THE TRUST for PUBLIC LAND

Healthy Parks, Healthy Communities
ESRI Health GIS Conference
October 9, 2007



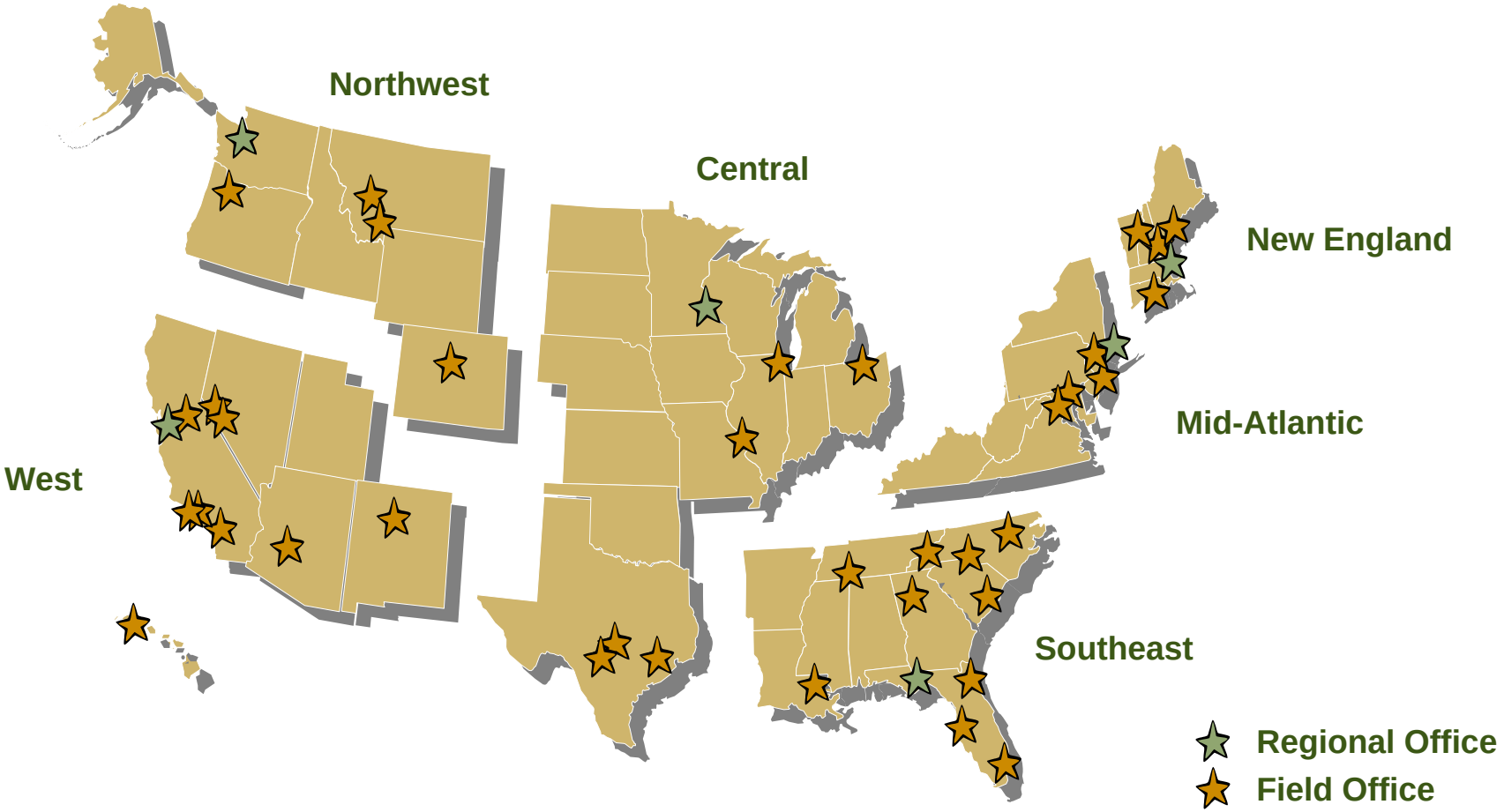


Trust for Public Land – *est.1972*

Mission

TPL conserves land for people to enjoy as parks, gardens, and other natural places, ensuring livable communities for generations to come.

6 Regions, 40+ Offices, 400+ People



"Land for People" never more important

We lose 3 million acres to development ….one Connecticut… every year

Source: USDA Natural Resources Inventory (Revised 12/2000) .

Healthy Parks, Healthy Communities: Working assumptions

- ✓ The lack of parks reduce opportunities for play, exercise and physical activity.
- ✓ Communities with high rates of poor health are the same communities that don't have appropriate access to parks
- ✓ To make changes, these health justice issues cannot be ignored.
- ✓ Linking these issues and raising funds (conservation finance) is one possible solution.

