

Sacramento Area Council of Governments



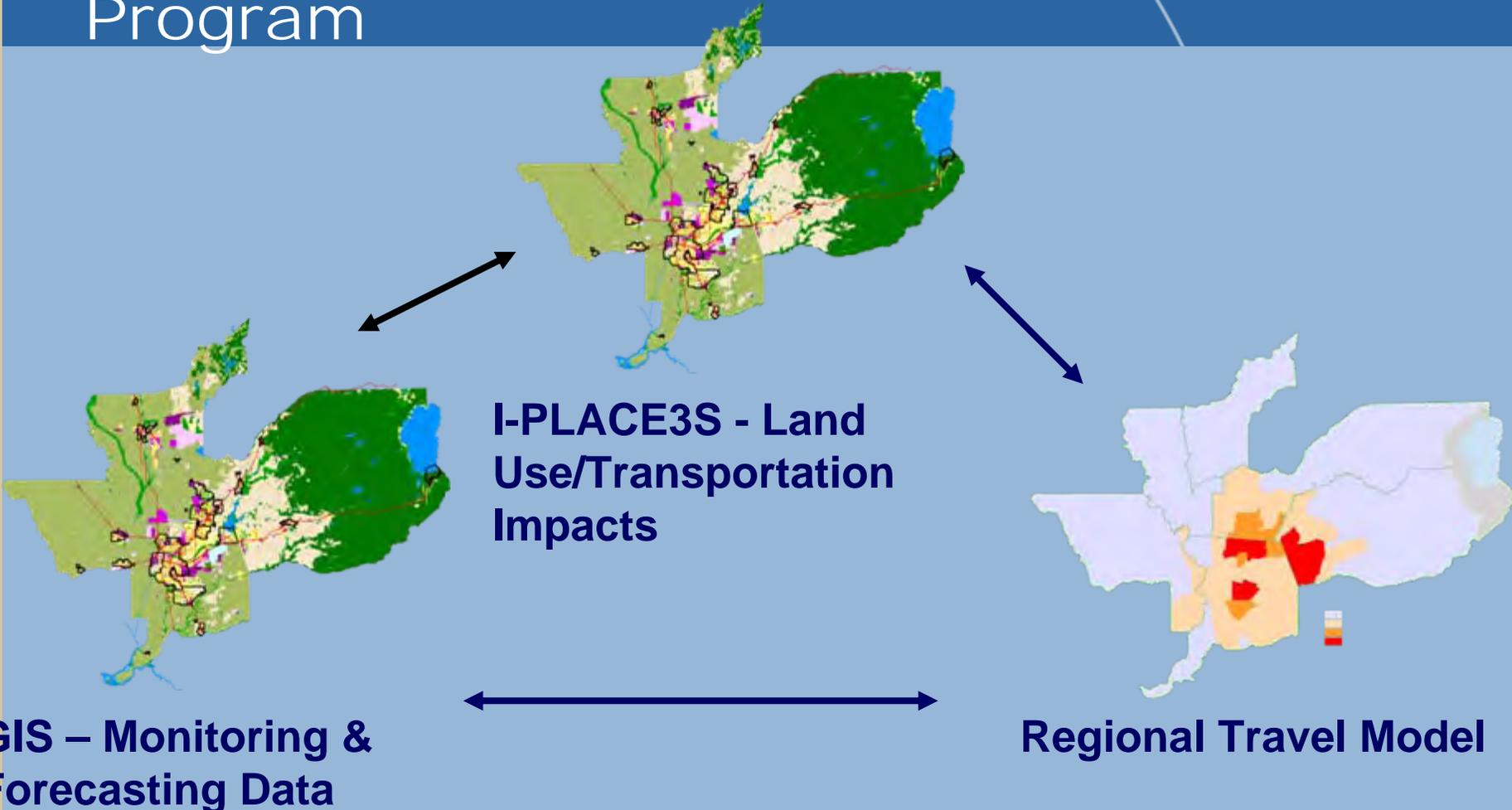
I-PLACE³S Overview

King County HealthScape Seminar

Gordon Garry, Sacramento Area Council of Governments

September 10, 2008

I-PLACE³S is One of Several Tools in SACOG's Modeling Program



I-PLACE³S Uses

Regional to Neighborhood-level applications



CLICK ON THE MAP TO PERFORM THE SELECTED ACTION!

