The Barrier | Replacing Interstate 280 for a New Neighborhood
The Highway Engineers’ Unrealized Dream  I-280 “The Southern Freeway”

**BUILT**

1. The Bay Bridge (80) opened in 1936. Its approach began at 5th St in SOMA.
2. The Golden Gate Bridge (101) opened in 1937. Its approaches are:
3. Doyle Drive (101) and Park Presidio Blvd (1). The latter, opened in 1940, was Northern California’s first freeway.
4. The Bayshore Freeway (101) opened from Army St to 7th & Bryant in 1953. It was completed in 1962.
5. The Southern Freeway (280) was begun in 1958 and completed in 1973.
6. The Embarcadero Freeway (480) opened in 1959.
7. The Central Freeway (101) opened in 1959.
8. See at right.

**DEMOLISHED**

7. The Embarcadero Freeway demolished in 1991

**HISTORIC MAP OF SAN FRANCISCO FREEWAYS**

What would the city look like today if postwar highway planners had their way — if the legendary Freeway Revolt had not taken place? This map is based on the amended Trafficways Plan of 1955, most of which was rejected by the Board of Supervisors in 1959.

- Most projects were rejected in 1959. Some were revised and finally canceled in the 1960s.
- The Junipero Serra Freeway (1) was partly built near Brotherhood Way.
- The Crosstown Freeway.
- The Mission Freeway was partly built as the San Jose Ave expressway.
- The Western Freeway (aka the Panhandle Freeway).
- The Park Presidio Freeway.
- The Southern Crossing, a second bridge to the East Bay. Later proposals were for an I-280/101 Freeway. The Torrey Pines Freeway, through La Jolla, and a segment from Mission to Market St reopened in 2006.
- The Golden Gate Freeway.
“Future growth is projected (ABAG data) along this corridor, but due to constraints in the corridor, the facility will remain unchanged.”

“In lieu of constructing new freeways, more alternatives to address congestion are being planned, in part, due to the financial and the political climate. It is the State’s goal to manage its existing system through various alternatives.”
“I-280 is **not a significant Goods Movement corridor.**”

“US 101, given its access to denser and more varied land uses including some freight facilities, is the preferred arterial for movement of freight.”

Trucks as a percent of overall traffic = 2.5%

“As I-280 neither traverses an area of significant freight movement or handling nor connects with major port facilities, there is **limited goods movement through the corridor.**”

“I-280 serves as an **alternative to US 101.**”

“I-280 serves regional and interregional recreational travel demand … as the **alternate freeway facility for US 101.**”

“As a result of the high tech industry in Silicon Valley, I-280 has become a major commute route, as well as a **highway alternative to US 101** for trips between the South Bay, San Francisco and points north.”
The Inconvenient Truth | I-280 exists today as a demand inducer

GOAL: Reduce statewide GHG emissions to 1990 levels by 2020

GOAL: Reduce vehicle CO₂ emissions 7% by 2020 and 15% by 2035

GOAL: Reduce VMT per capita from 21.3 to 18.2

GOAL: 20% of all trips made by bike by 2020
Multimodal Alternatives | High-quality already, even better soon
Where will all that traffic go if you take it down?
280 Volumes | The dominant traffic artery in Potrero Hill/Dogpatch

**Data Variation**

*Caltrans 280 Corridor Plan*

- Northbound: **29,000**
- Southbound: **28,500**

*Caltrans PeMS System*

- Northbound: **47,000**
- Southbound: **36,000**

*Caltrans website*

Combined North + South: **59,000 – 113,000**
101 Comparison | More than 2x 280’s volumes, heavy peaks, no extra capacity
Closer Look  |  Volume high south of 101 interchange, LOW northeast

SEGMENT G
101 Interchange to 6th St

SEGMENT F
San Mateo County Line to 101 Interchange

<table>
<thead>
<tr>
<th>Northbound</th>
<th>Southbound</th>
</tr>
</thead>
<tbody>
<tr>
<td>83,317</td>
<td>100,001</td>
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</table>
Octavia Boulevard Comparison | Gracefully handles 280’s traffic levels

<table>
<thead>
<tr>
<th>Street</th>
<th>Traffic Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>FELL St</td>
<td>33,000</td>
</tr>
<tr>
<td>OAK St</td>
<td>41,000</td>
</tr>
<tr>
<td>OCTAVIA North</td>
<td>24,000</td>
</tr>
<tr>
<td>OCTAVIA South</td>
<td>21,000</td>
</tr>
</tbody>
</table>

Source: SFCTA Central Freeway and Octavia Boulevard Circulation Study, June 2012
How does I-280 function now? | Freeway or Boulevard?

