

Zoning, Housing, and Habitat:

Ground-breaking Geospatial Tools for
Planning Washington's Future



Washington State
Department of
Commerce
MAKERS
architecture • planning • urban design



HDR



Washington Department of
FISH & WILDLIFE

v1.5

Panel

Washington State Zoning Atlas

- Tara Newman, tara.newman@commerce.wa.gov
- Tammi Laninga, tara.newman@commerce.wa.gov
- Ian Crozier, iantcrozier@gmail.com
- Rachel Miller, rachelm@makersearch.com

Cascadia Housing Study: Chang Xu, chang.xu@hdrinc.com

Washington's Riparian and Wildlife Tools: Ken Muir, ken.muir@dfw.wa.gov

Washington State Zoning Atlas

American Planning Association
Washington Chapter

Tara Newman, Tammi Laninga, Ian Crozier

10/08/2025



Washington State
Department of
Commerce

What is the WAZA?

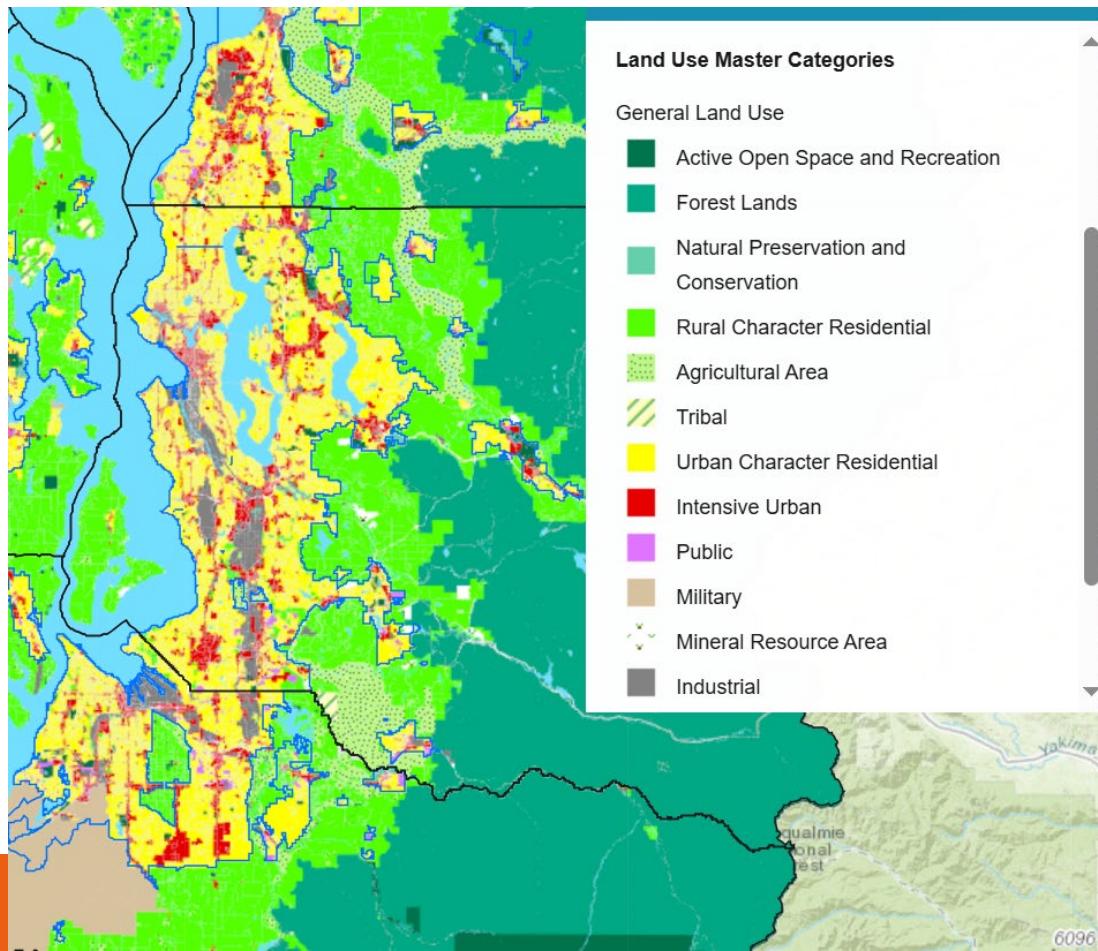
Tara Newman, Senior Planner – National Estuary Program,
Department of Commerce

What is a State Zoning Atlas?

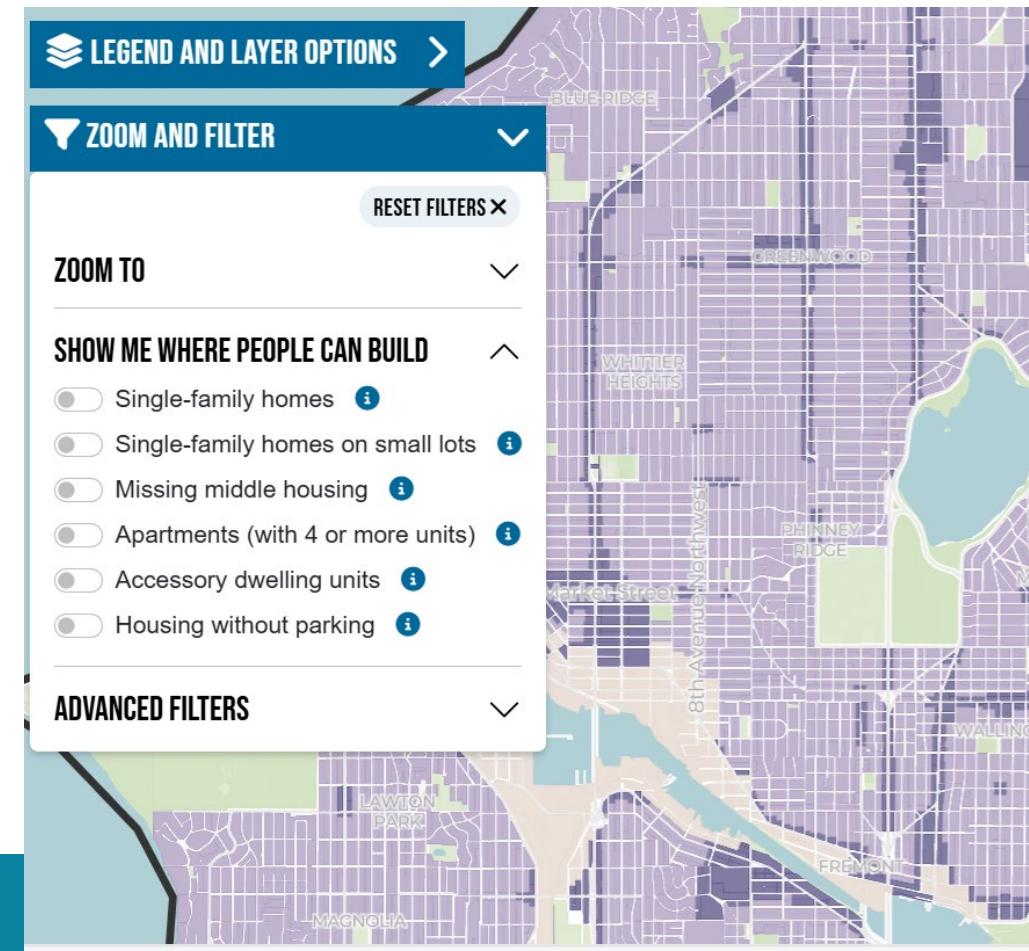
- Every city and county has its own zoning
 - Very difficult to map zones across jurisdictions
 - Even similar zones regulate uses and development differently
- Very difficult to assess zoning statewide or answer basic land use and policy questions at the state level.
 - For example,
 - Where do new housing policies apply?
 - Where are all the natural resource lands in the state?
 - Where can industrial or green energy uses be sited?
- Zoning Atlas translates each local jurisdiction's zoning into standardized categories and documents allowed uses and development standards.

Building from Previous Work

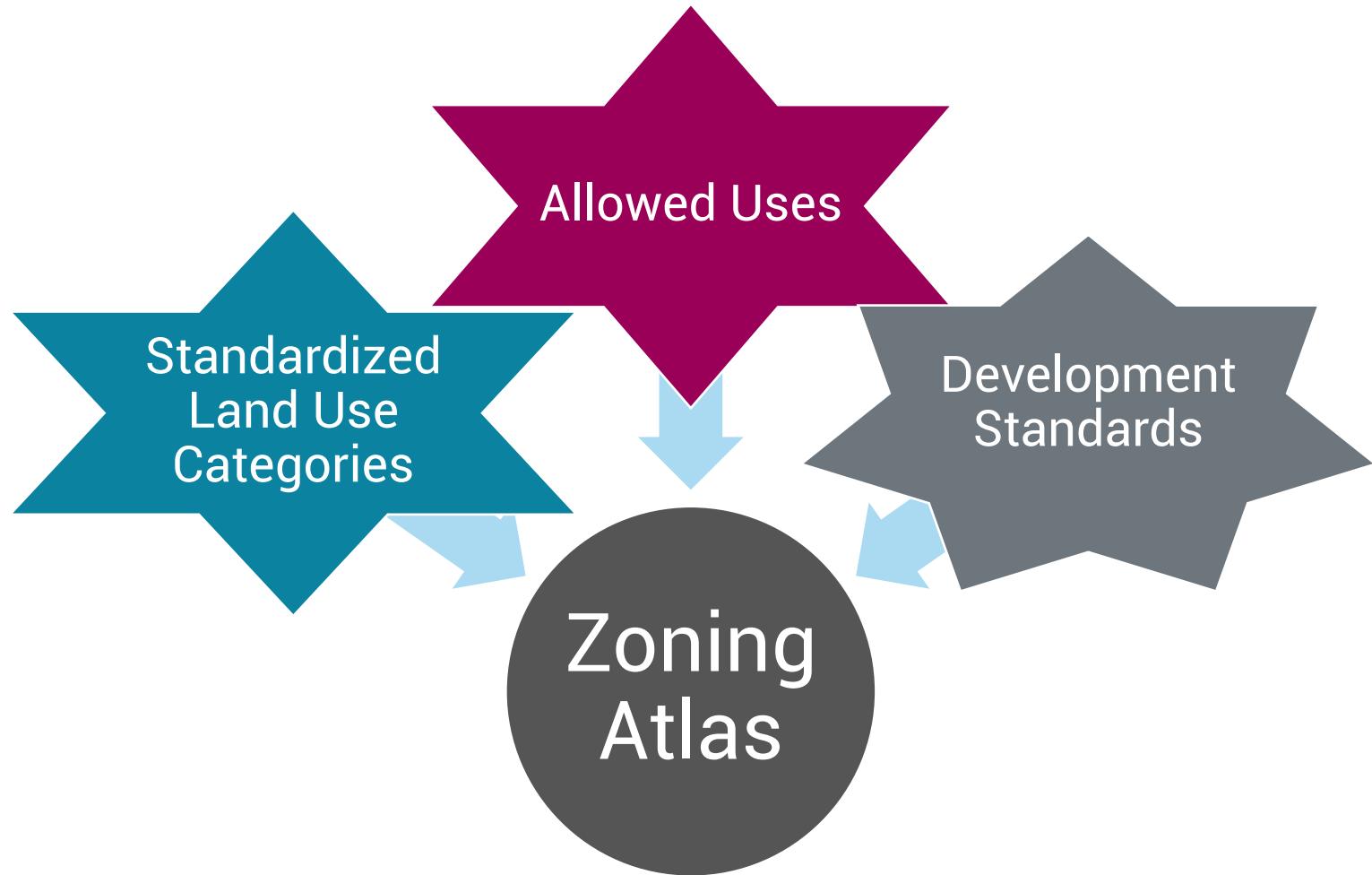
Puget Sound Mapping Project



National Zoning Atlas



What's Included in Washington's Zoning Atlas

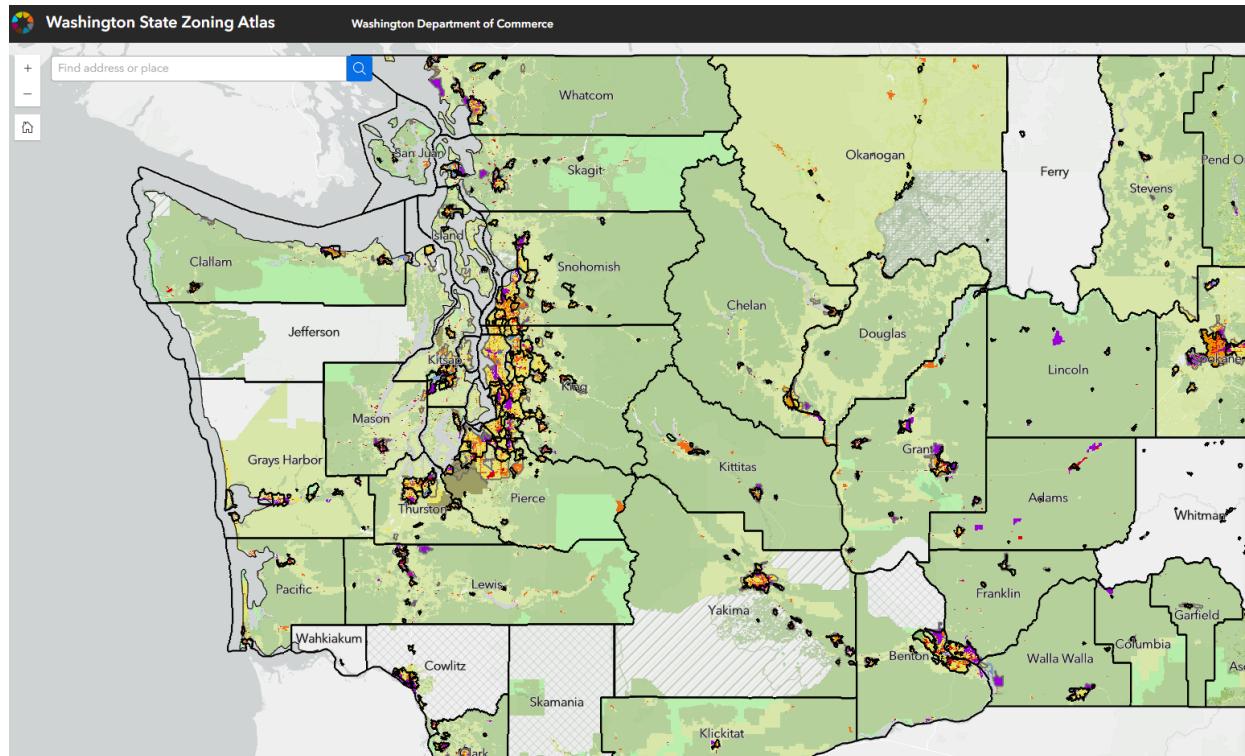


Exploring the Tool

- Commerce's Zoning Atlas website:

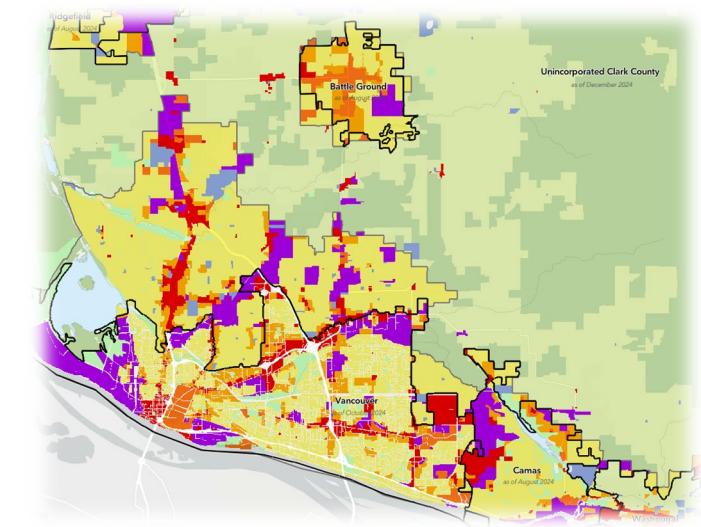
[https://www.commerce.wa.gov/growth-management/data-research/waza/ -](https://www.commerce.wa.gov/growth-management/data-research/waza/)

- Interactive Map
- Downloadable Database
- User Guide



Using the Zoning Atlas at the Local Level

- Compare zoning in similar jurisdictions
- Cross-jurisdictional or watershed planning
- More accessible zoning information for small jurisdictions
- Identifying development opportunities



Limitations

- Zoning remains local
- Some data may already be out of date
 - Atlas reflects data collected from April 2024 to June 2025
- Some data may be inaccurate or incomplete
- Zoning maps may not be accurate at the parcel level



Always check the jurisdiction's official code and maps!

Keeping it Updated

- We're working on a process for keeping Zoning Atlas updated
 - Rolling updates as jurisdictions update their codes and maps
 - Periodic database overhauls
- Send us your zoning updates!

WAZA Development

Dr. Tamara (Tammi) Laninga, Associate Professor, Director, Urban Planning & Sustainable Development Program, Western Washington University



The Development Team





Team Task & Timelines

Tasks	Project Team	Months
Populate Advisory Group	MAKERS, Commerce	1-2
Initial Database Set-up	MAKERS, BHC, NRSIG	2-4
Refine Zoning Classifications for Data Standardization	MAKERS, BHC, NRSIG, Advisory Group	3-5
Develop Student Analyst Guidance Document	MAKERS, BHC, NRSIG, Student Liaison (UW Graduate Student), Universities	3-5
Deliver Training Curriculum	WWU Faculty & BHC	4-6
Collect Data	Student Liaison, Urban planning students , MAKERS, BHC	6-15
Clean Data	MAKERS, NRSIG	12-16
Publish Atlas	NRSIG, Commerce	17-18



Training Seminar Recruitment

Training Seminar Topics & Tasks

Planning in WA
Zoning Atlas Project
Intro to
Methods/Tasks

Collect Zoning
Codes & Maps

Teams Test Code
Analysis Guidance &
Data Input Portal

Teams Present on
Deliverables &
Lessons Learned

Code
Analyst
Document
Drafted
& Input
Portal
Built

Inter-
Coder
Reliability

Guidance
Updated
& Paid
Analysts
Hired

Fun Facts ...

