Who Among the Potential Eligible are <u>**Not**</u> Receiving CalFresh?

Application of Neighborhood and Community-Level CalFresh Participation Measures

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PART I
Objectives of Today's Presentation

❖ **Show differences in CalFresh access at below county levels – *census tracts,* zip codes, *neighborhoods, etc.***

❖ **Highlight population subgroups having CalFresh access lower than expected based on poverty levels.**

❖ **Highlight the causes of spatial dissimilarities in CalFresh access using statistical analysis.**

❖ **Seek further directions on next steps, and taking this analysis outside CDSS.**

The Issue!

- **Socio-economic indicators at the county level rarely show significant correlations with CalFresh access.**

- **Existing research methods and capabilities limited our capacity to produce usable information at neighborhood levels.**

- **Geocoding analytics allow us to assemble a rich data set using a variety of resources.**

Objectives of Today's Presentation

❖ **Show differences in CalFresh access at below county levels –** *census tracts,* **zip codes,** *neighborhoods, etc* *using* **geocoding** *analytics.*

❖ **Highlight population subgroups having CalFresh access lower than expected based on poverty levels using** **geocoding** **analytics.**

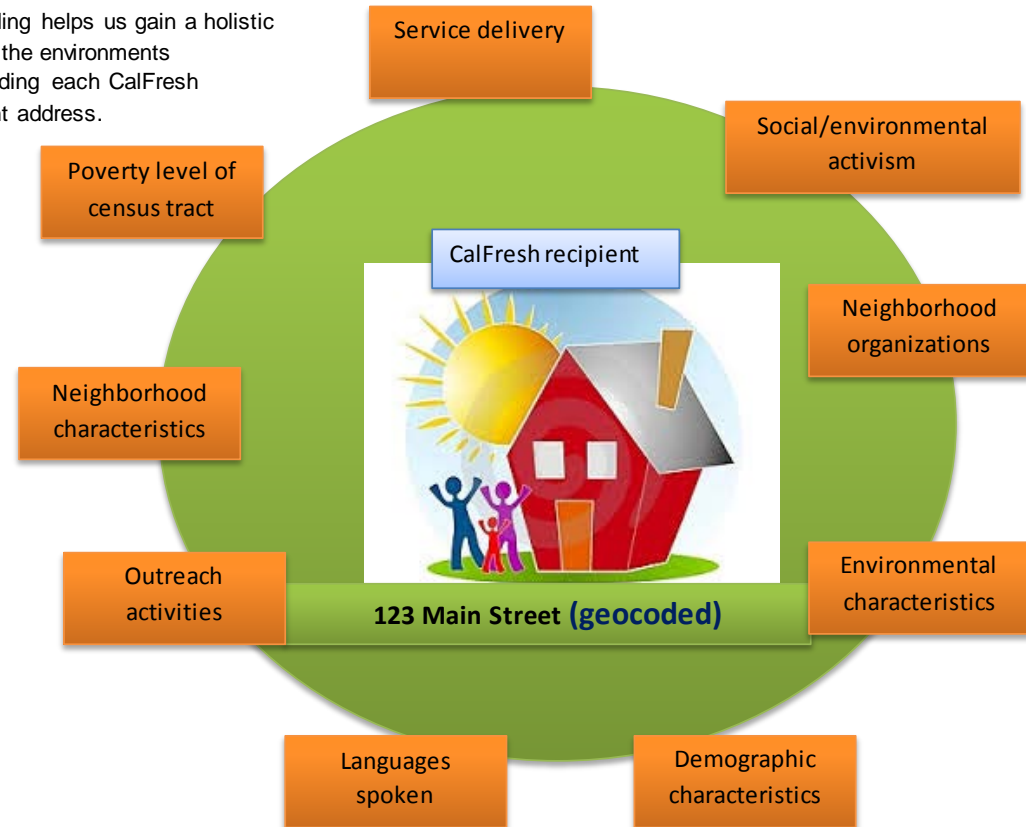# Geocoding

Gecoding is a technique that can help us:

I.   map recipient level data, and
II.   assess CalFresh reach at community levels.

Based on the poverty estimates for an area, this spatial analytical tool will enable us to identify places:

- where potential CalFresh eligibles reside,
- where CalFresh reach is low, and more importantly,
- where more effective and targeted outreach strategies could be directed.

Why geocode?

Geocoding helps us gain a holistic view of the environments surrounding each CalFresh recipient address.

Service delivery

Social/environmental activism

Poverty level of census tract

Neighborhood organizations

CalFresh recipient

Neighborhood characteristics

Environmental characteristics

Outreach activities

123 Main Street (geocoded)

Languages spoken

Demographic characteristics

Image source: http://jags-webdesign.com/home-clipart-image-stick-family-

Exploring Causes of Spatial Dissimilarities: A six-county Analysis

- **Background Information**

  - **Accounts for roughly a third of the State's total and CalFresh population.**

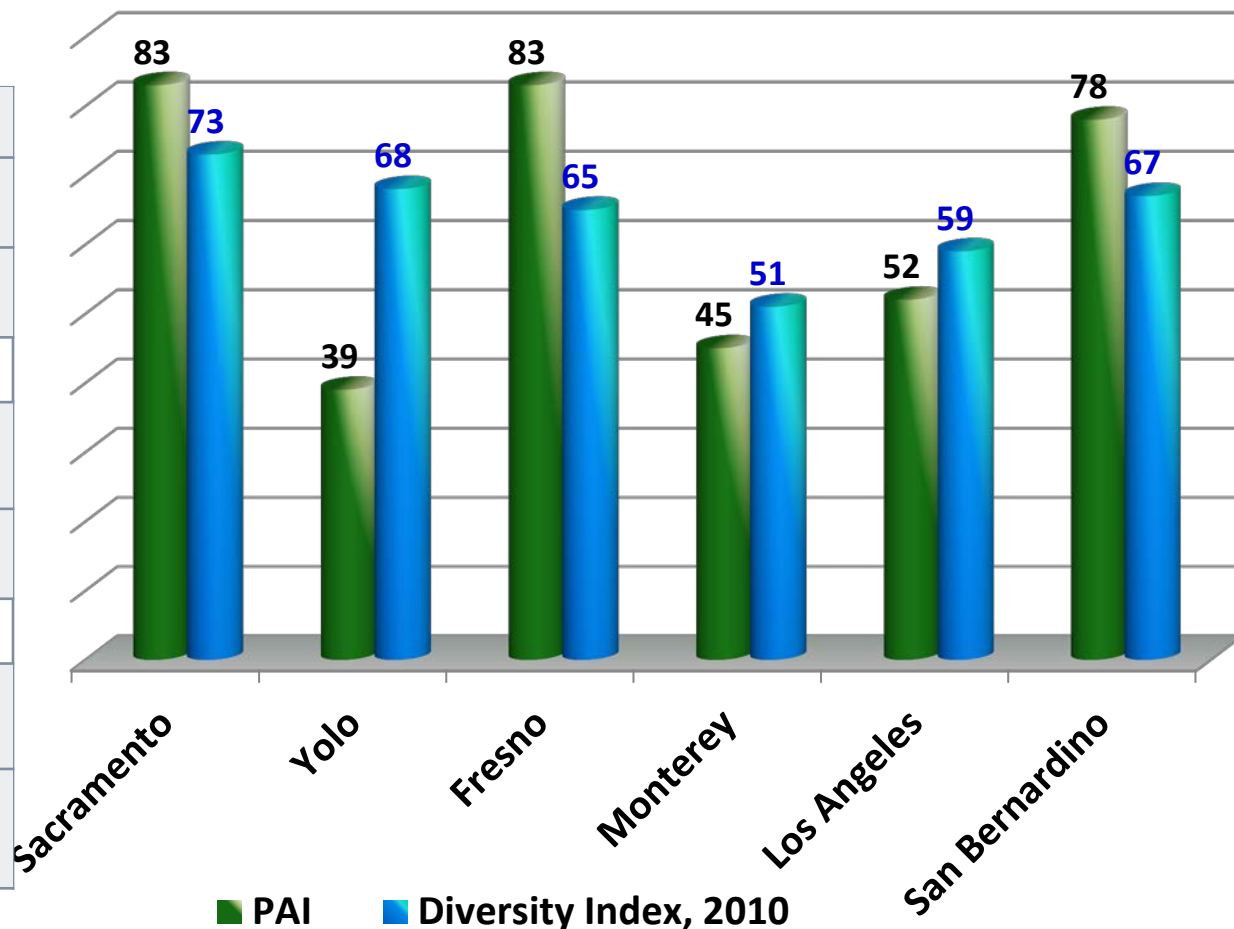 - **Varied socioeconomic characteristics – poverty, language spoken, etc.**

The Six Study Counties
Diversity Index (2010)* and Program Access Index (2011)**

The six study counties		
County		**PAI ***
North	Sacramento	**HIGH**
North	Yolo	**LOW**
	County	**PAI ***
Middle	Fresno	**HIGH**
Middle	Monterey	**LOW**
	County	**PAI ***
South	San Bernardino	**HIGH**
South	Los Angeles	**LOW**

Sacramento: PAI 83, Diversity Index 73
Yolo: PAI 39, Diversity Index 68
Fresno: PAI 83, Diversity Index 65
Monterey: PAI 45, Diversity Index 51
Los Angeles: PAI 52, Diversity Index 59
San Bernardino: PAI 78, Diversity Index 67

■ PAI   ■ Diversity Index, 2010

* We followed the methodology used by the Public Policy Institute of California (PPIC) in their calculation of the 1990 and 2000 index .
"Who's Your Neighbor? *Residential Segregation and Diversity in California" By Juan Onésimo Sandoval, Hans P. Johnson, and Sonya M. Tafoya* Public Policy Institute *of* California , *California Counts* Population Trends And Profiles, Volume 4 Number 1 • August 2002

