guideway is to be implemented in four segments. A summary of the Contract Packaging Plan for PE is currently included in the PMP as the project delivery approach for the Project. The four segments and method of delivery identified are:

- Segment I – East Kapolei to Pearl Highlands – DB
- Segment II – Pearl Highlands to Aloha Stadium – DB
- Segment III – Aloha Stadium to Middle Street Station – DBB
- Segment IV – Middle Street Station to Ala Moana Center – DBB

The DB approach is being planned to advance the project schedule in order to minimize escalation costs and start construction of the initial portion of the project while the remainder of the project proceeds through the DBB process. Work on these early contracts (Segments I & II, Maintenance and Storage Facility and Vehicle/Core Systems) is planned to be initiated after the ROD but ahead of the FFGA, utilizing excise tax funding. However, as noted above, any design activities beyond PE or construction activities not covered by automatic pre-award authority would require an LONP, which would be considered on a case by case basis.

Appendix B provides the status of the various design and construction contracts associated with this Project. The following is a list of contracts, delivery methods and contract packages anticipated for the project (number in parentheses indicates number of anticipated contracts if more than one):

- Professional Services
    - Project Management Support Consultant
    - General Engineering Consultant
    - Legal Services
    - LEED Commissioning
    - Insurance Consulting for Owner Controlled Insurance Program
    - Drilled Shaft Load Testing
- Design and Construction Services
    - Guideway & Utilities Design (2)
    - Stations Design (8)
    - Design-bid-build (DBB) Construction Engineering Inspection (5-7)
- Construction and Procurement Contracts
    - 3 Design-Build Contracts – Guideway (2) and MSF
    - Design-Bid-Build Contracts
        - Stations (8) – 1-3 stations each contract
        - Utility Relocation (2)
        - Guideway Construction (2)
        - System-wide Landscaping
    - Vehicle/Core Systems Design-Build-Operate-Maintain (DBOM)
    - Elevator/Escalator

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2.2.4 Vehicle Status

Vehicle procurement is included in the Core Systems DBOM Contract. The current assumptions for the vehicles include a total active rail car fleet of 76 "light metro" railcars. The railcar being proposed is an automated light metro car, similar to railcars currently in operation in Vancouver, Copenhagen, and Oslo, but not in the United States. The railcar would have three doors per side and a length of approximately 60 feet. Vehicles could run in two-, three-, or four-railcar trains. Following is a summary of the anticipated vehicle characteristics (subject to change based on proposals that will be received from DBOM contractors):

- 76 light metro vehicles (identified as heavy rail in SCC workbook)
- Standard gauge, steel wheel on steel rail
- Fully automated, manual operation possible (hostler panel)
- Nominal vehicle dimensions:
  - Length: 60 feet
  - Width: 10 feet
  - Height: Up to 13.3 feet
  - Floor Height: 3.77 feet above top of rail (at entry)
- Nominal Passenger Capacity: 190 per vehicle (AW2 load)
- Electric traction via third rail, nominal 750V direct current supply, all axles powered
- Semi-permanently coupled, bi-directional trainsets
- Wide gangways between end and middle cars
- 2 to 3 double passenger plug doors per side (per car)
- Manual crew doors with steps
- Dynamic / regenerative braking
- Alternating current propulsion
- 30+ year design life

2.3 Project Management Plan and Sub-Plans

2.3.1 Project Management Plan (PMP)

Revision 2 of the PMP, dated March 1, 2009, was prepared to support the City's request to enter PE. Revision 3 is in final internal circulation and is anticipated to be submitted for review in February 2010. This update will address key items associated with management of the Project during PE. The PMP update will also address recommendations identified in the PE approval letter and all prior PMOC review comments. It is anticipated that Revision 3 will address the following specific items:

- Update the PMP to be consistent with the current status of the Project
- Prepare a Staffing Plan and revise the organization chart due to changes in PMSC positions and City staff, and address the transition from PMSC staff to City staff during the PE and FD Phases of the Project
- Update the Project Delivery approach to reflect alignment, station locations, and segment delivery methods, once finalized
- Expand cost, schedule and claims management sections as the requirements and the processes are further defined

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- Expand the Configuration Management Plan and Document Control Procedures to incorporate the roles of the consultants (engineering, design, and construction) and contractors at the various stages of the project, and to include document response durations, tracking, turnover, retention, storage and retrieval.
- Expand the process for Procurement and Contracts and change order procedures to incorporate the roles of the GEC and contractors at the various stages of the Project.
- Expand the Construction Management and Testing and Start-Up sections as the requirements and the processes are further defined.

