



Information & Mapping in the Public Interest

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www.greeninfo.org



Roadmap

- **GreenInfo basics**
- **Design/communication**
- **How we approach cartography**
- **Interactive work**
- **Public Data**
- **Q&A**

GreenInfo Network



- Largest dedicated nonprofit GIS support group in U.S.
- 20 years, 800 organizations
- 12 staff, 20-30 projects at a time
- Extensive experience with land trusts, conservation, protected areas data



GreenInfo Network Mission

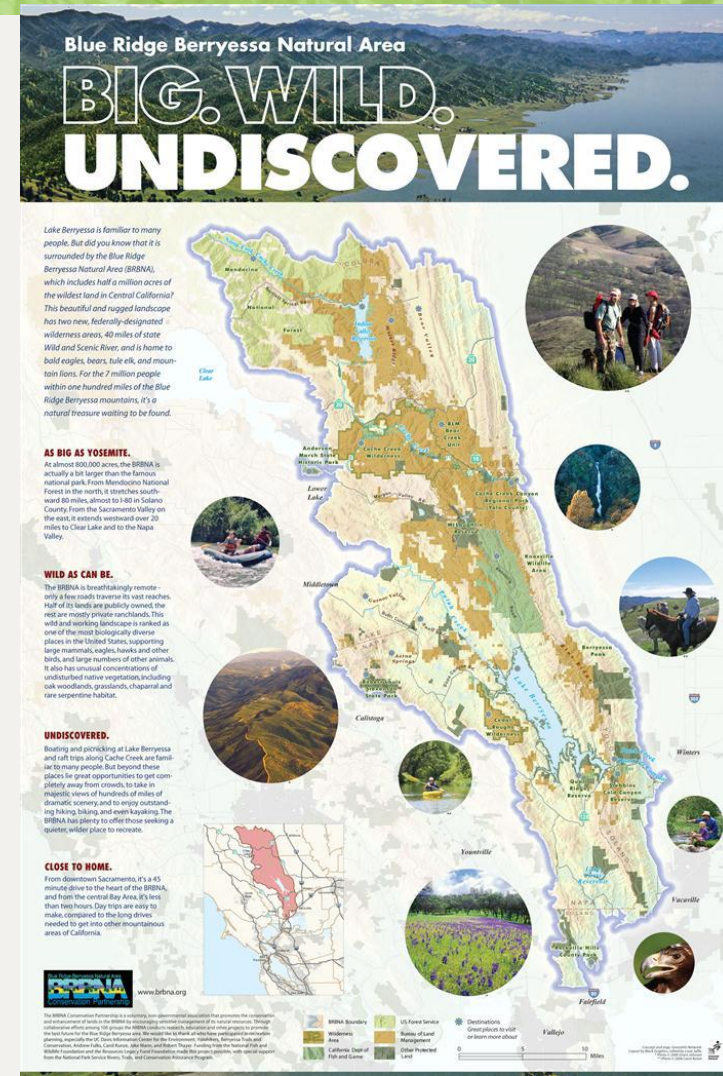
GreenInfo
Network



Bring the power of mapping,
information and communications
technology...

to non-profits, public agencies and
other public interest organizations...

to help them understand and show the
relationships between issues, people
and places.



Who We Serve

- Conservation: land trusts, public agencies, advocacy organizations, foundations
Acquiring land, protecting wilderness, biodiversity, guarding rivers, restoring resources
- Environment: policy and advocacy groups – local, state, national
Fighting sprawl, encouraging sound development, achieving social justice
- Social well being: research organizations, service providers, public agencies, foundations
Child care, housing opportunities, voting rights, access to services



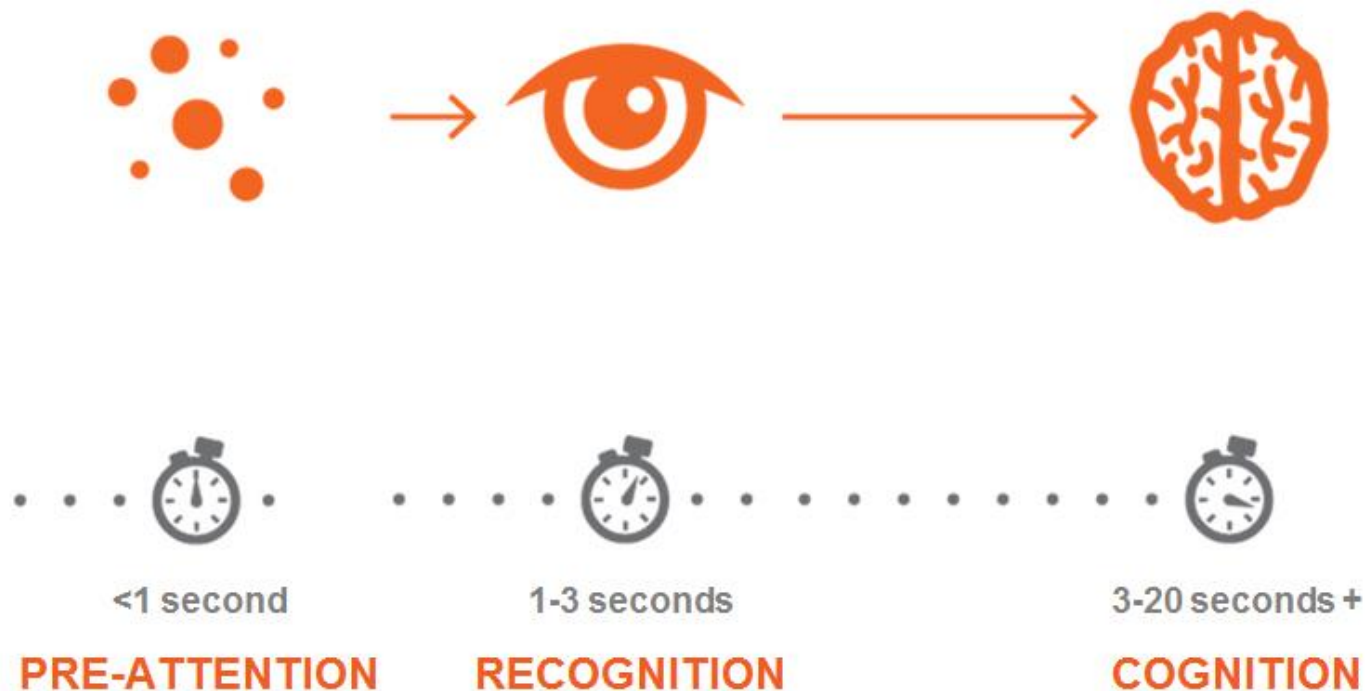
A topographic map with green contour lines and brown elevation markers, showing a mountainous region. The map is partially obscured by a blue horizontal band in the center.

Design and Communication

Design and Communication

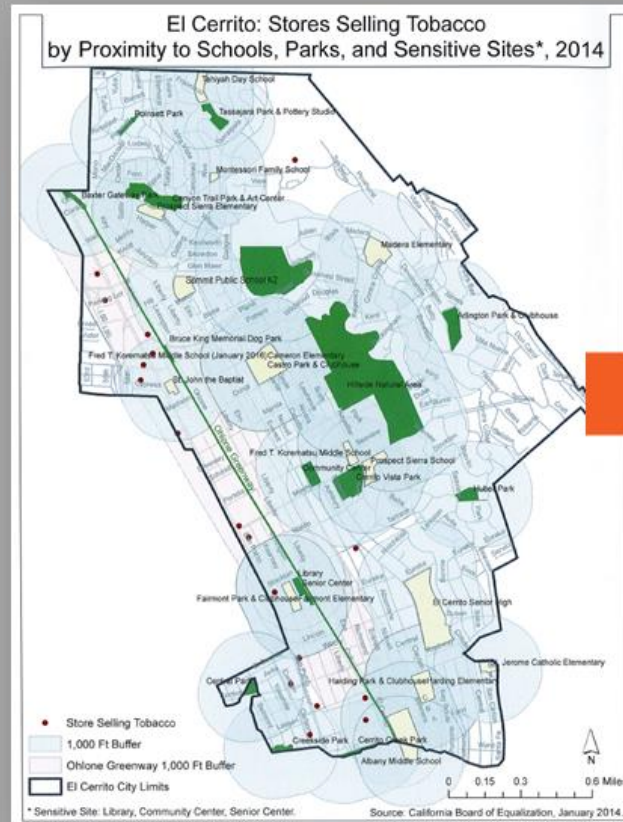
- 1. Focus on message and goals**
- 2. User-focus, unfold story in layers**
- 3. Frames GIS, maps, reports, websites, etc.**

How **your brain** perceives





Undefined
message



Meeting the Park Needs of All Californians

2015 Statewide Comprehensive Outdoor Recreation Plan



California's 150-year park legacy created one of the world's greatest systems, with nearly 1,000 agencies managing 14,000 parks. This plan provides pathways to continue the legacy throughout California.



V | Sharing Success Stories

The ability to respond to the public need for parks will depend, in part, on available financial resources and the ability to effectively share federal, state, and local resources. Although scarce financial resources pose significant challenges, sharing knowledge can benefit everyone.

This SCORP proposes that the network of parks agencies and advocates in California share their greatest achievements and solutions through the establishment of a special clearinghouse. The clearinghouse will foster understanding and the application of successful practices in these key areas:

- Community based planning
- Operations and maintenance

- Water and energy conservation
- Recreational programs
- Other success stories

The following pages illustrate how sharing stories can help agencies find solutions to challenges facing parks in California.



"Children had no place to play. Parents were fined if children played in apartment courtyards, and the school closed the gates after school and on weekends.

We started selling tamales ten years ago to have a park here. The community is very grateful for this park."

Left to Right: Rosalia Vargas, Irma Rios, and Reyna Artero | Statewide Park Program \$3.5 million grant to Latino Health Access in Santa Ana



Pogo Park – "We drilled capital moni down, into the community, to hire and local residents to design and build the themselves. Our motto is to lift up the people at the same time you lift up th place. And it worked. This public proje was a magnet that brought out all the goodness and talents of the neighborh that are so often hidden."

Pogo Park Team – Standing left to right: Danielle Gualdape e Karina Gualdape; Seated left to right: Tonie Lee and Teddy Ml Statewide Park Program \$1.8 million grant to City of Richmond with Elm Lay Lot Park, neighborhood residents performed the outreach, design, construction, and now maintenance phase n thought, skill, and care.

Community Based Planning

Getting meaningful engagement from park users at the start of park planning is a key to community based planning. Residents who live and work in a community understand their park and recreation needs. Projects designed with honest community input yield more successful, practical, safe, popular parks that become a source of community pride. A plan created with residents in the community generates institutional memory, allowing good plans to endure and evolve. OGALS' recent Prop. 86 competitive grant program also showed that requiring robust community engagement establishes

clear expectations and leads to better projects that most responsive to community needs.

Operations and Maintenance

Park agencies have used a variety of strategies to supplement limited resources, such as fundraisers, partnerships with sports leagues and non-profit organizations, "adopt-a-park," and weekend clean-up programs. Success stories can include strategies to maintaining existing parks, reusing school facilities, and recruiting volunteers to assist with on-going responsibilities.

