



EQUITABLE PARKS & AMENITIES DECISION SUPPORT SYSTEM

Measuring Access to City of Los Angeles Parks

Alex Yee (alex.yee@lacity.org):

Director of Systems

Department of Recreation and Parks City of Los Angeles

Daniel Elroi (daniel@northsouthgis.com):

President & CEO

NorthSouth GIS LLC





LA Mayor's Mandate:

- Quantify park accessibility
- Report park performance

Measure and report the level of access for LA City residents





LA Dept. of Recreation & Parks took it One Step Further:

- Performance Assessment
and
- Decision Support System



Performance Measurement Tools



Calculate performance of each park, based on distance:

- Total population served
- Population by age group
- Total households served
- Households by income



Networks Determine Access to Park Entrances

- Neighborhood Park (walking .5 miles)
- Community Park (driving 3 miles)
- Regional Park (driving 15 miles)



E-PADSS Homepage



**EQUITABLE PARKS & AMENITIES
DECISION SUPPORT SYSTEM**

Equitable Parks and Amenities Decision Support System (E-PADSS)

Welcome to the City of Los Angeles Department of Recreation and Parks Equitable Parks and Amenities Decision Support System (E-PADSS). Click one of the links below to get started.

For assistance, access to E-PADSS resources, or to report issues, please contact:

Robert Panglinan
213-202-3288
reb.panglinan@lacity.org

E-PADSS Tools

- [Performance Measurement Tool Results](#)
- [Decision Support Application \(login required\)](#)

E-PADSS Documentation

- [Decision Support Application User Guide](#)

Data Management Tools

- [Park Entrance Editor for RAP Parks \(login required\)](#)
- [Park Entrance Editor for Non-RAP Parks \(login required\)](#)
- [Citizen Park Editor \(login required\)](#)

E-PADSS Performance Measuring Tool



Performance Measurement Tool

Input Park Entrances Feature Class RAP
g:\gis\workspace\workspace\Projects\Performance\gdb.sde\gdb.RAPADMIN.CompositeParkEntrancesRap

Input Census Blocks Feature Class
g:\gis\workspace\workspace\Projects\Performance\gdb.sde\gdb.RAPADMIN.CensusBlocks

Input Walking Network Dataset
C:\GIS\workspace\workspace\Projects\Performance\gdb\WalkingNetwork.gdb\WalkingNetwork\WalkingNetwork_ND

Input Driving Network Dataset
C:\GIS\workspace\workspace\Projects\Performance\gdb\Streets

Neighborhood Network Type
Walking

Neighborhood Park Service Area in Miles
0.5

Community Network Type
Driving

Community Park Service Area in Miles
3

Regional Network Type
Driving

Regional Park Service Area in Miles
15

Output Directory
C:\GIS\workspace\workspace\Projects\Performance\gdb\Output

Analyze NonRAP Parks

Input Park Entrances Feature Class NonRAP
g:\gis\workspace\workspace\Projects\Performance\gdb.sde\gdb.RAPADMIN.CompositeParkEntrancesNonRap

Analyze All Parks RAP and NonRAP

Input Park Entrances Feature Class All
g:\gis\workspace\workspace\Projects\Performance\gdb.sde\gdb.RAPADMIN.CompositeParkEntrancesAll