320

- WA City & County Jurisdictions

29

- Students in the Course (6 EWU, 12 UW-S, 5 UW-T, 6 WWU)

1

- Graduate Student Liaison

11

- Paid Student Analysts (Summer 2024)

1-10

- Hours per jurisdiction

650

- Hours WWU students worked

97

- Percent of Zoning text data entered

Student Analyst Reflections



Confidence-Booster: *I now feel VERY confident reading code and am able to sift through lots of information quickly.*



Deeper Understanding: *[I] deepened my understanding of how zoning policies shape urban and rural development. I observed significant differences in how municipalities regulate housing density, commercial uses, and mixed-use developments.*

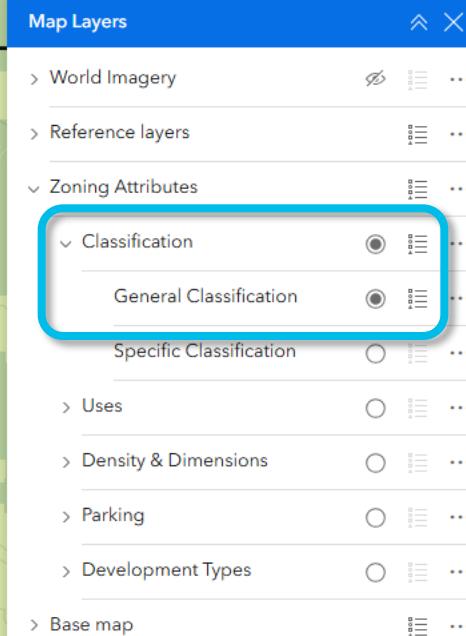
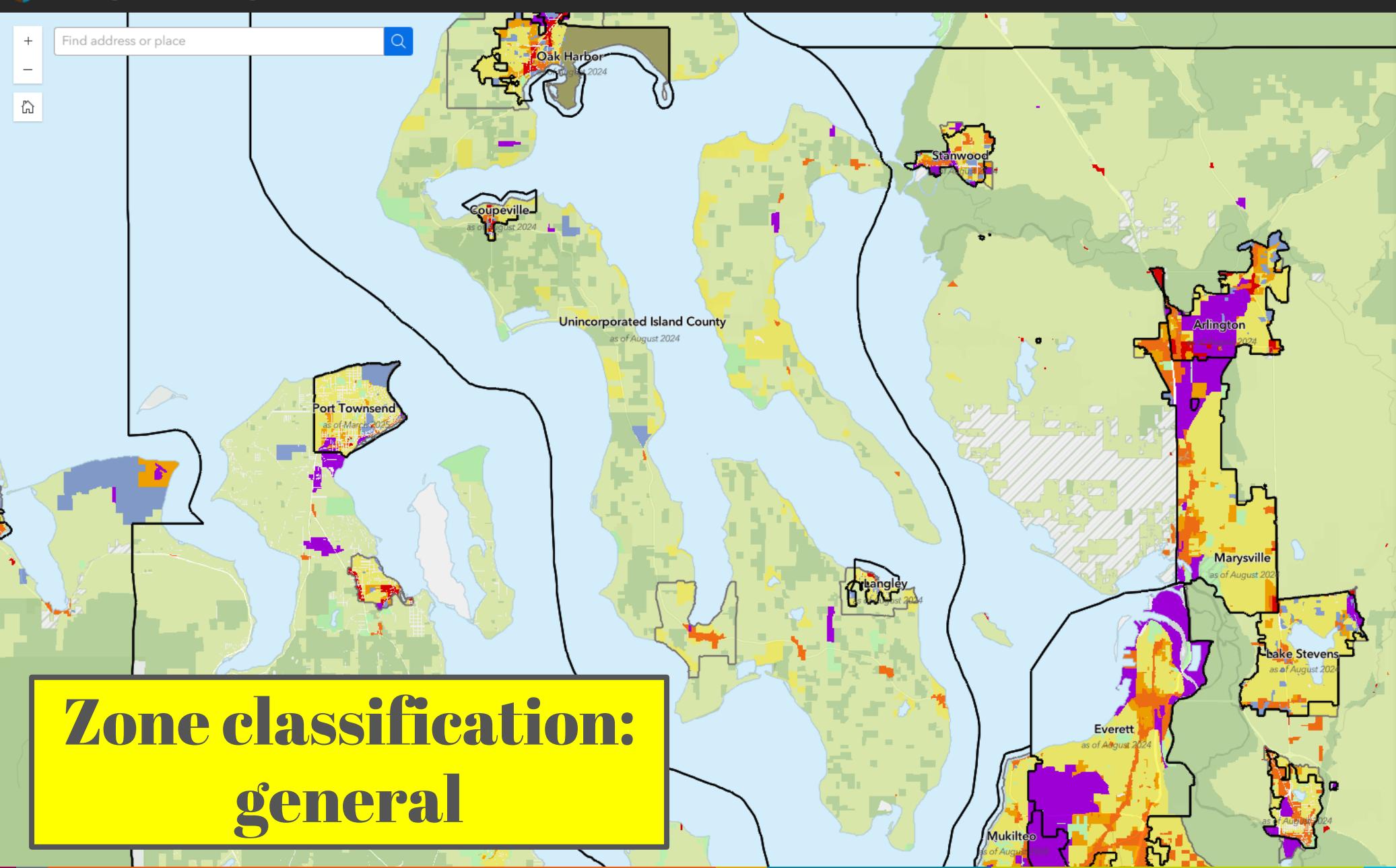


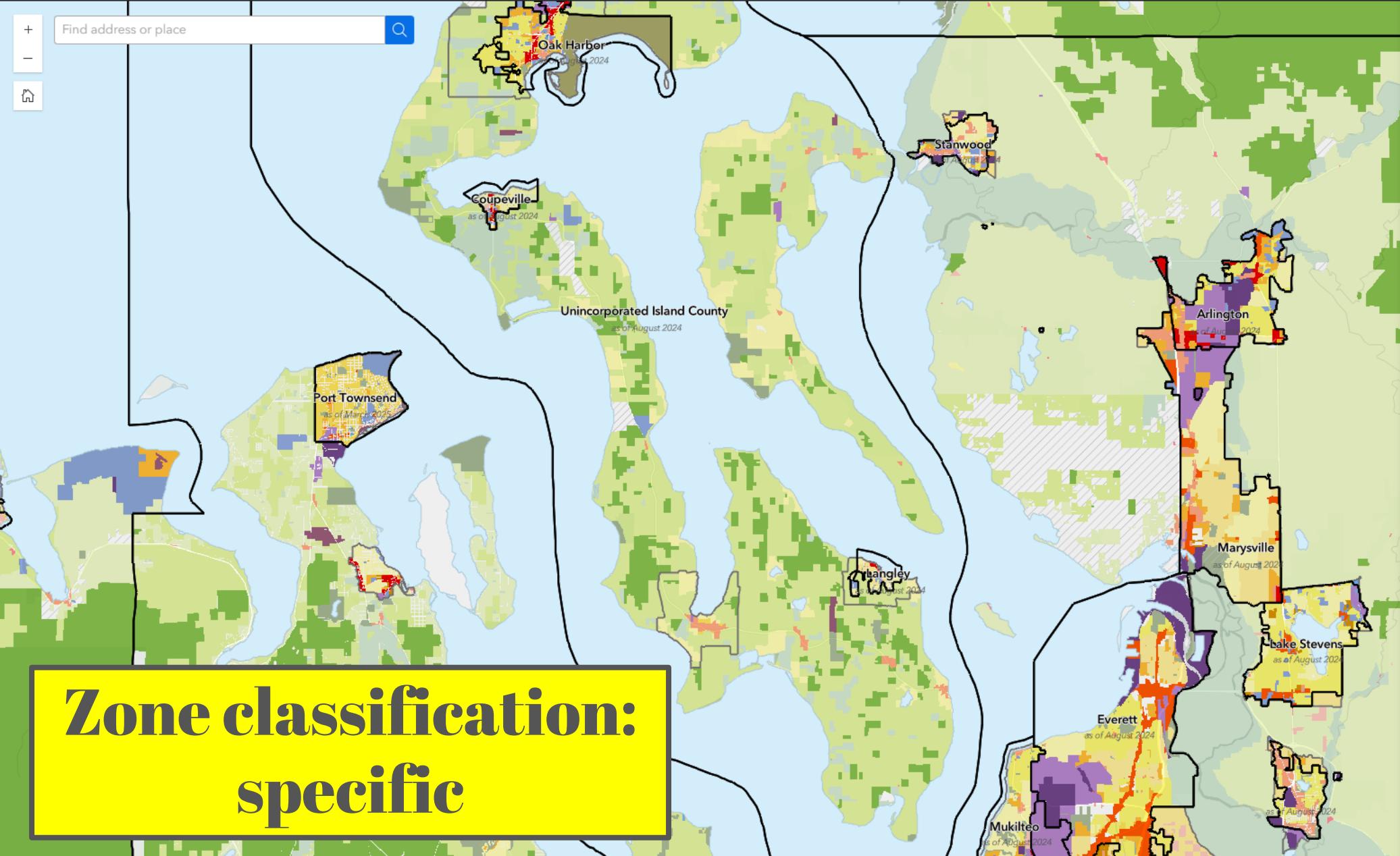
Need for Clear Codes: *Something that surprised me ... was how ambiguous some of the codes were ... Zoning codes should be user friendly and accessible to everyone to ensure effective uses.*

How to use the WAZA

Ian Crozier, while Associate 2 – Planner,
MAKERS architecture and urban design





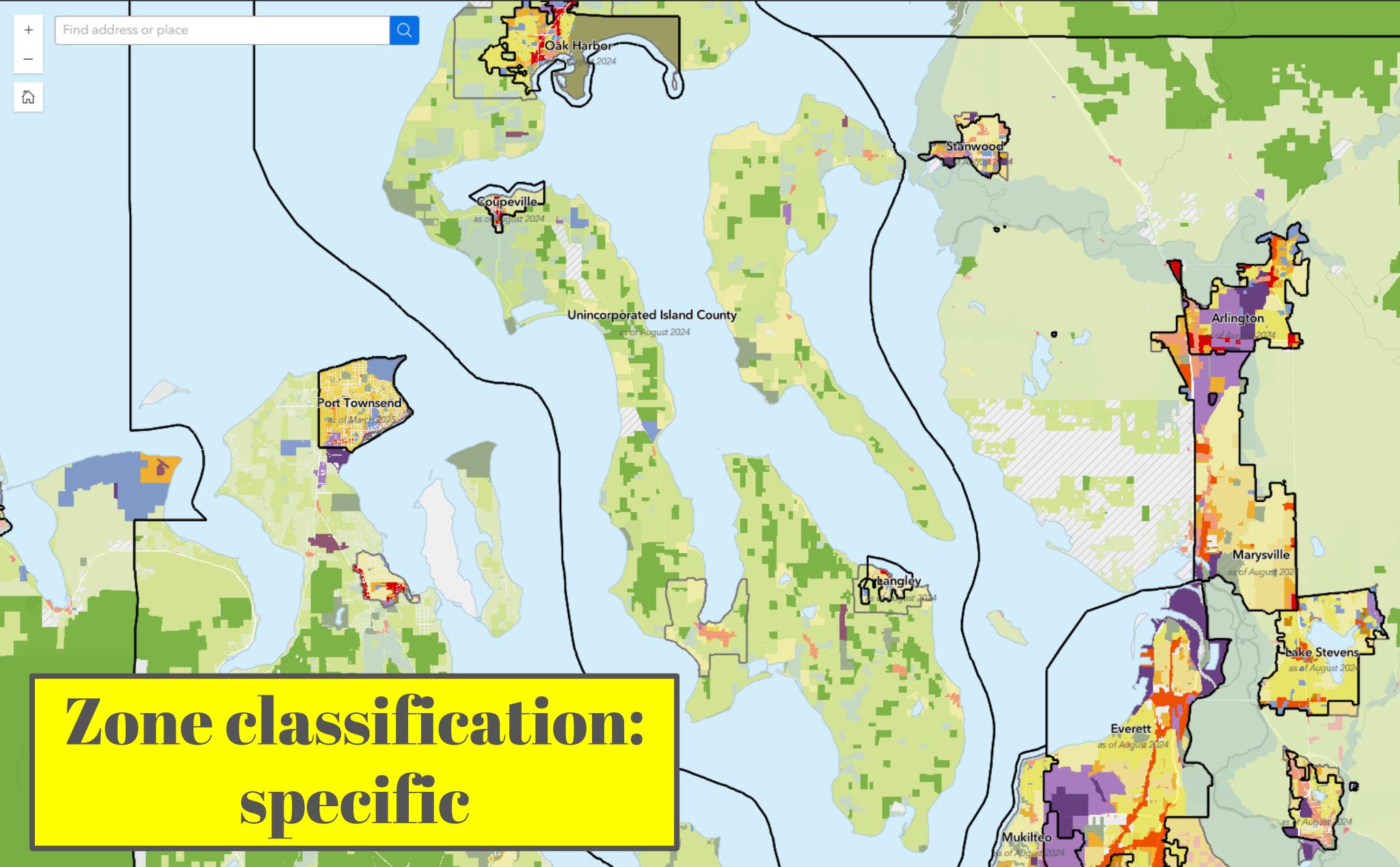


Map Layers

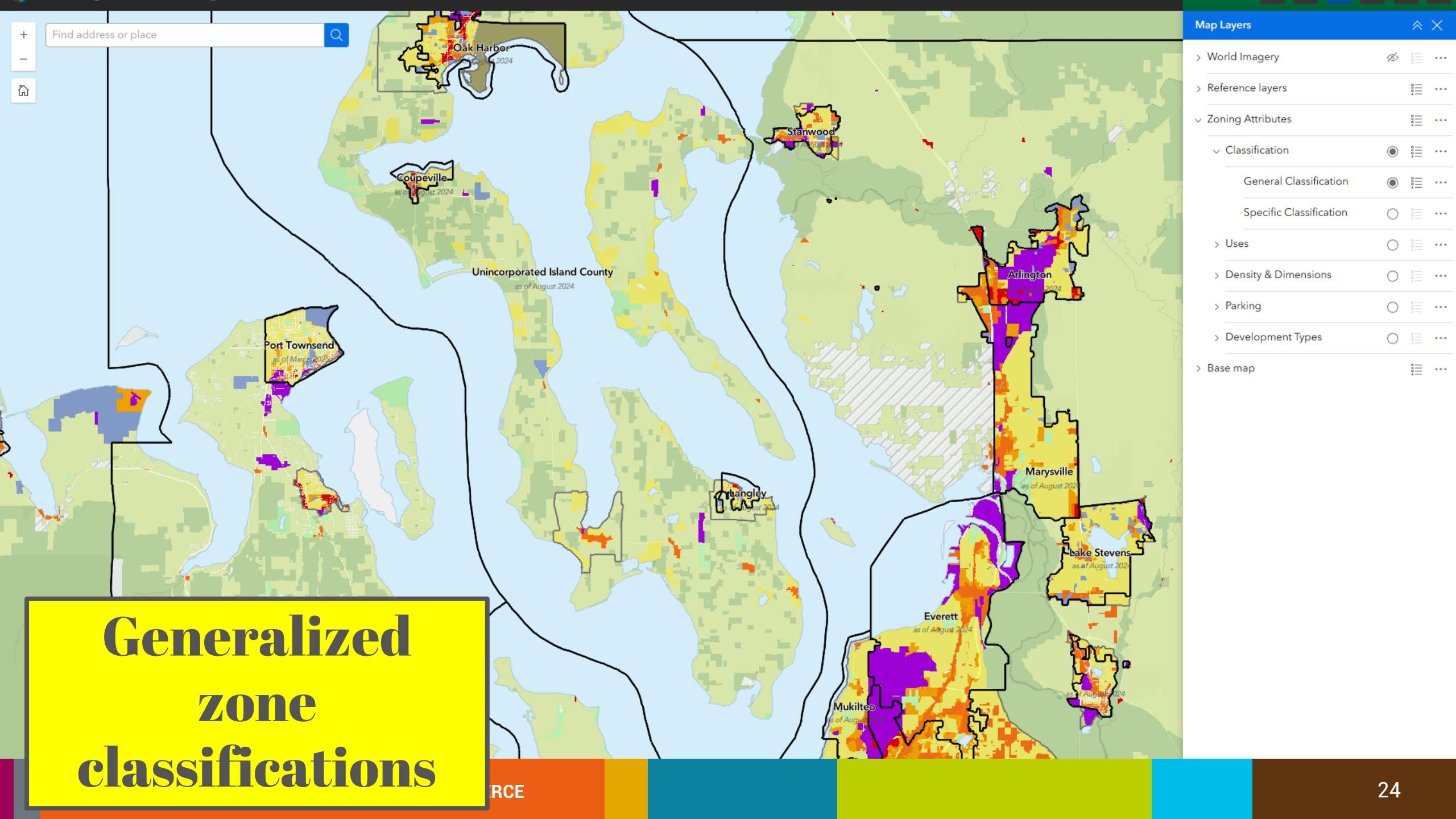
- > World Imagery
- > Reference layers
- > Zoning Attributes
- > Classification

