

Residential Infill Project



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Portland is changing.



Change by the Numbers:

2.43

Average people per home in 2010

2.38

Average people per home by 2030

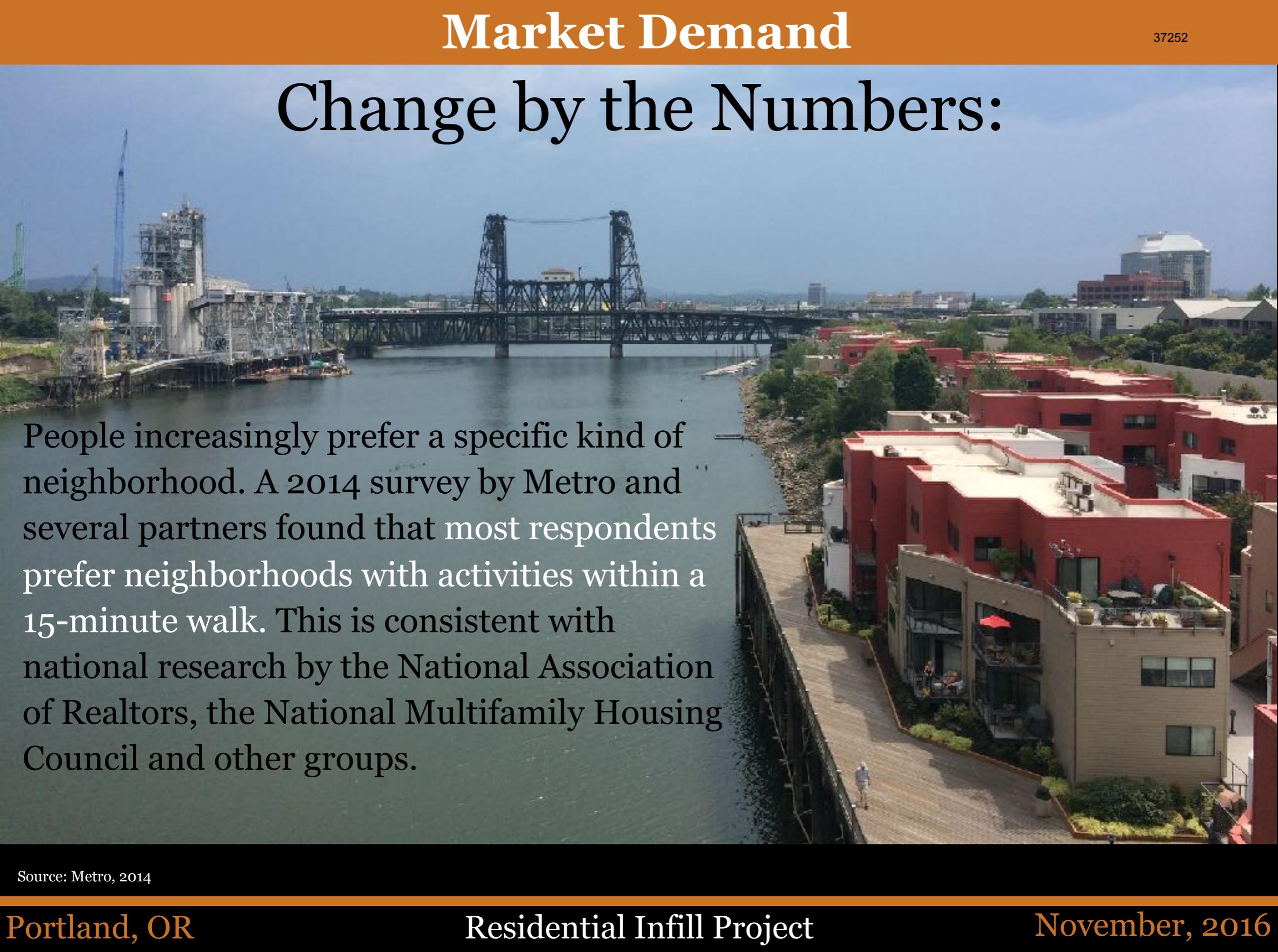
1.85

Average people per home for new growth

*This means increasing demand for smaller
and more flexible housing types...*

Source: Reshape America Database, Arthur C. Nelson, adapted from Woods & Poole Economics, Inc., 2011.
Figures are for the Portland Metropolitan Area.

