

City of McMinnville
Addendum 1 to June 2019 Draft Housing Needs Analysis (HNA):
Description of June 2020 Revisions to Residential Capacity Analysis,
as Reflected in June 2020 Draft Urbanization Report

Summary

This addendum provides supplemental analysis that revises certain aspects of the residential capacity analysis for the Buildable Land Inventory (BLI) in the June 2019 Draft Housing Needs Analysis (HNA). This updated analysis and revision to the June 2019 Draft HNA is reflected in the June 2020 Draft Urbanization Report. The updates address the issues below.

1. Corrections to BLI Acreages Due to Split-Zoned Lots Identified During EOA Work
2. Capacity of Exception Areas in the UGB
 - a. OAR 660-024-0067(6) Analysis
 - b. Density Assumptions
 - c. Other: Serviceability
3. Analysis Under ORS 197.296 as Amended by HB 2001
4. Small Lot Status and Capacity
5. Add capacity for vacant already platted lots within landslide constraint area

Any assumptions used in the June 2019 HNA which are revised by this addendum are described herein in detail.

The table below summarizes the revisions provided in this addendum.

In summary, the housing need remains unchanged; it is the capacity of the buildable lands which is revised. The need for 5,269 additional dwellings by 2041 remains the same. ***The updated analysis results in a reduction in the capacity of buildable lands, when compared to the 2019 Draft HNA, from 2,921 dwellings to 2,129 dwellings, a net capacity reduction of 792 dwellings.***

This means there is a deficit of buildable lands to meet the needs for 3,053 of the 5,269 needed dwellings by 2041. At a historic density of 4.9 du/gross acre, this is a deficit of 623 gross buildable acres. At the “needed” density of 5.3 du/gross acre, this is a deficit of 576 gross buildable acres.

Note: *The City is undertaking inventory and analysis of additional Goal 7 hazards, Goal 5 natural and cultural resources, and constraints which could be subject to adoption of protection measures which could potentially render certain areas unbuildable or could reduce capacity. While this addendum may provide additional information and discussion relating to these constraints, these other constraints have not been introduced into or applied to this revised capacity analysis.*

Summary Table - 2018-2041 Residential Capacity Analysis Revisions

Component	Description	Capacity - Dwelling Units		
		Original	Revised	Difference
2018 Capacity				
Total Relative to June 2019 Draft HNA		2,921	2,129	(792)
Adjustments				
1. Revised Total After Split-Zoned Lot Adjust.	BLI Buildable Res. Acres Adjusted to Split-Zoned Ac.	2,921	2,822	(99)
2. Exception Areas <2 acres	OAR 660-024-0067(6)	342	18	(324)
3. Exception Areas >=2 acres	Revise Avg. Hist. Density to R-1 Hist. Density	687	434	(253)
4. Elevation >415' (Potential Zone 3)	Subtract 6.5 bld ac in except. area @ R-1 Hist. Density	68	48	(20)
5. Small City Lot Adjustments*	Non-Exception Area < 2ac	366	251	(115)
6. Add Capacity to Platted Vacant Lots w/LSC	19 Small Vac. Platted Subd. Lots with Landslide Constr.	-	19	19
2018-41 Demand (for Vac/PV)				
Total		5,269	5,269	-
Adjustments				
7a. Vacant/Partially Vacant	To Address HB 2001 Amendments to ORS 197.296	4,847	5,182	335
7b. Infill/Redevelopment	To Address HB 2001 Amendments to ORS 197.296	422	87	(335)
2041 Deficit (for Vac/PC)				
Deficit: DUs		(1,926)	(3,053)	(1,127)
*Adjustments for small lots in Exception Areas are calculated separately above per OAR 660-024-0067(6) provisions				
2041 Deficit (Acres)				
Deficit: Acres @ Hist. 4.9 du/ac		(393)	(623)	(230)
Deficit: Acres @ Needed 5.3 du/ac		(363)	(576)	(213)

The following table summarizes the residential capacity analysis revisions by zone.

Zone	1			2			3			4			5			6			Subtotal with Cap Adjust		
	Orig Capacity by Zone	Total After Split Lot Adj		Exception Areas < 2a c			Exception Areas > 2 ac			Elevation >415'			Small Lot Adjustments			Vacant Platted Constr			Before	After	Diff
R-1	449	449	428	-21									93	61	-32	0	19	19	449	415	-34
R-2	561	561	569	8									90	71	-19				561	550	-11
R-3	28	28	28	0									29	23	-6				28	22	-6
R-4	127	127	110	-17									61	55	-6				127	104	-23
County	1753	1753	1687	-66	342	18	-324	687	434	-253	68	48	-20	93	41	-52			1753	1638	-115
SUM	2916	2916	2822	-94	342	18	-324	687	434	-253	68	48	-20	366	251	-115	0	19	2916	2129	-787
	(2921 in Table 94)	2921 in table	-99 in table																Orig	Rev	Diff
																			2921 in table	2129 in table	-792 in table

1. Corrections to BLI Acreages Due to Split-Zoned Lots Identified During EOA Work

Following completion of work on the June 2019 Draft HNA, the City began work on an update to the Economic Opportunities Analysis (EOA). During that work, it was observed that there were some split-zoned tax lots. While some tax lots had only a small portion of the acreage in a second zone, in other cases, there were a few larger tax lots that had a significant percentage of acreage in each zone. For example, some tax lots were split-zoned with some acreage in a residential zone and some acreage in a commercial zone. During the HNA work, the split-zoned tax lots had the entire acreage assigned to the zone in which the majority of the tax lot was located. This approach helped avoid issues with “slivers” that can result with technical issues associated with minor mapping alignments.

However, it was insufficient to address those few split-zoned tax lots with a significant percentage of the acreage in each zone. Therefore, during the Buildable Lands Inventory (BLI) work for the EOA, those tax lots were split at the zone boundary, and the acreage within each zone was addressed within the respective residential or employment buildable lands inventory. Acres in the residential portions were assigned to the residential BLI and acres in commercial or industrial portions were assigned to the employment BLI. The analysis dates for the cut-off date for the BLI work for the HNA and EOA work were also aligned for consistency.

The buildable lands inventory and capacity analysis for the HNA is updated accordingly. This is shown below for Exhibits 94 and 95. With the adjustments to buildable acres for the residential portions of the split zoned lots, the capacity is 2,822 dwellings.

Original Exhibits 94 and 95:

The original assumptions for the capacity analysis of buildable lands within the UGB used in the HNA, including status of unincorporated exception areas previously added to the UGB, was summarized in Tables 94 and 95, below.

Exhibit 94. Unconstrained Vacant and Partially Vacant Buildable Land (Water Zone 1 and 2) with Baseline Capacity, McMinnville UGB, 2018
 Source: Buildable Lands Inventory; Calculations by ECONorthwest. Note1: DU is dwelling unit. Note2: The density of county zoned land is the historic average density achieved (4.9 du/gross acre).

Zoning Districts	Total Unconstrained Buildable Acres (Water Zone 1 & 2)	Density Assumption (DU/Gross Acre)	Capacity (Dwelling Units)
R-1 Single Family Residential	145	3.1	449
R-2 Single Family Residential	131	4.3	561
R-3 Two Family Residential	6	4.8	28
R-4 Multiple-Family Residential	21	6.1	127
O-R Office/Residential	0	6.3	3
C-3 General Commercial	61	21.9	-
County Zoning	358	4.9	1,753
TOTAL	721	4.1	2,921

Exhibit 94 shows that McMinnville has 721 acres of unconstrained buildable lands, (approx. 660 acres in residential zones are assigned residential capacity), with capacity for 2,921 dwelling units using historical densities by zoning district (before deducting acreage for housing development between 2018 and 2021). Exhibit 95 shows that McMinnville has 588 acres of unconstrained buildable lands in Zone 1, 75 with capacity for 2,360 dwelling units (before deducting acreage for housing development between 2018 and 2021 and by using historical densities by zoning district).

