



Case Management in RI: Lead Poisoning and Beyond

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Outline



- Background- case management in RI
- Action levels in RI
- Case management evaluation
- Moving toward healthy housing

Background



- Case management in RI offered through lead centers
- Lead centers
 - Non-profit agencies funded by Medicaid
 - Offer comprehensive case management services to families of children with lead poisoning

Background



- Certification for lead center standards developed by:
 - RI Dept of Health
 - RI Dept of Human Services
 - Medicaid
- Four lead centers throughout the state
 - First one opened in 1998
 - Three others opened in 2003

Action Levels in RI



Category	Action Level	Action
Elevated Blood Lead	Venous 15-19 $\mu\text{g}/\text{dL}$	<p>Family is referred to a lead center for an in-home lead education visit and a visual assessment to identify lead hazards.</p> <p>If funding is available for a private inspection, some environmental intervention (i.e. spot repair, window replacement) may be performed.</p>
Persistent Lead Poisoning And Significant Lead Poisoning	Two venous blood lead levels (BLLs) 15-19 $\mu\text{g}/\text{dL}$ done 90-365 days apart One venous BLL ≥ 20 $\mu\text{g}/\text{dL}$	<p>Family is referred to a lead center for an in-home lead education visit and a visual assessment to identify lead hazards, AND the family is offered an environmental inspection.</p>

Case Mgt Evaluation



- Areas of interest
 - Parental knowledge about lead
 - Demographic differences
 - Accepting services
 - Refusing services
 - Changes in blood lead levels
 - Enrollment in Women Infants and Children (WIC)
 - Enrollment in Early Intervention (EI)

Sources of Data



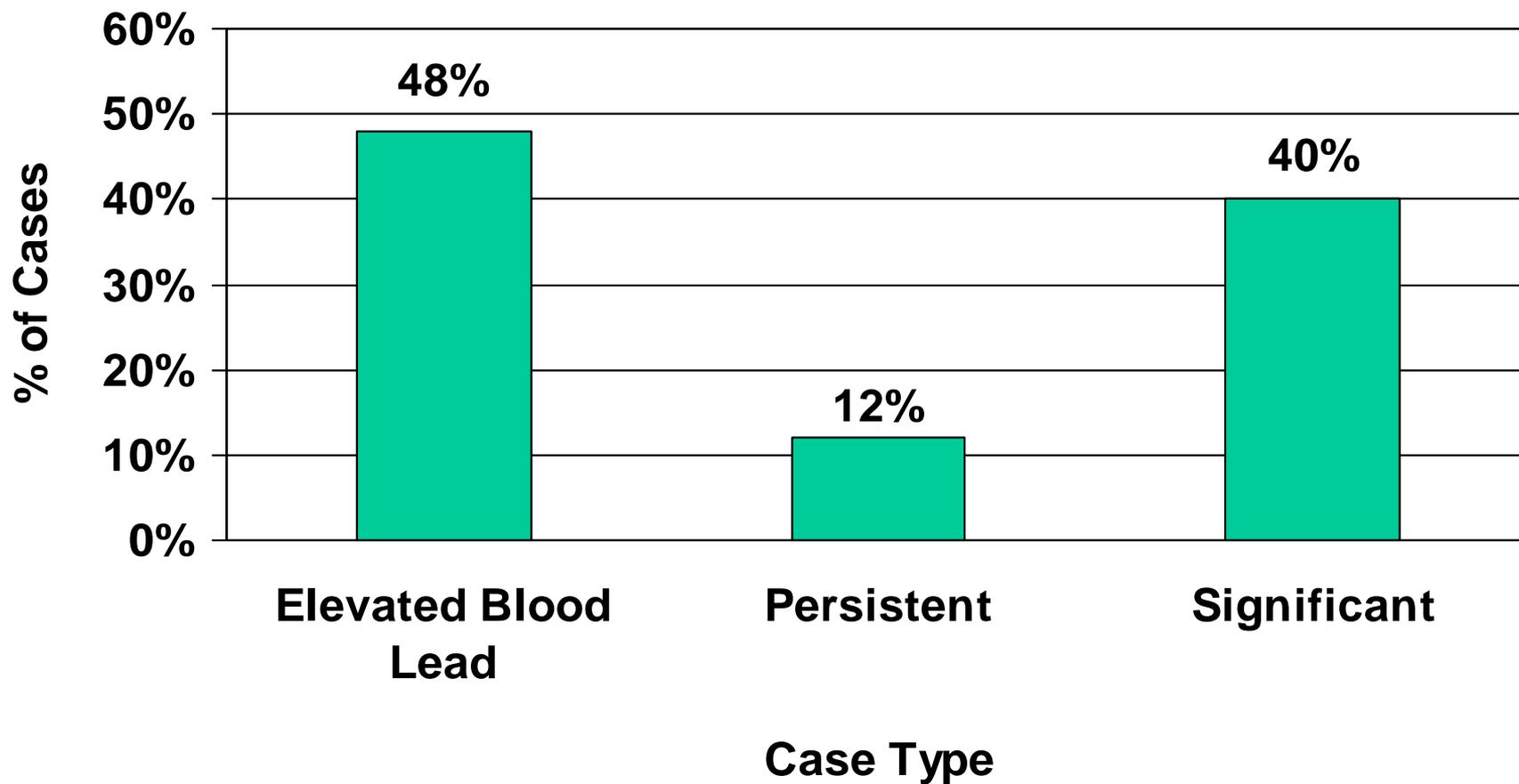
- Lead Center Database
 - Case management services
 - Parental education
- Lead Elimination Surveillance System
 - Blood lead screening data
- KIDSNET
 - WIC/EI
 - Race

