



10/30/2012

RFI # SFMTA-2013-11

REQUEST FOR INFORMATION / QUALIFICATIONS

To Provide Information on a proposed Taxi Real-Time Data System

1. OVERVIEW AND SCOPE

The San Francisco Municipal Transportation Agency (SFMTA) is requesting information regarding a proposal for a real-time taxi dispatch referral and information system. The agency is drafting legislation that, if adopted, will require all licensed taxi dispatch services to push real-time vehicle locations and availability information to a new system run for the SFMTA that will provide an Application Programming Interface (API) for application providers to electronically hail all licensed taxis from all companies. The system must be able to interface with existing dispatch systems and/or on-board equipment to provide real-time updates of taxi availability. The SFMTA will seek a technical partner to host and run this new “SFTaxi Data” hub as a software service (SaaS) under contract with the SFMTA. The agency wishes to receive feedback on the conceptual design, potential alternative solutions and data elements required to implement this system. The SFMTA hopes to implement a solution in spring of 2013.

Background:

The San Francisco taxi fleet is divided into 29 companies served by 10 different dispatch companies. Developers have entered the market to provide digital taxi hailing apps but are limited in their ability to reach all of San Francisco’s taxi fleet by having to either contract with each driver or with each taxi dispatch company to get access to information generated by the vehicle. Accordingly, no app provides access to more than a portion of the taxi fleet, making them inefficient from a customer perspective. A system run by the SFMTA will provide a single entity with all of the taxi location information to be shared to app developers who obtain a license from the SFMTA. The overall goal is to maintain a healthy and robust taxi industry in San Francisco that continues to contribute to the vibrancy of the city while improving environmental performance of the whole transportation sector. A reliable taxi fleet will contribute to lower private automotive ownership and an overall mode shift away from private autos.



Request for Information Goals

The SFMTA is planning to enact regulations to further the goals of real-time taxi access for third-party apps (referred to in this document as Online Taxi Dispatch Referral Companies). The purpose of this RFI is to solicit feedback from all industry stakeholders and solicit expressions of interest and demonstrations/overviews of software solutions that could meet the goals of this proposal. The SFMTA welcomes all interested parties to respond with feedback and recommendations to help make the best system possible for San Francisco residents and visitors.

Data Elements:

Below please find a table describing the data elements supporting the system and who will provide them. Only companies who are licensed by the SFMTA shall receive the data elements indicated as “published to all licensed recipients” in the tables below. In exchange for access to the specified data, these licensed Online Referral Companies will be required to share taxi hailing data with the SFMTA. For further details about the system the SFMTA is seeking please see Attachment A: System Conceptual Design and Overview.

Data Feed	Data Element	Description	Provided By	Published to all licensed recipients?
Vehicle Location: The vehicle data feed will push data to the SFTaxi Data system through the existing dispatch systems in a frequency of at least six times a minute.	Vehicle	Id of vehicle	Vehicle / Dispatch System	Yes
	Driver	Id of driver	Vehicle / Dispatch System	Yes
	Timestamp	Time of location record	Vehicle / Dispatch System	Yes
	Position	Latitude/longitude of vehicles' current position	Vehicle / Dispatch System	Yes
	Status	Current status of vehicle: · Off duty · Empty (on duty, meter off) · Occupied (meter on)	Vehicle / Dispatch System	Yes



Data Feed	Data Element	Description	Provided By	Published to all licensed recipients?
Trip: The trip data feed will publish this summary after each taxi trip is complete.	Id	Id of trip	Dispatch System	No
	Vehicle	Id of vehicle for trip	Dispatch System	No
	Driver	Id of driver for trip	Dispatch System	No
	Dispatch Company	Id of Dispatch Company for trip	Dispatch System	No
	Dispatcher	Id of Dispatcher	Dispatch System	No
	Shift	Id of driver's shift	Dispatch System	No
	Online Dispatch Referral Company (3 rd party)	Id of Online Dispatch Referral Company for trip	Dispatch System	No
	Dispatch Request	ID of Dispatch Request that originated this trip	Dispatch System	No
	Status	<ul style="list-style-type: none"> · Dispatched · Underway · Completed · Driver never showed · Customer never showed 	Dispatch System	No
	Start/end locations	Locations (address and latitude/longitude) for starting and ending locations	Dispatch System	No
	Start/end times	Actual pickup/drop off times	Dispatch System	No
	Wheelchair	True if a wheelchair was transported as part of the trip.	Dispatch System	No
	Payment Type	Indicator for type of payment: <ul style="list-style-type: none"> · Cash · Credit card · Paratransit debit card · Other card (corporate card, gift card, etc.) · Unpaid 	Dispatch System	No



