

Appendix 6

Employment land site characteristics

Background

Under Division 24 (Urban Growth Boundaries) of the Oregon Administrative Rules, Metro is required to complete an employment land inventory that describes site characteristics of buildable lands inside the urban growth boundary (as described in Division 9, Economic Development). Cities and counties, during their own planning efforts, are responsible for determining whether sites are suitable for uses that match their economic development objectives. This is an appropriate approach given the regional scale of this inventory and the desire to not replicate or supplant local efforts.

The approach used for this analysis is also informed by Division 9 (Economic Development) of the Oregon Administrative Rules, that states “The effort necessary to comply... will vary depending on the size of the jurisdiction...” and that “a jurisdiction’s planning effort is adequate if it uses the best available or readily collectible information...” This clause acknowledges that a detailed region-wide analysis of employment sites is not feasible either to complete or interpret in any meaningful fashion.

This analysis uses a general approach developed in consultation with Oregon Department of Land Conservation and Development staff for the 2014 Urban Growth Report. Table 1 summarizes the site characteristics mentioned in the Administrative Rules and the various data points used to summarize them. For practical reasons, this report presents regional maps and summary tables. Metro can provide its tax lot level buildable land inventory GIS database on request. Employment land is organized into three categories for this analysis:

- Commercial land
- General industrial land
- Large industrial sites (maps depict dots for each tax lot that comprises a large site; some sites may consist of multiple tax lots)

For the purposes of this analysis, “Parcels” refers to assessor tax lots.

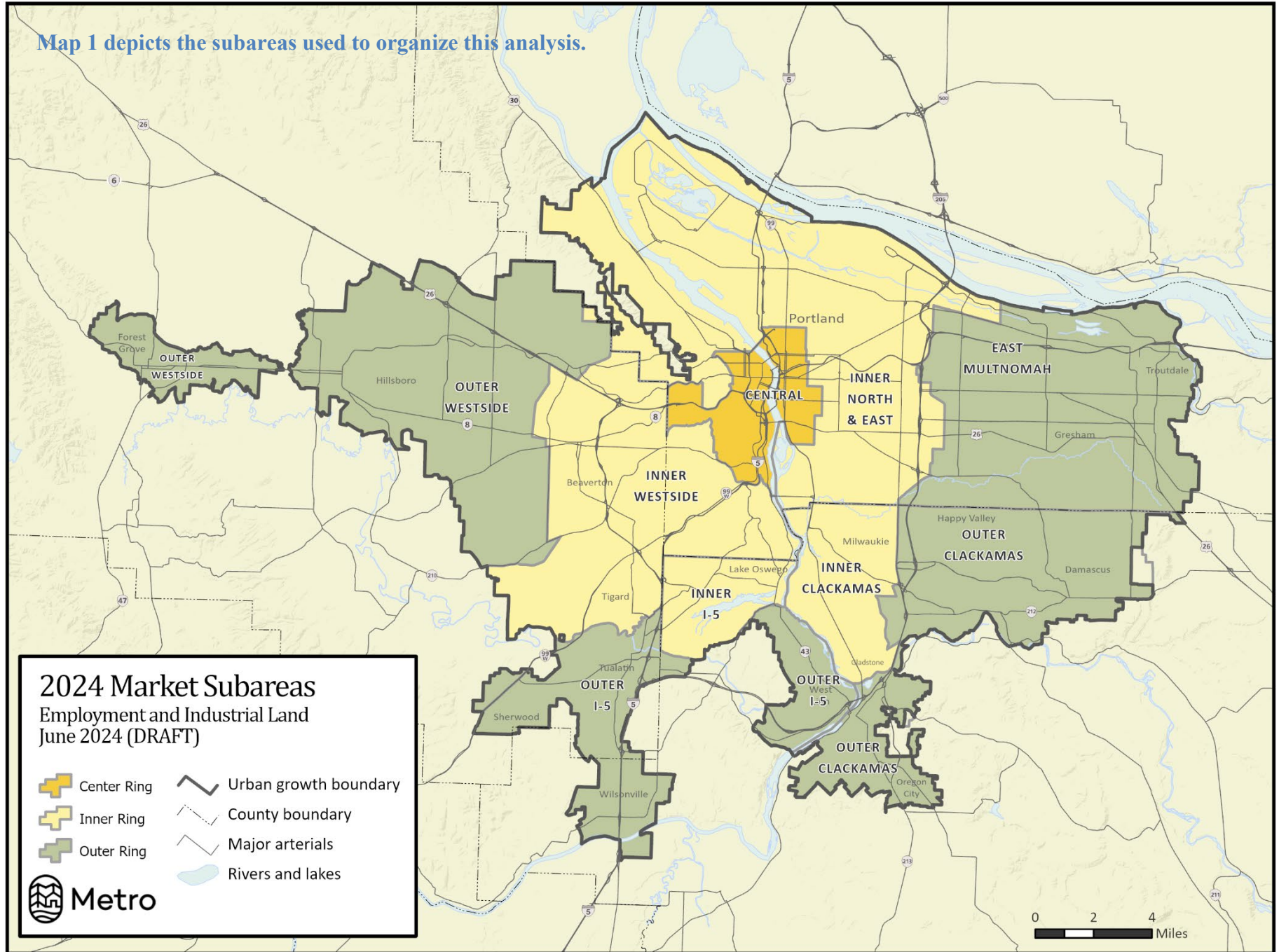
A note about totals: Appendix 2 totals include negative redevelopment (highest and best future use is less intense/less sq. ft. than existing structures) whereas Appendix 6 tables omit these negative redevelopment numbers. Overall, redevelopment to less intense uses accounts for about -50 acres over the entire region. Therefore, Appendix 2 employment land totals will be approximately 50 acres less than the numbers represented here. For more detail on the pro forma redevelopment model, please refer to the attachments to Appendix 2.

Table 1: summary of approach for describing site characteristics

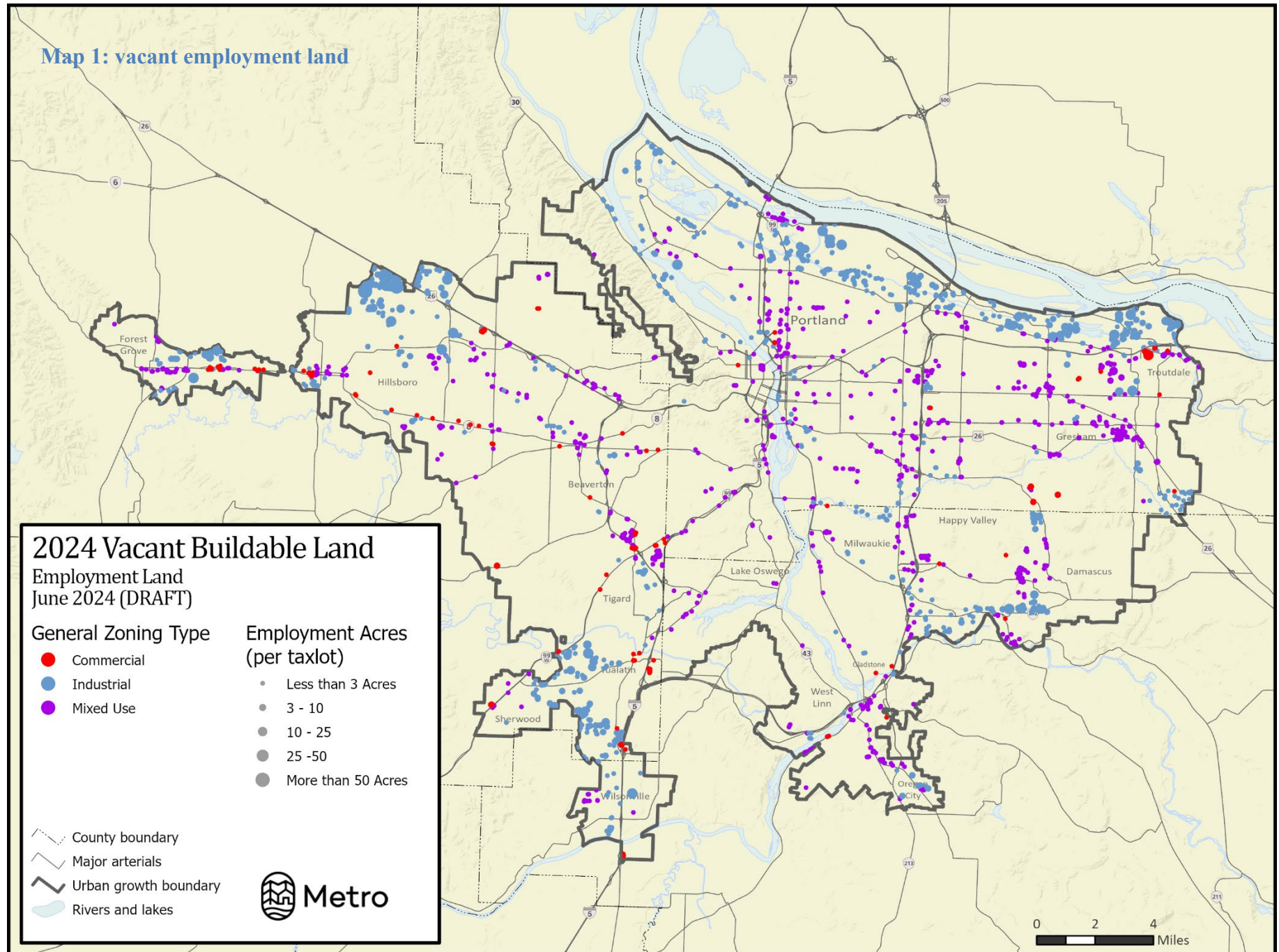
OR Administrative Rules Division 9 – Economic Development	Metro employment land inventory approach
Description of minimum acreage or site configuration characteristics including shape and topography	<p>Acreage – summary tables of net buildable acreages are provided. Metro can provide its tax-lot-level buildable land inventory GIS database on request.</p> <p>Shape - site shapes cannot be summarized in any meaningful fashion at the regional scale, but the GIS database includes a visual depiction of the shape of each tax lot in the inventory. Metro can provide its tax-lot-level buildable land inventory GIS database on request.</p> <p>Topography - portions of tax lots with slopes over 25% (10% for industrial land) have been removed from the inventory since they are deemed unbuildable. This report describes, as a site characteristic, the portion of each inventoried tax lot that has a slope between 7-25%. This range was chosen because slopes over 7% are often regarded as an impediment to industrial uses with larger development footprints.</p> <p>(Tables 2&2a)</p>
Visibility	This characteristic is taken to mean visibility from a public right of way. For each tax lot in the inventory, distance to the nearest major arterial is computed. (Map 5)
Specific types of public facilities, services or energy infrastructure	<p>Region-wide data to address this site characteristic are not readily available. For public security reasons, Metro does not have access to data on where power and gas transmission lines are. Metro also do not have access to data on where water and sewer facilities are located. The inventory depicts the following:</p> <ul style="list-style-type: none"> - Distance to closest major arterial (Map 5) - Fire district name (Map 6) -Sewer district name (Map 7) -Water district name (Map 8)
Proximity to a particular transportation or freight facility such as rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes.	<ul style="list-style-type: none"> -Distance to nearest rail terminal (Map 9) -Distance to transshipment facilities (Map 10) -Distance to major arterial (Map 5) -Distance to designated freight route (Map 11) -Distance to airport (Maps 12&13) -Distance to marine terminals (Map 14)
Description of any development constraints or infrastructure needs that affect the buildable area of sites in the inventory	<ul style="list-style-type: none"> -Number of environmentally constrained acres (note – these acres are removed from buildable land inventory). (Table 3) -Portion of each tax lot that has a slope between 7-25% (Table 4)

OR Administrative Rules Division 9 – Economic Development	Metro employment land inventory approach
	<ul style="list-style-type: none"> -Inside or outside marine use restriction area (Map 15) -Inside or outside an aviation overlay zone (Map 16) -Inside city (yes/no) (Map 17 and Table 5) -Land value per square foot (county assessor data) (Map 18) <p>Available in GIS data at parcel level:</p> <ul style="list-style-type: none"> -Owner flagged for tax exempt status (removed from inventory if not available for employment use) -Vacant or redevelopment land category (Metro) -Estimate of future streets and sidewalks acreage needs for vacant tax lots. However, we should note that our method uses a regional approach and may not reflect the actual needs of specific sites.