Performance Measurement Tool

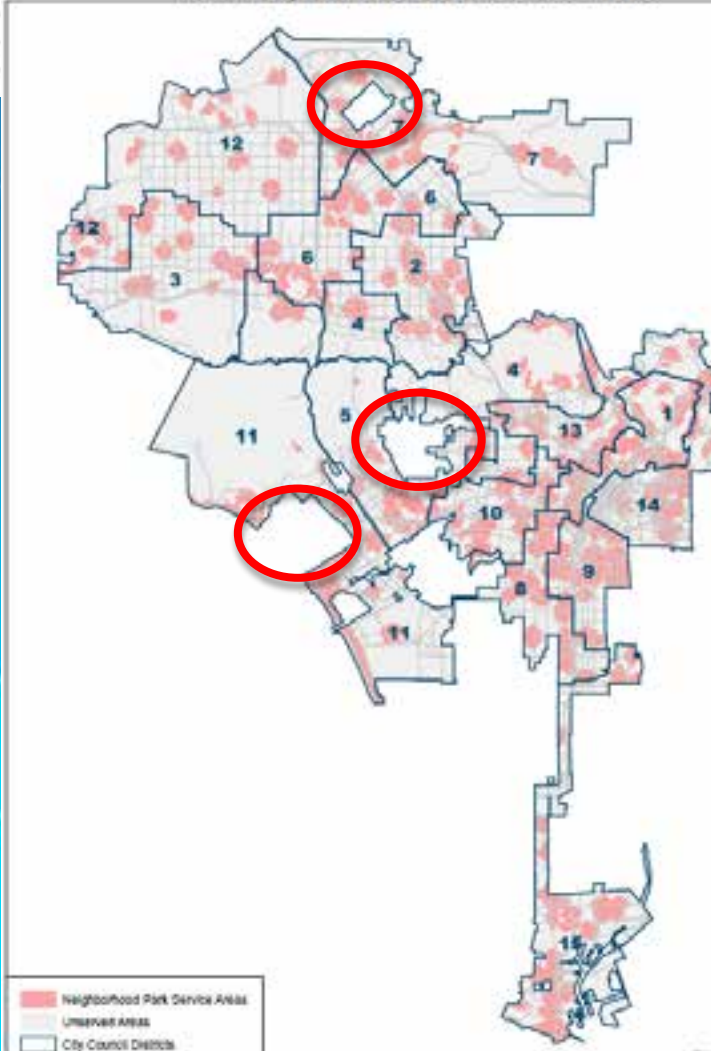
The performance measurement tool uses park entrances, road networks, and census blocks input datasets to generate park accessibility performance measures and service area maps. The tool is capable of generating performance measures and service area maps for three separate sets of input parks: (1) RAP parks alone; (2) Non-RAP parks alone; (3) All parks (RAP and non-RAP parks together). The performance measurement tool always generates outputs for RAP parks alone. Optionally, it will also generate outputs for non-RAP parks alone if the "Analyze NonRAP Parks" box is checked. Likewise, it will also generate outputs for all parks (RAP and Non-RAP together) if the "Analyze All Parks RAP and NonRAP" box is checked.

OK Cancel Environments... << Hide Help Tool Help

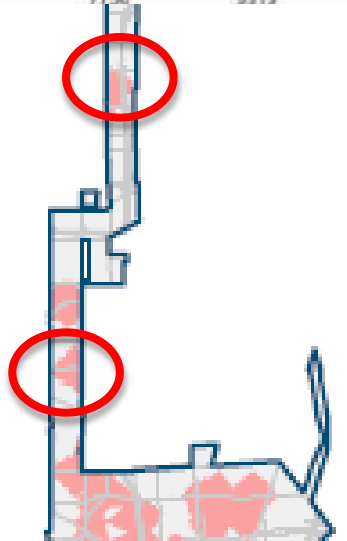
Council District	Census Blocks	Total Population	PopAgeUnder5Yrs	PopAge5To9Yrs	PopAge10to14Yrs	PopAge15to17Yrs	PopAge18to64Yrs	PopAge65YrsAndOver
1	903	154180	11241	9976	10206	6700	100872	15185
2	725	85440	5229	4764	4949	3233	59190	8075
3	403	68976	4818	4544	4455	2856	44994	7309
4	524	56786	2886	2368	2045	1196	41766	6525
5	604	65729	3379	2777	2489	1471	46633	8980
6	456	90758	7797	7131	7237	4545	57842	6206
7	591	85494	6796	6492	6674	4147	53539	7846
8	953	138106	11220	10529	11279	7356	85974	11748
9	833	163120	15870	14333	14494	9359	100960	8104
10	585	109315	7743	6880	7037	4665	73248	9742
11	1070	71618	3692	2759	2442	1492	52397	8836
12	373						23444	6395
13	835						91311	12165
14	1084						80138	12963
15	1076						78511	10681
City Total	11015						990819	140760