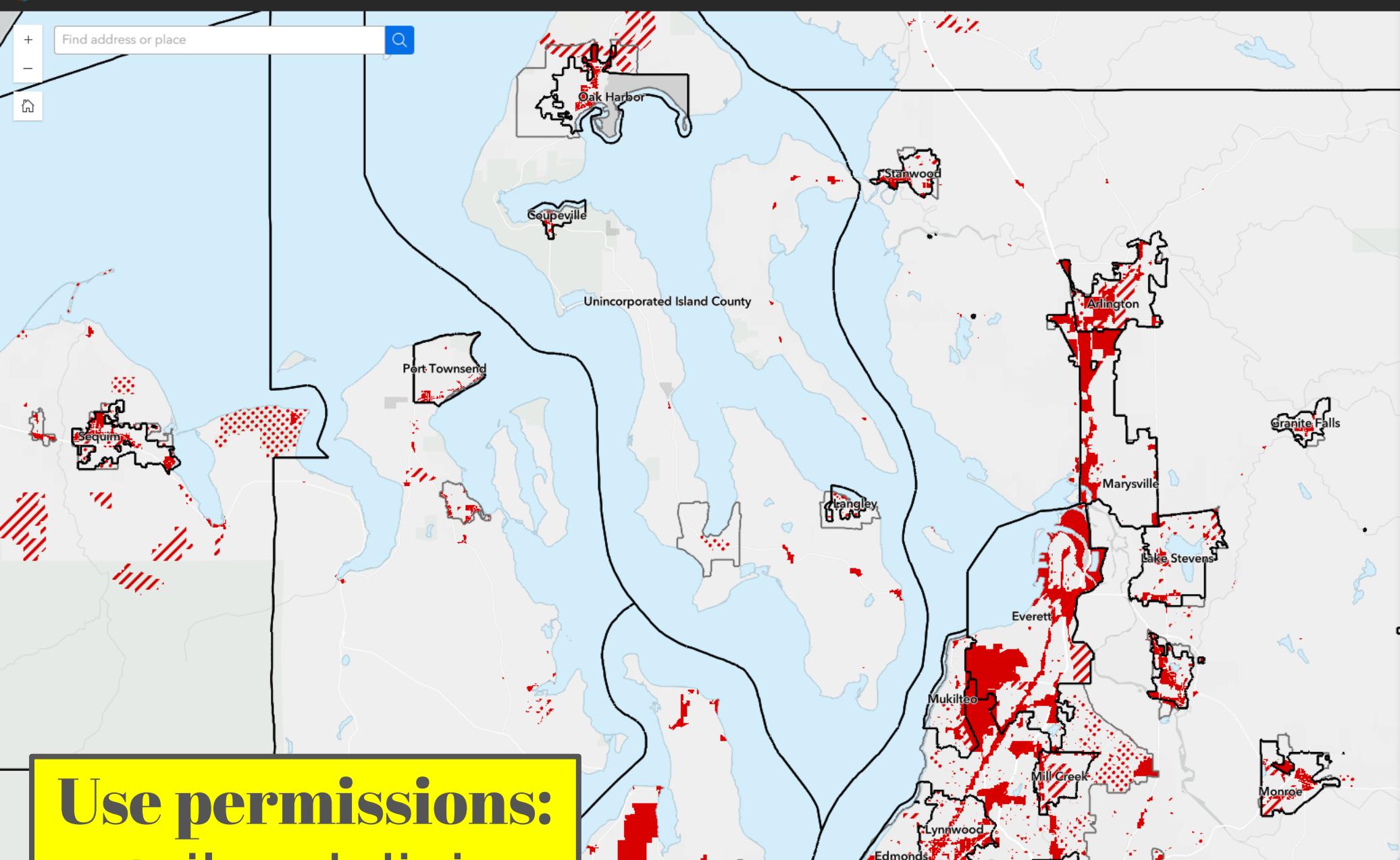
 - General Classification
 - Specific Classification

- > Uses
- > Density & Dimensions
- > Parking
- > Development Types
- > Base map



Zoning Attributes	
Classification	
Specific Classification	
Rural	
Rural Residential (>5 acre lot)	
Rural Residential (1-5 acre lot)	
Rural Flexible (>5 acre lot)	
Rural Flexible (1-5 acre lot)	
Low Intensity Residential	
Single-unit Res. 1-5 DU/ac	
Single-unit Res. 5-12 DU/ac	
Single-unit Res. >12 DU/ac	
Middle Housing 2 DU/lot	
Middle Housing 3-4 DU/lot	
Middle Housing 5-6 DU/lot	
Manufactured Home Park	
Multi-Unit Residential	
Multi-unit ≤4 stories	
Multi-unit 5-8 stories	
Multi-unit 9+ stories	
Mixed-Use	
Mixed-Use ≤4 Stories	
Mixed-Use 5-8 Stories	
Mixed-Use 9+ Stories	
Planned Community	
Commercial	
Retail Commercial	
Commercial Office	





