

# **Creating Moves to Opportunity:** Experimental Evidence on Barriers to Neighborhood Choice

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*With special thanks to our partners who implemented this experiment:*  
Seattle Housing Authority, King County Housing Authority,  
MDRC, and J-PAL North America

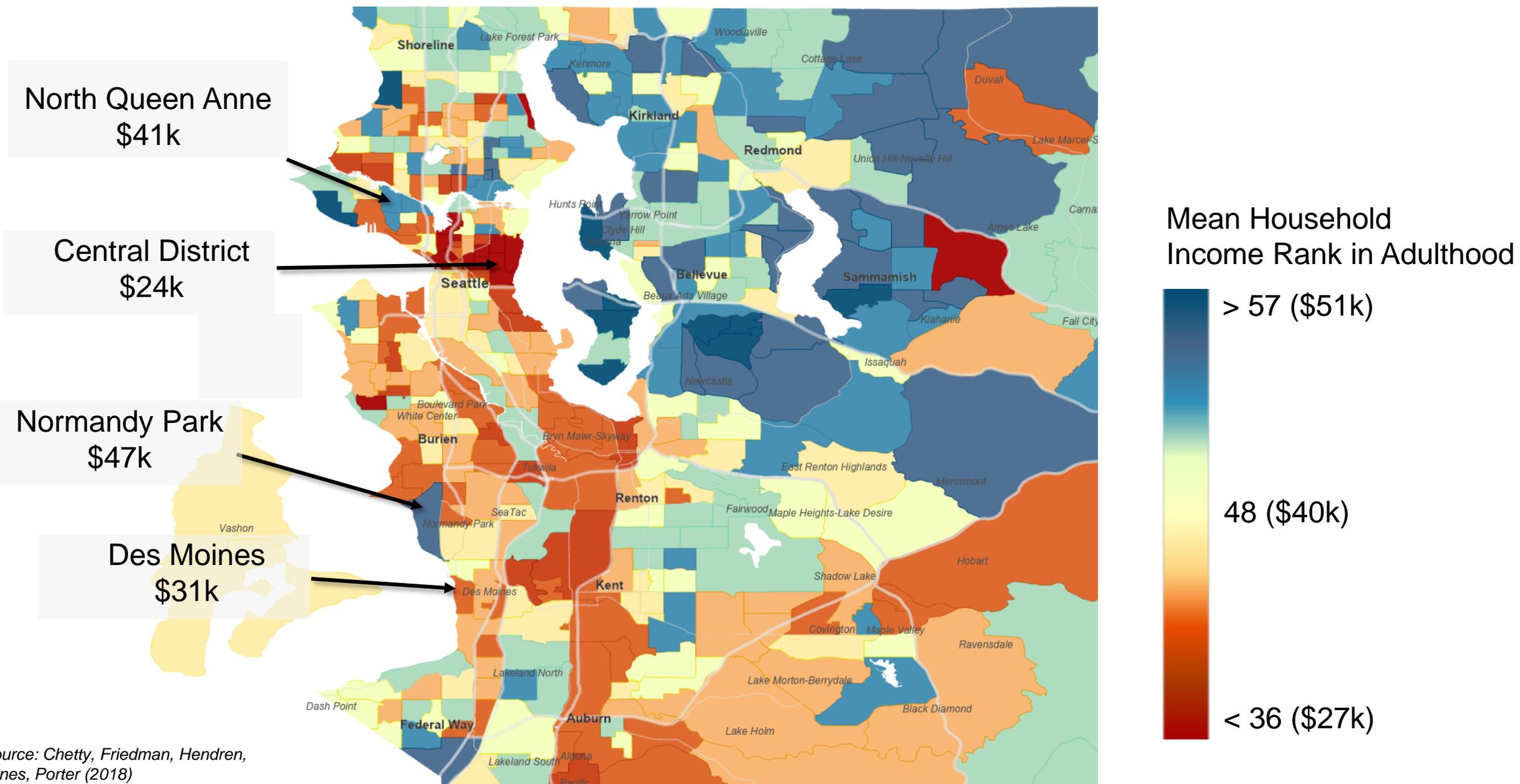
March 2020

## **Motivation: Four Facts on Neighborhoods and Economic Opportunity**

1. Children's prospects for upward income mobility vary substantially across neighborhoods

# The Geography of Upward Mobility in Seattle and King County

Average Income at Age 35 for Children with Parents Earning \$27,000 (25<sup>th</sup> percentile)

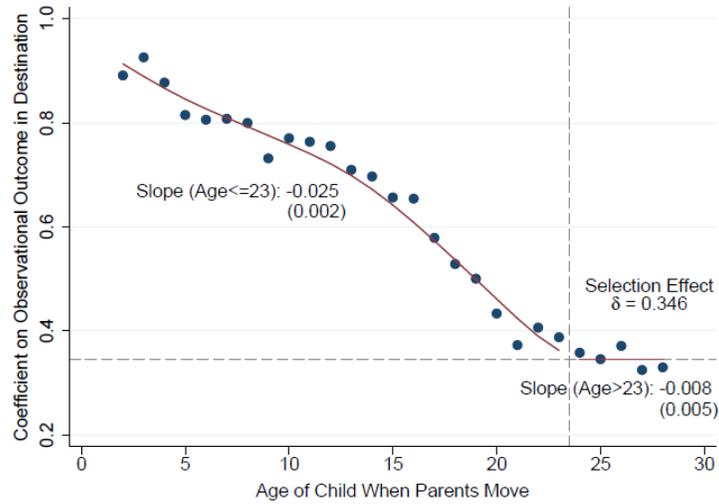


## Motivation: Four Facts on Neighborhoods and Economic Opportunity

1. Children's prospects for upward income mobility vary substantially across neighborhoods
2. Moving to better neighborhoods earlier in childhood improves children's outcomes in adulthood significantly

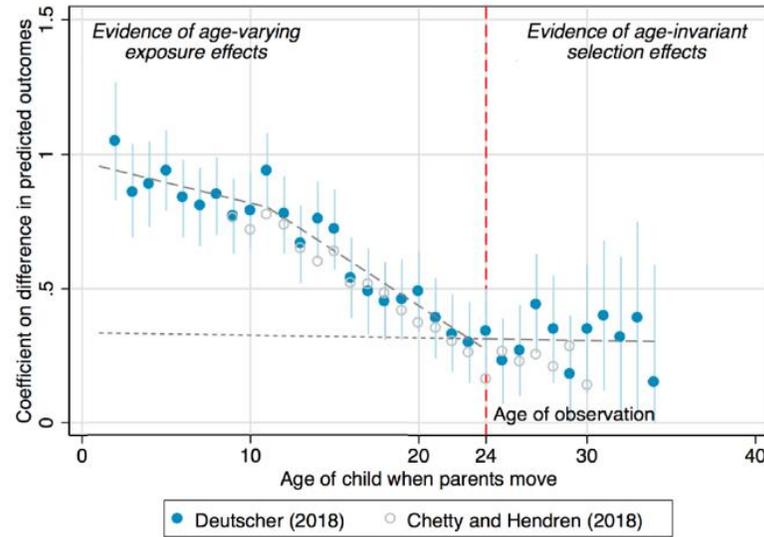
# Estimates of Childhood Exposure Effects

## United States



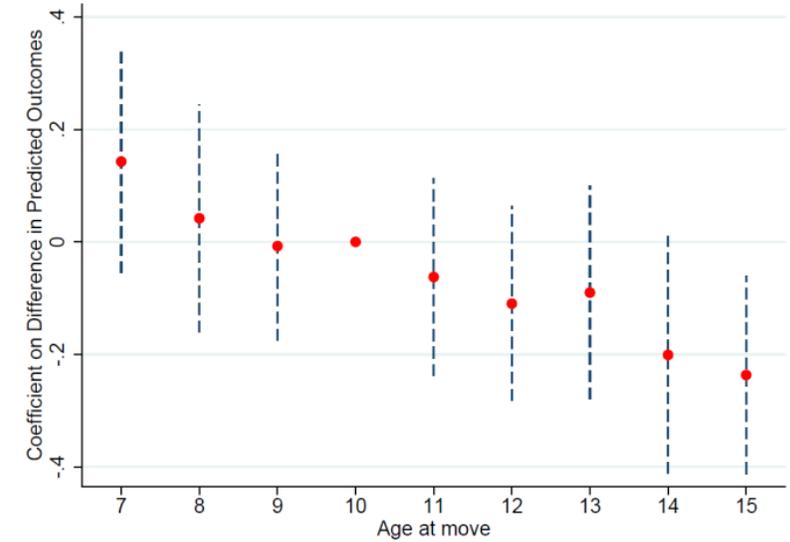
Source: Chetty, Friedman, Hendren, Jones, Porter (2018)

## Australia



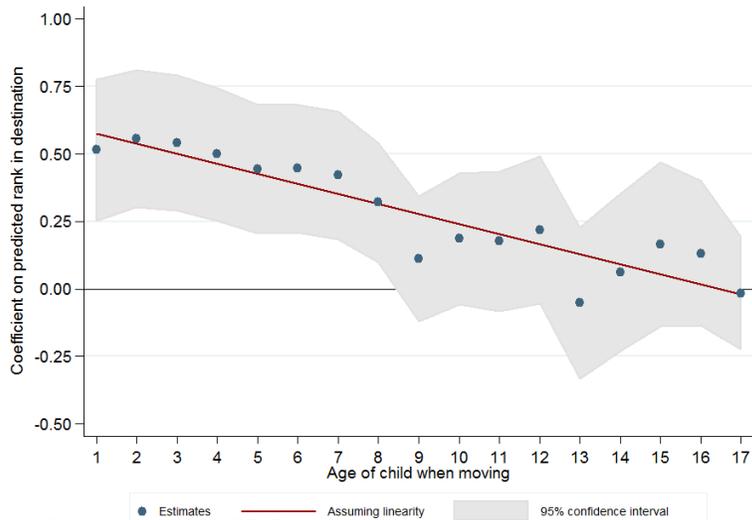
Source: Deutscher (2018)

## Montreal, Canada



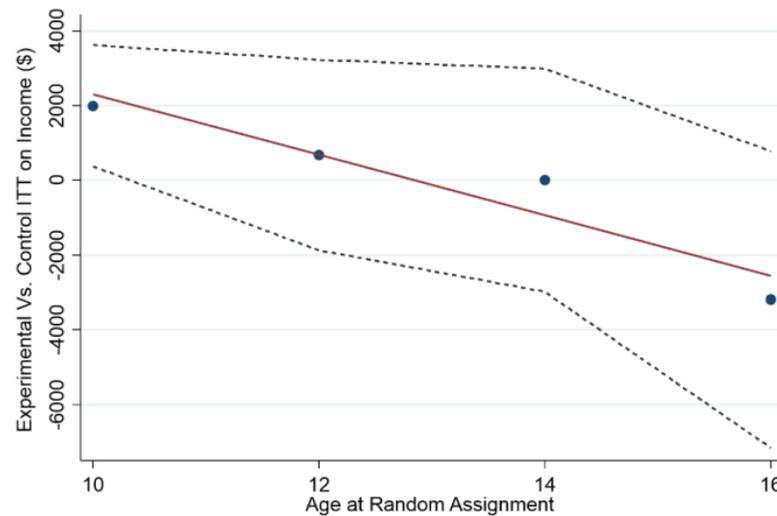
Source: Laliberté (2018)

## Denmark



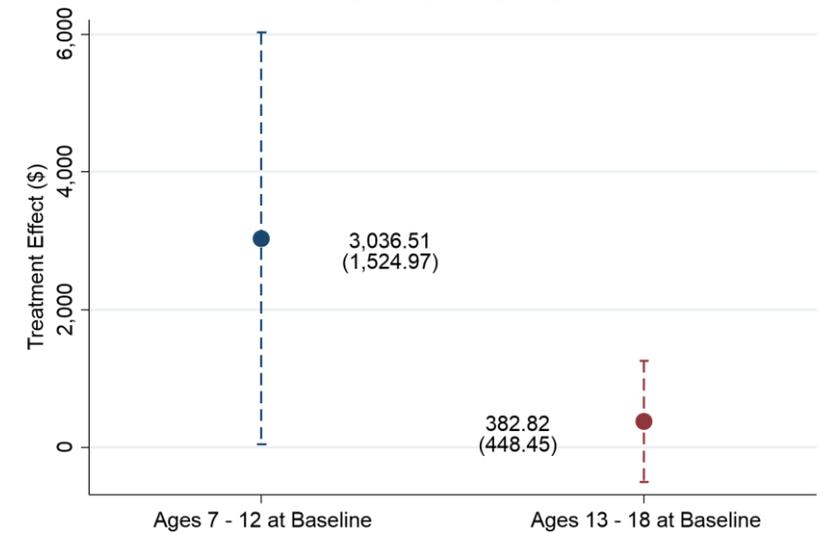
Source: Faurschou (2018)

## MTO: Baltimore, Boston, Chicago, LA, NYC



Source: Chetty, Hendren, Katz (AER 2016)

## Chicago Public Housing Demolitions

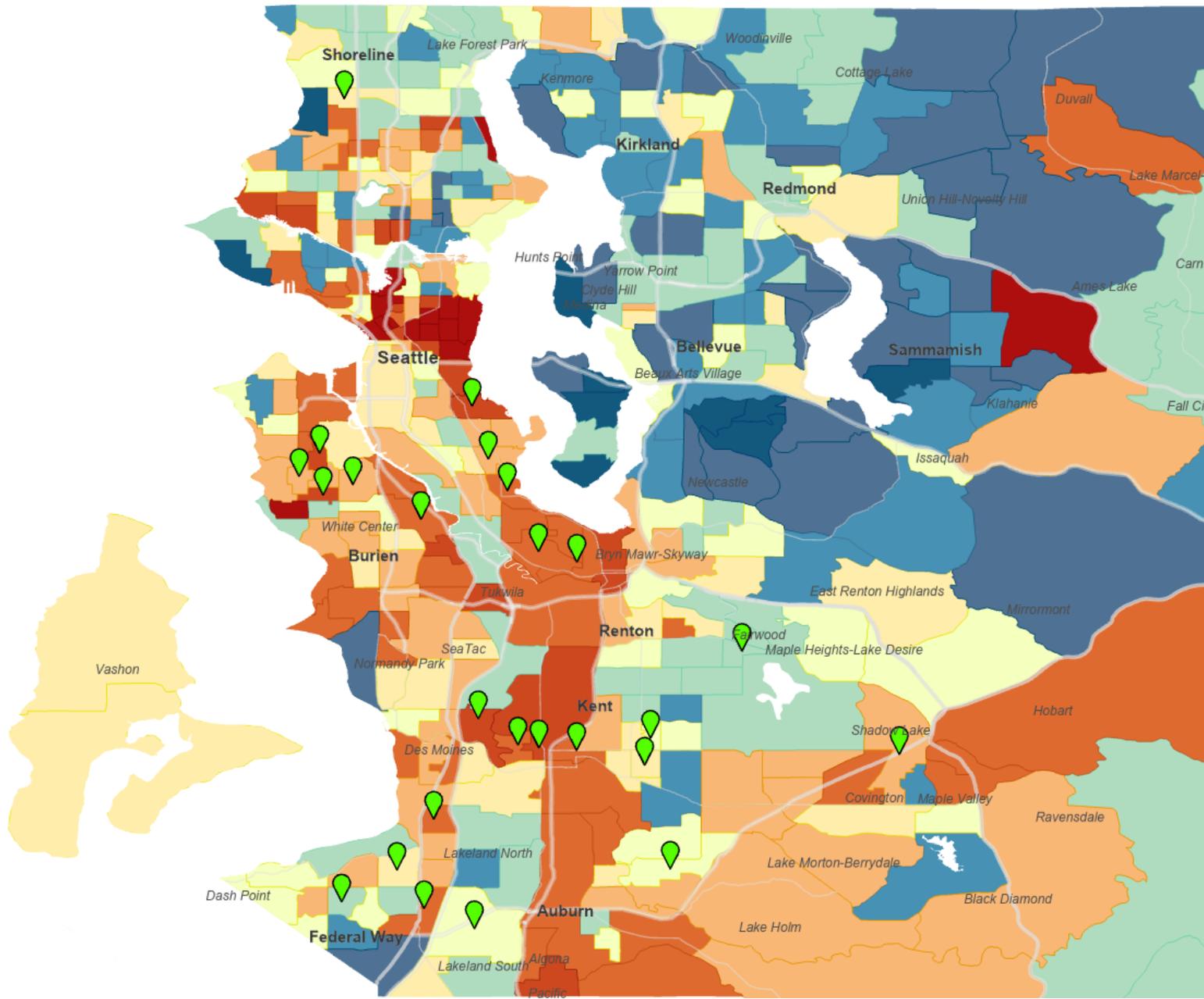


Source: Chyn (AER 2018)

## Motivation: Four Facts on Neighborhoods and Economic Opportunity

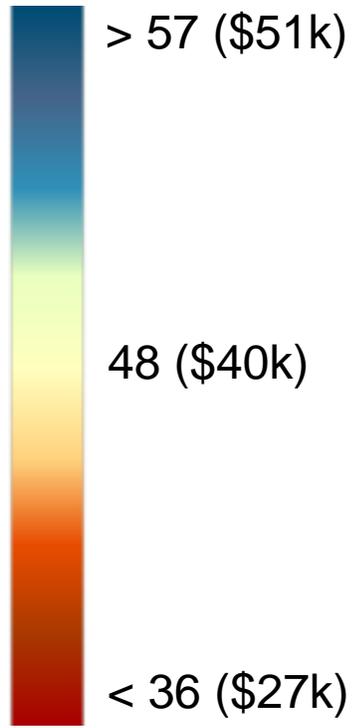
1. Children's prospects for upward income mobility vary substantially across neighborhoods
2. Moving to better neighborhoods earlier in childhood improves children's outcomes in adulthood significantly
3. Low-income families who receive housing vouchers predominantly live in low-opportunity neighborhoods

# Most Common Locations of Families with Housing Vouchers 2015-2017



 25 most common tracts where voucher holders with children leased before the CMTO experiment

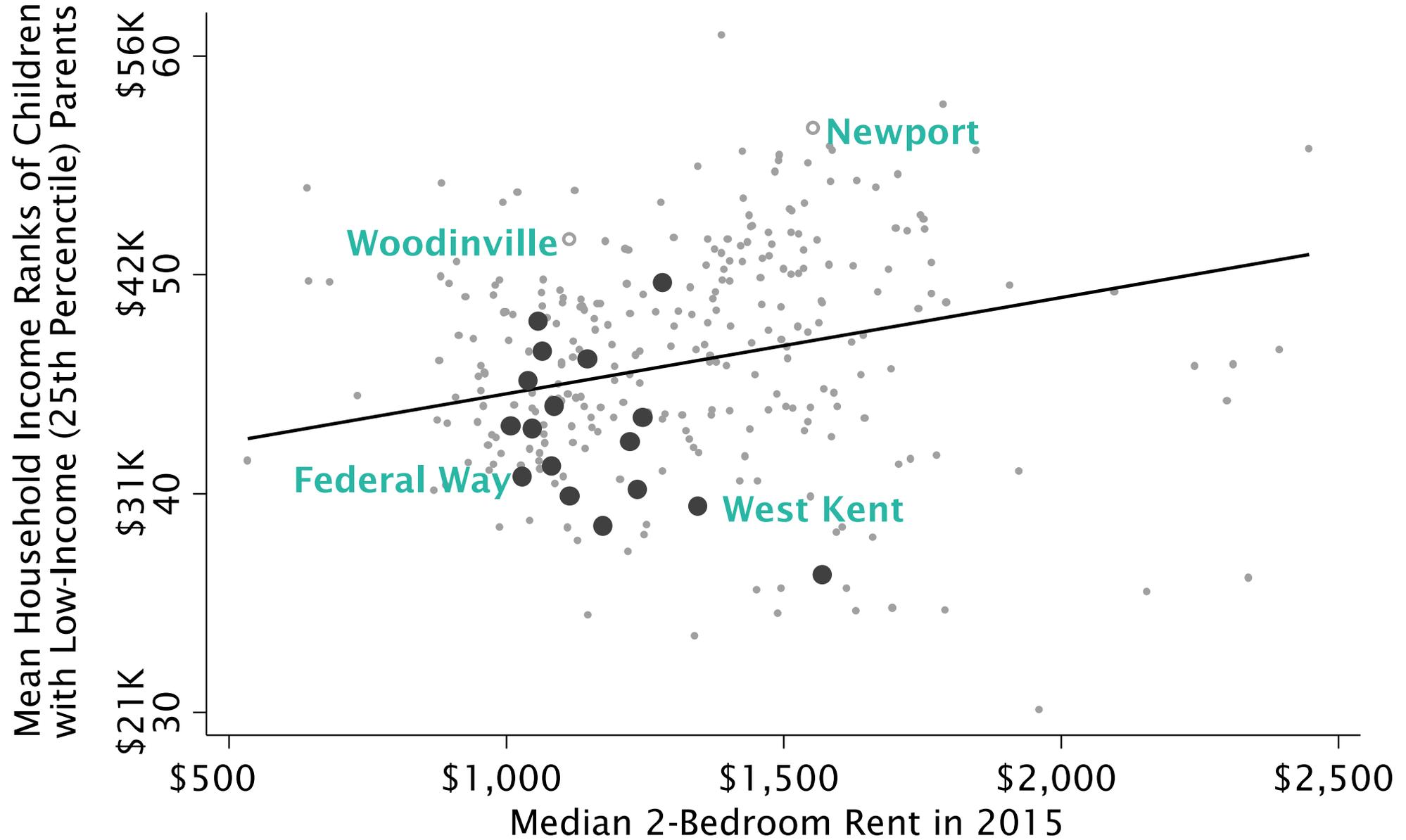
Mean Household Income Rank in Adulthood



## Motivation: Four Facts on Neighborhoods and Economic Opportunity

1. Children's prospects for upward income mobility vary substantially across neighborhoods
2. Moving to better neighborhoods earlier in childhood improves children's outcomes in adulthood significantly
3. Low-income families who receive housing vouchers currently live predominantly in low-opportunity neighborhoods
4. Differences in rent do not explain why low-income families live in low-opportunity areas

# The Price of Opportunity in King County: Upward Mobility vs. Rents, by Census Tract



# Question: Why Don't Low-Income Families Move to Opportunity?

- Two classes of explanations:
  1. **Preferences:** families may prefer to stay in current neighborhoods because of other amenities (e.g., commute time, proximity to family)
  2. **Barriers:** families may be unable to find housing in high-opportunity areas because of lack of information, search frictions, or landlords' tastes
  
- If barriers are what is driving segregation, can we reduce them through changes in affordable housing policy?