The California Parks "Success Stories" Clearinghouse

Success stories are powerful motivators for learning the most effective way to maximize park resources. The California Department of Parks and Recreation is establishing the California Parks "Success Stories" Clearinghouse, and invites all park agencies and organizations to contribute stories. Here's what to do:

1. **Create** a one page description of your success story and a second page of one or more good quality photos, save as one or two PDF documents.
2. **Email** this document to scorp@parks.ca.gov, with "Your agency's Success Story" in the subject line. You can send more than one at a time.

Success stories will be featured at www.parks.ca.gov/SCORP – learn more about submitting success stories on this site.

Park Access Tool

Park Acres per 1,000 Residents

Uses: This tool screens for areas that may not meet state recommended standard of 3 park acres per 1,000 residents. Users can evaluate park need areas in every jurisdiction of the state. This web tool provides choices of city, county, legislative districts, etc.

Method: Evaluates census tracts for park acres per 1,000 residents.

Metrics for area of analysis shown:

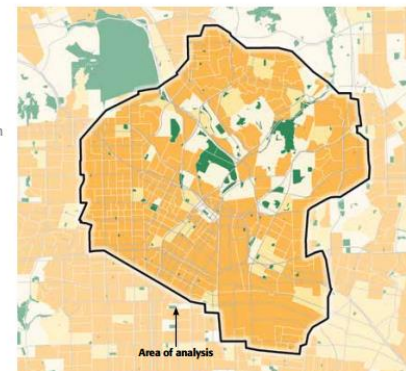
Population: 1.1 million

Park acres: 1,950

Park acres per 1,000: 1.8

Acres per 1,000 population, by census tract

◀ 1 1-3 >> parks



Neighborhood Areas with No Parks

Uses: This tool focuses on areas that lack nearby parks and can be used to guide future park planning.

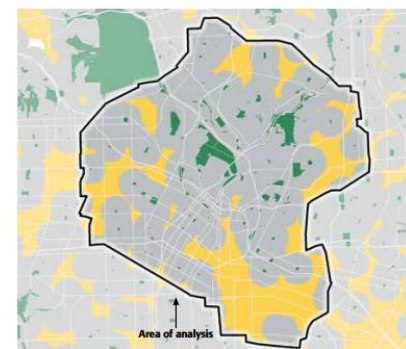
Method: Defines a half mile radius around all parks in state to determine park area availability.

Metrics for area of analysis shown:

16.6% of residents live without any park within .5 miles

Parks within 1/2 mile?

no yes parks



Park Access Tool

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Uses: This tool screens for areas that may not meet state recommended standard of 3 park acres per 1,000 residents. Users can evaluate park need areas in every jurisdiction of the state. This web tool provides choices of city, county, legislative districts, etc.

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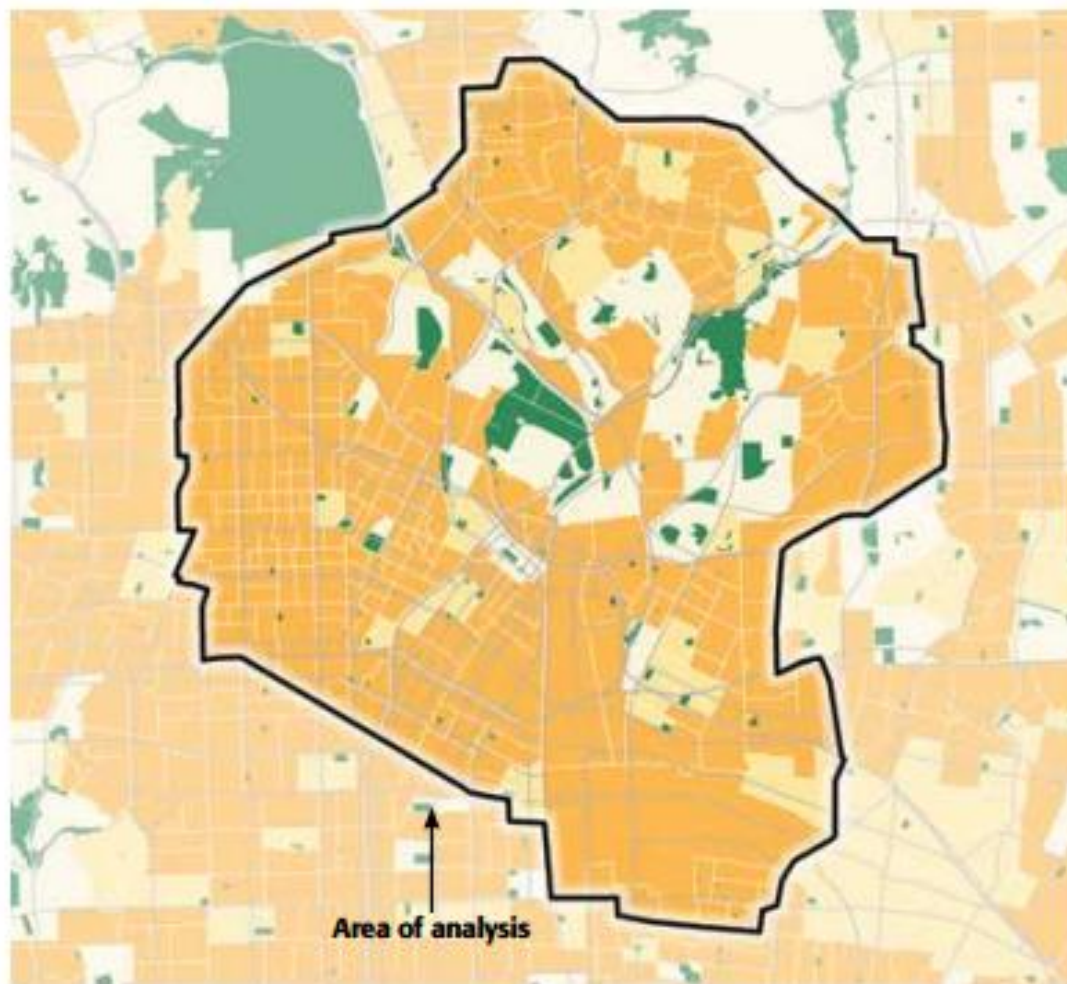
Acres per 1,000 population, by census tract

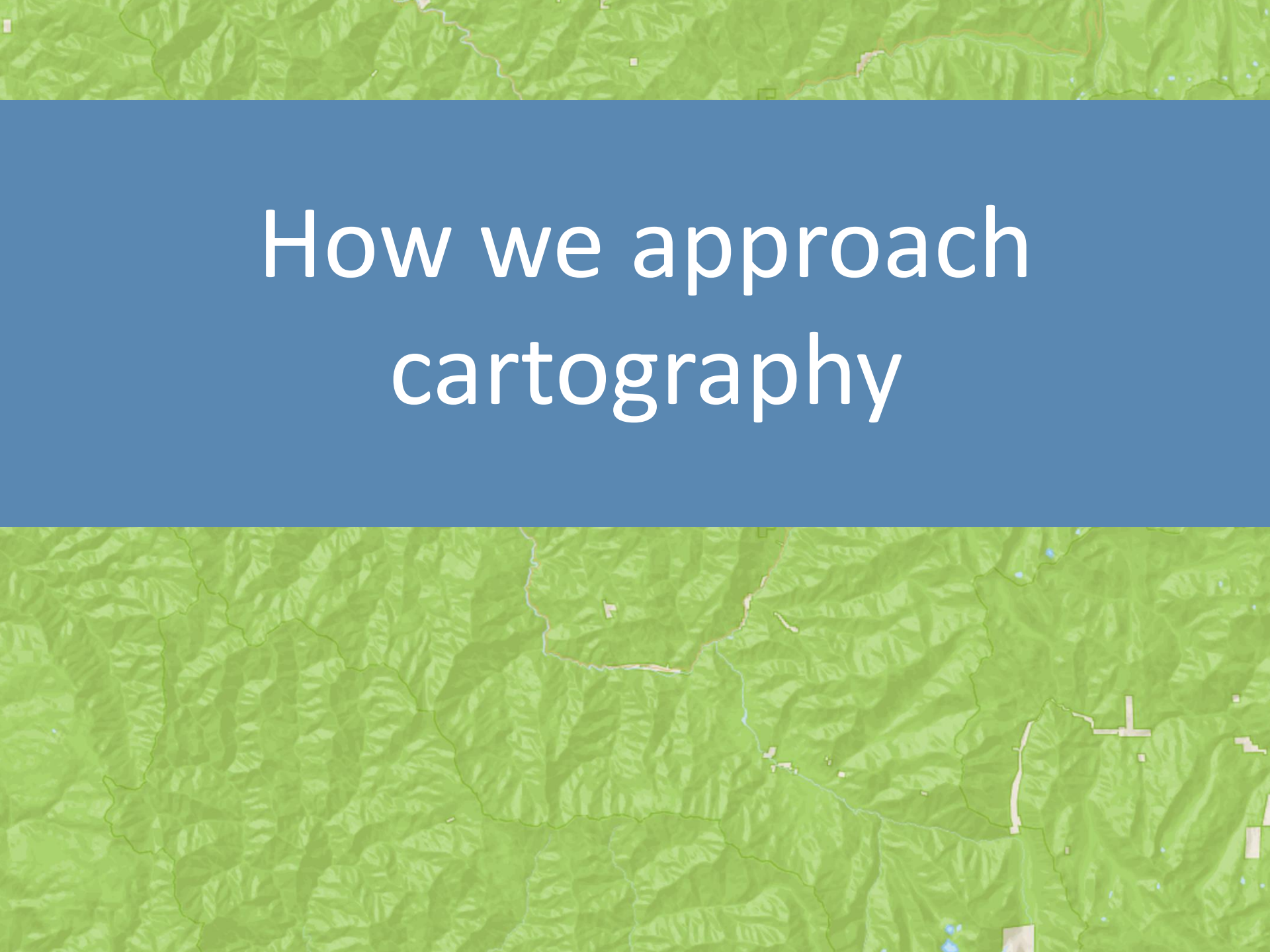
< 1

1-3

> 3

parks



A topographic map with green contour lines and brown elevation markers, showing a mountainous region. The map is visible in the top and bottom portions of the slide, framing the central text.

