10-9-2015

Affordable Housing as a Prerequisite for a Safe, Healthy, Equitable Transportation System: Evidence from a Nationwide Evaluation of Location Efficiency within the Low-Income Housing Tax Credit (LIHTC) Program

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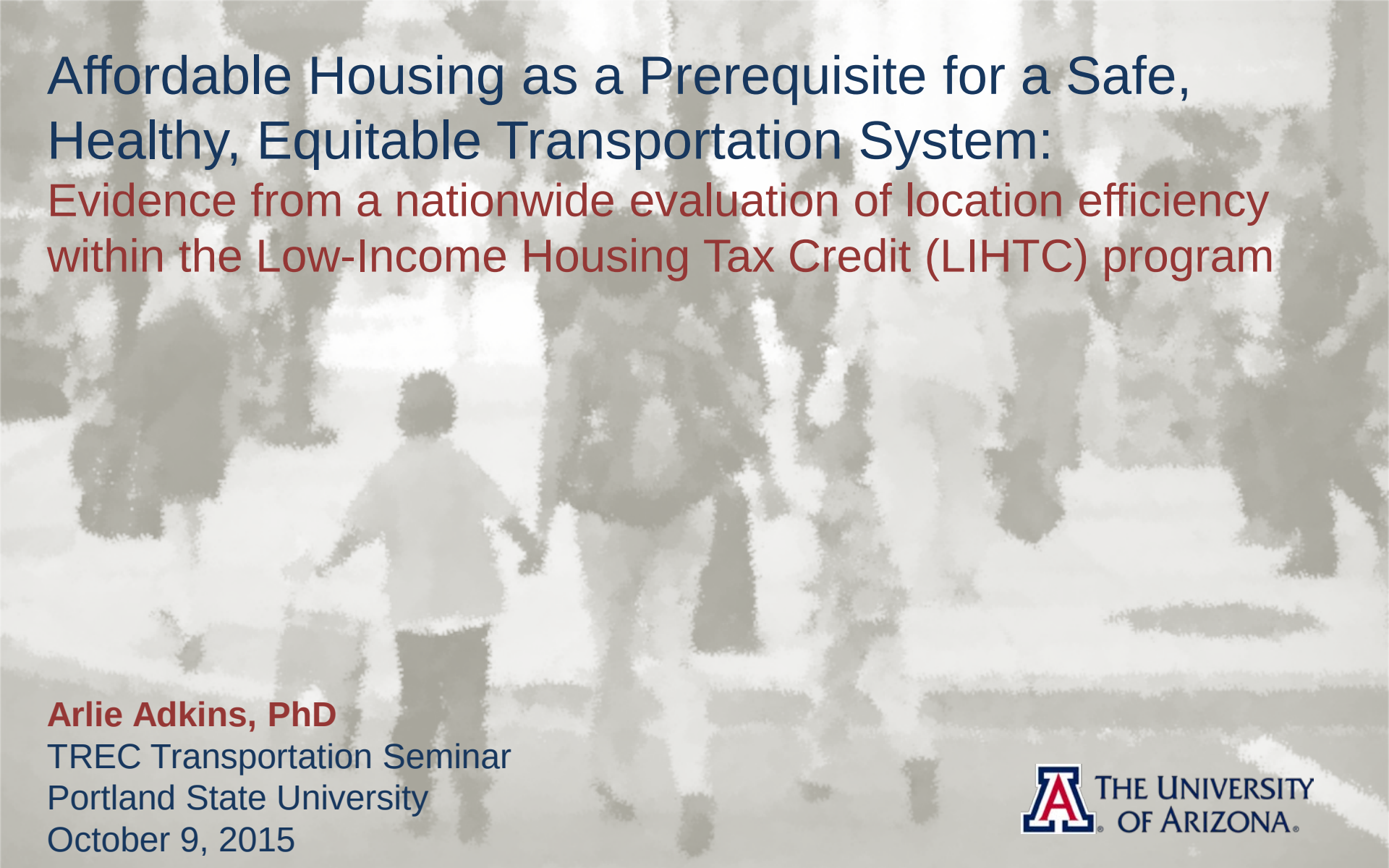
Affordable Housing as a Prerequisite for a Safe, Healthy, Equitable Transportation System:

Evidence from a nationwide evaluation of location efficiency within the Low-Income Housing Tax Credit (LIHTC) program

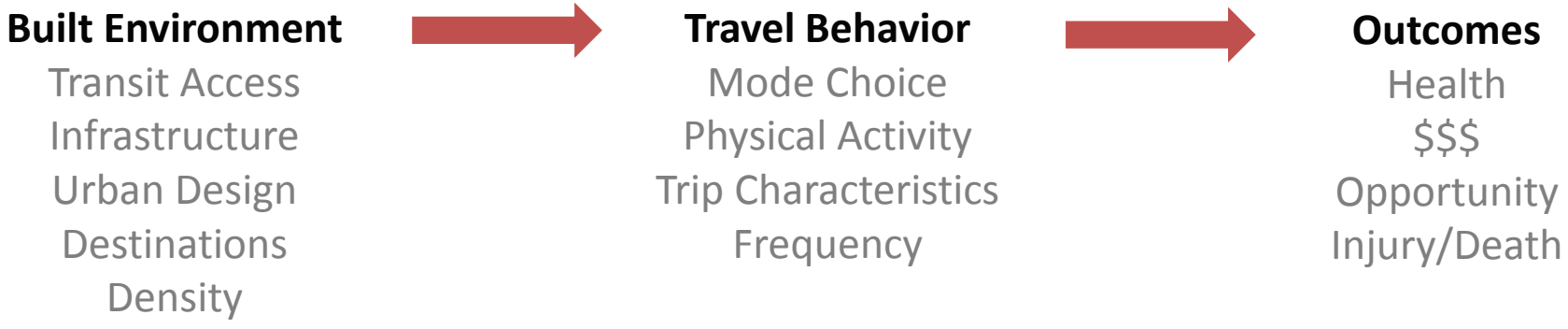


Arlie Adkins, PhD

TREC Transportation Seminar
Portland State University
October 9, 2015

THE UNIVERSITY OF ARIZONA

Thank you TREC.

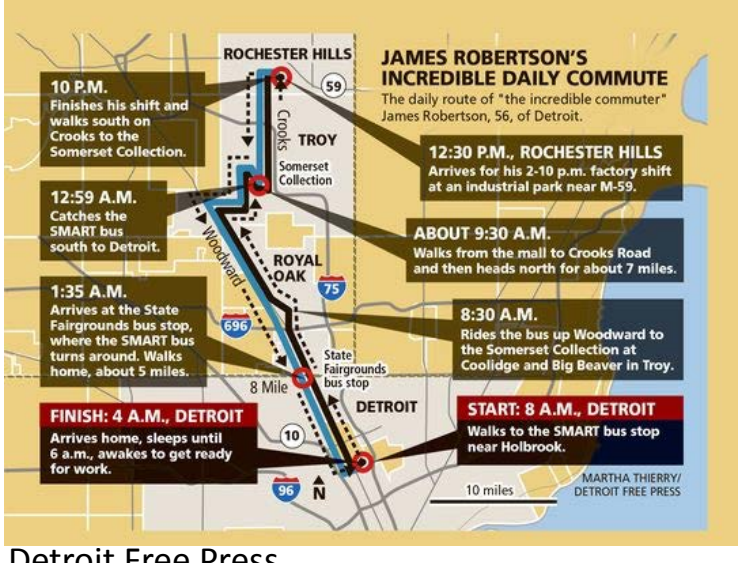

Built Environment
Transit Access
Infrastructure
Urban Design
Destinations
Density
Travel Behavior
Mode Choice
Physical Activity
Trip Characteristics
Frequency
Outcomes
Health
$$$
Opportunity
Injury/Death

Outcomes: Economic

Low-income households often spend a much higher percentage of income on transportation.

