

density and design

SERA

infill ideas for
Troutdale's future

June 2, 2010

tonight's program

definition of density

design principles

strategies for implementation

tools

what do we
mean when we
say
“density”?

population density?
residential density?
building density?
employment density?
gross density?
net density?

density

measurable benefits of density

- helps support great main streets



"It is important that enough people live close to the Town Center to provide a sufficient local market base for its shops and services..."

Troutdale Town Center Plan (1998)

measurable benefits of density

- provides economic benefits
- results in positive fiscal impacts
- promotes greater choice
- improves public health and safety
- provides environmental benefits



full zoning build out

Calhoun County, MI



full zoning build out

Calhoun County, MI

issues

- crowding
- congestion
- crime
- access to sun and views
- aesthetics

strategies for success:

- ☑ education
- ☑ better design
- ☑ city leadership

design principles

- active frontage
- taming the automobile
- diversity (dwelling and lot sizes)
- compatible design
- walkable neighborhoods



active frontage

- porches / patios / stoops
- landscaping
- windows and doors
- relationship to the street



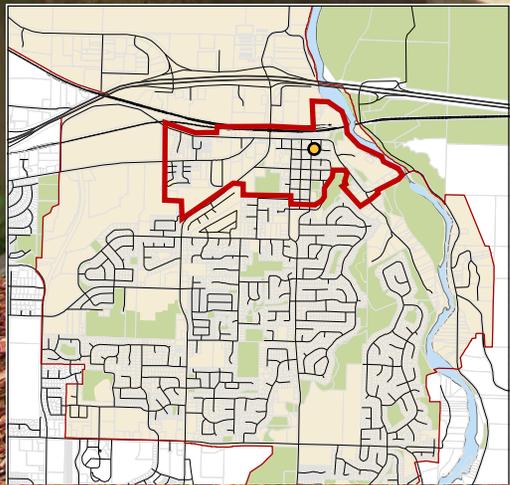
active frontage

- porches / patios / stoops
- landscaping
- windows and doors
- relationship to the street

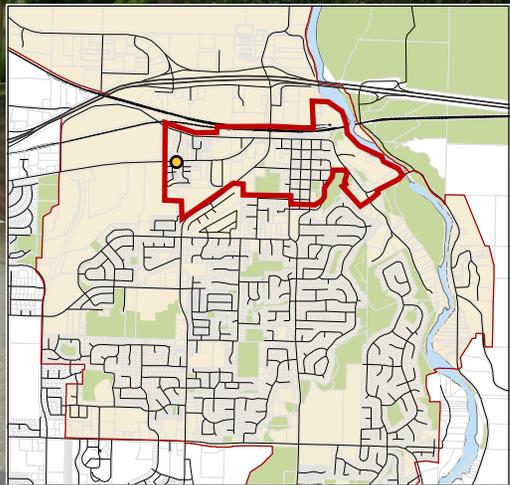


active frontage

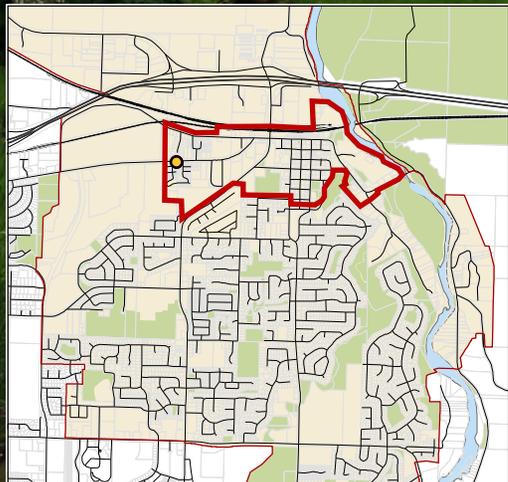
- porches / patios / stoops
- landscaping
- windows and doors
- relationship to the street



