

Form-Based Code Circuit Training!

PAW Boot Camp

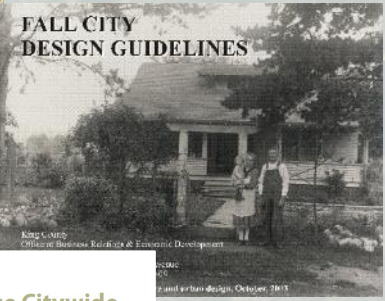
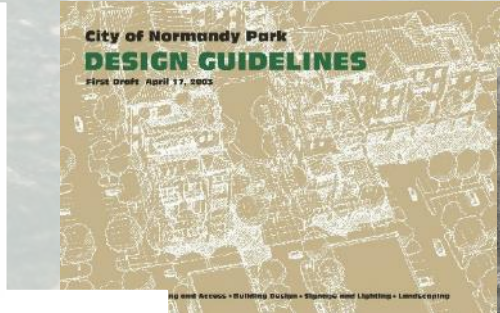
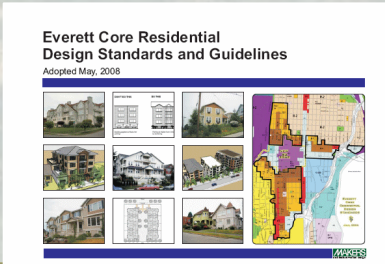
Mercer Island, November 15, 2019

Bob Bengford AICP
Scott Bonjukian AICP
Ian Crozier AICP

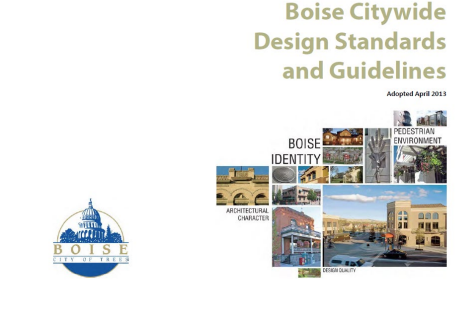
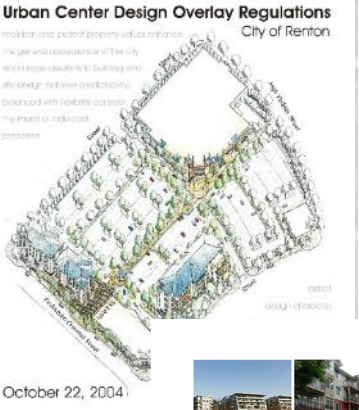


Training Exercises

1. Form-based codes calisthenics
2. Code initiation sprints
3. Land use reverse lunges
4. Housing diversity aerobics (including a VPS drill)
5. Community design jumping jacks
6. Block frontage bench dips
7. Site design sit-ups
8. Building design stair climb
9. Parking push-ups
10. Lessons learned stretches



Rural Town Centers and Corridors Project



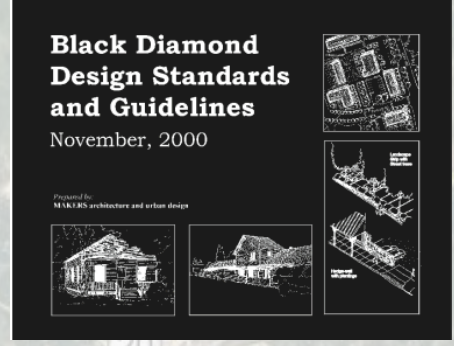
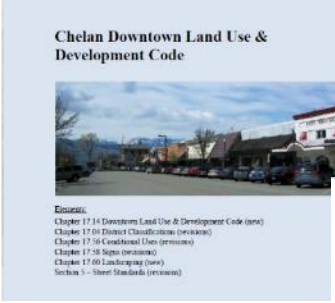
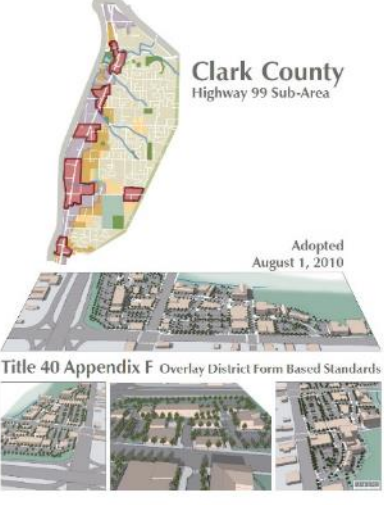
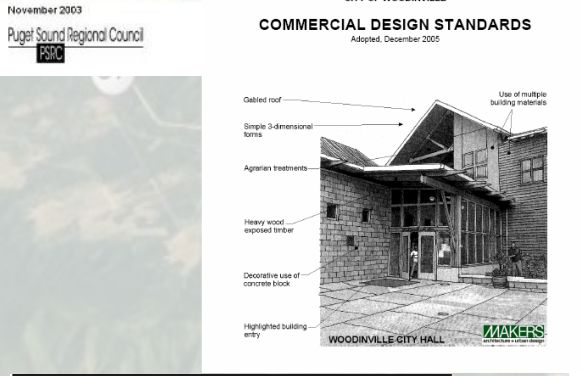
King County Landmarks Program
Office of Cultural Resources
350 Second Avenue, Suite 260
Seattle, WA 98101 (206) 216-6676
MAKERS architecture and urban design, August 2011

**GREENWOOD/PHINNEY
MAIN STREET DESIGN REPORT**



PREPARED FOR:
**GREENWOOD/PHINNEY
STREET STEERING COMMITTEE
AND THE CITY OF SEATTLE**

PREPARED BY: **MAKERS architecture**
MARCH, 2001



Case Studies

- Anacortes: 2016 – 2019
- Mountlake Terrace: 2018- 2019
- South Tukwila: 2019 – Current
- Issaquah: 2019 – Current
- Carnation: 2017-2018
- Bozeman, MT: 2015-2018
- Waxhaw, NC: 2015-2018
- Ellensburg: 2010-2012
- Clark County HWY 99: 2008-2009

A Hybrid Approach to Form-Based Codes in the Northwest

March 1, 2012 by Bob Bengford
Category: Planning Advisor

This Advisor column was originally published in January 2010

Can form-based codes be applied to Nor course.

Are they appropriate for your community

Below are some things to think about if y updating your land use/design codes usin

About Form Based Codes

Established first in Florida in 1982 as an al codes (FBC's) regulate development to ac include prescriptive requirements on the frontages and on the design of streets an existent. The Form-Based Code Institute's information on the topic.

Most form-based codes have been applie with well established character and/or a v consolidated ownership. By their nature t

Visualizing Compatible Density

April 10, 2017 by Bob Bengford
Category: Planning Advisor, Design



Density is a controversial subject in virtually all American and communities are seeking more density to promote e out. [Back to top](#) e goals, density is more often a thing to b

Google Earth - A City Planner's Best Friend

March 1, 2014 by Bob Bengford
Category: Tools for Planners, Planning Advisor

By Bob Bengford AICP, MAKERS

Rarely a day goes by at the office now where I don't use Google Earth. As a planning and urban design consultant working for several communities throughout the Pacific Northwest at any given time, it's an incredible tool to have at your finger tips. When curiosity beckons or specific research information is needed, you only need a few clicks on the mouse and keyboard and voila, you are flying overhead. (Bing Maps are pretty use aerial perspective views, which aren't offered on Google Earth.)

Providing for Usable Open Space for Multifamily Developments

March 1, 2012 by Bob Bengford
Category: Planning Advisor

This Advisor column was originally published in January 2012.

This is the second of two articles discussing regulatory strategies to address two challenges to creating compatible and livable infill development. The first article, published in February 2011, discussed strategies for protecting existing neighborhoods from the impacts of new development. This article describes concepts for providing usable open space in new multifamily residences.

Introduction

Smart growth principles call for the development of more intense mixed-use centers at transportation hubs or other strategic locations plus multifamily infill in neighborhood centers. Demographic changes in concert with fuel costs are increasing the demand for compact multifamily housing in Western Washington and throughout the country. With rising land costs, cities are finding it increasingly difficult to create new parkland to serve this increased density. Thus, it's becoming increasingly important for cities to update regulations to provide for usable on-site open space associated with multifamily development.

Sign Code Update: Finding the Sweet Spot between Flexibility & Clutter Management

May 26, 2015 by Bob Bengford
Category: Planning Advisor, Sign Control



Image courtesy of Melissa.

MRSC Advisor Joe Tovar, FAICP, Tovar Planning, contributed to this post.

Planned Unit Developments - Real World Experiences

November 1, 2012 by Bob Bengford
Category: Subdivisions and Planned Developments, Planning Advisor

By Bob Bengford, AICP, MAKERS

Introduction

The concept of planned unit developments has been around now for quite some time. Most cities and counties in Washington have adopted planned unit development ordinances. Much has been written over the years about the technical and legal nature of PUDs. This article, however, takes a look at how some of these ordinances are working in the real world. What are the major issues and challenges? Are PUD ordinances even necessary?

What is a Planned Unit Development (PUD)?

A PUD is both a type of development and a regulatory process. Individual definitions can vary greatly depending on the community or jurisdiction and its goals. The purpose of a PUD is generally to allow greater flexibility in the configuration of buildings and/or uses on a site than is allowed in standard zoning ordinances. A major goal of PUDs is often to encourage unified plans that provide a more complete and integrated package (hopefully including special amenities) over piecemeal development. A typical PUD would include a cluster of small lots in conjunction with a common usable open space with some recreational

i Lacey reached out for help in 1997 to transition Lacey's new vision. While the strict were perceived as restrictive

Who's Here?

- County planners?
- City planners?
- Consultants
- Public officials?
- Other?

Who's Here?

- Current or long range planning?

Who's Here?

- Current or long range planning?
- Have you been to any of the Form-Based Code Institute Training classes?
- Have you been involved in a code and/or design standards project?

Introductions.....

- Name
- Who you work for
- What elements of FBC/Hybrid FBC you are most interested in





Form-Based Code Calisthenics

Form-Based Codes?

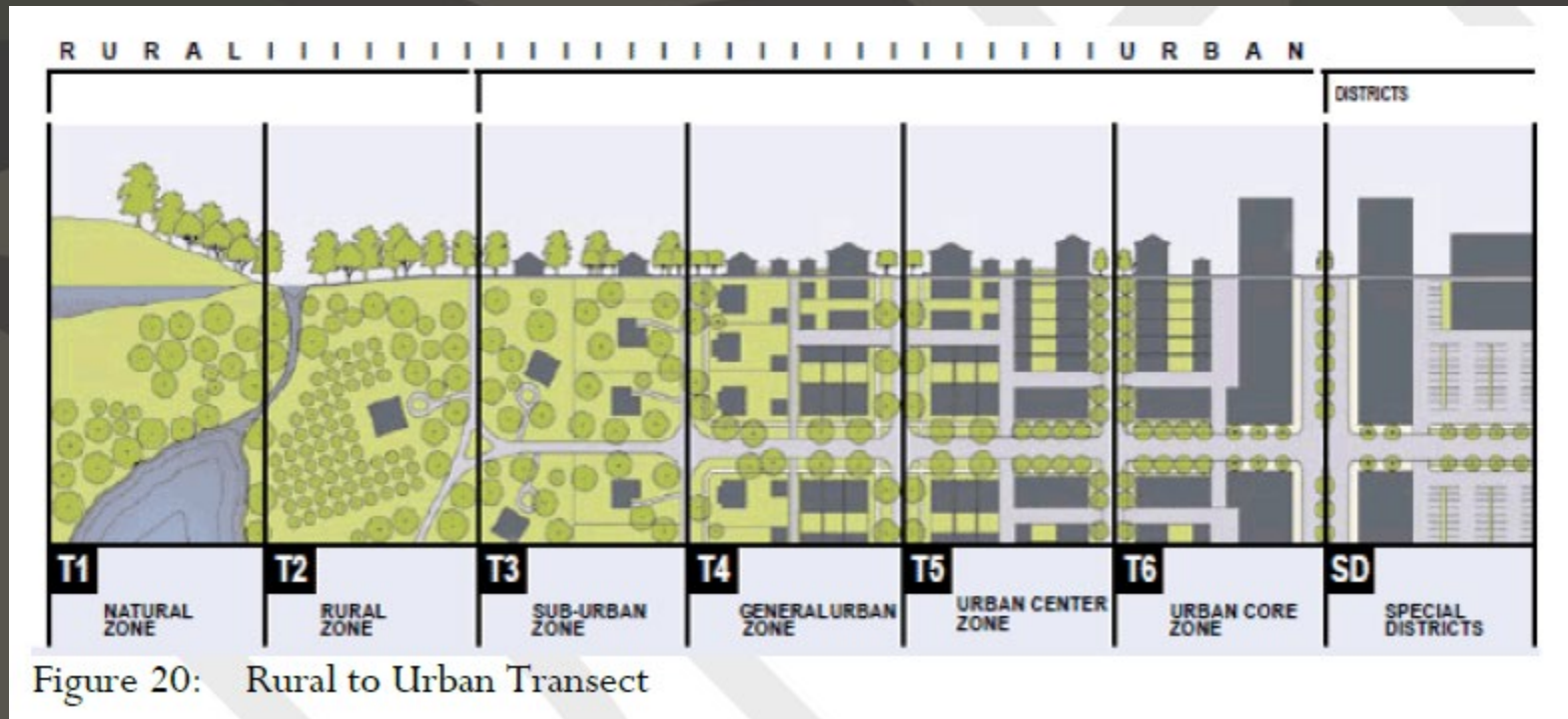
Greater emphasis over physical form of development over specific land uses

- What the street looks like
- What private development looks like from the street

An alternative to.....



What is a Form-Based Code?



- FBC organized around development intensity and form (over uses)

What is a Form-Based Code?

- What it looks like from the street

Weather protection on north & east side of streets (summer shade)

Building entry faces street

Sidewalk

8'

30"

6' min.

Storefront Street Standards

- Building located adjacent to sidewalk with direct entry onto sidewalk
- Parking to the rear of buildings encouraged; no more than 60' of street frontage may be occupied by parking
- Retail/Commercial use required on ground floor to min. 30' depth
- Weather protection over all entries (at least 3' deep) and at least 6' deep along at least 70% of facades on north and east sides of streets
- Transparent window area along at least 70% of ground floor facade between 30" and 8' above grade

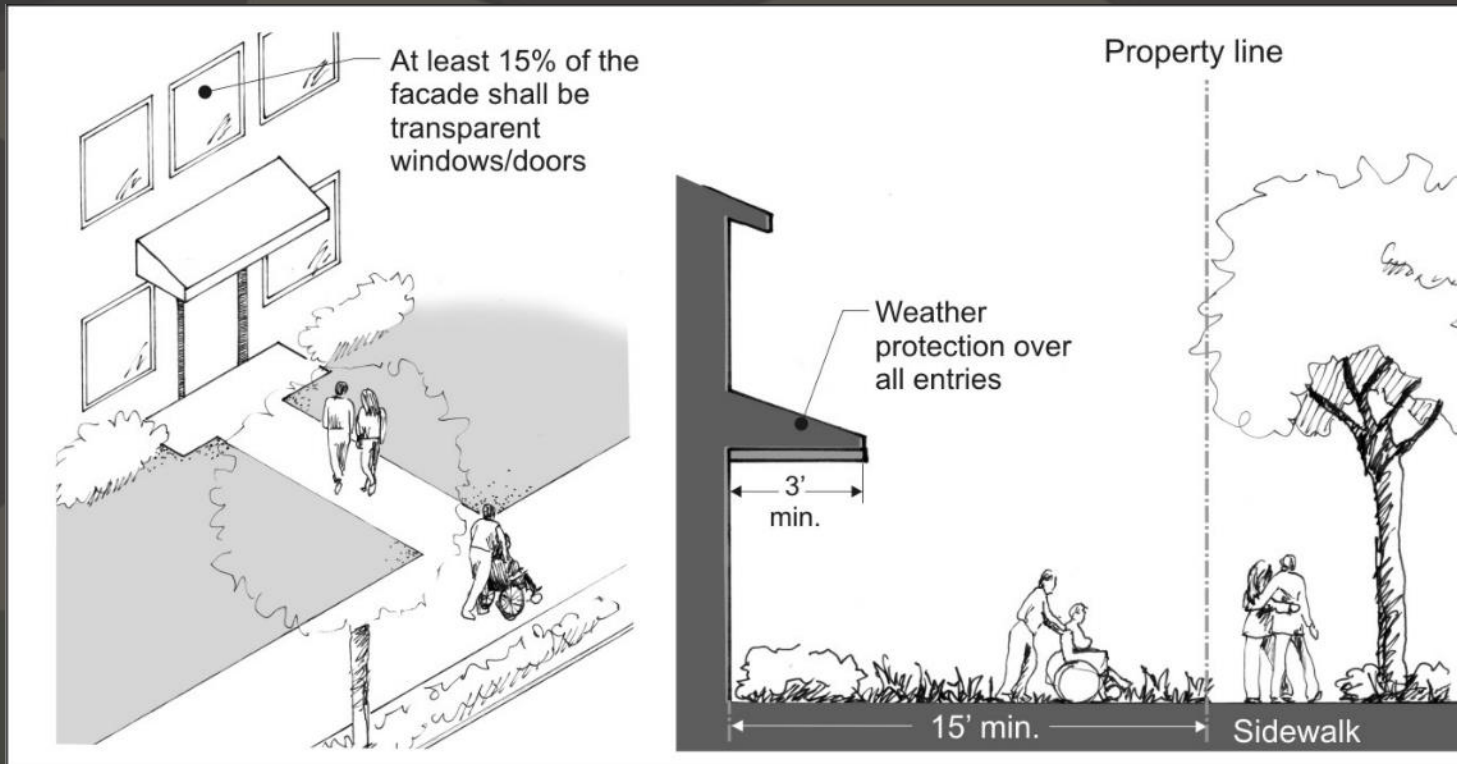
What is a Form-Based Code?

- What it looks like from the street



What is a Form-Based Code?

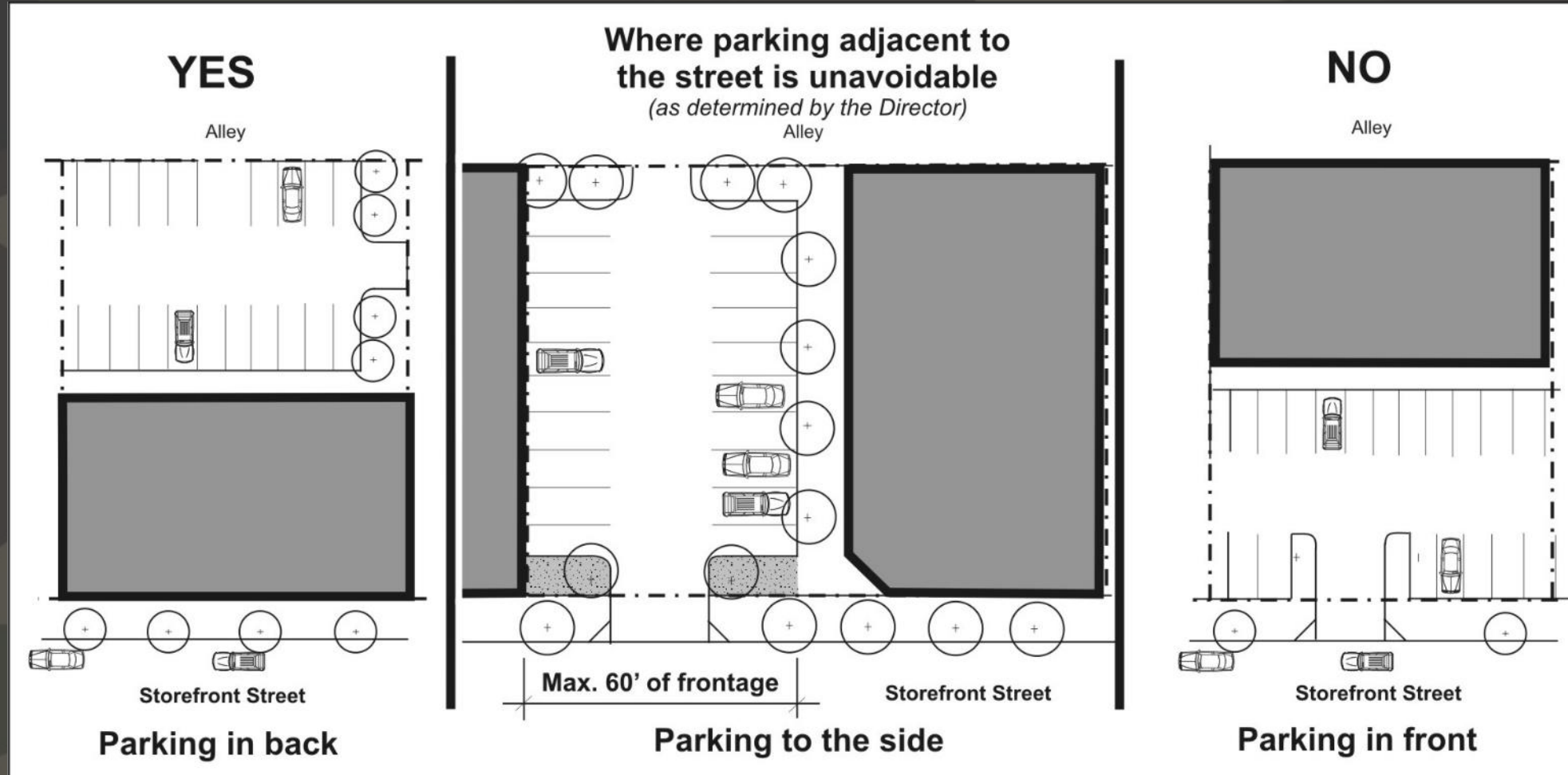
- What it looks like from the street



Landscaped Street Standards

- 15' minimum building setbacks
- No more than 50% of street frontage may be occupied by parking or vehicular access
- At least one building entry is visible from the sidewalk
- Weather protection at least 3' deep over all entries
- Transparent windows/doors shall occupy at least 15% of facade

What is a Form-Based Code?



FBC's Slow to Come to NW

- Origination far from NW
- Physical and political challenges
- NW' strong history with design guidelines

Some Challenges to FBC's



- Adapting to varied and unique local context (physical and political)
- Massive logistics of changing existing code
 - One district or whole city?
 - Entire code or just parts
 - Educating participants about the change
 - Awareness of the details, implications
 - Overcoming fears of change
 - \$\$\$\$\$\$\$






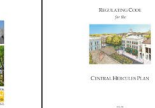





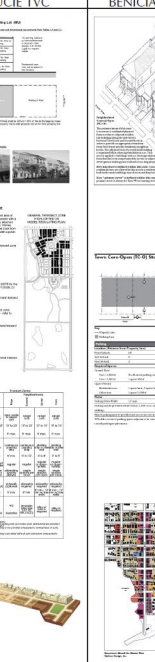
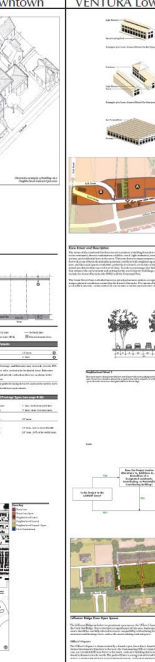
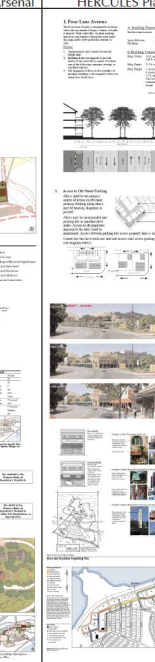


Our Experience with FBC's

Hwy 99 AND POINTS EAST
Planning a new direction

Highway 99 Sub-Area Plan

Clark County, Washington
December 16, 2008



GRASS VALLEY Loma Rica	VENTURA Downtown	VENTURA Midtown	ST. LUCIE TVC	BENICIA Downtown	VENTURA Lower Arsenal	HERCULES Plan	FORT WORTH S-side
 Project cover for Grass Valley Loma Rica, featuring a photograph of the area.	 Project cover for Ventura Downtown, featuring a photograph of the downtown area.	 Project cover for Ventura Midtown, featuring a photograph of the midtown area.	 Project cover for St. Lucie TVC, featuring a photograph of the TVC area.	 Project cover for Benicia Downtown, featuring a photograph of the downtown area.	 Project cover for Ventura Lower Arsenal, featuring a photograph of the Lower Arsenal area.	 Project cover for Hercules Plan, featuring a photograph of the Hercules area.	 Project cover for Fort Worth S-side, featuring a photograph of the S-side area.
 Detailed plan content for Grass Valley Loma Rica, including site plans, diagrams, and text.	 Detailed plan content for Ventura Downtown, including site plans, diagrams, and text.	 Detailed plan content for Ventura Midtown, including site plans, diagrams, and text.	 Detailed plan content for St. Lucie TVC, including site plans, diagrams, and text.	 Detailed plan content for Benicia Downtown, including site plans, diagrams, and text.	 Detailed plan content for Ventura Lower Arsenal, including site plans, diagrams, and text.	 Detailed plan content for Hercules Plan, including site plans, diagrams, and text.	 Detailed plan content for Fort Worth S-side, including site plans, diagrams, and text.



Hwy 99 AND POINTS EAST
Planning a new direction

NE 78th St



NE Hwy 99

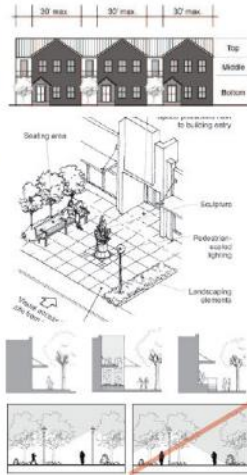
NE 13th Ave

Clark County Hwy 99 FBC

Clark County Highway 99 Sub-Area



Title 40 Appendix F Highway 99 Overlay District Form Based Standards



Draft
June 29, 2009

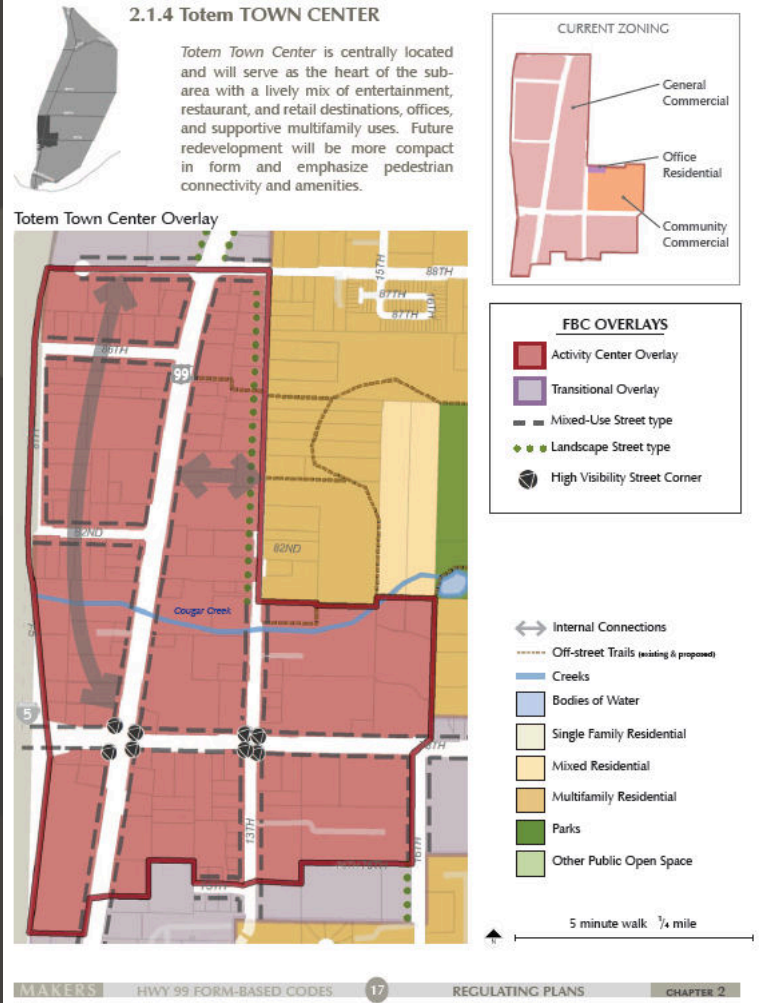
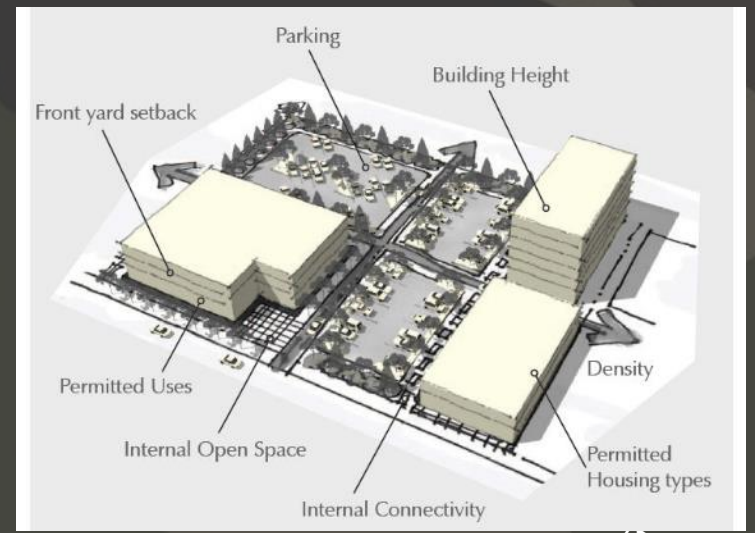


Table 2-4. Permitted frontages and how they relate to Street Types.

Street Type	Permitted Frontages per Street Type, for more details see Chapter 3 Frontage Type Standards
Storefront Street Permitted Frontages	
Mixed-Use Street Permitted Frontages in Activity Centers and Transitional Areas	
Landscape Street Permitted Frontages in Activity Centers and Transitional Areas	



Clark County Hwy 99 FBC

4.2 Activity Center Overlay

Emphasizes uses and design that attract pedestrian activity.

Building Placement

A Front Setback Requirements:

- Distance = 0'- 20' setback
- See Chapter 3 for setback requirements related to applicable frontage types.

B Side and Rear Setback Requirements:

- Firewall option (no windows) = 0' setback; above 25' tall = 10' additional setback for non-storefront buildings
- General (side/rear) setback = 10' min.
- Setback between structures = 10' min.
- Rear adjacent to SF zone = 25' min.
- See Section 5.1 for further side/rear yard details

D Internal Connectivity

- Create internal vehicular and pedestrian access where indicated on regulatory maps.
- See Section 5.3 - 5.4 for further details.

E Internal Open Space

See section 5.2 for design standards for the required open space

Commercial uses:

- 2 sq ft of pedestrian-oriented space per 1 lineal foot along frontages

Residential uses:

- 10 % of livable floor area

F Parking

Location and maximum frontage:

- Storefront Streets = 33% and side/rear
- All other streets = 50 % and side/rear

Amount and Design:

- See Section 5.5 for parking standards
- See Section 8.4 for parking lot landscaping requirements

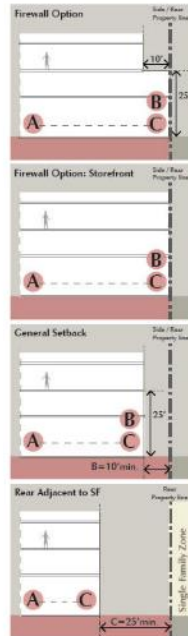


Figure 4-4. Activity Center Overlay building placement standards.

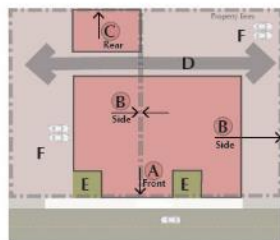


Figure 4-5. Site design elements for the Activity Center Overlay.

3.2 Permitted Frontage Types

The chart below illustrates a range of development frontages and the particular street types and overlays where they are permitted (shaded boxes). Combinations, or hybrids of multiple frontage types are permitted.

Table 3-2. Frontage Type Standards cross referenced with street types.

Frontage Types	Overlays and Street Types							
	Storefront Street	Mixed Use Street	Landscape Street	Mixed Use Street	Landscape Street	Multi-family	Mixed	Single Family
3.3 Storefront Façades located adjacent to the sidewalk.	✓	✓		✓				
3.4 Forecourt Uncovered courtyards within a storefront setting.	✓	✓		✓				
3.5 Stoop Elevated platform entry ways.			✓	✓			✓	
3.6 Light court Sunken courtyards in tandem with raised platforms.		✓		✓			✓	
3.7 Terrace yard Raised lawns or gardens separated from the frontage line by a retaining wall.		✓	✓	✓	✓	✓	✓	✓
3.8 Fenced yard Distinct separation between the public and private realms.		✓	✓	✓	✓	✓	✓	✓
3.9 Common yard Visually continuous landscaped space along adjacent yards.		✓	✓	✓	✓	✓	✓	✓

6.3 Building Materials

INTENT

- To encourage high-quality building materials that enhance the character of the area.
- To discourage poor materials with high life-cycle costs.
- To encourage the use of materials that reduce the visual bulk of large buildings.

6.3.1 Metal Siding Standards¹

Masonry, concrete, or other durable material must be incorporated between metal siding and the ground plane (at least 2 feet above grade).

6.3.2 Concrete Block Standards¹

When used for the primary façade (containing the primary pedestrian entrance), buildings are encouraged to incorporate a combination of textures and/or colors to add visual interest. For example, combining split or rock-façade units with smooth blocks can create distinctive patterns.

Specifically, a singular style and texture of concrete block may comprise no more than 50 percent of a façade facing a street or open space.

6.3.3 Stucco Standards¹

(1) **Proper trimming.** Stucco and similar troweled finishes (including Exterior Insulation and Finish system or "EIFS") must be trimmed in wood, masonry, or other material and must be sheltered from extreme weather by roof overhangs or other methods and are limited to no more than 50 percent of façades containing a customer or resident entry.

(2) **Weather exposure.** Horizontal surfaces exposed to the weather must be avoided.

(3) **Treatment near ground level.** Stucco, EIFS, and similar surfaces should not extend below 2 feet above the ground plane. Concrete, masonry, or other durable material must be used below the 2-foot-above-grade line to provide a durable surface where damage is most likely.

¹ Departures will be considered to the above Building Materials standards provided the use of materials and the façade design meets the intent of the standards. Applicants must demonstrate that the materials are durable, particularly where used near the ground level.



Figure 6-41. This building uses an acceptable combination of metal siding, concrete block and wood shingles (Duvall, WA).



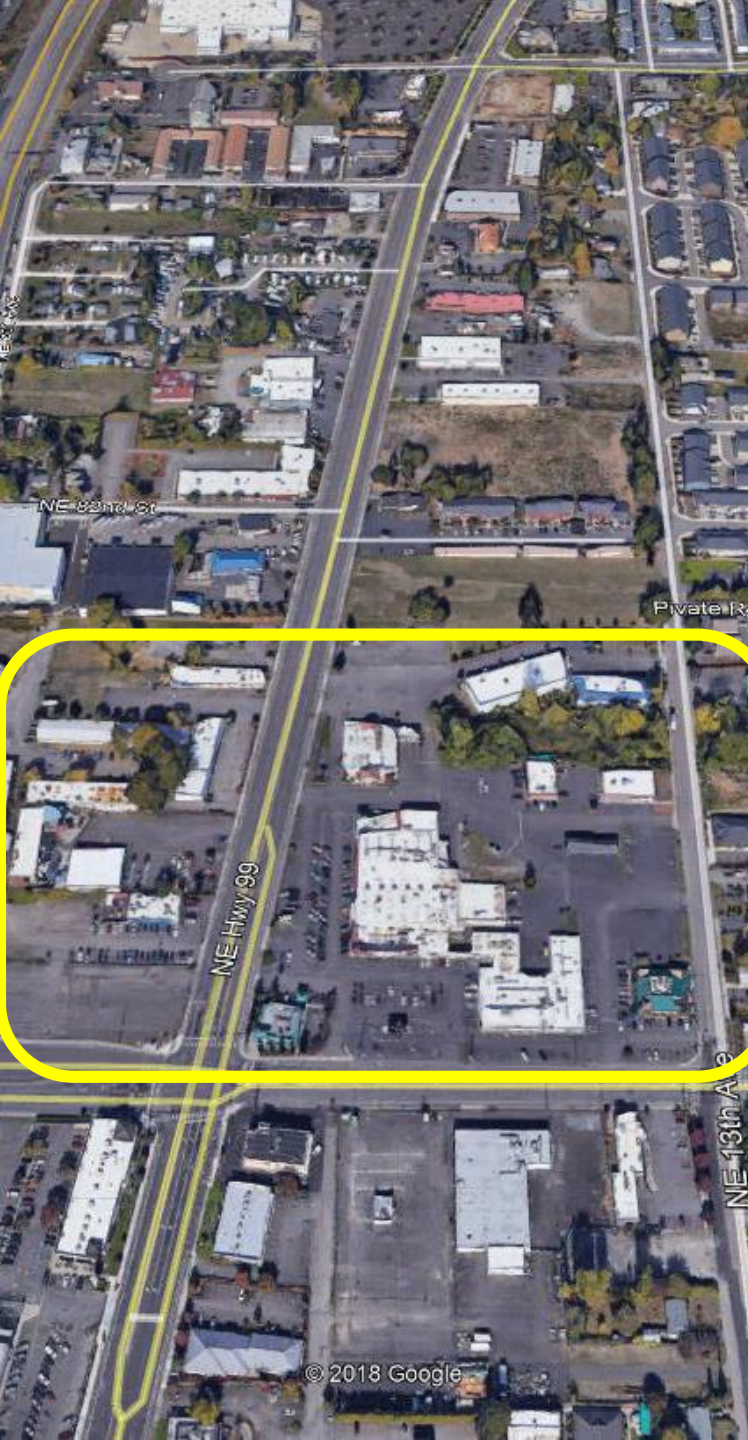
Figure 6-42. An example of an acceptable mix of smooth and split-faced concrete blocks (Bellevue, WA).



Figure 6-43. This building employs a single type of concrete block, but it comprises less than 50% of the façade (Snoqualmie, WA).



Figure 6-44. This building combines stucco and concrete block.



Development Example: TOTEM TOWN CENTER



DEVELOPMENT EXAMPLE 3-D VIEW



EXISTING CONDITIONS AND WETLAND/BUFFER BOUNDARY

This is just an EXAMPLE and intended to illustrate what the area might look like in 20 years if developed consistent with the proposed development standards (with a few departures).

It is assumed in this example scenario that the area would be redeveloped in phases, with multi-story mixed-use buildings constructed in later phases.

Wide, tree-lined sidewalks, with storefront retail



Creation of a new and lively Storefront Street makes up for the large parking area along NE 78th Street



Mixed-use development with retail on ground floor and residential or office above



Detail of development example between Hwy 99 and I-5, looking west



Entire development example, looking west



Entire development example, looking east from I-5



Development configured to use wetland as an amenity; locate trail along edge



Townhouses fronting on internal street



Private internal access road designed to look like a public street

Pedestrian-oriented space integrated with development



Distinctive building corners



Attractive pathways and landscaping in large parking lots



Clark County Hwy 99 FBC

Outcomes in district slower than anticipated, but this grocery store went in quickly after the code, and the design is much better because of the code than otherwise



A Northwest Interpretation:

A Hybrid Approach to Form-Based Codes in the Northwest

March 1, 2012 by Bob Bengford
Category: Planning Advisor

This Advisor column was originally published in January 2010.

Can form-based codes be applied to Northwest communities? Of course.

Are they appropriate for your community? It depends.

Below are some things to think about if you are considering updating your land use/design codes using a form-based approach.

About Form Based Codes

Established first in Florida in 1982 as an alternative to conventional codes (FBCs) regulate development to achieve a specific physical form. They include prescriptive requirements on the location and form of building frontages and on the design of streets and sidewalks. Permitted uses are often limited to those that are consistent with the form-based code. The Form-Based Code Institute's website (formbasedcode.com) provides information on the topic.

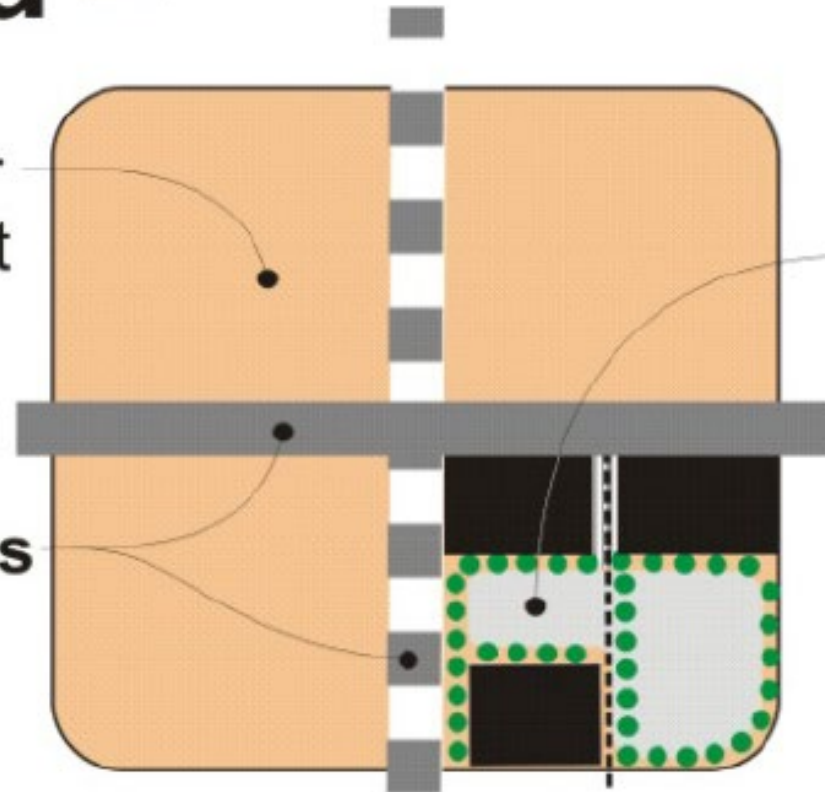
Most form-based codes have been applied to historic downtowns with well established character and/or a well-defined vision, or to areas with consolidated ownership. By their nature, they are often very detailed.