Outcomes: Opportunity

- Spatial mismatch between job centers, affordable housing, and affordable transportation results in more onerous commutes and fewer available jobs



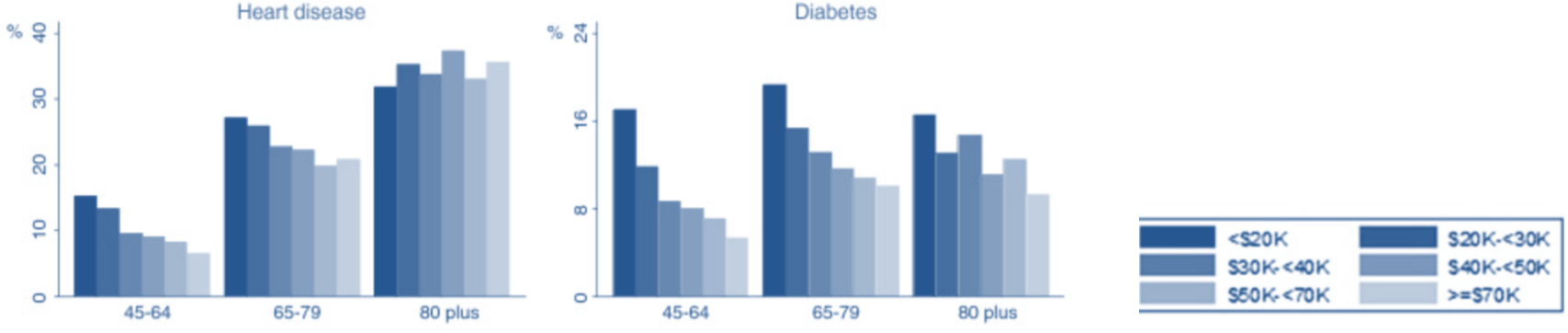
Detroit Free Press

Outcomes: Health

- Many chronic diseases associated with physical inactivity/activity are more prevalent in low-income individuals
- Low-income people more at risk of health complications from transportation-related air quality problems (asthma)

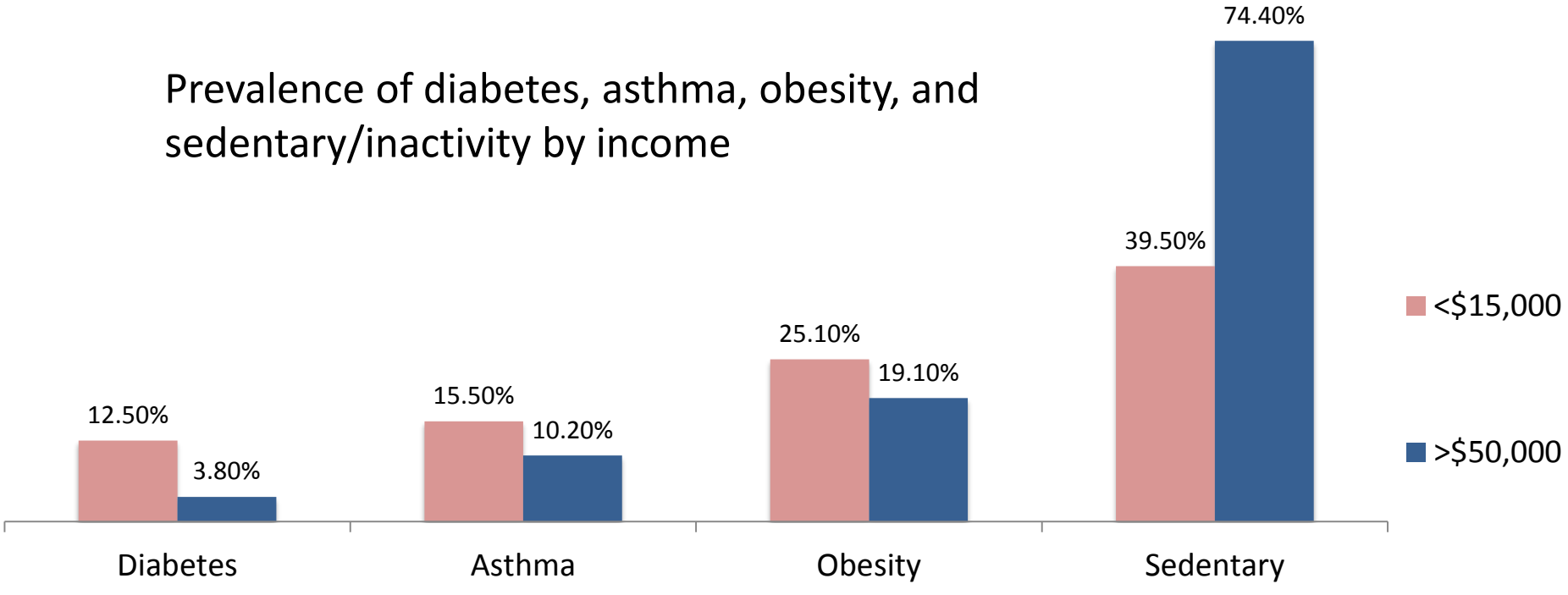
Outcomes: Health

Prevalence of chronic diseases by annual household income category, males



Korda, R. J., Paige, E., Yiengprugsawan, V., Latz, I., & Friel, S. (2014)

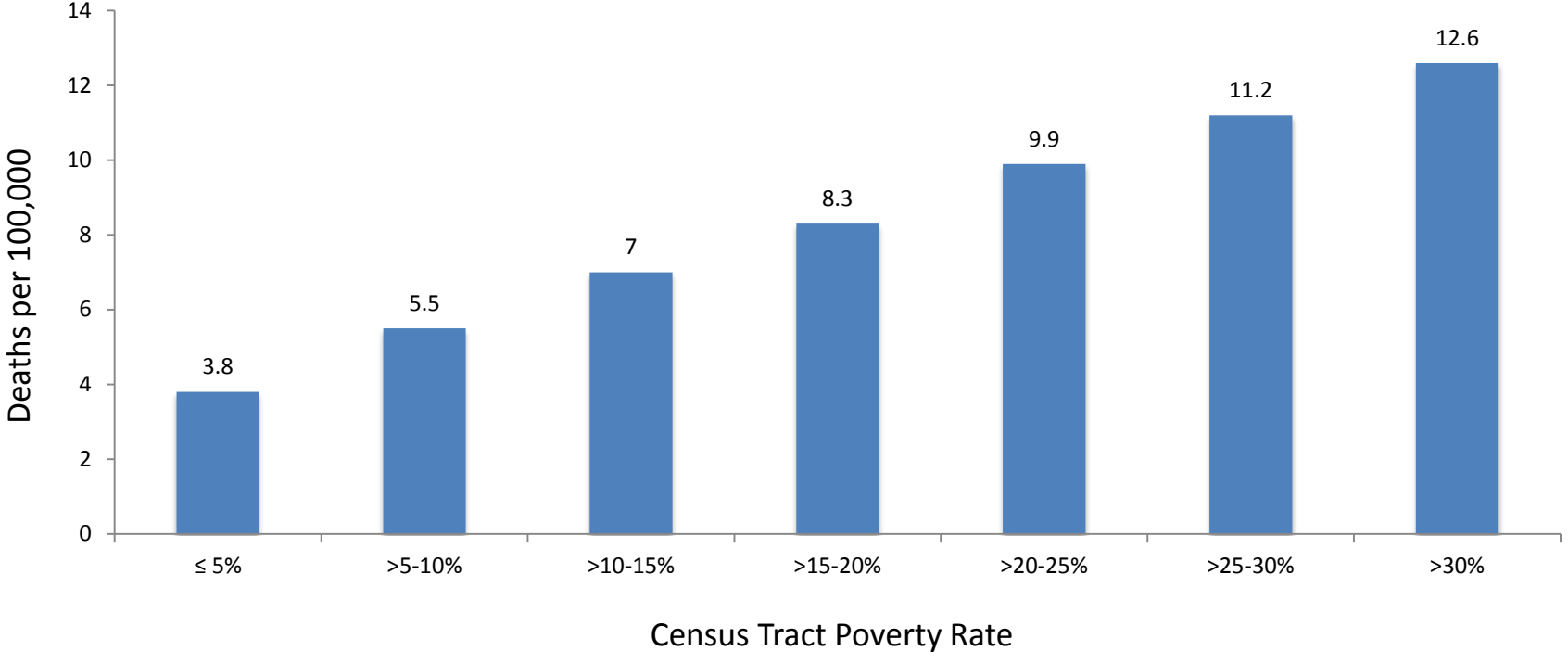
Outcomes: Health



Data from: Behavioral Risk Factor Surveillance System (BRFSS), 2002. Centers for Disease Control and Prevention.

Outcomes: Injury/Death

- Large disparities in fatality rates by race and income



Outcomes: Injury/Death

- Large disparities in fatality rates by race and income
- Pedestrian fatality rate for Black and Hispanic men twice than of white men
  - Disparity persists even after controlling for exposure

Outcomes are placed-based.

Place is housing-based.

