

Schroader, Kathy



From: Orjiako, Oliver
Sent: Tuesday, November 17, 2015 11:31 AM
To: Euler, Gordon, Alvarez, Jose; Anderson, Colete, Albrecht, Gary, Hermen, Matt, Kamp, Jacqueline, Lebowsky, Laurie, Lumbantobing, Sharon, Wisner, Sonja
Cc: Schroader, Kathy
Subject: FW: fix
Attachments: Planning Assumption Choices rev 108 - Table 2.pdf, Planning Assumption Choices rev 108 - Table 1.pdf, GraphOfPopulationOptions - Graph1.pdf, Planning Assumption Choices rev 108.docx

FYI and for the record Thanks

From: Madore, David
Sent: Tuesday, November 17, 2015 8:53 AM
To: Orjiako, Oliver
Subject: fix

Oliver,

Thank you for your team's wonderful work yesterday that successfully executed our Hockinson High School open house. Everything was so well planned and organized. Please express my great appreciation to your staff.

I noticed last night that I neglected to update graph 1 in the Word doc to match the Panel Boards and PowerPoint slides. The attached document fixes that. The paper copies that were already printed will continue to be fine and can be used since the difference is so minor and both are still 100% accurate.

Please swap the Word doc posted here with this attached Word doc that fixes that minor detail.
<http://www.clark.wa.gov/planning/2016update/documents/PlanningAssumptionChoicesrev108.pdf>

Also, the two tables and Graph 1 posted here do not load properly because they use very high resolution large files.
http://www.clark.wa.gov/planning/2016update/documents/2015_NOV_PUBLIC_MEETING_BOARDS_ALL_reducedsize.pdf

I emailed normal size pdf files to fix the problem yesterday to replace those three slides. They too are attached for your convenience. Please let me know if there is anything else that I can do to help and support your team.

Thank you,

David

Clark County

2016 Comprehensive Growth Management Plan Update



CHECKING IN ON OUR FUTURE

Proposed Changes to Planning Assumptions

An Evidence Based Proposal to the Community

11/15/2015

This document focuses primarily on the rural assumptions of the 2016 Comp Plan update, particularly Alternative 1 and Alternative 4. The proposal contrasts existing choice A with the proposed choice B and provides the factual basis for each. Table 1 provides the assumptions that define the methods for calculating the capacity for rural parcels to accommodate population growth. Table 2 provides the general planning assumptions for population growth, accommodating that growth, GMA considerations, and logical conclusions. The Reference Section provides relevant evidence, the historical basis, and supporting calculations for the two assumptions tables. The purpose of this document is to present the compelling need to revise the original draft assumptions with more accurate, appropriate, realistic, and evidence based assumptions and to apply the insight gained from staff, cities, citizens, the GIS database, and actual historical records to the planning methods and process.

Table 1: GIS Rural Vacant Buildable Lands Model (VBLM) Assumptions

Ref	A (existing)	B (proposed)
1	Every possible rural parcel shall be counted as a parcel that will develop regardless of conditions that would likely make such development unlikely.	These rural VBLM assumptions should be used not to reflect what is possible, but to reasonably plan for what is likely. Parcels that cannot reasonably be expected to develop should not be counted as parcels likely to develop. Cluster development remainder parcels that are known to be prohibited from further development should not be counted as parcels likely to develop.
2	Rural parcels located in areas far from basic infrastructure with continuous long term commercial forestry operations should be counted as parcels that will develop.	Parcels located in areas far from infrastructure with long term commercial forestry operations likely to continue should not be counted as likely to develop. These assumptions are not used to authorize or to prohibit the development of individual parcels. Rather, these assumptions should only be used for tallying parcel totals for general planning information.
3	Rural parcels including 100% of environmentally constrained areas that lack sufficient area for septic systems and well clearances shall be counted as rural parcels that will develop.	Rural parcels that have less than 1 acre of environmentally unconstrained land sufficient area for septic systems and well clearances should not be counted as likely to develop.
4	History shows that about 30% of dividable parcels with homes and 10% of vacant dividable parcels do not develop further. So those deductions have been applied to urban planning totals for years. But every rural parcel shall be counted as a parcel that will divide to the maximum degree possible.	History shows that about 30% of dividable parcels with homes and 10% of vacant dividable parcels do not develop further. So those deductions have been applied to urban planning totals for years. These same deductions should be applied to rural planning totals as well.
5	As long as county code allows, lots that are up to 10% smaller than the minimum lot size should be considered as conforming lots and counted as parcels likely to develop.	Same
6	Although county code prohibits most nonconforming parcels from developing, all nonconforming parcels with 1 acre shall be counted as rural parcels that will develop.	Due to some exceptions from the norm, 10% of nonconforming parcels with at least 1 acre of unconstrained area will likely develop.
7	A 15% urban Market Factor provides some margin for the law of supply and demand to comply with the GMA requirement to provide a sufficient supply and achieve the affordable housing goal. But a 0% Market Factor shall be used for rural areas.	A 7.5% rural Market Factor should be used to provide a reasonable margin for the law of supply and demand to comply with the GMA requirement to provide a sufficient supply and achieve the affordable housing goal. Implementation of this rural Market Factor is accomplished by deducting this percentage of parcels from the total available rural parcels. Note that this rural Market Factor is half of the urban Market Factor of 15% in order to also satisfy the GMA goal of reducing low density sprawl.
8	A 27.7% infrastructure deduction for infrastructure including roads, storm water, parks, schools, fire stations, conservation areas, lakes, streams, protected buffers, Etc.. A 0% deduction shall be used for rural areas.	Same

