



CLARK COUNTY, WA. // HOW MAY PEOPLE ARE WE GOING TO PLAN FOR?

THE 20 YEAR PLAN ONLY CARRIES US 7.1 YEARS USING UPDATED PROJECTIONS

		2016 CLARK COUNTY PLAN	ESTIMATED PROJECTIONS
20 year population gr			2% = 227,756
Number of Jobs		75,844	55,928
Application of the U.S.	Streets	*	36.3%
Infrastructure needs	Parks	-	12.8%
(% of acres)	Schools		7.3%
(70 Or acres)	Other	-	0.5%
	Total	27.7%	56.1%
	Residential	50%	20-30%
Developable Critical	Commercial	80%	50%
Lands Assumptions	Industrial	esidential 50% 2 commercial 80% dustrial 50%	
	Port	50%	70%
"Will not convert in	Residential	10-30%	15-35%
20 years"	Commercial	0%	10-30%
20 years	Industrial	0%	10-30%

YEAR	¹ POPULATION	PERCENT CHANGE
2000	345,238	-
2001	360,760	4%
2002	370,236	3%
2003	379,577	3%
2004	392,403	3%
2005	400,722	2%
2006	412,938	3%
2007	418,070	1%
2008	424,733	2%
2009	432,002	2%
2010	425,363	-2%
2011	433,418	2%
2012	437,226	1%
2013	442,843	1%
2014	450,441	2%
2015	459,495	2%
Average y	/ear-over-year growth	2.1%

¹ U.S. Census Bureau





Summary

Population

20 year urban population growth at 2%	204,980
2016 urban Comp Plan population growth	134,040
2016 urbanComp Plan with tested assumptions	72,841
Life of 2016 urban Comp Plan with tested assumptions	7.1 years

Residential Infrastructure

2016 New Comp Plan residential infrastructure assumption	27.7%
Realistic Assumptions	56.9%
Onsite infrastructure	36.3%
Parks Plan	12.8%
Schools Plan	7.3%
Other	<u>>1%</u>
Total	56.9%

Developable Critical Lands Assumptions

	2016 Plan	New Reality
Residential	50%	20-30%
Commercial	80%	50%
Industrial	50%	30%
Port	50%	70%

"Will not convert in 20 years" Assumptions

	2016 Plan	New Reality
Residential	10-30%	15-30%
Commercial	0%	10-30%
Industrial	0%	10-30%

Jobs

	2016 Plan	New Reality
New Urban Households	49,684	85,622
New Urban Jobs	75,844	55,928

Redevelopment jobs (+/- 17,000) Public sector jobs (+/- 7,700)





Population Projection

459,495 Populations at the end of 2015 (Columbian, 2016)

2015 had 2.0% population growth

Assume 2% population growth for 2016

468,685 Population after 2% growth in 2016 (this would be the starting point for the new plan)

20 years of population growth

2% growth = 227,756 new residents; 696,441 total population

1.8% growth = 200,948 new; 669,663 total population

1.5% growth = 162,565 new; 631,251 total population

1.3% growth = 135,348 new; 604,033 total population

Census

2010 Household size = 2.69 persons per household. 2.576 for all housing units

5.1% vacant housing units

Start the plan with 6/15/16 as updated

Vancouver all residential units = 2.39 per household

Battle Ground all residential units = 2.90 per household

Camas all residential units = 2.65 per household

Jerry's note to himself, re conversation with Bob Poole on Population Projections

The only population projection the county used in the 2016 Comp plan was 1.12%.

This resulted in a population growth for the 20 year period of 2015-35 of 115,000 people, including 11,500 rural residents at a 90-10 split.

When they began analyzing the growth boundaries, this growth did not fill up the existing boundaries.

They did not reduce the growth boundaries, but they held them fixed and calculated a capacity based on the existing growth boundaries, which was about 135,000 people. Add to this the 11,500 rural growth and the total is about 146,500 for the 20 year period.

This is a growth rate of about 1.4%. A growth rate of 2% would generate 205,000 people in 20 years.