Built Environment

Transit Access
Infrastructure
Urban Design
Destinations
Density

Travel Behavior

Mode Choice
Physical Activity
Safety

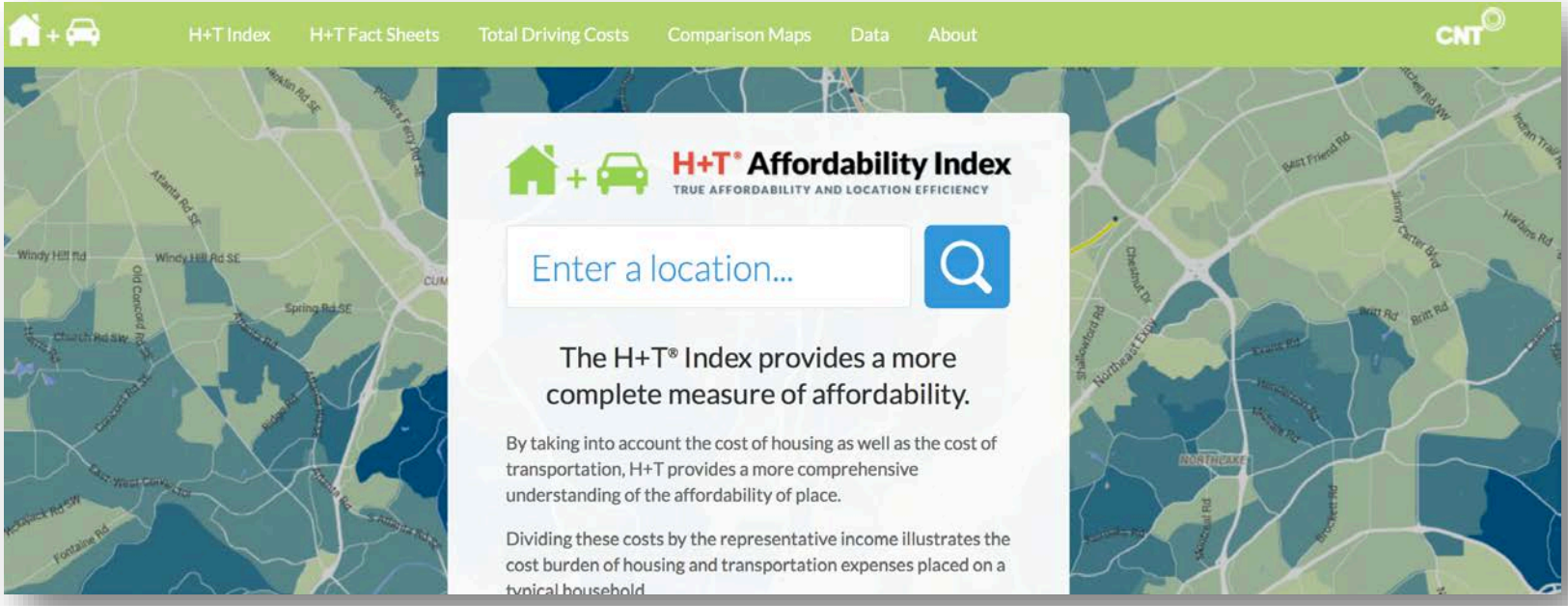
Outcomes

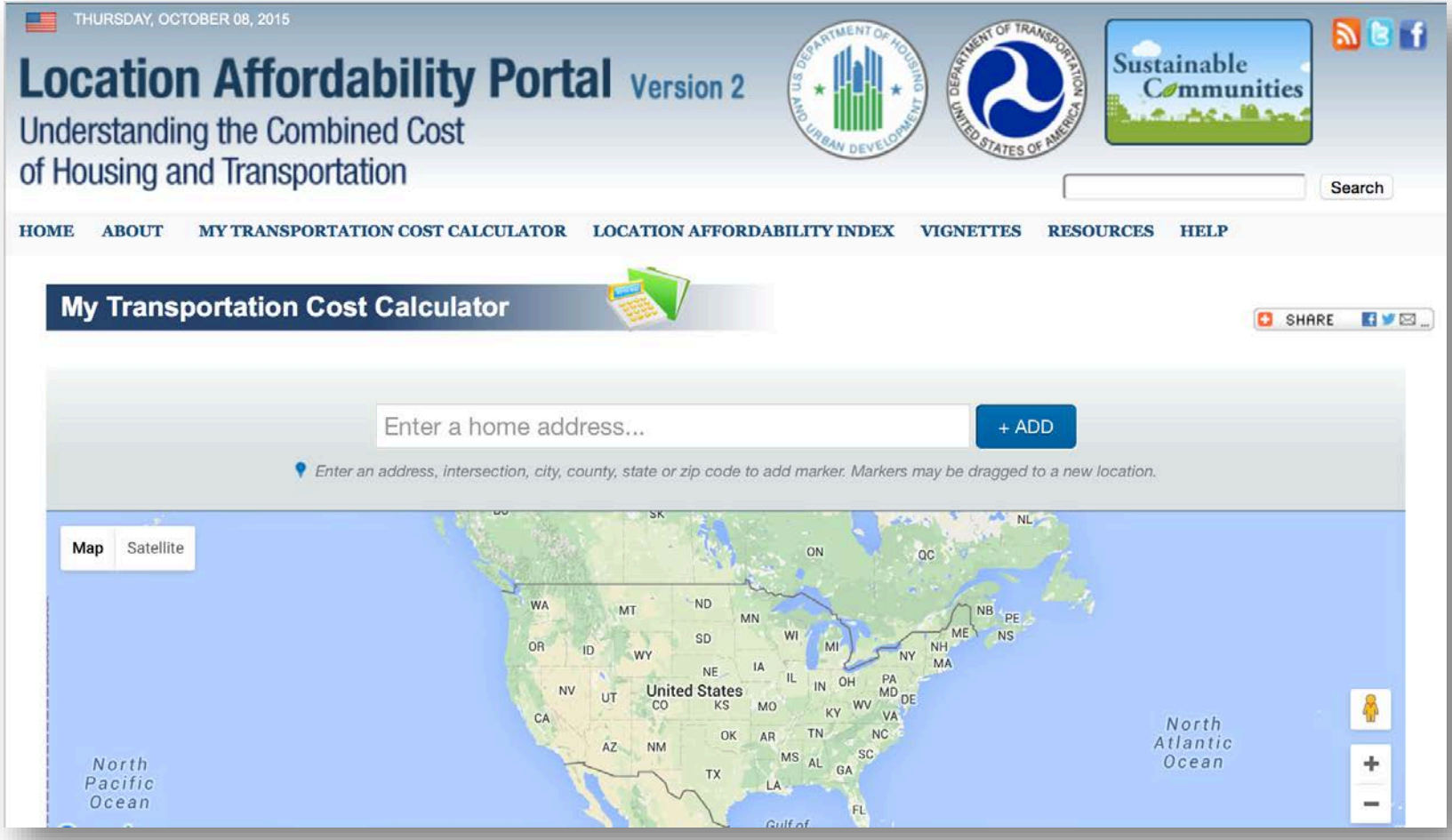
Health
$$$
Opportunity
Injury Prevention

Affordable housing is a requirement for an equitable transportation system

Housing + Transportation

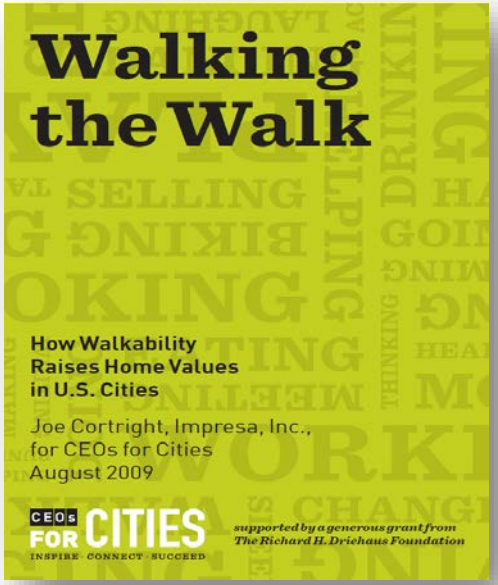
- Increasing acknowledgement that transportation costs need to be considered in calculations of housing costs
- Combined cost of place – “location affordability”
- New tools aimed at helping households make “location affordable” decisions about housing locations


H+T Index
H+T Fact Sheets
Total Driving Costs
Comparison Maps
Data
About
CNT
H+T® Affordability Index
TRUE AFFORDABILITY AND LOCATION EFFICIENCY
Enter a location...
The H+T® Index provides a more complete measure of affordability.
By taking into account the cost of housing as well as the cost of transportation, H+T provides a more comprehensive understanding of the affordability of place.
Dividing these costs by the representative income illustrates the cost burden of housing and transportation expenses placed on a typical household

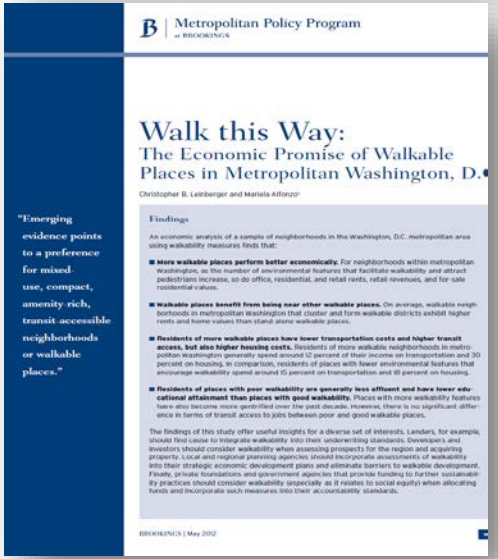

THURSDAY, OCTOBER 08, 2015
Location Affordability Portal Version 2
Understanding the Combined Cost of Housing and Transportation
Sustainable Communities
Search
HOME ABOUT MY TRANSPORTATION COST CALCULATOR LOCATION AFFORDABILITY INDEX VIGNETTES RESOURCES HELP
My Transportation Cost Calculator
SHARE
Enter a home address...
+ ADD
Enter an address, intersection, city, county, state or zip code to add marker. Markers may be dragged to a new location.
Map
Satellite
United States
North Pacific Ocean
North Atlantic Ocean
Gulf of

But…

Basic rule of urban economics: transportation improvements increase land values.