Exhibit 95. Unconstrained Vacant and Partially Vacant Buildable Land (Water Zone 1) with Baseline Capacity, McMinnville UGB, 2018

Source: Buildable Lands Inventory; Calculations by ECONorthwest. Note1: DU is dwelling unit. Note2: The density of county zoned land is the historic average density achieved (4.9 du/gross acre).

Zoning Districts	Total Unconstrained Buildable Acres (Water Zone 1)	Density Assumption (DU/Gross Acre)	Capacity (Dwelling Units)
R-1 Single Family Residential	109	3.1	338
R-2 Single Family Residential	86	4.3	368
R-3 Two Family Residential	6	4.8	28
R-4 Multiple-Family Residential	21	6.1	127
O-R Office/Residential	0	6.3	3
C-3 General Commercial	61	21.9	-
County Zoning	305	4.9	1,496
TOTAL	588	4.0	2,360

Note: All housing development occurring between 2018 and 2021 is assumed to be in Water Zone 1 as Water Zone 2 will not be serviceable during that time. The report presents this deduction in the following sub-section.

Updated Exhibits 94 and 95:

Exhibits 94 and 95 with the updated buildable lands and capacity analysis reflecting the adjustments for split-zoned properties are provided below:

Exhibit 94. Unconstrained Vacant and Partially Vacant Buildable Land (Water Zone 1 and 2) with Baseline Capacity, McMinnville UGB, 2018

Source: Buildable Lands Inventory; Calculations by ECONorthwest. Note1: DU is dwelling unit. Note2: The density of county zoned land is the historic average density achieved (4.9 du/gross acre).

Zoning Districts	Total Unconstrained Buildable Acres (Water Zone 1 & 2)	Density Assumption (DU/Gross Acre)	Capacity (Dwelling Units)
R-1 Single Family Residential	138	3.1	428
R-2 Single Family Residential	132	4.3	569
R-3 Two Family Residential	6	4.8	28
R-4 Multiple-Family Residential	18	6.1	110
C-3 General Commercial	5	21.9	-
City Sub-Total	300	-	1,135
County Zoning	344	4.9	1,687
County Sub-Total	344	-	1,687
TOTAL	644	-	2,822

Exhibit 95. Unconstrained Vacant and Partially Vacant Buildable Land (Water Zone 1) with Baseline Capacity, McMinnville UGB, 2018

Source: Buildable Lands Inventory; Calculations by ECONorthwest. Note1: DU is dwelling unit. Note2: The density of county zoned land is the historic average density achieved (4.9 du/gross acre).

Zoning Districts	Total Unconstrained Buildable Acres (Water Zone 1)	Density Assumption (DU/Gross Acre)	Capacity (Dwelling Units)
R-1 Single Family Residential	102	3.1	317
R-2 Single Family Residential	88	4.3	376
R-3 Two Family Residential	6	4.8	28
R-4 Multiple-Family Residential	18	6.1	110
C-3 General Commercial	5	21.9	-
City Sub-Total	219	-	831
County Zoning	292	4.9	1,430
County Sub-Total	292	-	1,430
TOTAL	511	-	2,261

2. Capacity of Exception Areas in the UGB

2a. OAR 660-024-0067(6) Analysis

As applied to the exception areas added to the UGB, the provisions of OAR 660-024-0067(6) provide for reduced capacity assumptions for tax lots less than two acres.

This is based on research and analysis that was conducted for the “HB 2554 Report.” In September 2015, The University of Oregon Community Service Center published a final report for the HB 2254 Rules Advisory Committee, “Analysis of Development on Rural Residential Lands: A Report to the HB 2254 Rules Advisory Committee.”

Some of the key findings excerpted from the report are as follows:

- Lots under two acres are much less likely to divide and develop at urban densities than lots over two acres.
- Across all zones, parcelization of lots (e.g., land divisions) less than 1 acre is very infrequent. Within Rural Residential zones, 2 to 5 acre parcels are the most common to parcelize. If cities are adding existing developed Rural Residential subdivisions with lots less than 2 acres, it is not likely that any capacity exists on these lands.
- Development and parcelization in all unincorporated areas inside UGBs has slowed tremendously since the implementation of the Statewide Planning Program but is still occurring in some jurisdictions. Continued development in incorporated areas, particularly on parcels less than 2 acres, will have long term implications for UGB expansion as parcels less than 2 acres are unlikely to subdivide inside UGBs.

OAR 660-024-0067(6) was adopted in response to these findings, and the OAR provides:

(6) For vacant or partially vacant lands added to the UGB to provide for residential uses:

- (a) Existing lots or parcels one acre or less may be assumed to have a development capacity of one dwelling unit per lot or parcel. Existing lots or parcels greater than one acre but less than two acres shall be assumed to have an aggregate development capacity of two dwelling units per acre.
- (b) In any subsequent review of a UGB pursuant to this division, the city may use a development assumption for land described in subsection (a) of this section for a period of up to 14 years from the date the lands were added to the UGB.

This applies to lands within three exception areas that were added to the UGB: Riverside South, Redmond Hill Road, and Fox Ridge Road.

The tables below show the total tax lots in these areas, total acres before deducting constraints, and total buildable acres. All tax lots in these areas are privately owned, except for three tax lots in Fox Ridge Road which would be unavailable for development. Two of these are public sites for water infrastructure and one of these is a cemetery. Those are included in the calculations for total tax lots and acres, but excluded from the calculations for buildable residential properties in the tables below.

Of the original capacity of 2,921 dwelling units within the UGB shown in the original Exhibit 94 of the HNA, capacity of 1,029 dwellings is assumed within the exception areas, as shown in the table below.

Capacity of Exception Areas and Other Lands

Areas	Capacity (DUs)
Exception Areas	1,029
Other Lands	1,892
Total	2,921

The breakdown of that 1,029 dwelling unit capacity for each exception area in the UGB is shown in the table below as calculated in the original June 2019 Draft HNA.

Capacity of Exception Areas

Area	Tot. Tls	Tot. Ac	Buildable Acres			DU/Gross Ac	Capacity (DUs)
			Zone 1	Zone 2+	Total		
Fox Ridge Road	29	145	0	23	23	4.9	113
Redmond Hill Road	15	44	10	30	40	4.9	196
Riverside South	76	191	147	0	147	4.9	720
SUM	120	380	158	53	210		1,029

Not all tax lots or acreage within tax lots is private land available for development. Some are public lands, and some private acreage is constrained by natural features or hazards. The following table provides a breakdown of the tax lots with buildable acreage by size class. Properties in the smaller size classes (<=1ac, >1<2 ac) will have the provisions of OAR 660-024-0067(6) applied, while the same density assumptions as the original method are applied to the larger size class (>=2 ac) in this section.

