

**Schroader, Kathy**



**From:** Orjiako, Oliver  
**Sent:** Wednesday, January 20, 2016 9 59 AM  
**To:** Alvarez, Jose, Anderson, Colete, Albrecht, Gary, Hermen, Matt, Kamp, Jacqueline, Lebowsky, Laurie, Lumbantobing, Sharon, Wiser, Sonja  
**Cc:** Schroader, Kathy  
**Subject:** FW: Final R W Thorpe & Associates, Inc Report  
**Attachments:** Invalid vs Indeterminate pdf, RWTA\_Clark County Planning Assumption Review) pdf

All

Attached, please find the final report from Thorpe and Associates regarding the Planning Assumptions. The final report was forwarded to Mark to make available to the Councilors this morning. Thanks.

Best,

Oliver

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**From:** Lee A. Michaelis [<mailto:lmichaelis@rwta.com>]  
**Sent:** Tuesday, January 19, 2016 5:08 PM  
**To:** Orjiako, Oliver; Euler, Gordon  
**Subject:** Final R.W. Thorpe & Associates, Inc. Report

Oliver & Gordon

Attached you will find our final report for your use at the February 16, 2016 Public Hearing. Also attached is our written position on the use of the term 'invalid' instead of the term 'indeterminate' as requested by Councilor Madore.

Please call or email if you have any questions.

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## Use of Invalid instead of Indeterminate

The use of the term "invalid" over "indeterminate" was based on three precise factors

The primary factor for using invalid over indeterminate is that R W Thorpe & Associates, Inc was tasked with examining the validity of each assumption on their face. The contract reached between Clark County and R W. Thorpe & Associates, Inc. states "Step 1. Review the Planning Assumptions introduced on November 4, 2015 (Alternative 4 b) and provide professional opinion on the validity of these assumptions and whether they should be applied to the Vacant Buildable Lands Model for the rural lands ". Assumptions which were found to not be based in-fact would therefore need to be excluded from the VBLM

Secondly, the definition of "validity" is to "hold water, to be valid, sound, and defensible; to show no inconsistency when put to the test."<sup>1</sup> Assumptions therefore, would either need to be valid and based in truth or not valid at all. Under the contract guidelines, R W Thorpe & Associates, Inc was responsible to determine which assumptions were based in truth. Determinations of invalidity were made through analysis of state and county code and a best practice review of similar counties

Finally, GMA (RCW 36.70a.070) guidelines stipulate that local circumstances may be considered at the county's discretion, however, a written record of explanation is required to justify how the adopted rural assumptions harmonize with GMA planning goals. Since no written record is available, and no credible evidence is available to justify the Alternative 4 b planning assumptions, the burden of proof falls to the county to prove their rationale. Since no rationale was provided, indeterminate is not a possible option for deciding which assumptions should be included in the VBLM

### RCW 36.70a.070

(5) Rural element. Counties shall include a rural element including lands that are not designated for urban growth, agriculture, forest, or mineral resources. The following provisions shall apply to the rural element:

(a) Growth management act goals and local circumstances. **Because circumstances vary from county to county, in establishing patterns of rural densities and uses, a county may consider local circumstances, but shall develop a written record explaining how the rural element harmonizes the planning goals in RCW 36.70A.020 and meets the requirements of this chapter.**

(b) Rural development. The rural element shall permit rural development, forestry, and agriculture in rural areas. The rural element shall provide for a variety of rural densities, uses, essential public facilities, and rural governmental services needed to serve the permitted densities and uses. To achieve a variety of rural densities and uses, counties may provide for clustering, density transfer, design guidelines, conservation easements, and other innovative techniques that will accommodate appropriate rural densities and uses that are not characterized by urban growth and that are consistent with rural character.

<sup>1</sup> "Validity." *The Free Dictionary*. Farlex. Web. 20 Jan 2016.

**GIS Rural Vacant Buildable Lands Model Assumptions  
for Clark County 2016 Comprehensive Plan Update**

***Executive Summary:***

Clark County and its Board of County Councilors are tasked with selecting a preferred alternative whereby the County Comprehensive Plan Update is based on calculations and projections for future planning and land use purposes. While it is important to determine land capacity in order to accommodate future population growth, it is also important to keep within the guidelines of Washington’s Growth Management Act (GMA). Washington State GMA requires a separate section in the Comprehensive Plan for the rural area and indicates that urban and rural areas have different development behaviors. Therefore, it can be reasonably assumed that applying urban area assumptions to rural areas is invalid.

Research for this assumptions critique includes close and careful examination of Clark County’s Code and development regulations as well as compliance with state regulations found in the Washington Administrative Code (WAC) and the Revised Code of Washington (RCW). In addition to county and state code, comparable county codes, comprehensive plans, and buildable lands reports were examined for similar assumptions. Several considerations include, common place assumptions, applicability to urban and rural land use, and planning commission recommendations.

Several comparable counties throughout the State of Washington were researched to determine what reasonable planning assumptions are widely used. The chosen counties were King, Pierce, Thurston, Spokane, and Whatcom Counties. These counties were selected because of their population, geographic, and economic similarities to Clark County.

As part of the review of these assumptions, consideration was given to background data and documents provided by Clark County. These documents, to our knowledge, are not adopted regulations or policies, but assist in creating the assumptions used in the Rural Vacant Buildable Lands Model.