# Creating Moves to Opportunity in Seattle and King County

Randomized trial to develop and test policy-scalable strategies to reduce barriers housing choice voucher recipients face in moving to high-opportunity areas in Seattle and King County



# Outline

① Program Description and Experimental Design

② Treatment Effect Estimates

③ Mechanisms

④ Conclusion

# Housing Choice Voucher Program: Institutional Background

- 2.2m families in U.S use housing vouchers each year
- Administered by local housing authorities
- Typical features:
  - Income cutoff for eligibility (~30% of area median income)
  - Waitlists: typically 2+ years
  - Limited time to use voucher: typically 4 months
  - Voucher subsidizes tenant's rent
    - Tenant typically pays 30% of income toward rent and utilities
    - Landlord receives rent up to a cap based on "fair market rent"
  - Inspection process for landlords

**Section 8 Housing Choice Voucher Program**  **Complete and return to one of the regional agencies listed on the reverse of this form**

Pre-Application for housing assistance  For agency use only: Date/Time Stamp/Control Number

Please print neatly in ink. All fields are required. Submit this form only. Incomplete, photocopied, e-mailed or faxed applications will not be accepted. If you are already on our Section 8 waiting list your record will be updated using the information that you provide below. Due to the volume of applications received, we will not verify the receipt of mailed applications. We cannot be responsible for material that is illegible or missing as a result of transmitting by fax or e-mail or lost/delayed through the mail.

**IMPORTANT!**

One-third of all applications are dropped from the waiting list due to unreported address changes. Do not let this happen to you. Report any change of address in writing to one of the regional agencies listed on the reverse of this form.

**Head of Household Information**

Social Security Number		Phone (include area code)		
First Name	Middle Name	Last Name		
Address		City/Town	State	Zip code
Shelter Name	Shelter Address	City/Town	State	Zip code

**Household and Demographic Information**

How many people will live in the unit? Include yourself. \_\_\_\_\_ Gross annual household income \$ \_\_\_\_\_  
Write in the approximate amount of your family's gross (before taxes) annual income. Include all sources for all family members.

**Check if the head of household or spouse is:**  
 62 years old or older  Disabled  Displaced by government action

We collect data on race & ethnicity in accordance with federal regulations. People of various races may also be of Hispanic ethnicity. Please indicate if you are Hispanic. Your answers will not affect your application.

**Is the head of household (Select as many as appropriate)**  
 White  Black/African American  American Indian/Alaskan Native  Asian   
 Native Hawaiian/Other Pacific Islander

**Is the head of household (Check only one)**  
 Hispanic  Non-Hispanic

**What is your current housing situation? (Check one box that best applies)**

<input type="checkbox"/> I am homeless	<input type="checkbox"/> I am doubled up with friends or relatives
<input type="checkbox"/> I live in substandard housing	<input type="checkbox"/> I live in public housing
<input type="checkbox"/> I have been involuntarily displaced	<input type="checkbox"/> I live in a transitional housing program
<input type="checkbox"/> I pay more than 50% of my monthly income for rent and utilities	<input type="checkbox"/> I live in subsidized housing
<input type="checkbox"/> I live in a shelter	<input type="checkbox"/> Other (describe)

**Certification of Applicant - Please read this statement very carefully. By signing, you are agreeing to its terms.**  
 I hereby certify that the information I have provided in this pre-application is true and accurate. I understand that:

- ✓ any misrepresentation or false information will result in my application being cancelled or denied, or in termination of housing assistance;
- ✓ this is a pre-application for tenant-based rental assistance through DHCD and its regional administering agencies and is not an offer of housing;
- ✓ at the time I rise to the top of the waiting lists, I will be required to provide verification of the information I have provided here, in accordance with federal housing regulations and DHCD policy;
- ✓ it is my responsibility to notify any one of DHCD's regional administering agencies of any change of address in writing and I understand that my application may be cancelled if I fail to do so;
- ✓ my participation in the Section 8 housing program is subject to my being eligible and in compliance with HUD and DHCD regulations; and that I will be subject to a criminal history check.

I agree that DHCD can share my information with other state agencies for the purposes of determining program eligibility.

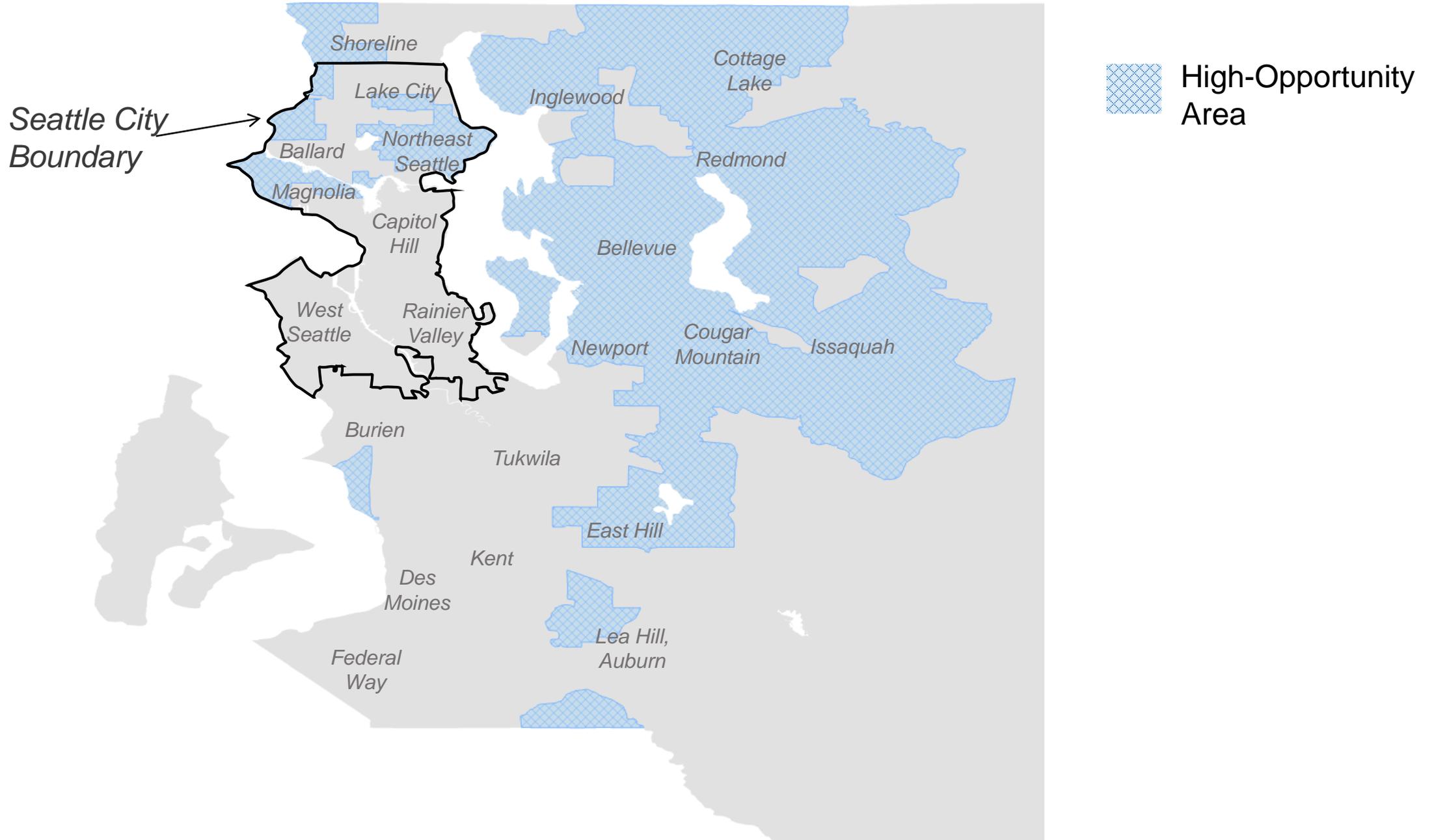
**Signature of head of household** \_\_\_\_\_ **Date** \_\_\_\_\_

DHCD manages a limited number of project-based Section 8 apartments in or near most major cities and towns throughout the state. To find out more contact one of the agencies on the reverse of this form or visit the Housing Consumer Education Center website at [www.masshousinginfo.org](http://www.masshousinginfo.org)

## Definition of Opportunity Areas

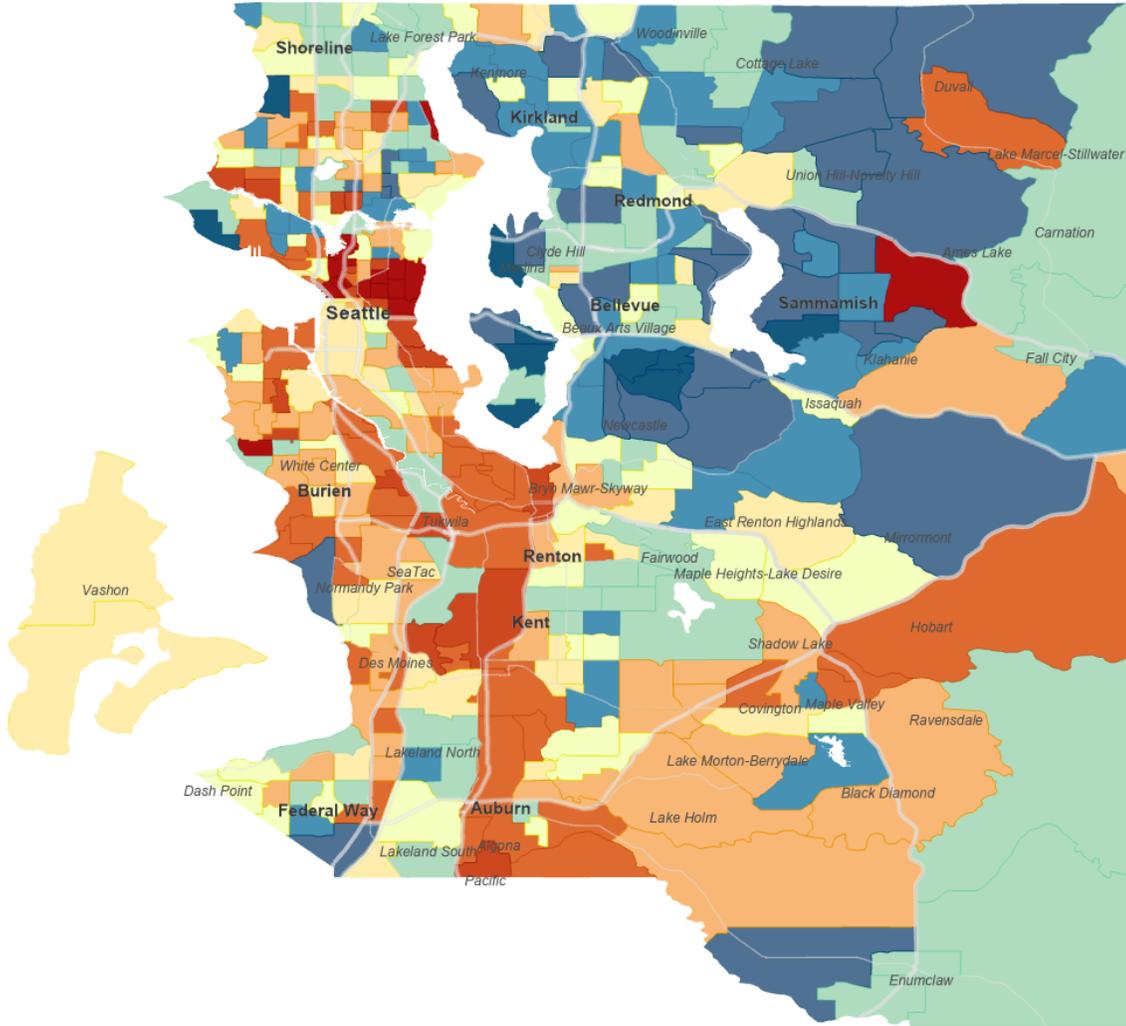
- Experimental intervention seeks to help voucher families move to opportunity areas
- First step: define a set of neighborhoods as “opportunity areas”
- Starting point: identify Census tracts with rates of upward income mobility roughly in top third of distribution within Seattle (SHA) and King County (KCHA)
- Adjust definitions in collaboration with housing authorities to account for two issues:
  - Neighborhood change (using test score data to assess stability)
  - Creating contiguous areas

# Designation of High-Opportunity Neighborhoods

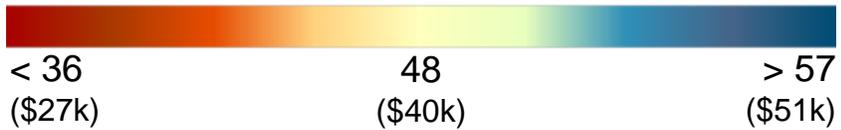
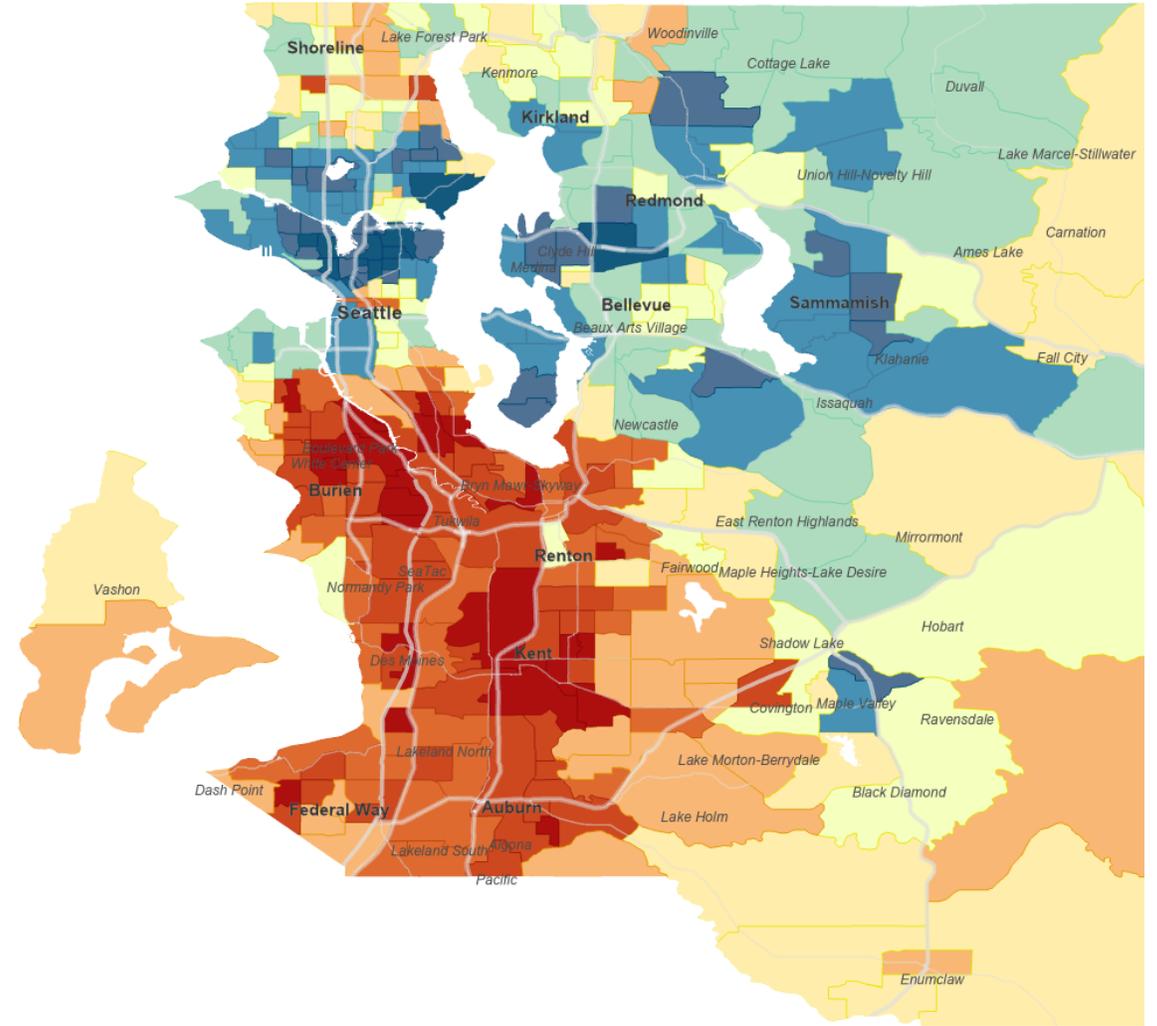


# Opportunity Atlas vs. Other Measures of Economic Opportunity

## Opportunity Atlas Upward Mobility



## Kirwan Child Opportunity Index



*Population-Weighted Correlation Across Tracts: 0.30*

# Treatment Interventions

CUSTOMIZED  
SEARCH  
ASSISTANCE

On average, non-profit staff spend **6 hours** with each household

DIRECT  
LANDLORD  
ENGAGEMENT

**47%** of rentals in high-opportunity areas made through links via non-profit staff

SHORT-TERM  
FINANCIAL  
ASSISTANCE

Average financial assistance of **\$1,000** for security deposits, application fees, etc.

Program Cost: \$2,660 per family issued a voucher  
(2.2% of average voucher payments over 7 years)

*Note: Families **not** required to move to high-opportunity areas*

## Key Elements in the CMTO Intervention

### CUSTOMIZED SEARCH ASSISTANCE

- **High-opportunity area education** to increase families' knowledge about high-opportunity areas.
- **Rental application coaching** to increase families' competitiveness for rental units by addressing credit history and preparing a narrative.
- **Housing locator services** to help families identify suitable units in high-opportunity areas.

### INCREASED LANDLORD ENGAGEMENT

- **Cultivate relationships** with landlords in designated high-opportunity areas to create housing opportunities for CMTO families.
- **Expedite lease-up processes** by completing PHA required documents and conducting housing inspections more quickly.
- **Insurance fund** to mitigate risks of property damage.