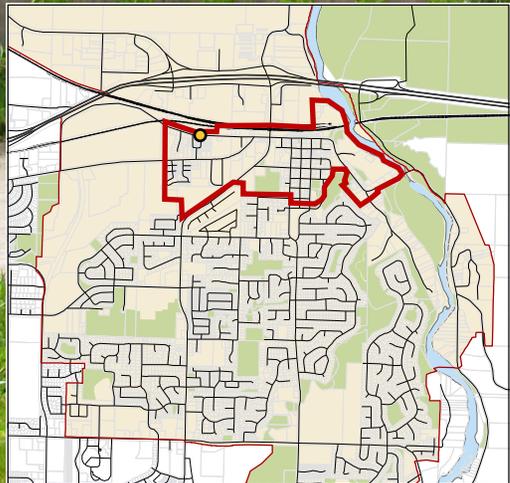
Troutdale, OR



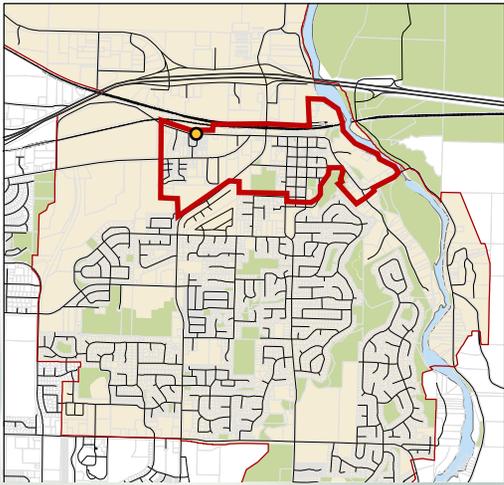
Troutdale, OR



Troutdale, OR



Troutdale, OR

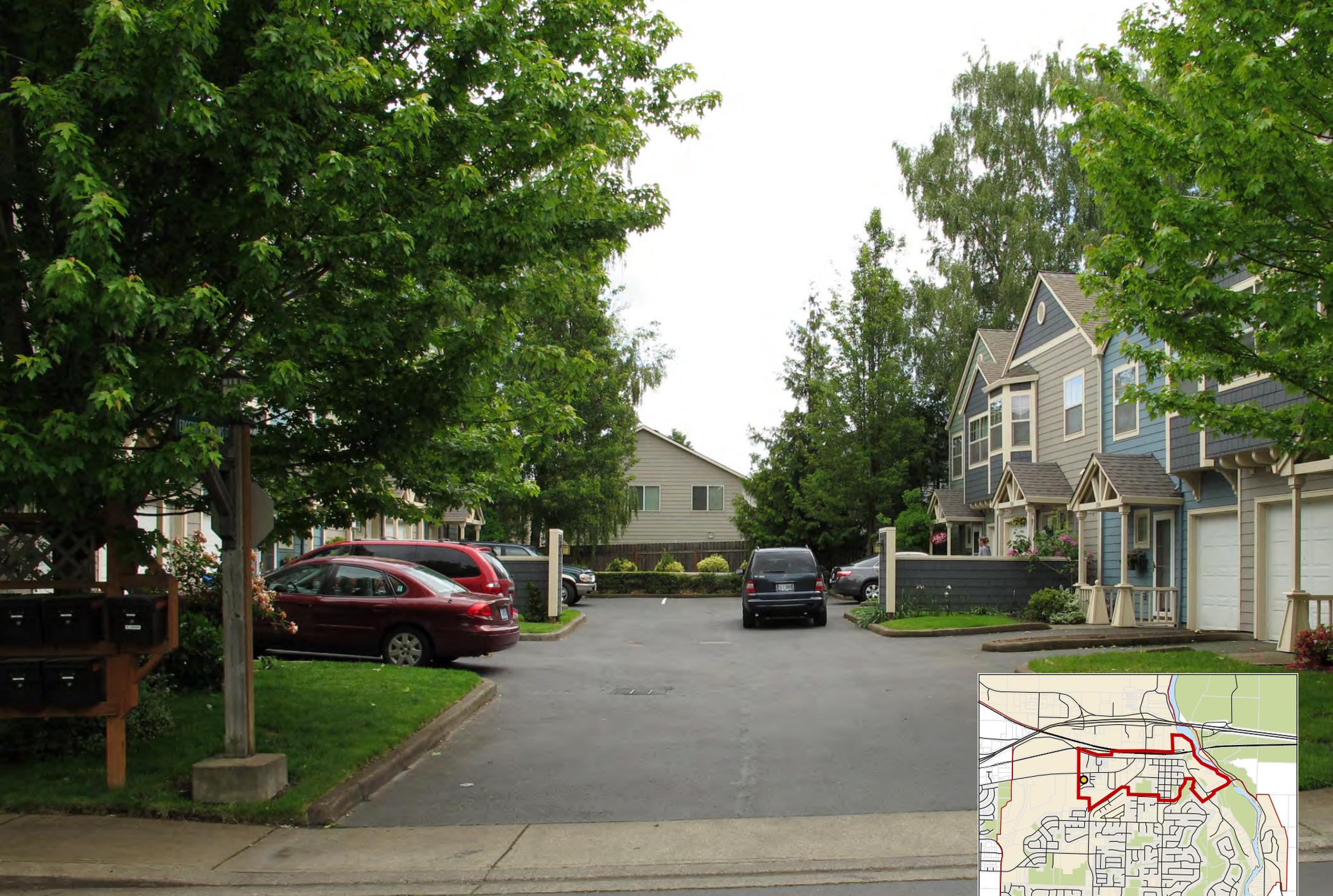


Troutdale, OR

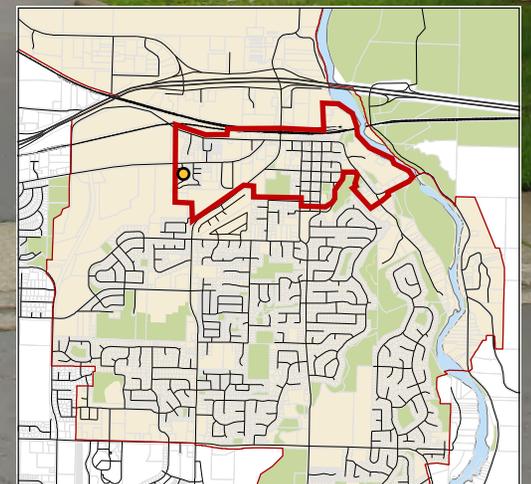
A photograph of a residential street featuring modern, multi-story houses with dark grey and light beige siding. The houses have gabled roofs and white garage doors. A paved alleyway runs alongside the houses, leading to a wooden fence and a satellite dish on the right. The sky is overcast.

taming the auto

- alleys
- parking courts
- consolidate curb cuts / shared driveways
- green street / traffic calming



taming the auto



Troutdale, OR



taming the auto

Parking Courts

Lake Oswego, OR

taming the auto

Shared Driveways





taming the auto

Green Street / Traffic Calming

Seattle, WA



diversity

- “aging in place”
- variety of lot sizes and housing types
- compatible architectural style

compatible design

- integrates natural features into site
- respects existing development patterns
- considers environmental conditions