Current conditions present common dilemma for health, quality of life & park advocates

- **Increasing rates of physical inactivity, overweight, & obesity**
- **Lack of community-level physical activity opportunities**

- **Record deficits for local & state governments**
- **Budget cuts for parks and recreation infrastructure**

Research supports safe, accessible parks as an intervention to increase physical activity

- Low-income communities of color have reduced access to community-level physical activity settings (Powell, 2004; Gordon-Larsen, 2006)
- Teens reporting no access to safe parks are more likely not to engage in any physical activity compared to teens with such access (Babey, 2005 & 2006)
- Living close to a park is a critical determinant of park use and physical activity in low-income and minority communities (Rand, 2006)

Healthy Parks, Healthy Communities in Santa Ana, CA

- Local partner: **Latino Health Access**, a nonprofit which was created to assist with the multiple health needs of Latinos in Orange County
- Santa Ana is the 8th most densely populated place in the United States with 12,471.5 people per sq. mile
- Park acreage: Roughly one acre per every 1,120 residents (other large California cities have 7.9 acres per 1,000 residents)
- At 34%, has the highest rates of child overweight rates in CA
- Population: 76% Latino, 12% Non-Hispanic Whites, 8.8% Asian, 1.7% African American, 1.19% Native American and 0.34% Pacific Islander
- 19.8% of the population live below the poverty line (including 24.1% of those under the age of 18)

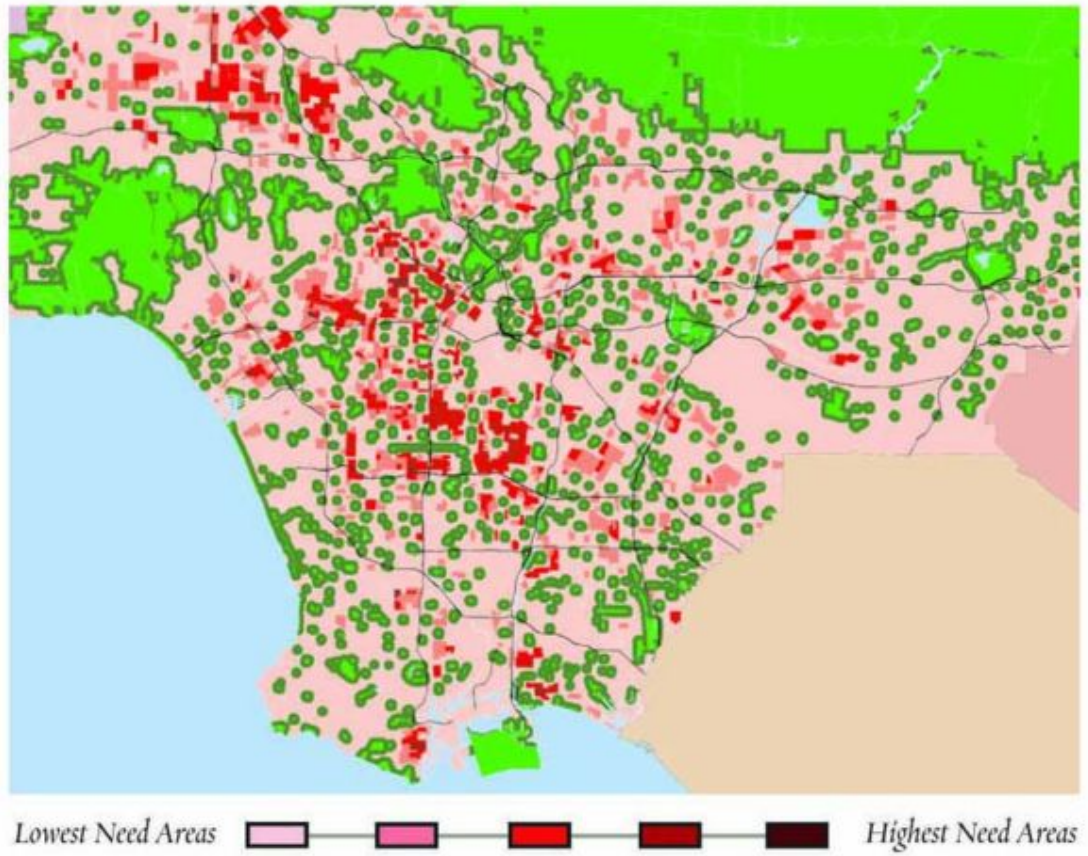
Some barriers in the built environment that prevent physical activity - Santa Ana, CA

Healthy Parks, Healthy Communities
Case study: Latino Health Access, Santa Ana, CA

- Developed series of park equity maps
- Completed HPHC training
- Completed feasibility report
- Assist with public opinion poll
- Collaborate on potential campaign

Park Needs Analysis Using GIS: A Tool to Increase Relevancy of Conservation for New Constituencies

TPL Geographic Information System Model



TPL's Park Equity Model

Park Inequities – A Working Definition

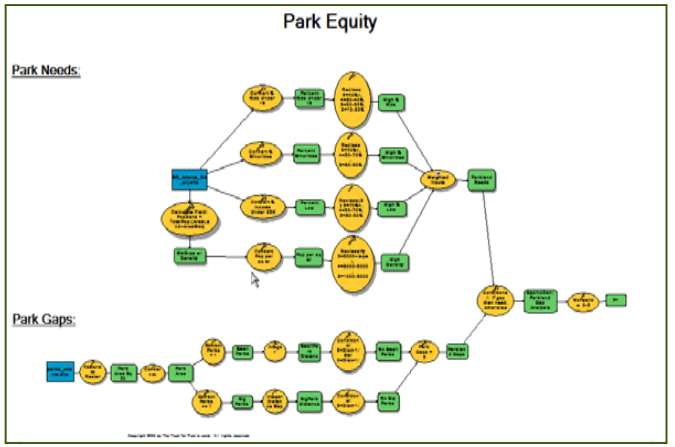
Disparate and inadequate access to safe and well-maintained parks, playgrounds and related public amenities and services designed for a variety of recreation purposes

