# SHRP2 C10: Metropolitan Transportation Commission
*Quarterly Report for April 2015 – June 2015*

## SUMMARY

On the administrative front, we have executed our contract agreement with the University of Texas at Austin's Center for Transportation Research.  We also issued a request for qualifications for on-call resources to draw on over the course of the project, and selected a bench of four consultants/teams who will be available for staff support.

In terms of the technical work, we made progress on the technical specifications for various Fast-Trips inputs; conducted the estimation literature review; implemented a Python version of the Fast-Trips software; and, launched our public-facing project website (see http://fast-trips.mtc.ca.gov/).

## IMPLEMENTATION

### Work accomplished for the period:

| Task | Activities |
|---|---|
| Task 1 - Project Mgmt / Tech Oversight | ● Negotiated and/or executed funding agreements<br>● Issued request for qualifications; selected consultant bench |
| Task 2 - Network Supply | ● Developed proposal for network design specification; currently under final review |
| Task 3 - Transit Demand | ● Developed proposal for demand data specification; currently under final review |
| Task 4 - Transit Rider Behavior | ● Initial literature review for estimation complete; working to document findings |
| Task 5 - Transit System Performance | |
| Task 6 - Software Implementation | ● Original Fast-Trips code base ported from C++ to Python |
| Task 7 - Test Case Development | |
| Task 8 - Agency Implementation & Testing | |
| Task 9 - Communications and Outreach | ● Developed and launched public-facing project website<br>● Posted project info on website blog and TMIP listserv |

| | ● Participated in C10 coordination call<br>● Presented project overview to planning staff at BART |
|---|---|

## Schedule status:

Progress on early agreement points has been slower than expected, and we are currently about two months behind our planned schedule.  The Management Team has identified additional staff resources who will help complete delayed tasks and accelerate our pace in order to stay on track.

## Expenditures and budget status:

| Resource | FHWA or In-kind | Encumbered / Committed | Invoiced to Date / Expended |
|---|---|---|---|
| SFCTA | FHWA | $310,000 | $0 |
| SFCTA | In-kind | $80,000 | $0[1] |
| PSRC | FHWA | $100,000 | $10,000 |
| PSRC | In-kind | $77,000 | $10,000 |
| MTC | FHWA | $174,500 | $5,200 |
| MTC | In-kind | $85,000 | $17,500 |
| Univ. of Texas, Austin | FHWA | $38,500 | $0,000 |
| Mark Hickman (Univ. of Queensland) | In-kind | $10,500 | $0 |
| To be determined | FHWA | $77,000 | $0 |
| *Total* | *FHWA* | *$700,000* | *$10,000* |
| *Total* | *In-kind* | *$253,000* | *$32,700* |
| *Total* | *All* | *$953,000* | *$42,700* |

## Summary of the quarter ahead:

Upcoming technical tasks include finalizing the specifications for the demand data and network representation, as well as completing the proposal for the process to synthesize transit data feeds to create the input to Fast-Trips.  Once these items are complete, we will proceed to collection and preparation of the data sets for demand, estimation, and test networks.  At the same time, the software team will refine the development plan for Fast-Trips and then continue to work on code enhancements to improve run times and implement additional features.

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[1] In-kind expenditures will be estimated as reimbursed expenses are invoiced.

### Risks/Challenges/Obstacles:

Over the past quarter, the main challenge has been ensuring consistent staff capacity/availability across the entire team; several tasks have been delayed due to lack of timely input/feedback from all team members. Some of the backlog has already been alleviated by adding a new SFCTA employee to our technical team who has taken over leadership of Task 3, and PSRC has targeted additional resources on their side who should be able to help. We have also identified several sub-tasks that would be good matches for the skills of the bench consultants from the RFQ process; we will be negotiating contracts with these resources in the beginning of the next quarter. The Technical Lead and the Project Manager will continue to monitor our progress and will elevate any concerns to the Management Team for resolution using our structured Decision-Making Framework.

## MEASURES

Our performance measures tracking tool shows current values for all metrics, including the developments in the past quarter specifically noted below.

### Implementation:

Several team members participated in the quarterly C10 coordination call. We shared information about our code port from C++ to Python as well as our public-facing website.