***Assumption Findings - Overview***  
**Valid: Assumptions 1 and 2**  
**Partially Valid: Assumption 5 and 8**  
**Invalid: Assumptions 3, 4, 6, and 7**

Research of all documents referenced above concludes that two of the eight assumptions are valid, four assumptions are invalid, and two assumptions are partially valid. Assumptions one and two are overall valid. Assumptions three, four, six, and seven are overall invalid. Assumption three is invalid as there is

not a way to determine on a case by case basis, which environmentally constrained lots will be able to develop. Thus it is not possible to assume which lots from this group are reasonably probable to develop, or not develop. Assumptions four, and seven are not valid as these assumptions were previously applied to urban parcels and simply carried over to apply to rural parcels. Rural and urban parcels develop at different rates and require additional analysis to determine appropriate percentage deductions. Assumption five was found to be partially invalid since all legal nonconforming lots are developable parcels. A new policy decision would need to be made and implementing regulations put in place to determine which percentage is appropriate to apply to nonconforming lots.

Assumption six is similar to assumption five, however the assumption is found to be invalid as it is not specified if the assumption refers to legal or illegal non-conforming lots. If the assumption refers to legal nonconforming lots than it is invalid as all legal nonconforming lots are eligible for development. If the assumption refers to illegal nonconforming lots, the assumption is invalid because illegal nonconforming lots are prohibited from development unless they are brought into compliance. Finally, assumption eight is determined to be valid on its face, however, a zero percent deduction for rural infrastructure is not reasonably probable and a percentage lower than 27.7% needs to be calculated based on available data and applied as a deduction to the rural land capacity. The necessary deduction should fall between 0% and 27.7%.

In addition to the eight assumptions consideration was also given to the average household size (persons per household) and urban/rural population split. The average household size and population split are two additional exploratory measures used to determine the validity of each assumption. The use of the average household size ratio determines the necessary housing units needed for the projected population growth over the next 20-year period. In conjunction with the average household size, the urban/rural population split determined the projected population increase outside of the urban growth areas (UGA).

**Assumption 1:**

**Assumption:** These rural VBLM assumptions should be used not to reflect what is possible, but to reasonably plan what is likely. Parcels that cannot reasonably be expected to develop should not be counted as 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.

**R.W. Thorpe & Associates, Inc. Finding - VALID:** State WACs, RCWs and GMA deem remainder parcels as permanently protected undevelopable areas save for a few exceptions so these areas should not be counted as likely to develop.

**Effect:** The validation of this assumption removes these parcels of land from the rural available inventory for future development.

**Response:** Clark County allows for a reduction in remainder lot size through an application process but this can only be done in limited cases under certain guidelines. The GMA guidelines stipulate that following cluster development, there is no further division of parcels until the area is included within the boundary of an urban area. Further, the remainder lots are considered permanently protected. This is also the case according to state Code under the WACs and RCWs as well as under the King Co. Comprehensive Plan.

**Clark Co. Code 40.240.370 F:** In the GMA, following cluster development, there may be no further division of any resulting parcel for residential purposes until the subject parcel is included within the boundary of an urban area. The local government shall ensure permanent protection for open areas created by cluster development. No parcel in a cluster development may be smaller than one (1) acre in a five (5) acre Residential or ten (10) acre Residential designation or two (2) acres in a Small-Scale Agriculture or Small Woodland designation.

**Clark Co. Code 40.240.370 H:** In the GMA, at least seventy-five percent (75%) of land subject to a cluster development shall be permanently protected as undeveloped land.

**Clark Co. Code 40.210.020 C 2 a-d:** One can submit an application for a reduction in remainder lot size. "Remainder lots cannot be further subdivided below 70% of the total developable area of the original parent parcel constituting the cluster subdivision" or "reduced by a total of more than one acre." Therefore, in limited cases, remainder parcels can be further subdivided and developed provided it is not more than one acre.

**Clark Co. Code 40.210.020 D:** Beyond an application for a reduction in remainder lot size though, the remainder parcel must be devoted to "open space, resource or other authorized use." According to 40.210.020 D3c2a "the remainder parcel can only be used as open space or for agricultural or forestry uses."

**WAC: Rural Element WAC 365-196-425: 5(b) Rural clusters:** One common form of innovative zoning technique is the rural cluster. A rural cluster can create smaller individual lots than would normally

be allowed in exchange for open space that preserves a significant portion of the original parcel. WAC 365-196-425 5(b) (1) when calculating the density of development for zoning purposes, counties should calculate density based on the number of dwelling units over the entire development parcel, rather than the size of the individual lots created WAC 365-196-425 5(b) (1) the open space portion of the original parcel should be held by an easement, parcel or tract for open space or resource use This should be held in perpetuity, without an expiration date WAC 365-196-425: 6(a)(1) (6) Limited areas of more intense rural development The act allows counties to plan for isolated pockets of more intense development in the rural area. These are referred to in the act as limited areas of more intense rural development or LAMIRDs. (a) LAMIRDs serve the following purposes: (i) to recognize existing areas of more intense rural development and to minimize and contain these areas to prevent low density sprawl

**Whatcom:** Whatcom County Code states that "20'32.315 Reserve area

(1) An easement on the subdivision plat shall establish a reserve area per the definition in WCC 20 97 344 that is protected in perpetuity so long as it is not within an urban growth area The minimum percentage of the parent parcel required to be within a reserve area is shown in WCC 20 32 253 (2) A reserve area may contain infrastructure necessary for the subdivision, including but not limited to underground utilities, storm-water ponds, and on-site septic system components, and, in reserve areas designated for agriculture, structures used for on-site agricultural uses permitted in WCC 20 32 054 Above-ground hard surface infrastructure such as roads and water tanks may be included in a reserve tract, but the area they occupy shall not be included in the reserve area percentage required in WCC 20 32 253 (Ord. 2013-028 § 2 Exh B, 2013) "

**Pierce:** Pierce Co. Code 19.30.040 B calls for reduction of undeveloped land into sprawling, low-density development giving support to the permanence of remainder lands on cluster developments not being developed in the future According to 19A.40.020 D discusses the clustering development in rural areas as a means to preserve and encourage buffers and open space

**Spokane:** According to a 2009 report to the Spokane Planning Commission in 2002, Spokane County adopted rural residential clustering provisions stipulating, open space set aside as a result of rural clustering is intended to be used for "small scale agriculture, forestry, habitat or future urbanization." Additionally, it notes that "In some cases, the open space/remainder parcel may include a single residential use." Therefore, this counters most other county and state code which seems to deem all remainder parcels as permanently protected. This document also notes in the Topic 4 section that in for parcels that are "encumbered with wetlands, steep slopes or other physical conditions" that stifle development potential, code can be revised to allow the number of building sites to be increased through an allowance of smaller lots clustered together in the remaining buildable land.

