



GreenTRIP Connect

- More homes and less traffic
- SB743 compliance
- General Plan Updates
- PDAs and TODs

**Southern California Association of Governments
Modeling Task Force
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Mayfair at Del Norte BART
El Cerrito

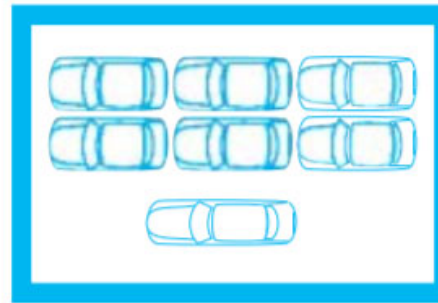




In Unit Bicycle Parking Hooks



FREE AC Transit Transbay Bus 2 / unit; 40 years



FREE GetAround membership to 4-6 Shared Cars

4 types of bike parking

154: in unit
24: guest secured
34: basement
8: on street



\$10 Bikelink Card for Every Resident



Bicycle Fixing Station



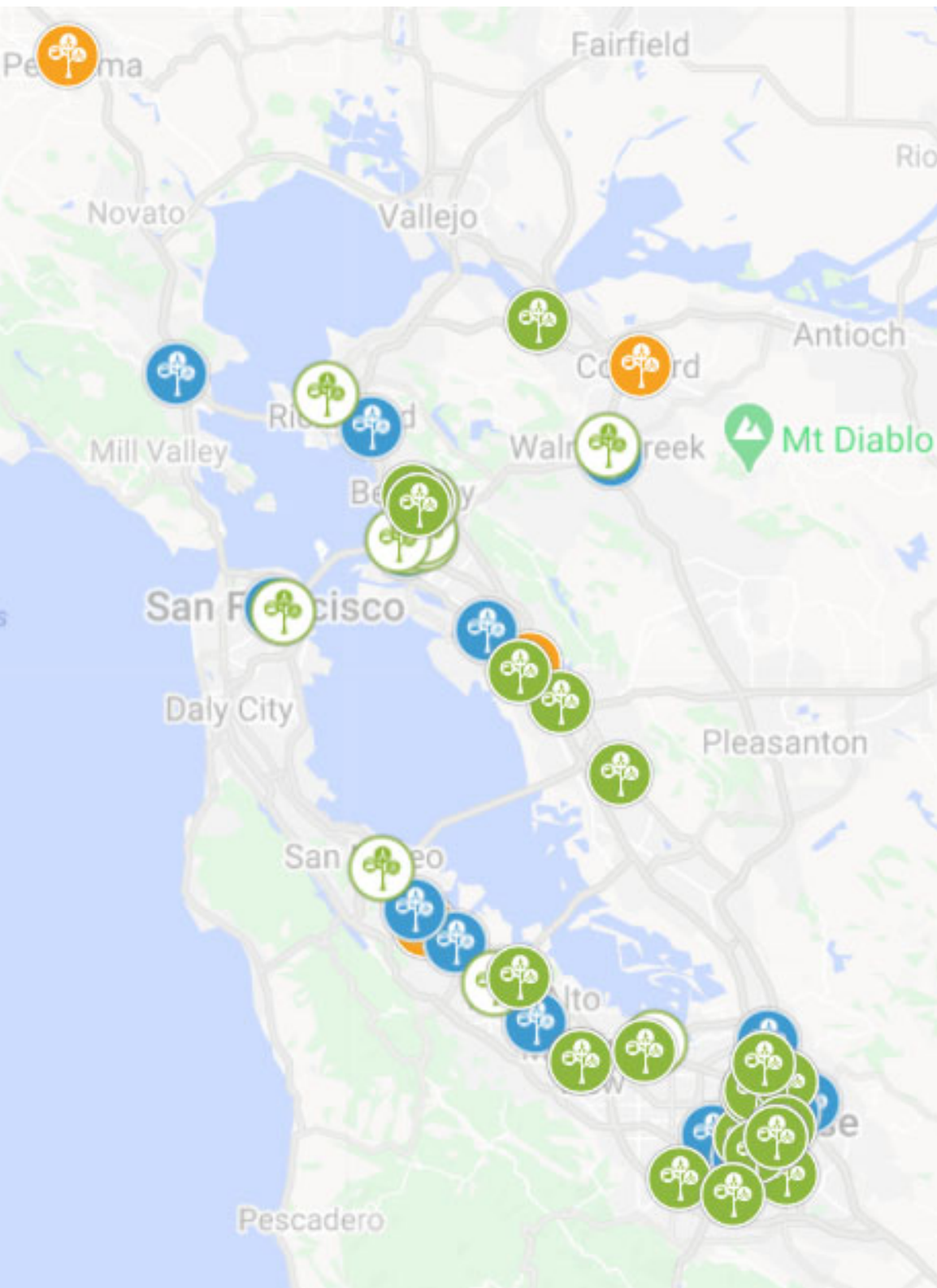
Walk/Bike/Transit Travel Info Touch Screen