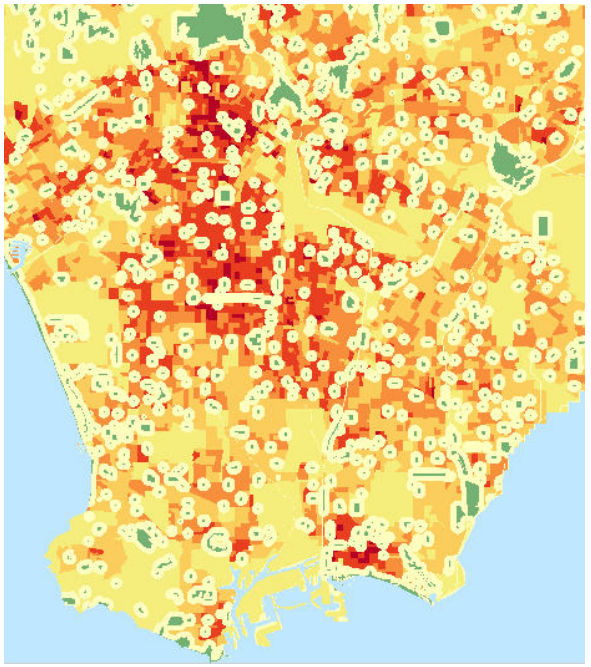
The TPL Park Equity Model

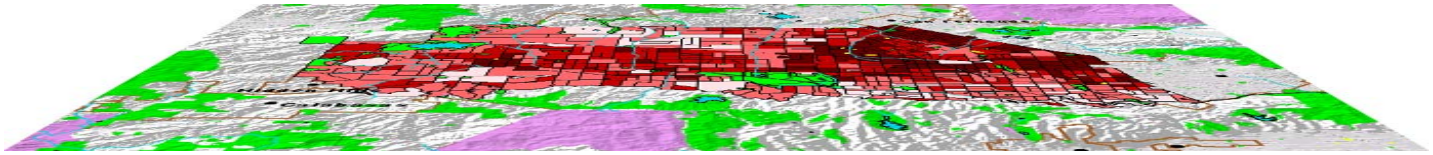
- Analyzes public access to existing parks and open space

- Evaluates **park need** using Census 2000 profiles
  - ✓ uses demographic variables such as
    - ❑ children
    - ❑ population density
    - ❑ minorities
    - ❑ low income
  - ✓ relative weights can be assigned to each variable to reflect local demographic priorities

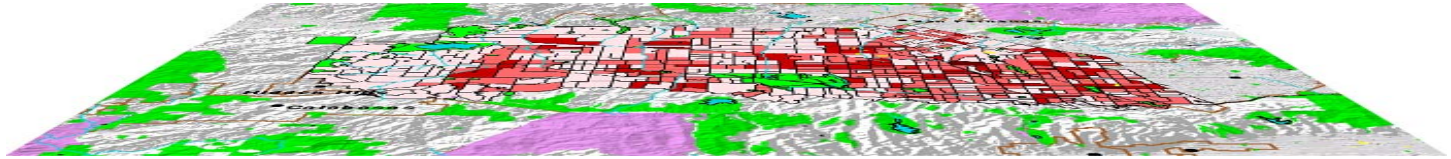
- Identifies **gaps** in park availability
  - ✓ assigns a service/accessibility range to each park
  - ✓ service ranges can be based on
    - ❑ park type
    - ❑ park size
    - ❑ amenities
    - ❑ carrying capacity
  - ✓ areas outside of park service buffers are gaps