### SHORT-TERM FINANCIAL ASSISTANCE

- Grants to **defray move-in expenses**, such as application fees and security deposits (on average \$1,000).

# Intervention Process Timeline

## Family Contacted

Notified of selection from waitlist



## Intake Appointment

Consent  
Randomization  
Baseline survey



## Nonprofit Staff Meet with Families and Landlords

Rental application coaching  
Opportunity area education  
Visiting locations



Search assistance  
Landlord recruitment  
Linking families to units

## Voucher Issued



## Unit Selected

Family approved by landlord for unit



## Lease Up

Receive paperwork and financial assistance (e.g. assistance for deposit)

## Lease Signed



# Creating Moves to Opportunity Program Costs

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Average Cost

## *A. Total Costs*

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Cost of CMTO services per family issued	\$2,661
Cost of CMTO services per family leased	\$3,045
Cost of CMTO services per opportunity move	\$5,006
Cost of CMTO services per family issued / 7-year HAP costs per family	2.2%

## *B. Costs by Service Category*

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Cost of CMTO financial assistance per issuance	\$1,043
Cost of CMTO program services per issuance	\$1,500
Cost of PHA CMTO administration per issuance	\$392
Cost savings of PHA security deposits paid by CMTO	(\$274)

## *C. Housing Assistance Payment (HAP) Costs*

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Incremental HAP cost per lease per year	\$2,626
Incremental HAP / average HAP costs per family	15.4%

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# Creating Moves to Opportunity Experiment

- Sample frame: families with at least one child below age 15 who were issued vouchers in either Seattle or King County between April 2018 to April 2019
- 430 eligible families in the experiment, split randomly into control (standard services) and treatment
  - 222 treatment families and 208 control families
- Randomly sampled 202 families for open-ended qualitative interviews
  - 80% overall response rate, N = 161

## Summary Statistics for Experimental Sample

Head of Household Characteristics	Pooled Mean	Control Mean	Treatment Mean
Household Income	\$19,667	\$19,517	\$19,806
% Black	49.29	49.76	48.86
% High School Grad	78.40	72.20	84.16
Head of Household's Age	34.21	34.24	34.18
Children's Mean Age	6.62	6.59	6.65
% Homeless	13.29	14.49	12.16
% Currently Working	56.41	59.90	53.15
% Satisfied with Current Neighborhood	50.87	47.94	53.62
% Unsatisfied with Any Child's Current School	15.11	16.46	13.87
Number of Observations	430	208	222

F-Test for Treat-Control Balance:

F-Statistic

P-Value

1.183

0.214

# Outline

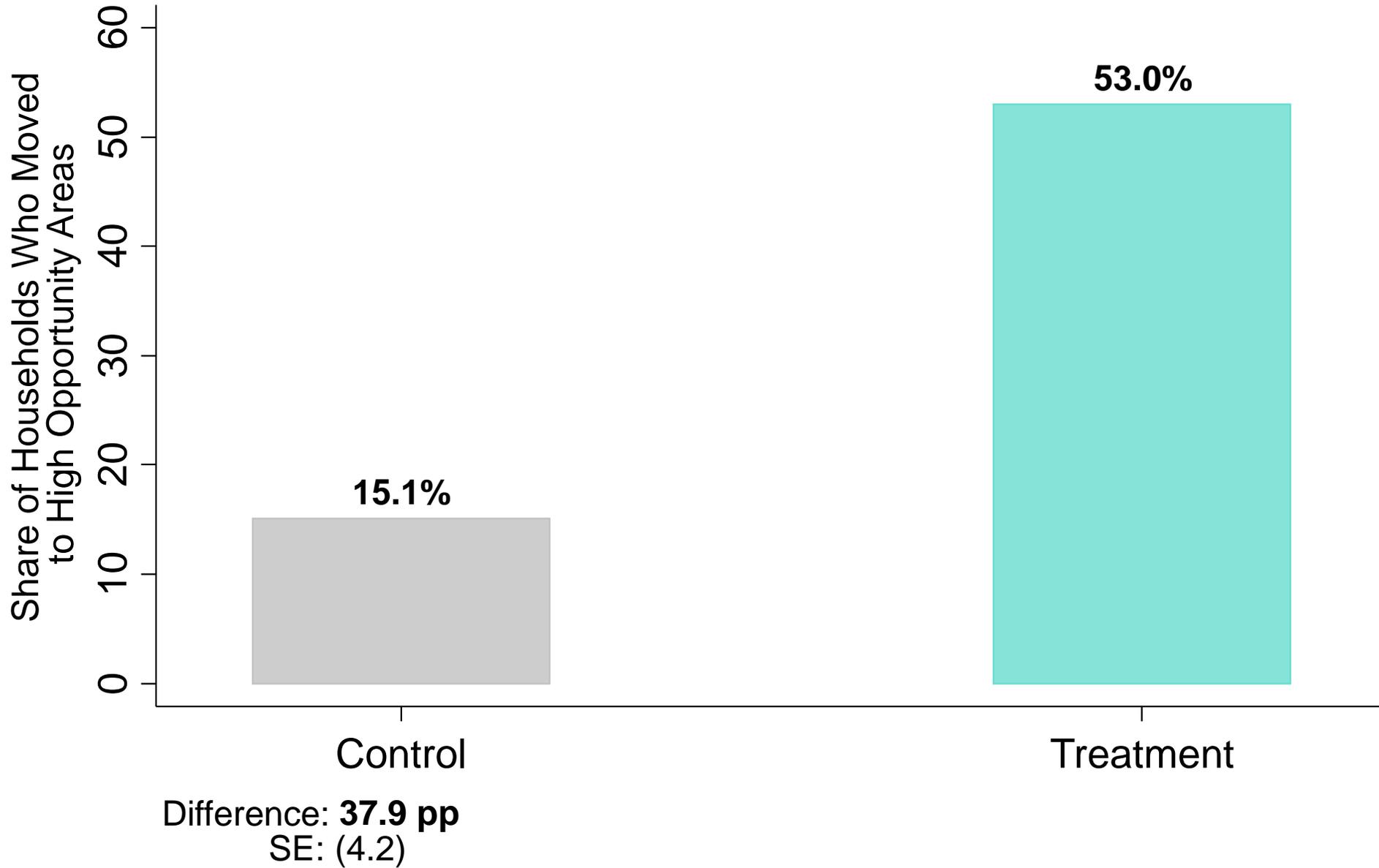
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② Treatment Effect Estimates

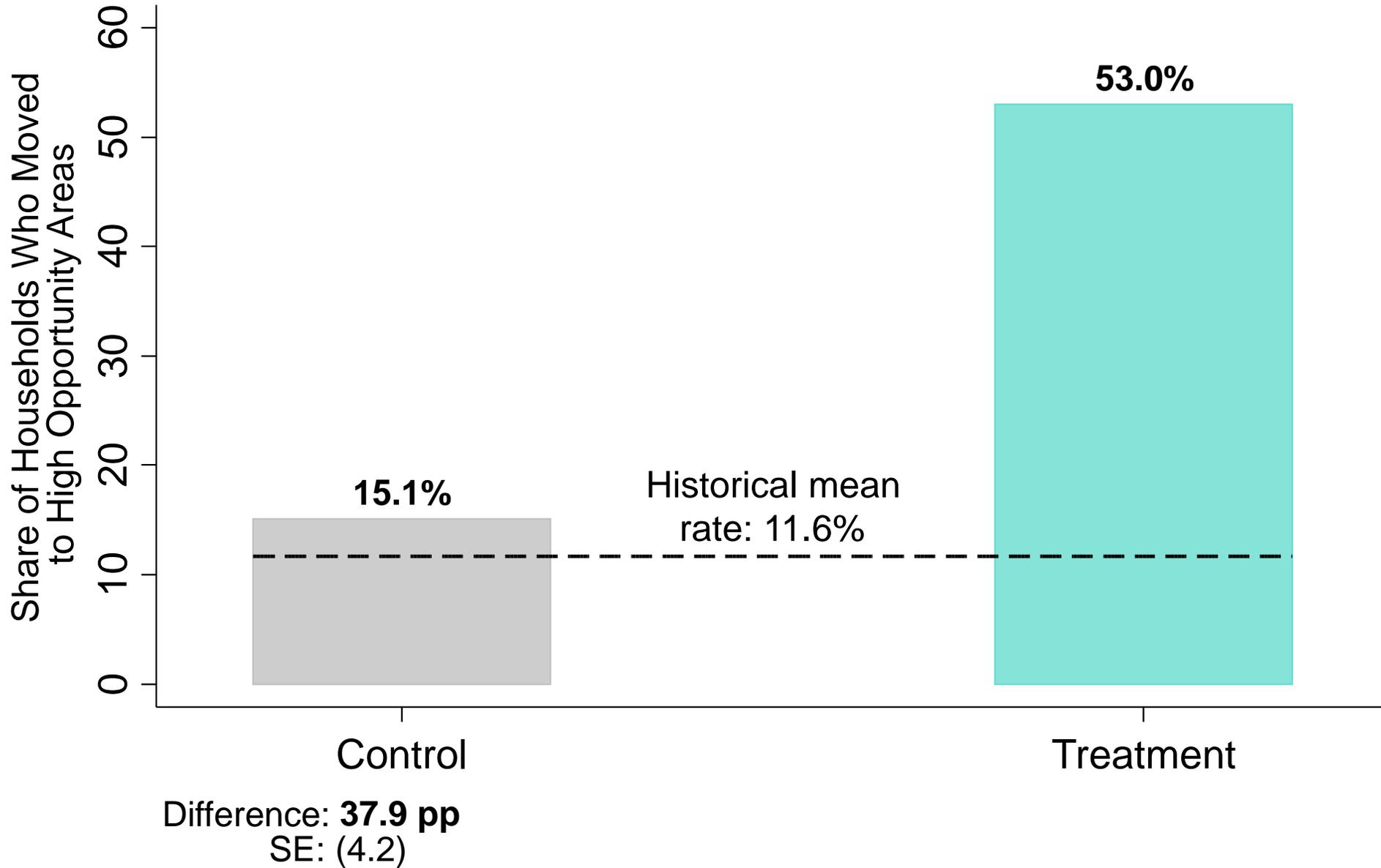
③ Mechanisms

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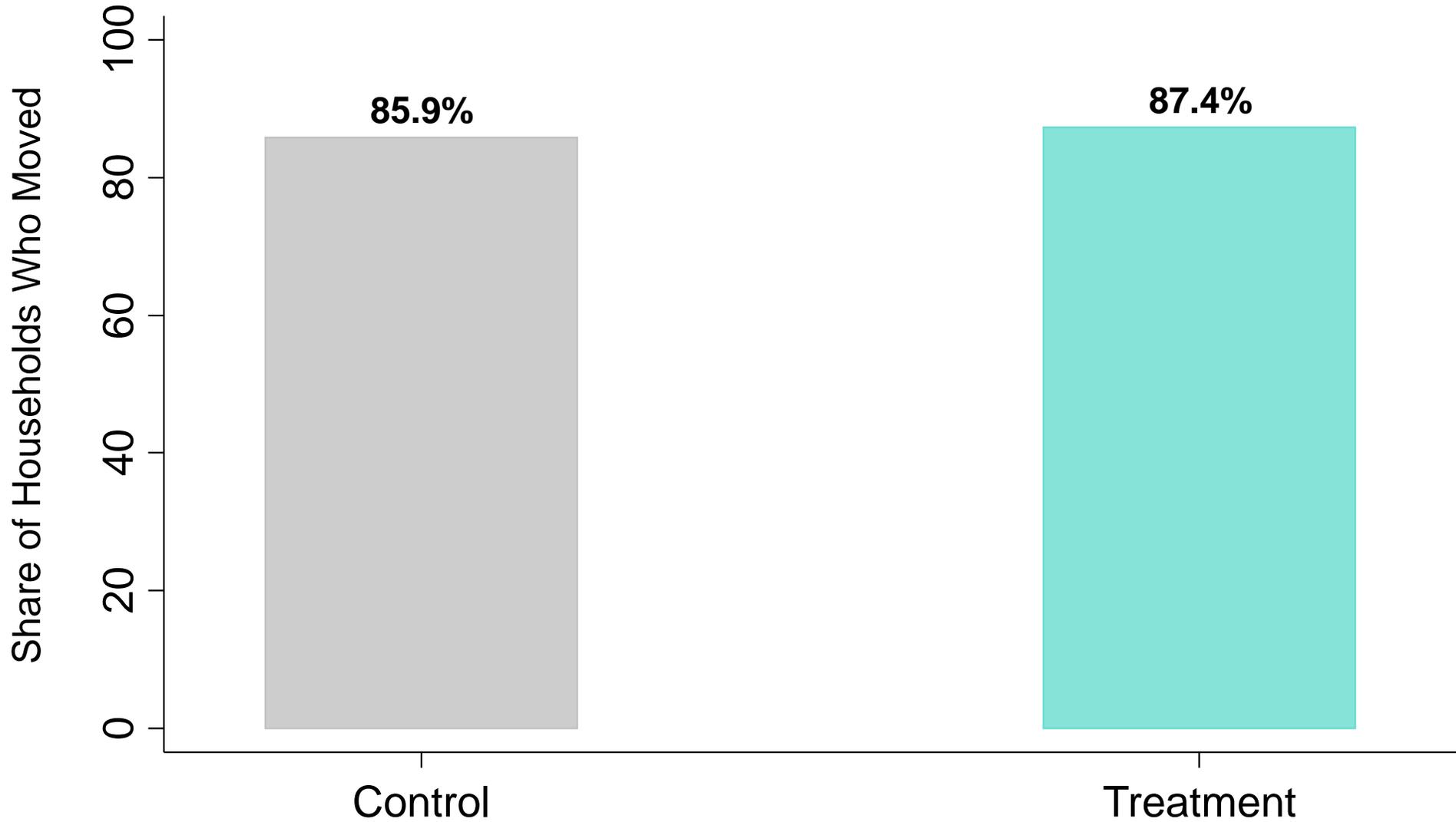
## Fraction of Families Who Leased Units in High Opportunity Areas



# Fraction of Families Who Leased Units in High Opportunity Areas

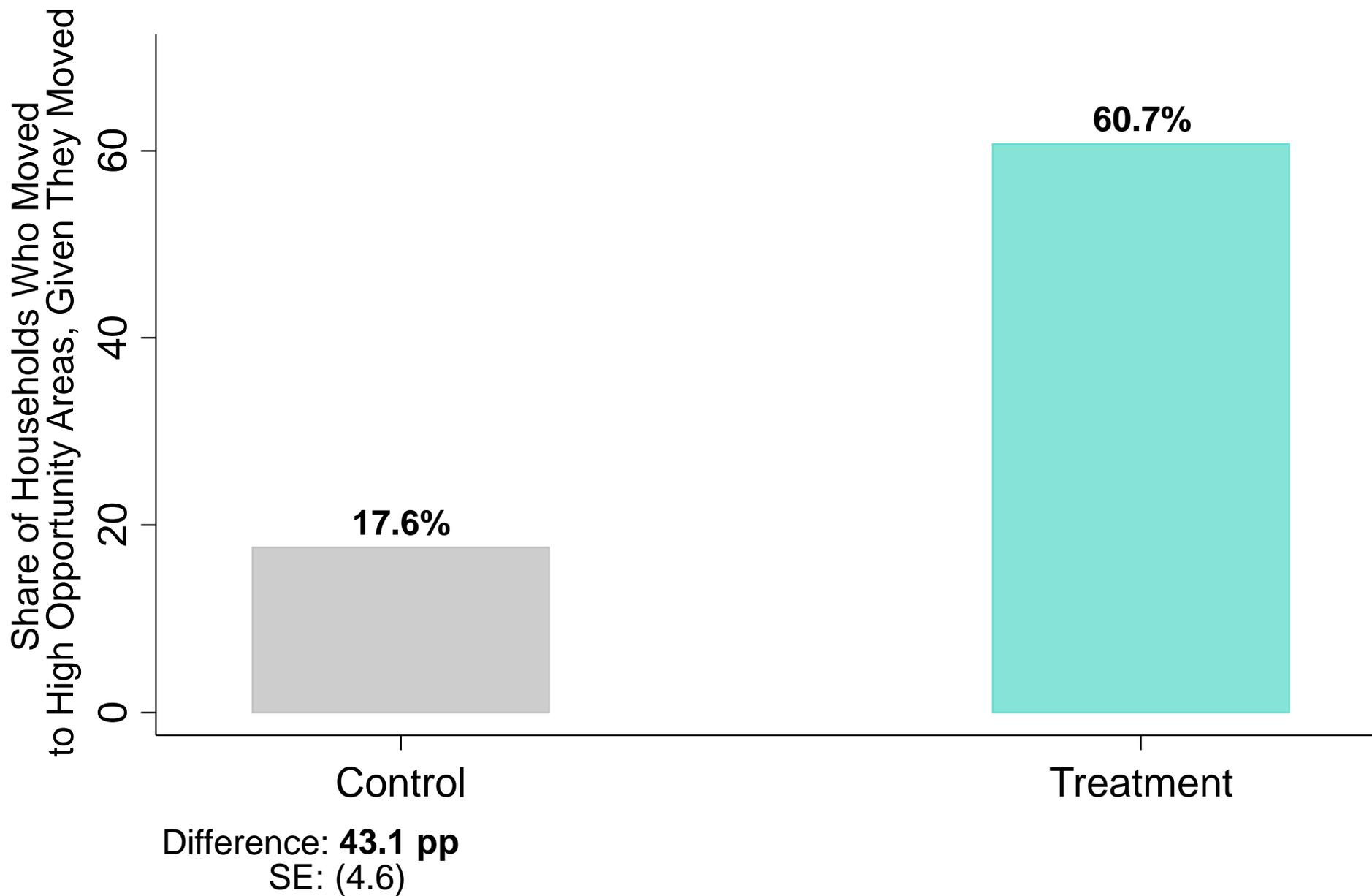


## Fraction Who Leased Any Unit

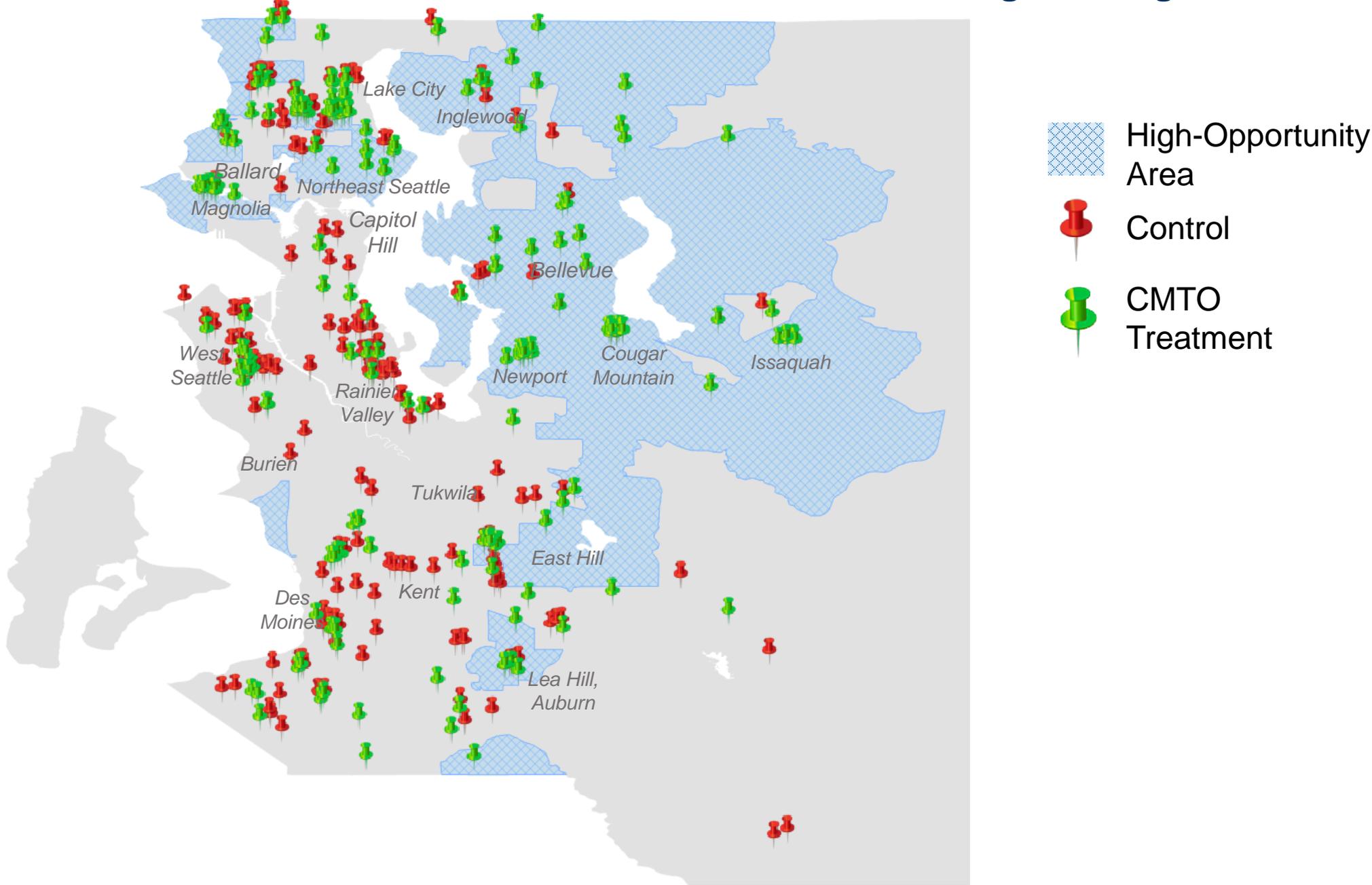


Difference: **1.5 pp**  
SE: (3.3)

