Is Transit Oriented Development Affordable for Low and Moderate Income Households?

Dr. Reid Ewing and Justyna Kaniewska
- Nominal affordability ceiling for a household is 30 percent of income for housing (H), 15 percent of income for transportation (T), and 45 percent of income for the sum (H+T).

- The combined cost of housing and transportation declines as places become more compact.

- As metropolitan compactness increases, transportation costs decrease faster than housing costs increased, creating a net decline in household costs.
What is TOD?

TOD is widely defined as compact, mixed-use development near transit facilities with high-quality walking environments, not necessarily at the expense of automobile access.
Research Questions

- Does TOD style development capitalize on increased accessibility by demanding higher rents than comparable contemporary developments with similar amenities?

- How much of the travel demand is captured internally or satisfied by alternate modes?

- Does the combination of H+T exceeds affordability standards for different income groups?
Redmond TOD, Seattle
Rhode Island Row, Washington D.C.
Wilshire/Vermont, Los Angeles
Fruitvale Village, San Francisco
Englewood TOD, Denver
Summary Across the Sites

- Redmond TOD, Seattle: 2.5 acres
- Rhode Island Row, D.C.: 6 acres
- Fruitvale Village, San Francisco: 3.4 acres
- Englewood, Denver: 30 acres
- Wilshire/Vermont, Los Angeles: 3.2 acres
- Orenco Station, Portland: 60 acres
- Station Park, Salt Lake City: 115 acres
Summary Across the Sites

- Redmond TOD, Seattle: 129
- Rhode Island Row, D.C.: 46
- Fruitvale Village, San Francisco: 14
- Englewood, Denver: 15
- Wilshire/Vermont, Los Angeles: 140
- Orenco Station, Portland: 32.4
- Station Park, Salt Lake City: 4.1

Gross Residential Density (units per gross acre)
Summary Across the Sites

Mode share

- Redmond: 19% walk, 13% transit
- Rhode Island Row: 17% walk, 37% transit
- Fruitvale: 28% walk, 41% transit
- Englewood: 19% walk, 17% transit
- Wilshire/Vermont: 27% walk, 41% transit
- Orenco Station: 46% walk, 20% transit
- Station Park: 4% walk, 6% transit
Summary Across the Sites

Vehicle Trips as % of ITE Trip Generation

<table>
<thead>
<tr>
<th>Site</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redmond</td>
<td>37%</td>
</tr>
<tr>
<td>Rhode Island Row</td>
<td>35%</td>
</tr>
<tr>
<td>Fruitvale</td>
<td>52%</td>
</tr>
<tr>
<td>Englewood</td>
<td>70%</td>
</tr>
<tr>
<td>Wilshire/Vermont</td>
<td>43%</td>
</tr>
<tr>
<td>Orenco Station</td>
<td>59%</td>
</tr>
<tr>
<td>Station Park</td>
<td>75%</td>
</tr>
</tbody>
</table>
Summary Across the Sites

Residential Parking Supplies and Demands

[Graph showing parking supplies and demands across various sites, with labels for each site: Redmond, Rhode Island Row, Fruitvale, Englewood, Wilshire/Vermont, Orenco Station, Station Park.]
Summary Across the Sites

Peak Parking Demand as % of ITE Guideline

- Redmond: 0%
- Rhode Island Row: 13%
- Fruitvale: 25%
- Englewood: 38%
- Wilshire/Vermont: 50%
- Orenco Station: 36%
- Station Park: 42%
- Summary Across the Sites: 36%
- Summary Across the Sites: 33%
- Summary Across the Sites: 19%
- Summary Across the Sites: 46%
- Summary Across the Sites: 33%
- Summary Across the Sites: 42%
- Summary Across the Sites: 36%
Parking Policies

- Lowest Parking Demand at Fruitvale Village, Rhode Island Row, and Wilshire/Vermont

1. Shared Parking
2. Unbundled Residential Parking
3. Paid Commercial Parking
This study assesses rent premiums associated with living in TODs and answers the question of whether TOD style development is affordable for low- and moderate-income households, defined respectively as 50% and 80% of the AMI. It also identifies measures taken by decision-makers (mainly jurisdictions and transit operators) and TOD developers to make housing affordable for low- and moderate-income households. We contacted metropolitan planning organizations, transit operators, and major cities to get a list of potential TODs. Out of the inventory of 183 potential TODs within 26 rail-served regions, 85 TODs within 23 regions meet our eight criteria and our analysis of housing affordability is based on these 85 cases.
Luxury Apartments with Auto Owners
Research Questions

• How do housing costs at TODs directly adjacent to rail stations compare to standards of affordability for low- and moderate-income households in the region?