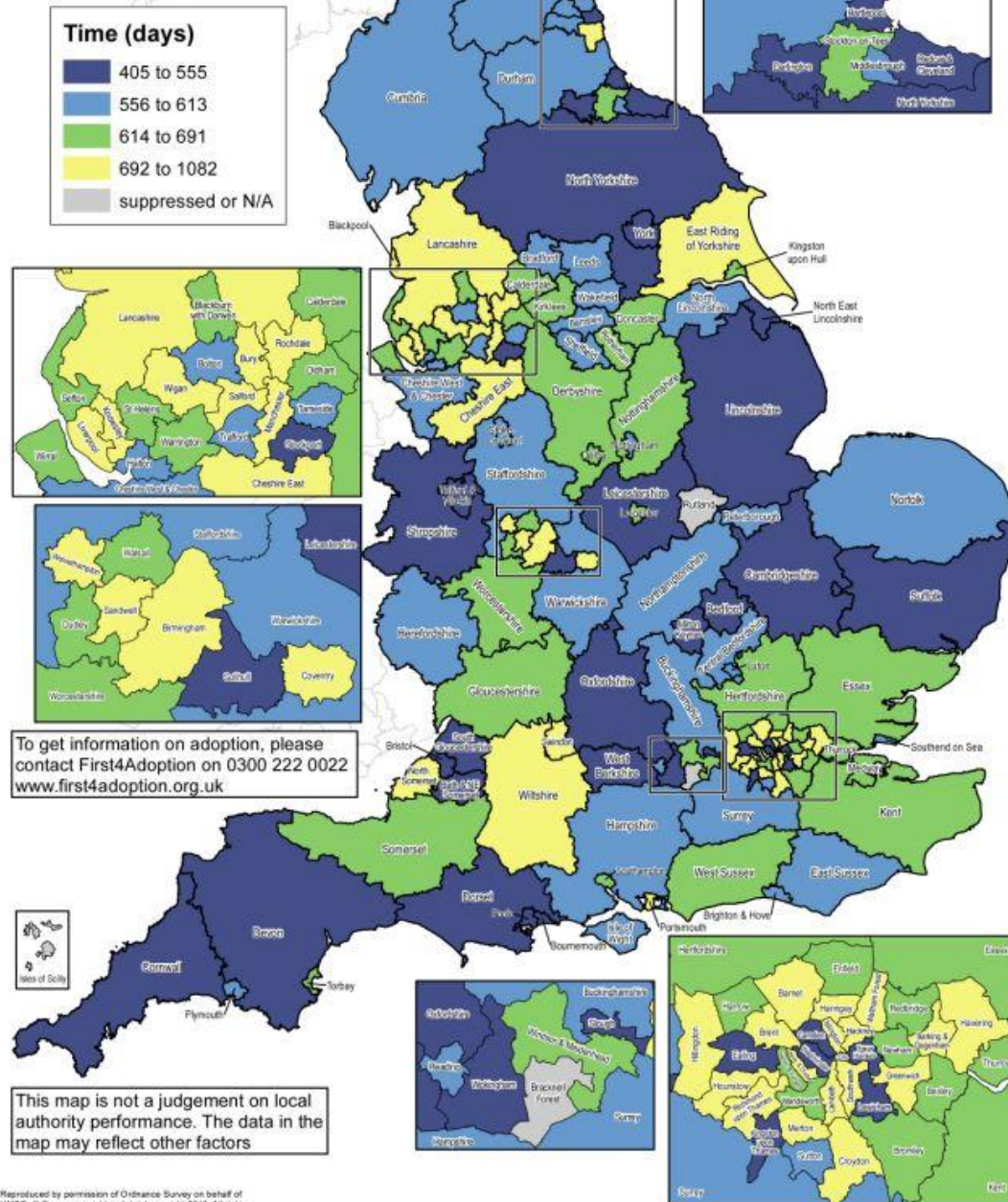
How we approach cartography

GIS Approach

- 1. Refined design approaches**
- 2. Custom, client-driven projects**
- 3. Wide range of topics and messages**

This?

Average time between a child entering care and moving in with its adoptive family, for children who have been adopted (days)
 – 3 year average (2009-12)



Or this?

Majority and Plurality Ethnicity
(based on Census 2010 data by block group)

Ethnicity	< 50%	50 - 75%	> 75%
African American	Light Purple	Medium Purple	Dark Purple
Asian/Pacific Islander	Light Green	Medium Green	Dark Green
Hispanic/Latino	Light Orange	Medium Orange	Dark Orange
Caucasian (non-Hispanic/Latino)	Light Brown	Medium Brown	Dark Brown

Legend:

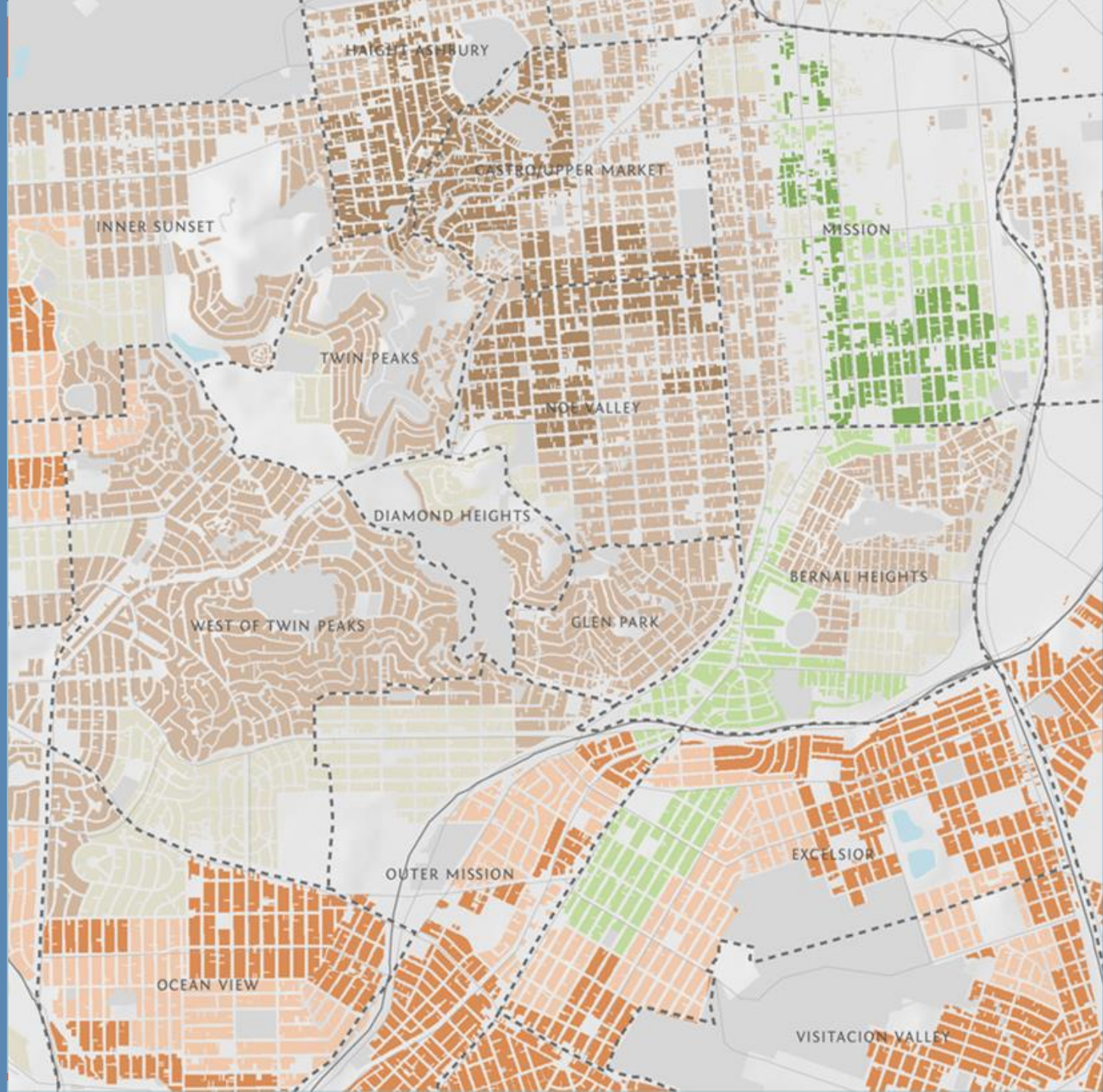
- Neighborhood (dashed line)
- Highway (thick solid line)
- Major Road (thin solid line)
- Park (gray shading)

Scale: 0 to 1 Mile

Data Source: US Census Bureau - 2010

GreenInfo Network

Or this?