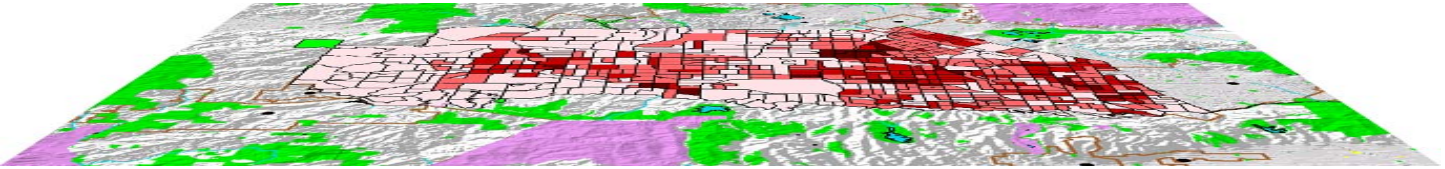




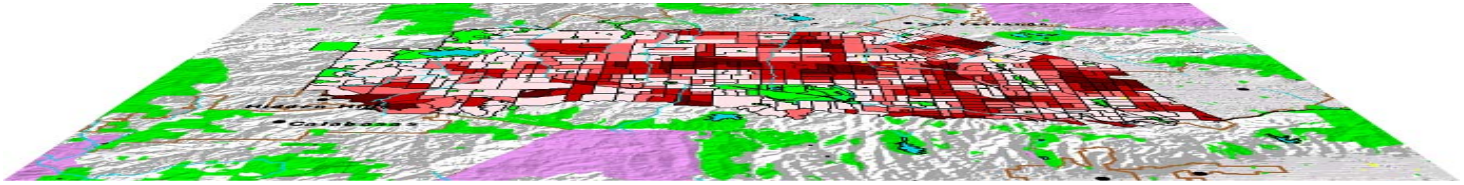
Age



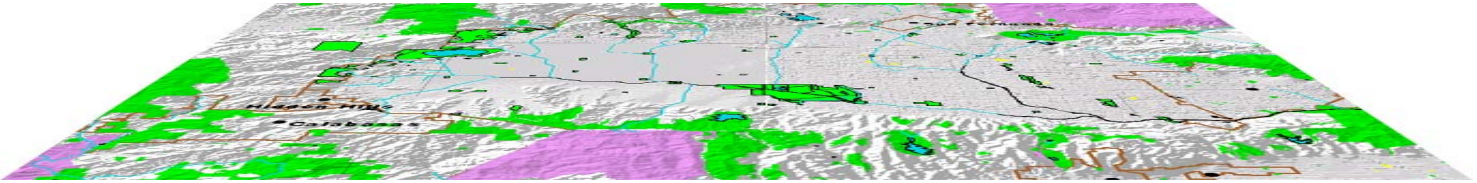
Income



Population Density



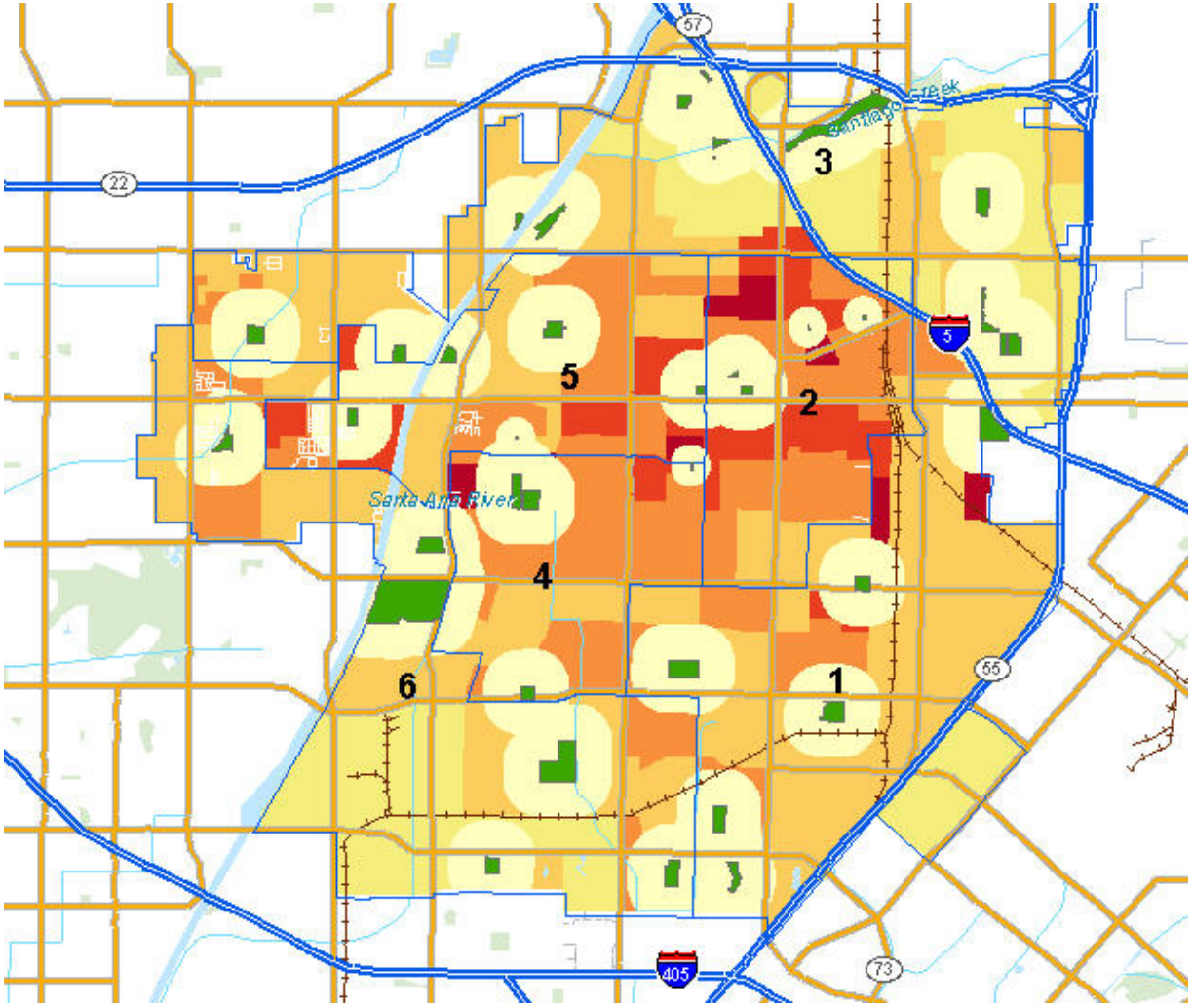
