

SPUR

Ideas + Action for a Better City

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@SPUR_Urbanist

#SmartCityParking

Reforming Parking Policies

Overview and Regional Perspective

Valerie Knepper

July 26, 2016



A green and white sign stands in a pond, surrounded by reeds and rocks. The sign has a green top section with white text and a white bottom section with green text. The pond's surface reflects the surrounding greenery and the sign itself. The foreground is filled with smooth, dark-colored stones.

**FROG
PARKING
ONLY**

**ALL OTHERS
WILL BE
TOAD!**

Why are parking policies important?

1. Land Use Impacts
2. Transportation Impacts
3. Equity, environment and efficiency



Land Use Impacts:

Parking is an expensive use of land, crowds out other uses

- **Excess parking requirements:**
 - Increase housing costs, reduce feasibility of infill/TOD
 - Favor development where land is cheaper
 - Do not allow market to address current housing preferences



Growing market for housing with little or no parking



Hardest To Attract
(33% of respondents)

High-Income
Suburbanites (11%)

Auto-Oriented,
Price-Conscious
(6%)

Kids, Cars
and Schools
(16%)

Mellow
Couples
(10%)

Ambitious
Urbanites
(19%)

Possible To Attract
(29% of respondents)

Easiest To Attract
(38% of respondents)

Transit-Preferring
(7%)

Urban
DINKs
(13%)

Young
Brainiacs
(18%)

Parking: Transportation Impacts

- More parking at home —> higher auto ownership and more driving
- Free parking at work —> more driving, increasing congestion
- Excess driving hurts the viability of quality transit, negatively impacts walking and bicycling.



Parking: Regional Impacts

- **Equity** – Low income residents own fewer cars, but most still pay for parking bundled into housing costs, even if they don't own a car. Employees receive parking benefits at work, even if they can't afford a car. Customers pay even if not using it.
- **Economics** – The region is investing billions into transit system – efficient transit is important to regional prosperity. Excess free parking undermines effective transit systems
- **Environment** – Reduce environmental impacts through reduced driving



What has MTC done to support parking reform?

Station Area Plans, technical assistance, model ordinances, case studies, workshops

- Support to cities for station area plans
- “Smart Parking Toolbox”
- Model to re-estimate parking demand w/ transit, pricing
- Technical analyses
- Workshops & Videos



Steps to reduce excess parking

- Eliminate requirements within half - mile “high quality transit” for housing (~ 80 locations in Bay Area)
- Reduce requirements for employee and customer parking, require shared parking, allow reuse of land, and support alternative modes
- Support pricing based on performance. Reward lower use instead of more use.
- Require affordable housing be built with lower parking levels



Are cities reducing their parking requirements?

- National trend of cities reducing requirements, especially residential around transit & downtowns
- Cities making changes to improve local economies and support local residents



Parking is being reformed ... slowly, but progressively

- **Politically difficult** for cities to change requirements. Outreach and pilots
- Many **cities don't think they have \$\$\$\$** to implement changes . . . But parking fees can be used to support changes
- If parking requirements are high this is a **missed opportunity to provide more lower-cost market-based housing, and support for small businesses**

Bay Area cities are leaders in field – including SF, Oakland, and Berkeley





CARTOONSTOCK.com

Search ID: jcen454

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TransForm



Our communities. Our transportation. Our future.



GreenTRIP Connect

Ann Cheng
GreenTRIP
Program Director

Balancing Cities and Their Parking **SPUR Oakland**

Darin Ranelletti / City of Oakland Department of Planning
Valerie Knepper / Metropolitan Transportation
Commission, formerly

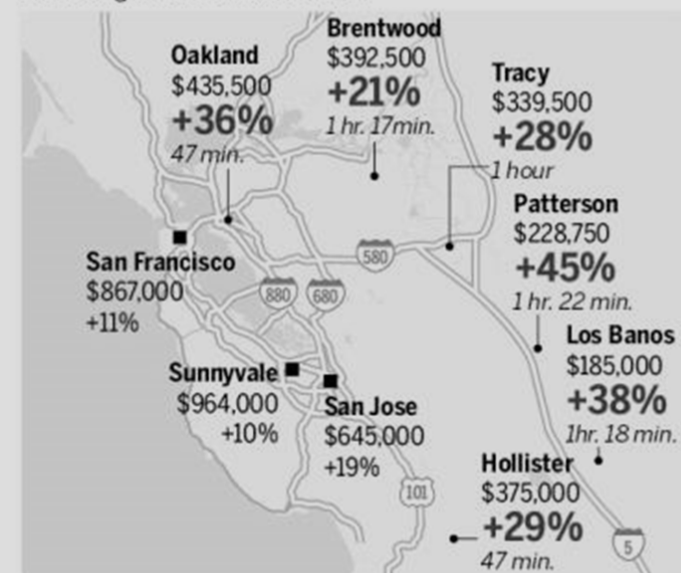
July 26, 2016



Home prices up in outer Bay Area

+28 to +45%

With driving times to San Jose in italics



Source: San Francisco Chronicle



STANDARD CERTIFICATION REQUIREMENTS

CERTIFICATION REQUIREMENTS			
 Place Type (and examples)			
	MAXIMUM PARKING SPACES PER UNIT	TRAFFIC REDUCTION STRATEGIES -Free Transit Passes -Free Carsharing Memberships -Unbundled Parking*	MAXIMUM PROJECTED DAILY MILES PER UNIT





STANDARD CERTIFICATION REQUIREMENTS

	CERTIFICATION REQUIREMENTS		
Place Type (and examples)	 MAXIMUM PARKING SPACES PER UNIT	   TRAFFIC REDUCTION STRATEGIES -Free Transit Passes -Free Carsharing Memberships -Unbundled Parking*	 MAXIMUM PROJECTED DAILY MILES PER UNIT

40 YEARS





STANDARD CERTIFICATION REQUIREMENTS

	CERTIFICATION REQUIREMENTS		
 Place Type (and examples)	 MAXIMUM PARKING SPACES PER UNIT	 TRAFFIC REDUCTION STRATEGIES <ul style="list-style-type: none">-Free Transit Passes-Free Carsharing Memberships-Unbundled Parking*	 MAXIMUM PROJECTED DAILY MILES PER UNIT



Transit Passes



Car Share





Created by Giovanni Tagliente
from Noun Project

4,370
GreenTRIP Certified
Homes, of which



1,575
are Affordable
Units



19
GreenTRIP Developers
committed to housing with
great transportation choices



27
GreenTRIP Certified
Projects approved



**8 Years of
GreenTRIP:
Successes
since 2008**

Axis Development
Barry Swenson Builders
Bridge Housing
BuildInc.

Community Housing and Development
Corporation/YHLA Architects
City Centric


The Core Companies
Dean Hanson/Kurt Anderson Architects
Eden Housing

Essex Property Trust/EBL&S
First Community Housing
Green Republic

Greenheart Land Company
Holliday Development
Nautilus Group, Inc.