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Exception Areas Tax Lots with Unconstrained Residential Capacity by Size Class

Area	# Unc. TLs <=1 Bld Ac			# Unc. TLs >1<2 Bld Ac			# Unc. TLs >=2 Bld Ac			SUM		
	w/DU	w/o DU	Total	w/DU	w/o DU	Total	w/DU	w/o DU	Total	w/DU	w/o DU	Total
Fox Ridge Road	1	1	2	1	0	1	1	0	1	3	1	4
Redmond Hill Road	1	0	1	1	0	1	8	5	13	10	5	15
Riverside South	20	1	21	14	1	15	35	5	40	69	7	76
SUM	22	2	24	16	1	17	44	10	54	82	13	95

The result of applying the OAR 660-024-0067(6) provisions to these tax lots based on size class results in revised capacity as provided in the table below.

Exception Areas Capacity with OAR 660-024-0067 Adjustments

Area	Capacity			TOTAL
	<=1 unconstr ac	>1<2 unconstr ac	>=2 unconstr ac	
Fox Ridge Road	1	1	119	121
Redmond Hill Road	0	1	160	161
Riverside South	1	14	408	423
SUM	2	16	687	705

The table below compares the original and revised capacity calculations. Capacity of lots less than two buildable acres is reduced from 342 DUs to 18 DUs. The result is reduced capacity from 1,029 DUs to 705 DUs within the three exception areas. This a difference of 324 fewer DUs for the exception areas resulting from applying OAR 660-024-0067(6) to parcels of two acres or smaller.

Exception Areas Capacity Comparison

Bld Ac	Original	Revised	Difference
Lots <2 bld ac	342	18	(324)
Lots >=2 bld ac	687	687	-
SUM	1,029	705	(324)

This means the overall capacity of lands within the UGB is reduced by 324 DUs, from the original 2,921 DUs as shown in the original Exhibit 94 of the HNA to 2,597 DUs as shown below, before accounting for the adjustments associated with issue #1 above and other issues below.

Capacity of Exception Areas and Other Lands

Areas	Capacity (DUs)		
	Original	Revised	Difference
Exception Areas	1,029	705	(324)
Other Lands	1,892	1,892	-
Total	2,921	2,597	(324)

2b. Revised Capacity and Density Assumptions for Exception Area Tax Lots >= 2 Acres

The density factor of 4.9 du/gross acre applied to the exception areas, calculated in the tables above, is the average density for all urban residential zones because the exception areas still have county rural zoning, and haven't yet had city urban residential zoning applied. Capacity

assumptions will need to be adjusted based on a determination of zoning to be applied to these areas, which is further discussed in a separate section below.

Since the average density for all zones was used to calculate capacity for exception areas, capacity assumptions need to be adjusted based on further determinations of suitability of zoning to be applied to these different areas. Capacity can be calculated based on the historic densities by zoning district, which for the R-1, R-2, and R-3 zones, are respectively 3.1 du/gross acre, 4.3 du/gross acre, and 4.8 du/gross acre. The high percentage of exception area small parcels with no capacity or low capacity under the OAR 660-024-0067(6) calculations, and their spatial distribution within these areas influences the consideration of the appropriate zoning for these areas.

Further, with the above findings and assumptions regarding parcels of two acres or smaller, efficiencies are not achieved on those smaller properties. This means significantly higher densities would be required on parcels ≥ 2 acres to achieve the overall average “needed” density of 4.9 du/acre within the exception areas, with insufficient numbers of parcels ≥ 2 acres to achieve this average. This means assumptions for exception areas need to recognize that these areas are incapable of realistically achieving production of housing averaging 4.9 du/gross acre in the baseline analysis.

The calculations below show the capacity of these areas after applying the OAR 660-024-0067(6) provisions to tax lots of < 2 acres, then applying an R-1 density assumption of 3.1 du/gross acre for tax lots ≥ 2 unconstrained acres, and how that would affect the overall capacity of lands in the UGB, versus the 4.9 du/gross acre assumption used above for the baseline analysis in the June 2019 Draft HNA.

Exception Areas Capacity with OAR 660-024-0067 Adjustments for Parcels Smaller than 2 acres and Revised Density Calculations for Parcels ≥ 2 Acres (at 3.1 du/gross acre).

Area	Capacity			TOTAL
	≤ 1 unconstr ac	$> 1 < 2$ unconstr ac	≥ 2 unconstr ac	
Fox Ridge Road	1	1	75	77
Redmond Hill Road	0	1	101	102
Riverside South	1	14	258	273
SUM	2	16	434	452

**applying 3.1 du/gross acre density factor to exception area properties ≥ 2 unconstrained acres*

Exception Areas Capacity Comparison

Bld Ac	Original	Revised	Difference
Lots < 2 bld ac	342	18	(324)
Lots ≥ 2 bld ac	687	434	(253)
SUM	1,029	452	(577)

**applying 3.1 du/gross acre density factor to exception area properties ≥ 2 unconstrained acres for revised*

Capacity of Exception Areas and Other Lands

Areas	Capacity (DUs)		
	Original	Revised	Difference
Exception Areas	1,029	452	(577)
Other Lands	1,892	1,892	-
Total	2,921	2,344	(577)

**applying 3.1 du/gross acre density factor to exception area properties ≥ 2 unconstrained acres for revised*

2c. Other: Serviceability: Elevation >415' Elevation (Potential Water Pressure Zone 3)

In the June 2019 Draft Residential Buildable Lands Inventory and Capacity Analysis, it was assumed that lands with elevations above 275' elevation were in water pressure service Zone 2, which requires development of Zone 2 water infrastructure to serve those properties, including water storage tanks. The assumptions for the BLI were that Zone 2 infrastructure would not be developed for approximately 10 years, but that Zone 2 could still be serviced approximately during the second half of the 2-year planning period.

However, water pressure Zone 2 is an elevation band between approximately 275'-415' elevation. Therefore, properties (and future structures) with elevation over 415' elevation would need to be further evaluated to determine whether they could be served from Zone 2 infrastructure, or whether a new Zone 3 (and/or additional Zones for substantially higher elevations) and associated infrastructure, would be necessary to serve properties with elevation over 415' elevation. Depending on the elevation, the ultimate extent and size of the service area, water provider standards and performance policies, fire pressure and fireflow requirements, and public drinking water standards, there may need to be analysis of options for private booster pumps, public pump stations, an/or ultimately additional water storage facilities.

A portion of the Fox Ridge area, approximately 6.5 acres, and a small portion of the Redmond Hill Road area, approximately 0.5 acre, are above 415' elevation. The current water system master plan doesn't currently include Zone 3 service. If the elevation above 415' elevation can't be served from Zone 2 facilities, or if Zone 3 service isn't addressed in the master plan, then approximately 6.5 acres of the Fox Ridge Road area would not be available for development within the 20-year planning horizon, reducing capacity of that area by approximately 32 additional DUs if applying the density factor of 4.9 du/gross acre. As addressed in 2b above, a density factor of 3.1 du/gross acre is assumed for this area, and this would reduce the capacity of this area by approximately 20 additional DUs.

3. Analysis under ORS 197.296 as Amended by HB 2001

HB 2001 was signed into law after the City finished the preliminary work to produce the June 2019 Draft HNA with recommendations from the Project Advisory Committee. HB 2001 amends ORS 197.296(6) in part to specify that, when a City is expanding its UGB and/or including new measures to accommodate growth within the UGB, that it must:

“adopt findings regarding the density expectations assumed to result from the measures adopted under this paragraph based upon the factors listed in ORS 197.303(2) and data in subsection (5)(a) of this section. The density expectations may not project an increase in residential capacity above achieved density by more than three percent without quantifiable validation of such departures. For a local government located outside a metropolitan service district, a quantifiable validation must demonstrate that the assumed housing capacity has been achieved in areas that are zoned to allow no greater than the same authorized density level within the local jurisdiction or a jurisdiction in the same region.”