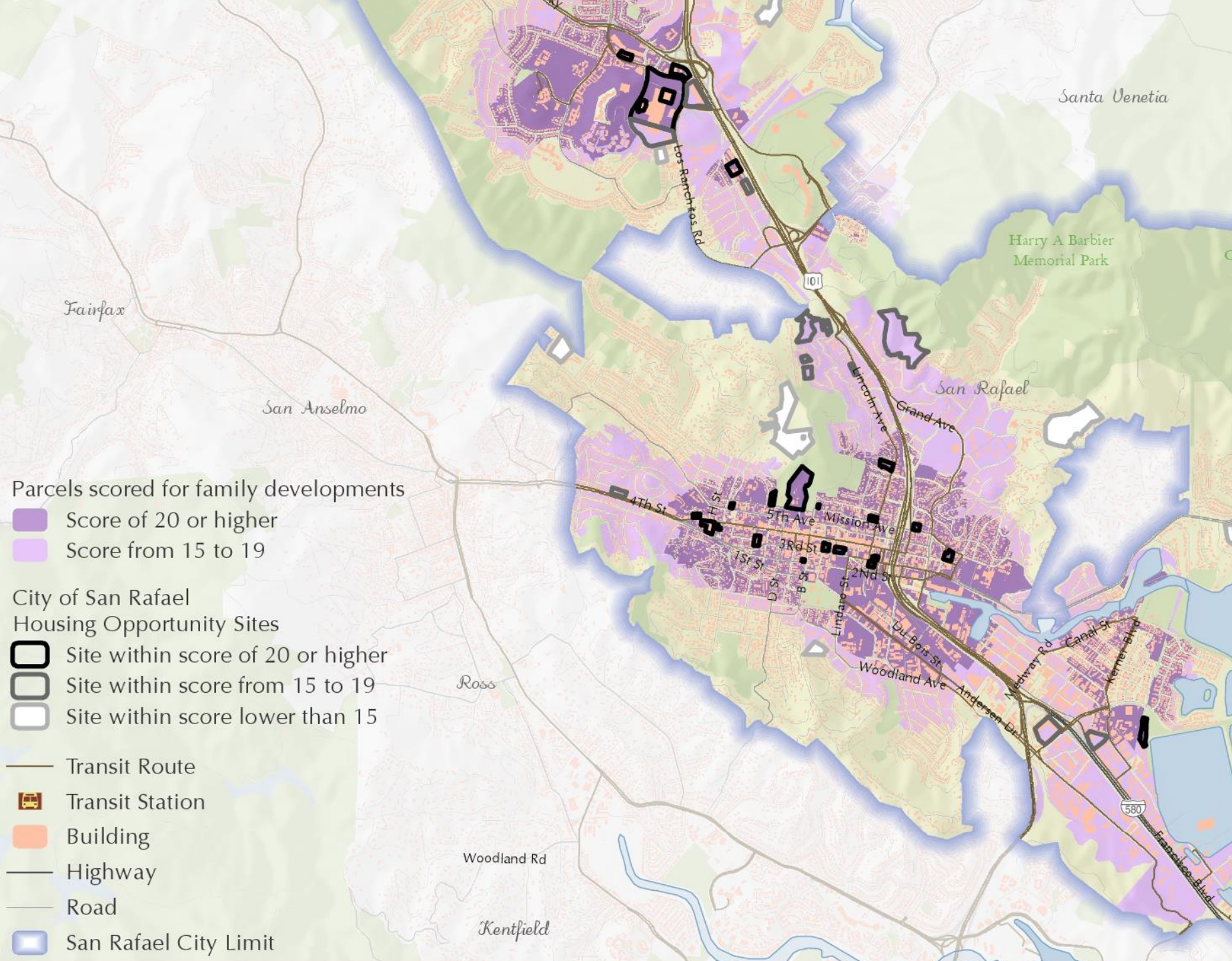


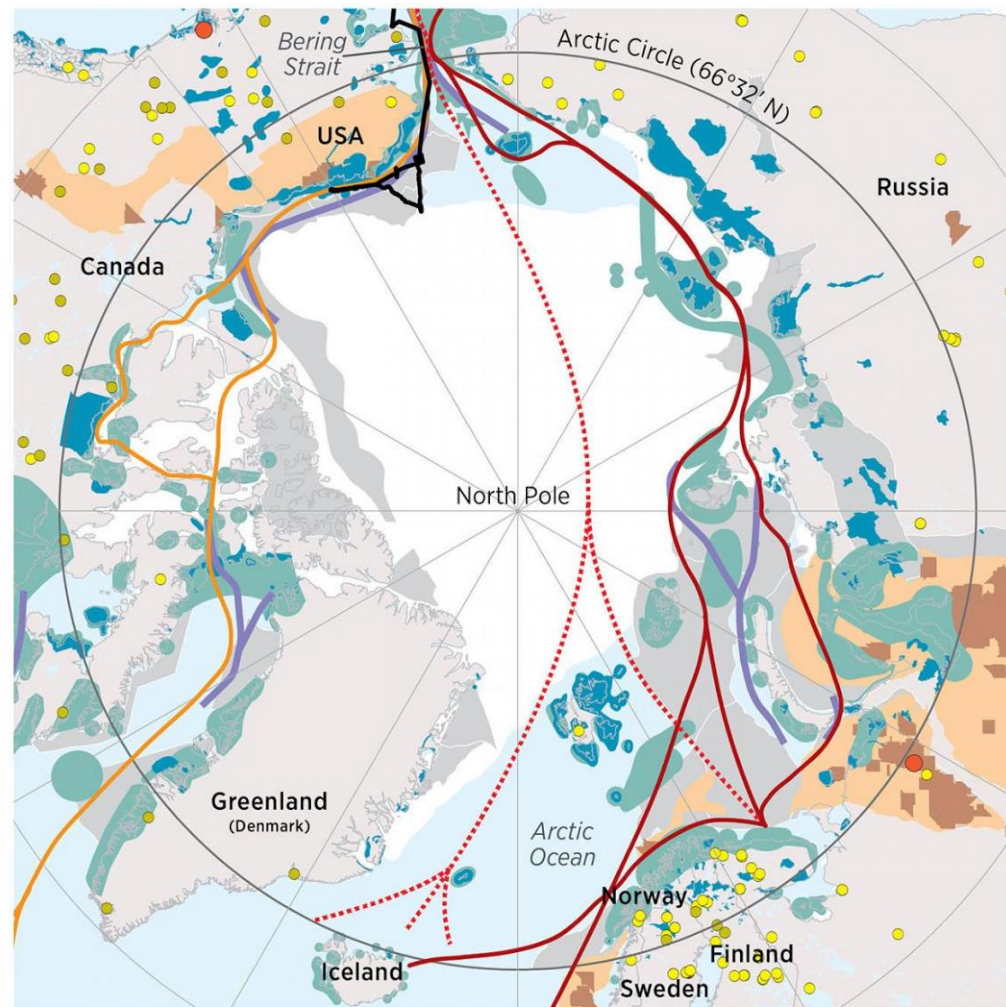
San Rafael, California



11/4/2010 www.greeninfo.org







THERE GOES THE NEIGHBORHOOD

As the melting Arctic opens for business, industry is increasingly encroaching on critical habitats. Here's a look at the places where wildlife and humans are colliding.

— Route of the USCGC *Healy*, July 2015

Critical Bird and Mammal Habitat

- Audubon and BirdLife International Circumpolar Global Important Bird Areas/Alaska State and Continental IBAs
- Areas identified as being of heightened ecological significance to birds by the Arctic Monitoring and Assessment Programme and the Institute of Marine Research
- Marine mammal migration corridors

Human Activity

Shipping

- Northern Sea Route
- Northwest Passage*
- ... Potential trans-Arctic route

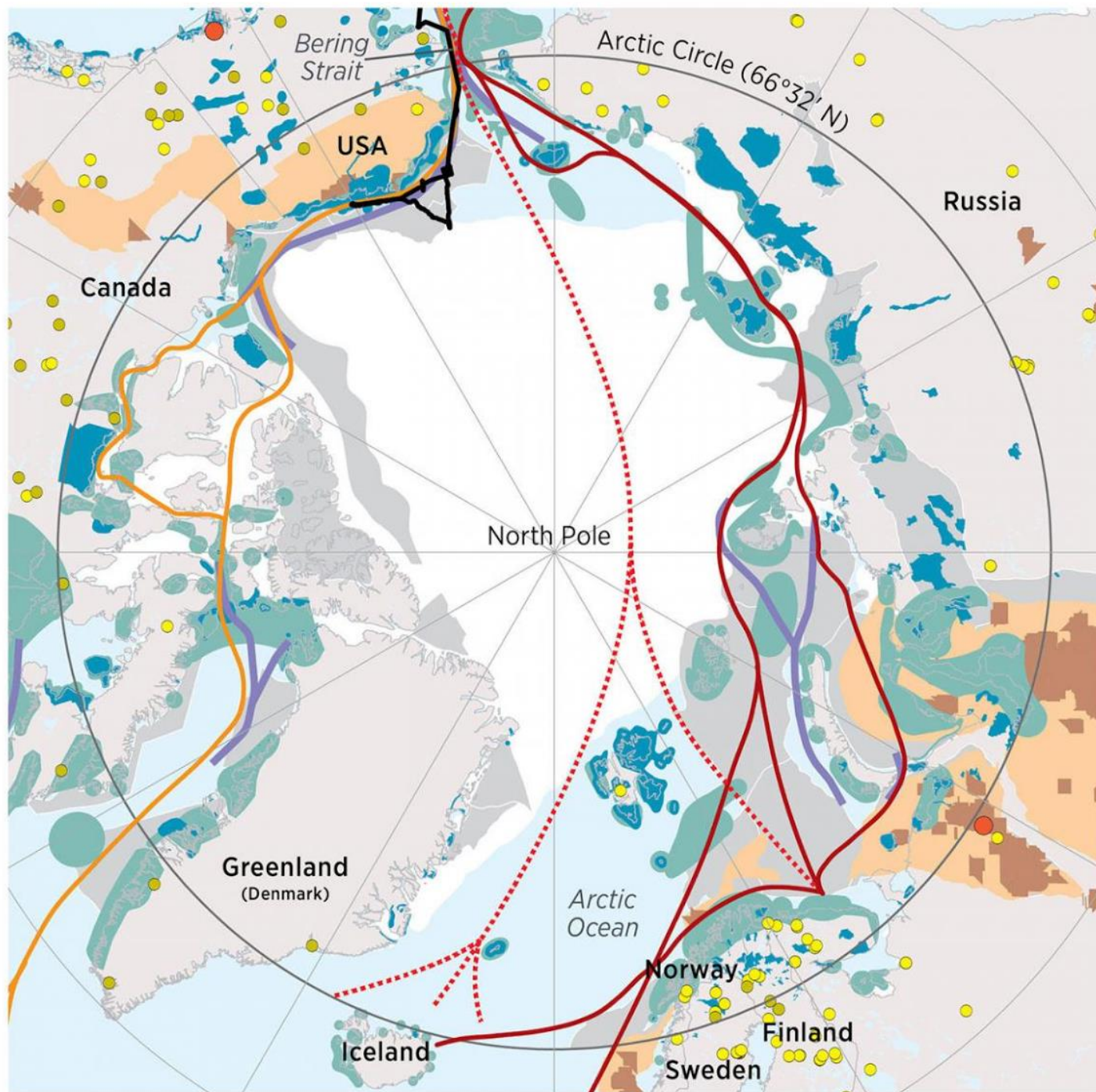
Oil and Gas

- Production areas
- Petroleum basins/provinces in which production is occurring
- Major oil spills
- Areas with a 50% or greater chance of holding significant reserves of undiscovered oil and gas

Mineral Mining

- Producing mines
- Potential mines in exploration/development

*(First full transit by an unescorted cargo ship occurred in 2014.)



The background of the slide is a topographic map showing a mountainous region. The map uses green and brown colors to represent elevation, with contour lines indicating the terrain. A blue line, likely a river or stream, winds through the landscape. The map is partially obscured by a blue horizontal band in the center.

Interactive Solutions

Interactive Approach

- 1. Open source stack**
- 2. User first, not data first**
- 3. Mobile responsive as much as possible**
- 4. Frequently combine web and print**



Parks for All Californians

Resources for meeting California's park and recreation needs

[← back to parks.ca.gov](#)



SCORP

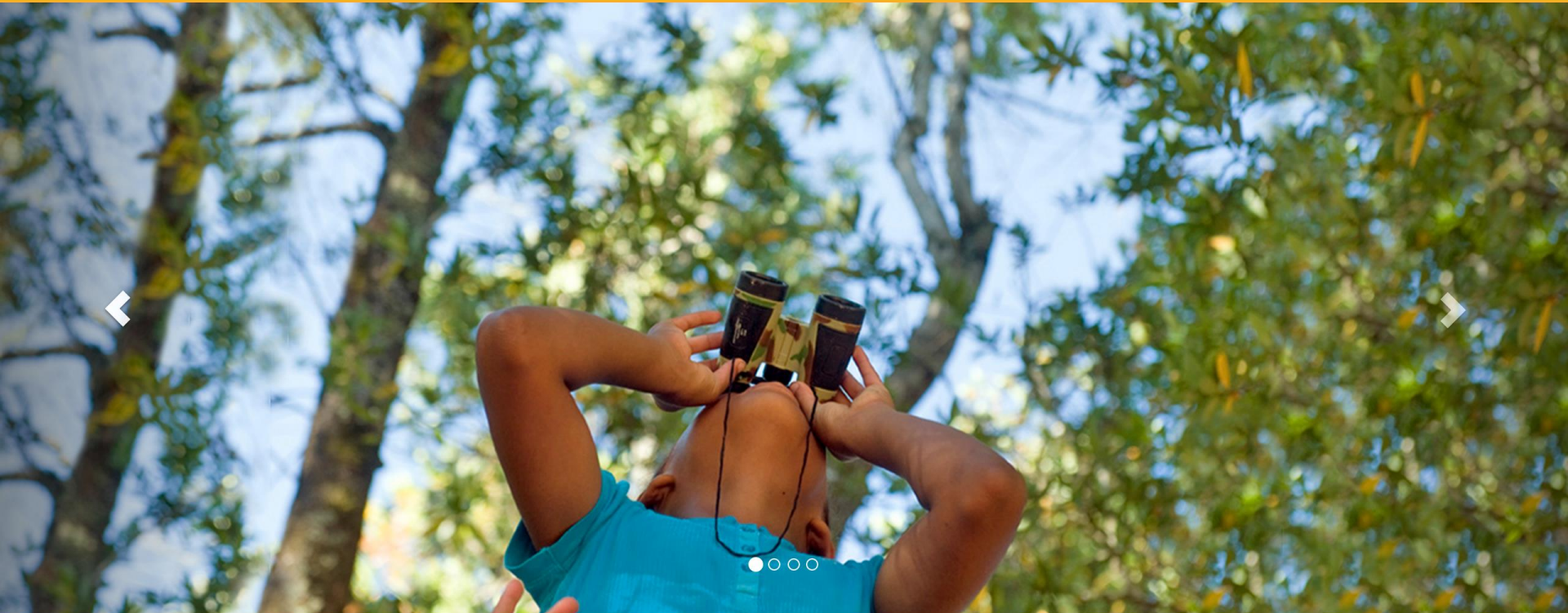
TOOLS ▾

STORIES ▾

PARTNERS

ACTION

ABOUT



California's 150-year park legacy created one of the world's greatest park systems with nearly 1,000 agencies managing 14,000 parks

www.parksforcalifornia.org/#scorp-carousel



Parks for All Californians

Resources for meeting California's park and recreation needs

[← back to parks.ca.gov](#)