• What proportion of TODs in the U.S. provides affordable housing units, and what are the relative shares of designated versus naturally occurring affordable units?

• What proportion of the housing units in TODs is affordable? Is the level of affordability the same for families of different sizes?

• What are the mechanisms used by TOD developers or jurisdictions to provide affordable housing?

• Do all the mechanisms result in similar levels of affordability?

• What proportion of jurisdictions has regulatory vs. voluntary measures?
Potential TODs

Rail criteria
- Three types of transit systems considered: commuter rail, light rail, heavy rail
- More than one rail line required

National TOD Database
- Identified regions that meet the two rail criteria
- **26 regions in the U.S. meet our criteria and are included in this study**

Contacting regions
- Contacted MPOs, transit operators, and major cities in the 26 regions to get a list of potential TODs
- **183**
- Planners in most of these agencies responded to our requests
- Transit operators have the best knowledge of TOD projects in their regions
183 Potential TODs

- Portland (5)
- Bay Area (4)
- San Diego (5)
- Los Angeles (12)
- SLC (6)
- Seattle (3)
- Denver (4)
- St. Louis (1)
- New Jersey (21)
- Philadelphia (10)
- Miami (7)
- Baltimore (11)
- NY (2)
- Boston (12)
- Sacramento (7)
- Washington DC (12)
- Chicago (2)
- Cleveland (4)
- Pittsburgh (3)
- Orlando (4)
- Orlando (4)
- New York (10)
- Portland (5)
- Albuquerque (3)
- Minneapolis/St. Paul (3)
- Houston (5)
- Austin (3)
- Dallas (20)
- New Jersey (21)
- Cleveland (4)
- Chicago (2)
- Washington DC (12)
- Boston (12)
- New York (10)
- Orlando (4)
Selecting TODs

The 7 criteria:
1) Dense and multistory
2) Mixed use (residential and commercial)
3) Pedestrian-friendly with public space
4) Self-contained parking
5) Adjacent to transit
6) Fully developed or nearly so
7) Built after transit

- 186 potential TODs
- in 26 regions

- 85 TODs
- 117 individual projects/developments
- 23 regions
- 42 counties
- 51 cities
85 TODs

Portland (3)  Bay Area (3)  San Diego (3)  Los Angeles (10)  SLC (3)  Seattle (1)  Denver (2)  St. Louis (1)  New Jersey (7)  Philadelphia (5)  Miami (2)  Baltimore (2)  NY (2)  Boston (7)  Sacramento (3)  Washington DC (10)  Atlanta (1)  Minneapolis/ St. Paul (3)  Cleveland (1)  Pittsburgh (1)
## Summary of Key Findings

<table>
<thead>
<tr>
<th>Regions</th>
<th>23</th>
<th># of designated Affordable Housing units*</th>
<th>4641</th>
<th># of TODs with designated AH units</th>
<th>51%</th>
</tr>
</thead>
<tbody>
<tr>
<td># of TODs</td>
<td>85</td>
<td>% of designated Affordable Housing units</td>
<td>13%</td>
<td># of projects with designated AH units</td>
<td>44%</td>
</tr>
<tr>
<td># of counties</td>
<td>42</td>
<td># of Naturally Occurring Affordable Housing*</td>
<td>2630</td>
<td># of TODs with NOAH</td>
<td>40%</td>
</tr>
<tr>
<td># of cities/ municipalities</td>
<td>51</td>
<td>% of Naturally Occurring Affordable Housing*</td>
<td>7%</td>
<td># of projects with NOAH</td>
<td>36%</td>
</tr>
<tr>
<td># of projects</td>
<td>117</td>
<td>Total # of Affordable Housing* units</td>
<td>7271</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total # of units</td>
<td>35614</td>
<td>% of Affordable Housing</td>
<td>20%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TODs, transit stations and projects

Methodology

- A transit station may have more than one TOD

\[ 1 \text{ transit station} \not\equiv 1 \text{ TOD} \]

- A TOD may consist of more than one individual project/development (examples on the following slides)

\[ 1 \text{ TOD} \not\equiv 1 \text{ project} \]

- One project does not necessarily mean one single building
- We define a project as a separate, self-contained building complex with a separate name and a unique legal and marketing identity
- Different individual projects are usually (but not necessarily) built by different developers in different years, and thus are subject to different affordable housing requirements
Example: Boston’s North Station has 4 TODs