Hybrid =

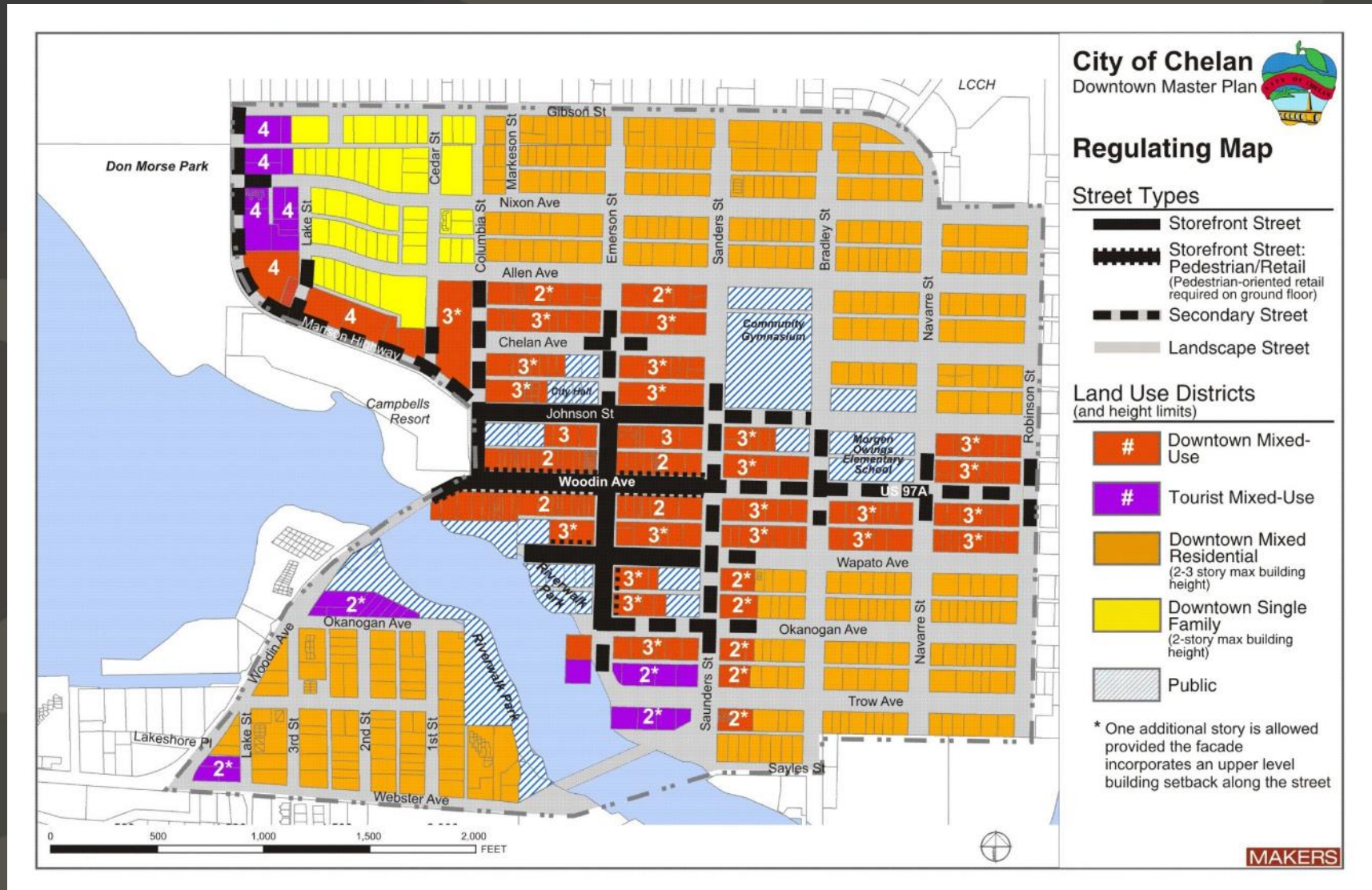
Districts for use & height provisions

Street Types for frontage standards

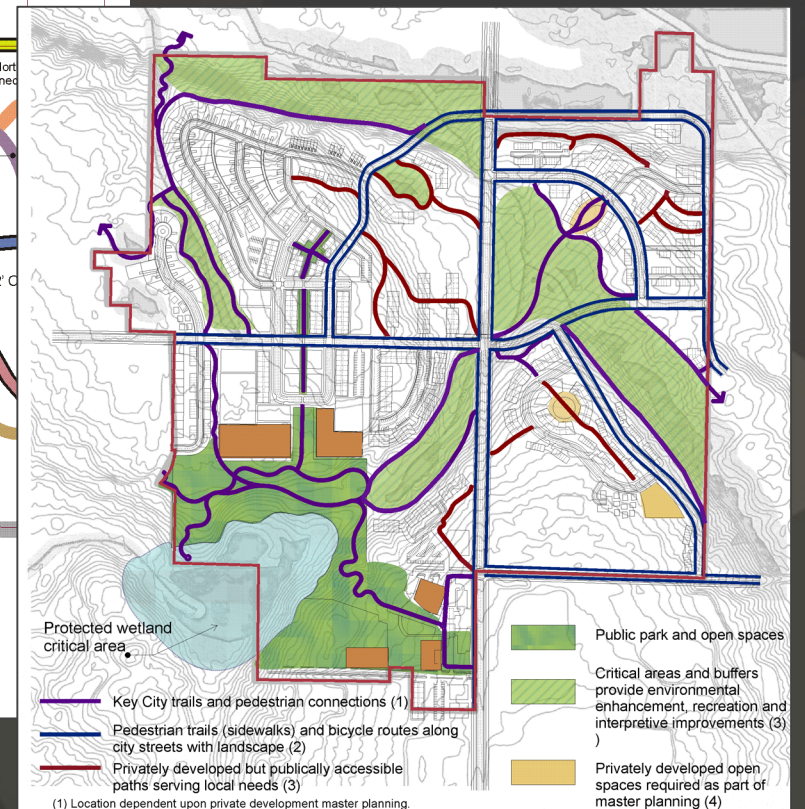
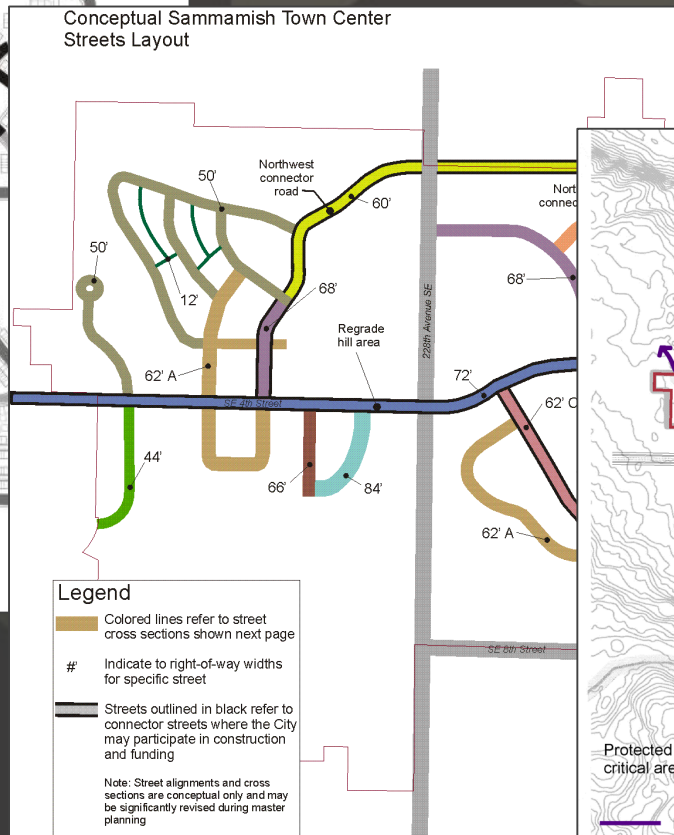
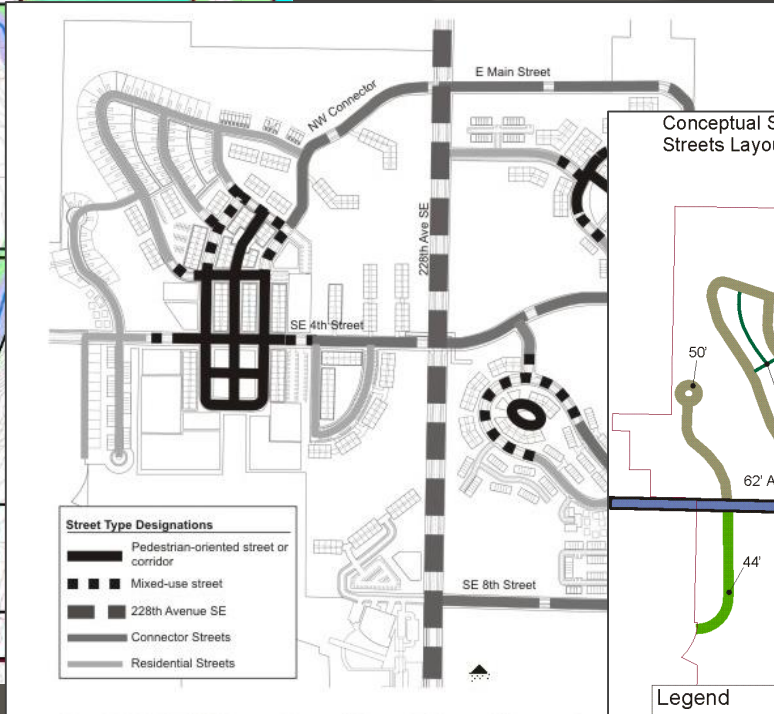
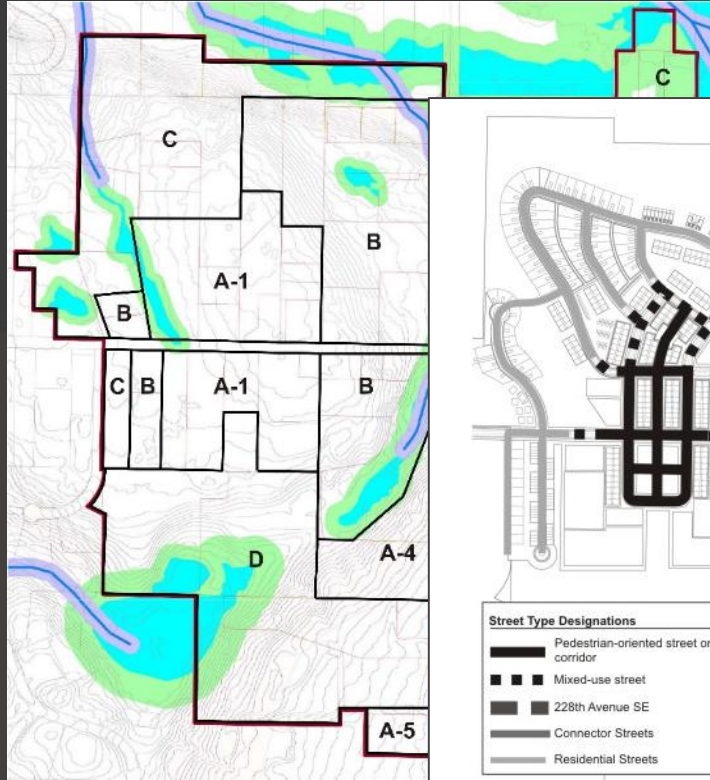
Design Guidelines for site & building design goals



Chelan Downtown Code



Sammamish Town Center







Code Initiation Sprints

Assessment

- What's not working?
- Is it implementing the comprehensive plan?

Assessment

Implementing recently adopted comprehensive or subarea plan?

- Clark County Hwy 99
- Ellensburg
- Anacortes
- Mountlake Terrace

ANACORTES



Comprehensive Plan 2016



July, 2016

Title 18
LAND USE CODE*

Chapters:

- 18.01 General Provisions
- 18.02 Definitions
- 18.03 Administration
- 18.04 Procedures
- 18.05 Enforcement
- 18.06 Establishment of Zoning Districts
- 18.07 Required Development and Design Standards
- 18.08 Nonconforming Situations
- 18.09 Parking
- 18.10 Environmental Protection
- 18.11 Signs
- 18.12 Landscaping and Tree Preservation
- 18.13 Subdivisions
- 18.14 Annexations
- 18.15 Transportation Concurrency Management



2017 Elected Officials
 Mayor
 Fred Butler
 Council
 Stacy Goodman, Council President
 Mary Lou Pauly, Deputy Council President
 Eileen Barber
 Mariah Reiffen

Grand Ridge Urban Design Guidelines

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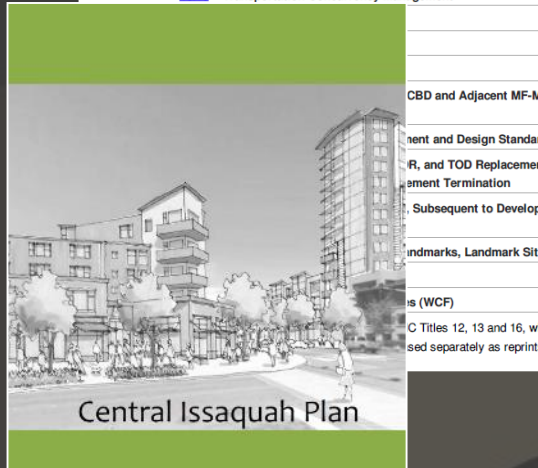
CENTRAL ISSAQUAH
Architecture & Urban Design Manual

City of Issaquah, Washington

Adopted by
Issaquah City Council
December 18, 2017

Goals for new Title 18

1. Clearer & more concise language, greater predictability
2. Enhanced code organization & usability
3. Improved consistency with adopted plans
4. Incorporate new code for Green Necklace implementation
5. Integrate CIDDS, Talus & Highlands into single land use code
6. Reduction of varying requirements by neighborhood



Central Issaquah Plan



CITY OF ISSAQUAH
2018 PARKS STRATEGIC PLAN



- 7.0 _____
- 8.0 _____
- 9.0 _____
- 10.0 _____

Highlands
Introduction

Guidelines, Development Standards

goals.
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mercial Association Architectural Review C
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Chapter 18.19BC Talus

Introduction

- 18.19C.010 Purpose.
- 18.19C.020 Intent.
- 18.19C.030 Scope and applicability.
- 18.19C.040 Interpretations and conflicts.
- 18.19C.050 Definitions.

Goals, Guidelines, Development Standards

- 18.19C.100 Planning goals.
- 18.19C.110 Urban Village Design Guidelines.
- 18.19C.120 Homeowner's or Commercial Association Architectural Review Committee (ARC).
- 18.19C.130 Zoning districts and permitted land uses.
- 18.19C.140 District standards.
- 18.19C.200 Hillside sites.
- 18.19C.210 Site walls.
- 18.19C.220 Parks and plazas.
- 18.19C.230 Trails.
- 18.19C.240 Single family and townhouse standards.
- 18.19C.250 Woonerf standards.
- 18.19C.260 Home occupations standards.
- 18.19C.270 Processing of applications including adjustments and modifications of standards.
- 18.19C.280 Vesting of permits.

Figures and Attachments

- Figure 1: Talus Land Use Map
- Figure 2: Talus Zoning Map and Chart
- Figure 3: Talus Parks Location Map
- Figure 4: Talus Trails Plan
- Attachment 1: Talus Appendix A – Planning Goals
- Attachment 2: Talus Appendix B – Urban Village Design Guidelines

General Known Issues

- ✓ Changing community character from rural town to small city, many of the base standards were established in the 1970's with some updates since – need standards updated for changed conditions.
- ✓ Infill supportive provisions which respect community character of existing development, e.g. transitions between differing intensities such as edge conditions of B-3 and R districts. Consideration of how transitions happen within districts.
- ✓ Accessory buildings
- ✓ Accessory dwelling units – general applicability of standards
- ✓ Differentiating zoning districts for long standing developed area and new areas.
- ✓ Solar and other sustainability features including water conservation, stormwater management practices and LED lighting
- ✓ Arterials setback standards
- ✓ Update of design standards and integration into districts rather than as overlays
- ✓ Consider adjustments for site planning thresholds
- ✓ PUD – Overlay, separate district or use
- ✓ Open Space and park land clarity for code users
- ✓ Affordable Housing incentives
- ✓ No infill development regulations
- ✓ No mixed use infill zone district or infrastructure standards
- ✓ Interface between B-3 zone district and historic residential neighborhoods



Objectives

- What's most important?
- What's workable?
- Involve the code users
- Communicate

Keys to a Good Code

Easy to Use!

Important Code Writing Style and Techniques



Courtesy of

Ryan Walters

Land Use Attorney

Anacortes City Council Member

Tribal Planner

Easy to Use

- Fewer words is better; say things only once

Easy to Use

- Fewer words is better; say things only once
- Be consistent
 - Adopt a naming convention
 - Use lists and tables

~~4.1 Intent~~

~~The intent of this Chapter is to establish building design standards that create a vibrant, Pedestrian Friendly, built environment through buildings designed to frame and engage the Public Realm. Through varied building styles, materials, colors and heights, buildings will contribute to a livable environment that attracts businesses and in particular residences to the valley floor. These design standards support and complement the other Chapters in this document.~~

5.4.1 Purpose

- A. To ensure that buildings portray a sense of high architectural integrity.
- B. To ensure that new buildings are appropriately designed for the site, address human scale, and become a positive element in the architectural character of the neighborhood.
- C. To ensure that new buildings use high-quality building materials and architectural finishes in a manner that exemplifies craftsman quality and durability.

Easy to Use

- Fewer words is better; say things only once
- Be consistent
 - Adopt a naming convention
 - Use lists and tables
- **Break up the code into manageable chunks**

Easy to Use

- Fewer words is better; say things only once
- Be consistent
 - Adopt a naming convention
 - Use lists and tables
- Break up the code into manageable chunks
- **Focus attention on substantive decision points**

Easy to Use

- Fewer words is better; say things only once
- Be consistent
 - Adopt a naming convention
 - Use lists and tables
- Break up the code into manageable chunks
- Focus attention on substantive decision points
- **Definitions**
 - Don't define obvious words
 - Don't define words to mean something other than their normal English definition
 - Always, always use the same words in the same way

Easy to Use

- **Use Plain Language**

Prefer normal English words over archaisms:

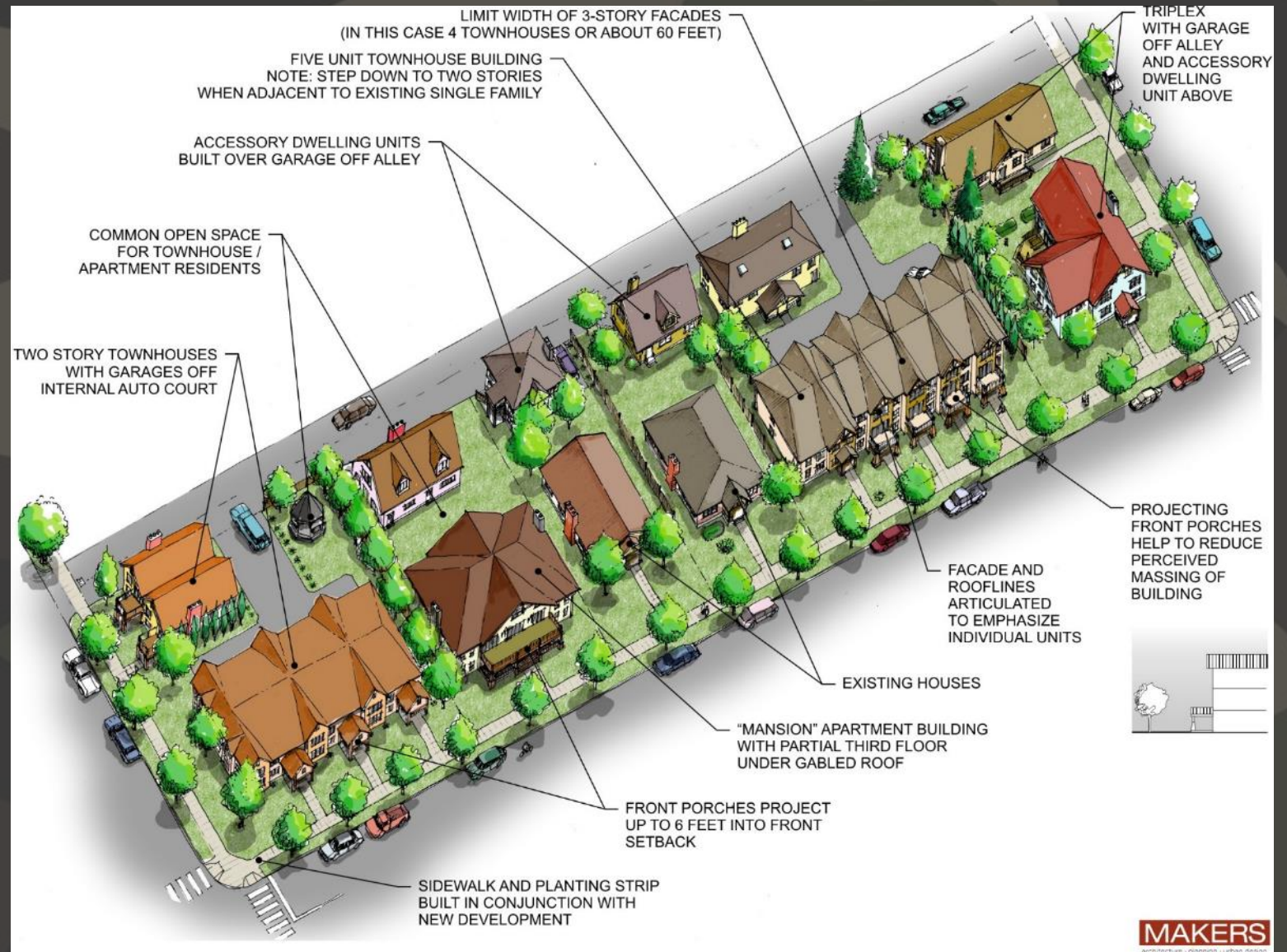
Shall, will → Must, may

Provided that → Except

Notwithstanding → Despite

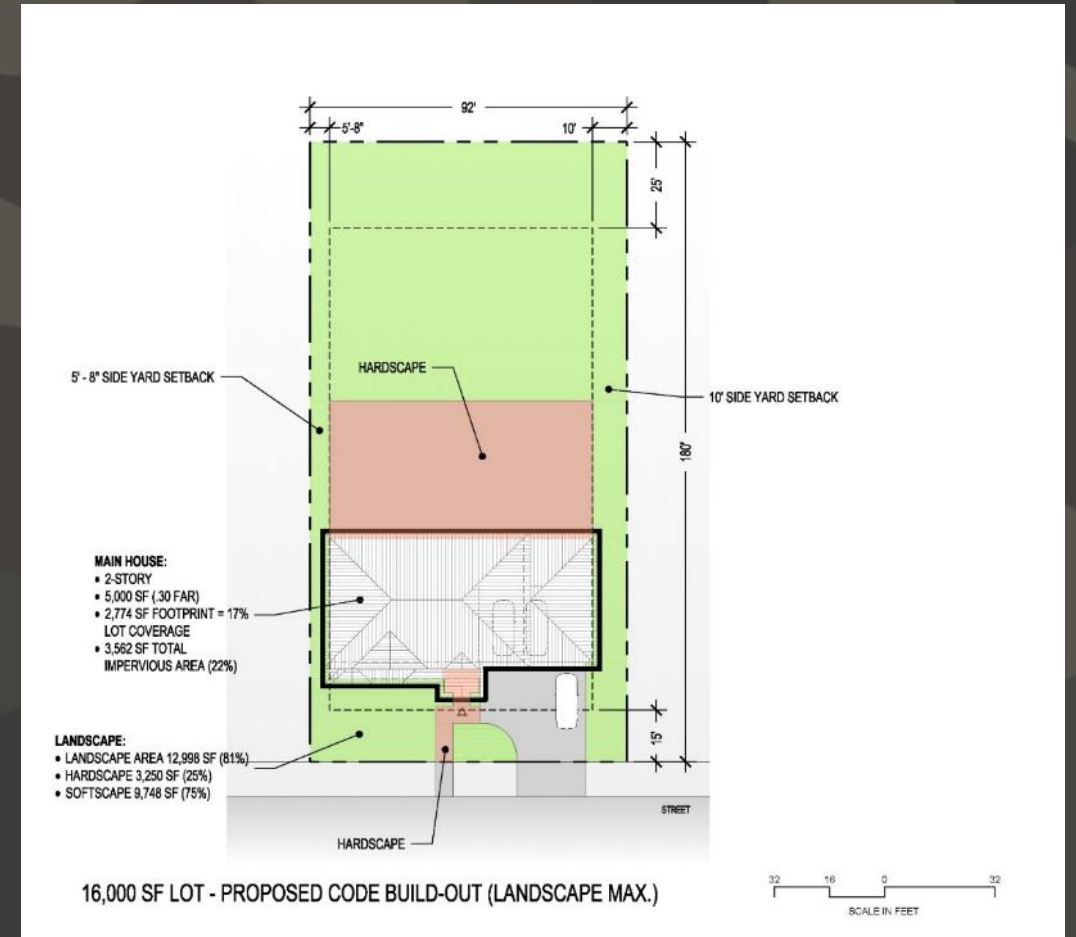
Assure/insure → Ensure

Test It!



Test It!

Mercer Island

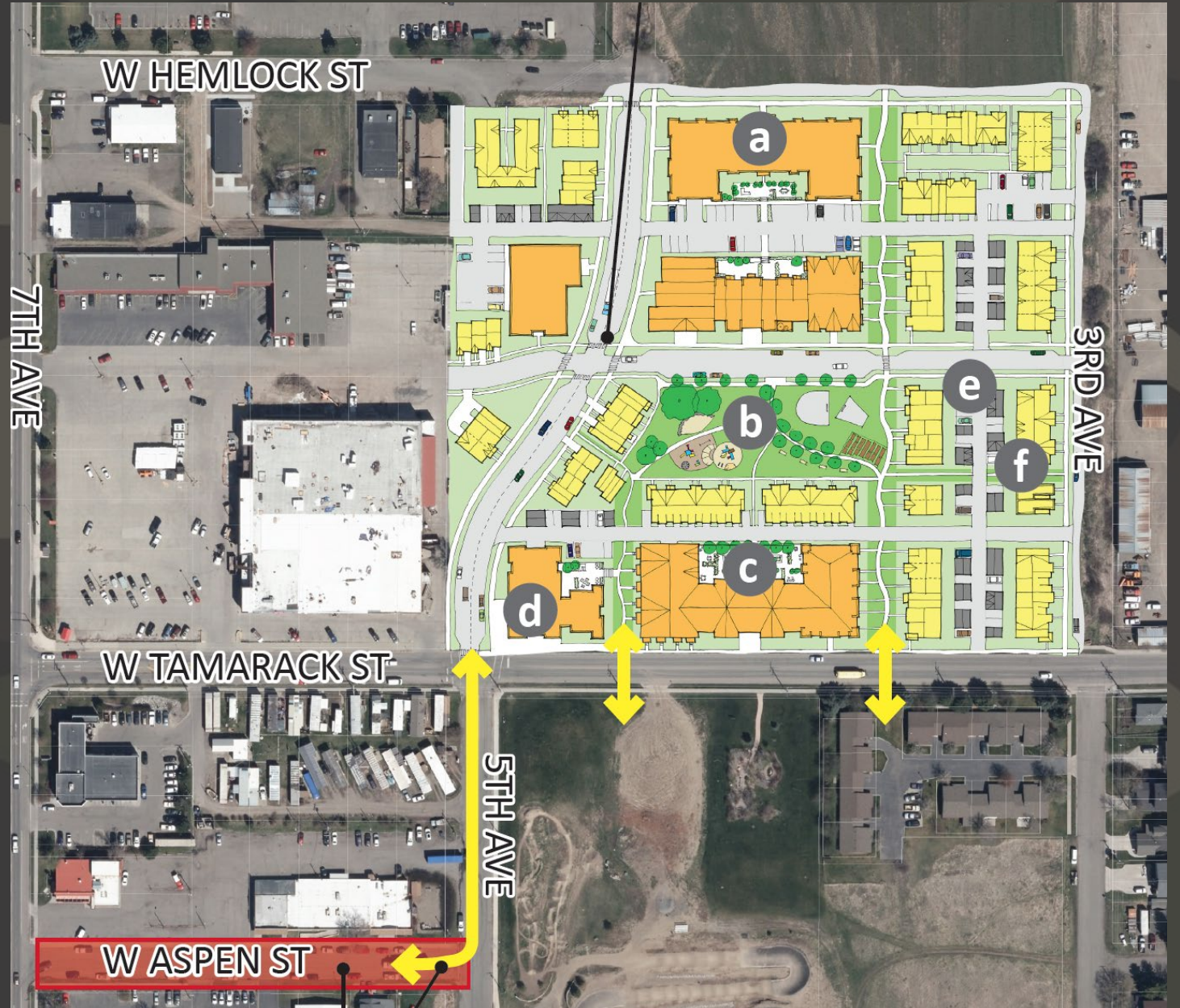


Test It!



Test It!

Bozeman



Test It!

Anacortes

Floor Area Ratio (FAR)

How It Works

NEW

The maximum Floor Area Ratio (FAR) standard limits the amount of building floor area that can be built proportional to the size of the lot. FAR has been removed from the mixed-use and industrial zones and added to the residential zones as an effective way to manage bulk and massing of Anacortes's neighborhoods.

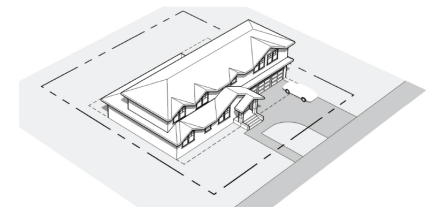
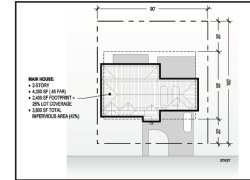
The definition from the draft code is:
 "Floor area ratio (FAR)" refers to the floor area of all buildings on a lot divided by the area of that lot. See AMC 19.42.060 for details on certain floor areas that are excluded from FAR calculations.

Proposed FAR Standards by Zone

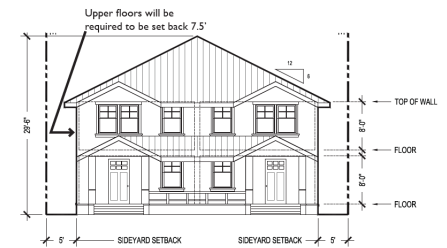
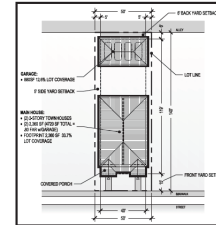
R1	R2	R2A	R3	R3A	R4	R4A	OT
0.40	0.45	0.45	0.80	0.80	1.20	1.0	0.50

What does FAR look like?

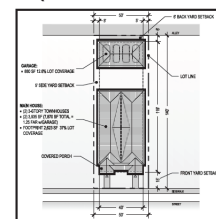
0.45 (R2 zone maximum)



0.80 (R3 zone maximum)

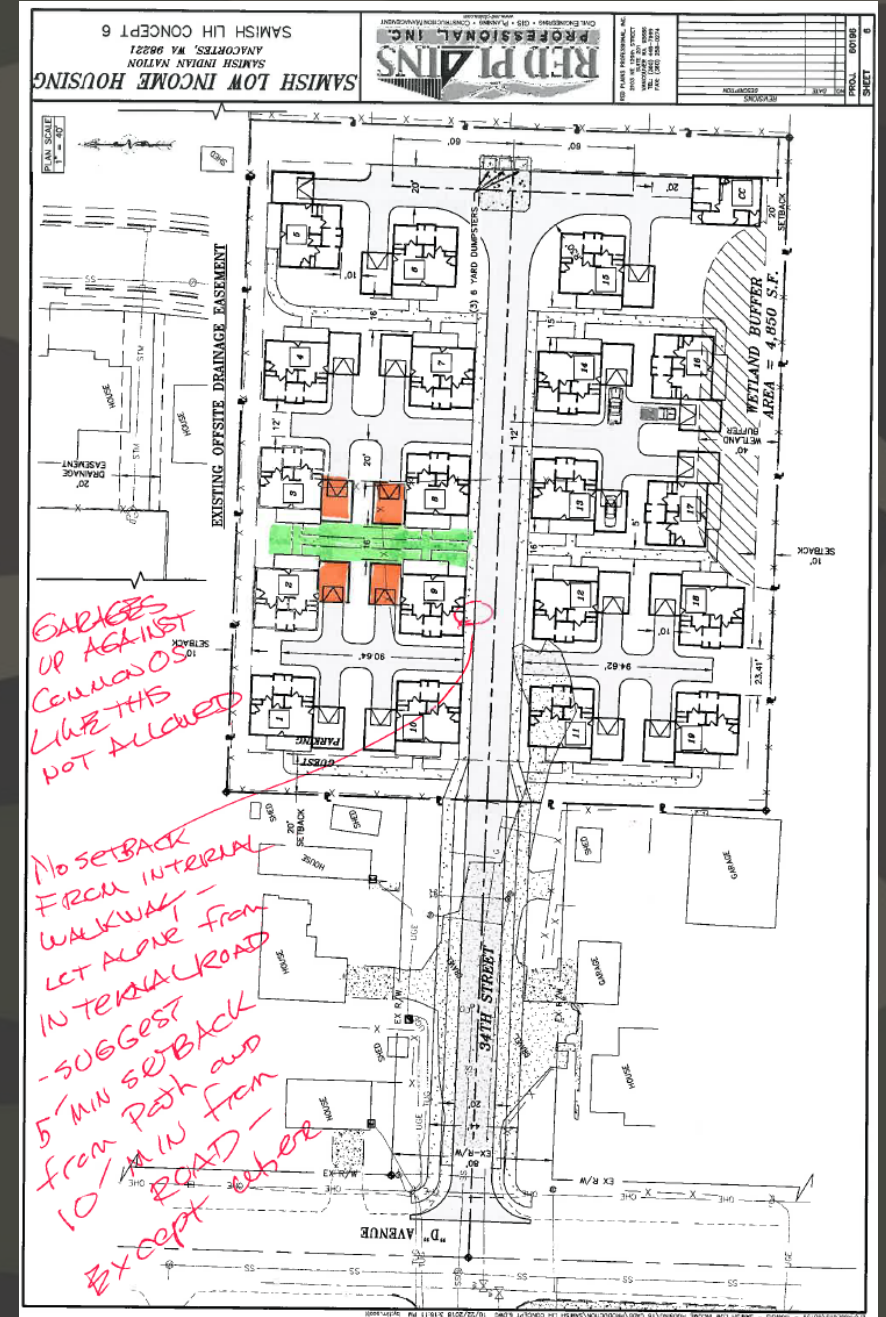
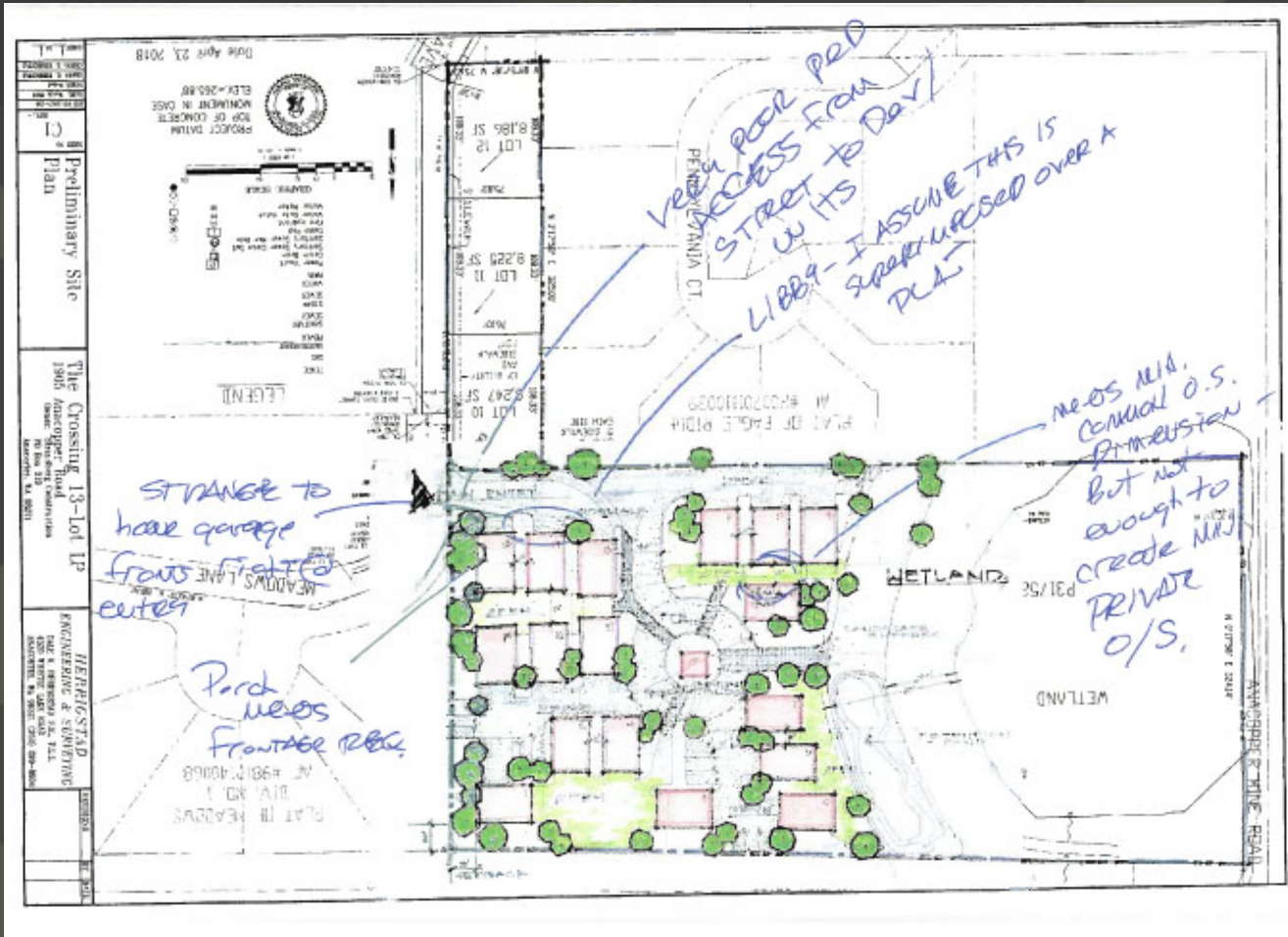


1.25 (R4 zone maximum is 1.20)



Test It!

Anacortes



Illustrate It!

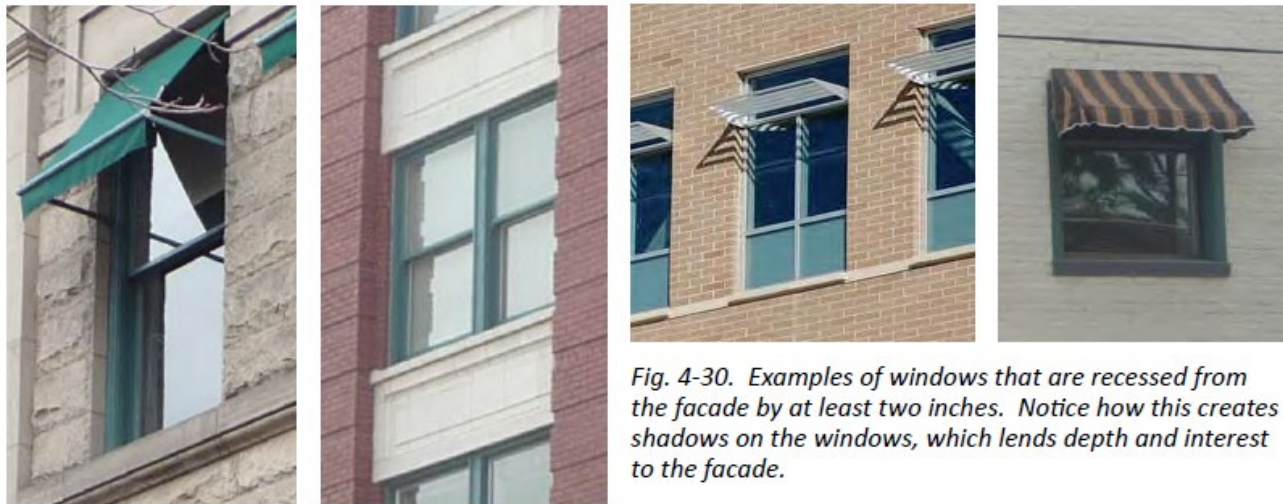
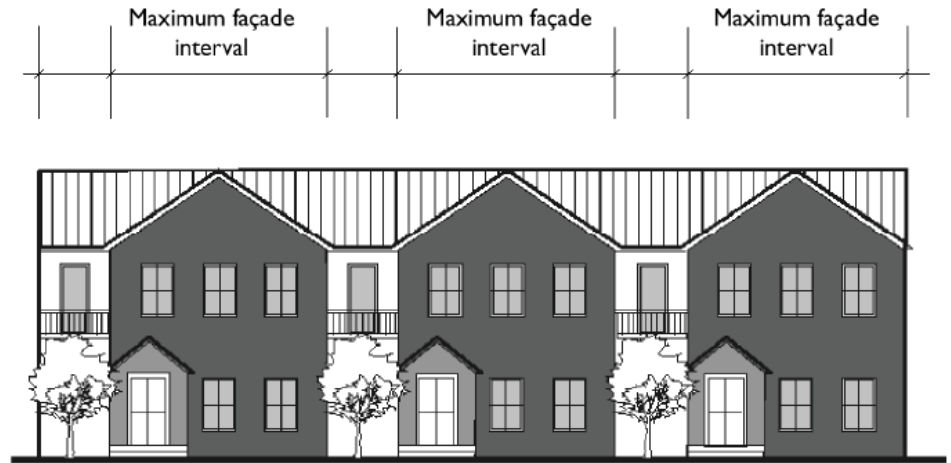


Fig. 4-30. Examples of windows that are recessed from the facade by at least two inches. Notice how this creates shadows on the windows, which lends depth and interest to the facade.



Fig. 4-32. Example of window without sufficient depth or trim.

Figure 19.63.030(C-2)
Residential façade articulation examples.



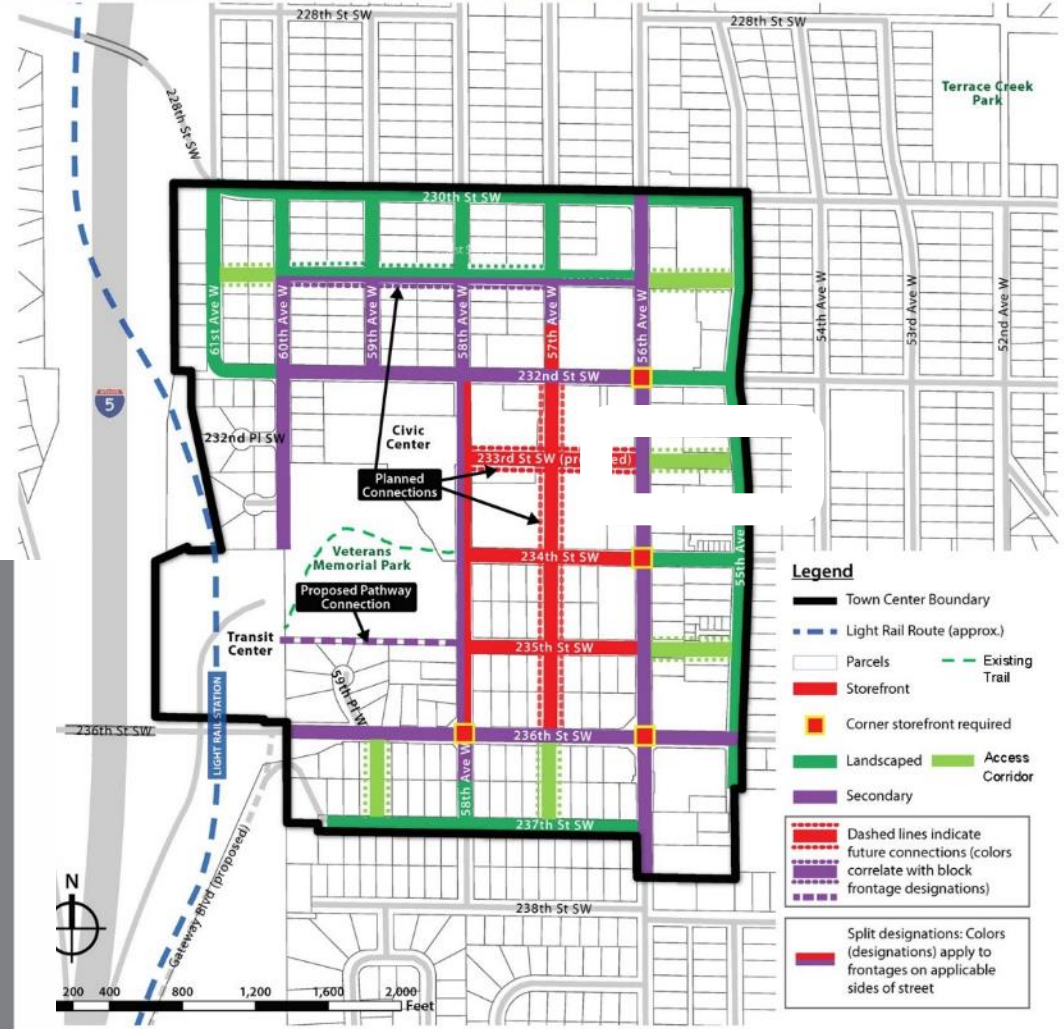
Below examples (except bottom right image) use a combination of vertical building modulation, window patterns, material changes, and roofline modulation.



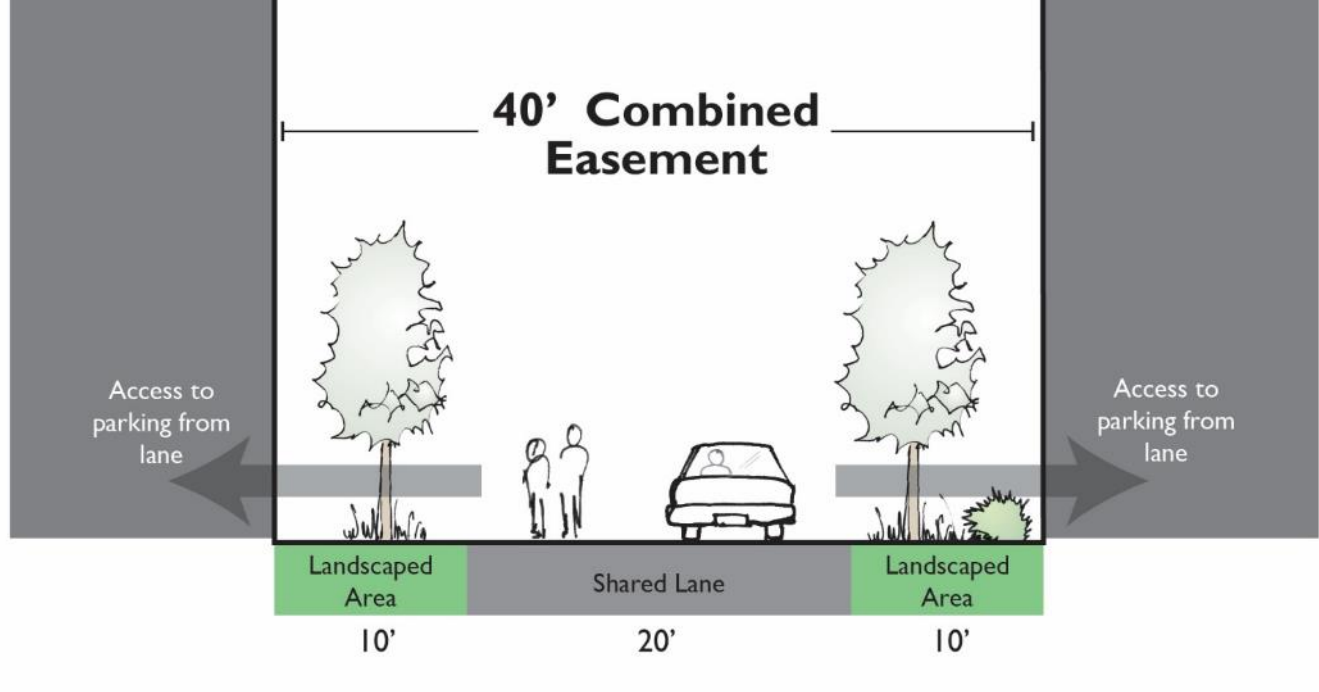
Illustrate It!

Mountlake Terrace

PROPOSED BLOCK FRONTAGE DESIGNATIONS



re 5.9 Proposed Town Center block frontage designations.



Illustrate It!

South Tukwila

Figure 2.1.C.2

Additional examples of ground-level residential frontages close to sidewalks, internal pathways, and open spaces.



Good examples: Image A includes a stoop design with brick terraced planters and low wrought iron fences. Images B and C includes low wrought iron fences that separate the common open space from the private open space/sidewalk. Images D and E include stoop designs with sidewalk level planters and concrete terrace planters.



Bad examples: Despite the raised ground level, the shallow setback design in Image F is insufficient to meet the intent of the standards. In Image G, the upper level building cantilever doesn't meet the standards and creates a cold "cave stoop" like form. The large areas of unscreened concrete walls in both examples are undesirable.



Anacortes

Integrating user-friendly tables WITH graphics!

Table 19.67.040(C)(2) Permitted signs illumination types.			
Illumination Type		Permitted zones	Other requirements
Neon.		All mixed-use and industrial zones	May be incorporated into a permitted wall, projecting, window, pole, or monument sign
Internally-illuminated cabinet signs. Sign face is illuminated through translucent casing. This includes internally illuminated changeable copy signs.		LM, LMI, MS, I & HM	May be incorporated into a permitted wall, pole, pylon, or monument sign
Digital message signage.		All mixed-use and industrial zones, except CBD	Only allowed to be integrated on permitted monument and pole signs per AMC 19.67.080(D)
Internally-illuminated awning signs. Awning face is illuminated through awning material.		Not allowed in any zone	
Externally-illuminated sign.		All zones	Illumination techniques must focus the light on the sign and avoid glare to the sky, streets, sidewalks, and other public spaces, and adjacent uses.

Wenatchee

Integrating user-friendly tables WITH graphics!