2.3.2 Quality Management Plan (QMP)

Revision 1 of the QMP, issued on May 11, 2009, was prepared to support the City's request to enter PE. The PMSC has hired a new Quality Manager who is scheduled to begin working on the Project on February 1, 2010. It is anticipated that Revision 3 of the QMP will be issued in April 2010. The update is to address the QA/QC procedures to be implemented by the design consultants, the GEC II, as well as DB and DBB contractors.

2.3.3 Rail Fleet Management Plan (RFMP)

The RFMP Draft, dated May 2009, was submitted to support the request to enter PE. The City will be required to submit a fully-developed RFMP for review in support of entry into FD, to ensure that the City will have adequate service to meet the transit demand for the years following construction of the New Starts project. The City has provided the PMOC with an informational copy of the RFMP and has requested the PMOC's preliminary input prior to its next submittal.

The PMOC notes that the RFMP format is generally acceptable and appears to address requisite topics related to rail fleet management. Specifically, the RFMP follows FTA's 8-step guidance in computing Peak Vehicle Requirements and Operating Spares Ratio. The PMOC recommends that the details of the railcar be included in the RFMP update once the award of the Core Systems Contract is complete. The PMOC anticipates that the City will submit an update of the RFMP in May 2010.

2.3.4 Bus Fleet Management Plan (BFMP)

Revision 0 of the BFMP, dated April 2008, was submitted to support the request to enter PE. The City is in the process of updating the document. The City had requested the PMOC's preliminary input prior to its next submittal. The PMOC notes that the content is generally acceptable and appears to address requisite topics related to bus fleet management. The PMOC does recommend the following be considered to enhance the BFMP:

- Add details related to load factor policy, basis of ridership forecast, funding plans and sources for procurement/rehab of buses and maintenance facilities capacity/expansion plans
- Add description to definitively state how bus service will not be degraded as a result of the rail project

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- To the maximum extent practicable, use a consistent time frame for all exhibits, tables, spreadsheets, etc. (e.g., 3-5 years prior to the start of design phase or after the start revenue operation of the rail project).

The City will be required to submit a fully developed BFMP for review in support of entry into FD to ensure that the City will have adequate service to meet the transit demand for the years following construction of the New Starts project. The PMOC anticipates the City to submit an update in May 2010.

2.3.5 Real Estate Acquisition and Management Plan (RAMP)

Revision 3 of the RAMP, dated October 2009, was submitted to support the request to enter PE. The City is in the process of updating the document. The PMOC has provided high-level review comments on Revision 3 of the RAMP. Some of the key findings include:

- There is no discussion of the appraisal Scope of Work
- Methodology for evaluating contaminated properties is not clearly described
- Real personalty (i.e. movable assets) determinations are not adequately addressed
- There are no relocation procedures

It is anticipated that a Real Estate Workshop will be scheduled for the second quarter of 2010 that would include FTA Headquarters and Region staff and the PMOC's real estate expert. The PMOC anticipates the City to submit Revision 4 in February 2010.

2.4 Project Schedule Status

The City developed a Master Project Schedule (MPS) and "baselined" the MPS at the request of the PMOC in the fall of 2009. The most recent MPS update was issued on October 19, 2009. The City will continue to providing monthly progress updates and expand the MPS detail as the project scope and definition are refined during the PE and final design phases. The project alignment contains four geographical segments, from east to east: West Oahu/Farrington, Kamehameha, Airport, and City Center. The City plans to open each segment in the same easterly direction as construction. The MPS "interim milestone" operational dates and the project Revenue Operation Date (ROD) are included in the table below.