Panoramic Interests
Resources for Community Development
Rhoades Planning Group
Thompson | Dorfman

CERTIFIED PROJECTS



← 4700 Telegraph Ave

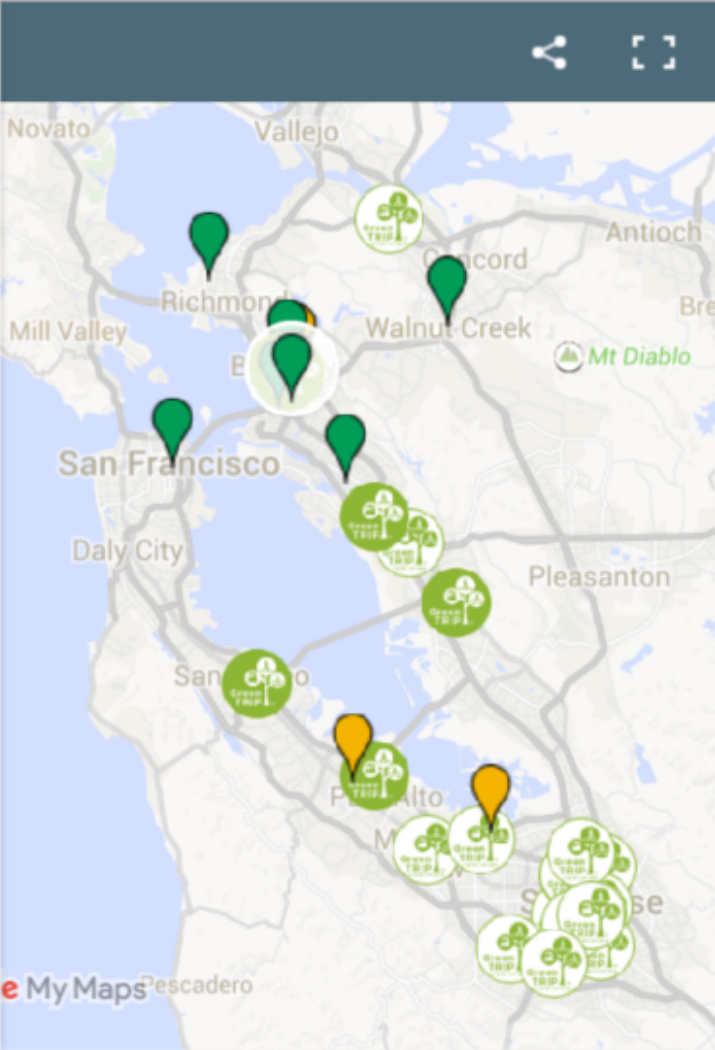
name
4700 Telegraph Ave

description
Certification Status: Conditional
Certification Awarded May 5, 2015

Developer: Nautilus Group, Inc.

Location: 4700 Telegraph Ave. Oakland, CA

[Read more on the GreenTRIP Project](#)



View all [GreenTRIP Certified Projects](#) in a larger map.



GreenTRIP

Traffic Reduction + Innovative Parking
www.GreenTRIP.org
PROJECT EVALUATION REPORT

4700 TELEGRAPH

4700 TELEGRAPH AVE, OAKLAND, CA 94609
DEVELOPER: NAUTILUS GROUP, INC.
WWW.NAUTILUSGRP.COM



PROJECTED DAILY DRIVING BY RESIDENTS
(Vehicle Miles Traveled per Household per Day)

GREENTRIP PLATINUM STANDARDS

LESS THAN **25 MILES/DAY** ☒ **15 MILES/DAY**

PER HOUSEHOLD, BASED ON
URBEMIS PROJECTION
URBEMIS 2007 v9.2.4



APPROPRIATE AMOUNT OF PARKING

GREENTRIP PLATINUM STANDARDS

MAXIMUM **0.5 SPACES/UNIT** ☒ **0.5 SPACES/UNIT**

Average spaces per home
(including guest parking),
excluding spaces shared with
non-residential uses.

24 PARKING SPACES
48 UNITS



TRAFFIC REDUCTION STRATEGIES

GREENTRIP PLATINUM STANDARDS

**ALL 3 STANDARD TRAFFIC
REDUCTION STRATEGIES**

- ☒ UNBUNDLED PARKING
- ☒ DISCOUNT TRANSIT PASSES
- ☒ DEVELOPER-PROVIDED CARSHARE VEHICLE

The project must have all three traffic reduction strategies plus additional strategies with a value of \$3,001 - \$5,000 per unit over 40 years, beyond the cost of standard strategies:

- UNBUNDLED PARKING
- DISCOUNT TRANSIT PASSES
- FREE CARSHARE MEMBERSHIP

- **\$6,400 VALUE PER UNIT OVER 40 YEARS IN ADDITIONAL STRATEGIES**

- **\$100 OF DRIVING CREDIT EACH FOR 2 RESIDENTS PER UNIT FOR ON-SITE CARSHARE**
- **1 BAY AREA BIKE SHARE MEMBERSHIP PER UNIT**

PLACE TYPE

GreenTRIP standards are customized for different types of neighborhoods, or "Place Types," as defined by the Metropolitan Transportation Commission's Station Area Planning Manual.

URBAN NEIGHBORHOOD

4700 Telegraph meets GreenTRIP Platinum Certification standards for the Urban Neighborhood Place Type. Above is an evaluation of how 4700 Telegraph satisfies each category.



CONDITIONAL
PLATINUM CERTIFICATION
AS OF MAY 5, 2015

4700 Telegraph has qualified for **Conditional Platinum Certification**. Full Certification is contingent on inclusion of key project characteristics in final city entitlements.



Photo Credit: Ken Gutmaier



COMPARED TO THE TYPICAL
BAY AREA HOUSEHOLD
4700 TELEGRAPH IS
PROJECTED* TO RESULT IN:

70% LESS DRIVING

Per Household
Bay Area Average is 50 Miles Driven per Day,
per Household

62% LESS GHGs

Per Household
Each household of 4700 Telegraph is expected
to emit 14 pounds of GHGs per day.

*URBEMIS Model 2007 v9.2.4

GreenTRIP evaluates how well a proposed residential project design achieves Traffic Reduction and Innovative Parking strategies. GreenTRIP conducts an evaluation based on information provided by the developer, Nautilus Group, Inc., and gathered from publicly available sources.

4700 TELEGRAPH

TRIP REDUCTION CREDITS

The following is an inventory of URBEMIS model inputs. The projected driving is affected by the following trip reduction credits.

DENSITY

120 UNITS/ACRE

SOURCE: NAUTILUS GROUP, INC.