- Truck Route?: Yes, Yes, No
- Traffic Volume: 183,000, 83,000, 45-74,000
- Freeway or NBHD Scale?: Freeway, Freeway, NBHD
- Demand Inducer?: Yes, No, Yes
Caltrans 280 Corridor Plan

EXISTING

Northbound 29,000
Southbound 28,500

FUTURE

Northbound 33,739
Southbound 32,892
"Future planned alternative mode projects, such as the planned High Speed Rail, may affect future traffic volumes in the area by providing an alternative to private auto use between the Bay Area and Southern California. Caltrain service near the I-280 corridor is another alternative to private auto use. These alternative travel options and their planned improvement could have a significant impact on future highway demand reduction."
The Downside of I-280 | A daily threat to residents
The Big Barrier | A divider of neighborhoods, A barrier to the waterfront
The I-280 Scar | Figure Ground, existing
Source: San Francisco Department Of Public Health

280 Noise Pollution
280 Particle Emissions + Pollution

Source: San Francisco Department Of Public Health
280 Opportunity | A New Boulevard north of 16th to make way for HSR
Typical Right-of-Way = 300’
Number of Parcels Used = 65

Total Land Used by Freeway = 1,260,000 ft$^2$
Or 29 Acres

Total Estimated Land Value = $100,000,000

280 Opportunities | Land Parcels
280's Perch | The advantages of topography
280's Perch | The topography, again, no freeway

MTA Woods Bus Yard (sunken)

Indiana St.

I-280 Platform

22nd St.

Caltrain Trench (under 280)
The Solution  |  Phase it out, repurpose + sell the land, repair the fabric
Phase I | Remove freeway north of Mariposa to make way for CA HSR
Phase II | Replace freeway north of 25th St with new Potrero Boulevard
Phase III | Replace freeway with boulevard north of Oakdale/101 interchange
Finally | Repair the fabric, start stitching then neighborhoods back together
New gracious Potrero Boulevard replaces Interstate 280

Dense housing on freeway platform and infilled throughout heart of neighborhood

E-Embarcadero MUNI extended to 22\textsuperscript{nd} St

Caltrain station, via Pier 70

New Station Square and Park on decked-over Caltrain tracks at 22\textsuperscript{nd} & Potrero Blvd

New high promenade and multiuse trail atop greened former 280 retaining wall

Stormwater swale treats all wastewater and overflow combined flow from Indiana force main
The Plan | The New Boulevard
The Plan | The New Boulevard

Existing PDR
10' 18' 14' 14' 8' 10'

Curb-to-curb 53'

Indiana Street
73' ROW

Potrero Boulevard 120' ROW
The Plan | E-Embarcadero extension + Potential (long-term) C-Circle line
The Plan | E-Embarc extension + Potential (long-term) C-Circle line
The Plan | Station Square decked over rails tracks
The Plan | Green Infrastructure
The Plan | The Stormwater Swale

Stormwater Flow Direction from Potrero Hill

15’ Multi-Use Trail

25’ Park + Wetland Cell Detention Pond

Stormwater Swale + Park

Primary Tank

Equalization Tank

Wetland Cell Detention Pond

Stormwater Swale Park

Natural Living Machine Storm- and Wastewater Treatment System

Stormwater Swale Park

Treated water recirculates to townhouses and office/retail space

Overflow stormwater in high force main

Potrero Boulevard to Potrero Boulevard

Existing RH-1 100’

Stormwater catchment area
The Plan | 3,500 Units of housing