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Activity ID	Delivery Method	Milestone Description	Baseline Finish Date	Latest Update Finish Date	Variance (Weeks)
West Oahu / Farrington Highway Segment					
I997	DB	Open Waipahu to Leeward Section	14DEC12	14DEC12	0
M999	DB	Maintenance Service Facility	01OCT13	01OCT13	
I998	DB	Open East Kapolei to Leeward CC Section	31JUL14	31JUL14	0
I999	DB	Open Leeward CC - Pearl Highlands Section	27APR15	27APR15	0
Kamehameha Segment					
J999	DB	Open Kamehameha Section	14SEP16	14SEP16	0
Airport Segment					
Z999	DBB	Open Airport Section	31OCT17	31OCT17	0
City Center					
9999	DBB	Open to Ala Moana Center *** (ROD) ***	03MAR19	03MAR19	0

The City is using multiple contract delivery methods: Design-build and the conventional design-bid-build method. It is using design-build on the first two contract sections to achieve the aggressive interim milestone operation date of December 2012 and July 2014 respectively. The interim milestone operation dates for the Kamehameha, Airport, and Ala Moana Segments may be achievable with proper project management.

The City must populate the FTA Roadmap for Final Design with realistic dates and incorporate key milestones from the Roadmap into its Master Project Schedule. The City must include realistic dates for resolution of all NEPA-related issues (Programmatic Agreement, Section 4(f), and Runway Protection Zone at the Honolulu International Airport). It is the PMOC's professional opinion that the near-term project schedule provided by the City is unrealistic. At this time, a date for the resolution of these issues and publication of the FEIS cannot be determined. The City must remain cognizant of the limits of the pre-award authority granted with the receipt of Record of Decision. The City intends to issue multiple NTPs for its DB contracts. However, as noted in a December 1, 2009 letter to the City, the FTA will consider LONPs for activities not covered by automatic pre-award authority on a case-by-case basis following completion of NEPA.

The following is a 90-day look ahead for important activities associated with the Project:

Period: January – March 2010		
Activity	**Responsibility**	**Date**
Kamehameha DB RFP Part 1 Proposals Due	City	January 5, 2010
MSF RFP Part 2 Proposals Due	City	January 22, 2010
Monthly Progress Meeting (conference call)	FTA, PMOC and City	February 2010 (TBD)
Publish FEIS/NOA*	FTA, City	TBD
Determine Priority List for KH DB	City	February 22, 2010
FTA Issues ROD*	FTA	TBD
Monthly Progress Meeting	FTA, PMOC and City	March 3, 2010
Begin ROW Purchasing*	City	TBD
NTP #2 WOFH DB Contract*	City	TBD

*Note: Dates are dependent on adequate resolution of all issues identified in Section 2.1.3.

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2.5 Project Cost Status

The Project Budget submitted with the City's request to enter PE is as follows:

Base Cost Estimate	$3.838 billion
Total Contingency	$1.219 billion (31.8% of Base Cost Estimate)
Finance Charges	$0.290 billion
Total Project Cost	**$5.348 billion**

Additional project costs include the following:

Pre-PE Expenditures	$0.082 billion
Financing Charges	$0.103 billion (post-revenue operations)
Grand Total Project Cost	**$5.532 billion**

With the following potential changes, the City feels the Total Project Cost could be reduced from $5.532 billion to $5.391 billion:

- Advancing the Kamehameha Highway Guideway & Utilities Contract through the use of DB procurement
- Incorporating costs from the accepted WOFH DB Contract price proposal

The City is preparing a bottoms-up cost estimate for the Project. It is anticipated that this estimate will be available for review by the PMOC in February or March 2010.

2.5.1 Standard Cost Category (SCC)

The SCC Workbook, including Main and Inflation worksheets, is submitted as a separate electronic file. The City is in the process of preparing a detailed bottoms-up estimate. In addition, the PMOC recommends the City perform quality assurance checks to verify scope inclusivity and escalation of SCC categories in accordance with the MPS. The cost estimate and Basis of Estimate should provide more justification and backup documentation supporting the quantification and assumptions for the "soft costs" and related General Conditions for the project.

2.5.2 Funding Sources

The following are the project capital revenue (funding) sources provided by the City during the January 2010 Progress Meeting:

General Excise Tax (GET)	$3.698 billion
Section 5309	$1.550 billion
Section 5307	$0.300 billion
ARRA (Section 5307)	$0.004 billion
Interest	$0.011 billion
Total	**$5.563 billion**

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The City is hopeful that it will be able to reduce the need for Section 5307 funds through project development (.i.e. refined Base Cost Estimate and revenue estimates during PE) and an aggressive bidding environment.