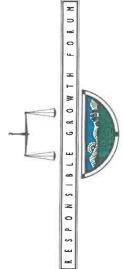
Residential Infrastructure Includes:

Onsite	36.3%
New Streets, public and private	
Street widening	
On site storm ponds	
On site open space	
On site recreational areas	
Offsite	
New arterials	?
Widened arterials	?
New freeways	?
Widened freeways	?
Parks per Parks Plan	12.8%
Neighborhood Parks	
Community Parks	
Regional Parks	
Schools per Schools Plan	7.3%
Elementary Schools	
Middle Schools	
High Schools	
Sports field complexes	?
Churches	0.5%
Police stations	?
Fire Stations	?
PUD substations	?
Powerlines	?
EMS stations	?
Daycare facilities	?
Temporary Subtotal	<u>20.6%</u>
Temporary Total	56.9%

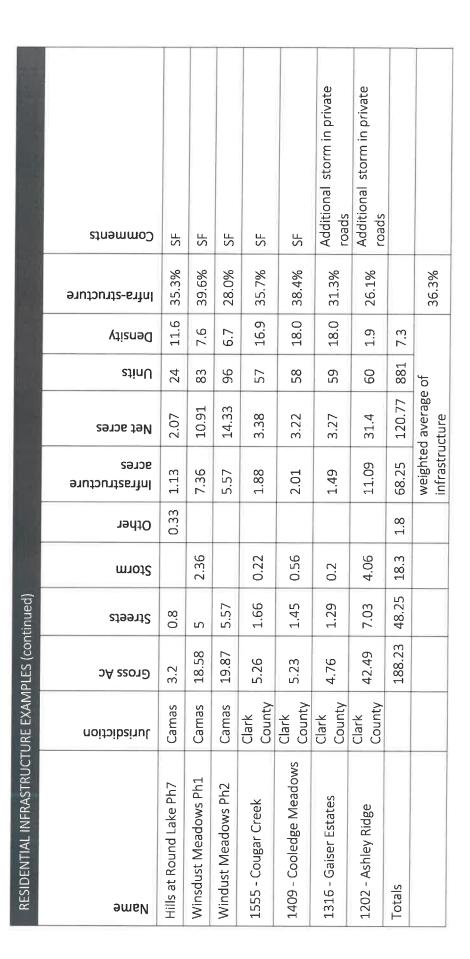




RESIDENTIAL INFRASTRUCTURE EXAMPLES	JRE EXAM	PLES			, di						100
Name	Jurisdiction	oA ssord	Streets	mıot2	Other	Infrastructure acres	serse teV	stinU	Density	erintourite-erifnl	comments
Whipple Creek Village	Clark	7.33	1.81	0.68		2.49	4.84	48	9.9	34.0%	2007 Plat town-houses
North Hills	Camas	9.98	4.07	0.34	0.1	4.41	5.57	44	7.9	44.2%	SF
Belz Place, Phase 1	Camas	14.25	3.74	1.3	0.33	5.37	8.88	48	5.4	37.7%	SF
Kates Cove	Camas	6.59	2.67	0.48		3.15	3.44	29	8.4	47.8%	SF
Winston Estates	Clark	5.45	0.89	0	0	0.89	4.56	24	5.3	16.3%	SF, no storm
Cascade Woods	Clark	2.07	0.11	0.42	0	0.53	1.54	28	18.2	25.6%	attached, existing streets
Birrel Estates	Clark	0.93	0.22	0	0	0.22	0.71	14	19.7	23.7%	attached, no storm, pvt streets
Generation place	Clark	4.85	1.19	0.37	0	1.56	3.29	56	17.0	32.2%	attached
Hills at Round Lake Ph1	Camas	4.64	1.33	0	0.52	1.85	2.79	19	6.8	39.9%	SF
Hills at Round Lake Ph2	Camas	5.51	2.41		0.41	2.82	2.69	24	8.9	51.2%	SF
Hills at round Lake Ph3	Camas	3.94	1.07			1.07	3.94	17	4.3	27.2%	SF
Hills at round Lake Ph4	Camas	13.88	2.03	7.31		9.34	4.54	30	9.9	67.3%	SF, Storm area serves other phases
Hills at Round Lake Ph5	Camas	3.56	1.4			1.4	2.16	25	11.6	39.3%	SF
Hills at Round Lake Ph6	Camas	5.86	2.51		0.11	2.62	3.24	38	11.7	44.7%	SF