This statute prescribes what assumptions cities are to apply when considering how implementation of standards to allow “middle housing” in zones that allow single-family dwellings would affect capacity consideration, stating, “The density expectations may not project an increase in residential capacity above achieved density by more than three percent without quantifiable validation of such departures.”

The City sought clarification from DLCD on their interpretation of how to apply this new provision to an HNA. Their interpretation is provided below:

We have come to the conclusion that the 3% limit on assumptions for increased residential capacity above achieved density applies to a broad range of “efficiency measures,” including many of the measures listed in OAR 660-038-0190(5). ORS Section 197.296(5) describes how local governments are to determine housing capacity within residential areas, based on the number, density, and average mix of housing types that have been developed since completion of the prior buildable land inventory.

The presumption here is that efficiency measures would be enacted within the same residential zones, in order to establish baseline numbers for past housing production. For this reason, the 3% cap would not apply to the establishment of new zones or zone changes that would allow higher densities than were previously allowed in an area. The notable exception here is the adoption of middle housing allowances, per HB 2001, which would not change the zoning and would therefore be subject to the 3% limitation.

It should also be noted that Section 6(b) allows local governments to assume housing production above a 3% increase if “quantifiable validation” of such an increase can be demonstrated, as detailed in Section 6(b).

The analysis in the June 2019 draft HNA reflects the analysis required by ORS 197.296 as it existed prior to the HB 2001 amendments.

The baseline “density expectations” by zone, and the associated capacity of buildable lands, using those density expectations for the BLI were provided in Exhibit 94 (below) in the June 2019 Draft HNA. It shows the 661 buildable residential acres have capacity for 2,921 dwelling units. Three percent above that capacity is 3,008 dwellings, or 87 additional dwellings. After correcting for split-zoned lots in Section 1 above, as reflected in the updated Exhibit 94 below, this capacity is 2,822 dwelling units based on the historic achieved density. Three percent capacity over historic achieved density, the assumption required by the statute, is 2,906 dwelling units, or about 85 additional dwellings.

Original

Exhibit 94. Unconstrained Vacant and Partially Vacant Buildable Land (Water Zone 1 and 2) with Baseline Capacity, McMinnville UGB, 2018
 Source: Buildable Lands Inventory; Calculations by ECONorthwest. Note1: DU is dwelling unit. Note2: The density of county zoned land is the historic average density achieved (4.9 du/gross acre).

Zoning Districts	Total Unconstrained Buildable Acres (Water Zone 1 & 2)	Density Assumption (DU/Gross Acre)	Capacity (Dwelling Units)
R-1 Single Family Residential	145	3.1	449
R-2 Single Family Residential	131	4.3	561
R-3 Two Family Residential	6	4.8	28
R-4 Multiple-Family Residential	21	6.1	127
O-R Office/Residential	0	6.3	3
C-3 General Commercial	61	21.9	-
County Zoning	358	4.9	1,753
TOTAL	721	4.1	2,921

Updated

Exhibit 94. Unconstrained Vacant and Partially Vacant Buildable Land (Water Zone 1 and 2) with Baseline Capacity, McMinnville UGB, 2018
 Source: Buildable Lands Inventory; Calculations by ECONorthwest. Note1: DU is dwelling unit. Note2: The density of county zoned land is the historic average density achieved (4.9 du/gross acre).

Zoning Districts	Total Unconstrained Buildable Acres (Water Zone 1 & 2)	Density Assumption (DU/Gross Acre)	Capacity (Dwelling Units)
R-1 Single Family Residential	138	3.1	428
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R-3 Two Family Residential	6	4.8	28
R-4 Multiple-Family Residential	18	6.1	110
C-3 General Commercial	5	21.9	-
City Sub-Total	300	-	1,135
County Zoning	344	4.9	1,687
County Sub-Total	344	-	1,687
TOTAL	644	-	2,822

The June 2019 Draft HNA already included assumptions about the amount of new residential development to be accommodated through infill and redevelopment. Therefore, that needs to be revised to be consistent with ORS 197.296 as amended by HB 2001 as discussed above, and to avoid double-counting infill and redevelopment assumptions twice.

The approach and assumptions used in the 2019 Draft HNA borrowed from the provisions for the “simplified” UGB approach in OAR 660 Division 38, which provides a range of percentages that can be used to assume how many new dwelling units would be developed through infill and

redevelopment, thereby reducing demand on new vacant and partially vacant land for new housing. This approach is based on deducting a percentage of housing from the total housing need that won't require new vacant or partially vacant land.

That approach specifies assumptions which are based on a percentage of needed housing assumed to be achieved through infill and redevelopment rather than the capacity of buildable lands. That is then deducted from the housing need that is assumed to require new vacant or partially vacant buildable land. The assumptions used in the 2019 Draft HNA were within the range identified under the simplified approach, but the assumptions were not based on quantifiable validation that identified specific properties likely to experience infill and redevelopment, and further, they exceeded the historic achieved infill and redevelopment.

The 3% limits in HB 2001 are applied to capacity of buildable lands, not a percentage of needed housing. Therefore, the 3% limits in HB 2001 need to be added, and the assumptions used in the June 2019 Draft HNA need to be removed.

The June 2019 Draft HNA assumed 8% of needed new housing would be achieved through infill and redevelopment. The tables below show what that means in terms of number of dwelling units and the impact in terms of effective density of the current inventory of vacant and partially vacant residential land. In short, the 8% infill rate (422 units) would mean the effective capacity of existing buildable land would be significantly higher than an additional 3% in capacity over the historic "achieved" density. An infill and redevelopment rate of 1.65% of needed housing (87 dwellings) would result in an effective increase in capacity of buildable lands of 3% over the historic achieved density for the residential buildable lands, based on the original 2,921 dwelling unit capacity in the original Exhibit 94. *(Please note the table below has calculations based on the original Exhibit 94. The narrative below describes the adjustments based on the updated Exhibit 94).*

Residential Land Type	2018-21	2021-41	SUM
New Vacant Land	563	4,284	4,847
Infill/Redev (8%)	49	373	422
SUM	612	4,657	5,269

Current Capacity			
Capacity of 661 Res Buildable Acres (Ex 94)			2,921
Density (2,921/661)	4.41	du/ac	

Effective Capacity with Current Infill & Redevelopment Assumptions			
Effective Cap. of 661 Res Bld Ac w/ 422 I/R Dus (8%)			3,343
I/R rate: 8%			
Difference (2,921 + 422)			422
Effective Density (3,343 du/661 ac)	5.06	du/ac	

103% of Current Capacity, Effective Infill & Redevelopment Rate			
103% of Capacity of 661 Res Bld Acres (2,921*1.03)			3,008
Difference			87
Effective Density	4.55	du/ac	
Effective I/R Rate (87/5,269): 1.65%			

The calculations in the table above were performed prior to the corrections to Exhibit 94 described in Section 1 to correct for buildable acres and capacity associated with split-zoned lots. If this is applied to the updated Exhibit 94 which reflects the buildable acres and capacity of 2,822 DUs after adjusting for split-zoned tax lots, the difference is only about 2 dwelling units less than the calculation above, approximately 85 dwelling units.

This is broken down by zoning district in the table below. The number is approximately 7 dwelling units higher in the table below due to rounding differences. The table below is again based on the capacity of 2,921 DUs in the original Exhibit 94 before correctly for split-zoned lots, so the calculation based on updated Exhibit 94 would be about 2-3 dwellings less.