RAP Neighborhood Park Service Areas



Total Households	HhIncUnder25k	HhInc25kTo34k	HhInc35kTo45k	HhInc50kTo74k	HhInc75kAndOver
49630	21843	6939	7277	7004	6567
31846	7795	3642	4343	6162	9904
23360	5676	2473	3011	4368	7832
27133	5301	2534	3050	5093	11155
31398	5756	2272	3569	5397	14404
24079	6789	3333	4120	3924	5913
22527	5502	2736	3162	4922	6206
39996	16109	5464	6122	6569	5732
37438	16533	5591	5606	5896	3812
39111	14150	5562	6773	5946	6640
34634	5824	2340	3603	5562	17305
13208	1827	739	1459	2218	6965
49217	17481	6783	7278	7756	9919
39323	17095				
39170	12291				
502070	160012				



Neighborhood Park Service Areas
 Unimproved Areas
 City Council Districts

E-PADSS Application Framework



EQUITABLE PARKS & AMENITIES DECISION SUPPORT SYSTEM

Search...

Navigation Decision Support Identify Measurement Markup

Navigation: Pan, Zoom In, Zoom Out, Initial View, Full Extent, Bookmarks, Print

Map Layers

- GIS Data
 - Existing Park Entrances
 - Street Crookline
 - Landbase
 - City Council Districts
 - Unimproved Parks
 - Existing Parks
 - City Limits
- Existing Park Service Areas
- Heat Maps
- Transportation Overlay
- LARSAC 2011 Aerial Imagery
- Esri Community Base Map