**Thurston:** According to Thurston County Development Code "(c)lustering of residences is encouraged, in conformance with chapter 20 30A, Planned Rural Residential Development, except that such residential lots shall be a minimum of one acre in size and no larger than five acres " Rural development clustering requires that an owner of a rural lot set aside the remainder of the parcel as a resource lot This lot would no longer be developable until such time as it is annexed by a city or brought to within the UGA

**King: King Co. Comprehensive R-334 C:** "Clustered development is offset with a permanent resource land tract preserved for forestry or agriculture" and "under no circumstances shall the tract be reserved for future development"

**King: King Co. Comprehensive Plan R-318:** The permanence of preservation tracts is also consistent with land developed within Rural Forest Focus Areas which stipulates that they shall be no more than one dwelling unit per 20 acres and the preservation tract is deemed as "permanent "

**Assumption 2:**

**Assumption:** Parcels located in areas far from any 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.

**R.W. Thorpe & Associates, Inc. Finding - VALID:** Though some development may happen in limited cases, lands that are deemed to have long term commercial forestry operations should not count as likely to develop.

**Effect:** The validation of this assumption removes these parcels of land from the rural available lands inventory for future development.

**Response:** It is difficult to accurately determine active forest lands vs land designated as forest land but likely to be developed as it may be in transition or in the process of being re-designated so as to be developed. While it is possible that removing all forest lands from the "likely to develop" tally may leave a portion of property that would actually be land that is likely to develop, these situations appear to be limited and therefore not enough to deem overall as likely to develop. Further, if we are to just include active forest lands deemed for long term commercial forestry operations, these lands would have even more limited to non-existent development potential. Thus, in terms of forest lands that actually have "long term commercial forestry operations" these lands as stated in the assumption should be excluded from land that is likely to be developed.

**Clark:** Clark Co. Code 40.240.120 includes several uses that are allowed outright without review. These uses however don't include new development or structures. They include "repair, maintenance and operation of existing structures". However, other uses may be allowed with review. Therefore, current Clark County code, doesn't appear to allow significant development on forest lands but might in limited cases with certain permits. These permitted cases would not, however, be on forest lands with long term commercial operations.

**Clark Co. Comprehensive Plan (Rural Lands)** "Natural resource activities such as farming and forestry are allowed and encouraged to occur as small scale activities in conjunction with the residential uses in the area." This implies that residential and forestry uses are meant to work and grow together. According to 1.2.2, Land within the UGA shall not contain areas designated for long-term agriculture or forestry resource use. Therefore, any forestry lands that fall within the UGA as opposed to rural areas would be counted as "likely to develop." As of 2007 there were 158,068 acres of forest lands.

**WAC:** There are situations where a land owner can re-designate their forest land as a developable parcel according to WAC 458-30-700. According to the WAC 458-40-540, the term "forest land" is synonymous with timberland and means all land in any contiguous ownership of twenty or more acres which is primarily devoted to commercial forestry.



**Whatcom:** Whatcom County Code 20 43 650 sets a development standard for commercial forestry (CF) districts which follows the guidelines of the general commercial (GC) district. This prohibits the development of permanent residential units for single family purposes. It does however, allow for semi-permanent residential units such as mobile homes.

**Pierce: Pierce Co. Code 19A.40.030 B** "Minimize conversion of agriculture and forestry land by providing cluster development and buffer strips between these designated lands and residential developments" Implication from this is that they do allow development on forest lands but in a limited "cluster" style capacity. Also, this allowance for limited development would not include lands deemed for long term commercial forestry operations

**Spokane: Spokane County Code Chapter 14.616 Resource Lands** The county code states that residential development on these properties is discouraged. While it is not barred, it is discouraged and it is unlikely that these parcels will develop while commercial forestry is still in operation for the foreseeable future. Furthermore, a plot of land can be rezoned from forestry to another type of land but one qualification that a landowner would need to prove is as follows, "The applicant must present clear and convincing evidence that the property is not conducive to long-term commercial forestry and does not substantially meet the forest lands designation criteria as adopted in the Comprehensive Plan." "The Forest Lands zone consists of higher elevation forests devoted to commercial wood production. Non-resource-related uses are discouraged. Residential density is 1 unit per 20 acres in order to minimize conflicts with forestry operations. Activities generally include the growing and harvesting of timber, forest products and associated management activities, such as road and trail construction, slash burning and thinning in accordance with the Washington State Forest Practices "

**King: King Co. Comprehensive Plan R-318:** Land developed within Rural Forest Focus Areas shall be no more than one dwelling unit per 20 acres and the preservation tract is deemed as "permanent"

**King Co. Comprehensive Plan R-202** Calls for the "integration of housing with traditional rural areas such as forestry, farming and keeping of livestock..." However, consistent with what has been found with other counties and state code any ability of further development on forest lands does not include active forest lands

**Assumption 3:**

**Assumption:** 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

**R.W. Thorpe & Associates, Inc. Finding - INVALID:** In some cases, county health regulations, state code, and recent technology make it permissible to develop environmentally constrained lots of less than 1 acre of suitable land.