**Use permissions:
retail and dining**

RCF

Legend

Zoning Attributes

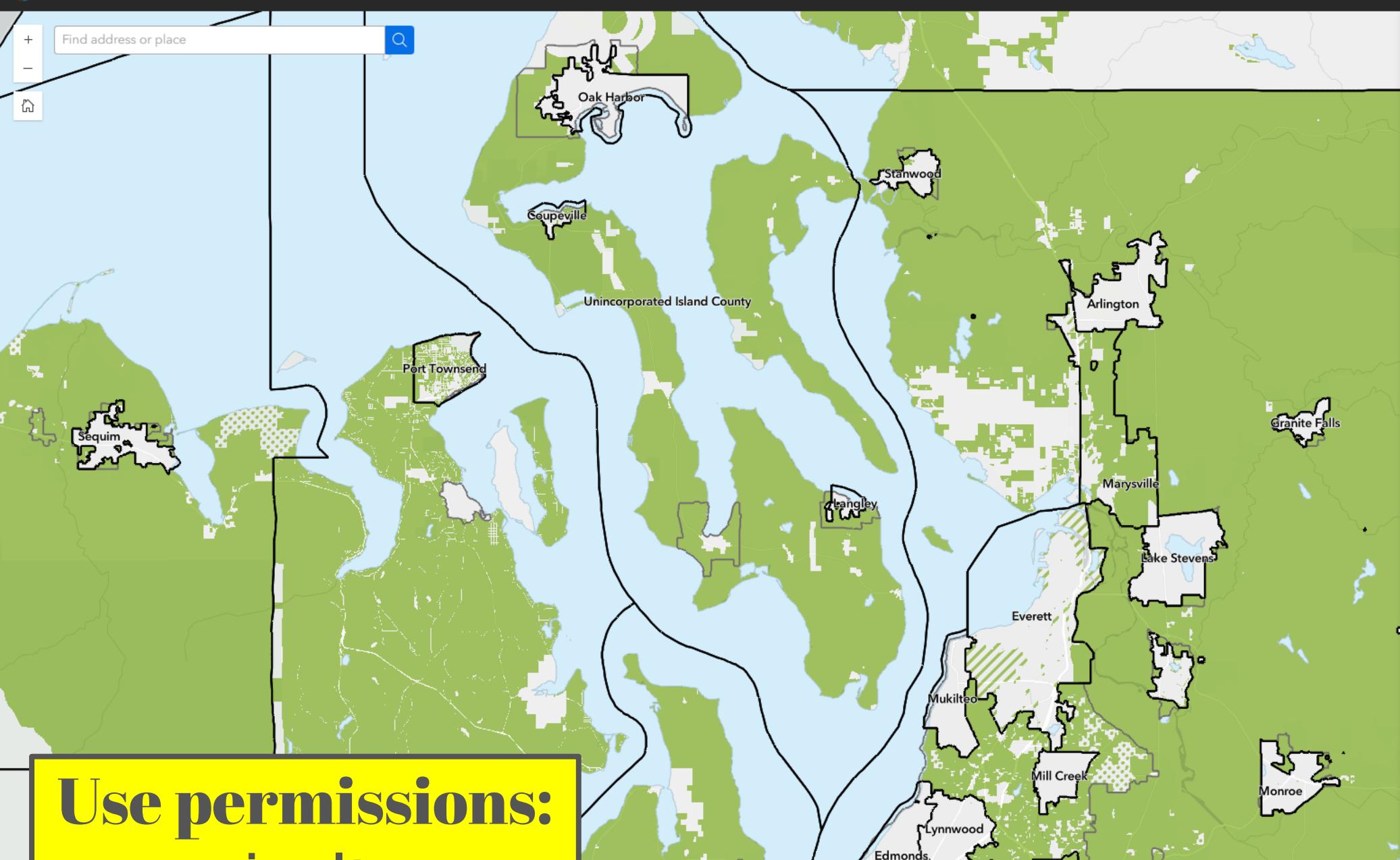
Uses

Retail and Dining Uses

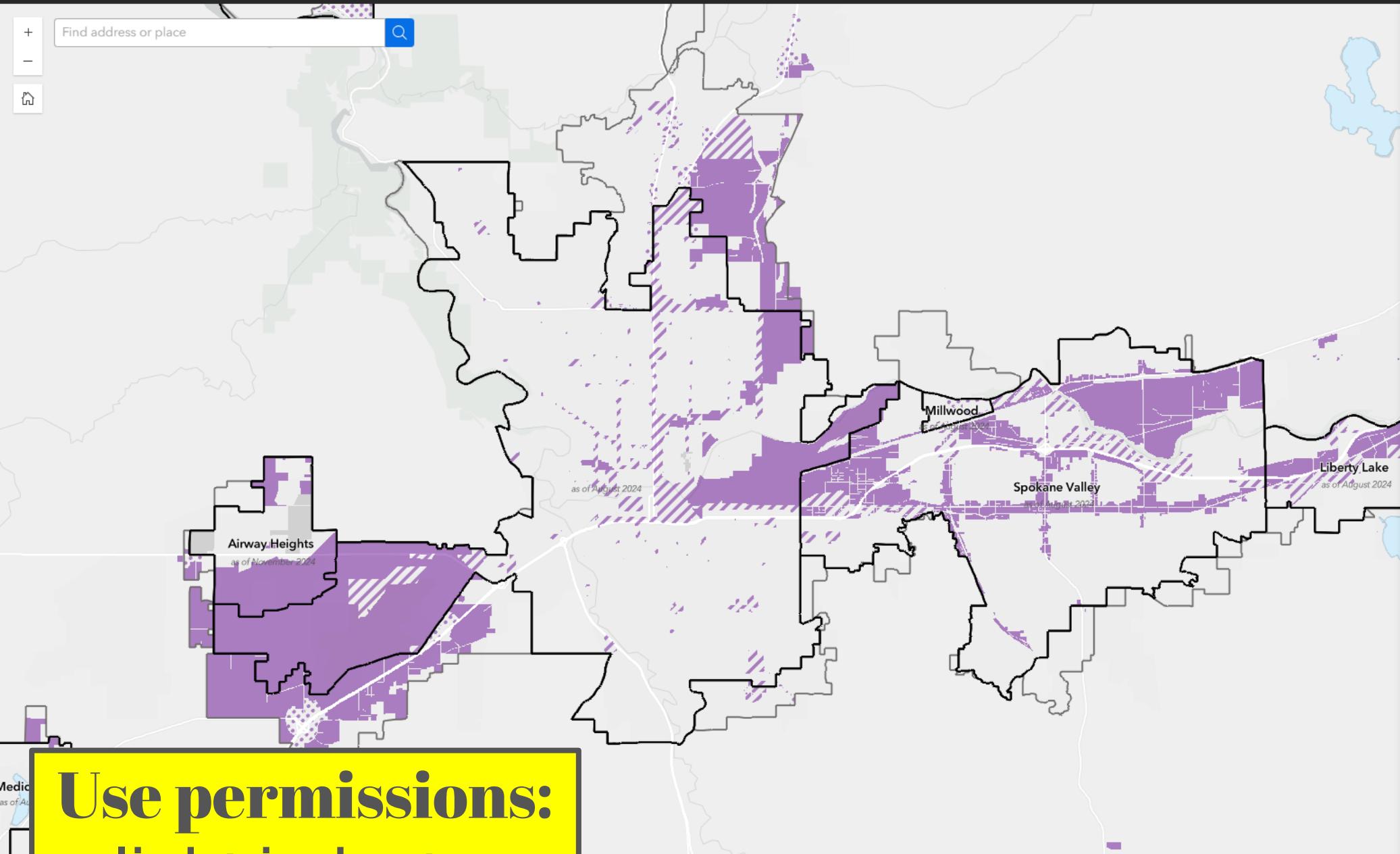
Retail and Dining Uses

Zones and Overlays

- Permitted
- Limited/Accessory
- Conditional
- Unknown
- Not Permitted



Use permissions:
agriculture



Legend

Zoning Attributes

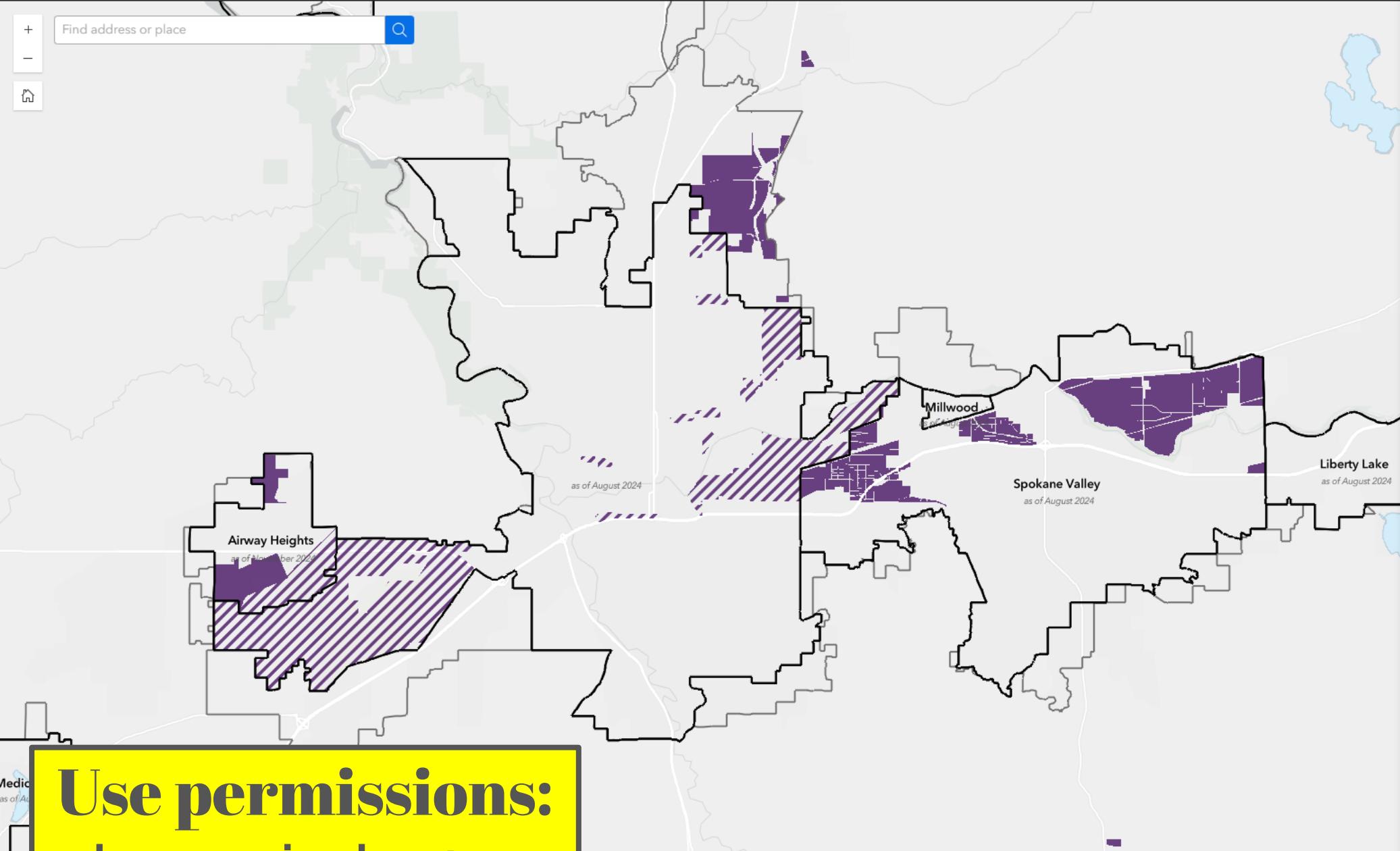
Uses

Light Industrial/Manufacturing Use

Light Industrial/Manufacturing Use

Zones and Overlays

- Permitted
- Limited/accessory
- Conditional
- Unknown
- Not permitted



Legend

Zoning Attributes

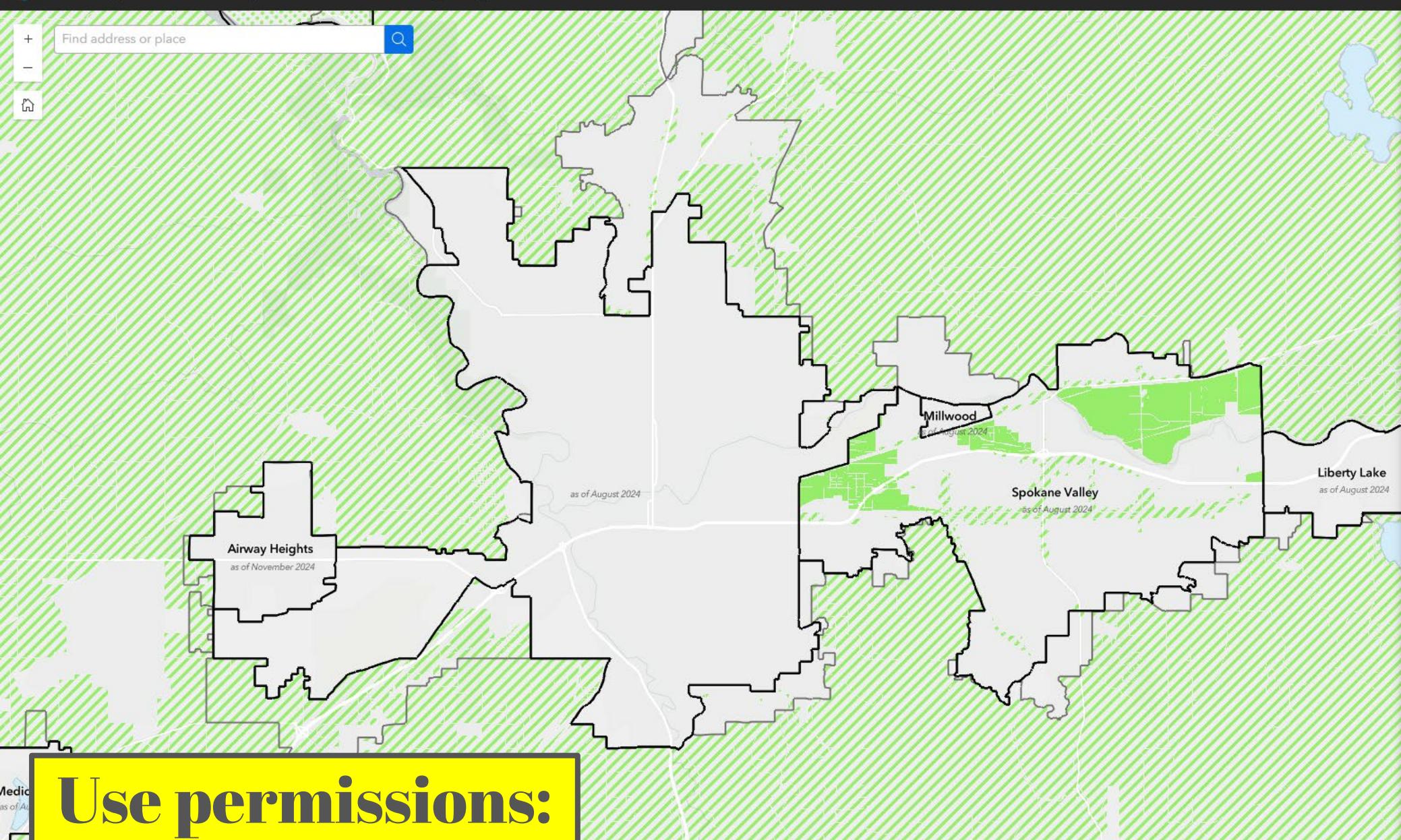
Uses

Heavy Industrial Use

Heavy Industrial Use

Zones and Overlays

- Permitted
- Limited/accessory
- Conditional
- Unknown
- Not permitted



Legend

Zoning Attributes

Uses

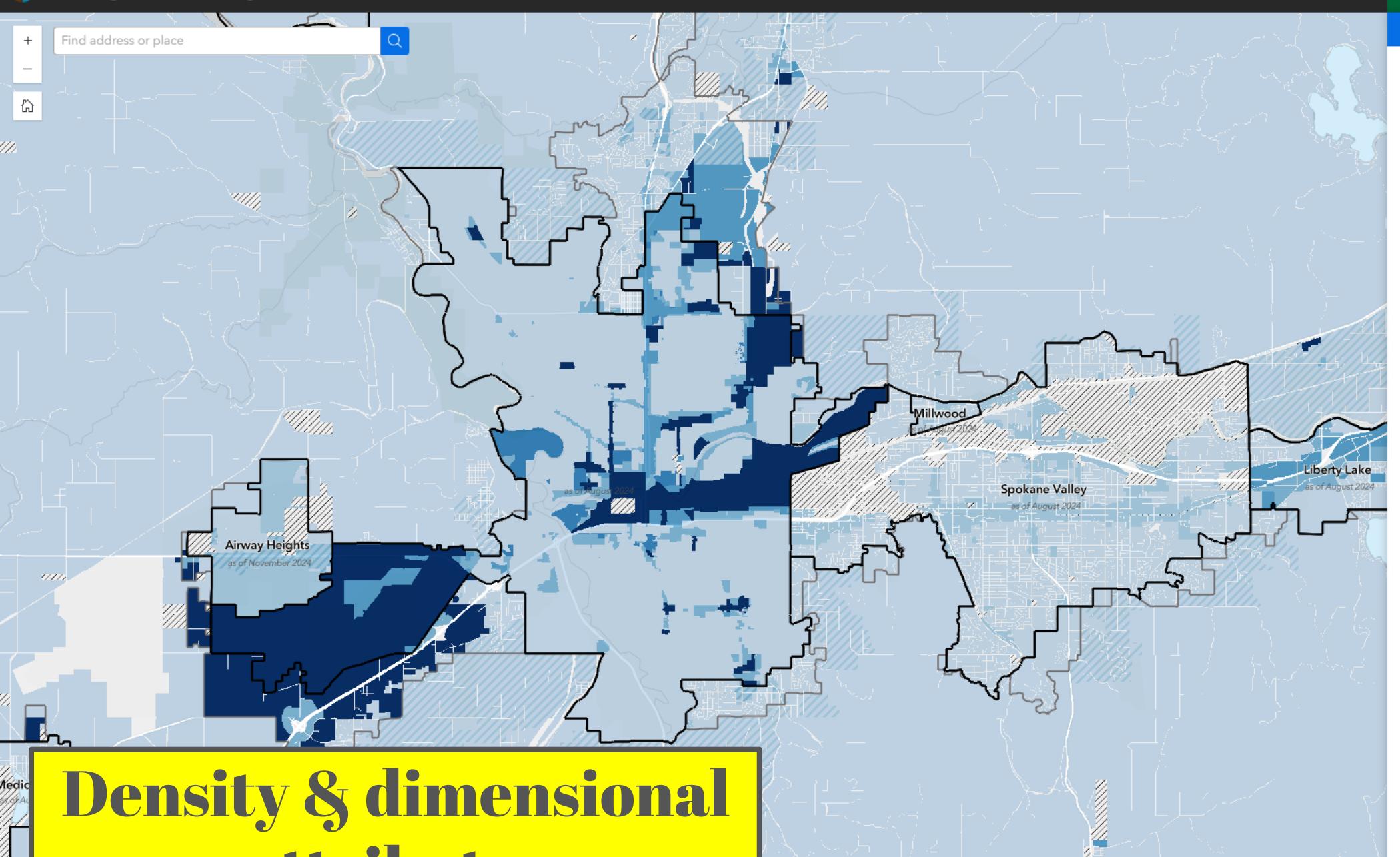
Green Energy Generation Use

Green Energy Use

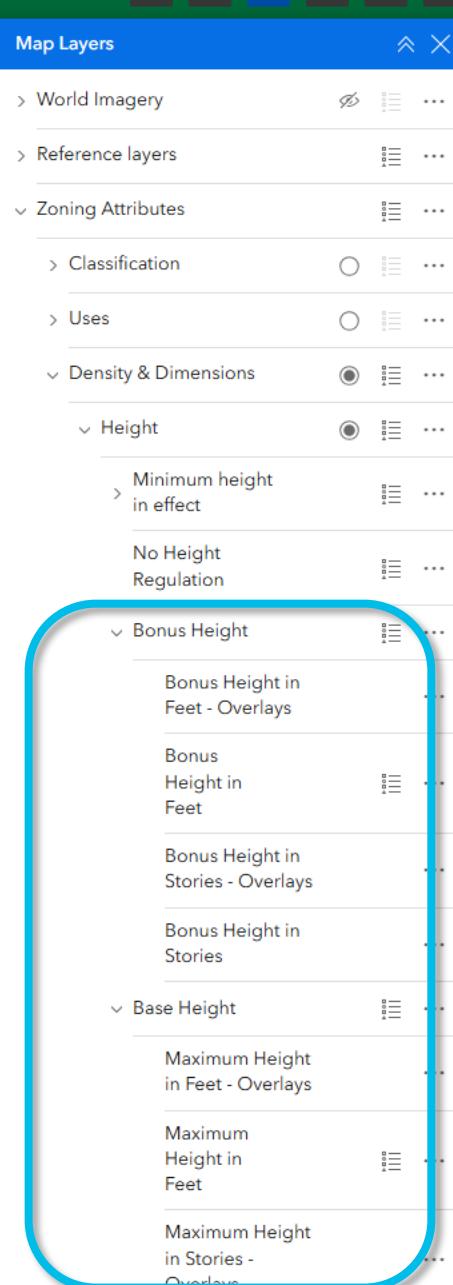
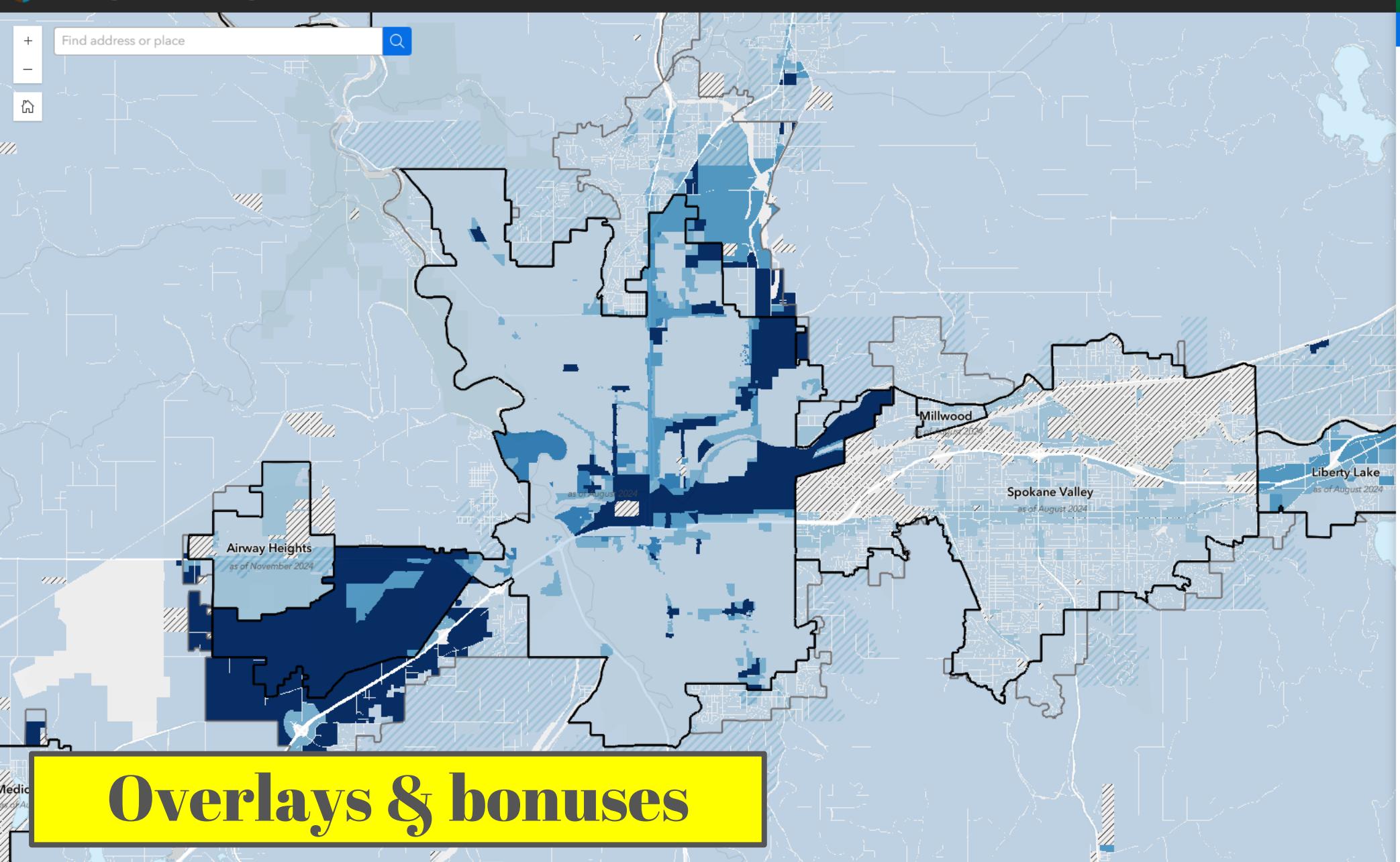
Zones and Overlays

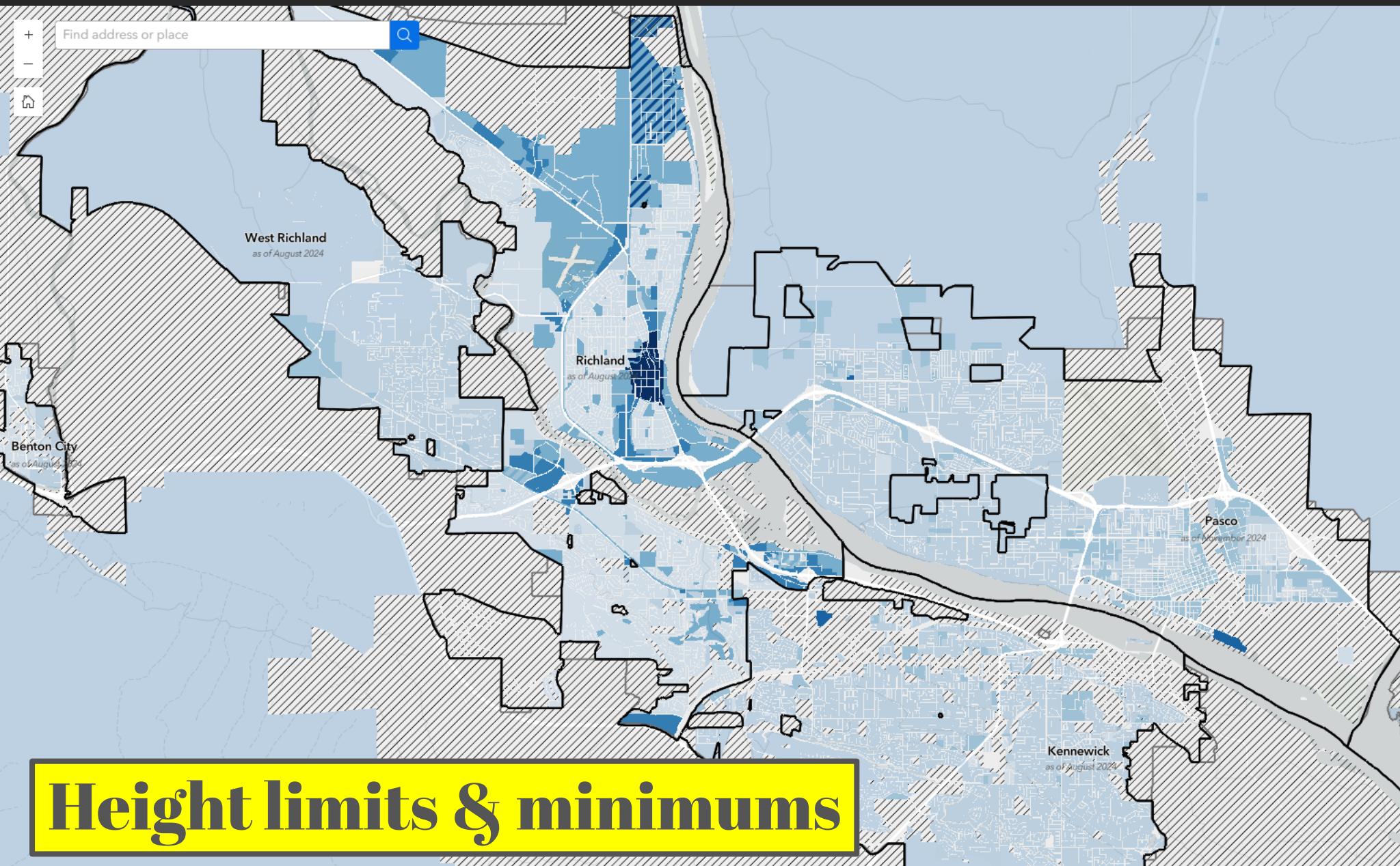
- Permitted
- Limited/accessory
- Conditional
- Not Permitted
- Unknown

Use permissions:
green energy



Density & dimensional attributes





Legend

Zone with Minimum Height

No Height Regulation

Bonus Height

Bonus Height in Feet

Zones and Overlays

No bonus

- ≤ 30' / two stories or less
- 31 - 40' / three stories
- 41 - 50' / four stories
- 51 - 60' / five stories
- 61 - 70' / six stories
- 71 - 80' / seven stories
- 81 - 90' / eight stories
- 91 - 100' / nine stories
- > 100' / ten+ stories

