

MEMORANDUM

TO: BOCC and Neil Caulkins

DATE: December 9, 2010

FROM: Jan Ollivier, Transportation Manager

RE: Petition from KCC, RIDGE, and FUTUREWISE to the GMHB regarding transportation concurrency

I am responding to issues brought up in the petition from KCC, RIDGE, and FUTUREWISE to the GMHB stating that Kittitas County violates RCWs 36.70A.020 (12), 36.70A.040 (4), and 36.70A.070 (6), specifically that the County has failed to adopt a transportation concurrency requirement in its implementing regulations. The petition also makes the “statement of standing” that they have membership that are landowners and residents of Kittitas County who are aggrieved or adversely affected by the county’s failure to adopt transportation concurrency regulations.

What is transportation concurrency? Transportation concurrency is defined in RCW 36.70A.070 (6) (b). Its basic meaning is -- when proposed developments are expected to cause traffic congestion to degrade below what the County has determined as acceptable, a financial commitment or improvements must be made to the transportation system to bring it back to acceptable congestion levels at the time of development.

Transportation concurrency has been implemented in Kittitas County and required by the County’s Comprehensive Plan (Chapter 4), Development Regulations KCC 15.04.200, KCC 12.01.090, KCC 12.01.095, and KCC 12.01.100, and the County’s Long-Range Transportation Plan (Chapter 6) (see attachments). Traffic Impact Studies are required for developments requiring SEPA (9 lots or more). Any intersection falling below the standard LOS C is required to participate in financing the improvement to bring the LOS to a C or above. A comprehensive analysis of County intersections was conducted for the County’s Long-Range Plan. This 20 year forecast and level of service analysis was conducted by a certified engineer. Currently, there are no intersections in unincorporated Kittitas County that are below the LOS standard. Twenty-year forecasts showed a possibility of 3 intersections (all near Ellensburg) that will go below the standard in the 2025.

Regarding the petition’s “statement of standing,” how can there be any residents who are aggrieved or adversely affected by a failure to adopt transportation concurrency regulations when the County has adopted and followed these policies and determined that there are no existing locations that fall below the standard? Kittitas County has implemented transportation concurrency in both long-range planning and current development review planning. Public Works requires developments to pay their share toward the mitigation of any intersection that is

forecasted to be degraded below the adopted standard and the improvement is programmed to be constructed concurrent with development.

There is one intersection in the County that has potential impacts from current developments, the intersection of Reecer Creek and University Way. The developments that have potential impacts on this intersection, and have final approval requirements to pay their share toward the mitigation, are: Black Horse, Teanaway Ridge, and Currier Creek Estates. The mitigation here is for a traffic signal. The other two intersections that have been forecasted as possibly degrading below a LOS C are Wilson Creek Road/Brick Mill Road and No. 6 Road/Kittitas Highway. The Kittitas Highway project will provide left turn lanes and improved sight distance at the No.6 Road intersection to improve its traffic operation and LOS. This project has recently been fully funded and is currently under design. The Intersection of Wilson Creek Road and Brick Mill Road could be mitigated by a four-way stop and flashing beacon. This project will be funded with local funds. All other Traffic Impact Analysis Studies required by the County for development applications throughout the County have shown no LOS impacts to County roads.

ATTACHMENT A

Kittitas County Comprehensive Plan Chapter 4. Transportation

4.4 Level of Service / Concurrency

Kittitas County measures level of service (LOS) for arterial roadways utilizing the Highway Capacity Manual (HCM) LOS methodology. The Highway Capacity Manual (HCM) method of measuring LOS is recognized as a national standard and is currently being utilized by other jurisdictions throughout the state and within Kittitas County including the Washington State Department of Transportation (WSDOT) and the City of Ellensburg.

4.5 Existing Deficiencies

The adopted LOS methodology and threshold determinations are stated in Section 4.8 Goals, Policies, and Objectives, specifically Level of Service (LOS) and Concurrency GPO 4.25 through GPO 4.33.