Pedestrian Trunk in Every Unit

34 units to 56 units

50% less transportation costs

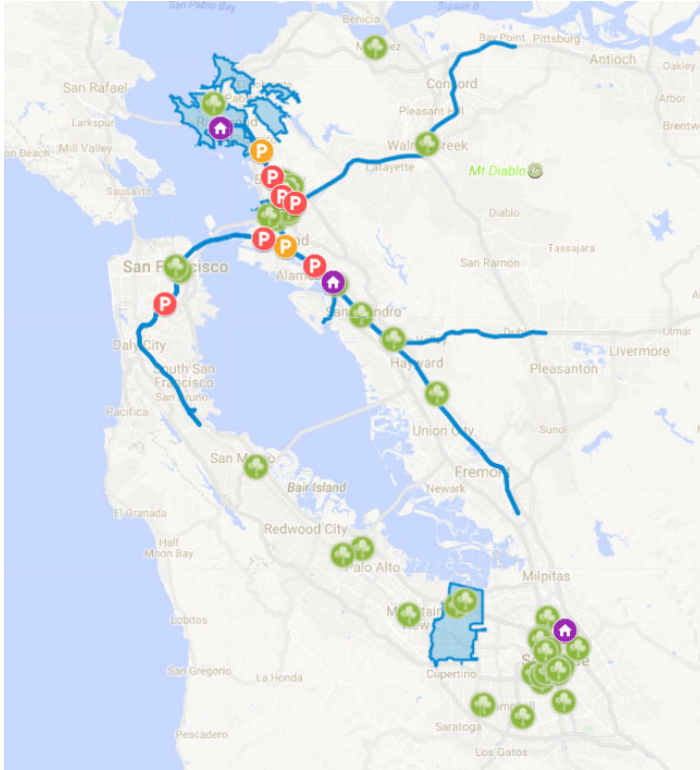


**\$27+ million
private
investment in
public transit**

7,000+ units

50+ projects

GreenTRIP Adopted



- City of Emeryville
- City of Richmond
- City of Sunnyvale
- City of Belmont
- City of Berkeley
- City of Oakland
- City of Pittsburg
- BART & VTA -- TOD policy
- CA Office of Planning and Research – 2020 General Plan Guidelines



GreenTRIP Parking Database



Parking Database

<http://Database.GreenTRIP.org>

ABOUT THE DATABASE

USER GUIDE

ABOUT THE DATA

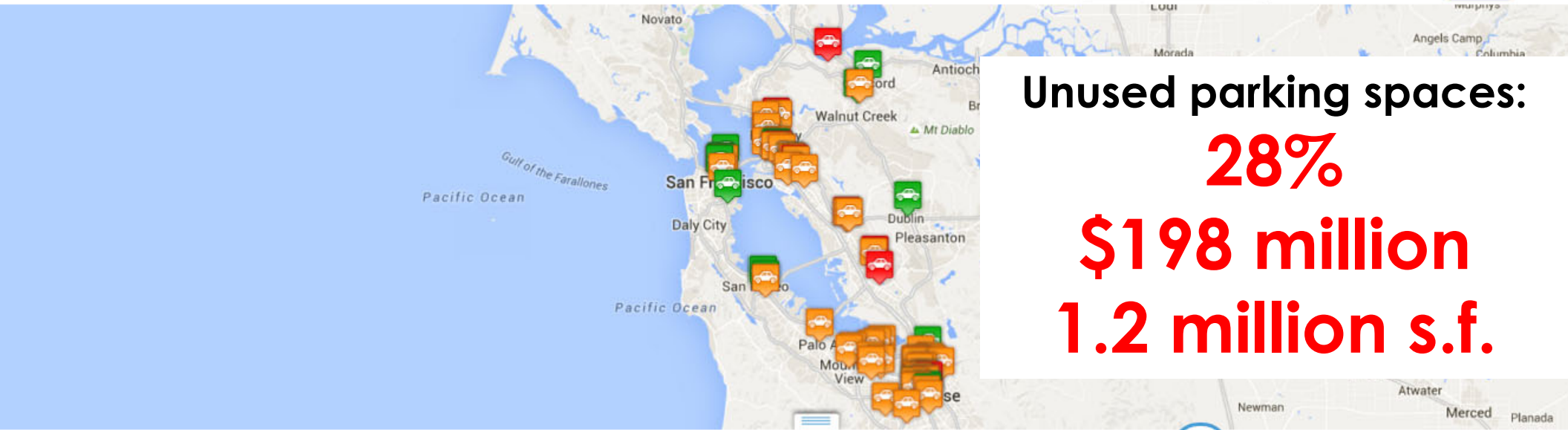
EVENTS

GLOSSARY

Boundaries

Building Labels

Buildings:



Unused parking spaces:
28%
\$198 million
1.2 million s.f.