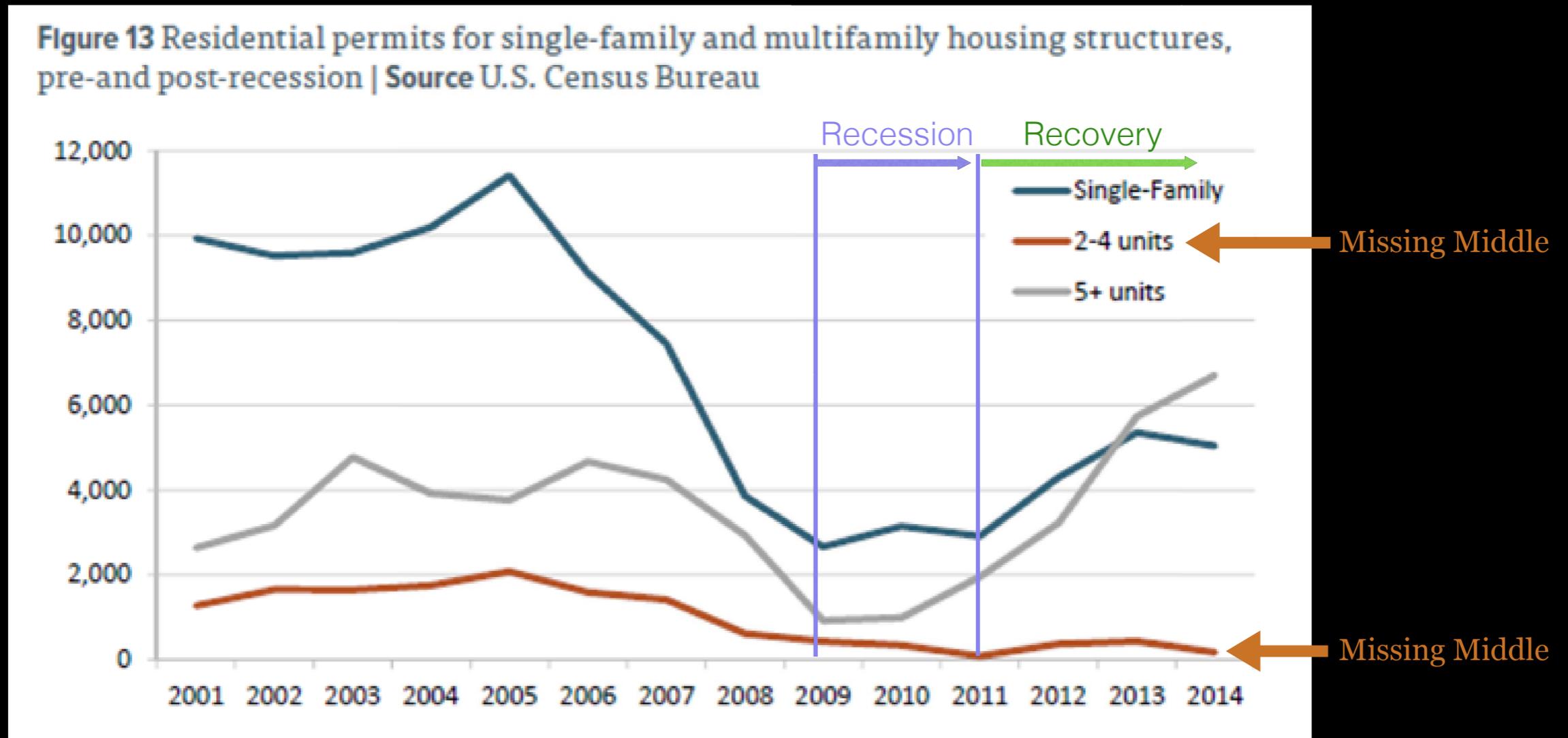
Change by the Numbers:



People increasingly prefer a specific kind of neighborhood. A 2014 survey by Metro and several partners found that most respondents prefer neighborhoods with activities within a 15-minute walk. This is consistent with national research by the National Association of Realtors, the National Multifamily Housing Council and other groups.