compatible design

New Columbia, Portland, OR



compatible design

Seattle, WA



walkable neighborhoods

Forest Heights neighborhood, Portland, OR

- shared facilities
- things to walk to
- safe and inviting routes



walkable neighborhoods

Manzanita, OR

- shared facilities
- things to walk to
- safe and inviting routes

residential zoning in troutdale

R-20
2 UNITS/ACRE

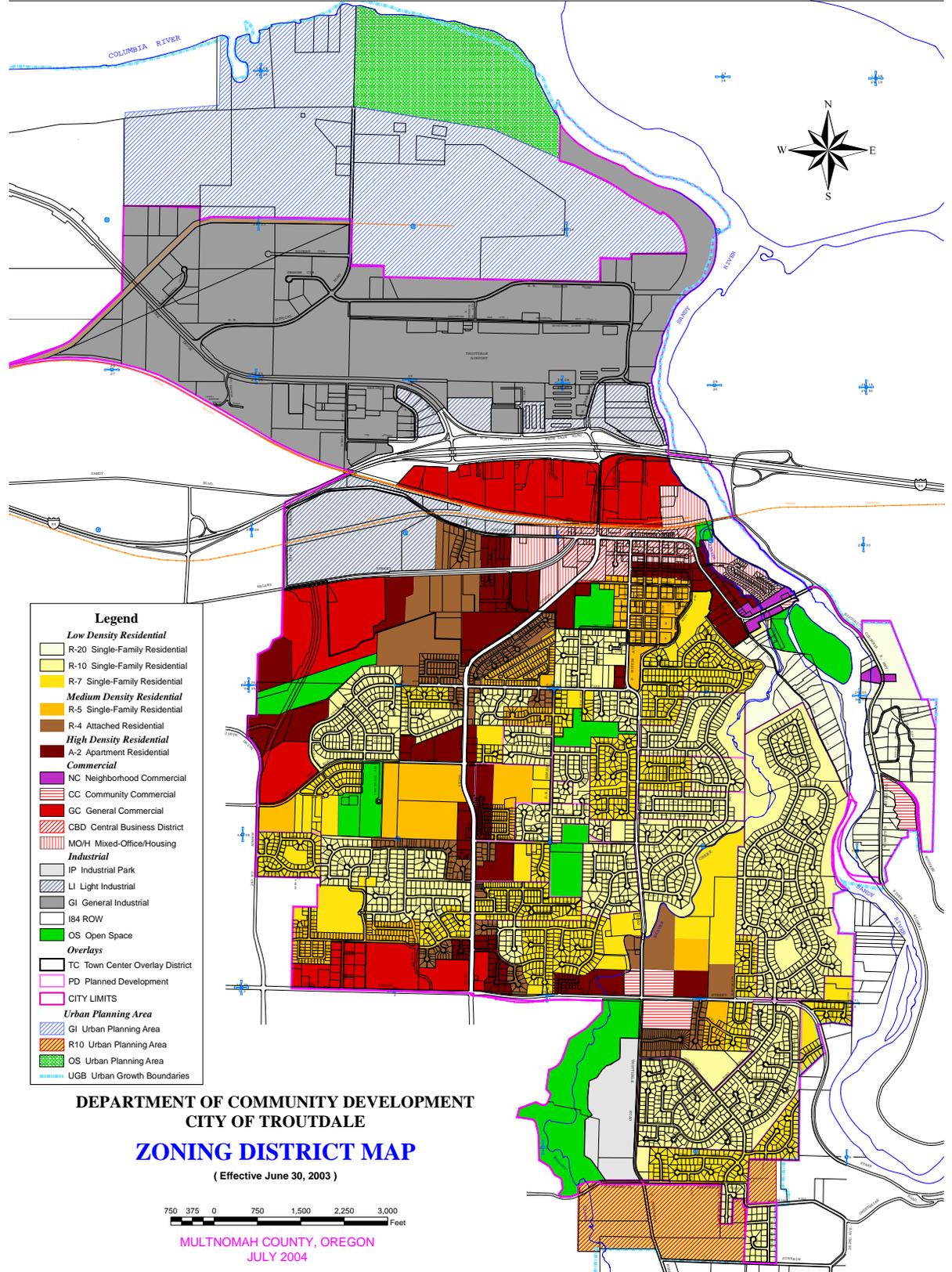
R-10
4 UNITS/ACRE

R-7
6 UNITS/ACRE

R-5
10 UNITS/ACRE

R-4
12.5 UNITS/ACRE

A-2
22 UNITS/ACRE



DEPARTMENT OF COMMUNITY DEVELOPMENT
CITY OF TROUTDALE
ZONING DISTRICT MAP
(Effective June 30, 2003)