The GET surcharge receipts received to date are approximately $429 million. Additional surcharge revenues are received approximately 30 days following the end of each quarter.

2.6 Project Risk

The PMOC completed a scope, schedule, and cost review in advance of completing a risk assessment of the Project as part of the evaluation of the Grantee's request to enter PE. A FINAL Spot Report was submitted in July 2009. The Spot Report included recommendations for cost and schedule contingency and identified key risks. However, this effort did not include development of risk management tools (e.g., Primary Mitigation Deliverables, Secondary Mitigation Activities, or a Risk and Contingency Management Plan). It is anticipated that the risk management tools will be developed in conjunction with an update of the risk assessment to support the City's request to enter Final Design.

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2.7 Action Items

Item No.	Item	Responsible Party	Date Identified	Date Due	Date Completed	Status
1	Provide Quarterly Report samples	PMOC	4-Nov-09	Dec-09		
2	Provide presentation of what is described in the FEIS for the airport and analysis of Master Plan for the Airport	City	4-Nov-09	Nov-09	16-Dec-09	Deleted as Action Item
3	Schedule real estate workshop	PMOC	4-Nov-09	Dec-09		Open
4	Provide FTA with "making the case" approach letter for LONP	City	4-Nov-09	Dec-09		Open
5	Provide FTA with a report on reduction of performance bond requirements	PMOC	4-Nov-09	Dec-09	29-Dec-09	Complete
6	Provide FMOC comments to Financial Plan	FTA	4-Nov-09	Nov-09	Dec-09	Complete
7	Provide FTA with OCIP Bid Protest notification [Update: Procurement terminated and will be re-solicited; letter will be sent to FTA Regional Counsel]	City	4-Nov-09			Open
8	Provide PMOC with GEC II Request For Qualifications	City	16-Dec-09	Dec-09	Dec-09	Complete
9	Provide PMOC with backup for WOFH Contract basis for NTP #1 scope and budget	City	16-Dec-09	Jan-10	13-Jan-10	Complete
10	FTA preparing a memo to Corporation Council on confidentiality	FTA	16-Dec-09	Jan-10		
11	Schedule Road Map meeting for Entry into FD	FTA/PMOC	16-Dec-09	Jan-10		PMOC will schedule a conference call after the City reviews the Road Map
12	Provide the FTA with Navy covenant (deed)	City	16-Dec-09	Dec-09	Dec-09	Complete
13	Provide the PMOC with Operational Peer Review Report	City	16-Dec-09	Jan-10	Jan-10	Complete
14	Provide the FTA with Transit Authority Resolution	City	16-Dec-09	Dec-09	Dec-09	Complete
15	Provide signed MOA with DHL for Navy Drum Site	City	Jan-10	Feb-10		
16	Provide Section 106 Programmatic Agreement comments	City	Jan-10	Feb-10		

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Item No.	Item	Responsible Party	Date Identified	Date Due	Date Completed	Status
17	Provide sample Force Account and Claims Avoidance Plans	PMOC	Jan-10	Feb-10		
18	Provide draft Operating Plan	City	Jan-10	Mar-10		
19	VE requirement for Design Build contracts	PMOC	Jan-10	Feb-10	26-Jan-10	PMOC provided response from FTA
20	High level review of RAMP Rev 3	PMOC	Jan-10	Feb-10	25-Jan-10	PMOC provided Job Memorandum
21	Populate Road Map	City	Jan-10	Feb-10		
22	Check on status of FTA SSOA Letter	PMOC	Jan-10	Feb-10		Jan-10 – Per information from TPM, letter is still pending.