Show Legend

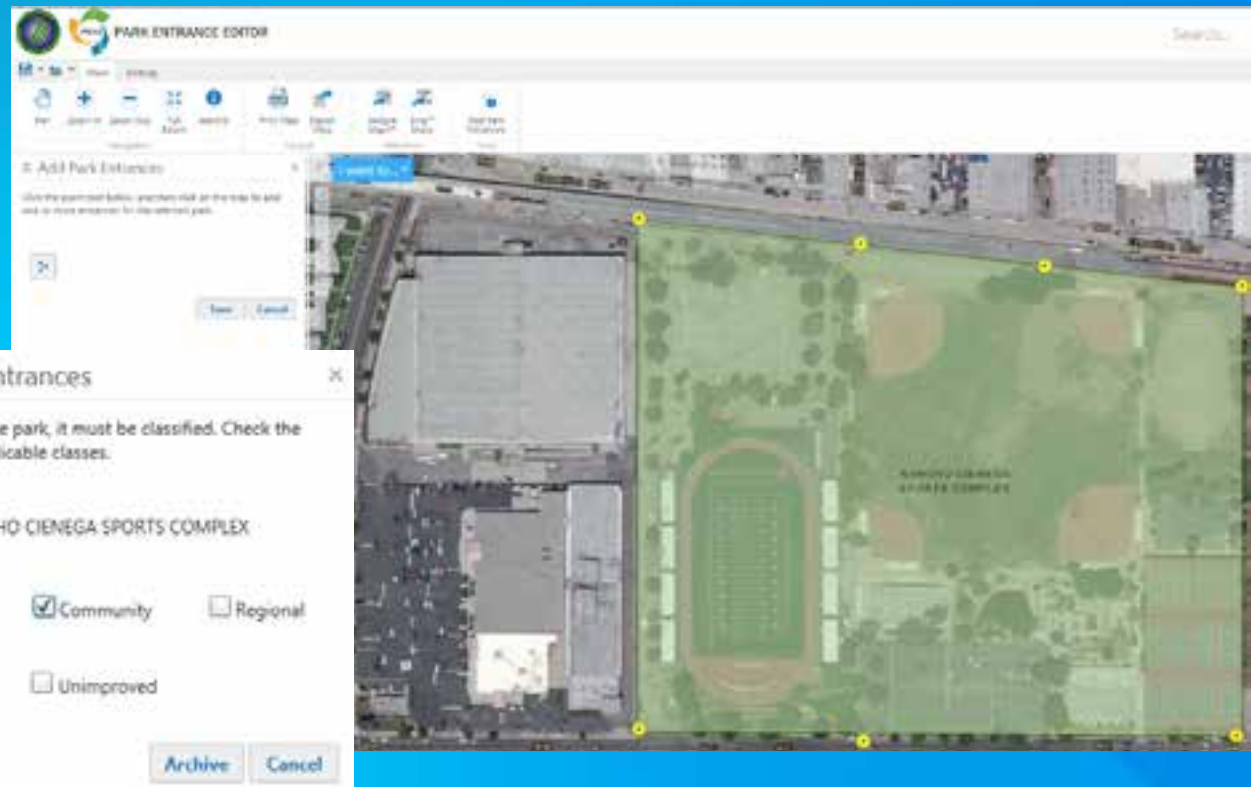
I want to... Esri Community Base Map

Map showing Los Angeles area with various layers and navigation tools.

E-PADSS Applications



- Performance Measurement (python scripts)
- Park Entrance Editor
- Decision Support Application
- Future Park Editor



The E-PADSS Decision Support System



- Build and compare development scenarios based on impact on performance

Navigation | Decision Support | Identify | Measurement | Markup

Pan | Zoom In | Zoom Out | Initial View | Full Extent | Bookmarks | Print

Analysis Complete

I want to...

The analysis has been completed, and a report was generated and saved with the scenario. Click the Download Report link below to download the report, or click the Download CSV link to download a comma-separated value text file with the performance metrics. When finished, click the Continue button to analyze another service area or generate another report for this scenario. Otherwise, click the Close button to close the scenario.

Scenario Name: test

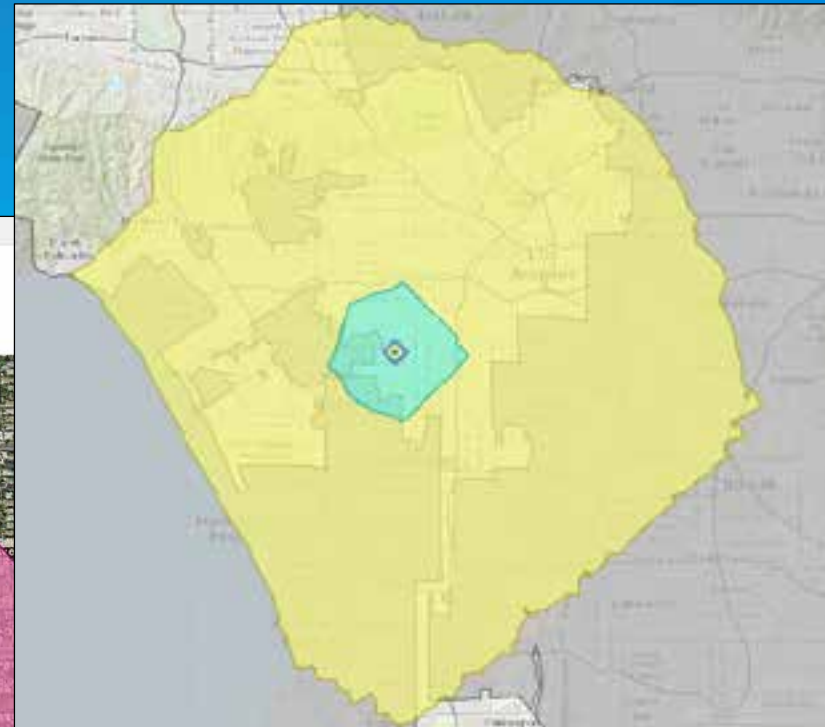
Park Class: Improved

Baseline Dataset: All Parks (RAP and Non-RAP)