Study Sample

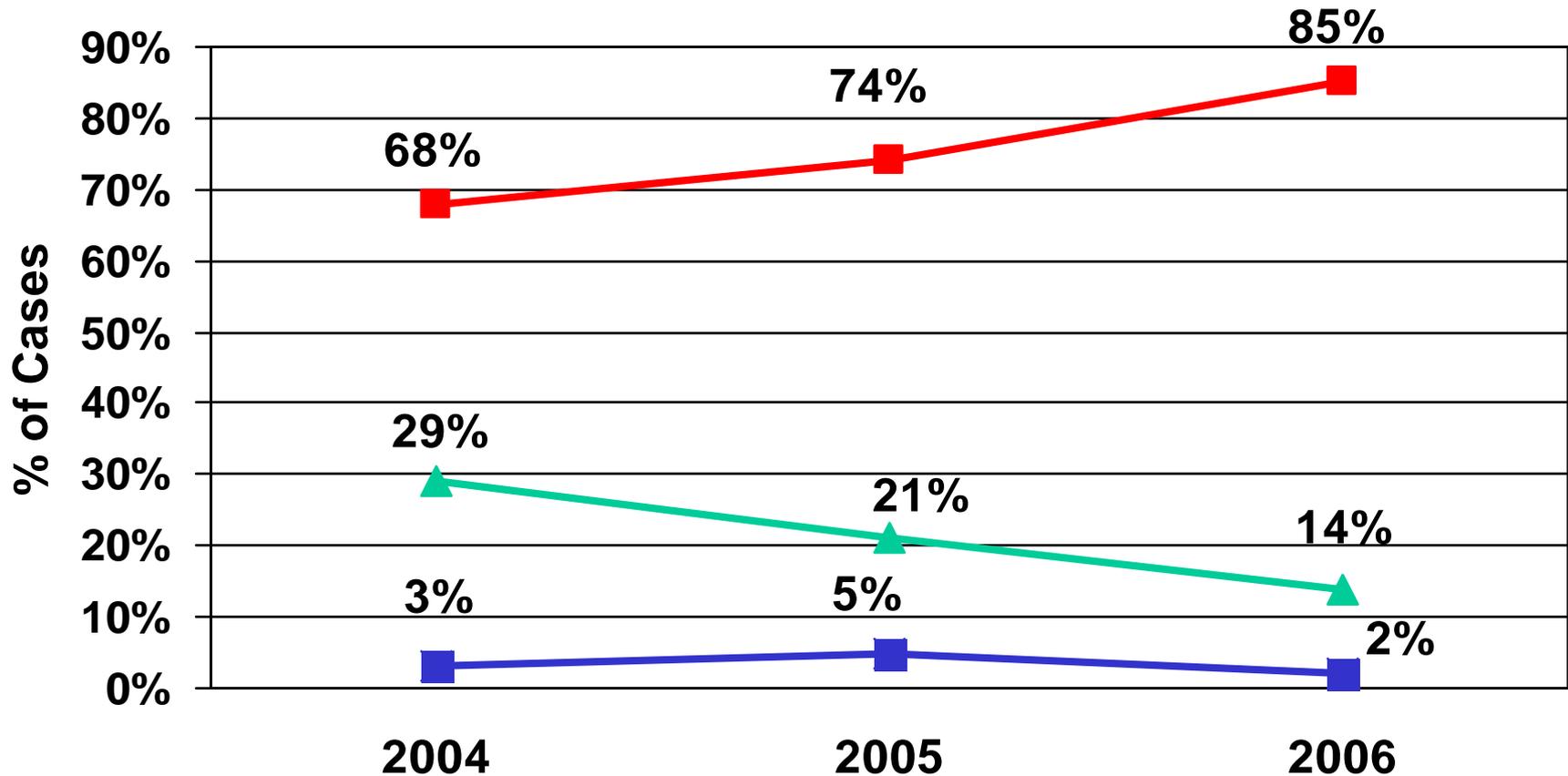


- Children who were referred to case management between Jan 1, 2004 and Dec 18, 2006
- N=827 cases

Study Sample by Case Type



Case Capture Rates



Case Status



Category	#	%
Closed Cases - Complete case mgt (300, 36%) - Refused case mgt (187, 23%)	487	59
On-going Cases (as of 12-18-06)	174	21
Incomplete Cases	166	20
Total	827	100

Objective 1



- To assess the effect of case management services on parental knowledge of lead poisoning issues

Assessment of Parent Knowledge



- Assessment
 - 11 multiple choice questions
 - Pre-test administered at first visit
 - Post-test administered several visits later

Lead Knowledge Assessment



- Sample Questions
 - What is lead?
 - Who should be screened for lead?
 - What health problems can result from lead poisoning?
 - What type of food should you feed a lead poisoned child?
 - How can you make your home temporarily lead safe?

Lead Knowledge Assessment



- Average pre-test score= 62%
- Average post-test score= 85%
 - $p < 0.01$
- Questions most likely to be wrong on the pre-test and correct on the post-test
 - What is lead?
 - What happens when pregnant women are exposed to lead through home renovations?

Objective 2



- To determine if there is a correlation between the duration of case management services and an increase in parental knowledge of lead poisoning issues

Duration of Case Mgt and Knowledge



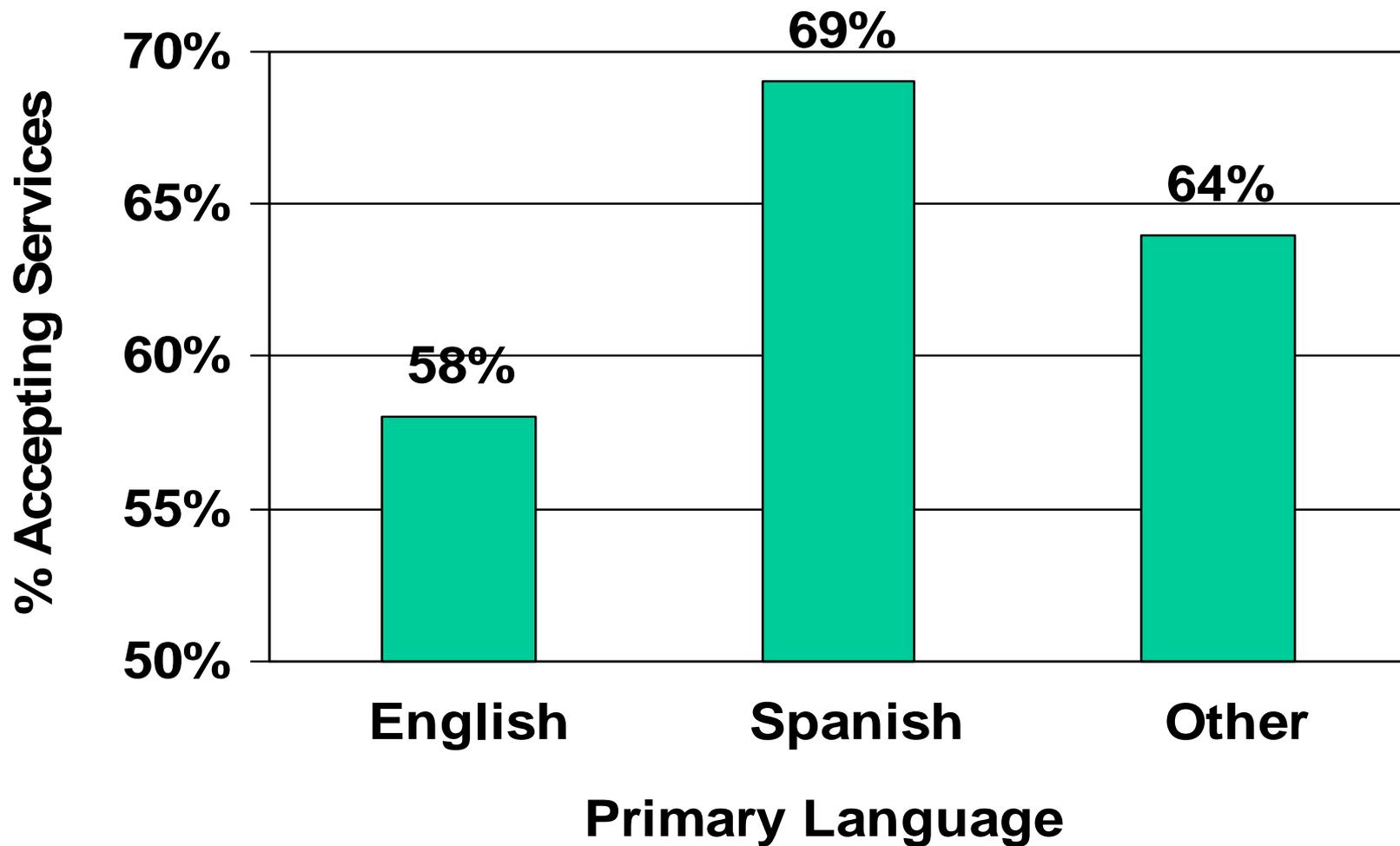
- Increase in post-test scores did not correlate with the number of visits, but . . .
- Post-test scores DID increase slightly the longer families were enrolled in case management