Table 19.67.060(A) Freestanding sign types and standards.				
Sign type	Location and street setback	Maximum quantity	Maximum height above existing grade	Maximum sign area
<p>Monument sign A sign which is attached to the ground by means of a wide base of solid appearance.</p> <p>See AMC 19.67.080(B) for supplemental design standards.</p> 	5' minimum street setback	<p>1 monument, pylon, or post & arm sign/ lot frontage, except:</p> <p>1 such freestanding sign per 150' of lot frontage where speed limit less than 35 mph</p> <p>1 such freestanding sign per 200' of lot frontage where speed limit 35 mph or greater</p>	<p>See Table 19.67.080(B)(4)</p> <p>In LMI and HM zones within 100' of SR-20 right-of-way, maximum height is 30'</p>	<p>See Table 19.67.080(B)(4)</p> <p>In LMI and HM zones within 100' of SR-20 right-of-way, 1 sq. ft. per linear foot of SR-20 frontage, up to a maximum of 160 sq. ft.</p>
<p>Pylon sign A sign mounted on two posts.</p> 	5' minimum street setback	<p>1 monument, pylon, or post & arm sign/ lot frontage, except:</p> <p>1 such freestanding sign per 150' of lot frontage where speed limit less than 35 mph</p> <p>1 freestanding sign per 200' of lot frontage where speed limit 35 mph or greater</p>	<p>Monument sign standards apply per Table 19.67.080(B)(4) except pylon signs are limited to 8' in height</p> <p>In LMI and HM zones within 100' of SR-20 right-of-way, maximum height is 30'</p>	<p>Monument sign standards apply per Table 19.67.080(B)(4)</p> <p>In LMI and HM zones within 100' of SR-20 right-of-way, 1sf per linear foot of SR-20 frontage, up to a maximum of 160sf</p>

Code Organization

1950's CODE

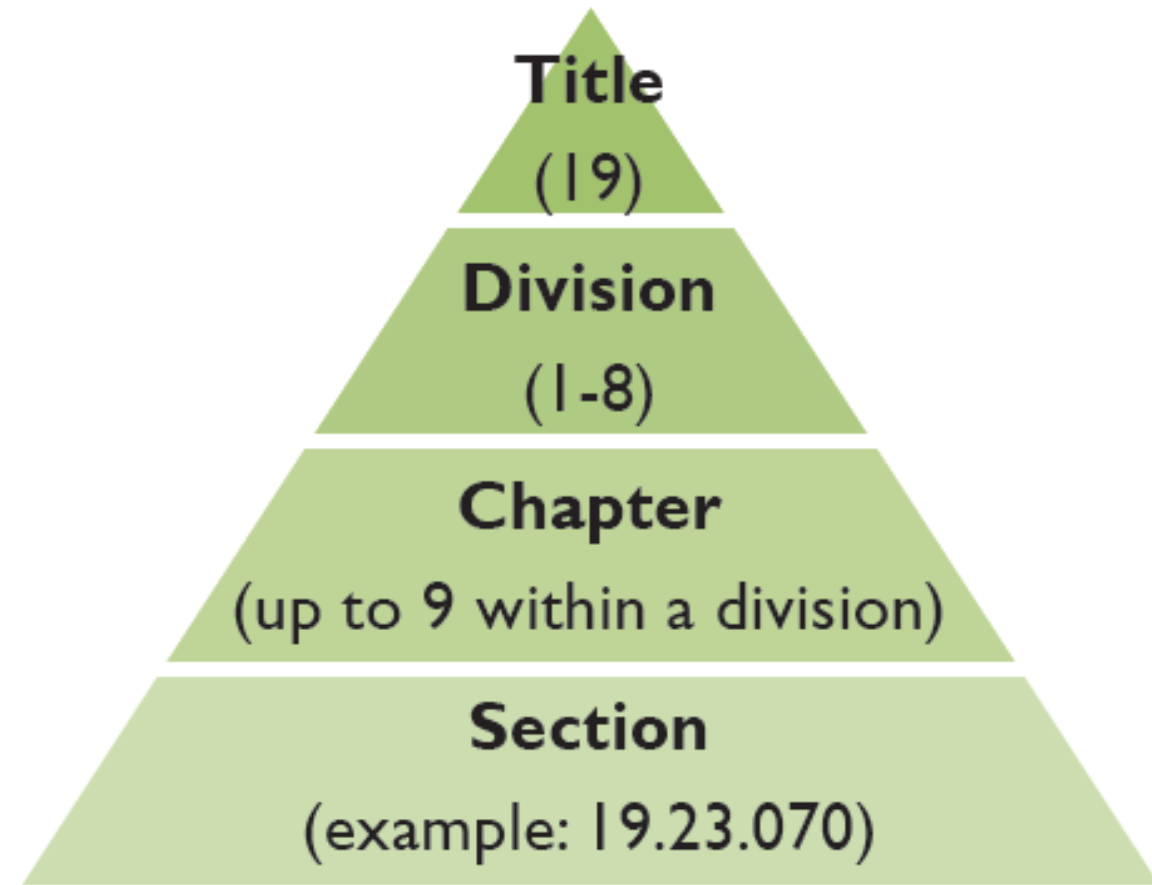


FRESH CODE



Zoning Code Organization

- For complete code overhauls:
- Create a code logical & adaptable organization/numbering hierarchy



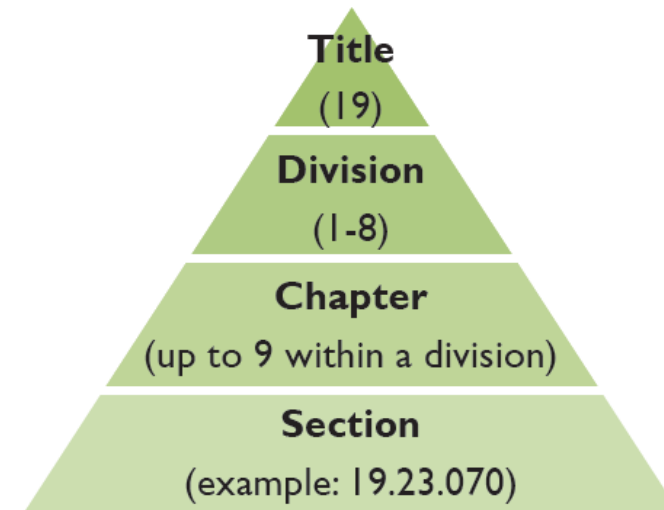
Existing Zoning Code (Title 17)

Chapter 17.04 - GENERAL PROVISIONS - (D1)
Chapter 17.04 - GENERAL PROVISIONS - (D1)
Chapter 17.05 - CONCURRENCY - (D2)
Chapter 17.06 - DEFINITIONS - (D1)
Chapter 17.08 - ADMINISTRATION - (D1)
Chapter 17.10 - BOARD OF ADJUSTMENT, PLANNING COMMISSION, AND CONDITIONAL USES - (D1 & D3)
Chapter 17.12 - ZONES, MAPS, AND BOUNDARIES - (D4)
Chapter 17.14 - AMENDMENTS AND REZONES - (D1)
Chapter 17.15 - HEAVY MANUFACTURING USE DISTRICT (HM) - (D4)
Chapter 17.17 - MANUFACTURING AND SHIPPING DISTRICT (MS) - (D4)
Chapter 17.18 - LIGHT MANUFACTURING USE DISTRICT (LM) - (D4)
Chapter 17.19 - LIGHT MANUFACTURING 1 USE DISTRICT (LM1) - (D4)
Chapter 17.20 - CENTRAL BUSINESS USE DISTRICT (CBD) - (D4)
Chapter 17.21 - COMMERCIAL MARINE DISTRICT (CM) - (D4)
Chapter 17.22 - COMMERCIAL MARINE 1 DISTRICT (CM1) - (D4)
Chapter 17.23 - COMMERCIAL MARINE 2 DISTRICT (CM2) - (D4)
Chapter 17.24 - COMMERCIAL DISTRICT (C) - (D4)
Chapter 17.26 - PUBLIC USE DISTRICT (P) - (D4)
Chapter 17.27 - OLD TOWN OVERLAY DISTRICT - (D4)
Chapter 17.28 - RESIDENTIAL HIGH DENSITY DISTRICT (R4) - (D4)
Chapter 17.30 - RESIDENTIAL HIGH DENSITY A DISTRICT (R4A) - (D4)
Chapter 17.32 - RESIDENTIAL HIGH DENSITY B DISTRICT (R4B) - (D4)
Chapter 17.34 - RESIDENTIAL MEDIUM DENSITY DISTRICT (R3) - (D4)
Chapter 17.36 - RESIDENTIAL DISTRICT (R2) - (D4)
Chapter 17.38 - RESIDENTIAL DISTRICT (R1) - (D4)
Chapter 17.39 - AERONAUTICAL ZONE DISTRICT (AZ) - (D4)
Chapter 17.40 - SIGNS - (D6)
Chapter 17.41 - LANDSCAPING REQUIREMENTS - (D6)
Chapter 17.42 - SUBDIVISIONS AND REPLATS - (D2 and D5)
Chapter 17.44 - PLANNED UNIT DEVELOPMENT (X) AND COTTAGE HOUSING - (D6)
Chapter 17.46 - PARKING - (D6)
Chapter 17.48 - ACCESSORY BUILDINGS, STORAGE, AND DOCKS - (D4)
Chapter 17.49 - HAZARDOUS WASTE TREATMENT AND STORAGE FACILITIES - (D4)
Chapter 17.50 - EXCAVATIONS - (D4)
Chapter 17.52 - FENCES, WALLS, AND HEDGES - (D4)
Chapter 17.54 - STANDARDS—GENERALLY - (D6)
Chapter 17.56 - ANNEXATION - (D1)
Chapter 17.58 - UNZONED LAND - (D4)
Chapter 17.60 - NONCONFORMING USES - (D4)
Chapter 17.62 - PUBLIC HEARINGS - (D2)
Chapter 17.63 - WIRELESS TELECOMMUNICATIONS TOWERS AND ANTENNAS - (D4)
Chapter 17.64 - SPECIAL USES - (D4)
Chapter 17.66 - PENALTIES FOR VIOLATION - (X)
Chapter 17.67 - APPENDICES - (X)
Chapter 17.70 - CRITICAL AREA REGULATIONS - (D7)
Chapter 17.74 - DEVELOPMENT AGREEMENT FOR PORT-OWNED PROPERTY - (D8)
Chapter 17.75 - ESSENTIAL PUBLIC FACILITIES - (D4)

Proposed Zoning Code (Title 19)

Division 1 – General Legislative Provisions (City Staff)
Division 2 – Procedures (City Staff)
Division 3 – Permits (City Staff)
Division 4 – Zoning & Land Uses (MAKERS)
Division 5 – Community Design (MAKERS)
Division 6 – Project Design (MAKERS)
Division 7 – Environment (City Staff)
Division 8 – Development Agreements (City Staff)

The (D#) reference and shading show what division the current chapter will be located in.







Land Use Reverse Lunges

Land Use/Zoning Components

- District intent statements
- Permitted uses
- Density & dimensional standards
- Special use standards

Zoning District Intent Statements

- Keep the intent statements at a high level
- Don't put regulations in the intent statements
- Provide some useful locational criteria
- Tie the zone to the Comprehensive Plan

3.1.5 Residential Districts & Map Designations

A. Residential Existing Districts 1-5 (RX)

1. The RX districts are intended to retain the single-family residential character of established Waxhaw neighborhoods.
2. Use of this district is appropriate for:
 - a. Areas designated X1 (Existing Neighborhood) in the comprehensive plan; or
 - b. Other areas characterized by and/or approved as single-family residential development with a consistent range of lot sizes.

B. Residential Woodland District (RW)

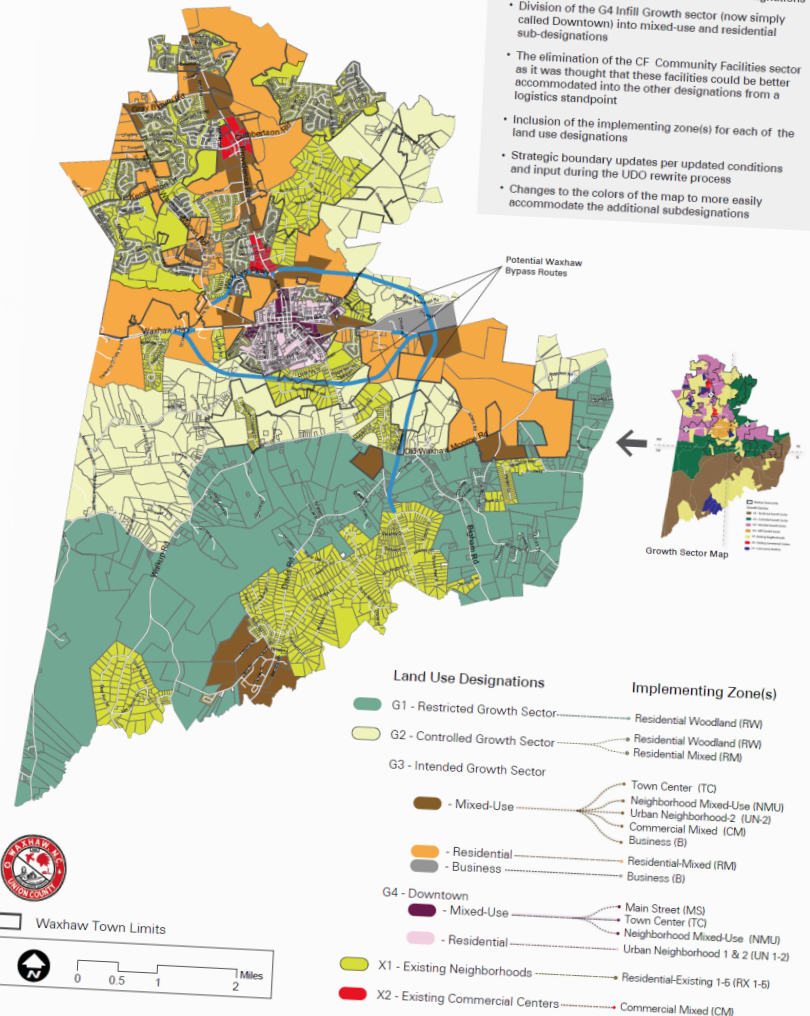
1. The RW district applies to rural woodland areas that are outside of utility service that intended to maintain the rural woodland character or preserve the opportunity for urban levels of development once urban services are extended into the area.
2. Use of the RW district is appropriate for:
 - a. Areas designated G1 (restricted growth) in the comprehensive plan; and
 - b. Areas designated G2 (controlled growth) in the comprehensive plan.

WAXHAW FUTURE LAND USE PLAN

APPROVED, October 26, 2016

The draft map below uses the elements of the Growth Sector Map (copied below) in the latest draft of the Comprehensive Plan update and adds a finer level of detail to help guide the City's zoning map decisions. Key updates from the Growth Sector Map include:

- Division of the G3 Intended Growth sector into mixed-use, residential, and business sub-designations
- Division of the G4 Infill Growth sector (now simply called Downtown) into mixed-use and residential sub-designations
- The elimination of the CF Community Facilities sector as it was thought that these facilities could be better accommodated into the other designations from a logistics standpoint
- Inclusion of the implementing zone(s) for each of the land use designations
- Strategic boundary updates per updated conditions and input during the UDO rewrite process
- Changes to the colors of the map to more easily accommodate the additional subdesignations



Clear & Simple Use Charts

Land Uses	ZONING DISTRICTS																
	CONSERVANCY/ RECREATION	RESIDENTIAL							COMMERCIAL				FACILITIES			MIN	
		C-Res	SF-E	SF-S	SF-SL	SF-D	MUR	MF-M	MF-H	PO	CBD	MU	R	IC	CF-F	CF-R	CF-OS
AUTOMOTIVE⁴																	
- Automobile Emission Testing Facility																	1
- Automobile Insurance Service Center									1		2	2	1				
- Auto and Truck Maintenance/Service Shops											2	2	1				
- Car Wash											2	2	1				
- Auto Parts and Accessories (tires, batteries, etc.)	<i>See Retail/Service</i>																
- Automobile Service Station ²										3	3	3	3	1			
- Automobile and Truck Rental ¹												3	3	1			
- Automobile and Truck Sales/Dealership ¹														1			
- Automotive Wrecking or Dismantling Yard ^{1, 4}														2			
- Large Vehicle and Heavy Equipment Sales/Dealership ¹ (RV, tractor trailer, construction equipment, etc.)														1			

DISTRICT KEY:

SF-D = Single Family Duplex	PO = Professional Office	CF = Community Facilities
C-Rec = Conservancy Recreation (7.26 or 14.52 du/acre)	CBD = Cultural and Business District	CF-OS = Open Space
C-Res = Conservancy Residential (7.26 du/acre)	R = Retail Commercial	CF-R = Recreation
SF-SL = Single Family Small Lot (7.26 du/acre)	IC = Intensive Commercial	CF-F = Facilities
MUR = Mixed Use Residential	MU = Mixed Use	
SF-E = Single Family Suburban Estates (1.24 Density du/acre)	M = Mineral Resource	
MF-M = Multifamily Medium Density (14.52 du/acre)		
MF-H = Multifamily High Density (29 du/acre)		
Suburban (4.5 du/acre)		

FOOTNOTES KEY:

- See Design Checklist for screening requirements.
- Service stations require a three hundred (300) foot distance radius from any children's state-licensed school facility, including day care, preschool and grades K through 12.
- Parking lots and garage (commercial) only permitted in the Community Facilities zone as an accessory use.
- In all CARA classes, vehicle repair and servicing must be conducted indoors over impermeable pads. Underground storage tanks (UST) with hazardous substances are required to demonstrate to the City that the facility complies with federal and state laws. No dry wells shall be allowed. Wrecking yards are prohibited in Class 1, 2 and 3 CARA.

PERMITTED USE & LEVEL OF REVIEW KEY:

0 = Level 0 Review; 1 = Level 1 Review*; 2 = Level 2 Review*; 3 = Level 3 Review, regardless of size/location of parcel; 4 = Level 4 Review; 5 = Level 5 Review; NO NUMBER = NOT PERMITTED

*Level 3 Review required if Level 1 or 2 proposal is ≥ three (3) acres and < fifteen (15) acres. Level 3 Review is also required for Level 1 or Level 2 proposals located on Front St., Sunset Way, NW Maple St., Newport Way, Gilman Blvd. (east of SR 900), SR 900, NW Sammamish Rd., East Lake Sammamish Parkway (ELSP), SE 56th Street west to one thousand two hundred (1,200) feet east of ELSP, Issaquah-Fall City Road, Issaquah-Pine Lake Road SE, 228th Avenue SE, SE 43rd Way, West Lake Sammamish Parkway (WLSP) or any street or street segment that abuts and is generally parallel to Interstate 90 (I-90), or the site abuts I-90; see Chapter 18.04 IMC, Procedures, for details on levels of review; provided, that this provision shall not apply to property subject to Ordinance 2311, Olde Town Design Standards, as amended by Ordinance 2352. The level of review designated on the Table of Permitted Land Uses is required for property subject to the Olde Town Design Standards.

*Level 5 Review required if project is > fifteen (15) acres.

Critical Aquifer Recharge Areas/Well Head Protection. Any proposed uses within critical aquifer recharge areas that have the potential to degrade water quality in the CARA may be prohibited, or conditioned as established in IMC 18.10.796, Critical aquifer recharge areas (CARAs), and Chapter 13.29 IMC, Groundwater Quality Protection Standards.

Nonresidential uses that were permitted and established in the MUR Mixed Use Residential District prior to June 1, 2006, may continue as permitted uses. All subsequent MUR uses shall comply with this table.

Clear & Simple Use Charts

Uses	ZONING DISTRICTS														
	CONSERVANCY/ RECREATION	RESIDENTIAL						COMMERCIAL			FACILITIES			MIN	
		C-Res	SF-E	SF-S	SF-SL	SF-D	MUR	MF-M	MF-H	PO	CBD	MU	CF-R	CF-F	CF-OS
AUTOMOTIVE¹															
- Automobile Emission Testing Facility															1
- Automobile Insurance Service Center										2	2	1			
- Auto and Truck Maintenance/Service Shops										2	2	1			
- Car Wash										2	2	1			
- Auto Parts and Accessories (tires, batteries, etc.)	See Retail/Service														
- Automobile Service Station ²										3	3	3	3	1	
- Automobile and Truck Rental ¹											3	3	1		
- Automobile and Truck Sales/Dealership ¹													1		
- Automotive Wrecking or Dismantling Yard													2		
- Large Vehicle Heavy Equipment Sales/Dealership ¹ (RV, tractor, trailer, construction equipment, etc.)													1		

DISTRICT KEY:

SF-D = Single Family Duplex (7.26 or 14.52 du/acre)	PO = Professional Office	CF = Community Facilities
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SF-SL = Single Family Small Lot (7.26 du/acre)	R = Retail Commercial	CF-R = Recreation
MUR = Mixed Use Residential	IC = Intensive Commercial	CF-F = Facilities
MF-M = Multifamily Medium Density (14.52 du/acre)	MU = Mixed Use	
MF-H = Multifamily High Density (29 du/acre)	M = Mineral Resource	

FOOTNOTES KEY:

- See Design Checklist for siting requirements.
- Service stations require a three hundred (300) foot distance radius from children's state-licensed school facility, including day care, preschool and grade school through 12.
- Parking lots and garage (commercial) are permitted in the Community Facilities zone as an accessory use.
- In all CARA classes, vehicle repair and servicing must be conducted indoors over impermeable pads. Underground storage tanks (UST) with hazardous substances are required to demonstrate to the City that the facility complies with federal and state laws. No dry wells shall be allowed. Wrecking yards are prohibited in Class 1, 2 and 3 CARA.

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0 = Level 0 Review; 1 = Level 1 Review*; 2 = Level 2 Review; 3 = Level 3 Review, regardless of size/location of parcel; 4 = Level 4 Review; 5 = Level 5 Review; N/A = NOT PERMITTED

*Level 3 Review required if Level 1 or 2 proposed on ≥ three (3) acres and < fifteen (15) acres. Level 3 Review is also required for Level 1 or Level 2 proposals located on Front St., Sunnyside Way, NW Maple St., Newport Way, Gilman Blvd. (east of Sunnyside), SR 900, NW Sammamish Parkway, East Lake Sammamish Parkway (ELSP), SE 56th Street west to one thousand two hundred (1,200) feet east of ELSP, Issaquah-Fall City Road, Issaquah-Pine Lake Road SE, 228th Avenue, SE 43rd Way, West Lake Sammamish Parkway (WLSP) or any street or street segment that abuts and is generally parallel to Interstate 90 (I-90), or the site abuts I-90; see Chapter 18.04 IMC, Procedures, for details of review; provided, that this provision shall not apply to property subject to Ordinance 2311, Old Town Design Standards, as amended by Ordinance 2352. The level of review designated on the Table of Permitted Uses is required for property subject to the Olde Town Design Standards.

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Critical Aquifer Recharge Areas/Well Head Protection. Any proposed uses within critical aquifer recharge areas that have the potential to degrade water quality in the CARA may be prohibited, or conditioned as established in IMC 18.04 IMC, Critical aquifer recharge areas (CARAs), and Chapter 13.29 IMC, Groundwater Quality Protection Standards.

Residential uses that were permitted and established in the MUR Mixed Use Residential District prior to June 1, 2006, may continue as permitted uses. All subsequent MUR uses shall comply with this table.

19.41.040 - Principal uses permitted in residential zones.

Table 19.41.040 below provides the list of permitted principal uses in residential zones.

NOTE: Accessory uses are not shown in these Principal Use charts. See AMC Chapter 19.47 Accessory Uses and Structures for applicable accessory use provisions.

Table 19.41.040 Principal uses permitted in residential zones.									
Principal Use	R1	R2	R2A	R3	R3A	R4	R4A	OT	Reference
RESIDENTIAL									
Household Living, as listed below									AMC 19.43.010(A)
Single-family	P	P	P	P	P	P	P	P	AMC 19.43.010(B)
Single-family, small lot				P	P	P	P		AMC 19.43.010(C)
Cottage housing		P	P	P	P	P	P		AMC 19.43.010(D)
Duplex		C	P	P	P	P	P	P	AMC 19.43.010(E)
Triplex				C	P	P	P		AMC 19.43.010(F)
Townhouse				C	P	P	P		AMC 19.43.010(G)
Multifamily, 4 units				C	P	P	P		AMC 19.43.010(H) and (I)
Multifamily, 5 or more units						P	P		AMC 19.43.010(H) and (I)
Live-work									AMC 19.43.010(J)
Group Living, as listed below									AMC 19.43.020(A)
Adult family home	P	P	P	P	P	P	P	P	AMC 19.43.020(B)
Assisted living facility				C	C	P	C		AMC 19.43.020(C)
Nursing homes						C			AMC 19.43.020(D)
Rooming houses				C	C	P	P	C	AMC 19.43.020(E)

Use umbrella
(and defined)
use-terms

Split into multiple
charts when
needed

No footnotes!

Table 19.41.050

Principal uses permitted in mixed-use and industrial zones.

Principal Use	CBD	C	MMU	CM	CM2	LM	LMI	MS	I	HM	Reference
Retail Sales, Except as listed below and based on net floor area (NFA)/individual use:											AMC 19.44.120(A)
<5,000 NFA	P	P	P	P	P		P(X)	P		P(X)	(X) AMC 19.44.120(B-C)
5,000-25,000 NFA	P	P	P	P				C			
25,001-50,000 NFA	P	P	C								
>50,000 NFA	C	C	C								

The Details!

Definitions for
uses in the chart

District-specific
standards

Use Type
Standards

Chapter 19.43 - RESIDENTIAL USES

19.43.010 - Household living.

A. Household living use category.

Residential occupancy of a dwelling unit by a household. Household living includes the following uses.

1. Single-family.
2. Single-family, small lot.
3. Cottage housing.
4. Duplex.
5. Triplex.
6. Townhouse.
7. Multifamily, 4 or more units.
8. Live-work.

B. Single-family.

1. Definition. A detached dwelling that is entirely surrounded by open space on the same lot, and which is designed for and occupied exclusively by one family and the household employees of the family, if any.
2. District-specific standards.
 - a. In the CBD and C zones, no new single-family residences may be constructed. Single-family uses are conditionally permitted in these zones if in an existing building that was a single-family residence at some time in its past.
 - b. In the LMI zone single-family uses are permitted only for existing platted lots. In no event will this allow a residential subdivision.
3. Standards - multiple single-family dwellings on one lot. Two or more single-family dwellings may be built on the same lot provided the applicable lot size standard (one dwelling unit/minimum lot area for single-family dwellings) is met. For example, if the minimum lot area for single-family dwellings is 7,500-square-feet, two single-family dwellings could be built on a 15,000-square-foot lot. Applicants must demonstrate how the lot could be subdivided in the future consistent with the density and dimensional standards of this title.

Speaking of Housing.....

Principal uses permitted in residential zones.

Principal Use	R1	R2	R2A	R3	R3A	R4	R4A	OT	Reference
RESIDENTIAL									
Household Living, as listed below									AMC 19.43.010(A)
Single-family	P	P	P	P	P	P	P	P	AMC 19.43.010(B)
Single-family, small lot				P	P	P	P		AMC 19.43.010(C)
Cottage housing		P	P	P	P	P	P		AMC 19.43.010(D)
Duplex		C	P	P	P	P	P	P	AMC 19.43.010(E)
Triplex				C	P	P	P		AMC 19.43.010(F)
Townhouse				C	P	P	P		AMC 19.43.010(G)
Multifamily, 4 units				C	P	P	P		AMC 19.43.010(H) and (I)
Multifamily, 5 or more units						P	P		AMC 19.43.010(H) and (I)
Live-work									AMC 19.43.010(J)

Figure 19.43.010(C)(3)(a)

Key single family - small lot, duplex, and triplex design standards.

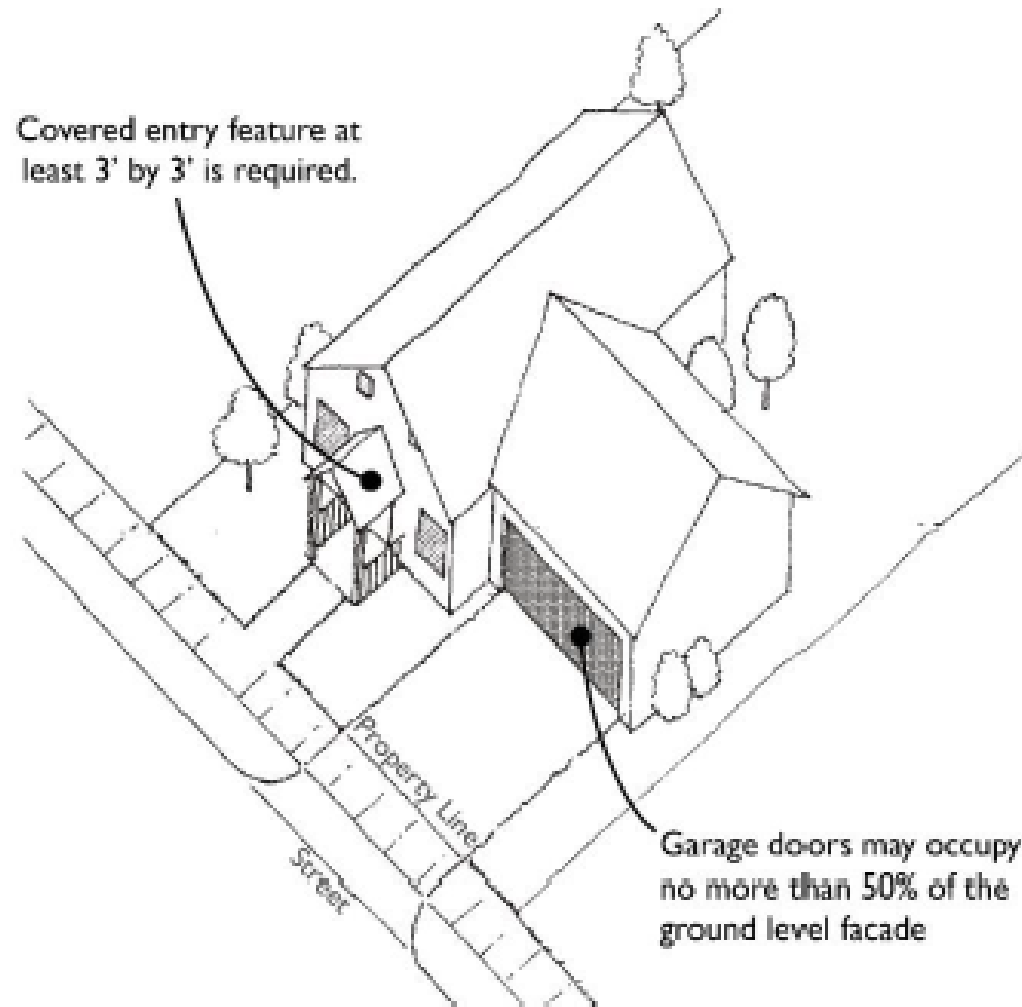


Figure 19.43.010(D)(2) Cottage housing site plan example.

Private internal access road with parking (open and enclosed) placed to the side of cottages

Cottages with porches facing common open space

Private open space

Connected internal pathway system



Shared community building

10' min. separation between cottages

Figure 19.43.010(G)(6)

Acceptable and unacceptable examples of garage/entry configurations.



The left example features a landscaped area and a trellis to highlight the entry. In the middle image, the balconies and landscaped areas deemphasize the garage. In the right image, the lack of landscaping near the entries would not be allowed (where this is the primary pedestrian entry to the unit).

Density & Dimensional Standards

- Again, use live cross-references over footnotes
- Simplify to the extent possible

Table 19.42.020

Form and intensity standards for residential zones.

Measure	R1	R2	R2A	R3	R3A	R4	R4A	OT	Conditions/Reference
LOT SIZE & DEVELOPMENT INTENSITY									
Lot size for single-family dwelling, minimum (square-feet) (AMC 19.42.080)	15,000	7,500	6,000	4,500	3,000	3,000	3,000	6,000	See AMC 19.43.010(C) for standards for lots <5,000sf.
Lot size for duplex, minimum (square-feet) (AMC 19.42.080)		9,000	9,000	7,500	5,000	4,200	4,200	7,500	See AMC 19.43.010(E) for duplex standards.
Additional lot size needed for additional dwelling unit beyond duplex, minimum (square-feet) (AMC 19.42.080)				2,500	2,000		1,200		See AMC 19.43.010(F) and (G) for applicable housing type standards
Minimum lot width circle									Applies to each newly created lot in residential zones. See AMC 19.42.090 for minimum lot width circle calculation and exceptions.
Lot with alley access (feet)	100	60	50	35	25	25	25	45	
Lot without alley access (feet)	100	60	50	40	30	30	30	50	
Density maximum (dwelling units/gross acre)	2	4	6	See lot size min. above		None	18	9	See AMC 19.42.100 for calculating density

Table 19.42.020

Form and intensity standards for residential zones.

Measure	R1	R2	R2A	R3	R3A	R4	R4A	OT	Conditions/Reference
LOT SIZE & DEVELOPMENT INTENSITY									
Lot size for single-family dwelling, minimum (square-feet) (AMC 19.42.080)	15,000	7,500	6,000	4,500	3,000	3,000	3,000	6,000	See AMC 19.43.010(C) for standards for lots <5,000sf.
Lot size for duplex, minimum (square-feet) (AMC 19.42.080)		9,000	9,000	7,500	5,000	4,200	4,200	7,500	See AMC 19.43.010(E) for duplex standards.
Additional lot size needed for additional dwelling unit beyond duplex, minimum (square-feet) (AMC 19.42.080)				2,500	2,000		1,200		See AMC 19.43.010(F) and (G) for applicable housing type standards
Minimum lot width circle									Applies to each newly created lot in residential zones. See AMC 19.42.090 for minimum lot width circle calculation and exceptions.
Lot with alley access (feet)	100	60	50	35	25	25	25	45	
Lot without alley access (feet)	100	60	50	40	30	30	30	50	
Density maximum (dwelling units/gross acre)	2	4	6	See lot size min. above		None	18	9	See AMC 19.42.100 for calculating density

Table 19.42.020

Form and intensity standards for residential zones.

Measure	R1	R2	R2A	R3	R3A	R4	R4A	OT	Conditions/Reference
LOT SIZE & DEVELOPMENT INTENSITY									
Lot size for single-family dwelling, minimum (square-feet) (AMC 19.42.080)	15,000	7,500	6,000	4,500	3,000	3,000	3,000	6,000	See AMC 19.43.010(C) for standards for lots <5,000sf.
Lot size for duplex, minimum (square-feet) (AMC 19.42.080)		9,000	9,000	7,500	5,000	4,200	4,200	7,500	See AMC 19.43.010(E) for duplex standards.
Additional lot size needed for additional dwelling unit beyond duplex, minimum (square-feet) (AMC 19.42.080)				2,500	2,000		1,200		See AMC 19.43.010(F) and (G) for applicable housing type standards
Minimum lot width circle									Applies to each newly created lot in residential zones. See AMC 19.42.090 for minimum lot width circle calculation and exceptions.
Lot with alley access (feet)	100	60	50	35	25	25	25	45	
Lot without alley access (feet)	100	60	50	40	30	30	30	50	
Density maximum (dwelling units/gross acre)	2	4	6	See lot size min. above		None	18	9	See AMC 19.42.100 for calculating density

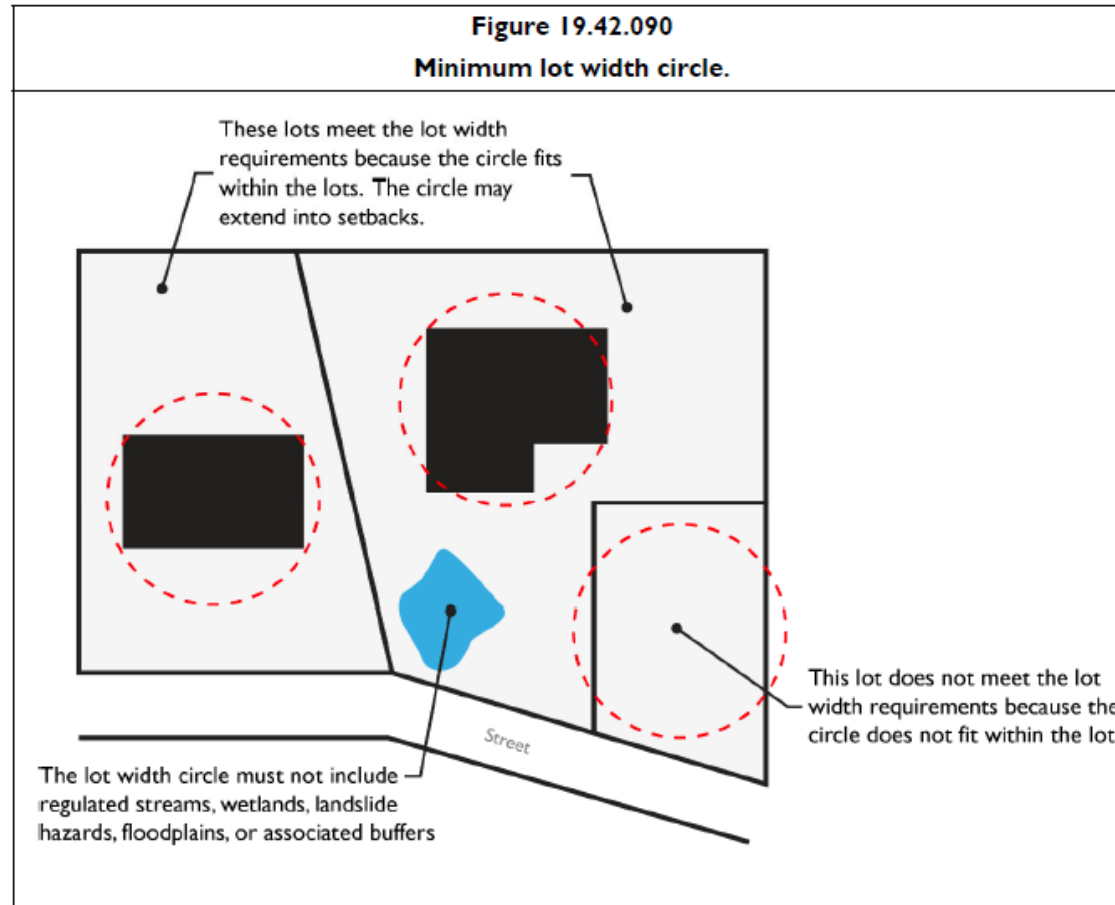
Form and

Measure	RI	R
LOT SIZE & DEVELOPMENT IN		
Lot size for single-family dwelling, minimum (square-feet) (AMC 19.42.080)	15,000	7,5
Lot size for duplex, minimum (square-feet) (AMC 19.42.080)		9,0
Additional lot size needed for additional dwelling unit beyond duplex, minimum (square-feet) (AMC 19.42.080)		
Minimum lot width circle		
Lot with alley access (feet)	100	6
Lot without alley access (feet)	100	6
Density maximum (dwelling units/gross acre)	2	

19.42.090 - Minimum lot width circle calculation and exceptions.

- A. Purpose. The purpose of the minimum lot width circle requirement is to:
1. Ensure that each lot is wide enough to maintain a consistent and compatible land use pattern in residential neighborhoods; and
 2. Ensure that a minimum buildable area is included in each lot created.
- B. Requirement. Table 19.42.020 identifies the minimum lot width circle diameter that must fit within each newly created lot in residential zones. This circle establishes that at least some portion of a lot must be at least as wide as the minimum lot width. The lot width circle must not include submerged lands, landslide hazard areas and buffers, regulated wetlands and buffers, and Category 1, 2, 3 and 4 streams and buffers.
- C. The following lots are exempt from minimum lot width circle standards: Duplexes, triplexes, cottage and townhouse developments, where individual units are subdivided into separate lots via unit lot subdivision.

Figure 19.42.090
Minimum lot width circle.



Reference

19.43.010(C) for
for lots
00sf.

19.43.010(E) for
standards.

19.43.010(F) and
able housing
standards

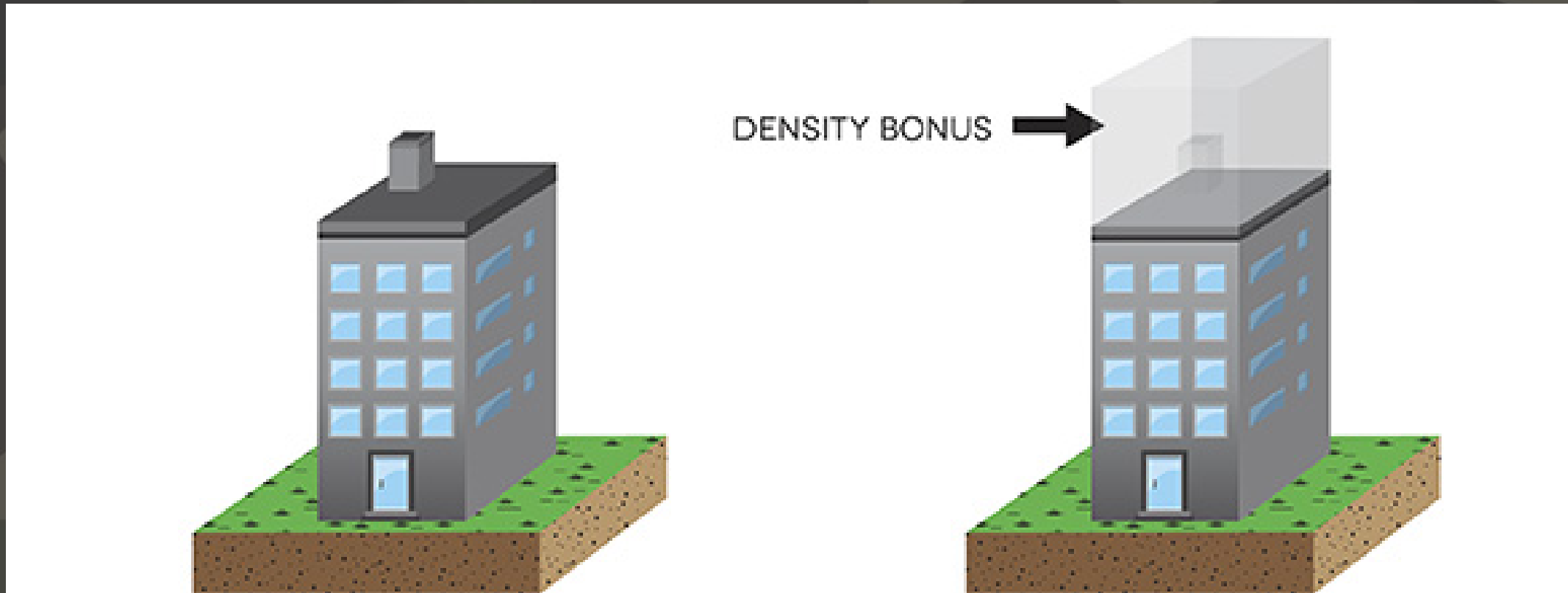
each newly
in residential
19.43.010(C) 19.42.090
in lot width
ulation and
tions.

19.42.100 for
g density

Integrating lot size flexibility – Wenatchee

Standard	RS	RL	RM	RH	RF	Conditions/ Exceptions/ Reference
Minimum Lot Dimensions						
Lot Area						WCC 10.46.060
Standard lot	7,250sf, except 10,000sf for a duplex	5,500sf feet, except 8,000sf for a duplex	3,000sf, except 4,500sf for a duplex	3,000sf, except 4,000sf for a duplex	20,000sf	
Cluster subdivision lot	3,600sf	3,000sf	N/A	N/A		Chapter 11.32 WCC
Maximum Density						
Maximum Density	6 units/acre	8 units/acre	20 units/ acre	40units/ acre	1 units/lot	WCC 10.46.110

Density Bonuses?

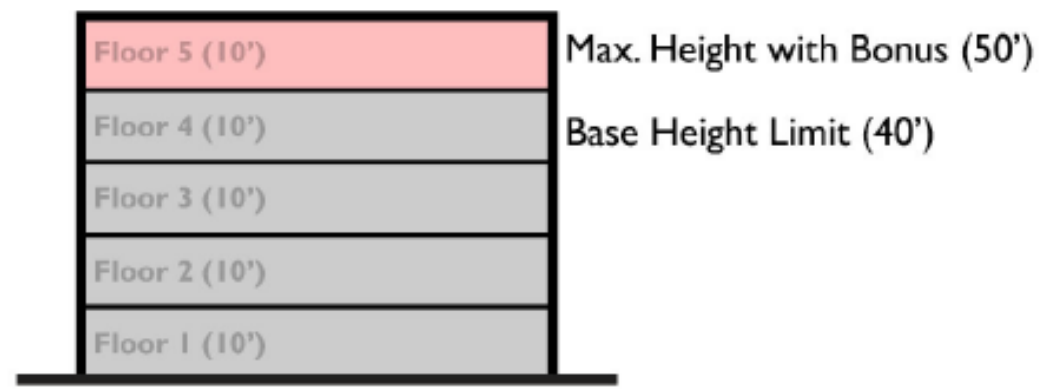


City of North Vancouver

Table 19.42.030

Form and intensity standards for mixed-use and industrial zones.

Measure	CBD	C	MMU	CM	CM2	LM	LMI	MS	I	HM	Conditions/ Reference
LOT SIZE & DEVELOPMENT INTENSITY											
Density minimum (dwelling units/gross acre)	15	15	15(×)								See AMC 19.42.100 (×) East of Q Avenue only
Maximum building size without a conditional use permit (gross floor area)				200,000			300, 000		200, 000		
Landscaped area, minimum percentage	10%	10%	10%	15%	15%	10%	10%		10%	10%	See AMC 19.65.030 for landscaped area provisions
HEIGHT (feet) – PRINCIPAL STRUCTURES											
Height, base maximum	65	50	35- 45(×)	35	50	35	50	50	50	50	See AMC 19.42.120 for building height exceptions and modifications (×) AMC 19.42.120(C)(4-5)
Height, maximum with bonus			50-65 (×)	50		50					See AMC 19.42.060- .080 (×) AMC 19.42.120(C)(4-5)



19.42.050 - Bonus incentives in the R4 zone.