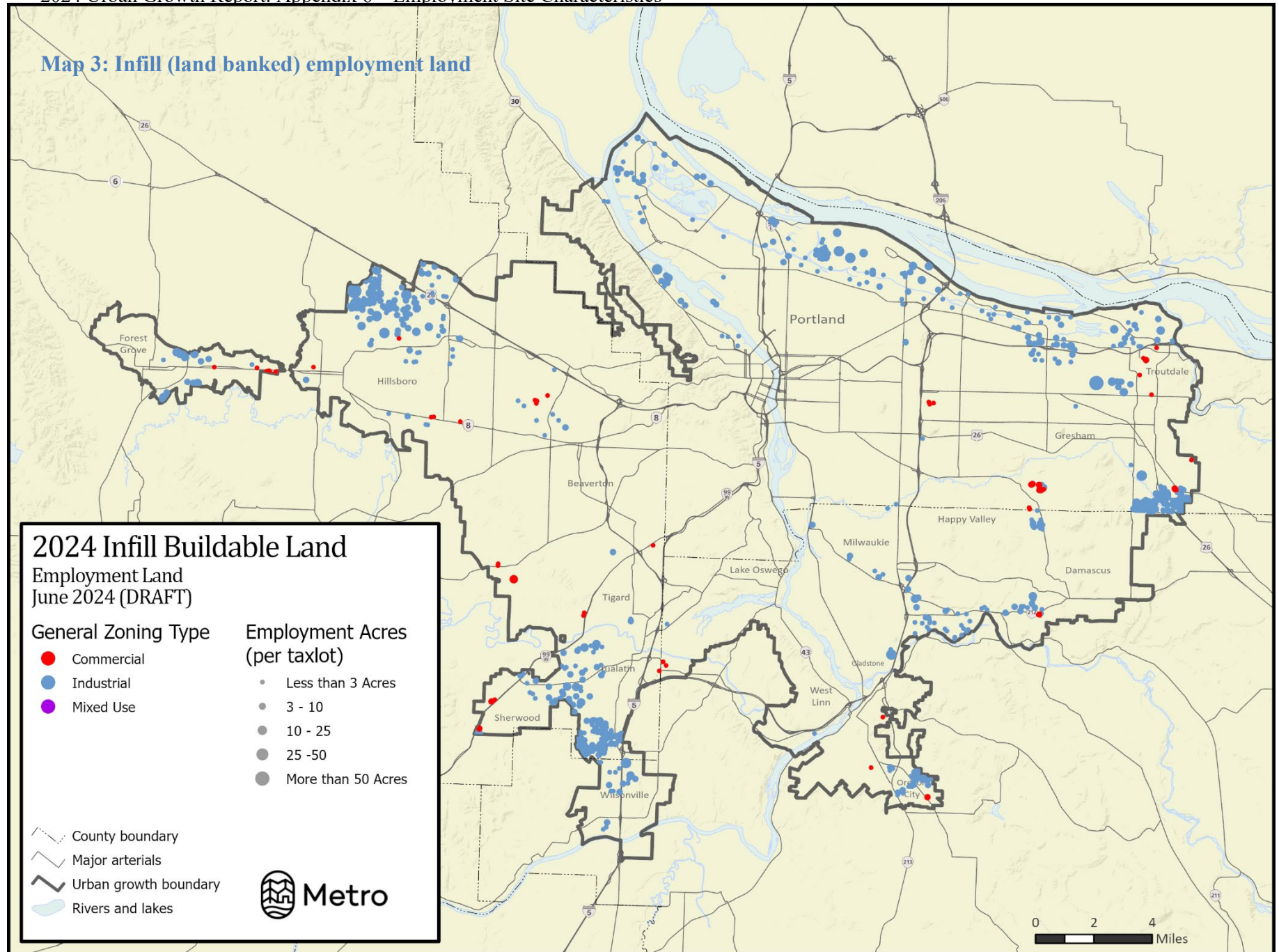
Map 1 depicts the subareas used to organize this analysis.



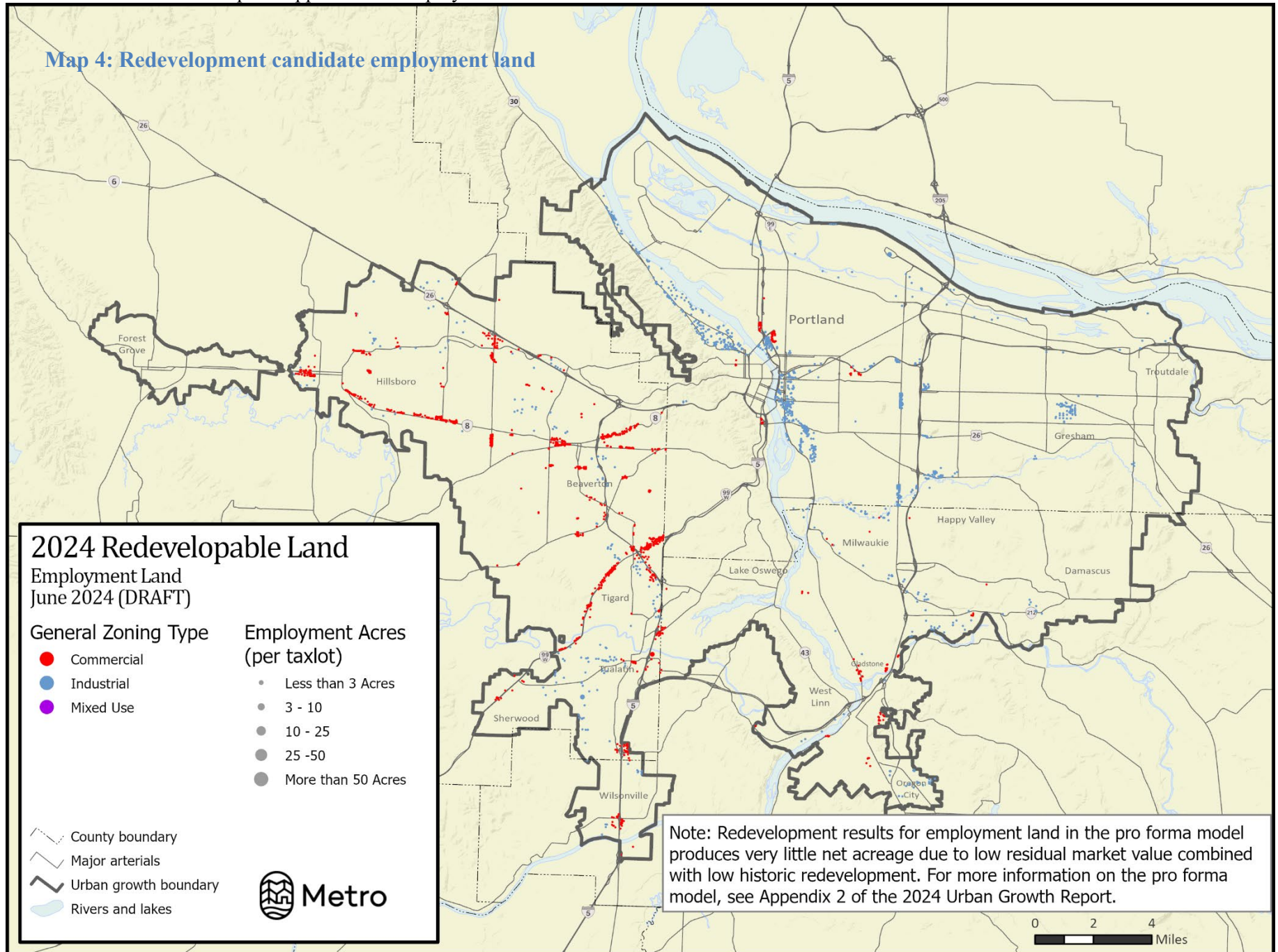
Map 1: vacant employment land



Map 3: Infill (land banked) employment land



Map 4: Redevelopment candidate employment land



Description of minimum acreage or site configuration characteristics including shape and topography

Table 2: Summary data on acres of buildable employment land inside the Metro urban growth boundary

Market Subarea	Vacant		Infill		Redevelopment		New Urban and Planned		Total	
	Parcels	Acres	Parcels	Acres	Parcels	Acres	Parcels	Acres	Parcels	Acres
Central	110	11.4			370	4.0			480	15.5
Commercial	78	6.7			56	0.8			134	7.5
Industrial	32	4.7			314	3.2			346	8.0
East Multnomah	348	661.3	181	614.2	117	17.3			646	1,337.5
Commercial	226	161.1	18	46.2					244	207.3
Industrial	120	425.7	161	521.6	93	6.3			374	998.2
Large Lot Industrial	2	74.6	2	46.4	24	11.0			28	132.0
Inner Clackamas	48	7.6	9	53.2	70	1.1			127	61.9
Commercial	24	1.6			32	0.2			56	1.8
Industrial	24	6.0	9	53.2	38	0.9			71	60.1
Inner I-5	13	1.3	1	1.3	9	0.1			23	2.7
Commercial	13	1.3			8	0.1			21	1.4
Industrial			1	1.3	1	0.0			2	1.3
Inner North & East	520	460.1	105	432.5	500	45.6	9	65.0	1,134	1,025.2
Commercial	178	9.9	3	4.4	39	0.6			220	14.9
Industrial	336	364.0	96	371.8	458	41.9	9	65.0	899	864.6
Large Lot Industrial	6	86.3	6	56.3	3	3.1			15	145.7
Inner Westside	149	35.8	14	43.6	501	29.1	1	28.0	665	139.4
Commercial	126	10.2	5	26.8	446	23.7	1	28.0	578	88.7
Industrial	23	25.6	9	16.8	55	5.4			87	50.6
Outer Clackamas	271	284.4	89	280.4	92	6.4			452	590.6
Commercial	198	33.2	6	15.2	29	0.8			233	49.2
Industrial	71	242.5	80	255.0	63	5.6			214	519.3
Large Lot Industrial	2	8.8	3	10.2					5	22.2
Outer I-5	162	370.9	149	517.3	183	31.2	1	4.9	495	948.8
Commercial	45	15.8	4	14.6	106	7.9	1	4.9	156	43.2
Industrial	91	285.7	116	394.3	73	18.7			280	716.1
Large Lot Industrial	26	69.4	29	108.3	4	4.6			59	189.5
Outer Westside	302	859.5	154	872.8	398	21.5			854	1,774.5
Commercial	158	48.2	17	39.4	346	12.2			521	99.8
Industrial	126	404.0	131	682.6	51	9.3			308	1,116.7
Large Lot Industrial	18	407.2	6	150.7	1	0.0			25	557.9
Grand Total	1,923	2,692.3	702	2,815.4	2,240	156.3	11	97.9	4,876	5,896.1

