1455 Market Street, 22nd Floor San Francisco, California 94103 415.522.4800 FAX 415.522.4829 Info@sfcta.org www.sfcta.org



Memorandum

Date: April 20, 2017

To: Transportation Authority Board

From: Jeff Hobson – Deputy Director of Planning

Subject: 04/25/17 Board Meeting: Overview of Emerging Mobility Services & Technology Studies

RECOMMENDATION 🗵 Information 🗆 Action	☐ Fund Allocation
• None. This is an information item.	☐ Fund Programming ☐ Policy/Legislation
SUMMARY	☑ Plan/Study
Per Commissioner Farrell's request, this item provides an overview and update on our Emerging Mobility Services & Technology (EMST) policy study. Originally scoped as a jitney study, the study examines the full range of technology enabled transportation from carshare and bikeshare to shuttles, transportation network companies and autonomous vehicles. The study includes: 1) an inventory of existing services and technologies operating or under development in San Francisco; 2) identification of a goals-based policy framework for assessing the benefits and impacts of these services and technologies; and 3) an evaluation of existing conditions based on currently available data. We are on schedule to complete the study in summer 2017.	☐ Capital Project Oversight/Delivery ☐ Budget/Finance ☐ Contracts ☐ Procurement ☐ Other:

DISCUSSION

Background.

New technologies are enabling rapid adaptation and innovation in transportation modes and services. These technologies include ride-hailing services like Lyft and Uber, ride-pooling services such as Chariot, and autonomous vehicle technologies. Some of these services operate at legal margins and their impacts on the transportation system have gone unmeasured. These technological advances in transportation services have resulted in potentially complementary and conflicting services with the City's Transit First and other policies and likely require updates to existing transportation infrastructure, rules, regulations and policies. The public sector policy response can be strengthened by a goals-based evaluation of the benefits and impacts of the new services. This analysis can also help shape the application and integration of these technologies to support transportation and other citywide goals.

Scope of Work.

This memorandum provides an overview of the EMST studies objectives and deliverables schedule. EMST will include several core tasks including documentation of existing services and technology, developing a policy framework, and evaluating existing services and their ability to meet San Francisco Transportation Plan (SFTP) and citywide goals. We may also develop data reporting policies and

identify future research and pilot opportunities in coordination with our Study partner, the San Francisco Municipal Transportation Agency (SFMTA), and other stakeholders.

Task 1. Inventory of EMST

The objective of Task 1 is to create an up-to-date reference and categorization of services currently operating in San Francisco or reasonably expected to start soon, based on experiences of other similar cities. In addition, Task 1 will develop an inventory of legislative issues and document various policies at regional, state and federal levels related to EMST. Lastly, Task 1 will produce a qualitative inventory of potential outcomes and effects on personal transportation choices and general impacts on the transportation system.

Task 2. Policy Framework

Task 2 will establish a policy framework, objectives/targets and metrics to assess whether and how transportation technologies help San Francisco meet its SFTP goals. The Framework will draw from existing and ongoing studies including A Framework for Jitneys, the SFMTA's Draft Shared-Use Mobility Strategy and Draft Guiding Principles, among others. The policy framework will also consider best practices and lessons learned from other cities and jurisdictions that have established or considered policies related to EMST.

Task 3. EMST Services Evaluation

Combining the inventory documentation from Task 1 and the established policy metrics from Task 2, Task 3 will evaluate each service's ability to meet SFTP goals. This evaluation will also identify various data gaps which will serve as the foundation for future data reporting policy (Task 4) and areas for additional study (Task 5).

While we will continue to engage with UC Berkeley's Transportation Network Company (TNC) Climate Impacts Study, we will pursue our own data collection as well, particularly with respect to TNC operations in San Francisco and its impacts on San Francisco's transportation system.

Ongoing Community Outreach

We plan to foster an open and communicative relationship between SFMTA and other City agencies, community stakeholders and tech-sector representatives related to project goals and milestones.

Optional Tasks.

Task 4. Data Reporting Policy, Protocols & Strategy for Implementation

Task 4 will identify potential sources of data and develop a policy for reporting data regarding EMST. In coordination with a variety of stakeholders, this effort should seek to define the purpose, means of transmission, and terms of agreement -- including consumer privacy and proprietary business assets -- between public agencies and private and nonprofit transportation providers.

Task 5. EMST Plot and Research Studies Plan

Referencing data and evaluation gaps from Task 3's evaluation, Task 5 will identify pilots and university research projects that will generate useful data for policy-related evaluation. This effort will also document existing pilots' best practices and lessons learned. Finally, Task 5 will create a multiagency, as applicable, implementation plan for pilots and evaluation methodology that will prepare San Francisco to forecast benefits and impacts of EMST.

Agency Coordination.

We will work in close coordination with the SFMTA on these work plans. Our agencies have formed a steering committee to establish working groups to coordinate project deliverables and community outreach efforts. Working group topics include TNC impacts, Private Transit Vehicles (e.g. Chariot), Policy development, and Autonomous Vehicles.

During this collaboration, SFMTA will be further developing the Guiding Principles for Emerging Mobility Services (EMS) to create their Shared-Use Mobility Strategy that will focus on integrating EMS and public transit. Strategy deliverables include assessment of best practices, guidelines for private public partnership, recommendations on policies/regulations and identification of potential future pilots.

The SFMTA and Transportation Authority (acting as the Treasure Island Mobility Management Agency) will also be delivering the Federal Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) grant, which includes six pilots focused on smart carpool near Bay Bridge on- and off-ramps; smart signals centered on safety and congestion and Treasure Island mobility. The Treasure Island pilots include an automated shuttle system and electronic tolling. Building upon the Commuter Shuttle Program, the SFMTA is creating draft legislation and procedures to regulate Private Transit Vehicles, like Chariot, to ensure their safe operation and manage their impact on Muni. The partnership between SFMTA and the Transportation Authority will be beneficial to both agencies' efforts and future collaborative endeavors working with EMST providers.

FINANCIAL IMPACT

None. This is an information item.

CAC POSITION

None. This is an information item.

SUPPLEMENTAL MATERIALS

None.