"An additional one point increase in Walk Score was associated with between a $700 and $3,000 increase in home values."



"More walkable places perform better economically" in terms of higher office, residential and retail rents; residential sales values; retail revenues

Increased property values can result in:

- More tax revenue
- Development at higher densities
- Amplification of affordable housing shortage
- Increased vehicle ownership as hh incomes increase

Low-income households priced out

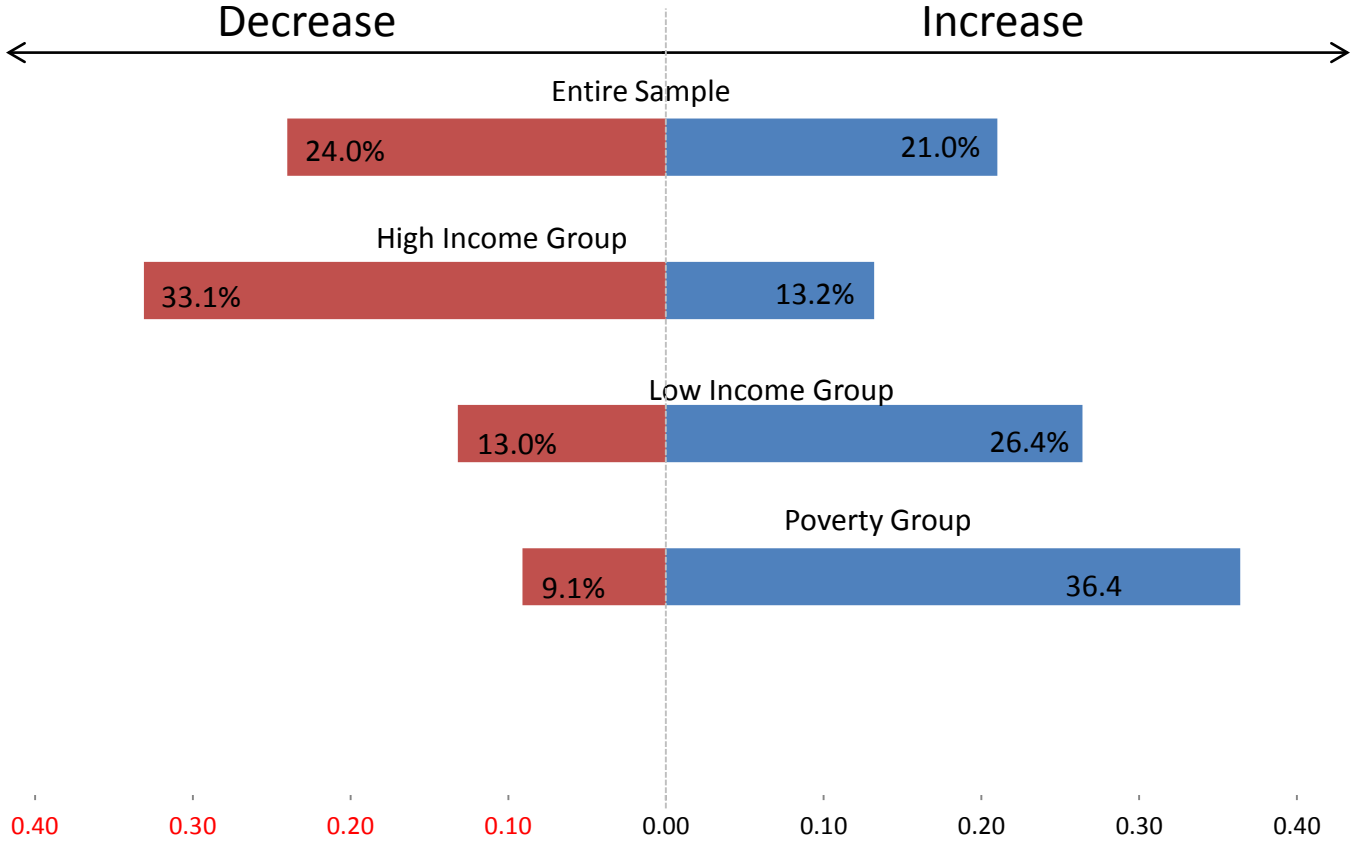
Proportion of respondents who expressed a strong preference for pedestrian accessibility who moved to a “very walkable” neighborhood?

53.4% of higher income respondents

18.4% of low-income respondents

Pedestrian-accessibility by move date

Compared to your previous home, do you expect transportation costs at your new home to increase, decrease, or stay about the same? (N = 344)



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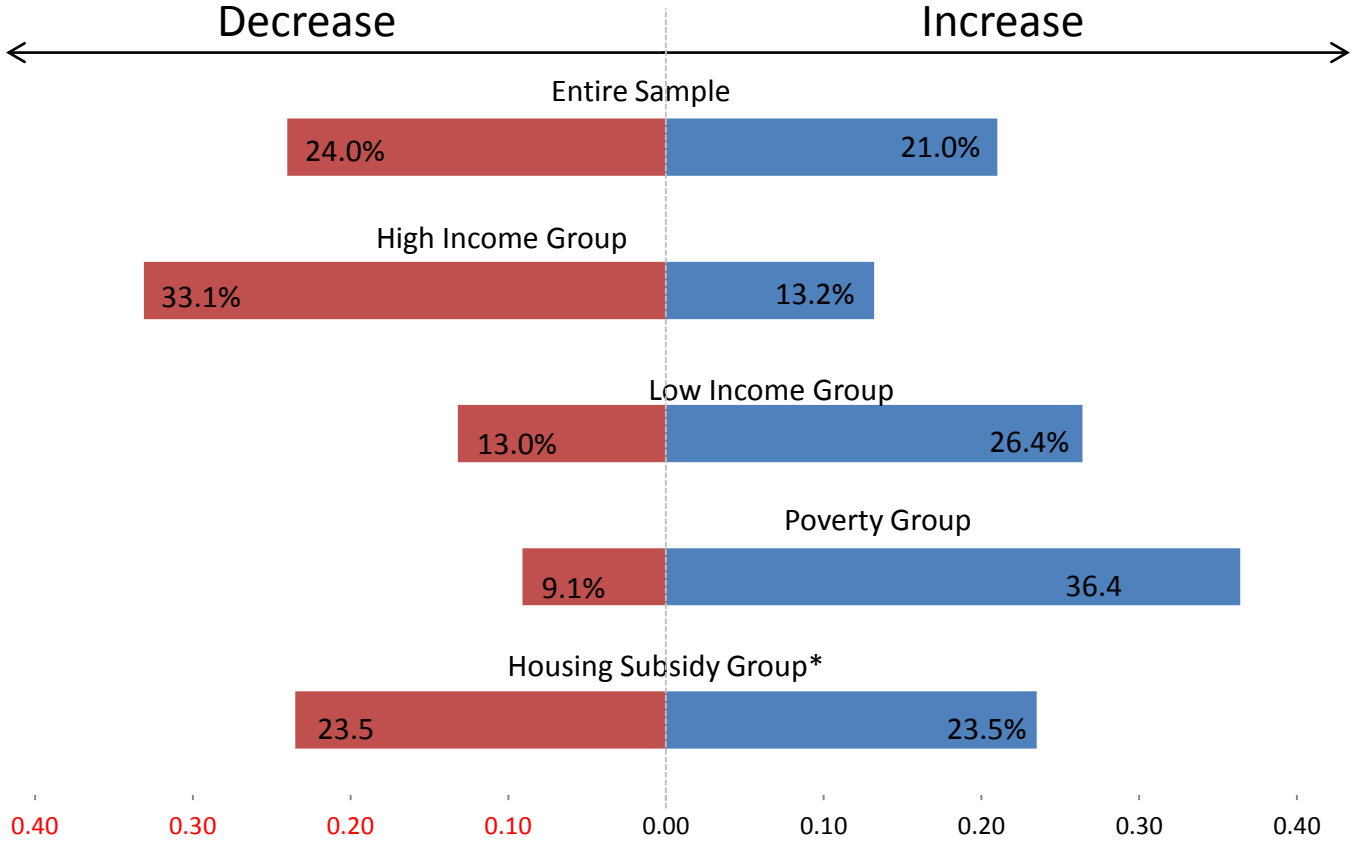