*Based on calculations by the Research Services Branch, CDSS
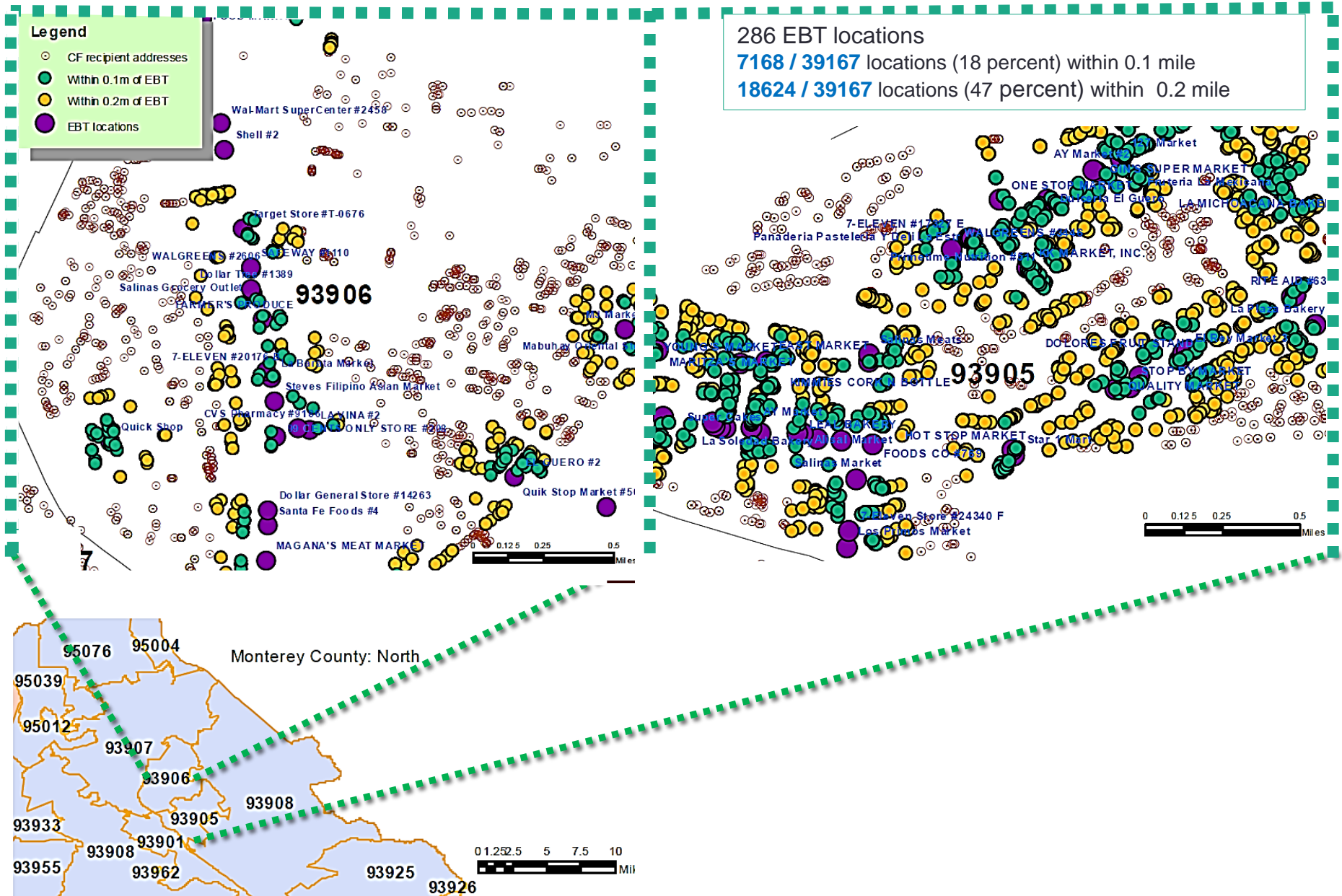 PAI : Program Access Index.

Fresno County CalFresh Distributions (July, 2013)

Percent

32

Percent below poverty level
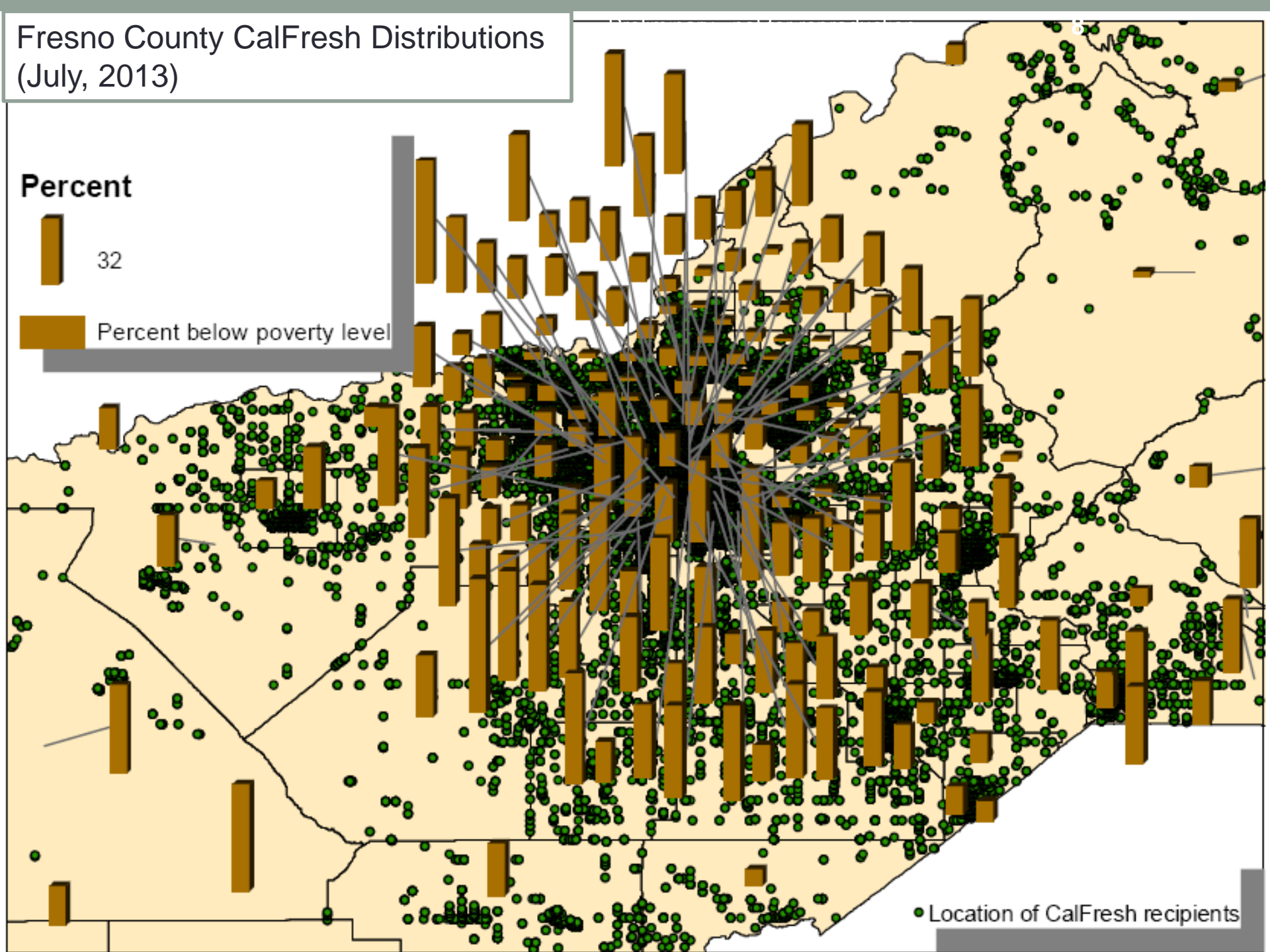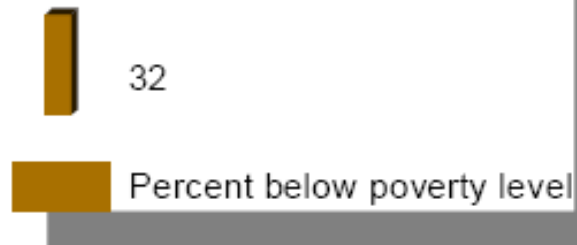
• Location of CalFresh recipients

Monterey County: CalFresh Recipient Addresses and Distance from EBT Locations
(Zip Codes 93905 and 93906)

Legend
- CF recipient addresses
- Within 0.1m of EBT
- Within 0.2m of EBT
- EBT locations

286 EBT locations

7168 / 39167 locations (18 percent) within 0.1 mile

18624 / 39167 locations (47 percent) within 0.2 mile

Wal-Mart SuperCenter #2458
Shell #2
Target Store #T-0676
WALGREENS #2606
SAFEWAY #110
Dollar Tree #1389
Salinas Grocery Outlet
FARMER'S PRODUCE
93906
Mabuhay Oriental
7-ELEVEN #20170
La Bonita Market
Steves Filipino Asian Market
CVS Pharmacy #9160
LA XINA #2
Quick Shop
99 CENT ONLY STORE #369
EL GUERO #2
Dollar General Store #14263
Santa Fe Foods #4
Quik Stop Market #50
MAGANA'S MEAT MARKET

AY Market
AY Market
PMC SUPERMARKET
ONE STOP
Fruteria La Mexicana
Fruteria El Guero
LA MICHOACANA
7-ELEVEN #17187 E
Panaderia Pasteleria Y La Ley
WALGREENS #4848
RITE AID #63
Premium Nutrition #2
BO MARKET, INC.
La Plaza Bakery
YOUNG'S MARKET
SALINAS Meats
MARIO'S MARKET
DOLORES FRUIT STAND
 KINNEY'S CORK N BOTTLE
STOP BY MARKET
QUALITY MARKET
Super Galvez del Mundo
La Potro Bakery
PIT STOP MARKET
La Soledad Bakery
Abigail Market
Star Mart
Salinas Market
FOODS CO #718
93905
7-Eleven Store #24340 F
Los Pinos Market

Monterey County: North

95076 95004
95039
95012
93907
93906
93908
93905
93933
93908 93901
93955
93962 93925
93926

Measuring CalFresh Access

County: Program Access Index (PAI)

VS.