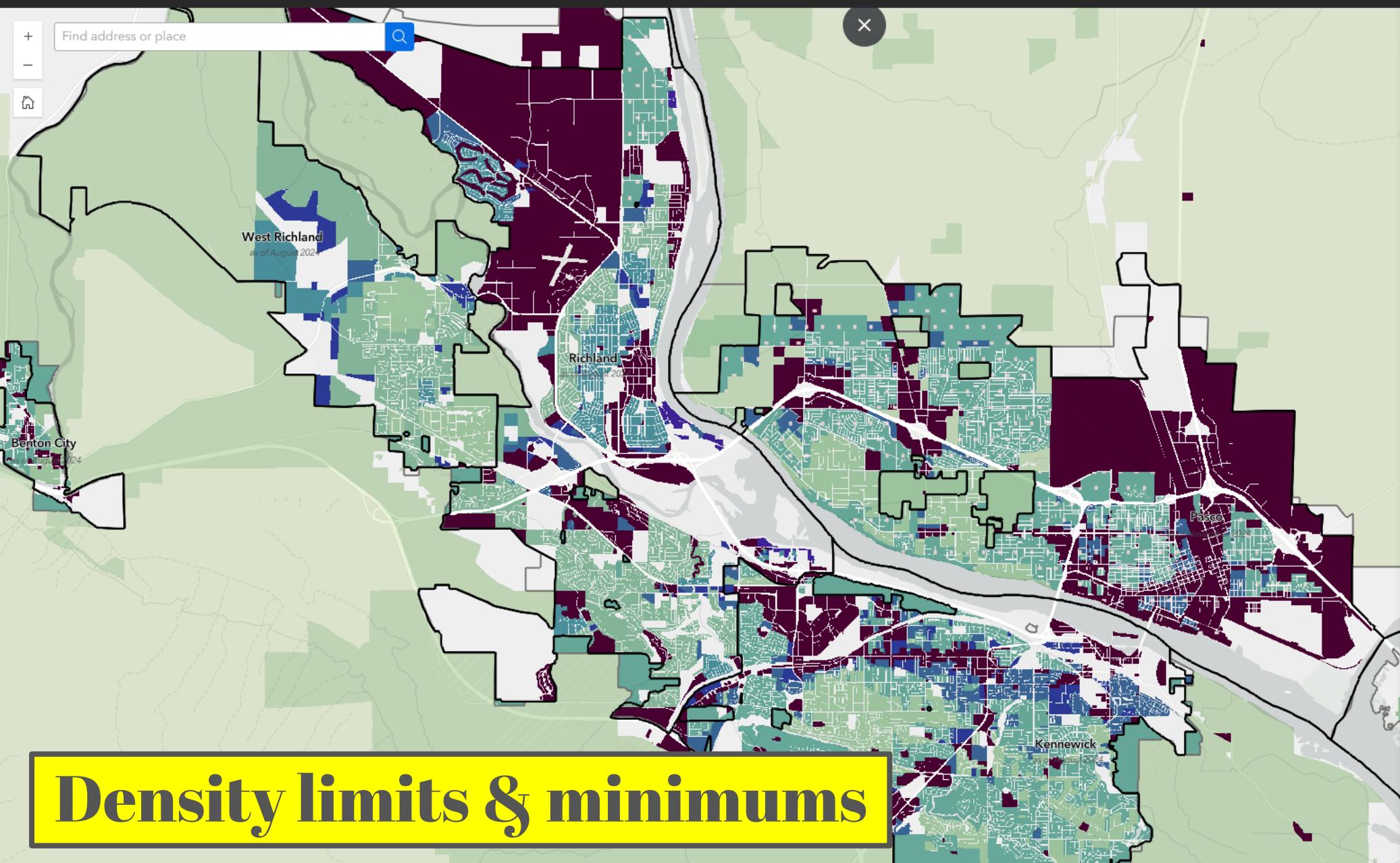
Base Height

Maximum Height in Feet

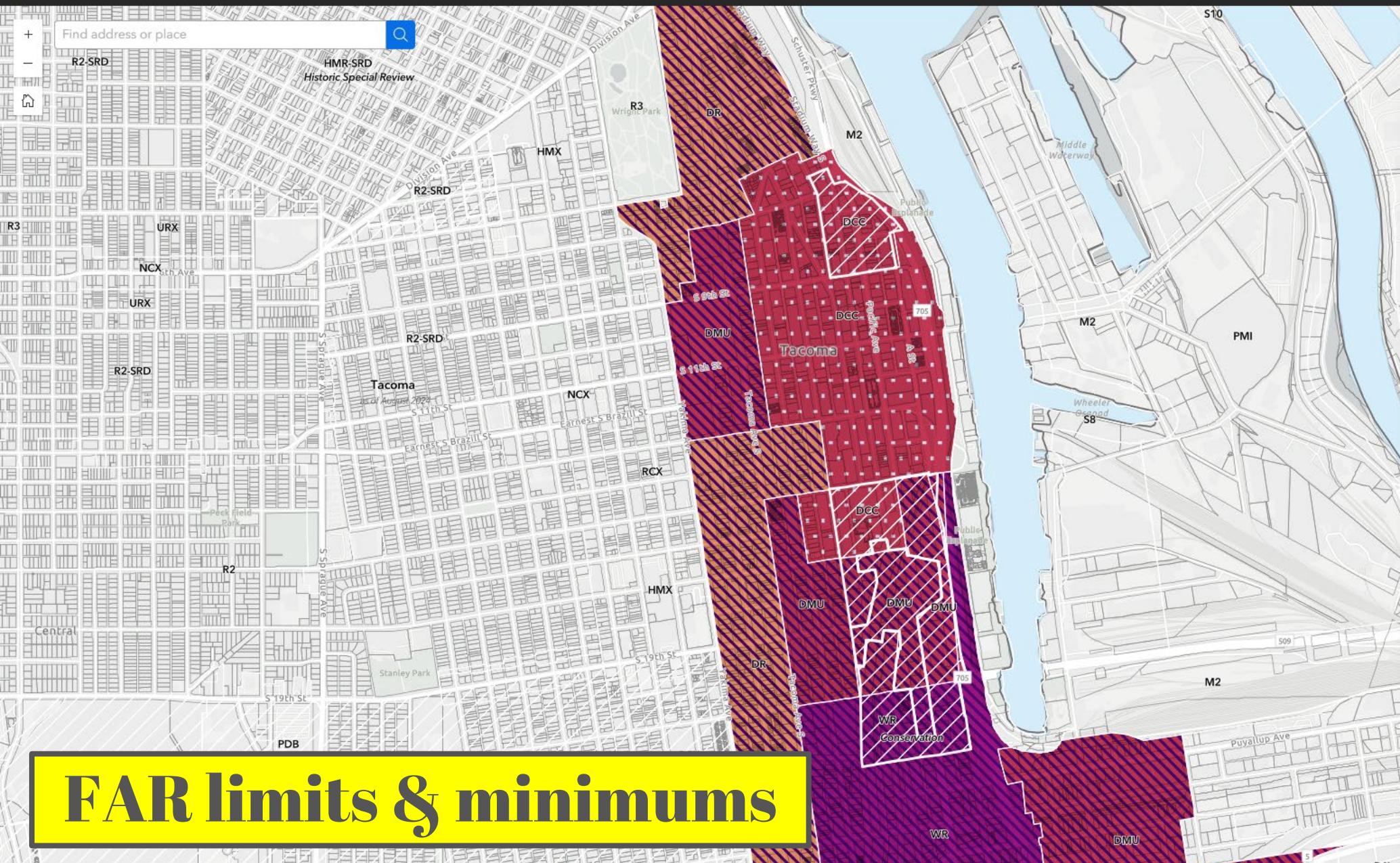
Zones and Overlays

NA

- ≤ 30' / two stories or less
- 31 - 40' / three stories
- 41 - 50' / four stories
- 51 - 60' / five stories
- 61 - 70' / six stories



Density limits & minimums



Legend

Zoning Attributes

Density & Dimensions

Floor Area Ratio (FAR)

Minimum FAR in effect

Minimum FAR

Bonus FAR

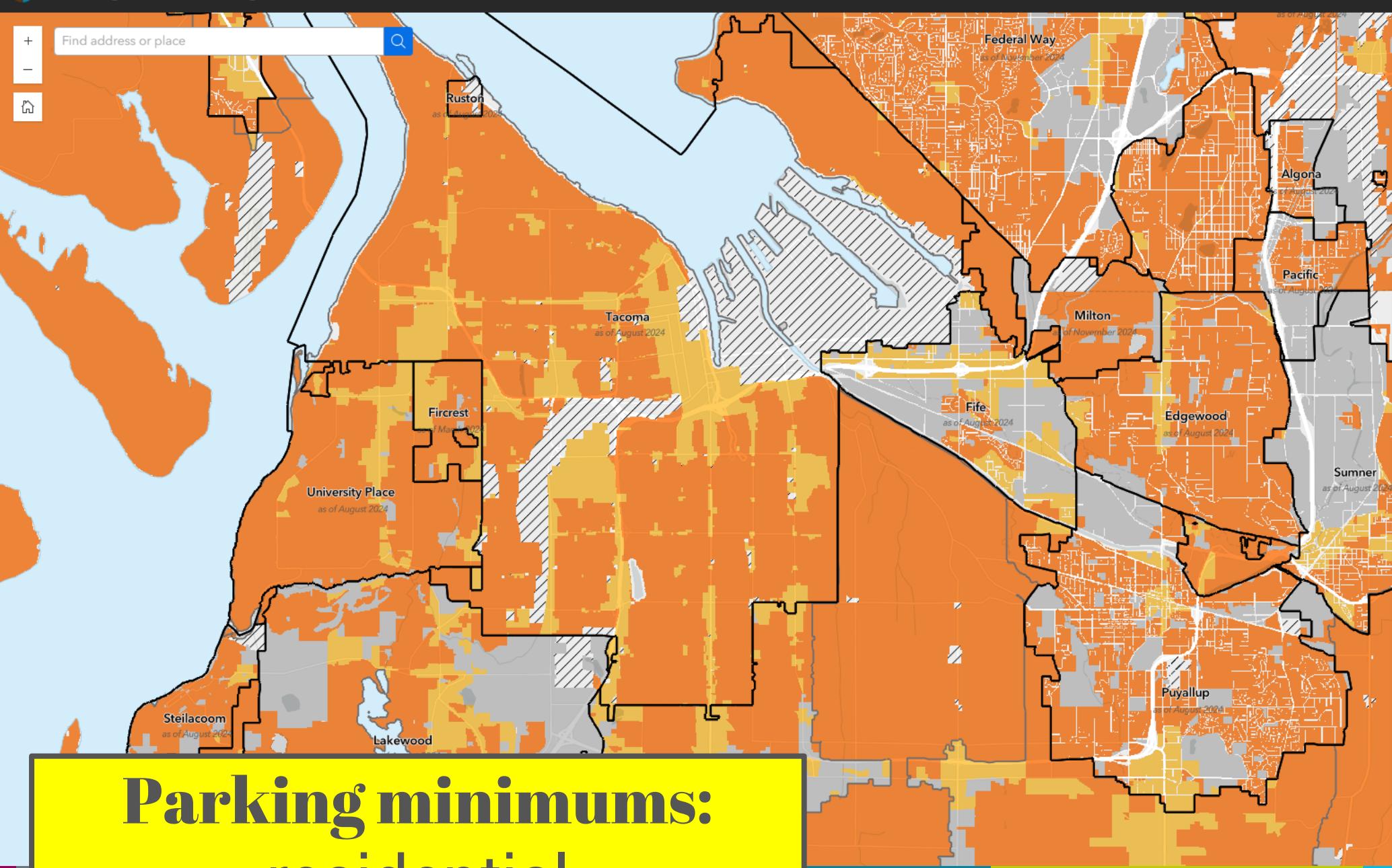
Zones and overlays

- > 4.0
- 3.0-4.0
- 2.0-3.0
- 1.0-2.0
- 0.5-1.0
- <0.5
- 0.0-0.0

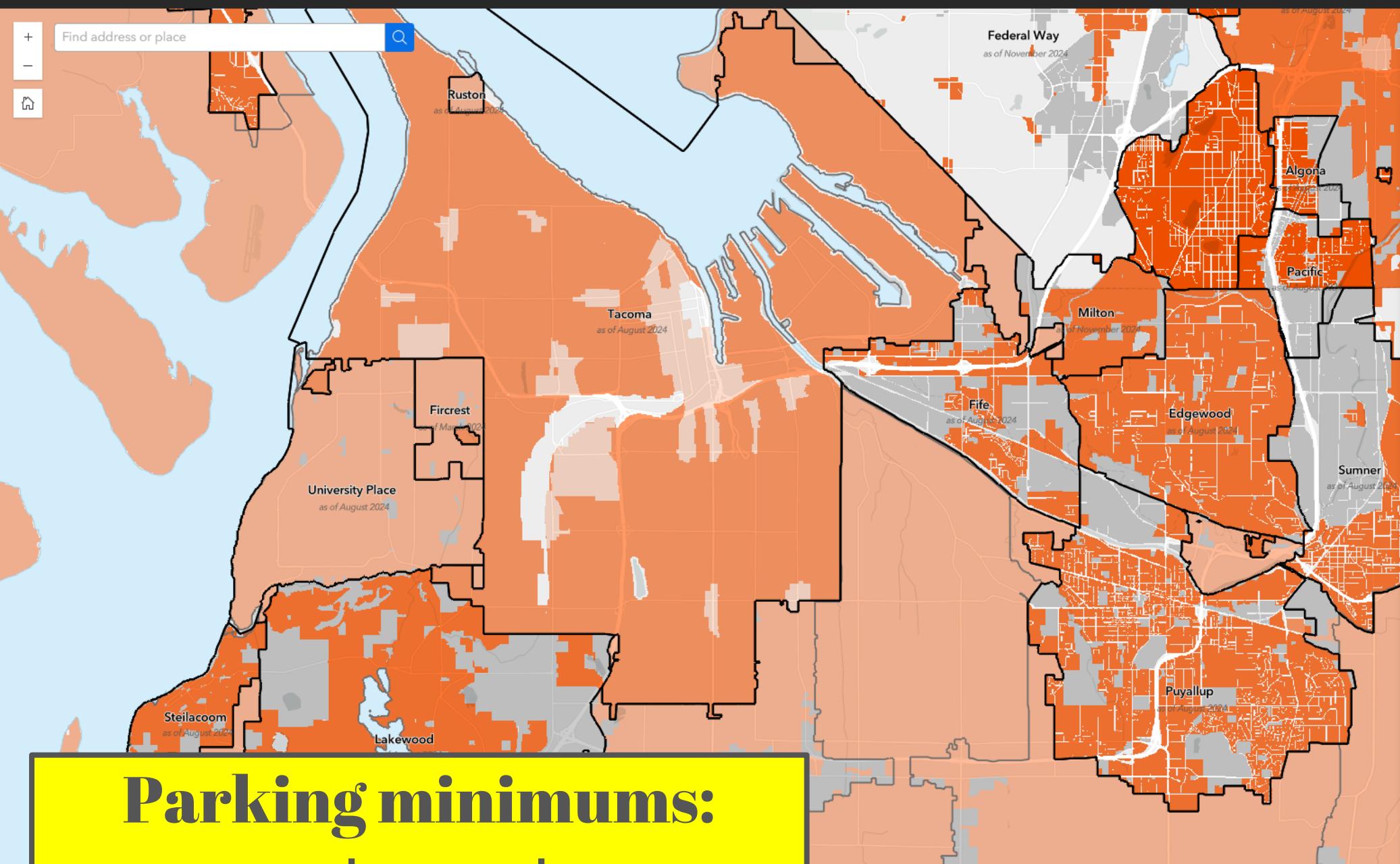
Base FAR

Zones and overlays

- 4.0+
- 3.0-4.0
- 2.0-3.0
- 1.0-2.0
- 0.5-1.0
- <0.5
- Unknown



**Parking minimums:
residential**



Legend

Zoning Attributes

Parking

Restaurant required parking

Restaurants not permitted

Parking ratio - Restaurant

Spaces per 1,000 sf

None

> 2.5

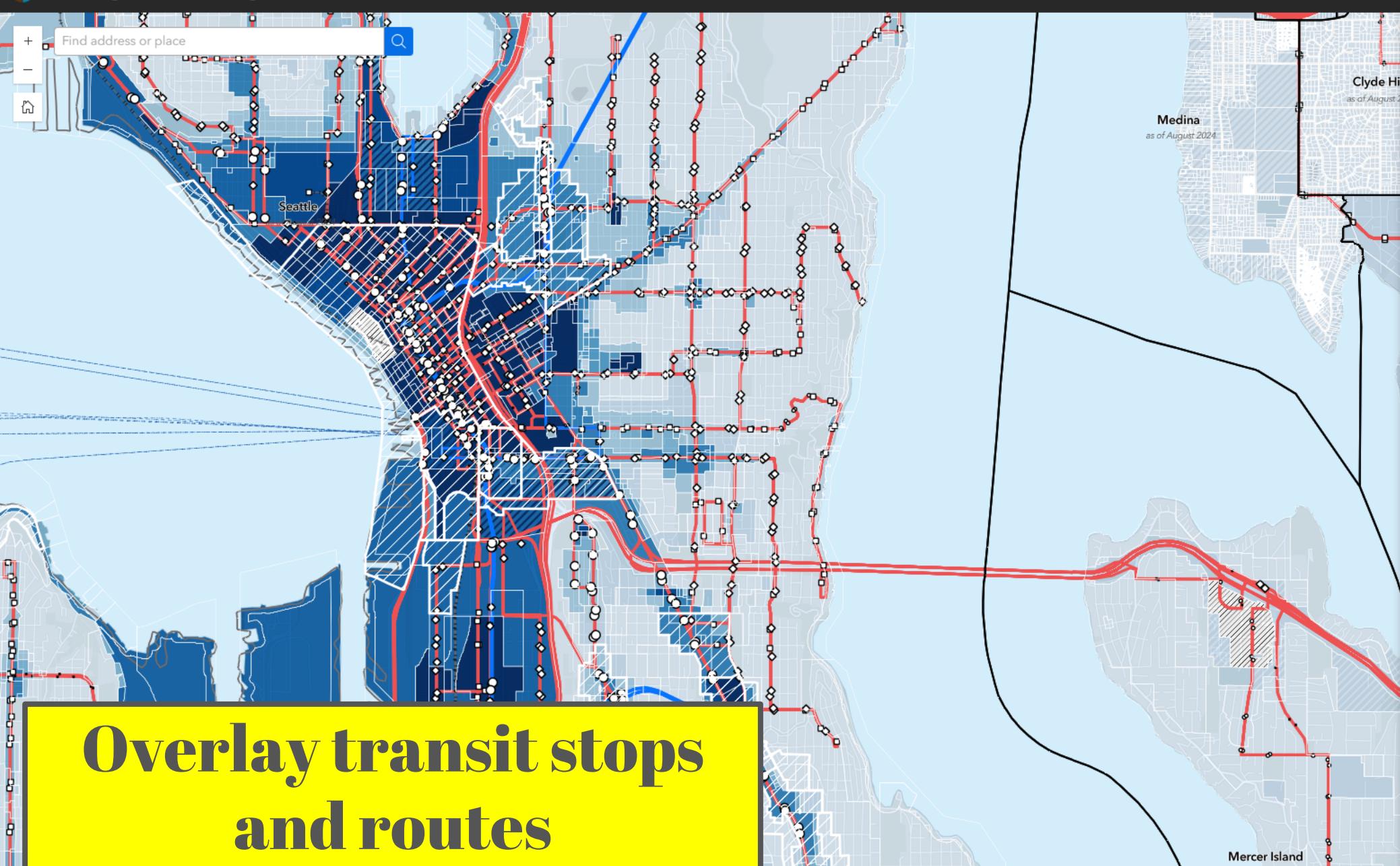
> 2.5 - 5

> 5 - 7.5

> 7.5 - 10

> 10

**Parking minimums:
restaurants**



Map Layers

Reference layers

Jurisdictions

Street names

Overlay Labels

Zone Labels

Overlay Information

Zone information

Urban Growth Areas

Year adopted

Transit Stops (2022)

Transit Routes (2022)

Waterbodies

Counties

Current Parcels (2025)