- A. Purpose.** To allow flexibility in building height in exchange for the integration of affordable dwelling units into the development.
- B. Applicability.** Height bonuses are available to development in the R4 zone as established in Chapter 19.42 Form and Intensity Standards provided it complies with one of the affordable housing options in this section.
- C. Option 1: Small units.** Developments where at least 25-percent of the total dwelling units contain no more than 600-square-feet of gross floor area qualify for the height bonus.
- D. Option 2: Affordable units.** Developments that integrate affordable dwelling units per the standards below qualify for the height bonus.
 - 1. For every three dwelling units occupying floor area above the base height limit, at least one affordable dwelling unit must be integrated into the development. Dwelling units larger than

Provision allows a height increase from 45' to 65' in subject area below

Re-examine the MMU Height Bonus Options



MMU Height Bonus Incentives

- B. Bonus incentives in the portion of the MMU zone east of Q Avenue.** Buildings integrating one feature from the list below have a bonus height limit addition of ten-feet above the base height limit. Buildings integrating two features from the list below have a bonus height limit addition of 20-feet above the base height limit.

Table 19.42.070

Height bonus incentive features for the portion of the MMU zone east of Q Avenue.

- I Vertical mixed-use building design:** Ground level spaces designed to accommodate non-residential uses must occupy at least 50% of the building's primary façade. Such spaces must be at least 50' deep and contain 13' minimum floor to ceiling heights. Residential lobbies and structured parking areas do not qualify as non-residential space for the purposes of this incentive option.

Examples



MMU Height Bonus Incentives

Table 19.42.070

Height bonus incentive features for the portion of the MMU zone east of Q Avenue.

- 2 Provide additional ground level pedestrian-oriented space** [meeting design requirements in AMC 19.62.040(C)] equal to at least 2% of the development site.

Such space must be above and beyond minimum sidewalk, esplanade, and applicable pedestrian-oriented space requirements. This could include a small entry plaza (left image), or it could include a widened sidewalk (middle image).



- 3 Provide space for a public park** at least 10,000sf in area on a site agreed upon by the City. The space should be configured and located so it is able to incorporate common municipal park features such as playgrounds, fitness areas, picnic areas, pavilions, etc.

- 4 Integrate ornamental stormwater management features.** Include creative and expressive techniques to celebrate stormwater management. The feature must be a significant visible design feature of the site and must include educational signage or a plaque explaining the incorporated stormwater techniques as determined and approved by the City. The design and management plan for the features must demonstrate long term success of the ornamental stormwater management element. See examples below.



MMU Height Bonus Incentives

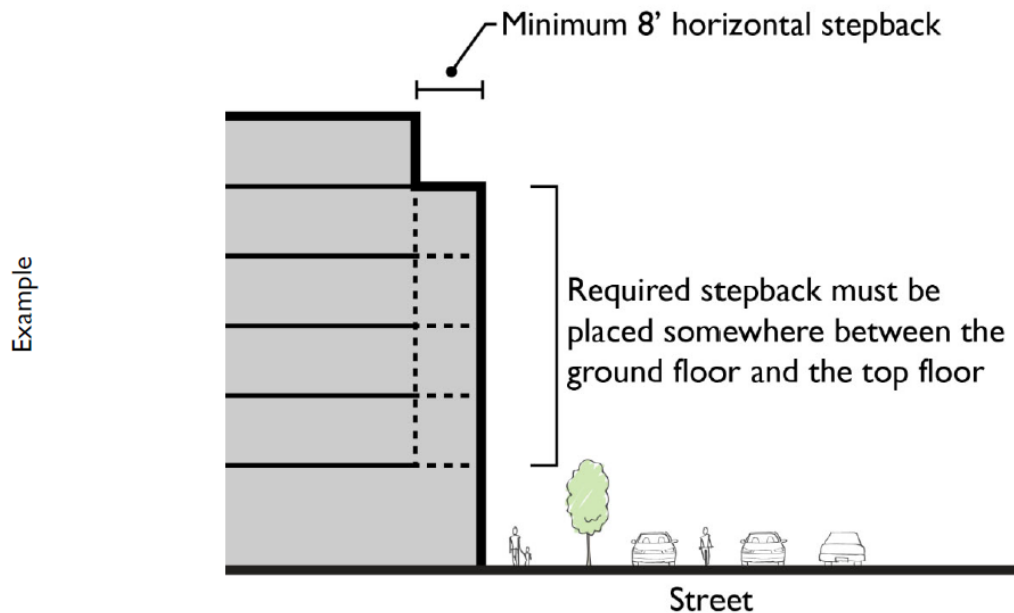
Table 19.42.070

Height bonus incentive features for the portion of the MMU zone east of Q Avenue.

- 5 Integrate visible landscaping elements on buildings.** This could include a combination of green walls and green roof elements integrated as a prominent visual feature of the building. To qualify, at least 50% of applicable roof areas or 5% of street facing façades must be vegetated. Reduced and/or a combination of green roof/walls may be acceptable provided the visible placement and high quality of the installations achieves the intent of the amenity feature. The design and management plan for the landscaping features must demonstrate long term success of the landscaping element. See examples below.



- 6 Integrate upper level building step backs.** Stepbacks must be at least 8' deep, along at least 75% of building frontage, and located on the building's street facing façade(s). See example below.



MMU Height Bonus Incentives

Table 19.42.070

Height bonus incentive features for the portion of the MMU zone east of Q Avenue.

- 7 Integration of permanent public art in visible location.** This could include a mural, mosaic, sculptural element, or gateway feature that is clearly recognizable as public art as determined by the director in consultation with the City of Anacortes Arts Commission. Feature may be located in a plaza, within the streetscape adjacent to the building, and/or on the building. Off-site features may be considered by the City provided they are placed within the Central Waterfront MMU zone. To qualify as an amenity, the estimated cost of the feature must be at least 1% of the construction cost of the development.

Example



- 8 Exceptional landscaping display in visible location.** The display must cover an area equal to at least 2% of the development site and function as a prominent visual feature of the development. The design and management plan for the landscaping display must demonstrate long term success of the landscaping elements. See examples below.

Example



MMU Height Bonus Incentives

Table 19.42.070

Height bonus incentive features for the portion of the MMU zone east of Q Avenue.

- 9 **Integrating brick as the primary cladding material on the building.** In order to qualify, brick must occupy at least 50% of the cladding on the street facing façades of the applicable building.

Example



- 10 **Provide freely accessible public restrooms.** Must be available to the general public (not only commercial customers) and available daily.

- 11 **Provide indoor meeting space** available for free to the general public (3,000sf min.). See example below.

Example



- 12 **Other similar features that function as a permanent public amenity.** Such features must be comparable in cost and public benefit to the features above.

Density Bonuses – Lessons Learned

- What's most important?
- Craft bonus provisions so applicants will “want to use them”
- Do your best to make options measurable
- Do your best to make options relatively equal/proportional
- Don't waste time on features that will never get used
- Find/illustrate examples of options!

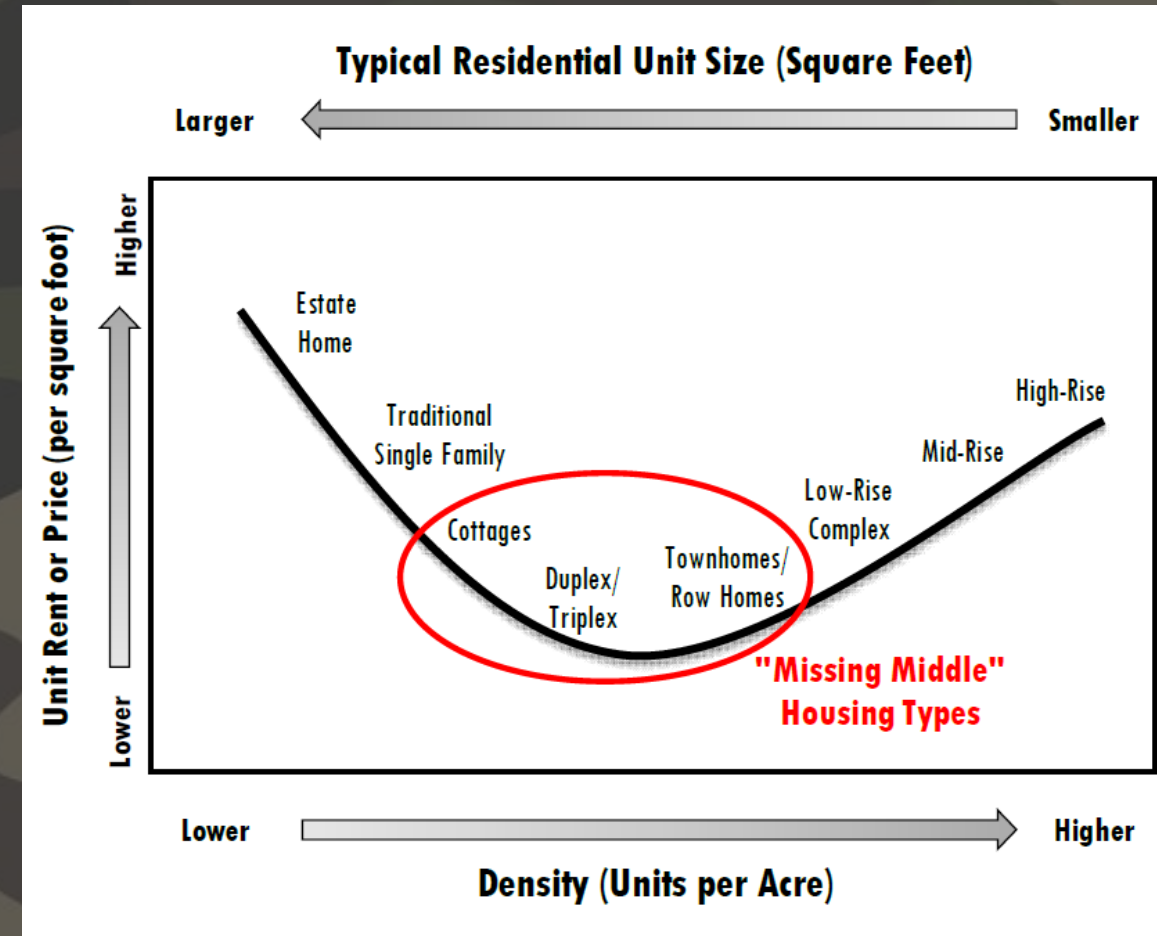




Housing Diversity Aerobics

What's the Situation/Need?

- Home prices rising faster than incomes
- Market rate middle-income housing doesn't pencil
 - Expensive construction
 - Limited building capacity in desirable areas
- Duplexes, townhomes, cottages have the lowest construction costs per unit and provide the most gentle density increase



What's the Situation/Need?

- Demographics
- Unit mix (housing type/form of ownership)
- Housing condition
- Housing cost
- Development market conditions
- Development context
(parks, streetscape, safety, livability issues)

What are the local opportunities for new housing?

- Vacant development sites
- Infill opportunities
- Redevelopment
 - Underutilized commercial areas
 - Transit corridors
 - CBD/neighborhood commercial centers



Considering Options & Preferences

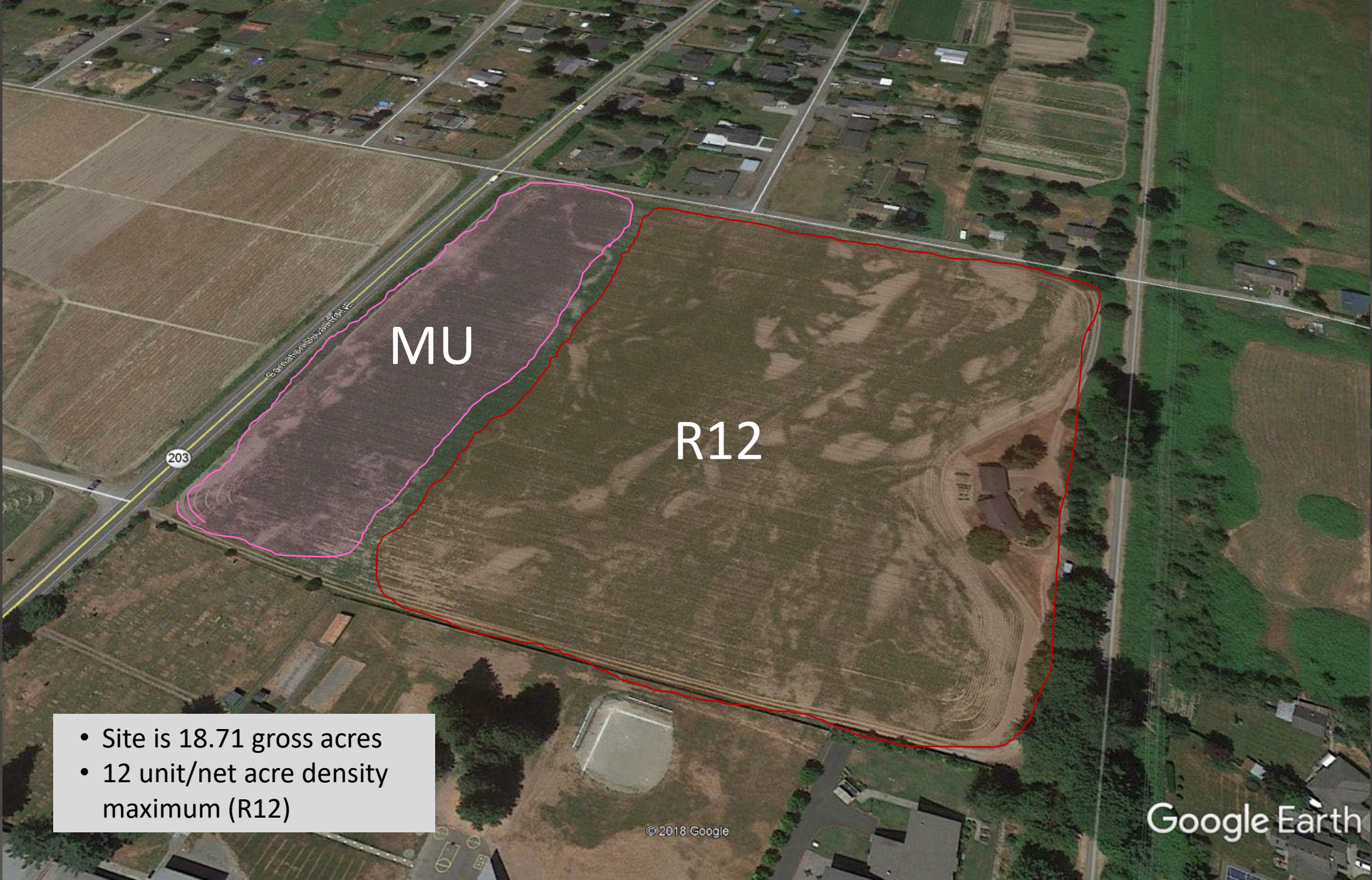
1. Visual Preference Surveys

Switch to VPS!

VPS resource: Missing Middle Photo Library:
[flickr.com/photos/sightline_middle_housing/](https://www.flickr.com/photos/sightline_middle_housing/)
Free and open source photos of missing middle housing



VPS Outcome in....Carnation



- Site is 18.71 gross acres
- 12 unit/net acre density maximum (R12)

Outcomes/Directives

- Promote “traditional” design
 - Pitched roofs
 - Articulated facades
 - Integrate human-scale design details
 - High quality durable materials
- Encourage a mixture of housing types
- Avoid monotony
- Extend downtown’s street grid (but allow some flexibility)
- Integrate parks and usable open space

11x17 100% scale 1" = 100'
 8.5x11 50% scale 1" = 200'



R12 Site Plan, Pocket Parks, 18-0702
 (07/02/2018, 04:35 pm)

11x17 100% scale 1" = 100'
 8.5x11 50% scale 1" = 200'



R12 Site Plan, Central Park, 18-0627
 (07/03/2018, 02:59 pm)

scale 1" = 100'
 scale 1" = 200'



18-0627

scale 1" = 100'
 scale 1" = 200'



CARNATION
 ELEMENTARY
 SCHOOL

RIVERVIEW
 LEARNING
 CENTER

scale 1" = 100'
 scale 1" = 200'



18-0627







18-0627

CARNATION
 ELEMENTARY
 SCHOOL

RIVERVIEW
 LEARNING
 CENTER

R12 Zone Development Conceptual Example

August 10, 2018

- 35 units  Single Family Detached
- 8 units  Cottage Housing
1/2 units for density purposes
- 49 units  Townhouse
- 29 units  Live-Work Townhouse
- 20 units  Apartments
- Lot Line
- Setback Line
-  Parking

Site Stats

Gross Area 18.71 ac
 Public ROW 4.31 ac
 Park 2.42 ac

Net Area 11.98 ac
 Units 137
 Density 11.44 du/net acre





© DigitalGlobe





DigitalGlobe



R-12 Changes

Adjustments to ensure a mix of housing types:

- Allow duplexes and multifamily – provided they meet strict design standards
- Require a mix of housing types
 - Detached single family
 - Cottages
 - Duplexes *(only when served by alley or shared access)*
 - Townhouses *(only when served by alley or shared access)*
 - Multifamily



.....Mixture of Housing Types

10-acre site or more

- At least **three** different housing types
 - Detached single family
 - Cottages
 - Duplexes (*only when served by alley or shared access*)
 - Townhouses (*only when served by alley or shared access & only up to 5 attached*)
 - Multifamily
- No single housing type may occupy more than **60%** of total dwelling units on the site

5-10-acre site

- At least ~~three~~ **two** different housing types
 - Detached single family
 - Cottages
 - Duplexes (*only when served by alley or shared access*)
 - Townhouses (*only when served by alley or shared access & only up to 5 attached*)
 - Multifamily
- No single housing type may occupy more than ~~60~~ **80%** of total dwelling units on the site

Sites less than five acres are exempt from this housing mix requirement

Other R-12 Changes

- Instituting a minimum density: 8 dwelling units/acre
 - Promotes integration of a mixture of housing types
 - Close in development within walking distance of downtown businesses
- Reducing minimum lot width (from 60-40')
- Adjusting 25' max building height:
 - Allow increase to 35' when over 100' from a single family zone

Increase from 25' to 35' when
100'+ from edge of the zone



*Allows more
flexibility for
townhouses and
multifamily uses*



R-12.....Integrate a Street Grid

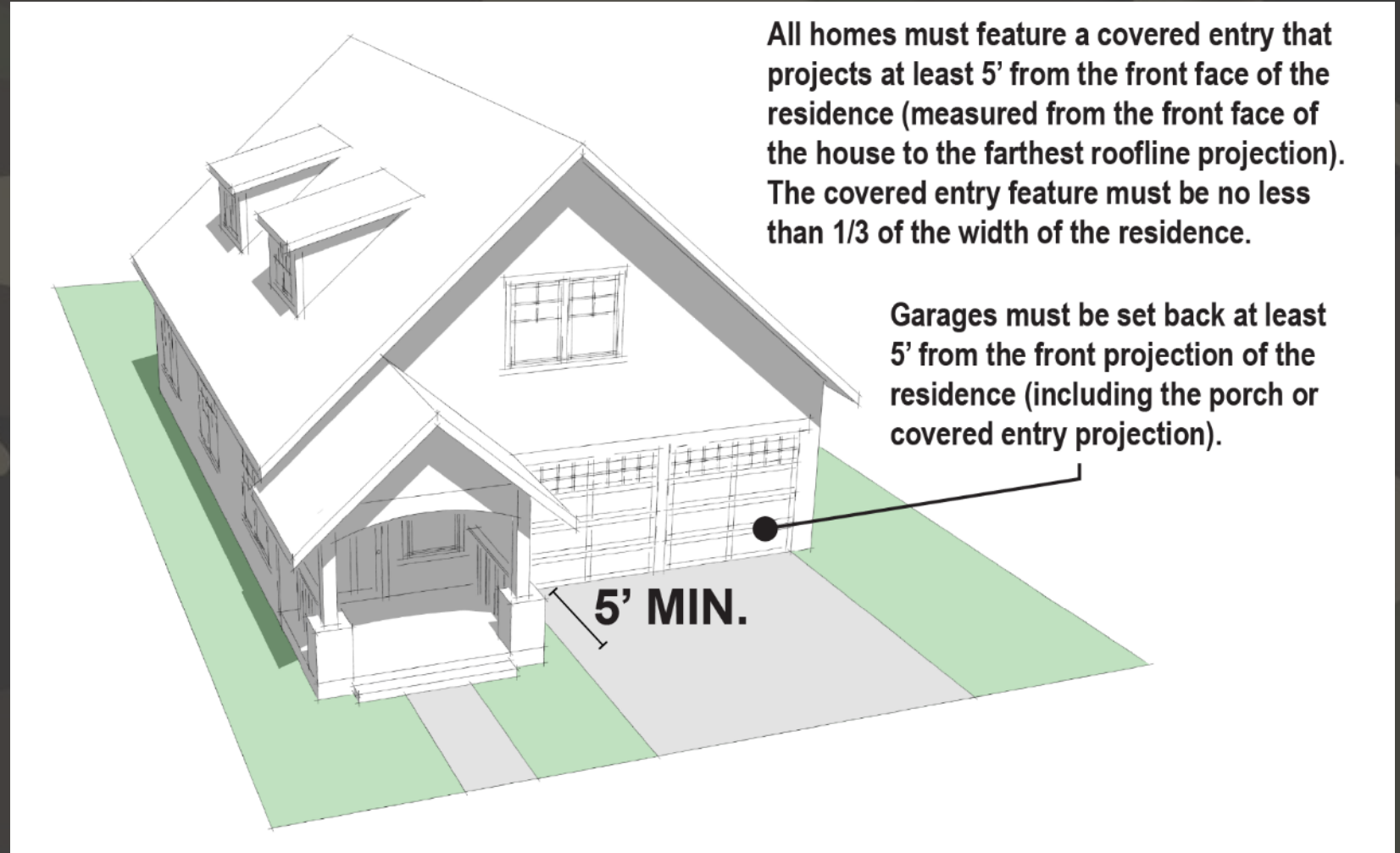
Generally consistent downtown

- Alley loaded east-west blocks no longer than 650 feet and between 200-250 feet wide
- Extensions of existing streets around the edge of the site are required.
- Exceptions and variation from the street grid will be allowed for the integration of parks, trails, and public facilities.



R-12....Design Standards for Single Family & Duplexes

Similar to what's
been adopted for
R-6



Architectural Character

Rather than legislate specific styles, the standards focus on the following façade design elements

- Façade articulation
- Façade details
- Window design
- Materials
- Roofline design

Housing Diversity – Other Considerations & Case Studies

Exploring / Evaluating Options

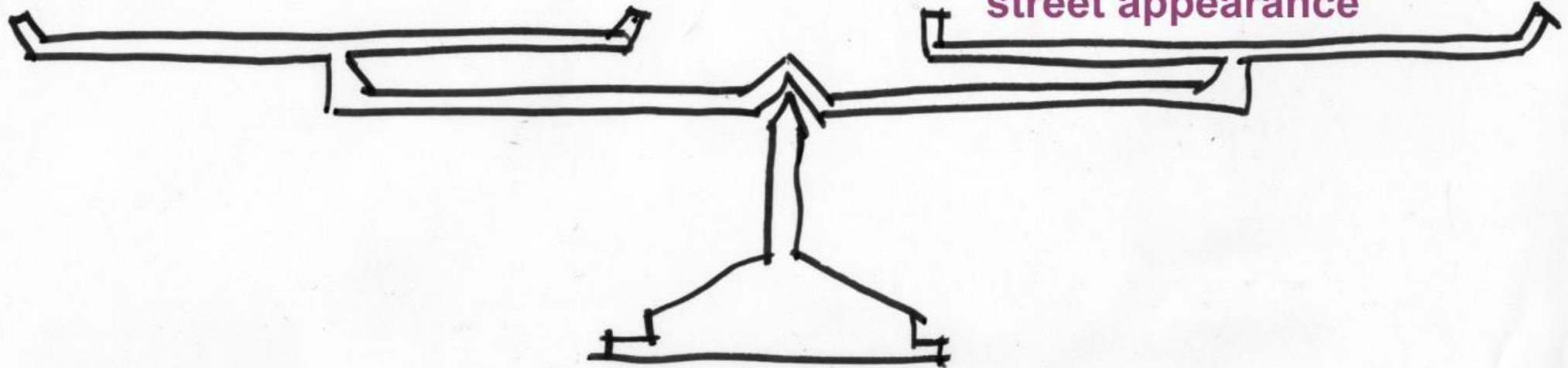
Increased density with better design assurances

GREATER ZONING FLEXIBILITY

- Dimensional adjustments
- Greater densities if compatibility is achieved
- Increased housing types
- Permit process simplified.

GREATER DESIGN CONTROL

- **Compatibility with neighbors**
- **Adequate parking**
- **Privacy and livability maintained**
- **Higher quality and better street appearance**

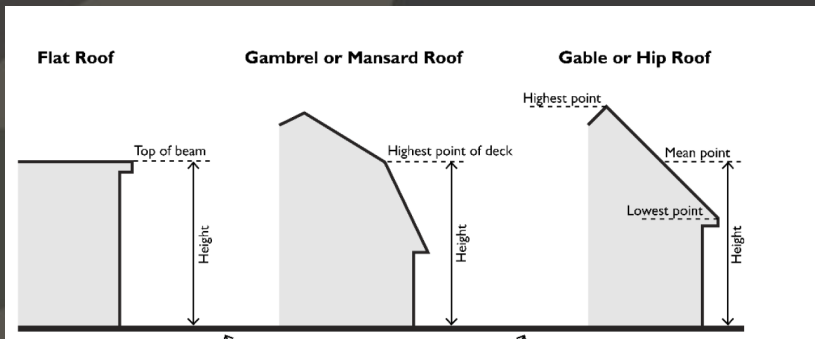


Educating participants

1. Clearly communicate issues & challenges
2. Bring in experts
3. Go on tour – real or virtual
4. Case studies

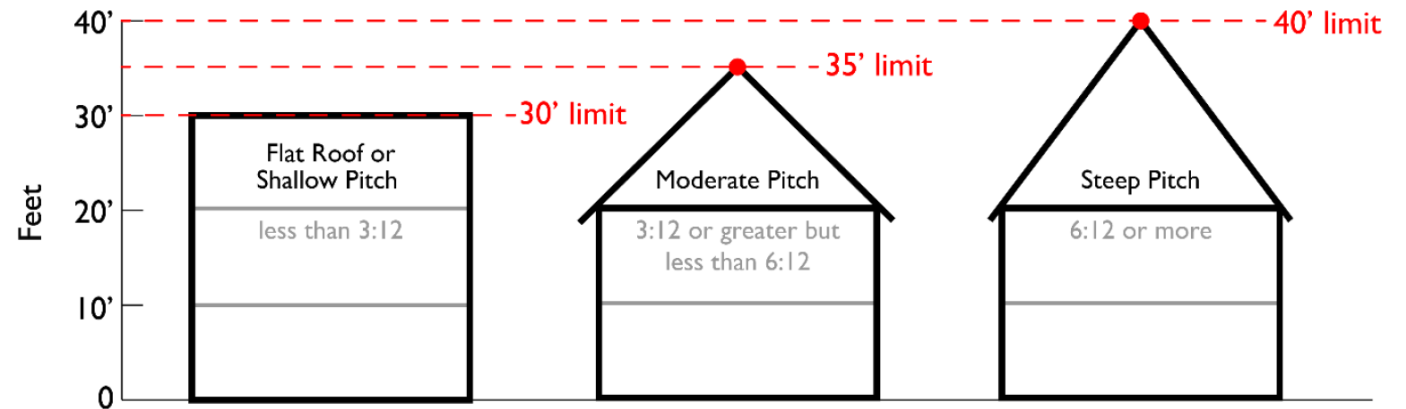
Educating Participants

Clearly communicating issues/challenges



Considerations

Consideration	Possible Benefits	Potential Drawbacks
1a Keep the proposed approach, but further clarify how buildings with multiple pitched rooflines are measured (including providing examples) and add an absolute limit for pitched roof forms.	Prevents 3-story flat roofed buildings and provides greater flexibility to pitched roof forms while limiting loopholes for much taller buildings	Provision makes buildings on a sloping site more challenging (with reduced limit)
<i>See images above for graphic example</i>		
1b Retain the current method of measuring height (to the top of the structure), reduce limit from 35' to 30', but offer between 5-10' of additional height for pitched roof forms (of a particular roof pitch or greater)	Prevents 3-story flat roofed buildings and provides greater flexibility to pitched roof forms while limiting loopholes for much taller buildings	



Allows for a story flat roofed

Educating Participants

Bring in experts

Panelists weigh in with ideas for attracting future development to Mountlake Terrace

July 14, 2018



Moderator Bill Trimm, left, with panelists Chris Fiori and Bob Tiscareno



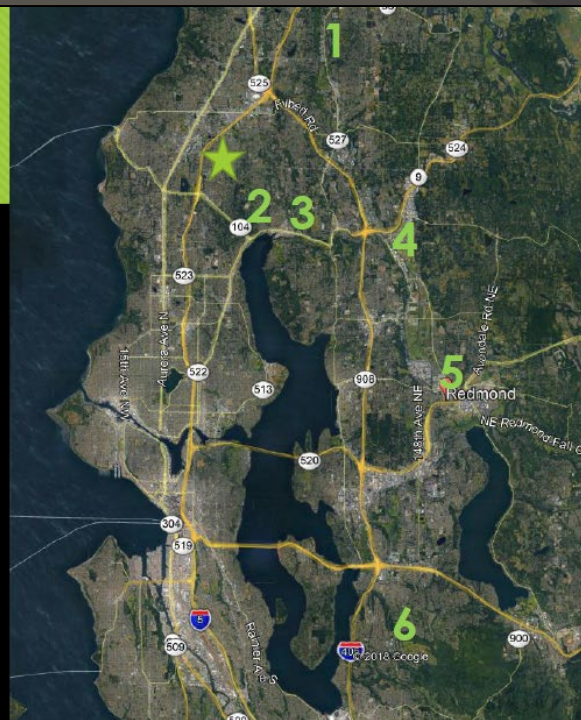
Educating Participants

Go on our tour – real or virtual



The Tour

1. Mill Creek Town Center
2. Kenmore
3. Bothell
4. Woodinville
5. Redmond
6. Newcastle



Educating Participants

What tools are other communities using.....

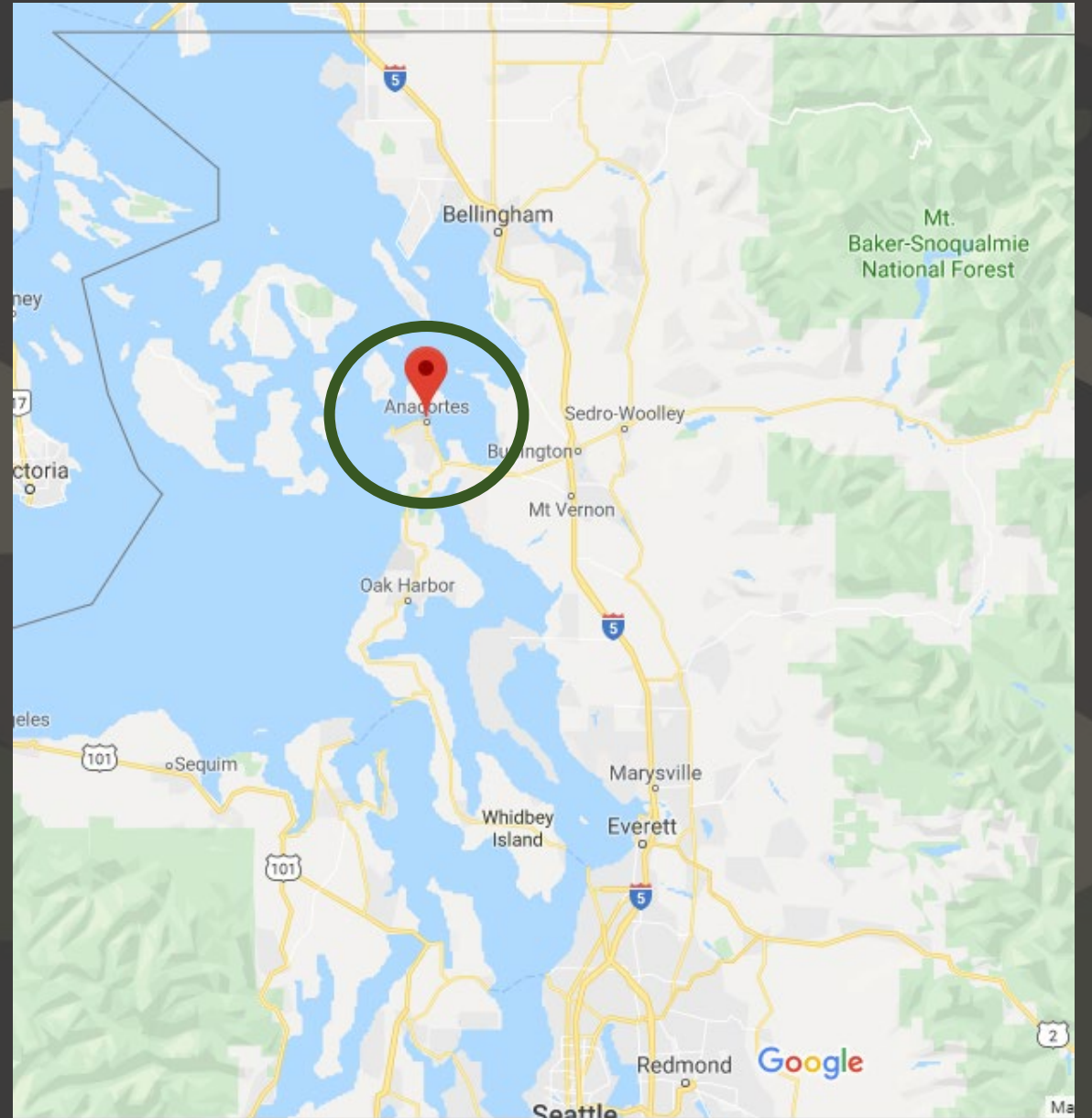
City and subarea	Approach	Key station area minimum parking ratios
Shoreline Base: 20.50.390 Reduction: 20.50.400(A)(5) and 20.50.400(F)	25 percent reduction for all uses within ¼ mile of light rail station.	<ul style="list-style-type: none"> • Multifamily <ul style="list-style-type: none"> ○ 0.56 per studio and 1 bedroom ○ 1.13 per 2+ bedrooms • Professional office, 0.75 per 500sf • Retail, 0.75 per 400sf • Restaurant, 0.75 per 75sf • Hotel, 0.75 per unit
SeaTac Base: 15.455.120 Reduction: 15.310.310	Variable percentage reduction for most uses within approximately ¼ mile of light rail station. <ul style="list-style-type: none"> • 35% - Residential • 40% - Government, business services, manufacturing • 30% - Recreational and cultural, retail and commercial 	<ul style="list-style-type: none"> • Multifamily <ul style="list-style-type: none"> ○ 0.65 per studio ○ 0.98 per 1 bedroom ○ 1.3 per 2+ bedrooms • Professional office, 0.6 per 300sf • Retail, 0.7 per 250sf • Restaurant, 0.7 per 150sf • Hotel (no shuttle service), 0.63 per room
Lynnwood - City Center zones Base: 21.18.800 Reduction: 21.60.400(D)	Hybrid of specific ratios by zone and 20 percentage reduction for most other land uses. City Center zoning extends up to 1 mile from the future light rail station. Includes maximums.	<ul style="list-style-type: none"> • Residential, 0.5 per unit • Professional Office, 2 per 1,000gfa • Retail, 3 per 1,000gfa • Restaurant, 1 per 4 seats • Hotel, 1 per room

Case Studies/Solutions

1. Anacortes
2. Wenatchee

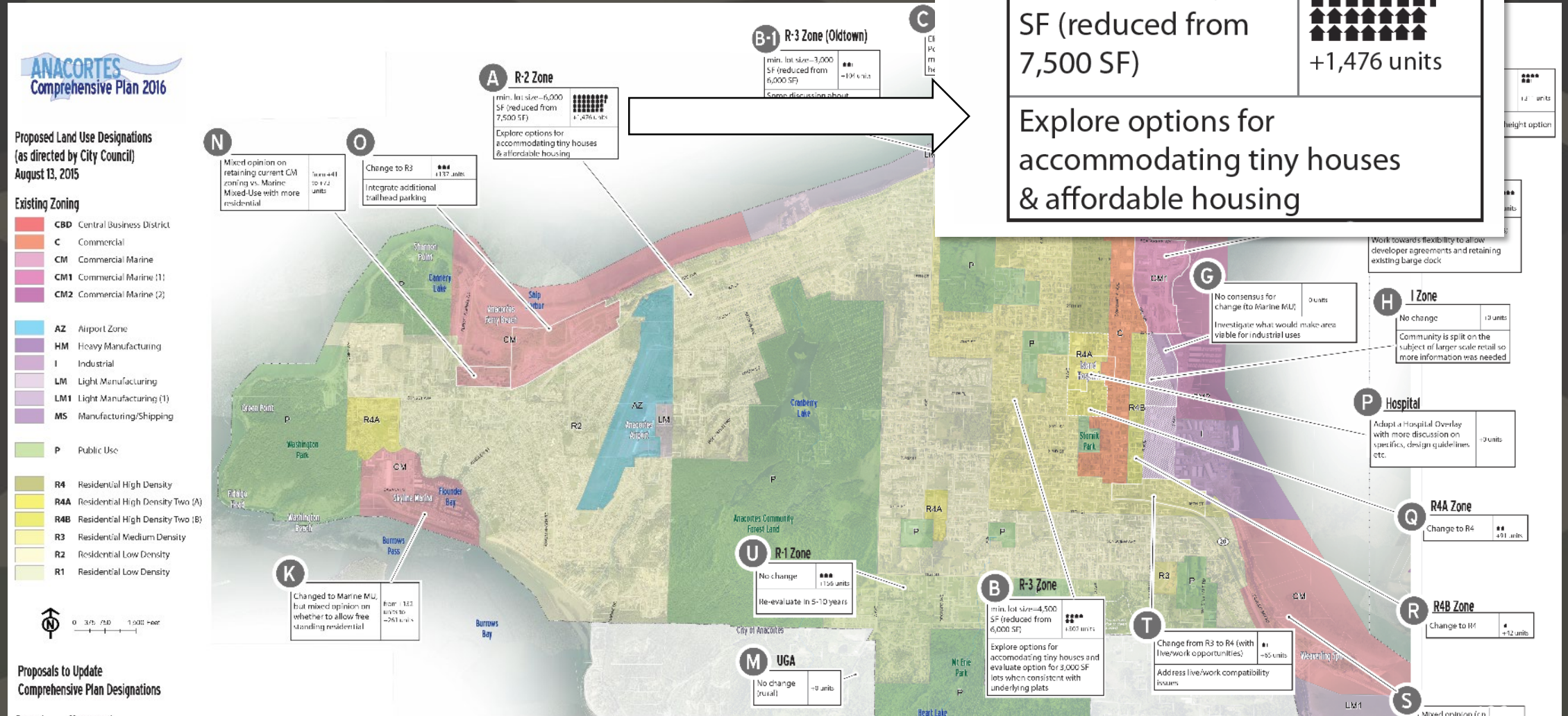
Anacortes

A little of Everything!



Exploring / Evaluating Options

Statistics, bang for buck, +/-

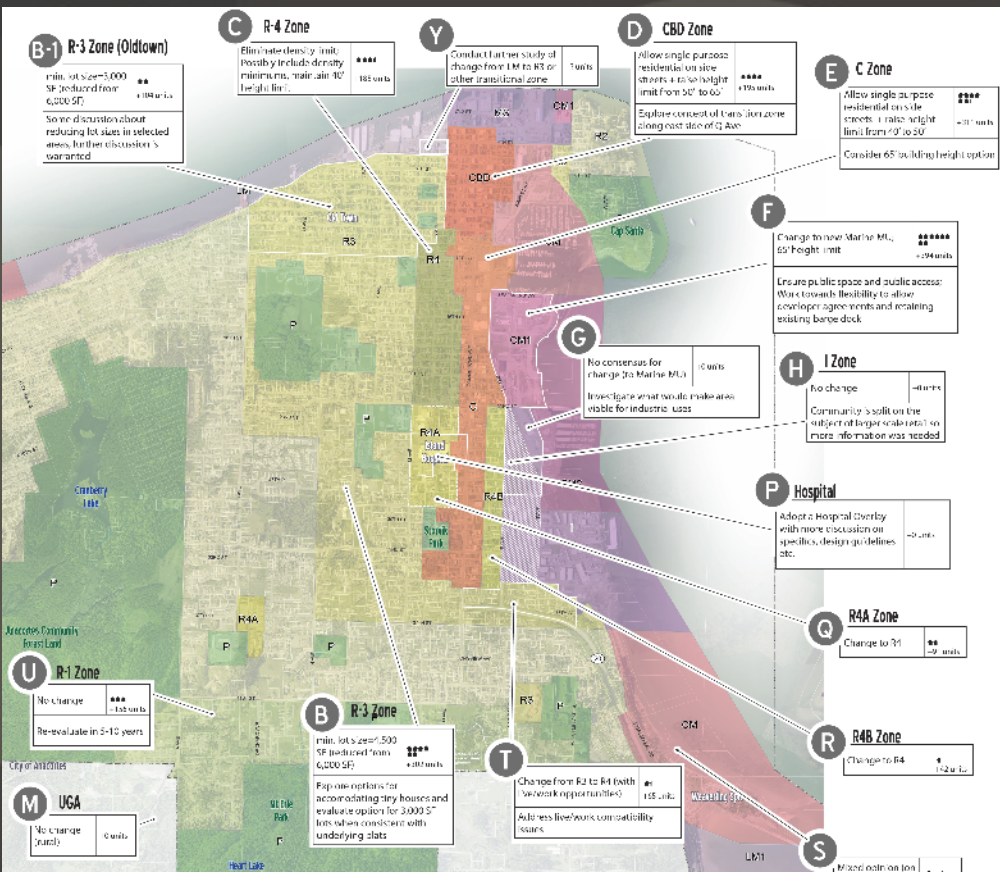


UPDATED

Affordable Housing How The Code May Affect Housing Prices

Anacortes

A little of Everything!



Increasing Housing Supply

Both the Comprehensive Plan and draft development regulations call for strategic lot size reductions, density increases, and new housing opportunities that should increase the supply of new housing (compared to development under the existing code).

Diversifying Housing Options

Proposed development regulations allow for a wider range of housing choices than are currently allowed. Cottage housing, small lot homes, accessory dwelling units, and townhouses can provide multiple options for people at all incomes levels.

Reducing House Sizes

The proposed floor area ratio limits and cottage housing provisions limit the size of homes and thus will have obvious impacts on the cost of such homes.

Affordable Housing Incentives

Height bonuses under consideration in the C, CBD & MMU zones are planned be tied to affordable housing (AH) requirements. Affordable housing bonus incentives in other zones and fee waivers are being explored. Per City Council direction, draft code language has been developed to facilitate potential affordable housing developments within a limited area on an accelerated schedule.



Examples of housing types that would be newly allowed or easier to build under the proposed code changes



Anacortes

A little of Everything!

Accessory Dwelling Units (ADUs)

What is an ADU?

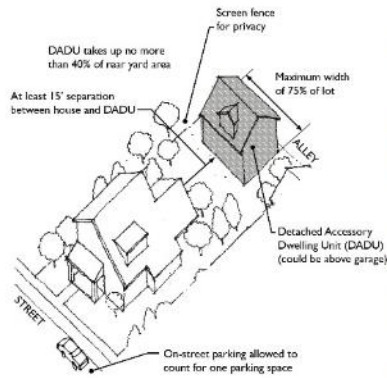
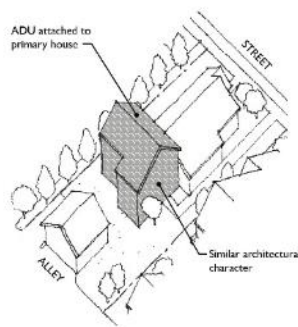
ADUs are extra living units associated with a single family home. They can either be within the home, such as in a basement or above a garage, or detached and located in a yard (often referred to as a "backyard cottage").

Are they allowed now?

- Yes, allowed in all residential zones and subject to standards
- The home or ADU must be occupied by one or more property owners
- May be within a single family home (attached) or detached
- May be up to 900sf in area
- A total of 3 off-street parking spaces for the home & ADU are required
- Height limit is 16' for detached ADUs

Proposed Concepts

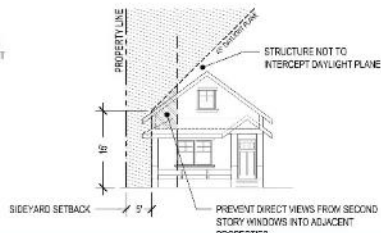
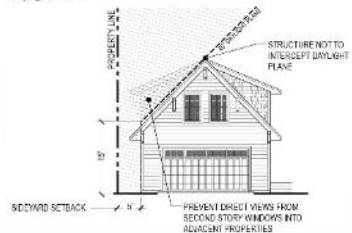
ADU/DADU Location



Examples



Daylight Plane



Permitted Housing Types Proposed Concepts

- Not allowed
- Allowed in limited cases
- Permitted use

Black text indicates no changes from current code.
Red text indicates proposed concepts.