4.5.1 Twenty-Year Forecast

As the population grows within the county, the number of registered vehicles and drivers will also increase. Where those vehicles travel will depend, in large part, on where the drivers reside, shop and work. Determining the likely increases in traffic along transportation facilities is based on the land uses, which will be permitted and even encouraged in various parts of the county. The Long-Range Transportation Plan that is maintained by the Kittitas County Department of Public Works and adopted by reference indicates the twenty-year forecasted traffic growth and level of service impacts to the County's transportation system.

GPO 4.13 Kittitas County shall require new development that reduces County road LOS below the LOS standards to mitigate their impacts.

GPO 4.19 Kittitas County shall evaluate the merits of a proposed land use action against the potential impacts on the transportation system by reviewing development proposals for potential impacts to the transportation system and requiring developments to identify and mitigate their transportation impacts through SEPA or other local regulatory actions.

Level of Service (LOS) and Concurrency

GPO 4.25 To implement LOS standards that evaluates the adequacy of transportation facilities, which are measurable, understandable, and appropriate to the services and/or facilities being considered under local conditions.

GPO 4.26 Kittitas County shall utilize the Highway Capacity Manual (HCM) methodology to measure the effectiveness of the arterial system at arterial intersections by evaluating all arterial/arterial intersections (including state highways) to identify existing service levels and by developing a transportation model to evaluate the impacts of future land use alternatives on arterial/arterial intersections. Intersections, which fall below level of service "C" in rural areas and "D" in federal urban areas, shall be considered deficient.

GPO 4.27 To ensure that necessary transportation facilities and services to maintain adopted level of service standards are available when the impacts of development occur.

GPO 4.28 Kittitas County shall develop and implement a concurrency management system, which identifies existing deficiencies, funded improvements, and system capacity balances.

GPO 4.29 To develop a LOS standard that corresponds to land development goals and policies as expressed in the overall Comprehensive Plan for Kittitas County.

GPO 4.30 To encourage land use development patterns and support technology infrastructure, which reduce the demand for increased capacity on roadways.

GPO 4.31 Reserved

GPO 4.32 To develop a variety of performance measurements to evaluate the transportation system and prioritize improvements.

GPO 4.33 Kittitas County shall establish appropriate performance measures by developing and implementing a Pavement Management System (PMS) to measure pavement conditions and to prioritize maintenance or improvement projects, and by developing and implementing a Safety Management System (SMS) to identify potentially hazardous locations and to prioritize mitigation measures.

ATTACHMENT B

Kittitas County Code Title 15 / Environmental Policy

15.04.200 Substantive authority.

1. The policies and goals set forth in this chapter are supplementary to those in the existing authorization of the county.
2. The county may attach conditions to a permit or approval for a proposal so long as:
 - a. Such conditions are necessary to mitigate specific probable adverse environmental impacts identified in environmental documents prepared pursuant to this chapter; and
 - b. Such conditions are in writing; and
 - c. The mitigation measures included in such conditions are reasonable and capable of being accomplished; and
 - d. The county has considered whether other local, state, or federal mitigation measures applied to the proposal are sufficient to mitigate the identified impacts; and
 - e. Such conditions are based on one or more policies in subsection (d) of this section and cited in the license or other decision document.
3. The county may deny a permit or approval for a proposal on the basis of SEPA so long as:
 - a. A finding is made that approving the proposal would result in probable significant adverse environmental impacts that are identified in a FEIS or final SEIS prepared pursuant to this chapter; and
 - b. A finding is made that there are no reasonable mitigation measures capable of being accomplished that are sufficient to mitigate the identified impact; and
 - c. The denial is based on one or more policies identified in subsection (d) of this section and identified in writing in the decision document.
4. The county designates and adopts by reference the following policies as the basis for the county's exercise of authority pursuant to this section:
 - a. The county shall use all practicable means, consistent with other essential considerations of state policy, to improve and coordinate plans, functions, programs, and resources to the end that the state and its citizens may:
 - i. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
 - ii. Assure for all people of Washington safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
 - iii. Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;