Zoning District	Total Unconstrained Buildable Acres (Water Zones 1 & 2)	Density Assumption (DU/gross ac)	Capacity (Dwelling Units)	3% Higher Density Assumption	Capacity (Dwelling Units)	Difference in Capacity (Dwelling Units)
R-1	145	3.1	449	3.193	463	14
R-2	131	4.3	561	4.429	580	19
R-3	6	4.8	28	4.944	30	2
R-4	21	6.1	127	6.283	132	5
O-R	0	6.3	3	6.489	3	0
C-3	61	21.9	-	22.557	-	-
County Zoning	358	4.9	1,753	5.047	1,807	54
Total	722	4.1	2,921		3,015	94

*661 buildable residential acres, excluding C-3 zoned land

**Rounding and calculations to two decimal places for the 3% higher density assumption results in capacity of 3,008 rather than 3,015.

Absent additional efficiency measures, an infill/redevelopment rate in excess of 1.65% of needed new housing or roughly 85 dwelling units would exceed the additional 3% capacity of buildable land above historic achieved density without quantifiable validation for buildable lands, and would be inconsistent with HB 2001.

4. Small Lot Status and Capacity

Most of the tax lots which do not have land use entitlements are highly parcelized in small, dispersed parcels. Based on analysis of historic partition and development on small lots, the capacity assumptions used in the June 2019 Draft HNA would overstate the capacity yield of smaller lots during the planning period. Background information is provided below. Based on the analysis of historic partition activity, the capacity of partially vacant lots smaller than 2 acres would be revised to reflect historic capacity achieved through residential partitions of lots smaller than 2 acres.

Background

State law requires that, for all land classified as “buildable” in the Buildable Land Inventory, it must be assumed that land will develop during the 20-year planning period to meet the housing need, unless there is a surplus which exceeds the need. In this respect, the applicable law doesn’t differentiate between one decision to develop a 50-lot subdivision on a larger property from 50 separate decisions that would each partition or add a home to a smaller property. The reality is much different in terms of decision-making and investments to develop new housing. The housing market doesn’t supply housing nearly as efficiently through the incremental small

lot development. This is borne out by McMinnville’s partition and development history, as well as findings documented in the HB 2554 report.

The HB 26554 report includes the following findings:

- Across all zones, parcelization of lots (e.g., land divisions) less than 1 acre is very infrequent.
- Development and parcelization in all unincorporated areas inside UGBs has slowed tremendously since the implementation of the Statewide Planning Program but is still occurring in some jurisdictions. Continued development in incorporated areas, particularly on parcels less than 2 acres, will have long term implications for UGB expansion as parcels less than 2 acres are unlikely to subdivide inside UGBs.

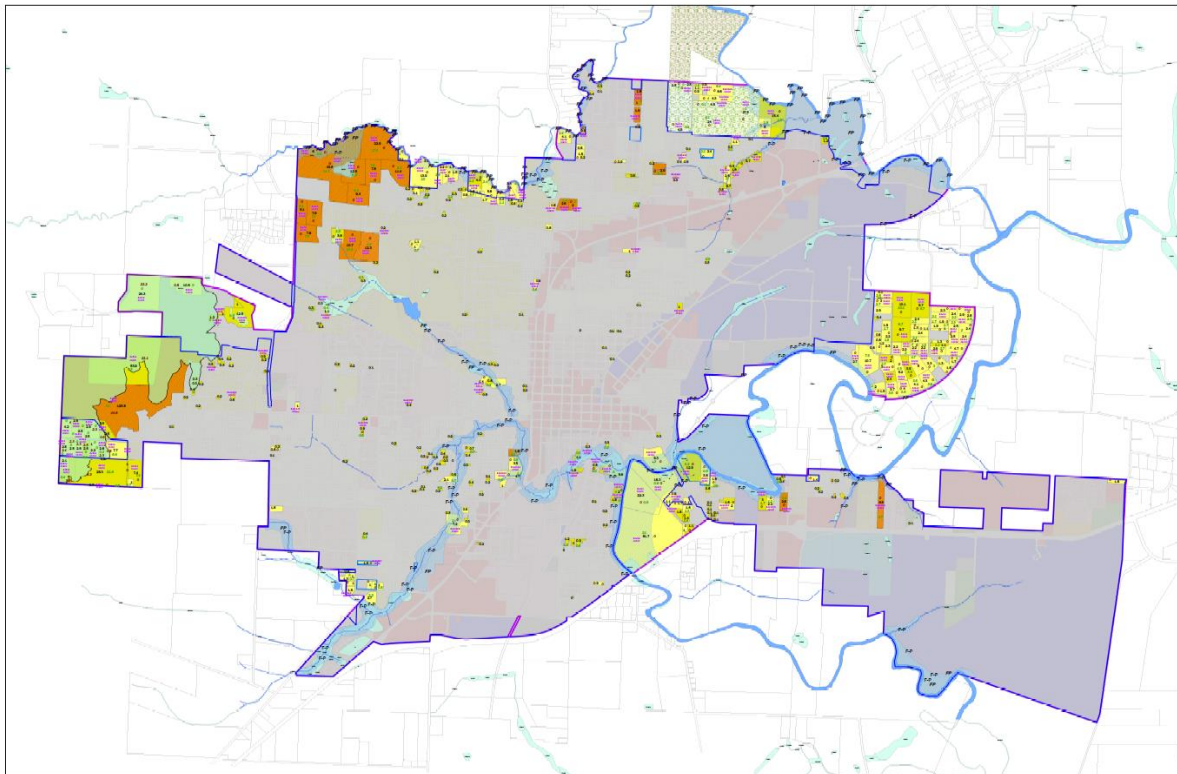
Intuitively, most people would think of further development on smaller lots with existing homes as infill or redevelopment. However, for purposes of the BLI, small properties under one-half acre with an existing home are classified as “developed,” while small properties just over one-half acre and everything larger with a home are classified as “partially vacant.” Developed properties aren’t assumed to have further capacity other than an assumption and recognition that a percentage of those developed properties may have capacity for additional infill or redevelopment which may occur for a percentage of those lots during the 20-year planning period. However, if development occurs on a lot over one-half acre, that is technically considered “new development” rather than “infill or redevelopment” and treated the same per state law as larger greenfield development sites when considering capacity. That technical difference in terminology is significant, because every “partially vacant” property must be assumed to further develop during the 20-year planning period (unless surplus) in order to meet the identified housing need. This is important when considering the BLI, because any property owner decisions about whether those properties will actually develop additional dwellings during the 20-year planning period can’t be considered. The result can be that “false capacity” may be assigned to those properties and tied up in those properties if they don’t develop, rather than providing actual capacity through addition of lands that would be likely to actually develop over the 20-year period.

In addition, division of existing small parcels may be less likely to achieve needed density, because there is often fractional remnant acreage when an existing property further divides or develops that doesn’t add additional capacity, whereas development of a larger property allows for establishment of efficient lots sizes and configurations that can more efficiently respond to and achieve the allowed density permitted by the zoning district.

These issues would be less of a concern if there were only a few small properties which are assigned capacity as “partially vacant” lots in the buildable land inventory. However, most of the land in the UGB has already developed, and most of the larger buildable properties in the UGB are already “entitled” for specific developments. Entitled properties are unlikely to have opportunity for increased capacity through enactment of efficiency measures. Much of the remaining buildable land in the UGB is within small properties. These make up a disproportionate share of the number of remaining properties classified as “buildable” within the UGB per state law.