**Effect:** The finding of this assumption as invalid includes environmentally constrained lots in the rural available lands inventory.

**Response:** The ability to request waivers when property size is not adequate to host on-site septic systems coupled with Large On-site Sewage Systems (LOSS) serving multiple residential units, make these lots possible to develop. Waivers are considered on a site by site basis by state and county health inspectors. There is not a way to provide a blanket approach that would be applicable to all parcels of land. Furthermore, health inspectors can increase the necessary well and septic system set-backs per (WAC 246-272A-0210) and (Clark County Code 24.17.120) as they see fit on a site by site basis. This could potentially make lots which have more than 1 acre of environmentally unconstrained land undevelopable and would need to be factored into the equation for this assumption.

**Clark:** The Clark County Code determines minimum lot sizes through two methods (Clark County Code 24.17.230). Method one allows for the county health inspector to require a lot size larger than the standard assumed 1 acre if it is determined that nitrogen is a concern either through planning activities as described in Clark County Code 24.17.60 or another process. Clark County Code 24.17.120 dictates that only professional engineers, designers, and public health officials may perform soil and site evaluations. Unless the health inspector determines the viability of each parcel of land prior to the finalized comprehensive plan, it is not possible to determine what lots can, and cannot be developed at this time. The Clark County 2015 Buildable Lands Report indicates that 43% of all residential development occurred on environmentally constrained land, which means that there are a considerable amount of actions that can make development on constrained land possible and also likely.

**WAC (246-272A-0210):** The horizontal separation between an OSS dispersal component and an individual water well, individual spring, or surface water that is not a public water source can be reduced to a minimum of seventy-five feet, by the local health officer, and be described as a conforming system upon signed approval by the health officer if the applicant demonstrates.

(a) Adequate protective site-specific conditions, such as physical settings with low hydro-geologic susceptibility from contaminant infiltration. Examples of such conditions include evidence of confining layers and/or aquitards separating potable water from the OSS treatment zone, excessive depth to groundwater, down-gradient contaminant source, or outside the zone of influence, or

(b) Design and proper operation of an OSS system assuring enhanced treatment performance beyond that accomplished by meeting the vertical separation and effluent distribution requirements described in WAC 246-272A-0230 Table VI; or (c) Evidence of protective conditions involving both (a) and (b) of this subsection

**Whatcom:** WCC 24.05.210 states that 5 Permit the installation of an OSS, where the minimum land area requirements or lot sizes cannot be met, only when all of the following criteria are met. a) The lot is registered as a legal lot of record created prior to the effective date of the ordinance codified in this chapter; b) The lot is outside an area identified by the local plan developed under WCC 24.05.050 where minimum land area has been listed as a design parameter necessary for public health protection; and c) The proposed system meets all requirements of this chapter other than minimum land area. Again permission to build an onsite sewer system in Whatcom County would be determined on a site-by-site basis.

**Thurston:** Thurston County Code 24.50.060 explains that "The approval authority may authorize use of additional area to the minimum extent necessary in a critical area buffer to accommodate an onsite sewage disposal system or well, consistent with other requirements of this title, only if there is no alternative. "This is a site-by-site approval based on planning recommendations and health inspector's approval

**King:** KCC 21A.24.316 stipulates that development is prohibited "(o) n lots smaller than one acre, an on-site septic system, unless: a the system is approved by the Washington state Department of Health and has been listed by the Washington State Department of Health as meeting treatment standard N as provided in WAC chapter 426-172A\*, or b the Seattle-King County department of public health determines that the systems required under subsection A 13 a of this section will not function on the site." While this is similar to Assumption 3, the KCC states that this section pertains to the development in areas which contain critical aquifers. No such designation was made about critical aquifers in Assumption 3 and thus, the assumption is overly broad. When applying this KCC to Assumption 3, King County makes a similar assumption based on prohibited develop, but as was indicated in the above section, the State can approve development on a site-by-site basis

**Assumption 4:**

**Assumption:** History shows that about 30% of dividable parcels with homes and 10% of vacant 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.

**R.W. Thorpe & Associates, Inc. Finding - INVALID:** The 30% and 10% "Never to Convert" assumption would not be applicable to rural parcels as rural lands develop at different rates when compared to those located within the UGA.

**Effect:** The finding of this assumption as invalid would include corresponding existing parcels in the rural available land inventory

**Response:** It would be inconsistent to treat urban areas the same as rural. Assuming that rural areas will develop at the same rate as urban areas appears to be a false assumption. It is likely that rural areas would develop at a much slower rate than urban areas, but again that depends on several factors. The 30% "Never to Convert" assumption is suggested as a guideline in the Washington State Buildable Land Program Guidelines from June 2000. Other counties throughout Washington have used this calculation as well. However, it should be remembered that these calculations are pertaining to properties with an existing residence that are located within the UGA. Since rural properties would likely develop at a different rate, it is unlikely that this assumption would be applicable.

**Clark:** The Clark County VBLM assumes a 30% "Never to Convert" deduction for under-utilized lots in urban areas. This conclusion was reached through research of recent historical trends. Using building permit data, the county is able to track the percentage of lots that are developed or redeveloped. The historical data did not, however, extend to rural building permits, therefore, it is not likely that one could assume the same "Never to Convert" percentage for urban and rural land since their development patterns behave differently. Similar to the 30% factor considered for under-utilized lots, the Clark County VBLM assumes a 10% "Never to Convert" deduction for vacant lots in urban areas. This conclusion was reached through research of recent historical trends. Using building permit data, the county is able to track the percentage of lots that are developed or redeveloped. The historical data did not, however, extend to rural building permits, therefore, it is not likely that one could assume the same "Never to Convert" percentage for urban and rural land since their development patterns behave differently.