TODs vs. transit stations
TODs vs. individual projects/developments

Example: McArthur Station (Oakland, CA) has 4 projects developed by 3 developers in different years

Block A and C: developed by Hines in 2020 and 2019 respectively
Block B: developed by Boston Properties in 2020
Block D: developed by Bridge Housing 2016 (nonprofit developer: 100% affordable)
Designated Affordable Housing

Definitions

• Designated affordable housing units, also referred to as low-income housing, income-restricted housing or workforce housing, result from either regulatory requirements imposed by city/county/state authority or voluntary participation in city/county run programs and policies, i.e. inclusionary housing/zoning ordinances or policies.

• They may also be produced as a result of joint projects conducted by a commercial or nonprofit developer and any number of local government agencies such as, but not limited to, Parking Authorities, Economic Development Authorities, City/County Departments of Transportation, Housing Bureaus, and public universities. In such instances, the projects receive some amount of public funding.

• The units are often designed as affordable for a certain period of time, during which they are monitored by a city/program that helped to produce them, i.e. the city of Boston, Low Income Housing Tax Credit Program.
Designated Affordable Housing - findings

- 6 (26%) Regions do not have any designated income-restricted units
- Further 5 regions (22%) have less than 10% of their stock designated as affordable
- ½ of the 85 TODs have some DAH units
- 42 TODs (49%) do not have any designated low-income units
- Slightly less than ½ of individual projects have some DAH units
- The high percentage of affordable units usually results from single projects that are designated 100% affordable (more on it later)
Naturally Occurring Affordable Housing

Methodology

• Naturally Occurring Affordable Housing refers to residential rental properties that maintain low rents without federal subsidy and have not been built in response to city/county/state regulations or policies or as a result of some development agreement that included such a requirement.

• We estimated the number of NOAH units based on the availability of units at certain rent levels as of July, 2021.
Naturally Occurring Affordable Housing - findings

- 6 regions (26%) do not have any NOAH units
- Only 5 Regions have more than 5% of the TOD housing units naturally affordable
- 40% of the TODs have some NOAH units in their stock
- As of July 2021, 60% of the TODs did not have any NOAH units
- 1/3 of the individual projects have some NOAH units in their stock
- Slightly more TODs and individual projects have DAH than NOAH
There are significant disparities in the allocation of affordable housing (both designated and naturally occurring) across regions - from 0% to over 60%.

Generally, Regions have either NOAH or DAH units.

In most instances, the difference between high and low percentages of affordable units lie with single projects that are designated 100% affordable.

* As of July, 2021
60% of all the projects/developments offer none or less than 10% of their units as affordable.

Only 14% of the projects are 100% affordable.
Projects that are 100% affordable

<table>
<thead>
<tr>
<th>Project</th>
<th>Total # of units</th>
<th>% of NOAH</th>
<th>% of DAH</th>
<th>Overall % of AH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motion at Dadeland Station</td>
<td>294</td>
<td>0%</td>
<td>0%</td>
<td>61%</td>
</tr>
<tr>
<td>Brownsville Transit Village at Brownsville Metrorail Station</td>
<td>466</td>
<td>0%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

- Brownsville Transit Village project was brought to life by a public-private partnership between Carlisle Development Group (affordable housing developer) and Miami-Dade Transit Authority.
- It was built on an underutilized city-owned 8-acre parking lot and financed with LIHTC.
In order to gain a deeper understanding of mechanisms driving production of affordable housing, we have reviewed a large number of municipal, county and state websites, zoning codes, policy guidelines, websites of various transit operators as well as guidelines and reports prepared by them. We have used LIHTC databases as well as other programs’ databases that monitor affordable units. We have looked at transit-oriented development and housing affordability status reports prepared by various governing bodies, as well as tax credit allocation memos written by city and state officials. We have examined various types of mechanisms and interventions – both regulatory and voluntary, bottom-up and top-down approaches – that lead to/stimulate/necessitate the production of affordable units.
1. There is a very large range of interventions (both regulatory and incentive-based) utilized at city and county levels, and very few at state and national levels.

2. Generally, there is a large number of different regulations, policies, and approaches that are highly localized, context-dependent, and fragmented.

3. There has been an increased public involvement through city- and statewide policy/regulatory measures. Over the past few years, a significant number of cities and states have adopted both voluntary and regulatory measures to ensure sufficient production of affordable units. However, most of them were adopted after a significant share of TODs and developments studied in this project had already been completed.