BUILDING INDUSTRY ASSOCIATION OF CLARK COUNTY







Parks Vancouver

Vancouver & Clark County Parks Plan requires 7.5 Ac Urban Parks per 1,000 population

Vancouver code requires 6 Ac Urban Parks per 1,000 population = 5 parks and 1 open space

For the Current Plan of 135,348 population growth, this would calculate to 1015 Acres of urban parks at the 7.5 ac standard

For the Current Plan of 135,348 population growth, this would calculate to 812 Acres of urban parks at the 7.5 ac standard

Using the 6 ac Standard

1000 pop/2.66 pop per hh = 6 ac per 376 HH = .016 ac per HH * 8hh per ac = 0.128 ac parks per 1.0 ac

This equates to 12.8% of Vacant Buildable Land for parks

Parks Camas

Camas has planned 5 ac Neighborhood Parks and Community Parks per 1000 population

Camas also has planned in addition 30 acres of Open Space per 1000 population.





Schools Population Projection

Battle Ground Schools data (old comp plan*)

0.373 students K-6 per household =0.053 student/grade/household

0.083 students 7-8 per household = 0.044 student/grade/household

0.130 students 9-12 per household = 0.0325 student/grade/household

Camas data (old comp plan*)

0.256 students K-5 per household = 0.043 student/grade/household

0.129 students 6-8 per household = 0.043 student/grade/household

0.165 students 9-12 per household = 0.041 student/grade/household

New School Needs (for existing CompPlan) (use Camas data)

Existing 20 year plan = 50281 Household

K-5 = 50281*0.048x6=14481 new students

 $6-8 = 50281*0.043 \times 3 = 6486$ new students

9-12 = 50281* 0.037 x4 = 7441 new students

K-5 = 14481 students @ 600/school = 24.1 schools @ 10= 241 Ac

6-8 = 6486 students @ 1000/school = 6 schools @ 20 = 130 Ac

9-12 = 7441 students @ 2000/school =8 schools @ 40 =149 Ac

Total 29,353 students

520 Ac

Each HH requires 0.0135 Ac.,- each net Acre needs 0.062 to 0.083 Acres, depending on density.

Schools = 6.2% to 8.3% of net developable land

* ESD 112 and Evergreen School District verified that these are still valid numbers to use.





Will Not Convert

This does not mean never to convert; it just means that this parcel will not develop in the 20 year time frame.

Examples:

- Property erroneously categorized by GIS, and may be already converted.
- Property that will be converted to a preservation status, such as historic, conservancy, or land trust.
- Industrial property that is 100% used now, but has a low real property value per acre, such as batch plants.
- Polluted property too expensive to clean up.
- Property in a low intensity use that the property owners want to keep, such as Steakburger prior to redevelopment.
- Commercial outside sales areas.
- *Long haul trucking parking lots.
- *Golf driving ranges
- *Landfill sites, not identified as such.
- Urban homes on large lots, kept in the family, or used as a residence for a long time.
- Development costs that preclude development, such as frontage improvements, drainage issues, or expensive sewer extensions
- Mobile homes on lots, not excluded.
- *Parking lots not taxed with the adjacent use, but used as such.
- Parcel may be large enough, but geometry prevents further division.
- *Section 30
- Owner's expectations are more than the market will pay.
- Current owner plans to reside on property until he retires, and then sell.

Recommendations:

15%-- Res vacant will not convert

35%-- Res underutilized will not convert

15%-- Com and Ind vacant will not convert

30%--Com and Ind underutilized will not convert

^{*}Shown as vacant because there are no current structures.