# Fraction Who Leased Units in High Opportunity Areas, Conditional on Leasing Up Using Voucher



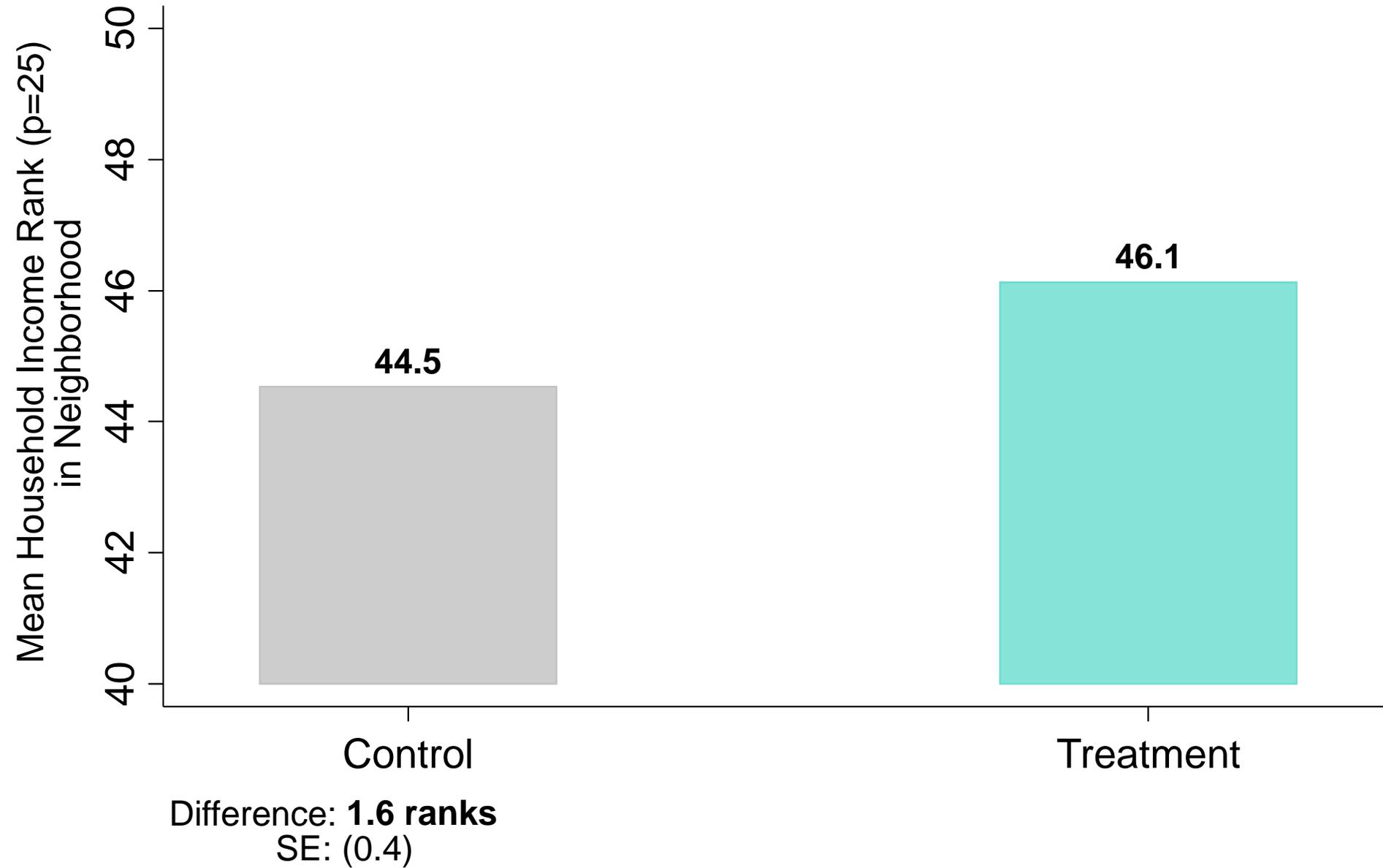
# Destination Locations for Families that Leased Units Using Housing Vouchers



## Predicted Impacts on Upward Mobility

- How much do these moves improve children's rates of upward income mobility?
- Cannot directly answer this question yet, but can make a prediction based on historical data on upward mobility by tract from the Opportunity Atlas

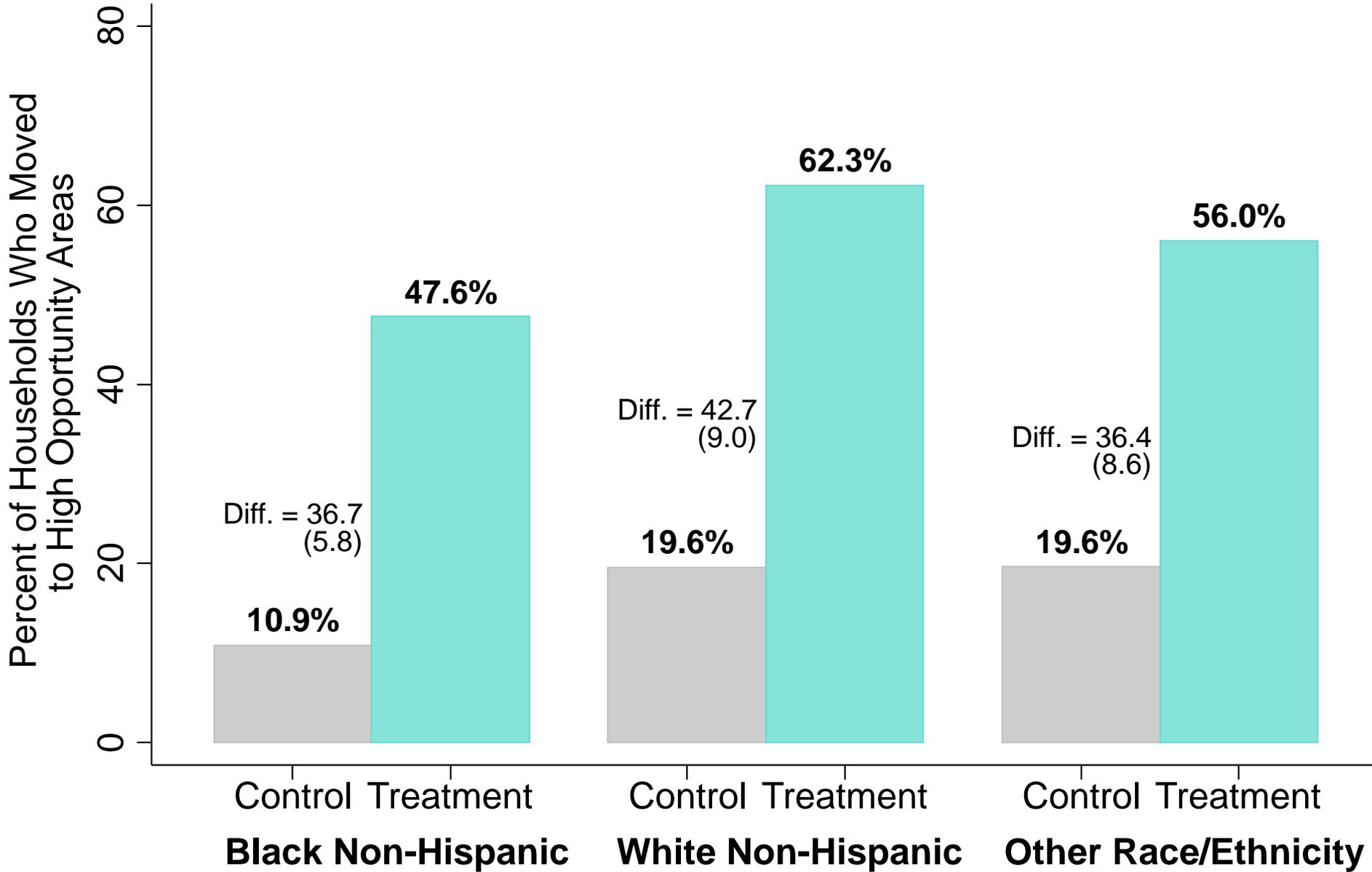
## Upward Mobility in Destination Neighborhoods



# Predicted Impact on Upward Mobility

- Treatment effect on observed rate of upward mobility in destination tracts = 1.6 percentiles
- Translate this into predicted causal impact on earnings for a given child whose family is induced to move to a high-opportunity area by CMTO by making two adjustments
  1. Chetty, Friedman, Hendren, Jones, and Porter (2018) estimate that 62% of the observational variation in upward mobility across tracts is due to causal effects
  2. 37.9% of families induced to move to high-opportunity neighborhoods by treatment
- Adjusting for these two factors  $\rightarrow$  causal effect of  $1.6 \times \frac{0.62}{0.379} \approx 2.6$  percentiles
  - About \$3,000 (8.4%) in annual household income or \$214,000 (undiscounted) over a child's lifetime
- Alternative scaling: moving to a high-opportunity area reduces the intergenerational persistence of income (p25-75 gap in outcomes) by about 20%

## Treatment Effects By Race and Ethnicity

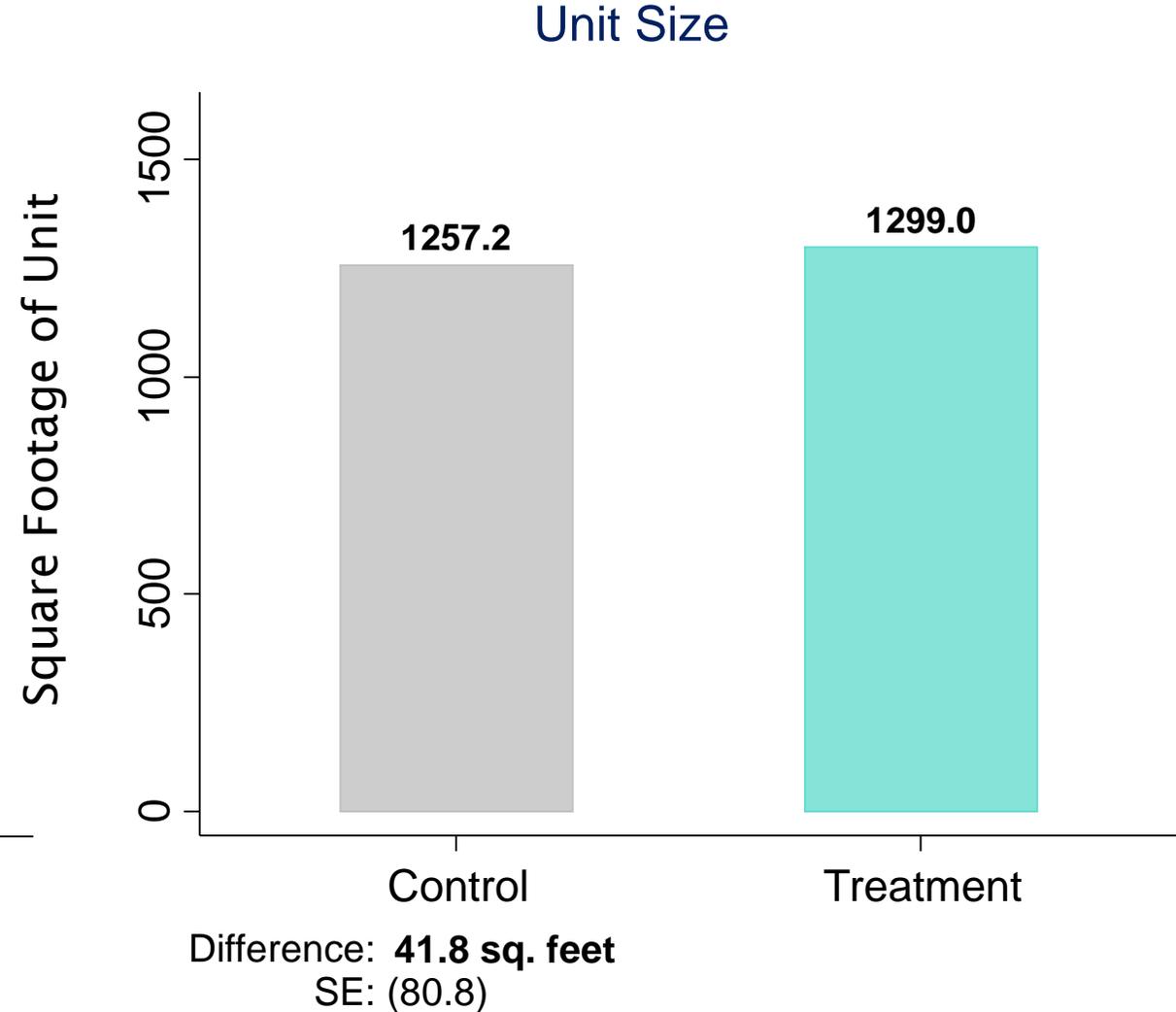
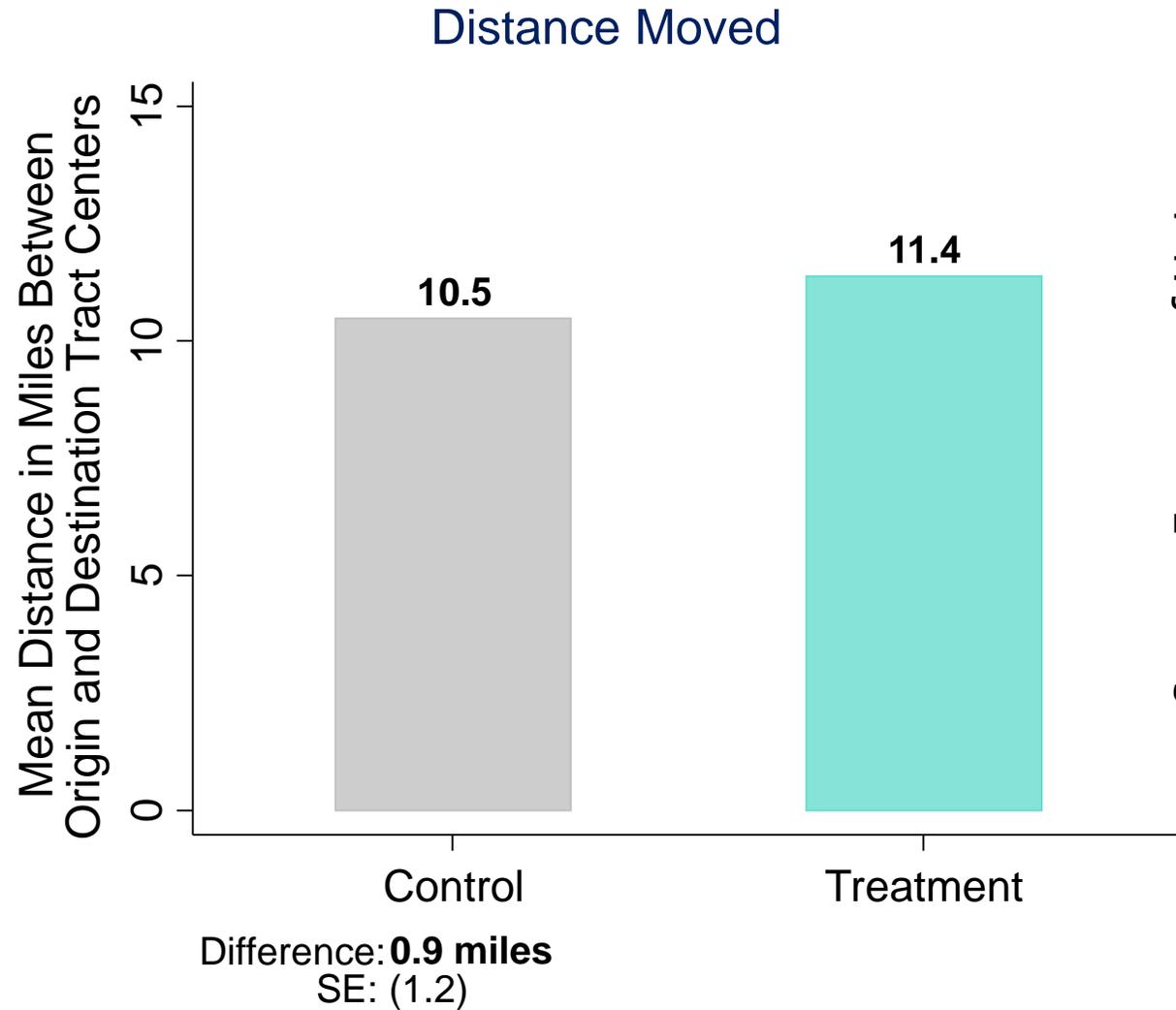


## Tradeoffs in Unit Characteristics

- Are families making sacrifices on other dimensions to move to high-opportunity areas?