Neighborhood: Program Reach Index (PRI)

Program Access Index (PAI)

$$PAI = \frac{(\text{CalFresh Participants}) - (\text{Disaster CalFresh Program Participants})}{(\text{Individuals with Income} < 125\% \text{ Poverty Threshold}) - (\text{FDPIR Participants}) - (\text{SSI Recipients})}$$

Where:
FDPRI: **Food Distribution Program on Indian Reservations**
SSI: **Supplemental Security Income**

Source: http://www.fns.usda.gov/sites/default/files/PAI2011.pdf

Program Reach Index (PRI) *

$$PRI = \frac{Census\ Tract\ CalFresh\ Participants}{Tract\ pop\ size\ X\ Tract\ proportion\ below\ poverty\ level\ X\ 1.3 - SSISSP}$$

* Geography-based or population-based

Advantages of Using PRI

❖ **Measure CalFresh access at below county levels.**

❖ **Measure differences in access among population subgroups.**

❖ **Use results to devise targeted CalFresh outreach activities.**

❖ **Help uncover the limitations of PAI methodology.**

Application Example: LA County on the Map

Potential Eligible – Below 130 percent Poverty

vs.

CalFresh Access – PRI

Legend

Elig. (130 pcnt)

- 5 – 250
- 251 – 500
- 501 – 1000
- 1001 – 2000
- Above 2000
- No data

MEDIUM

HIGH

LOW

Legend

PRI

- 0.00 - 0.25
- 0.26 - 0.50
- 0.51 - 0.75
- 0.76 - 1.00
- Above 1
- No data

HIGH

MEDIUM

HIGH
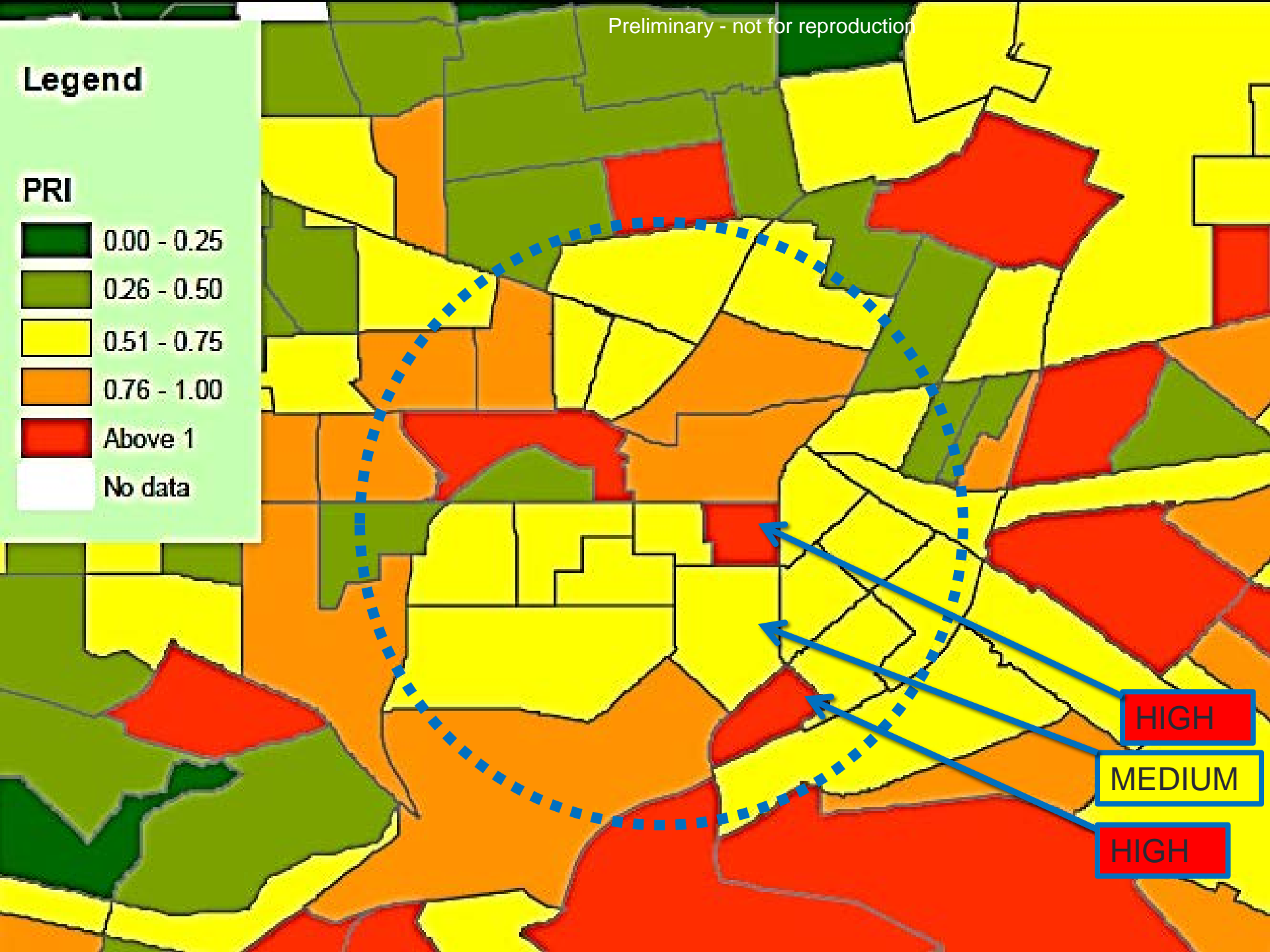
L.A. County Tracts: Percent Speaking Languages other than English by Position Above or Below Median

(Median = 58.3)

L.A. County

Legend
- Tracts with non-English below median
- Tracts with non-English above median
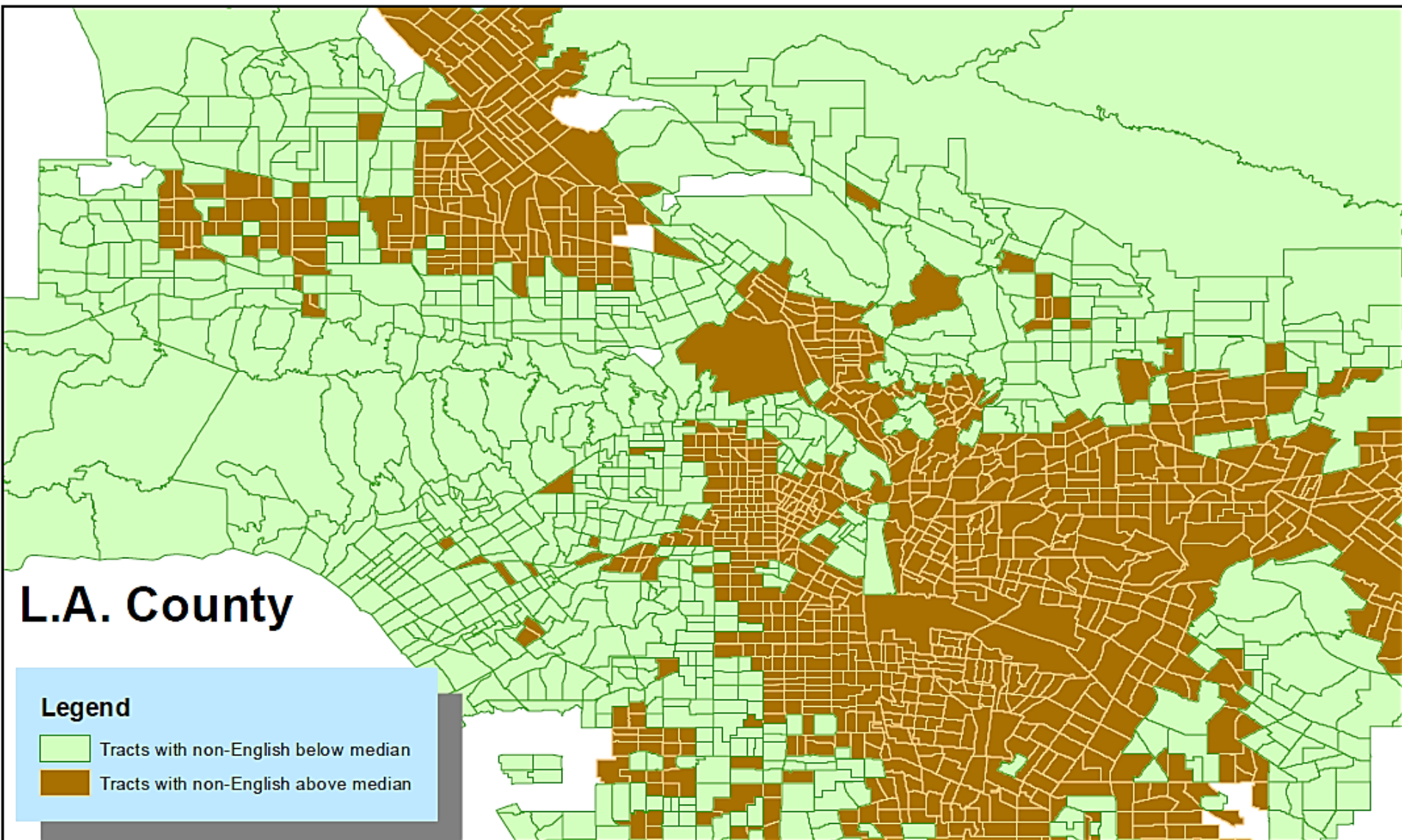
L.A. County Tracts: Percent Below Poverty by Position Above or Below Median

(Median = 11.2)