Layers

- Highways
- Major Roads
- Minor Roads
- Parcel Lines

SUB-AREA LAYERS

- CITIES-2
- REGIONAL_SUBAREAS_080904
- RURAL_NODES_7/22/04_NEW

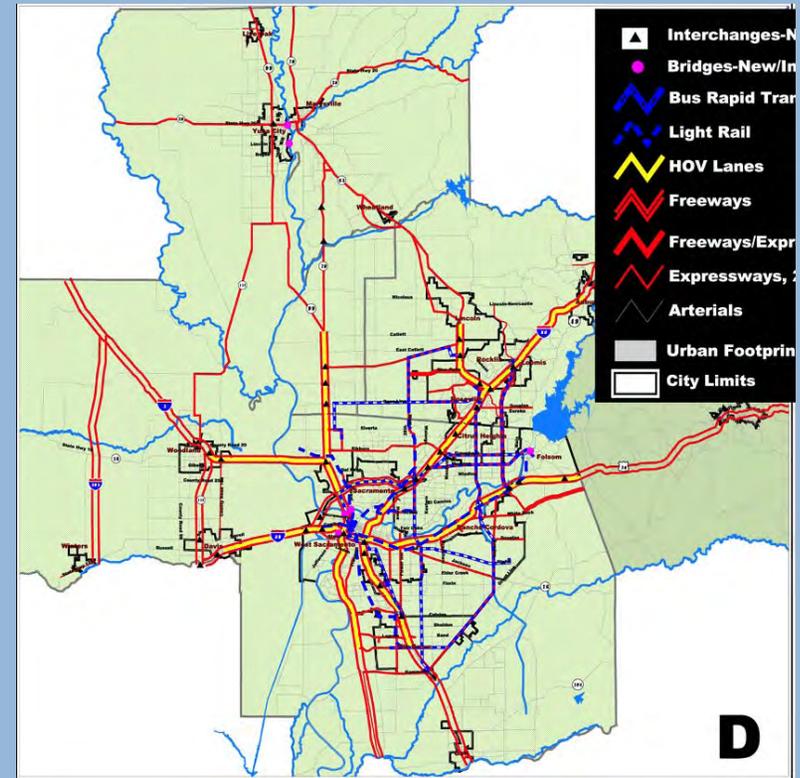
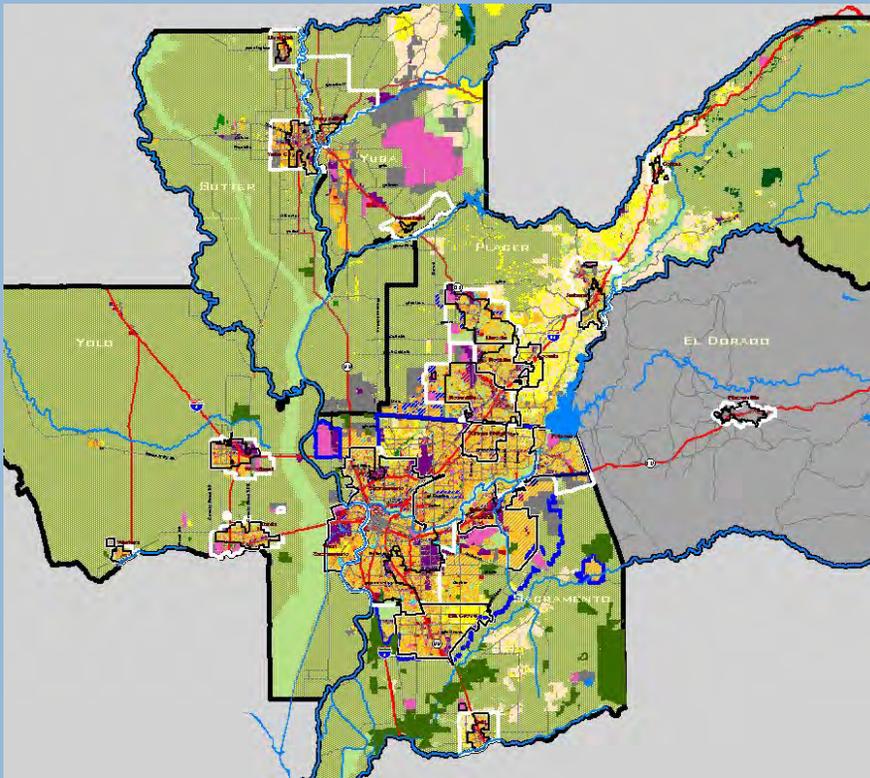
SUB-AREA QUERIES

- NONE

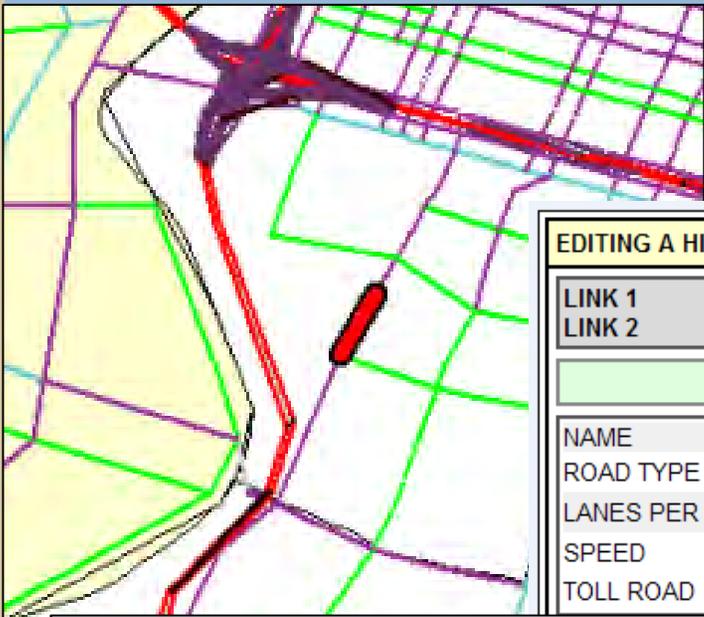
Map Size: 1X

Redraw

Regional Blueprint Land Use Scenarios



Regional Transportation Plan Public Workshops



EDITING A HIGHWAY LINK [EDIT DETAILS](#)

