



# **Ravenswood Business District (RBD) TDM Plan: VMT/Day Comparables Research Memo**

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# Suburban TDM mode shift evidence is scarce

- "TDM measures are more effective in contexts that are dense, mixed-use, transit-oriented, and have amenities that are accessible by walking and bicycling.
- Therefore, in more suburban contexts, it may not be feasible to reduce VMT to less-than-significant levels through on-site TDM measures alone."
  - - Krute Singa, MTC Principal Regional Planner.
- Within auto-centered Bay Area contexts, TDM evidence is scarce for:
  - High-ridership local circulator shuttle buses
  - Transit screens
  - Bike/scooter share
  - Information & marketing
  - Car sharing
  - Bike buddies.

# VMT/Day Comparables

- For TDM, Bay Area Peninsula areas that are comparable to RBD have not achieved a 40% ADT or Vehicle Miles Traveled (VMT) reduction.
- Comparables are located about three miles from Caltrain and require crossing Highway 101 to access Caltrain:
  1. The mixed-use (office, residential, retail) area 2.3 mi from Caltrain around the Foster City Public Library, 1000 E Hillsdale Blvd.
  2. Pacific Shores Center - offices in the vicinity of 1300 Seaport Blvd, Redwood City, CA (3.1 mi from Caltrain)
  3. Offices in the vicinity of 505 Penobscot Dr, Redwood City (2.2 mi from Caltrain)
  4. Apartments in the vicinity of 950 Redwood Shores Pkwy, Redwood City (3.2 mi from Caltrain)
  5. Pacific Biosciences & employers in the vicinity of 1305 O'Brien Dr, Menlo Park - just west of RBD (3.6 mi from Caltrain)



# Data source: Fehr & Peers CA VMT per capita tool

- VMT/day/capita (resident or worker) for each CA Census Block Group
  - HBW: how many VMT/day driving to/from work, working in this Block Group
  - HBX: for residents within a Block Group, how many VMT/day for all trips?
  - [Link to F&P tool](#)

**FEHR & PEERS**

**VMT+ | Providing VMT Per Capita Estimates Across California**  
Derived from 2019 StreetLight Data

**Find Your VMT**  
On the map, use the magnifying glass or bookmark to find your area of interest -

Use the selector to select and view block group VMT values.

**Select**

**Regional Filters**  
Select a single or multiple filters to create a subset of block groups VMT below or above regional VMT averages. Regions are jurisdictionally based: City / Unincorporated County (UC), County, or MPO.

Map labels: Coyote Point Recreation Area, Burlingame, San Mateo Park, Hillsborough Park, San Mateo, Foster City.

# Data Caveats

- “Fehr & Peers derived VMT estimates from a custom application of StreetLight Data. We used sample trip estimates from March through May of 2019. Fehr & Peers makes no warranty regarding the data's accuracy, quality, or appropriate use. Since the VMT estimates are new and have not been fully validated or peer-reviewed, the data is offered as-is and should be thoroughly reviewed for reasonableness in any applications.”
  - “Streetlight's sampling in a given Census Block Group may be low.”
  - “Users should not completely trust the data. It's very much a beta tool.”



