



A Method to Forecast Local Hispanic Voting Strength

Peter A. Morrison
RAND (retired)

Presented at the 2014 Applied Demography Conference, San Antonio, TX January 8-10



Overview

- ***FOCUS***

- How does Hispanic voting strength materialize in heavily Hispanic locales?
- Can a demographic accounting framework forecast this process?

- ***IMPORTANCE:***

- Hispanics' evolving voting strength spurs concerns with potential empowerment under alternative local election systems



Presentation Outline

- Background and context
- Logic of my approach
- Accuracy of simulated 2000-2010 “forecasts” for 8 communities
- Conclusions and next steps



Background and Context

- Local electorates typically evolve as
 - Ethnic residential enclaves mature & expand
 - Their juvenile citizens reach adulthood
 - Their elderly citizens die off
- Approaches to foreseeing the future:
 - From geography: *Spatial diffusion*
 - From demography: *Cohort progression*



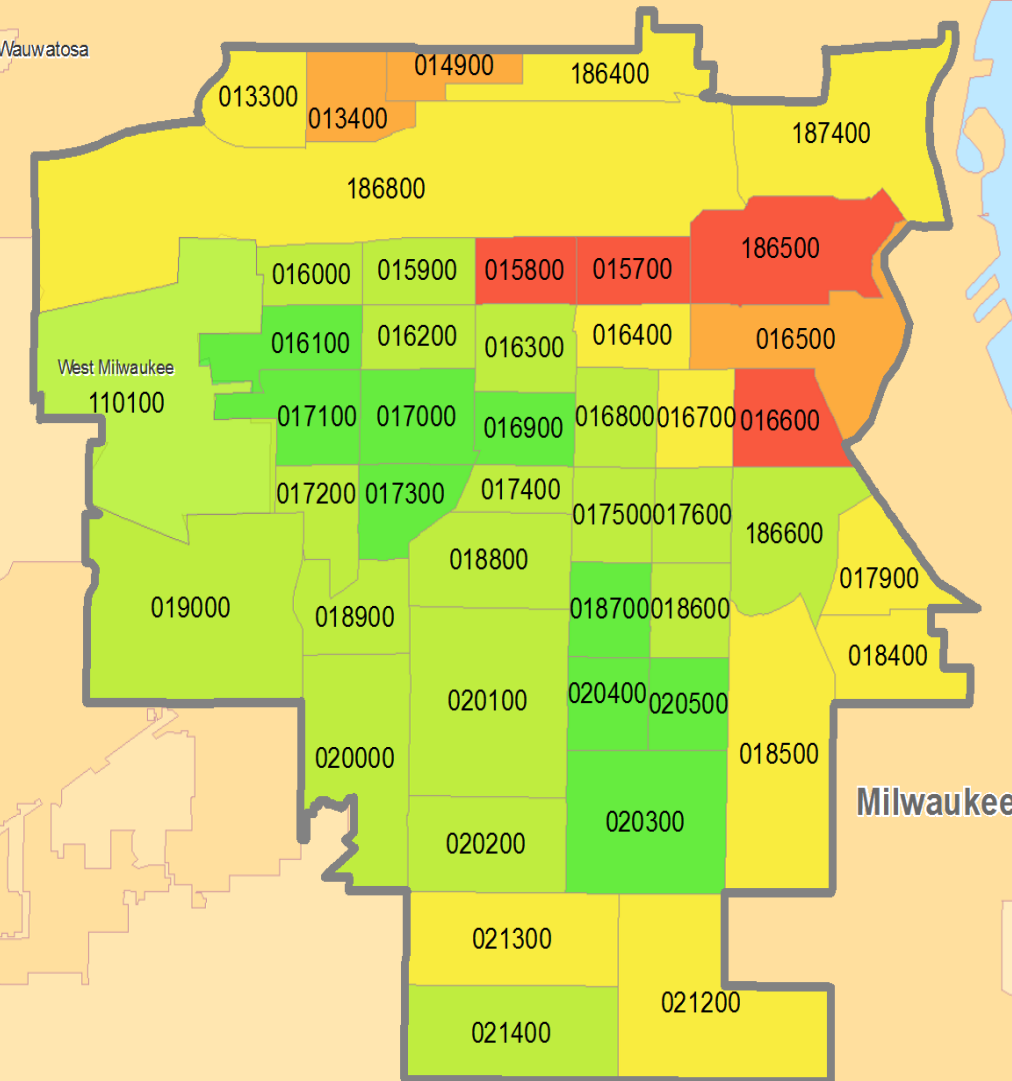
Logic of This Approach

- Calibrate *spatial diffusion* model to project Hispanic enclave expansion
- Calibrate *cohort progression* models to project evolving future electorate:
 - Add juvenile citizens as they attain voting age
 - Subtract elderly citizens as they die off

Local Hispanic Enclaves Are Varied

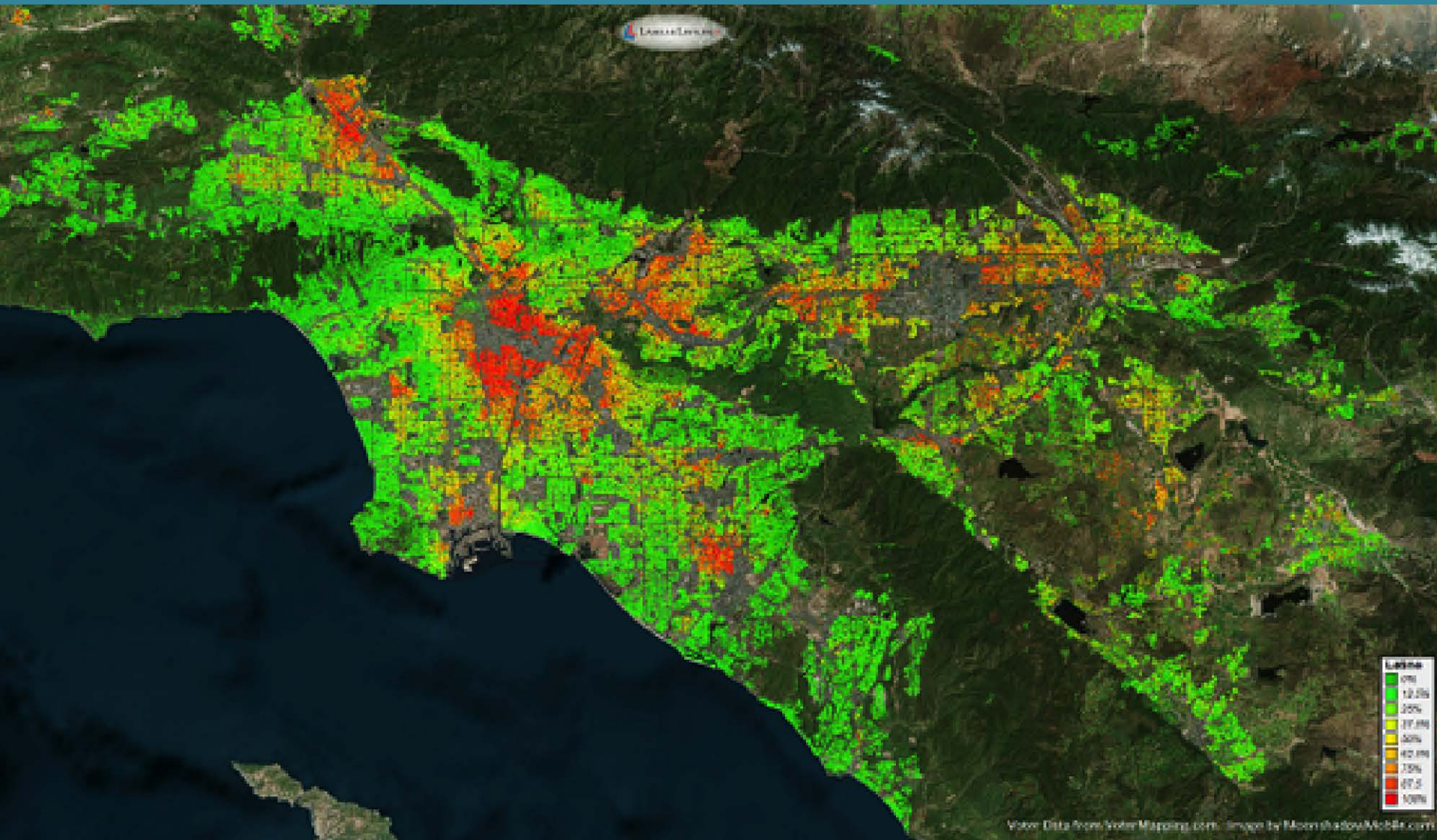
Hispanic Enclave in Milwaukee County, WI