LINK 1	3823 : 3824
LINK 2	3824 : 3823

ENABLED - YES

NAME

ROAD TYPE: 4 - Minor Arterial

LANES PER DIRECTION: 1 LANE

SPEED: 35 MPH

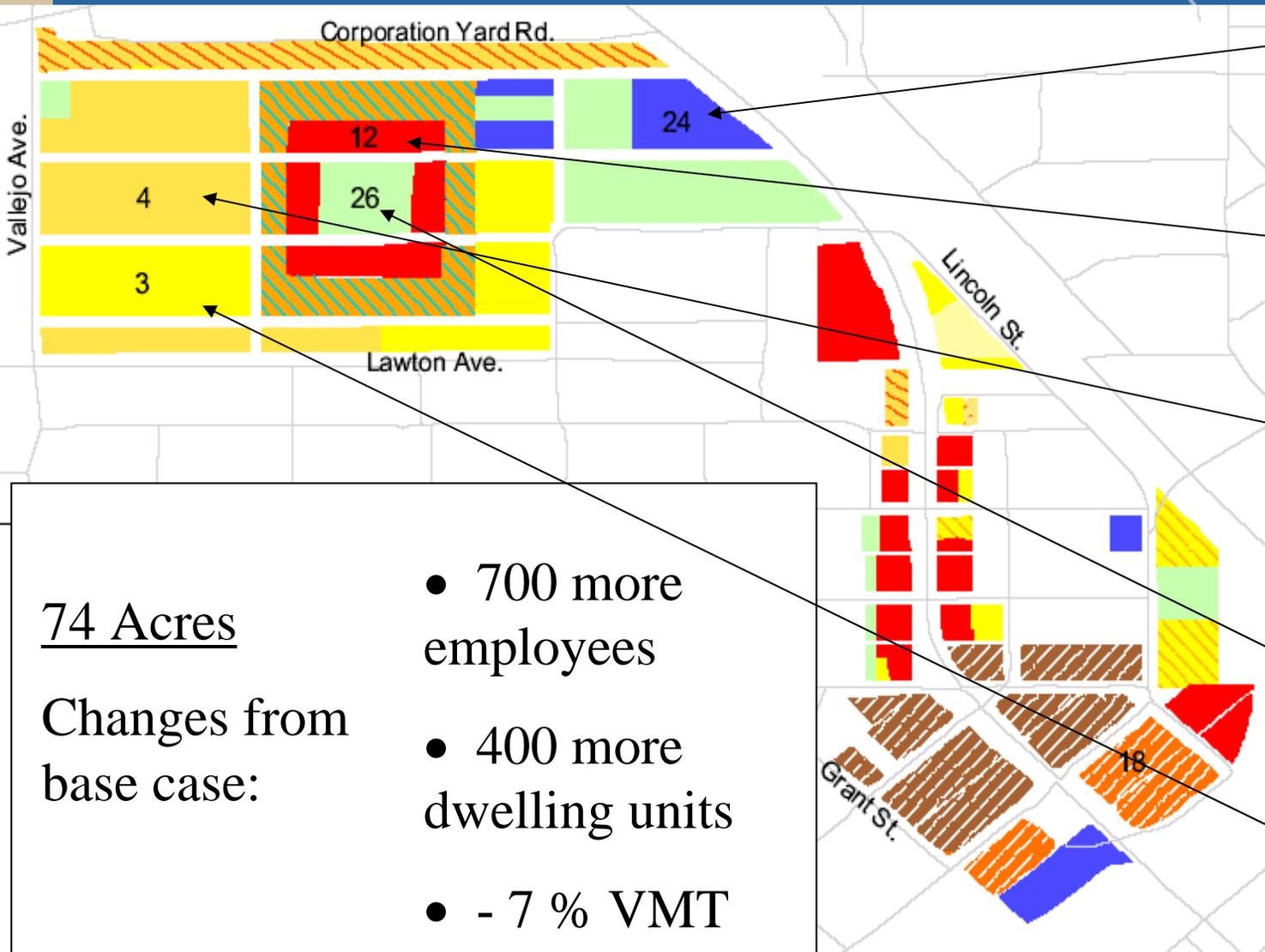
TOLL ROAD: YES NO

- Edit roadway links or roadway projects
- Edit transit routes

TRAVEL MODEL TRANSIT LINKS

LINK NAME	TRANSIT TYPE	ENABLED	FREQ1	FREQ2
001	Local Bus	<input checked="" type="checkbox"/>	15	30
003	Local Bus	<input checked="" type="checkbox"/>	15	0
004	Local Bus	<input checked="" type="checkbox"/>	60	60
007	Local Bus	<input checked="" type="checkbox"/>	45	0
009B	Local Bus	<input checked="" type="checkbox"/>	60	60

Neighborhood Study Area Land Use Scenario



74 Acres

Changes from
base case:

- 700 more employees
- 400 more dwelling units
- - 7 % VMT

Key Land Uses Featured



24 Public/Civic/
Education



12 Community/
Neighborhood Retail



4 Small Lot Single
Family Residential



26 Parks



3 Medium Lot Single
Family Residential

Local Land Use Plan Updates



- Two cities used I-PLACE³S to develop General Plan land use scenarios

SACRAMENTO
GENERAL PLAN NEWSLETTER
VOL. 2 / SEPTEMBER 2005
Creating the Most Livable City in America

Residents Help Shape Sacramento's Future at Town Hall Forums

More than a thousand Sacramento residents responded to the City's challenge to get involved in planning Sacramento's future by participating in one of the scheduled Town Hall Forums. The 14 forums were held throughout the City during May and June.

Participants at the interactive forums studied aerial maps of their neighborhoods, marking areas they viewed as community assets and bringing attention to areas they felt needed improvements. Participants voiced their thoughts and ideas about the City and neighborhoods, expressed their concerns, and identified the characteristics they felt make a neighborhood a great place to live.

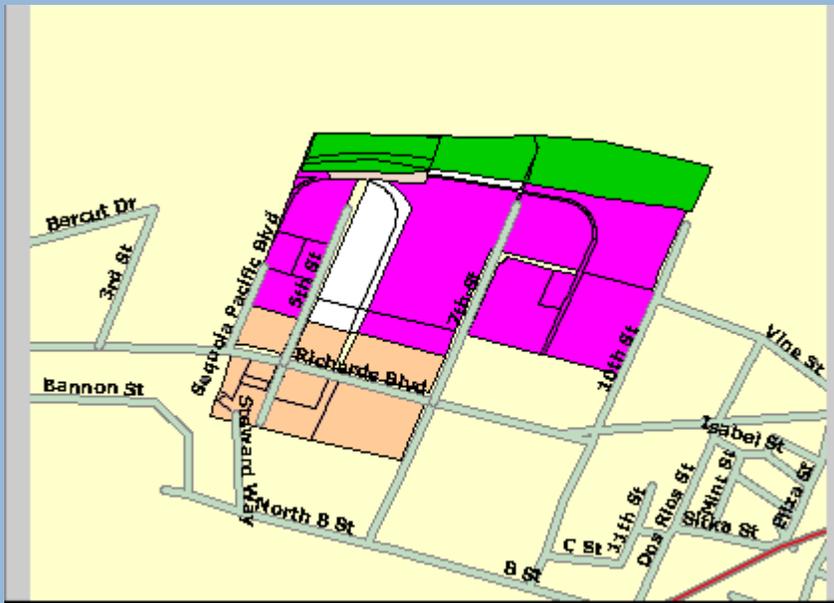
Residents listen attentively as City staff introduces the General Plan process at a Town Hall Forum.

Three Things We Heard From You

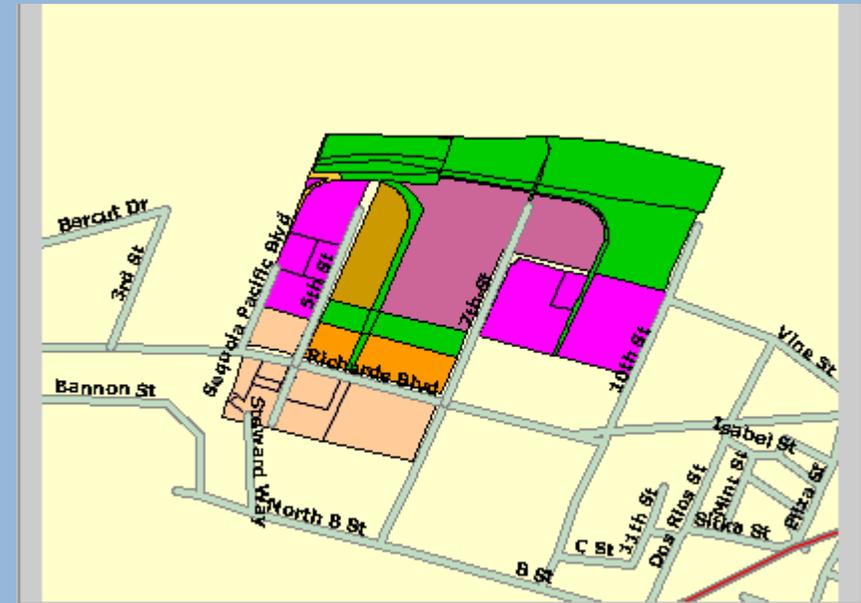
Throughout the 14 Town Hall Forums, participants shared their views and concerns. The top three issues you expressed are:

- 1) Making sure that we have safe neighborhoods
- 2) Increasing mixed-use and higher density developments around light rail stations and along commercial corridors
- 3) Distribution of affordable housing throughout the City

Blueprint Development Review



- BASE CASE



- MIXED RETAIL/RESIDENTIAL

SCENARIO COMPARISON

SCENARIO NAME	TOTAL EMPLOYEE			TOTAL DWELLING UNIT			VMT PER HOUSEHOLD CHANGE	VMT PER RETAIL JOB CHANGE	VMT PER NON-RETAIL JOB CHANGE	TRANSIT CHANGE	PED/BIKE CHANGE
	CHANGE	EMPLOYEES	PER ACRE	CHANGE	UNITS	UNITS PER ACRE					
BASE CASE	0	2,209	21.16	0	2	1.07	0%	0%	0%	0.0%	0.0%
MIXED RETAIL/RESIDENTIAL	-604	1,605	29.46	+2,999	3,001	72.27	-56%	-85%	-64%	+0.6%	+6.2%

“Place Types” are the Building Blocks



RESIDENTIAL BUILDING TYPES							
1	Rural Residential			2	1	—	Rural residential includes very large lot residential (1 acre per lot).
2	Large Lot Single Family Residential			1	4	—	Arden Park has mainly large lots in the 1/2 to 1/3 acre size. Gardenland (South Natomas) has grid-streets with 1 acre lots and small houses.
3	Medium Lot Single Family Residential			2	6	—	Standard single family lot of 52x100 min. Allows cul-de-sacs or grid patterns, w/cul-de-sac subdivisions at low end of range. Curtis Park at high end of range.
4	Small Lot Single Family Residential			2	12	—	Small lot subdivisions: Villa Palazzo in Pocket (3,500 sqft lots), standard lots in Laguna West and some low density suburban garden apartments.
5(O)	Townhouse (Owner)			3	15	—	Metro Square in midtown is detached townhouse project at approx. 20 DU/ac. Most standard 2-story apts w/ surface parking are in this range.
5(R)	Townhouse (Rental)						
6(O)	Low-Rise Condos (Owner)			2	24	—	2+ story attached units with structured parking (e.g., suck-under).
6(R)	Low-Rise Apartments (Rental)						
7(O)	Mid-Rise Condos (Owner)			3	35	—	3 story mid-level development. Less space dedicated to landscaping; more frontage on street.
7(R)	Mid-Rise Apartments (Rental)						
8(O)	High-Rise Condos (Owner)			6	66	—	6 story development with structured parking. Buildings include elevators, interior courtyards, and hallways.
8(R)	High-Rise Apartments (Rental)						
9(O)	Urban Condos (Owner)			10	105	—	10 story urban development. Buildings may include a health facility, door man, etc.
9(R)	Urban Apartments (Rental)						

User-Defined, includes:

- Inventoried allowed land uses
- Land uses that might not yet exist in codes (e.g. mixed use)

User Defines Place Type Physical Assumptions



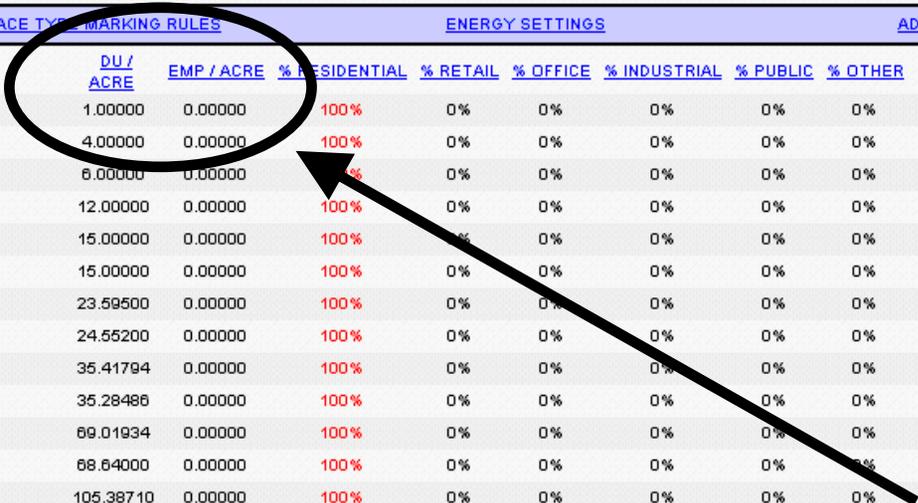
18 Mixed-use
Employment Focus
High-rise

PERCENT OF PLACE TYPE BY SECTOR					
% RESIDENTIAL	% RETAIL	% OFFICE	% INDUSTRIAL	% PUBLIC	% OTHER
45%	40%	15%	0%	0%	0%
	RESTARAUNTS	GOVERNMENT		EDUCATION	
	33.33333%	0%		0%	
	RETAIL	OFFICE		MEDICAL	
	33.33333%	100%		0%	
	SERVICE	SERVICE		GOVERNMENT	
	33.33333%	0%		0%	
		MEDICAL			
		0%			
SQUARE FOOTAGE BY SECTOR					
RESIDENTIAL	RETAIL	OFFICE	INDUSTRIAL	PUBLIC	OTHER
900	250	300	0	0	0
PARKING RATIOS PER 1000 SQ FT OR PER DWELLING UNIT					
RESIDENTIAL	RETAIL	OFFICE	INDUSTRIAL	PUBLIC	OTHER
1.5	4	3	0	0	0
PARKING TYPES DISTRIBUTION (# OF LEVELS)					
ABOVE GROUND PARKING		UNDER BUILDING PARKING		TUCKUNDER PARKING	
2		0		0	
MISCELLANEOUS SETTINGS					
LANDSCAPING / SETBACK (%)		UNDERBUILD (%)		SQFT PER PARKING SPACE	
15		100		325	
RESIDENTIAL TYPE	AVG LOT SIZE	MAXIMUM HEIGHT (# OF STORIES)	# OF BEDROOMS		
Attached	0	3			
ACCESSORY UNITS		EXISTING UNITS ACCESSORY RATIO		NEW ACCESSORY RATIO	
<input type="radio"/> YES <input checked="" type="radio"/> NO		1		1	