# Tradeoffs in Neighborhood and Unit Quality

## Treatment Effects on Distance Moved and Unit Size

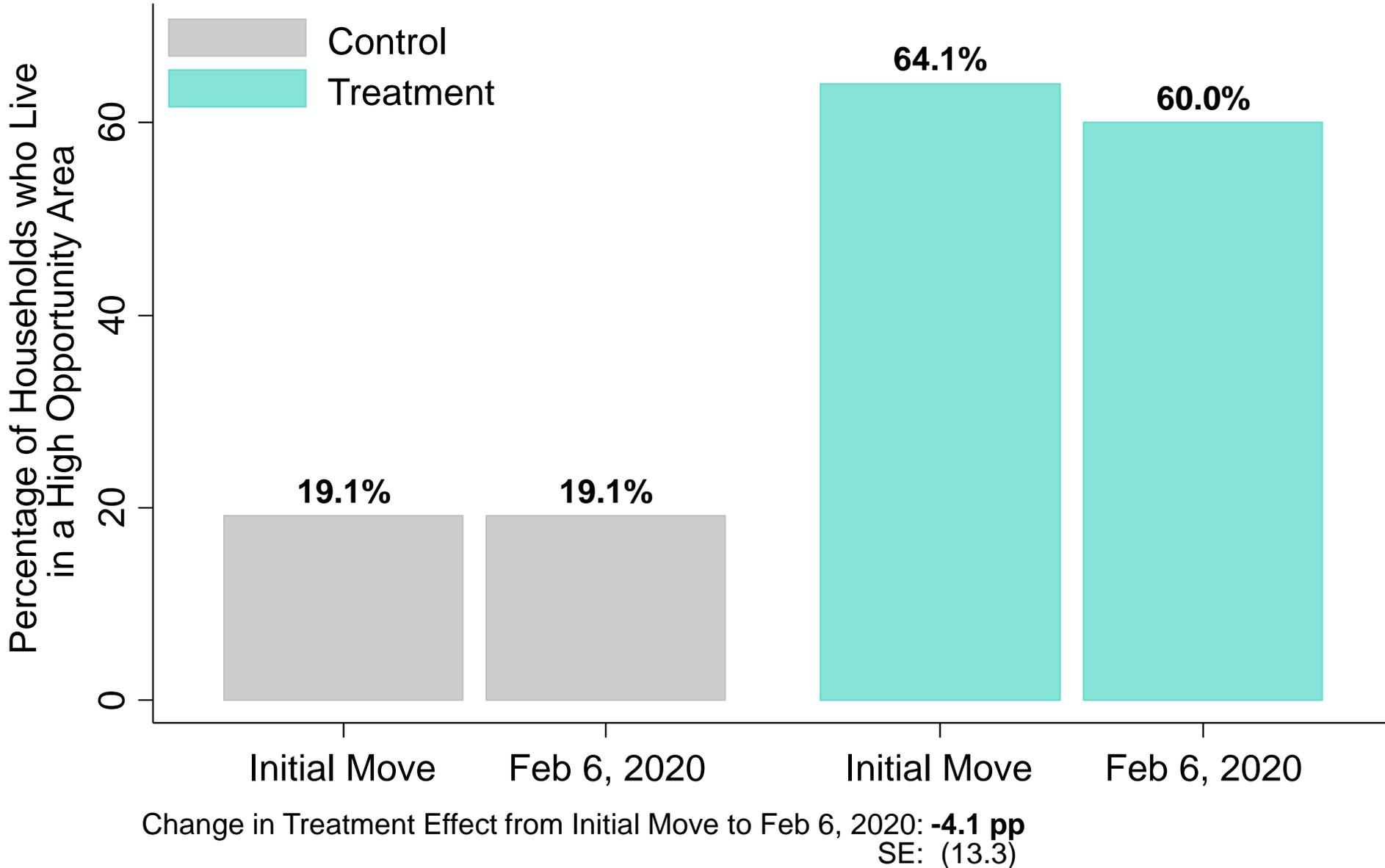


## Persistence in High-Opportunity Neighborhoods

- Do families induced to move to high-opportunity areas by CMTO choose to stay there when their leases come up for renewal?

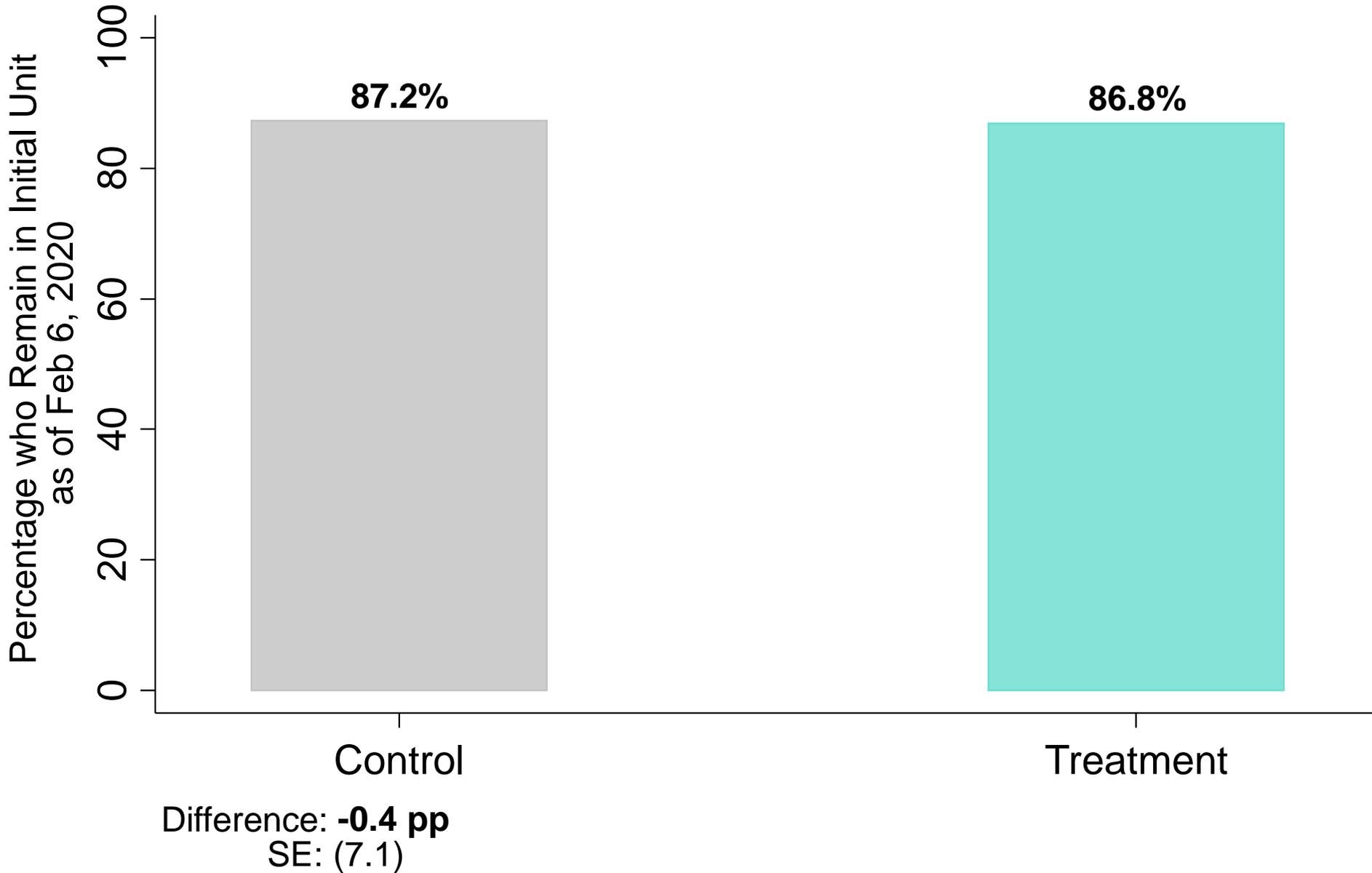
# Share of Households Living in High-Opportunity Areas

Among Households Issued a Voucher Before September 1, 2018 and who Leased-Up Before January 7, 2019



# Short-Run Persistence - Share of Households who Have Stayed in Unit

Among Households Issued a Voucher pre September 1, 2018 and Leased-Up pre January 7, 2019



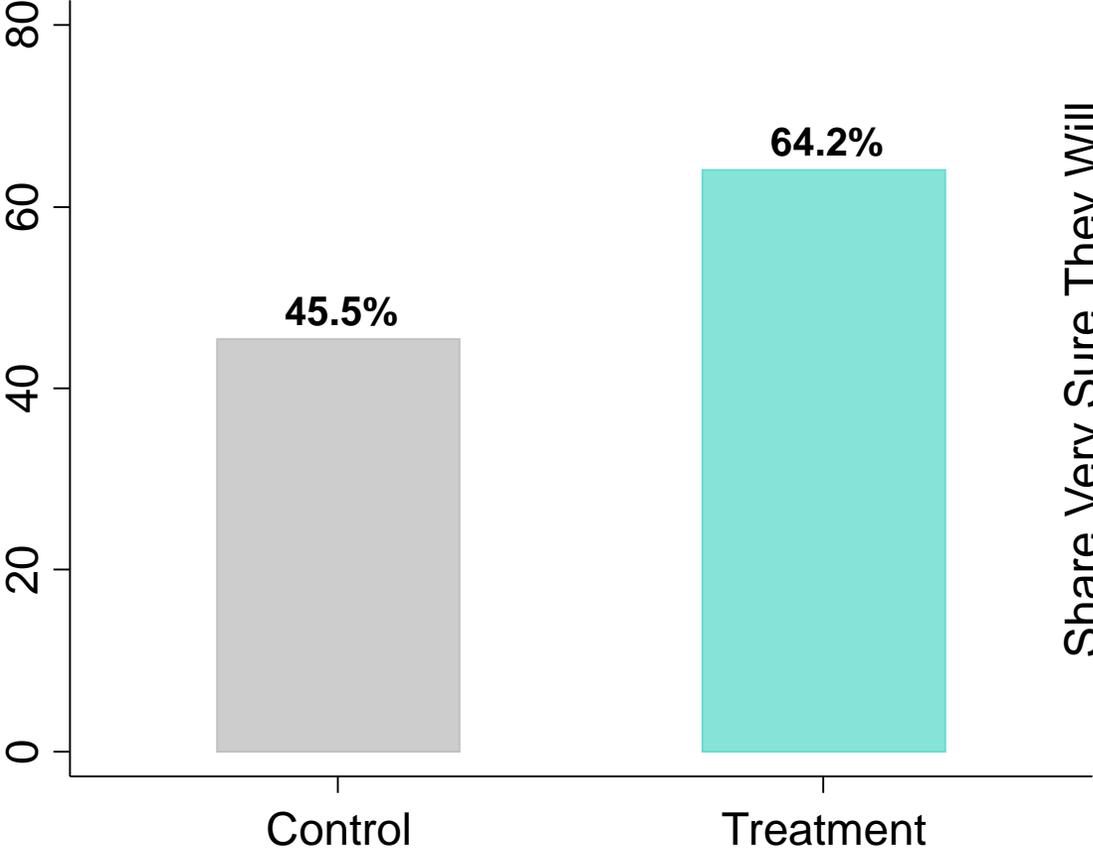
# Persistence in High-Opportunity Neighborhoods

- Do families induced to move to high-opportunity areas by CMTO choose to stay there when their leases come up for renewal?
- To predict longer-run persistence, we use surveys administered to a randomly selected set of families post-move
  1. Are families satisfied with their new neighborhoods?
  2. How likely do they think they are to move?
- Such subjective assessments of satisfaction and persistence are highly predictive of subsequent move rates (Clark and Ledwith 2006; Basolo and Yerena 2017)

# Satisfaction with New Neighborhoods

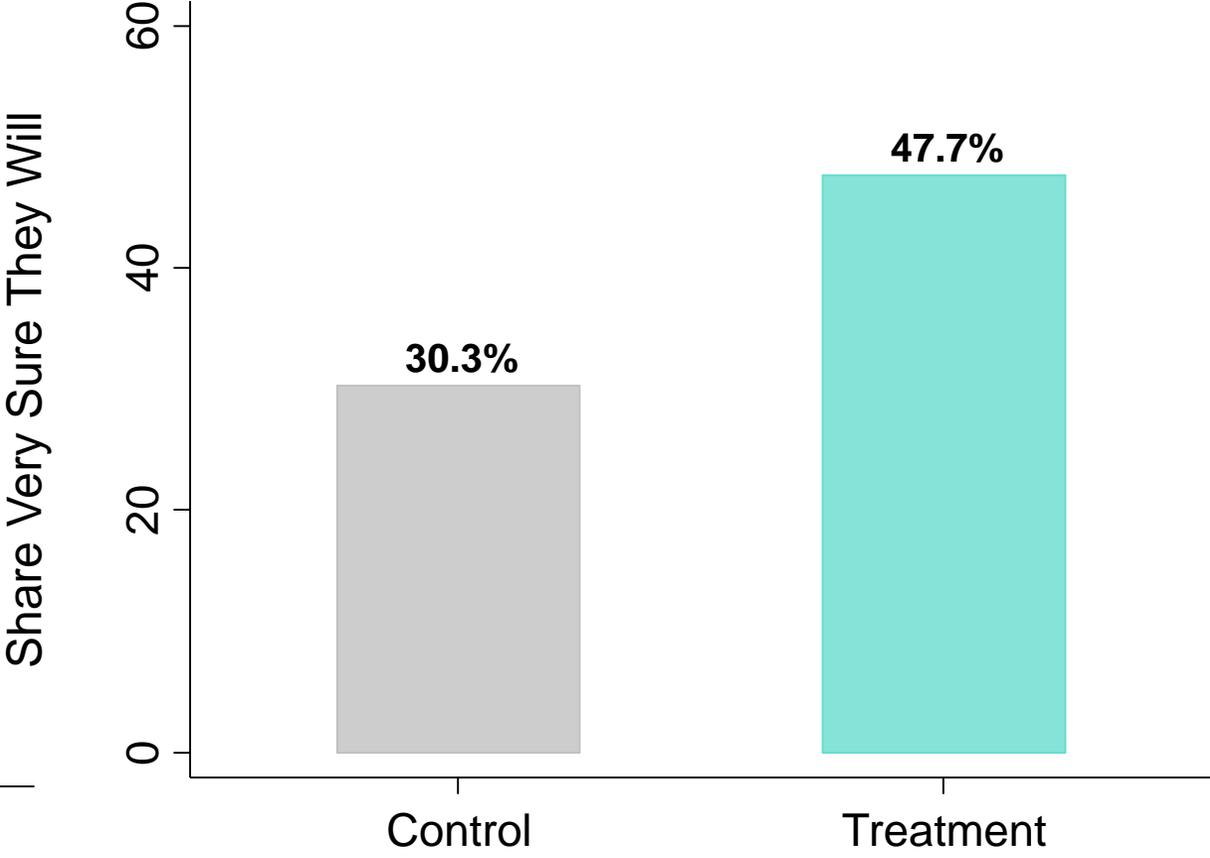
Based on Surveys Six Months Post-Move

## Satisfaction with New Neighborhood



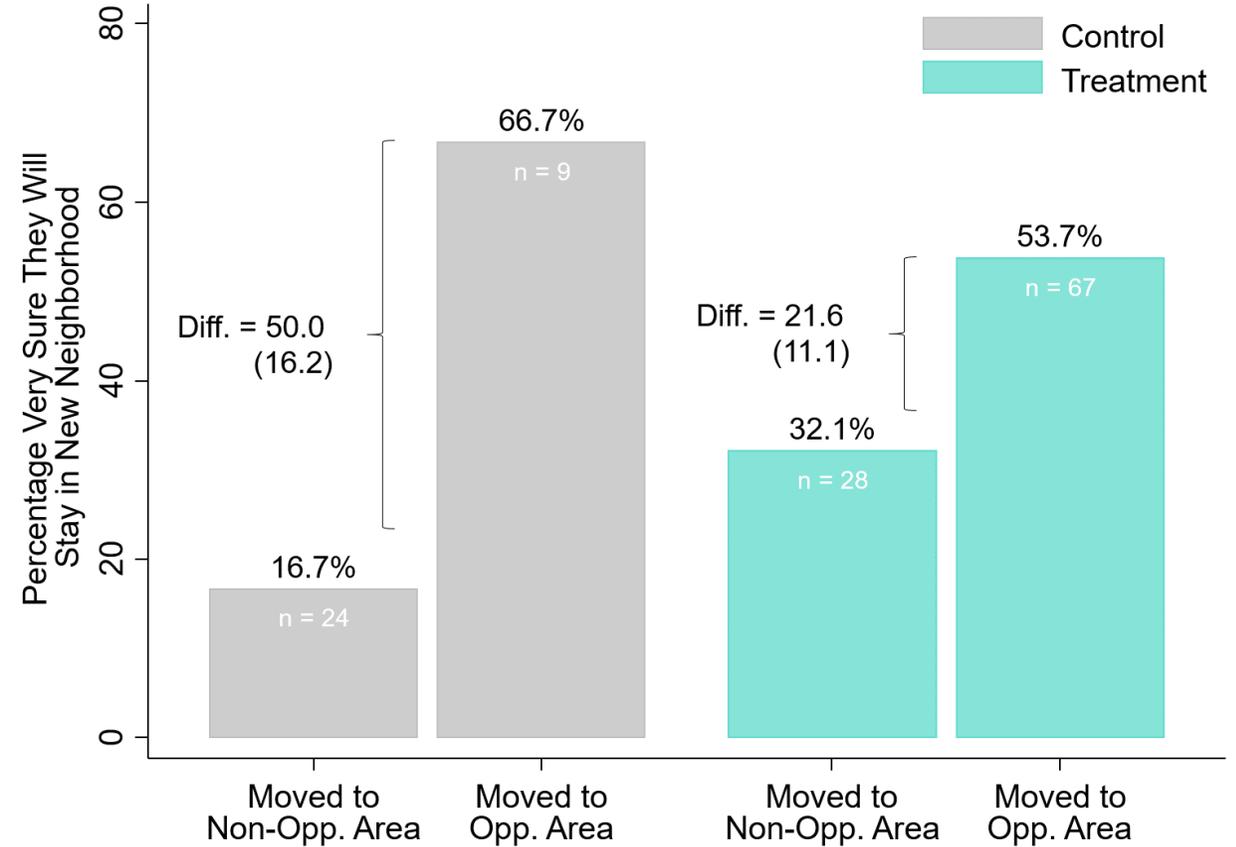
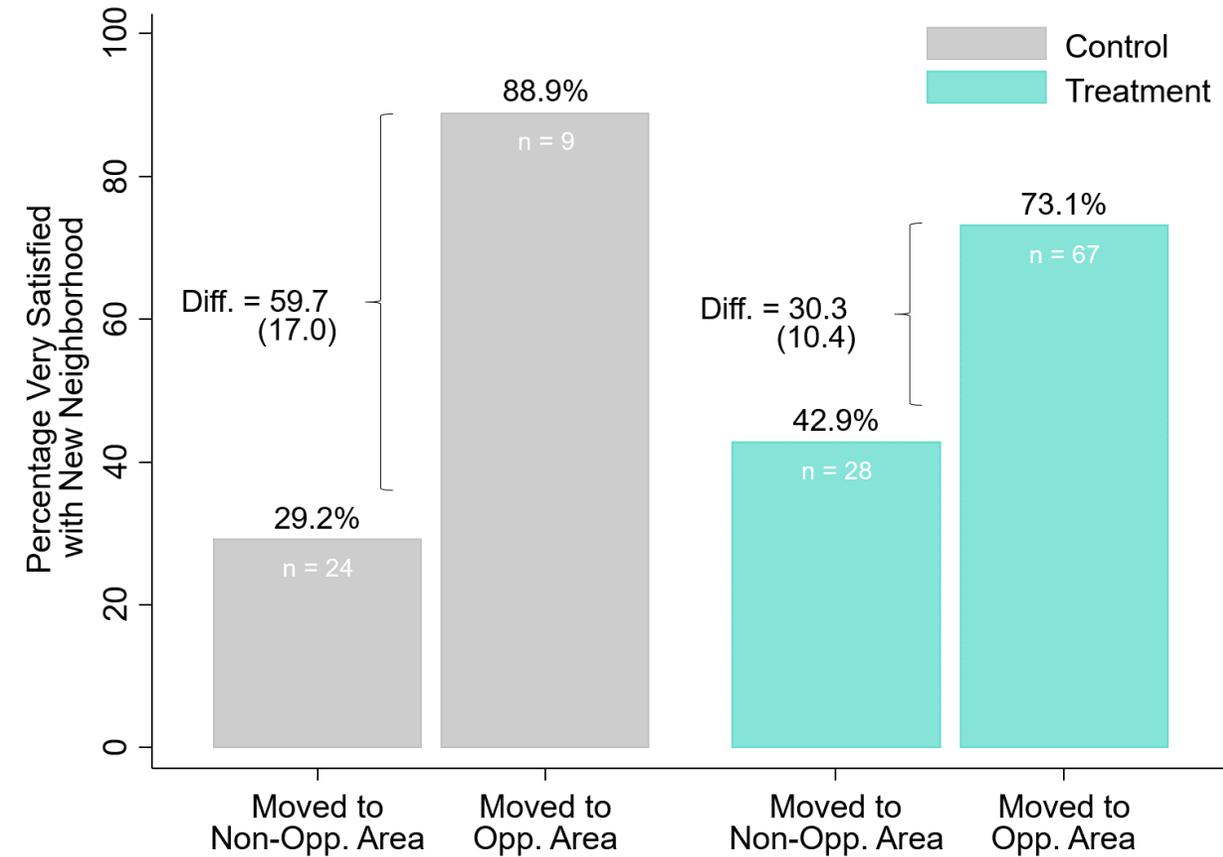
Difference: **18.7 pp**  
SE: (10.1)

## Certainty about Wanting to Stay in New Neighborhood



Difference: **17.4 pp**  
SE: (9.8)