- iv. Preserve important historic, cultural, and natural aspects of our national heritage;
 - v. Maintain, wherever possible, an environment which supports diversity and a variety of individual choice;
 - vi. Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
 - vii. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.
- b. The county recognizes that each person has a fundamental and inalienable right to a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.
- c. The county adopts by reference the policies in the following county codes, ordinances, resolutions and plans: Kittitas County Comprehensive Plan, Kittitas County Zoning Code, Kittitas County Subdivision Code, Kittitas County Shoreline Master Program, Uniform Building Code, Uniform Plumbing Code, Uniform Mechanical Code and the Uniform Fire Code.

ATTACHMENT C

Kittitas County Code Title 12 / Roads and Bridges

12.01.090 Responsibility to Provide Roadway Improvements.

- A. Any parcel creation, which will impact the service level, safety or operational efficiency of abutting or serving roadways or is required by other County Code or ordinance to improve such roadways shall improve those roadways in accordance with these Standards. The extent of the off-site improvements to roads serving a development shall be based on an assessment by the County of the impacts of the proposed land development. The assessment will be based on factors including, but not limited to, functional classification, primitive road designation, single access to development, safety and level of service.
- B. Any parcel creation abutting and impacting existing roads shall improve the frontage of those roads in accordance with these standards. The extent of improvements shall be based on the assessment by the County of the impacts of the proposed land development stated in Section A. above. Short plats within the UGA creating only one additional lot to a tax lot with an existing dwelling unit are exempt from providing urban type street improvements but are subject to shoulder improvements providing these improvements are consistent with surrounding roads and do not present a safety problem.
- C. Any land development or parcel creation that contains internal roads shall construct or improve those roadways to these Standards.
- D. It is the County's practice that it will not allow subdivisions to be recorded unless there exists a recorded continuous public or private access to the subdivision. Nor will the County accept a road for maintenance until the road is directly connected to a County or other publicly maintained road.
- E. All public road improvement and development projects within an UGA shall include pedestrian access as a part of the design in accordance with the appropriate City's standard, provided a pre-annexation agreement between the applicant and the appropriate City has been entered into and requires the same.
- F. All road improvements planned or specified in any adopted Growth Management plan of the County shall be planned and constructed in accordance with these Standards.
- G. Contiguous parcels, parcels under the same ownership and/or parcels sharing access easements/roads that submit any land development application, shall be reviewed as one development for transportation and road improvement purposes. (Ord. 2005-30, 2005)

12.01.095 General Requirements.

1. The road circulation system within a proposed plat shall provide for access to adjacent properties whenever such provision is reasonable and practical.
2. At least two ingress-egress routes which are interconnected are required for all roads that serve more than 40 lots.
3. Deadend streets, designed to be so permanently, shall be provided at the closed end with a turn-around having an outside right-of-way easement diameter of at least one hundred ten feet.
4. Any public road whose rights have been acquired by deed easement or prescription shall not be closed off or otherwise made inaccessible in any way.
5. No road names shall be used which will duplicate or be confused with the names of existing roads. Road names shall be subject to the approval of the Department of Public Works.
6. Corner lots shall have no dimension less than ninety feet. Lot corner shall be rounded by an arc, the minimum radius of which shall be not less than 35 feet at street intersections, or as required by the WSDOT Design Manual.
7. All parcel creations that access property over private lands, public lands, or road easements managed by other agencies must submit an approved easement from the land owners or road/easement managers that specifically address access, maintenance, seasonal restrictions and other restrictions and or limitations. These easements and permits shall be presented or recorded prior to final approval.
8. Irrigation and delivery water shall be relocated to the utility easement along the existing county road. Additional easement width may be required to accommodate the delivery or tail water. Irrigation water shall not be conveyed or drained into a new county road right of way. A franchise agreement will be required for irrigation water crossing the county right of way.
9. All roads crossing an irrigation ditch shall have a crossing agreement with the ditch owner or irrigation entity.
10. All new roads shall conform to the County Transportation Plan, when published. (Ord. 2005-30, 2005)