[Home](#) [SCORP](#) [TOOLS ▾](#) [STORIES ▾](#) [PARTNERS](#) [ACTION](#) [ABOUT](#)

[Park Access](#) [Community FactFinder](#) [Grant Allocations](#) [Methods](#)

Park Access Tool

California is proud to introduce the nation's first statewide use of GIS technology showing neighborhood-level park access and demographic information.

[Read more »](#)

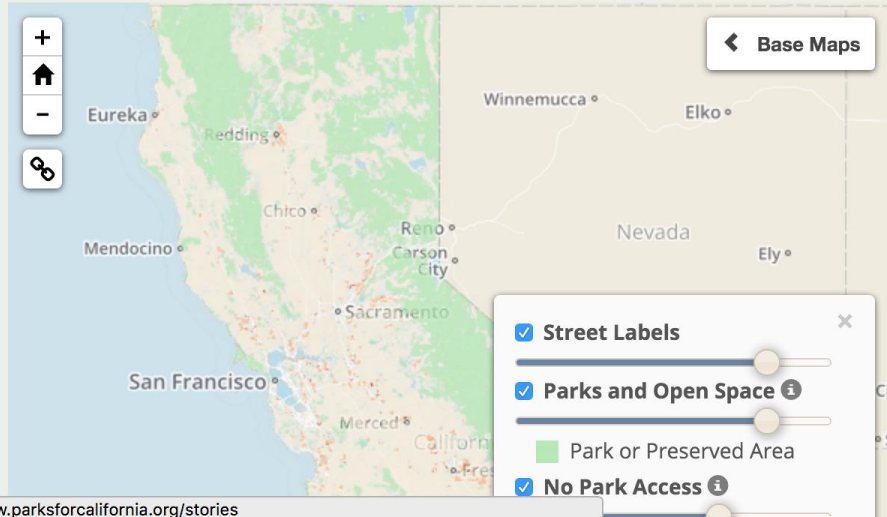
[SEARCH](#)

[GET REPORT](#)

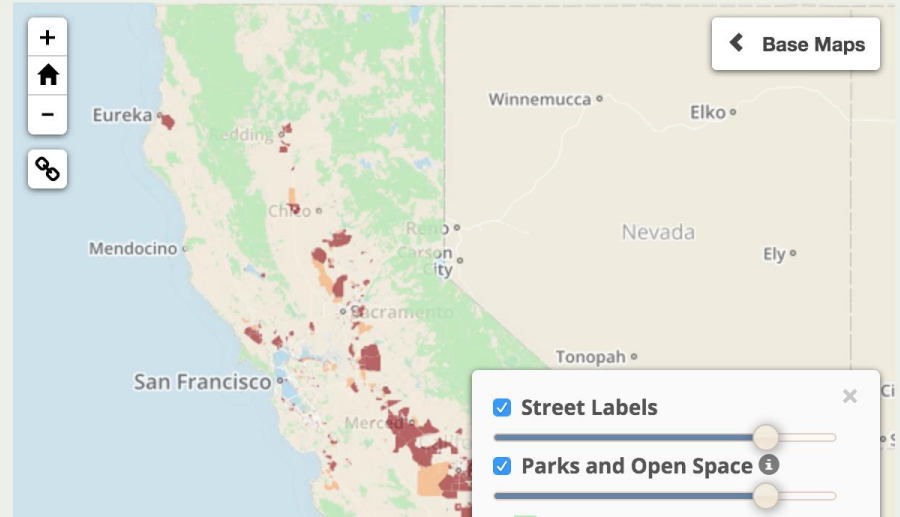
[GET GIS DATA](#)

[GIVE FEEDBACK](#)

24% of residents of **California** live further than a **half mile** from a park



62% of residents of **California** live in areas with **less than 3 acres** of parks or open space per 1000 residents





Parks for All Californians

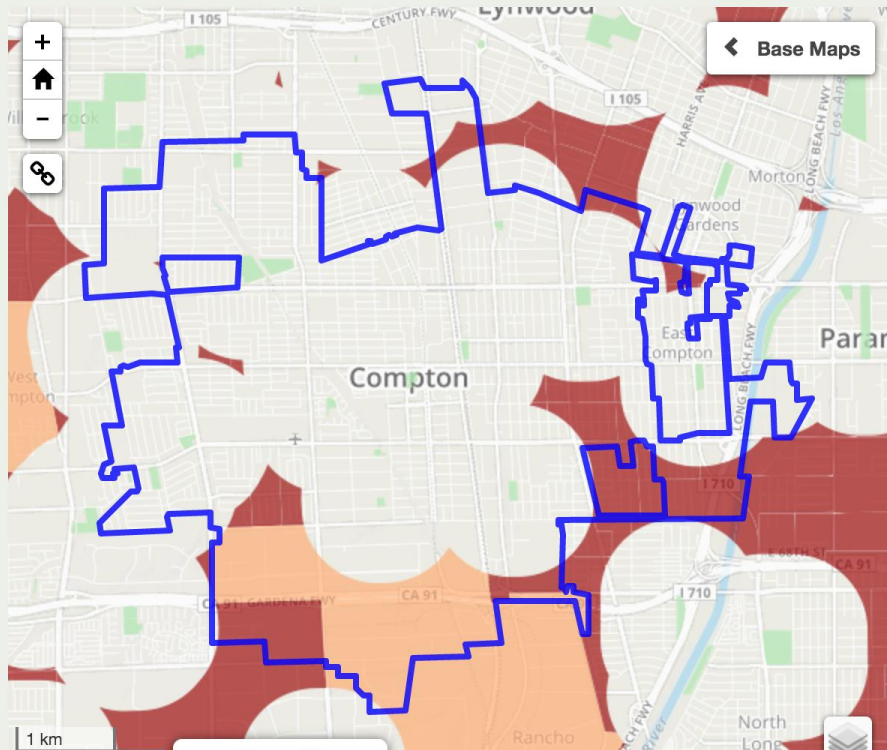
Resources for meeting California's park and recreation needs

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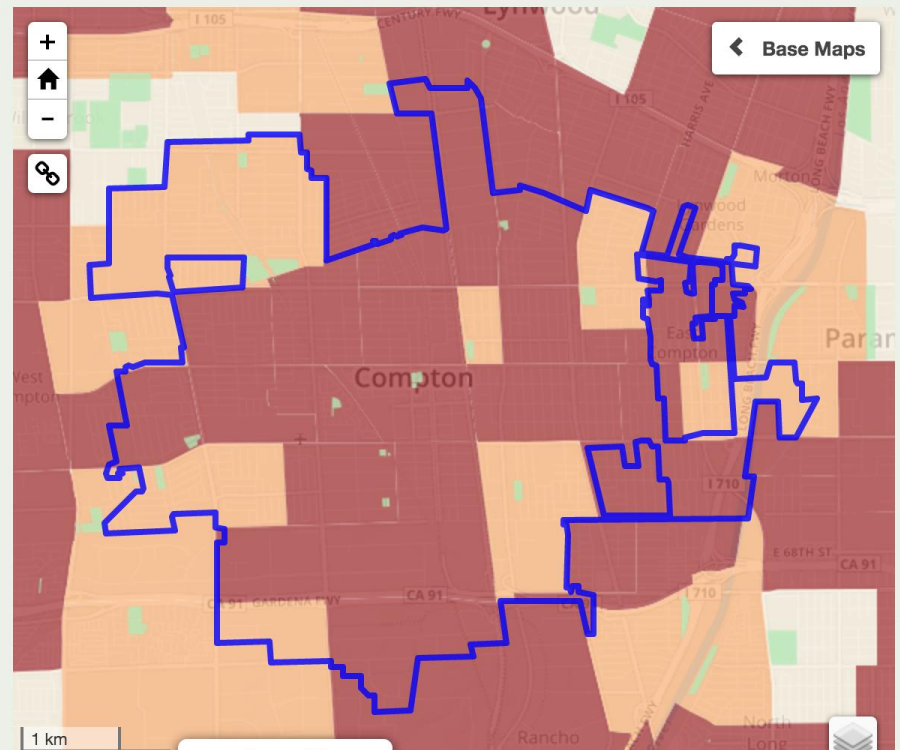
[↑](#) [SCORP](#) [TOOLS ▾](#) [STORIES ▾](#) [PARTNERS](#) [ACTION](#) [ABOUT](#)

[Park Access](#) [Community FactFinder](#) [Grant Allocations](#) [Methods](#)

20% of residents of **Compton** live further than a **half mile** from a park



100% of residents of **Compton** live in areas with **less than 3 acres** of parks or open space per 1000 residents





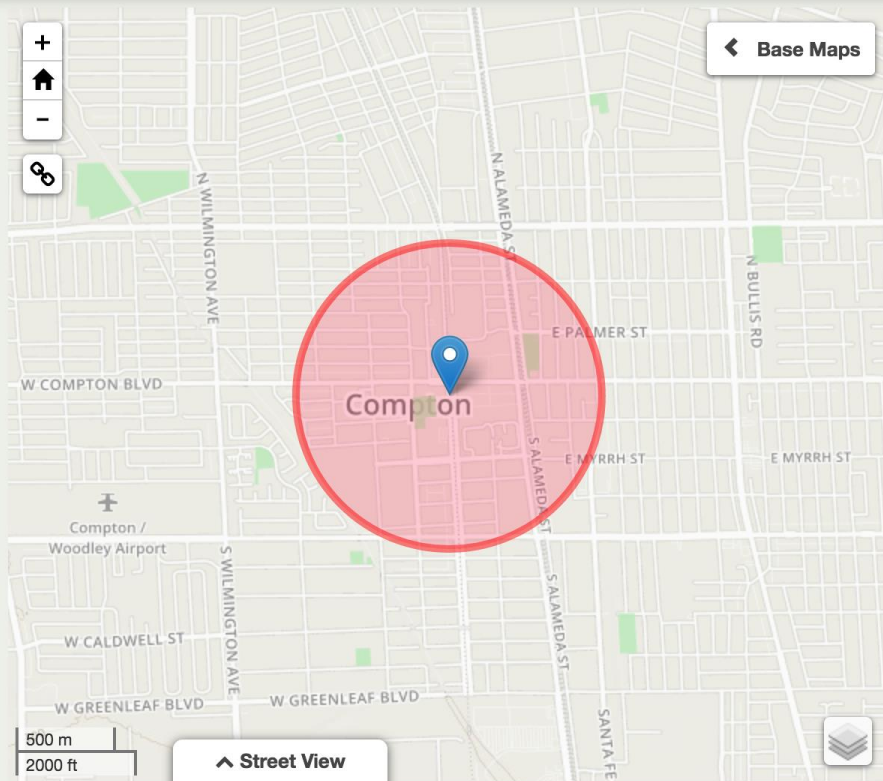
Parks for All Californians

Resources for meeting California's park and recreation needs

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[Park Access](#) [Community FactFinder](#) [Grant Allocations](#) [Methods](#)



Community FactFinder:

[GET REPORT](#)

Click **the pin**, then select an area on the **map**.