double check with county 135.3 18,571.0 13,273.2 5,297.9 11,030.9 2,629.3 10,294.9 13,832.4 6,247.4 832.3 16,542.3 62,555.9 74,321.6 4,726.0 2,735.6 1,295.6 3,924.9 11,765.7 7,461.6 390.9 21.2 77.3 247.4 268.5 468.3 Persons Persons per HH 1,961.9 1,053.2 4,147.0 988.5 147.0 **Housing Units** 50.8 7,002.6 2,348.7 312.9 6,531.8 23,517.3 8.0 5,200.2 487.1 27,940.4 1,776.7 1,028.4 2,805.1 176.0 101.0 February 2016 BOCC Preferred Alt Summary Totals 2016 subtotal exdusion Infra Infrastr Acres Developable Hauseline Housing density 327.0 1,167.1 121.8 8,5 645.0 391.4 52.1 1,088.6 552.9 3,492.6 Infrastr Acres Developable Excusion Net Acres 831.7 691.2 175.5 247.1 121.8 171.4 467.5 36.7 44.0 23.3 7,273.5 866.7 296.1 25.2 122.6 343.1 150.0 2,767.6 2.8 264.8 67.3 94.0 141.2 247.1 20.0 417.1 1,118.8 1,329.6 178.0 14.1 16.9 9.7 332.1 210.8 112.4 65.7 8.9 structure % 561.5 229.4 379.7 415.0 250.7 417.5 3.1 1,8 955.6 30,5 1,053.5 2,855.4 21.1 59,9 6,438.7 702.5 373.2 14.8 Acres 131.8 202.7 104.7 54.6 222.3 will not convert acres 385.4 151.3 2,400.6 0.0 349.5 288.5 9.6 1,196.1 83.9 1.1 156.4 5.6 6.6 14.8 will not convert 158.5 606.1 414.1 226.2 1,395.6 2.0 445.8 1.8 55.3 124.7 91.2 20.9 668.1 1,659.3 166.8 94.3 261.1 9.1 11.2 45.0 3,664.9 critucal exclusion acres critical exclusion 1,797.3 740.0 2,550.3 1,517.4 0.0 1,901.3 314.2 921.2 102.7 6,498.8 7,677.5 16.4 88.9 13.1 383.9 570.6 0.0 2,559.2 1,178.7 0.0 403.9 0.0 1,063.1 82.0 5,8 0.0 94.8 15,928.1 **Gross Acres** copyright 2016 Jerry Olson RESIDENTIAL T RESIDENTIAL **Battle Ground** Total Washougal Total Ridgefield Vancouver Total La Center Woodland Total Total Yacolt Total Total NGA NGA New NGA UGA UGA City City New City New City UGA City UGA UGA

10294

832

62909

2735 4765

11814

390 77 0

247

135121

135,390.6

50,244.2

2645 1295

5298

121

12546

11031

2801

Assumptions

ı,	nf	ra	ct	hei	11/	٠ı	۱.		
ш		10	· 51		111			11	_

Infrastructure			
	Residential deduction	27.70%	
	Residential deduction Camas	27.70%	
	Residential deduction Ridgefield	27.70%	
	Commercial deduction	25.00%	
	Industrial deduction	25.00%	
	Industrial deduction port	25.00%	
	Mixed Use deduction residential	25.00%	27.7
	Mixed Use deduction commercial	25.00%	27.7
	Mixed Use deduction employment	25.00%	
Never to convert			
Never to convert	Vacant residential deduction	10.00%	
	Underutilized residential deduction	30.00%	
	Commercial deduction vacant	0.00%	
	Commercial deduction underutilized	0.00%	
	Industrial deduction vacant	0.00%	
	Industrial deduction underutilized	0.00%	
	Industrial deduction port	0.00%	
	Mixed Use deduction residential	10.00%	
	Mixed Use deduction commercial	0.00%	
	Mixed Use deduction employment	0.00%	
Critical			
	Residential deduction vacant	50.00%	
	Residential deduction underutilized	50.00%	
	Commercial deduction vacant	20.00%	
	Commercial deduction underutilized	20.00%	
	Mixed Use deduction residential vac	20.00%	50
	Mixed Use deduction residential UU	20.00%	50
	Mixed Use deduction comercial vac	20.00%	
	Mixed Use deduction comercial UU	20.00%	
	Industrial deduction vacant	50.00%	
	Industrial deduction underutilized	50.00%	
	Port deduction	50.00%	
	Battle Ground MU-R		
	Battle Ground MU-E		
Density			
,	BG res	6	

Camas res

6

	La Center res Ridgefield res Vancouver res Washougal res Woodland res Yacolt res	4 6 8 6 4 4	
Jobs	Commercial jobs per acre Industrial jobs per acre Port jobs per acre	20 9 9	
Mixed Use	Res MU (res 60 - com 40) BG Res MU (res 80 - com 20) Employment res MU (res 25 - com 75)	60.00% 80.00% 25.00%	
Housing	People per res unit	2.66	
Population	Population projection	1.1%	