Zoning Attributes

Classification

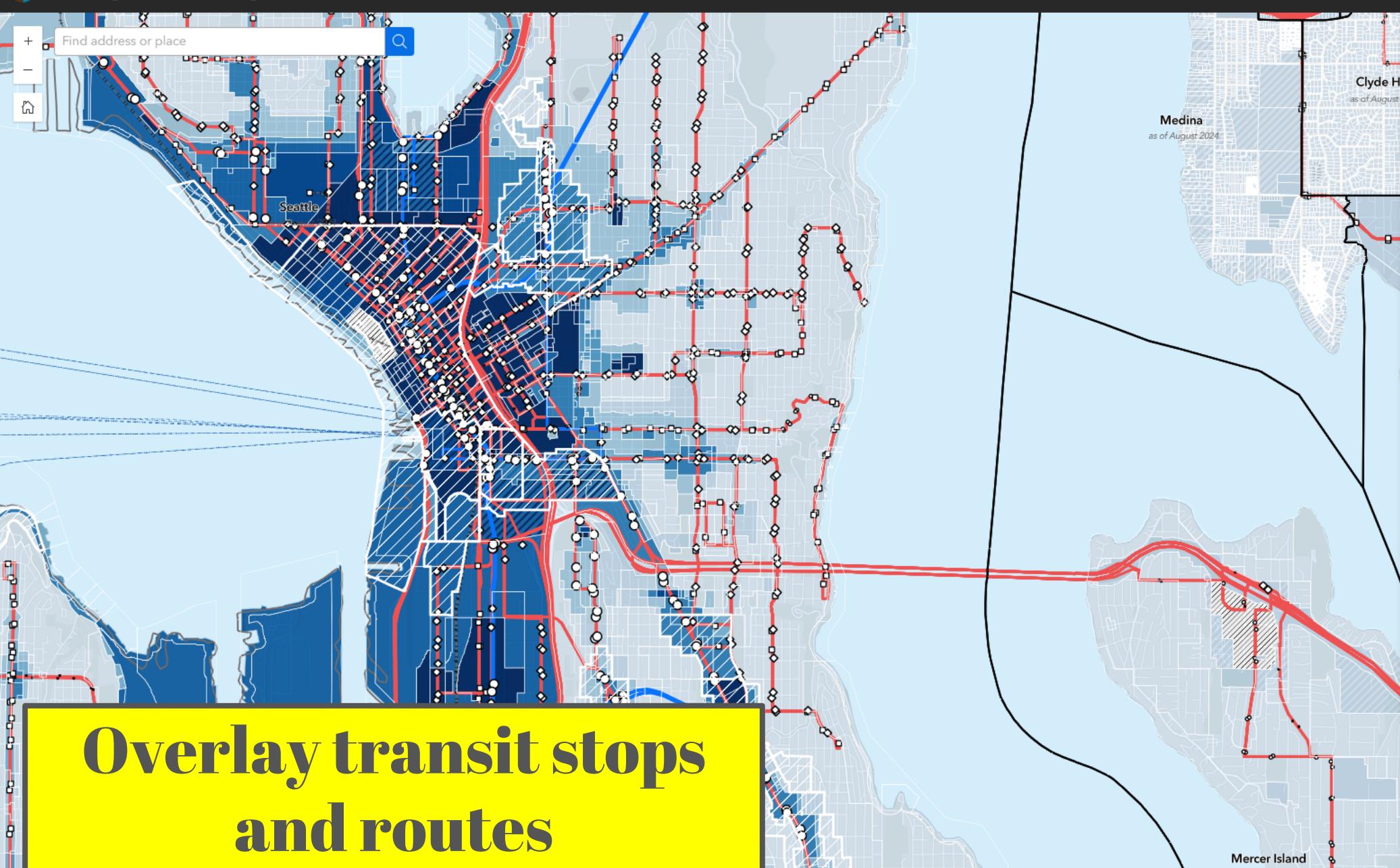
Uses

Density & Dimensions

Parking

Development Types

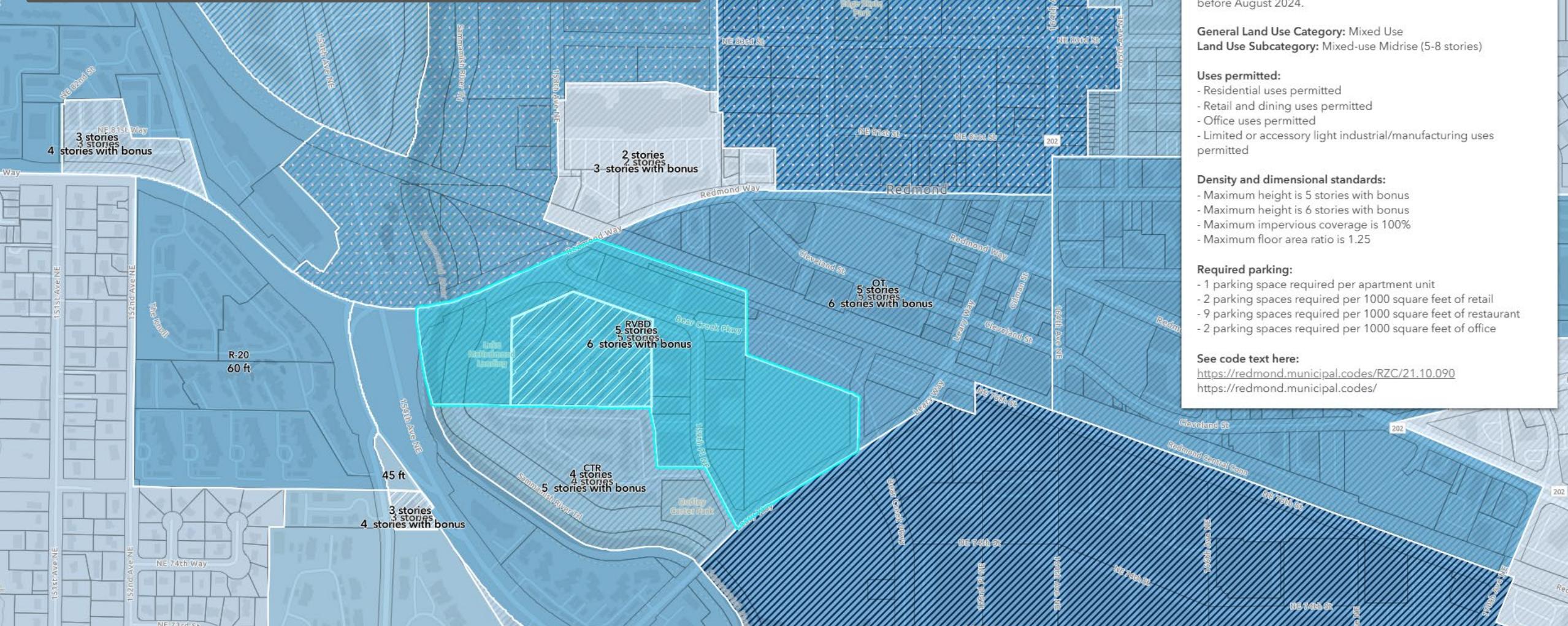
Base map



**Overlay transit stops
and routes**
(2022 data from WSDOT)

Legend	
Reference layers	
Transit Stops (2022)	
Service level	
○ 12 min weekday headways or better	
◊ 15 min weekday headways or better	
□ 30 min weekday headways or better	
◆ 1 hr weekday headways or better	
◆ 6 trips on weekdays or better	
▪ 2 trips on weekdays or better	
Transit Routes (2022)	
— Light rail or streetcar	
— Commuter rail	
— Bus routes	
— Ferry routes	
Zoning Attributes	
Density & Dimensions	
Height	
Minimum height in effect	
Zone with Minimum Height	
▪	
No Height Regulation	
▪	
Bonus Height	
Bonus Height in Feet	
Zones and Overlays	

Click on a zone for a summary pop-up box



Direct link to zoning code in pop-up box

Zoning Code → Article I, Zone-Based Regulations → Ch. 21.10, Downtown Regulations →

21.10.090 River Bend (RVBD) Zone.

 This section was recently amended by Ordinance 3186, codified in May 2025.

A. Purpose. The River Bend (RVBD) zone is one of four distinct mixed-use residential/office districts in the Downtown Neighborhood: Sammamish Trail (SMT), Town Square (TSQ), Anderson Park (AP), and River Bend (RVBD). All four zones are intended to provide for significant residential growth, as well as opportunities for growth in professional, business, health, and personal services. These zones provide for a range of employment uses, such as financial and professional services, public administrative offices, health services, advanced technology industries, universities and technical colleges, and other activities normally conducted in multistory office structures. These zones are intended as areas for the densest employment and residential uses in the Downtown, but also provide for supporting retail, service, and entertainment uses located within walking distance of each other. Some of the quieter streets in these zones allow residential uses on the ground floor, whereas the primary streets are intended for active, pedestrian-friendly and activating commercial uses. The River Bend zone enhances this area as an entrance to Downtown by requiring streetscape improvements, by using design standards to encourage the creation of mixed residential/office villages and buildings, and by linking the zone with the Downtown core and Sammamish River. The River Bend zone also preserves the "green" gateway on Leary Way at the south end of Downtown by providing for the acquisition of land and the application of design standards and forest management.

The following table is specific to this zone and provides references for each of the major topics that are regulated throughout the code. The individual topics provide function as connection or linkage to the chapters and sections.

What's Nearby

ARTICLE		
← ...21.02	I	II →
CHAPTER		
← 21.08	21.10	21.12 →
SECTION		
← ...080	...090	...100 →

River Bend (Downtown Mixed Use) (RVBD) is a mixed use zone located in Redmond. Data recorded for code adopted on or before August 2024.

General Land Use Category: Mixed Use
Land Use Subcategory: Mixed-use Midrise (5-8 stories)

Uses permitted:

- Residential uses permitted
- Retail and dining uses permitted
- Office uses permitted
- Limited or accessory light industrial/manufacturing uses permitted

Density and dimensional standards:

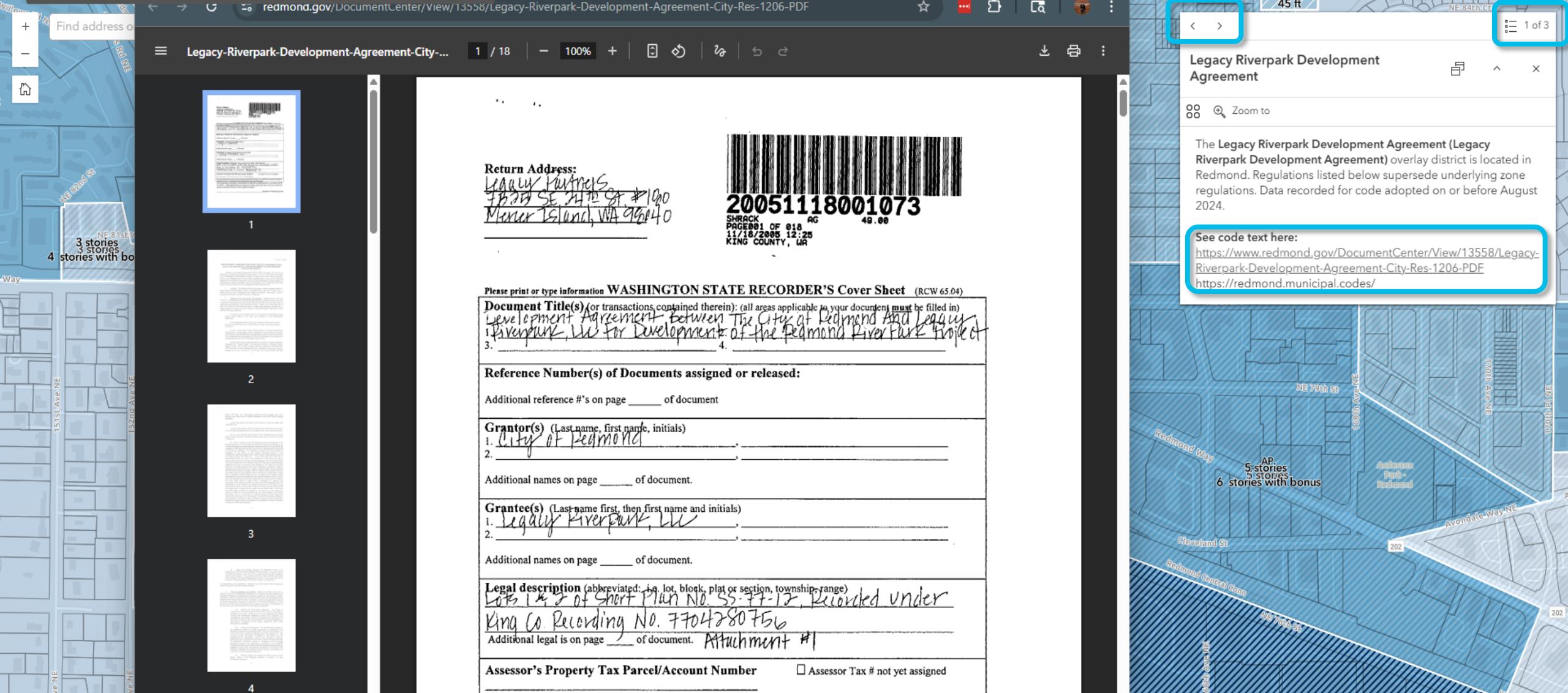
- Maximum height is 5 stories with bonus
- Maximum height is 6 stories with bonus
- Maximum impervious coverage is 100%
- Maximum floor area ratio is 1.25

Required parking:

- 1 parking space required per apartment unit
- 2 parking spaces required per 1000 square feet of retail
- 9 parking spaces required per 1000 square feet of restaurant
- 2 parking spaces required per 1000 square feet of office

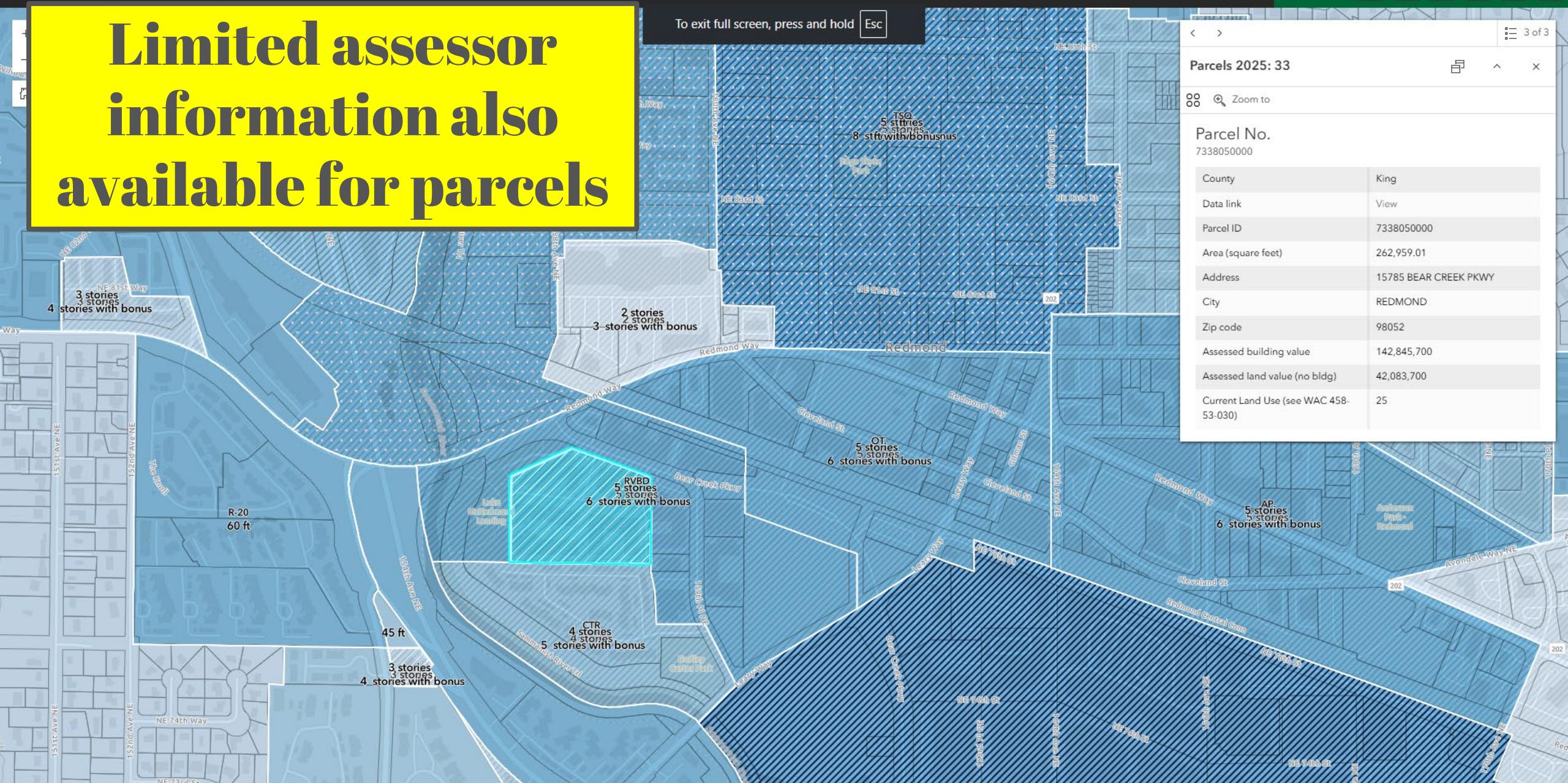
See code text here:
<https://redmond.municipal.codes/RZC/21.10.090>
<https://redmond.municipal.codes/>

Overlays too!