# Pacific Shores Center / Google

## 1300 Seaport Blvd, Redwood City

Block Group: 060816103021

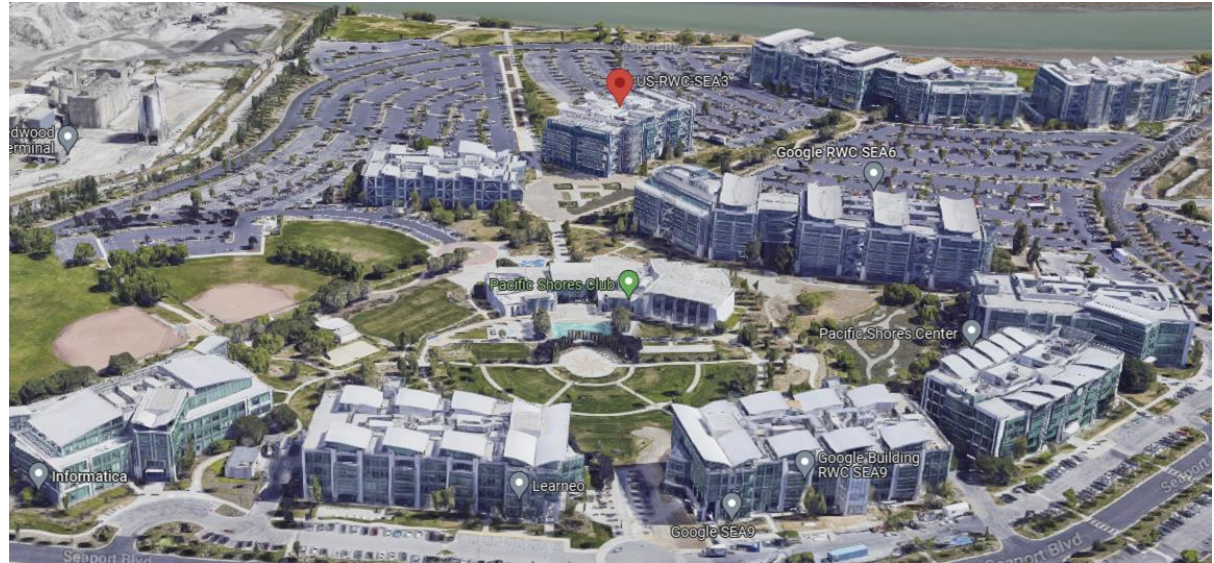
HBX (all resident) VMT/day: 21.8

HBW (worker commute) VMT/day: **26.7**

**Higher** than Bay Area average: HBX VMT: 19.4, HBW VMT: 15.4



Image credit: Google Maps  
3D (non-commercial use)



# Mixed use by Foster City Library, 1000 E Hillsdale Blvd

Block Group: 060816080251

HBX (all resident) VMT/day: 25.4

HBW (worker commute) VMT/day: **20.2**

**Higher** than Bay Area average: HBX VMT: 19.4, HBW VMT: 15.4

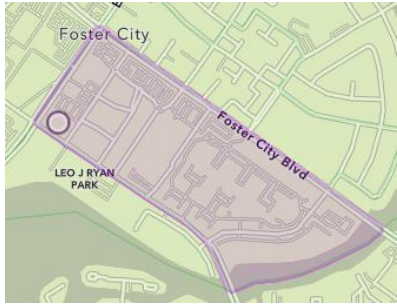


Image credit: Google Maps  
3D (non-commercial use)

# 505 Penobscot Dr, Redwood City

Block Group: 060816103021 (Same as Pacific Shores Center, 1300 Seaport Blvd, RC)

HBX (all resident) VMT/day: 21.8

HBW (worker commute) VMT/day: **26.7**

**Higher** than Bay Area average: HBX VMT: 19.4, HBW VMT: 15.4



Image credit: Google Maps  
3D (non-commercial use)