OR enter an address below and click **Go!**

Enter an address, city ('city, CA') or latitude/longitude

Go!

Results for Compton (County: Los Angeles)

Latitude, longitude	33.8952789, -118.2243271	
Total Population	10,715	i
Youth Population	3,963	i
Senior Population	623	i
Median Household Income	\$36,161	i
Per Capita Income	\$12,311	i
People in Poverty	3,595	i
Households without Access to a Car	494	i
Parks total area	7.81 acres	i
Parks per 1000 people	0.73 acres	i



Par
Resource



SCORP

T

Pal



W COMPTON BLVD

Compton /
Woodley Airport

W CALDWELL ST

W GREENLEAF BLVD

W GREENLEAF

500 m

2000 ft

Street View

California State Parks Community FactFinder Report

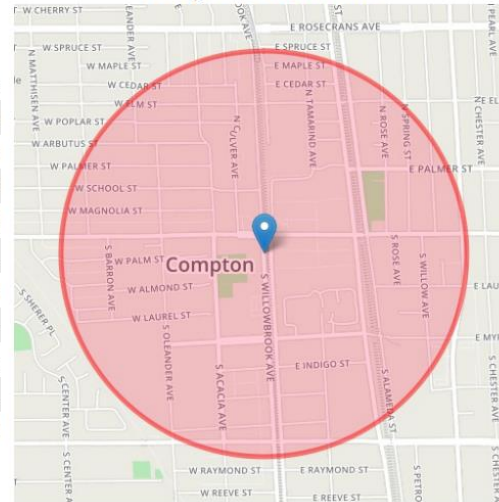
Project ID: 847
Coordinates: 33.8952, -118.2243
Date: 11/27/2016

This is your SCORP project report for the site you have defined. Please refer to your **Project ID** above in any future communications about the project.

PROJECT AREA STATISTICS

County:	Los Angeles
City:	Compton
Total Population:	10715
Youth Population:	3963
Senior Population:	623
Households Without Access to a Car:	494.1
Number of People in Poverty:	3595
Median Household Income:	\$36,161
Per Capita Income:	\$12,311
Park Acres:	7.81
Park Acres per 1,000 Residents:	0.73

PROJECT AREA MAP



REPORT BACKGROUND

The project statistics have been calculated based on half mile radius around the point location selected. Only park acres within the project area's half mile radius are reported.

Population and people in poverty are calculated by determining the percent of any census block groups that intersect with the project area. The project area is then assigned the sum of all the census block group portions. An equal distribution in census block groups is assumed. Rural areas are calculated at a census block level to improve results.

Median household and per capita income are calculated as a weighted average of the census block group values that fall within the project area.

More information on the calculations is available on [the methods page](#) »

Demographics—American Community Survey (ACS) 5-year estimates 2008-2012; Decennial 2010 Census; the margin of error (MOE) was not analyzed.

Parks—California Protected Areas Database 2014b CFF adjusted (11/2014) - more information at <http://www.CALands.org>. Parks and park acres area based on best available source information but may not always contain exact boundaries or all parks in specific locations. Parks are defined further in the 2015 SCORP (pg. 4).

Users can send updated information on parks to SCORP@parks.ca.gov



SCORP Community FactFinder
is a service of the California Department of Parks and Recreation
www.parks.ca.gov

SCORP Community FactFinder
Created by GreenInfo Network in consultation
with CA Dept. of Parks and Recreation
www.greeninfo.org



← [back to parks.ca.gov](#)

GET REPORT

Go!

118.2243271



CLIMATE BENEFITS FOR CALIFORNIA BETA

Find out how California's climate investment program is making communities more healthy, sustainable, and fair

FILTER Program, Geography, Year

SEARCH

PROGRAM FILTERS

Select one or more program names as a search filter

SELECT ALL

Select programs

YEAR FILTER

Select a year

GEOGRAPHY FILTERS

Show all projects Show projects completely within selected area

Region | County | US Congressional District | State Senate District | State Assembly District

CLEAR

Select region

Include California-wide projects


FILTER BY DISADVANTAGED COMMUNITIES


Restrict to projects that benefit disadvantaged communities


RESET ALL

SEARCH

Showing all projects


398
Projects Funded


\$480,072,836
Total Investment


2,910,643
MT GHG Reduction

Get report

Share

MAP

TABLE

Transportation and Sustainable Communities

Clean Energy and Energy Efficiency

Natural Resources and Waste Diversion

Show 10 entries

Project	Program	Amount	Location	GHG Reduction	Reduction in Vehicle-Miles Traveled (VMT)	Transit Ridership Increase	Bike or Pedestrian Improvements
127th Street Apartments <i>Meta Housing Corporation</i> Affordable housing opportunity will provide 85 new units to people with special needs, near amenities and resources.	[map] Affordable Housing and Sustainable Communities Program	\$1,500,000	Los Angeles	18,142	TBD	TBD	yes