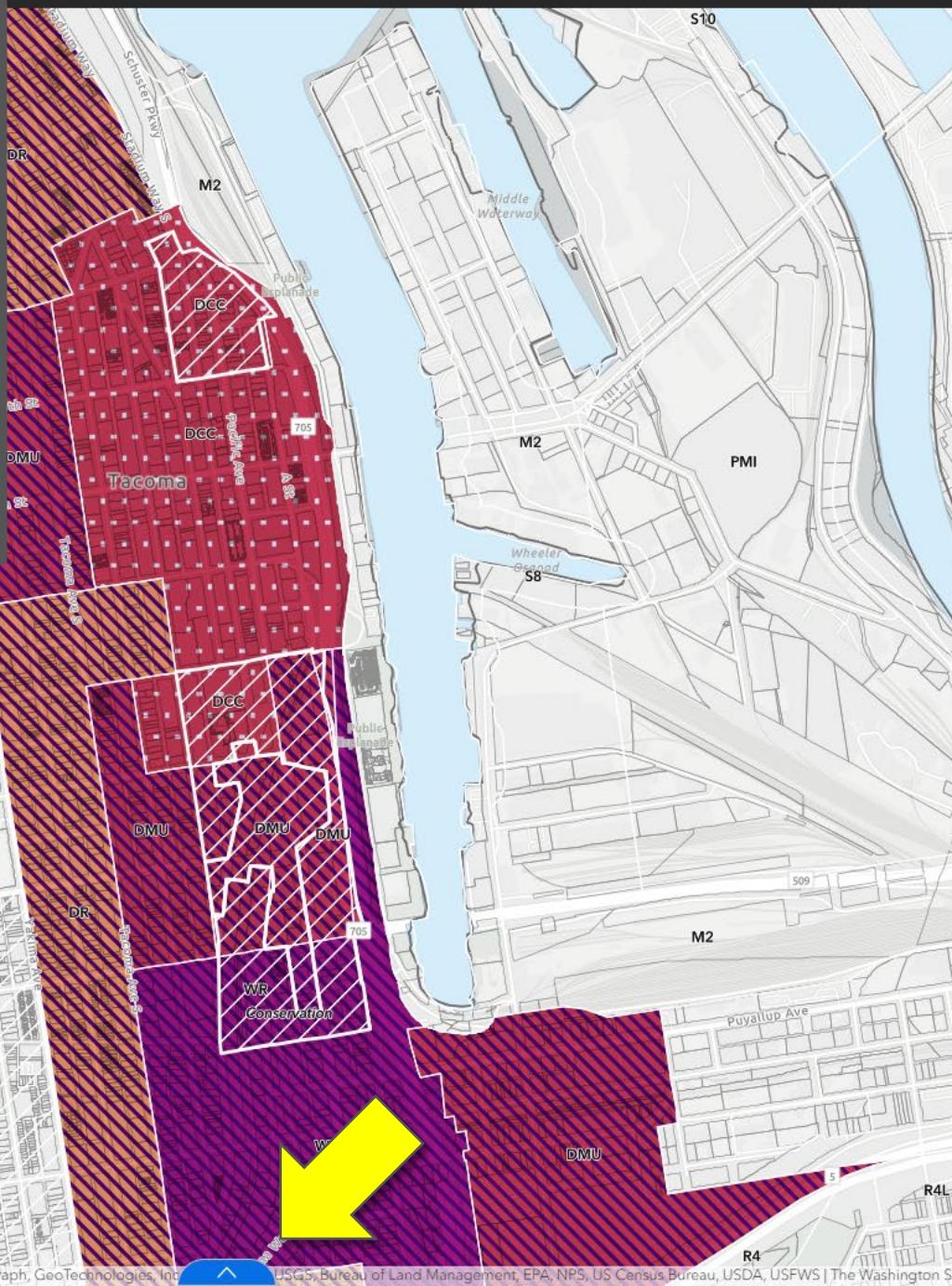
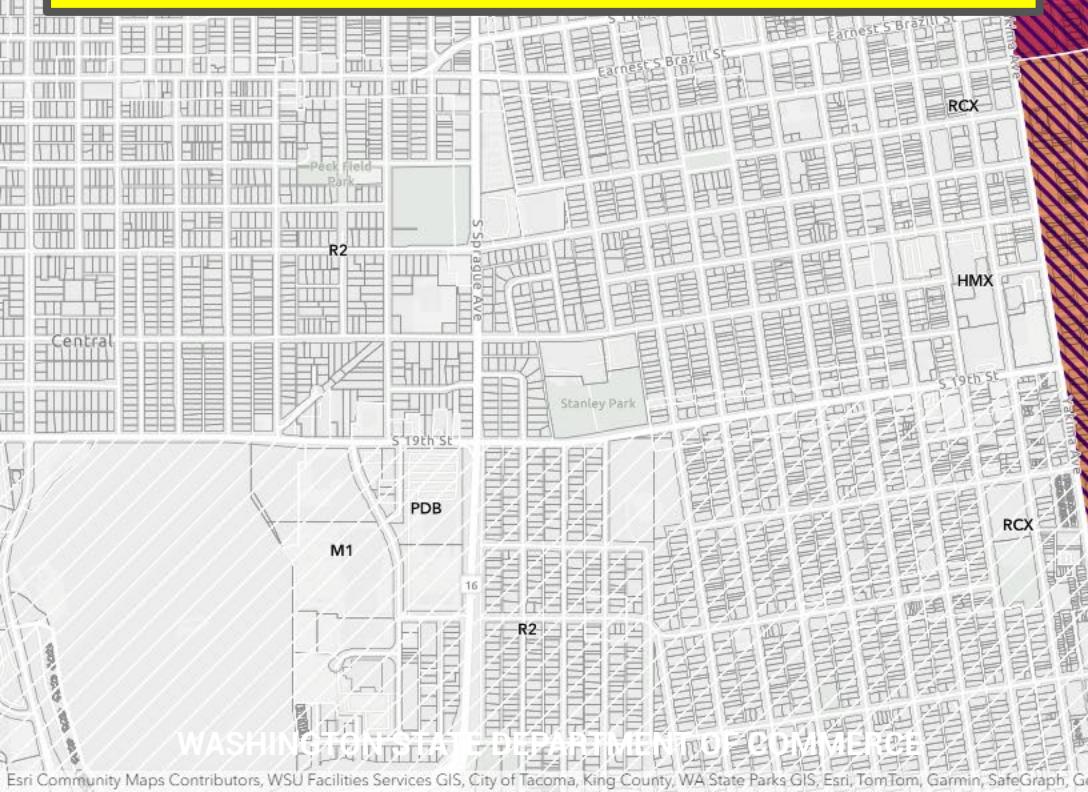


Limited assessor information also available for parcels





Expand the table at the bottom of the screen to specific information about each zone



Legend

Zoning Attributes

Density & Dimensions

Floor Area Ratio (FAR)

Minimum FAR in effect

Minimum FAR

Bonus FAR

Zones and overlays

- > 4 - 10
- 3.0 - 4.0
- 2.0 - 3.0
- 1.0 - 2.0
- 0.5 - 1.0
- < 0.5
- 0.0 - 0.0

Base FAR

Zones and overlays

- 4.0+
- 3.0 - 4.0
- 2.0 - 3.0
- 1.0 - 2.0
- 0.5 - 1.0
- < 0.5
- Unknown

Expand the table at the bottom of the screen to specific information about each zone



Esri Community Maps Contributors, WSU Facilities Services GIS, City of Tacoma, King County, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc.  USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS | The Washington State Zoning Atlas was developed by a team incl... Powered by Esri

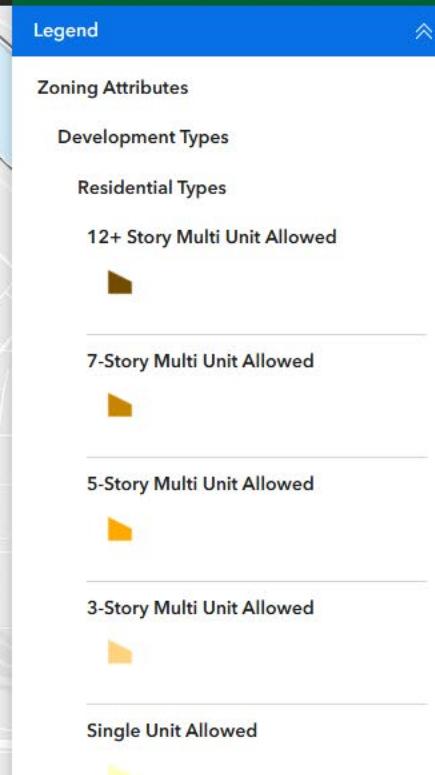
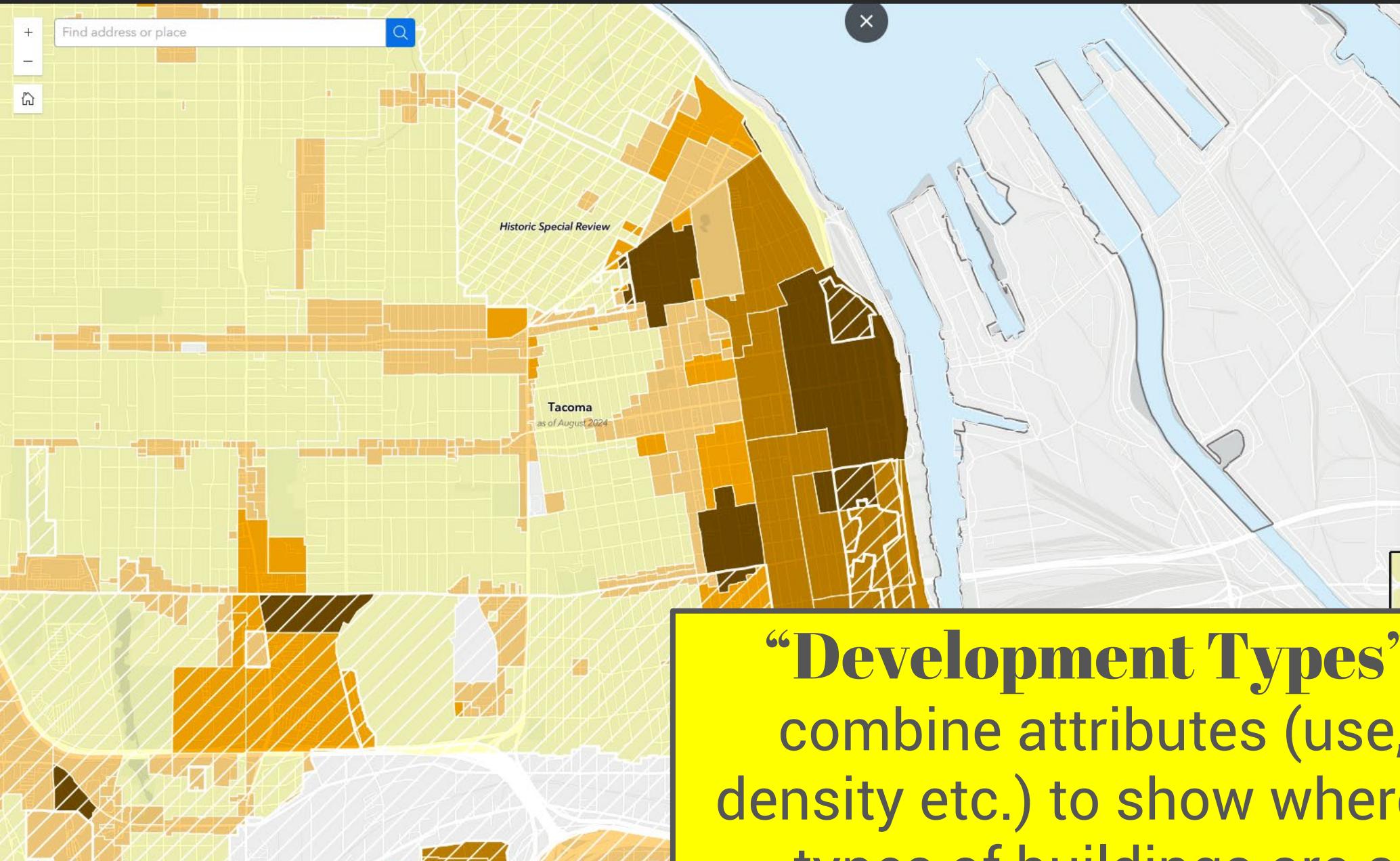
Jurisdictions	Overlay Labels	Zone Labels	Overlay Information	Zone information	Urban Growth Areas	Year adopted	Waterbodies	Counties	Current Parcels (2025)	Minimum FAR - Overlays	Minimum FAF	
OBJECTID	GEOID	Jurisdiction Name	County FIPS Code	County Name	Zone ID/Abbreviation	Zone Name	General Zone Category	Specific Zone Category	User Rights			
162303	5370000	Tacoma	053	Pierce	DMU	Downtown Mixed-Use Dis...	Mixed Use	Mixed-use High Rise (9+ sto...	Permitted			
162304	5370000	Tacoma	053	Pierce	DMU	Downtown Mixed-Use Dis...	Mixed Use	Mixed-use High Rise (9+ sto...	Permitted			
162305	5370000	Tacoma	053	Pierce	DMU	Downtown Mixed-Use Dis...	Mixed Use	Mixed-use High Rise (9+ sto...	Permitted			
162310	5370000	Tacoma	053	Pierce	M1	Light Industrial District	Industrial	Light Industrial/Flex	Limited/A...			
162316	5370000	Tacoma	053	Pierce	M2	Heavy Industrial	Industrial	Heavy Industrial	Limited/A...			
162323	5370000	Tacoma	053	Pierce	NCX	Neighborhood Commercial	Mixed Use	Mixed-use Midrise (5-8 sto...	Permitted			
162324	5370000	Tacoma	053	Pierce	NCX	Neighborhood Commercial	Mixed Use	Mixed-use Midrise (5-8 sto...	Permitted			
162325	5370000	Tacoma	053	Pierce	NRX	Neighborhood Residential	Multi-unit Residential	Multi-unit Lowrise (up to 4...	Permitted			
162326	5370000	Tacoma	053	Pierce	PMI	Port Maritime and Industrial	Industrial	Industrial Airport/Seaport	Limited/A...			
162470	5370000	Tacoma	053	Pierce	RCX	Regional Commercial Mix...	Mixed Use	Mixed-use Midrise (5-8 sto...	Permitted			



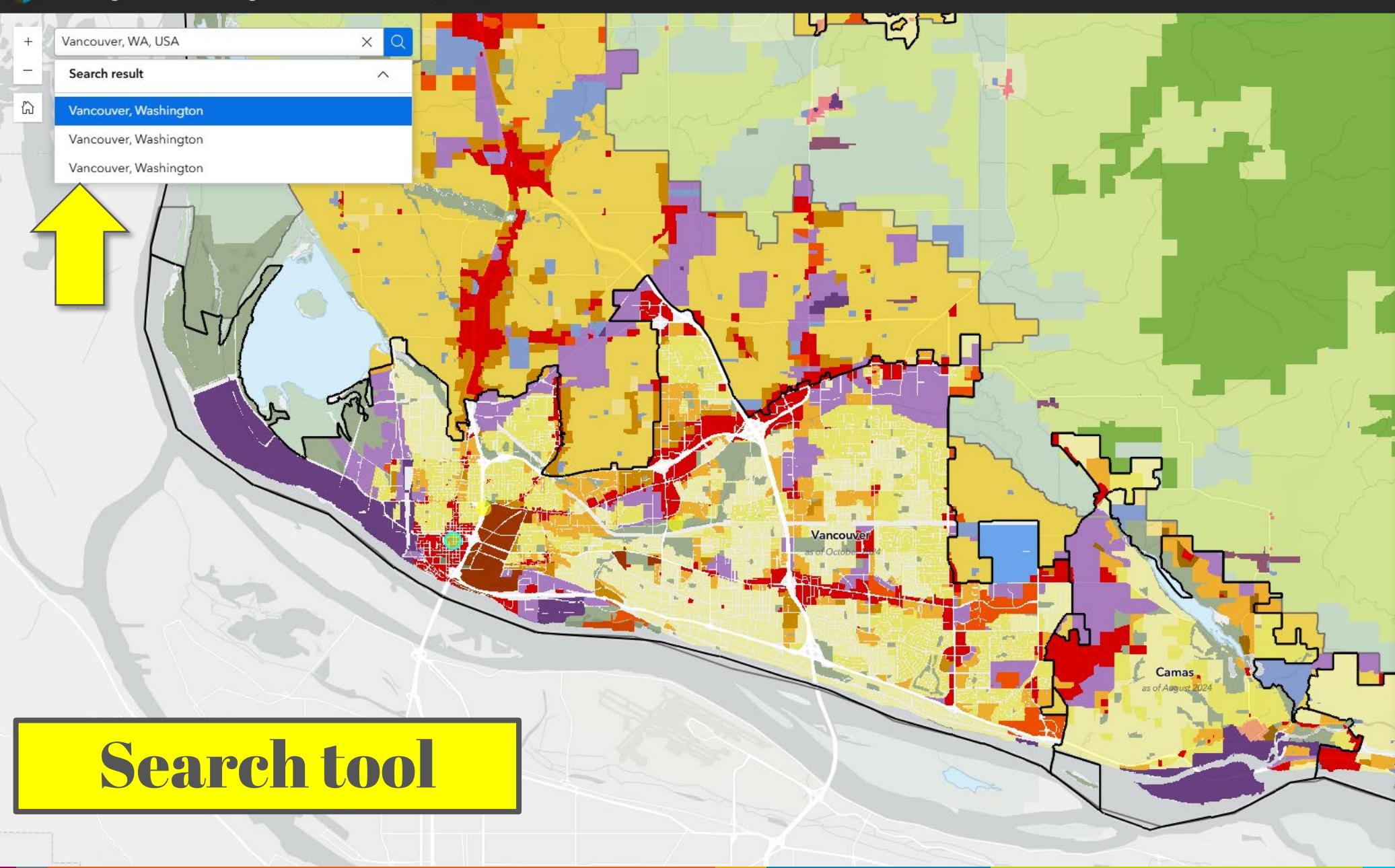
Filter table data by map extent



OBJECTID	GEOID	Jurisdiction Name	County FIPS Code	County Name	Zone ID/Abbreviation	Zone Name	General Zone Category	Specific Zone Category	Permitted
162701	5370000	Tacoma	053	Pierce	DCC	Downtown Commercial C...	Mixed Use	Mixed-use High Rise (9+ sto...	Permitted
162702	5370000	Tacoma	053	Pierce	DCC	Downtown Commercial C...	Mixed Use	Mixed-use High Rise (9+ sto...	Permitted
162703	5370000	Tacoma	053	Pierce	DCC	Downtown Commercial C...	Mixed Use	Mixed-use High Rise (9+ sto...	Permitted
162704	5370000	Tacoma	053	Pierce	DCC	Downtown Commercial C...	Mixed Use	Mixed-use High Rise (9+ sto...	Permitted
162709	5370000	Tacoma	053	Pierce	DMU	Downtown Mixed-Use Dis...	Mixed Use	Mixed-use High Rise (9+ sto...	Permitted
162711	5370000	Tacoma	053	Pierce	DR	Downtown Residential Dis...	Mixed Use	Mixed-use High Rise (9+ sto...	Permitted
162717	5370000	Tacoma	053	Pierce	HMX	Hospital-Medical Mixed-U...	Public and Semi-Public Use	Public and Semi-Public Use	Permitted
162746	5370000	Tacoma	053	Pierce	NCX	Neighborhood Commerci...	Mixed Use	Mixed-use Midrise (5-8 sto...	Permitted
162917	5370000	Tacoma	053	Pierce	R4L	Low-Density Multiple-Fam...	Multi-unit Residential	Multi-unit Lowrise (up to 4...	Permitted
162940	5370000	Tacoma	053	Pierce	RCX	Regional Commercial Mix...	Mixed Use	Mixed-use Midrise (5-8 sto...	Permitted