Gap Analysis



Base Map

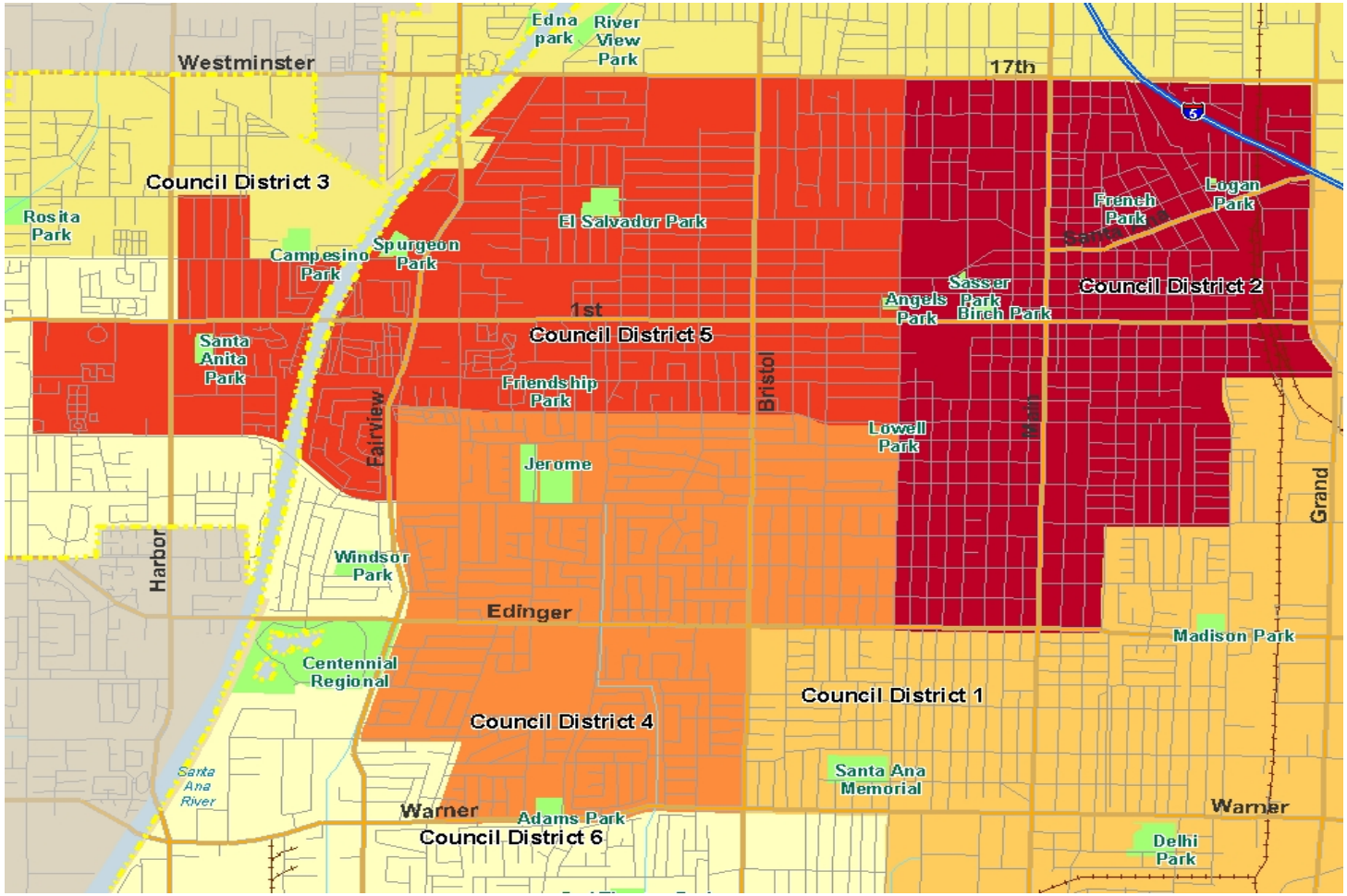
Park Equity – Santa Ana

Source: TPL Greenprinting Analysis Unit



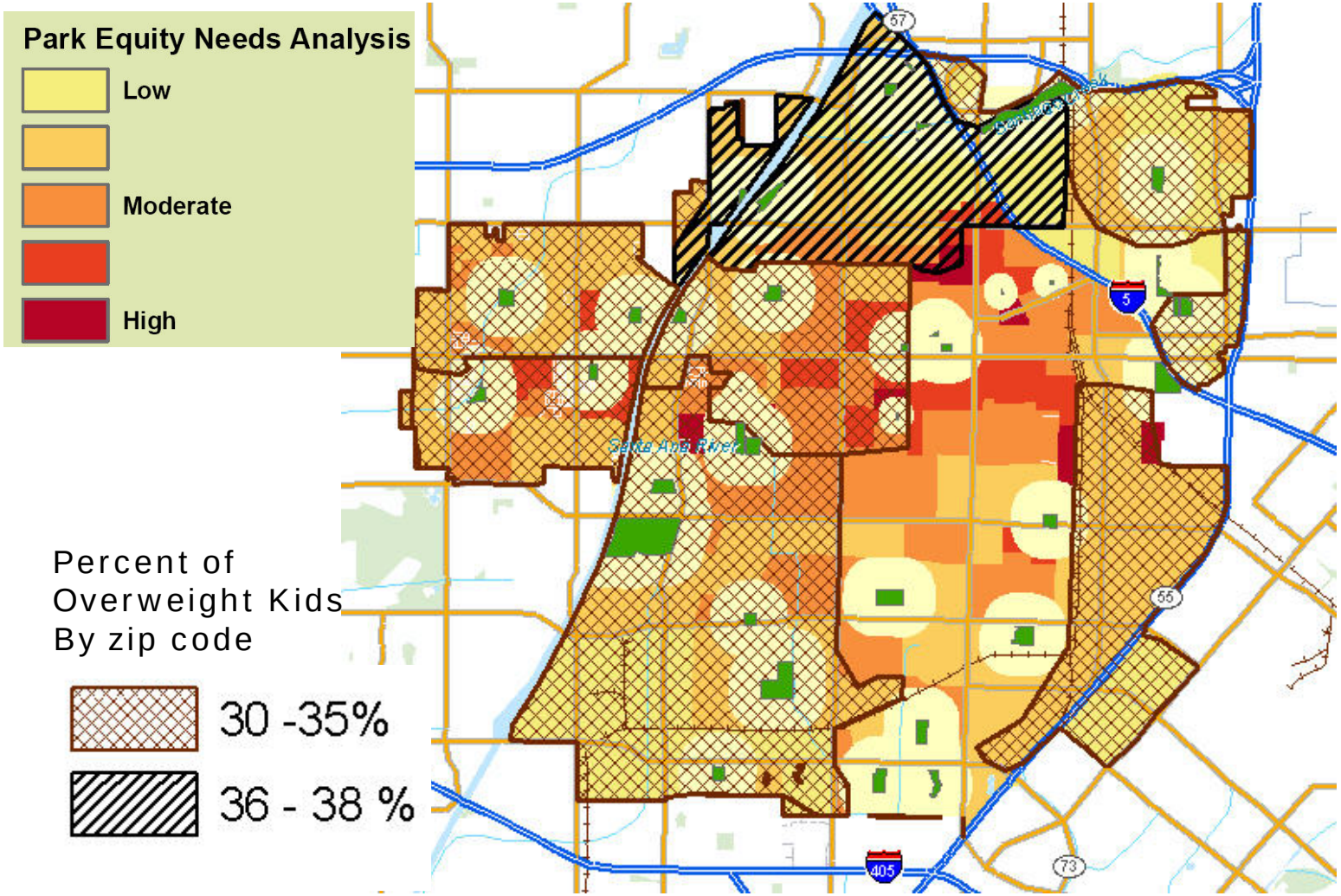
Park Deficit Analysis by Zipcode – Santa Ana

Source: TPL Greenprinting Analysis Unit



Park Equity Analysis with Health Risk Layer – Santa Ana

Source: TPL Greenprinting Analysis Unit



Data Sources for Los Angeles and Santa Ana Analyses:

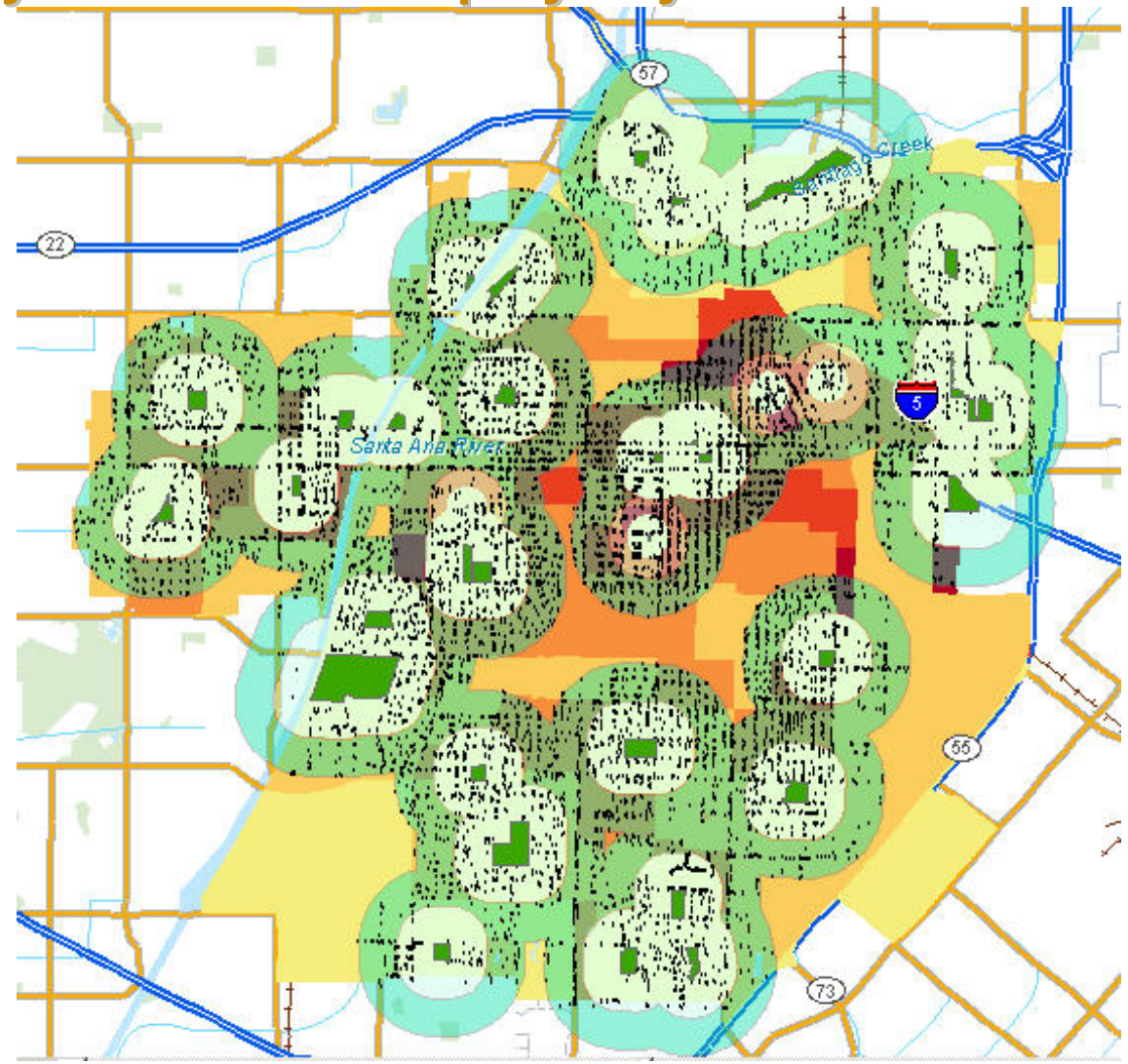
Park Equity and Park Deficit Analyses:

- Parks and Open Space Data: Thomas Bros. Maps (A Division of Rand McNally & Co.)
- Census data: Geolytics

Childhood Health-Related Analyses:

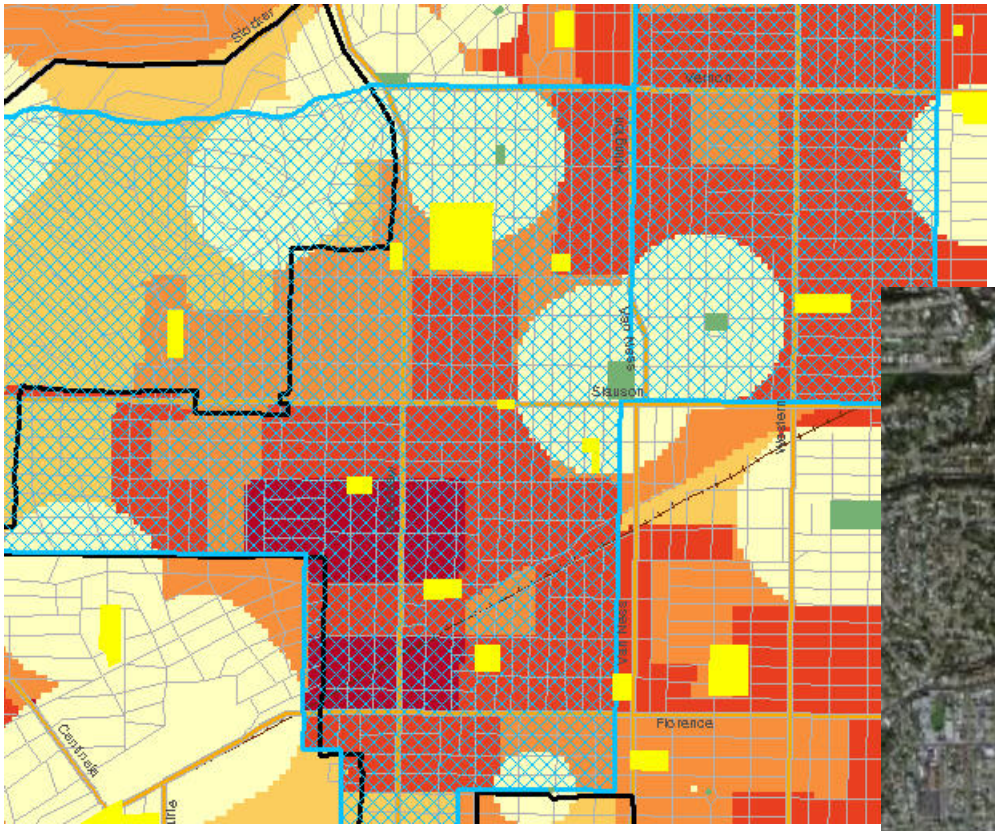
- 2005 California Department of Education Fitnessgram database