3.0 APPENDICES

Appendix A: Acronym List

BFMP	Bus Fleet Management Plan
DB	Design-Build
DBB	Design-Bid-Build
DBOM	Design-Build-Operate-Maintain
DHHL	Department of Hawaiian Homelands
FD	Final Design
FEIS	Final Environmental Impact Statement
FFGA	Full Funding Grant Agreement
FONSI	Finding of No Significant Impact
FTA	Federal Transit Administration
FY	Fiscal Year
GEC	General Engineering Consultant
GET	General Excise Tax
HAR	Hawaii Administrative Rules on Procurement
HDOT	Hawaii Department of Transportation
HHCTC	Honolulu High Capacity Transit Corridor Project
LCC	Leeward Community College
LONP	Letter of No Prejudice
MSF	Maintenance and Storage Facility
NEPA	National Environmental Policy Act
NOA	Notice of Availability
NTP	Notice to Proceed
PA	Programmatic Agreement
PE	Preliminary Engineering
PMOC	Project Management Oversight Contractor
PMP	Project Management Plan
PMSC	Project Management Support Consultant
QMP	Quality Management Plan
RAMP	Real Estate Acquisition and Management Plan
RFMP	Rail Fleet Management Plan
RFP	Request for Proposals
RFQ	Request for Qualifications
ROD	Record of Decision
ROD	Revenue Operation Date
RPZ	Runway Protection Zone
SCP	Safety Certification Plan
SHPO	State Historic Preservation Office
SSMP	Safety and Security Management Plan
SSOA	State Safety Oversight Agency
SSPP	System Safety Program Plan
WOFH	West Oahu/Farrington Highway
YOE	Year of Expenditure

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Appendix B: Contract Status

The following sections provide the scope and status of the various contracts identified for this Project.

Project Management Support Consultant (PMSC) Contract.

- Scope – The consultant will serve as a program manager in providing oversight of the PE, FD, and construction activities for the DB and DBB contracts.
- Status – The City issued a contract amendment in late 2009 to extend the PMSC for another ten years.

General Engineering Consultant (GEC) II Contract

- Scope – The consultant will provide services related to elevated guideway engineering, systems engineering, rail station design, construction management oversight, procurement, contract administration, configuration control, claims support, scheduling, project financing and environmental planning. After the qualifications are evaluated and the top qualifier is selected, the City will develop the detailed scope of the contract. The GEC II Contract will include a ten year period of performance. The City expects to hire separate Construction Engineering and Inspection firms to provide field services for the DBB contracts.
- Status – This contract is on hold until after the Record of Decision (ROD) is issued. The City will issue a contract amendment to extend the GEC I Contract until the GEC II consultant is selected.

West Oahu/Farrington Highway (WOFH) DB Contract

- Scope – This contract includes the design and construction of a portion of the guideway alignment from the initial station at East Kapolei and continuing approximately 6.8 miles to a point just east of the planned Pearl Highlands station. The alignment runs along the east side of North South Road. This portion of the guideway is being identified as the West Oahu/Farrington Highway Design-Build Contract. The guideway is comprised mostly of a two-track aerial structure with a 0.3-mile portion of twin single-track guideways and a 0.3-mile section of guideway at grade.

  As the alignment approaches Leeward Community College (LCC), the guideway alignment traverses from the median of Farrington Highway to the makai side of the highway where it transitions to an at-grade section. Once at grade, the entrance(s) to the Maintenance and Storage Facility (MSF) is (are) encountered. The Guideway crosses Ala Ike Road at two locations, with the roadway passing under the guideway alignment in box-culverts. At the LCC Station, a station plaza area is planned to allow passengers to walk under the guideway to access either platform.

- Status – Kiewit Constructors was awarded a $482,924,000 contract on November 18, 2009. Notice to Proceed (NTP) #1 was issued on December 1, 2009 to Kiewit. The maximum reimbursable amount under NTP #1 is $27 million. NTP #1 is for approximately 90 days and the scope of work for Kiewit is limited to the elements of PE whose principal purpose is refinement and validation of information supporting the

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NEPA process. NTP #2 will be issued shortly following the issuance of the Record of Decision (ROD). Should NTP #2 not be issued within the required timeframe per the contract, the City will meet with the contractor to re-evaluate the work schedule and make adjustments as deemed necessary. NTP #3 will be issued for Final Design work activities, as defined by the City. NTP #4 and any subsequent NTPs will be issued for all remaining work in the contract.

- Schedule – The contract schedule was provided by Kiewit with its proposal. With the City's issuance of NTP #1 on December 1, 2009, Kiewit has 45 calendar days, or until January 14, 2010, to submit a detailed baseline schedule to the City for review and approval. The PMOC requested a copy of the schedule electronic file once approved by the City.