4. Regulatory measures seem to have a very limited impact on the number of affordable units offered in TODs and are less effective than bottom-up voluntary and targeted programs, policies and actions.
5. Both voluntary and regulatory measures adopted at city, county, and state levels have only limited impact on numbers/shares of affordable housing, resulting on average in 5-15% of affordable units and rarely exceeding 20%.

6. All of the TOD projects that are 100% affordable (100% of the units are affordable to households earning no more than 80% of AMI) rely on multiple measures and often receive public funding as well as utilize various zoning relief, fee waivers, and tax exemptions.

7. Over the past few years, there has been a growing number of policies adopted by transit authorities that support and incentivize the production of affordable housing near transit stations.

8. When projects built 10-15 years ago are compared to the ones built recently or are currently under construction, generally a relatively higher share of projects offer affordable units, and the share of affordable units within a given development is higher.

9. There are only a few single measures designed specifically to promote/incentivize/regulate the production of affordable housing in TODs.
Most policies and regulations are initiated at a city level, with few operating at a county and state level.

These interventions can be further categorized into regulatory and voluntary, bottom-up and top-down, as well as public and private.
<table>
<thead>
<tr>
<th>Mechanisms—categories and examples</th>
</tr>
</thead>
</table>

### Housing Affordability Mechanisms

<table>
<thead>
<tr>
<th>Voluntary</th>
<th>Regulatory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Top-down</strong></td>
<td><strong>City level policies</strong></td>
</tr>
<tr>
<td>Los Angeles (CA) - TOC (Transit-Oriented Communities, Affordable Housing Incentive Program (2017)</td>
<td>Oakland (CA) - Affordable Housing Impact Fees Ordinance (2016)</td>
</tr>
<tr>
<td>Washington (DC) - Affordable Dwelling Unit (ADU) Program</td>
<td>Walnut Creek (CA) - Inclusionary Housing Ordinance (2016)</td>
</tr>
<tr>
<td>Austin (TX) - Affordable Housing Bonus Program (2013)</td>
<td>Sacramento (CA) - Mixed Income Housing Ordinance (2015)</td>
</tr>
<tr>
<td>Dallas (TX) - Mixed Income Housing Bonus Ordinance (2013)</td>
<td>Sacramento (CA) - Affordable Housing Ordinance (2014)</td>
</tr>
<tr>
<td>Fort Worth (TX) - Neighborhood Empowerment Zones (NEZ)</td>
<td>Los Angeles (CA) - Inclusionary Housing Ordinance (2020)</td>
</tr>
<tr>
<td>Philadelphia (PA) - Mixed-Income Housing Bonus (2018)</td>
<td>Miami (FL) - Inclusionary Zoning (IZ) Ordinance</td>
</tr>
<tr>
<td><strong>(3) State laws</strong></td>
<td>Yorkshire (NY) - Affordable Housing Ordinance (2018)</td>
</tr>
<tr>
<td>California - State Density Bonus Law</td>
<td><strong>(7) County and state level programs/ regulations:</strong></td>
</tr>
<tr>
<td>Virginia - Affordable Dwelling Unit Ordinance (1996, Virginia Law)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Bottom-up</strong></th>
<th><strong>Programs/ programs:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Examples</strong></td>
<td><strong>(1) Public Housing: HOPE VI Funding</strong></td>
</tr>
<tr>
<td>(1) Tax credit policies and programs:</td>
<td>(2) Transit Operators Policies:</td>
</tr>
<tr>
<td>Seattle (WA) - Multifamily Property Tax Exemption (MPTF), Program (1993)</td>
<td>BART’s (Bay Area Rapid Transit) Transit-Oriented Development Policy</td>
</tr>
<tr>
<td>Tax Increment Financing</td>
<td>MBTA’s (Massachusetts Bay Transportation Authority, Transportation Oriented Development initiative)</td>
</tr>
<tr>
<td>Low-income Housing Tax Credit (LIHTC)</td>
<td><strong>(3) Public Funding:</strong></td>
</tr>
<tr>
<td><strong>(2) Discretionary from abatement/ waivers</strong></td>
<td>HOME funds from the Washington County Office of Community Development</td>
</tr>
<tr>
<td>Real Estate Tax Abatement</td>
<td>Grants from OHCs (Oregon Housing and Community Services) and NeighborWorks America</td>
</tr>
<tr>
<td><strong>(4) Private non-profit developers and CDCs (Community Development Corporations):</strong></td>
<td>Grants from the City of Seattle Office of Housing - Seattle, WA (Vercy Olafiole Plaza)</td>
</tr>
<tr>
<td>The Unity Council (Social Equity Development Corporation, CDC), Bridge Housing (CDC), DEVOO (New Brunswick Development Corporation)</td>
<td>Grants from the City of San Diego Redevelopment Agency - San Diego, CA (the Village at Marina Vista)</td>
</tr>
<tr>
<td>CDC of Long Island, WOCS (Wyndham gtk)</td>
<td><strong>(5) Preferential land sale/ lease:</strong></td>
</tr>
<tr>
<td><strong>(5) Building located on transit operator's or city’s land</strong></td>
<td></td>
</tr>
</tbody>
</table>
**Key Finding:** most of the projects (marked in green) had been built before local governments adopted ordinances and policies requiring a certain percentage of units to be set aside as income-restricted units.