### Partnership:

A total of 17 people are now using our collaboration tools: the Asana project management system, our code repositories on Github, and cloud storage on Google Drive and Box.

### Dissemination:

The team presented an overview of our efforts to Bay Area Rapid Transit (BART) planning staff on June 8, 2015.

| CATEGORY | DEFINITIONS | | | TOTAL | Jan-Mar 2015 | Apr-Jun 2015 | Jul-Sep 2015 | Oct-Dec 2015 | Jan-Mar 2016 | Apr-Jun 2016 | Jul-Sep 2016 | Oct-Dec 2016 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Tool Implementation and Deployment** | **OUTPUT MEASURE** | **METRIC 1** | **TARGET 1** | | | | | | | | | |
| | Agency and project partners participate in all required calls/meetings. | Number of calls/meetings attended | Minimum: Participation in group kick-off, project kick-off, and 2 additional scheduled calls per year | **3** | 2 | 1 | | | | | | |
| | Project deliverables are submitted to Volpe/FHWA on time and on schedule. | Quarterly progress reports submitted by specified due date | Quarterly progress reports submitted by specified due date. | **2** | 1 | 1 | | | | | | |
| | | Final deliverables submitted by due date | Final deliverables submitted by due date. | **1** | 1 | 0 | | | | | | |
| | Agency identifies desireable refinements (i.e., suggestions for future research) for tools created from the C10 project. | Documentation of desireable refinements within existing project deliverables | Information about desireable refinements included within final report. | **0** | n/a | n/a | n/a | n/a | n/a | n/a | n/a | |
| | Agency supplies lessons learned from participating as a C10 grantee. | Documentation of lessons learned | Information about grantee experience included within final report. | **0** | n/a | n/a | n/a | n/a | n/a | n/a | n/a | |
| | **OUTCOME MEASURE** | **METRIC 2** | **TARGET 2** | | | | | | | | | |
| | Travel demand model contains new sensititivities suitable for policy analysis. | Number of progress reports that document new variables / modeling options available | At least one | **0** | 0 | 0 | | | | | | |
| | Methodologies, work processes, key decisions, problems encountered, & lessons learned are sufficiently well documented that peers can follow the work and repeat the results. | Number of issues and lessons documented in on-line tools | At least one | **0** | 0 | 0 | | | | | | |
| **Capacity Building and Partnerships** | **OUTPUT MEASURE** | **METRIC 1** | **TARGET 1** | | | | | | | | | |
| | Agency practitioners (staff, contractors, consultants) and assigned partner staff are engaged with project and familiar with results. | Number of users of online collaboration tools | Staff from each partner agency makes contributions to archive of project knowledge. | **17** | 15 | 17 | | | | | | |
| | **OUTCOME MEASURE** | **METRIC 2** | **TARGET 2** | | | | | | | | | |
| | Agency and partner staff acquire additional skills and expertise. | Number of progress reports that document new skills / expertise acquired | At least one | **0** | 0 | 0 | | | | | | |
| | Improved work processes, data, analysis tools, and decision information are in use by our agencies. | Number of progress reports that document uptake of new processes, data, tools, methods | At least one | **0** | 0 | 0 | | | | | | |
| **Technology Transfer / Research Dissemination** | **OUTPUT MEASURE** | **METRIC 1** | **TARGET 1** | | | | | | | | | |
| | Project data and information is shared with the academic and practitioner communities. | Number of presentations delivered (conferences, technical meetings, TRB) | 1 TRB paper or poster, or participation in a panel/workshop that recounts the information | **1** | 0 | 1 | | | | | | |
| | | Number of papers/memos/articles written about the project experience | 1 Presentation prior to project closeout to FHWA or other interested communities | **0** | 0 | 0 | | | | | | |
| | **OUTCOME MEASURE** | **METRIC 2** | **TARGET 2** | | | | | | | | | |
| | Peer agencies in the state/region expresss interest in or begin to deploy C10 tools. | Number of agencies that contact C10 team about the project and/or express plans to pursue implementation | At least one | **1** | 0 | 1 | | | | | | |