**20%
REDUCTION**

MIX OF USES

WITHIN A HALF-MILE
5,248 JOBS
4,569 HOMES



**7%
REDUCTION**

LOCAL RETAIL PRESENT

SOURCE: 2010 CENSUS



**2%
REDUCTION**

TRANSIT SERVICE

617 BUSES WITHIN 1/4 MILE
**450 DAILY STOPS AT MACARTHUR
BART STATION**

SOURCE: 511.ORG



**13%
REDUCTION**

PEDESTRIAN/BICYCLE FRIENDLINESS

490 INTERSECTIONS PER SQ. MILE
100% STREETS W/ SIDEWALKS
97% ARTERIAL STREETS W/ BIKE LANES
OR WHERE SUITABLE, DIRECT PARALLEL ROUTES

SOURCE: GOOGLE MAPS



**7%
REDUCTION**

AFFORDABLE HOUSING

**0% OF UNITS ARE DEED
RESTRICTED BELOW MARKET RATE
HOUSING**

SOURCE: NAUTILUS GROUP, INC.

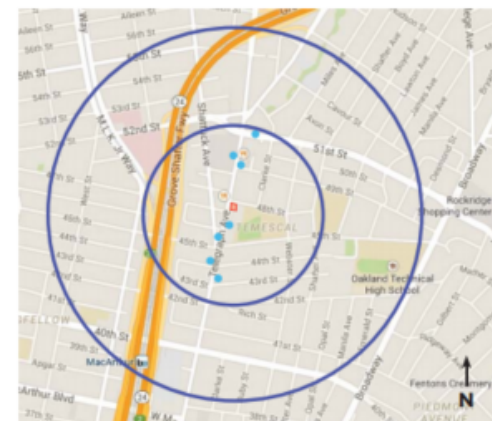


**0%
REDUCTION**

Residents living and working within a 1/2 mile or 10 minute walk to transit are 10 times more likely to take transit.¹

Residents living within a 1/2 mile of transit drive 50% less than those living further away.²

PROJECT CONTEXT MAP



RED SHADING REPRESENTS THE PROJECT FOOTPRINT. ● = BUS STOP WITHIN 1/4 MILE
CONCENTRIC CIRCLES REPRESENT THE AREA WITHIN 1/4 AND 1/2-MILE FROM THE PROJECT.
SOURCE: GOOGLE MAPS



RENDERING FOR 4700 TELEGRAPH, OAKLAND

KEY PROJECT DETAILS:

- **0.4 ACRES, 48 UNITS, 5 STORIES**
- **2 AC TRANSIT EASY PASSES PER UNIT FOR 40 YEARS**
- **DEVELOPER-PURCHASED CARSHARE VEHICLE ON-SITE**
- **\$100 ANNUAL DRIVING CREDIT EACH FOR UP TO 2 RESIDENTS PER UNIT FOR 40 YEARS**
- **100% UNBUNDLED PARKING SPACES**
- **48 SECURED BIKE PARKING SPACES**
- **10 SHORT-TERM BIKE PARKING SPACES**
- **1 BAY AREA BIKE SHARE MEMBERSHIP PER UNIT OVER 40 YEARS**

QUESTIONS?

Contact: Jean Long, GreenTRIP Planner
Jean@TransFormCA.org
(510) 740-3150 x340 www.GreenTRIP.org

a project of **TransForm**

¹ ABAG New Places, New Choices, 2007

² Cervero, Arrington, TCRP Report 128, 2008



Connect *beta*
Creating affordable, low-traffic and healthy communities



[Connect Tool](#) [About](#) [Methodology](#) [Glossary](#) [Feedback](#) [GreenTRIP Program](#)

Step 1: Enter a location

598 S 1st St, San Jose, CA, United States



Step 2: Pick a parcel

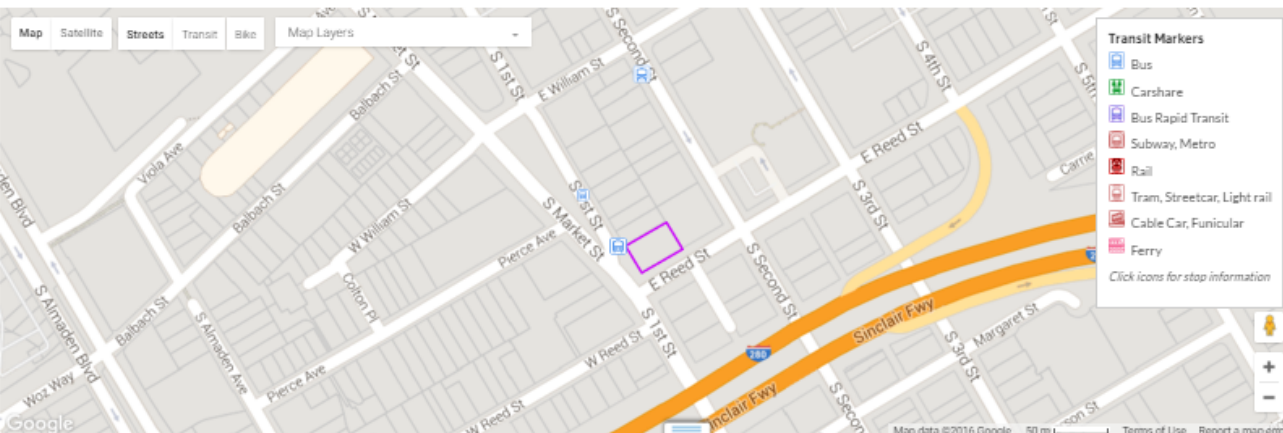
[SELECT A PARCEL](#)

[DRAW TO SELECT](#)

[CLEAR PARCEL](#)

[VIDEO](#)

[LAUNCH TOUR](#)



Step 3: Tell us about the project

Enter details on your proposed 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.

Building

How many housing units will there be?

Total Units

200

[CUSTOMIZE UNITS](#)

[RESTORE DEFAULTS](#)

Municipal Parking Requirement:

5

spaces/unit

Low Impact Parking Estimate: 50 spaces

☒ Enter Your Own Parking

Total Spaces

50

[RESTORE DEFAULTS](#)

Parking Construction Characteristics

The default parking construction characteristics below are based on ... Edit the parking characteristics below if you know them.

[Parking](#)

[Construction](#)

[Maintenance](#)

GreenTRIP Dashboard for Your Project

Project Characteristics

Building: 200 units

Parking Proposed: 50 spaces

Value of GreenTRIP Strategies

\$2,069

per year/household

Comparison Snapshot

[per unit](#)

[building totals](#)

Parking
Spaces
predicted use

Avg. Daily
Driving
miles/day

Avg. Daily
Greenhouse Gases
pounds/day

if built in an Average Location

San Jose-Sunnyvale-Santa Clara, CA Metro Area

1.49

34.23

38.11

if built on Selected Parcel

0.59

20.73

23.08

with Affordable Housing

--

--

--

with GreenTRIP Strategies

0.37

10.22

11.38

Your Project

0.37

10.22

11.38

Total Impact of Project

% Compared to Average Location

-75.2%

-70.1%

-70.1%

Parking Impacts of Project

Compared to Municipal parking
requirement of 5 spaces/unit, or 100
spaces total.