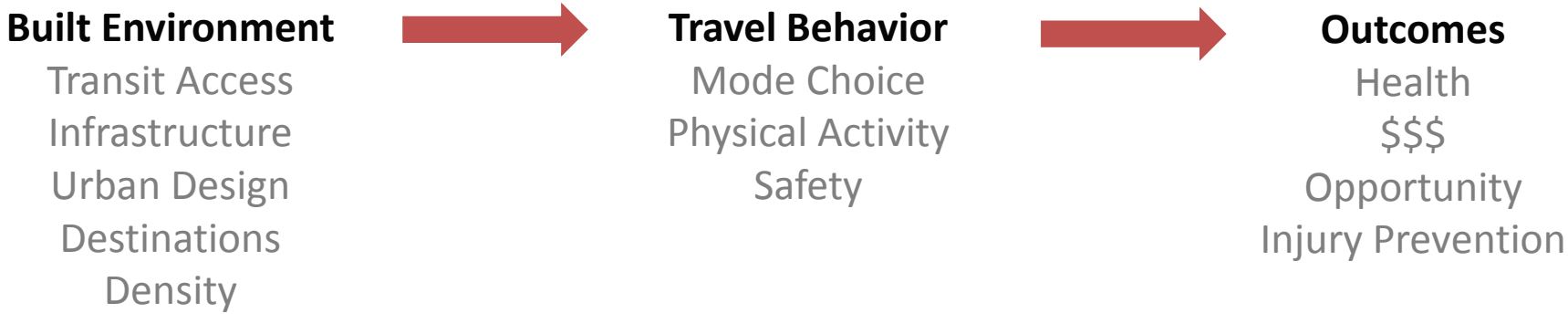
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Injury Prevention

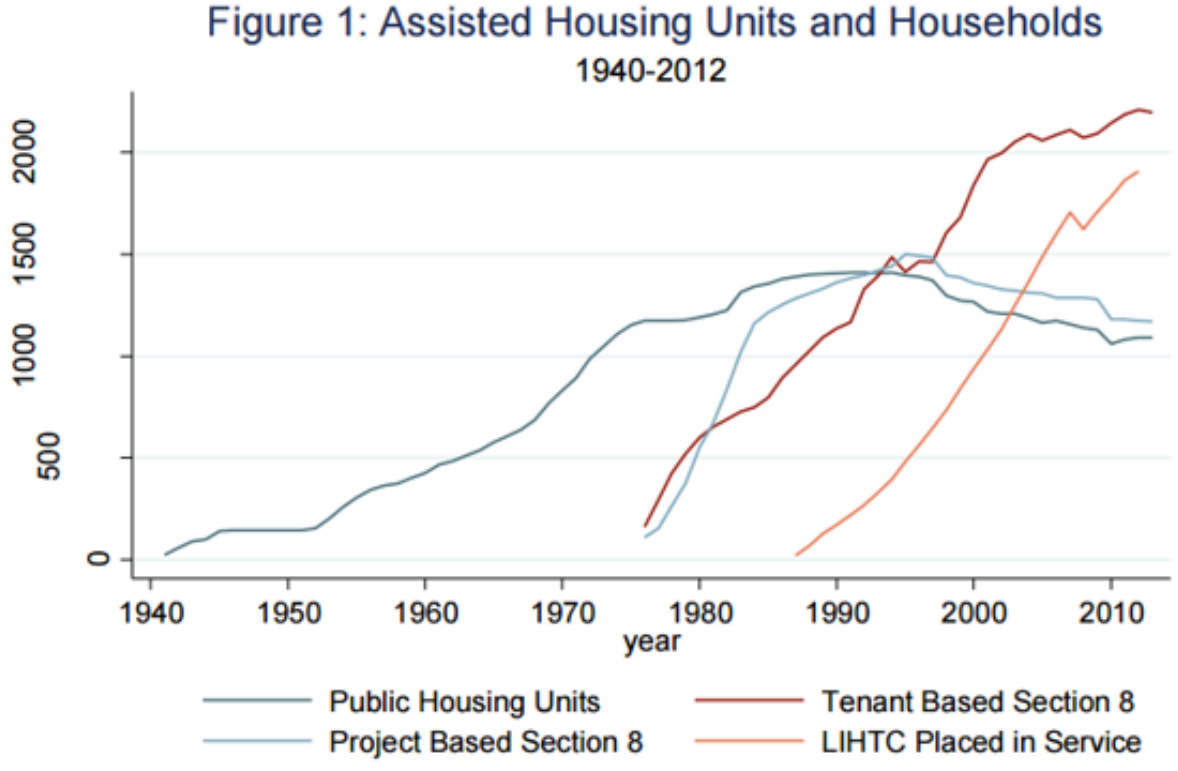
Portland Region Housing Choice Voucher Program Mover Study

- Just completed study with Andree Tremoulet and Ryan Dann
- How do HCV movers in the Portland region fare in terms of LE?
  - In Portland:
    - HCV movers ended up with lower levels of LE than previous home
    - HCV movers had lower LE than non-movers
  - In suburbs:
    - HCV movers LE stayed the same or increased
    - No differences between movers and non-movers

Location Efficiency in the Low-Income Housing Tax Credit (LIHTC) Program

- With Gary Pivo and Andrew Sanderford at Univ. of Arizona
- What proportion of LIHTC units built between 2007 and 2011 are in location efficient places?
  - Do state allocation plans (QAPs) make a difference?
  - Does the share of LIHTC built by non-profits make a difference?

Location Efficiency in the Low-Income Housing Tax Credit (LIHTC) Program



Source: Citylab.com

Location Efficiency in the Low-Income Housing Tax Credit (LIHTC) Program

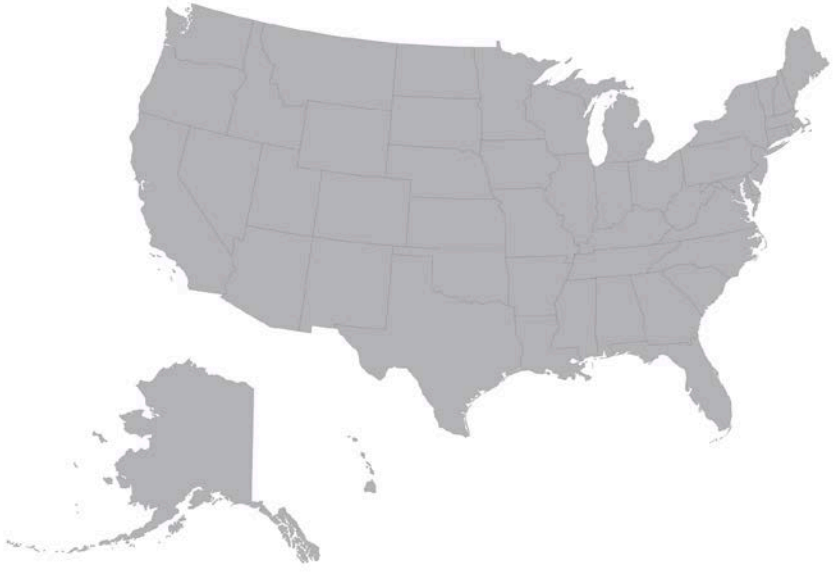
- Location efficiency variables from EPA Smart Location Database:
  - Residential Density
  - Street connectivity
  - Transit supportive (5% transit mode share)
  - Near rail transit (1/2 mile)
  - Relative regional accessibility (jobs)

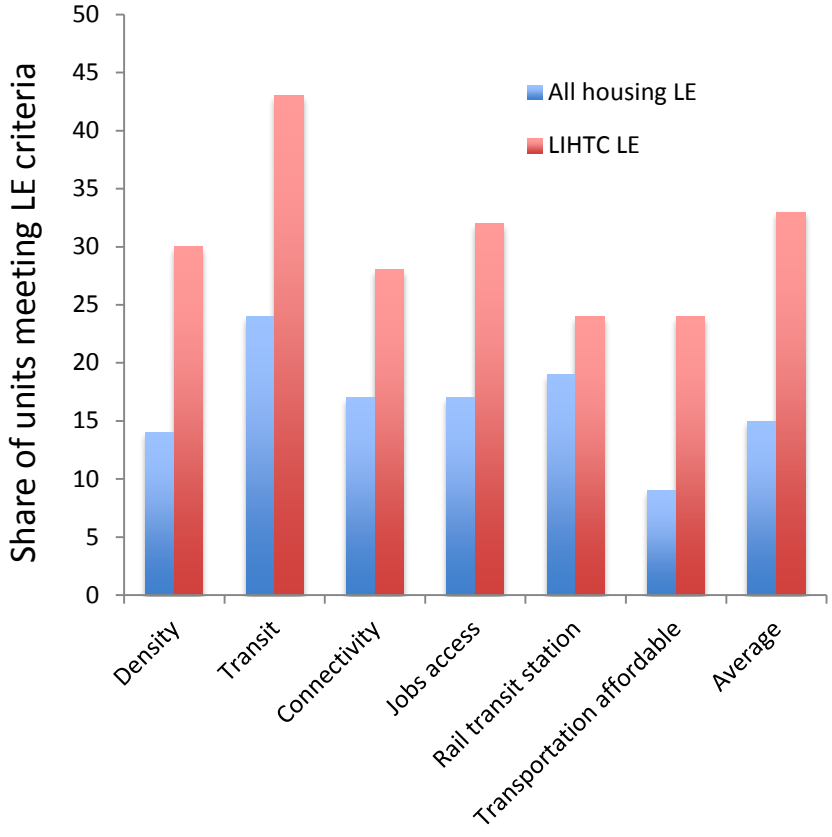
  Transportation costs < 20% of income for low-income household (Location Affordability Index)