Table 2: Planning Assumptions

Ref	A (existing)	B (proposed)
1	The 20 year urban population is forecasted to increase by 116,591.	Same
2	The actual urban/rural split has consistently been 86/14 for decades. But a 90/10 split shall be used instead to lower the rural population growth forecast to only 12,955 persons.	The actual urban/rural split has consistently been 86/14 for decades and is a viable policy option. The 1994 approved plan used 80/20. A more moderate policy of 87.5/12.5 forecasts 16,656 new rural persons for this plan update.
3	The annual county-wide population is forecasted to grow by 129,546 from 448,845 in 2015 to 578,391 in 2035 which calculates to an annual growth rate of 1.28%.	The county-wide population is forecasted to grow by 133,247 from 448,845 in 2015 to 582,092 in 2035. That is a 1.31% annual growth rate. That total is 0.6% higher than choice A. The annual rate is 0.03% higher than choice A.
4	The choice A assumptions assert that Alternative 1 would add 18,814 new persons in the rural area which is 45% more impact than necessary since choice A forecasts a need for 12,955 new persons in the rural area.	The choice B assumptions show that Alternative 1 can fit 8,182 new persons which is 51% too low. Thus Alternative 1 is not a viable option since it cannot comply with the GMA requirement to provide for the forecasted growth. (8,182 / 16,656)
5	The choice A assumptions assert that the original draft Alternative 4 map would add 32,987 new persons which is 155% more impact than necessary since choice A forecasts a need for 12,955 new persons in the rural area.	The choice B assumptions assert that the updated Alternative 4 map can accommodate 16,332 new rural persons. That falls within 2% of the forecasted rural population growth of 16,656 persons. Therefore, Alternative 4 is the appropriate choice.
6	No improvements or mitigations that were identified in the public process should be allowed. Each draft alternative must be accepted or rejected as is. Any revisions would require the process to start over and result in missing the required deadline.	The Alternative 4 updated maps include mitigations that increase the variety of lot sizes including AG-20, preserve large parcels near the UGBs for future employment, and better preserve the rural character. These revisions and planning assumptions should be allowed as proposed.
7	Cluster options are not necessarily included in any Alternative and therefore may not be available to preserve open space or large areas of habitat.	Rural cluster options are to be integrated into Alternative 4 within the limits of the law per previous direction given by the Board for R, AG, and FR zones to provide flexibility, to preserve open space, and to better provide for larger aggregated areas of habitat.
8	The existing Alternative-1 map defines 57% of existing R parcels as nonconforming, 76% of existing AG parcels as nonconforming, and 89% of existing FR parcels as nonconforming. It is not realistic since it does not fit the already developed patterns that actually exist.	The updated Alternative-4 map should be adopted to correct the mismatch between Alternative 1 map and the already developed patterns that actually exist, to respect predominant lots sizes, to resolve some spot zoning problems, and to best accommodate the forecasted population.