Fare amount	Fare amount from meter	Dispatch System	No
Tip amount	Tip amount if available	Dispatch System	No
Passenger count	Number of passengers if known	Dispatch System	No
Trip distance	Distance of trip	Dispatch System	No
Driver Rating	Rating 1-5 stars by customer	Source OnLine Referral Company	No
Vehicle Rating	Rating 1-5 stars by customer	Source OnLine Referral Company	No

Data Feed	Data Element	Description	Provided By	Published to all licensed recipients?
Vehicle: The SFMTA will publish this information as needed to the SFTaxi Data system to keep the current list of licensed San Francisco taxicabs.	Id	Id of vehicle	SFMTA	Yes
	Fleet	Id of vehicle's fleet	SFMTA	Yes
	Medallion	Id of vehicle's medallion	SFMTA	Yes
	Drivers	Id's of drivers authorized to drive this vehicle	SFMTA	Yes
	Vehicle type	<ul style="list-style-type: none"> · Taxi · Ramp Taxi · Other 	SFMTA	Yes
	Seat count	Number of available seats	SFMTA	Yes
	Make	Make of vehicle	SFMTA	Yes
	Model	Model of vehicle	SFMTA	Yes
	Year	Year of vehicle	SFMTA	Yes
	Fuel Type	<ul style="list-style-type: none"> · Gasoline · Compressed Natural Gas (CNG) · Hybrid · Electric · Biodiesel 	SFMTA	Yes
	GHG Score	The numeric score representing a vehicle's carbon emissions	SFMTA	Yes



	Spare	Is this a “spare” cab? (Some cabs can only be used on a contingent basis when the regular cab is unavailable for mechanical reasons. Such vehicles are “spares.”)	SFMTA	Yes
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Data Feed	Data Element	Description	Provided By	Published to all licensed recipients?
Dispatch Request: These elements constitute a request for a taxi dispatch. The system will generate an ID to allow further communication about this request.	Id	Unique id generated by the Originator that will identify all communication about this dispatch through its entire lifecycle.	OnLine Referral Company Or Dispatch Company	No
	Originator	Id of company originating this dispatch request. If the dispatch came via an Online Dispatch Referral Company this will be the id of that company. If the dispatch came through “traditional” dispatch (e.g. the customer phones a Fleet directly) this will be the id of the Dispatch Company (since no Online Dispatch Referral Company is involved).	OnLine Referral Company Or Dispatch Company	No
	Customer Phone	Phone number of customer	OnLine Referral Company Or Dispatch Company	No
	Time of request	Date and time request was made	OnLine Referral Company Or Dispatch Company	No
	Requested Pickup Location	Address and latitude/longitude for requested pickup location	OnLine Referral Company Or Dispatch Company	No



Requested drop off Location	Address and latitude/longitude for requested drop off location (if given by customer)	OnLine Referral Company Or Dispatch Company	No
Requested pick up time	Time requested by customer for pickup (typically “now”)	OnLine Referral Company Or Dispatch Company	No
Vehicles	One or more vehicle ids of vehicles that should be dispatched, listed in preference order. If no ids are specified, the Online	OnLine Referral Company	No
Fleets	Requested Fleets in order of preference to dispatch a vehicle. If the Vehicle Ids field and the Fleet Ids field are both empty, the Online Dispatch Referral Company is requesting that any vehicle from any Fleet may be dispatched, and all Dispatch Companies may try to dispatch any vehicle.	OnLine Referral Company	No
Driver acceptances	All drivers who accepted the request	OnLine Referral Company	No
Driver refusals	All drivers who refused the request	OnLine Referral Company	No
Driver cancellations	All drivers who accepted a request but later canceled their acceptances	OnLine Referral Company	No
3 rd Party cancellations	All vehicles canceled by Online Dispatch Referral Company	OnLine Referral Company	No