I-PLACE³S Provides Calculated Yield

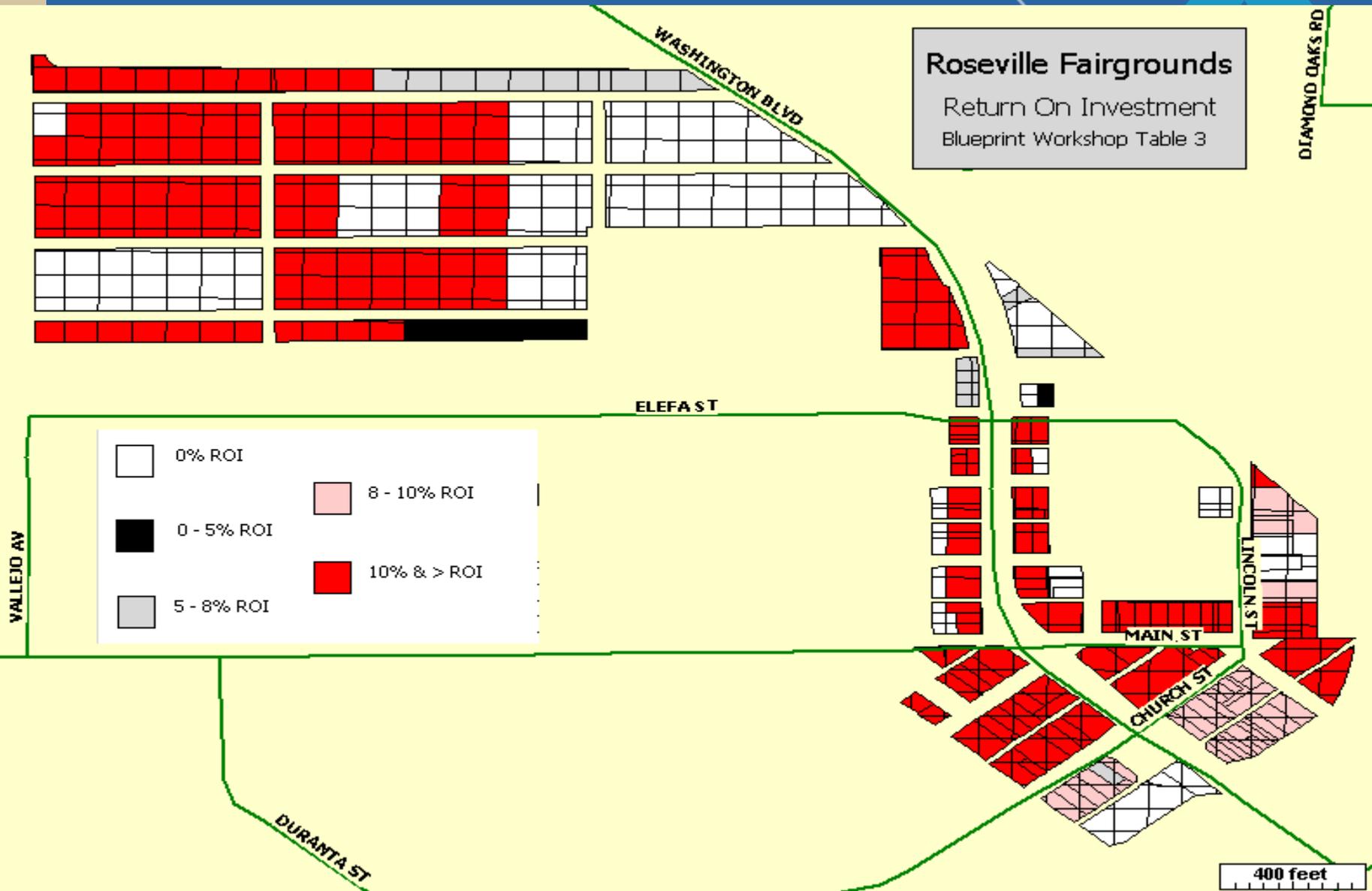


PLACE TYPES		PLACE TYPE MARKING RULES			ENERGY SETTINGS					ADD NEW PLACE TYPE
PLACE TYPE NAME	DU / ACRE	EMP / ACRE	% RESIDENTIAL	% RETAIL	% OFFICE	% INDUSTRIAL	% PUBLIC	% OTHER	FLOOR AREA RATIO	
1. RURAL RESIDENTIAL	1.00000	0.00000	100%	0%	0%	0%	0%	0%	0.09	
2. LARGE LOT SINGLE FAMILY RESIDENTIAL	4.00000	0.00000	100%	0%	0%	0%	0%	0%	0.28	
3. MEDIUM LOT SINGLE FAMILY RESIDENTIAL	6.00000	0.00000	100%	0%	0%	0%	0%	0%	0.34	
4. SMALL LOT SINGLE FAMILY RESIDENTIAL	12.00000	0.00000	100%	0%	0%	0%	0%	0%	0.47	
5(O). TOWNHOUSE (OWNER)	15.00000	0.00000	100%	0%	0%	0%	0%	0%	0.48	
5(R). TOWNHOUSE (RENTAL)	15.00000	0.00000	100%	0%	0%	0%	0%	0%	0.41	
6(O). LOW-RISE CONDOS (OWNER)	23.59500	0.00000	100%	0%	0%	0%	0%	0%	0.65	
6(R). LOW-RISE APARTMENTS (RENTAL)	24.55200	0.00000	100%	0%	0%	0%	0%	0%	0.56	
7(O). MID-RISE CONDOS (OWNER)	35.41794	0.00000	100%	0%	0%	0%	0%	0%	0.89	
7(R). MID-RISE APARTMENTS (RENTALS)	35.28486	0.00000	100%	0%	0%	0%	0%	0%	0.77	
8(O). HIGH-RISE CONDOS (OWNER)	69.01934	0.00000	100%	0%	0%	0%	0%	0%	1.58	
8(R). HIGH-RISE APARTMENTS (RENTAL)	68.64000	0.00000	100%	0%	0%	0%	0%	0%	1.42	
9(O). URBAN CONDOS (OWNER)	105.38710	0.00000	100%	0%	0%	0%	0%	0%	2.30	
9(R). URBAN APARTMENTS (RENTAL)	105.68656	0.00000	100%	0%	0%	0%	0%	0%		
10. MID-RISE OFFICE	0.00000	54.15769	0%	5%	95%	0%				
11. HIGH-RISE OFFICE	0.00000	154.62889	0%	5%	95%	0%				
12. COMMUNITY/NEIGHBORHOOD RETAIL	0.00000	47.39328	0%	100%	0%	0%				
13. HOTEL	0.00000	74.50534	0%	65%	35%	0%				
14(O). HORIZONTAL MIXED USE	6.00000	33.60000	50%	50%	0%	0%				
15(O). LIVE/WORK (OWNER)	22.47015	22.47015	80%	0%	20%	0%				
15(R). LIVE/WORK (RENTAL)	23.39716	23.39716	80%	0%	20%	0%				
16(O). MIXED USE RESIDENTIAL FOCUS MID-RISE (OWNER)	23.28871	39.62556	67%	25%	8%	0%	0%	0%	0.72	
16(R). MIXED USE RESIDENTIAL FOCUS MID-RISE (RENTAL)	23.28871	39.62556	67%	25%	8%	0%	0%	0%	0.72	
17(O). MIXED USE RESIDENTIAL FOCUS HIGH-RISE (OWNER)	85.10470	83.14075	78%	17%	5%	0%	0%	0%	2.25	
17(R). MIXED USE RESIDENTIAL FOCUS HIGH-RISE (RENTAL)	85.10470	83.14075	78%	17%	5%	0%	0%	0%	2.25	
18. MIXED USE EMPLOYMENT FOCUS MID-RISE	13.28327	54.54995	45%	33%	22%	0%	0%	0%	0.61	