15,000 Sq. Ft.
Space Gained from Smart
Parking

\$2,500,000
Saved on Parking
Construction

[Share Dashboard](#)

[View Full Report](#)

See inspiring examples of



GreenTRIP Certified Projects

GreenTRIP Connect v. Beta

JAPANTOWN SENIOR APARTMENTS

685 NORTH SIXTH ST., SAN JOSE, CA
DEVELOPER: FIRST COMMUNITY HOUSING
WWW.FIRSTHOUSING.COM



PROJECTED DAILY DRIVING BY RESIDENTS

(Vehicle Miles Traveled per Household per Day)

GREENTRIP STANDARDS

LESS THAN **35** MILES/DAY

✓ **22** MILES/DAY

PER HOUSEHOLD, BASED ON
URBEMIS PROJECTION
URBEMIS 2007 v9.2.4



APPROPRIATE AMOUNT OF PARKING

GREENTRIP STANDARDS

MAXIMUM **1.5** SPACES/UNIT

✓ **0.55** SPACES/UNIT

Average spaces per home
(including guest parking),
excluding spaces shared with
non-residential uses.

41 RESIDENTIAL PARKING SPACES
75 HOMES



TRAFFIC REDUCTION STRATEGIES

GREENTRIP STANDARDS

AT LEAST 1 OF 3 TRAFFIC
REDUCTION STRATEGIES

✓ **FREE VTA ECO-PASSES**

The project must have at least
one of these three traffic
reduction strategies:

- UNBUNDLE PARKING
- DISCOUNT TRANSIT PASSES
- FREE CARSHARE MEMBERSHIP

- PROVIDING FREE VTA ECO-PASSES FOR ALL RESIDENTS TO ACCESS LIGHTRAIL AND BUS FOR THE LIFE OF THE PROJECT

FULL CERTIFICATION
AS OF APRIL 4, 2013

Japantown Senior Apartments has
achieved GreenTRIP Certification.

This project was approved in 2013.



COMPARED TO THE TYPICAL
BAY AREA HOUSEHOLD
JAPANTOWN SENIOR
APARTMENTS IS PROJECTED*
TO RESULT IN:

56% LESS DRIVING

Per Household
Bay Area Average is 50 Miles Driven per Day,
per Household

45% LESS GHGs

Per Household
Each household of Japantown Senior Apts. is
expected to emit 21 pounds of GHGs per day.

*URBEMIS Model 2007 v9.2.4



GreenTRIP Connect's Purpose:

Connect instantly calculates reductions in driving and greenhouse gas emissions from residential developments built in smart locations with affordable homes and traffic reduction strategies.

WHY CREATING AND PRESERVING AFFORDABLE HOMES NEAR TRANSIT IS A HIGHLY EFFECTIVE CLIMATE PROTECTION STRATEGY



Database.greentrip.org



Parking Database



[ABOUT THE DATABASE](#)

[USER GUIDE](#)

[ABOUT THE DATA](#)

[EVENTS](#)

[GLOSSARY](#)

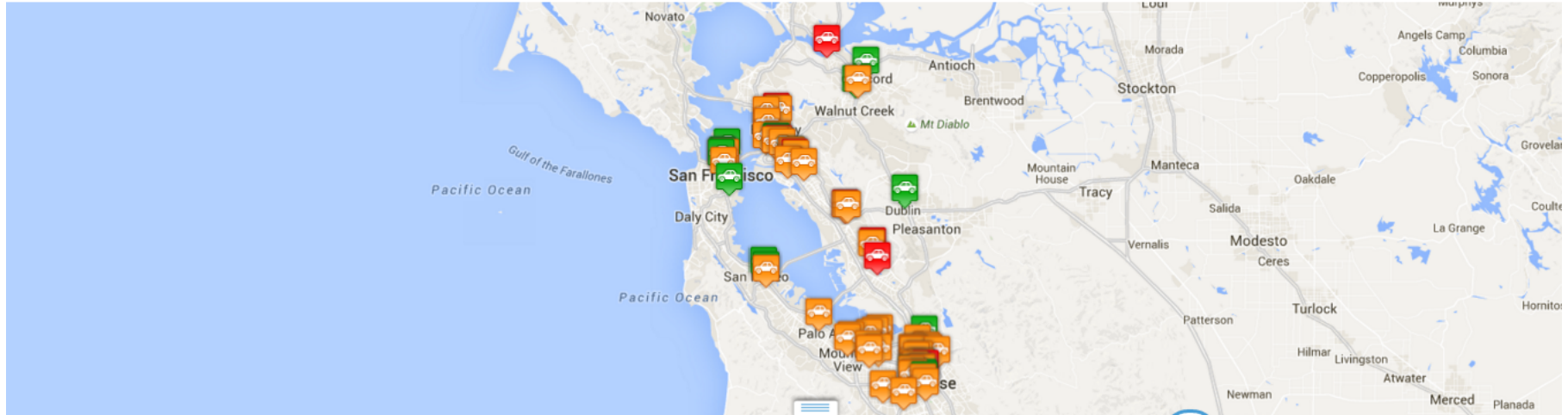
Boundaries ▾

Building Labels ▾

Buildings: [Select All](#)

[Hide Unselected](#)

[Search](#)



[Building](#)

[Parking](#)

[Location](#)

[Transportation](#)

Showing **80** buildings that meet your criteria. [View Report](#)

Number of Units

- ☐ Any
- ☐ 20-49
- ☐ 50-99
- ☐ 100-199
- ☐ 200+

Resident Type

- ☐ Any
- ☐ Family
- ☐ Senior
- ☐ Diverse Abilities
- ☐ Condo

Unit Size

- ☐ Any
- ☐ Studio
- ☐ 1 BR
- ☐ 2 BR
- ☐ 3 BR +

% of Units Below Market Rate

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

Development Type

- ☐ Any
- ☐ Mixed Use
- ☐ All Residential

Developer

Project

[Glossary of Terms](#)

[Download .CSV](#)

[View for Print](#)

Comparison Report

\$198,034,000

Construction Cost of Unused Spaces

28%

Average % of Unused Spaces

1,164,600

Square Feet of Unused Parking

13,823 Total Spaces
9,941 Used 3,882 Unused
Avg. Available Spaces / Unit: 1.16
Avg. Occupied Spaces / Unit: 0.84

Thank You to our 2015 **GreenTRIP Connect** Founding Sponsors!



Paradigm Shifter

Visionary



Connector



Partner



Supporter

Slides that follow are in lieu of Online Connect tool.



