

# Enable any App to See Your Toll Managed and Tolloed Lanes Feed Specification

**About Santa Clara Valley Transportation Authority (VTA)**  
VTA is the congestion management agency, transit provider, a sales tax authority, and a deliverer of capital projects in Santa Clara County, California.

**About Silicon Valley Express Lanes (SVEL)**  
The Silicon Valley Express Lanes are located in Santa Clara County, California, the most populated county in the San Francisco Bay Area and home to 72 of the largest 100 companies that comprise Silicon Valley. The VTA Silicon Valley Express Lanes Program is a network that includes the SR 237 and SR 85 / US 101 freeways. The program is authorized for 2 corridors.

**About Bay Area Express Lanes**  
Bay Area transportation agencies are developing a 550-mile network of Bay Area Express Lanes that will be completed in 2035. Lanes already are open on I-580 in Dublin, Pleasanton and Livermore, I-680 southbound from Pleasanton to Milpitas, and on State Route 237 between Milpitas and San Jose.

**About The Managed and Tolloed Lanes Feed Specification**  
Private sector and public agencies are coming together to establish a managed and tolled lanes specification focusing on the Bay Area Tolled and Express Lanes facilities. The goal of the effort is to the implement something that can be simple and useful to public that can be eventually used across the nation.

## Purpose

**For the success of a connected tolling network; there exists a need for a data standard.**

- Navigation Apps and Maps
- Autonomous Vehicle's can better navigate tolled lanes
- Toll Payment options are better specified
- Create a standard data feed for all managed lanes operators to assist in development and operation
- One common Managed Lanes Data feed for all Managed Lanes

## Schema

**The Schema is based on modern APIs**

- Github for solicitation of open comments
- Flexible json format which allows for better backwards compatibility
- Standardized geojson to describe facilities