2000-2010 Hispanic Population Change by Tract

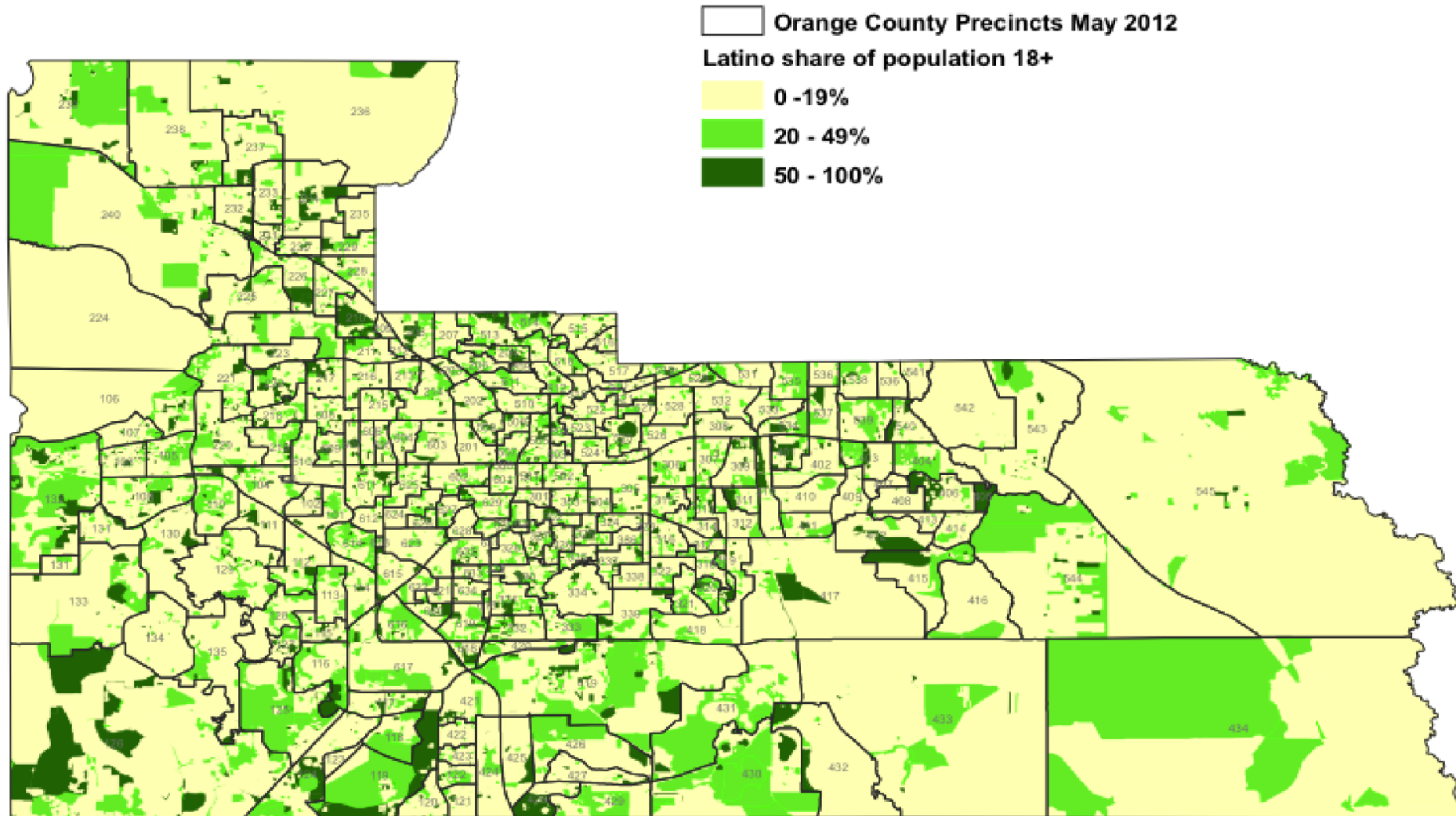


Total change 2000-2010 was +7,004, reflecting growth of +23,588 Hispanics and a decline of -16,544 non-Hispanics.

Multiple Hispanic Enclaves: Greater Los Angeles



Orange County, FL -- Multiple Enclaves





Spatial Diffusion Model

- Portrays coalescence & outward growth of Hispanic residential enclaves
- Projects future growth according to adjacent past growth
- Model is easily calibrated & interpreted

How Voting Strength Materializes

City of Yakima, WA

Yakima city, WA		Projected Hispanic Share of Citizen Population 18+ Midyear 2002-2010				Actual Share (2010 Census & 2008-12 ACS)
Citizen Population (2000)	Number	2002	2004	2005	2010	
<i>18 & older:</i>	43,282	45,720	47,887	48,970	54,387	55,395
Hispanics	6,169	7,337	8,375	8,894	11,489	12,550
NonHispanics	37,113	38,383	39,512	40,076	42,899	
%Hispanic	14.25%	16.05%	17.49%	18.16%	21.12%	22.66%
<i>Under 18:</i>	19,502	x (2/18)	x (4/18)	x (5/18)	x (10/18)	
Hispanics	9,342					
NonHispanics	10,160					
%Hispanic	47.9%					

Sources: US Census Bureau, 2000 Census, SF2 Table QT-P1 and SF4 Table PCT044; 2010 Census, SF2 Table QT-P1 and 2008-12 American Community Survey, Tables B05003 and B05003I.

Young Hispanics Age Into an Electorate, Elderly non-Hispanic Voters Die Off

Age group	City of Gainesville, GA Population		
	Total population	% Hispanic	% White NonHisp
75 to 79 years	629	3.3%	82.5%
80 to 84 years	604	2.6%	87.1%
85 to 89 years	436	2.3%	92.0%
90 to 94 years	221	0.5%	92.8%
95+ years	66	0.0%	87.9%
Total, all ages	33,804	41.6%	39.0%
Under age 18	10,276	57.6%	20.9%
Age 18+	23,528	34.6%	46.9%
Age 65+	3,567	5.1%	82.1%



Cohort Progression Model

- Accounts for Hispanics aging into the electorate as older non-Hispanics die off
- Isolates effects of age structure apart from other possible influences
- Documents how Hispanics may ripen into a majority of future eligible voters