Graph 1: Rural Population Capacity and Forecast

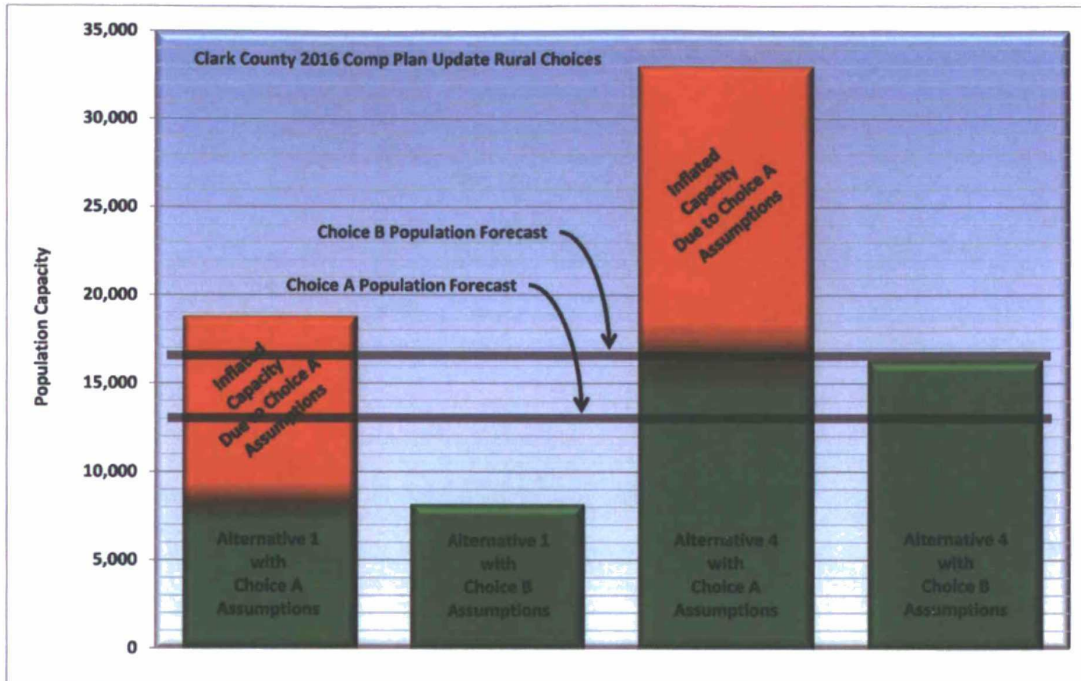


Table 3: The Actual Urban / Rural split for the past 20 years

Year	County-wide Population	Rural Population	Percent Rural Population	Urban / Rural Split
1995	279,522	43,254	15.5	84/16
1996	293,182	44,882	15.3	85/15
1997	305,287	46,409	15.2	85/15
1998	319,233	48,104	15.1	85/15
1999	330,800	49,429	14.9	85/15
2000	346,435	51,182	14.8	85/15
2001	354,870	52,002	14.7	85/15
2002	369,360	53,548	14.5	85/15
2003	375,394	54,146	14.4	86/14
2004	384,713	54,869	14.3	86/14
2005	395,780	56,009	14.2	86/14
2006	406,124	57,551	14.2	86/14
2007	414,743	58,608	14.1	86/14
2008	419,483	59,042	14.1	86/14
2009	424,406	59,623	14.0	86/14
2010	427,327	59,858	14.0	86/14
2011	432,109	60,544	14.0	86/14
2012	435,048	60,845	14.0	86/14
2013	443,277	61,489	13.9	86/14
2014	446,785	61,948	13.9	86/14

Source: Clark County Assessor GIS records:

The following table documents the actual capacity of the rural area to accommodate the potential population increase for Alternative 1 and Alternative 4 using proposed choice B assumptions compared to the existing choice A assumptions considered in the DSEIS. The revised Alternative 4 map with Choice B assumptions is the proposed Choice B policy.

Table 4: Rural Capacity to Accommodate Population Growth

	Alt-1 Capacity per DSEIS Choice A (existing)	Alt-1 Actual Capacity Choice B (proposed)	Alt-4 Capacity per DSEIS Choice A (existing)	Alt-4 Actual Capacity Choice B (proposed)
Rural Zone	5,684	2,570	9,880	4,710
Agriculture Zone	970	286	1,958	733
Forest Zone	419	162	563	1,097
Nonconforming likely		183		74
Other Rural Zones		124		124
Gross potential growth home sites	7,073	3,325	12,401	6,638
7.5% Market Factor deduction	0	-249	0	-498
Net potential growth of home sites	7,073	3,076	12,401	6,140
Potential population growth	18,814	8,182	32,987	16,332

Source: Clark County GIS:

Correcting the population growth planning assumptions:

The following table lists the population, growth rates, and urban/rural split options for resolving the differences between the tables in the DSEIS, the adopted resolutions, and planning assumptions. Reference 4 is proposed Choice B policy.