Source: Metro, 2014

Supply is not keeping up.



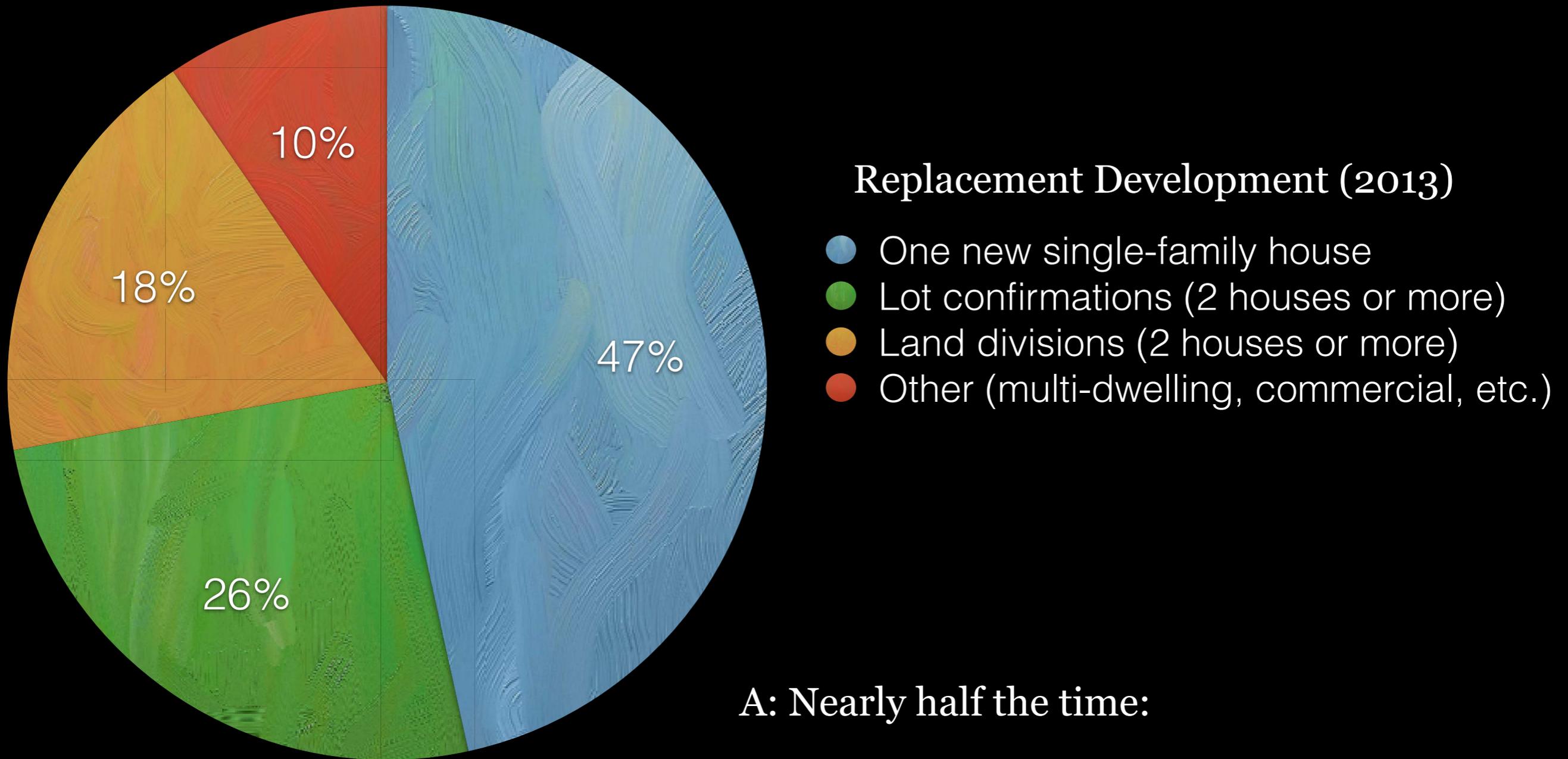
- The **recovery** in housing construction has yet to reach Missing Middle building types
- **Zoning codes** can effectively prevent Missing Middle types from being built in many neighborhoods
- **Delays** can drive up project costs
- **Unpredictability** can cause developers to drop projects altogether
- Before the downturn, young **first-time homebuyers** supported this segment
- Now, those households are instead **renting apartments**.