github  
SOCIAL CODING



toll\_authority\_info.json    general\_toll\_info.json

toll\_destination.json    toll\_facility.json

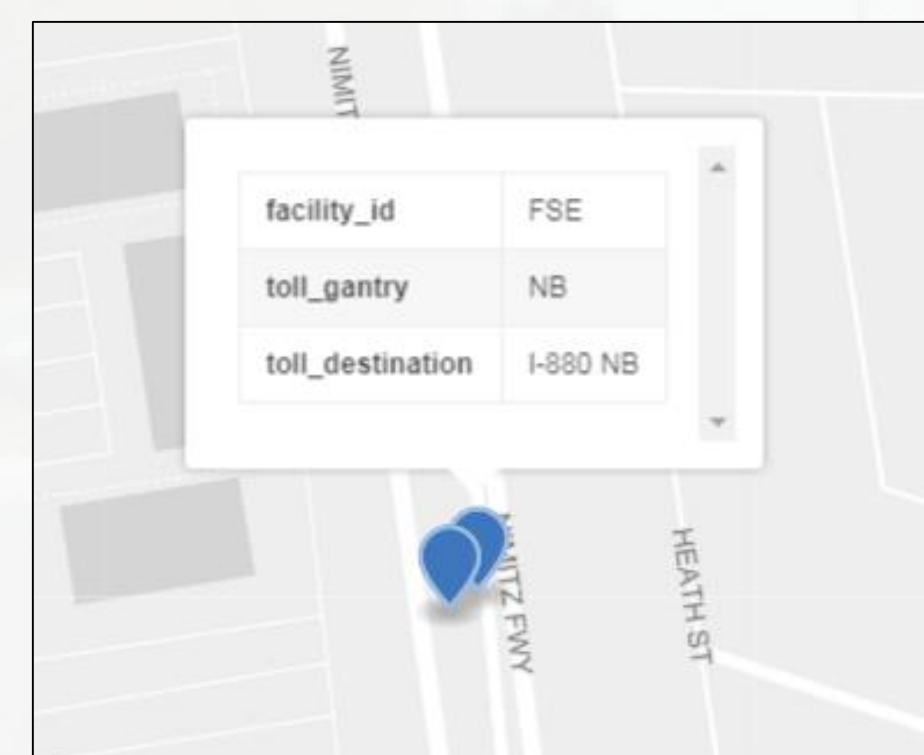
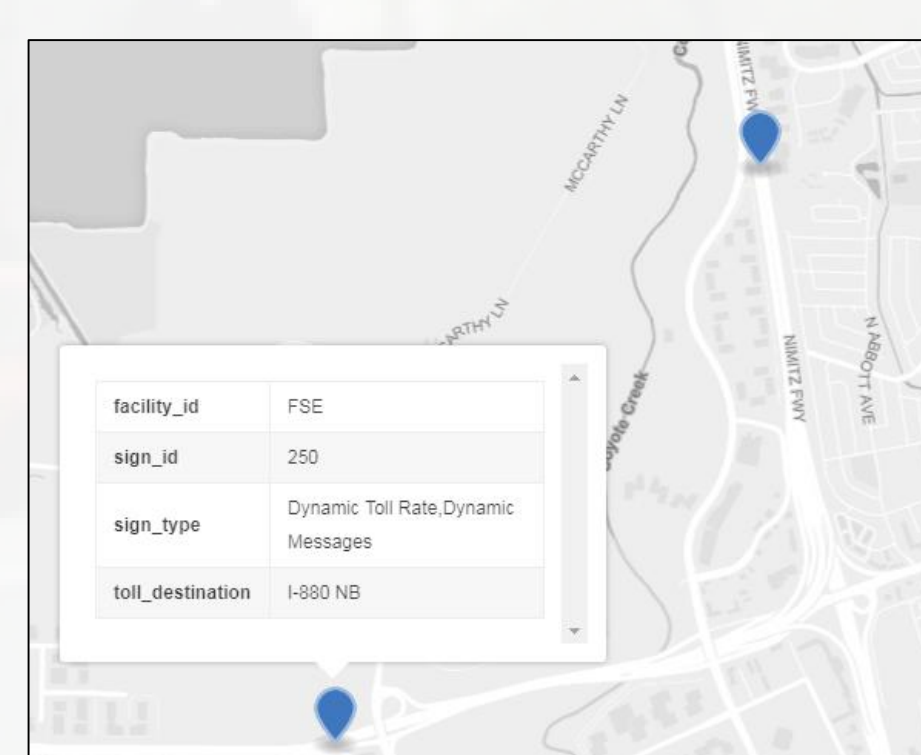
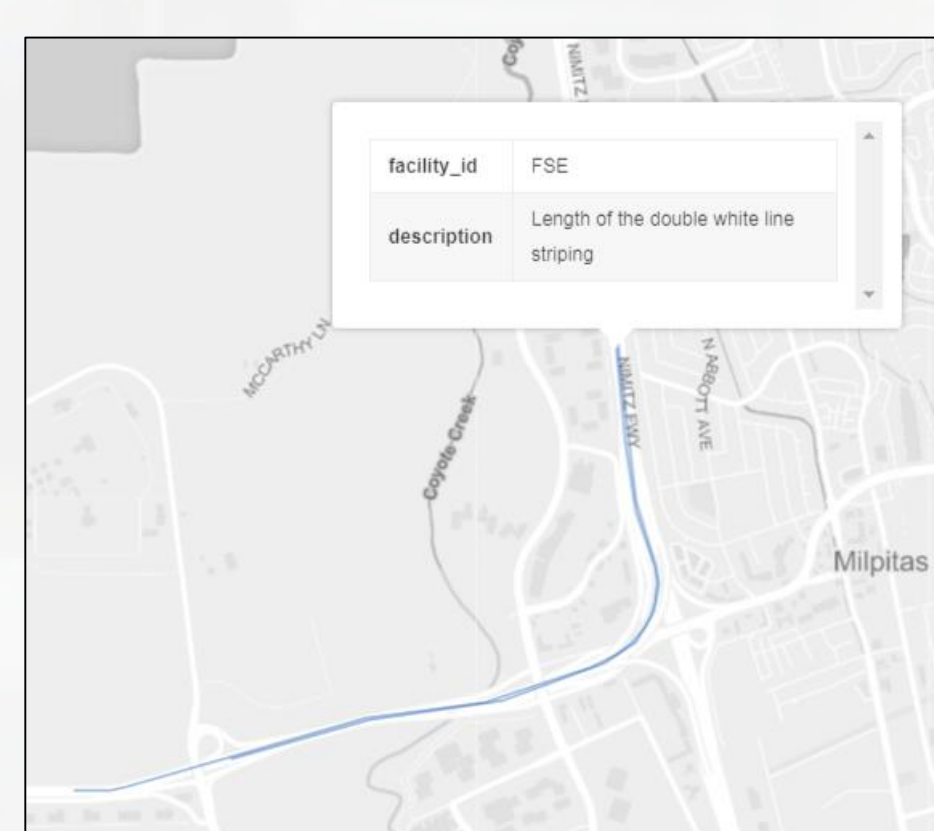
toll\_status.json    toll\_periods.json