**WAC:** The Washington State Buildable Lands program introduced a book of guidelines in June 2000 which utilizes several methodologies for calculating buildable lands within a jurisdiction.

**RCW 36.70a.070 (5) (b)** states that "Rural development. The rural element shall permit rural development, forestry, and agriculture in rural areas. The rural element shall provide for a variety of rural densities, uses, essential public facilities, and rural governmental services needed to serve the permitted densities and uses. To achieve a variety of rural densities and uses, counties may provide for clustering, density transfer, design guidelines, conservation easements, and other innovative techniques that will accommodate appropriate rural densities and uses that are not characterized by urban growth and that are consistent with rural character." Applying the same assumptions used for

urban land use would not be in compliance with the requirements by state code as these assumptions are not consistent with rural character

**Whatcom:** The Whatcom County Land Capacity Analysis explains a methodology for calculating vacant and under-utilized lands throughout the county's various UGAs. Again, there is not precedent for calculating a percentage of vacant and under-developed land conversion outside of the UGA. It can be assumed that vacant and underdeveloped parcels in the rural areas of the county will develop at different levels

**Spokane:** The Spokane County Regional Land Quantity analysis contains a methodology to measure the quantity of land that is available for development with in the 20 projection used in the county comprehensive plan. Page 7 of the 2011 report indicates that a 30% reduction was made to account for lands that are not likely to develop over the 20-year time frame. The methodology was developed through utilization of the step-by-step Land Quantity Analysis methodology developed by the Washington State Department of Commerce

**Assumption 5:**

**Assumption:** 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

**R.W. Thorpe & Associates, Inc. Finding – PARTIALLY INVALID:** All nonconforming lots that are found to be legally created shall be considered likely to develop, not just those that meet a lot area percentage threshold. A county policy change would be required to recognize a nonconforming lot as conforming.

**Effect:** The finding of this assumption as partially invalid means that the County Council would need to adopt regulations which elects to consider non-conforming lots that are up to 10% smaller than the minimum lot size as conforming lots. A new policy would remove lots that are less than 90% of the minimum lot size requirement from the rural available land inventory

**Response:** Conforming and non-conforming lots are able to be developed based on input from the public and planning department. The 10% smaller requirement would need to be instituted as code by the county council, updated, and included in the final Comprehensive Plan Update. There is currently no provision in the Clark County code that calls for treating nonconforming lots that are up to 10% smaller than the minimum lot size to be considered conforming.

**Clark:** Clark County code allows for non-conforming lots to be developed per (CCC 40.530.010). A legal lot of record that was consistent with the zoning laws at the time of its creation, these lots are eligible for building permits. Furthermore, an illegal nonconforming lot could be eligible for a building permit, should it be brought into regulation prior to permit application. While this assumption may be accurate on its face, it would require an update of the Clark County code to allow lots up to 10% smaller than the minimum to be considered a conforming lot.

**WAC:** State law does not regulate nonconforming lots, therefore it is left to the local jurisdiction's discretion to determine if these lots can be considered for development. Clark County does not currently have a policy in-place that recognizes nonconforming lots which are up to 10% smaller than minimum lot size. A new policy would need to be publicly reviewed and voted on by the County Council before it can be included in the Comprehensive Plan.

**Whatcom: 20.83.060 Lots of record.** Except as modified by WCC 20.83.070, legal parcels or lots of record that do not meet the minimum area or width requirements of the zone district may be developed with permitted, accessory and conditional uses provided. (1) That all other district standards are met, and (2) The lots or parcels were created pursuant to applicable state and local subdivision regulations in place at the time of lot segregation (Ord 2000-013 § 1, 2000, Ord 87-12, 1987, Ord 87-11, 1987; Ord 82-78, 1982)

**Spokane: The Spokane County Comp. Plan RL.5.5** explains "Isolated non-residential uses in rural areas, which are located outside of rural activity centers or limited development areas, may be

designated as conforming uses and allowed to expand or change use provided the uses were legally established on or before July 1, 1993, are consistent with rural character, and detrimental impacts to the rural area will not be increased or intensified " Lots which were established before July 1993 are considered legal non-conforming lots and they are eligible for development and expansion

**Thurston:** TCC 24 50 060 allows provisions for legally created nonconforming lots to be developed There are several stipulations that place restrictions on how much of the lot is eligible for development, but it is still considered a legal lot and is likely to develop

**King:** The King County 2014 BLR uses a methodology which incorporates "However, the analysis did recognize that vacant parcels below the minimum lot size could be allowed one housing unit, on parcels more than twice the minimum, the lot size factor was applied

**Assumption 6:**

**Assumption:** Due to some exceptions from the norm, 10% of nonconforming parcels with at least 1 acre of unconstrained area will likely develop.

**R.W. Thorpe & Associates, Inc. Finding - INVALID:** There is no public data that supports this assumption. However, if historical data is consistent, the state code allows for the county to make these decisions at their discretion. Although, this would likely not be applicable to rural parcels, as rural and urban parcels develop at different rates.

**Effect:** The finding of this assumption as invalid would include corresponding properties in the rural available lands inventory.

**Response:** In order for this assumption to be validated, it is necessary to provide some type of data in support. First, a nonconforming lot is either a lot that does not conform to current zoning standards. There are two different types of nonconforming lots. The first type is a legal nonconforming lot which was a legal lot of record that was created prior the zoning change. So while the lot was in compliance at the time it was created, it is no longer in compliance, but is still grandfathered in and considered legal. An illegal nonconforming lot is a lot that was created after the current zoning was implemented and is not in compliance with current zoning regulations. All legal nonconforming lots are able to be developed provided they adhere to all other development regulations and standards, therefore it is reasonable to assume this assumption is invalid if it is referring to legal- nonconforming. If the assumption is in reference to illegal nonconforming lots, regardless of size, the assumption is likely invalid as these lots are prohibited from development.