Objective 3

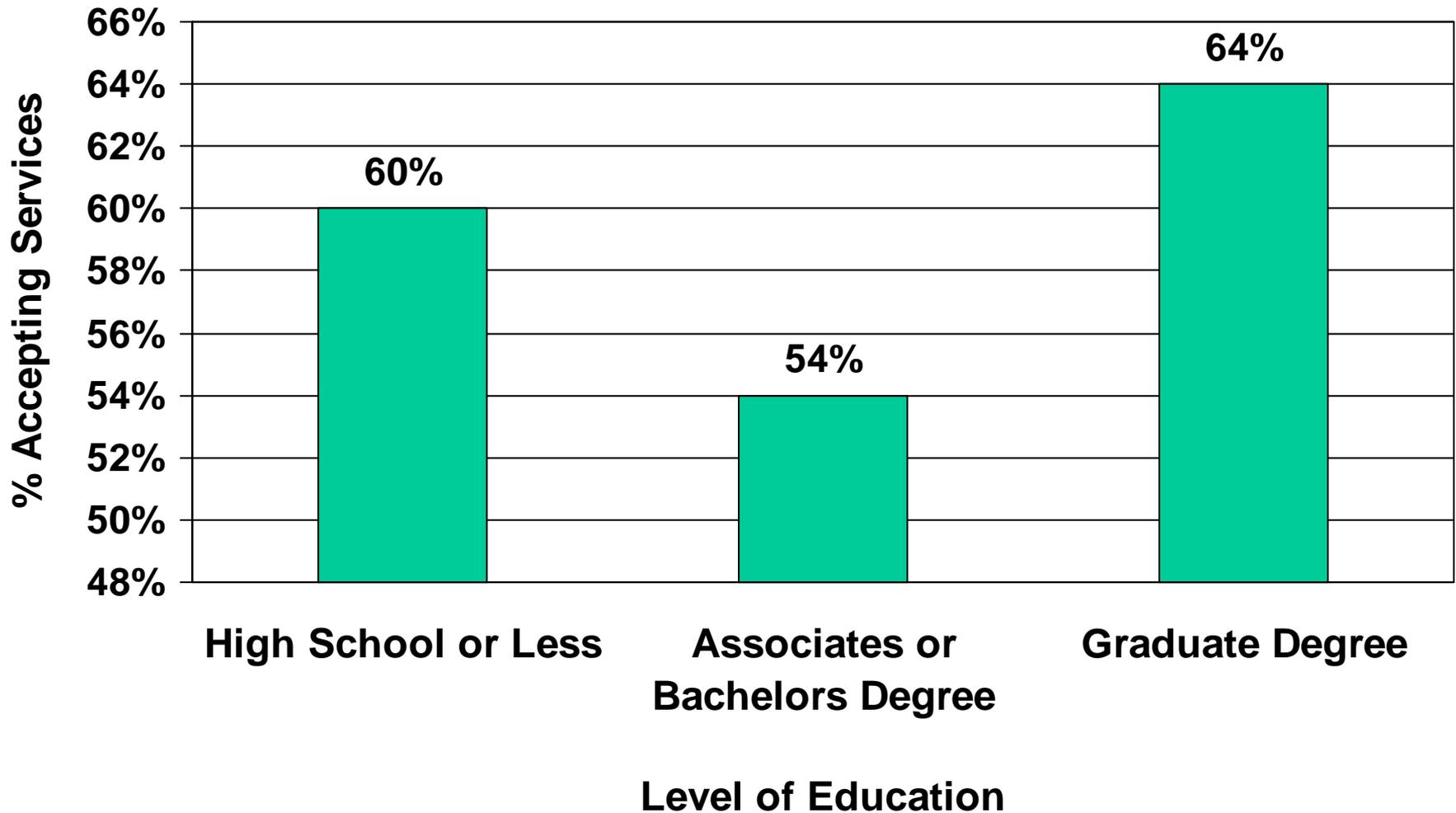


- To determine if there are demographic differences between children who receive case management services and those who refuse