Source: Metro, 2014

Portland's Housing Crisis

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Q: **What gets built** after a house is demolished?



A: Nearly half the time:

One single family house is demolished to make room for **one single family house**.

Source: Portland Bureau of Planning and Sustainability (BPS)

What is FAR?

Floor

FAR is the ratio of a building's **total floor area...**

Area

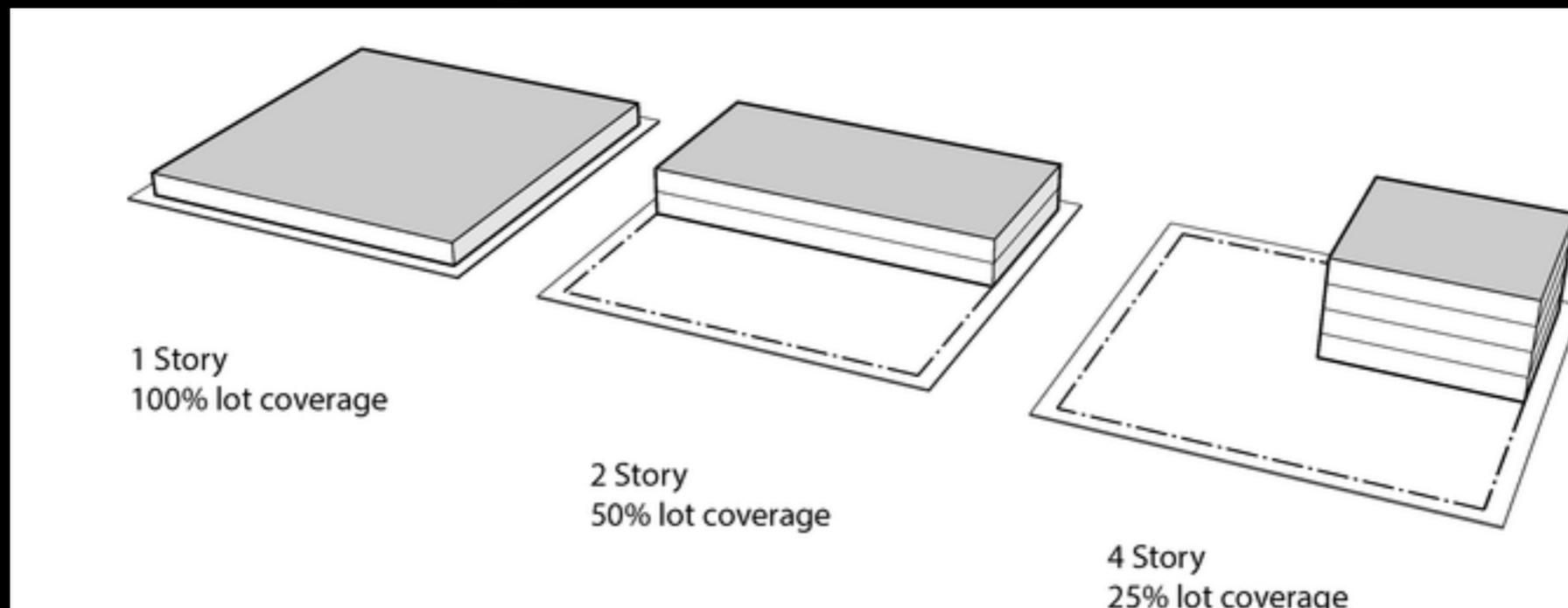
(above ground with legal head height)

...to the **land area of the parcel** upon which it is built.