**Clark: Clark County Code 40.530.010** describes two categories for nonconforming lot. Legal nonconforming and illegal nonconforming. Since the assumption simply states "nonconforming" the assumption is invalid. "C Nonconforming Status 1. Any lot, use, or structure which, in whole or part, is not in conformance with current zoning requirements shall be considered as follows:

- a. Legal Nonconforming. Lots, uses and structures legally created or established under prior zoning and/or platting regulations. These lots, uses and structures may be maintained or altered subject to provisions of this chapter.
- b. Illegal Nonconforming. Lots, uses and structures which were not in conformance with applicable zoning and/or platting regulations at the time of creation or establishment. Illegal nonconforming lots, uses and structures shall be discontinued, terminated or brought into compliance with current standards.

2. It shall be the burden of a property owner or proponent to demonstrate the legal nonconformity of a lot, use, and structure."

**WAC:** This planning assumption is not based on historical data from Clark County, and there is not an existing state code that requires or stipulates this assumption. However, state code dictates that planning assumptions for comprehensive plan updates are left to the discretion of the counties. RCW 36 70a.070 (5) (b) states that "Rural development. The rural element shall permit rural development, forestry, and agriculture in rural areas. The rural element shall provide for a variety of rural densities, uses, essential public facilities, and rural governmental services needed to serve the permitted densities and uses. To achieve a variety of rural densities and uses, counties may provide for clustering, density transfer, design guidelines, conservation easements, and other innovative



techniques that will accommodate appropriate rural densities and uses that are not characterized by urban growth and that are consistent with rural character " Applying the same assumptions used for urban land use would not be in compliance with the requirements by state code as these assumptions are not consistent with rural character

**Pierce: 20.65.005 Nonconforming lots.** Except as otherwise required by law, a lot legally established prior to the effective date of the ordinance codified in this title, which does not conform to the minimum lot area, minimum lot width and/or minimum lot depth requirements of this title, nevertheless may be developed subject to all other development standards, use restrictions and other applicable requirements established by this title. For the purposes of this chapter, a lot shall include at a minimum, all property having the same Pierce County assessor's tax identification number (Ord 2529 § 1, 1997; Ord 2181 § 1, 1988)

**Thurston: TCC 24 50 060** allows provisions for legally created nonconforming lots to be developed. There are several stipulations that place restrictions on how much of the lot is eligible for development, but it is still considered a legal lot and is likely to develop

**Spokane: The Spokane County Comp. Plan RL.5.5** explains "Isolated non-residential uses in rural areas, which are located outside of rural activity centers or limited development areas, may be designated as conforming uses and allowed to expand or change use provided the uses were legally established on or before July 1, 1993, are consistent with rural character, and detrimental impacts to the rural area will not be increased or intensified " Lots which were established before July 1993 are considered legal non-conforming lots and they are eligible for development and expansion. There is no provision for applying an assumption of 10% development from rural nonconforming lots

**Note:** There is not a provision in county documents that states that a percentage of nonconforming lots should be expected to develop. If the lot is legal nonconforming it should be counted in the land inventory. If the lot is illegal nonconforming, it should not be considered conforming.

**Assumption 7:**

**Assumption:** 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.

**R.W. Thorpe & Associates, Inc. Findings - INVALID** The Market Factor in the Washington State code allows counties to use a "reasonable supply and demand factor when sizing Urban Growth areas. This would not necessarily be applicable to rural growth projections.

**Effect:** The findings of this assumption as invalid means that there will not be a 7.5% deduction from available rural lands inventory.

**Response:** Market Factor as described in Washington State Code (RCW 36 70a 110) provides counties the flexibility to use local supply and demand calculations when sizing urban growth areas. Since the area in question is the calculation of available rural lots, which lay outside the UGA, this assumption likely would not be valid. Furthermore, the 7.5% assumption as it applies to rural lands is not consistent with previous urban assumptions as they are applied to rural development.

**Clark:** The Clark County comprehensive plan calls for County-wide Planning Policies state the following, (3.0.1) "The county shall recognize existing development and provide lands, which allow rural development in areas, which are developed or committed to development of a rural character. Replicating actions reserved for urban land use would not reflect the rural character as outlined in the County Comprehensive plan."

**WAC: Under RCW 36.70A.110** of the Washington State Code, each county is required to make accommodations for affordable housing across all segments and sectors. RCW 36 70a 110 (2) states that each urban growth area shall make planning determinations which include a reasonable land market supply factor. In determining the market factor, RCW 36 70a.110 allows for jurisdictions to include local circumstances and cities and counties have discretion to do so in their comprehensive plans. Furthermore, RCW 36 70a 070 (5) (b) states that "Rural development. The rural element shall permit rural development, forestry, and agriculture in rural areas. The rural element shall provide for a variety of rural densities, uses, essential public facilities, and rural governmental services needed to serve the permitted densities and uses. To achieve a variety of rural densities and uses, counties may provide for clustering, density transfer, design guidelines, conservation easements, and other innovative techniques that will accommodate appropriate rural densities and uses that are not characterized by urban growth and that are consistent with rural character." Applying the same assumptions used for urban land use would not be in compliance with the requirements by state code as these assumptions are likely not consistent with rural character.