L.A. County

Legend

- Tracts with poverty level below median
- Tracts with poverty level above median
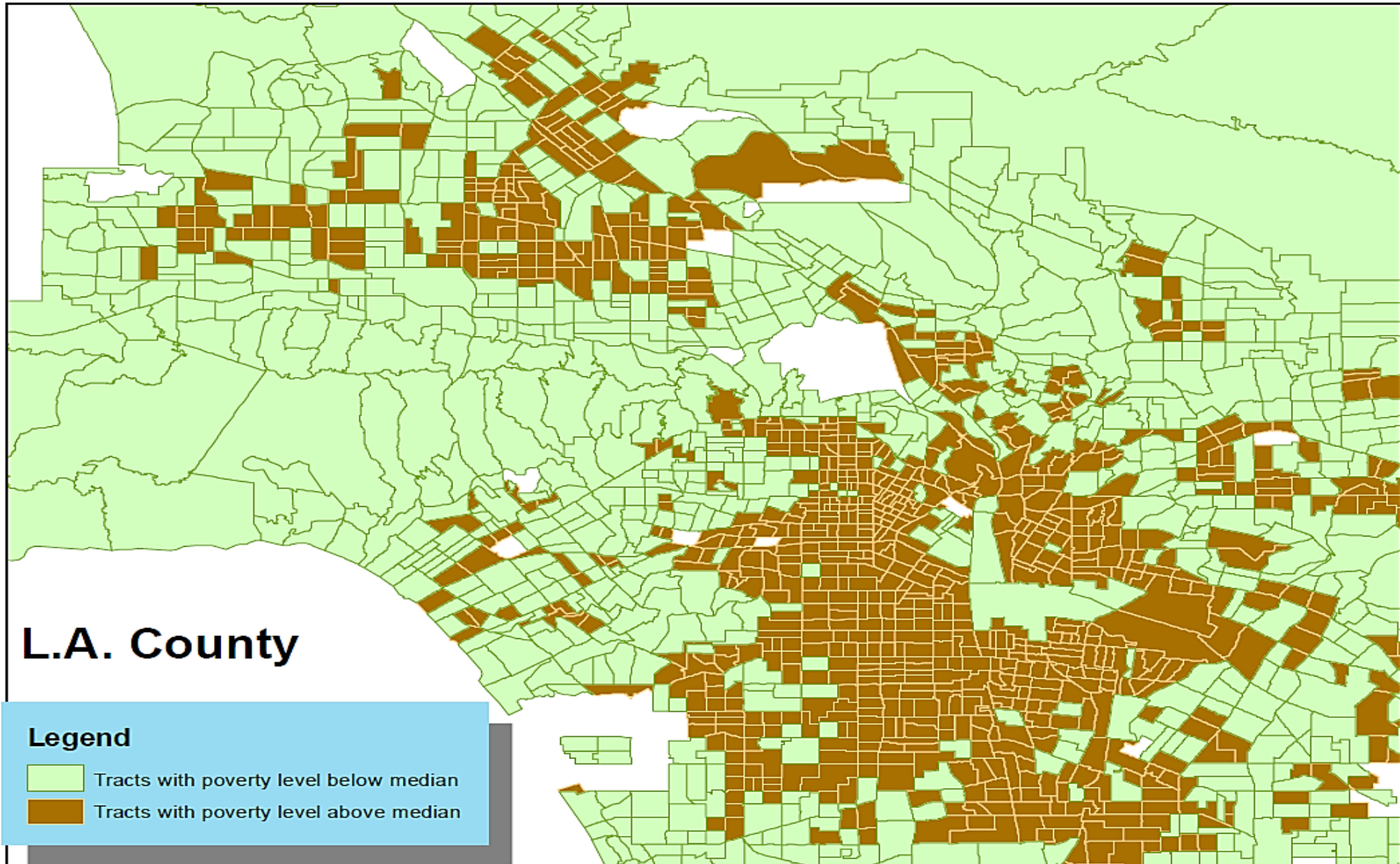
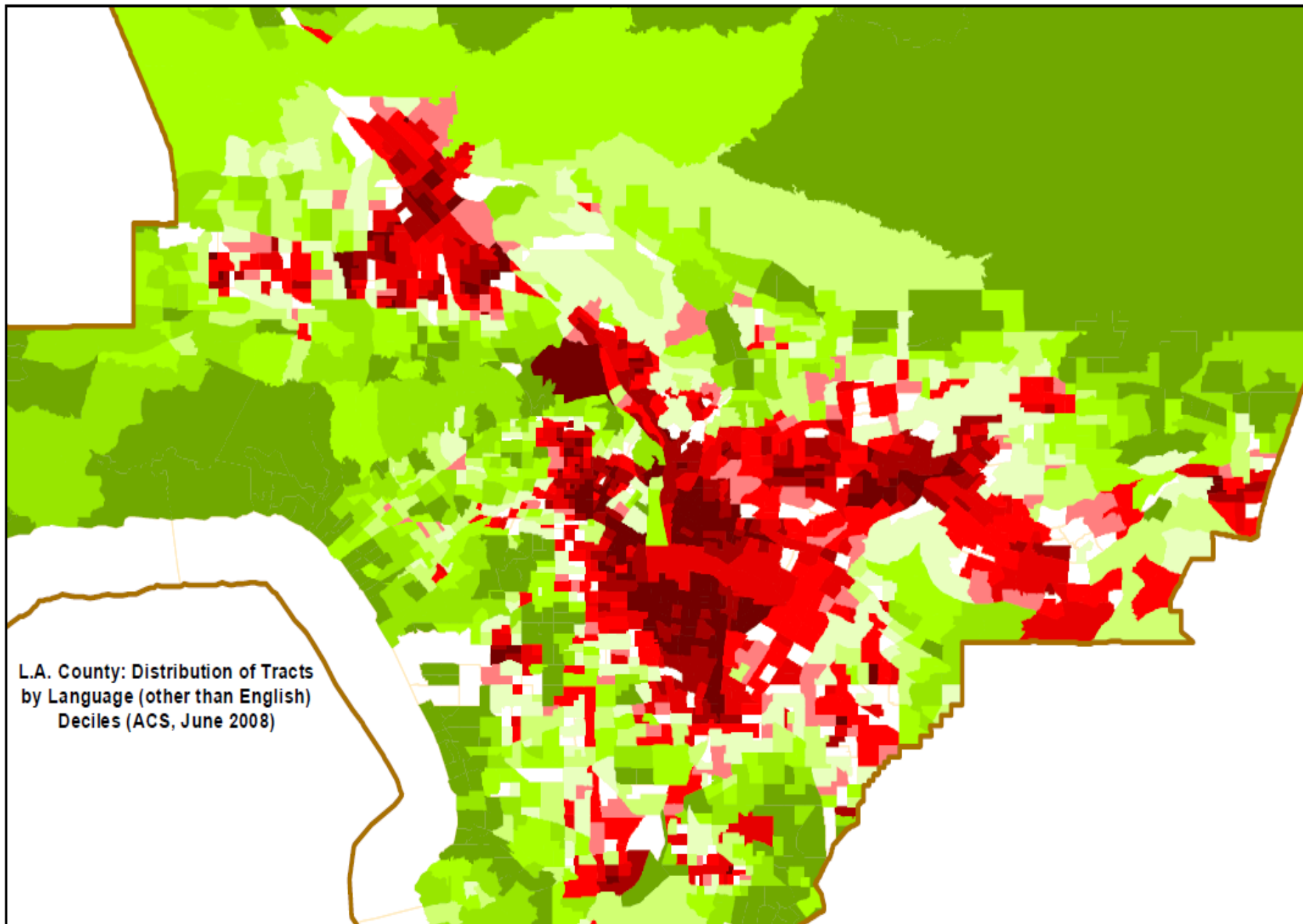# (* Poverty median = 11.2)

Tracts with percent below poverty <u>lower than county median</u> *

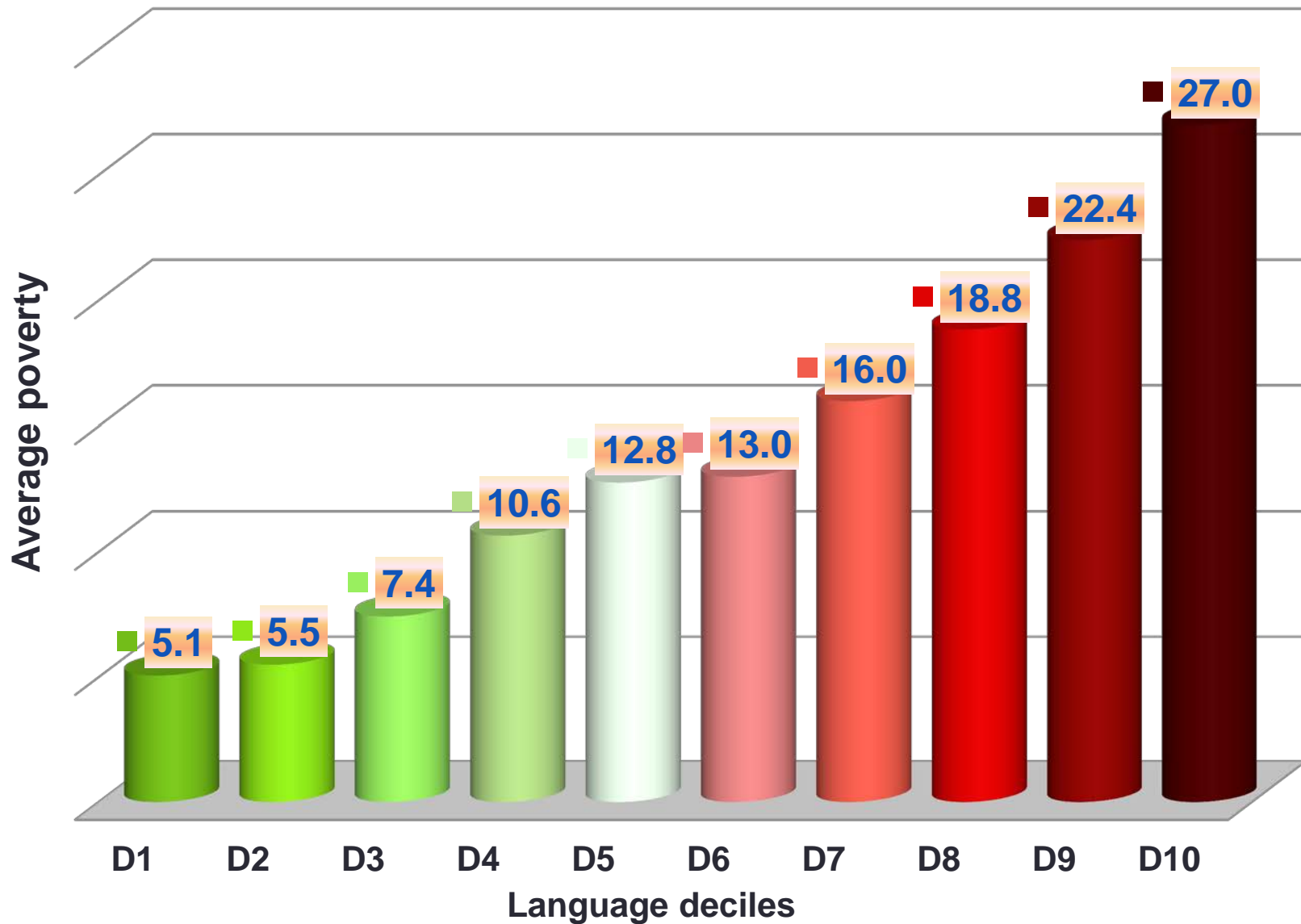❖ **Average percent below poverty = 5.0 percent**