Download Report

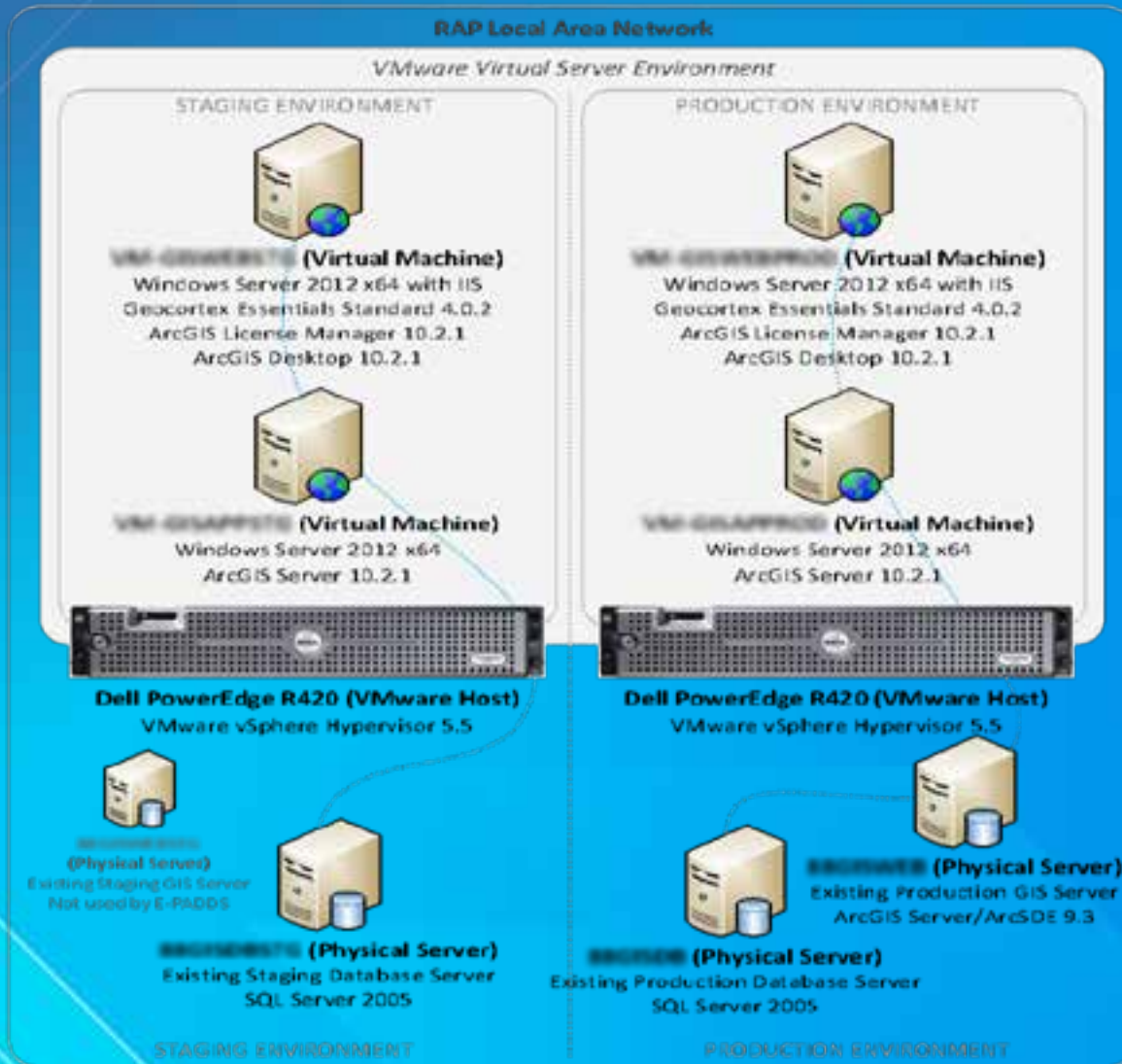
Download CSV

Continue Close



Population and Age Breakdown			Household and Income Breakdown		
	Total Residents Served:	Currently Non-Served Residents Served:	Total Households Served:	Currently Non-Served Households Served:	
Residents Served:	7,027	3,640	Households Served:	2,257	1,123
Residents Served by Age			Households Served by Annual Income		
Under Age 5:	454	234	Under \$25,000:	755	386
Age 5 to 9:	433	220	\$25,000 to \$34,999:	183	62
Age 10 to 14:	494	243	\$35,000 to \$49,999:	428	223
Age 15 to 17:	635	182	\$50,000 to \$74,999:	461	228
Age 18 to 64:	4,498	2,335	\$75,000 and Over:	430	224
Age 65 and Over:	790	426			

E-PADSS System Architecture





E-PADSS Phase I Success




- The project has been a resounding success. We are now moving to Phase II.



**EQUITABLE PARKS & AMENITIES
DECISION SUPPORT SYSTEM**

Park Analysis Report



Scenario Information