Table 5: Variations in Population Forecast Documentation

Ref	Starting population in the year 2015	20-year county-wide population projection	Planned county-wide population growth	Planned urban population growth	Planned rural population growth	Stated annual growth rate	Actual annual growth rate
1	448,845	578,391*	129,546*	116,591	12,955	1.12%*	1.28%
2	447,865	577,431*	129,566*	116,609	12,957	1.25%*	1.29%
3	448,815	577,431*	128,616*	115,754	12,862	1.26%*	1.27%
4	448,845*	582,092	133,247	116,591*	16,656	1.31%	1.31%

* indicates a directly specified parameter that drives the other parameters.

The calculations for each of the table entries are as follows:

Ref 1: The most recent population growth projection was adopted on April 14, 2015 via resolution# 2015-04-05

<http://clark.wa.gov/thegrid/documents/2015-04-05.pdf>

2015 starting population = 578,391 – 129,546 = 448,845

The Urban/rural population growth split = 90% urban, 10% rural

2035 urban population growth = 129,546 *0.9 = 116,591

2035 rural population growth = 129,546 *0.1 = 12,955

County-wide annual growth rate = 578,391 / 448,845 = 1.2886208

The 20th root of 1.2886208 = 1.012759, annual growth rate = 1.28%

Ref 2: DSEIS table S-1 on page S-2

<http://clark.wa.gov/cgrid/images/DSEISTableS-1.JPG>

2015 starting population = 577,431 – 129,566 = 447,865

The Urban/rural population growth split = 90% urban, 10% rural

2035 urban population growth = 129,566 * 0.9 = 116,609

2035 rural population growth = 129,566 * 0.1 = 12,957

County-wide annual growth rate = 577,431 / 447,865 = 1.289297

The 20th root of 1.289297 = 1.012859, annual growth rate = 1.29%

Ref 3: DSEIS table 1-1 on page 1-2

<http://clark.wa.gov/cgrid/images/DSEISTable1-1.JPG>

2015 starting population = 577,431 – 128,616 = 448,815

The Urban/rural population growth split = 90% urban, 10% rural

2035 urban population growth = 128,616 * 0.9 = 115,754

2035 rural population growth = 128,616 * 0.1 = 12,862

County-wide annual growth rate = 577,431 / 448,815 = 1.286568

The 20th root of 1.286568 = 1.0126786, annual growth rate = 1.27%

Ref 4: Corrected starting population and urban population growth to original resolution# 2015-04-05 with 87.5/12.5 urban/rural split.

For 87.5/12.5 urban/rural population growth split, the numbers are as follows:

2035 urban population growth = 116,591 (from resolution# 2015-04-05).

Keeping the same urban growth, the rural population growth is calculated as follows, where X = the rural population growth:

$X = 116,591 * .125 / .875 = 16,656$

County-wide population growth = 116,591 + 16,656 = 133,247

County-wide 2035 population = 448,845 + 133,247 = 582,092

County-wide annual growth rate = 582,092 / 448,845 = 1.2968664

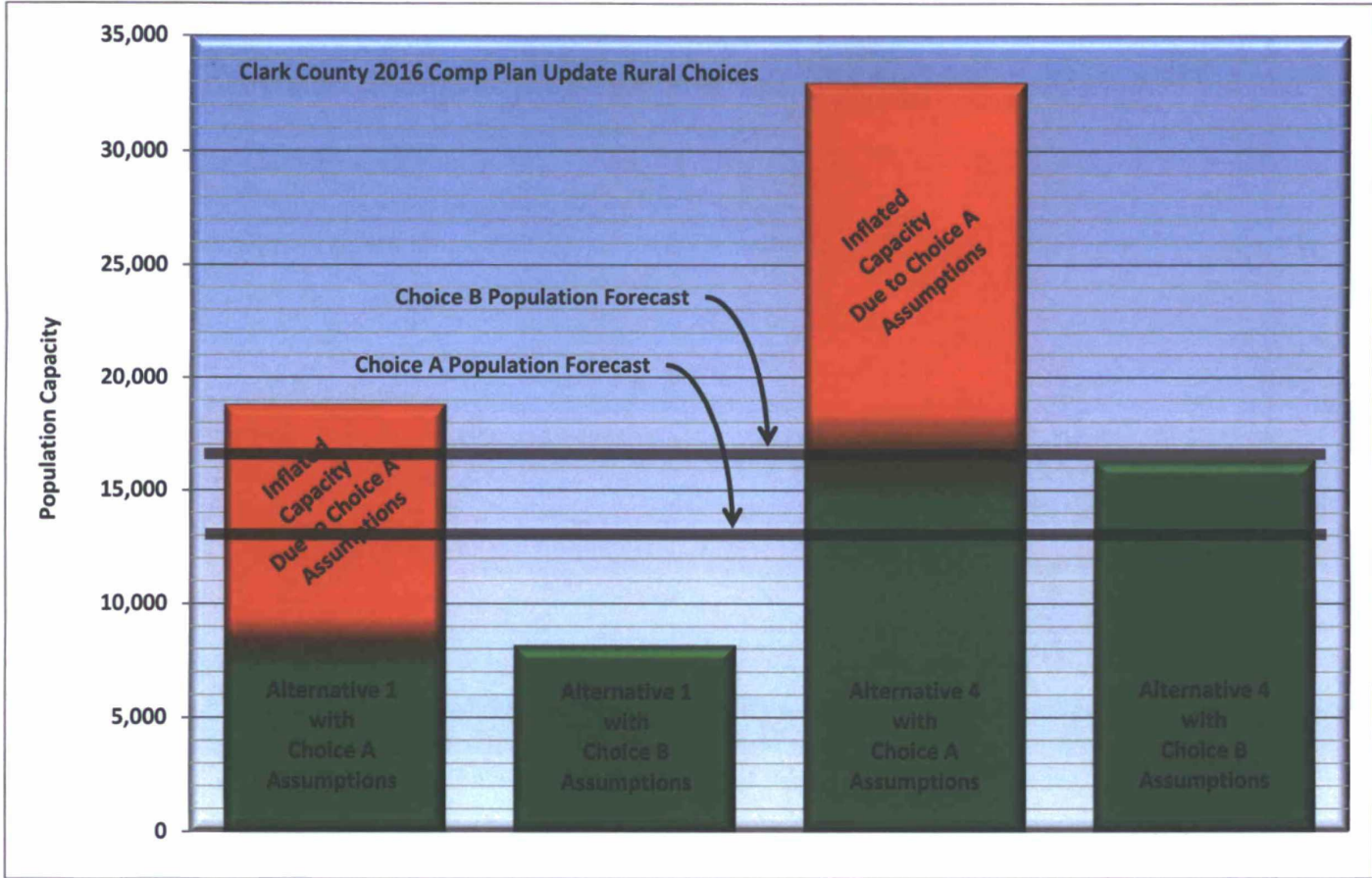
The 20th root of 1.2968664 = 1.01308238, annual growth rate = 1.31%

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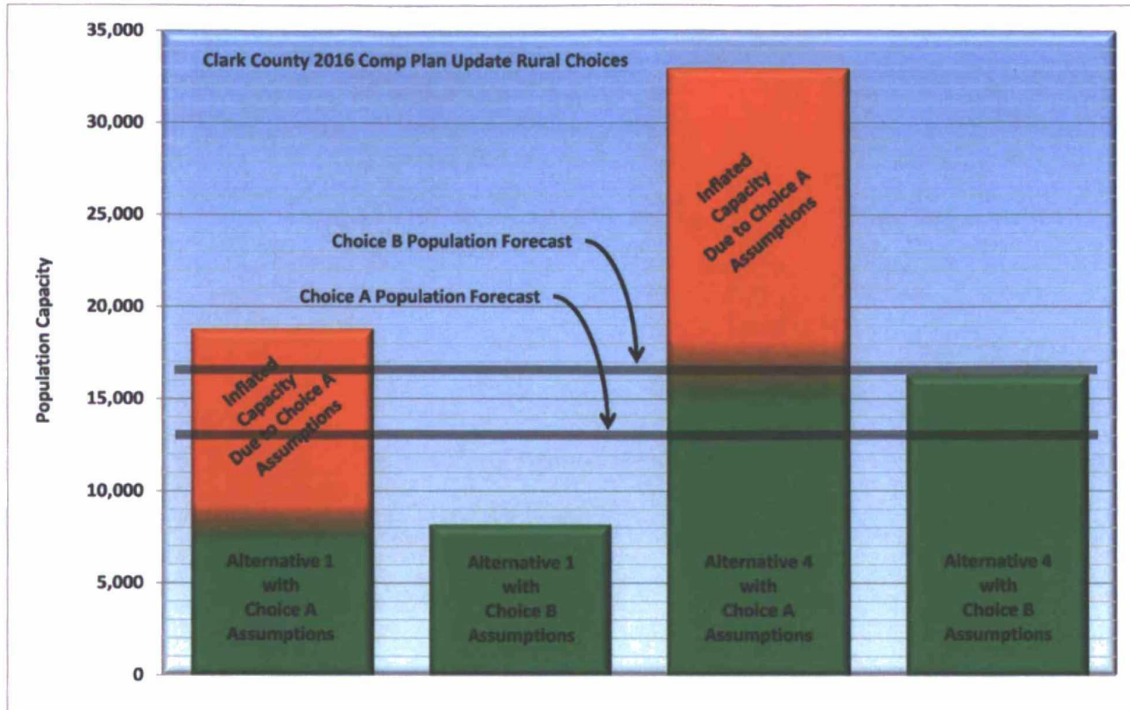