Tracts with percent below poverty <u>higher than county median</u>
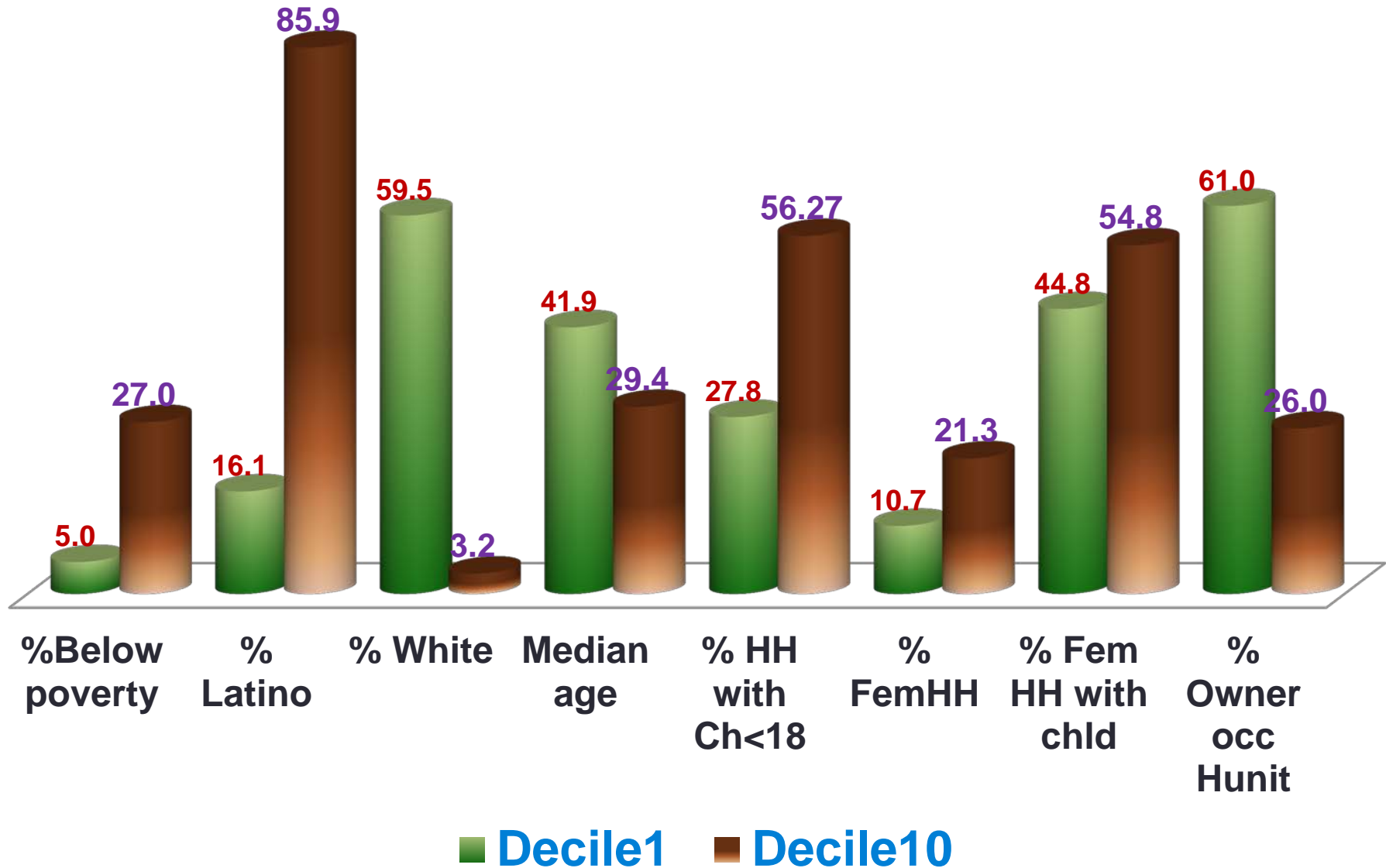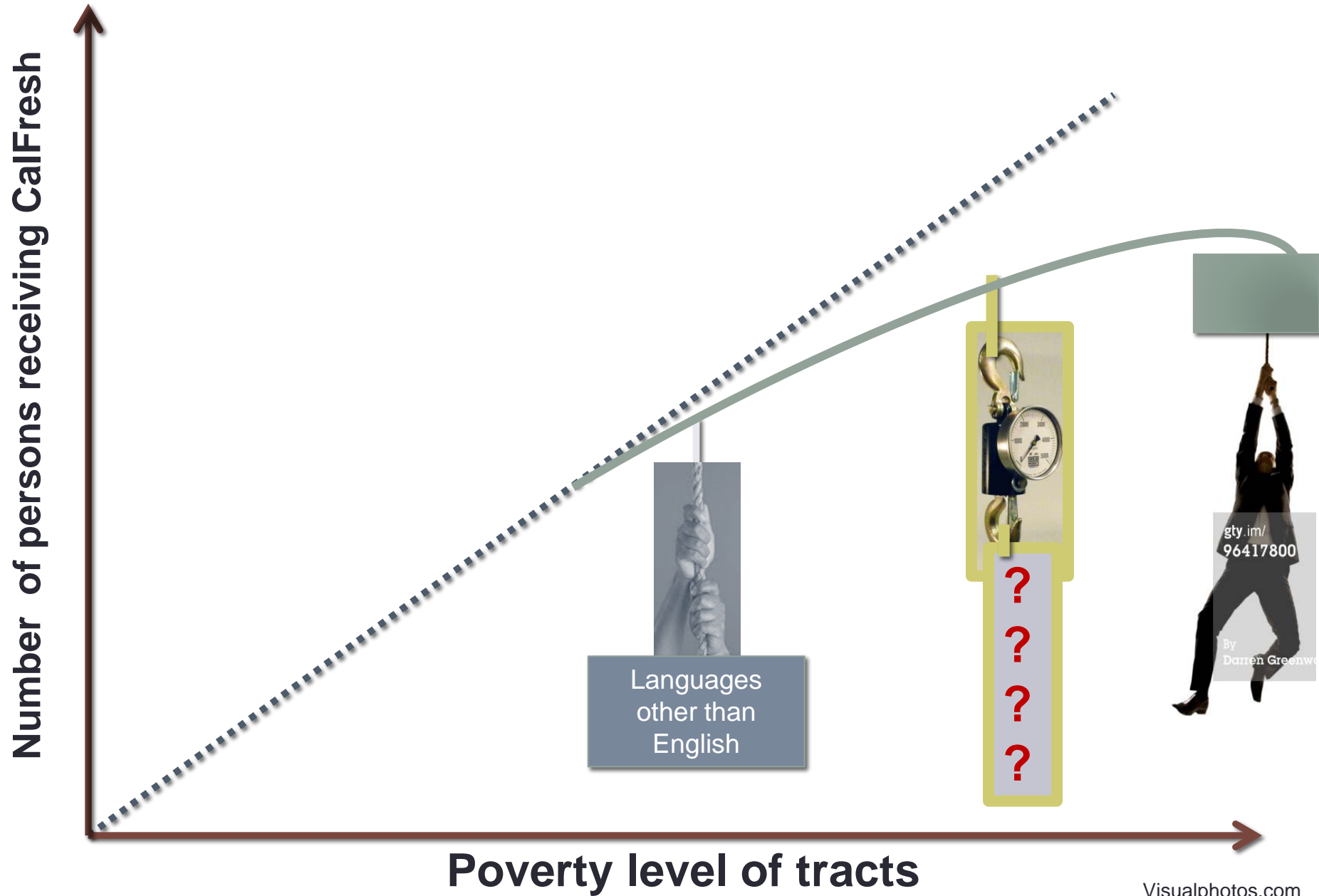
❖ **Average percent below poverty = 24.0 percent**

10th — 99.4-88.3
9th — 88.2-80.9
8th — (red box, no value visible)
7th — 73.7-66.3
6th — 62.2-58.6
5th — 58.5-50.5
4th — 50.4-40.8
3rd — 40.7-31.6
2nd — 31.5-23.4
1st — 23.3-0.0*