Standard	R-1	R-2	R-3	R-4	C/CBD	MMU
Single Household Family - Standard Lot 	●	●	●	●	●	●
Single Family Dwelling - Small Lot (lots <5,000sf) 			○	●	●	●
<small>Lots <5,000sf not currently allowed, except through special review process; Suggest allowing them as part of density averaging approach provided design standards are included to ensure minimum usable open space and minimizing impacts of garages and driveways.</small>						
Accessory Dwelling Unit (ADU) 	○	○	●	●	●	●
<small>Revise provisions to allow freestanding ground level and attached ADU's provided ownership, parking, and setback provisions are met. Relax lot size and width requirements for ADU's but include provision to ensure minimum usable open space in rear yard</small>						
Cottage Housing 		●	●	●	●	●
<small>Adopt new provisions allowing for cottage housing developments in these zones. Cottages shall be 1 to 1-1/2 stories, no more than 1,200sf, clustered in groups of 4-12 around a central open space and feature prominent front porches. For density purposes, each cottage is = to one-half dwelling unit, since they are very small and less density impact.</small>						
Duplex 			●	●	●	●
Townhouse 			○	○	●	●
<small>Relax lot requirements that currently only allow very large townhouses. Use density averaging to ensure that levels of development are appropriate. Add new design standards for building massing, facade articulation & minimum open space.</small>						
Apartments 					●	●
Apartments in Mixed-Use Structure 					○	○



Anacortes

Height bonus – one extra floor in multiple zones via:

Option 1: Small units

Option 2: Affordable units



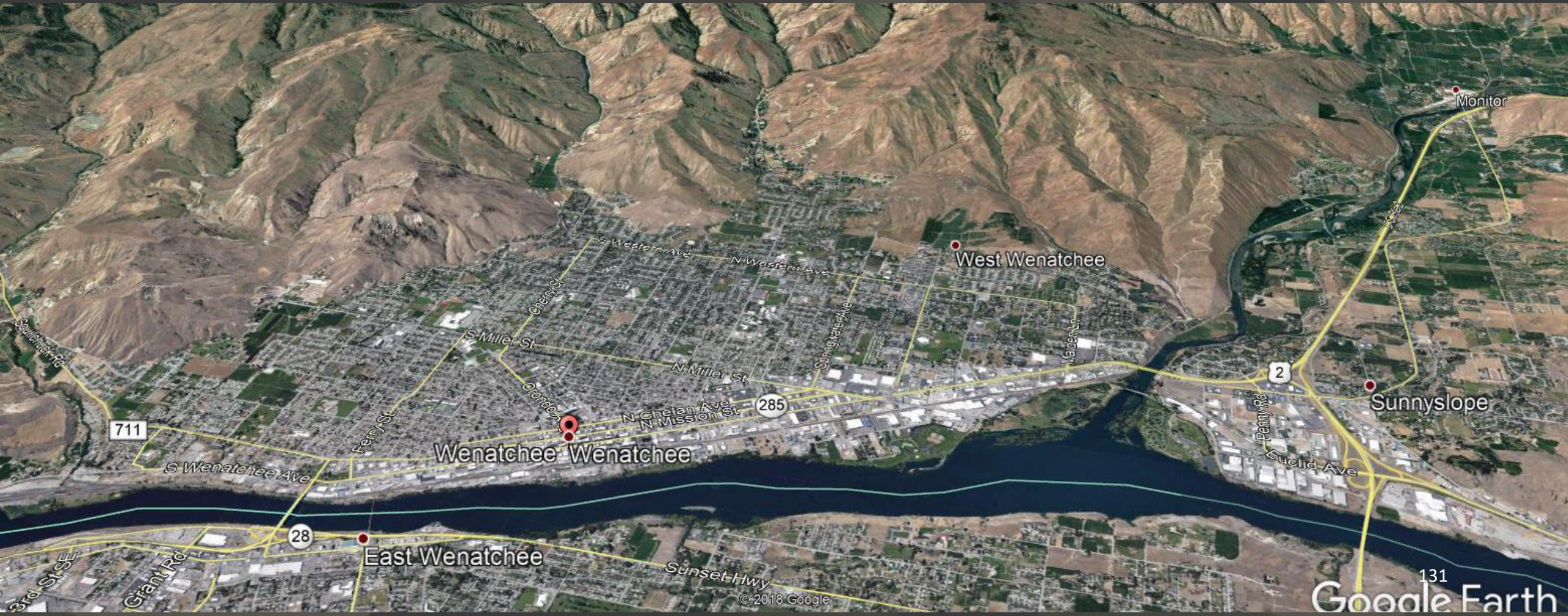
Anacortes

Proposed development
utilizing small unit
option on site below



Wenatchee

- A little bit of everything!

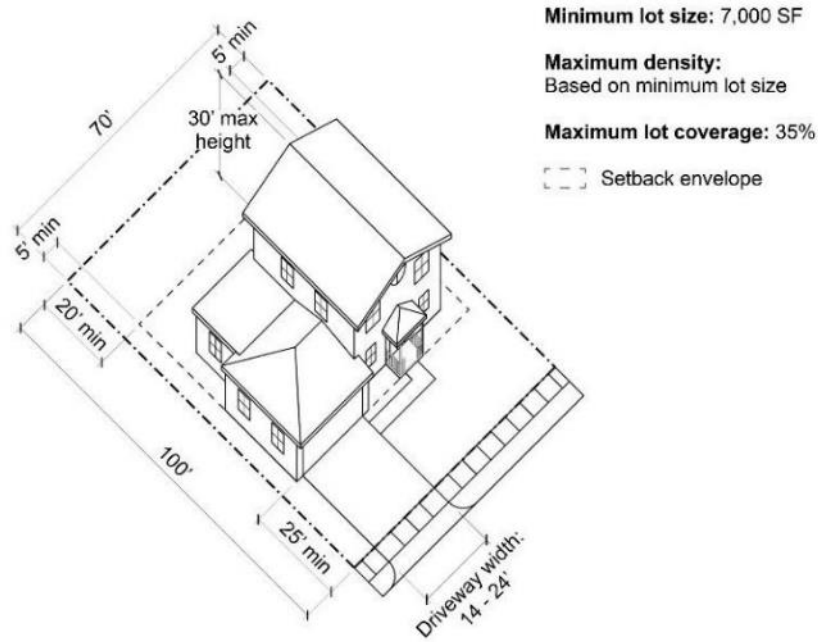




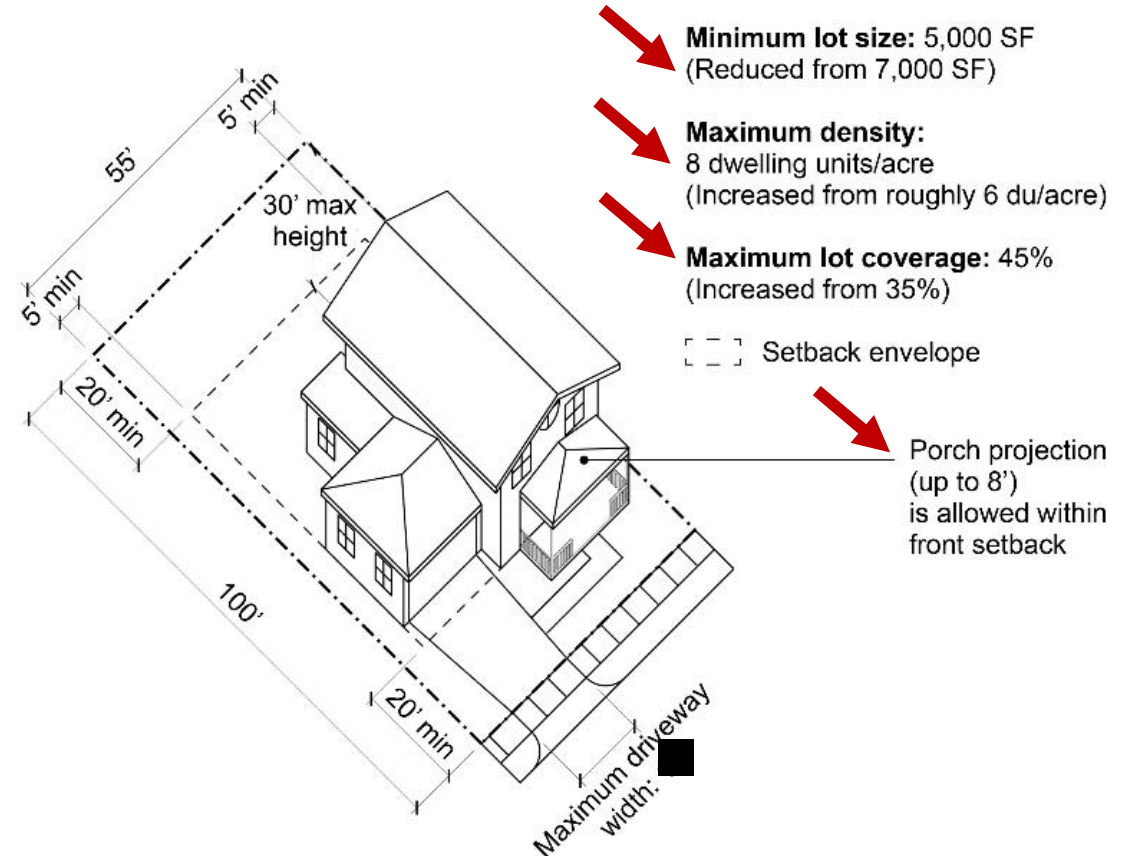
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e

Strategic lot size reduction / clustering flexibility

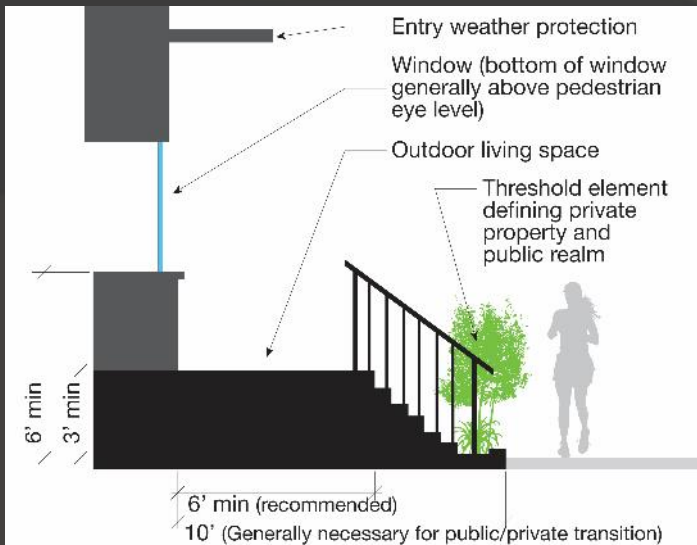
EXAMPLE LOT/HOUSE AT MINIMUM LOT SIZE



EXAMPLE LOT/HOUSE AT MINIMUM LOT SIZE (FOR SINGLE FAMILY)





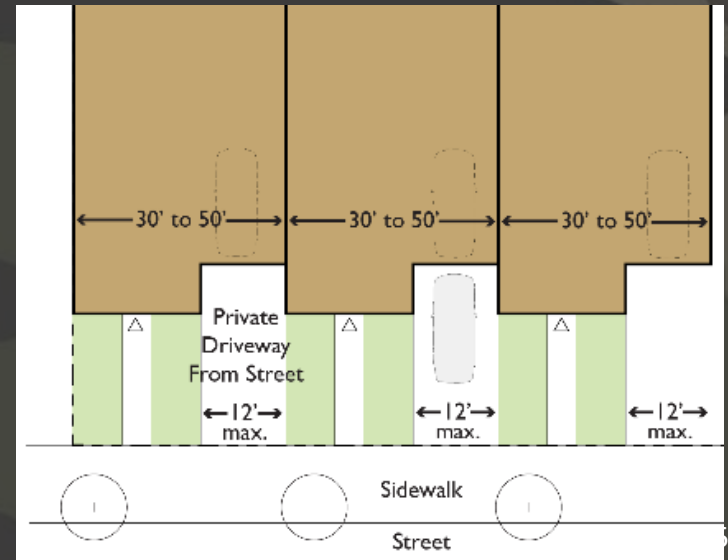


Entries and relationship to the street – private and welcoming

standards



Parking and open space arrangements







Community Design Jumping Jacks

Community Design Chapter

Integrating those code provisions that impact the larger community design framework:

1. Streets
 - When required?
 - What are the standards
2. Access/driveways
3. Subdivision/master plan design
4. Block sizes and connectivity
5. Park integration
6. Lot design alternatives

Street Improvements

1. Applicability

Construction or provision of public right-of-way improvements consistent with the requirements in this chapter and AMC Chapter 19.52 Public Street Design is required as condition of approval of the following development activities:

- A. Creation of any new dwelling units, except for accessory dwelling units.
- B. Creation of any new non-residential development.
- C. The establishment of new lots with a subdivision, short subdivision, or binding site plan when such lots do not otherwise have access from a public right-of-way.
- D. Alteration of, or addition to, a single family residence when the estimated value of the proposed structural improvements exceeds 50-percent of the Skagit County Assessor's value of the existing structure(s) on the subject property within a 12-month period.
- E. Alteration of, or addition to, a commercial, industrial, or multi-family development when the estimated value of the proposed improvements exceeds 50-percent of the Skagit County Assessor's value of the existing structure(s) on the subject property, within a 12-month period.

Exception: Tenant improvements to existing buildings (no new increase in gross floor area) are exempt from the public right-of-way improvements in this chapter.

Street Improvements

1. Applicability
2. Clarifications

- D. Transition to existing improvements. If improvements required by this chapter will connect with improvements in the same ROW that do not conform to this chapter, the following applies:
 1. If the improvements will connect with existing improvements of a greater dimension, the improvement must be built at the greater dimension unless the public works director determines that the dimensions of the existing improvement will be decreased in the future.
 2. If the improvements will connect with existing improvements of a lesser dimension, the following applies, as determined by the public works director:
 - a. If the dimensions of the existing improvements will not be increased in the future, the new improvement must be permanently flared or tapered to match the existing improvements.
 - b. If the dimensions of the existing improvements will be increased in the future, the required improvements must be installed in the full length of the right-of-way abutting the subject property with temporary flaring or tapering on the existing improvements.

Street Improvements

1. Applicability
2. Clarifications
3. Modifications, deferments, waivers, sidewalk construction-in-lieu program

D. Deferment.

1. A deferment to the installation of required improvements may be granted for any of the following reasons:
 - a. The required improvement is part of a larger project that has been scheduled for implementation and is fully funded in the City's six-year Capital Facilities Plan.
 - b. Construction or alteration of a single-family dwelling unit on an existing lot greater than one acre (net) in size where there are no frontage improvements meeting city standards within 200-feet of the lot, or identified through approved plats, and potential exists for future development of the lot.
 - c. Other unusual circumstances preclude the construction of the improvements as required.
2. If the applicant meets the above criteria in Section 19.51.060(D)(1) for deferment, the applicant is only obligated to install, at a future date, improvements subject to AMC 19.51.040.
3. If the city approves a deferment, the applicant must sign a concomitant agreement to run with the property, in a form acceptable to the city attorney, specifying that the applicant must install or reimburse the city for construction of the deferred improvements as directed by the public works director. The applicant must record this agreement with the Skagit County Auditor's Office.
4. The applicant must grade the subject portion of the right-of-way as though the public improvement were to be immediately installed and stabilize the graded area in a manner approved by the public works director. The applicant may be relieved of this requirement if the public works director determines that unusual circumstances preclude the grading.

E. Waiver.

A waiver to the requirement to install all or a portion of the required improvements may be granted for any of the following reasons:

1. The installation of the improvements will cause a safety hazard or an environmental impact that cannot be mitigated; or
2. The current level and extent of the improvements in the ROW adjacent to the subject property are not likely to be changed in the future.

Street Design

- Decide on what's in the zoning code vs detailed engineering standards

Street Design

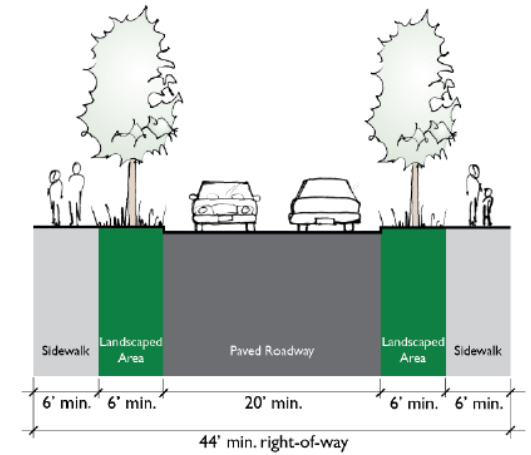
- Standards for new streets
- Note that the modifications provisions noted above
- Some cities include optional X-section standards for residential streets

Table 19.52.040(A)

Low-volume local street standards.

For rules of interpretation, see subsection (B).

Right-of-way width	44 ft. minimum
Landscaped area width	6 ft. minimum on each side
Pavement width	20 ft. except where parking lane(s) are included
Grade	12% maximum
Sidewalk width	6 ft. minimum
Bike lanes	NA



Note: All residential subdivisions must accommodate provisions for guest parking [AMC 19.64.030(B)] and applicable service deliveries and activities typical to the size, type, and density of the proposed development. Guest parking may be accommodated by integrating on-street parking lanes and/or pockets, off-street parking areas, or other methods to the satisfaction of the public works director.

Parking pocket	8 ft. minimum
----------------	---------------



Parking pockets may be integrated into one or both sides of the street in place of landscaped areas for up to 50% of the street length provided wider planting strips and trees planted elsewhere along the street compensate for the displaced landscaped areas.

Private Driveways & Access

- Driveway location
- Driveway width
- Driveway spacing
- Lots with alleys

Table 19.53.030		
Driveway cut width.		
Use Type	Minimum Width	Maximum Width
Residential		
Lot width = 50-feet or greater	10-feet	20-feet
Lot width < 50-feet	10-feet	12-feet or 20-feet if shared with adjacent lot
Commercial and Industrial	20-feet	30-feet

Residential Shared Driveways



NE 73rd St

© 2018 Google

121st Ln NE

Google Earth



© 2018 Google
© 2018 Google



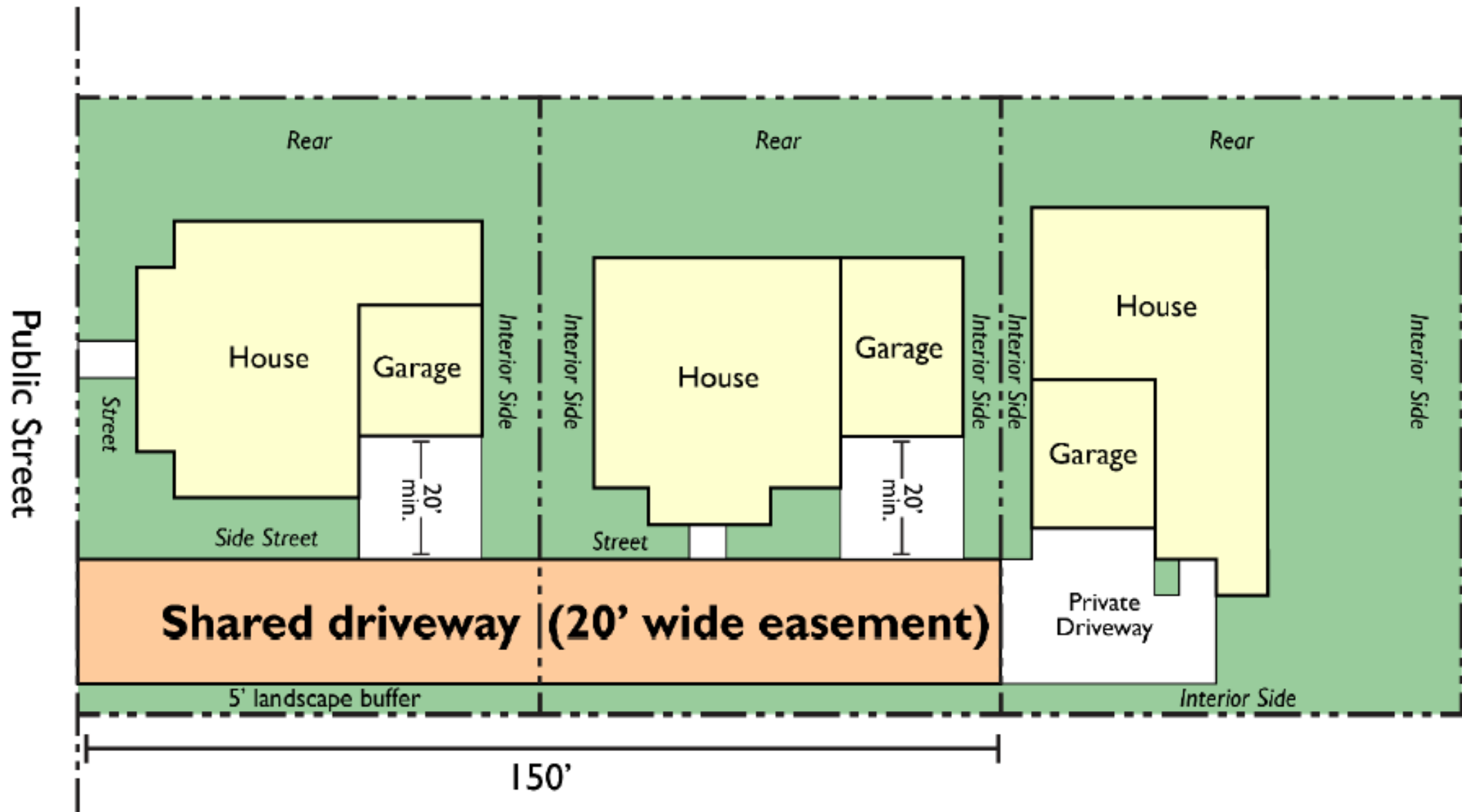
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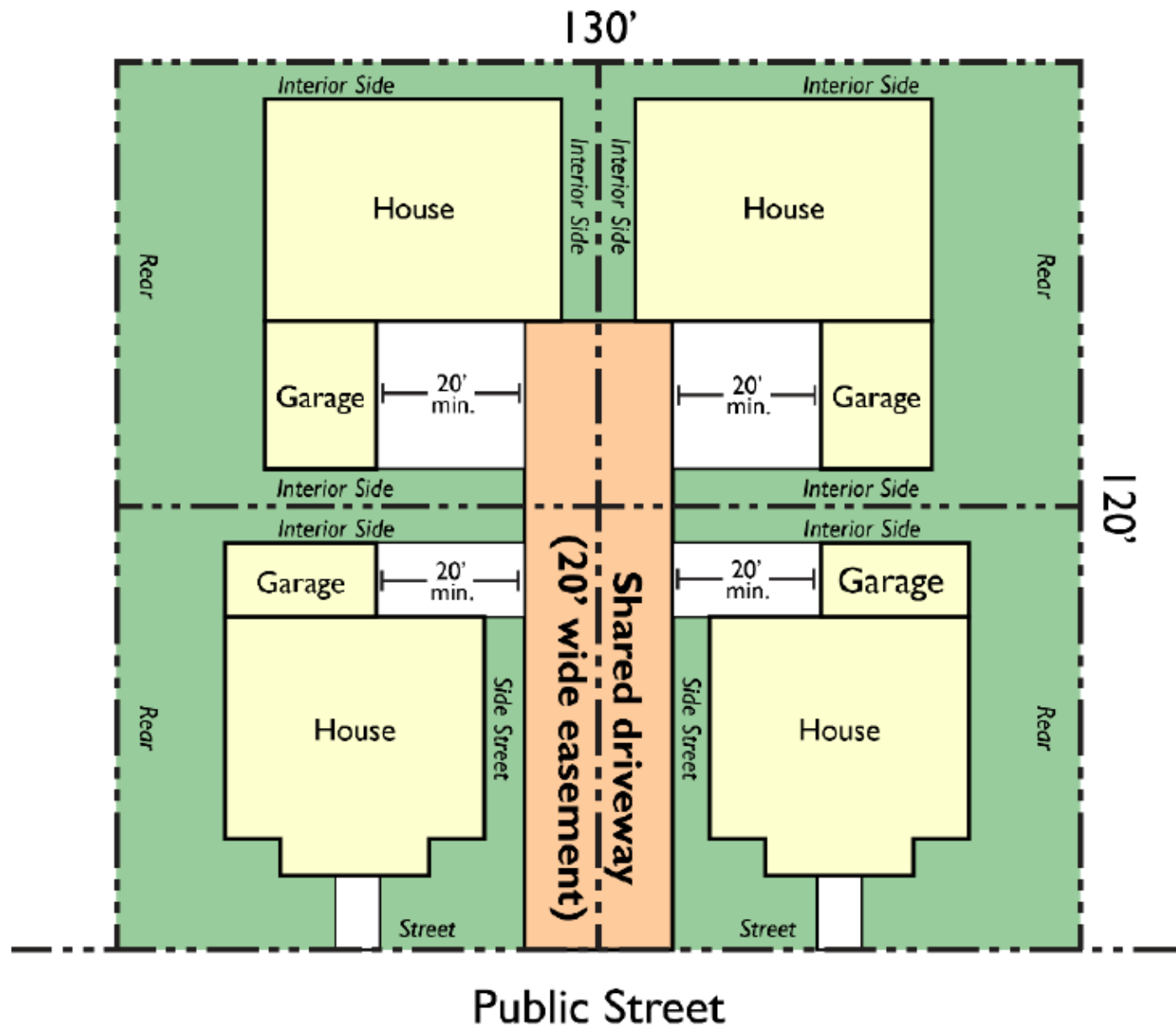
Google Earth

Draft Proposal

AMC 19.53.040 & and 19.54.040(C): Shared driveways may be allowed for single-family, duplex, or triplex developments (or any combination thereof) when the City determines a public street is not necessary and sufficient emergency vehicle access is provided (per guidance from the Anacortes Fire Department). Shared driveways may provide access for a maximum of six dwelling units in any combination of single-family, duplex, and triplex buildings.

Table 19.53.040(B) Residential shared driveway standards.				
Max. # units	Max. length	Min. Paved width	Min. Easement width	Turnaround?
Up to 3	150'	16'	20'	No
Up to 6	150'	20'	20'	No
Up to 6	>150'	20'	20'	Yes – approved turnaround
Shared driveways can serve up to 6 lots. Beyond that, lots must be served by a public street, including:				
7-9	"Lane standard" – public road with approved turnaround			
10+	Low volume residential public road			





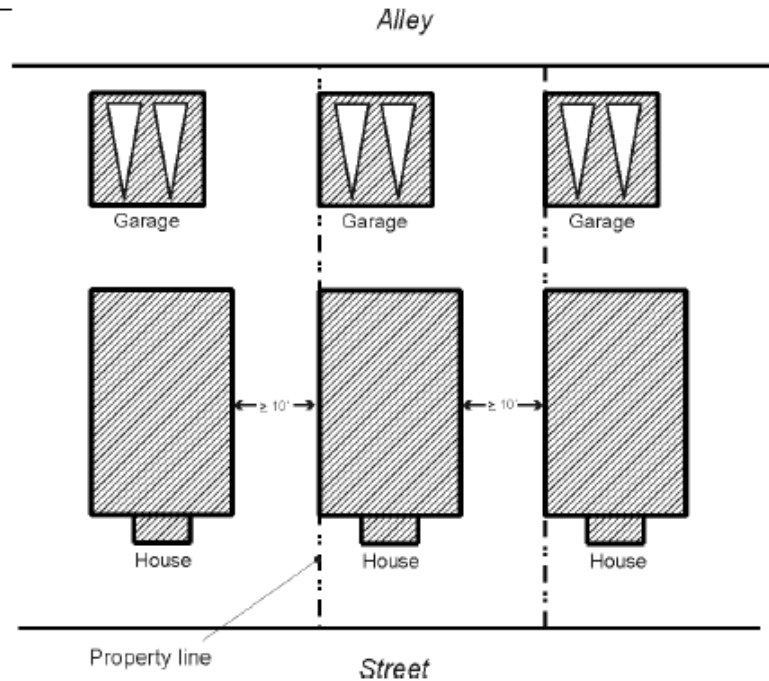
Lot Design

Adding provisions allowing

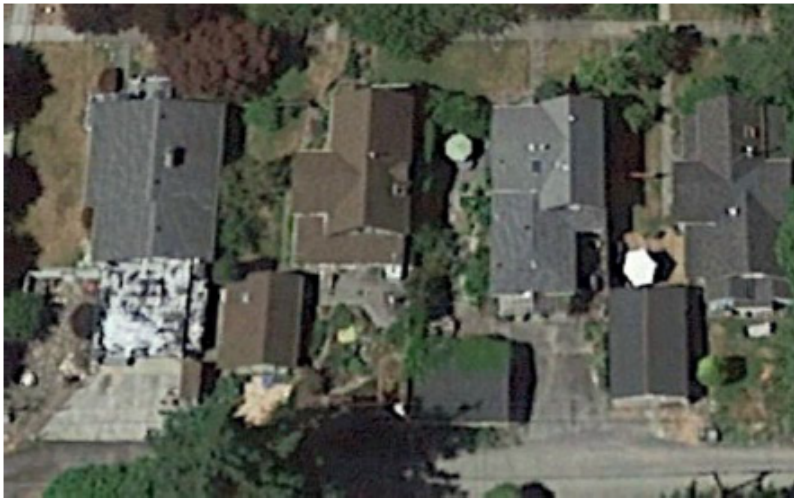
- Zero lot line
- Pedestrian-only entry lots
- Alley access lots

Zero lot line.

This is a configuration where the house and/or garage is built up to one of the side property lines, providing the opportunity for more usable side setback space. Examples are below.



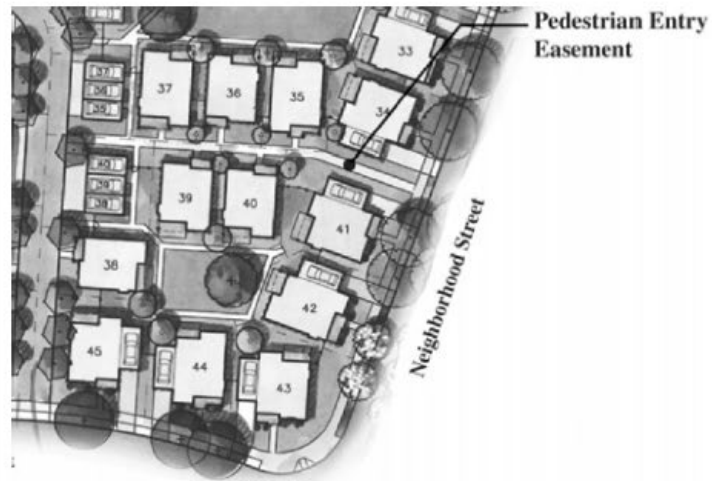
Example of side yard on a zero lot line configuration (adjacent home to the right doesn't contain transparent windows on the side wall)



The lots in the left image (from Bellingham) date back to early 1900s and include zero lot line configurations where the side yard successfully functions as the residents private and usable open space.

Pedestrian-only entry lots.

This includes configurations where one or more lots are clustered around a pedestrian easement and/or common open space and do not front on a street. Most cottage housing developments are an example of this. Parking may be accessed off an alley or shared driveway in a manner similar to examples illustrated below.



Alley access lots.

This includes configurations where lots front onto an alley and are not adjacent to public street.







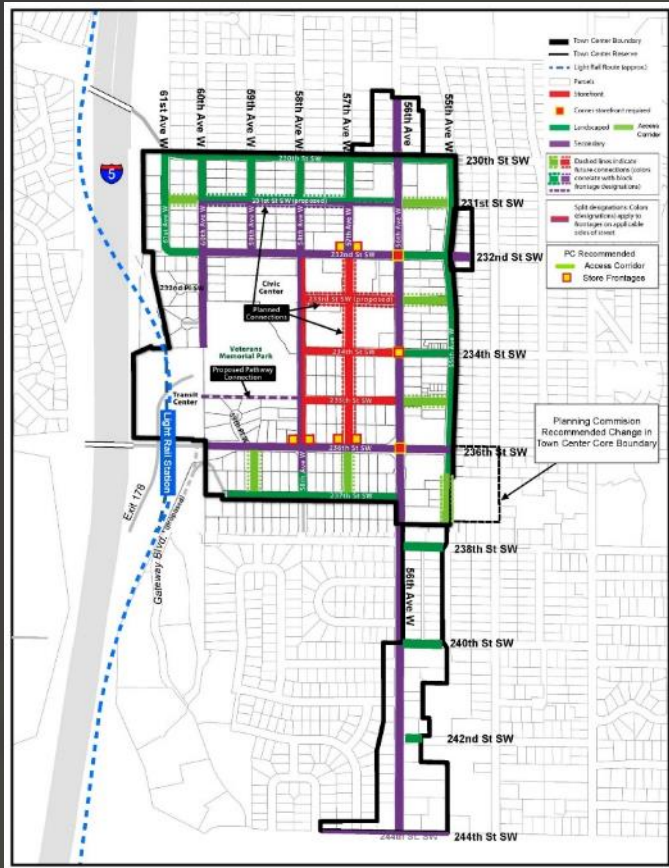
Block Frontage Bench Dips

Block Frontage Standards

1. What are they?
2. Why would we need them?

Block Frontage Standards

- Identify where storefronts are required
- Identify where landscaped frontages are required
- Identify where storefronts are optional
- Identify any blocks with special frontage design



Where are They Most Useful?

1. Reinforcing / strengthening form of an existing downtown or neighborhood center
2. Transforming auto-oriented centers or strips into a more pedestrian-oriented form
3. Guiding “new” town or neighborhood center development consistent with community vision

Why?

- **It recognizes not all streets are the same.**

For example, Commercial Avenue in the Downtown core obviously warrants a different treatment than side streets off of South Commercial Avenue.

- **Standards can be tailored for desired building/streetscape form.**

Requirements for sidewalk widths, landscaping types, transparency, parking location, and other design issues can be adjusted to help shape the built environment.

- **The approach is adaptable to changing conditions.**

If the context or community objectives change, the block frontage designation can also change.

- **The approach has been successful elsewhere.**

Numerous Washington cities have employed this approach for years - and it's helped them achieve community design objectives.

Where Has it Been Used

1. Kirkland
2. Carnation
3. Sumner
4. Bonney Lake
5. Sammamish
6. Woodinville
7. Ellensburg
8. Chelan
9. Anacortes
10. Mountlake Terrace
11. Everett
12. Snoqualmie
13. Duvall
14. Tumwater
15. Tacoma
16. Eatonville
17. Renton
18. Newcastle
19. Bellevue
20. Normandy Park
21. Des Moines
22. Freeland
23. Pierce County
24. Woodland
25. Mercer Island
26. Blaine
27. Seattle
28. Olympia
29. Boise, ID
30. Bozeman, MT

Mountlake Terrace Town Center

Mountlake Terrace

232nd Pl SW

232nd St SW

58th Ave W

58th Ave W

58th Ave W

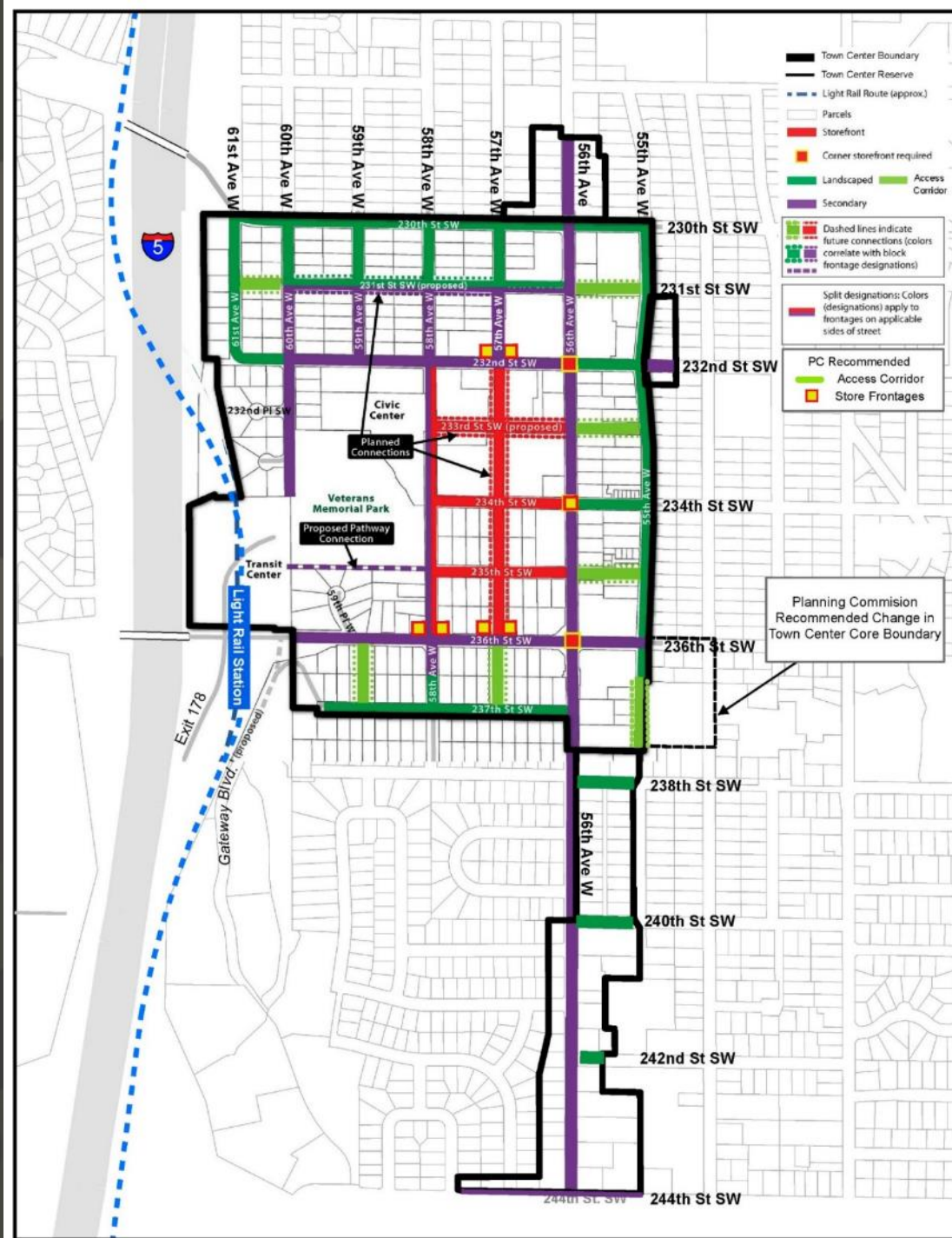
58th Ave W

234th St SW

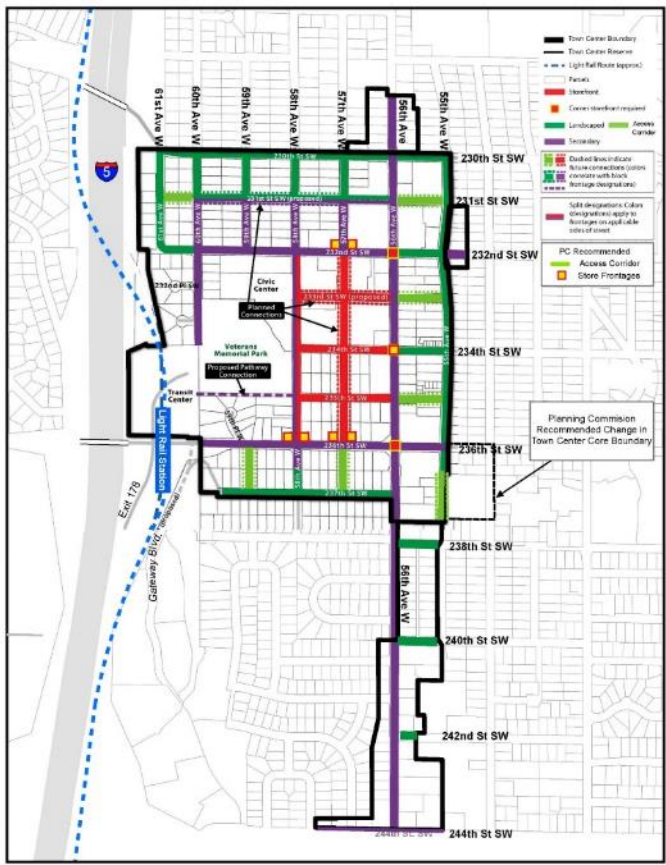
235th St SW

Park at Rice

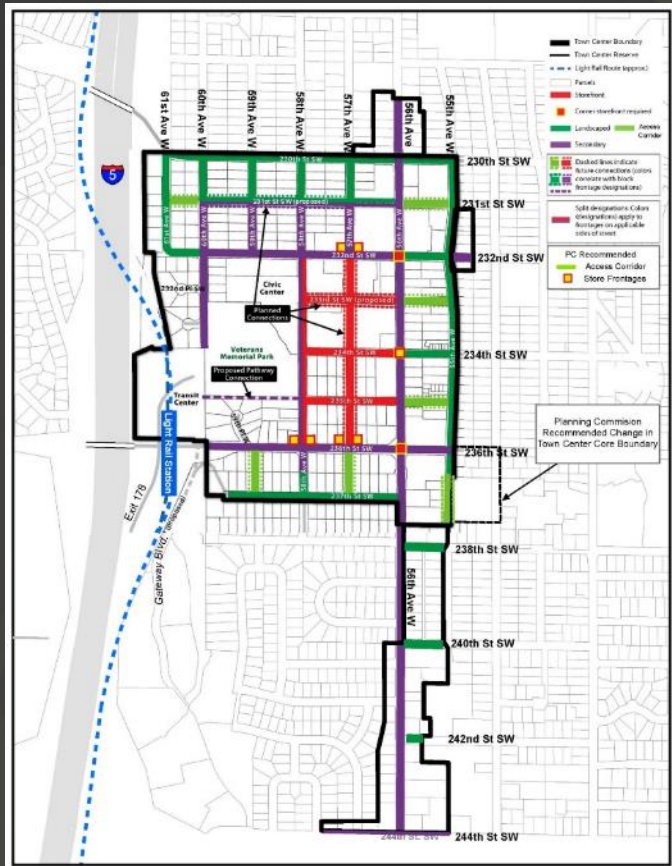
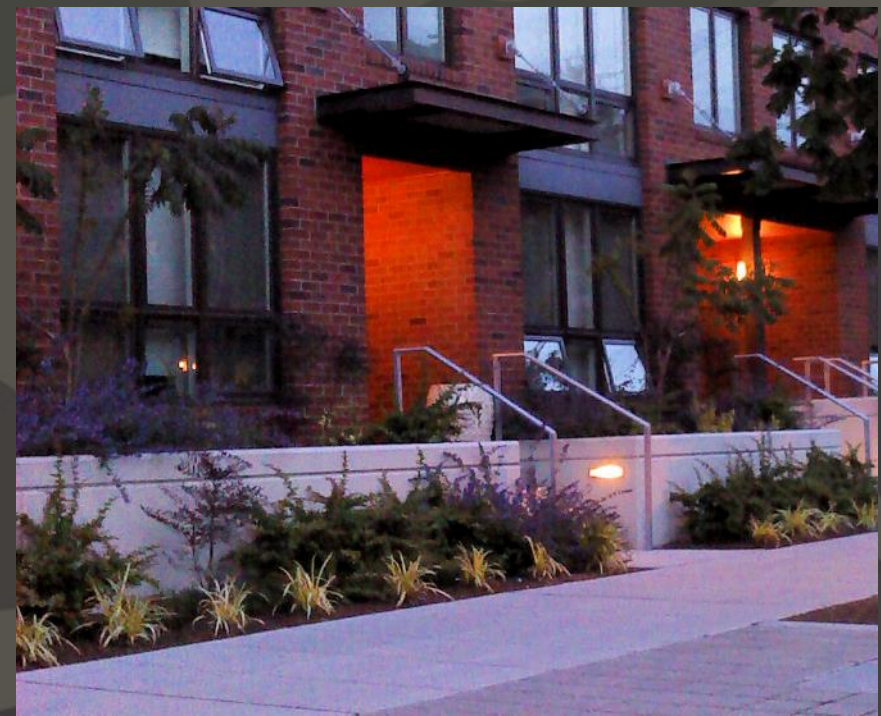
Mountlake Terrace Town Center