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Net potential growth of home sites	7,073	3,076	12,401	6,140
Potential population growth	18,814	8,182	32,987	16,332

Source: Clark County GIS:

Correcting the population growth planning assumptions:

The following table lists the population, growth rates, and urban/rural split options for resolving the differences between the tables in the DSEIS, the adopted resolutions, and planning assumptions. Reference 4 is proposed Choice B policy.

Table 5: Variations in Population Forecast Documentation

Ref	Starting population in the year 2015	20-year county-wide population projection	Planned county-wide population growth	Planned urban population growth	Planned rural population growth	Stated annual growth rate	Actual annual growth rate
1	448,845	578,391*	129,546*	116,591	12,955	1.12%*	1.28%
2	447,865	577,431*	129,566*	116,609	12,957	1.25%*	1.29%
3	448,815	577,431*	128,616*	115,754	12,862	1.26%*	1.27%
4	448,845*	582,092	133,247	116,591*	16,656	1.31%	1.31%

* indicates a directly specified parameter that drives the other parameters.

The calculations for each of the table entries are as follows:

Ref 1: The most recent population growth projection was adopted on April 14, 2015 via resolution# 2015-04-05

<http://clark.wa.gov/thegrid/documents/2015-04-05.pdf>

2015 starting population = 578,391 – 129,546 = 448,845

The Urban/rural population growth split = 90% urban, 10% rural

2035 urban population growth = 129,546 * 0.9 = 116,591

2035 rural population growth = 129,546 * 0.1 = 12,955

County-wide annual growth rate = 578,391 / 448,845 = 1.2886208

The 20th root of 1.2886208 = 1.012759, annual growth rate = 1.28%

Ref 2: DSEIS table S-1 on page S-2

<http://clark.wa.gov/cgrid/images/DSEISTableS-1.JPG>

2015 starting population = 577,431 – 129,566 = 447,865

The Urban/rural population growth split = 90% urban, 10% rural

2035 urban population growth = 129,566 * 0.9 = 116,609

2035 rural population growth = 129,566 * 0.1 = 12,957

County-wide annual growth rate = 577,431 / 447,865 = 1.289297

The 20th root of 1.289297 = 1.012859, annual growth rate = 1.29%

Ref 3: DSEIS table 1-1 on page 1-2

<http://clark.wa.gov/cgrid/images/DSEISTable1-1.JPG>

2015 starting population = 577,431 – 128,616 = 448,815

The Urban/rural population growth split = 90% urban, 10% rural

2035 urban population growth = 128,616 * 0.9 = 115,754

2035 rural population growth = 128,616 * 0.1 = 12,862

County-wide annual growth rate = 577,431 / 448,815 = 1.286568

The 20th root of 1.286568 = 1.0126786, annual growth rate = 1.27%

Ref 4: Corrected starting population and urban population growth to original resolution# 2015-04-05 with 87.5/12.5 urban/rural split.

For 87.5/12.5 urban/rural population growth split, the numbers are as follows:

2035 urban population growth = 116,591 (from resolution# 2015-04-05).

Keeping the same urban growth, the rural population growth is calculated as follows, where X = the rural population growth:

$X = 116,591 * .125 / .875 = 16,656$

County-wide population growth = 116,591 + 16,656 = 133,247

County-wide 2035 population = 448,845 + 133,247 = 582,092

County-wide annual growth rate = 582,092 / 448,845 = 1.2968664

The 20th root of 1.2968664 = 1.01308238, annual growth rate = 1.31%