*
w
i
p

L.A. County: Distribution of Tracts
by Language (other than English)
Deciles (ACS, June 2008)
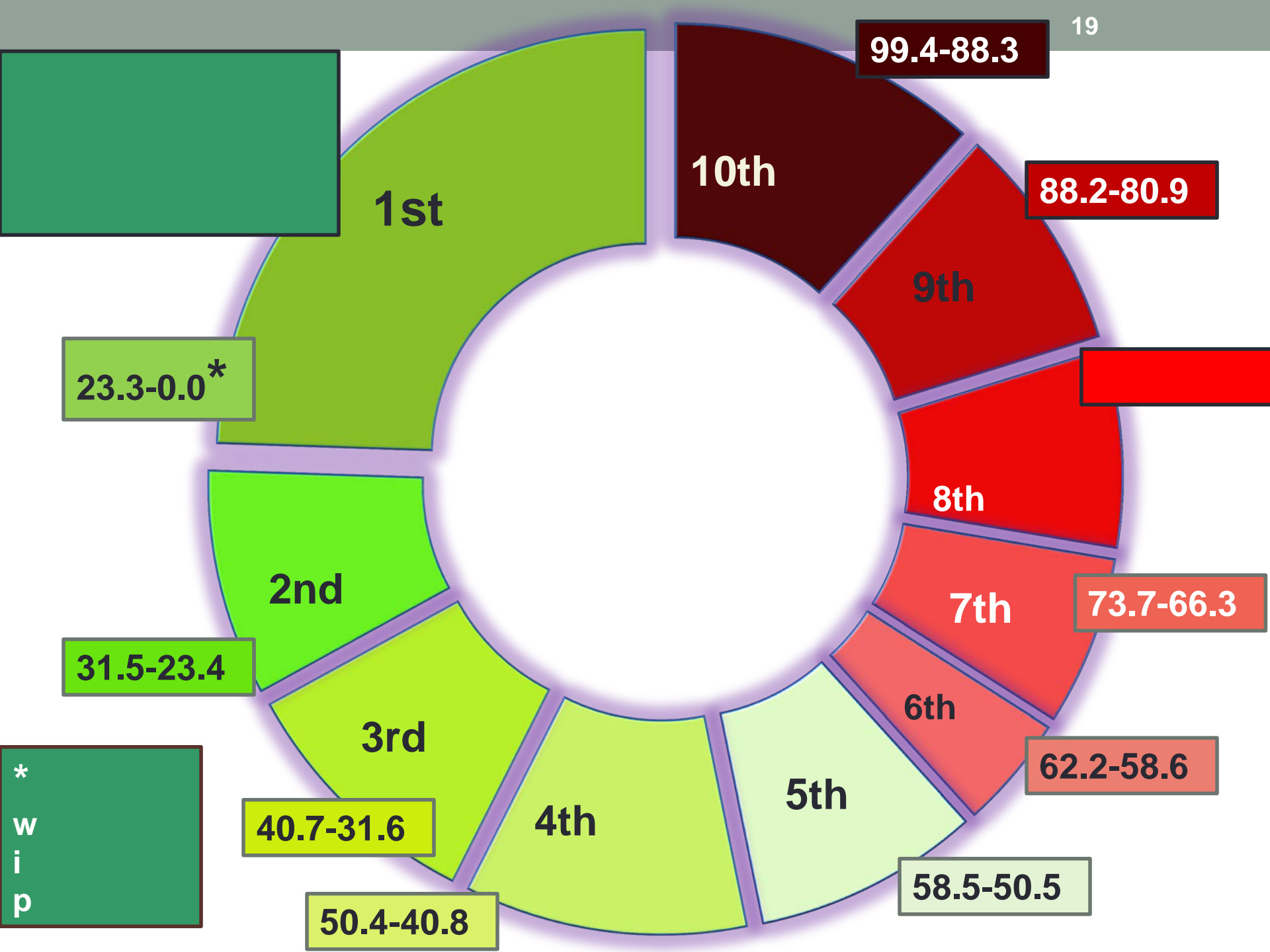
L.A. County: Average Poverty Level Tract by Language (other than English) Deciles

Average poverty

D1	D2	D3	D4	D5	D6	D7	D8	D9	D10
5.1	5.5	7.4	10.6	12.8	13.0	16.0	18.8	22.4	27.0

Language deciles

Socioeconomic Characteristics, Decile-level Averages:
Decile1 vs. Decile10

Number of persons receiving CalFresh

Poverty level of tracts

Languages other than English

? ? ? ?

gty.im/ 96417800

By Darren Greenwo

Visualphotos.com

PART II
1. Re-evaluation of existing measurement tools

- **Denominator adjustments.**

2. Picking the low-hanging fruits (Medi-Cal recipients currently not receiving CalFresh)

- **Based on aid-code analysis, extract the addresses of Medi-Cal recipient that appear to be eligible to receive CalFresh benefits.**
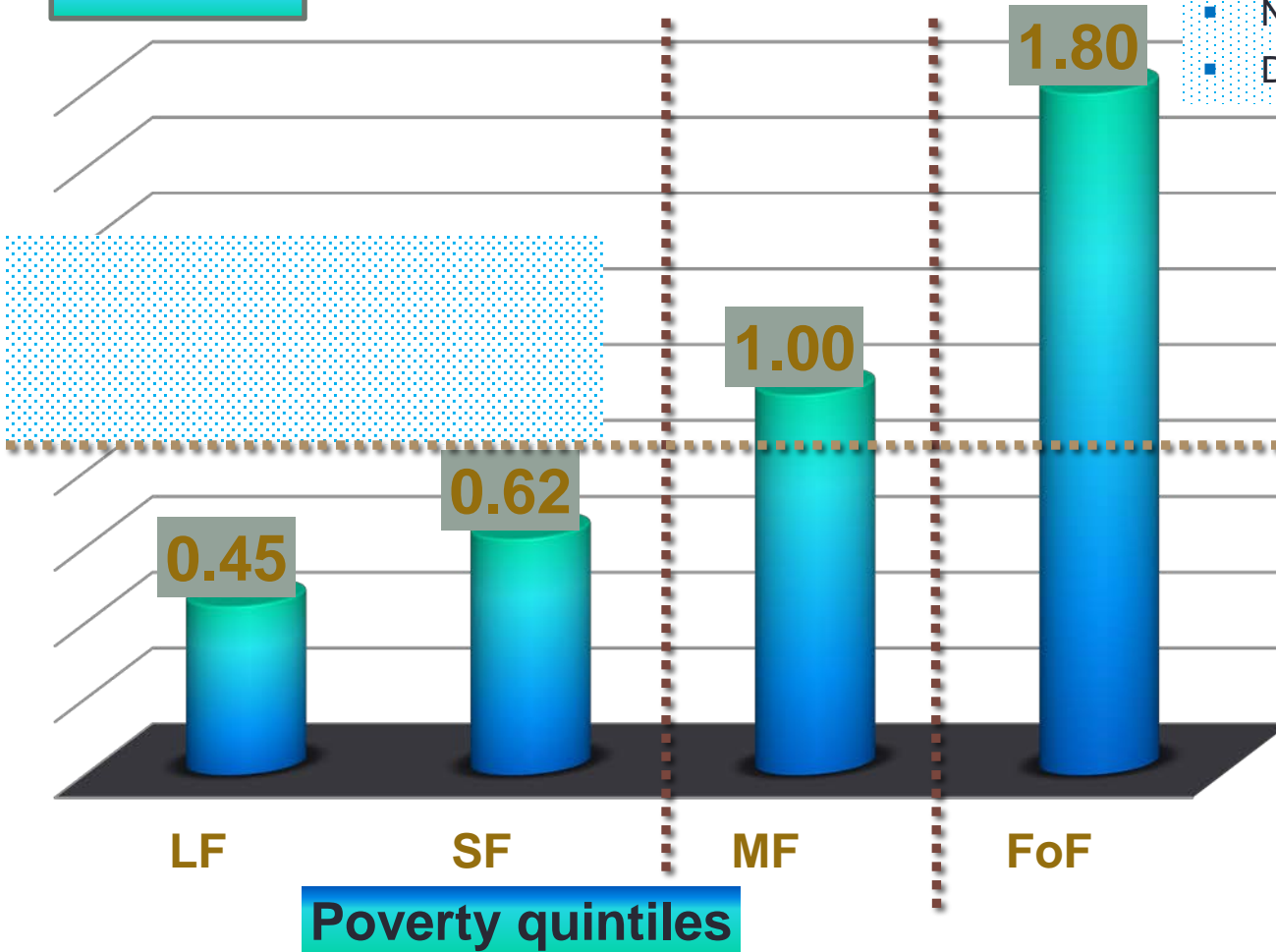
Fresno PRI (all ages)

Fresno

PAI: 0.89

The problem:
- Numerator: **Low**
- Denominator: **Low**

1.80

1.00

0.62

0.45

LF **SF** **MF** **FoF**

Poverty quintiles

Solution #1
Remove SSI/SSP

LF	10,879
SF	9,204
MF	8,164
FoF	5,059
HF	2,301

Proportion of Child-only Households in Counties With High CalFresh Access

PAI by Region, 2010

	North and Mountain	Bay Area	Farm Belt	L.A.	Southern (w/o L.A.)
Value	0.7269	0.5452	0.7075	0.590	0.6237

N in R ,
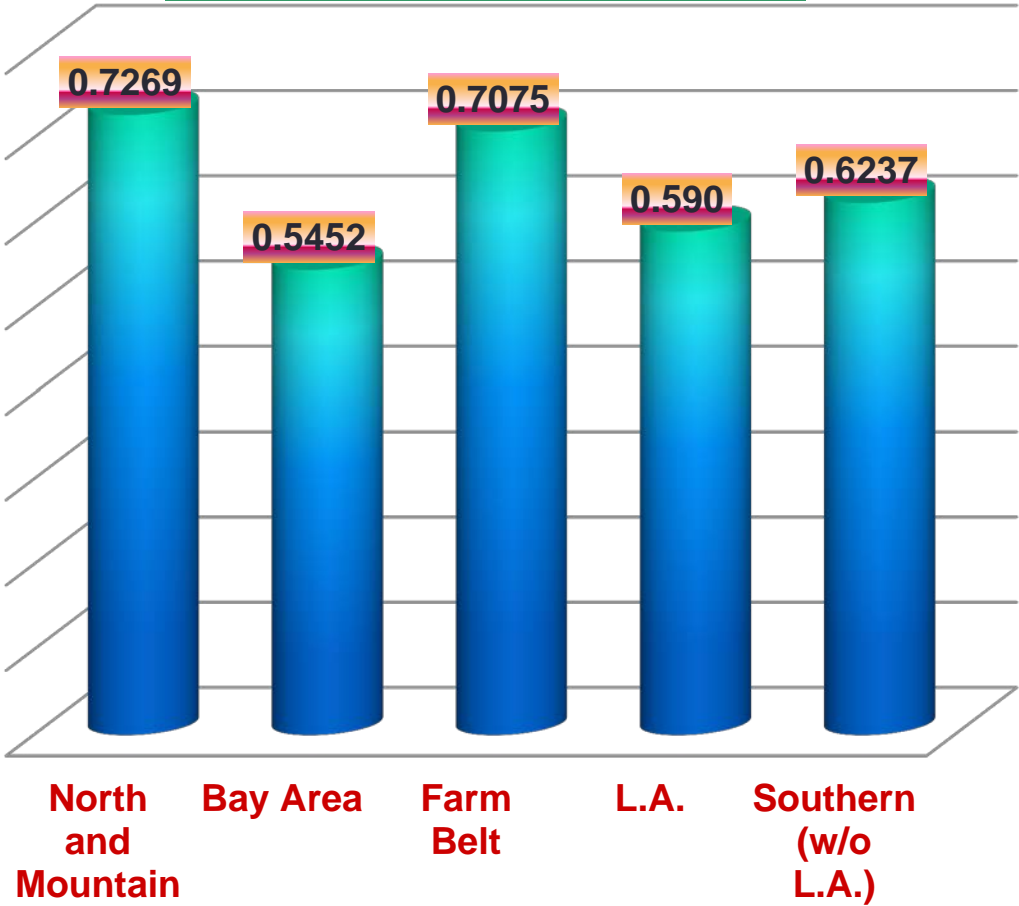
County*	Proportion of Child-only households (June, 2013)
Amador	
Bute	
Calaveras	
Del Norte	
Humbolt	
Inyo	
Lake	
Lassen	
Mariposa	
Mendocino	
Modoc	
Nevada	
Plumas	
Shasta	
Siskiyou	
Tehama	
Tuolumne	
Average	
Median	