Ratio

$$\frac{\text{total floor area}}{\text{land area of the parcel}} = \text{FAR}$$

A building with 1.0 FAR could be...



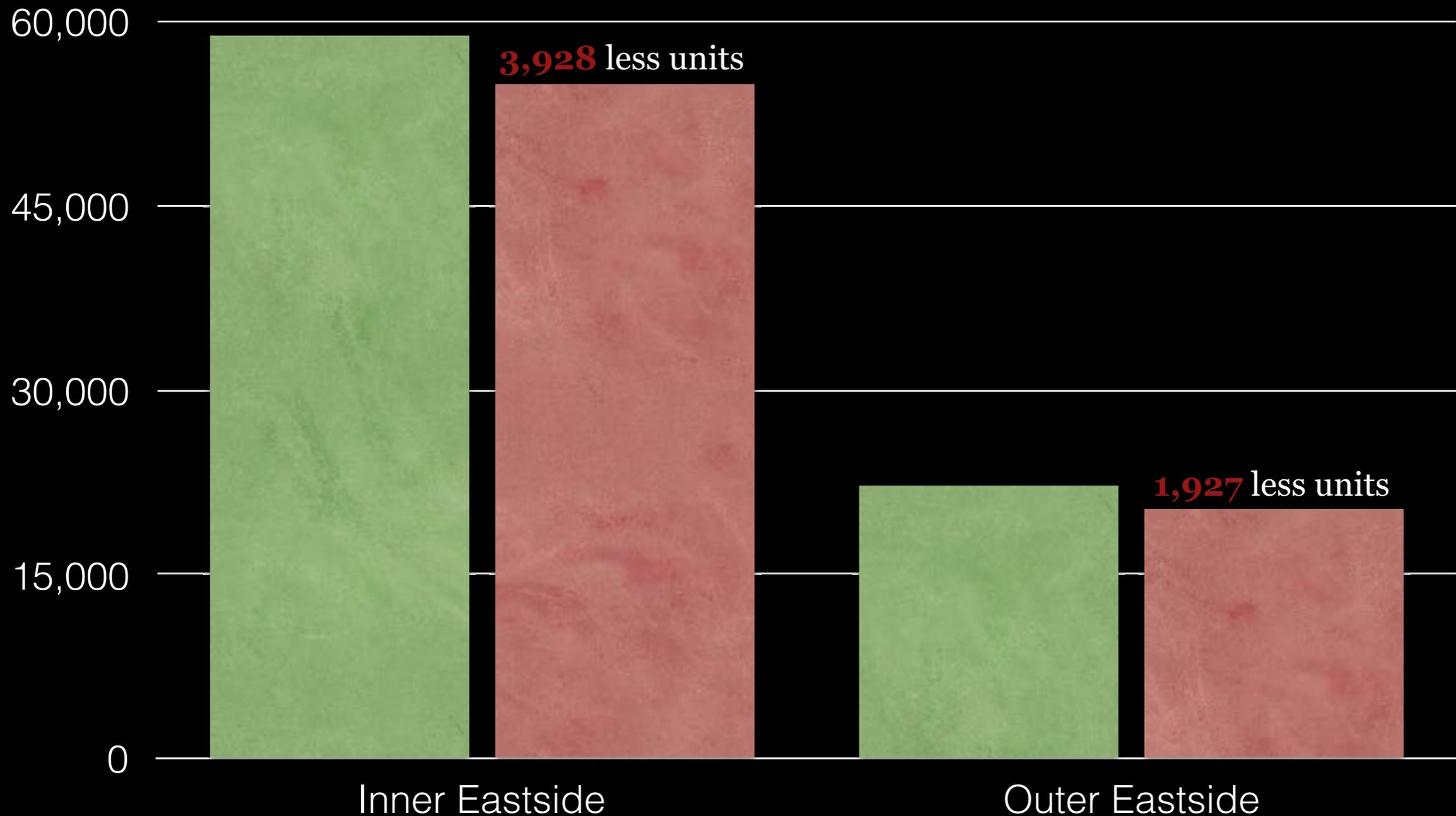
0.5 FAR is too low for dense urban neighborhoods.