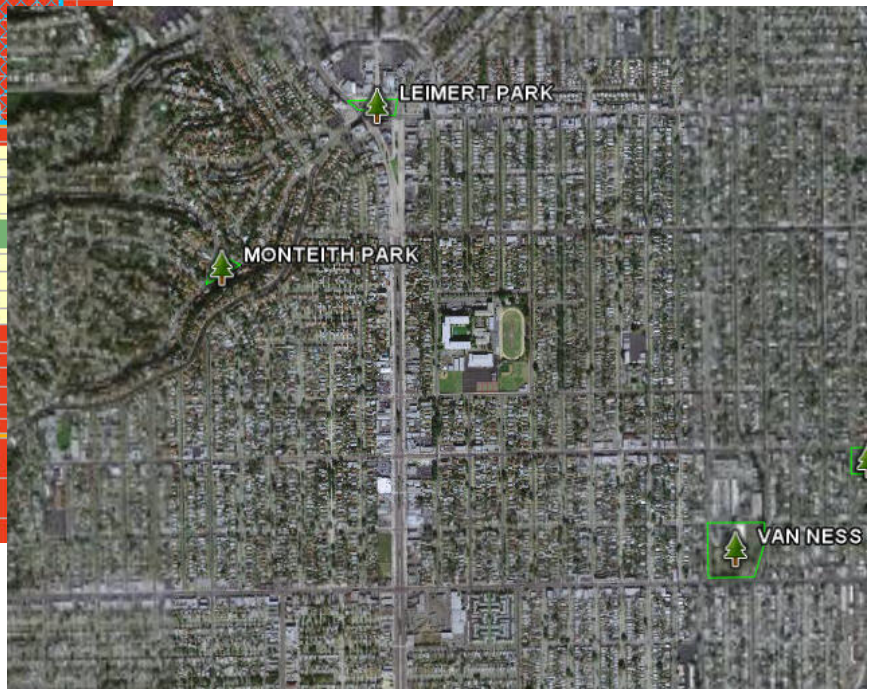
Crime Analysis with Park Equity Layer – Santa Ana



Park Need Analysis with Health Risk Layer – Los Angeles

Crenshaw High School





Summary

- ✓TPL pilot program
- ✓Non-traditional partners – land conservation, health and policy makers
- ✓Awareness raising through trainings
- ✓GIS and conservation finance as tools
- ✓Common goal – increase access to open space, increase access to venues for physical activity, and reduce disparities in health

Center for City Park Excellence

What CCPE does:

- Collect data on city park systems

- Undertake studies about park systems, individual parks and park issues

- Pull together meetings of experts to explore new urban park issues

- Write articles for external publications

- Maintain a major database and set of articles on the TPL webpage

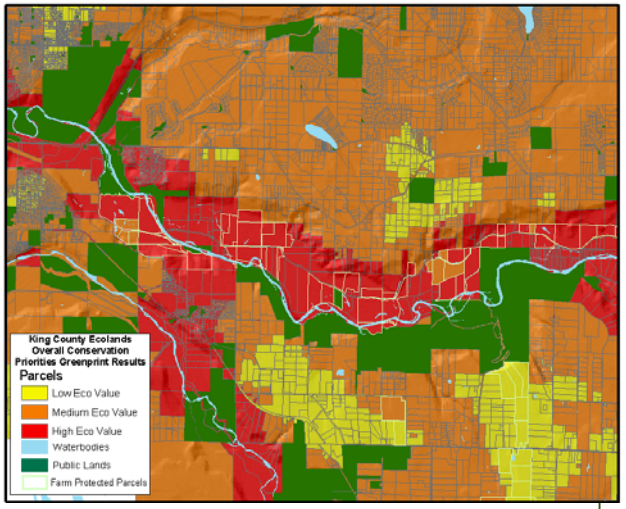
TPL's Conservation Services

Conservation Vision	**Helping communities to develop implementation strategies for their parks and open space goals.**
Conservation Finance	**Helping government partners and communities to create funding for parks and open space.**
Conservation Transactions	**Helping government partners and communities to evaluate and purchase land.**

Greenprinting is using Geographic Information Systems (GIS) to make informed, **strategic** decisions about land conservation priorities.

Greenprinting – For Proactive Conservation Planning:

- Incorporates a broad range of conservation goals
- Reflects unique community resources and priorities
- Utilizes "best available" data and science and utilizes existing datasets derived from studies and processes already completed or underway
- Identifies areas offering highest conservation benefit
- TPL has completed over 40 Greenprints across the country
- Models developed using new software from ESRI (ArcGIS 9x ModelBuilder & Spatial Analyst)



Contact information

On the Web at:

www.tpl.org/hphc

www.tpl.org/ccpe

www.tpl.org/cityparkfacts

www.tpl.org/greenprinting