Building **Parking** Location Transportation

Showing **80** buildings that meet your criteria.

Number of Units

- Any
- 20-49
- 50-99
- 100-199

Resident Type

- Any
- Family
- Senior
- Diverse Abilities

Unit Size

- Any
- Studio
- 1 BR
- 2 BR





% of Units Below Market Rate

- Any
- None: 100% Market Rate
- 0-49% BMR
- 50-100% BMR




Development Type

- Any
- Mixed Use
- All Residential

Table 1. VMT mitigation measures summarized. Note that this list is not exhaustive, and other measures that satisfy CEQA requirements could be developed.

Measure	Ease of implementation	Efficacy	On- or Off-System	Key considerations
Active transportation	High	Low ⁶	Both (Note: for the SHS, may be most effective when integrated with conventional "main-street" highways)	Must provide access to destinations, not simply recreational opportunities.
Land use – residential	Low 	High 	Off	Requires partnership agreements with land use jurisdictions housing authorities, and private developers. VMT benefits come from density, affordability and location.
Land use – employment	Low 	High 	Off	Requires partnership agreements with land use jurisdictions housing authorities, and private developers. VMT benefits come from density and location.
TDM	High	Medium	Off	Services can be tailored to meet specific user needs. Must be supported with long term maintenance of effort.
Transit service improvement	Low to high	Low to high	Both	Usually requires partnership agreements with transit operators.
Local road networks/ connectivity	Low to high	Low to high	Off	Can relieve pressures on SHS and provide more direct, multimodal access to destinations.

⁶ This is not to imply that Active Transportation projects are not a high priority for Caltrans and worth doing for their own sake. While Active Transportation projects do have a downward VMT effect, the amount of VMT that can be reduced by these projects is often much smaller than the VMT induced by highway projects. This scale is important to consider when developing mitigations.

Measure	Ease of implementation	Efficacy	On- or Off-System	Key considerations
Micro-mobility	High	Low	Both	Requires partnership agreements with transit operators and/or transportation network companies.
Telecommuting	High	Minimal	NA	Telecommuting tends to shift trip-making, but not reduce VMT. Any claim here would need careful, specific support.
Schedule-shifting	NA	None	NA	Reschedules rather than reduces trips. Likely increases VMT.
Road diets	High	High 	Both	Lane removals can be considered roughly equivalent to lane additions for similar facilities.
Pricing	Low to high	High 	Both	Operational details and market analysis needed during PA&ED.
Lane management	Low to high	Low	On	VMT effect depends on specific management strategy such as transit/HOV priority.
Parking pricing/restrictions	High	High 	Off (On in some limited cases)	Potentially powerful tool for specific land uses in a highway corridor.
Park and ride lots	High	Low	Both	Removes commute trips. Effect on total VMT needs to be addressed in mitigation plan.
Land preservation	High	Unclear	Off	Could work in theory but measurement is difficult. May be best combined with transfer of development rights to spur infill TOD.

GreenTRIP Connect



Connect

Traffic and Climate Calculator for Housing

<http://Connect.GreenTRIP.org>

[Connect Tool](#) [About](#) [Sponsors](#) [Partners](#) [More Info](#) [GreenTRIP Program](#) [Certify Your Project](#)

Welcome to GreenTRIP Connect. Connect helps you instantly calculate how smart location, affordable homes and traffic reduction strategies can reduce driving and greenhouse gas emissions from residential development. It also calculates how much money and space can be saved from right-sized parking.