Scenario Name:
14094 W Van Nuys Blvd

Description:
GSO Owned Property at 14094 W Van Nuys Blvd
Note that property is not on GSO Surplus Property List.

Scenario Type:
New Park

Park Class:
Neighborhood

Baseline Dataset*:
All Parks (RAP and Non-RAP)

*The baseline dataset is the existing parks dataset whose service areas are used to calculate the currently non-served matrix given below. If these residents and households, which could be served by the proposed park, are not currently served by any existing park in the baseline dataset.

Population and Age Breakdown

	Total Residents Served	Currently Non-Served Residents Served
Residents Served:	4,383	2,830

Residents Served by Age		
Under Age 5:	352	212
Age 5 to 9:	310	201
Age 10 to 14:	379	235

Household and Income Breakdown

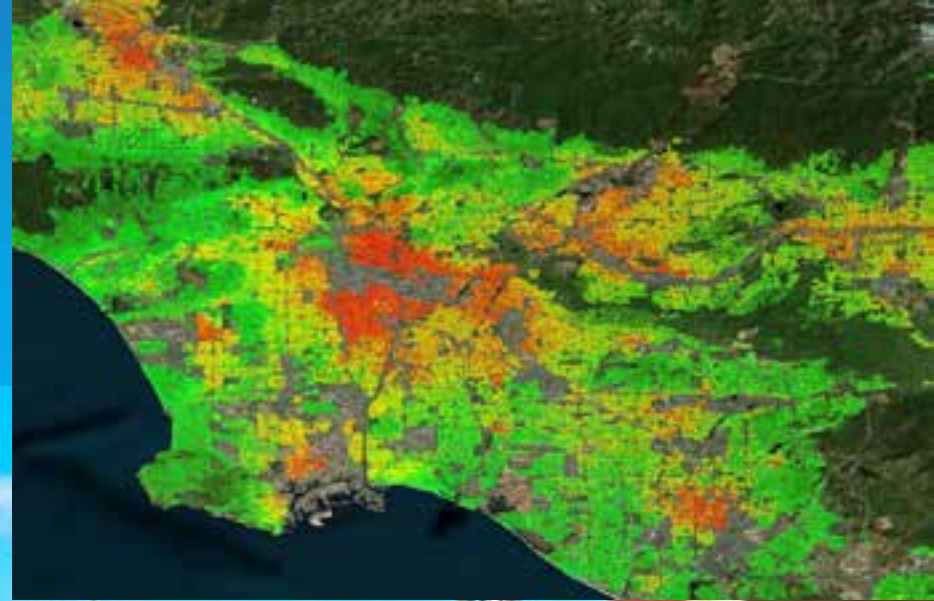
	Total Households Served	Currently Non-Served Households Served
Households Served:	981	656