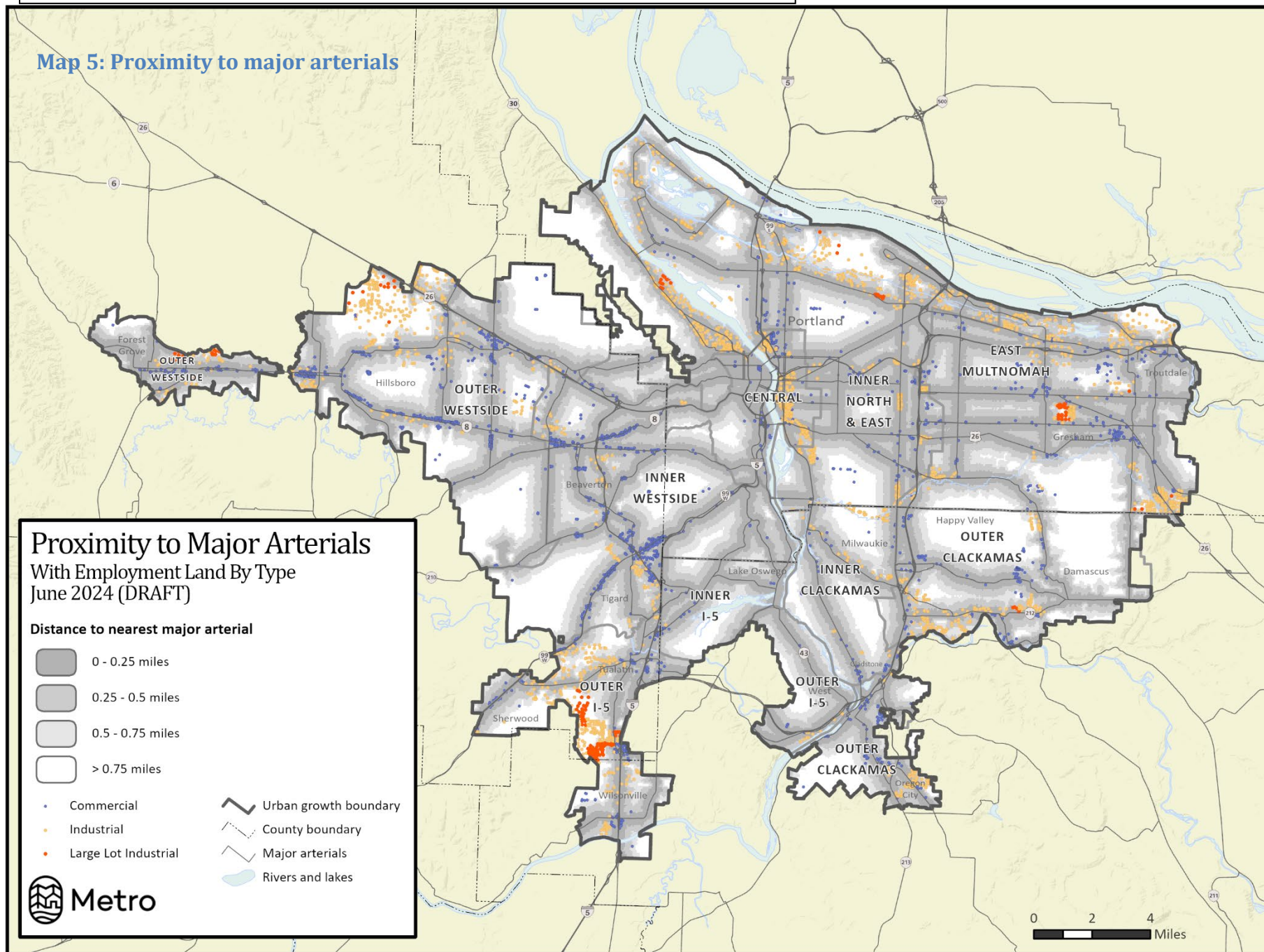
2024 Urban Growth Report: Appendix 6 – Employment Site Characteristics

Table 2a: Average and median sites sizes of buildable employment land inside the Metro urban growth boundary (redevelopment and “new urban and planned” categories not included)

Market Subareas	Infill				Vacant				Totals			
	Parcels	Acres	Mean Acres	Median Acres	Parcels	Acres	Mean Acres	Median Acres	Parcels	Acres	Mean Acres	Median Acres
Central					110	11.4	0.10	0.04	110	11.4	0.10	0.04
Commercial					78	6.7	0.09	0.03	78	6.7	0.09	0.03
Industrial					32	4.7	0.15	0.07	32	4.7	0.15	0.07
East Multnomah	181	658.9	3.64	2.11	348	661.3	1.90	0.28	529	1,320.2	2.50	1.11
Commercial	18	46.2	2.57	2.36	226	161.1	0.71	0.19	244	207.3	0.85	0.21
Industrial	161	566.3	3.52	2.03	120	425.7	3.55	1.80	281	991.9	3.53	1.98
Large Lot Industrial	2	46.4	23.20	23.20	2	74.6	37.29	37.29	4	121.0	30.25	28.38
Inner Clackamas	9	53.2	5.91	1.67	48	7.6	0.16	0.06	57	60.8	1.07	0.11
Commercial					24	1.6	0.07	0.04	24	1.6	0.07	0.04
Industrial	9	53.2	5.91	1.67	24	6.0	0.25	0.12	33	59.2	1.79	0.17
Inner I-5	1	1.3	1.34	1.34	13	1.3	0.10	0.09	14	2.6	0.19	0.09
Commercial					13	1.3	0.10	0.09	13	1.3	0.10	0.09
Industrial	1	1.3	1.34	1.34					1	1.3	1.34	1.34
Inner North & East	105	454.5	4.33	2.16	520	460.1	0.88	0.10	625	914.6	1.46	0.15
Commercial	3	4.4	1.47	1.59	178	9.9	0.06	0.02	181	14.3	0.08	0.02
Industrial	96	393.8	4.10	2.00	336	364.0	1.08	0.21	432	757.7	1.75	0.39
Large Lot Industrial	6	56.3	9.38	6.22	6	86.3	14.38	6.81	12	142.5	11.88	6.22
Inner Westside	14	46.5	3.32	1.84	149	35.8	0.24	0.03	163	82.3	0.50	0.04
Commercial	5	26.8	5.36	1.89	126	10.2	0.08	0.02	131	37.0	0.28	0.02
Industrial	9	19.6	2.18	1.79	23	25.6	1.11	0.57	32	45.3	1.41	1.40
Outer Clackamas	89	299.8	3.37	2.01	271	284.4	1.05	0.07	360	584.2	1.62	0.26
Commercial	6	15.2	2.54	1.40	198	33.2	0.17	0.04	204	48.4	0.24	0.04
Industrial	80	271.2	3.39	2.04	71	242.5	3.41	1.32	151	513.6	3.40	1.87
Large Lot Industrial	3	13.4	4.46	3.17	2	8.8	4.38	4.38	5	22.2	4.43	3.17
Outer I-5	149	541.8	3.64	2.72	162	370.9	2.29	0.77	311	912.7	2.93	1.98
Commercial	4	14.6	3.66	2.22	45	15.8	0.35	0.06	49	30.5	0.62	0.10
Industrial	116	411.7	3.55	2.51	91	285.7	3.14	1.12	207	697.4	3.37	2.11
Large Lot Industrial	29	115.5	3.98	3.36	26	69.4	2.67	2.85	55	184.9	3.36	3.10
Outer Westside	154	893.5	5.80	2.99	302	859.5	2.85	0.27	456	1,753.0	3.84	1.22
Commercial	17	39.4	2.32	1.98	158	48.2	0.31	0.05	175	87.7	0.50	0.06
Industrial	131	703.4	5.37	3.21	126	404.0	3.21	1.22	257	1,107.4	4.31	2.01
Large Lot Industrial	6	150.7	25.12	15.14	18	407.2	22.62	11.64	24	558.0	23.25	14.22
Grand Total	702	2,949.5	4.20	2.33	1,923	2,692.3	1.40	0.13	2,625	5,641.9	2.15	0.41