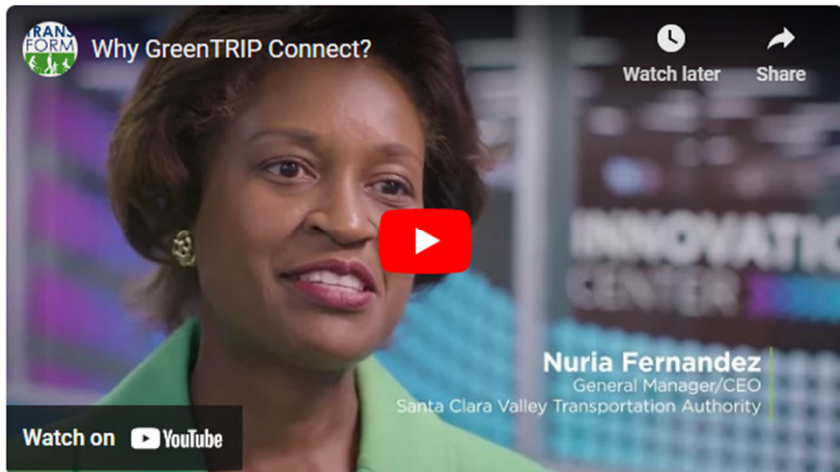
Get Started Using GreenTRIP Connect

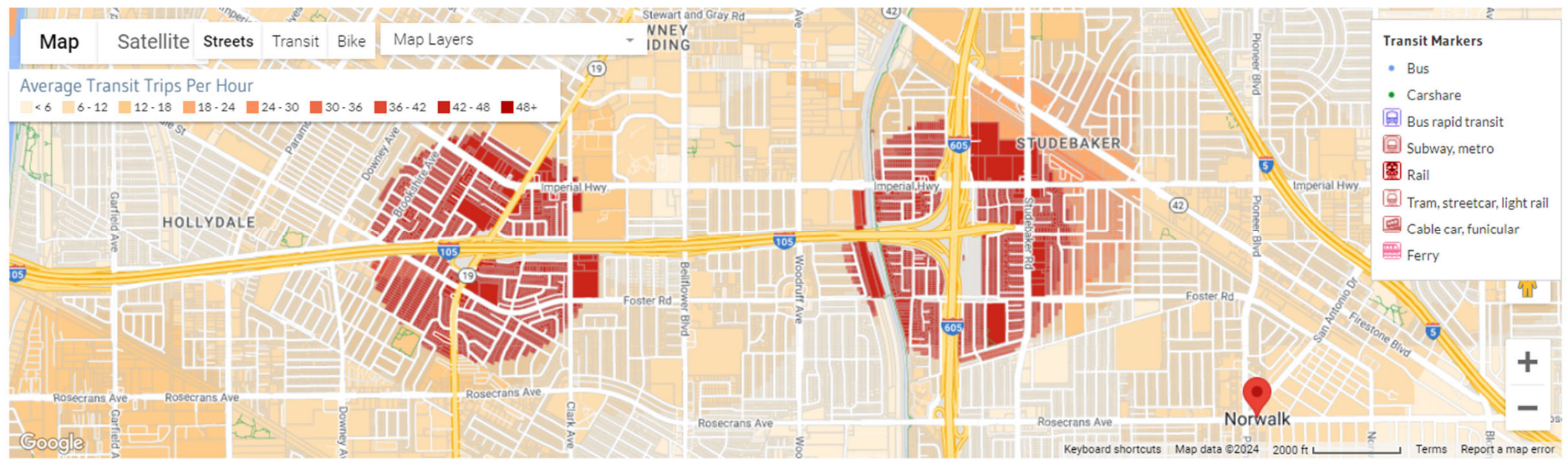
city of norwalk