www.climatebenefits.org



398

Projects Funded



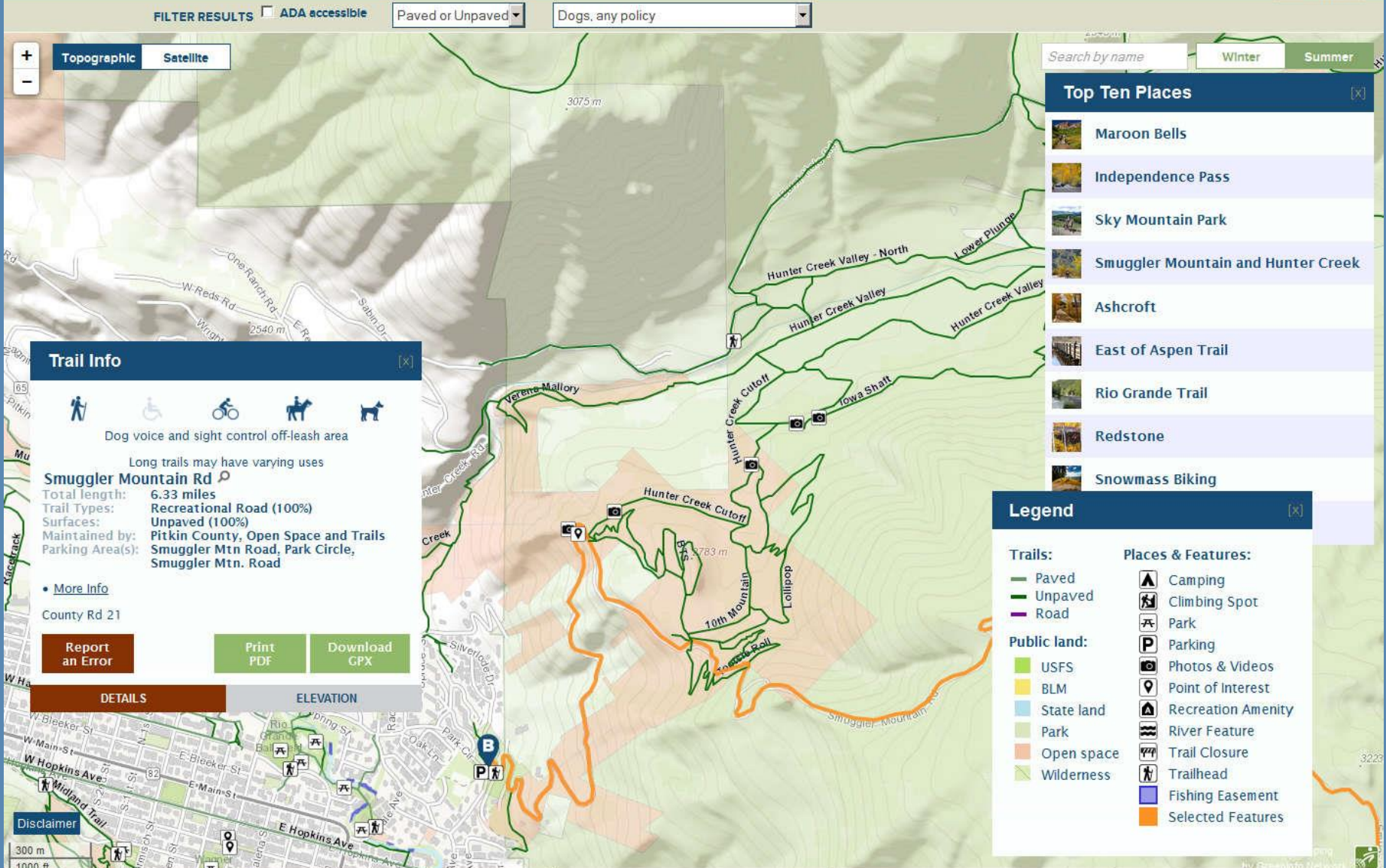
\$480,072,836

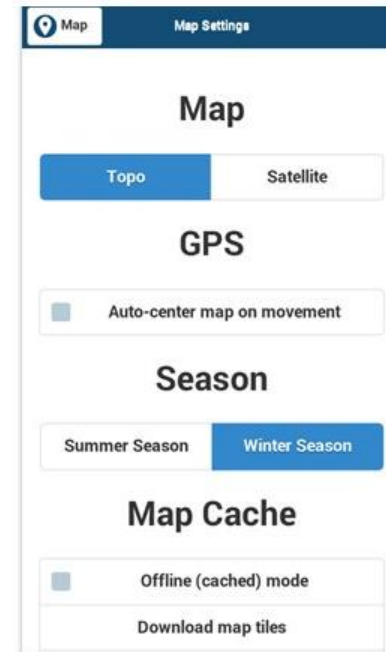
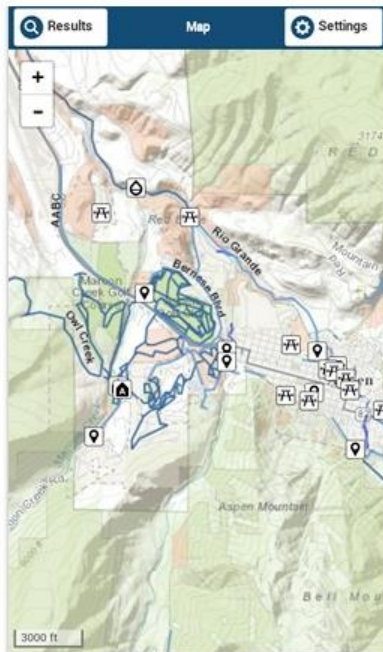
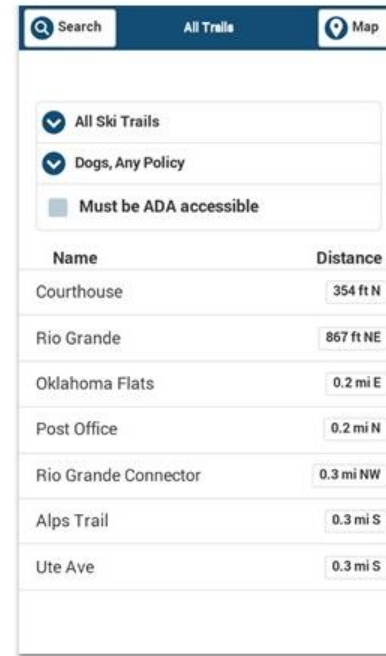
Total Investment



2,910,643

MT GHG Reduction ⓘ







Search for parks, hiking, sports, and more.

find a park

 near me





 browse map

or find things to do

 backpacking

 ball fields

 basketball

 beaches & bay

 bicycle trails

 board sports

 boating

 camping

SAN DIEGO OUTSIDE BET



Search for parks, hiking,
sports, and more.

find a park

 near me



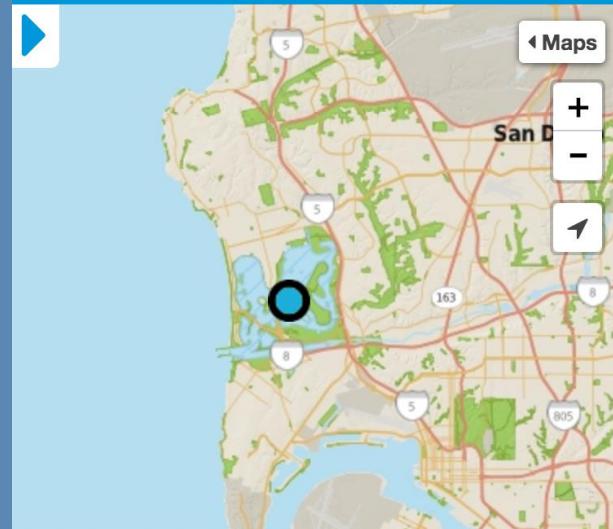


 browse map

or find things to do

 backpacking

SAN DIEGO OUTSIDE BET



Mission Bay Park

Activities: Hiking, Bicycle Trails, Swimming,
Fishing, Kayak/Canoe, Boating, Wildlife Viewing,
Camping, Dog Park, Ball Fields, Basketball,
Picnic/BBQ, Tennis, Playground

3,908 acres

Park managed by [San Diego, City of](#)



www.mapcollaborator.org

CPAD Edition

Introduction

Zoom to a location

Search

Post a note on the map

Add an area

Upload data for review

A title for this note:
a brief title or subject

Description:
type your note here

Type of note:
Add a park

Your contact info:
your name
your organization or affiliation
your email address

Save note

Cancel

Layers

CPAD version 2015b data

☐ CPAD By Access

☒ CPAD By Owner Level

City

Country

Federal

Non Profit

Private

Special District

State

☐ CPAD By Ownership

☐ Military Lands

☒ CPAD Notes

☒ Accepted

☒ Declined

☒ Pending

☒ Proposed Edits to CPAD

☒ Accepted

☒ Declined

☒ Pending

☒ File Uploads

Uploaded files

☐ City Boundaries

☐ County Boundaries

☐ Schools

Location note

Submitted by Larry Orman on 2014-10-05

Status: Accepted

ID #: 292

Update public access

This is now open and part of the hold unit, which should be renamed to Dublin Hills Regional Park http://www.ebparks.org/parks/dublin_hills

Base Maps

StreetView & BirdsEye

Google

© Peter Wubbels Terms of Use Report a problem

bing

© 2015 HERE © 2015 Microsoft Corporation Available Exclusively by DigitalGlobe © Harris Corp. Earthstar Geographics LLC Pictometry Bird's Eye © 2015 Pictometry International Corp.

Demonstration Viewer

MapCollaborator™ Viewer

Introduction

Zoom to a location

Data sources

CPAD

CPAD data on protected areas - learn more at www.calands.org

Sea Level, 2000 Baseline

Areas inundated by unimpeded Pacific coastal flooding under baseline (year 2000) conditions. In the Bay Area, we are using inund000cm_100yr.tif from USGS CASCade Project.

<http://pacinst.org/the-impacts-of-sea-level-rise-on-the-california-coast-gis-data-downloads/>

<http://cascade.wr.usgs.gov/data/Task2b-SFBay/data.shtm>

Sea Level, Projected 2100

Areas inundated by unimpeded Pacific coastal flooding under a scenario of 1.4-meter (55-inch) sea-level rise. In the Bay Area, we are using inund140cm_100yr.tif from USGS CASCade Project.

<http://pacinst.org/the-impacts-of-sea-level-rise-on-the-california-coast-gis-data-downloads/>

<http://cascade.wr.usgs.gov/data/Task2b-SFBay/data.shtm>

People of Color, > 50%

US Census block groups (ACS 2008-2012) median household income and people of color. For people of color calculations, we added up all the population count and made sure they equaled total population (Total Population - B01001e1) then subtracted the population for white alone (B02001e2) in order to get white and people of color populations.

<http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml>

Congressional Districts

California data file

<http://wedrawthelines.ca.gov/maps-final-draft-congressional-districts.html>

Layers

☒ CPAD By Owner Level

- ☐ US Forest Service
- ☐ US Bureau of Land Management
- ☐ National Park Service
- ☐ US Fish and Wildlife Service
- ☐ Other Federal
- ☐ California Department of Parks and Recreation
- ☐ California Department of Fish and Wildlife
- ☐ Other State
- ☐ City
- ☐ County
- ☐ Non Governmental Organization
- ☐ Special District

☒ Sea Level, Projected 2100

☒ Sea Level, 2000 Baseline

- ☐ >50% People of Color
- ☐ Congressional Districts
- ☐ Counties
- ☐ Schools Affected by Sea Level Rise

MLK Reg. Shoreline

606.2 acres

Owner: California State Lands Commission

Manager: East Bay Regional Park District

Website: <http://www.slc.ca.gov/>

Access: Open Access

County: Alameda

Unit ID: 29417

SuperUnit ID: 3285

Zoom To >>

> StreetView & BirdsEye

The background of the slide is a topographic map with green contour lines and some small white and blue markers. A solid blue horizontal band is positioned across the middle of the image, containing the title text.

Public Data

What data do we maintain?

- 1. California Protected Areas Database**
- 2. California Conservation Easements Database**
- 3. California Schools Campus Database**
- 4. Key partner on Protected Areas Database of the United States**



California Protected Areas Data Portal

LOGIN

CPAD | CCED | REVISE | RESOURCES | NEWS | ABOUT

ABOUT

This portal contains protected areas GIS data for California, including the California Protected Areas Database (**CPAD** - fee owned lands) and the California Conservation Easement Database (**CCED**).

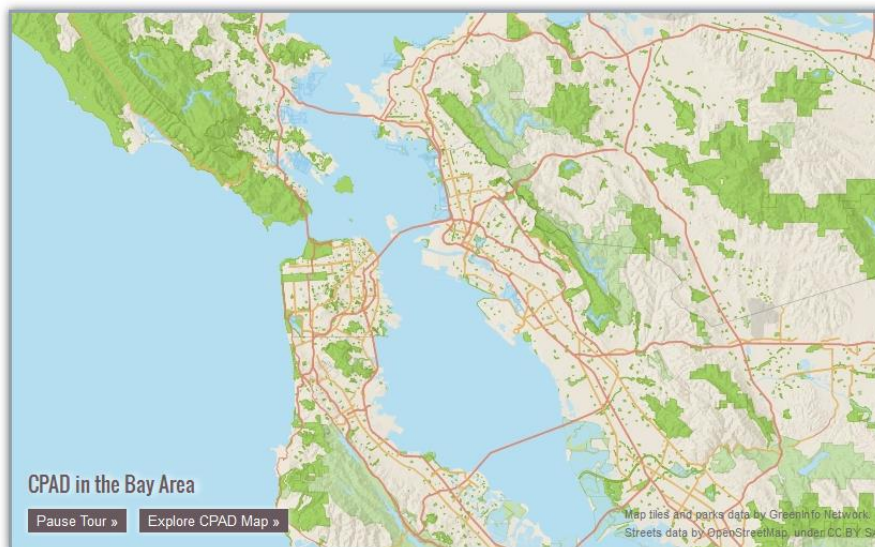
➤ [Learn more](#)

WHAT'S NEW

- First **CCED** Release (3/14), plus reports
- New **CPAD** Release (3/14)
- Sign up for March & April Webinars
- Tell us what you want, **take CPAD survey**

STATS AND MAPS

- **CPAD** - 49 million acres, 1,000 agencies/orgs
- **CCED** - 1.5 million acres, 93 agencies/orgs
- Explore **CPAD** map
- Find recreation with [ParkInfo.org](#)



Download

Survey

Explore

Subscribe

Revise



Protected areas data on this site is maintained by GreenInfo Network, a nonprofit organization that supports public interest groups and agencies with a wide range of GIS and related technology.