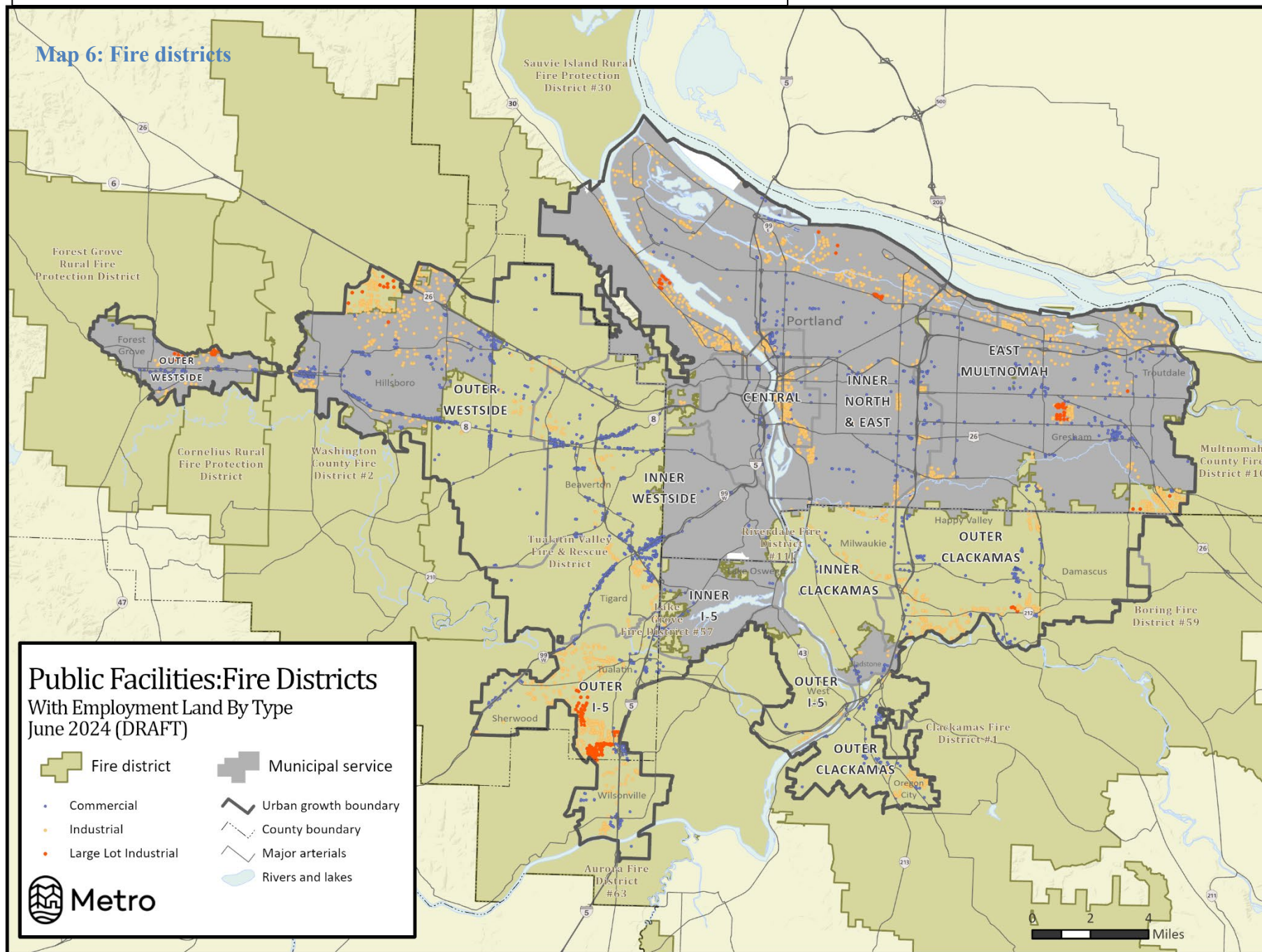
Employment Land Type	Infill				Vacant				Totals			
	Parcels	Acres	Mean Acres	Median Acres	Parcels	Acres	Mean Acres	Median Acres	Parcels	Acres	Mean Acres	Median Acres
Commercial	53	146.8	2.77	1.89	1,046	287.9	0.28	0.04	1,099	434.7	0.40	0.05
Industrial	603	2,420.5	4.01	2.24	823	1,758.1	2.14	0.49	1,426	4,178.6	2.93	1.41
Large Lot Industrial	46	382.3	8.31	3.89	54	646.3	11.97	3.52	100	1,028.5	10.29	3.59
Grand Total	702	2,949.5	4.20	2.33	1,923	2,692.3	1.40	0.13	2,625	5,641.9	2.15	0.41

Map 5: Proximity to major arterials



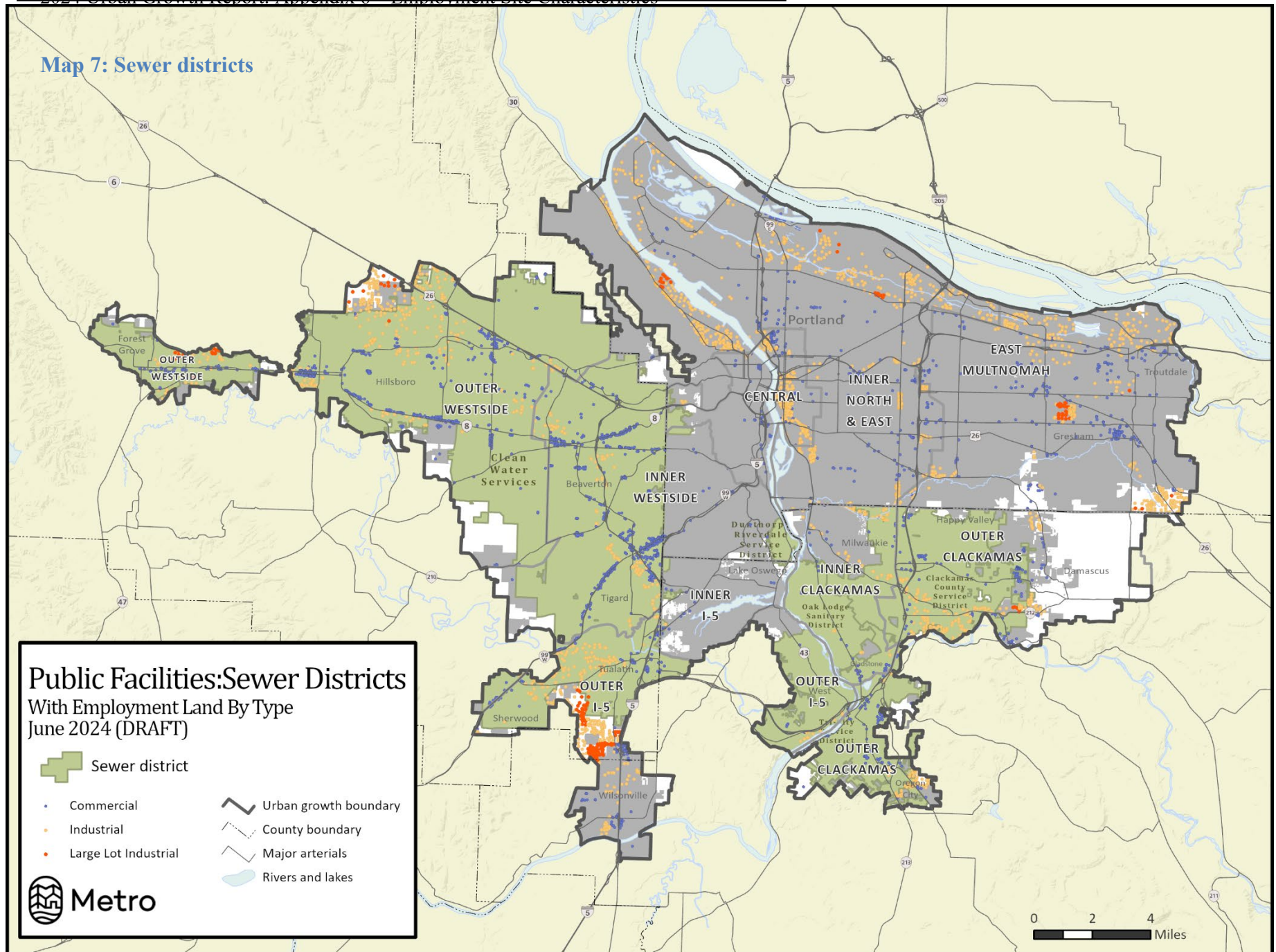
Specific types of public facilities, services or energy infrastructure

Map 6: Fire districts



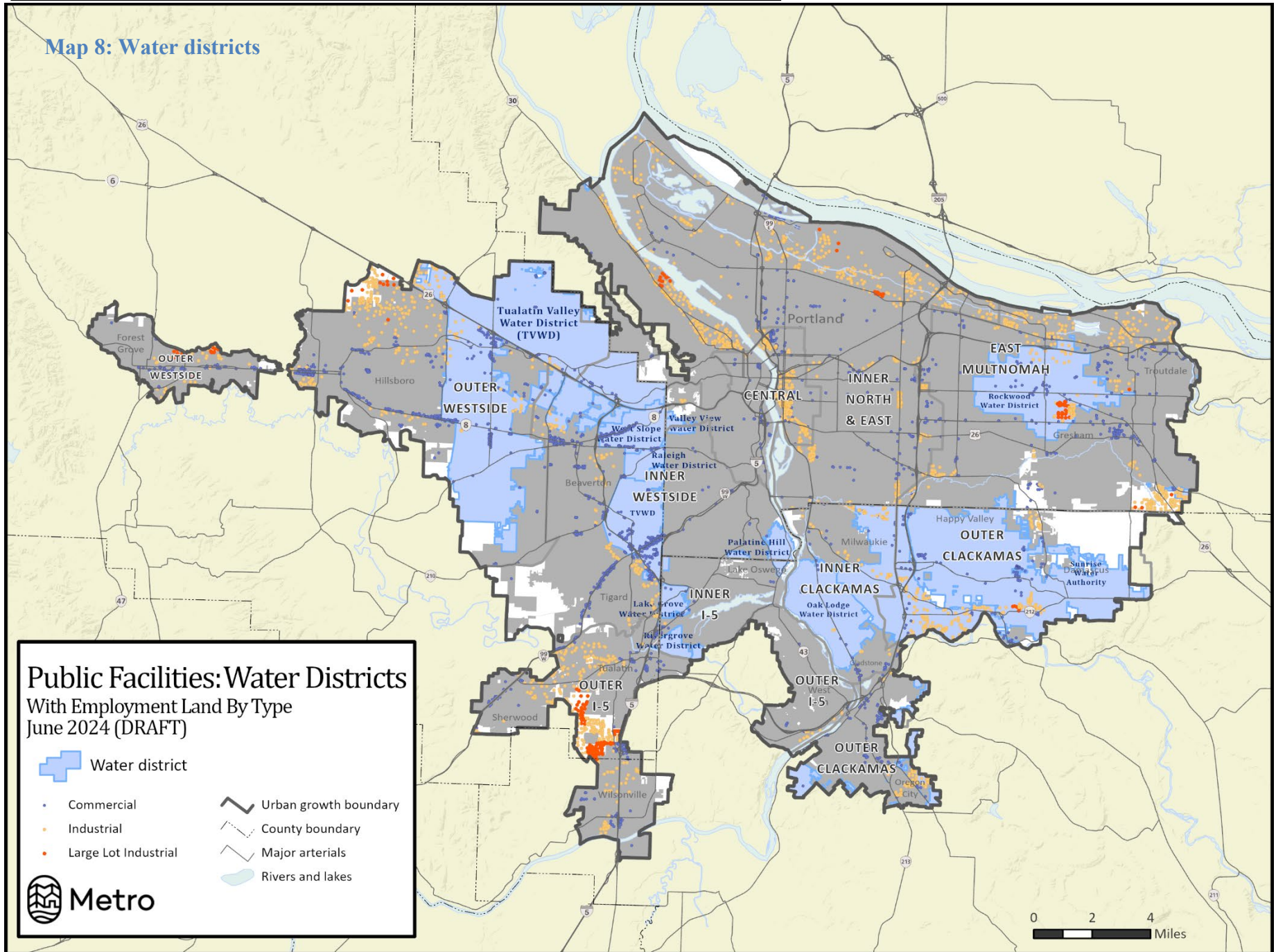
Specific types of public facilities, services or energy infrastructure

Map 7: Sewer districts



Specific types of public facilities, services or energy infrastructure

Map 8: Water districts



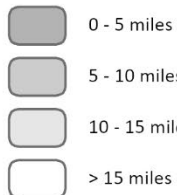
Proximity to a particular transportation or freight facility such as rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes

Map 9: Proximity to rail terminal

Proximity to Rail Terminals

With Employment Land By Type
June 2024 (DRAFT)