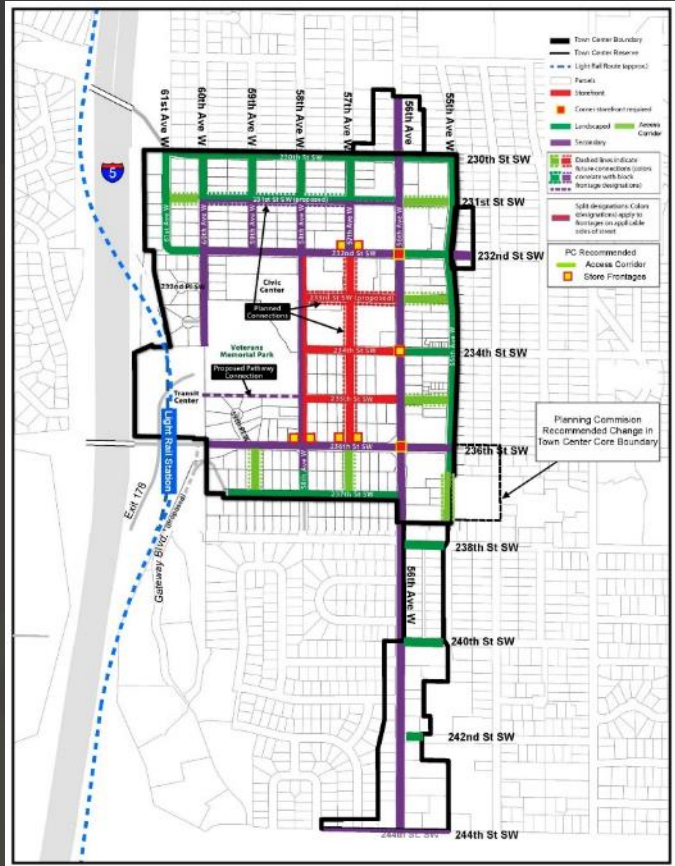
Storefronts



Landscaped



Mixed



OR



High Visibility Street Corners

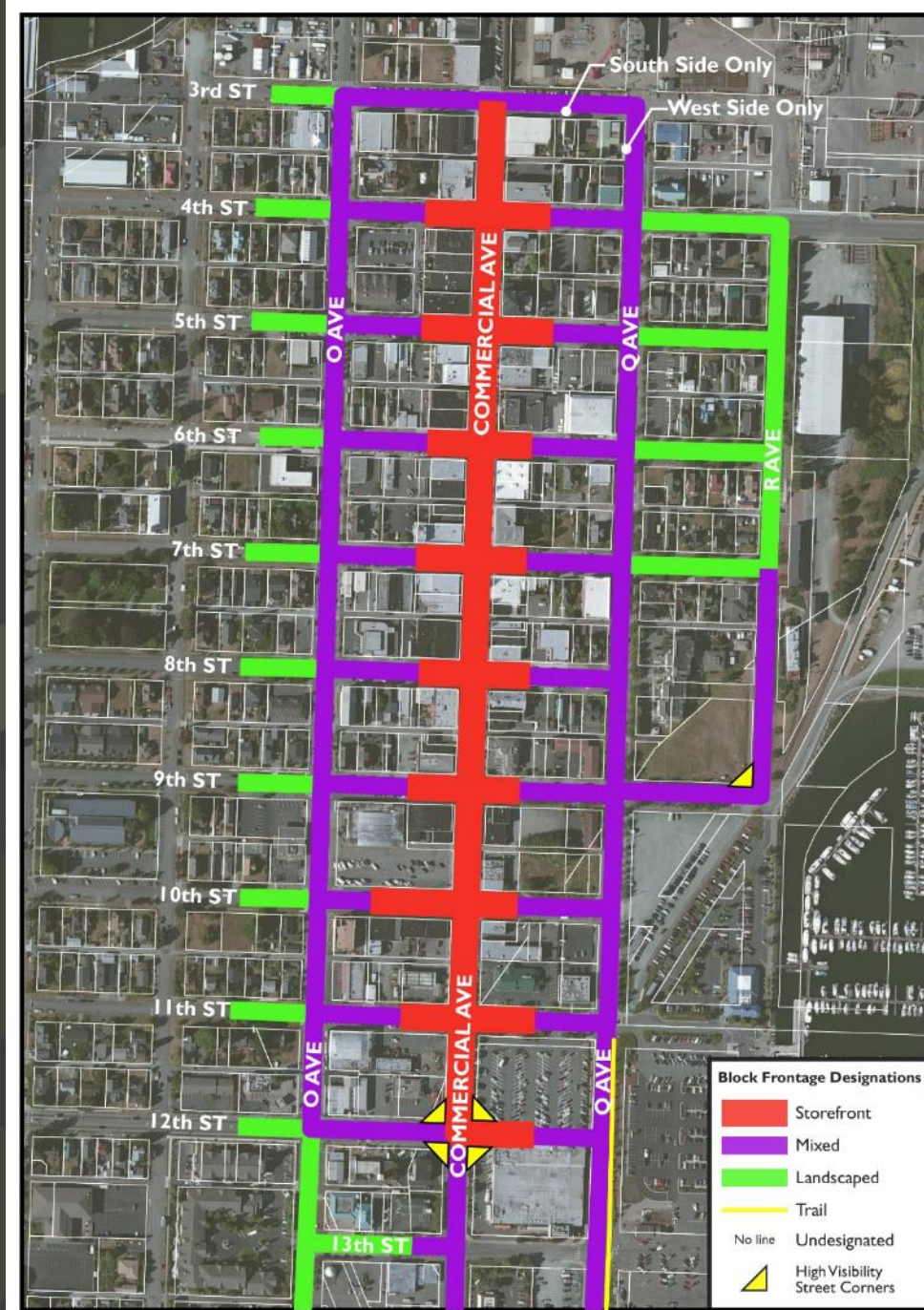


Examples

Anacortes



Downtown



0 500 1,000 Feet Originally exported scale: 1:2,000



Anacortes



South Commercial Ave



Anacortes



Central Waterfront



Chelan



Chelan

ALT 97



Regulating Map

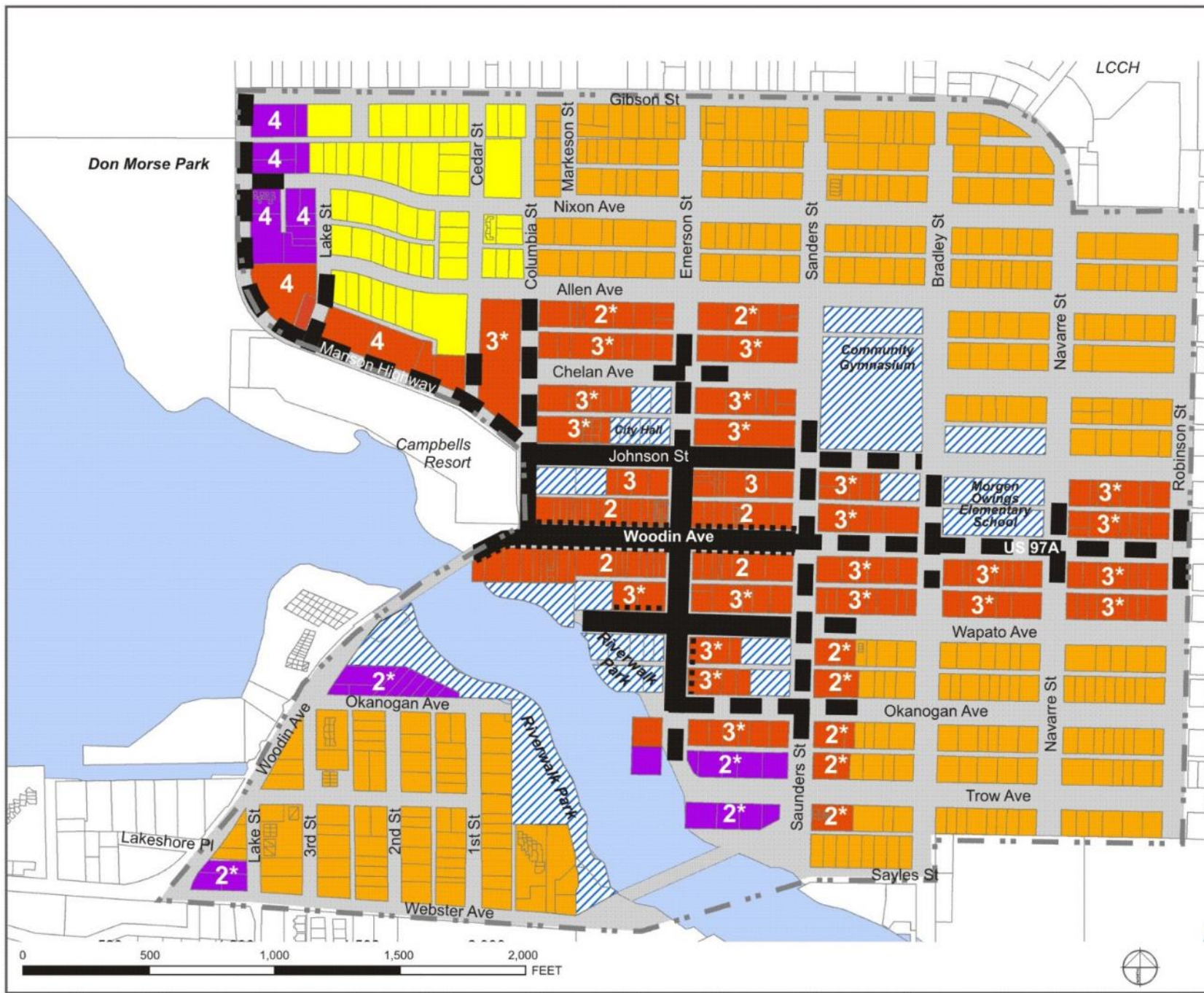
Street Types

-  Storefront Street
-  Storefront Street: Pedestrian/Retail (Pedestrian-oriented retail required on ground floor)
-  Secondary Street
-  Landscape Street

Land Use Districts (and height limits)

-  # Downtown Mixed-Use
-  # Tourist Mixed-Use
-  Downtown Mixed Residential (2-3 story max building height)
-  Downtown Single Family (2-story max building height)
-  Public

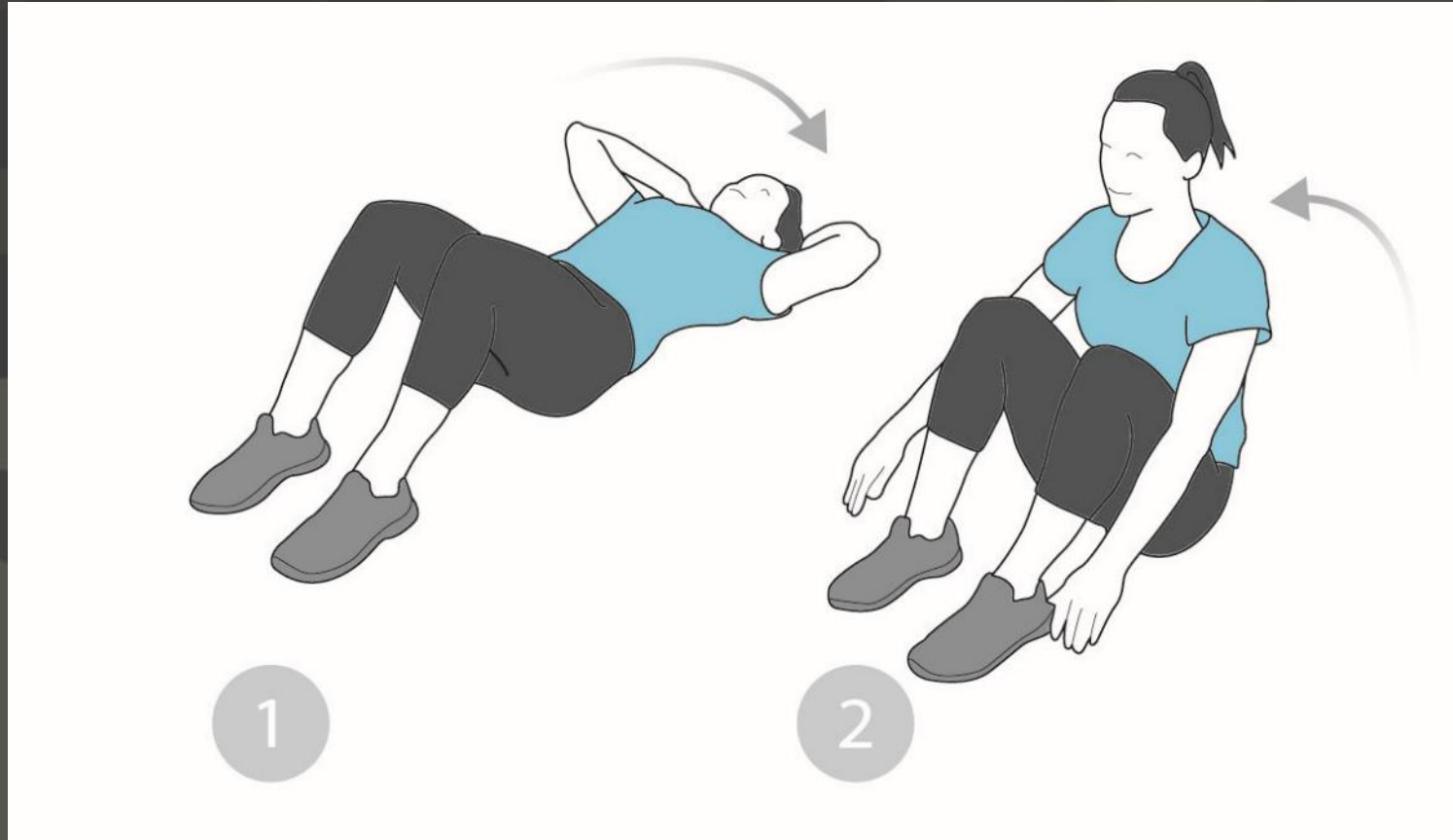
* One additional story is allowed provided the facade incorporates an upper level building setback along the street





Partner Exercise
The Valsalva Maneuver
The Seated Row

20



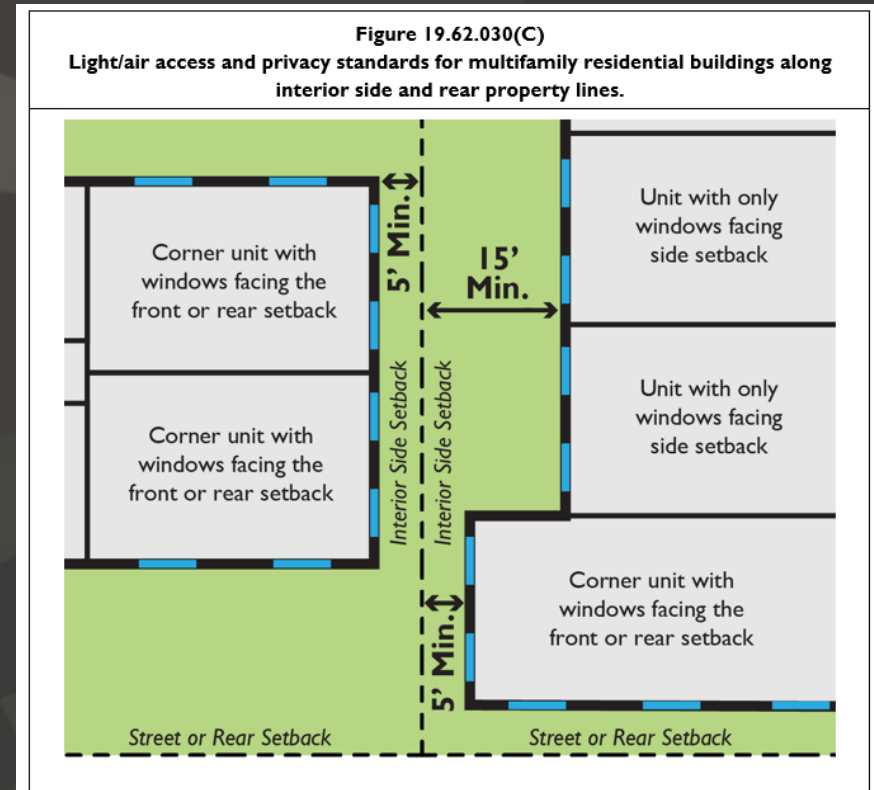
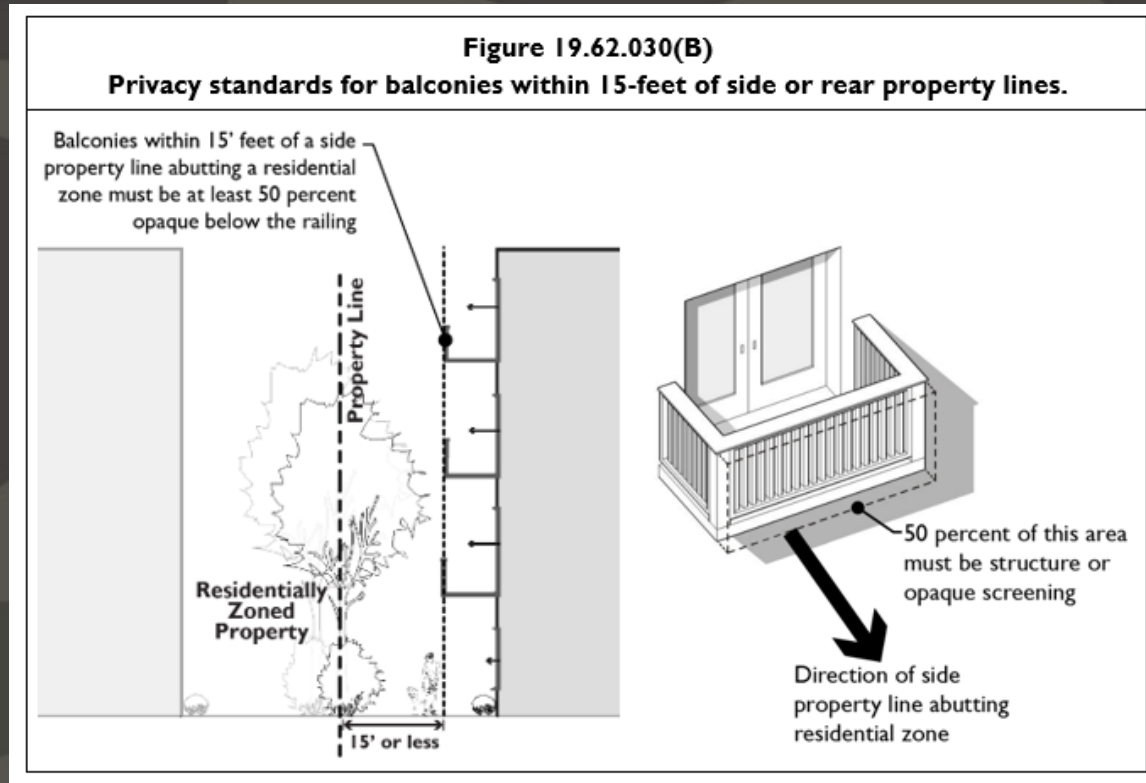
Site Design Sit-Ups

Site Planning

1. Relationships to adjacent properties
2. Residential open space
3. Commercial open space
4. Landscaping

Relationship to adjacent properties

Most important in areas with zero or minimal side yard setbacks



Residential Open Space

Figure 19.62.040(B)(2)
Shared open space examples.



The upper left example include a combination of open lawn area for informal recreation plus pathways and decorative landscape areas to enhance the setting for residents. The upper right courtyard includes pathways, seating areas, landscaped beds, and decorative lighting to provide a visual and physical amenity for residents.



The left image above includes a covered gathering space with outdoor grills adjacent to a landscaped commons with a central pathway. The right image includes a pond/wetland type area with boardwalk and seating areas.

Residential Open Space – Min. Area

- A critical element to livability – and also marketability
- MAKERS’ approach: Minimum square footage based on number and size of units

	Tukwila			Comparable Jurisdictions				
	<u>Tukwila South Proposed</u>	<u>Current Code: MDR/HDR</u>	<u>Current Code: TUC</u>	<u>Newcastle Commons Newcastle</u>	<u>Greenbridge King County</u>	<u>Discovery Heights Issaquah Highlands¹</u>	<u>City of Anacortes</u>	<u>City of Shoreline</u>
Recreation Space								
Studio	100 SF per unit	400 SF per unit	200 SF per unit	50 SF per unit	90 SF per unit	48 SF per unit	100 SF per unit	100 SF per unit
1-BR	100 SF per unit	400 SF per unit	200 SF per unit	65 SF per unit	90 SF per unit	48 SF per unit	100 SF per unit	100 SF per unit
2-BR	150 SF per unit	400 SF per unit	200 SF per unit	80 SF per unit	170 SF per unit	48 SF per unit	150 SF per unit	130 SF per unit
3-BR+	200 SF per unit	400 SF per unit	200 SF per unit	80 SF per unit	170 SF per unit	48 SF per unit	150 SF per unit	170 SF per unit

1. Issaquah Zoning code allows for recreation space to be provided as Individual Private Community Space such as patios, balconies or decks or Common Private Community Space which is easily accessible to all residents of the complex

Residential Open Space - Proportion

- Allow multiple types of space to meet the development's cumulative requirements – up to a point. Diversity is desirable.
- Provide design standards for each option to ensure usability.

Recreation space type	Maximum allowable percentage of required useable recreation space
Shared outdoor open space	100%
Ground level individual open space	100% (for adjacent units only)
Balconies	50%
Common indoor recreation areas	20%

Residential Open Space - Examples

Indoor rec rooms



Shared outdoor space



Roof decks



Individual outdoor space



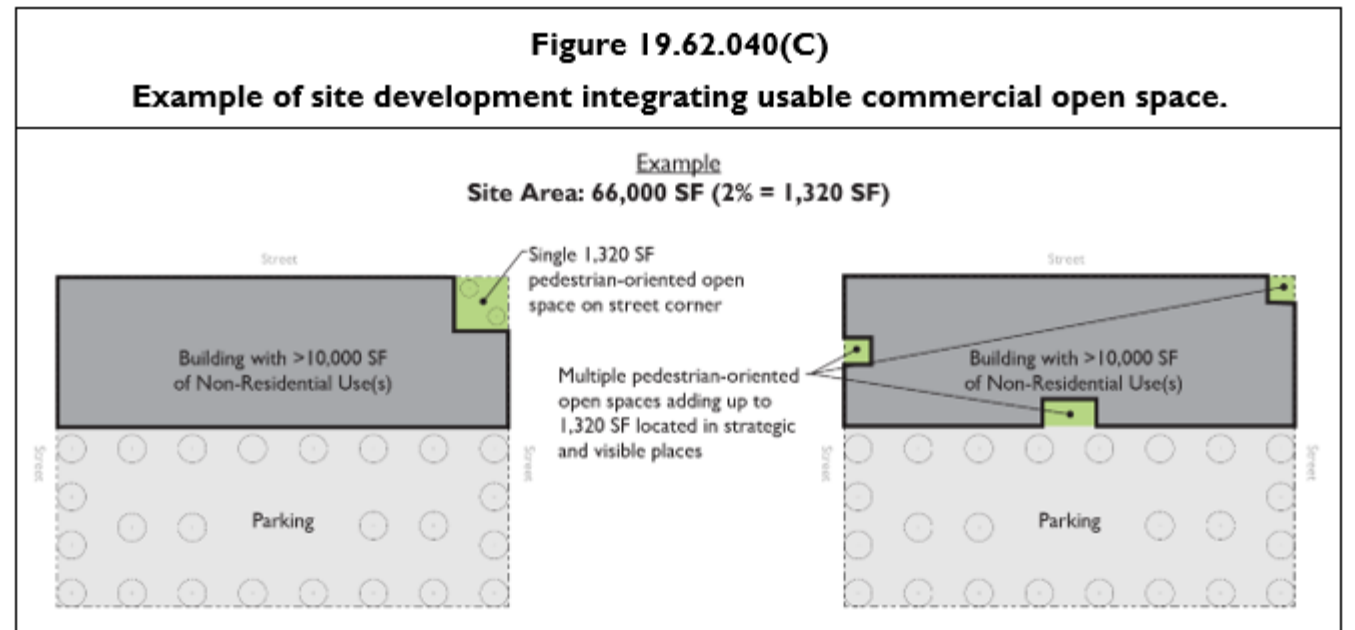
Balconies



Commercial Open Space

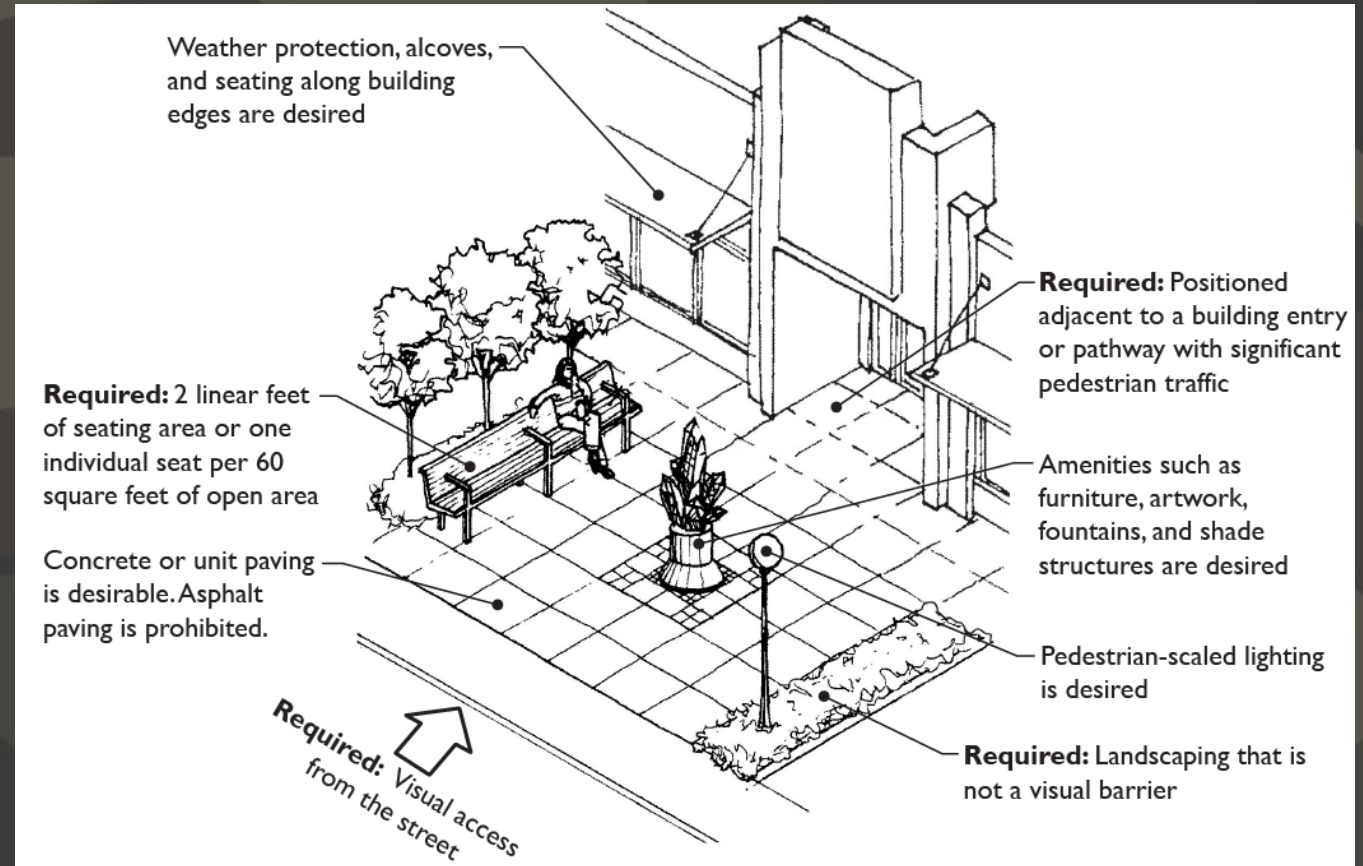
C. Usable commercial open space. New developments with non-residential uses with more than 10,000-square-feet of gross floor area in the C, CBD, and MMU zones must provide open space equal to at least two-percent of the development site. The open space may be in the form of pedestrian-oriented open space per subsection (D) below, garden, play area and/or other open space feature that serves both as a visual amenity and a place for human activity. Portions of sidewalks that are wider than 12-feet and which meet the standards of pedestrian-oriented open space may be counted toward this requirement.

DEPARTURE: Open space area may be reduced to one-percent of the development site if the director finds the project includes exceptional design features and elements that meet the purpose of the standards. This includes open spaces that feature a combination of design (site materials, amenities, and configuration) and location/context that clearly exceed typical plaza designs found in the region.

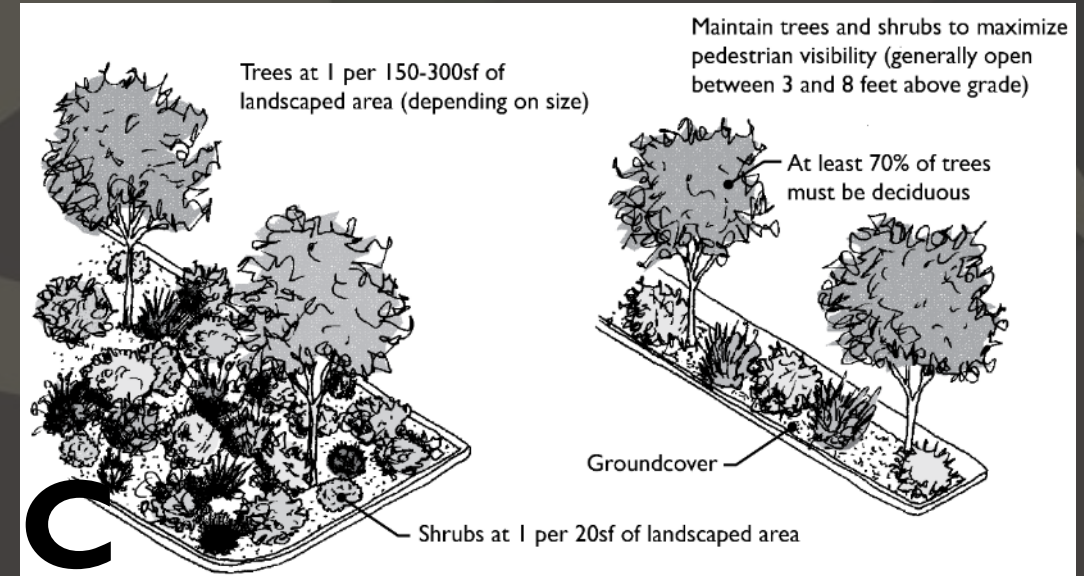
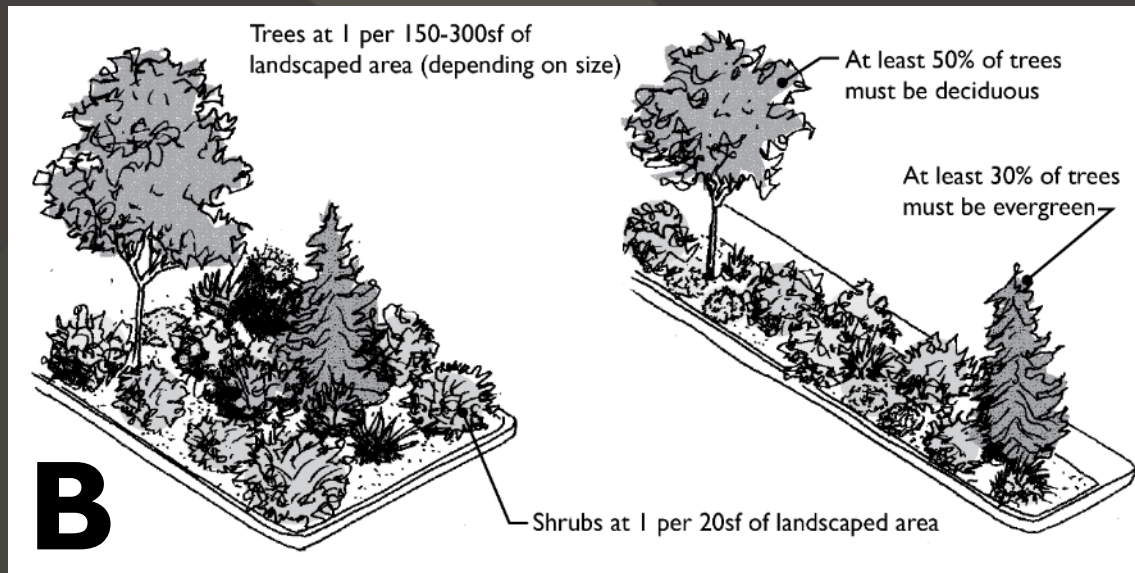
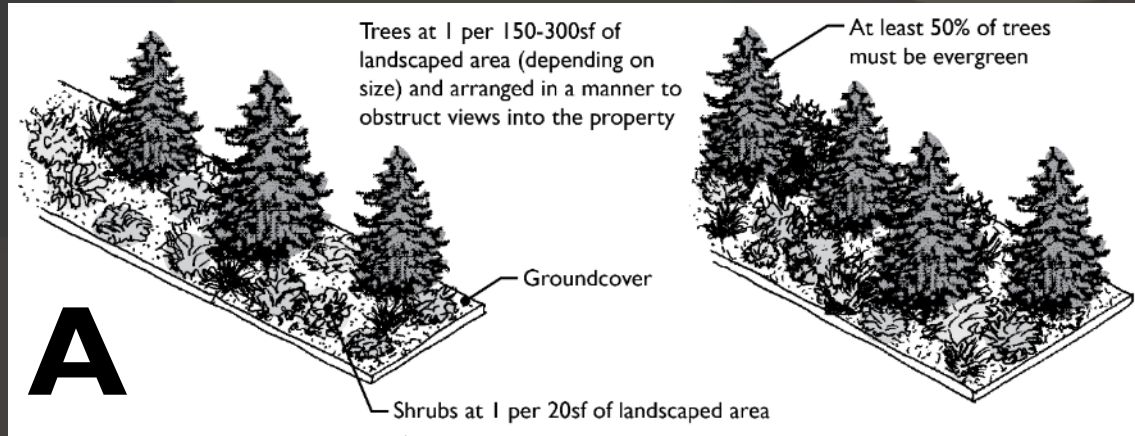


Commercial Open Space

- Can be strategically limited to certain zones or large sites
- Provide a sense of respite and community gathering space
- Provide standards for usability



Landscaping



Landscaping Types

- Just three types can cover a range of screening requirements
- Type A – dense screen for unwanted views
- Type B – filtered screen for visual separation
- Type C - see-through screen for parking lots and building elevations

Buffer Matrix

- Refer to the types here – and throughout code for other functions

Developing Use	Existing Abutting Uses and Districts					
	Street	R-1 & R-2 zones	R-3 & R-4 zones or Multi-family use	C, CBD, MMU & CM zones	HM, MS, CM2, I & LM zones	Park & trails
Multifamily	See block frontage standards	Fence, plus BC-5'	Fence, ABC-5', or path	Fence, BC-5', or path	Fence plus ABC-10'	Fence or ABCD-10'
Low intensity non-residential use	See block frontage standards	Fence, plus ABC-5'	Fence or AB-5'	Site site planning standards in chapter 19.62		See trail frontage standards
Moderate intensity non-residential use	See block frontage standards	Fence, plus ABC-10'	Fence plus ABC-5'			See trail frontage standards
High intensity non-residential use	See block frontage standards	Fence, plus ABC-15'	Fence plus ABC-10'			See trail frontage standards
Outdoor storage	See block frontage standards, plus A-10'	Fence, plus ABC-10'	Fence plus ABC-10'	Fence or A-5' or B-10'		Fence plus ABC-5' or A-10'
Heavy industry	See block frontage standards	Fence, plus ABC-20'	Fence plus ABC-20'	Fence plus ABC-5' or A-10'	Fence plus ABC-5' or A-10'	Fence plus ABC-10' or AB-20'

Other Site Planning Elements

- Internal pedestrian access and design
- Vehicular circulation and parking
- Service areas and mechanical equipment

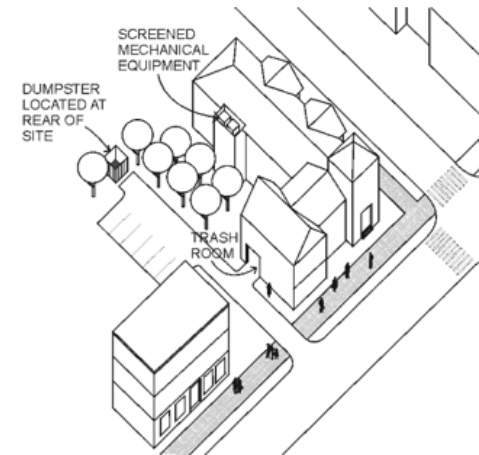
Figure 19.62.050(D)(5)

Example of a successful pedestrian sidewalk between parking lot and storefront.



Figure 19.62.070(B)

Service element location



Locate service elements to reduce impacts on the residential and pedestrian environment, and provide appropriate enclosure.





Building Design Stair Climb

Building Design

1. Façade articulation & massing
2. Building details
3. Exterior materials
4. Blank walls

Façade Articulation – Residential

Figure 20.131.040.C
Residential façade articulation examples.



Below examples use a combination of vertical building modulation, window patterns, material changes, and roofline modulation.



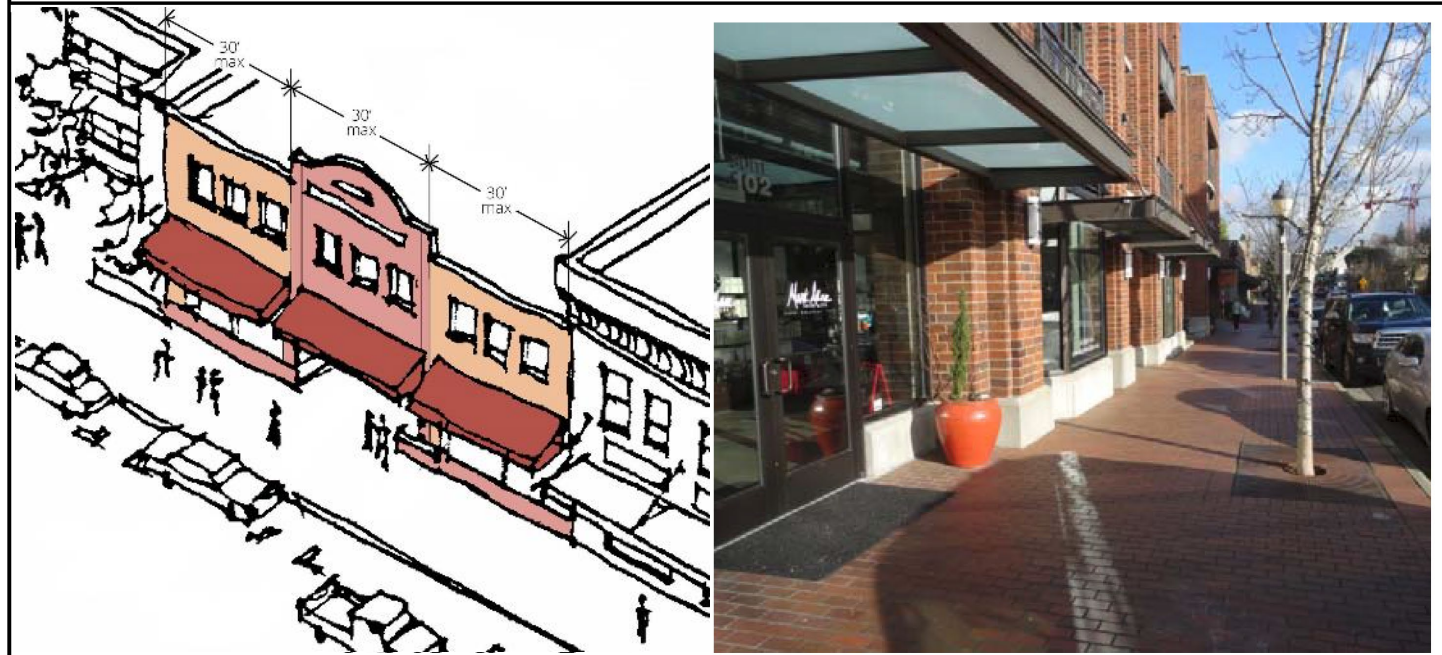




Façade Articulation – Commercial

- Most important for storefronts and mixed-use developments
- Typically a 30' interval, based on historic storefront size and column spacing

Figure 19.63.040(B)
Façade articulation examples.

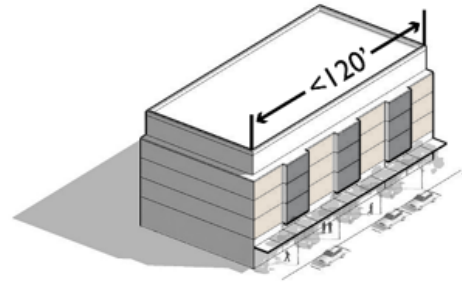


Maximum Façade Width

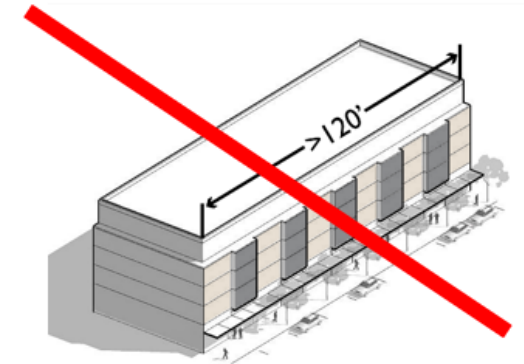
- Critical for retaining a sense of human scale
- Typically suggest a maximum width of 100-120'
- Major feature required to break up façade – not necessarily a courtyard as shown here

Figure 3.1.C

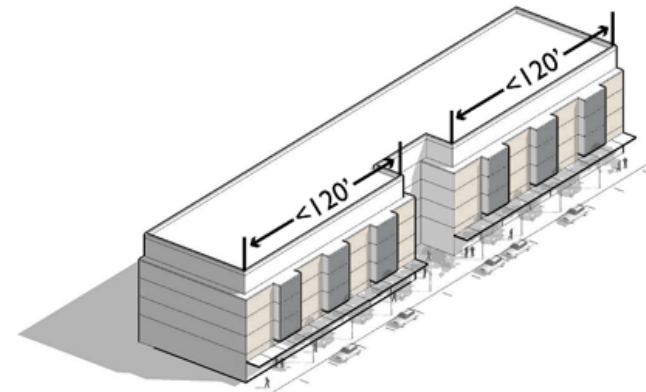
Illustrating maximum façade width guidelines and good and bad examples.



Less than 120' wide: Meets guideline.



More than 120' wide: Does not meet guideline.



Bad



Really Bad



New examples being used for South Tukwila

Figure 3.1.C

Illustrating maximum façade width guidelines and good and bad examples.

Building incorporates a courtyard along the façade (technique #1 noted above) to effectively break it up into smaller components: Meets guideline.



The central portion of the left building (Image A) employs substantial horizontal and vertical modulation (from adjacent building elevation segments), a different mix of façade materials, distinctive rooflines and different window fenestration techniques to effectively break up the building massing. Image B building employs distinct facades to lend the appearance that it's several different buildings.



Image C and D buildings feature a combination of modest vertical modulation, roofline modulation, and window fenestration techniques, but lack the more effective techniques to visually break up its expansive and repetitious façade length.

Building Details: Doors, Windows, Etc.

Figure 19.63.040(B)(1)

Examples of decorative or specially designed windows and entries.



Examples of decorative or specially designed windows and entries. A = openable storefront window. B = transom windows. C = openable window with decorative details. D = decorative window shades. E = Decorative door. F = recessed entry.

Figure 19.63.040(C)

Acceptable and unacceptable window design examples.



Recessed and/or trimmed windows.



This window lacks any other detail that adds visual interest.

Building Details

Toolbox approach

B. Façade details - non-residential and mixed-use buildings. All commercial and mixed-use buildings must be enhanced with appropriate details. All new buildings and additions and buildings associated with Level II and III Improvements (see section 20.128.020) must employ at least one detail element from each of the three categories below for each façade facing a street or public space for each façade articulation interval (see section 20.131.040). For example, a building with 120 feet of street frontage with a façade articulated at 40-foot intervals will need to meet the standards for each of the three façade segments below.

- I. Window and/or entry treatment, such as:
 - a. Display windows divided into a grid of multiple panes.
 - b. Transom windows.
 - c. Roll-up windows/doors.
 - d. Other distinctive window treatment that meets the purpose of the standards.
 - e. Recessed entry.
 - f. Decorative door.
 - g. Other decorative or specially designed entry treatment that meets the intent of the standards.

Decorative Windows & Entries

Figure 20.131.050.B.1

Examples of decorative or specially designed windows and entries.



Examples of decorative or specially designed windows and entries. A = operable storefront window. B = transom windows. C = operable window with decorative details. D = decorative window shades. E = Decorative door. F = recessed entry.

Building Elements & Façade Details

Figure 20.131.050.B.2

Examples of attached elements that enhance the visual intrigue of the building.



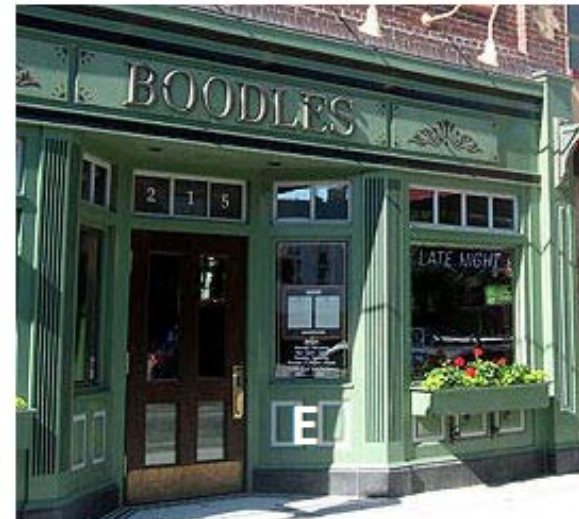
Examples of elements attached to facades that enhance the visual intrigue of the building. A = retractable awning. B = custom hanging bike rack and repair station integrated as a storefront design element. C = decorative façade/sign lighting D and E = custom decorative canopy. F decorative tower.

Building Materials & Other Facade Elements

Figure 20.131.050.B.3
Examples of decorative surface materials.



Examples of decorative surface materials. A = decorative brick/design. B = decorative tile-work and column pattern. C = decorative medallion.



D = decorative mosaic tile work. E = decorative bulkhead. F = Decorative materials and design.

Window Design

Figure 20.131.050.C

Acceptable and unacceptable window design examples.



Recessed and/or trimmed windows.



The window in the left image lacks any other detail that adds visual interest.



Building Material Standards

- The most commonly used exterior materials typically warrant some conditions for their use
 - Concrete block
 - EIFS
 - Metal siding
 - Hardi-panels/planks
- Can regulate in different ways – focus on the ground floor and public-facing elevations

Figure 19.63.050(C)(1)

Acceptable concrete block use/design.



CMU is the primary cladding for the corner element above, but secondary to brick on the main façades. The corner element uses a combination of decorative split faced CMU closer to the sidewalk and smooth-faced CMU that is colored to look more like traditional white terra cotta tiles.



The above façade illustrates an acceptable alternative example, as CMU is used as the primary cladding material. Note the use of split-façade CMU's above each of the awnings and coupled with the use of smooth-façade CMU's on the vertical columns (which employ black accent tiles for added interest).

Building Materials: Concrete Block (CMU)

C. Special conditions and limitations for the use of certain cladding materials.

- I. Concrete block (a.k.a. CMU) may be used as a cladding material if it is incorporated with other permitted materials and/or incorporates a combination of textures and/or colors to add visual interest. For example, combining split or rock-façade units with smooth blocks can create distinctive patterns. The figures below illustrate acceptable concrete block use/designs.

Figure 20.131.060.C.1
Acceptable concrete block use/design.



CMU is the primary cladding for the corner element above, but secondary to brick on the main facades. The corner element uses a combination of decorative split faced CMU closer to the sidewalk and smooth-faced CMU that is colored to look more like traditional white terra cotta tiles.



The above façade illustrates an acceptable alternative example, as CMU is used as the primary cladding material. Note the use of split-façade CMU's above each of the awnings and coupled with the use of smooth-façade CMU's on the vertical columns (which employ black accent tiles for added interest).



Building Materials: Metal Siding

2. Metal siding may be used as a secondary cladding material if it is incorporated with other permitted materials and complies with the following standards:
 - a. It must feature visible corner molding and trim and does not extend to the ground level of non-residential and mixed-use buildings and no lower than two feet above grade for residential buildings. Masonry, concrete, or other durable material must be incorporated between the metal siding and the ground plane.
 - b. Metal siding must be factory finished, with a matte, non-reflective surface.
- ➡ Departures will be considered provided the material's integration and overall façade composition meets the intent of the standards.

Figure 20.131.060.C.2
Acceptable metal siding examples.



The use of metal siding in each example above is secondary to masonry. The left and right images are more contemporary in character, whereas the middle image is more rustic and industrial, with more refined windows.









Building Materials: EIFS

3. Standards for the use of Exterior Insulation and Finish System (EIFS). Such material/finishes may be used as a decorative accent cladding material if it is incorporated with other permitted materials and it complies with the following:
- EIFS is limited to no more than 20 percent of the total façade area and may not be the primary cladding material.
 - EIFS must feature a smooth or sand finish only.
 - EIFS must be trimmed in wood, masonry, or other material and must be sheltered from weather by roof overhangs or other methods.
 - EIFS must not be used on the ground floor when facing a street, internal access road or pathway. Concrete, masonry, or other durable material must be used for ground level wall surfaces to provide a durable surface where damage is most likely.