Analysis

- National and state-level analysis
- Rather than determining whether each state placed LIHTC in a relatively location efficient place for that state, we used national standards
- Also compared LIHTC LE to LE of all housing stock to see which states over-performed against their baseline LE

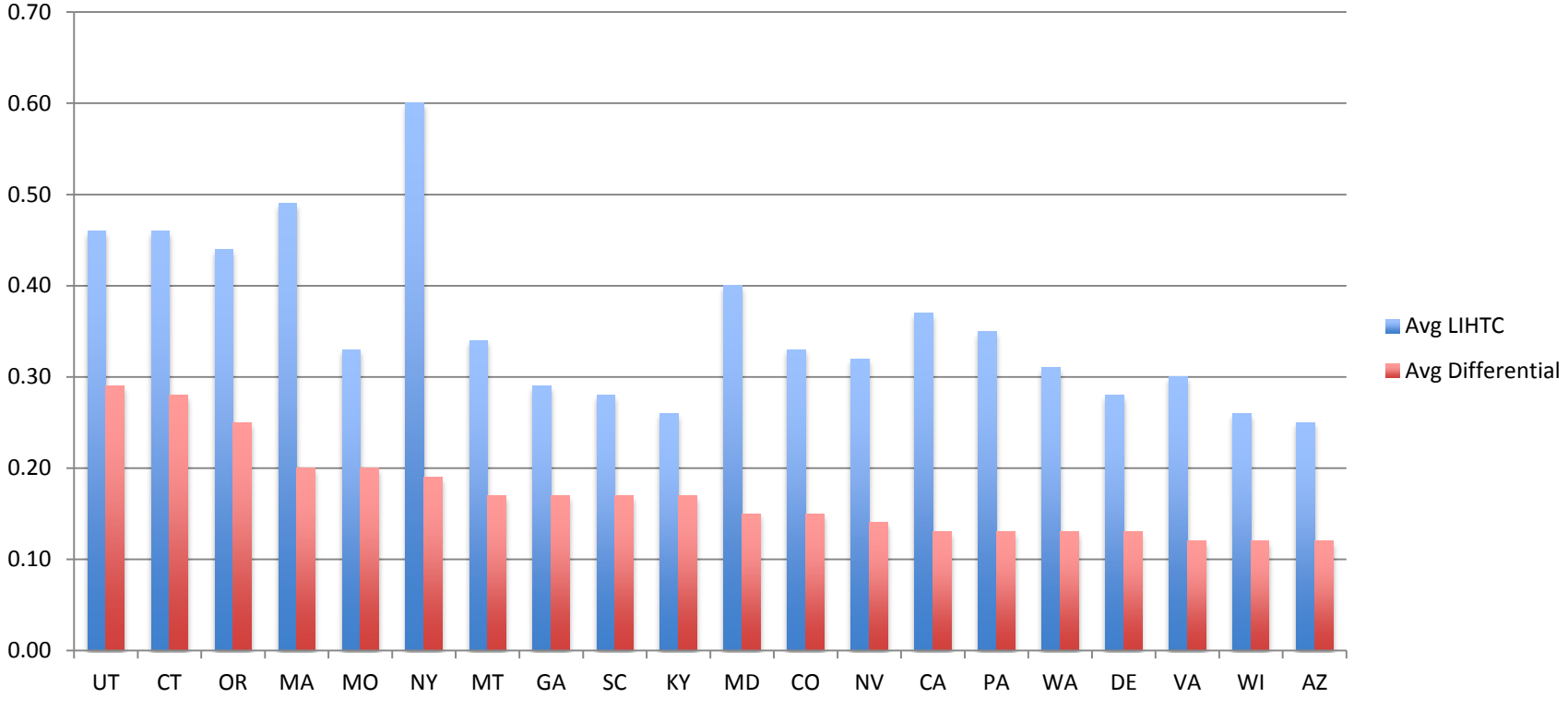
LE of LIHTC built from 2007-2011



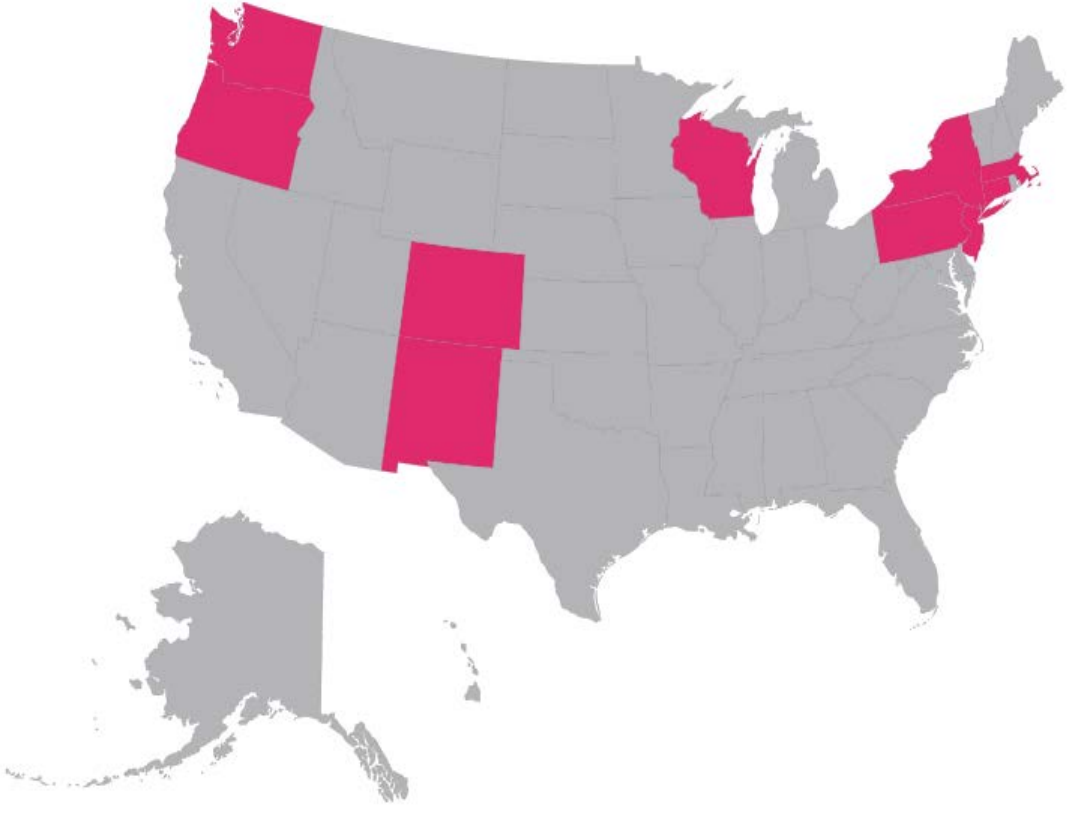


36% of LIHTC was built in CBGs meeting 3 or more LE criteria

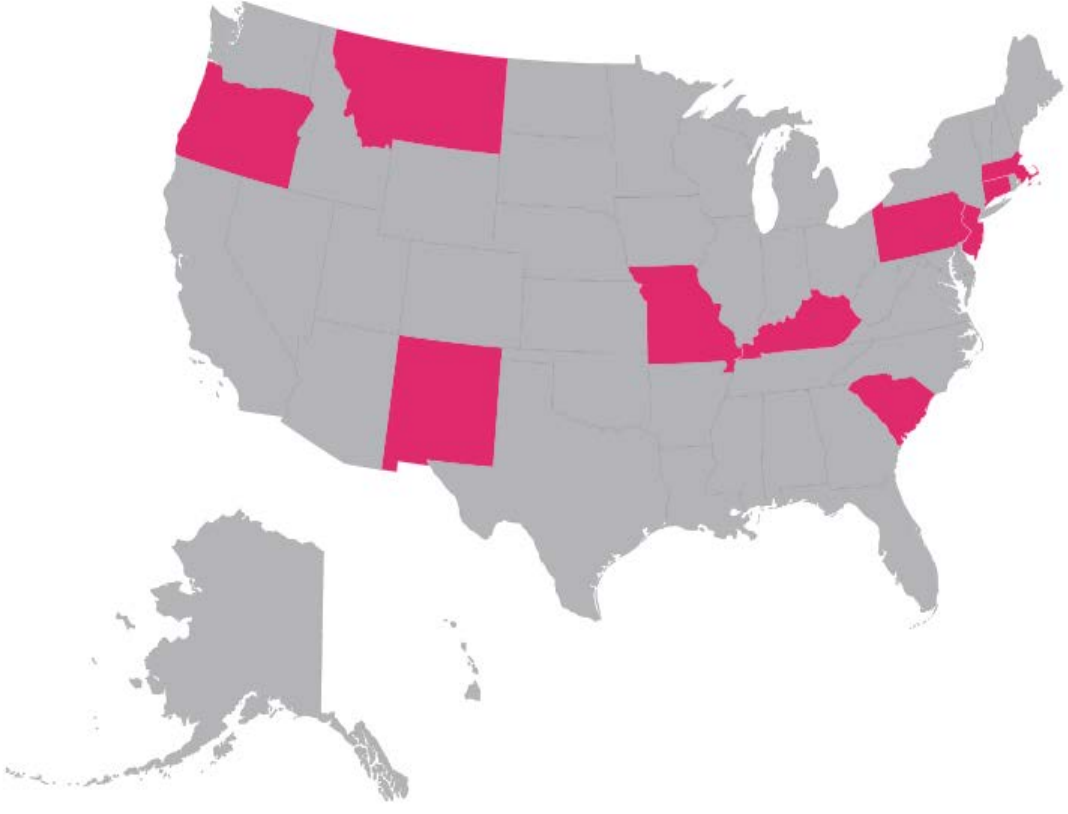
State by state LIHTC LE



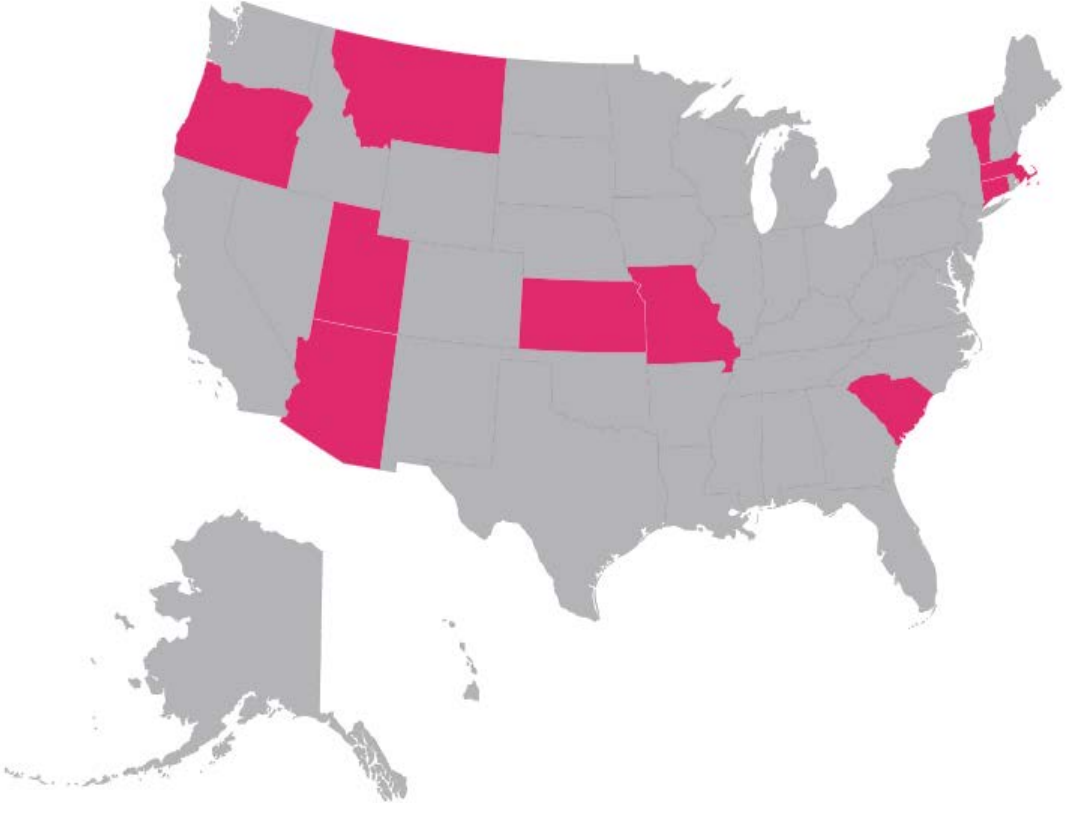
Differential: Residential Density



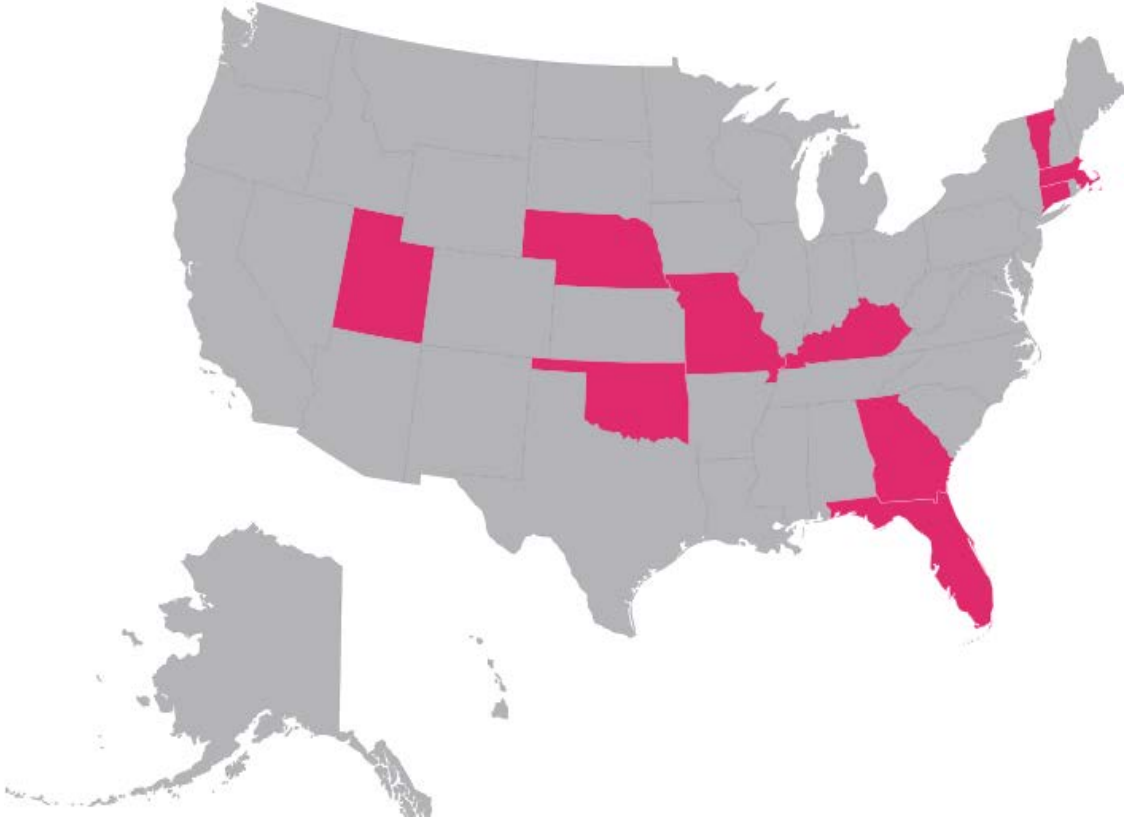
Differential: Connectivity



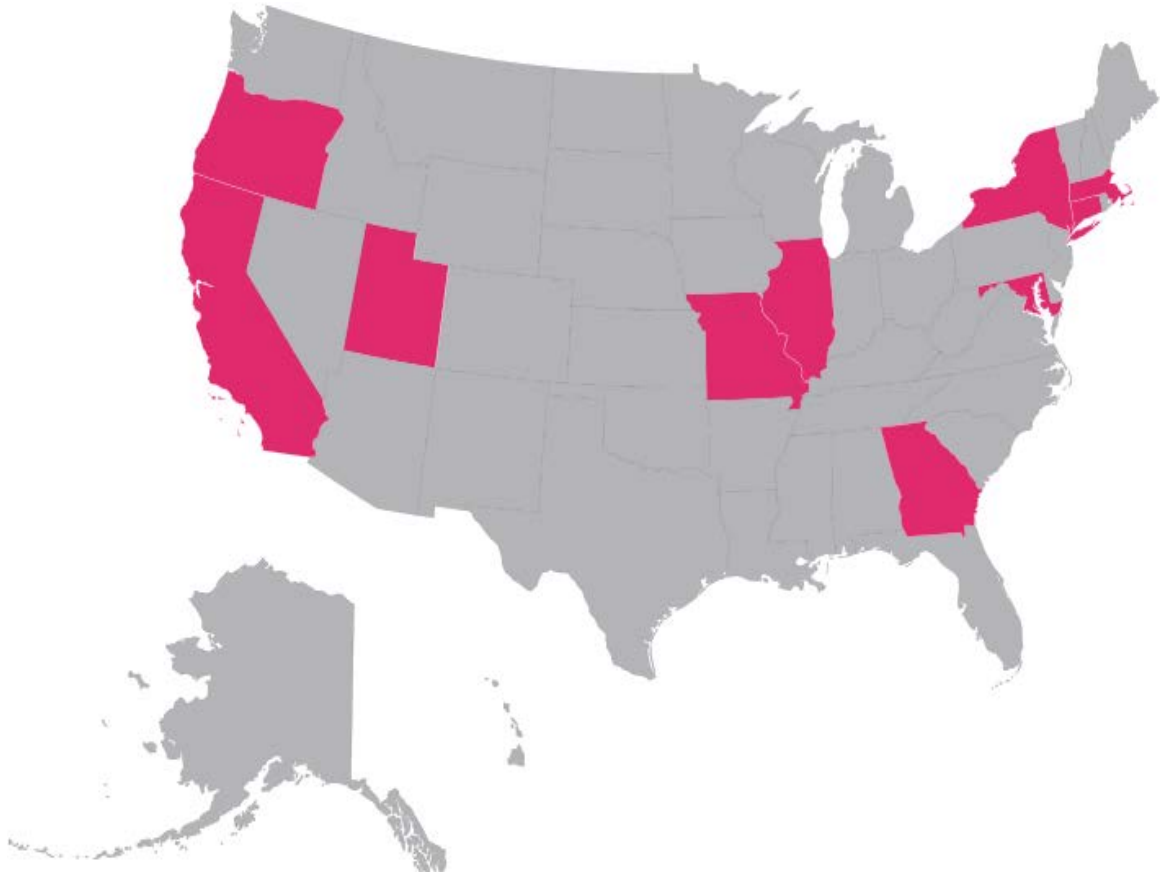
Relative Regional Accessibility



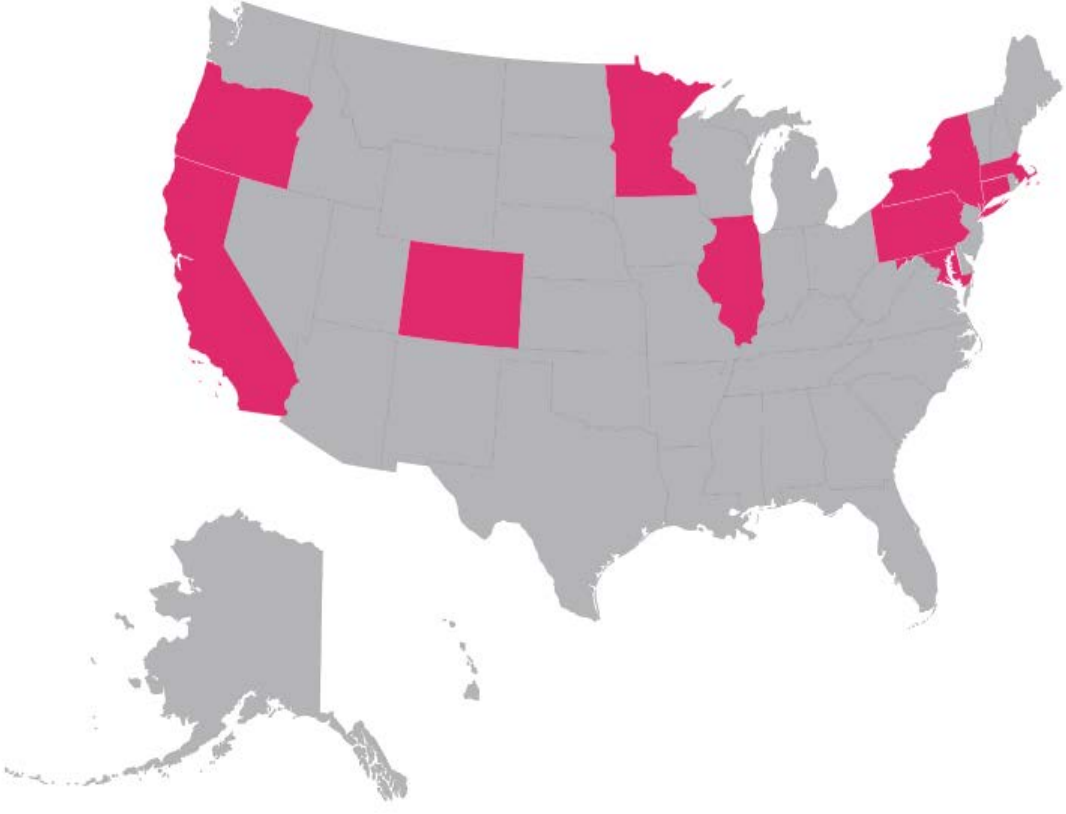
Differential: Transit Use



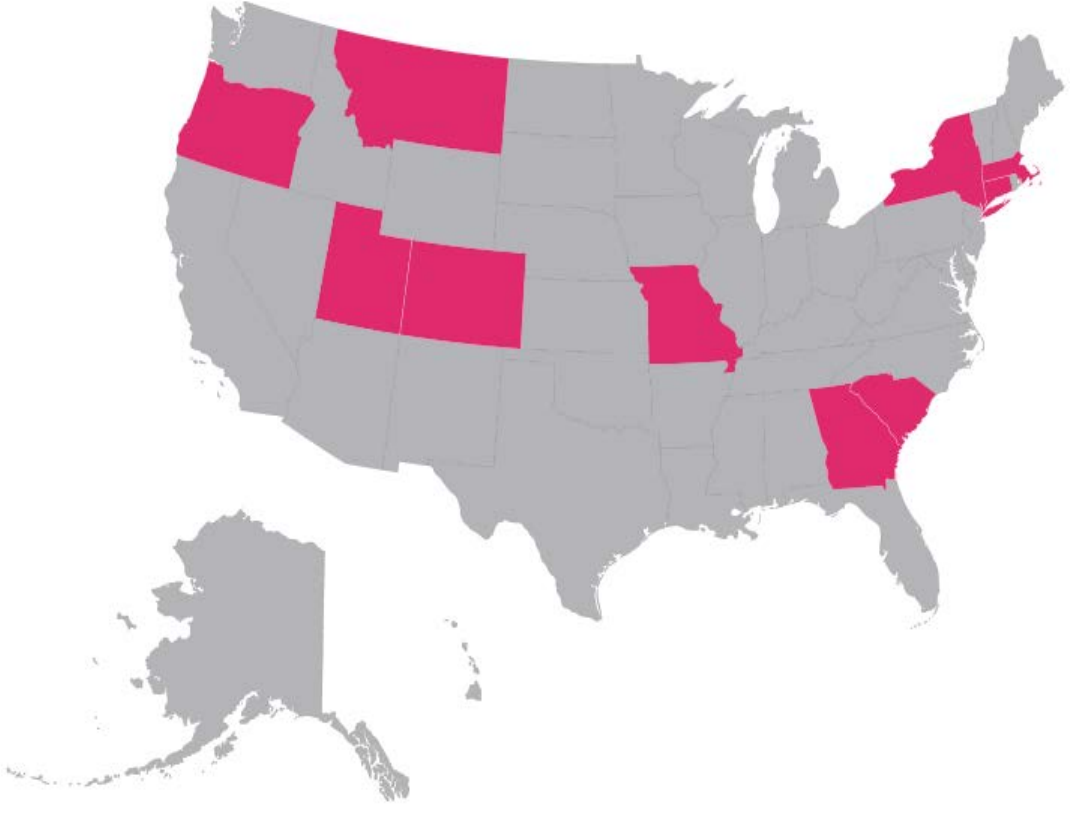
Near rail transit



Differential: Transportation costs < 20%



Differential: LIHTC LE (averaged)



Regression Analysis