Connect beta

Creating affordable, low-traffic and healthy communities

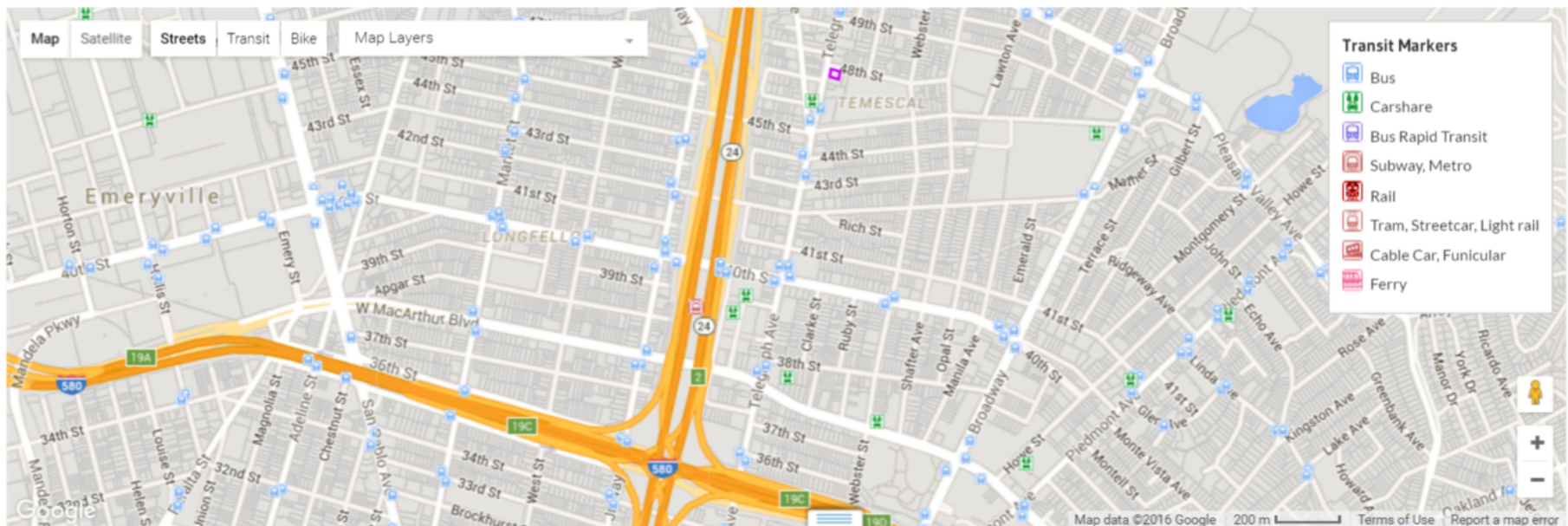


[Connect Tool](#) [About](#) [Methodology](#) [Glossary](#) [FAQ](#) [Feedback](#) [GreenTRIP Program](#)

Step 1: Enter a location



Step 2: Pick a parcel

[SELECT A PARCEL](#)[DRAW TO SELECT](#)[CLEAR PARCEL](#)[▶ VIDEO](#)[LAUNCH TOUR](#)

Step 3: Tell us about the project

Enter details on your proposed project, or create a hypothetical one, to

GreenTRIP Dashboard for Your Project

[Project Characteristics](#)

[Value of GreenTRIP Strategies](#)



Connect *beta*

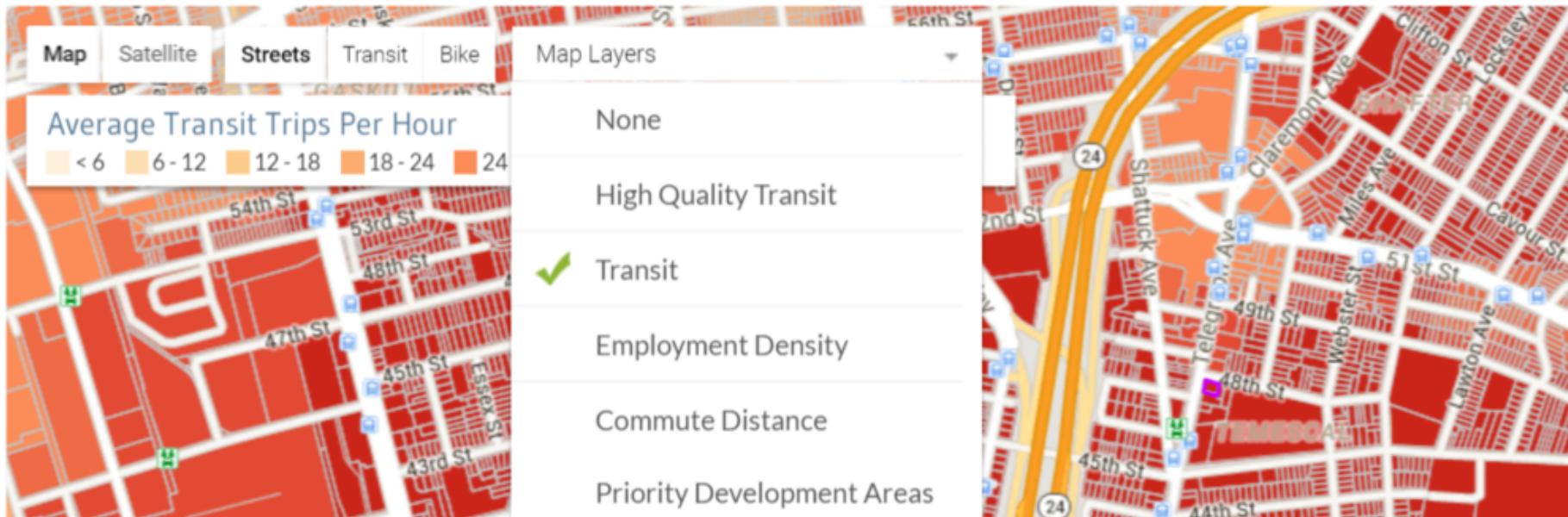
Creating affordable, low-traffic and healthy communities

[Connect Tool](#)[About](#)[Methodology](#)[Glossary](#)[FAQ](#)[Feedback](#)[GreenTRIP Program](#)

Step 1: Enter a location



Step 2: Pick a parcel

[SELECT A PARCEL](#)[DRAW TO SELECT](#)[CLEAR PARCEL](#)

Step 3: Tell us about the project

Enter details on your proposed 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.

Building

How many housing units will there be?

Total Units 

CUSTOMIZE UNITS

Low Impact Parking Estimate: **44** s

☐ Enter Your Own Parking

The default characteristics below are based on a typical building with **48 units** in the geography you selected. Edit the unit characteristics below if you know them.

	Number of Units	Estimated Avg. Sq. Ft.	Expected Rent (\$/mo)
Studio	<input type="text" value="1"/>	<input type="text" value="470"/>	<input type="text" value="2356"/>
1 BR	<input type="text" value="26"/>	<input type="text" value="660"/>	<input type="text" value="2356"/>
2 BR	<input type="text" value="18"/>	<input type="text" value="850"/>	<input type="text" value="2356"/>
3+ BR	<input type="text" value="3"/>	<input type="text" value="1100"/>	<input type="text" value="2944"/>
Total	48 units	755	2393

Low Impact Parking Estimate: **44** spaces [?]