750 375 0 750 1,500 2,250 3,000
Feet

MULTNOMAH COUNTY, OREGON
JULY 2004

low density residential

R-20
2 UNITS/ACRE

R-10
4 UNITS/ACRE

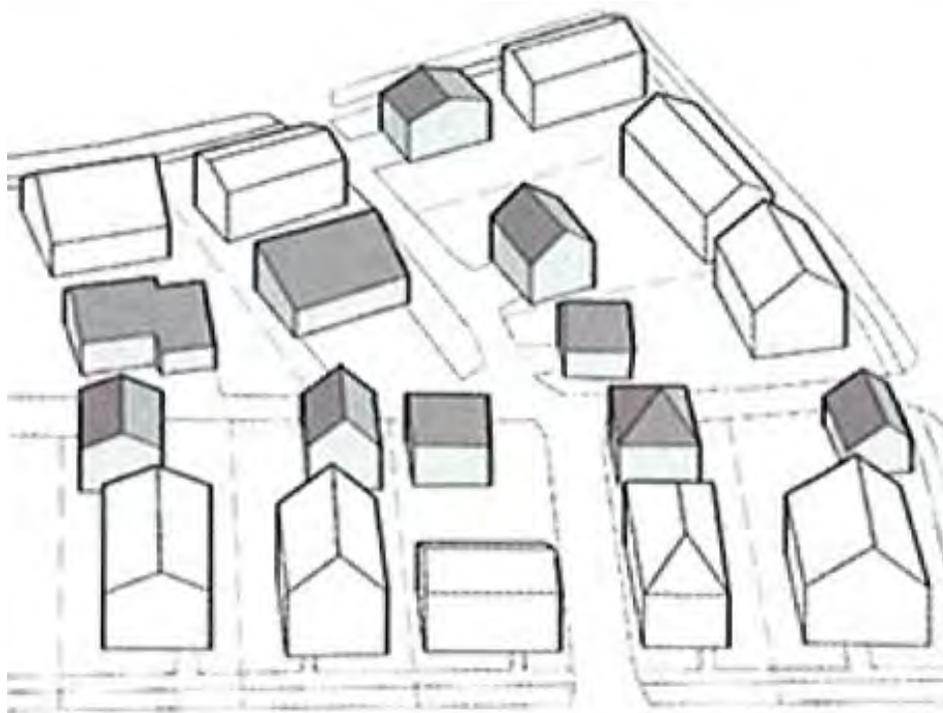
R-7
6 UNITS/ACRE

R-5
10 UNITS/ACRE

R-4
12.5 UNITS/ACRE

A-2
22 UNITS/ACRE

Accessory Dwelling Units (ADU), also called Granny Flats



from *Visualizing Density* (Campoli and MacLean)