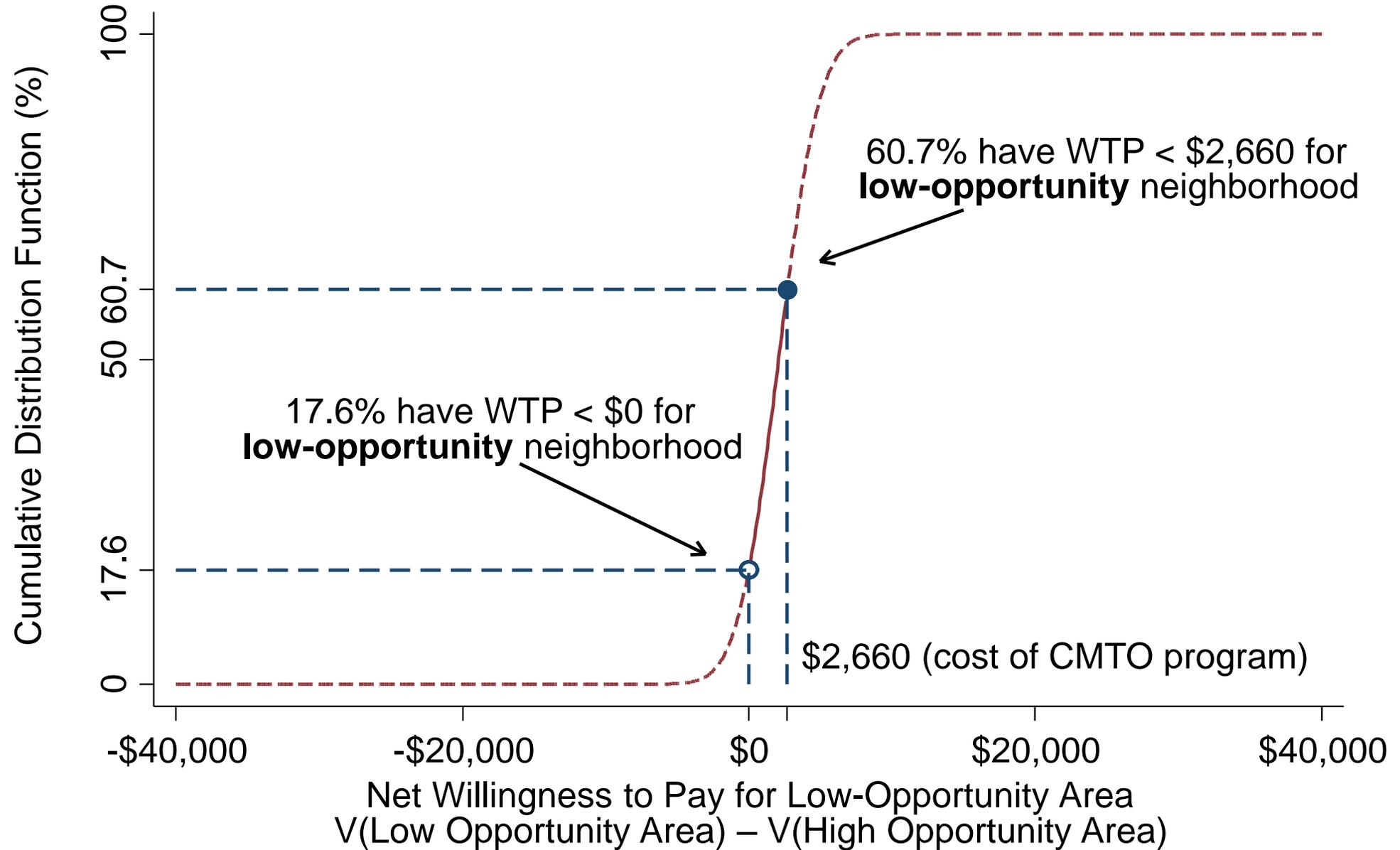
# Satisfaction in New Neighborhood by Type of Area Leased In



## Implications for Models of Neighborhood Choice

- Experimental results suggest that barriers play a central role in neighborhood choice
  - Frictionless model would require that 43% of people happen to have (net) willingness to pay for low-opportunity areas between \$0 and \$2,660 (cost of treatment)

# Distribution of Preferences for High Opportunity Neighborhoods Implied by Frictionless Model



## Implications for Models of Neighborhood Choice

- Experimental results suggest that barriers play a central role in neighborhood choice
  - Frictionless model would require that 43% of people happen to have (net) willingness to pay for low-opportunity areas between \$0 and \$2,660 (cost of treatment)
- These barriers could potentially be captured in a standard model of housing search with sufficiently large search costs [e.g., Wheaton 1990; Kennan and Walker 2011]
  - Important to unpack what these costs are to understand how to reduce them

# Outline

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③ Mechanisms

④ Conclusion

## Qualitative Evidence on Mechanisms

- What are the barriers families face in moving to higher-opportunity areas?
- Qualitative study of 161 families interviewed for two hours each during search process and post-move
- Key lessons from these interviews (based on systematic coding of 8,000 pages of transcripts):
  1. [Scarcity] Most families have extremely limited time and resources to search  
[Mullainathan and Shafir 2013]
  2. [Customization] Case workers' ability to respond to each family's **specific** needs is crucial above and beyond standardized resources

## **Five Key Mechanisms Underlying the Treatment Effects**

1. Emotional Support (61% prevalence rate)
2. Increased Motivation to Move to Opportunity (78%)
3. Streamlining the Search Process (73%)
4. Landlord Brokering (61%)
5. Short-Term Financial Assistance (81%)

# Qualitative Evidence on Mechanisms

## Emotional/Psychological Support

*“It was this whole flood of relief. It was this whole flood of, “I don’t know how I’m going to do this” and “I don’t know what I’m going to do” and “This isn’t working,” and yeah...I think it was just the supportive nature of having lots of conversations with Megan.” –Jackie*

## Brokering with Landlords

*“When you find a place, I will come with you and we will help you to fill out the application. I will talk with the landlord, I will help you to do a lot of stuff, that maybe sometimes will be complicated.” –Leah*

## Short-Term Financial Assistance

*“I’m not going to be able to pay here and then there [in the new apartment] ...They were able to get me more money, so that they would pay more of my first portion of my rent. Because they understood the situation that I was in.” –Jennifer*

## Intervention Dosage: Treated Households' Usage of CMTO Services

	Pooled		Moved to Low Opportunity Tract		Moved to High Opportunity Tract	
	Mean	SD	Mean	SD	Mean	SD
	(1)	(2)	(3)	(4)	(5)	(6)
Total hours in contact with non-profit or PHA staff	5.98	4.51	4.46	3.55	7.05	5.07
Percent linked to a unit of a landlord contacted by non-profit staff (%)	27.5	44.7	5.3	22.5	46.6	50.1
Percent that received any financial assistance (%)	63.5	48.2	27.6	45.0	95.8	20.2
Total amount of assistance among families that received financial assistance (\$)	1,642	1,220	252	539	1,983	1,100

## Correlations Between Usage of CMTO Services Among Families who Moved to High-Opportunity Areas

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	Time Meeting with CMTO Staff	Financial Assistance	Unit Found Through Housing Locator
Time Meeting with CMTO Staff	1		
Financial Assistance	0.19	1	
Unit Found Through Housing Locator	0.11	-0.10	1

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## Mechanisms: Evidence from Alternative Policies

- More standardized policies with similar goals of helping families move to higher-opportunity areas have much smaller impacts than CMTO:
  1. Information provision
    - Schwartz et al. (2017) and Bergman et al. (2019): RCTs providing information and lighter-touch counseling → order-of-magnitude smaller impacts
    - CMTO treatment effect of 48 pp on fraction living in high-opportunity areas even among families who were living in high-opportunity areas at baseline

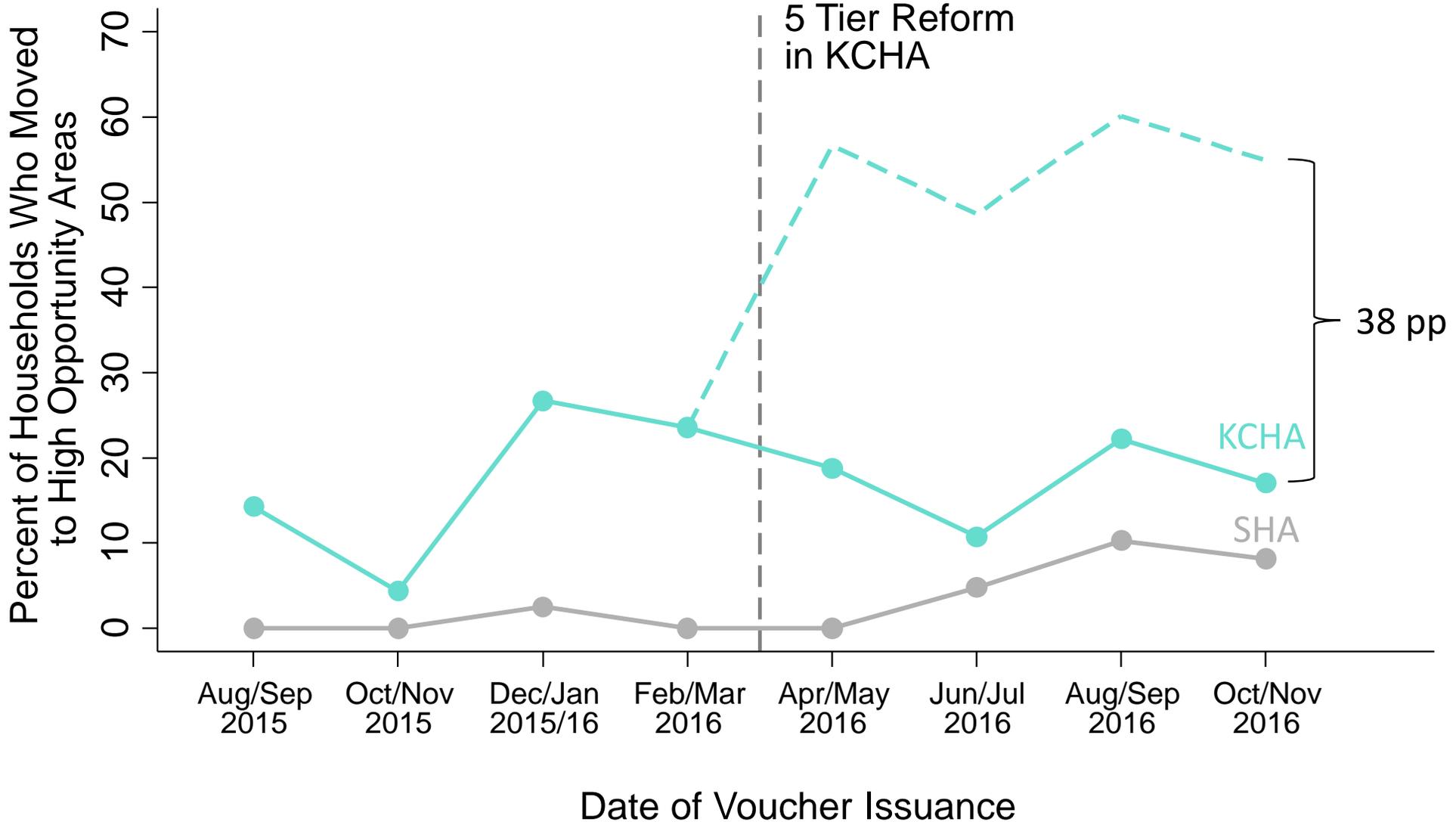
## Mechanisms: Evidence from Alternative Policies

- More standardized policies with similar goals of helping families move to higher-opportunity areas have much smaller impacts than CMTO:
  1. Information provision
  2. Financial incentives: Small Area Fair Market Rents
    - Offer larger voucher payments in higher rent areas [Collinson and Ganong 2018]
    - Offer larger voucher payments in higher opportunity neighborhoods

## Impacts of Financial Incentives: Evidence From Changes in Rent Payment Standards

- Study two changes in payment standards that preceded CMTO experiment using a difference-in-differences design
  1. March 2016: King County switched from a two-tier to five-tier payment standard, effectively increasing payment standards in more expensive areas of the county
  2. February 2018: Seattle effectively increased payment standards in areas designated as “high opportunity” by making a supplemental payment to families with children

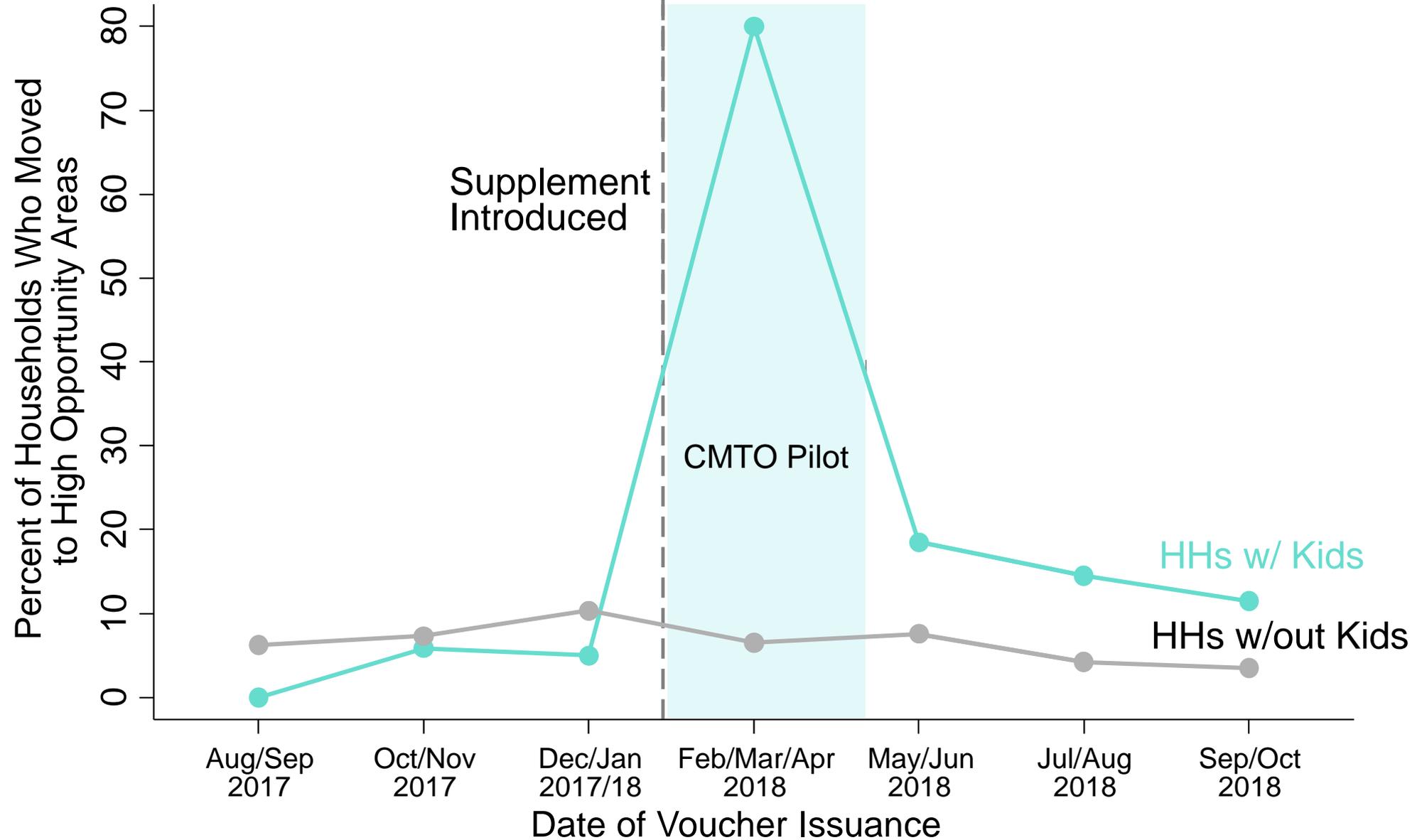
# CMTO Has Much Larger Impact on Moves to Opportunity than Small Area Payment Standards



Effect of 5-Tier Reform: -3.59 ranks  
(5.75)

# Effect of SHA Increase in Payment Standards for High-Opportunity Areas in Seattle

## Difference-in-Difference Estimate



Note: data shown from May 2018 onward are based on control group in CMTO experiment

Effect of Family Access Supplement: 13.79 pp (5.11)

## Impacts of Financial Incentives: Conclusions

- Results suggest that simply providing adequate rental payments to move to higher-opportunity areas is insufficient to induce moves to opportunity
- Need to provide additional customized support in search process to overcome barriers

# Conclusions

- Economic segregation in the United States appears to be driven not by deep-rooted preferences but rather by small barriers in housing search process
- Services to reduce barriers to moving can increase moves to opportunity and thereby increased intergenerational upward mobility substantially
  - Program cost is about \$2,660 per family issued a voucher, or \$5,000 per opportunity move
  - CMTO is predicted to increase the lifetime household income of each child who moves by **\$214,000 (8.4%)**
  - Also predicted to increase college attendance rates, reduce teen birth rates, and reduce incarceration rates significantly

# Family Stability and Opportunity Vouchers Act of 2019

116TH CONGRESS  
1ST SESSION

**S.** \_\_\_\_\_

To authorize a new type of housing choice voucher to help achieve the goals of ending homelessness among families with children, increasing housing opportunities, and improving life outcomes of poor children.

---

IN THE SENATE OF THE UNITED STATES

---

Mr. YOUNG (for himself and Mr. VAN HOLLEN) introduced the following bill;  
which was read twice and referred to the Committee on

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## **A BILL**

To authorize a new type of housing choice voucher to help achieve the goals of ending homelessness among families with children, increasing housing opportunities, and improving life outcomes of poor children.



The *Family Stability and Opportunity Vouchers Act* puts a significant down payment on evidence-based housing mobility vouchers for the nation's most vulnerable families with young children. The bill couples mobility vouchers with customized support services to help families escape the cycle of poverty and move to high opportunity areas.

Specifically the bill:

- Creates an **additional 500,000 housing vouchers** over five years for low-income, high-need families with young children. Pregnant women and families with a **child under age 6** would qualify for these new vouchers if they have a history of homelessness or housing instability, live in an area of concentrated poverty, or are at risk of being pushed out of an opportunity area.
- Provides voucher recipients with **access to counseling and case management services** that have a proven track record of helping families move out of poverty.
- The bills resources would enable housing agencies to **engage new landlords in the voucher program** and connect families with information about housing in high-opportunity neighborhoods, and community-based supports for families as they move.