☒ Enter Your Own Parking

Total Spaces

Parking Construction Characteristics

The default parking construction characteristics below are based on ... Edit the parking characteristics below if you know them.

	Parking Spaces	Construction Cost per Space (\$)	Maintenance Cost per Space (\$/Month)
Surface	<input type="text" value="0"/>	<input type="text" value="20000"/>	<input type="text" value="120"/>
Garage / Structure	<input type="text" value="44"/>	<input type="text" value="50000"/>	<input type="text" value="175"/>
Underground Garage	<input type="text" value="0"/>	<input type="text" value="80000"/>	<input type="text" value="200"/>
Lifts	<input type="text" value="0"/>	<input type="text" value="55000"/>	<input type="text" value="250"/>
Tandem	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="120"/>
Bike	<input type="text" value="0"/>	<input type="text" value="20"/>	<input type="text" value="0.25"/>


Affordable Housing



☐ Will there be affordable units?

GreenTRIP Strategies



☐ Will there be a charge for parking? 

Will (are) the following transportation benefits be offered to future (current) project residents?



☐ Resident Transit Passes



☐ Car Sharing Memberships



☐ Bike Sharing Memberships

GreenTRIP Dashboard for Your Project

Project Characteristics

Building: **48 units** (default)

Parking Proposed: **44 spaces** (default)

Value of GreenTRIP Strategies

\$0
per year/household

Comparison Snapshot

per unit

building totals

Parking
Spaces
predicted use

Avg. Daily
Driving
miles/day

Avg. Daily
Greenhouse Gases
pounds/day

if built in an Average Location

Alameda County

1.19

38.71

44.55

if built on Selected Parcel

0.92

27.44

31.57

with Affordable Housing



--

--

--

with GreenTRIP Strategies



--

--

--

Your Project

0.92

27.44

31.57

Total Impact of Project

% Compared to Average Location

-22.8%



-29.1%



-29.1%



Parking Impacts of Project

Compared to Municipal parking requirement of **2.2** spaces/unit, or **106** spaces total.



18,480 Sq. Ft.
Space Gained from Smart
Parking



\$3,080,000
Saved on Parking
Construction

Share Dashboard

View Full Report


See inspiring examples of



GreenTRIP Certified Projects

GreenTRIP Strategies



☒ Will there be a charge for parking? 

50

Avg. Price




☒ Resident Transit Passes

Monthly Value of



☒ Bike Sharing Memberships

One per unit 

Annual Value of Membership



GreenTRIP Dashboard for Your Project

Project Characteristics

Building: **48 units** (default)

Parking Proposed: **44 spaces** (default)

Value of GreenTRIP Strategies



\$3,688

per year/household

Comparison Snapshot

per unit

building totals

	Parking Spaces predicted use	Avg. Daily Driving miles/day	Avg. Daily Greenhouse Gases pounds/day
if built in an Average Location			
Alameda County	1.19	38.71	44.55
if built on Selected Parcel	0.92	27.44	31.57
with Affordable Housing 	--	--	--
with GreenTRIP Strategies 	0.71	21.28	24.49
Your Project	0.71	21.28	24.49

Total Impact of Project

% Compared to Average Location

-40.4%



-45%



-45%



Parking Impacts of Project

Compared to Municipal parking requirement of **2.2** spaces/unit, or **106** spaces total.



18,480 Sq. Ft.
Space Gained from Smart
Parking



\$3,080,000
Saved on Parking
Construction

Share Dashboard

View Full Report



See inspiring examples of

GreenTRIP Certified Projects

Will (are) the following transportation benefits be offered to future (current) project residents?



☒ Resident Transit Pass

Add affordable units to your project...

[Continue to Full Report](#)

[Close](#)

Monthly Value of Pass

\$147

Learn more [here](#) about Transit Pass Programs in the San Francisco Bay Area.

See examples of actual housing developments providing free or discounted Transit Passes residents in the [GreenTRIP Parking Database](#)



☒ Car Sharing Memberships

Two per unit



Annual Value of Membership

Project Characteristics

Building: 105 units

Parking Proposed: 79 spaces

Comparison Snapshot

[per unit](#)

[building totals](#)

if built in an Average Location

San Jose-Sunnyvale-Santa Clara

if built on Selected Parcel

with Affordable Housing

with GreenTRIP Strategies

Your Project

Total Impact of Project

% Compared to Average Location

Parking Impacts of Project

Compared to Municipal parking requirement of 2.2 spaces per unit, total spaces total.

Affordable Housing



☒ Will there be affordable units?

Affordable Units

105

Low-Income (BMR 51-80%)



ADD ANOTHER INCOME GROUP

Low-Income (BMR 51-80%)



Extremely Low-Income (BMR Below 30% AMI)

Very Low-Income (BMR 31-50% AMI)

Low-Income (BMR 51-80%)

Moderate Income (BMR 80-120% AMI)

GreenTRIP Dashboard for Your Project

Project Characteristics

Building: **48 units** (default)

Parking Proposed: **44 spaces** (default)

Value of GreenTRIP Strategies

\$3,688

per year/household

Comparison Snapshot

per unit

building totals

Parking
Spaces
predicted use

Avg. Daily
Driving
miles/day

Avg. Daily
Greenhouse Gases
pounds/day

if built in an Average Location

Alameda County

1.19

38.71

44.55

if built on Selected Parcel

0.92

27.44

31.57

with Affordable Housing



--

--

--

with GreenTRIP Strategies



0.71

21.28

24.49

Your Project

0.71

21.28

24.49

Total Impact of Project

% Compared to Average Location

-40.4%



-45%



-45%



Parking Impacts of Project

Compared to Municipal parking
requirement of **2.2** spaces/unit, or **106**
spaces total.



18,480 Sq. Ft.
Space Gained from Smart
Parking



\$3,080,000
Saved on Parking
Construction

Share Dashboard

View Full Report

See inspiring examples of

Below is a custom GreenTRIP Connect project impact report that you can Share, Save, Print and Edit.
Add project information to customize the Connect Impact Report.

Project Name / Address

Prepared by

Share/Save Custom Connect Report

Project Status

Edit Location & Inputs

Print

Additional Project Info

This information will appear below the GreenTRIP Dashboard in your Project Report.