low density residential

R-20
2 UNITS/ACRE

R-10
4 UNITS/ACRE

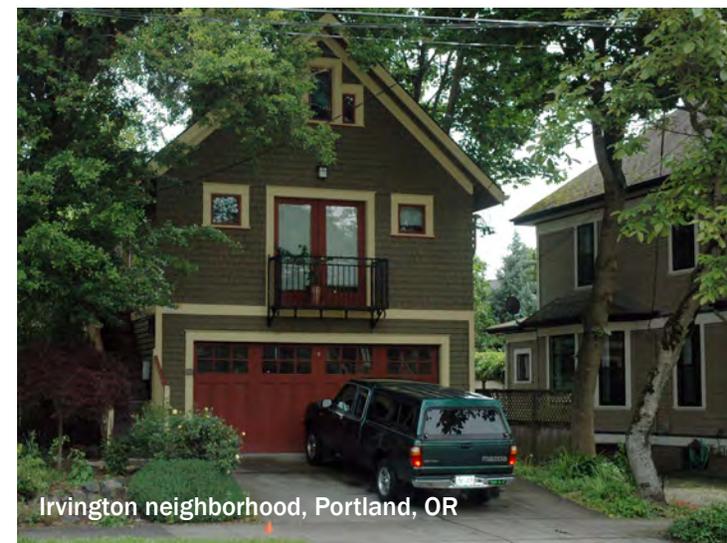
R-7
6 UNITS/ACRE

R-5
10 UNITS/ACRE

R-4
12.5 UNITS/ACRE

A-2
22 UNITS/ACRE

Accessory Dwelling Units (ADU), also called Granny Flats



medium density residential

R-20
2 UNITS/ACRE

R-10
4 UNITS/ACRE

R-7
6 UNITS/ACRE

R-5
10 UNITS/ACRE

R-4
12.5 UNITS/ACRE

A-2
22 UNITS/ACRE

Attached Dwellings / Infill



medium density residential

R-20
2 UNITS/ACRE

R-10
4 UNITS/ACRE

R-7
6 UNITS/ACRE

R-5
10 UNITS/ACRE

R-4
12.5 UNITS/ACRE

A-2
22 UNITS/ACRE

Skinny Houses



Chestnut Hill, PA



Troutdale, OR



Troutdale, OR

medium density residential

R-20
2 UNITS/ACRE

R-10
4 UNITS/ACRE

R-7
6 UNITS/ACRE

R-5
10 UNITS/ACRE

R-4
12.5 UNITS/ACRE

A-2
22 UNITS/ACRE

Attached Dwellings / Infill



Hillsboro, OR



Lake Oswego, OR

medium density residential

R-20
2 UNITS/ACRE

R-10
4 UNITS/ACRE

R-7
6 UNITS/ACRE

R-5
10 UNITS/ACRE

R-4
12.5 UNITS/ACRE

A-2
22 UNITS/ACRE

Attached Dwellings



medium density residential

R-20
2 UNITS/ACRE

R-10
4 UNITS/ACRE

R-7
6 UNITS/ACRE

R-5
10 UNITS/ACRE

R-4
12.5 UNITS/ACRE

A-2
22 UNITS/ACRE

Smaller + Smarter Houses



medium density residential