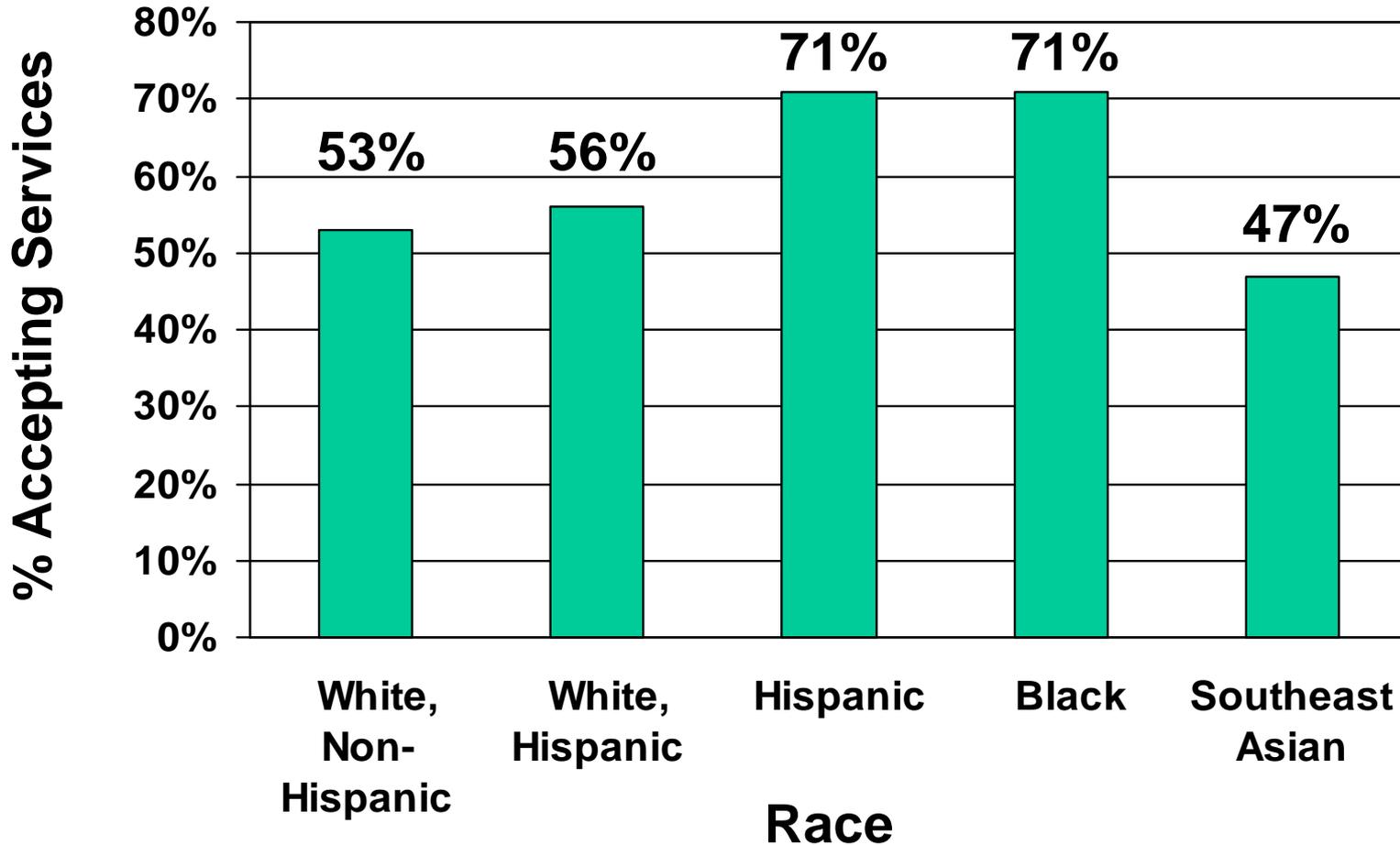
Breakdown by Primary Language



Breakdown by Mother's Education



Breakdown by Race

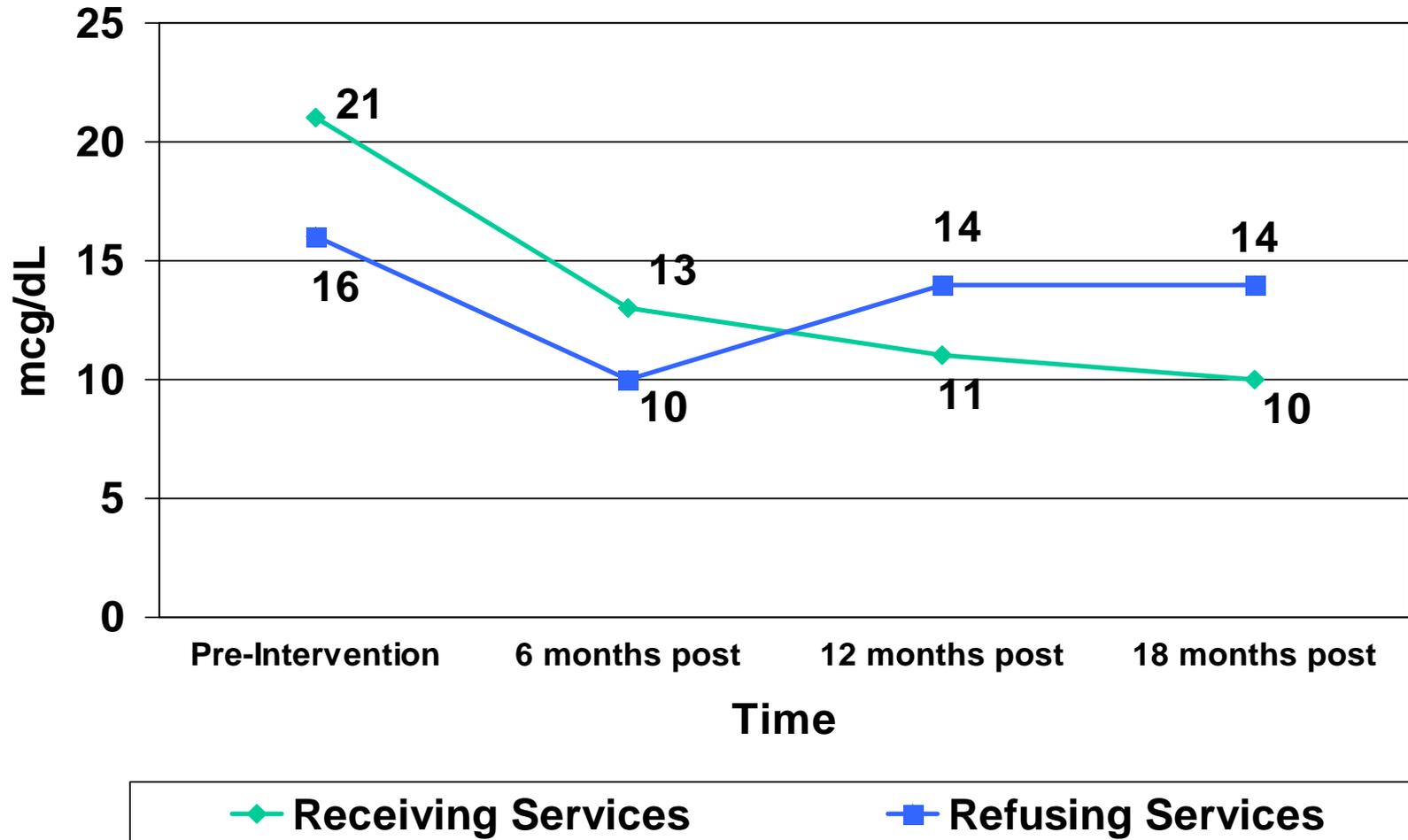


Objective 4



- To determine the rate of change in the blood lead levels of children before case management compared to 6, 12, and 18 months after