Connect beta

Creating affordable, low-traffic and healthy communities

Custom Project Report

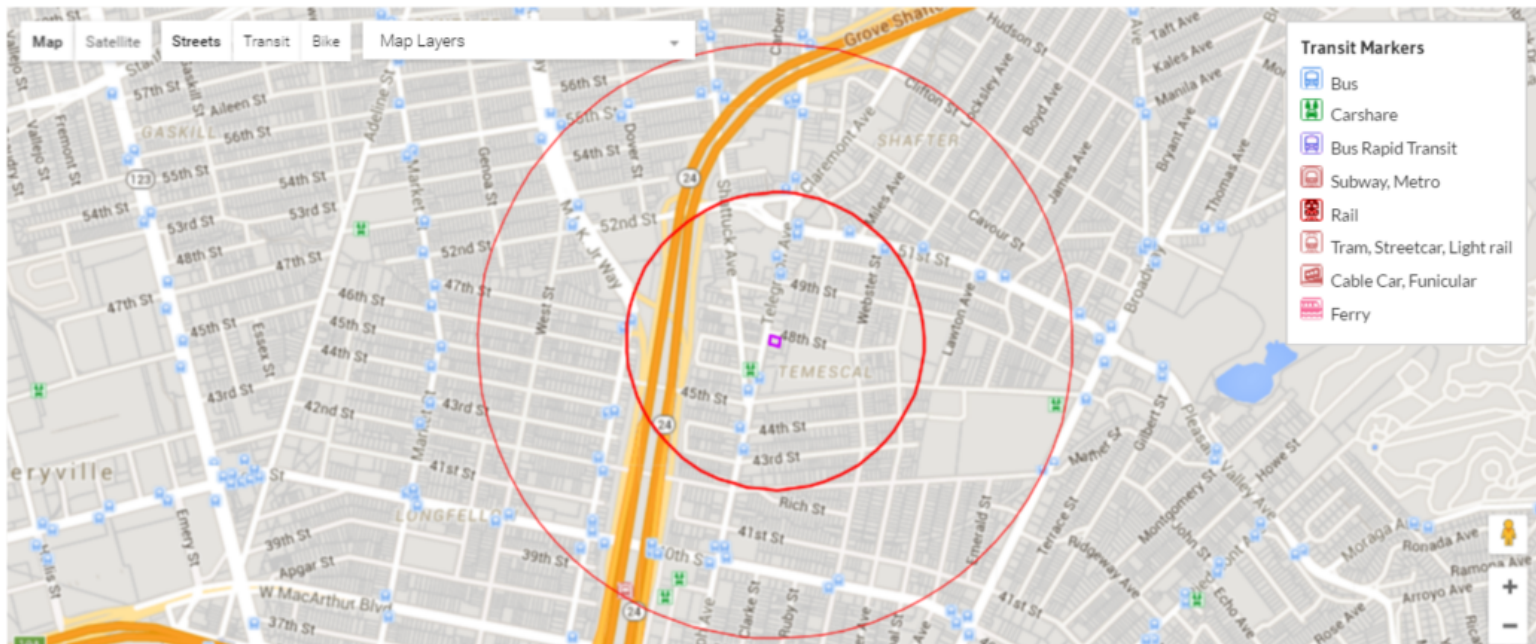
TransForm

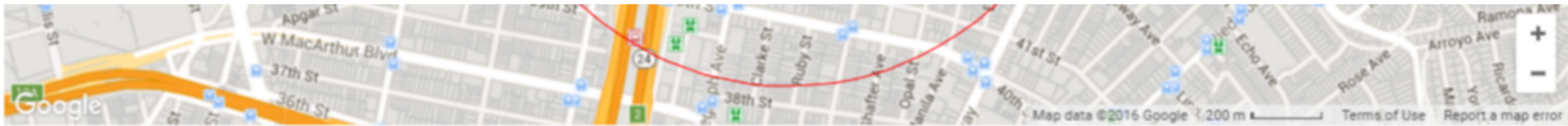
Untitled Project

Prepared by:

Parcel Pin #: 13-1150-19-2

Project Status: Not Specified





This project has the following predicted parking use (SF Bay Area only), average daily driving and GHG's based on the project's location, unit count, unit mix, rent, parking supply, and traffic reduction strategies.

GreenTRIP Dashboard for Your Project

Project Characteristics

Building: **48 units**
 Parking Proposed: **44 spaces**

Value of GreenTRIP Strategies

\$3,688
 per year/household

Comparison Snapshot

per unit **building totals**

	Parking Spaces predicted use	Avg. Daily Driving miles/day	Avg. Daily Greenhouse Gases pounds/day
if built in an Average Location			
Alameda County	1.19	38.71	44.55
if built on Selected Parcel	0.92	27.44	31.57
with Affordable Housing	--	--	--
with GreenTRIP Strategies	0.71	21.28	24.49
Your Project	0.71	21.28	24.49

Total Impact of Project

% Compared to Average Location

-40.4%

-45%

-45%

Parking Impacts of Project

Compared to Municipal parking requirement of **2.2** spaces/unit, or **106** spaces total.

18,480 Sq. Ft.
 Space Gained from Smart Parking

\$3,080,000
 Saved on Parking Construction

Additional Project Info:

NOTE: This report was produced using GreenTRIP Connect, an online resource. This report does not imply that this project has received a GreenTRIP Certification. To learn more or provide feedback on GreenTRIP Connect go to: [Connect.GreenTRIP.org](https://connect.greentrip.org)

GreenTRIP Connect Custom Project Report (page 2)

Building

Units	Avg. Sq. Ft.	Avg. Rent (\$/mo)
1 Studio	470	\$2,356
26 1 BR	660	\$2,356
18 2 BR	850	\$2,356
3 3+ BR	1,100	\$2,944
48 Total	755	\$2,393

Total Acres: 0.16

Dwelling Units per Acre: 305.73

Bedrooms per Acre: 458.60

Parking

Resident Parking

Stalls	Price per Month
44	\$50

Used Spaces per Dwelling Unit:

Used Spaces per Bedroom: 0.47

Parking Construction Costs

Stalls	Construction Cost per Stall	Maintenance Cost per Stall
Surface	44 Garage/Structure	\$50,000
\$175	Underground Garage	Lifts
Tandem	Bike	

Project Location

Transit within a 1/4 mile:

AC Transit
1, 12, 800, 18, 1r

Transit within a 1/2 mile:

AC Transit
31, 1, 12, 658, 682, 651, 653, 660, 657, 696, 851, 800, 51a,
cb, c, 57, 18, 662, 1r

Bay Area Rapid Transit

fremont - richmond, pittsburg/bay point - sfa/millbrae,
richmond - daly city/millbrae

Carshare within a 1/4 mile:

City CarShare
telegraph & 46th

Carshare within a 1/2 mile:

City CarShare
45th & broadway (kaiser), macarthur bart
Zipcar
macarthur bart



GreenTRIP Strategies

	Household Value
Resident Transit Passes	
Two per unit	\$150
Car Sharing Memberships	
none	
Bike Sharing Memberships	
One per unit	\$88
Unbundled Parking	
\$50 per Month for residents of public	

Average cost of owning and operating a vehicle \$8,698/yr according to AAA



Affordable Housing

none

Transition to Connect online for
tour, then exploration and back to
slides.