R-20
2 UNITS/ACRE

R-10
4 UNITS/ACRE

R-7
6 UNITS/ACRE

R-5
10 UNITS/ACRE

R-4
12.5 UNITS/ACRE

A-2
22 UNITS/ACRE

Cottage Clusters



Courtesy of The Cottage Company



Conover Commons, Redmond, WA



Bella Beach, Gleneden, OR

medium density residential

R-20
2 UNITS/ACRE

R-10
4 UNITS/ACRE

R-7
6 UNITS/ACRE

R-5
10 UNITS/ACRE

R-4
12.5 UNITS/ACRE

A-2
22 UNITS/ACRE

Cottage Clusters



Chestnut Hill, PA



high density residential

R-20
2 UNITS/ACRE

R-10
4 UNITS/ACRE

R-7
6 UNITS/ACRE

R-5
10 UNITS/ACRE

R-4
12.5 UNITS/ACRE

A-2
22 UNITS/ACRE

Apartment Building Alternatives



high density residential

R-20
2 UNITS/ACRE

R-10
4 UNITS/ACRE

R-7
6 UNITS/ACRE

R-5
10 UNITS/ACRE

R-4
12.5 UNITS/ACRE

A-2
22 UNITS/ACRE

Apartment Building Alternatives



mixed use

Retail / Office / Residential



mixed use

Retail / Residential



mixed use

Office / Public / Residential



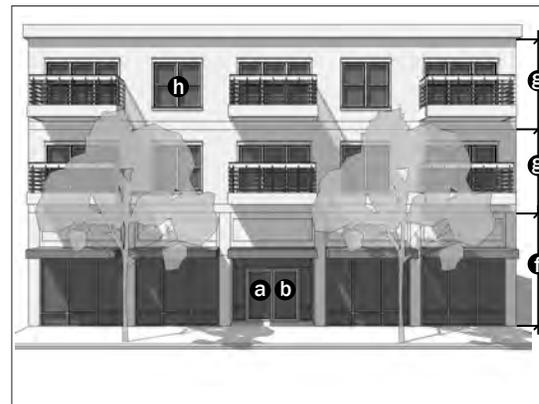
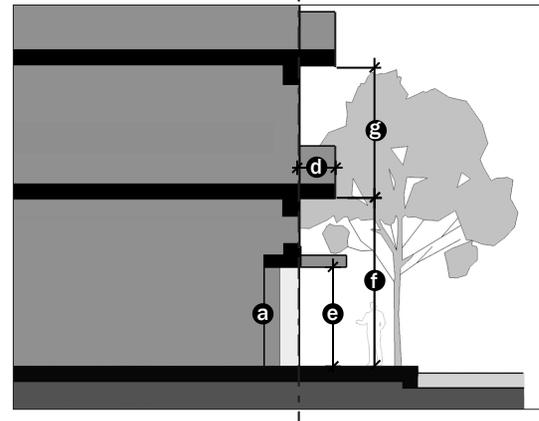
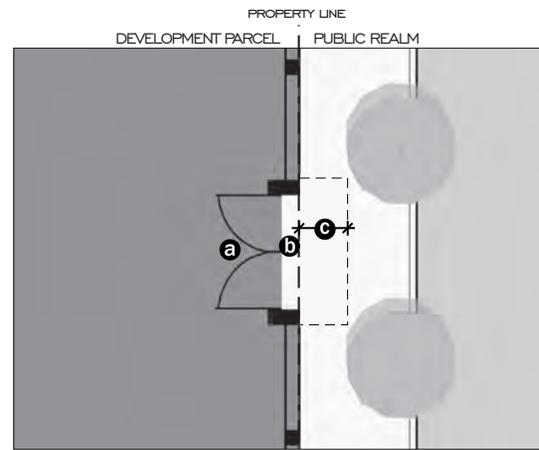
mixed use

Live / Work

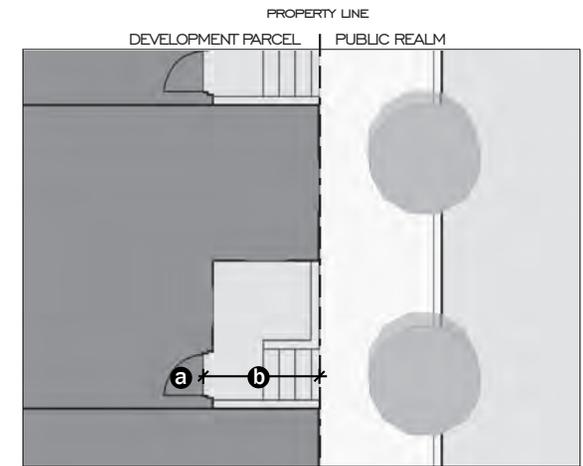


Tools

- development code
- form based code
- design guidelines
- public / private partnerships
- incentives



