



**Project Title:** The Digital Curb Program: Revolutionizing Curb Management in San Francisco

**Location:** San Francisco, CA

**Timeline:** September 2023 - June 2026

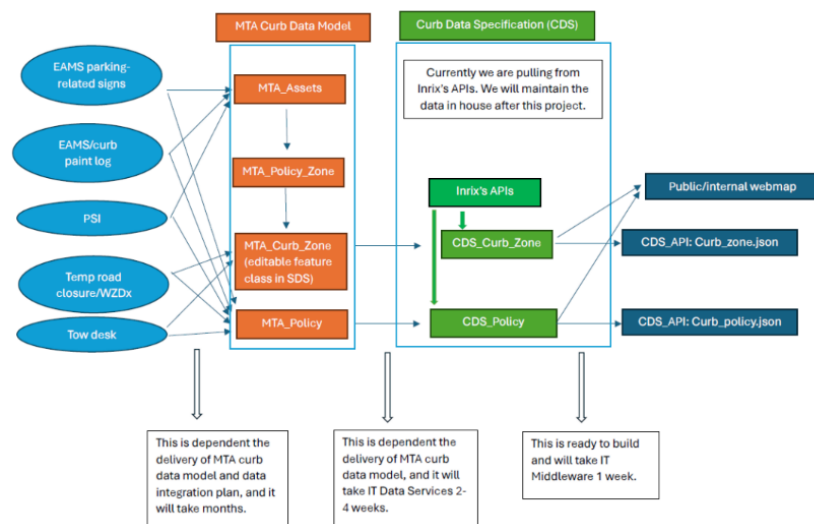
**Pilot area:** Entire city

### Problem Statement

San Francisco has about 28,000 blockfaces and 2,430 curb miles. The current estimated allocation of curb space in San Francisco by purpose is: Storage for vehicles: 90%; Movement of motorized and nonmotorized 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 but does not maintain a detailed digital curb inventory for the entire city.

### Project Overview

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.



### How did you select the study area?

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.

### Technology Partners and Outputs

SFMTA began by reviewing existing asset data and overlaying with the purchased curb inventory layer from INRIX. Both the vendor and city staff performed validation and made



## SMART GRANT CURB COLLABORATIVE

## Data Standardization

manual edits to the combined data set. The team continues to seek out ways to automate the validation and change management process.

| Purpose                                | Details                                                                    | Vendors                                                                            | Key Stats                    |
|----------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------|
| Create a digital curb inventory in CDS | Obtain a curb inventory layer and combine with existing SFMTA asset layers |  | Entire City of San Francisco |

### How was CDS used in this project?

- A curb inventory was purchased from a vendor, integrated with additional city assets, and converted to CDS.
- Curb data will be made publicly available in CDS format by the end of the project.

### Key Challenges

- The key challenge remains the long-term maintenance of curb data. Creating and editing the curb zones themselves is still a manual spatial editing task.
- Automation not possible from day one and still determining where the opportunities are to automate collection, maintenance, storage, and publishing.
- There are different use cases for curb data- from the private vehicle, to companies, to city staff. City curb managers need more detail than a private auto driver looking for parking.

### Key Learnings

- Coding the curb is possible!
- Linking asset management with digital curb is an effective way to make updates. It is possible to use existing asset data like sign data, CAD drawings, and operational systems as a starting point when creating a curb inventory. Expect manual reconciliation and transformation between sources.
- The private sector, specifically ridehail and delivery services, have expressed interest in curb data, including temporary closures and occupancy information.

### What's Next?

The SFMTA will start maintaining the Digital Curb and anticipates releasing it to the public in 2026.

### Quick Links

[Digital Curb Project](#)