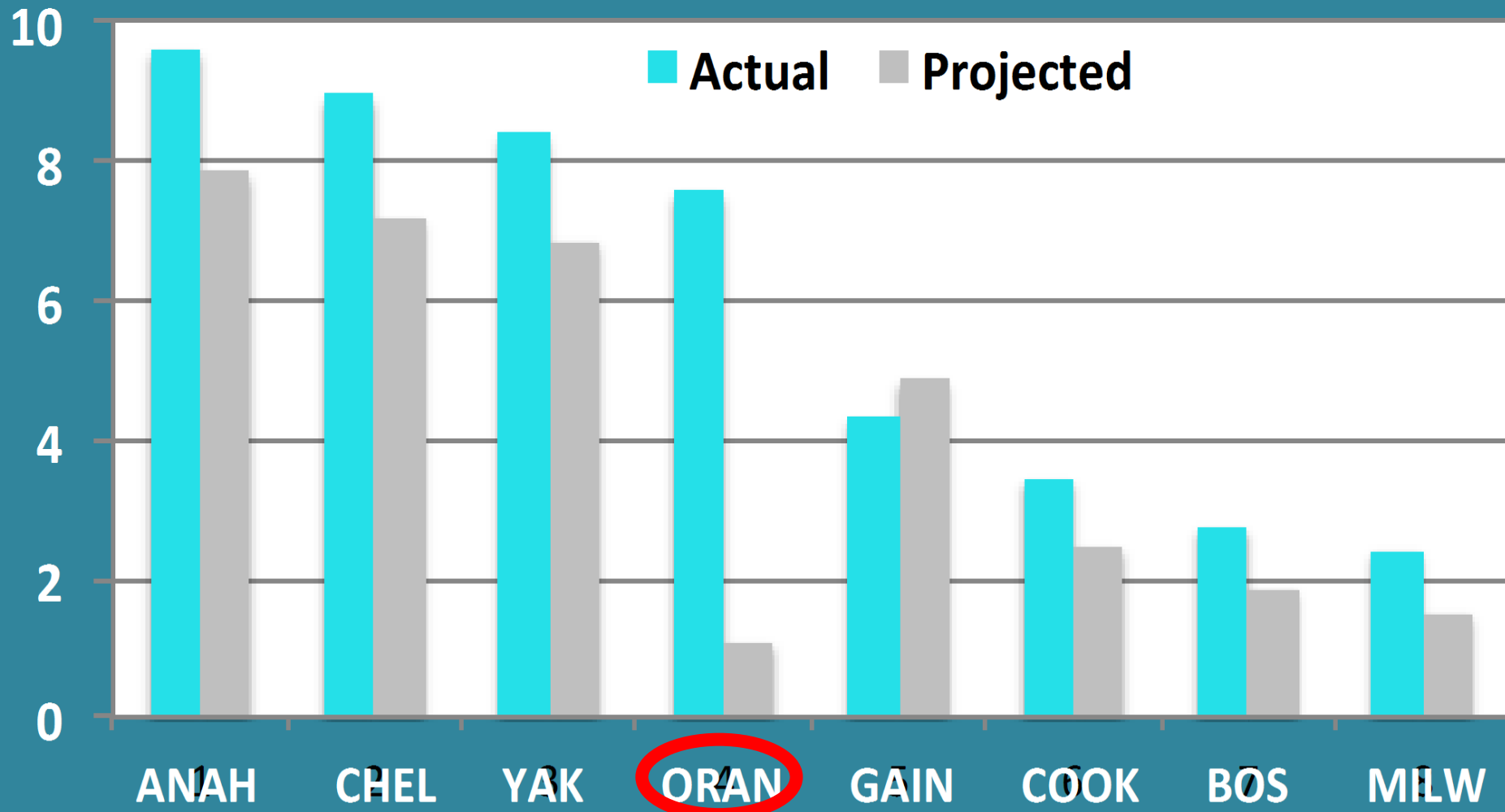
Predictive Accuracy: 2000-2010 Simulated Forecasts

Forecast Detail

City or County	Hispanic Share of Citizens 18+			Change, 2000-2010		
	2000	2010	2010 (proj.)	Actual	Projected	Difference
Anaheim, CA	24.0%	33.6%	31.8%	9.6	7.9	-1.8
Chelsea, MA	29.4%	38.4%	36.6%	9.0	7.2	-1.8
Yakima, WA	14.3%	22.7%	21.1%	8.4	6.9	-1.5
Orange Cnty, FL	15.1%	22.6%	16.2%	7.6	1.1	-6.5
Gainesville, GA	7.1%	11.5%	12.0%	4.3	4.9	0.5
Cook Cnty, IL	11.2%	14.7%	13.7%	3.4	2.5	-1.0
Boston, MA	8.7%	11.4%	10.5%	2.8	1.9	-0.9
Milwaukee, WI	6.9%	9.3%	8.4%	2.4	1.5	-0.9

Forecast Summary

2000-2010
increase



Conclusions & Next Steps

What Have We Learned?

- Youthful cohort succession increases voting strength in Hispanic immigrant communities
- A model quantifying this process accounts for much of that prospective increase
- Further possible refinements could account for:
 - Adult noncitizen Hispanics who will naturalize
 - Migratory influx of adult citizen Hispanics
 - Mortality loss through elderly cohort succession