Changes in BLLs

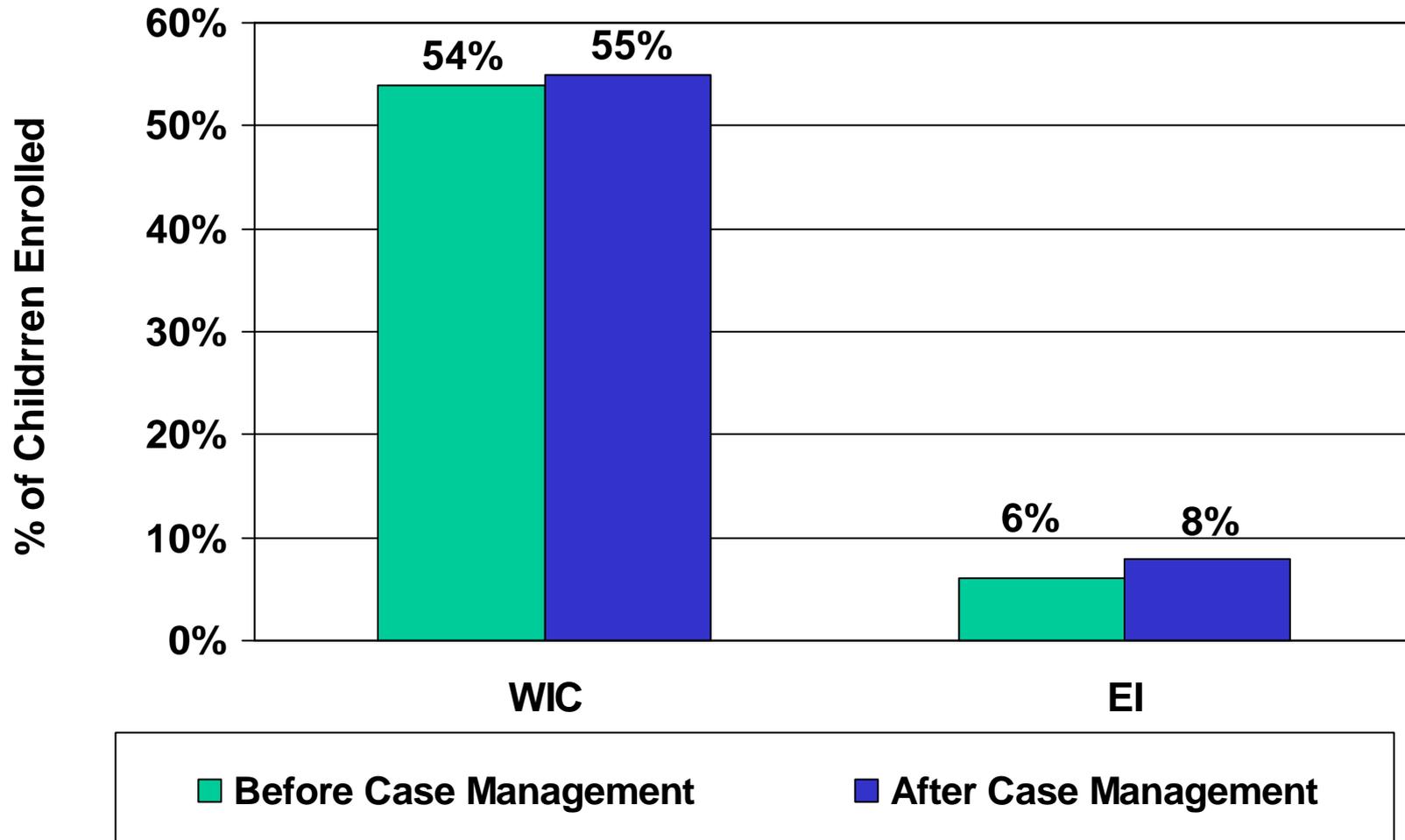


Objectives 5 and 6



- To determine if eligible children were more likely to enroll in WIC after they receive case management services
- To determine if eligible children were more likely to enroll in Early Intervention after they receive case management services

Enrollment in WIC and EI



Recommendations



- Monitor number of referrals and open cases
- Continue to enhance educational efforts
- Develop ways to increase understanding of “lead safe”
- Maintain quality improvement efforts
- Move toward healthy housing

Moving Toward Healthy Housing



- Lead centers began collecting information on environmental risks besides lead
 - Heating
 - Pests
 - Asthma
 - Mold/Moisture
 - Smoke/Carbon Monoxide detectors

Moving Toward Healthy Housing



- Expand environmental inspections to include other hazards in the home besides lead
- Use lead centers as a model for “asthma centers”

Summary



- Case management for lead poisoning in RI is well established and has a positive impact on families
- Next steps
 - To use home visits for lead to educate about other healthy homes issues
 - Rather than offering lead inspections, offer healthy housing inspections



Questions?

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BUILDING A FRAMEWORK FOR HEALTHY HOUSING

2008 National Healthy Homes Conference

Public Housing Relocation of Residents: A Case Study of Atlanta

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Baseline Study

- Our aim is to assess the effect of public housing transformation policy on the economic well-being of soon to be relocated public housing families in Atlanta neighborhoods.



Background

- Since the mid-1990s, the Atlanta Housing Authority (AHA) has demolished over 17,000 public housing units.
- AHA plans to demolish another 3,800 by 2010.
- The current planned demolitions will affect 9,600 public housing residents.



Background

- By the late 1980s, public housing was being cited as one of the causes of concentrated urban poverty leading to new housing policy formation (Goetz, 2002).
- In 1992 the HOPE VI (Housing Opportunities for People Everywhere) Program was created to reinvent public housing by demolishing the large, spatially concentrated developments and replacing them with mixed-income housing, thus deconcentrating poverty and its associated crime (Popkin et al., 2004; R. Smith, 2002).



Background

- The AHA was at the forefront of this effort. In fact Atlanta gained the reputation as a leader in rethinking public housing and addressing issues of concentrated poverty that had long overshadowed any public housing successes.



Background

- Many former public housing residents were relocated to private market housing with the help of Housing Choice Vouchers (formerly Section 8).
- AHA's plan is to do the same with current residents.
- Vouchers provide a rent subsidy to participating landlords thus keeping the rent amount at 30 percent of the tenant's income.



Background

- AHA has replaced the original public housing sites with mixed income mixed use communities.
- Fewer than 17 percent of residents moved out of public housing have had the opportunity to return to the new mixed income developments (Keating, 2001).
- The Atlanta Taskforce for Homelessness has estimated that Atlanta has an over 80,000 housing unit deficit for very low income residents.



Background

- Although these mixed income/use communities have been declared a success, they, and the relocations that precipitate them, have not been substantially researched.
- This round of demolitions and relocations provides a unique opportunity to do so.



This Study

- We initiated a prospective study of six public housing communities slated for demolition and 1 public housing community not yet set for demolition as a control.
- Four are family communities and three are senior citizen or disabled communities



This Study

- We created an omnibus survey of all aspects of the current lives of residents—current neighborhood, home, fear of crime, collective efficacy, social support, locus of control, financial and food security, demographics of family, physical and mental health, self esteem and depression.
- We also created a set of questions on the residents attitudes towards home, the relocations and the AHA.



