3-4-2016

Edged Out: Location Efficient Housing and Low Income Households in the Portland Region

Andrée Tremoulet  
*Portland State University, andree@commonworksconsulting.com*

Ryan Dann  
*Portland State University*

Follow this and additional works at: [https://pdxscholar.library.pdx.edu/trec_seminar](https://pdxscholar.library.pdx.edu/trec_seminar)

Part of the Transportation Commons, Urban Studies Commons, and the Urban Studies and Planning Commons

Let us know how access to this document benefits you.

**Recommended Citation**

[https://pdxscholar.library.pdx.edu/trec_seminar/13](https://pdxscholar.library.pdx.edu/trec_seminar/13)

This Book is brought to you for free and open access. It has been accepted for inclusion in TREC Friday Seminar Series by an authorized administrator of PDXScholar. For more information, please contact pdxscholar@pdx.edu.
Edged Out

Location Efficient Housing and Low Income Households in the Portland Region

Andree Tremoulet, PhD & Ryan Dann
Center for Urban Studies, Portland State University

with Arlie Adkins, PhD, University of Arizona
Transportation Costs & Built Environment

Where You Live Matters

Location Affordability
Housing + Transportation Costs = The Combined Cost of Place

Source: Federal Highway Administration Livability Initiative
Who Needs Location Affordable Housing?

Households with low incomes have the most to gain from lowering their transportation costs.

Source: Litman, 2013
What Are Housing Choice Vouchers?

- Largest housing subsidy program for low-income Americans.
- Participants find modest, qualifying housing; voucher pays for portion of rent.
  - Participant typically pays 30 – 40% of income for housing costs.
- Approximately 15,000 vouchers in metro area in 2012. But demand far exceeds supply.
What Are Housing Choice Vouchers?

- Largest housing subsidy program for low-income Americans.
- Participants find modest, qualifying housing; voucher pays for portion of rent.
  - Participant typically pays 30 – 40% of income for housing costs.
- Approximately 15,000 vouchers in metro area in 2012. But demand far exceeds supply.
- Competing with other renters for available apartments.
Toolkit Design & Evaluation
Project Overview

Goal: To help households with housing vouchers contain or reduce their transportation costs by accessing location efficient housing when they move.
Toolkit Development Process

- Interviews with PHA staff
- Focus groups with recent movers
- Promising practices and model tools

= Prototype tools to test & refine
How does housing location figure into the decision-making process of voucher holders who move, if at all?

What role does location efficiency play in moves?

- Location mattered to some movers
- Search methods and tools

- Personally efficient locations
- Location efficiency secondary
Walk Score Apartment Finder
Introductory Video

Rent

Bye, bye money...

Insurance

Repairs

Bus pass

Gas

Transportation
LOOKING FOR A PLACE TO LIVE?

Think bigger than just the home
When you choose a place to live, you're choosing more than a safe, affordable space for you and your family.

You're also choosing a neighborhood that meets your family's needs. You're choosing schools, stores, medical providers, job commutes, and many other things that affect how much time and money you'll spend on transportation.

Why consider transportation now?
In our area, transportation costs about 30% of what families with housing assistance earn each month. For many, that's about as much as their housing costs.

CHECK IT OUT!