<table>
<thead>
<tr>
<th>Regions</th>
<th># of TODs</th>
<th># of projects</th>
<th># of cities/ municipalities</th>
<th>Year each project completed</th>
<th># of projects that were subject to city/county/state wide requirements when built</th>
<th># of cities that were subject to city/county/state wide requirements in July 2017</th>
<th>% of designated Affordable Housing Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlanta, GA</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2009</td>
<td>2018</td>
<td>0</td>
<td>10%</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>2004</td>
<td>n/a</td>
<td>0</td>
<td>16%</td>
</tr>
<tr>
<td>Baltimore, MD</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2004</td>
<td>2014</td>
<td>0</td>
<td>16%</td>
</tr>
<tr>
<td>Boston, MA</td>
<td>7</td>
<td>8</td>
<td>2</td>
<td>2004</td>
<td>2006, 2008, 2009, 2013</td>
<td>0</td>
<td>26%</td>
</tr>
<tr>
<td>Cleveland, OH</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2018</td>
<td>n/a</td>
<td>0</td>
<td>5%</td>
</tr>
<tr>
<td>Dallas, TX</td>
<td>12</td>
<td>19</td>
<td>8</td>
<td>1998</td>
<td>2002, 2003, 2005, 2008</td>
<td>0</td>
<td>16%</td>
</tr>
<tr>
<td>Denver, CO</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2001</td>
<td>2003</td>
<td>0</td>
<td>16%</td>
</tr>
<tr>
<td>Houston, TX</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>2014</td>
<td>n/a</td>
<td>0</td>
<td>16%</td>
</tr>
<tr>
<td>Miami, FL</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>2011</td>
<td>2017</td>
<td>0</td>
<td>16%</td>
</tr>
<tr>
<td>Minneapolis St Paul, MN</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2011</td>
<td>2013</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>New York, NY</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2003</td>
<td>2008, 2015, 2016, 2019</td>
<td>0</td>
<td>16%</td>
</tr>
<tr>
<td>Philadelphia, PA</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2004</td>
<td>n/a</td>
<td>0</td>
<td>16%</td>
</tr>
<tr>
<td>Pittsburgh, PA</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2009</td>
<td>n/a</td>
<td>0</td>
<td>16%</td>
</tr>
<tr>
<td>Sacramento, CA</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>2005</td>
<td>2002, 2012, 2017</td>
<td>0</td>
<td>16%</td>
</tr>
<tr>
<td>Salt Lake City, UT</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2011</td>
<td>2013, 2017, 2018, 2020</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>San Diego, CA</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1999</td>
<td>2005, 2007</td>
<td>0</td>
<td>16%</td>
</tr>
<tr>
<td>San Francisco Bay Area, CA</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2004</td>
<td>2010, 2016, 2018, 2019</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Seattle, WA</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2011</td>
<td>2017, 2018</td>
<td>0</td>
<td>16%</td>
</tr>
<tr>
<td>St. Louis, MO</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2007</td>
<td>n/a</td>
<td>0</td>
<td>16%</td>
</tr>
</tbody>
</table>

Only 32 of 117 projects (27%) were subject to any affordable housing requirements when they were planned and built.