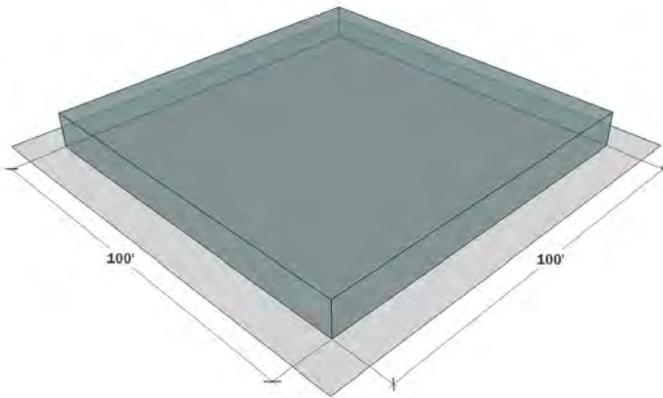
- a** Primary entry door oriented to street or public space
- b** Entrance is covered and/or recessed behind facade
- c** Min 3'; Max 6' projection
- d** Max 4' balcony/deck projection
- e** Min 10' clearance
- f** Min 60% windows
- g** Min 30% windows
- h** Upper windows vertically oriented



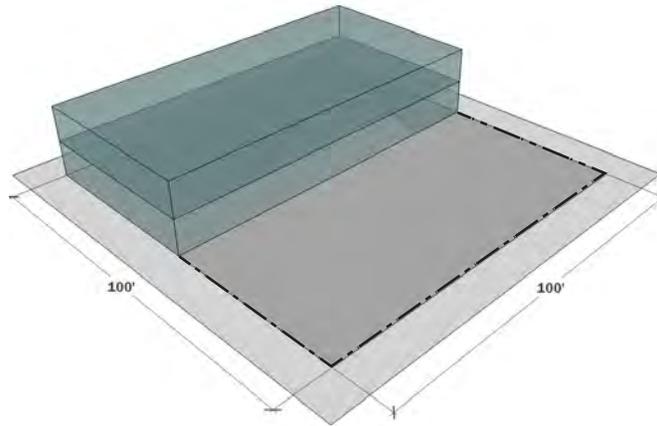
- a** Primary entry doors oriented to street or public space
- b** Entrance is covered and/or recessed behind facade
- c** Max 4' balcony/deck projection
- d** Min 10' clearance
- e** Min 30% windows
- f** Upper windows vertically oriented

Floor Area Ratio (FAR)

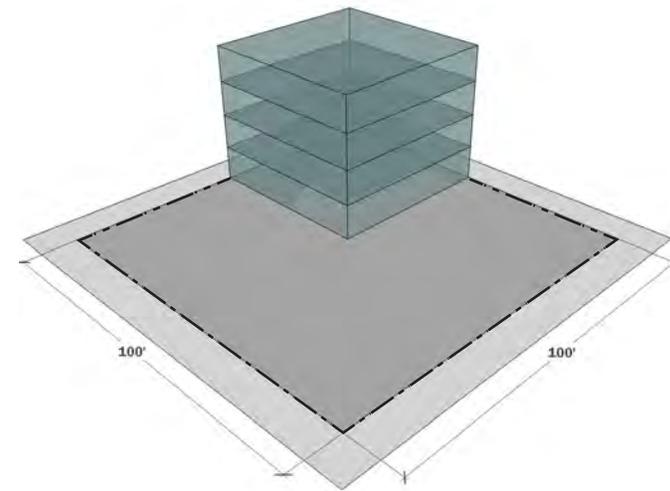
FAR = 1.0



**10,000 sf building
100% lot coverage**



**10,000 sf building
50% lot coverage**



**10,000 sf building
25% lot coverage**

Main Street

“A Town Center requires enough people living, working and shopping within a comfortable walking distance in order to thrive.

It is important that enough people live close to the Town Center to provide a sufficient local market base for its shops and services.”

Troutdale Town Center Plan (1998)