Make Sure the Home Is Right for You

Transportation + Housing Cost Comparison Worksheet
Here's an example

<table>
<thead>
<tr>
<th>Name 1</th>
<th>Address: 497 Vacuums - Drive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Name 1 place you go often: work, school, etc.</td>
<td>3</td>
</tr>
<tr>
<td>2. How long will you get there? Car, bus, walk, etc.</td>
<td>5 minutes</td>
</tr>
<tr>
<td>3. Number of times per week you work</td>
<td>5</td>
</tr>
<tr>
<td>4. Miles from your home to work</td>
<td>5</td>
</tr>
<tr>
<td>5. Round trip miles per month</td>
<td>20 miles</td>
</tr>
<tr>
<td>6. Cost per month</td>
<td>$10.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name 2</th>
<th>Address: 123 Elm St.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Name 2 place you go often: work, school, etc.</td>
<td>3</td>
</tr>
<tr>
<td>2. How long will you get there? Car, bus, walk, etc.</td>
<td>5 minutes</td>
</tr>
<tr>
<td>3. Number of times per week you work</td>
<td>5</td>
</tr>
<tr>
<td>4. Miles from your home to work</td>
<td>5</td>
</tr>
<tr>
<td>5. Round trip miles per month</td>
<td>20 miles</td>
</tr>
<tr>
<td>6. Cost per month</td>
<td>$10.00</td>
</tr>
</tbody>
</table>

How long does it take to travel to work?

<table>
<thead>
<tr>
<th>Name 1</th>
<th>Name 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 minutes</td>
<td>30 minutes</td>
</tr>
<tr>
<td>30 minutes</td>
<td>40 minutes</td>
</tr>
<tr>
<td>40 minutes</td>
<td>50 minutes</td>
</tr>
</tbody>
</table>

How much do you spend traveling per month?

<table>
<thead>
<tr>
<th>Name 1</th>
<th>Name 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>$20.00</td>
<td>$30.00</td>
</tr>
<tr>
<td>$30.00</td>
<td>$40.00</td>
</tr>
<tr>
<td>$40.00</td>
<td>$50.00</td>
</tr>
</tbody>
</table>

Compare your combined monthly housing and transportation costs and see how much of your income is left.

<table>
<thead>
<tr>
<th>Income</th>
<th>Housing Cost</th>
<th>Transportation Cost</th>
<th>Housing + Transportation Cost</th>
<th>What's Left</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name 1</td>
<td>$400</td>
<td>$120</td>
<td>$360</td>
<td>$240</td>
</tr>
<tr>
<td>Name 2</td>
<td>$400</td>
<td>$120</td>
<td>$360</td>
<td>$240</td>
</tr>
</tbody>
</table>
Toolkit Evaluation

Research Design
- Control & Intervention Groups
- Two-Wave Surveys

What Survey Measured
- Perceptions
- Preferences
- Behaviors

Domains
- Built environment/neighborhood
- Transportation modes
- Factors affecting housing choice

Sample
- 125 paired surveys
- All four housing authorities
Results

• Analysis
  o Few significant differences found between control and intervention group
    • Intervention group had higher transit accessibility and lower housing costs after moving

• Limitations
  o Majority of movers had already decided to where move before intervention

• Conclusions
  o Transportation is not a top-tier concern, for good reasons
  o Toolkit may be more appropriate in other settings
Additional Research
Regional Access to Location Efficient Housing by HCV Participants

A mixed methods study to investigate the differences in location affordability and efficiency among 2,026 voucher recipients who moved within the Portland, Oregon region during 2012-13.

Research Design

• How do the location efficiency and affordability outcomes of voucher holders who move within a city compare to those who move within the suburbs?
• How do the location efficiency and affordability outcomes of movers compare to non-movers?

Study Dataset

• Time Period: 2012-2013
• 13,500 HCV participants from three housing authorities
  o 7,900 Home Forward, 3,200 Washington County, and 2,400 Vancouver
  o 11,000 non-movers and 2,000 movers
    ▪ Movers: 1,100 in Portland and 900 in suburbs
Quantitative Analysis

Variables

• Location Affordability Index (LAI) -- U.S. DOT & U.S. HUD
  o Block-Group Level
  o Models transportation and housing costs
  o Various housing profiles
    • ‘Very-low income individual’ and ‘Single-parent family’ profiles
  • Smart Location Database (SLD) – U.S. EPA
    o Location efficiency metrics at the Block-Group Level
      • Density, network connectivity, transit access, & employment
  • Walk Score®
    o Address-specific metric
Overview of All 13,500 Voucher Households