**Whatcom:** The Whatcom County comprehensive plan uses a final market factor deduction after all other land use deductions are implemented. Page 7 Sec. 3.6 indicates that a 15% market factor should be used for vacant, residential, commercial and industrial zones. While the Whatcom uses the same deduction as Clark County, it should be considered that the market deduction is set for parcels within the UGA, therefore it is likely that the rural parcels would need to calculate a different percentage based on rural land use trends.

**Pierce:** As stipulated in policy 2.1.1, "urban growth areas must be of sufficient size to accommodate only the urban growth projected to occur over the succeeding 20-year planning period." This infers that the urban growth area should not be over-sized. However, in determining the appropriate size of the urban growth area, various components must be taken into account, such as critical areas, open space, and a market safety factor, i.e., maintaining a supply of developable land sufficient to allow market forces to operate.

**Spokane:** The Spokane County Regional Land Quantity Analysis uses market factor in its methodology stating "Market Factor (MF). A land market supply factor used by each jurisdiction as a cushion in determining how much land will be needed over the next twenty years. The concept tries to balance the competing issues of contributing neither to sprawl nor to increased housing prices. It recognizes that not all land designed for UGA uses can be expected to come on the market over the twenty-year planning period. A market factor of up to 25% was recently determined by the Central Puget Sound GMA Hearings Board (Kitsap County case) to be presumed reasonable. Any larger factor would be Planning Technical Committee May 24, 2011 10 closely scrutinized by the Central Board. While this case did not address market factors specific to cities it suggests that jurisdictions using market factors in excess of 25% will need to document why the higher rate is appropriate. The commercial land formula uses 25% or a 1.25 factor. Jurisdictions planning with a higher market factor will need to demonstrate why a higher rate is more appropriate."

**Thurston:** The Thurston County comprehensive plan accounts for the market factor as stipulated in RCW 36.70a110. Thurston County uses the market factor only as it applies to UGAs. Additionally, the Thurston County Buildable Lands Report from 2014 states that "The urban growth area may not exceed the areas necessary to accommodate the growth management planning projections, plus a reasonable land market supply factor, or market factor. In determining this market factor, counties and cities may consider local circumstances. Cities and counties have discretion in their comprehensive plans to make many choices about accommodating growth."

**King:** According to the King County Buildable Lands report from 2002, King County includes a market factor for different regions of the county. As stated in Chapter 1 page 17 Deduction of a percentage of the remaining land assumed not to be available for development during the planning period. In even the most urbanized settings, a portion of the net land supply will always be withheld from development or redevelopment due to several factors. These factors include personal use, investment or speculative holding, land banking for future business expansion, and other considerations that serve to hold land off the market. This adjustment to the land supply is referred to as a "market factor." Consistent with LCTF recommendations, market factors ranged generally from 5% to 20%, with re-developable land discounted more heavily than vacant land. Variations within and outside of the recommended range reflect local land ownership and market conditions, as

well as knowledge about proposed projects. Furthermore, **page 26** explains "There is no certainty that the remaining land will, in fact, be developed, but it has the potential to be developed if demand is sufficient. Market factors vary by jurisdictions within a range, based on countywide guidelines. Using the guidelines, each jurisdiction determined appropriate market factors for their city, often on a zone by zone basis. This meant that market factor determinations were based on local knowledge of an area's marketability." The King County Draft Comprehensive plan explains "The Rural Area cannot be a significant source of affordable housing for King County residents, but it will contain diverse housing opportunities through a mix of large lots, clustering, existing smaller lots and higher densities in Cities in the Rural Area and Rural Towns, as services permit." (pg 3-17) While some affordable housing in the rural areas is required by the GMA, it is not at a significant level in areas with higher urban densities, additionally, the market factor was not used in these calculations.

**Assumption 8:**

**Assumption:** The adopted VBLM used for urban areas includes a 27.7% infrastructure deduction for urban parcels for roads and storm water. Because rural parcels are much larger than urban parcels, no infrastructure the rural infrastructure deduction is assumed to be small. No deduction shall be used for rural parcels for any infrastructure such as roads, storm water, parks, schools, fire-stations, conservation areas, lakes, streams, protected buffers, Etc.

**R.W. Thorpe & Associates, Inc. Finding – PARTIALLY INVALID:** The population density of the rural areas lends to a reduction of necessary services in the rural areas. Thus, the 27.7% infrastructure reduction would be significantly larger than what is actually necessary. Therefore, this assumption on its face is likely true, however, a zero deduction would likely be false as some land area is necessary for infrastructure to support future development.

**Effect:** The finding of this assumption as partially valid means that more research into rural land infrastructure reductions is needed. The county will need to determine an infrastructure reduction percentage between 0% and 27.7% that is representative of rural developmental patterns. The calculated percentage will then be deducted from the rural available lands inventory.

**Response:** In assumptions 5, 6, and 7 it is suggested that urban assumptions should apply to rural areas, however assumption 8 indicates that the same assumption for an urban area should not apply to a rural area. This is inconsistent and there is no explanation for this inconsistency.

**Clark:** The Clark County VBLM uses the 27.7% infrastructure reduction to apply to vacant and under-utilized lots within the UGA. While this is likely a correct assumption that rural development would require a significantly smaller percentage for infrastructure purposes, a zero deduction is also not reasonable.

**WAC:** Again, as previously stated under assumption 7, RCW 36.70a.070(5)(b) states that "(r)ural development. The rural element shall permit rural development, forestry, and agriculture in rural areas. The rural element shall provide for a variety of rural densities, uses, essential public facilities, and rural governmental services needed to serve the permitted densities and uses. To achieve a variety of rural densities and uses, counties may provide for clustering, density transfer, design guidelines, conservation easements, and other innovative techniques that will accommodate appropriate rural densities and uses that are not characterized by urban growth and that are consistent with rural character." Although the urban and rural areas should be treated differently, as stated in previous assumptions, this assumption can be considered true as it would be a conservative estimate since the necessary infrastructure in the rural areas would be limited and not necessarily need the 27.7% deduction.