*Alpine, Mono, Sierra and Trinity are excluded

Program Reach Index (PRI) Child-only Method

$$PRI = \frac{Census\ Tract\ CalFresh\ Participants}{Tract\ pop\ size\ X\ Tract\ proportion\ below\ poverty\ level\ X\ 1.3 - (SSISSP + No.ChildOnlyHHs * .94 * F)}$$

F: Adjustment factor

F = Total number of families ÷ number of families with own children under 18

Total CalFresh Households and Child-only CalFresh Households (Top 10 counties for Child-only cases), June 2013

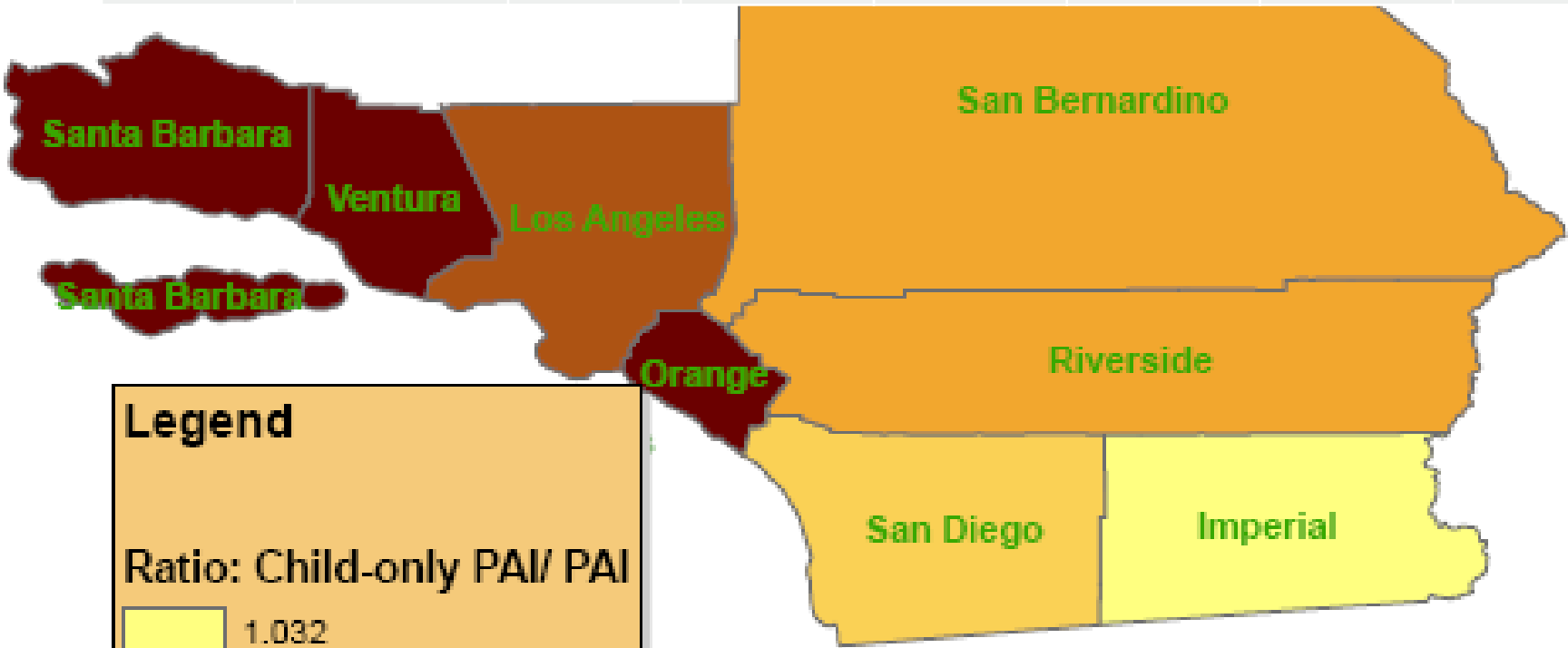| County	Child-only CalFresh households	Total CalFresh households	Percent
L.A. County	108,602	541944	20 percent
Orange	27,567	99,489	28 percent
San Bernardino	20,698	148807	14 percent
Riverside	16,178	110752	15 percent
San Diego	14,322	105565	14 percent
Fresno	12,619	88114	14 percent
Santa Clara	11,066	52382	21 percent
Kern	10,286	56,382	18 percent
Sacramento	9,645	88674	11 percent
Alameda	9,040	62192	15 percent

L.A. County: Location of Child-only Households by Tract Percentage of People Speaking Languages Other than English, June 2013

84.3
92.7
90033
93.5
91.7
86.8
85.2
90063
94.8
93.9
96
91.9
89.4
95.2
89.2
88.4
92.3
92.3
92.6

42.4
23.8
51.2
30.9
* Tract percentage of persons speaking languages other than English
36.8
47.4 *
90638
34
Legend
• Child-only households
31.3
** **90621**
** Numbers in purple are zip codes
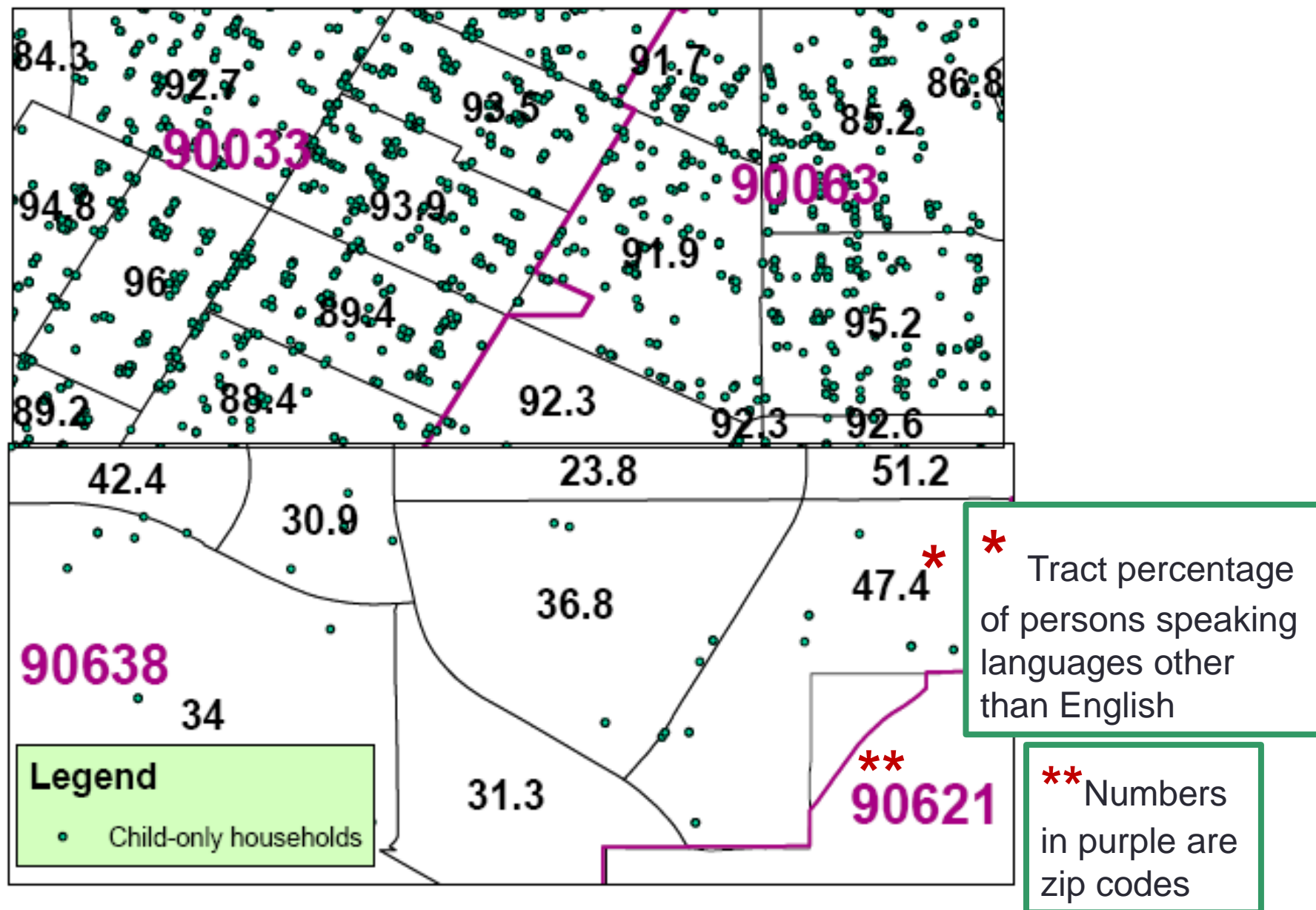
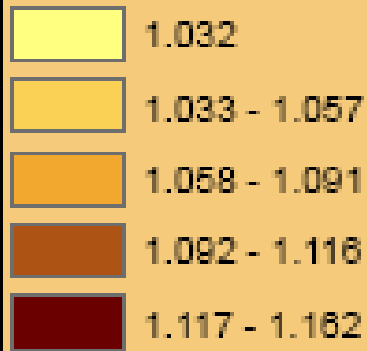# The Ratio of Adjusted PAI (Child-only method) to PAI, by County (June 2011) Southern California (map) and top 16 "gainers" (list)