# 950 Redwood Shores Pkwy, Redwood City

Block Group: 060816103033

HBX (all resident) VMT/day: 20.4

HBW (worker commute) VMT/day: 21.2

**Higher** than Bay Area average: HBX VMT: 19.4, HBW VMT: 15.4

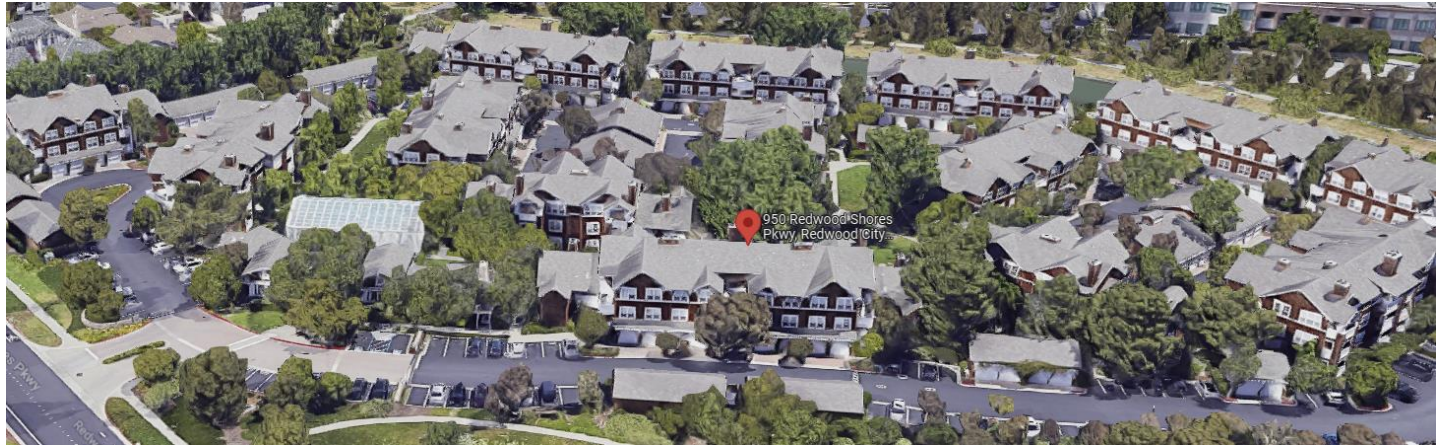


Image credit: Google Maps  
3D (non-commercial use)

# Pacific Biosciences & employers

## 1305 O'Brien Dr, MP, west of RBD

Block Group: 060816103033 (includes RBD)

HBX (all resident) VMT/day: 22.6

HBW (worker commute) VMT/day: **26.5**

**Higher** than Bay Area average: HBX VMT: 19.4, HBW VMT: 15.4

EPA policy targets 40% ADT reduction. Exploring 40% VMT reduction:

- 60% HBX (all resident) VMT/day: 13.6 (way below the regl average)
- 60% HBW (worker commute) VMT/day: 15.9 (about the regl average)

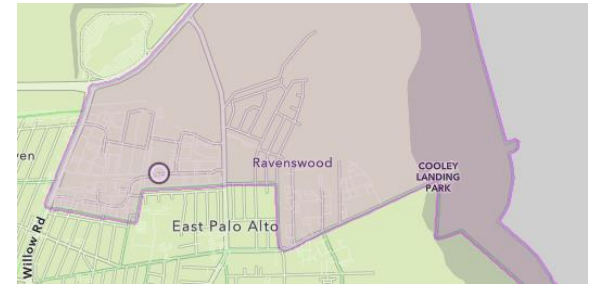


Image credit: Google Maps 3D (non-commercial use)

Low HBW VMT/day:

Green shaded areas:

0-85% of Bay Area HBW VMT avg

- Few tech or bioscience jobs, more retail jobs
- Closer to Caltrain & walkable downtowns
- *Theory: relatively more short commute apartment rentals*