**Whatcom:** The Whatcom County Land Capacity Analysis uses an infrastructure reduction to determine future land capacity. The percentage of deduction used is based on recent development.

trends in similar areas. Looking at the data from recent rural development trends the county surmises what percent reduction is appropriate. The 2014 Whatcom County Comprehensive plan states "Development in rural areas should not receive urban levels of service except where necessary to protect public health, safety, and the environment. Services should be coordinated to ensure that rural areas receive appropriate services including law enforcement protection, fire protection, and emergency services" (Ch 2 pg. 72). This indicates that at least some percentage of land should account for infrastructure buildout.

**Note:** It appears that no other counties have a specific framework for calculating the necessary infrastructure deductions for rural areas, however, according to Whatcom County there is a need to ensure that there is at least some deduction for rural infrastructure needs.

**Urban/Rural Population Split:**

Historical basis of 20-year trend indicates an 85/15 or 86/14 split. The proposal is a 90/10 split. 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.

**Findings:** The population growth split has historically averaged 89% urban and 11% rural for the past 20 years. The 2004 and 2007 comprehensive plans have used the 90/10 growth projection which is accurate.

**Response:** While the overall population trend indicates an 86/14 urban rural split, the population growth has actually increased at the 89/11 level, which means that the rural population is steadily decreasing in terms of its annual growth percentage. Therefore, the county would actually need to accommodate fewer future residents in rural areas. Thus, it appears that all four alternatives project significantly more lots than what is needed to accommodate growth.

**Clark:** Clark County has historically used the 90/10 urban rural population growth split. These numbers were used in the planning assumptions for the past two comprehensive plans (2004 and 2007). Using Table 3 from Exhibit A: Planning Assumptions Rev. v1.09, the actual total population split between urban and rural can be calculated to determine growth percentages and determine the accuracy of the 90/10 growth assumption.  $(\text{Total pop. yr. 2} - \text{total pop. yr. 1}) = \text{total increase}$ .  $(\text{Rural pop. yr. 2} - \text{rural pop. yr. 1}) = \text{total rural pop. increase}$ .  $(\text{Rural increase} / \text{total increase}) = \text{rural growth \%}$ .

**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

**WAC:** Growth trends vary throughout the State of Washington and therefore there is no specific state code governing how counties project their growth across a 20 year planning cycle. However, the state code does allow local city and county jurisdictions the autonomy to make planning decisions based on local circumstances.

**Whatcom:** According to US Census data, the Whatcom County urban/rural split is 76/24. Whatcom County used the actual population split to calculate the county-wide planning assumptions for the comprehensive plan update. This works for Whatcom County as the growth rate between urban and rural areas is roughly the same at 78/22.

**Spokane:** According to the 2009 Spokane County Urban Growth area update, the urban/rural population split projected for 2031 is a 75/25 split. This number is consistent with the county's overall population through the past decade. The county uses the projected growth numbers instead of the actual population breakdown to determine planning needs. Spokane County's actions are in line with the use of the 90/10 split to evaluate Clark County.

**Thurston:** Thurston County BLR indicates an increasingly urban population trend. Currently 31% of Thurston County's population resides in rural areas. The population growth, however, is increasingly urban. New growth in the county has developed at the 86/14 split recently. Projected population growth in Thurston County is 13% rural and 87% urban. These trends are similar to Clark County and in line with this assumption.

**King:** According to the King County BLR, the urban and rural population split is 92/8.



**Clark County average household size:**

The Clark County comprehensive plan update was developed with the assumption that 2.66 individuals per household would remain consistent and thus require between 4,835 and 4,870 new rural housing units to accommodate population growth over the next two decades  $((129,556/2.66) * 10)$ .

**Findings:** The projected population increase of 129,556 (Table S-1; Page S-2) over the next 20 years indicates that there is a need for 4,870 new residential units in the rural areas of Clark County. Based on these projections, all four alternatives, detailed on Page 1-3 of the Draft Supplemental EIS, which were considered exceed the number of units needed to accommodate the growth.

**Response:** According to recent census data, after nearly 50 years of average household size decline, the average person per household number in the US is on the rise. There is need to take these calculations into consideration when determining the projected average household size over the next 20 years.

**Clark:** According to the US Census bureau the total estimated population for Clark County Washington in 2014 was 438,272 and the total number of housing units were 169,520. The ratio  $(438,272/169,520)$  is equal to 2.60 person's per-household.

**WAC:** Washington State has an average household size of 2.54 which is below the national average of 2.61.

**Whatcom:** US Census data indicates that the average household size for Whatcom County is 2.50 which is below the state average of 2.54 and below the national average of 2.61.

**Pierce:** US Census data indicates that Pierce County has an average household size of 2.6 which is equal to the national average of 2.61. The Pierce County BLR accounts for a smaller average household size when calculating 20 year population projects and need for additional residential units. The number is adjusted down from the 2000 census date to reflect a trend of decreasing household sizes. Pierce County's buildable lands model assumes an average household size of 2.8 pphh. The projected number is used to build a cushion and to stay consistent with the national trend of an increase in average pphh. The Pierce County buildable lands report does not use a total county wide pphh calculation for its projections, but rather the ratio is broken down into local city jurisdictions.

**Spokane:** US Census data indicates that Spokane County has an average household size of 2.43 which is below the national average of 2.61.

**Thurston:** US Census data indicates that Thurston County has an average household size of 2.5 which is below the national average of 2.61.

**King:** US Census data indicates that King County has an average household size of 2.4 which is below the national average of 2.61.