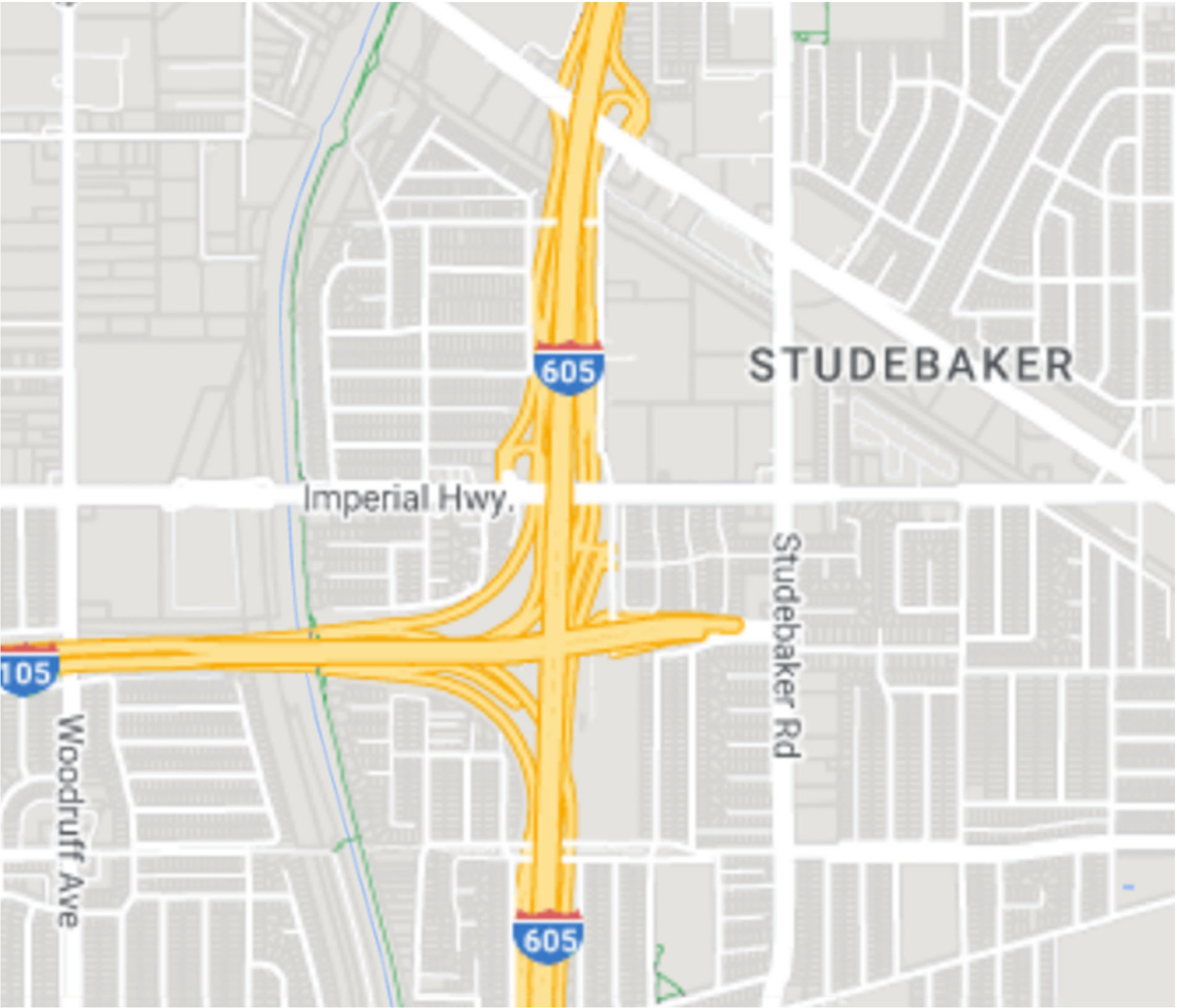
GO

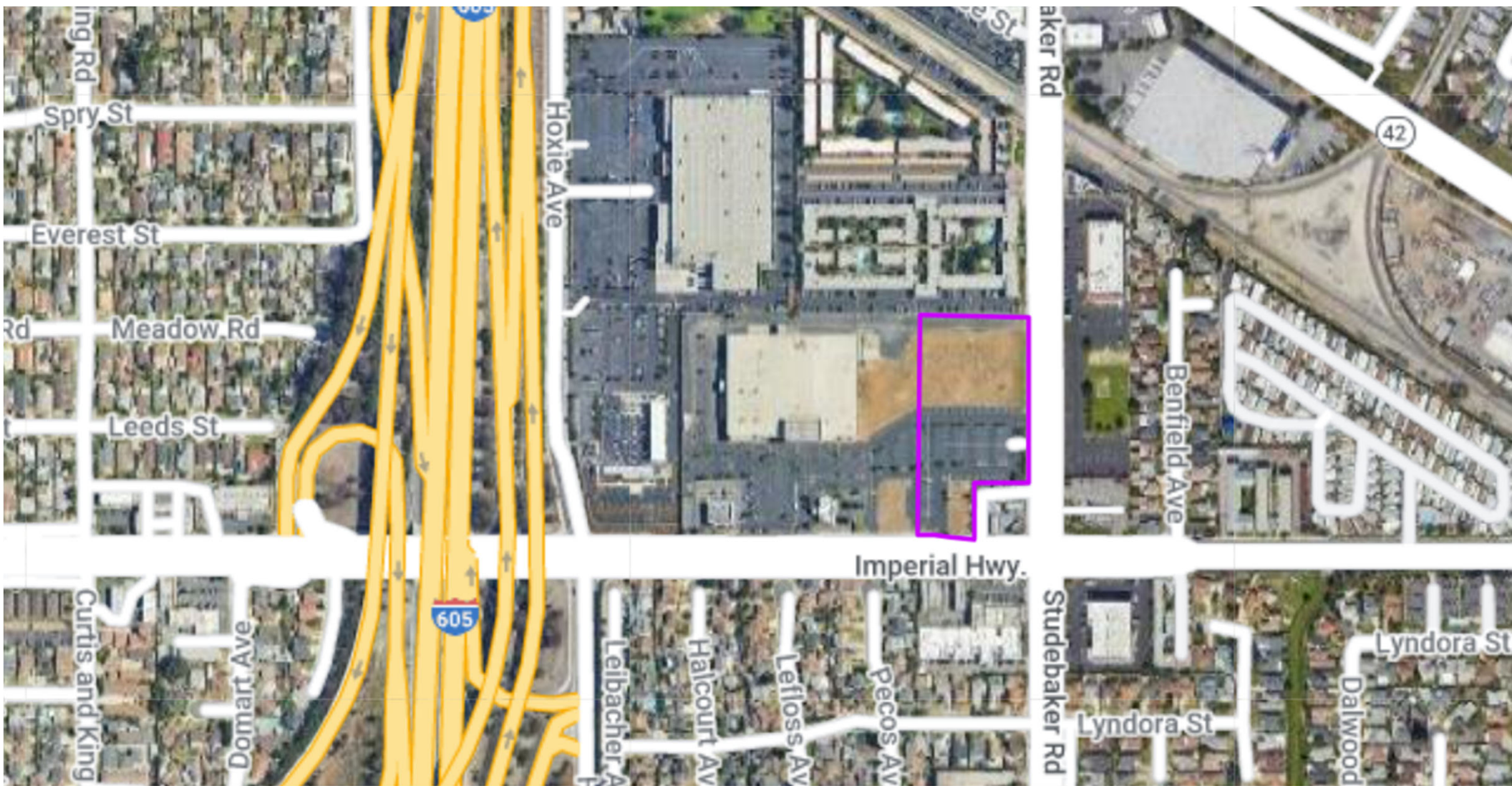


For residential developments in California









Map

Streets