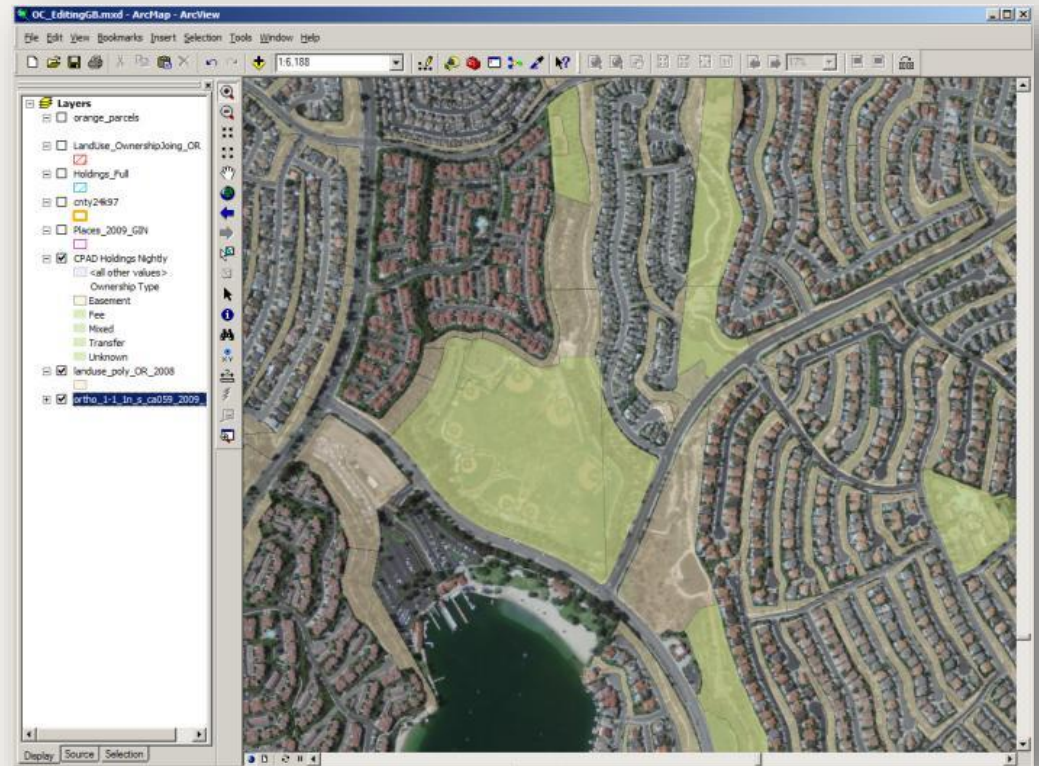
What's inside?

CPAD contains open lands owned in fee, from small parks to large wilderness areas.
CCED contains data on conservation easements for wildlife, ranching and open space uses.



The Database

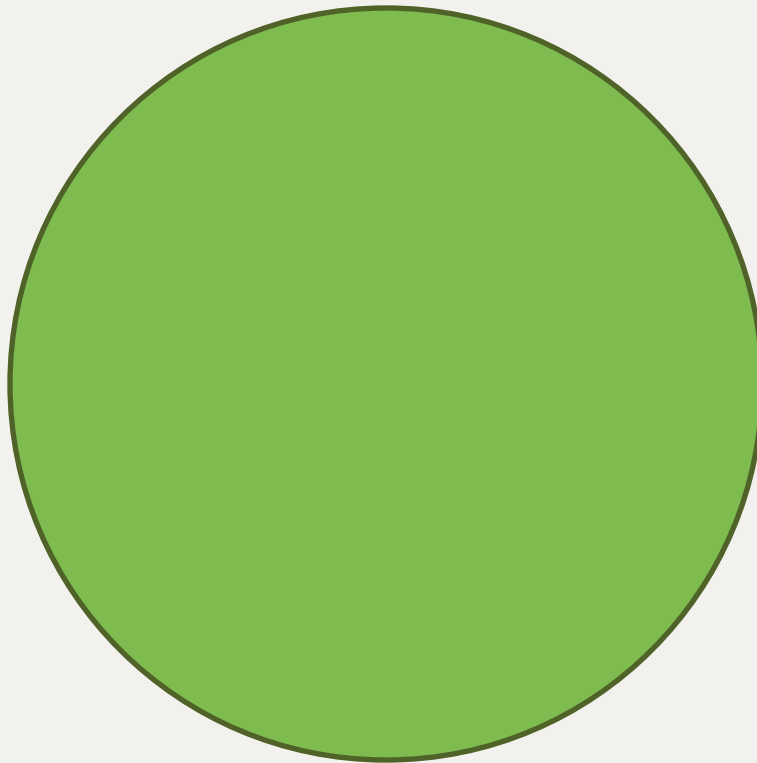
- GIS data
- 49+ million acres
- 14,000 parks
- v. 2016b (Dec. 2016)
- www.calands.org



1,000+ Agencies



What's in the Inventory



CPAD – fee owned

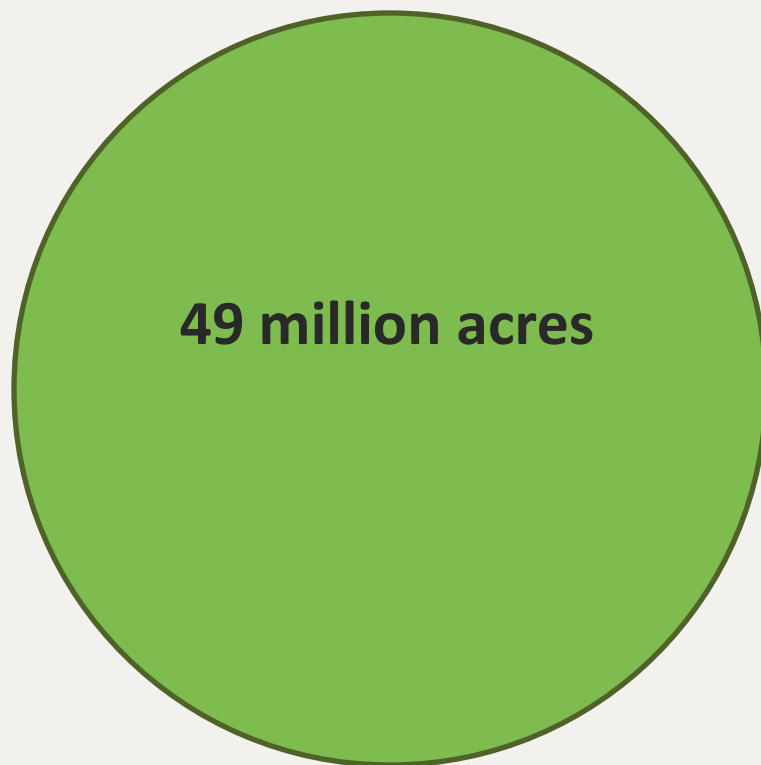
49 million acres



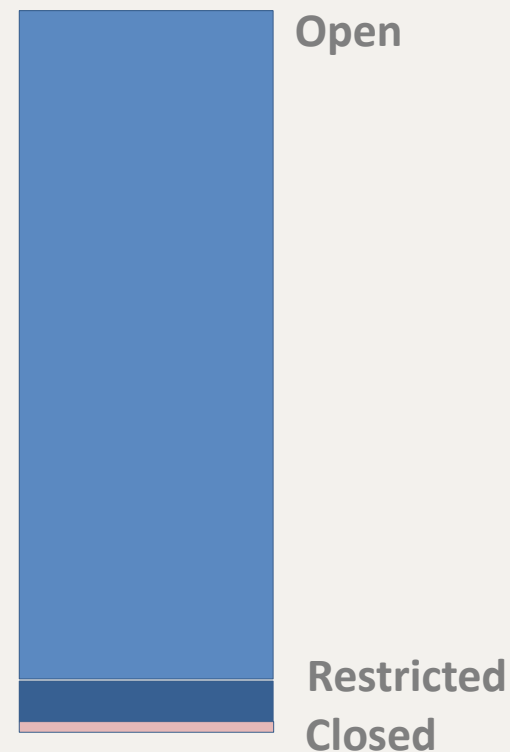
CCED – easements

2 million acres

What's in the Inventory

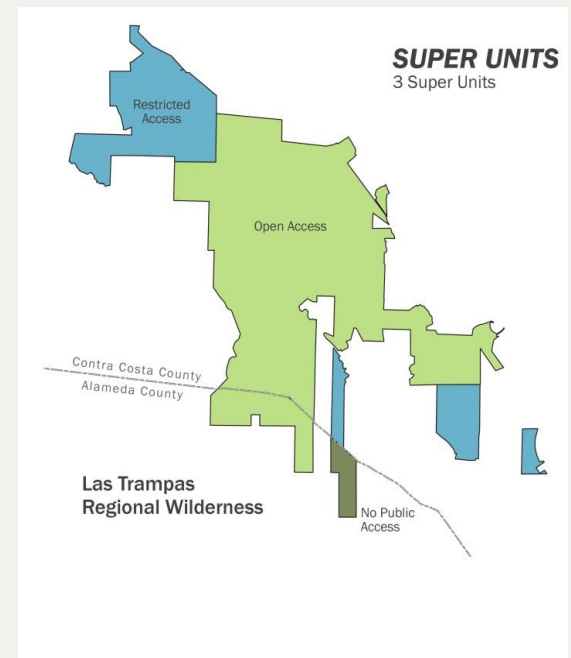
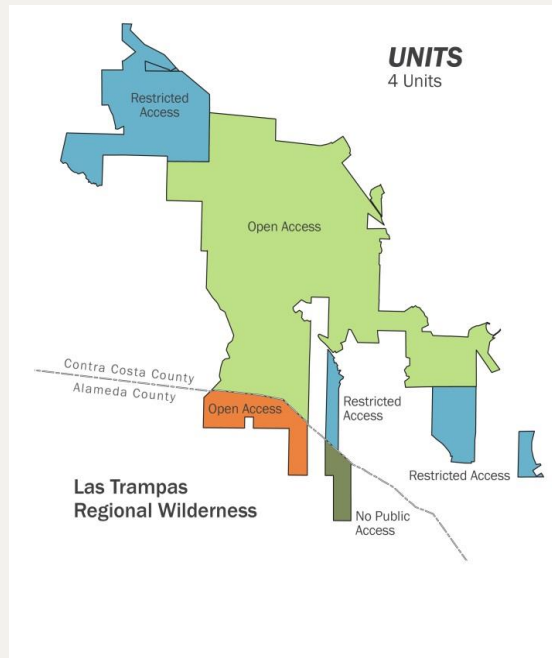
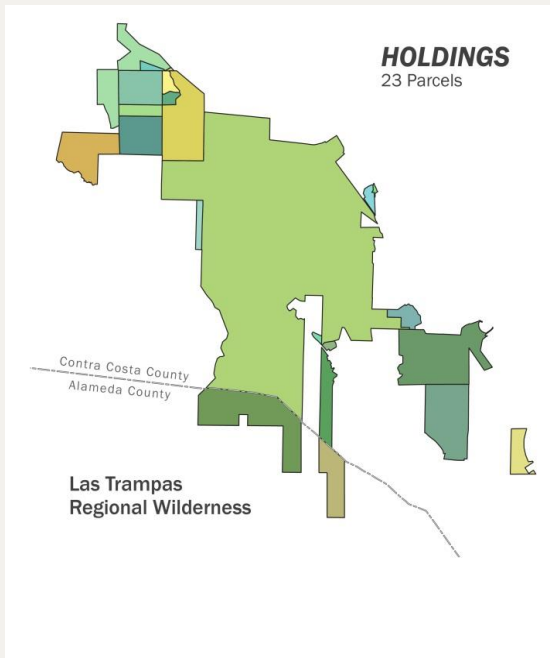


CPAD (fee owned)



Access, acres

How CPAD is structured





Information and Mapping in the Public Interest

[**www.greeninfo.org**](http://www.greeninfo.org)