- Model predicting state LIHTC LE:
  - After controlling for other market characteristics
    - **State qualified allocation plans' LE criteria** and **share of LIHTC developed by non-profit sector** are predictors of LIHTC LE differential

In conclusion

- LIHTC more location efficient than other housing
- Potential to be more LE, especially in some states
- Policy support and non-profit involvement help
- Limited scope of HCV and LIHTC; more needs to be done
- Big limitation: we do not directly address risk of further concentration of poverty; we don't know what the right % of LE LIHTC is
- Next steps: metro area comparisons, effect of QAP changes

Lessons for transportation planners

Do not:

1) Stop making transportation improvements

Lessons for transportation planners

Do:

1) Include a goal of preserving and creating affordable housing from the beginning of large transportation projects
2) Leverage transportation funding
3) Make affordable affordable housing central to the mission of transportation agencies
4) Capture value from land increases AND put that back into affordable housing
5) Get creative
6) Transportation students: take a housing class

American Institute of Certified Planners Code of Ethics

Selected “Principles to Which We Aspire”

We shall have special concern for the long-range consequences of present actions.

American Institute of Certified Planners Code of Ethics

Selected “Principles to Which We Aspire”

We shall pay special attention to the interrelatedness of decisions.

American Institute of Certified Planners Code of Ethics

Selected “Principles to Which We Aspire”

We shall seek social justice by working to expand choice and opportunity for all persons, recognizing a special responsibility to plan for the needs of the disadvantaged and to promote racial and economic integration. We shall urge the alteration of policies, institutions, and decisions that oppose such needs.

Thank you!
Comments?
Questions?

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