This Study

- We supplement this primary data with secondary data from HUD, the US Census, and from the Atlanta Police department.
- We intend to spatially locate the residents after they are relocated to examine if the relocations meet the stated goals of AHA or if the relocations create ‘de-facto’ projects
 - in other words, how do the relocations impact receiving neighborhoods.



This Study

- We will re-survey the residents 6 months and 18 months post-relocation to examine
 - if their home, and living conditions have improved through subsidized, private market housing.
 - Have expenses increased,
 - Has transportation become an issue since senior housing is so centrally located,
 - how long does it take to adjust, build new networks, and
 - What are the long term and short term health effects of the relocations?



This Study

- We initiated a stratified random sample of 500 residents.
- We successfully completed 384 baseline surveys for a 77 % response rate.



Who Lives in Family or Senior Public Housing?

	Family	Senior		Family	Senior
Male	4 % (.20)	48 % (.50)	Lived in PH as kid	54 % (.20)	23 % (.42)
Age	40.4 (15)	61.6 (12.)	Education	11 (2)	11.3 (2.6)
Black	97 % (.18)	90 % (.30)	Currently working	42 % (.23)	6 % (.23)
White	2 % (.14)	5 % (.22)	Monthly Income	\$764 (507)	\$751 (465)
Married	6 % (.24)	5 % (.21)	Monthly rent	\$263	\$220
# kids	2 (1.9)	.01 (.10)	# of rooms	3.6	2.3

Percents or means with (standard deviations)



How did Residents Come to Live in Public Housing?

	Family	Senior
Affordable	35 %	23 %
Family Dissolution	15%	8 %
Desire for Independence	15 %	10 %
Improvement over previous home situation	15 %	21 %
Health Reason	2 %	24 %
Loss of job or Home	9 %	10 %

Percents or means with (standard deviations)



How Financially Secure are Residents?

	Family	Senior
Overall Financial Security (1-5) 1=very secure, 5= not at all secure	1.9 (0.73)	1.8 (.83)
Over 15 days late with rent in the last 12 months?	24 %	6 %
At the end of most months, household had more than enough money left over	1 %	7 %
household had some money left over	33 %	33 %
household had just enough to make ends meet	48 %	46 %
household did not have enough money to make ends meet	15 %	12 %

Percents or means with (standard deviations)



What is the Physical Health of Residents?

	Family	Senior
Self- Rate your Health 1=Excellent, 5=poor	2.8 (1.3)	3.5 (1.1)
Been diagnosed with Diabetes	13 %	29 %
Been diagnosed with High Blood pressure	39 %	75 %
Been diagnosed with Asthma	22 %	20 %
Been diagnosed with Arthritis/rheumatism	23 %	56 %
Been diagnosed with Heart Disease	9 %	25 %

Percents or means with (standard deviations)



What is the Mental Health of Residents?

	Family	Senior
In past 4 weeks, how often mental health poor? 1= very often 5= not at all	3.9 (1.4) Not often	3.9 (1.2)
In past 4 weeks, how often worried, tense or anxious? \ 1= very often 5= not at all	2.9 (1.5)	3.4 (1.4)
In past 4 weeks, how often felt depressed, sad, blue? 1= very often 5= not at all	3.2 (1.4)	3.7 (1.3)

Percents or means with (standard deviations)



What do Residents Think about their Homes?

	Family	Senior
Overall Condition of Apartment (1-4) 1=excellent, 4= Poor	2.6 (0.78) Fair	2.2 (.93) Good
How long lived in your Public housing Community (months)	120 (1.2) 10 years	80 (72) ~7 years
Physical problems with building (leaks, peeling paint, pests, non-working appliances, etc-- 0-7)	2.2 (1.9)	1.5 (1.4)
Most cited building problem: Roaches and pests	62 %	70 %

Percents or means with (standard deviations)



What do Residents Think about their Neighborhoods and Local Crime?

	Family	Senior
Neighborhood Social Capital (1-5) 5=worse social capital	3.5 (0.78)	2.9 % (.83)
Neighborhood Connection/Importance (1-5) 5=more connection/importance	2.75 (1.2)	3.76 (0.9)
Neighborhood Social Disorganization (1-5) 5=more disorganized	3.51 (.72)	2.85 (.84)
Overall satisfaction with neighborhood (1-5) 5= very unsatisfied	3.28 (1.3)	2.27 (1.2)
Fear of crime in Neighborhood (1=very afraid-5=not at all afraid)	2.84 (1.2)	3.37 (1.2)

Percents or means with (standard deviations)



How do Residents Rate the AHA and their Relocation Process?

	Family	Senior
Did AHA come to your community to announce relocations? % Yes	88 %	88 %
Did you attend meeting with AHA % Yes	80 %	80 %
Did AHA show you HUD relocation plans--% yes	47 %	40 %
Were you able to provide input to AHA--%Yes	54 %	45 %
How confident you will find a home as good as your current one> 1=very--4=not very	1.8 (1.0)	2.1 (1.1)
I think AHA has done a good job planning the relocations -----% agree	47 %	43 %

Percents or means with (standard deviations)



What do Residents Think of the Upcoming Relocations?

	Family	Senior
Are the buildings in your community physically run down beyond repair--% Yes	31 %	12 %
Should AHA spend money on renovation or relocation or both? % relocation only	39 %	33 %
Do you prefer renovation or relocation--% relocation	63 %	33 %
How ready are you to move now? 1=not at all ready – 4 very ready	2.9 (1.2) ready	2.0 (1.2)
Would you move even if AHA does not get HUD approval? %Yes	59 %	34 %

Percents or means with (standard deviations)



What Problems Do Residents Think They Will Face?

1=not a problem—3= a big problem	Family	Senior
Have enough money for a down-payment	2.0 (.8)	1.9 (.8)
Getting to doctor or medical clinic from new home	1.5 (.7)	1.7 (.8)
Have neighbors who can help in an emergency	1.8 (.7)	1.7 (.7)
Be able to get to work from my new home	1.4 (.6)	1.3 (.6)
Be able to find quality child care for my Children	1.5 (.7)	--

Percents or means with (standard deviations)



What do Residents Think of the Upcoming Relocations?