https://mtlfs.vta.org/mtlfs/mtlfs.json

Facility Location

Toll Message Sign Locations

Gantry Locations

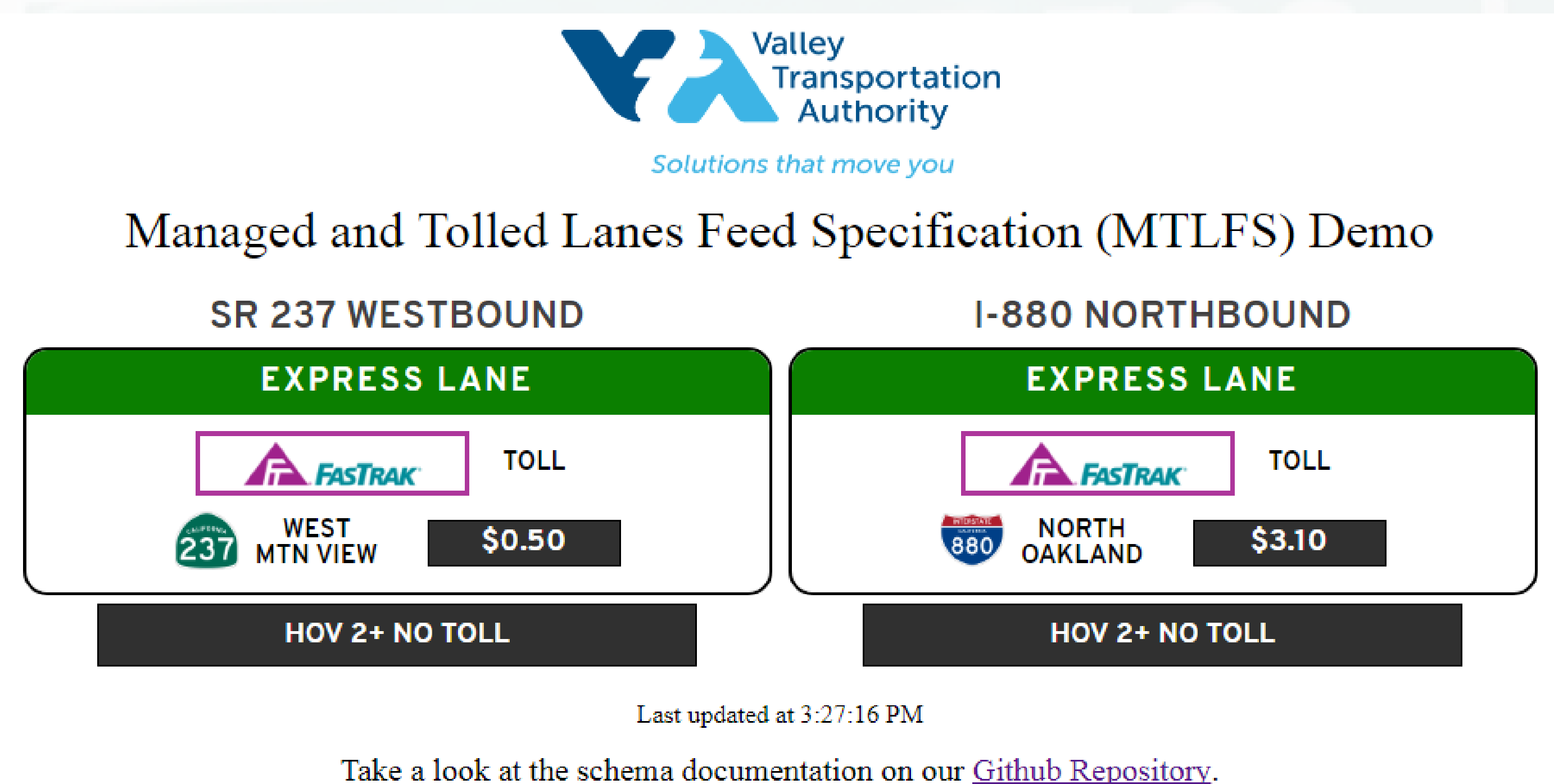


facility\_geom.geojson

toll\_signs\_geom.geojson

gantry\_geom.geojson

**Poster on the go code:**



Last updated at 3:27:16 PM

Take a look at the schema documentation on our [Github Repository](#).