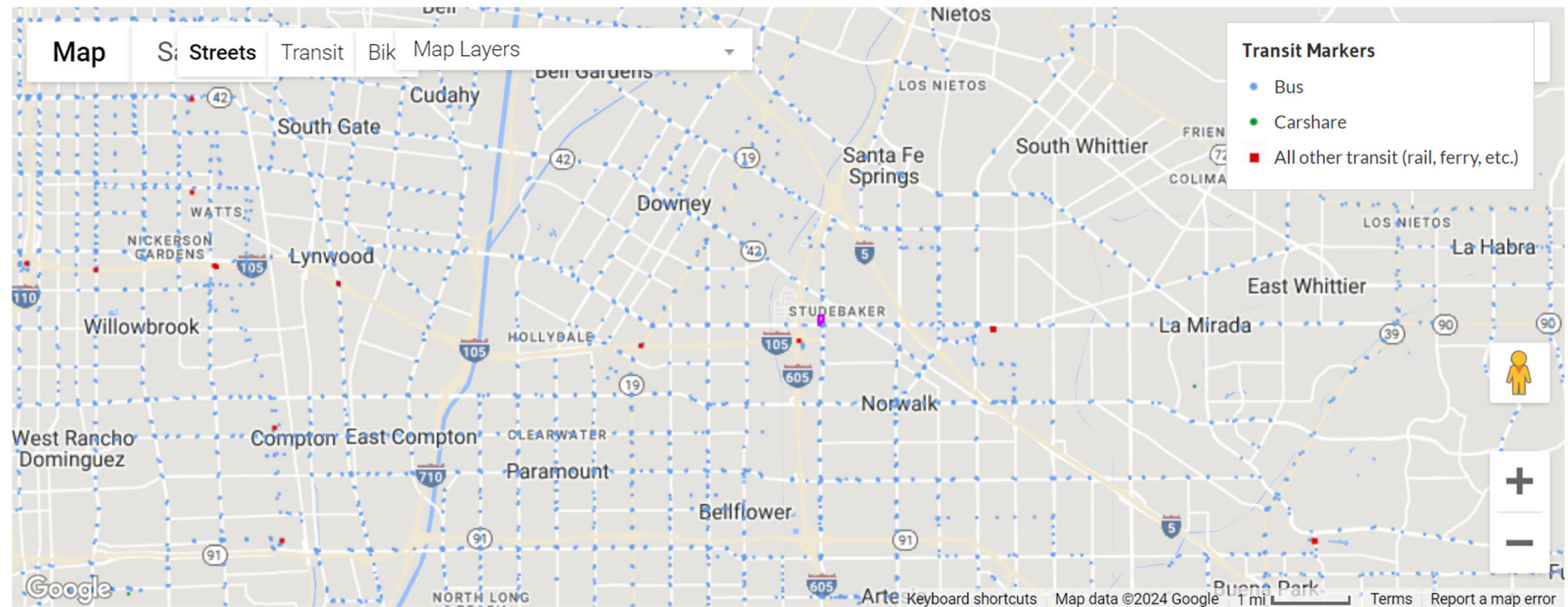
Transit

Bik

Map Layers

Transit Markers

- Bus
- Carshare
- All other transit (rail, ferry, etc.)