- Cost
  - Original Contract Value – $482,924,000
  - Current Contract Value – $482,924,000
  - Expended to Date – $0
  - % Expended – 0%

- Issues or Concerns
  - The executed agreement calls for issuance of all four NTPs within 120 calendar days of the December 1, 2009 NTP #1 date, or by March 1, 2010. If that does not occur, the City will review Kiewit's schedule of milestones and the baseline schedule to determine whether there has been a time or a cost impact. It is unlikely the 120 calendar day schedule for issuance of all NTPs will be met.
  - The PMOC cautioned that the City should share future NTPs with the FTA and PMOC in advance of their issuance. The purpose of this review is to ensure City remains within the constraints of the New Starts requirements.

Kamehameha Highway Guideway DB Contract

- Scope – The contractor will design and construct a portion of the guideway alignment from the initial station at East Pearl Highlands to a point just east of the planned Aloha Stadium Station, a distance of approximately 3.9 miles. This portion of the guideway is being identified as the Kamehameha Highway Design-Build Contract. The guideway is comprised of a two-track aerial structure.

- Status – The Kamehameha Highway Guideway was originally to be constructed using DBB, but the City decided to utilize DB to take advantage of the perceived favorable bid climate. RFP Part 1 was issued on November 18, 2009, with responses received on January 5, 2010. RFP Part 2 will be issued on March 9, 2010. RFP Part 2 proposals are due on July 16, 2010. The City will make a selection on September 3, 2010 and issue NTP #1 on October 8, 2010. The contract is set up for multiple NTPs, if needed.

- Cost – The budget for this contract is $323.5 million.

- Schedule – The Kamehameha Guideway DB project is approximately 48 months in duration.

- Issues or Concerns
  - The PMOC is concerned that FTA and the PMOC will not be afforded an opportunity to review RFP Part II documents in advance of their issuance due to the City's confidentiality requirements for DB procurement.

Maintenance and Storage Facility DB Contract

- Scope – The contractor will design and construct the MSF to accommodate 80 revenue vehicles. The maximum capacity of the site is 100 revenue vehicles. The Shop Facility will include administrative and operational offices for the agency, including an Operations Control Center. The MSF will be designed and commissioned to achieve Leadership in Energy and Environmental Design (LEED) Green Building Rating System Silver Certification, and will operate in accordance with FTA Sustainable Maintenance and Operational Standards. The scope of the contract includes the procurement of all rail materials.

- Status – RFP Part 1 was issued on May 28, 2009. RFP Part 2 was issued on July 24, 2009 and proposals were received on January 22, 2010. The City expects to make a selection on March 5, 2010 and issue NTP #1 following receipt of a ROD.

- Cost – The budget for this contract is $234 million, of which approximately $156 million is for MSF design and construction and the remainder is for track material procurement.

- Issues or Concerns
  - The City is including two separate MSF sites, which are identified in the NEPA document as a 44-acre vacant site near Leeward Community College and a 41-acre agricultural site in Hoopili. The City continues to identify two potential sites since the DEIS did so as well. The Navy Drum Site is the City's preferred location for the MSF and the current RFP documents reflect the Navy Drum site.
  - The City must sign a lease with the Department of Hawaiian Homelands (DHHL) for the Navy Drum Site. To do so, they must first execute a Memorandum of Agreement (MOA). The MOA has been approved by the City Council, but has not been executed by DHHL. DHHL has reviewed the MOA and has begun its approval process, which takes approximately one month.
  - The PMOC is concerned that FTA and the PMOC have not been afforded an opportunity to review RFP Part II documents in advance of their issuance due to the City's confidentiality requirements for DB procurement.

Vehicle/Core Systems DBOM Contract

- Scope – A Design-Build-Operate-Maintain (DBOM) contract is anticipated to be awarded by the City in June 2010 and will include the following:
  - Design and manufacture of vehicles
  - Design, manufacture, and installation of systems components including train control communications, traction power, and fare vending equipment

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- Operations and Maintenance.

  The Operations and Maintenance contract will extend 5 years beyond the full build revenue date (2019), with an additional 5 year option. The Operations and Maintenance contractor will be responsible for Intermediate Operating Section Openings (6 sections including the demonstration section opening in 2012).

- Status – RFP Part 1 was issued on April 8, 2009. RFP Part 2 was issued on August 17, 2009, with responses originally due in February 2010. However, the proposals are now due on March 19, 2010. The City expects to make a selection on June 2, 2010 and issue NTP #1 on July 9, 2010.

- Cost – The budget for this contract is $650 million, including equipment and installation.