Calculated Maximum Dwelling Units/Acre and Employees/Acre

Return on Investment



Other Parameters and Variables



CONSTRAINTS					BACK TO CONSTRAINT MANAGER
PRIORITY	CONSTRAINT NAME	FIELD NAME	PERCENT	ACRES AFFECTED	
0	HARDWOODS	HAR_CODE	100	1,742.32 ACRES	[DELETE CONSTRAINT]
0	WETLANDS	WET_CODE	100	2,218.36 ACRES	[DELETE CONSTRAINT]
0	VERNAL POOLS	VER_CODE	100	149.62 ACRES	[DELETE CONSTRAINT]
0	STREAMS	STR_CODE	100	1,754.81 ACRES	[DELETE CONSTRAINT]

- Define Constrained Lands

PLACE³S

100% 2X ZOOM IN 2X PAN IDENTIFY Parcel

% COV 100% REDEV MODE % DENS 100% % ACRES 100% FACE TYPE - LEGEND Residential

CLICK ON THE MAP TO PERFORM THE SELECTED ACTION

Roads
 Parcel Lines

SUB-AREA QUERIES

NONE
 PARCELS CHANGED

Map Size: 1X

- Vary development densities (gross and net)

- Redevelopment Rate



Basic Data Needs

- General Plan or Zoning designations
- Existing Conditions:
 - Housing Units
 - Employees
 - Land uses
- Growth forecast:
 - Housing Units
 - Employees
- Parcel data
- Environmental Constraints
- Subarea shapefiles for reporting and analysis

Building Scenarios



- One Set of Tools, Two Applications
 - Scenario Building to establish alternatives from ground up
 - Public Workshops to evaluate and refine scenarios

Blueprint Planning Land Use Alternatives



RESIDENTIAL BUILDING TYPES							
1	Rural Residential			2	1	-	Rural residential includes very large lot residential (1 acre per lot).
2	Large Lot Single Family Residential			1	4	-	Alden Park has mainly large lots in the 1/2 to 1/3 acre size. Gardenland (South Natomas) has grid-streets with 1 acre
3	Medium Lot Single Family Residential			2	6		
4	Small Lot Single Family Residential			2	12		
5(O)	Townhouse (Owner)			3	15		
5(R)	Townhouse (Rental)			3	15		
6(O)	Low-Rise Condos (Owner)			2	24		
6(R)	Low-Rise Apartments (Rental)			2	24		
7(O)	Mid-Rise Condos (Owner)			3	35		
7(R)	Mid-Rise Apartments (Rental)			3	35		
8(O)	High-Rise Condos (Owner)			6	66		
8(R)	High-Rise Apartments (Rental)			6	66		
9(O)	Urban Condos (Owner)			10	105		
9(R)	Urban Apartments (Rental)			10	105		

LAND USE CHIP SET												
1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4
5(O)	5(O)	5(O)	5(O)	5(O)	5(O)	5(O)	5(O)	5(O)	5(O)	5(O)	5(O)	5(O)
5(R)	5(R)	5(R)	5(R)	5(R)	5(R)	5(R)	5(R)	5(R)	5(R)	5(R)	5(R)	5(R)
6(O)	6(O)	6(O)	6(O)	6(O)	6(O)	6(O)	6(O)	6(O)	6(O)	6(O)	6(O)	6(O)
6(R)	6(R)	6(R)	6(R)	6(R)	6(R)	6(R)	6(R)	6(R)	6(R)	6(R)	6(R)	6(R)
7(O)	7(O)	7(O)	7(O)	7(O)	7(O)	7(O)	7(O)	7(O)	7(O)	7(O)	7(O)	7(O)
7(R)	7(R)	7(R)	7(R)	7(R)	7(R)	7(R)	7(R)	7(R)	7(R)	7(R)	7(R)	7(R)
8(O)	8(O)	8(O)	8(O)	8(O)	8(O)	8(O)	8(O)	8(O)	8(O)	8(O)	8(O)	8(O)
8(R)	8(R)	8(R)	8(R)	8(R)	8(R)	8(R)	8(R)	8(R)	8(R)	8(R)	8(R)	8(R)
9(O)	9(O)	9(O)	9(O)	9(O)	9(O)	9(O)	9(O)	9(O)	9(O)	9(O)	9(O)	9(O)
9(R)	9(R)	9(R)	9(R)	9(R)	9(R)	9(R)	9(R)	9(R)	9(R)	9(R)	9(R)	9(R)
10	10	10	10	10	10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13	13	13	13	13	13



Building Scenarios



MAIN MENU | CHANGE PASSWORD | LOGOUT

PLACE³S

ZOOMIN 2X ZOOMOUT 2X PAN IDENTIFY
Parcel

50% REDEVELOPMENT MODE MARK PLACE TYPE 95%
A. Rural Residential* [PLACE](#)
[TYPE LEGEND](#)

Layers CLICK ON THE MAP TO PERFORM THE SELECTED ACTION!