Figure 20.131.060.C.3
Acceptable and unacceptable EIFS examples.



Note the use of brick and decorative concrete block on the ground level and EIFS on the second floor of the left image. The window treatments visible on the second floor add depth and interest to the façade. The right image employs EIFS between the window and sidewalk - this design is prohibited.

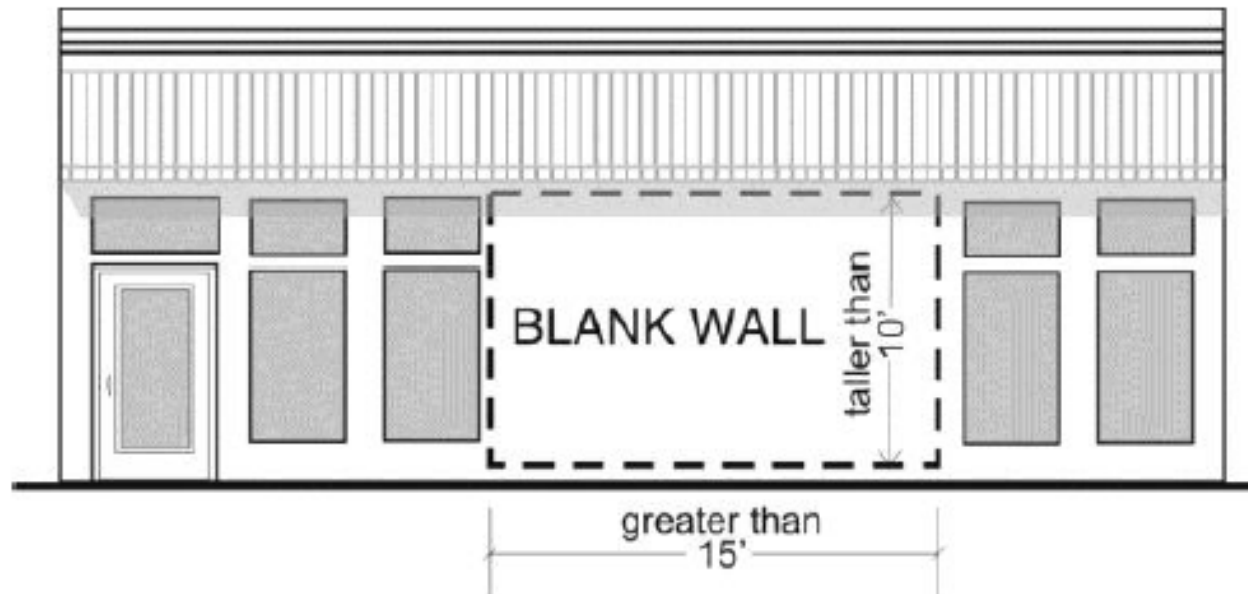
Building Materials: EIFS





Blank Walls

Figure 20.131.070.B
Blank wall definition.



Blank Walls

- Treatment is key for enhancing the pedestrian realm
- Reduce graffiti targets

Figure 3.5.B

Blank wall treatment examples.



Image A uses an artistic mural and Image B uses a landscape planting bed. Image C includes a landscape planting bed with shrubs too low to meet the screening requirement. Image D includes simple detailing (color changes) and a landscape planting bed which are ineffective in screening or treating the blank wall.

Corporate Architecture

Some communities prohibit it in case of change of use



Corporate Architecture

Corporate architects will conform to your local standards if they are in place!







Parking Push-Ups

Why Are We Concerned About Parking?

Parking effects everything we plan for:

- Transportation systems
- Housing market
- Economic development
- Environment
- Urban design and character
- Building form and site layout

Aesthetics, Cost, Pollution, Safety, Etc.



Retail Parking

1-1/2 Hours Complimentary with Validation

Public Parking Rates

All Taxes Included

Rate With Validation

1-1/2 Hours or Less	Free
1-1/2 to 2 Hours	\$ 8.00
2 to 3 Hours	16.00
3 to 4 Hours	26.00
4 to 12 Hours	31.00
12 to 24 Hours	51.00

HB 1923 – Key Housing and Parking Provisions

Planning Grant Options

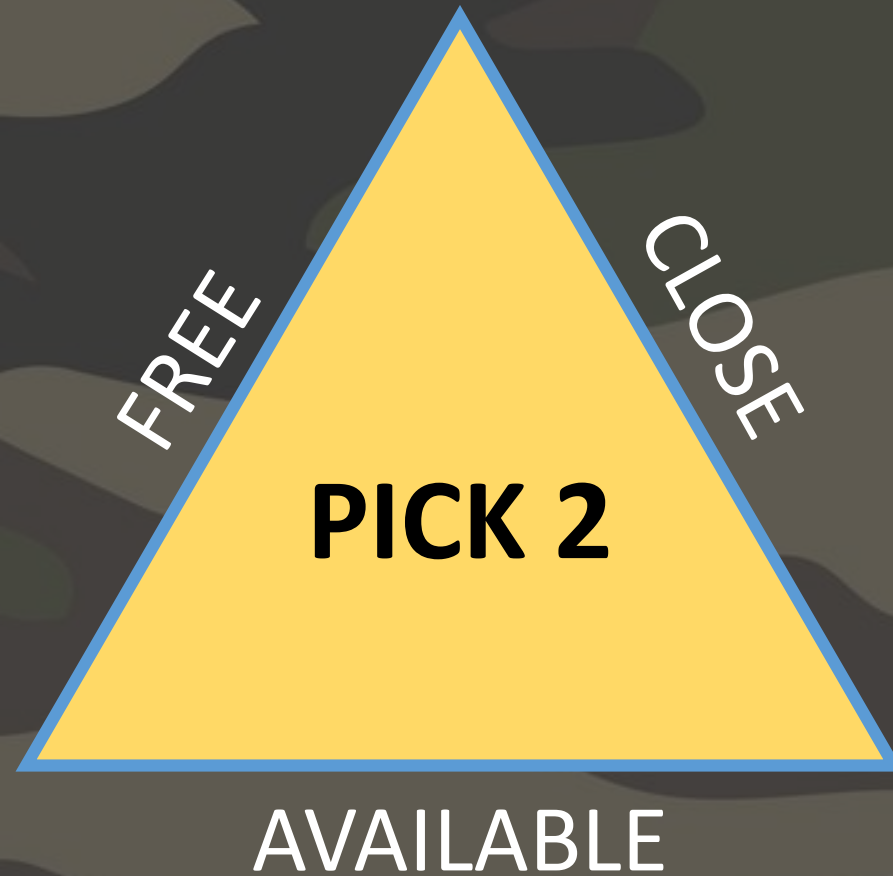
- For transit-oriented zoning updates, minimum must be no more than 0.5 parking spaces per bedroom in multifamily zones
- No parking may be required for ADUs

New RCW 36.70A.620 for housing within $\frac{1}{4}$ mile of good transit (with exceptions):

- Very and extremely low-income housing: Minimums limited to 1 space per bedroom or 0.75 spaces per unit
- Disabled and senior housing: No minimums allowed for residents, but allowed for visitors and staff

Is Parking A “Necessary Evil”?

Yes, But It's A Balance



What Planners Can and Can't Control

Influences on Travel

- Land use mix and distribution
- Demographics (age, income)
- Jobs that require driving
- Private parking rates
- Transit availability and quality
- Bicycle network safety
- Fuel prices
- Weather

Shaping the Impacts of Parking

- Parking availability and quantity
- Allowing alternative amounts and uses of parking
- Parking lot location and entries
- Parking lot/structure design
- Employer/developer incentives
- On-street parking prices
- Local environmental regulations

Typical (Outdated) Parking Codes

- Detailed requirements for a litany of land uses
- Assume everyone and their dog is driving
- Little or no flexibility for unique situations or community context
- Minimal or no requirements for landscaping and screening
- Silent on relationship to buildings, streets, and pedestrian circulation

LAND USE	REQUIRED PARKING
RESIDENTIAL	
Single Family/Duplex	2 spaces per unit; tandem parking may be used to fulfill this requirement
Accessory Dwelling Unit	1 space; tandem parking may be used to fulfill this requirement
Multifamily: Studio Apartment	1 space per unit ³
Multifamily: Other Than Studio Apt.	2 spaces per unit ³
Senior Housing, Large and Small Scale	1 space per 2 units and 1 space for each employee @ peak times ³
Assisted Living Facilities:	
- Senior Assisted Care Facility	1 space for each 2 units + 1 space per employee @ max. shift
- Residential Care Facility	1 space for each 2 units + 1 space per employee @ max. shift
- Nursing Home	1 space per 3 beds
- Retirement Home	1 space per 3 beds
PUBLIC/QUASI-PUBLIC	
Banquet/Meeting/Reception	1 space per 75 sq. ft. GFA in dining or lounge areas or 1 space per 4 persons @ occupancy load, whichever is greater
Church/ Religious Facility, Funeral Home/Mortuary /Memorial Chapel	1 space per 4 seats
Community Center	1 space per 300 sq. ft. of offices, plus 1 space per 100 sq. ft. of weight rooms/workout and/or dance rooms, plus 1 space per 150 sq. ft. of multipurpose activity rooms, plus 1 space per 100 sq. ft. for restaurant/cafe or snack bar, plus 1 space per employee @ max. shift, plus additional for any stadiums/arenas or other uses according to standards established in Chapter 18.07 IMC
Day Care Operations ²	1 space per 6 attendees @ max. occupancy, plus 1 space per employee @ max. shift
Government:	
- Courthouse	3 spaces per courtroom, plus 1 space for each 30 sq. ft. of fixed seating in the courtroom. In addition, for the remainder of the courthouse, 1 space for each 300 sq. ft. of GFA
- Government Office Buildings	1 space per 300 sq. ft. GFA (like general office)

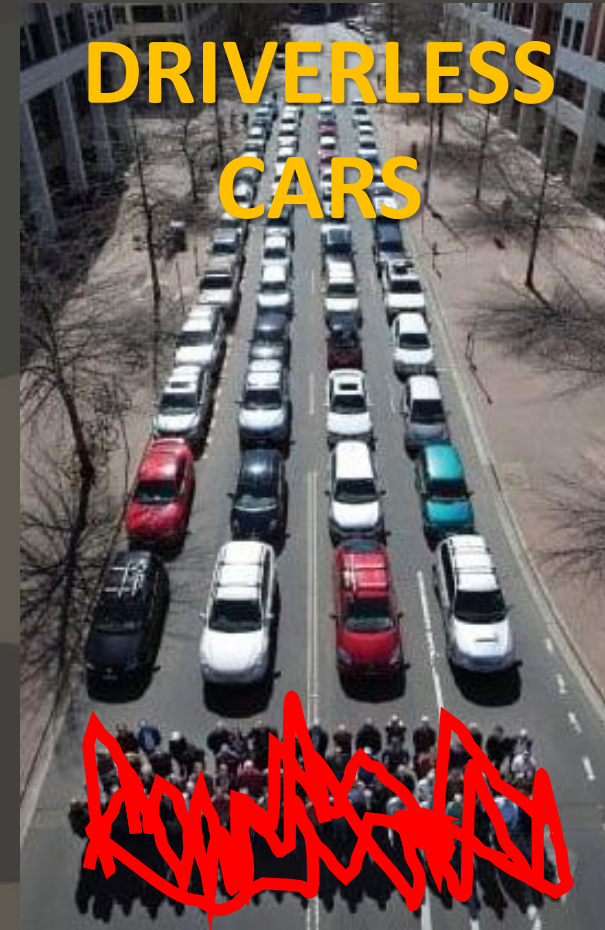
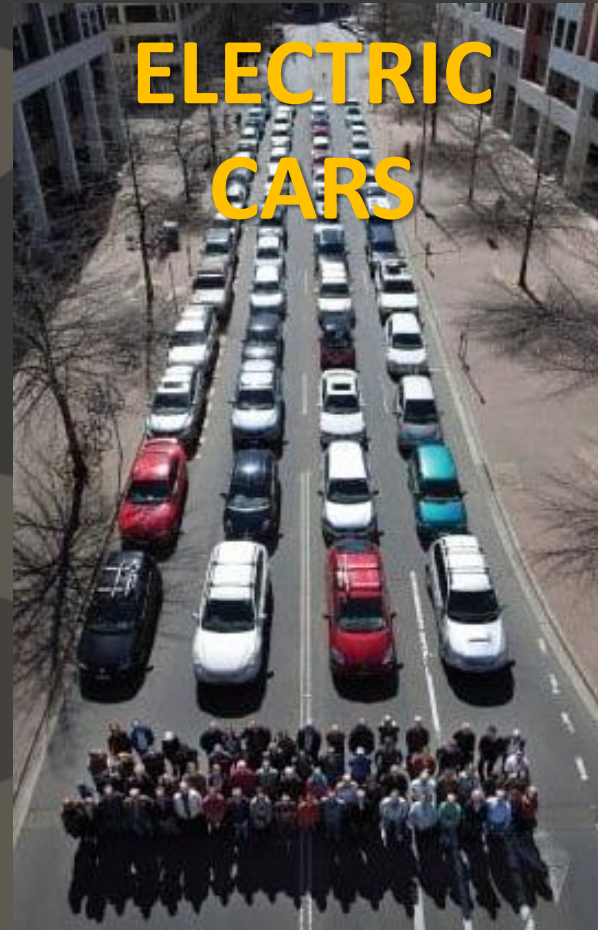
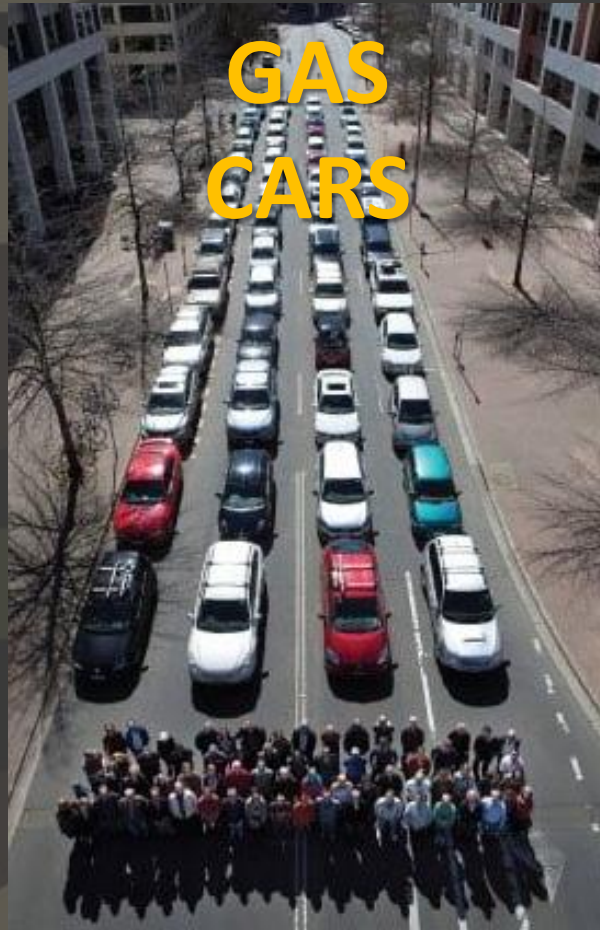
Not Everyone Drives

- Young
- Old
- People with disabilities
- Low-income
- Suspended license
- Environmentalists



Driverless Cars Are Still Cars

They're not coming to save us



Town Center vs. Suburban Contexts



Parking Demand

Same distance – but sometimes, a different willingness to walk



Parking Demand

Same distance – but sometimes, a different willingness to walk



Development Feasibility Example

2.6 acre town center block

Proposal for 4-floor, 25,000 SF footprint mixed-use building



Development Feasibility Example

Program

- Ground floor – 6,250 SF restaurant and 18,750 SF retail (*25% and 75%*)
- 3 floors residential - 85 units averaging 1.5 bedrooms = 128 bedrooms (*700 SF per unit @ 80% efficiency*)

Parking code

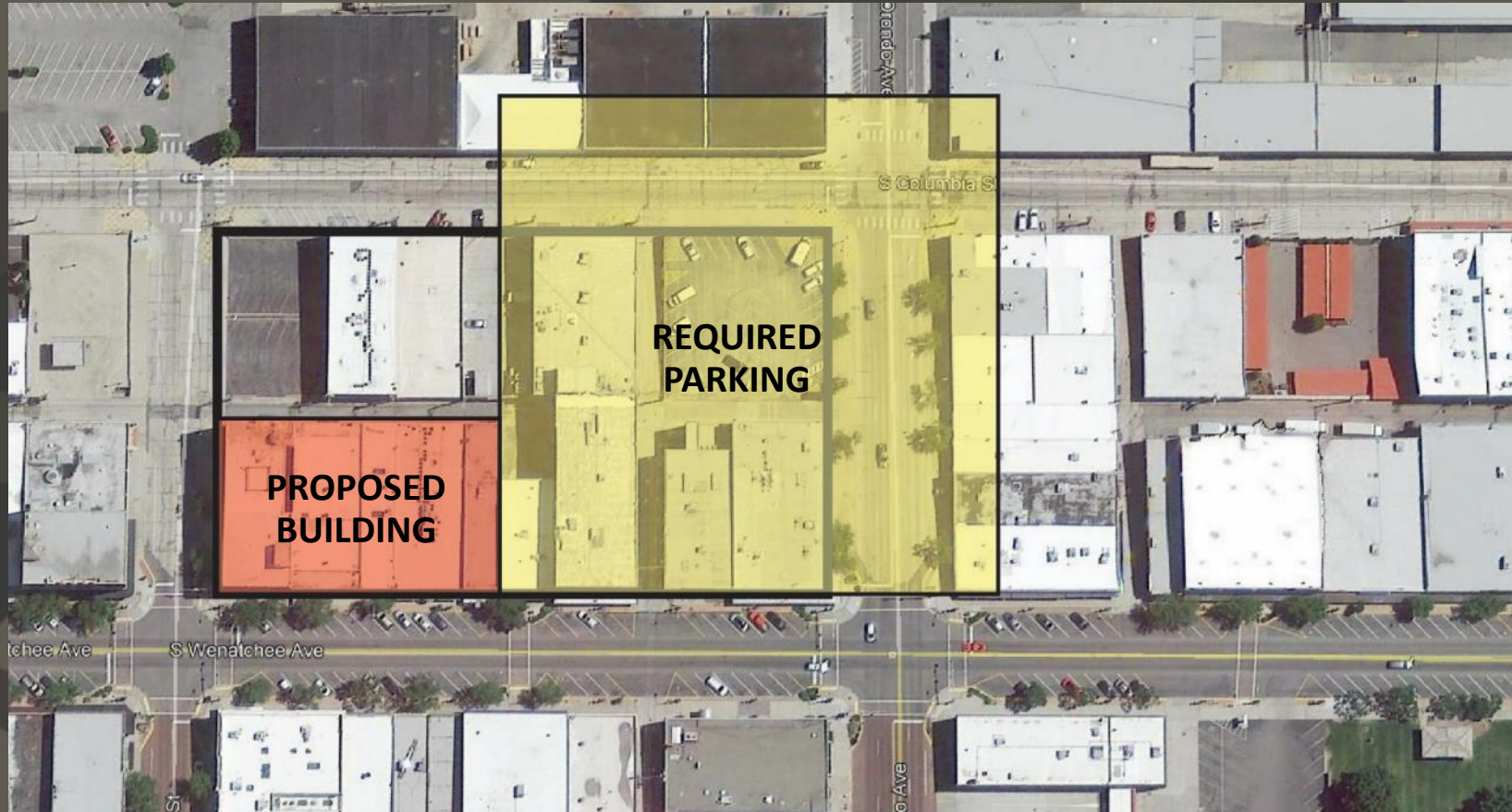
- 1.5 spaces per bedroom (!) = 191 spaces
- Restaurant, 10 spaces per 1,000 GFA = 63 spaces
- Retail, 2.85-4 spaces per 1,000 GFA = 59 spaces

Minimum required spaces = 313

Development Feasibility Example

Parking Area: 400sf x 313 spaces = 125,200sf (2.9 acres)

Unbuildable without expensive structured parking – if it is even feasible with geotechnical conditions, height limits, and market economics.



Various Approaches

...To aligning your parking policies with community goals and desires, market realities, and fostering sustainability

Levels of Parking Policy Complexity

1	Require plentiful parking for everything and everywhere
2	Adjust parking minimums for key locations and land uses based on actual use (or remove and let the market decide, where appropriate)
3	Create parking maximums, alternative compliance options and incentives, and parking lot/structure design standards
4	Coordinate parking policy with multi-modal transportation investments to reduce the need for driving and parking

Today's Focus

Incremental opportunities to right-size the quantity and quality of parking

Levels of Parking Policy Complexity

1

Require plentiful parking for everything and everywhere

2

Adjust parking minimums for key locations and land uses based on actual use (or remove and let the market decide, where appropriate)

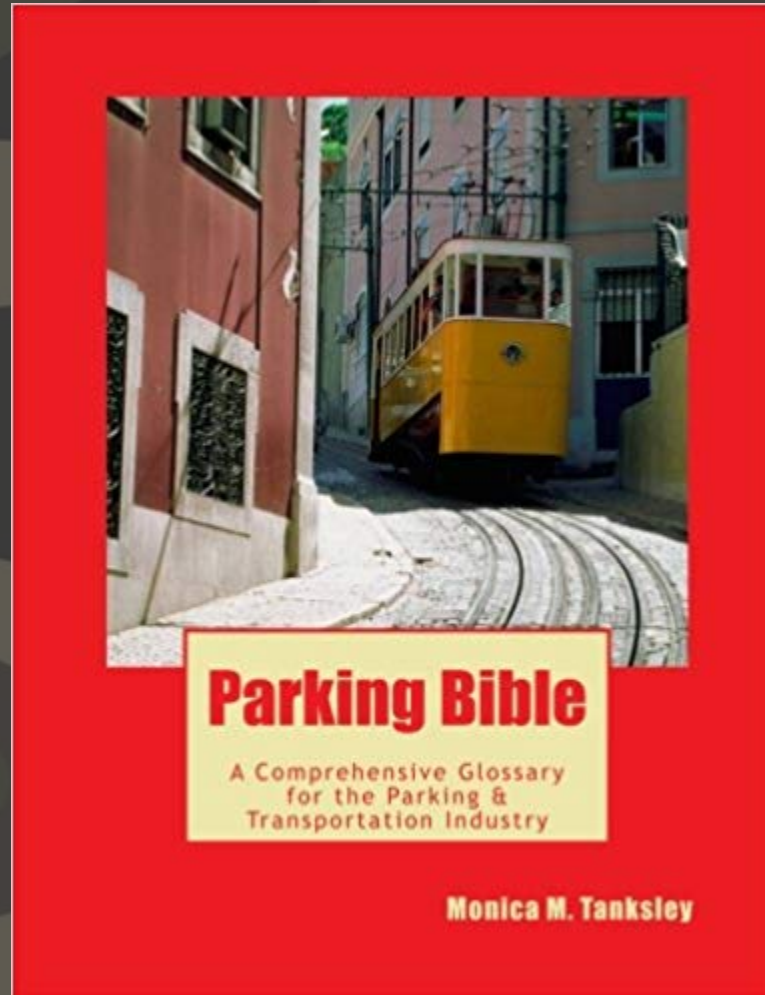
3

Create parking maximums, alternative compliance options and incentives, and parking lot/structure design standards

4

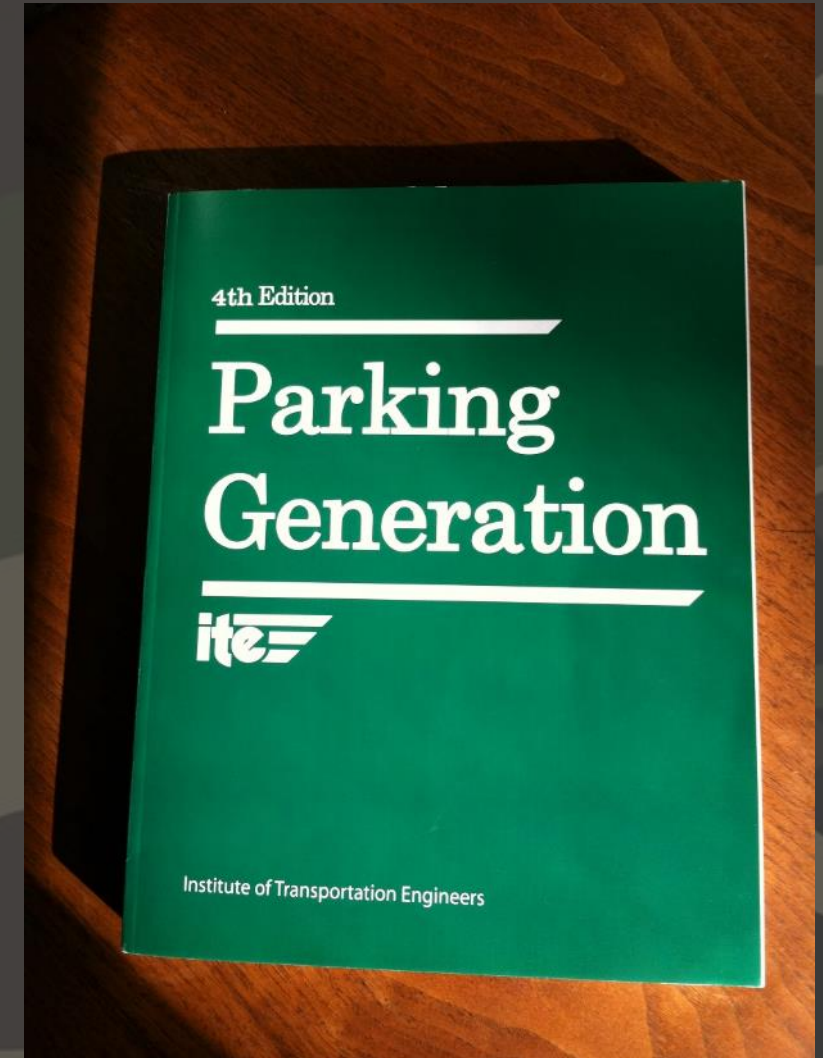
Coordinate parking policy with multi-modal transportation investments to reduce the need for driving and parking

How Did Parking Numbers Come To Be?



How Did Parking Numbers Come To Be?

- No one really knows
- It's not clear there is a scientific basis for most community's parking codes
- Many cities rely on the requirements of other cities, which may repeat mistakes without proper context
- The ITE Parking Generation handbook provides decent occupancy survey data, but the sample sizes are small, seem to involve free parking, and do not account for transit service



Effects of Parking Supply

- Oversupply leads to **induced demand**: Increased automobile ownership, vehicle miles traveled, and congestion.
- **Parking is expensive to build**. Construction of parking in multi-family projects costs between \$20,000 - \$40,000 per stall (10-20% of construction cost), which has an impact on rent charged to tenants.
- On average, multi-family buildings in King County supply **40% more parking than is utilized**.
- **Too little parking can have negative impacts** on marketability of multi-family housing projects, and on-street parking spillover impacts when on-street parking is not sufficiently managed and priced

Right Size Parking

- King County research project and development tool with broader use for general trends
- Ongoing research based on 200+ multifamily properties throughout King County



Right Size Parking – Online Map + Calculator

Enter a location...

Parking/Unit Ratio (Number of Stalls/Unit)
>0.50 ≤1.22

No Parcels Selected

Building & Parking Specifications | Location Characteristics | Parking Impacts

The preset values below represent subregional (CBD, Urban and Suburban) average/median values (from field work) for building (with no affordable units) and parking specifications. These represent the default values, as a starting point, for which parking use ratios are estimated. Scroll down to view parking optimization estimates and guidance on unbundled and affordable housing options.

	NUMBER OF UNITS	AVERAGE RENT (\$)	RESIDENTIAL AREA (SQ FT)
STUDIOS:	<input type="text" value="20"/>	<input type="text" value="\$975"/>	<input type="text" value="550"/>
1 BEDROOMS:	<input type="text" value="60"/>	<input type="text" value="\$1,150"/>	<input type="text" value="750"/>
2 BEDROOMS:	<input type="text" value="60"/>	<input type="text" value="\$1,450"/>	<input type="text" value="950"/>
3+ BEDROOMS:	<input type="text" value="10"/>	<input type="text" value="\$1,575"/>	<input type="text" value="1200"/>
TOTAL:	150	\$1,275	125,000

AFFORDABLE UNITS:

PARKING

PARKING STALLS:

PRICE PER STALL (\$/MO):

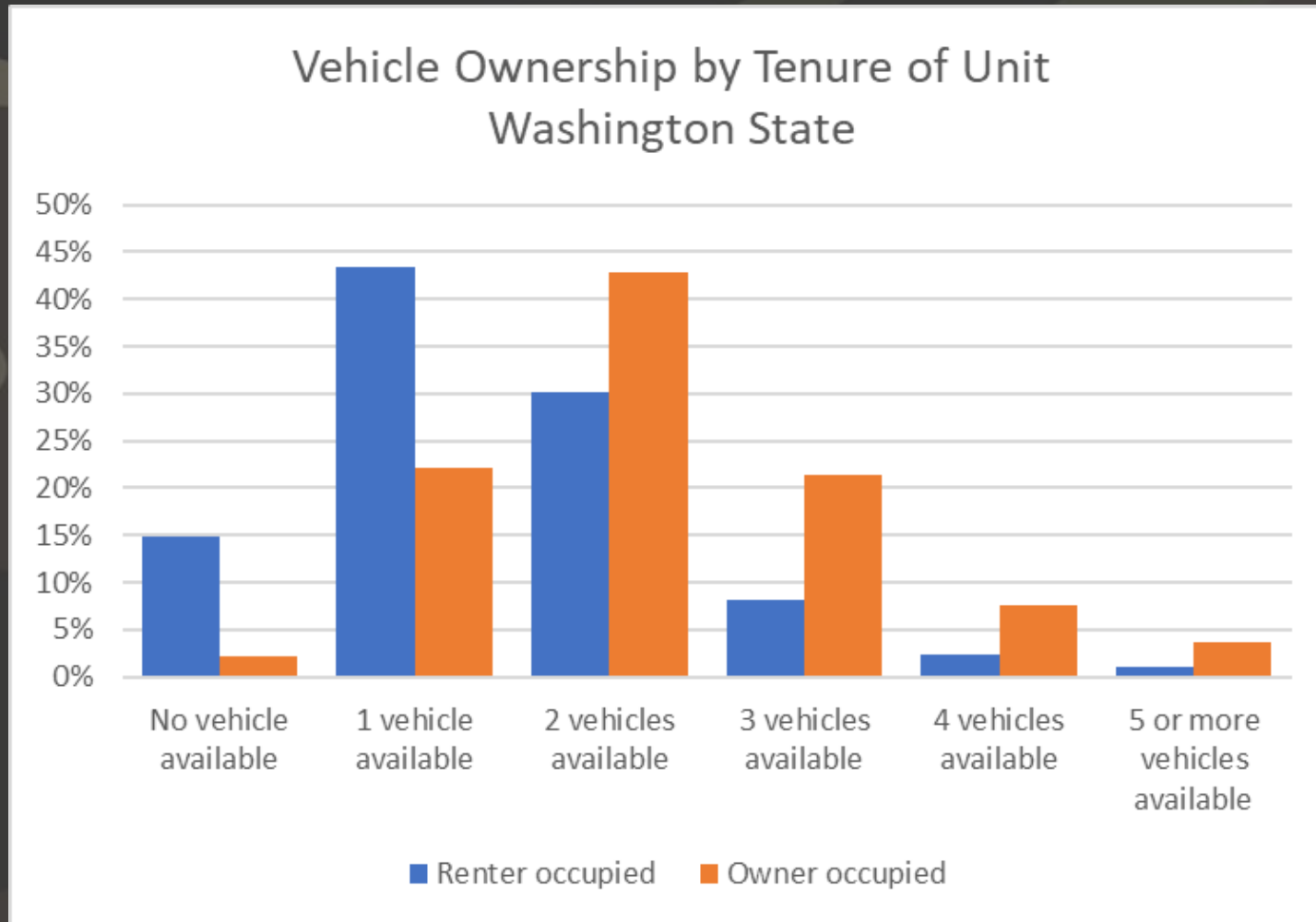
Optimized Parking Supply and Market Price

Modeled parking utilization per building is **nn** parked cars and this estimate has a range of **nn - nn** cars per building.

Map data ©2019 Google | Terms of Use | Report a map error

<https://rightsizeparking.org/>

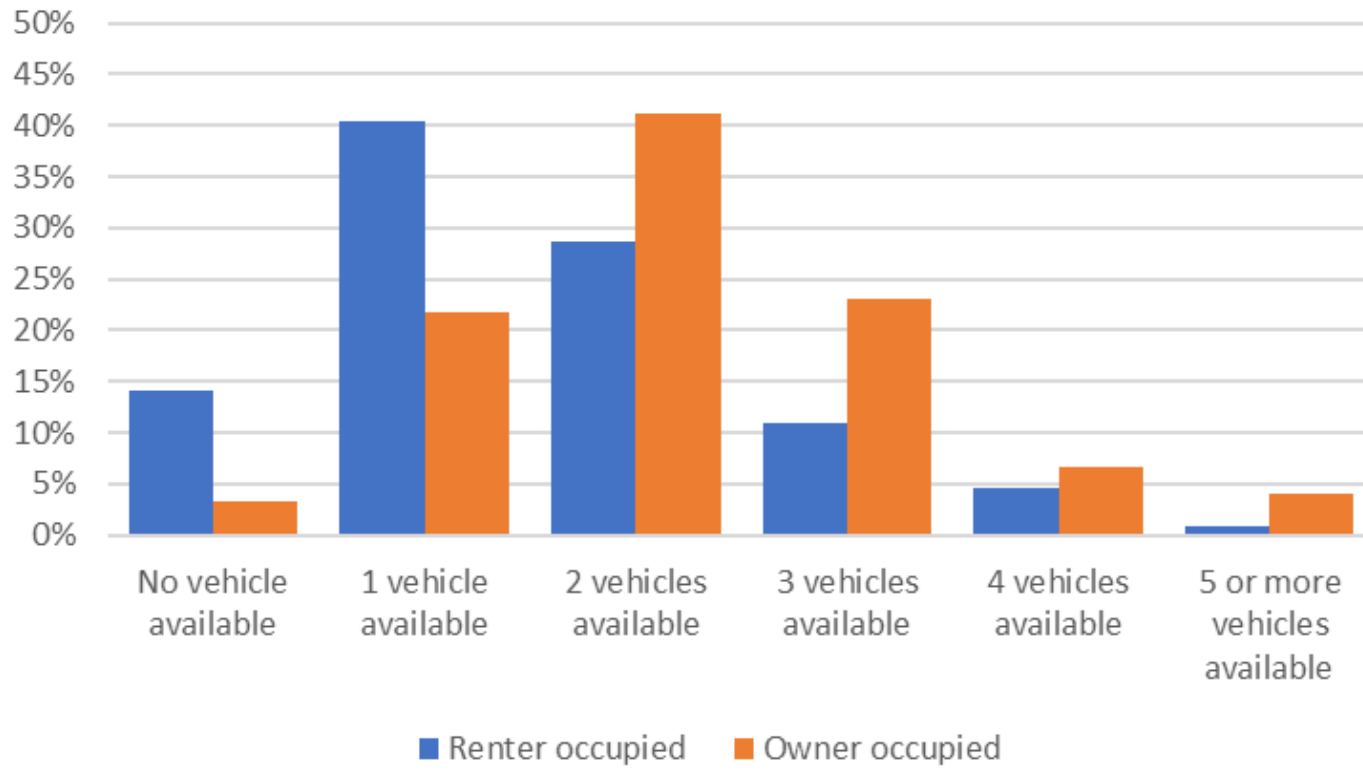
Multifamily Parking Ratio Considerations



- Parking is an equity issue when it affects housing cost and the environment
- Rental households are **6 times more likely** to have no cars than owner households
- If rental households do have cars, 1 is most common
- If owner households have cars, 2 is most common

Multifamily Parking Ratio Considerations

Vehicle Ownership by Tenure of Unit
Chelan County



The same trends are true even in rural areas

Don't Forget Commercial - #BlackFridayParking

If the lot is not full all day on Black Friday, it may be oversized

 Mike Christensen, MCMP, CNU-A, AICP Candidate
@MRC_SLC

It's Black Friday Parking Day! strongtowns.org/journal/2017/1... via @StrongTowns #BlackFridayParking




 nicowags • Follow

nicowags My subtle commentary on the idiocy of minimum parking requirements #blackfridayparking #zoning #strongtowns @strongtownspics

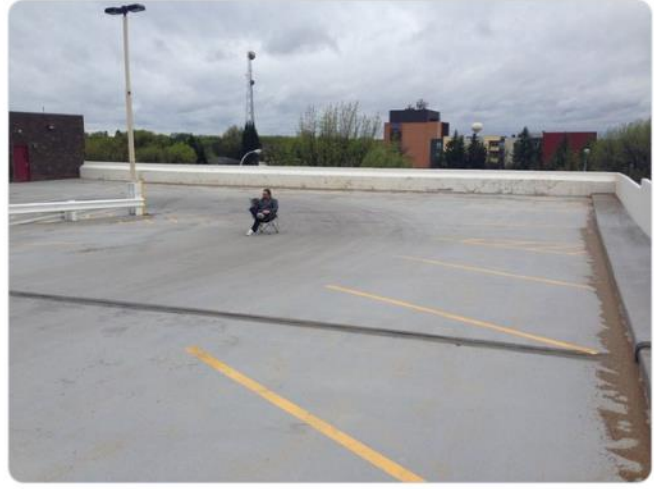
154w

dear_ndugu Oh my God! Have you ever seen Rte. 1 in Maryland next to I-95? Miles and miles of abandoned big boxes.

154w Reply

 Strong Towns
@StrongTowns


Our national obsession with parking wastes countless acres of land and millions of dollars. Know a parking lot near you that's too big even for the busiest shopping day of the year? Snap a photo and share it with hashtag #blackfridayparking bit.ly/2BtKre6



 dougaul #blackfridayparking 5th level empty, 1 car parked. Entire garage, about 1000-1200 spots total was probably 30-40% full.

102w



 schaeafadelics Empty parking spots in front of Target on Maryland Parkway in Las Vegas #blackfridayparking

102w

Towns Removing/Overhauling Parking Minimums

You're not alone – many resources and peer cities are available!

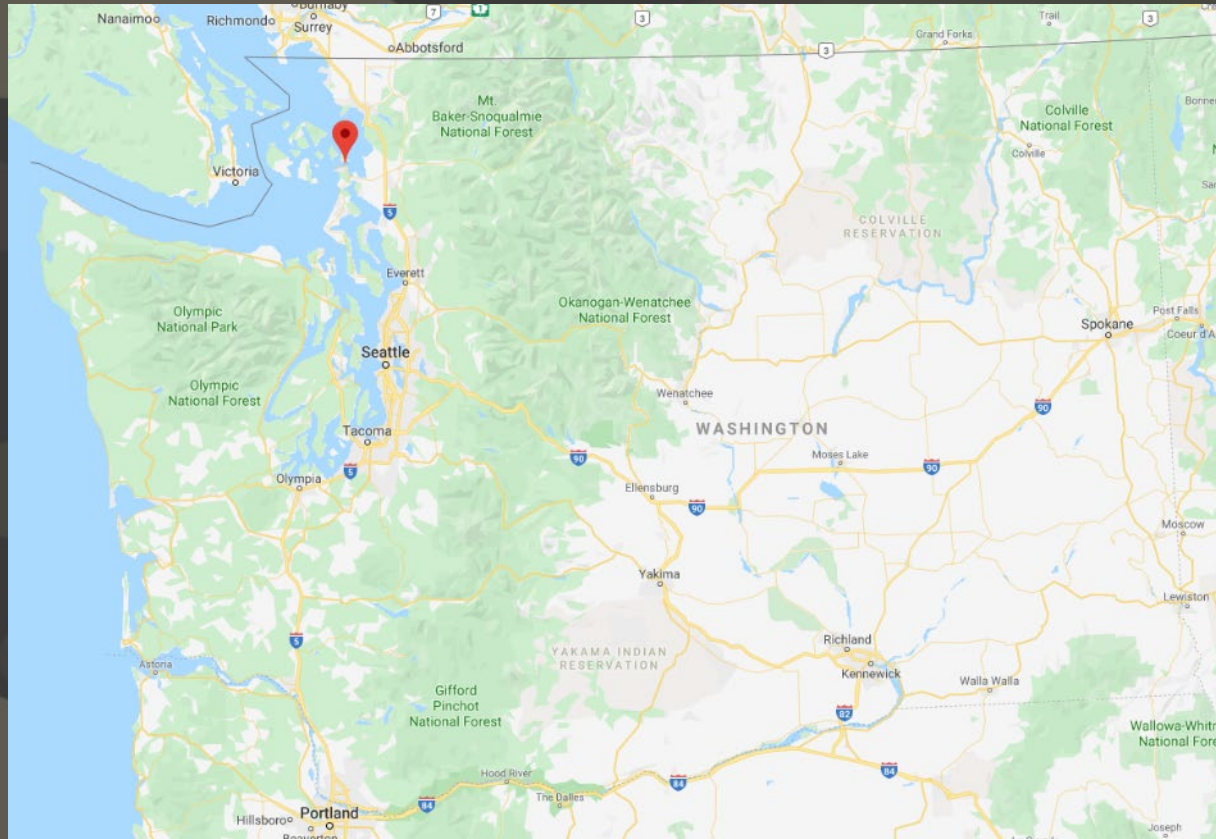


<https://www.strongtowns.org/journal/2015/11/18/a-map-of-cities-that-got-rid-of-parking-minimums>

Incremental Steps for Right-Sizing Quantity

- Reducing and removing parking minimums requires political support and public education
- Incremental options (pilot programs):
 - Location: Start in business districts and areas served by good transit
 - Rate: And/or offer a percent reduction less than 100%
- Guest parking ratios can help justify major residential reductions in areas concerned about street parking
- Parking maximums for large in-town uses (retail, multifamily, office, institutional, etc.) can be supported by a parking survey

Case Study: Anacortes, WA Development Regulations Update



Anacortes Parking Study

- In 2015 Transportation Solutions, Inc. conducted a parking study as part of the Comprehensive Plan update.
- Scope: Downtown and waterfront
- Purpose: Help the community understand the relationship between parking and land use, identify parking strategies, and find potential changes to land use policy.

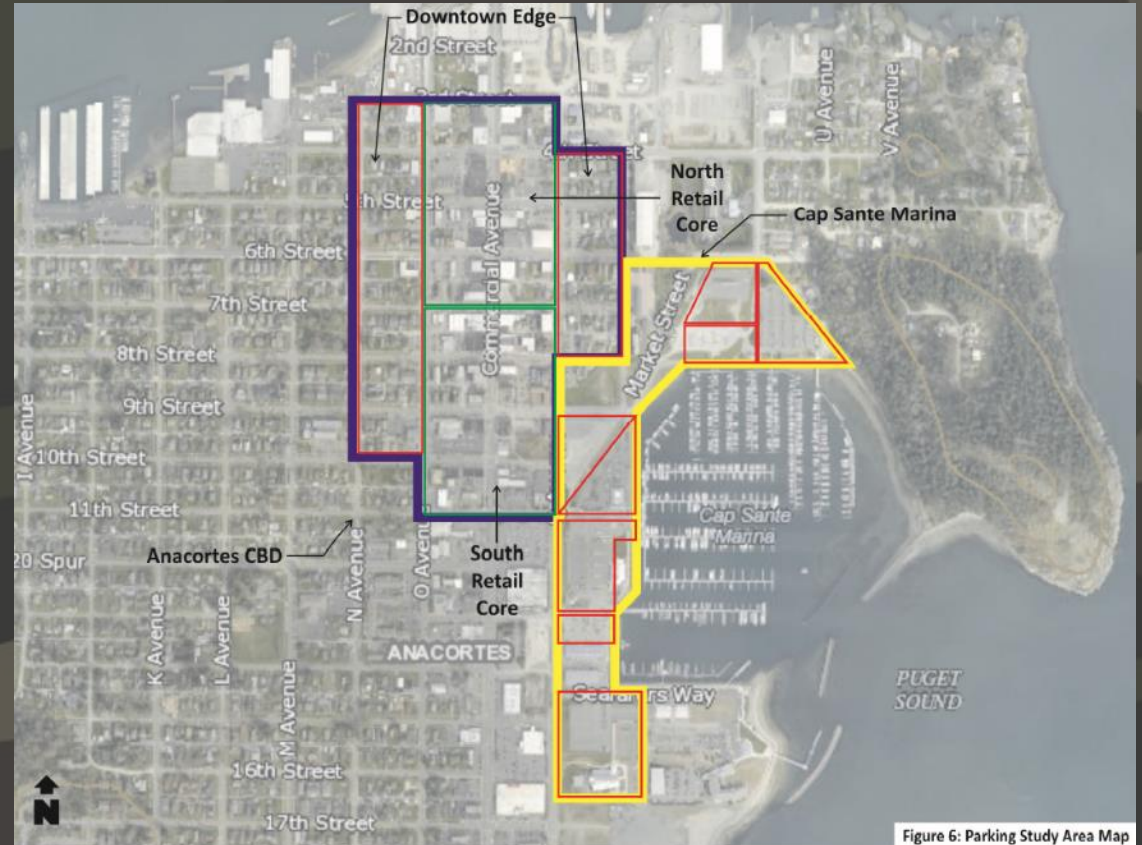
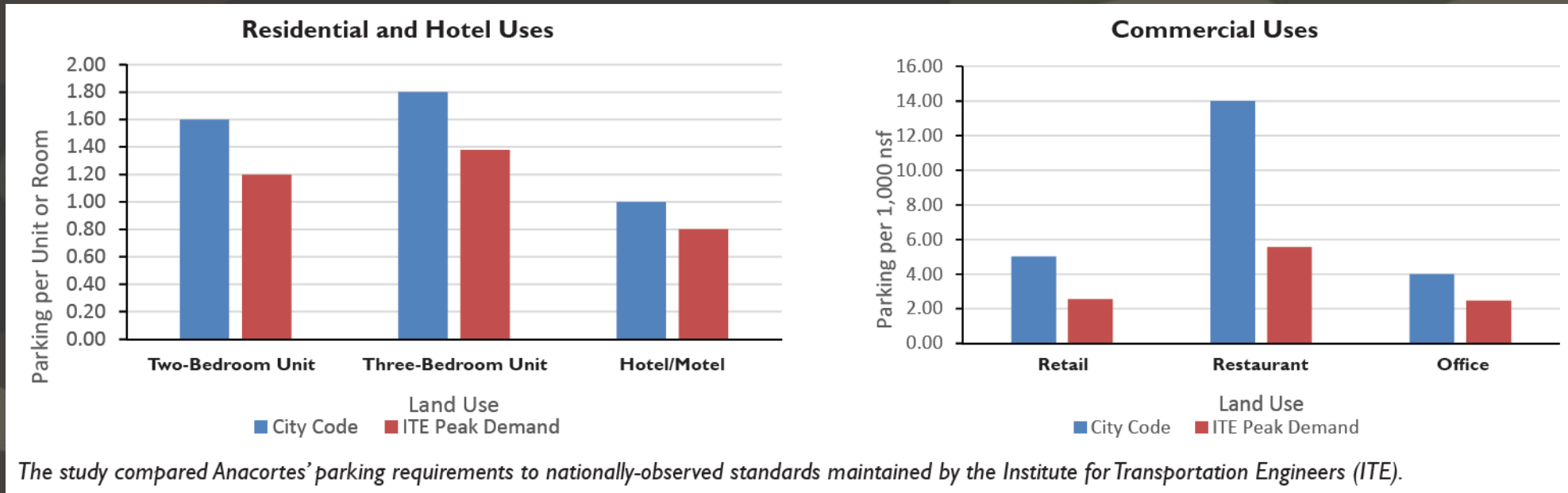


Figure 6: Parking Study Area Map

Anacortes Parking Study - Key Findings

- Anacortes' parking requirements were generally higher than actual need.
- For residential development, the number of parking spaces required is roughly **20% more than the peak demand**.
- Restaurant parking requirements **exceed actual parking needs by 250%**.



