SHRP2 C10: Metropolitan Transportation Commission

Quarterly Report for January 2017 – March 2017 (prepared 20-Mar-2017)

SUMMARY

The three-agency group implementing Fast-Trips has continued advancing work on network development, demand preparation, route choice estimation, and software development. Past quarter technical highlights include: dissemination activities at TRB Annual Meeting; continued refinement and calibration of the SFCTA implementation; debugging of full-scale implementation at PSRC; and bringing new staff resources up to speed to support work on calibration, skimming, and convergence.

We have now completed the selection process for an on-call bench of travel demand researchers who are interested in assisting us with the parallel track of work on research problem statement development; contracting directly with these partners should begin shortly. Also, over the last quarter we completed a round of amendments to the existing funding agreements with the main agency partners and key subcontractors. Please note that our Principal Investigator (David Ory) has recently separated from MTC; Lisa Zorn is assisting with administrative functions in an interim capacity during the search for David's replacement.

IMPLEMENTATION

Work accomplished for the period:

Task	Activities
Task 1 - Project Mgmt / Tech Oversight	 Continued to meet on a bi-weekly basis on management-level updates and issues Completed selection of on-call partners to assist with development of research problem statements Completed amendments to all agency and contractor funding agreements in order to update authorized budgets and schedules
Task 2 - Network Supply	 Prepared documentation of version 0.3 of GTFS-Plus network standard for future incorporation into final deliverable Continued to update network inputs for both SF Bay Area and Puget Sound regions to address issues identified during implementation testing Refined documentation of proposed dwell time model, to support upcoming management team review
Task 3 - Transit Demand	

Task	Activities
Task 4 - Transit Rider Behavior	Continued test runs of Fast-Trips for calibration against OBS & CHTS data Refined interactive Tableau calibration dashboard tool
Task 5 - Transit System Performance	
Task 6 - Software Implementation	Conducted more full-scale Fast-Trips runs and examined results to identify and fix code and input issues Looped in new staff to assist with implementation of multiple loop approach to convergence
Task 7 - Test Case Development	
Task 8 - Agency Implementation & Testing	De-bugged multiple model runs with full-scale Soundcast (PSRC) network
Task 9 - Communications and Outreach	 Updated project website with two new blog posts Presented two papers at the 2017 TRB Annual Meeting (one via lectern session and both as posters) Initiated coordination with academic team members on development of teaching materials

Schedule status:

The team continues to make good progress on implementation and calibration of the SF Bay Area version of Fast-Trips, and the PSRC version is now being tested using full-scale network and demand inputs. Our overall pace on the technical work is steady, but some administrative functions have slowed due to recent staff transitions.

Expenditures and budget status:

Resource	FHWA/ In-kind	Encumbered / Committed	Invoiced to Date / Expended
SFCTA	FHWA	\$337,800	\$117,400
SFCTA	In-kind	\$80,000	\$49,600
PSRC	FHWA	\$65,000	\$37,400
PSRC	In-kind	\$65,000	\$41,900
MTC	FHWA	\$83,000	\$4,800
MTC	In-kind, outside	\$198,000	\$108,600

Resource	FHWA/ In-kind	Encumbered / Committed	Invoiced to Date / Expended
Univ. of Texas, Austin	FHWA	\$38,500	\$14,600
Mark Hickman (Univ. of Queensland)	In-kind	\$10,500	\$0
Hood Consulting	FHWA	\$18,000	\$11,400
UrbanLabs, LLC	FHWA	\$100,000	\$22,800
To be determined	FHWA	\$16,700	\$0
Total	FHWA	\$659,000	\$208,400
Total	In-kind	\$353,500	\$200,100
Total	All	\$1,012,500	\$408,500

Invoices for a sizeable amount of work activities are expected to be received and processed sometime in early 2017.

The funds identified above as "To be determined" are expected to be used to compensate the on-call consultants who participate in the development of research problem statements. The table above will be updated next quarter, once contracts are executed with individual participants.

Summary of the quarter ahead:

In the next quarter, we will continue to move ahead on the technical tasks. We have completed content development for several deliverables that should be ready for management review very shortly. We will continue refining, calibrating, and validating our initial implementation, including our asserted route choice estimation parameters. For software development, we plan to implement and test our proposed approach to convergence. The networks team and demand team will be monitoring developments on the rest of the project and will update their contributions and documentation as necessary. We look forward to preparing and presenting our contributions for the 2017 Planning Applications Conference, and we plan to begin development of the teaching materials that are part of our communications & dissemination plan. We will also enter into contracting arrangements with the consultants who will be assisting with the research problem definition work that we scoped out last quarter.

Risks/Challenges/Obstacles:

The main risk at this point is schedule adherence. Managing the recent staffing transitions and bringing new resources up to speed, together with the need to work around other competing priorities at our partner agencies, have all limited our ability to accelerate our pace. We will continue to monitor overall workload commitments of existing team members in order to maintain forward progress.

MFASURES

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

Implementation and Deployment:

There was no quarterly C10 coordination call this period.

Capacity and Partnership:

A total of 24 people are currently using our collaboration tools: the Asana project management system, our code repositories on GitHub, and cloud storage on Google Drive and Box.

Dissemination:

Seven members of our team participated in the TRB Annual Meeting in January, including presentation of our two accepted papers via one lectern session and two poster sessions. Team members received three inquiries on our project from academic researchers at TRB. We also posted two new blog entries on the project website this quarter, and updated the site with our new team members and the latest links to our technical content. Finally, we discussed the status of our project with RSG (in preparation for the readiness assessment) as well as Trillium and the other members of the transit data consortium.