The VBLM Spreadsheet

- 1) This is the County Data as of the end of the process in 2016. We gave a copy to Bob Pool, and outside of a few inconsistencies around mixed use, he liked it. Actually, they incorporated my style into their spreadsheet.
- 2) There are two copies of the database on the thumb drive, and they are the same. One is named Master, and should not be edited. The other is called "Play around with". If you want other versions of "Play around with", simply do a "save as" with the Master for another copy.
- 3) There are many sheets in the spreadsheet, but only two are directly important. The one called "Summary" is a summary of all the calculations by type and city. There is a number for total population accommodated by this calculation, depending on what the assumptions are. The same exists for jobs by Commercial and Industrial.
- 4) This spreadsheet does not account for any redevelopment, except on underutilized commercial and industrial.
- 5) The Sheet called "Assumptions" lists all of the assumptions in play. By changing any of the numbers on this sheet, the calculations are changed throughout the spreadsheet. As an example, the plan will accommodate about 134,000 new residents, and by changing any of the residential assumptions, such as "development on critical lands", that number will change, as will the numbers for the affected cities.
- 6) There are three Sheets for each city, one inside the city limits, one outside the city limits in the UGA, and one for the proposed new land for the UGA. The new land is already in the number for the UGA.



Practical expertise. Exceptional results.

222 E. Evergreen Blvd. Vancouver, WA 98660 360-695-1385

Dear Rep. Pike,

I am sorry I cannot make your hearing tomorrow on GMA, but I hope these few comments will be acknowledged.

I am the owner of an Engineering Company in Vancouver, and have been since 1968, long enough to have participated in the application of the first Urban Growth Boundary in Clark County in the early 1970's. It was accepted by the building community at that time because it was large enough to prevent price pressure on housing prices caused by a reduced supply.

I directed the Government Affairs of the Clark County Homebuilders from 1976-2006, served on their Board of Directors for all of that time, and have been on the Board of the Responsible Growth Forum since 1989. The Comp Plans of 1980, 1994, 2004, 2007, and 2016 have been reviewed during in that period, and I have offered extensive input into all of them.

Busse Nuttley was my staff at CCHBA when she was elected to the House, and we had frequent phone conversations during the adoption of GMA. One of our mutual concerns was that Urban Boundaries not become iron curtains, and that a true 20 year supply be offered inside.

Once implementation reached to the local level, text book planners have managed to shrink that 20 year supply down to much less than a ten year supply, and it is getting worse. With even this mild recovery we are experiencing, lot prices and home prices in Clark County have soared.

This reduction in the supply is mostly accomplished by how you define the 20 year supply, and by the assumptions you use.

Population Projection:

The new plan is anticipating using 1.1% as the projected growth rate, and never, except in the very depths of this last recession for a limited time, has Clark County grown at that snail's pace. The growth rate is already over 2%, and has never been under 2% for any lengthy period in my 50 years in Clark County.

Infrastructure:

Planners have always underestimated the public infrastructure needed, and the effects of generous park plans, extensive storm drainage, and large tracts for schools.

Critical Land Conversion:

The new plan, as well as the previous ones, carries the ridiculous assumption that over half of the thousands of acres of critical land in the Urban Boundaries will develop to full density. Not only that, but with each new plan, those undeveloped critical lands are still there, and the percentage of critical lands in the vacant buildable lands inventory increases.

Jobs per Acre:

The overuse of the Business Park Zone to gain the advantage of a designated 20 jobs per acre has been opposed by the business community. The majority of the high paying jobs want to go to an industrial zone. The Port of Vancouver estimates 3-4 jobs per acre on its Gateway development, when the report uses 9 jobs per acre.

Mixed Use:

No one wants Mixed Use. It is a Smart-Growth Planning dream that people want to live over a Safeway Store on the outskirts of Battleground, and those tracts designated Mixed Use go undeveloped.

Please see the attached Planning Assumptions from the Comp Plan, with my superimposed comments.

Thank you for considering my testimony on GMA.

Jerry Olson, PLS, PE
Olson Engineering, Inc.
222 East Evergreen Blvd
Vancouver, WA 98660
wcrolsons@tds.net
jolson@olsonengr.com\3606951385