1=strongly disagree, 5= strongly agree	Family	Senior
I feel stressed b/c I don't think subsidized housing will be very stable	3.0 (1.2)	3.0 (1.2)
I am worried there are not enough subsidized homes available	3.6 (1.2)	3.7 (1.1)
I feel worried about having enough money each month to pay both rent and utilities	3.5 (1.3)	3.2 (1.4)
Since hearing about the relocations, my future feels very uncertain	2.8 (1.3)	3.2 (1.4)
I'm very excited about moving to subsidized housing	3.8 (1.2)	3.0 (1.3)

Percents or means with (standard deviations)

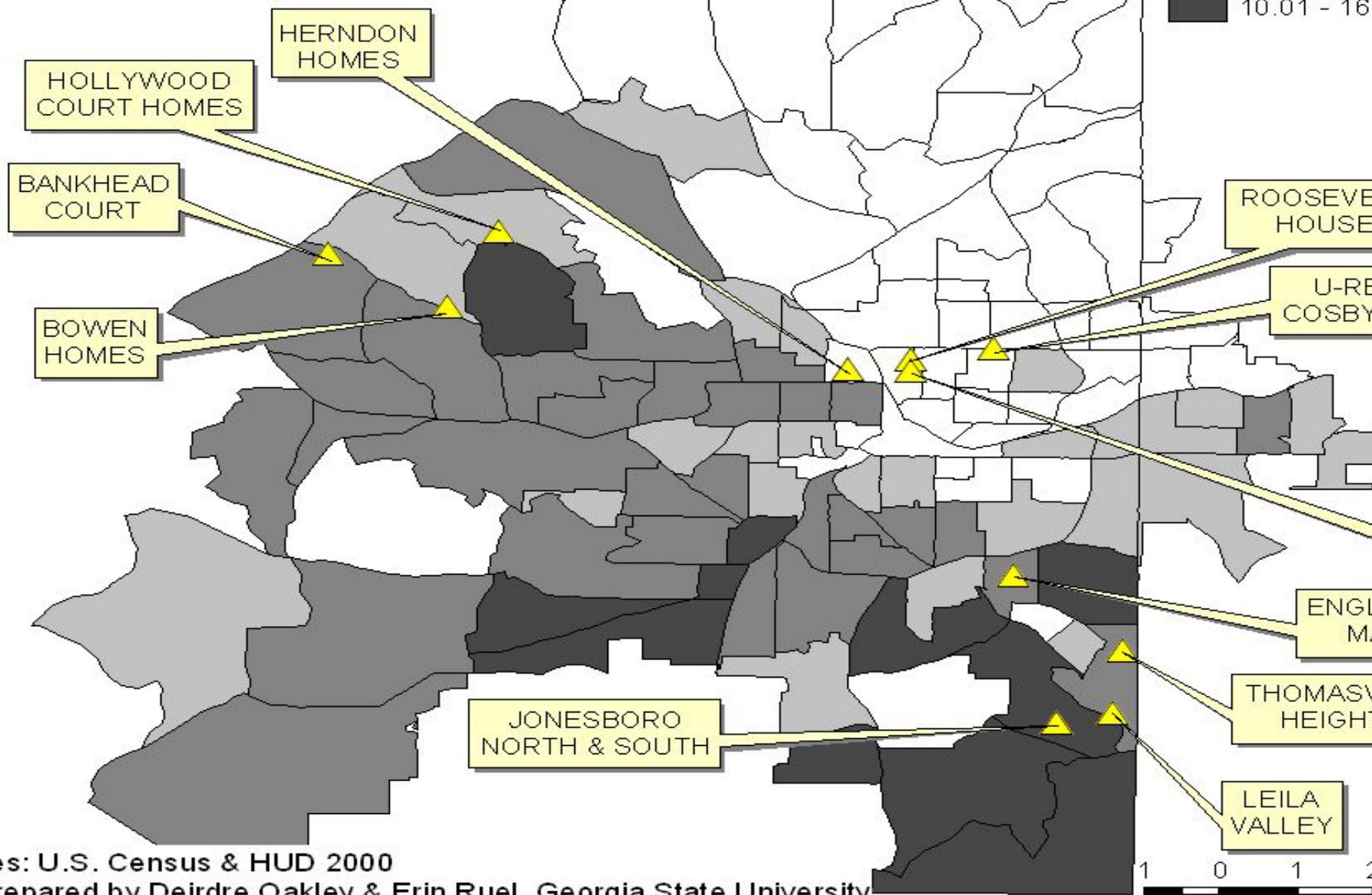


Summary Primary Data Findings

- Public housing appears to be a last resort housing choice for people with few monetary or social resources, and people with health or disability issues.
- Residents want to move out of public housing—but not because housing is dilapidated.
- Senior high rise housing appears to be much nicer than family housing.
- Residents are concerned about the financial aspect to relocating and whether or not there are private market homes available.
- We've discussed individual effects, but what are potential effects of relocations on receiving neighborhoods?