- Issues or Concerns
  - The PMOC is concerned that FTA and the PMOC have not been afforded an opportunity to review RFP Part II documents in advance of their issuance due to the City's confidentiality requirements for DB procurement.

Airport Guideway & Utility Relocation DBB Contract

- Scope – The project delivery method for the guideway and utility relocations will be DBB. The City anticipates awarding separate construction contracts for the utility relocation and guideway. This segment extends from Aloha Stadium Station to Lagoon Drive Station.

- Status – This segment is in the PE phase. The PE drawings are under final review by the City, and the GEC is completing quantity take-offs. Utility relocation and guideway construction are anticipated to begin in late 2011 and early 2012, respectively.

- Cost – The estimated contract value will be available when the bottoms-up estimate is complete.

- Issues or Concerns
  - None identified at this time.

City Center Guideway & Utility Relocation DBB Contract

- Scope – The project delivery method for the guideway and utility relocations will be DBB. The City anticipates awarding separate construction contracts for the utility relocation and guideway. This segment extends from Lagoon Drive Station to Ala Moana Center Station.

- Status – This segment is in the PE phase and the GEC II contract will be performing the PE/FD drawings for this project. The PE drawings are under final review by the City, and the GEC is completing quantity take-offs. Utility relocation and guideway construction are anticipated to begin in late 2011 and early 2012, respectively.

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- Cost – The estimated contract value will be available when the bottoms-up estimate is complete.

- Issues or Concerns
  - None identified at this time. The City is in the process of finalizing third party agreements for utility relocations.

Station Packages

- Scope – All stations will be implemented using DBB. The City has developed station group packages for design, and it intends to issue construction contracts based on those station packages. Following are the packages that the City is currently considering:
  - The West Oahu Station Group, consisting of three stations: East Kapolei, UH-West Oahu and Hoopili.
  - The Farrington Station Group, consisting of three stations: West Loch, Waipahu Transit Center and Leeward Community College.
  - The Pearl Highlands Station, H2 Ramps and Garage Group, consisting of one station at Pearl Highlands, new ramps from H2 to access the station and a multi-level parking structure.
  - The Kamehameha Station Group, consisting of two stations: Pearlridge and Aloha Stadium.
  - The Airport Station Group, consisting of three stations: Pearl Harbor Navy Base, Honolulu International Airport, and Lagoon Drive.
  - The Dillingham Station Group DBB contract, consisting of three stations: Middle Street Transit Center, Kalihi and Kapalama.
  - The City Center Group, consisting of three stations: Iwilei, Chinatown and Downtown.
  - The Kakaako Station Group, consisting of three stations: Civic Center, Kakaako and Ala Moana Center

- Status – Design is procured in a one-step Request for Qualifications (RFQ) process. The RFQ for Farrington Stations Design was released on October 13, 2009. Responses were received in early January 2010. The RFQ for West Oahu Stations has been delayed and has not yet been rescheduled.

- Cost
  - The estimated contract values for each package will be available when the bottoms-up estimate is complete.

- Issues or Concerns
  - None identified at this time. The City is in the process of finalizing third party agreements for utility relocations.

Elevators and Escalators

- Scope - The City intends to issue a DB contract to furnish, install, test, and commission all elevator and escalator equipment.

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- Status – The City anticipates procuring this contract in 2011.

- Schedule – Following are the key contract dates:
  - Prepare Procurement Packages – January 2011
  - Bid-Award Elevator Packages – May 2011
  - Elevator & Escalators Construction – September 2011

- Cost – The estimated contract values will be available when the bottoms-up estimate is complete.

- Issues or Concerns
  - None identified at this time.