- Highways
- Major Roads
- Minor Roads
- Parcel Lines

SUB-AREA LAYERS

- 160-ACRE GRIDS
- LRT_STATIONS

SUB-AREA QUERIES

- NONE

Map Size: 1X

SAC SCENARIO D EAST - TABLE 15

[BACK TO SCENARIO DETAIL MENU](#) [ZOOM TO SCENARIO EXTENT](#)

User Applies Place Types to study area via:

- Map
- Query
- Overlay

Building Scenarios



- User Decides Scenario Parameters
 - How much growth?
 - What principles will be used to shape the growth?
 - What is the housing stock?

- User Allocates Growth
 - Where will the growth go?

Performance Measures to Compare Alternative Planning Scenarios



- Total jobs and dwelling units
- Density by land use type
- Mix of uses (defined by land use type)
- Economic feasibility (Return on Investment)
- Vehicle mile traveled and vehicle trips per household
- Change in walk/bike and transit mode shares
- Export data to regional travel model
- Mobile source air emissions

Compare Alternative Land Use Scenarios



[MAIN MENU](#) | [CHANGE PASSWORD](#) | [LOGOUT](#)

PLACE³S

CURRENT PROJECT YOLO REGIONALS	PROJECT TYPE NEIGHBORHOOD	LEAD ORGANIZATION SACOG	STU CUS
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CURRENT SCENARIO : [BASE CASE](#)

MARK THE SCENARIOS YOU WISH TO COMPARE

SCENARIO NAME	CREATE DATE	DESCRIPTION
<input type="checkbox"/> BASE CASE	2/23/2004 10:36:37 AM	SCENARIO C - REVISED NO CONS
<input type="checkbox"/> REGIONAL B	2/23/2004 10:53:07 AM	YOLO C W/ CONSTRAINTS, AND C
<input type="checkbox"/> COPY OF REGIONAL B	3/2/2004 7:20:12 AM	YOLO SCENARIO C
<input type="checkbox"/> REGIONAL D	3/2/2004 7:22:23 AM	YOLO SCENARIO D W/ G TO N AM
<input type="checkbox"/> REGIONAL C	3/4/2004 9:35:48 AM	REVISED COUNTY D
<input type="checkbox"/> NEW COPY OF REGIONAL B	4/1/2004 9:12:19 AM	
<input type="checkbox"/> NEW COPY OF REGIONAL D	4/1/2004 9:17:34 AM	
<input type="checkbox"/> NEW COPY OF REGIONAL C	4/1/2004 9:20:44 AM	
<input type="checkbox"/> PREFERRED REGIONAL C	6/11/2004 9:22:27 AM	PREF ALT TO USE
<input type="checkbox"/> PREFERRED SCENARIO COPY	7/12/2004 4:09:44 PM	
<input type="checkbox"/> PREFERRED SCENARIO (WEST SAC CHANGES)	7/12/2004 4:48:41 PM	

CONTINUE WITH COMPARISON

INDICATORS TO COMPARE

INDICATOR NAME

- TOTAL ACRES
- TOTAL EMPLOYEE CHANGE
- TOTAL EMPLOYEES
- TOTAL RESIDENTS
- ACRES W/EMPLOYMENT
- ACRES W/DWELLING UNITS
- EMPLOYEES PER ACRE
- EMPLOYEES PER DWELLING UNIT
- DWELLING UNITS PER EMPLOYEE
- TOTAL DWELLING UNIT CHANGE
- TOTAL DWELLING UNITS
- DWELLING UNITS PER ACRE
- ATTACHED DWELLING UNITS
- DETACHED DWELLING UNITS
- ACCESSORY UNITS
- RESIDENTS PER ACRE
- JOBS PER HOUSEHOLD
- WATER CONSUMPTION
- EMPLOYMENT FLOOR AREA RATIO
- RETAIL JOBS
- OFFICE JOBS
- INDUSTRIAL JOBS
- PUBLIC JOBS
- OTHER JOBS

- TRANSIT FRIENDLINESS
- PEDESTRIAN FRIENDLINESS
- FEET OF BIKEWAYS PER CAPITA
- TOTAL POPULATION
- TOTAL RETAIL EMPLOYEES
- TOTAL NON-RETAIL EMPLOYEES
- TOTAL POPULATION CHANGE
- TOTAL RETAIL EMPLOYEES CHANGE
- TOTAL NON-RETAIL EMPLOYEES CHANGE
- TRIPS PER HOUSEHOLD
- TRIPS PER HOUSEHOLD CHANGE
- VMT PER HOUSEHOLD
- VMT PER HOUSEHOLD CHANGE
- VMT TOTAL
- MODE SPLIT
- ACRES REDEVELOPED
- DWELLING UNITS (REDEVELOPED)
- EMPLOYEES (REDEVELOPED)
- ORIGINAL DWELLING UNITS (REDEVELOPED)
- ORIGINAL EMPLOYEES (REDEVELOPED)
- DWELLING UNITS CHANGE (REDEVELOPED)
- EMPLOYEES CHANGE (REDEVELOPED)

REPORT TYPE

- WEB REPORT
- EXCEL SPREADSHEET

New Module: I-PLACE³S Energy Module



[MAIN MENU](#) | [CHANGE PASSWORD](#) | [LOGOUT](#)

PLACE³S

PROJECT ENERGY MANAGER

CURRENT PROJECT RAILYARDS ENERGY TESTING 2	PROJECT TYPE NEIGHBORHOOD	LEAD ORGANIZATION	STUDY AREA CUSTOM STUDY SHAPEFILE
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PROJECT ENERGY MANAGER

INITIAL PROJECT SETUP

INITIAL PROJECT ENERGY SETUP COMPLETE

YEAR BUILT SETTINGS

Use "Median Year Built" from Census Data
 Use a Field From Project Shapefile:
 Use Year Built Data Table (SANDAG)

PUBLIC UTILITY DISTRICT SETTINGS

PUD NAME	LBS CO2 / MWh	LBS NO _x / MWh	LBS SO ₂ / MWh
SMUD	769	0	0

PLACE TYPE SETTINGS

[PLACE TY](#)

ENERGY SECTOR PERCENTAGES

PLACE TYPE NAME	# STORIES	AVG DU SIZE (SQFT)	USEABLE ROOF %	ROOF TILT (DEGREES)	RESIDENTIAL								
					Detached	Group Home	≥ 3 Stories	≤ 3 Stories	Mobile Home	Rural	Townhouse	Assemb	
MF - HIGH-RISE INTENSE RESIDENTIAL	10	1100	60%	0°	100%								
MF - HIGH RISE INTENSE URBAN 5 RESIDENTIAL	8	1100	60%	0°			95%						
MF - HIGH RISE INTENSE URBAN RESIDENTIAL - PARCEL 2	8	1100	60%	0°			96%						