BLI buildable acres in small lots and capacity assumptions

Most of the UGB is located within water pressure service Zone 1. Approximately 82% of the non-entitled tax lots classified as buildable land within Zone 1 are two acres or smaller, approximately 93% of these non-entitled tax lots are three acres or smaller, and approximately 97% of these non-entitled tax lots are 5 acres or smaller. Of these Zone 1 non-entitled tax lots with buildable acres of three acres or larger, only three properties are within City limits: one parcel between 3-4 acres, one parcel of about 7 acres, and one parcel of about 22 acres. The remainder are in the unincorporated UGB.



**Orange indicates entitled properties as of December 2019*

Non-Entitled

Approximate Zone 1 Buildable Acres, Residential

Total: ~348 Tax Lots

>20 ac: 2 properties (~43 ac)
22 ac (in city)
21 ac (out of city)

10-20 ac: 4 properties (~40 ac)
10 ac (out of city)
10 ac (out of city)
10 ac (out of city)
10 ac (out of city)

5-10 ac: 6 properties (~38 ac)
8 ac (out of city)
7 ac (in city)
7 ac (out of city)
6 ac (out of city)
5 ac (out of city)
5 ac (out of city)

2-5 ac: ~52 properties
4-5 ac: ~5 properties (~20 ac) (all 5 out of city)
3-4 ac: ~9 properties (~27 ac) (8 out of city, 1 in city)
2-3 ac: ~38 properties

0-2 ac: ~284 properties
1-2 ac: ~94 properties
0-1 ac: ~190 properties

Of the approximately 284 properties which have less than two unconstrained acres, ~41 properties are in exception areas, and the remaining ~243 in other areas, predominantly within city limits. Those ~243 were assigned full capacity in the June 2019 Draft BLI, unlike the reductions described in this addendum for parcels smaller than 2 acres in exception areas.

Further, fractional acres in tax lots become aggregated in the BLI and capacity analysis, where compounding is more of an issue with a disproportionate number of smaller parcels, where fractional acres can't actually be aggregated into buildable acres since the properties are dispersed and non-contiguous. This can overstate capacity. These are classified as buildable, although most have an existing home, and are classified as partially vacant. Per the HB 2554 report, these smaller parcels less than two acres (190 tax lots with 0-1 acres, 94 tax lots with 1-2 acres) most with home, are unlikely to achieve full capacity, if any. Lots less than one-half acre with a home are already excluded from this total as "developed".

The analysis identified buildable acres on each parcel then aggregated into total buildable acres then multiplied by the respective density factor, therefore counting those fractional acres. If capacity is assigned for each tax lot, tossing out the fractional acres first then aggregating the capacity for each lot, that is a more accurate analysis of capacity, and will necessarily be lower than aggregating fractional acres. Historic analysis shows most new units on smaller properties result from land divisions rather than adding more dwellings to existing lots. The vast majority of capacity in smaller parcels during the historic analysis period was through land divisions – not by adding an additional dwelling to an existing lot or by subdividing these small lots (4 or more lots), but by partitioning (3 or fewer lots). However, that method presents issues for the BLI where buildable acres must be identified when calculating for middle housing that may not be on separate lots.

Staff conducted a review of historic partition activity to determine whether there were any implications for capacity assigned to smaller lots in city limits. Many properties that are partitioned are remnants of land divided through the old metes and bounds descriptions of dividing and describing properties, often rural properties that were added to the city and UGB over time or much older city properties. Many of these weren't divided with regard to current minimum lot sizes or current zoning. More recent land divisions have divided with respect to the zoning, often seeking to maximize the density by dividing into as many lots or parcels as allowed by the minimum lot size of the zone. The larger remnant properties within the UGB aren't increasing in number except if/when larger rural properties are added to the UGB, therefore their supply is decreasing over time. Essentially, nearly all of these smaller lots that still remain likely would have been existing at the time of the previous BLI, and still haven't been divided since then or during the last historic analysis period. These properties haven't divided since the last BLI, even during a period in which there has been a constrained land supply as evidenced by the prior and current BLI. This suggests that while they are classified as "buildable" per state law, the reality is they haven't been available for development. This artificially ties up capacity, which means other buildable land likely to be available for development during the planning period can't be brought into the UGB.

While not applied to the analysis in this addendum, this suggests that based on the HB 2554 findings, that the threshold for what is considered "developed" vs. "partially vacant" should be increased, or similar capacity adjustment should be codified, to account for the limited capacity actualized on smaller parcels. This would be analogous to the OAR 660-024-0067(6) provisions for exception area parcels less than two acres.

Note: *Many of these small parcels are classified as "partially vacant". The HNA uses the "safe harbor" methodology available to smaller cities, although this isn't an actual safe harbor for McMinnville due to its size. Classifying these lots as partially vacant and buildable means the HNA assumes every one must further develop in order to meet the identified housing needs over the next 20 years.*

Ideally, in light of real-world data about the further development potential of smaller lots and parcels, smaller properties would be re-evaluated to determine whether some of these should not be classified as buildable, or whether assumptions should be adjusted to allow assumptions about infill and redevelopment of smaller "partially vacant" parcels that are different than greenfield development - either assuming reduced capacity, or assuming only a percentage would be expected to develop during the planning period.

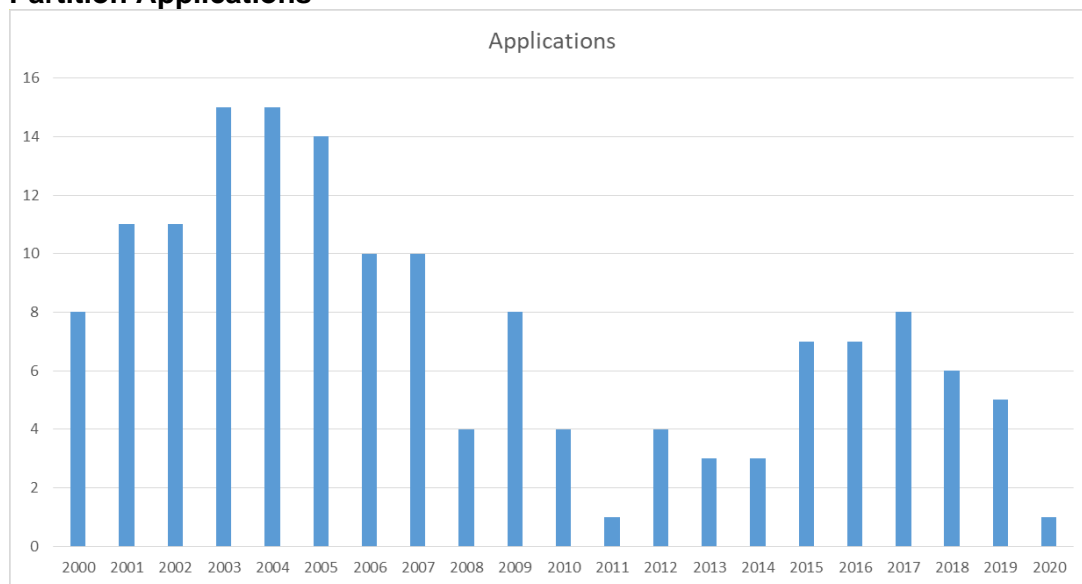
Historic Partition Activity

Additional development of partially vacant properties has typically occurred through partitioning, and development of the resulting new parcels. In general, the supply of parcels that would further partition into 2 or 3 parcels is diminishing over time, typically a remnant of areas where the city grew into unplatted areas. Properties which are large enough to subdivide into four or more lots generally reflect the density of the zoning. Except for where new exception area lands are added to the UGB, the partitionable properties are largely a subset of the same supply of small parcels that existed during last planning horizon and historic analysis period.