Madera	Santa Cruz	Santa Barbara	Ventura	Orange	Santa Clara	Monterey	Los Angeles
1.190	1.162	1.160	1.156	1.155	1.144	1.144	1.128
Solano	San Francisco	Sonoma	Napa	Fresno	Marin	Alameda	San Benito
1.126	1.126	1.124	1.124	1.110	1.110	1.108	1.107

Legend

Ratio: Child-only PAI/ PAI

- 1.032
- 1.033 - 1.057
- 1.058 - 1.091
- 1.092 - 1.116
- 1.117 - 1.162

Santa Barbara, Ventura, Los Angeles, San Bernardino, Orange, Riverside, San Diego, Imperial

0 15 30 60 90 120 Miles

Program Reach Index (PRI), Child-only Households Method
L.A. County, Decile10

CalFresh Total	178,020
Total Eligible	341,012
SSI/SSP*.5	22,174

No. Child-only HHs	27,836
AllHHs/HHs with Chld.	235,761 / 109,670 = 2.15
Estimated Ineligibles	**59,840**
PRI I	0.558
PRI II	0.687
Difference	0.129

Selected Zip codes: L.A. County
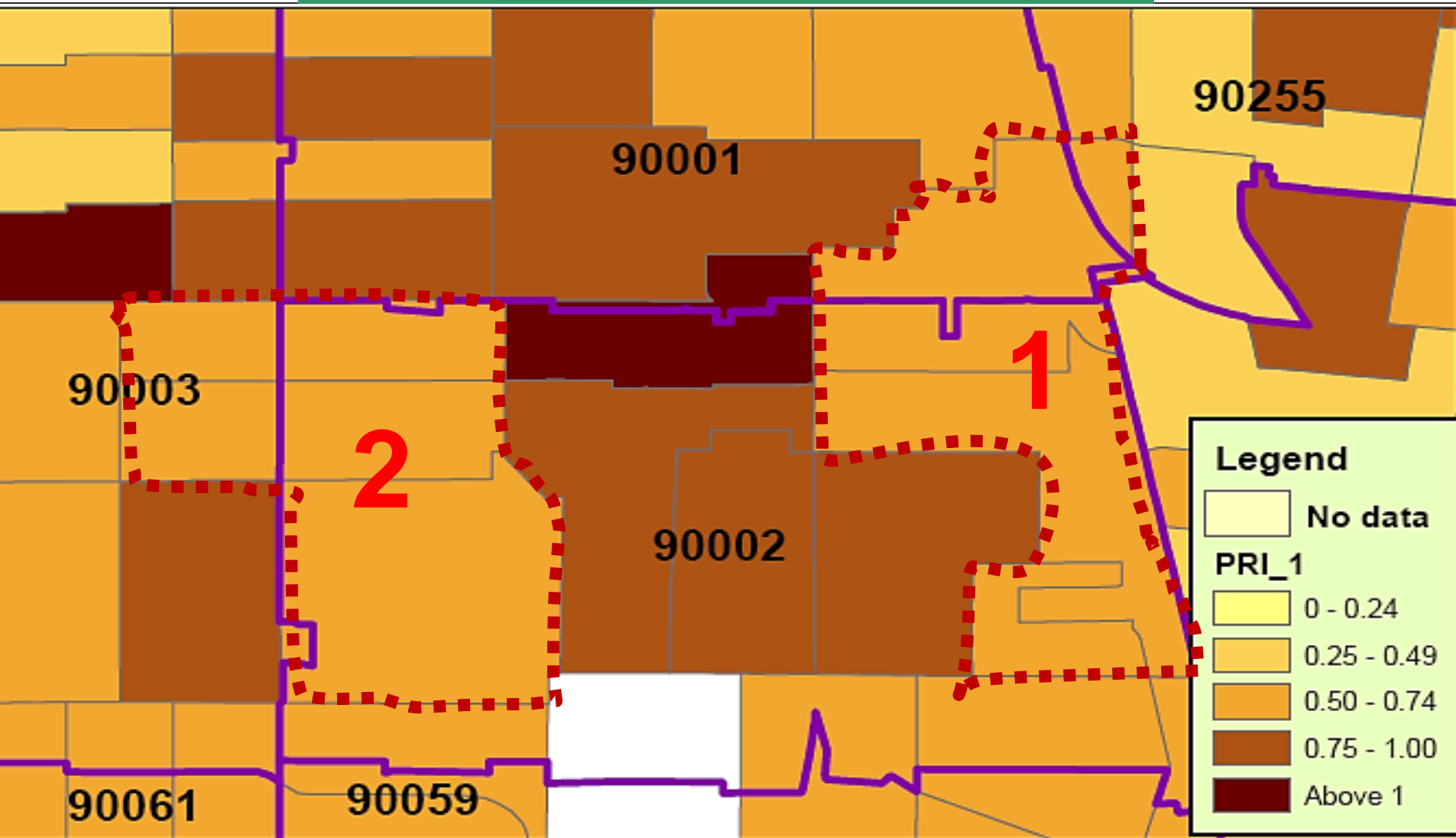
Selected Zip codes: L.A. County
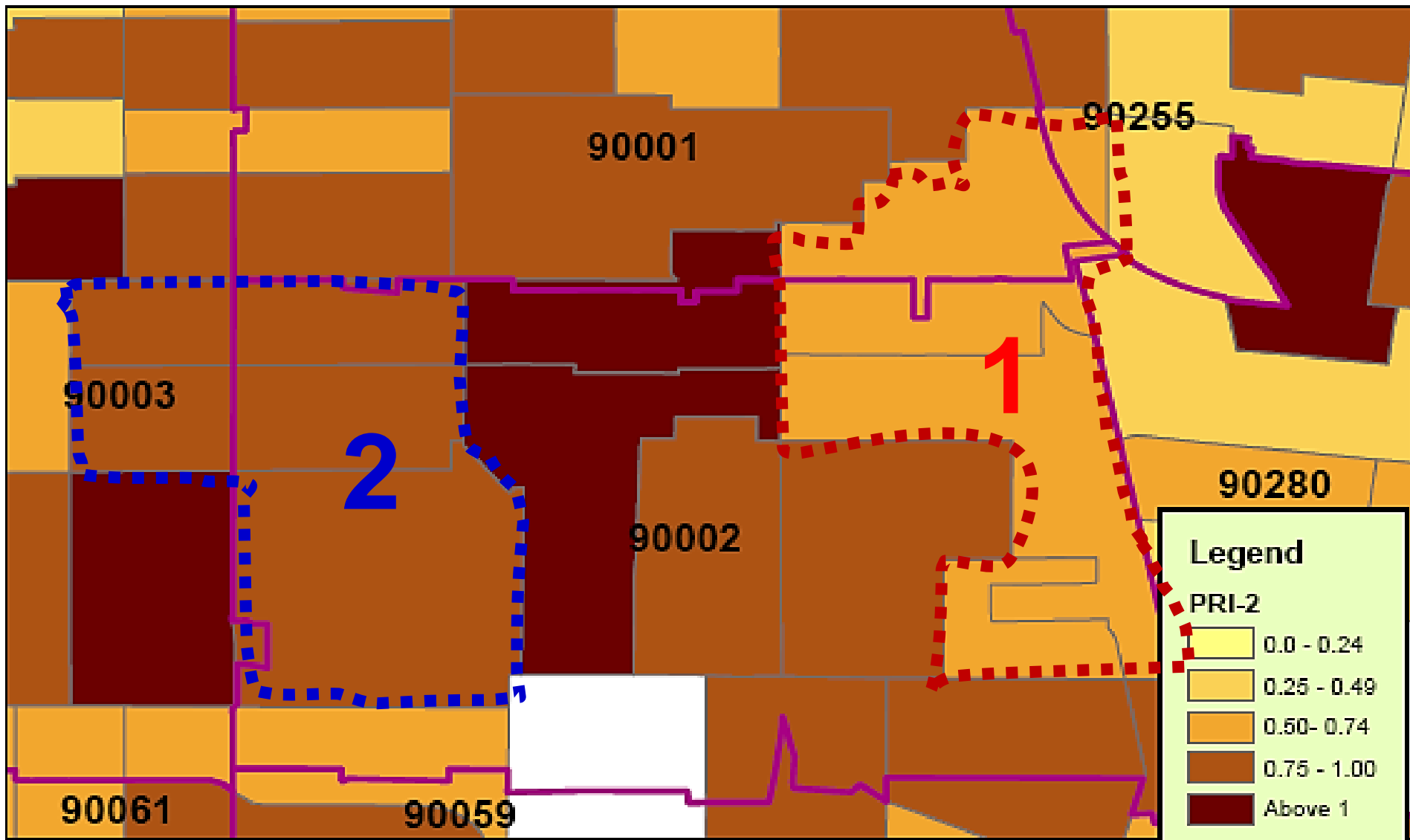
Fresno PRI (Child-only method), by Poverty Quintiles : Lowest fifth

Total CalFresh	**108,668**
Total eligible	**188,930**
SSI-SSP*.5	**32,750**
Child-only*.94	**10,388**
All HHs/ HHs with<18	**47,054 / 22,537 = 2.087**
"Estimated" Ineligibles	**21,680**
PRI - LF	**0.69**

Medi-Cal Recipient Analysis
Potential CalFresh Enrollees Currently Receiving Medi-Cal (Top 10 Counties)

County	Number	Percent
Los Angeles	565,680	37.38
Orange	101,147	6.68
San Bernardino	81,395	5.38
San Diego	79,436	5.25
Riverside	77,584	5.13
Santa Clara	56,328	3.72
Sacramento	50,417	3.33
Fresno	46,138	3.05
Alameda	44,347	2.93
Kern	44,304	2.93

SUMMA R Y

- **The Program Reach Index (PRI) is as useful an indicator of CalFresh access at the county level as the Program Access Index (PAI).**

- **The ability to apply PRI at below county levels makes it much more valuable in accessing CalFresh reach at community and neighborhood levels.**

- **The PRI can help target outreach activities through mapping techniques that highlight areas needing benefits the most.**

- **Use of the CalFresh Child-only households method provided a sensible refinement by enabling the removal of some ineligible individuals from the denominator.**