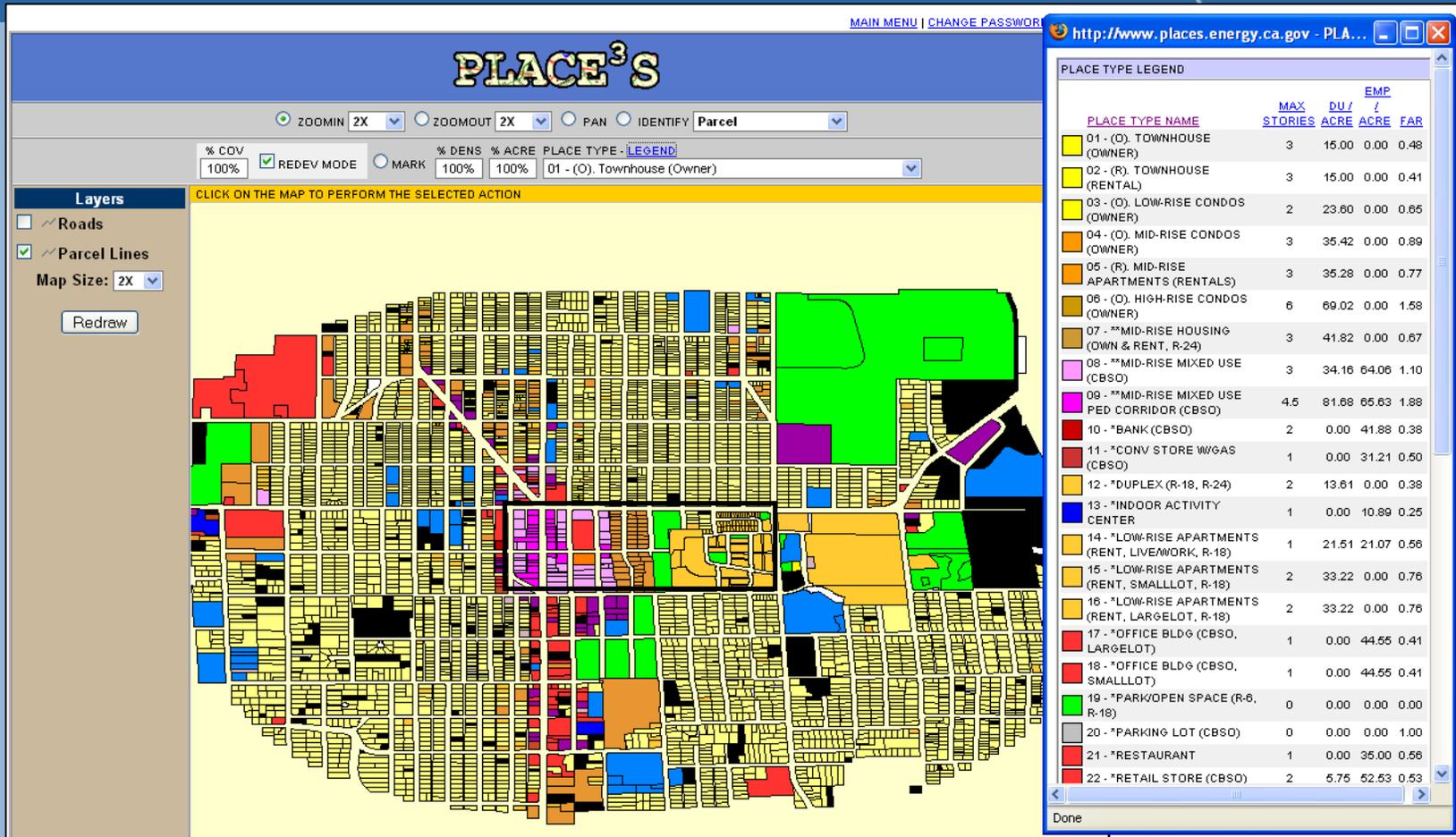
Place Type Energy Settings - The I-PLACE³S Energy Module has energy usage information for various "sector types". Place types must be mapped to these sector types in order to determine the energy usage for each place type.

Future Applications Under Development



- Rural landscapes evaluation
- CO₂ emissions calculation added to I-PLACE³S
SACMET travel model
- Infrastructure costs impacts

The White Center/ 98th Street Corridor Study



New Modules Developed Through This Study



Public health (outcomes: physical activity, BMI, walk and bike trips)

Climate change and air quality (outcomes: CO₂, NOX, HC, and CO; vehicle trips and VMT)

Physical Activity and BMI Module (Person Inputs)



- Demographics
 - Number of adults in household
 - Employment status
 - Number of children in household
- Ratio of adults to cars
- Household income
- Access to transit
- Intersection density
- Area housing density
- Area land use mix
- Park availability
- Area retail and fast food establishments

Climate Change Module (Household Inputs)



- Household demographics
 - Working adults
 - Non-working adults
 - Children
- Household Income
- Access to transit
- Area intersection density
- Household area density
- Area mix of land uses

I-PLACE³S Demographic Variables



[MAIN MENU](#) | [CHANGE PASSWORD](#) | [LOGOUT](#)

PLACE³S

ZOOMIN **2X** | ZOOMOUT **2X** | PAN | IDENTIFY **Parcel**

% COV **100%** | REDEV MODE | MARK | % DENS **100%** | % ACREPLACE TYPE - [LEGEND](#) | **01 - (O). Townhouse (Owner)**

Layers

Roads

Parcel Lines

SUB-AREA LAYERS

SHOW LABELS

RAD DUMMY FILE

Map Size: **1X**

CLICK ON THE MAP TO PERFORM THE SELECTED ACTION

<u>FIELD NAME</u>	<u>FIELD DESCRIPTION</u>
GEOG_NAME	THIS IS THE NAME OF EACH SUB-AREA
OPTYPE	PLACE TYPE NAME
HHWRK	NUMBER OF WORKERS IN HH
HHNWRK	NUMBER OF NON-WORKERS IN HH
HHKIDS	NUMBER OF CHILDREN IN HH
HHINC1	HOUSEHOLD INCOME 1
HHINC2	HOUSEHOLD INCOME 2
HHCAR	NUMBER OF CARS OWNED BY HH

HEALTH TEST - BUILDOUT

[SCENARIO DETAIL MENU](#) | [ZOOM TO SCENARIO EXTENT](#)
[PROJECT DETAIL MENU](#) | [EDIT SCENARIO INFORMATION](#)

[QUICK INDICATORS](#) | [VIEW / SAVE THIS MAP IMAGE](#)

2.984 s