<http://Connect.GreenTRIP.org>

Connect Phase 2

2017 and beyond

What could we add that would enhance or strengthen Connect?

- Transit Sliders
- Trip Generation – Smart Growth – Multi-Modal
- Plan Area modeling
- Health and economic metrics
- Your ideas here – show demand and support funding for next phase

How will you use Connect?

- Development project approval
- Advocacy
- Policy change
- Other ideas?

**How can you help us get
the word out?**

Connect.GreenTRIP.org





Darin Ranelletti
Deputy Director, Planning
SPUR Lunchtime Forum
July 26, 2016

On-Street Parking



Off-Street Parking



Why Update Parking Requirements

Since 1965...

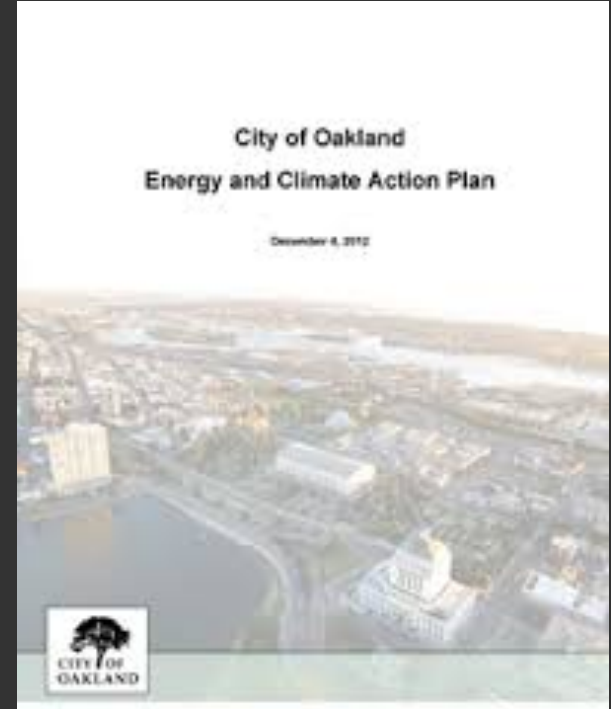
- Policies have changed
- Transit has changed
- Oakland has changed



Why Update Parking Requirements

Policy Framework

- Oakland Land Use and Transportation Element
- Climate Action Plan
- Housing Equity Roadmap
- Mayor's Housing Cabinet
- “Transit First” Policy
- TOD Plans



Goals of the Parking Update

- Achieve “just right” parking for developments
- Increase housing supply and affordability
- Maintain consistency with sustainability goals
- Encourage efficient use of land
- Support the vitality of commercial districts
- Contribute to neighborhood walkability



Goals of the Parking Update

- How much is “not enough”?
- How much is “too much”?



Proposed Update

DOWNTOWN



- No minimum parking required
- Parking maximum: 1.25 spaces per unit
- Unbundled parking required
- Transit passes/information for residents required
- Car share space required



Proposed Update

FORM-BASED COMMERCIAL PARKING REQUIREMENTS



Upper stories: one parking space per 1,000 sf of floor area

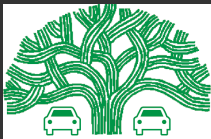
Ground Floor: One parking space per 600 sf of floor area



Proposed Update

REDUCTION IN PARKING REQUIREMENTS

Strategy	Reduction
Public/Private car sharing onsite/offsite	20/10 percent
Transit passes	10 percent
Within ½ mile of “major transit stop”	30 percent
> <i>No more than a 50 percent decrease</i>	



Proposed Update

REDUCTIONS FOR AFFORDABLE HOUSING

- 0.5 parking space/unit if within one-half mile of a “major transit stop”
- .75 parking space/unit otherwise
- Can incorporate further reductions



Proposed Update

UNBUNDLING REQUIRED

(10+ UNITS)



+



=

RENT



Proposed Update

**ADDITIONAL PARKING NOT REQUIRED FOR
EXPANSIONS TO HISTORIC BUILDINGS**



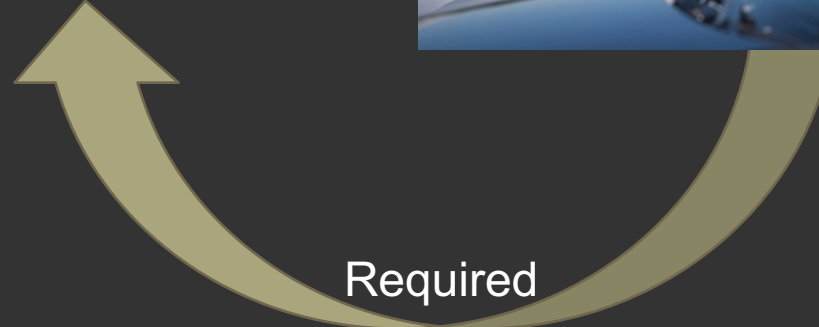
Proposed Update

**ADDITIONAL PARKING NOT REQUIRED FOR
CHANGE OF USE WITHIN EXISTING BUILDINGS**



Proposed Update

OFF SITE PARKING ALLOWED



Required
Parking



Proposed Update

**NO PARKING REQUIRED ON NARROW
LOTS IN COMMERCIAL ZONES**



Key Issues & Challenges

- **On-street parking permits**
- **Parking maximums**
- **Reduced parking in exchange for benefits**
- **Ongoing compliance**

Lessons Learned & Tips

- **Collect data**
- **Policy context**
- **Research other cities**
- **Public engagement**
- **Pilot**
- **Take your time**



Adoption Status

June 2016: Planning Commission

Sept – Oct 2016: City Council

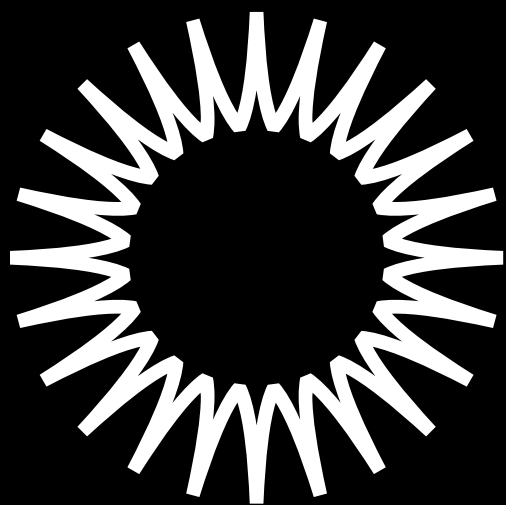
More Information

www.oaklandnet.com/planning

Project Manager: Neil Gray,

ngray@oaklandnet.com, (510) 238-3878





SPUR

Ideas + Action for a Better City

learn more at SPUR.org

tweet about this event:

@SPUR_Urbanist

#SmartCityParking