Anacortes Parking Study – On-Street Findings

- Downtown has 2,114 parking stalls, about 55% of which are on-street
- During peak summer weekday times, about 50% of all Downtown parking spaces are occupied
- More than 90% of people visiting Downtown park for two hours or less



Anacortes Parking Study – Recommendations

- Conduct comprehensive review of zoning code and align parking requirements with desired land-use changes
- Reduce parking requirements for retail and commercial uses
- Tailor requirements for specialty land-uses such as high density multifamily
- Distinguish Downtown parking requirements from citywide parking requirements
- Lower minimum parking standards to no more than 15% of forecasted needs
- Establish an in-lieu fee policy to improve or fund public parking lots

Anacortes Parking Update - MAKERS' Approach

Lower minimums across the board

Use	Minimum
Single-family detached	1 per unit
Single-family detached, small lot (<5,000 square feet) <i>[NEW]</i>	1 2 per unit
Single-family attached (townhomes, duplex, triplex) <i>[NEW]</i>	Based on number of bedrooms (multifamily)
Cottage housing <i>[NEW]</i>	1.2 per unit
Multifamily, one-bedroom or studio	1.0 1.2 per unit
Multifamily, two-bedrooms	1.4 1.6 per unit
Multifamily, three or more bedrooms	1.6 1.8 per unit
Hotel/motel	1 per guest room
Office	2.5 4 per 1,000sf NFA
Personal services	2.5 3 per 1,000sf NFA
Restaurant	5 14 per 1,000sf NFA
Retail or shopping center, less than 15,000 square feet	3 5 per 1,000sf NFA
Retail or shopping center, more than 15,000 square feet	3 4 per 1,000sf NFA
Light manufacturing or industrial	1.5 per 1,000sf NFA

Anacortes Parking Update - MAKERS' Approach

Implement maximums for the major/large land uses

Use	Minimum	Maximum <i>[NEW]</i>
Single-family detached	1 per unit	
Single-family detached, small lot (<5,000 square feet) <i>[NEW]</i>	1 2 per unit	
Single-family attached (townhomes, duplex, triplex) <i>[NEW]</i>	Based on number of bedrooms (multifamily)	
Cottage housing <i>[NEW]</i>	1.2 per unit	
Multifamily, one-bedroom or studio	1.0 1.2 per unit	1.5 per unit
Multifamily, two-bedrooms	1.4 1.6 per unit	2 per unit
Multifamily, three or more bedrooms	1.6 1.8 per unit	2 per unit
Hotel/motel	1 per guest room	1.5 per guest room
Office	2.5 4 per 1,000sf NFA	4 per 1,000sf NFA
Personal services	2.5 3 per 1,000sf NFA	3 per 1,000sf NFA
Restaurant	5 14 per 1,000sf NFA	8 per 1,000sf NFA
Retail or shopping center, less than 15,000 square feet	3 5 per 1,000sf NFA	5 per 1,000sf NFA
Retail or shopping center, more than 15,000 square feet	3 4 per 1,000sf NFA	4 per 1,000sf NFA
Light manufacturing or industrial	1.5 per 1,000sf NFA	2 per 1,000sf NFA

Anacortes Parking Update - MAKERS' Approach

Plus:

- Reduce minimums by 50% in the CBD zone
- No minimum for ground-floor commercial uses in the CBD zone
- Building expansions of less than 50% in non-residential zones are exempt from conforming to the minimum



Anacortes Parking Update - MAKERS' Approach

Provide **Director discretion** for uncommon uses:

- Hospitals
- Passenger terminals
- Most commercial indoor and outdoor recreation
- Vehicle sales/rental
- Marijuana facilities
- Public/civic, religious, resource, and institutional uses

The applicant must supply one of the following:

1. Documentation regarding actual parking demand for the use.
2. Technical studies prepared by a qualified professional relating to the parking need for the proposed use.
3. Documentation of parking requirements for the proposed use from other comparable jurisdictions.

Adjustment Opportunities

Minimums may be reduced in all commercial and multifamily zones if:

1. Reduce up to 50% if supported by a parking study

Adjustment Opportunities – Parking Study

- May be based on scientific data, census data, transit service, academic studies, similar uses in the city or comparable cities, or other sources accepted by the director
- May be required for adjusting minimum and maximum quantitative requirements, determining times of peak parking demand, and determining impacts to on-street parking
- Must be prepared by either a professional engineer with expertise in traffic and parking analyses or an equally qualified individual authorized by the director

Adjustment Opportunities – Carpooling

Minimums may be reduced in all commercial and multifamily zones if:

1. Reduce up to 50% if supported by a parking study
2. For non-residential uses >5,000 GSF, two parking spaces may be replaced by one space reserved for employee carpools, up to a 10% reduction



Adjustment Opportunities – Bike Facilities

Minimums may be reduced in all commercial and multifamily zones if:

1. Reduce up to 50% if supported by a parking study
2. For non-residential uses >5,000 GSF, two parking spaces may be replaced by one space reserved for employee carpools, up to a 10% reduction
3. For non-residential uses >5,000 GSF provide long-term bicycle parking facilities, up to a 5% reduction

Adjustment Opportunities – Bike Facilities

Provide showers, changing rooms, and day-use lockers near secure, long-term bicycle parking (intended to support employee commutes).

Separate short- and long-term bike facility design guidelines are provided.



Adjustment Opportunities – Car-Sharing

Minimums may be reduced in all commercial and multifamily zones if:

1. Reduce up to 50% if supported by a parking study
2. For non-residential uses >5,000 GSF, two parking spaces may be replaced by one space reserved for employee carpools, up to a 10% reduction
3. For non-residential uses >5,000 GSF provide long-term bicycle parking facilities, up to a 5% reduction
4. For new residential uses with >20 dwelling units, three parking spaces may be replaced by one space reserved for a car-sharing provider, up to a 15% reduction.

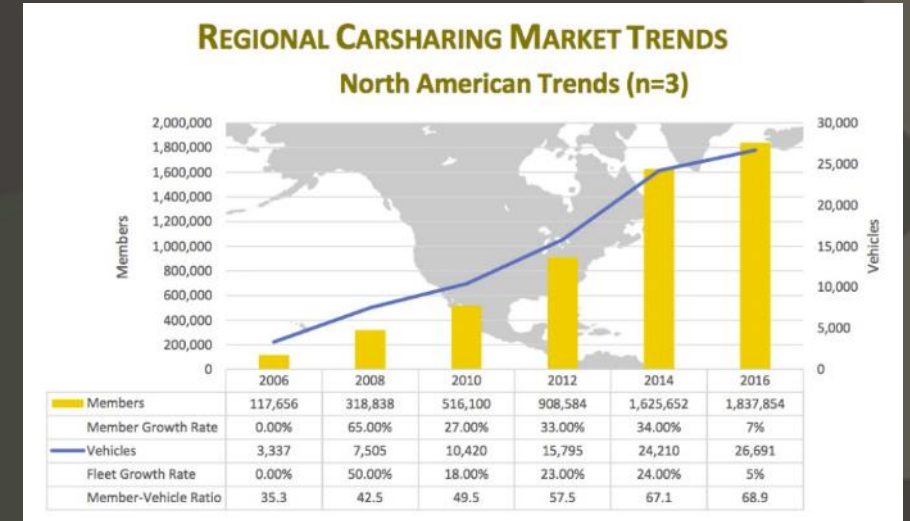
Adjustment Opportunities – Car-Sharing

- Requires long-term agreement between the property owner and a car-sharing provider.
- The agreement must be recorded with the title to the property before a certificate of occupancy is issued.
- **Car-share provider definition:** Membership-based and licensed business that offers use of motor vehicles 24 hours a day and seven days a week to members who reserve vehicles in advance, and that charges members for the time and/or miles.



Adjustment Opportunities – Car-Sharing

- A Transportation Research Board/National Academy of Sciences study (2005) found, on average, each shared car takes about 13 private cars off the road
- The benefits of car-ownership without the downsides
- Popular with more than millennials – 15% of Zipcar members are over 50 years old
- Cars sit unused 90-95% of their lives
- **Downside:** Private operator must be present in your community (not currently in Anacortes)



Adjustment Opportunities – Car-Sharing

Scott's own research: Save about \$8,000/year

The Northwest Urbanist

The Benefits of Living Car-Free

Posted on [January 16, 2018](#)



Yes, you can take a Zipcar camping! (Photo by the author)

2016 Trips

Date(s)	Destination	Purpose	Car	Miles Driven	Total Cost	Split?	Individual Cost
February	San Juan Islands	Recreation	Chrysler 200	300	\$137.20	Y	\$68.60
March	Renton	Shopping	Ford Escape	34	\$51.61	Y	\$25.81
March	Snoqualmie Pass	Skiing	Jeep Patriot	144	\$69.70	Y	\$34.85
April	n/a	n/a	Mazda 2	8	\$32.45	n/a	\$32.45
May	Renton	Shopping	Ford Focus	32	\$36.31	N	\$36.31
June	Renton	Shopping	Subaru Crosstrek	33	\$33.72	N	\$33.72
June	Capitol Hill	Errand	Ford Transit 150	3	\$26.35	N	\$26.35
August	Tukwila	Shopping	Honda CR-V	30	\$48.24	Y	\$24.12
August	n/a	n/a	Honda Civic	5	\$25.23	N	\$25.23
September	Mount Rainier	Hiking	Honda Civic	190	\$95.61	Y	\$47.81
September	Golden Gardens	Recreation	Volkswagen Golf	21	\$65.69	Y	\$32.85
September	Puyallup	Recreation	Ford Focus	75	\$61.29	Y	\$30.65
October	n/a	n/a	Honda Civic	14	\$18.47	n/a	\$18.47
September	Pullman	Recreation	Hyundai Elantra	656	\$294.00	Y	\$147.00
October	Eastern Washington	Camping	Subaru Impreza	314	\$232.84	Y	\$116.42
November	Ballard	Recreation	Honda Civic	12	\$34.02	Y	\$17.01
December	Northgate	Shopping	Honda Fit	15	\$29.04	N	\$29.04
December	Kirkland	Recreation	Honda Fit	38	\$38.00	Y	\$19.00
2016 Totals				1,924	\$1,329.77		\$765.67

2017 Trips

February	Puyallup	Family	Honda CR-V	101	\$67.45	N	\$67.45
April	Downtown	Errand	Honda Fit	2	\$13.71	N	\$13.71
April	Skagit County, Anacortes	Recreation	Subaru Impreza	182	\$87.06	Y	\$43.53
May	Northgate	Shopping	Honda Fit	20	\$37.99	N	\$37.99
June	Northgate	Shopping	Honda Fit	25	\$37.77	N	\$37.77
June	Whidbey Island, Everett	Recreation	Honda Fit	175	\$86.00	Y	\$43.00
July	Camano Island	Recreation	Honda Civic	144	\$90.71	N	\$90.71
July	Interbay	Recreation	Honda Civic	24	\$90.71	Y	\$45.36
July	Eastern Washington	Camping	Subaru Crosstrek	760	\$388.77	Y	\$194.39
August	Renton	Recreation	Volkswagen Golf	51	\$38.89	Y	\$19.45
August	Auburn	Recreation	Volkswagen Golf	56	\$52.74	Y	\$26.37
August	Renton	Shopping	Honda Odyssey	32	\$32.85	N	\$32.85
September	Olympic Peninsula	Camping	Subaru Crosstrek	307	\$251.52	Y	\$125.76
October	Tukwila	Shopping	Honda Civic	64	\$86.00	Y	\$43.00
December	Capitol Hill	Errand	Mazda 3	12	\$30.93	N	\$30.93
2017 Totals				1,955	\$1,393.10		\$852.26

2016-2017 Averages

1,940 **\$1,361.44** **\$808.96**

Fee-In-Lieu

- Placeholder to give the City time for developing a downtown parking plan
- Would allow up to 50% reduction, plus another 50% with a parking study
- Funds required to fund shared public parking facilities



Parking for ADUs

- One parking space is often required – but small lots not designed for extra parking will not be able to comply
- Baby step: Allow on-street parking to count for the required space
- Big step: Remove the requirement
- State House Bill 1923 encourages removal as one option to receive planning grant

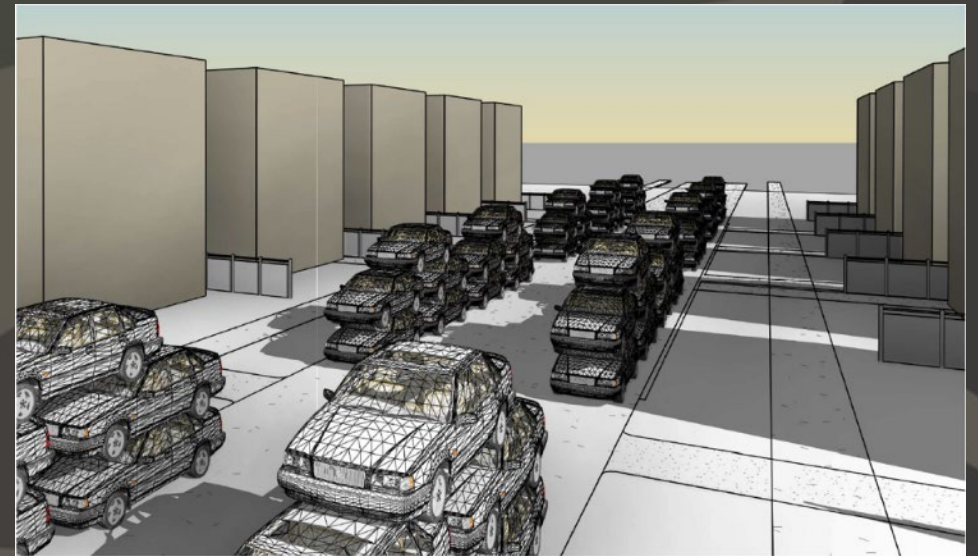


Image courtesy of Clara Park, Van Ness Feldman

Residential Guest Parking

- In our research, about half of parking codes explicitly address guest parking, and half do not
- Calling out guest parking can help ease a transition to lower base parking requirements, and also address a practical need
- Consider that different housing types and demographics have different guest needs – overnight visitors, party-goers, nursing care, etc.
- Don't overdo it and allow flexibility



Residential Guest Parking – Anacortes

Housing Type	Guest Parking Requirement
Single-family	1 per 2 units
Cottage	1 per 4 units
Duplex or Triplex	1 per 4 units
Townhouse	1 per 4 units
Multifamily	<ul style="list-style-type: none">• 1 per 8 units• 1 per 10 units if the multifamily use parking is provided entirely by structured parking

- CBD zone is exempt
- On-street parking may fulfill the requirement
- Multifamily *1 per 10* provision encourages structured parking, and also acknowledges that structured parking is already expensive as it is

Residential Guest Parking – Other Cities

City	Guest Parking Requirement
Renton	<ul style="list-style-type: none">• In two residential zones, 10% of the minimum required spaces must be set aside for guest parking (as opposed to being extra spaces).• Other zones in Renton don't have a specific guest requirements.
Shoreline	One extra space per 10 dwelling units. This can be partially or wholly reduced if a traffic study demonstrates on-street parking is adequate.
Redmond	One extra space per 5 dwelling units.
Kent	No specific guest parking requirements.
SeaTac	No specific guest parking requirements.
Bothell	No specific guest parking requirements.

Transit-Oriented Parking

- Concept: High-quality transit service reduces need for residents, workers, and shoppers to own cars and get to destinations by car
- High-quality urban environment encourages walking and short trips
- Station areas: The better the transit, the larger the area. Typically 5-10 minute walk or $\frac{1}{4}$ to $\frac{1}{2}$ mile radius.
- Other cities provide a variety of examples on how to approach parking around transit



Transit-Oriented Parking - Examples

A sampling of the variety of distance and reduction techniques

City	TOD Reduction	Resulting Ratio Examples
Bothell	Reduction opportunity within 600 feet (1/8 mile) of bus stops scheduled to run weekdays 7-9am and 4-6pm <i>Majority employee parking: 4% per bus run, up to 40%</i> <i>Majority non-employee parking: 2% per bus run, up to 20%</i>	<ul style="list-style-type: none"> • 1.6 per dwelling unit • Office, 0.60 per 300sf • Retail, 0.80 per 300sf • Restaurant, 0.80 per 300sf
Shoreline	Flat 25% reduction for all uses within 1/4 mile of a light rail station (two opening by 2024).	<ul style="list-style-type: none"> • 0.56 per studio and 1 bedroom • 1.13 per 2+ bedrooms • Office, 0.75 per 500sf • Retail, 0.75 per 400sf • Restaurant, 0.75 per 75sf
SeaTac	Variable reduction for most uses within 1/4 mile of light rail station (two existing). <i>35% - Residential</i> <i>40% - Government, business services, manufacturing</i> <i>30% - Recreational and cultural, retail and commercial</i>	<ul style="list-style-type: none"> • 0.65 per studio • 0.98 per 1 bedroom • 1.3 per 2+ bedrooms • Professional office, 0.60 per 300sf • Retail, 0.70 per 250sf • Restaurant, 0.70 per 150sf

Case Study: Seattle Frequent Transit Lawsuit

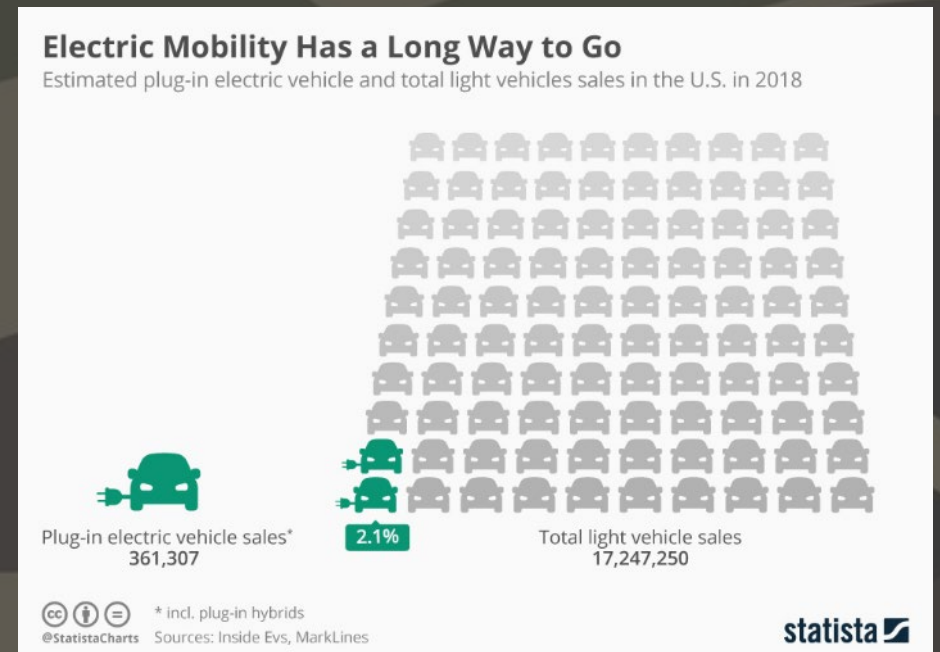
- Neighborhood lawsuit delayed a 57-unit building with no parking in Phinney Ridge over definition of “frequent transit”
- Previous definition: “Transit service headways in at least one direction of 15 minutes or less for at least 12 hours per day, 6 days per week, and transit service headways of 30 minutes or less for at least 18 hours every day.”
- Neighbors argued the Route 5 bus was frequently off-schedule and did not qualify. Hearing Examiner agreed.
- City updated its definition to refer to published scheduled arrival times rather than actual arrival times



<https://seattletransitblog.com/2018/02/23/city-pushes-apartments-opposed-lack-onsite-parking/>

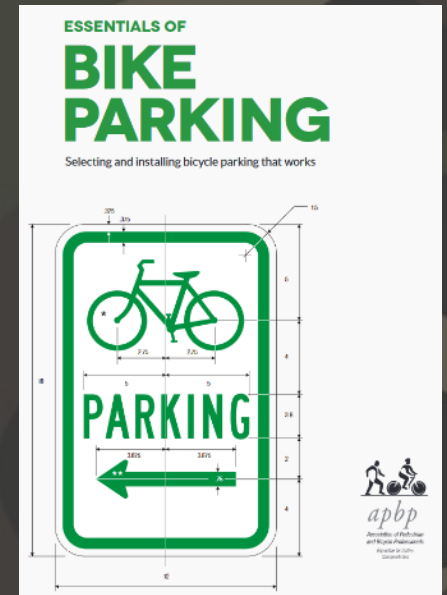
Electric Vehicle-Ready Parking

- Reduced parking for electric charging spots doesn't make sense – fuel type does not change reasons to drive
- Shoreline example: 10% of the minimum required spaces must be ready for electric vehicle infrastructure, if the chargers are not also provided
- In other words, wiring conduit and electrical capacity must be prepared up front to prepare for future installation



Bicycle Parking – Anacortes Example

- Don't base on proportion of car spaces
- Distinguish between short-term parking and long-term parking – different security vs. convenience considerations
- At a minimum, two short-term and two long-term spaces per development
- Refinements after substantial research from APBP “Bicycle Parking Guidelines” (2010), City of Redmond code (“Bicycle Capital of the Northwest”), Census commute data
- Guidance provided for on-street bike parking managed by property owners



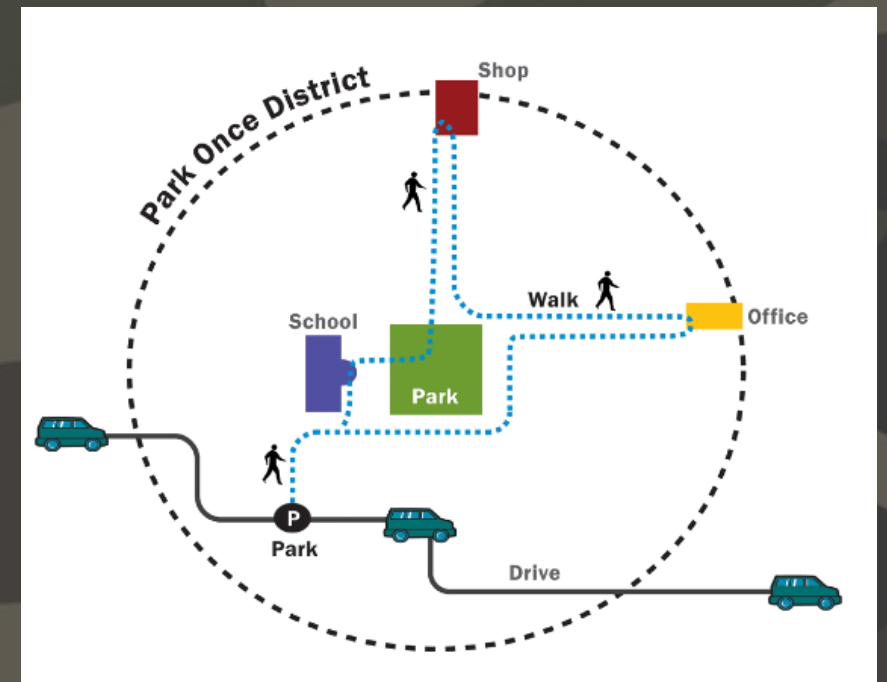
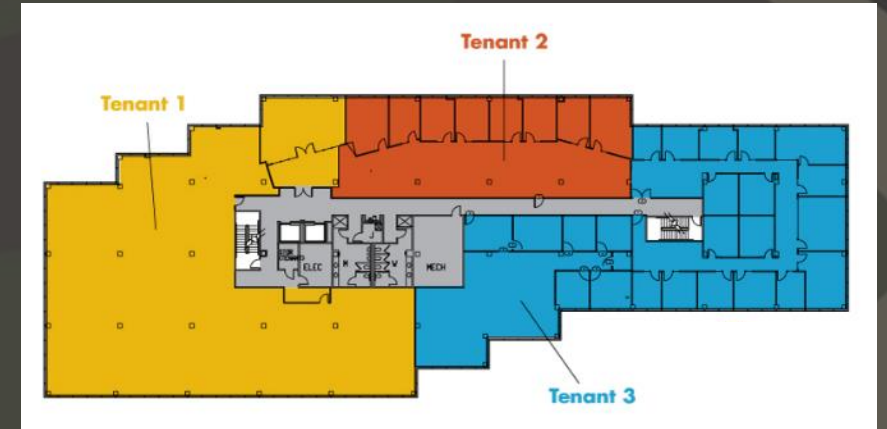
Bicycle Parking – Anacortes Example

More generalized than vehicle parking

Use	Short-Term, Minimum	Long-Term, Minimum
Multifamily, group living	0.5 per 10 dwelling units, and 2 minimum	5 per 10 dwelling units, and 2 minimum
Overnight lodging	0.5 per 10 guest rooms, and 2 minimum	0.3 per 10 guest rooms, and 2 minimum
Place of assembly, civic, indoor recreation, day care	Fixed seats: 3 per 100 No fixed seats: 0.20 per 1,000-square-feet of NLA 2 minimum	Fixed seats: 2 per 100 No fixed seats: 0.10 per 1,000-square-feet of NLA 2 minimum
Retail sales, general service, personal service	0.25 per 1,000-square-feet of NLA, and 2 minimum	0.10 per 1,000-square-feet of NLA, and 2 minimum
Restaurant/bar	0.5 per 1,000-square-feet of NLA, and 2 minimum	0.10 per 1,000-square-feet of NLA, and 2 minimum
Office	0.10 per 1,000-square-feet of NLA, and 2 minimum	0.20 per 1,000-square-feet of NLA
Medical	0.05 per 1,000-square-feet of NLA, and 2 minimum	0.05 per 1,000-square-feet of NLA, and 2 minimum
Industrial, utilities	0.05 per 1,000-square-feet of NLA, and 2 minimum	0.05 per 1,000-square-feet of NLA, and 2 minimum
Schools, pre-kindergarten and K-12	0.75 per 10 students of planned capacity, and 2 minimum	1 per 10 employees and 1 per 20 students of planned capacity, and 2 minimum
Colleges and universities	1 per 10 students of planned capacity, and 2 minimum	1 per 10 employees and 1 per 10 students of planned capacity, and 2 minimum

Other Considerations

- Non-residential building net square feet vs. gross square feet can be a 20-30% difference. Using **net square footage is a better link to trip demand** and could result in less wasted parking.
- Shared parking. Usually voluntary and not mandatory, and thus rarely implemented. At least basic provisions should be included in code in case the opportunity arises.
- Park-once districts: Allow multiple trips without moving the car, based out of a central public or private parking facility



Other Considerations

- Office workers tend to be the most flexible on commute options, and may respond best to incentives
- Affordable/subsidized housing needs less parking than moderate-high income housing
- Bars/taverns – Port Orchard exempts areas that serve alcohol from parking requirements (discourage drunk driving)

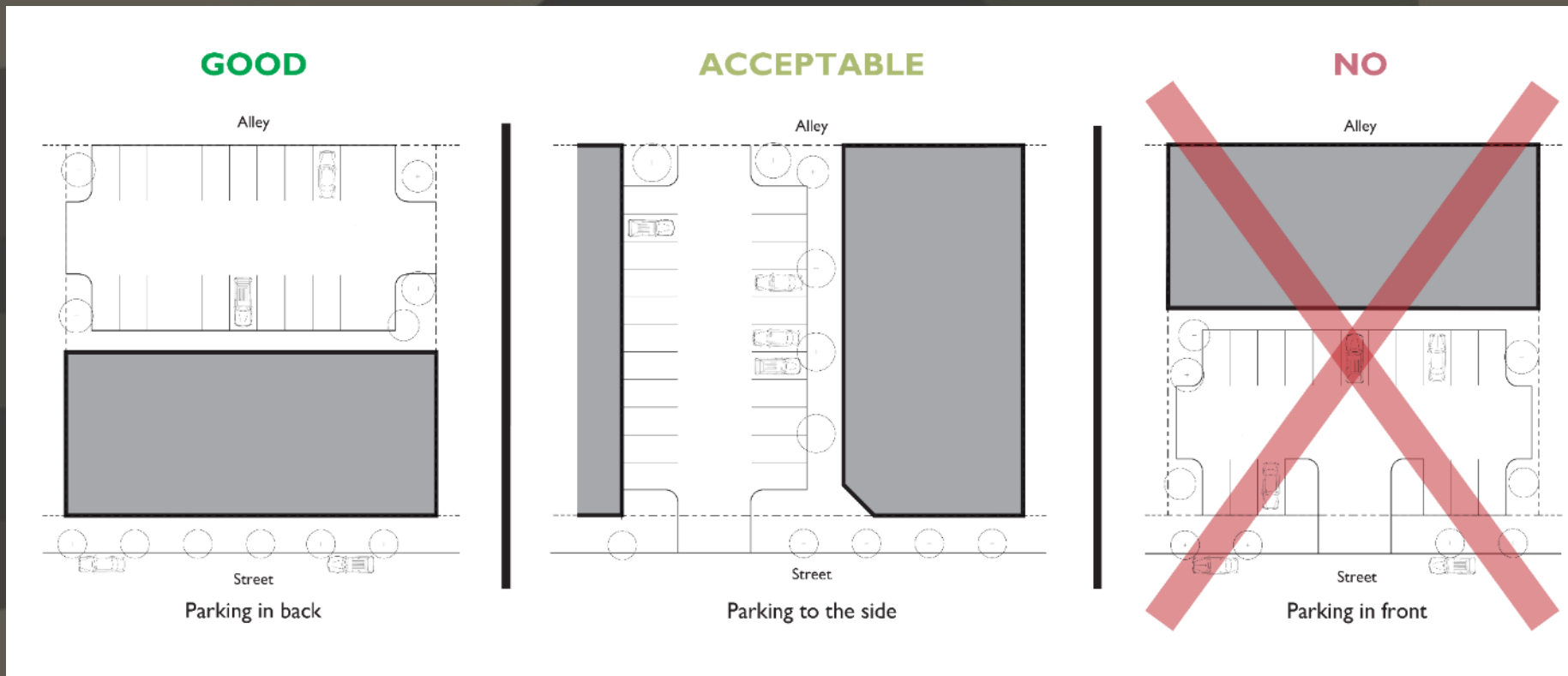
Best Practices in Parking Design

Urban Design Considerations

- Location of parking
- Parking lot landscaping
- Garage design and pedestrian sightlines

Parking Location

- In the highest-priority pedestrian areas, parking in back is often preferred (especially if alleys are available)
- Parking on the side can be acceptable in certain areas, with limits



Parking Lot Landscaping Types

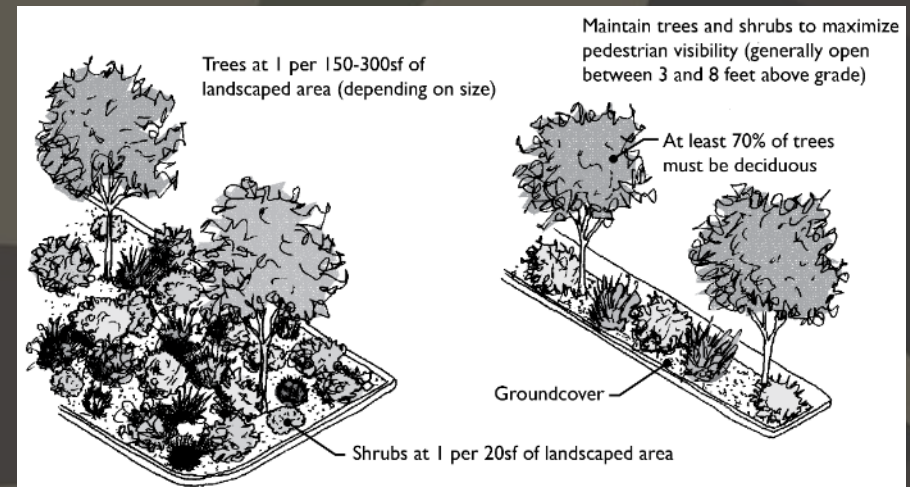
- Interior landscaping – to break up the monotony of parking stalls
- Perimeter landscaping – to screen/buffer parking from the street



Interior Landscaping Standards

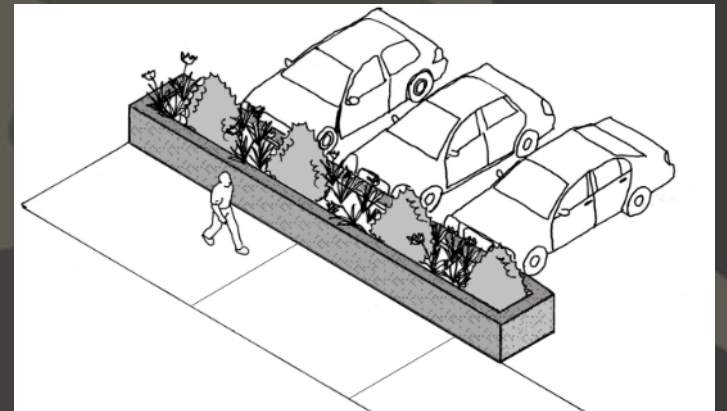
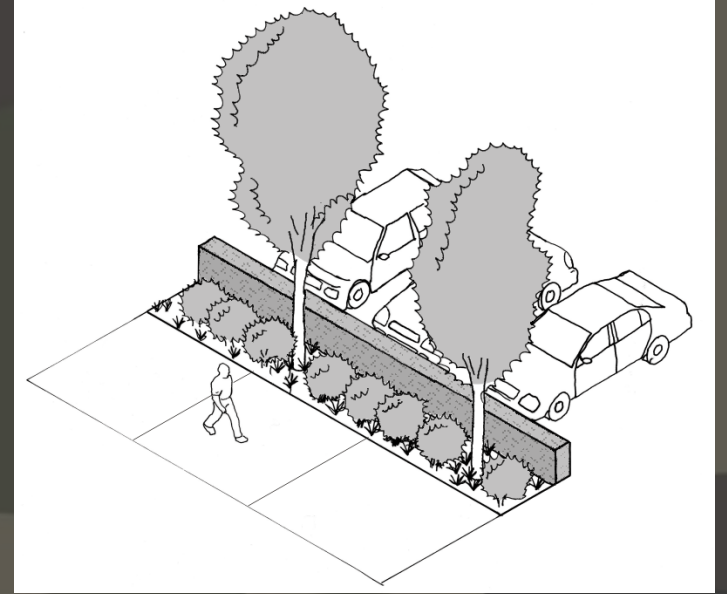
Methods and standards vary greatly. MAKERS' typical recommendations keep it simple:

- Required in lots with 20 or more spaces
- Constitute at least 5% of the parking area and distributed throughout the lot.
- Planting areas must have a minimum average width of 10 feet (measured inside the curb) and must be the same length as the parking stall or column.
- Type C (at right) landscaping must be used in required planting areas.



Perimeter Landscaping Standards

- Because context varies significantly, a variety of treatments can work on parking lot edges
- Where 5-10 feet landscape buffers are infeasible, low walls and raised planters can be an effective alternative
- Consider more flexibility along internal lot lines



Structured Parking Design

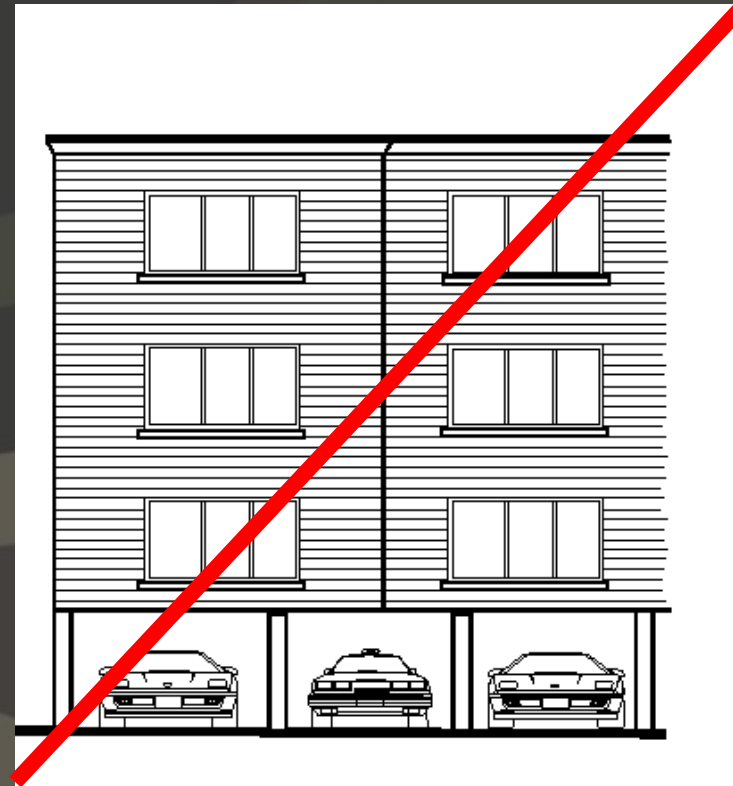
Order of preference

1. Hidden/underground
2. Wrapped by active uses (Texas Donut)
3. Exposed with appropriate treatment (in-structure or standalone)



Structured Parking Design – Hidden Examples

Avoid floating setups with buildings on stilts



Structured Parking Design – Texas Donut

Residential or commercial uses fronting parking garages



Structured Parking Design – Texas Donut

Left – Courtyard between garage and building

Right – Exposed parking visible from the alley is acceptable



Structured Parking Design – Design Treatments

- Goal: Integrate lower parking levels with the upper floors, and add visual interest to the façade
- This can be achieved through similar fenestration, articulation interval requirements, screening and grills, etc.



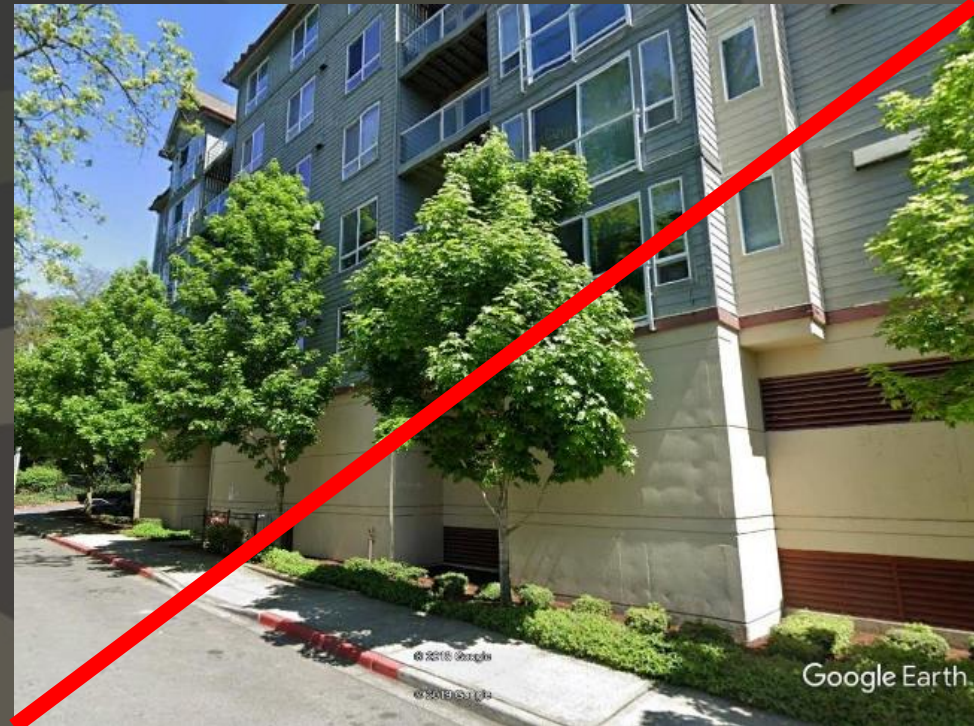
Structured Parking Design – Design Treatments

Avoid a “detached” look



Structured Parking Design – Design Treatments

These examples do not enhance the pedestrian realm



Structured Parking Design – Garage Entries

- Parking garage entries should be well-integrated into the design of the building and must not dominate the streetscape.
- They should be designed and sited to complement, not subordinate, the pedestrian entry.
- Direct visibility between pedestrians and motorists should be provided. Options include setback entries, cropped wall corners, wall openings, or other treatments to enhance safety and visibility.



Structured Parking Design – Freestanding

- The more visible the structure from public streets, the stronger design treatments are warranted
- Landscaped buffer elements such as setbacks and trellis structures are desirable



Resources

- <https://medium.com/sidewalk-talk/less-parking-can-mean-more-housing-heres-how-14b9e50fe646>
- <https://www.prnewswire.com/news-releases/study-americans-love-their-cars-yet-3-in-10-have-considered-handing-over-their-keys-300753760.html>
- <https://www.theatlantic.com/technology/archive/2016/01/the-decline-of-the-drivers-license/425169/>
- <https://news.gallup.com/poll/236813/adults-drive-frequently-fewer-enjoy-lot.aspx>
- <https://usa.streetsblog.org/2018/07/12/american-cities-are-drowning-in-car-storage/>
- <https://medium.com/sidewalk-talk/less-parking-can-mean-more-housing-heres-how-14b9e50fe646>
- <https://www.sightline.org/2019/10/02/in-mid-density-zones-portland-has-a-choice-garages-or-low-prices/>
- <https://urbanland.uli.org/development-business/developers-reduce-parking-via-car-sharing/>

Multi-Modal Transportation Investments

Investing in transit is making a difference in Seattle

But what about smaller towns?

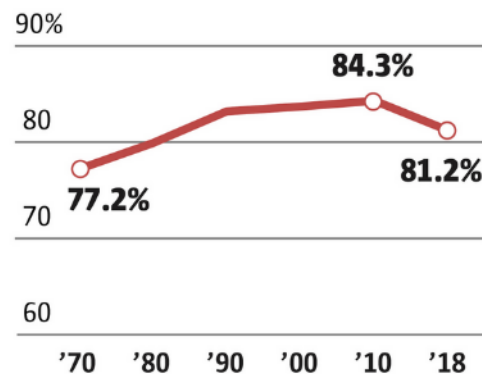
Seattle's rate of car ownership saw the biggest drop among big U.S. cities – by far

Nov. 2, 2019 at 6:00 am | Updated Nov. 2, 2019 at 3:53 pm



Car ownership lowest in decades

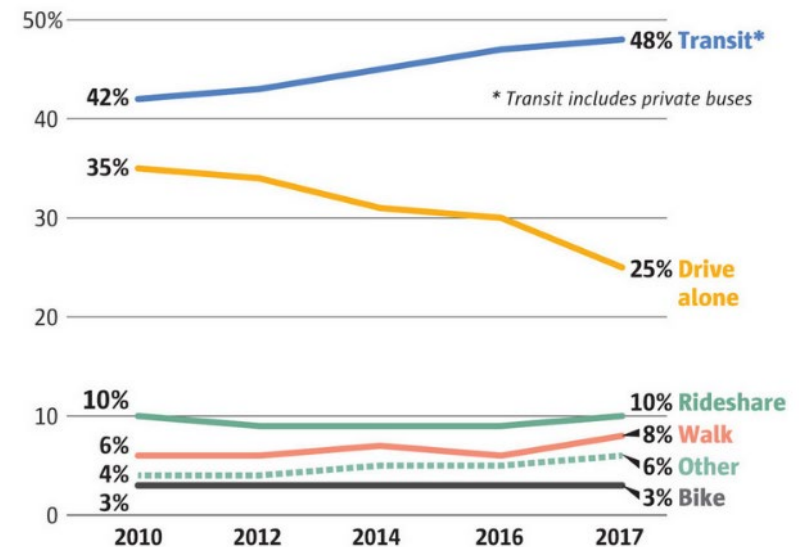
In 2018, about 81% of Seattle households owned at least one car, the lowest rate since the 1980s.



Source: U.S. Census, Social Explorer
JAMES ABUNDIS/ THE SEATTLE TIMES

How people commute downtown

Solo driving continues to decline in the central city, as transit and walking grow. People who use taxis, Uber or Lyft could appear as either "rideshare" or "other."



Source: Commute Seattle, Seattle Department of Transportation

MARK NOWLIN / THE SEATTLE TIMES



Lessons Learned Stretches

Lessons Learned

1. Determine what's most important - in terms of land uses, community design, and economic development objectives
2. Choose a “workable” regulatory approach – with special attention to the review process and available staffing/expertise
3. Look at a lot of case studies – both in terms of codes and actual communities
4. Involve the full range of stakeholders – help them foster a sense of ownership in the codes
5. Help participants understand the implications of various options
6. Pick your battles – it's OK to “parking lot” some items

Thank You!