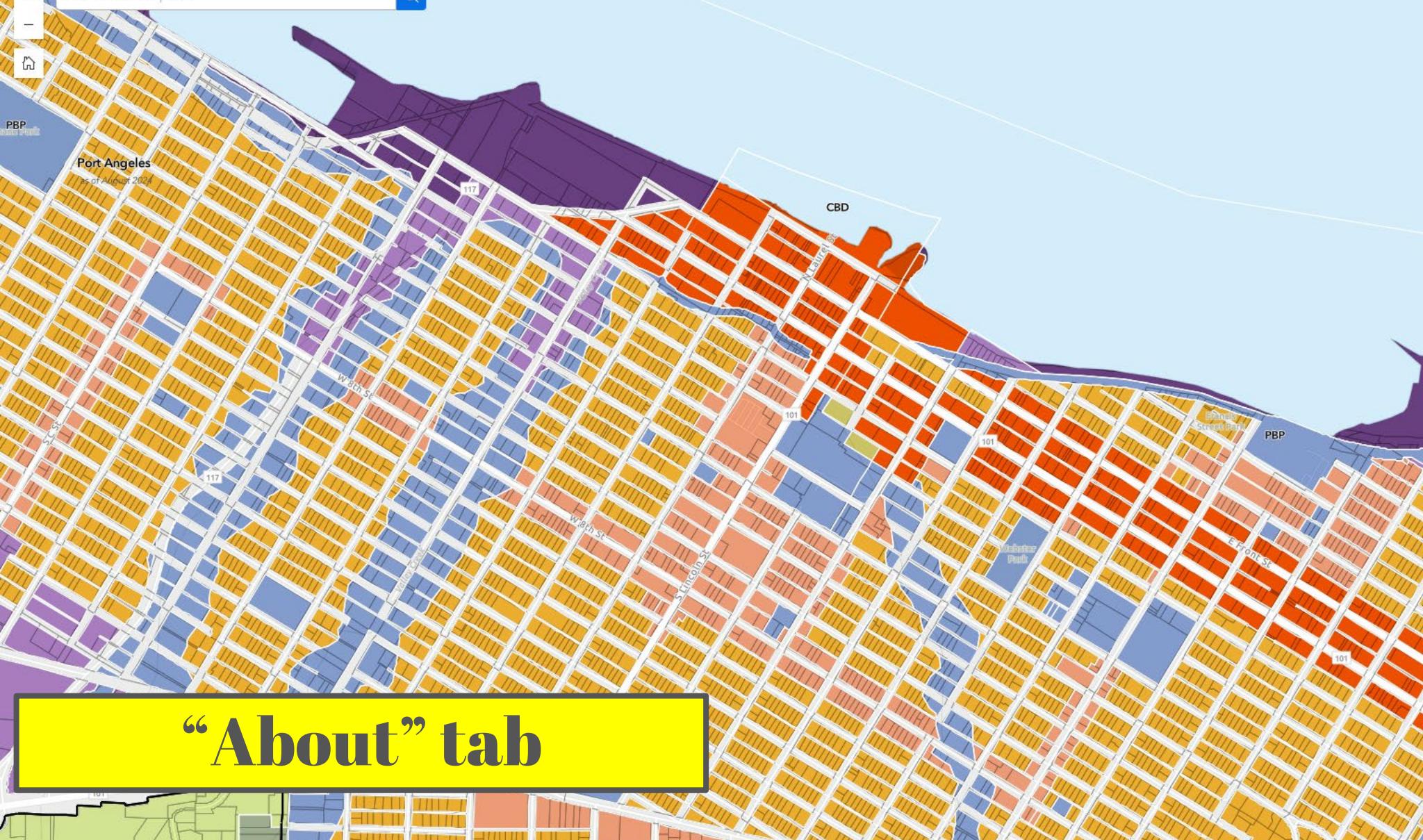
“Development Types” layers
combine attributes (use, height, density etc.) to show where different types of buildings are allowed.



Map Layers
ArcGIS World Geocoding Service
World Imagery
Reference layers
Zoning Attributes
Base map



Find address or place



Welcome to the Washington Zoning Atlas!

Geospatial Open Data Portal at [Washington State Zoning Atlas](#) | [Washington State Geospatial Open Data Portal](#)

Map navigation

Pan:

touch and drag, click and drag, or arrow keys

Zoom:

touch and pinch, mouse wheel, shift + click + drag, or plus and minus keys and buttons

Layers:

Explore map layers by clicking on the layer list button at the top right corner of the map

Legend:

View the legend for the currently displayed layers by clicking on the legend button at the top right corner of the map

Attribute table:

Click on the arrow at the bottom of the map to open the database in table form

Tips

Scaled visibility. Some layers are only visible at certain zoom ratios. Zoom in on the map if you do not see the data you expect to see.

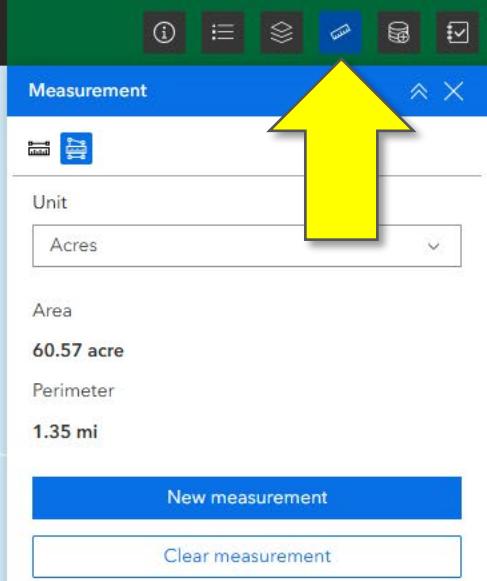
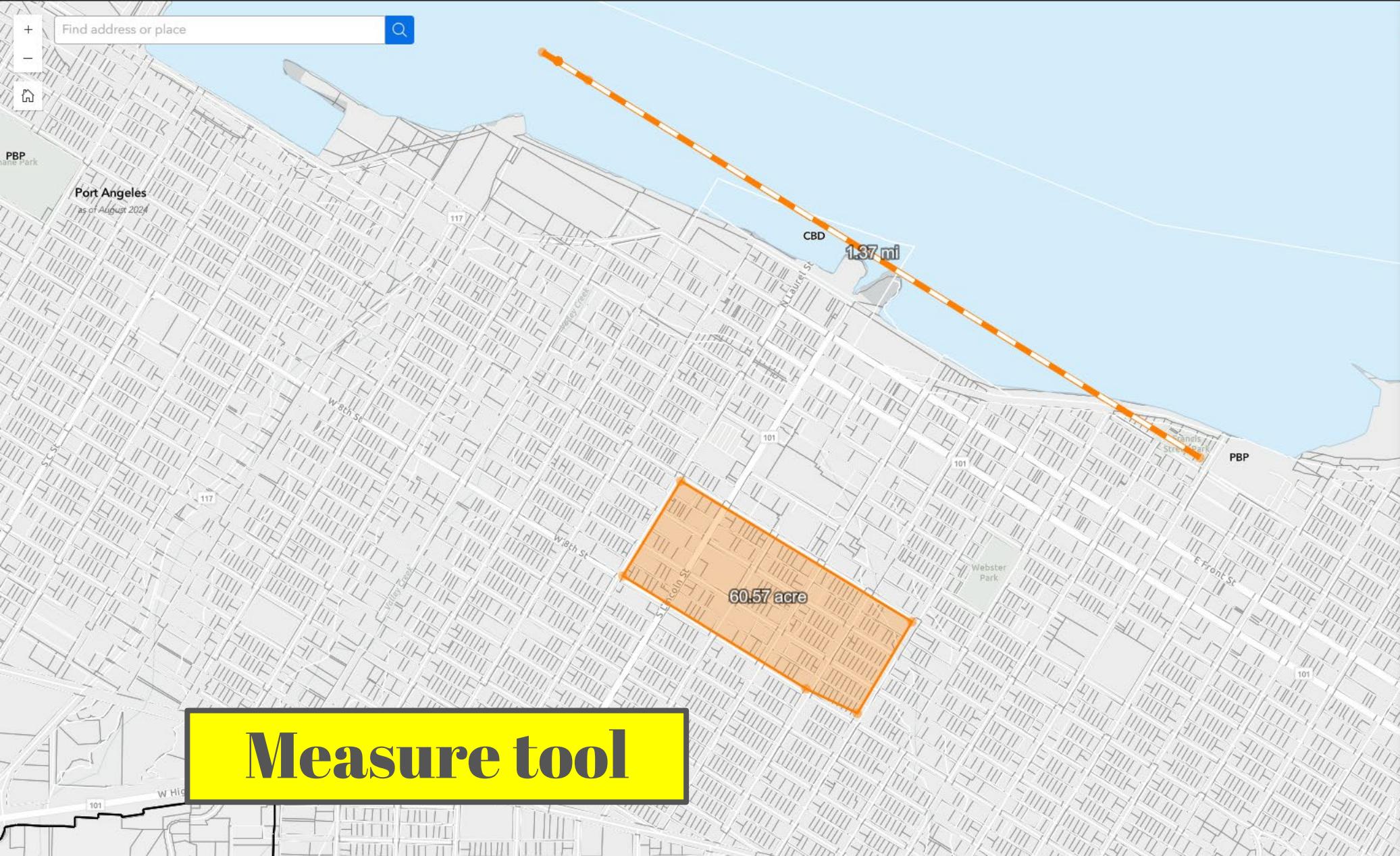
Pop-ups. Ensure the "Zone information" layer, under "Reference layers," is turned on in order to click on the map and see pop-ups with a zone's summary information.

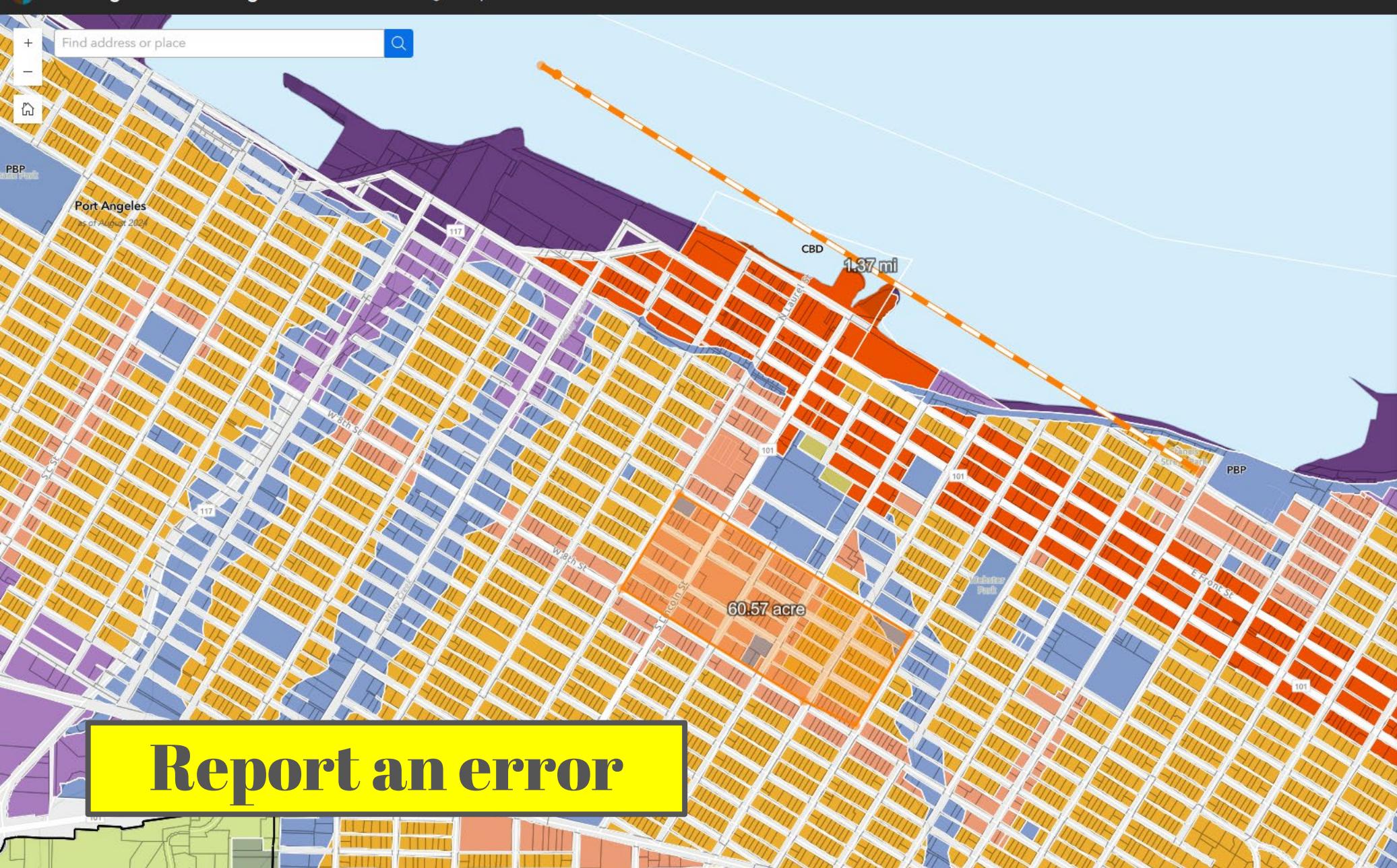
Legend. The legend provides symbology for all zoning attribute layers that are turned on, with the base zoning attribute at the bottom of the grouping. Click on the arrows in the legend to see symbology for other layers that are turned on.

Overlays. Washington jurisdictions have a variety of overlays. In some cases, overlay zones straightforwardly replace standards tracked by the Zoning Atlas in the underlying zoning. In other cases, overlays apply design standards or review processes that are outside the scope of the Zoning Atlas. In this map, overlays are generally spatial shapes that signify an overlay exists over a certain area. Users can turn off overlays in the layers panel if they are generally interested in the base zoning attributes.

Filters. Users have the option to filter the zones displayed by different attributes. For example, you could choose to display only zones that allow residential uses where the height limit is over 50 feet. Consulting the list of attribute names and parameters in the Data Entry Guidance document will help identify useful fields for filtering.







Report an Error

Report an Error

Please use this form to report any errors in the map.

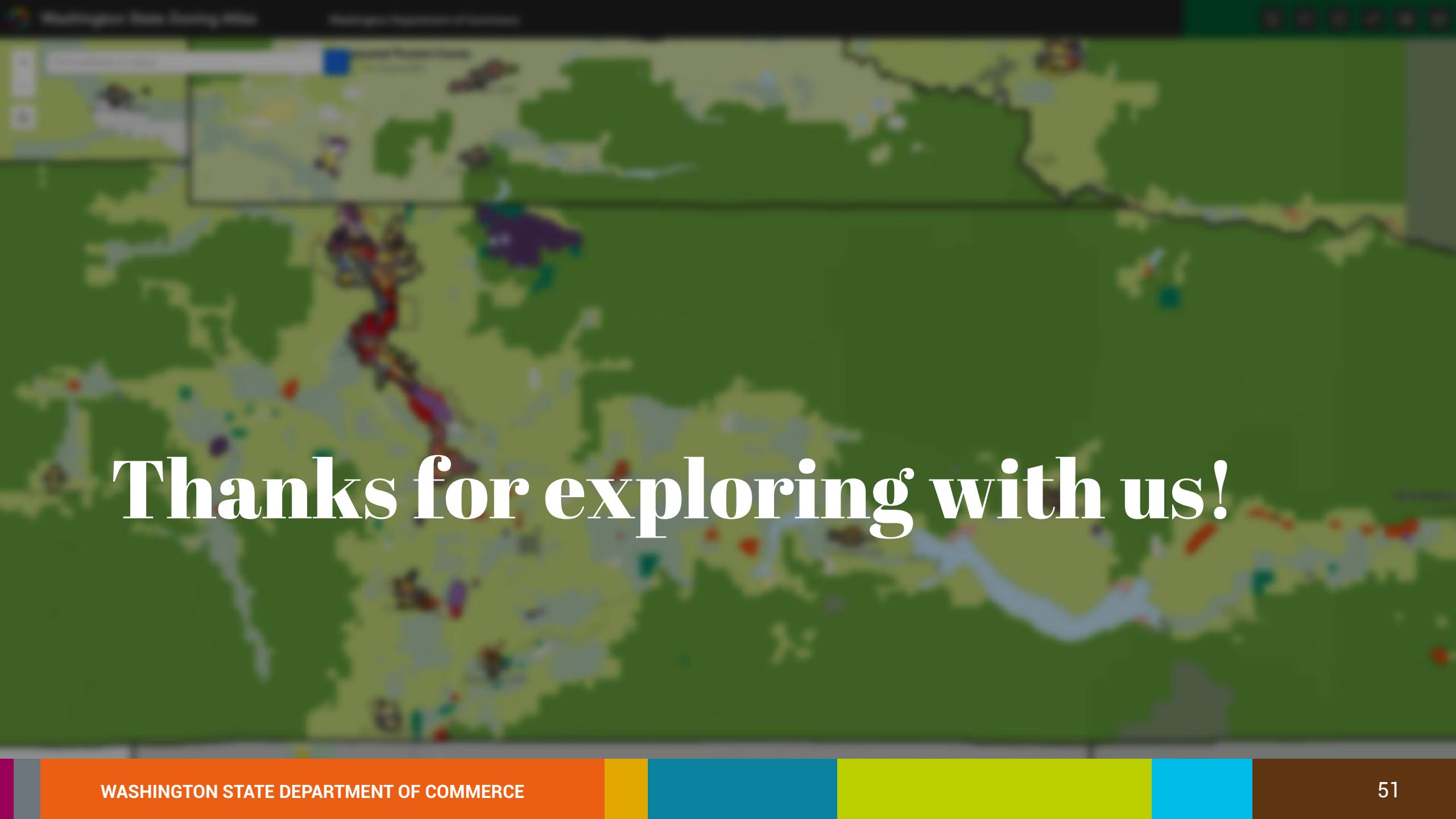
Name

Affiliation

Email

Please describe the error or issue you are experiencing.

1000



Thanks for exploring with us!