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Appendix C: PE Approval Letter Requirements

No.	Item	City Responsible Person	Date Due	Completion Date	Comments
Project Scope, Design and Development					
1	Identify any third party agreements necessary for project completion, including utility agreements with private and public owners and military	LR / HLB	Jan-10		Status Matrix being sent to the PMOC on a monthly basis
2	Resolve the specific regarding proximity of the guideway to runways 22R/4L and 22L/4R at the Honolulu International Airport with HDOT and FAA	HLB	Ongoing		
3	Fully develop vehicle basis of design and functional sizing	JS	Mar-10		PMOC will review selected proposal to determine whether it meets operational criteria
4	Determine rail fleet size requirement	JS	May-10		Delayed due to change in CORE Systems proposal due date
5	Fully develop scope for the administration building and operations control center	JS / HLB	Jul/Aug-10		
6	Determine the final location of the maintenance and storage facility	FM			Address in FEIS reconciliation table
7	Finalize a contracting packaging plan which includes a source selection plan(s) and contract specific work plans	SZ	Jan-10		On Schedule
8	Develop strategies to streamline the City's process to award contracts and to enter into grant agreements, especially as applicable to FTA grants	LR	Apr-10		Transit Authority Resolution 09-252 CD 1 passed on 12/16/09. Goes to public vote during November elections.
9	Develop a preliminary operation plan	JS	Mar-10		Final operations plan will be submitted following election of the Core Systems Contractor.
10	Ensure the service velocity does not erode over the next course of design changes	JS	Mar-10		On Schedule - currently being evaluated
Project Schedule					
11	Provide a baseline of the master Project Schedule (MPS) early in PE which will be used for monthly progress updates and tracking schedule variances	MH	Jan-10	10/29/2009	Uploaded to PS site including horse blanket schedule.
12	Address the utilization manpower and equipment resource loading and budget and cost loading	MH	Mar-10		On schedule; cost loaded, waiting for resource loading

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No.	Item	City Responsible Person	Date Due	Completion Date	Comments
13	Include critical activities in the MPS: utility activities, real estate acquisitions, system integration, starting and testing, operational commissioning and training, vehicle procurement, major construction material procurement, FTA review and comment, detail activities for early construction packages	MH	Apr-10		Delayed until after the CORE Systems proposals are submitted and contractor selected
14	Develop a right-of-way schedule	MH	Jan-10	10/29/2009	Uploaded to PS site.
15	Modify the Work Breakdown Structure to cross over with the project budget and cost breakdown structure	MH	Jan-10	01/06/10	Complete
Project Cost					
16	Develop a detailed bottoms-up-style project cost estimate to Standard Cost Category format. The estimate should be detailed sufficiently to determine distributions of materials, labor, equipment and genial conditions elements at a minimum. The soft cost estimates should be based on staffing plans, force account plans, contracts and so forth rather than solely on percentages. The estimate should eliminate parametric-style values, cost estimating relationships, and lump sums as much as possible during PE	MH	Mar-10		On schedule
17	Escalate the cost estimate in accordance with the MPS	MH	Mar-10		Need to wait until Item No. 16 is complete
18	Provide justification and backup documents to support the quantification and assumptions for the "soft costs" and related general conditions of the project	MH	Feb-10		On schedule
Technical Capacity					
19	Update the Project Management Plan to bring it into full conformance with FTA requirements, and implement the configuration management and change control mechanism	SZ	Jan-10		On schedule for January update
20	Develop detailed staffing plans for all remaining phases of the project to ensure adequate technical capacity. The plans should include the dates by which the City will fill each key position. All key City management positions should be filled during PE.	TH/PR	Jun-10		
21	Work with the State of Hawaii to establish a State Safety Oversight Agency office to oversee the project	KA	Apr-10		Still waiting for FTA letter to the Governor before work can proceed.

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No.	Item	City Responsible Person	Date Due	Completion Date	Comments
22	Submit a fully developed Rail Fleet Management Plan	JS	Apr-10		On Schedule
23	Have a quantifiable metrics for measuring the real status of work, both cost and schedule of all professional service contracts, and any inter-local agreements for participatory services	MH	Apr-10		
24	Develop a Contingency Management Plan which will identify the specific risks and implement the anticipated mitigation measures	SZ			Hold off until January
25	Develop an Environmental Mitigation Plan that identifies required environmental mitigation actions and the party responsible for the mitigation and that will eventually become the basis for quarterly mitigation monitoring and quarterly mitigation reports	JA/FM	Mar-10		Being worked on; will be complete in first quarter 2010
26	Update and implement the:				
	Real Estate and Acquisition Plan	JI	Mar-10		Being updated; next revision will be completed after the PMOC-FTA ROW meeting in Honolulu
	Bus Fleet Management Plan	PK	Jun-10		
	Safety and Security Management Plan	KA	Jan-10		On Schedule
	Quality Management Plan	SZ	Apr-10		