*0.5 FAR is more appropriate for a **suburban**, automobile-oriented context.*

Allowable FAR Should be Higher

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Reducing allowable floor area from the current level to **0.5 FAR** will result in roughly **6,000 fewer** housing units produced.
*(over the coming **20 years**, according to the Johnson Economics report)*

Allowable FAR Should be Higher

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0.9 FAR is more appropriate for Portland's dense urban neighborhoods.



*When a **building** is allowed to cover up to **45%** of a lot, **0.9 FAR** allows for that building to have a **full second story**.*

What is progressive?

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Not
In
My
Back
Yard

So, if Portland is a “progressive” city...



Q: Is it **progressive** to be a **NIMBY**?

A: **No**. It is not progressive to be in favor of economic or racial segregation.

Why a Form-Based Code?

Form
Based
Code

Regulate the **form** of buildings, **not the number of units**



T4 Neighborhood Medium Footprint (T4N.MF)
1703-2.60 T4 Neighborhood Medium Footprint (T4N.MF)

A. Intent
To provide variety of housing choices, in medium footprint, medium-density building types, which reinforce the walkable nature of the neighborhood, support neighborhood-serving commercial adjacent to this Zone, and support public transportation alternatives. The following are generally appropriate form elements in this Zone:

B. Sub-Zone(s)
T4N.MF-Open Zone (T4NMF-O)
The open sub-zone provides the same building form but allows for a more diverse mix of uses.

General note: The drawing above is intended to provide a brief overview of this Transition Zone and is illustrative only.

Detached	Medium-to-Large lot Width
Medium Footprint	Medium-to-Large Front Setback
Small-to-Medium Side Setbacks	Up to 2% Stories
Beveled Ground Floor	Primarily with Stoops and Porches

Set limits on:

- Height
- Setback
- Bulk
- Lot Coverage

Then, let the **market** decide how many units to provide within the resulting **building envelope**.

T4 Neighborhood Medium Footprint (T4N.MF)

Key
--- ROW / Lot Line

Building Type	Lot		Standards
	Width (A)	Depth (B)	
Carriage House	n/a	n/a	783-3.40
Detached House	50' min;	80' min.	783-3.50
Medium	75' max.		
Detached House	40' min;	80' min.	783-3.40
Compact	60' max.		
Duplex	50' min;	130' min.	783-3.30
	75' max.		
Rowhouse	18' min;	80' min.	783-3.10
	35' max.		
Multi-Flex Small	50' min;	130' min.	783-3.10B
	100' max.		
Multi-Flex Large	75' min;	130' min.	783-3.10C
	100' max.		

Building Form	
Height	
Mass Building	
Stories	2 1/4 stories max.
To Eave/Parapet	24' max. (C)
Overall	25' max. (D)
Accessory Structure(s)	
Accessory Dwellings	1 stories max.
Other	1 story max.
Ground Floor Finish Level	18' min. (E)
above Sidewalk	
Ground Floor Ceiling	(F)
Service or Retail	12' min.
Upper Floor(s) Ceiling	8' min. (G)
Ground floor-lobbies and common areas in multi-unit buildings may have a 0" to 6" ground floor finish level.	
Footprint	
Depth, Overall Floor Space	24' min. (H)
Accessory Structure(s)	
Width	24' max.
Depth	12' max.
Miscellaneous	
Loading docks, overhead doors, and other service entries shall be screened and not be located on primary street facades.	

To preserve neighborhood character:

Use a **form based** code.