During a planning period for which there was a deficit of buildable residential land, there was still only a small number of new properties created through partitioning, and many of these were to separate a parcel with an existing dwelling from 1 or 2 additional parcels. Some were to split properties that already had development on each new parcel.

- Partition records indicate that from 2000-2018, there were approximately 135 partition applications that would have created a total of 177 new parcels, excluding withdrawn applications. Of these, 34 applications were for parent parcels of 0.5 acres or less, 26 were 0.5-1 acre, and 78 were greater than 1 acre. About 48 of these were commercial/ industrial/ institutional /large multi-family housing sites. Additional partitions included in these figures were applications that adjusted large properties in preparation for subdivision phasing. Therefore, many of these partitions didn't create new buildable residential parcels. Further, some partitions didn't create any additional buildable capacity – they were sites already developed with two or more homes that were divided so there was one home on each parcel.
- Further, the partition activity peaked in 2003-2004, so the information should be analyzed to determine if this is due to a diminishing supply of smaller sites which are eligible or feasible for further land divisions.
- This suggests the assumptions regarding residential infill and redevelopment of 8% used in the 2019 Draft HNA are high. This historic partitioning activity suggests infill and redevelopment consistent with the HB 2001 methodology is more appropriate.

Partition Applications



City of McMinnville Partition Applications 2000-2018
(Excludes Withdrawn Applications)

Total Partitions	Partitions by Parent Parcel Size					SUM
	<=0.5 ac	>0.5-1 ac	>1-2 ac	>2 ac	SUM -All	<=2 ac
Number of partition applications (excluding withdrawn)	34	25	15	61	135	74
Number of additional parcels from partitioning	41	35	21	76	173	97
Total partition applications per year	1.8	1.3	0.8	3.2	7.1	3.9
Total additional parcels per year	2.2	1.8	1.1	4.0	9.1	5.1
Residential Partitions						
Number of residential partitions (includes zero lot line lots)	32	23	11	9	75	66
Number of new residential parcels*	39	34	16	14	103	89
Residential partitions per year	1.7	1.2	0.6	0.5	3.9	3.5
Additional residential parcels per year	2.1	1.8	0.8	0.7	5.4	4.7
Other Partitions						
Number of non-residential partitions**	2	2	4	38	46	8
Number of subdivision phasing partitions***	0	0	0	14	14	0
SUM of non-residential and subdivision phasing partitions	2	2	4	52	60	8

*Some partitions added no capacity: the parent parcel had more than one dwelling, and the partition split the dwellings onto separate parcels

**Approximately 46 partitions from 2000-2018 were commercial, industrial, institutional, or large multi-family sites

***Approximately 14 partitions were to adjust large properties in preparation for subdivision phasing

Acreage by Parent Parcel Size	Parent Parcel Acreage by Parent Parcel Size					SUM
	<=0.5 ac	>0.5-1 ac	>1-2 ac	>2 ac	SUM	
All	13	49	23	993	1,078	84
Residential only*	12	48	18	151	228	77
New residential parcels per acre	3.28	0.71	0.91	0.09	0.45	1.15

The table above shows that for residential partitions, on average, there were 1.15 new parcels per parent parcel acre (89/77) for the 2000-2018 period.

Most buildable residential lots which are developed are new vacant lots created through residential subdivisions. A small number of new parcels are created through partitioning. Most of those add new development capacity, but some are simply to split ownership of a parcel that has more than one existing dwelling so that each of the existing dwellings is on a separate parcel.

Approximately 3,038 new dwellings were added from 2000 to mid-2018. During the same time period, about 75 partition applications added 103 additional residential parcels. By definition, a partition adds 1 or 2 new parcels in addition to the original parcel. The average was 1.37 new parcels per partition application. If each new parcel was developed with a dwelling, that would account for 3.4% of new dwellings, which would be an average of 179 new dwellings, about 9.4 new dwelling per year; however, partitioning accounted for an average of only 5.4 new dwellings per year.

Partitions of parent parcels of less than one-half acre were accounted for in infill and redevelopment assumptions. Not all of new parcels below developed with new dwellings.

Over the 2000-2018 period, there were:

- 32 new partitions of residential parent parcels smaller than one-half acre in size, creating 39 additional parcels, averaging 2.1 per year.
- 23 new partitions of residential parent parcels of one-half acre to one acre, creating 34 additional parcels, averaging 1.8 per year.
- 11 new partitions of residential parent parcels of one to two acres in size, creating 16 additional parcels, averaging 0.8 per year.

- 9 new partitions of residential parent parcels larger than two acres in size, creating 14 additional parcels, averaging 0.7 per year.

Non-Entitled Properties in the UGB

The following table summarize the non-entitled properties in the UGB by size class.

Size	Total		Entitled		Non-Entitled	
	TLs	Bld Ac	TLs	Bld Ac	TLs	Bld Ac
<=0.5 bld ac	193	84	3	1	190	83
>0.5-1 bld ac	66	47	1	1	65	46
>1-2 bld ac	50	75	3	6	47	69
>2 bld ac	63	438	16	198	47	241
SUM	372	644	23	205	349	439

The subtotal of properties 0-2 acres is approximately 309 tax lots classified as vacant or partially vacant (193 TLs <0.5 acres, 66 TLs 0.5-1 acres, and 50 TLs 1-2 acres, with buildable acres between 0-2 acres totaling about 206 buildable acres ac (84 buildable acres in 193 TLs with 0-0.5 buildable acres, 47 buildable acres in 66 TLs with 0.5-1 buildable acres, and 75 buildable acres in 50 TLs with 1-2 buildable acres). This already excludes developed parcels <1/2 acre with an existing dwelling.

This section only adjusts capacity for non-entitled small lots in non-exception areas, so a subset of tax lots in non-exception areas is identified.

The assumptions in the June 2019 Draft HNA assumed the following capacity on vacant and partially vacant non-exception area properties smaller than 2 acres by zone, yielding 366 dwelling units of capacity.

Zone	Vac/PV <=2 ac		Vacant <=2 ac		PV <=2 ac		DU/Gross Ac	Vac&PV	Vac	PV
	TLs	Bld. Ac.	TLs	Bld. Ac.	TLs	Bld. Ac.		Cap (Dus)	Cap (Dus)	Cap (Dus)
R-1	81	30	60	13	21	17	3.1	93	41	53
R-2	75	21	67	15	8	6	4.3	90	64	25
R-3	20	6	18	5	2	1	4.8	29	22	6
R-4	36	10	34	9	2	1	6.1	61	54	9
County	21	19	6	5	15	14	4.9	93	25	66
SUM	233	86	185	47	48	39		366	205	158

Based on the analysis of historic partitions and development of vacant and partially vacant tax lots smaller than 2 total acres within the UGB in non-exception areas, the following revised assumptions are used for the baseline capacity analysis instead of the assumptions used in the June 2019 Draft HNA:

- **Vacant** lots less than 2 acres will be assumed to develop at the historic density by zone. This is the same assumption as the original methodology for these lots, yielding 205 new dwellings.
- **Partially vacant** lots less than 2 acres will be assumed to further develop through partitioning and development, consistent with the analysis above for historic partition

activity: there are 39 buildable acres, and these will yield an average of 1.15 new parcels per parent parcel acre, and each new parcel will be assumed to yield a new dwelling. This assumption yields 45 new dwellings on these lots. These parcels were assumed to yield 158 dwellings using the original methodology.