Google



Connect

Traffic and Climate Calculator for Housing



- Connect Tool
- About
- Sponsors
- Partners
- More Info
- GreenTRIP Program
- Certify Your Project



Partners

More Info

GreenTRIP Program

Enter

Methodology

FAQ

Glossary

Resources

Feedback

Step 2: Pick a parcel

- SELECT A PARCEL
- DRAW TO SELECT
- CLEAR PARCEL

- VIDEO
- LAUNCH TOUR

Imperial Highway and Studebaker Road- N/W Corner
Norwalk Transit System
4, 2

Transit Markers

- Bus
- Carshare
- Bus rapid transit
- Subway, metro
- Rail
- Tram, streetcar, light rail
- Cable car, funicular
- Ferry

Click icons for stop information

Step 3: Tell us about the project

Enter details on your proposed residential project, or create a hypothetical one, to explore how a variety of project characteristics change the amount of driving, greenhouse gas emissions and parking.

Start by selecting one or more parcels on the map above.

GreenTRIP Connect dashboard for your project

Project characteristics

- Building: 200 units (default)
- Parking proposed: 100 spaces (default)
- Density: 54.08 units/acre
- Parking ratio: 0.50 spaces/unit

GreenTRIP
Certification
ready?



Get started [?]

[See requirements](#)

[+] Click to hide details

Map

Satellite

Streets

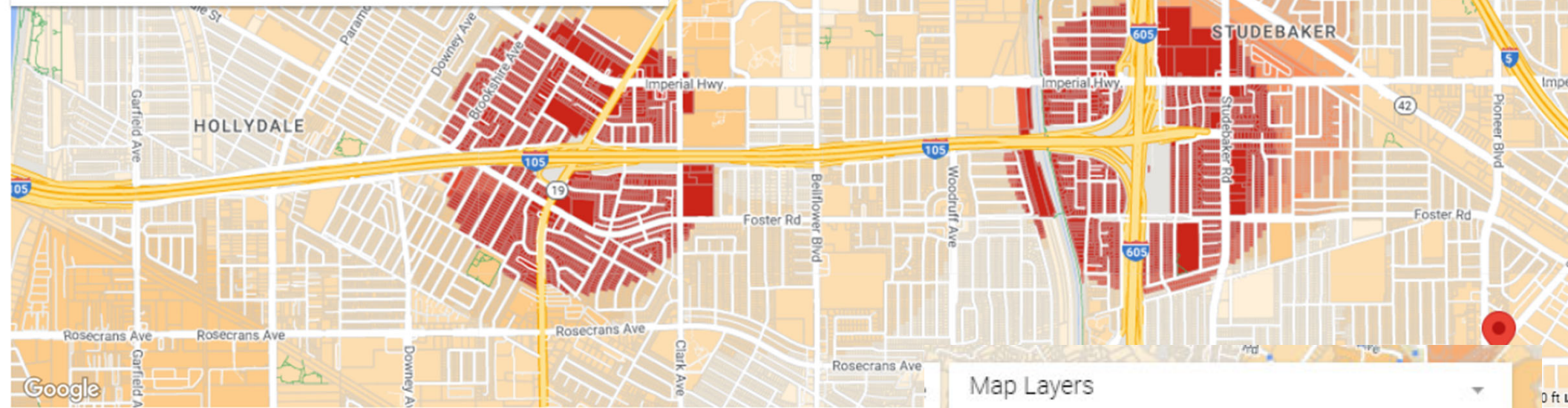
Transit

Bike

Map Layers

Average Transit Trips Per Hour

< 6 6 - 12 12 - 18 18 - 24 24 - 30 30 - 36 36 - 42 42 - 48 48+



Map Layers

None

High quality transit

✓ Transit

Employment density

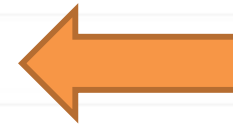
Commute distance

Priority development areas

Metropolitan Planning Organization areas

Counties

Cities




Built in Comparisons for SB743 Implementation

GreenTRIP Connect dashboard for your project

Project characteristics

Building: **200 units** (default)
 Parking proposed: **100 spaces** (default)
 Density: **54.08 units/acre**
 Parking ratio: **0.50 spaces/unit**

**GreenTRIP
Certification
ready?**



Get started ?

[See requirements](#)

[+] Click to hide details



Comparison snapshot

per unit
 per day

Driving
miles/day


Greenhouse gases
kg CO₂/day


Parking spaces
predicted use


if built in an average location in the <input type="text" value="City"/>	Driving miles/day	Greenhouse gases kg CO ₂ /day	Parking spaces predicted use
Norwalk City	32.44	18.49	n/a ?
if built on selected parcel	23.3	13.28	n/a
with affordable housing 	20.93	11.93	n/a
with GreenTRIP strategies 	13.04	7.44	n/a
Your project	13.04	7.44	n/a

\$1,048 Resident savings from selected GreenTRIP strategies per year/household

\$17,000,000 Saved on parking compared to municipal parking requirement of **2.2** spaces/unit, or **440** spaces total.