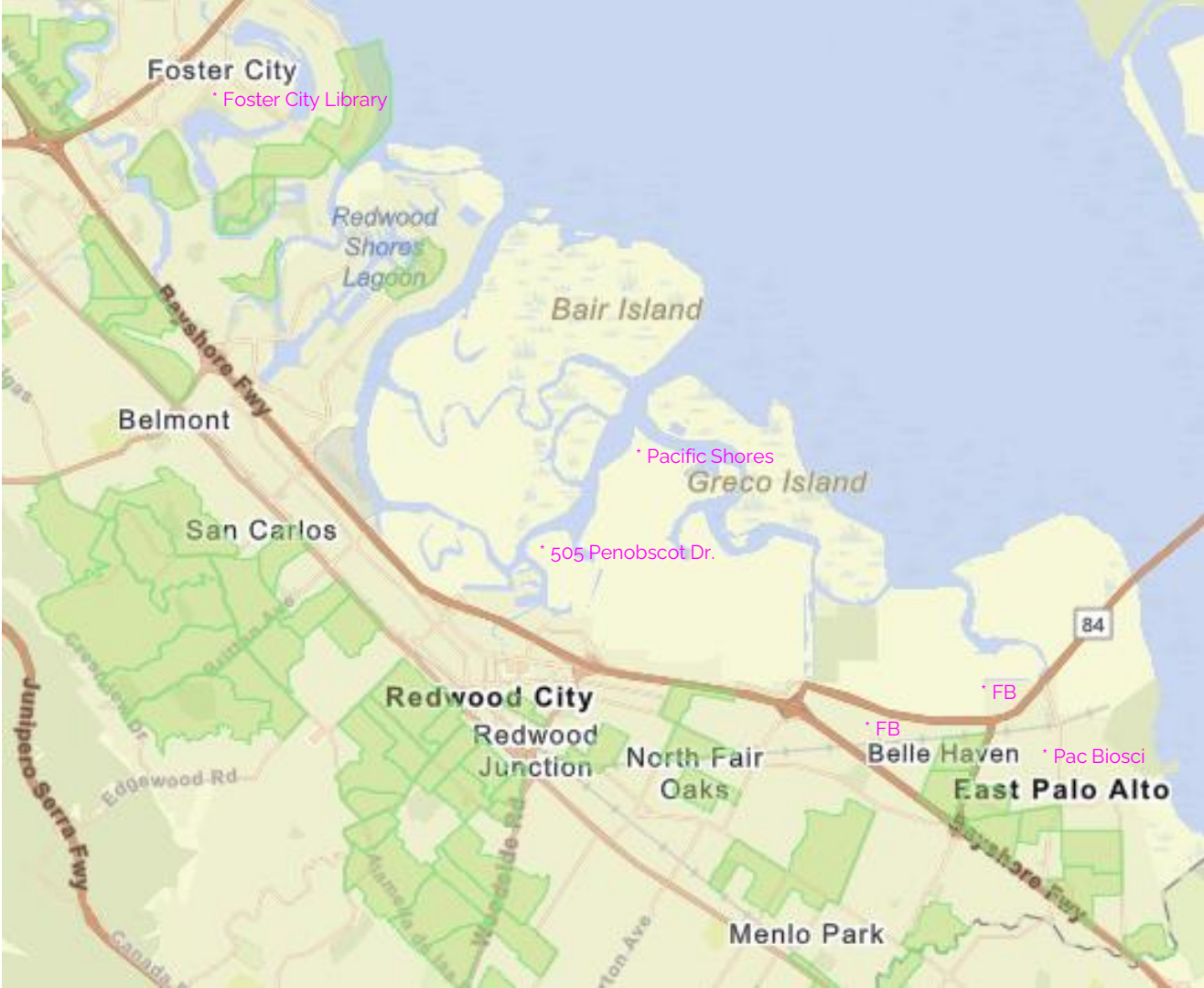
High HBW VMT/day:

Magenta Comparables

- Many tech & bioscience jobs
- *Theory: bought far away single family home*

We expect \*FB Menlo Park, with private line haul commuter bus service to have low HBW, but it does not

- FB was at roughly 50% SOV
- But many commutes are long-distance from SF



# Santa Clara County: Low HBW VMT/day:

Green shaded areas:

0-85% of Bay Area HBW VMT avg

- Few tech or bioscience jobs, more retail jobs
- Closer to Caltrain, El Camino Real, & walkable downtowns
- *Hypothesis: relatively more short commute apartment rental*



# Tech workers travel farther than service

A SPUR 2014 analysis indirectly supports the “Long commute SFH Tech worker, short commute apartment-dwelling service worker” hypothesis:

And commuters will travel further for a better jobs (more likely to cross a county boundary as their wages increase)