## Next Steps: National Scaling

- Going forward, we plan to partner with other cities to expand CMTO nationally
- Of course, not all families can move to opportunity → also studying which place-based investments have the biggest impacts on upward mobility in low-opportunity areas



*From Jasmine, 7 years old, whose family moved to a high-opportunity area in Seattle*

Seattle and King County Housing Authorities

Andria Lazaga, Sarah Oppenheimer, Jenny Le, Jodi Speer

MDRC

James Riccio, Nandita Verma, Jonathan Bigelow, Gilda Azurdia

J-PAL North America

Jacob Binder, Graham Simpson, Kristen Watkins

Opportunity Insights

Federico Gonzalez Rodriguez, Jamie Gracie, Martin Koenen, Sarah Merchant, Max Pienkny, Peter Ruhm, James Stratton, Kai Matheson

Johns Hopkins Fieldwork Team

Paige Ackman, Christina Ambrosino, Divya Baron, Joseph Boselovic, Erin Carll, Devin Collins, Hannah Curtis, Christine Jang, Akanksha Jayathi, Nicole Kovski, Melanie Nadon, Kiara Nerenberg, Daphne Moraga, Bronte Nevins, Simon Robbennolt, Brianna So, Maria Vignau-Loria, Allison Young, MEF Associates

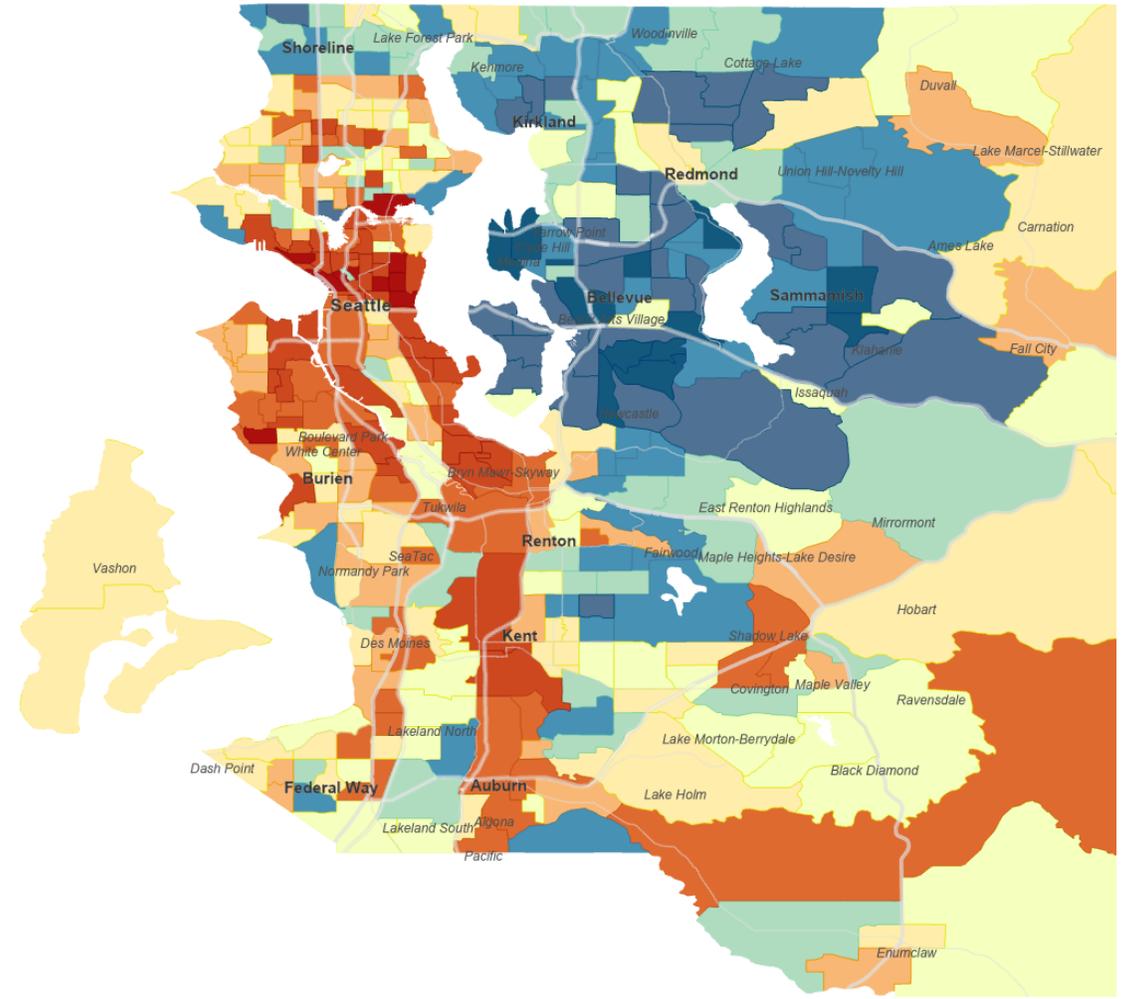
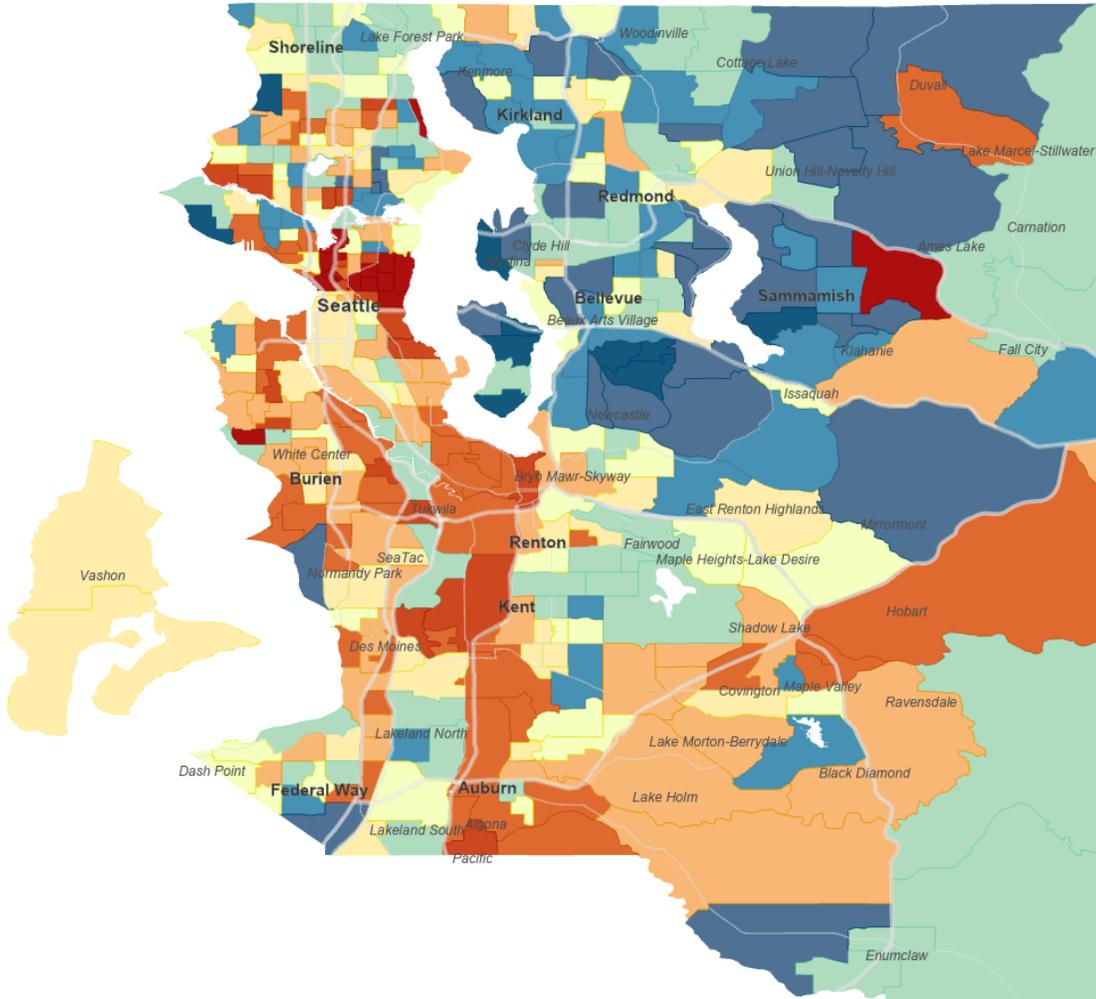
This research was funded by the Bill & Melinda Gates Foundation, Chan-Zuckerberg Initiative, Surgo Foundation, the William T. Grant Foundation, and Harvard University

# Appendix Figures

# Preliminary vs Final Version of Opportunity Atlas Upward Mobility Measure

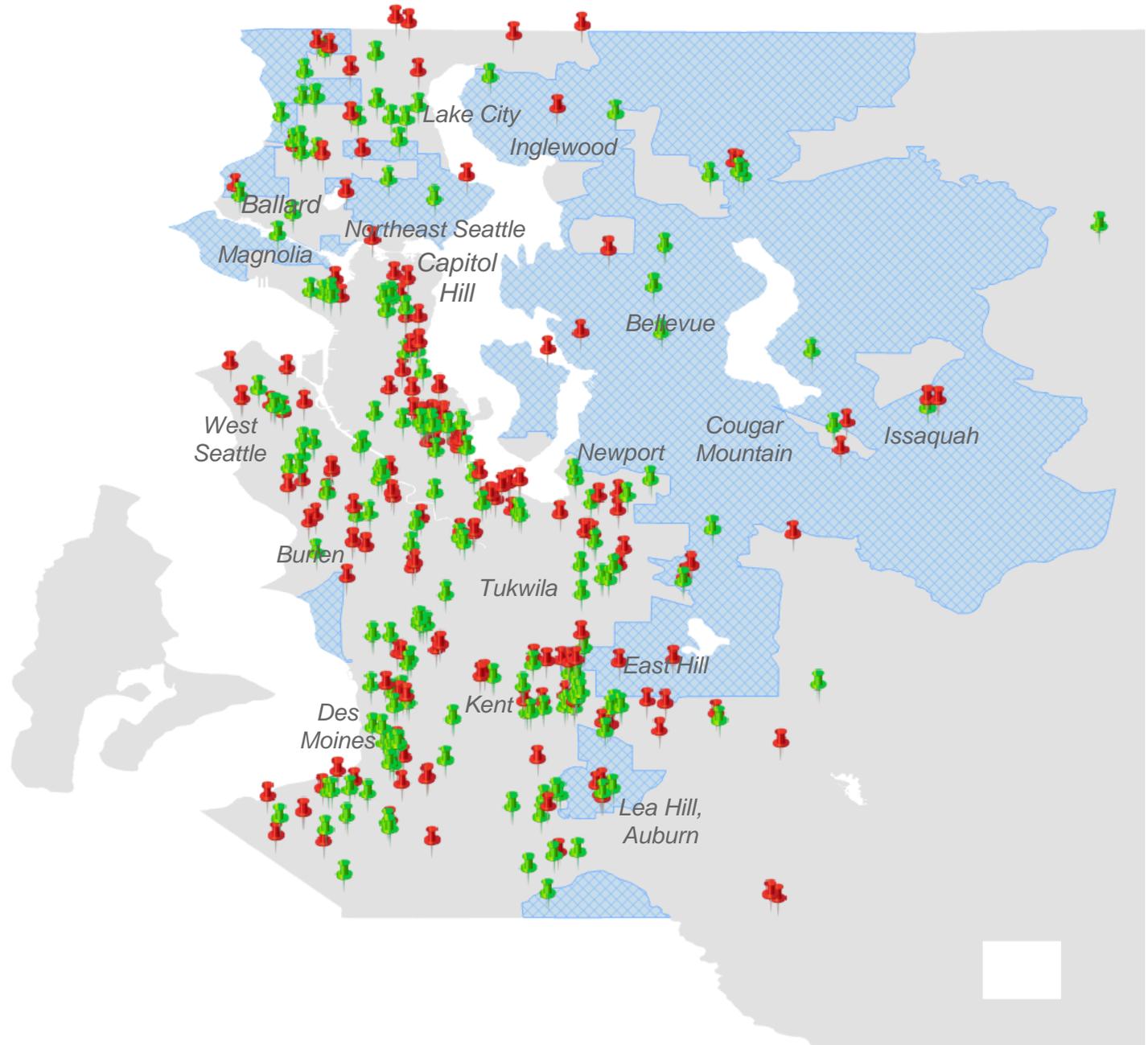
## Final Version of Opportunity Atlas

## Preliminary Forecasts Used to Define High-Opportunity Areas



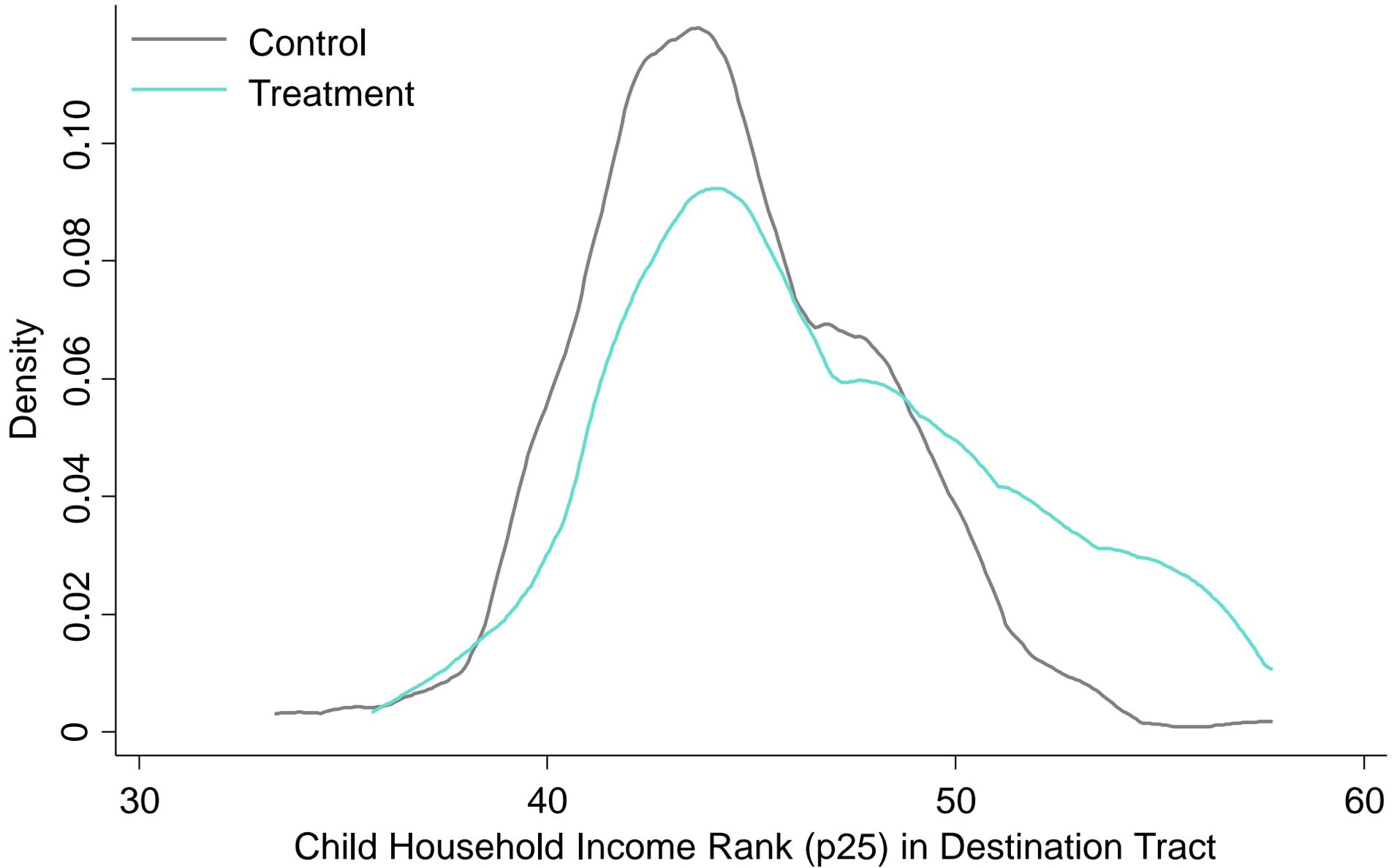
*Population-Weighted Correlation Across Tracts: 0.74*

# Map of Origin Tracts for Voucher Recipients



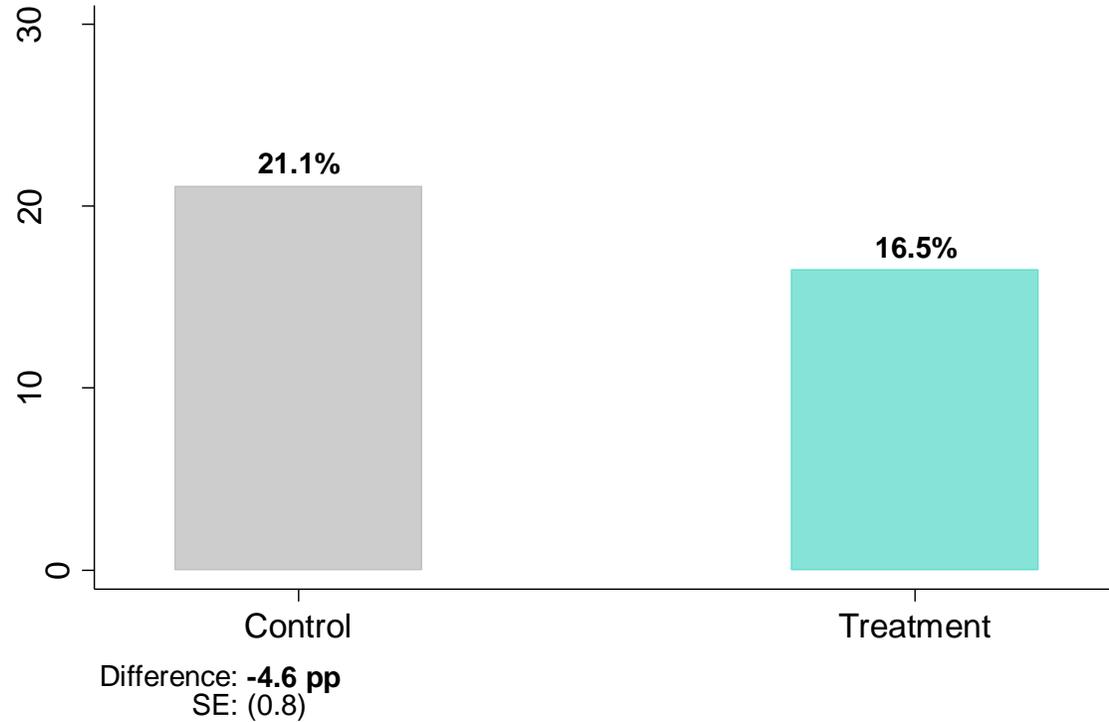
-  High-Opportunity Area
-  Control
-  CMTO Treatment