Comparing Portland & Suburban Voucher Households

• Portland households lived in much higher location-efficient neighborhoods, all categories:
  Residential, Employment, Built Environment, & Transit

• Portland households lived in much higher location-affordable neighborhoods, both profiles:
  Very Low Income Individuals & Single Parent Families

• Portland households had higher Walk Scores (63.3 vs. 48.3)
Smart Location Database Density Comparisons
Portland vs. Suburbs

- Residential
- Employment
- Road Network
- Multi-Modal
- Pedestrian

Portland vs. Suburbs

- Portland
- Suburbs
Smart Location Database Comparison
Portland vs. Suburbs

<table>
<thead>
<tr>
<th>Distance Transit (in feet)</th>
<th>Frequency Transit</th>
<th>Jobs by Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland</td>
<td>Suburbs</td>
<td></td>
</tr>
<tr>
<td>1,013</td>
<td>1,884</td>
<td>13,114</td>
</tr>
<tr>
<td>2,092</td>
<td>304</td>
<td>3,458</td>
</tr>
</tbody>
</table>
Results: Spatial Analysis of Movers

- **Portland Movers**
  - Moved to less location-efficient neighborhoods, all categories
    - Residential
    - Employment
    - Built Environment
    - Transit
  - Moved to less location-affordable neighborhoods, both profiles
    - Very Low Income Individuals
    - Single Parent Families
  - Lower Walk Score (61.3 to 56.7)

- **Suburban Movers**
  - No significant difference in location efficiency, all categories & variables
  - No significant difference in location affordability, neither profile
  - No significant difference in Walk Score (45.3 to 45.7)
Results: Spatial Analysis of Movers vs. Non-Movers

**Within Portland**

- Movers lived in less location-efficient neighborhoods, all categories
  - Residential
  - Employment
  - Built Environment
  - Transit
- Movers lived in less location-affordable neighborhoods, both profiles
  - Very Low Income Individuals
  - Single Parent Families
- Movers had lower Walk Score (63.6 to 56.7)

**Within Suburbs**

- Movers lived in *slightly* less location-efficient neighborhoods, all categories
  - Employment
  - Built Environment
  - Transit
- Movers lived in less location-affordable neighborhoods, one profiles
  - Very Low Income Individuals
- Movers had lower Walk Score (48.9 to 45.7)
Location Metric Comparisons
Portland Non-Movers vs. Movers

- Residential density
- Commute distance (miles)
- Network density
- Job density
- Pedestrian density

Comparison groups:
- Non-Movers
- Pre-Movers
- Post-Movers
Walk Score Comparisons
Non-Movers vs. Movers, Portland & Suburbs

- Portland
  - Non-Movers
  - Pre-Movers
  - Post-Movers

- Suburbs
  - Non-Movers
  - Pre-Movers
  - Post-Movers
In Summary...

Movers

• Moving tends to decrease transportation and employment options for low-income households in Portland.

• Moving may maintain (suburbs) or possibly increase (Portland) automobile dependency for low-income households.

Movers vs. Non-Movers

• There are significant differences in transportation and employment options between those who move and those who stay in place throughout the metropolitan area.
Policy Considerations

In a tight real estate market...

• Importance of providing opportunities for residents to stay in place

• Market unaided not likely to produce location-efficient housing for lower income households
  • Those who need location-efficient housing are least likely to access it.

• Importance of supply side subsidies (LIHTC, etc.) and tools like inclusionary zoning to create affordable, lower cost location-efficient housing
Products

• Toolkit: may be effective in housing markets providing greater choice
• Tech transfer: toolkit provided to “partner agencies”
• Rich database: housing and transportation preferences of low-income voucher holders
• Article in forthcoming issue of *Housing Policy Debate* (Spring 2016)
• Research could be used by advocates
Thank You

Andree Tremoulet  atrem@pdx.edu
Ryan Dann  rjdann@pdx.edu