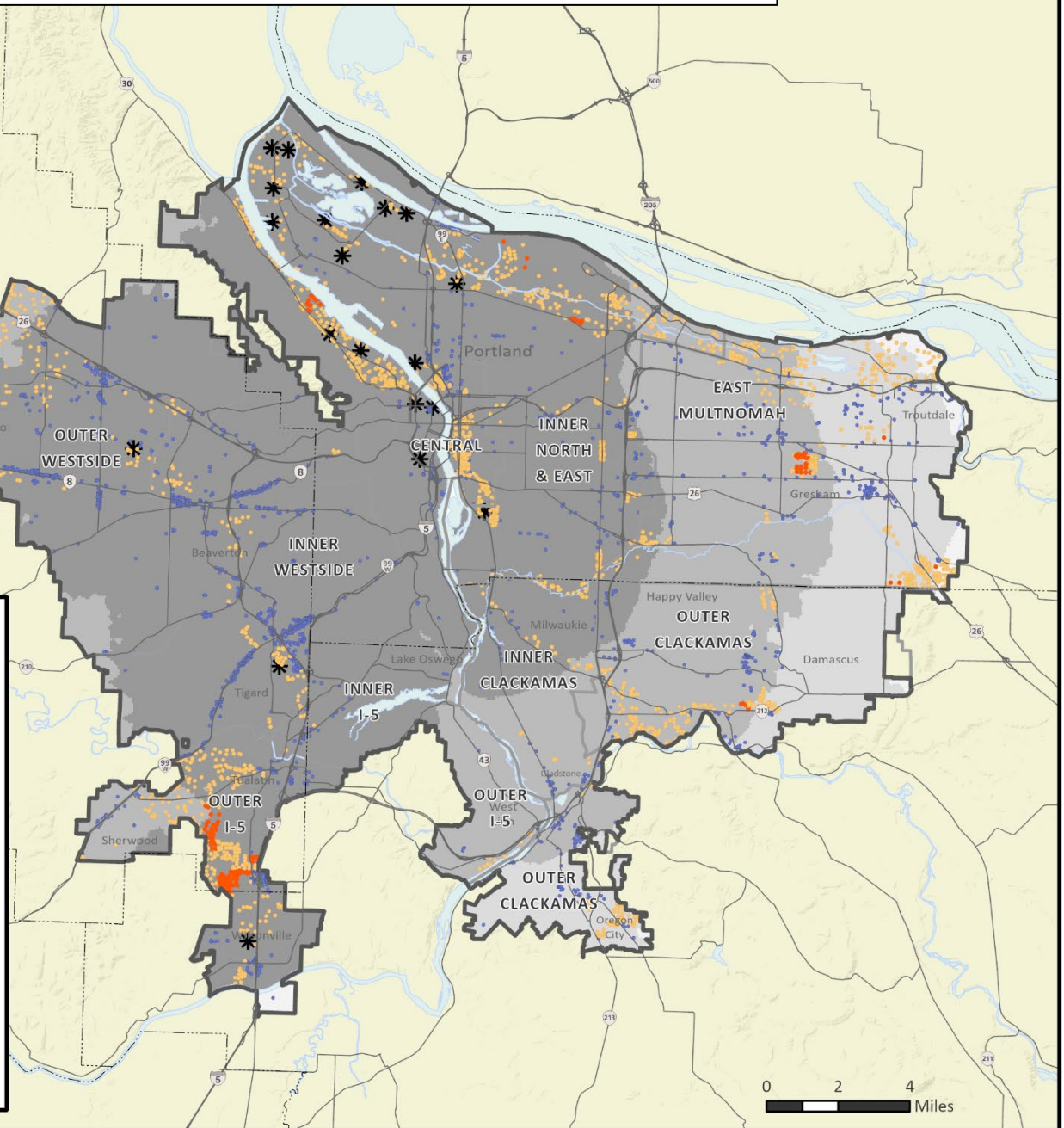
Distance to rail terminals



* Rail Terminals

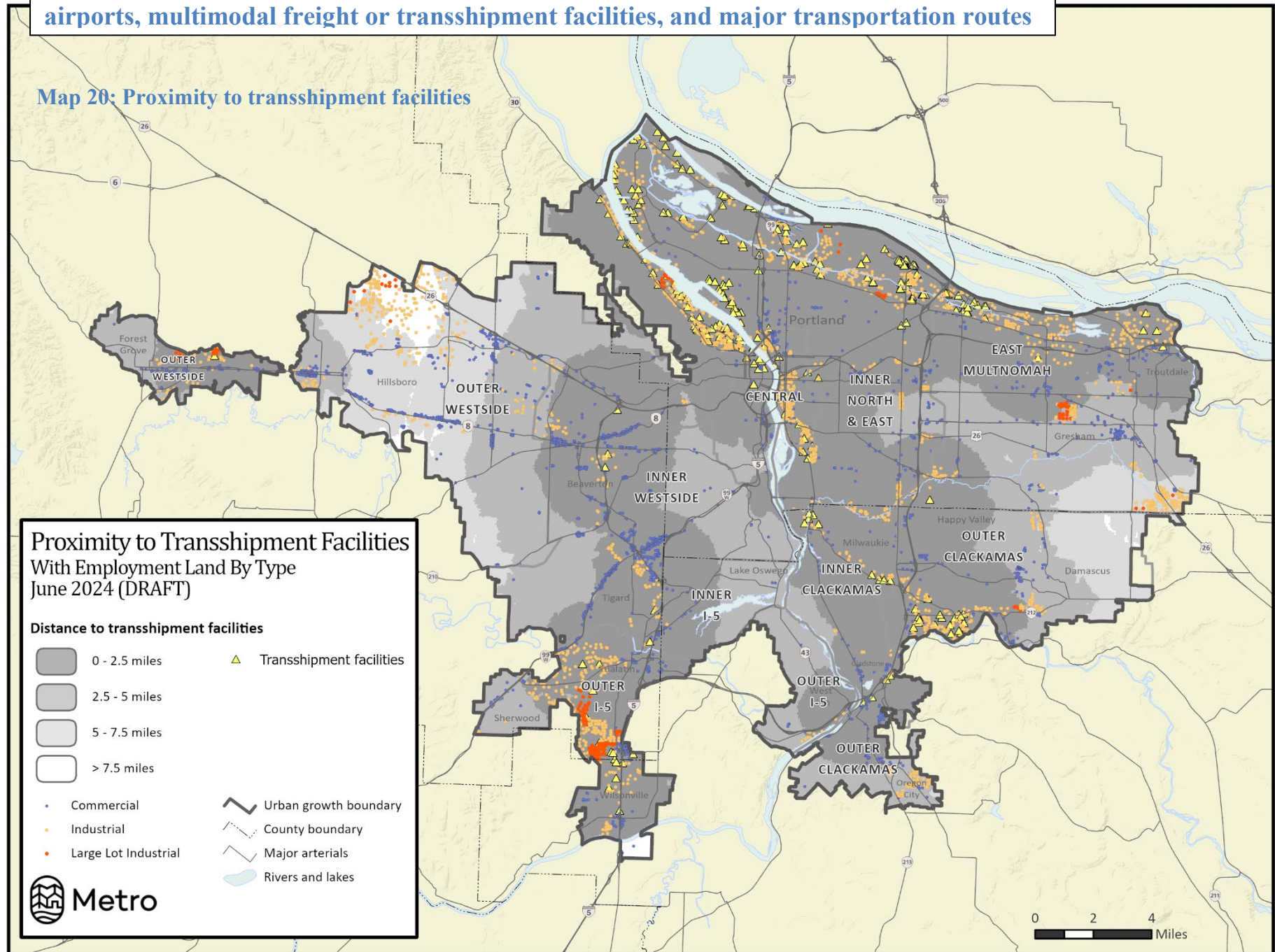
- Commercial
- Industrial
- Large Lot Industrial

- Urban growth boundary
- - - County boundary
- Major arterials
- Rivers and lakes



Proximity to a particular transportation or freight facility such as rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes

Map 20: Proximity to transshipment facilities



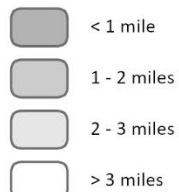
Proximity to a particular transportation or freight facility such as rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes

Map 3: Proximity to designated freight route

Proximity to Freight Network

With Employment Land By Type
June 2024 (DRAFT)