MDT Message	Text describing the parameters of the dispatch. This is text sent by the Online Dispatch Referral Company for the driver's benefit and shows whatever the Online Dispatch Referral Company wants the driver to know about this dispatch. Information might include: <ul style="list-style-type: none"> · Prepaid tip amount · Customer agrees to forfeit \$10 if they're not at pickup 	OnLine Referral Company	No
Disposition	<ul style="list-style-type: none"> · Dispatch pending · No vehicles available · Dispatch scheduled 	Dispatch Company	No
ETA	Estimated arrival time for dispatched vehicle	Dispatch Company	No

These represent the major data elements the SFMTA contemplates requiring from the taxi entities regulated by the SFMTA and/or SFTaxiData licensees. Further details are described in Attachment A and address updates and communication regarding the specifics of acceptance and confirmation of electronic hailing. Please review Attachment A for the conceptual design of the system with all data communication desired.

RFI/RFQ QUESTIONS

If your company would be interested in assisting the SFMTA to develop the SFTaxi Data system, please respond with a letter or e-mail no later than November 30th, 2012 that addresses the questions below. Your responses will not be scored or ranked.

1. What direct experience can your company demonstrate with a comparable software solution?
2. Please describe your experience with vehicle dispatch and the taxi industry.
3. What experience does your company have building real-time transportation monitoring systems?
4. What experience does your company have supporting APIs to support third party applications?
5. Are the data elements described enough to achieve the goals of a robust online dispatch company and regulatory data?



6. Can existing dispatch and on-board systems provide the data and use the interfaces described?
7. What are the best ways to measure performance of the system?
8. What management reports are recommended to allow the SFMTA to undertake regular evaluations of taxi demand and supply by origination neighborhood, time of day, day of week, taxi fleet, destination and other factors?

Please feel free to address issues that you feel are relevant but were not expressly stated above.

2. SPECIAL PROVISIONS

Thank you for considering this request for information. The details that you will provide will help SFMTA to make an informed decision on how to proceed with the program. Please send your response to the attention of **Ashish Patel, Manager of Contracts & Procurement at SFMTA, 1 South Van Ness Avenue, 6th floor, San Francisco, CA 94103** or send an email to Ashish.Patel@sfmta.com by **November 30th, 2012**.

The submittal of a response to this RFI does not guarantee use of the information provided. This is not a Request for Proposals. This RFI is to be used solely for the purpose of soliciting input about the feasibility of the SFMTA's goals. The SFMTA assumes no responsibility for any other use of this document. Participation in this industry review is strictly voluntary and SFMTA will not reimburse participants for any costs in connection therewith.

3. PUBLIC RECORDS ACT/SUNSHINE ORDINANCE

Responses to this RFI/RFQ become the exclusive property of SFMTA and subject to the California Public Records Act and the City's Sunshine Ordinance. Those elements in each submittal which are trade secrets as that term is defined in Civil Code section 3426.1(d) or otherwise exempt by law from disclosure and which are prominently marked as "TRADE SECRET," "CONFIDENTIAL," OR "PROPRIETARY" may not be subject to disclosure. The SFMTA shall not in any way be liable or responsible for the disclosure of any such records including, without limitation, those so marked if disclosure is deemed to be required by law or by an order of the Court. Respondents are encouraged not to indiscriminately identify all or most of their submittal as exempt from disclosure without justification.



In the event the City is required to defend an action on a California Public Records Act or San Francisco Sunshine Ordinance request for any of the contents of a submittal marked “confidential,” “proprietary,” or “trade secret,” respondent agrees, upon submission of its submittal for SFMTA’s consideration, to defend and indemnify the City from all costs and expenses, including attorneys’ fees, in any action or liability arising under the California Public Records Act or San Francisco Sunshine Ordinance.