60%
Less driving
19.4
Fewer miles per day


60%
Less climate impact
11.06
Fewer kg of CO₂ per day



n/a
parking used
n/a
parking spaces used

Total driving and climate impact compared to **Norwalk City** average.

Share dashboard

View project report

Apply for certification

See inspiring examples of  GreenTRIP Certified projects

GreenTRIP Connect dashboard for your project

Project characteristics

Building: **200 units** (default)
Parking proposed: **100 spaces** (default)
Density: **54.08 units/acre**
Parking ratio: **0.50 spaces/unit**

GreenTRIP
Certification
ready?



Get started [?]

[See requirements](#)

[+] Click to hide details

Comparison snapshot

per unit building totals
per day per year

Toggle
Outputs

Driving
miles/day

Greenhouse gases
kg CO₂/day

Parking spaces
predicted use

if built in an average location in the

	Driving miles/day	Greenhouse gases kg CO ₂ /day	Parking spaces predicted use
Norwalk City	32.44	18.49	n/a [?]
if built on selected parcel	23.3	13.28	n/a
with affordable housing	22.83	13.01	n/a
with GreenTRIP strategies	18.26	10.41	n/a
Your project	18.26	10.41	n/a

\$0

Resident savings from selected GreenTRIP strategies per year/household

\$10,000,000



Saved on parking compared to municipal parking requirement of **1.5** spaces/unit, or **300** spaces total.



44%

Less driving

14.18

Fewer miles per day



44%

Less climate impact

8.08

Fewer kg of CO₂ per day



n/a
parking used

n/a
parking spaces used

Total driving and climate impact compared to **Norwalk City** average.

Savings!

Share dashboard

View project report

Apply for certification

updated outputs highlighted in yellow

Below is a custom GreenTRIP Connect project report that you can share, save, print and edit.
Add project information to customize the Connect project report.

Project name / address

Connect Demo for SCAG Modeling Task Force

Prepared by

Ann Cheng Consulting, LLC

Edit location & inputs

Share Connect project report

Download CSV

Print



Project status

Exploratory



Additional project info

This information will appear below the GreenTRIP dashboard in your project report.

This is an example of VMT analysis report that could be used by local developers and planning staff to determine how a project meets VMT screening requirements.

Shareable permalink
<https://connect.greentrip.org/map-tool.php?p=560302>



Connect

Traffic and Climate Calculator for Housing

Connect project report

4-page Connect Report for TDM related VMT analysis

Connect Demo for SCAG Modeling Task Force

URL: <https://connect.greentrip.org/map-tool.php?p=560302>

Prepared by: Ann Cheng Consulting, LLC

Project status: Exploratory

Additional project info: This is an example of VMT analysis report that could be used by local developers and planning staff to determine how a project meets VMT screening requirements.

GreenTRIP Connect (Connect.GreenTRIP.org) is a free, online tool that models traffic and greenhouse gas impacts of a residential project in California. Based on the project's location, unit count, unit mix, rent, parking supply, and traffic reduction strategies, this project will result in:

- **2,835 fewer** miles driven every day compared to the Norwalk City average.
- **44% fewer** GHG impacts every day compared to the Norwalk City average.
- **\$0** in transportation savings for future residents.

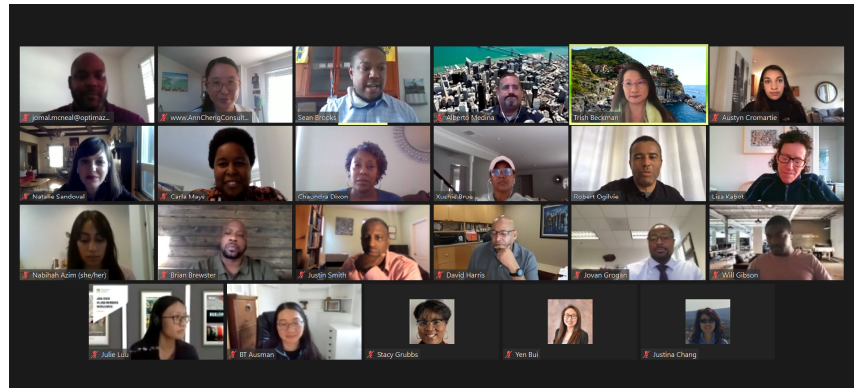
Parking when compared to Municipal requirements:

- **Saving \$10,000,000** in parking construction cost if built with **0.50** instead of the municipal requirement of **1.5 spaces/unit**.
- **Saving 28,200 sq.ft.** in parking spaces **which could be allocated to 38 housing units of 751 sq.ft.**



GreenTRIP Connect Uses

- Share and watch the video. **FREE Tech Tools**
- Use Connect and database in community meetings, workshops and webinars on **SB743 Implementation or TDM analysis**
- **Recorded Connect training webinars**



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