



The Digital Curb Program: Revolutionizing Curb Management in San Francisco

San Francisco Municipal Transportation Agency

PROJECT PARTNERS

Open Mobility Foundation



PROJECT CHALLENGE

Congestion at the curb continues to be a problem that plagues cities. When drivers cannot find available curb space, they circle for parking or double-park, slowing down transit and other traffic, creating safety hazards for people walking and biking, and making it difficult for people and goods to get to their destinations. And while most cities want to better manage their curbs, they lack foundational data about their curbs. SFMTA's Digital Curb project aims to solve this problem by: (1) creating a citywide Digital Curb regulation inventory, (2) keeping those regulations up to date, and (3) disseminating curb regulations via analytical tools and an open data feed using the Curb Data Specification.

IMPACT

The Digital Curb project covers the entire City and County of San Francisco, which has a population of over 800,000 people and is one of the densest cities in the country. The Digital Curb will benefit everyone who moves around San Francisco. For those who drive, need to park or stop, the Digital Curb will tell them when and where that's possible. Those who walk, ride or take transit will benefit from reduced congestion.

CURRENT STATE OF THE ISSUE

San Francisco has about 28,000 blockfaces and 2,430 curb miles. Current estimated allocation of curb space in San Francisco by purpose: Storage for vehicles: 90%; Movement of motorized and non-motorized means of transportation: 4%; Public space and services (e.g., parklets): 3%; Access for goods (e.g., short term loading for trucks) 2%; Access for people (e.g., transit stops, pick-up. SFMTA makes about 100 changes to curb regulations every month.

POLICY QUESTIONS

1. Will having accurate, up-to-date curb data help curb users make better decisions about when and where to drive, park and load? 2. How often will members of the public and private sector organizations access the Digital Curb map and API? 3. Will curb users like TNCs, on-demand delivery companies, and autonomous vehicle companies tap into the Digital Curb API and use it to help streamline their operations?

STAGE 1 OUTCOMES

1. A complete and up-to-date inventory of curb regulations is successfully created for the entire City of San Francisco. Curb inventory available to staff via Geodatabase; public and private organizations via SFMTA.com and DataSF open data portal. 2. SFMTA is able to keep the data up to date in a timely manner 3. City staff, the public, and private sector organizations use the Digital Curb inventory.

STAGE 2 VISION

A Stage 2 deployment will include digitally managing the curb, which may include: Gathering data on curb demand; Making data available on curb availability; Changing rates dynamically and communicating prices through CDS; Collecting payments automatically, rather than at a physical parking meter; and Enforcing regulations digitally.