- **Together**, this yields 251 dwellings (with rounding differences) for tax lots smaller than 2 acres in non-exception areas, which are calculated separately. This is 115 fewer dwellings on these properties (251 dwellings vs. 366 dwellings).

5. Capacity for Already-Platted Vacant Lots within Landslide Constraint Area

Some vacant lots that were already platted in a subdivision were assigned no capacity because they were within the landslide constraint area. These lots are able to develop subject to approved geotechnical analysis, so these lots are assigned capacity consistent with the subdivision approval. 19 lots were affected, so the capacity is increased from 0 dwellings to 19 dwellings for these lots (1 dwelling for each lot).

Any other constraints and hazards not addressed in the June 2019 HNA or herein would be analyzed and addressed separately, and are not addressed herein.

Summary of Results

With each of the revisions above reflected in the BLI and capacity analysis, the aggregate results are as follows:

- **Revised Capacity of UGB Lands:** 2,129 DUs
- **Total Housing Need:** 5,269 (unchanged)
- **Revised Demand on Vacant/Partially Vacant Land:** 5,182 DUs
- **Deficit:** $2,129 - 5,182 = -3,053$ DUs

2041 Deficit, Gross Buildable Acres:

@4.9 avg historic density: -623 ac

@5.3 needed density: -576 ac

This is summarized in the following table.

2018-2041 Residential Capacity Analysis Revisions

Component	Description	Capacity - Dwelling Units		
		Original	Revised	Difference
2018 Capacity				
Total Relative to June 2019 Draft HNA		2,921	2,129	(792)
Adjustments				
1. Revised Total After Split-Zoned Lot Adjust.	BLI Buildable Res. Acres Adjusted to Split-Zoned Ac.	2,921	2,822	(99)
2. Exception Areas <2 acres	OAR 660-024-0067(6)	342	18	(324)
3. Exception Areas >=2 acres	Revise Avg. Hist. Density to R-1 Hist. Density	687	434	(253)
4. Elevation >415' (Potential Zone 3)	Subtract 6.5 bld ac in except. area @ R-1 Hist. Density	68	48	(20)
5. Small City Lot Adjustments*	Non-Exception Area < 2ac	366	251	(115)
6. Add Capacity to Platted Vacant Lots w/LSC	19 Small Vac. Platted Subd. Lots with Landslide Constr.	-	19	19
2018-41 Demand (for Vac/PV)				
Total		5,269	5,269	-
Adjustments				
7a. Vacant/Partially Vacant	To Address HB 2001 Amendments to ORS 197.296	4,847	5,182	335
7b. Infill/Redevelopment	To Address HB 2001 Amendments to ORS 197.296	422	87	(335)
2041 Deficit (for Vac/PC)				
Deficit: DUs		(1,926)	(3,053)	(1,127)
*Adjustments for small lots in Exception Areas are calculated separately above per OAR 660-024-0067(6) provisions				
2041 Deficit (Acres)				
Deficit: Acres @ Hist. 4.9 du/ac		(393)	(623)	(230)
Deficit: Acres @ Needed 5.3 du/ac		(363)	(576)	(213)

The following table summarizes the residential capacity analysis revisions by zone.

Zone	Capacity													Subtotal with Cap Adjust								
	Orig Capacity by Zone	1			2			3			4			5			6			Before	After	Diff
		Before	After	Diff	Before	After	Diff	Before	After	Diff	Before	After	Diff	Before	After	Diff						
R-1	449	449	428	-21									93	61	-32	0	19	19	449	415	-34	
R-2	551	561	569	8									90	71	-19				561	550	-11	
R-3	28	28	28	0									29	23	-6				28	22	-6	
R-4	127	127	110	-17									61	55	-6				127	104	-23	
County	1753	1753	1687	-66	342	18	-324	687	434	-253	68	48	-20	93	41	-52			1753	1638	-115	
SUM	2916	2916	2822	-96	342	18	-324	687	434	-253	68	48	-20	366	251	-115	0	19	2916	2129	-787	
	(2921 in Table 94)	2921 in table		-99 in table															Orig	Rev	Diff	
																			2921 in table		-792 in table	

Additional Considerations

This Addendum provides the amended baseline capacity analysis. The City has estimated a target future “needed density” of 5.3 du/gross acre, which applies to “buildable land,” excluding development assumed to occur through infill and redevelopment on properties classified as developed. This is an 8% increase over the historic average density of 4.9 du/gross acre. Given limitations on buildable lands within the current UGB, since the majority of lands are developed, there will be challenges in “bending the curve” to achieve significant efficiencies and additional density on lands already within the UGB. Additional density will likely need to be achieved on land to be added to the UGB. Much of the buildable land already within the UGB includes limitations, including:

- **Entitlements.** A substantial portion of the remaining buildable land within the UGB is in properties which already have entitled land use decisions that already establish the development densities, where it unlikely that new efficiency measures would influence the capacity of those entitled approvals.
- **Exception Lands.** Consistent with the OAR analysis provided herein, the majority of exception lands that were brought into the UGB are substantially parcelized and already developed with homes, distributed in a pattern which limits the likelihood that extension

of urban services for the limited amount of incremental development that would occur, or that higher densities would be achieved. These properties have developed because they didn't require service extensions, using on-site private wells and septic systems instead and served by rural streets. The incremental amount of additional development capacity compared to what has already developed makes the prospect of sewer, water, storm water, and city standard street improvements challenging given that the costs would be needed within an area that is significantly developed, where cost can't now be easily captured from existing development that has already occurred.

- **Small Lots.** A substantial number of the buildable lots are small city lots with existing homes, classified as "partially vacant" buildable land which exceed the size threshold to be classified as "developed", but which are unlikely to all develop during the planning period or achieve "needed density," despite the assumptions required by state law that they must all be classified as buildable and assumed to develop during the 20-year planning period in order to meet the identified housing needs for that period.
- **Infrastructure Capacity Limitations.** The few larger properties within the UGB which are not already entitled would have the greatest likelihood for efficiency measures that would have a greater likelihood of achieving increased capacity. However, several of those have infrastructure capacity limitations that present limitations to density and capacity increases through efficiency measures. For example, sewer modeling is typically based on historic density achieved by zone rather than maximum density permitted by zone. In many cases, there is insufficient sewer capacity to build to the maximum density permitted by the zoning, let alone higher densities associated with potential upzoning.

Because the City completed the June 2019 Draft HNA prior to enactment of HB 2001, and with the above limitations, the Draft HNA doesn't include assumptions for increased capacity for residential buildable lands within the UGB in excess of historic density based on existing zoning. It provides a baseline capacity analysis. The baseline capacity analysis is based on the existing zoning of lands in the UGB.

The City is continuing to evaluate efficiency measures identified in the June 2019 Draft Housing Strategy. The greatest likelihood for achieving the identified "needed density" for the needed number of new housing units would result from inclusion of buildable lands in the UGB for which there are greater opportunities for efficiencies associated with new master planned development on larger properties.

Exhibits 94 and 96 provide the capacity of buildable lands within the UGB based on the historic density. Exhibit 96 also summarizes capacity of land within the UGB for historic density of 4.9 du/gross acre and for needed density of 5.3 du/gross acre.