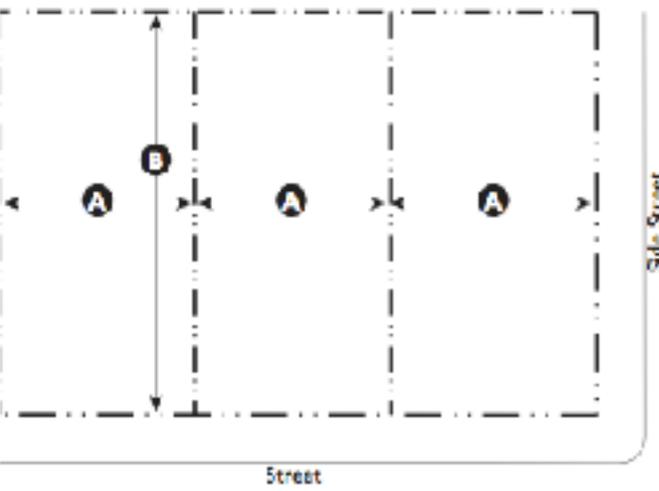
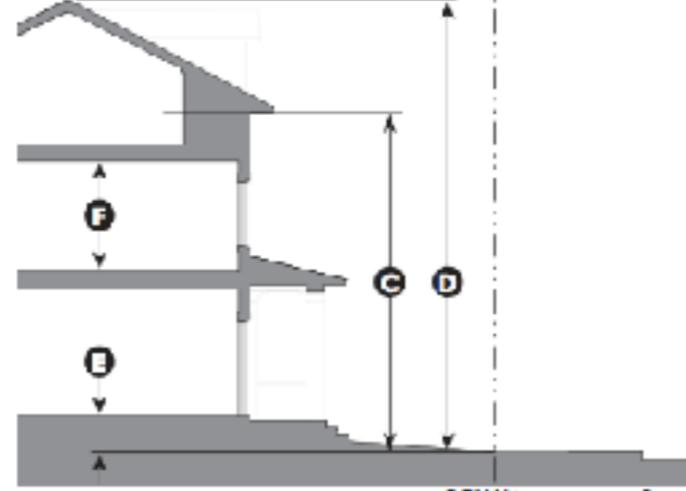
One size does not fit all
(Not all R5 zones are the same)

Let neighborhoods set their own place-specific **design standards** for:

- allowable **building types**
- **frontage** types
- lot **coverage**
- etc.

1703-2.40
T3 Estate (T3E)

Specific to Transect Zones

Key
---- ROW / Lot Line

Key
---- ROW Line

Building Type	Lot		Standards
	Width A	Depth B	
Carrriage House	n/a	n/a	1703-3.40
Detached House:	50' min.;	100' min.	1703-3.50
Medium	100' max.		

D. Building Form	
Height	
Main Building	
Stories	2½ stories max.
To Eave/Parapet	24' max. C
Overall	35' max. D
Accessory Structure(s)	
Accessory Dwellings	1½ stories max.
Other	1 story max.
Ground Floor Finish Level above Sidewalk	18" min. E
Upper Floor(s) Ceiling	8' min. F
Footprint	
Lot Coverage	35% max.
Accessory Structure(s)	
Width	24' max.
Depth	36' max.

Four+ Plexes for Affordability

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For the **market** to deliver units **affordable** to households at < 100% of MFI, it must be allowed **at least four units** on a lot.

	Single Family	Duplex	Triplex	4-Plex	8-Plex
Size (SqFt)	2500	2500	3,600	4,400	4,400
FAR	0.5	0.5	0.72	0.88	0.88
Unit Size (SqFt)	2500	1250	1,200	1,100	550
Property Acquisition	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000
Total Development Cost	\$ 750,000	\$ 862,500	\$ 1,110,000	\$ 1,260,000	\$ 1,280,000
Sales Price per Unit (Buy)	\$ 750,000	\$ 431,250	\$ 370,000	\$ 315,000	\$ 160,000
Rent/Unit/Month	\$ 5,469	\$ 2,734	\$ 2,698	\$ 2,297	\$ 1,167

Pro-forma for inner neighborhoods

Residential Infill Project



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