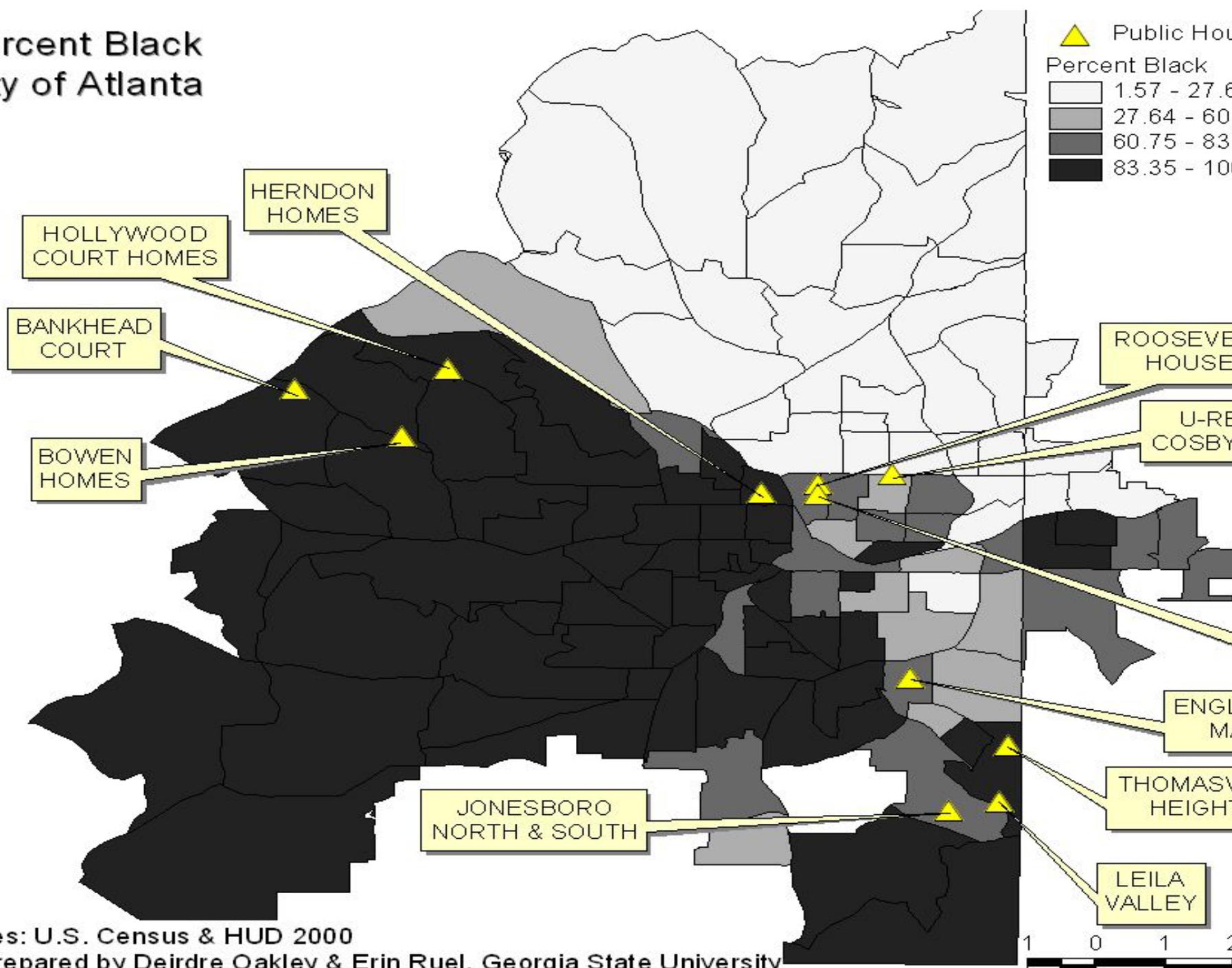


Percent Voucher Housing City of Atlanta



Sources: U.S. Census & HUD 2000
 Map prepared by Deirdre Oakley & Erin Ruel, Georgia State University

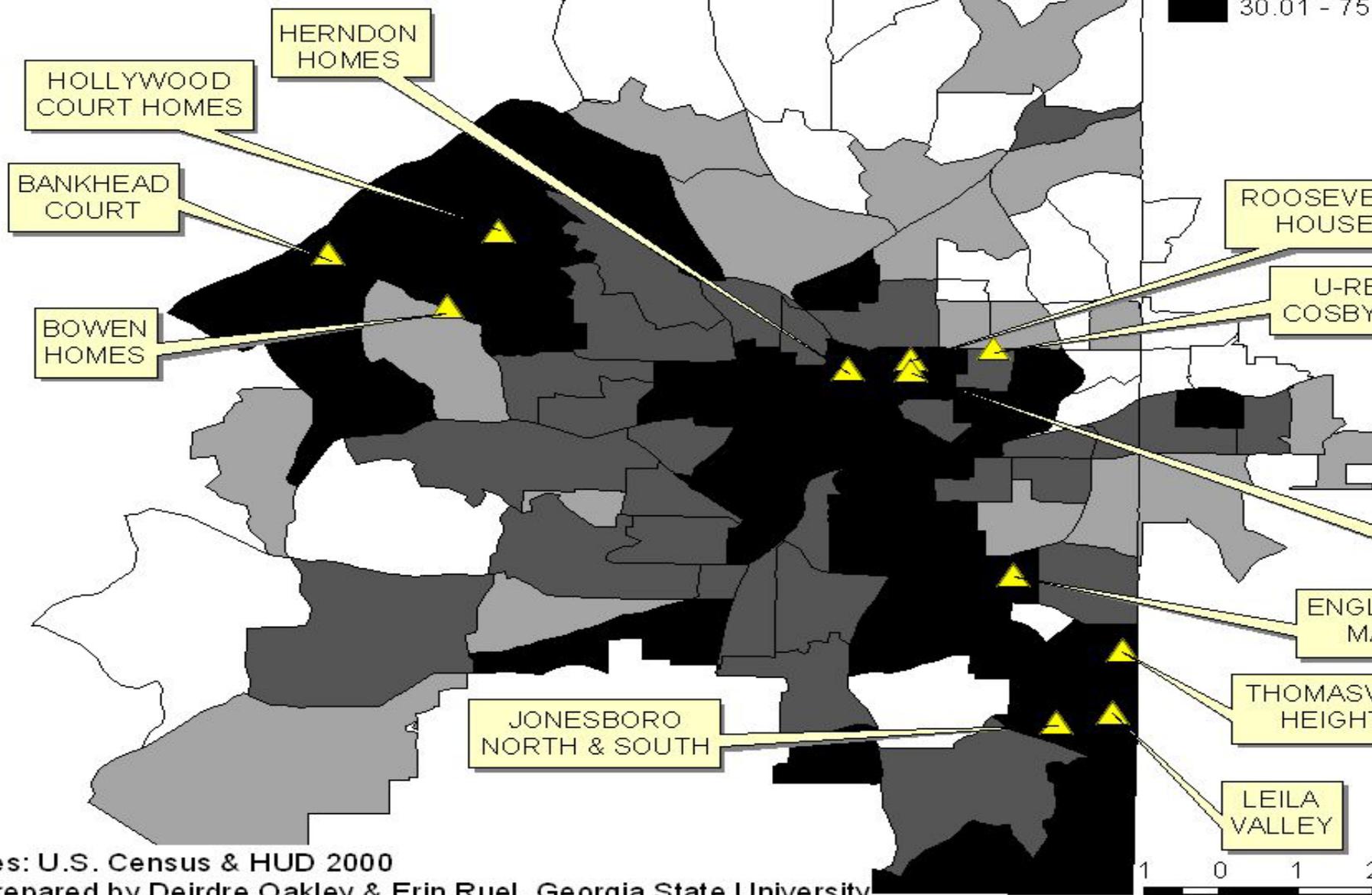
Percent Black City of Atlanta



Sources: U.S. Census & HUD 2000

Map prepared by Deirdre Oakley & Erin Ruel, Georgia State University

Percent Poverty City of Atlanta



▲ Public Housing
Percent Poverty
0 - 10
10.01 - 20
20.01 - 30
30.01 - 75

Secondary Data Findings

- The majority of voucher housing is concentrated in poor, black neighborhoods.
 - Does little to achieve goal of deconcentrating poverty
 - Reinforces existing patterns of racial residential segregation
 - Creates 'de-facto' housing projects?



Conclusions

- Residents agree that project based public housing has many problems that need to be addressed.
- Since many who enter public housing do so because of health, family dissolution and job or housing loss, we may want to rethink eliminating all the existing stock of low income housing—better than the alternative (homelessness).
- Many want to relocate to subsidized housing—evidence is not yet available on if that is a permanent and stable solution that will deconcentrate urban poverty.
- If we want healthy housing for all regardless of economic resources, housing policy needs to address
 - why people are in public housing in the first place,
 - Overall availability of housing for very low income persons, and
 - how relocations will impact existing neighborhoods.