Phones

Websites

Currently used in:  
Tollsmart

SVEL Server

Secure Toll info Push Every 5 Minutes



## Under Development

**First focus on the San Francisco Bay Area Facilities**

- Express Lanes – static and dynamic data
- Bridges – static data, vehicle type, electronic vs. toll booth
- Developer Needs – validation tools, lane specific data, historical tolling and speed data



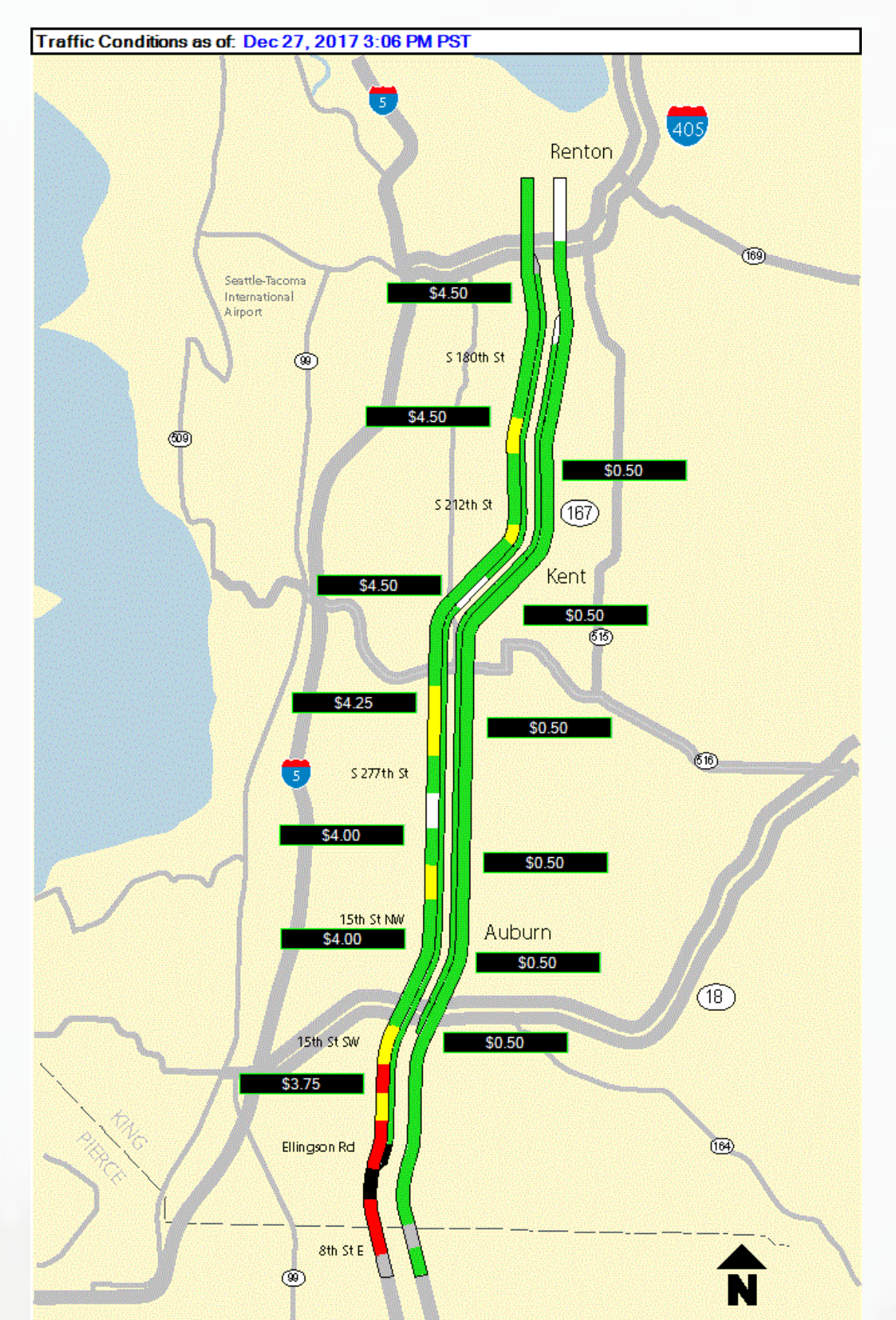
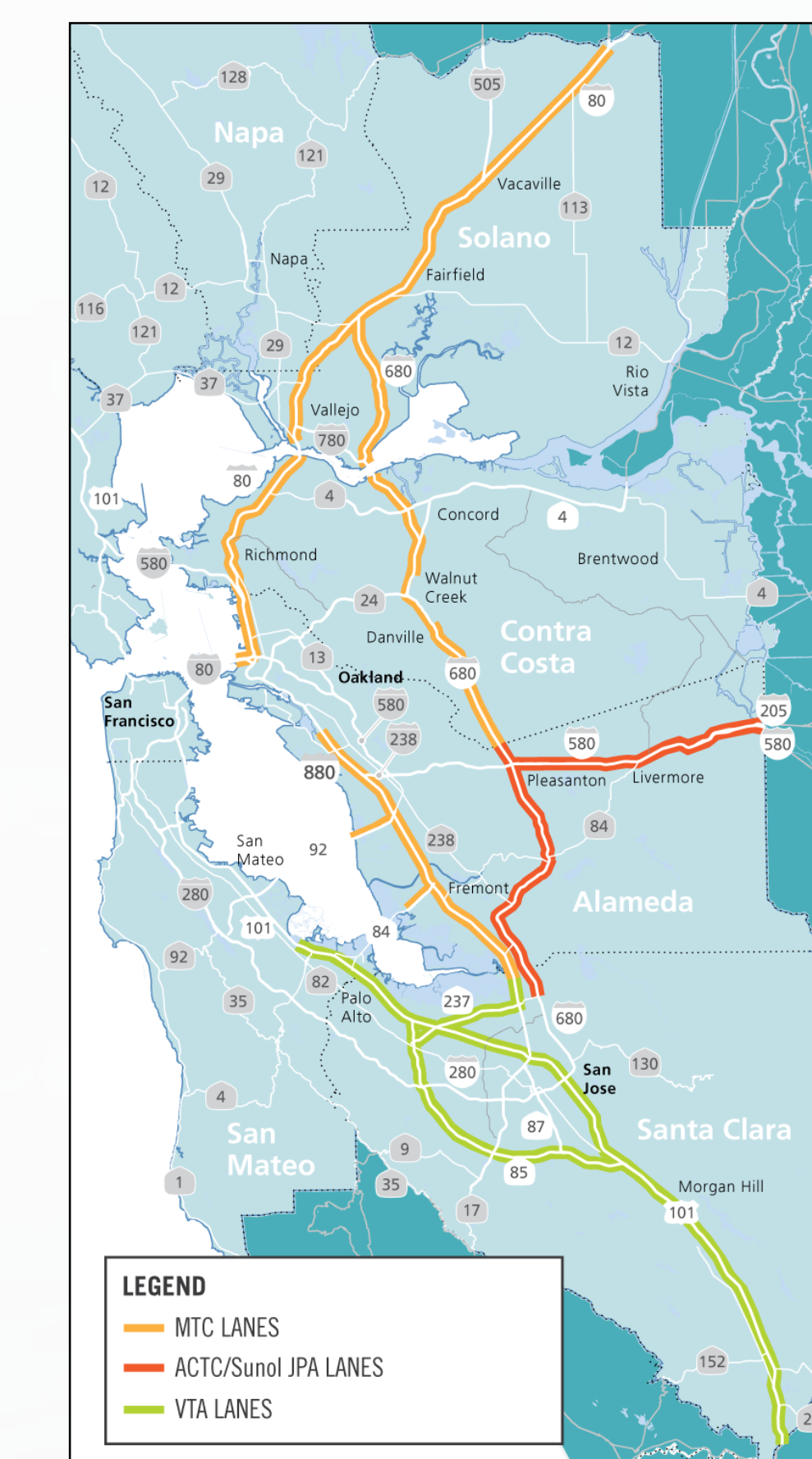
According to Tollsmart, VTA and WSDOT are the only two agencies with managed lane feeds in the U.S. with Open APIs, thus leading the way for open data and best practices.



## Implementation

**Very Simple Website API Architecture**

- Easy to implement architecture
- Anyone should be able to take their existing data feeds and add an MTLFS format endpoint



## Future Needs

**Create a Standard Data Feed for all Managed and Tolloed Facilities**

- Express Lanes, Carpool Lanes, Ramp Meters, Thruways, Bridges, Tunnels, etc.
- Variable Speed Limits, Switchable Lanes, Cordon Pricing
- The data spec hosts to the next step in transportation funding
- Vehicle Miles Traveled
- Interoperability with other modes of transportation.
- Connect to more mobile apps