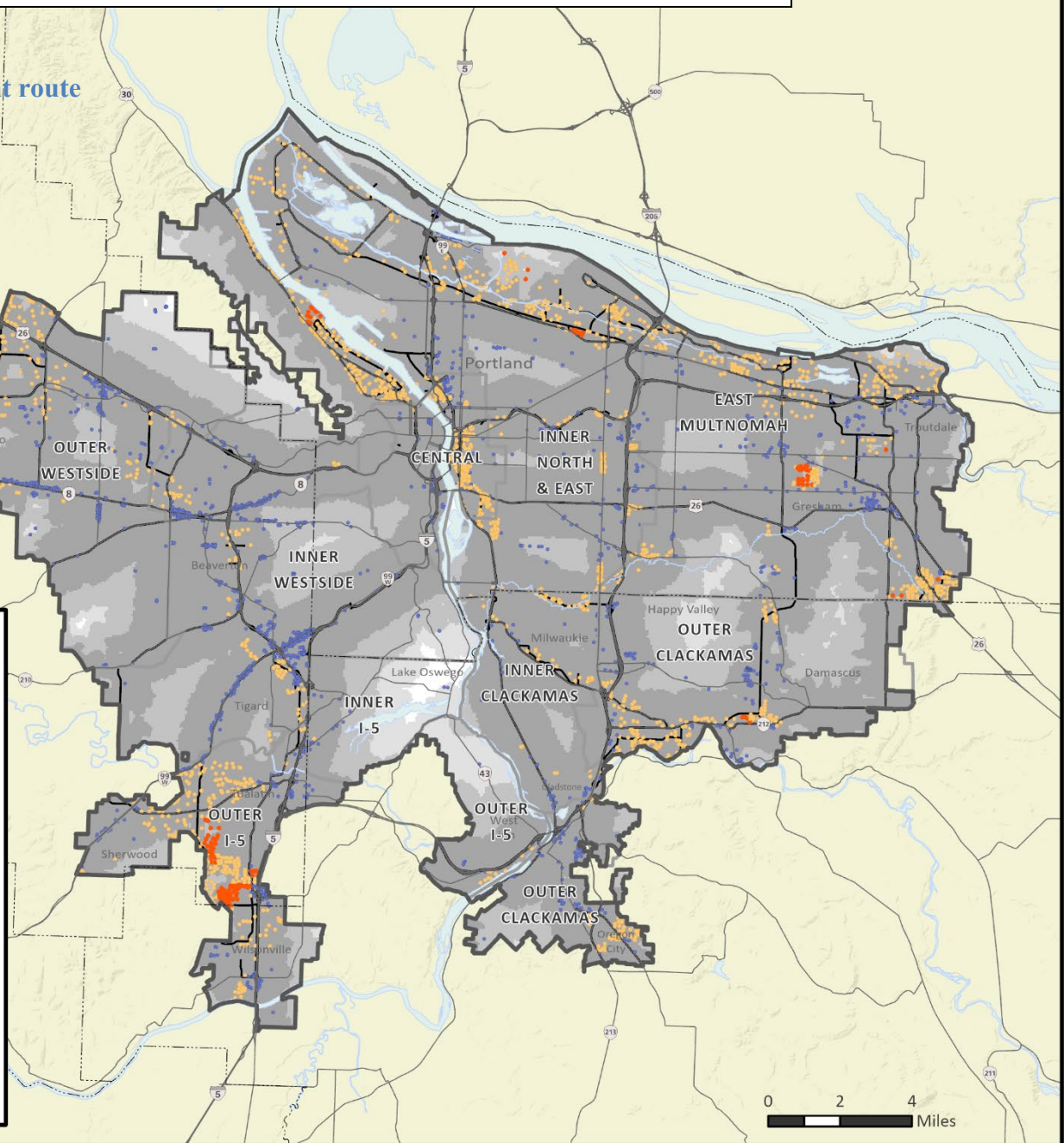
Distance to road in freight network



Freight network

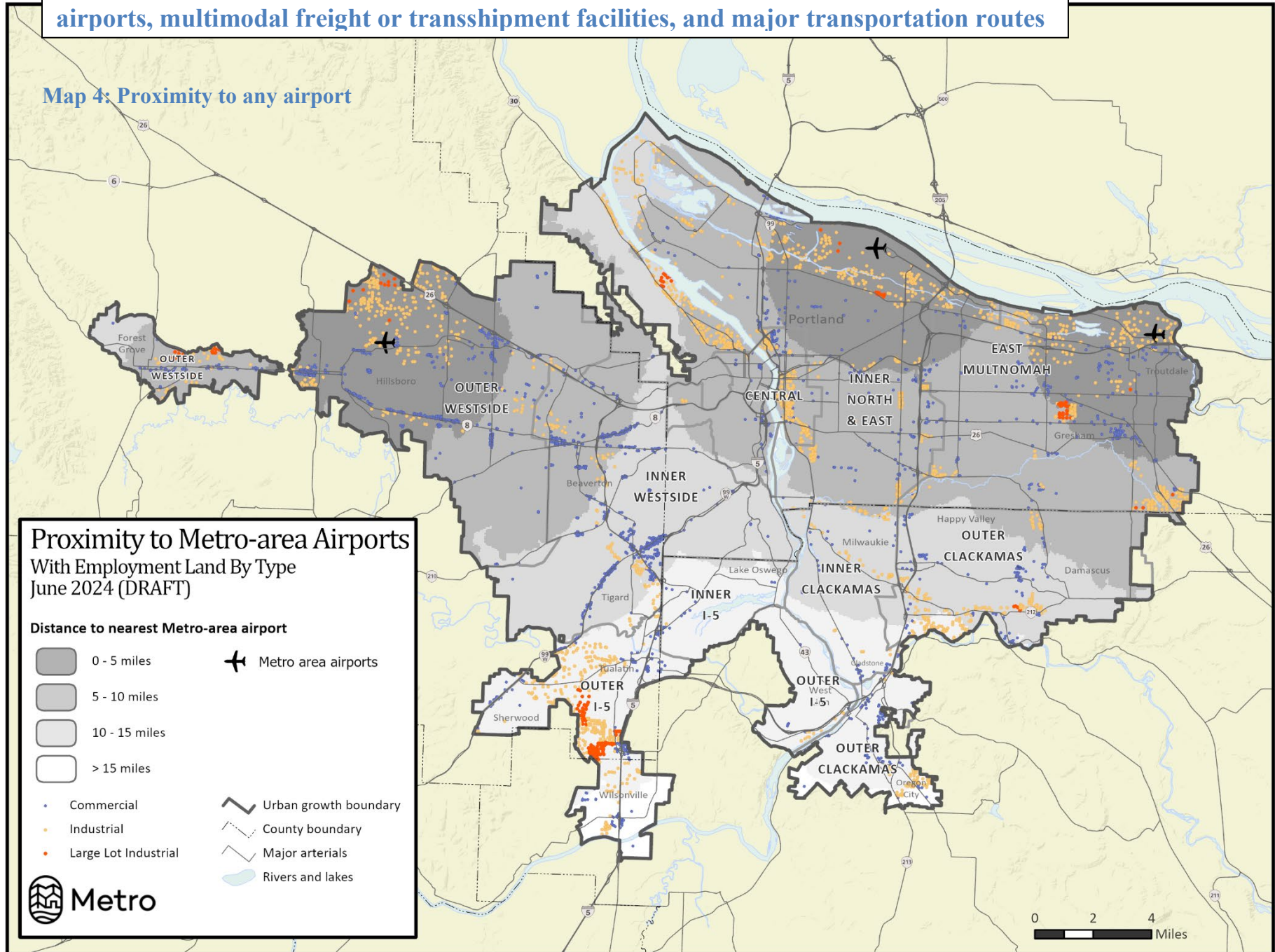
- Commercial
- Industrial
- Large Lot Industrial

- Urban growth boundary
- County boundary
- Major arterials
- Rivers and lakes



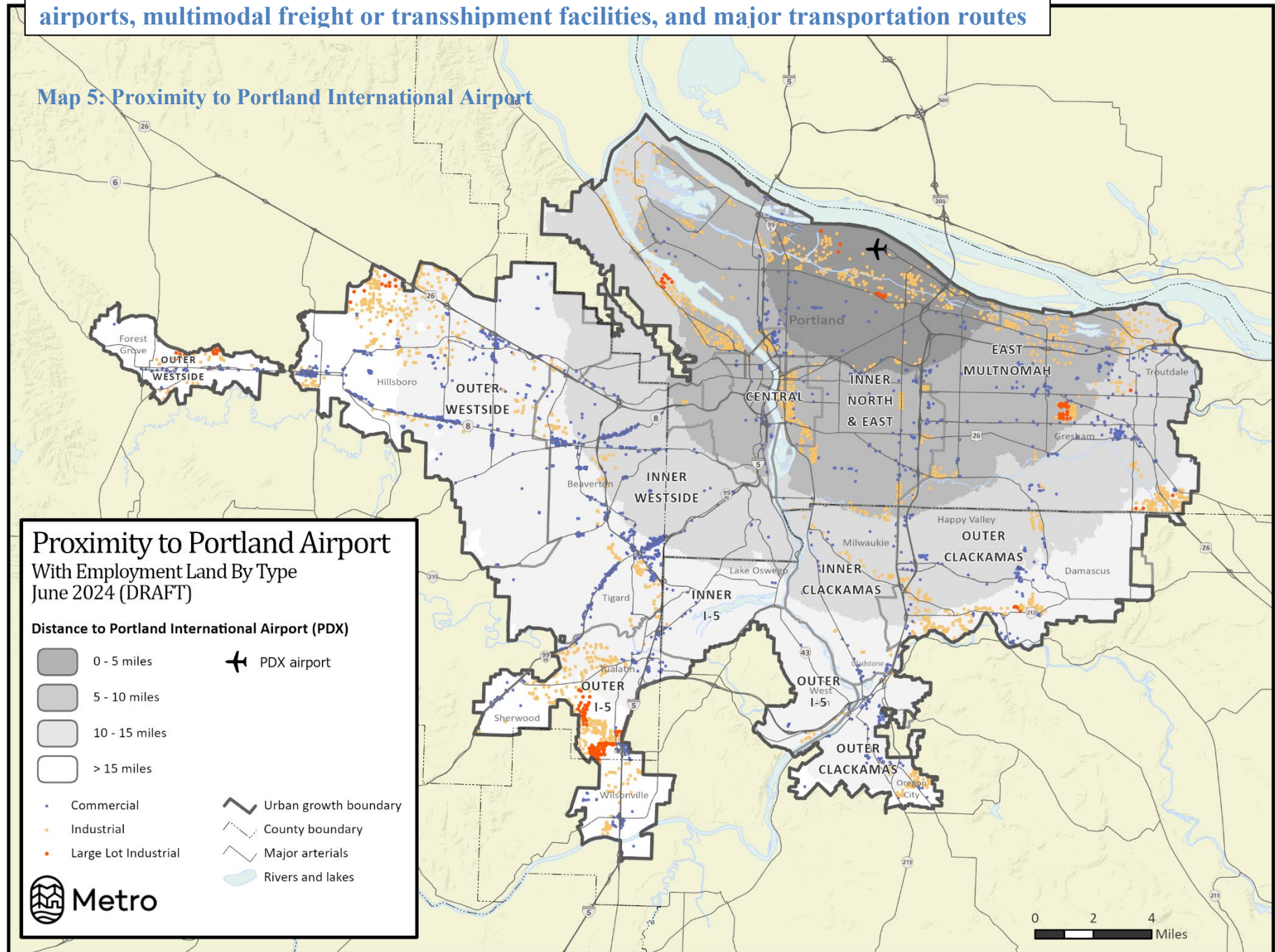
Proximity to a particular transportation or freight facility such as rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes

Map 4: Proximity to any airport



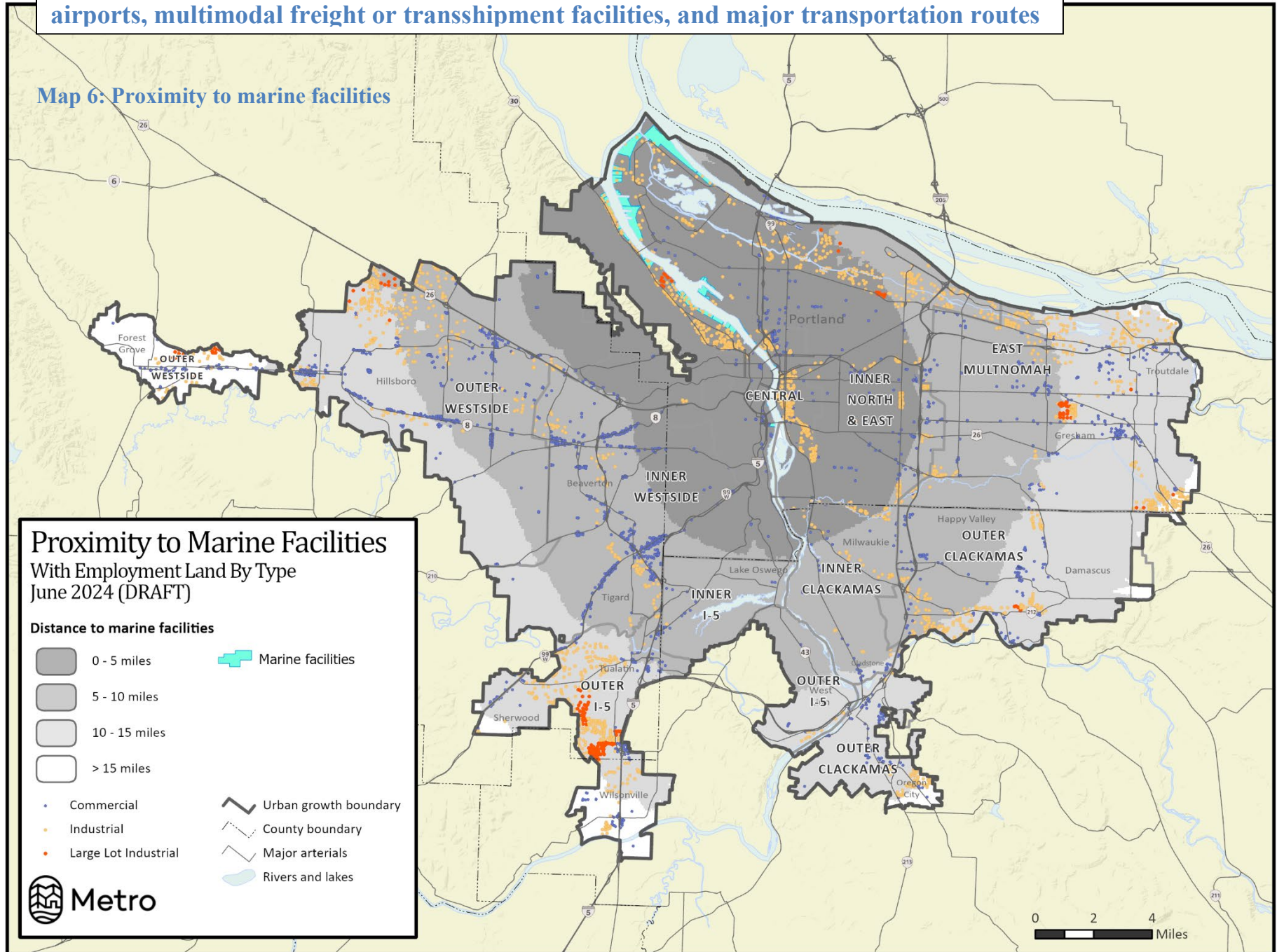
Proximity to a particular transportation or freight facility such as rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes

Map 5: Proximity to Portland International Airport



Proximity to a particular transportation or freight facility such as rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes

Map 6: Proximity to marine facilities



Description of any development constraints or infrastructure needs that affect the buildable area of sites in the inventory

The methodology used for the buildable land inventory removes environmentally constrained acres.

Table 3: Environmentally constrained acres removed from buildable land inventory

Market Subarea	Gross Acres	Unconstrained Acres	Constrained Acres
Central	156.3	140.9	15.5
Commercial	44.0	41.0	3.0
Industrial	112.3	99.8	12.5
East Multnomah	3,103.8	2,183.6	920.2
Commercial	386.9	303.3	83.6
Industrial	2,418.7	1,745.4	673.4
Large Lot Industrial	298.1	134.9	163.2
Inner Clackamas	277.9	250.5	27.4
Commercial	18.8	18.2	0.6
Industrial	259.2	232.4	26.8
Inner I-5	26.6	23.2	3.3
Commercial	20.2	18.6	1.6
Industrial	6.3	4.6	1.7
Inner North & East	3,946.1	3,424.0	522.1
Commercial	93.6	80.1	13.5
Industrial	3,514.5	3,077.8	436.7
Large Lot Industrial	338.0	266.1	71.9
Inner Westside	1,085.6	899.2	186.5
Commercial	710.5	555.2	155.3
Industrial	375.1	343.9	31.2
Outer Clackamas	1,492.2	1,191.0	301.2
Commercial	361.0	222.9	138.1
Industrial	1,097.7	934.7	163.0
Large Lot Industrial	33.5	33.5	0.0
Outer I-5	2,693.9	2,213.7	480.2
Commercial	304.8	223.0	81.8
Industrial	1,965.6	1,645.9	319.7
Large Lot Industrial	423.5	344.8	78.8
Outer Westside	4,635.9	4,138.2	497.6
Commercial	793.6	646.6	147.0
Industrial	3,143.2	2,837.3	305.9
Large Lot Industrial	699.1	654.3	44.8
Grand Total	17,418.3	14,464.4	2,953.9

2024 Urban Growth Report: Appendix 6 – Employment Site Characteristics

Table 3 describes constraints from slopes. Areas with slopes over 25 percent are removed from the buildable land inventory. For this site characteristics analysis, areas with slopes over 7% are identified.

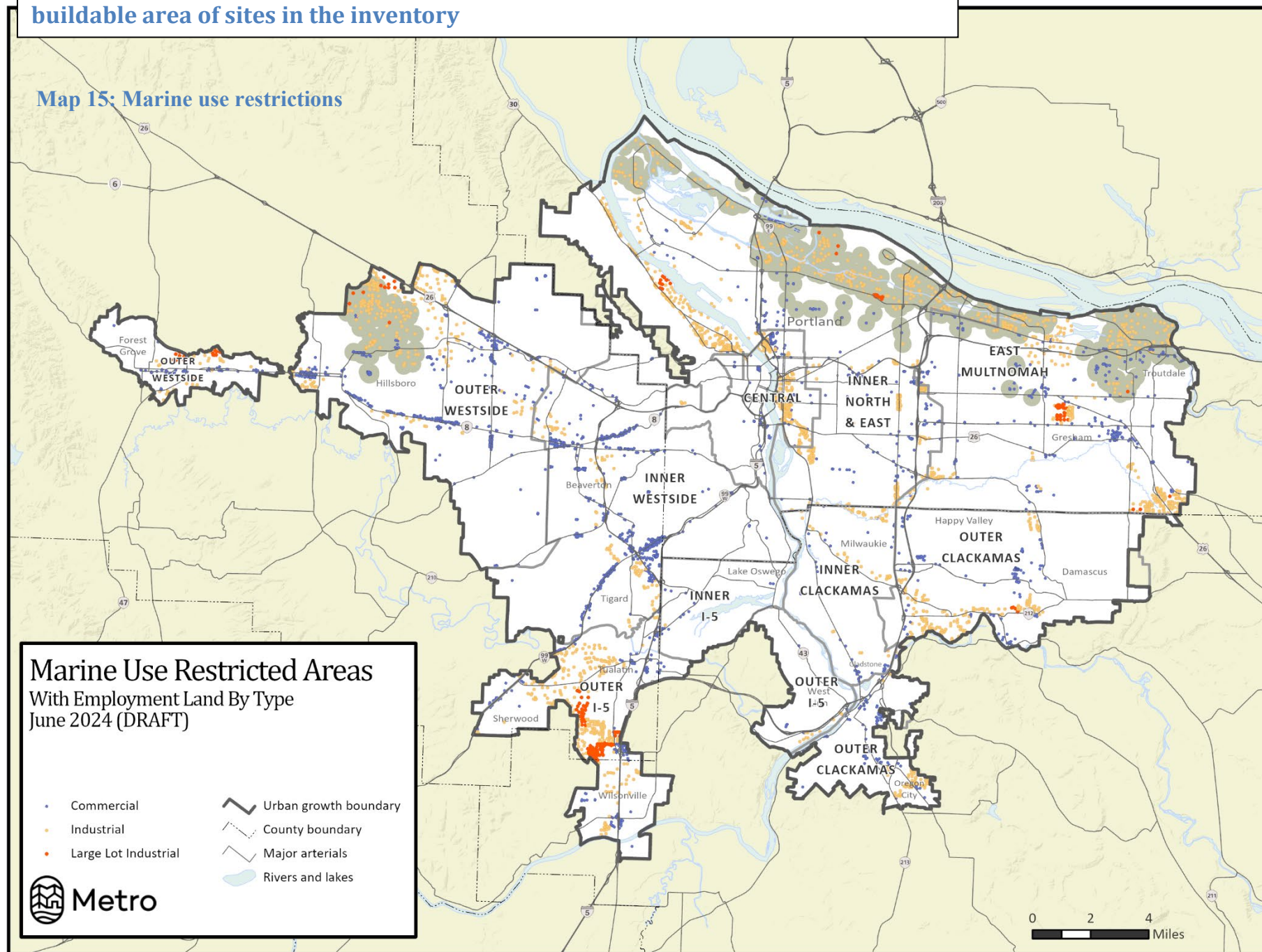
- Unconstrained: 10% or less of the tax lot has steep slopes
- Partially Constrained: 10.01% to 50% of the tax lot has steep slopes
- Constrained: 50 to 89.99% of the lot has steep slopes
- Heavily Constrained: Greater than 90% of the site has steep slopes

Table 4: Steep (>7%) slope constraints (slopes over 25% are removed from buildable land inventory (10% for Industrial))

Market Subarea	Unconstrained		Partially Constrained		Constrained		Heavily Constrained		Total	
	Parcels	Acres	Parcels	Acres	Parcels	Acres	Parcels	Acres	Parcels	Acres
Central	346	9.6	49	2.6	52	2.0	33	1.3	480	15.5
Commercial	92	5.4	13	1.2	14	0.3	15	0.6	134	7.5
Industrial	254	4.2	36	1.4	38	1.8	18	0.6	346	8.0
East Multnomah	335	508.9	180	606.8	94	202.7	37	19.2	646	1,337.5
Commercial	163	88.1	37	54.1	23	61.6	21	3.6	244	207.3
Industrial	170	346.2	131	501.1	61	136.3	12	14.6	374	998.2
Large Lot Industrial	2	74.6	12	51.6	10	4.8	4	1.0	28	132.0
Inner Clackamas	71	3.7	30	55.2	17	2.8	9	0.3	127	61.9
Commercial	44	1.2	3	0.0	6	0.5	3	0.0	56	1.8
Industrial	27	2.5	27	55.2	11	2.2	6	0.2	71	60.1
Inner I-5	13	2.0	3	0.1	1	0.2	6	0.4	23	2.7
Commercial	12	0.7	3	0.1	1	0.2	5	0.4	21	1.4
Industrial	1	1.3					1	0.0	2	1.3
Inner North & East	637	385.2	241	565.7	124	60.5	132	13.8	1,134	1,025.2
Commercial	146	6.9	26	5.7	17	1.6	31	0.6	220	14.9
Industrial	485	310.2	208	485.3	106	58.0	100	11.1	899	864.6
Large Lot Industrial	6	68.1	7	74.7	1	0.8	1	2.1	15	145.7
Inner Westside	294	23.9	196	63.3	104	18.7	70	5.4	664	111.4
Commercial	266	10.7	161	39.5	84	6.2	66	4.3	577	60.7
Industrial	28	13.2	35	23.8	20	12.5	4	1.2	87	50.6
Outer Clackamas	179	227.7	133	232.8	80	121.5	60	8.5	452	590.6
Commercial	87	16.1	57	17.5	39	9.9	50	5.7	233	49.2
Industrial	92	211.7	76	215.3	36	89.5	10	2.8	214	519.3
Large Lot Industrial					5	22.2			5	22.2
Outer I-5	179	342.7	180	426.2	95	165.1	40	9.9	494	943.9
Commercial	70	4.1	48	12.5	20	18.2	17	3.4	155	38.3
Industrial	84	242.0	115	365.8	62	103.5	19	4.9	280	716.1
Large Lot Industrial	25	96.6	17	47.9	13	43.4	4	1.6	59	189.5
Outer Westside	644	1,281.3	158	455.0	44	38.0	8	0.2	854	1,774.5
Commercial	428	57.2	68	28.8	20	13.7	5	0.1	521	99.8
Industrial	197	785.8	85	306.7	23	24.1	3	0.1	308	1,116.7
Large Lot Industrial	19	438.4	5	119.4	1	0.2			25	557.9
Grand Total	2,698	2,785.0	1,170	2,407.7	611	611.5	395	59.0	4,874	5,863.2