# Distribution of Upward Mobility in Destination Tracts

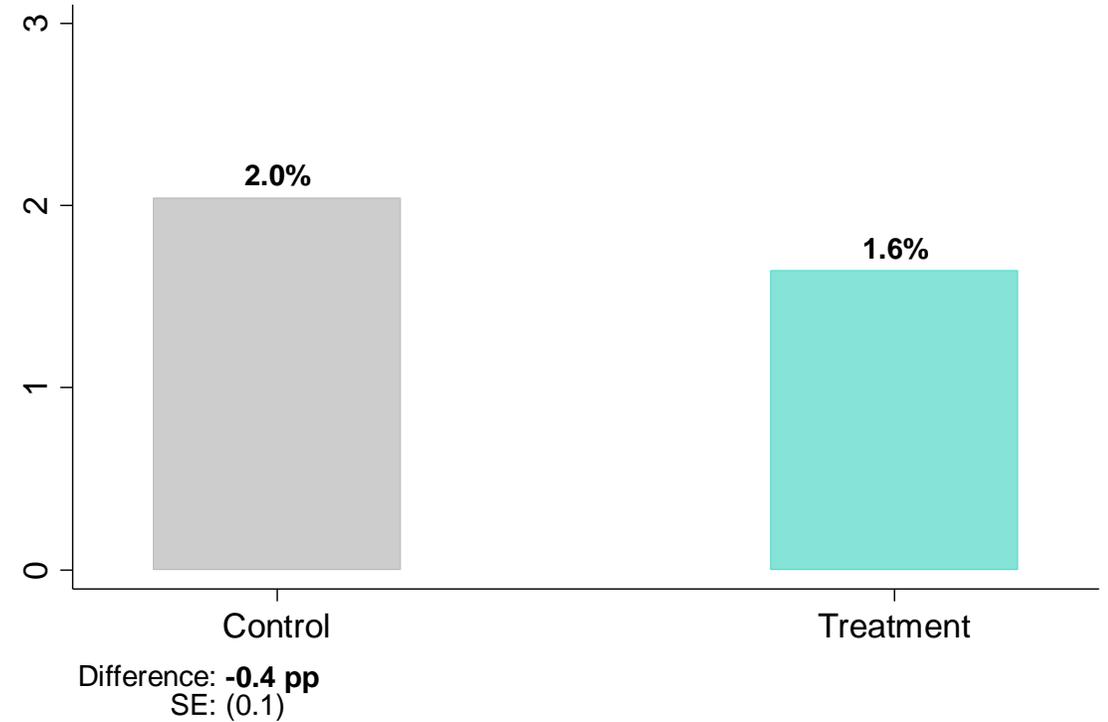


# Predicted Treatment Effects on Other Long-Term Outcomes

## Teenage Birth Rates of Children in Adulthood

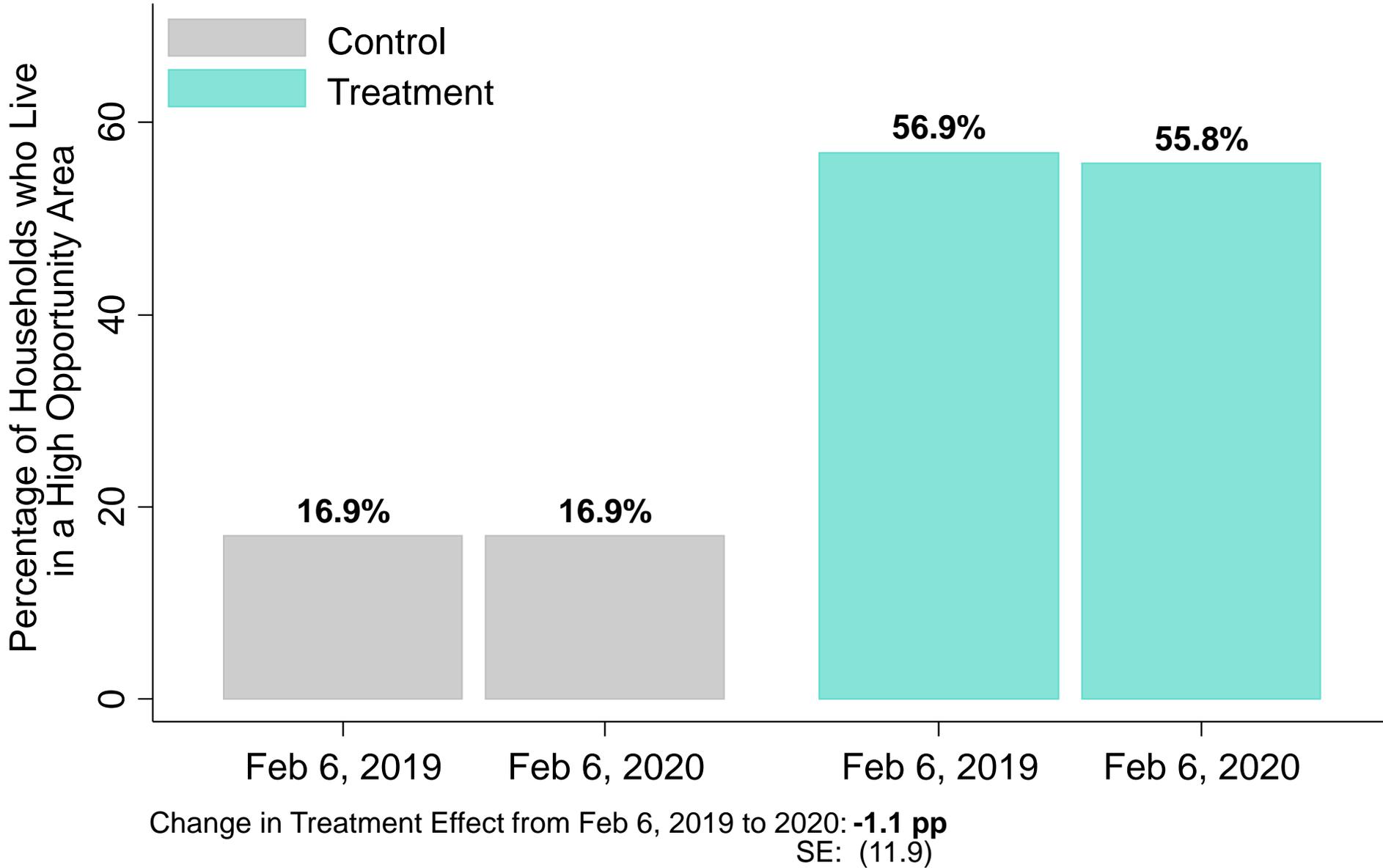


## Incarceration Rates of Children in Adulthood

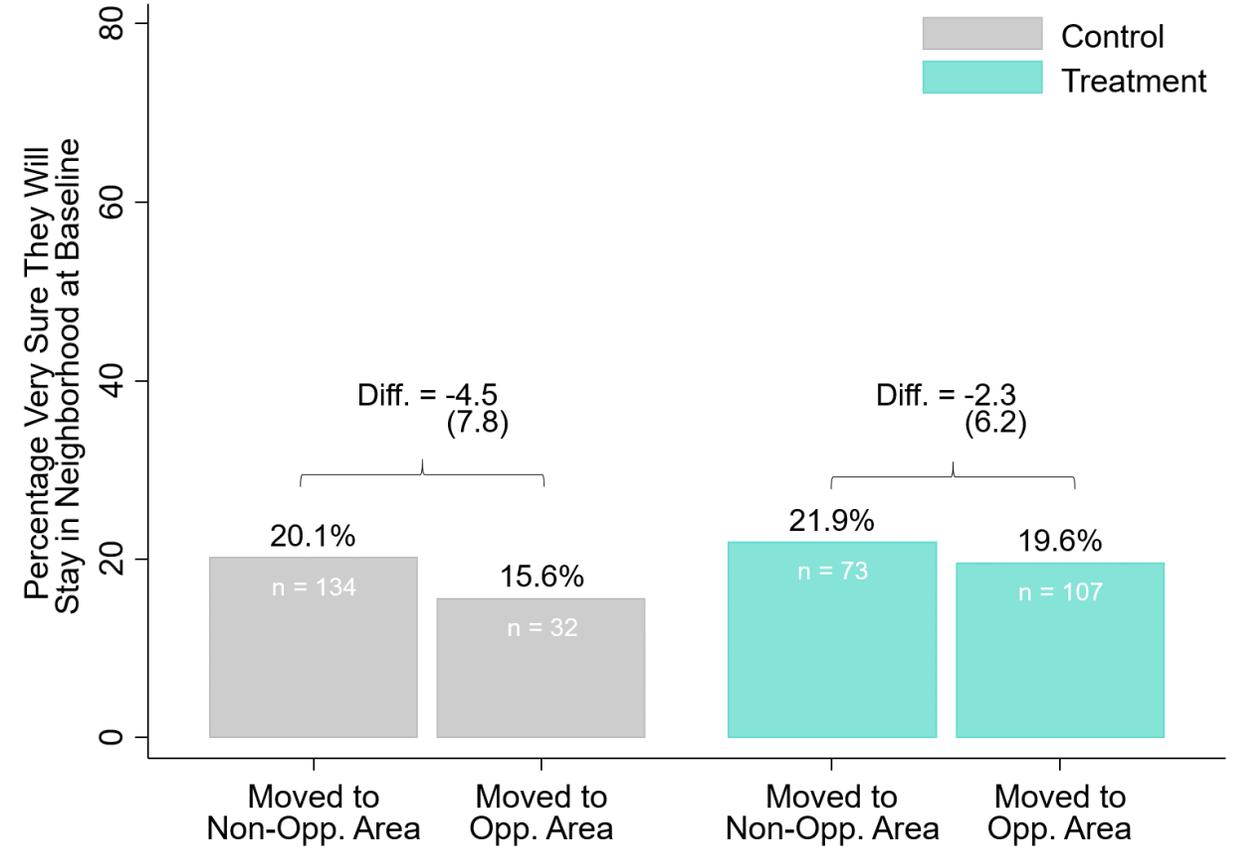
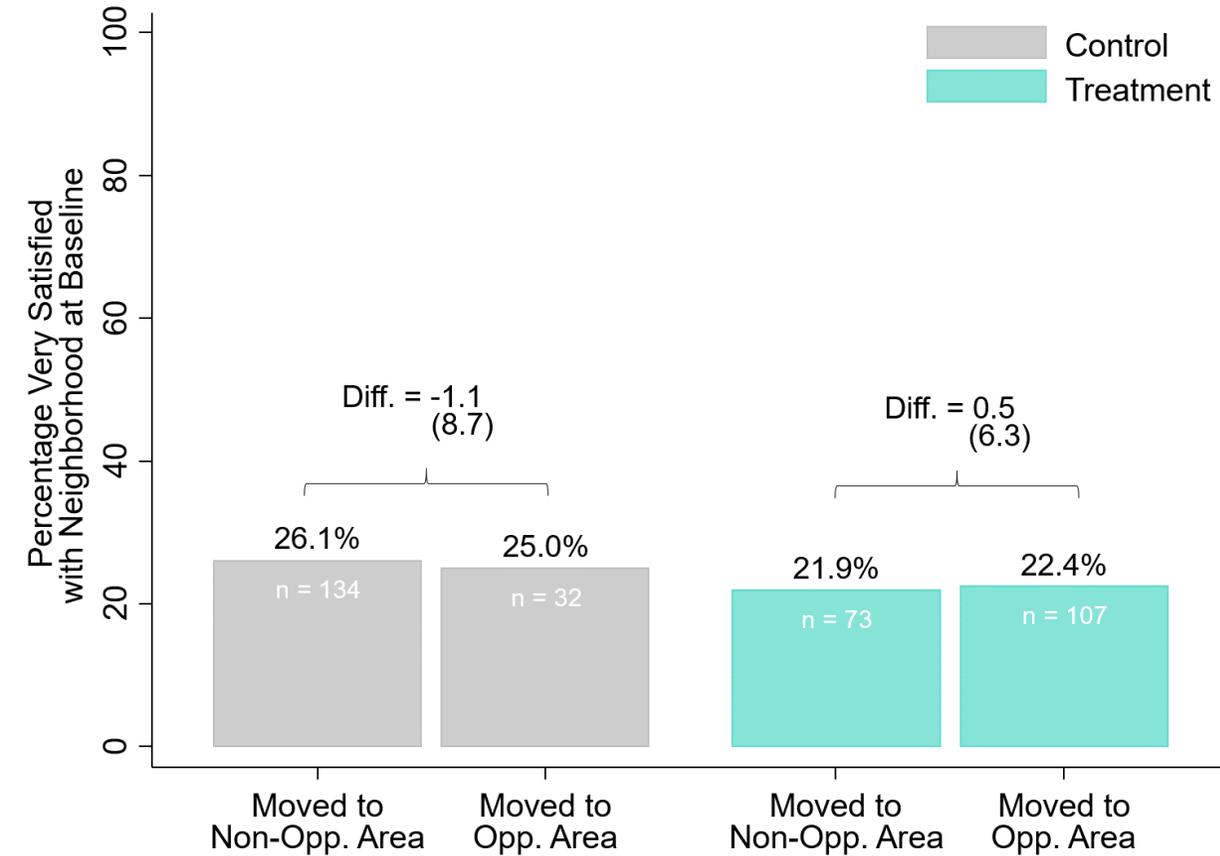


# Short-Run Persistence - Share of Households in High-Opportunity Areas

Among Households Issued a Voucher pre September 1, 2018

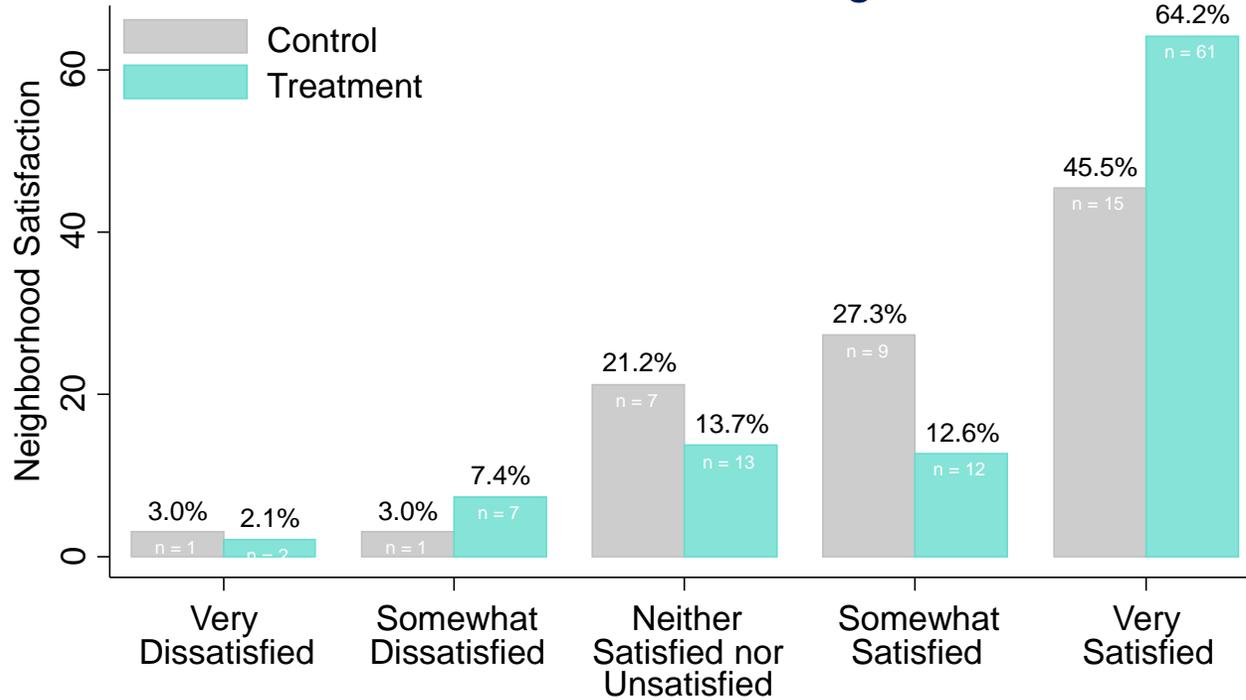


# Satisfaction in Neighborhood at Baseline by Type of Area



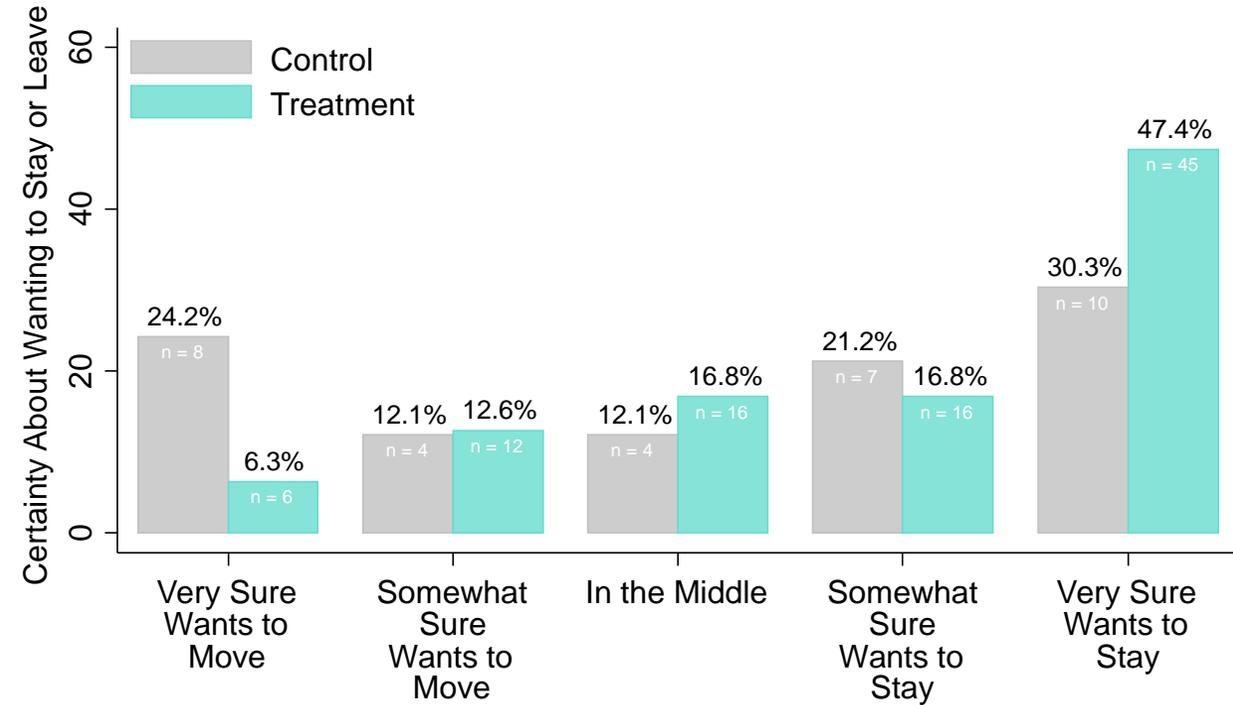
# Post-Move Treatment Effects on Neighborhood Satisfaction

## Satisfaction with New Neighborhood



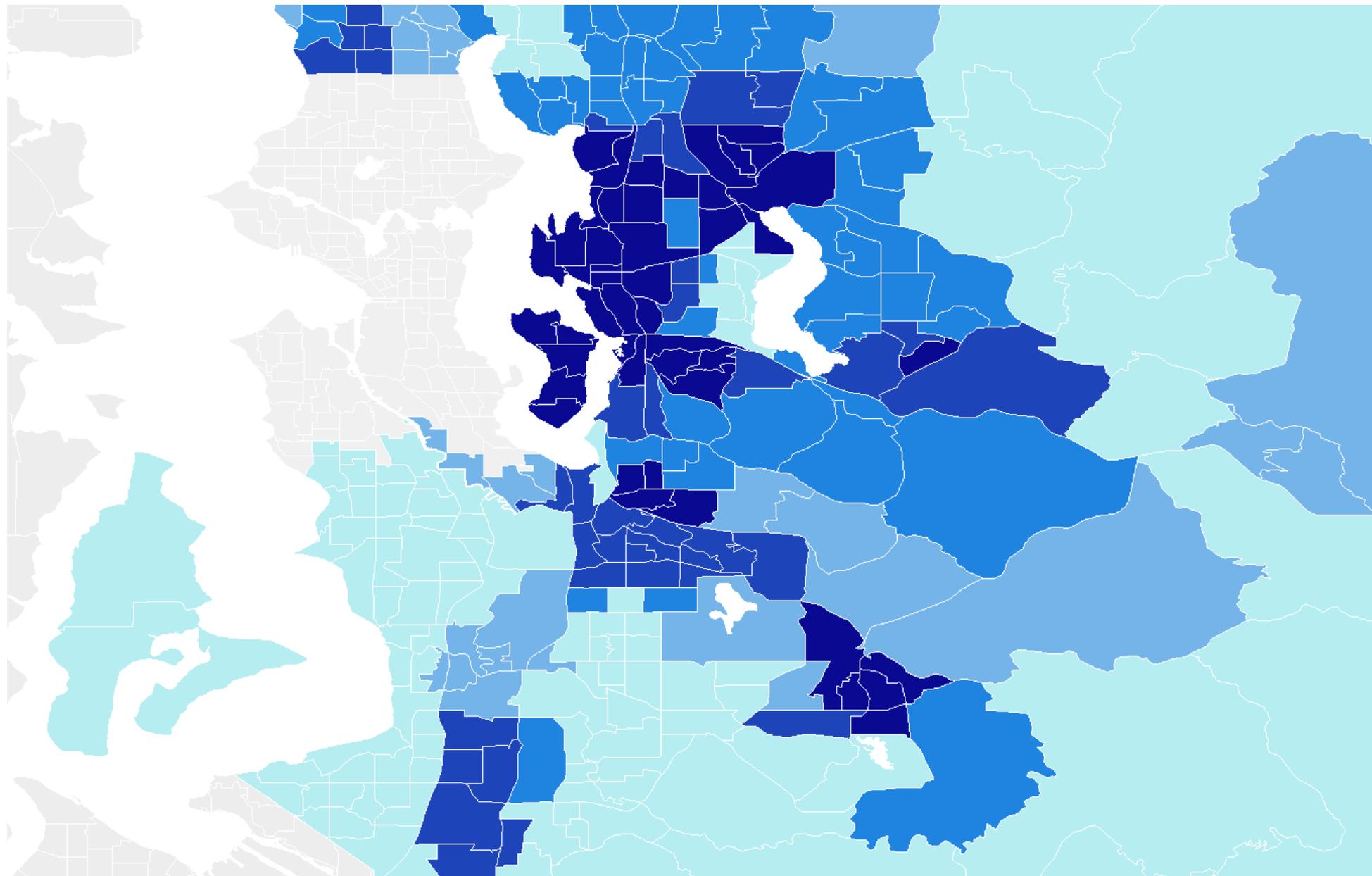
Difference in % Very Satisfied: **18.7pp**  
SE: (10.1)

## Certainty about Wanting to Stay in New Neighborhood



Difference in % Very Sure Want to Stay: **17.4pp**  
SE: (9.8)

# Changes to King County Housing Authority Payment Standards in March 2016



Increase in  
Max Rent  
for 2BR Apt.