Households Served by Annual Income		
Under \$25,000:	227	140
\$25,000 to \$34,999:	110	90
\$35,000 to \$49,999:	174	116

Phase II: Comprehensive Maps and Reports



- Enhance park analysis
- Integrate disparate data
- Accurately display facilities and amenities
- Create thematic maps
- Highlight needs
- Reduce cost
- Maximize resources



Data Collection Tool



- Add facilities and amenities in the field
- Edit attributes with mobile applications
- Assist with service requests



Systems Integration

- Track the Online Activity Catalog (OAC) users
- Determine location of those who use park resources
- Determine how programming impacts the surrounding community



Department of Recreation and Parks
ONLINE ACTIVITY CATALOG

Home | Activity Registration | Shopping Cart | Waiting List | Request Refund | My Profile | My Schedule | Help

06/08/2015 10:22 AM

Griffith Park Adult Community Center - Activity Registration

3008 RIVERSIDE DRIVE, LOS ANGELES, CA 90027 (323) 644-5979

You have accessed the Griffith Park Adult Community Center activity registration home page. Choose one of the following search options below to obtain information on activities that interest you.

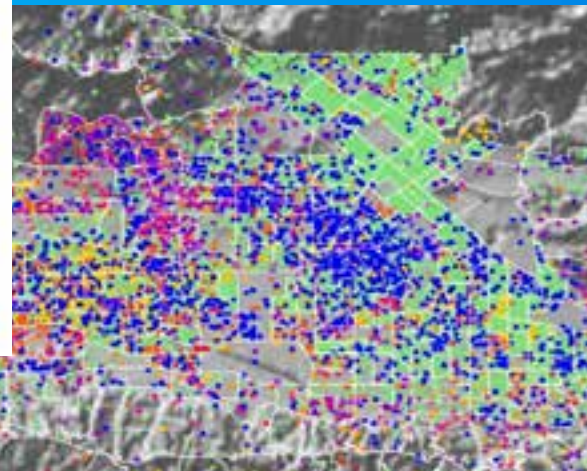
SEARCH BY ACTIVITY NAME: **GO >**

SEARCH BY TYPE AND AGE: and **GO >**

SEARCH BY ACTIVITY NUMBER: **GO >**

BROWSE THE ENTIRE ACTIVITIES CATALOG: **GO >**

Online Registration Home - Privacy Policy - Contact Us - Rap Home - LA City Home



Live!

GIS E-PADSS Demo

Alex Yee & Daniel Elroi

Support: Robert Pangilinan,
GIS Programmer



EQUITABLE
DECISION S

Equitable Parks and Amenities Decision

Welcome to the City of Los Angeles Department of Recreation and Parks E-PADSS System (E-PADSS). Click one of the links below.

For assistance, access to E-PADSS resources

Robert Pangilinan
213-202-3288
rob.pangilinan@lacity.org

E-PADSS Tools

[Performance Measurement Tool Results](#)

[Decision Support Application \(login required\)](#)

E-PADSS Documentation

[Decision Support Application User Guide](#)

Data Management Tools

[Park Entrance Editor for RAP Parks \(login required\)](#)

[Park Entrance Editor for Non-RAP Parks \(login required\)](#)

[Future Park Editor \(login required\)](#)



EQUITABLE PARKS & AMENITIES DECISION SUPPORT SYSTEM

Measuring Access to City of Los Angeles Parks

Alex Yee (alex.yee@lacity.org):

Director of Systems

Department of Recreation and Parks City of Los Angeles

Daniel Elroi (daniel@northsouthgis.com):

President & CEO

NorthSouth GIS LLC