Even now, 23 out of 51 cities (45%) do not have any regulatory requirements regarding the production of income-restricted units.
The Fruitvale Village, Oakland, CA

### Phase I
- **Affordable units:** 10 (out of 47; 20%)
- **Developer:** the Unity Council (a non-profit Social Equity Development Corporation)
- **Funding:** commercial

### Phase II-A (Casa Arabella)
- **Affordable units:** 94 (out of 367, 26%)
- **Developers:** the Unity Council and EBALDC (East Bay Asian Local Development Corporation)
- **Funding:** City of Oakland, Alameda County, the State of California, the Oakland Housing Authority and banks

### Phase II-B
- **Affordable units:** 181 (100%)
- **Developers:** the Unity Council and BRIDGE Housing (nonprofit developer of affordable homes)
- **Funding:** the Affordable Housing and Sustainable Communities (AHSC) grant from the State of California Strategic Growth Council
- **Land:** developed on city-owned property (long term lease from BART)

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The state and cities get involved which makes higher share affordability possible.
Thank you
APPENDIX
What is TOD?

TOD is widely defined as compact, mixed-use development near transit facilities with high-quality walking environments, not necessarily at the expense of automobile access.

- Dense and multistory
- Mixed use (residential and commercial)
- Pedestrian-friendly with public space
- Self-contained parking
- Adjacent to transit
- Fully developed or nearly so
- Built after transit
Affordability of market-rate housing

Methodology

• First, we tried to establish whether market-rate apartments in the 85 TODs are affordable to low (30-50% of AMI) and moderate (50-80% of AMI) income households of 2, 3, and 4 persons

• We collected the lowest prices of studio, one-bedroom, two-bedroom, and three-bedroom apartments (if available) in each individual project/development

• To show results at the regional level, we worked with ranges of minimal prices as different TODs in a given region, and individual projects within any TOD, have different lowest price levels for various apartment sizes

• We compared collected rent levels to 2021 income limits set by the Department of Housing and Urban Development (HUD) for low income (50-80% of AMI) and very low income (30-50% of AMI) households of 2, 3, and 4 persons

• We assumed that 2-person families can occupy studios or 1-bedroom apartments, 4-person families are eligible for 2-bedroom apartments, and 3-person families can occupy either 1- or 2-bedroom apartments based on “2 per bedroom plus 1” rule
Designated Affordable Housing - findings

- ½ of the 85 TODs have some DAH units
- 42 TODs (49%) do not have any designated low-income units
- Slightly less than ½ of individual projects have some DAH units
Naturally Occurring Affordable Housing - findings

• 40% of the TODs have some NOAH units in their stock
• As of July 2021, 60% of the TODs did not have any NOAH units
• 1/3 of the individual projects have some NOAH units in their stock
• Slightly more TODs and individual projects have DAH than NOAH
Affordable Housing by Region

<table>
<thead>
<tr>
<th># of TODs</th>
<th>Total # of units</th>
<th>% of DAH</th>
<th>% of NOAH</th>
<th>% of AH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AH: Affordable Housing</strong></td>
<td><strong>NOAH: Naturally Occurring Affordable Housing</strong></td>
<td><strong>DAH: Designated Affordable Housing</strong></td>
<td><strong>Overall number/ average</strong></td>
<td></td>
</tr>
<tr>
<td>Washington, DC</td>
<td>10</td>
<td>5054</td>
<td>11%</td>
<td>5%</td>
</tr>
<tr>
<td>St Louis, MO</td>
<td>1</td>
<td>818</td>
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<td>0%</td>
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<tr>
<td>Seattle, WA</td>
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<td>1617</td>
<td>31%</td>
<td>4%</td>
</tr>
<tr>
<td>San Francisco Bay Area, CA</td>
<td>3</td>
<td>605</td>
<td>7%</td>
<td>1%</td>
</tr>
<tr>
<td>San Diego, CA</td>
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<td>1221</td>
<td>27%</td>
<td>3%</td>
</tr>
<tr>
<td>Salt Lake City, UT</td>
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<td>231</td>
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<td>0%</td>
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<tr>
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<td>319</td>
<td>17%</td>
<td>5%</td>
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<td>2%</td>
</tr>
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<tr>
<td>Houston, TX</td>
<td>2</td>
<td>2208</td>
<td>2%</td>
<td>4%</td>
</tr>
</tbody>
</table>
| Denver, CO | 2 | 368 | 8% | 3% | 8%
| Dallas, TX | 12 | 1091 | 13% | 0% | 15% |
| Cleveland, OH | 7 | 364 | 0% | 2% | 3% |
| Boston, MA | 2 | 386 | 15% | 2% | 15% |
| Baltimore, MD | 2 | 1082 | 15% | 1% | 15% |
| Austin, TX | 2 | 1091 | 13% | 0% | 15% |
| Atlanta, GA | 1 | 364 | 0% | 2% | 15% |

35,614 | 13% | 7% | 20%