Description of any development constraints or infrastructure needs that affect the buildable area of sites in the inventory

Map 15: Marine use restrictions



Description of any development constraints or infrastructure needs that affect the buildable area of sites in the inventory

Map 16: Aviation overlay zones

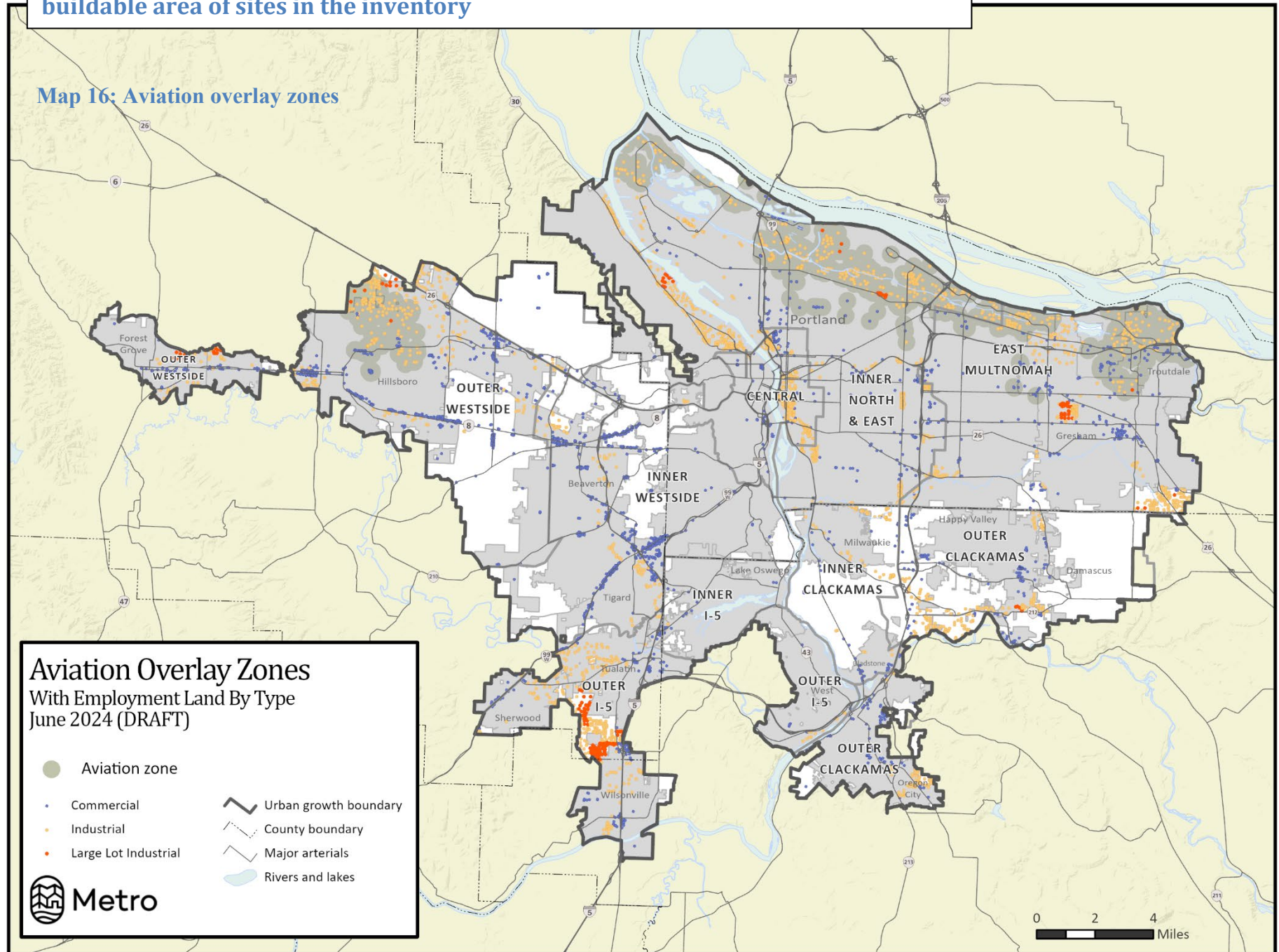
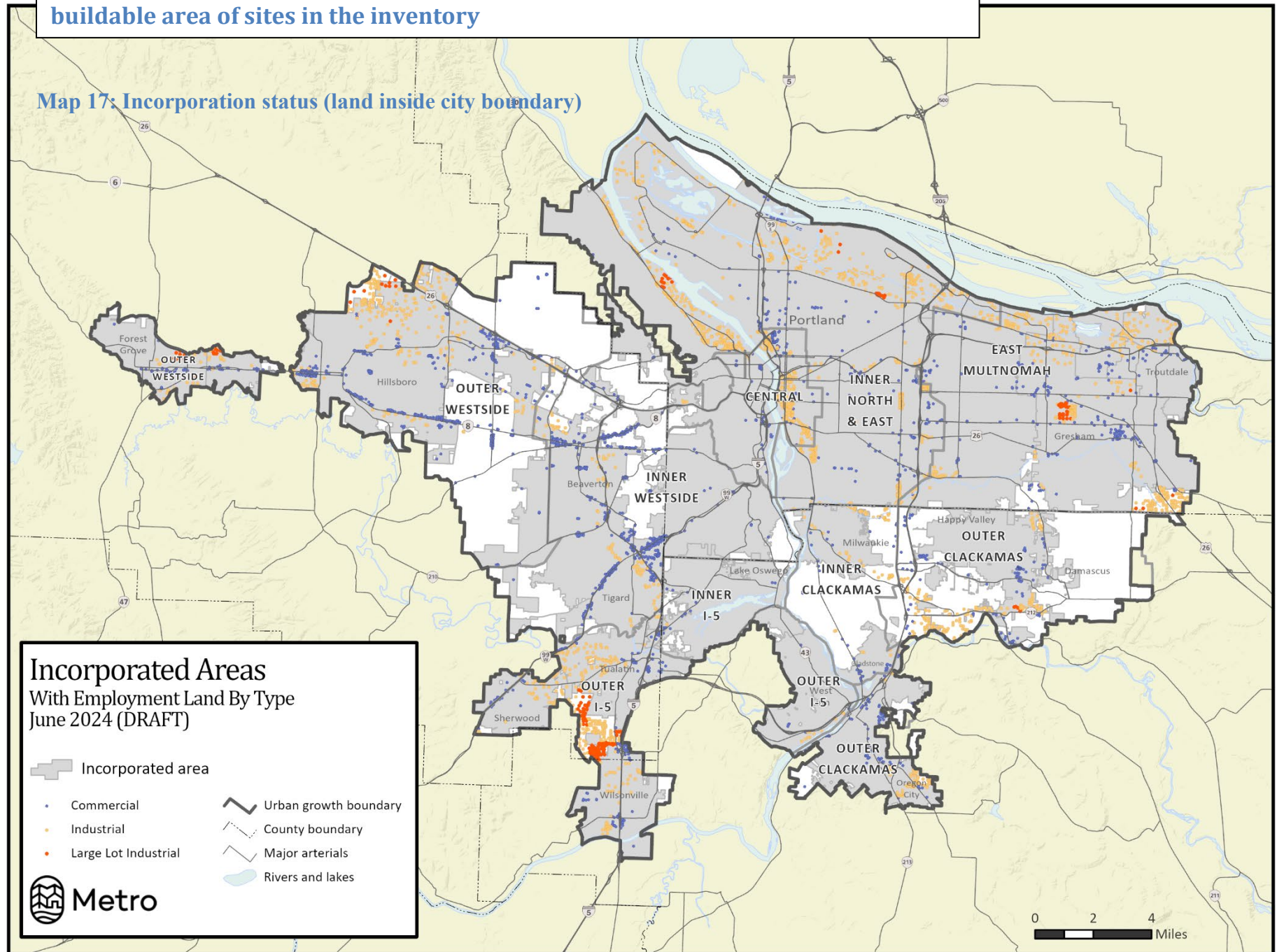


Table 5: Incorporation status (land inside city boundary)

Market Subareas	Incorporated Area		Unincorporated Area		Total	
	Parcels	Acres	Parcels	Acres	Parcels	Acres
Central	480	15.5			480	15.5
Commercial	134	7.5			134	7.5
Industrial	346	8.0			346	8.0
East Multnomah	527	965.6	119	371.9	646	1,337.5
Commercial	229	162.1	15	45.2	244	207.3
Industrial	273	748.9	101	249.3	374	998.2
Large Lot Industrial	25	54.6	3	77.3	28	132.0
Inner Clackamas	71	48.1	56	13.8	127	61.9
Commercial	37	1.0	19	0.8	56	1.8
Industrial	34	47.0	37	13.1	71	60.1
Inner I-5	22	2.7	1	0.0	23	2.7
Commercial	21	1.4			21	1.4
Industrial	1	1.3	1	0.0	2	1.3
Inner North & East	1,131	1,025.1	3	0.0	1,134	1,025.2
Commercial	220	14.9			220	14.9
Industrial	896	864.6	3	0.0	899	864.6
Large Lot Industrial	15	145.7			15	145.7
Inner Westside	566	87.1	98	24.2	664	111.4
Commercial	489	53.4	88	7.3	577	60.7
Industrial	77	33.7	10	16.9	87	50.6
Outer Clackamas	280	397.1	172	193.5	452	590.6
Commercial	182	38.6	51	10.6	233	49.2
Industrial	93	336.4	121	182.9	214	519.3
Large Lot Industrial	5	22.2			5	22.2
Outer I-5	327	483.7	167	460.2	494	943.9
Commercial	150	29.4	5	9.0	155	38.3
Industrial	169	431.9	111	284.2	280	716.1
Large Lot Industrial	8	22.4	51	167.1	59	189.5
Outer Westside	646	1,031.4	208	743.1	854	1,774.5
Commercial	409	78.6	112	21.3	521	99.8
Industrial	225	813.9	83	302.9	308	1,116.7
Large Lot Industrial	12	139.0	13	419.0	25	557.9
Grand Total	4,050	4,056.3	824	1,806.8	4,874	5,863.2

Description of any development constraints or infrastructure needs that affect the buildable area of sites in the inventory

Map 17: Incorporation status (land inside city boundary)



Description of any development constraints or infrastructure needs that affect the buildable area of sites in the inventory

Map 18: Land value per square foot