12.01.100 General References.

The Standards implement and are intended to be consistent with:

- A. County Code, as amended
- B. Kittitas County Comprehensive Plan, current edition.
- C. Kittitas County Transportation Plan, when adopted.
- D. Adopted Community Plans.
- E. Kittitas County Non-Motorized Transportation Plan, when adopted.
- F. Kittitas County Capital Improvement Program, as amended.
- G. Kittitas County Growth Management Program
- H. Kittitas County Manual on Accommodating Utilities within the Right-of-way (Ord. 2005-30, 2005; Ord. 2004-13, 2004)

ATTACHMENT D

Kittitas County Long Range Transportation Plan – 2008 Chapter 6 – Operating Conditions

How Operating Conditions of County Roads are Defined

Operating conditions of County roads are depicted by the road's capacity and level of service. The capacity of a transportation facility is the maximum number of vehicles that can use the facility under specified conditions. A transportation facility will not generally operate at its capacity, but at a reduced level where traffic conditions range from free flow to stop-and-go conditions. The typical method of measuring these different operating conditions is referred to as level of service (LOS). Letters designate each level, from A to F, with LOS A representing the best operating conditions and LOS F the worst. Each LOS represents a range of operating conditions and the driver's perception of these conditions. Kittitas County adopted the LOS standard for rural areas at LOS C and for urban areas at LOS D. The County may consider changing the LOS standard on corridors that cross into Ellensburg and Cle Elum jurisdictions to be consistent with city LOS standards in a future update of the Comprehensive Plan.

What are Concurrency Requirements for Transportation Projects?

The Growth Management Act (GMA) requires that transportation improvements to accommodate development impacts must be made concurrently with land development. "Concurrency" means that any needed improvements are in place at the time of development or that a financial commitment exists to complete the improvements within six years. The concurrency goal, linking development approval and public infrastructure, was established in the 1990 GMA as follows:

Public facilities and services. Ensure that those facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current levels of service below locally established minimum standards [RCW 36.70A.020(12)].

If concurrency cannot be demonstrated to maintain the County's adopted level of service standards, the GMA prohibits development approval unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development.

Existing Operating Conditions of County Roads is Acceptable

In general, the existing transportation network is in good operating condition. Existing average daily traffic volumes on roadways range from less than 10 vehicles to 8,200 vehicles. These volumes are very low compared to daily traffic volumes on typical arterial roads statewide.

An intersection level of service analysis was conducted for all “arterial to arterial” (including collectors) intersections in the county – which included 77 intersections in Kittitas County’s jurisdiction. This analysis shows that all intersections currently operate at an acceptable level of service and most intersections operate at the high level of service “A.” The following table summarizes this analysis and Appendix B - Existing & Future Conditions provides additional detail.

Table 6-1 Existing Level of Service Summary of Kittitas County’s Major Intersections		
<i>LOS</i>	<i>Number of intersections</i>	<i>% of intersections</i>
A	68	88%
B	8	11%
C	1	1%
D	0	0
E	0	0
F	0	0
TOTAL	77	100%

What will the Operating Conditions be in 2025?

Future traffic volumes on Kittitas County roadways are estimated to increase approximately 150% by the year 2025. These volumes are low compared to daily traffic volumes on a typical arterial roadway. PM peak hour volumes on County roadways will vary from 120 vehicles per hour on Taneum Road at the Thorp Highway to 880 vehicles per hour on Vantage Highway at Wilson Creek Road.

LOS was calculated using *Synchro* 6.0 and the 2000 HCM methodologies. The results of the LOS analysis for future conditions at the arterial-to-arterial plus collector intersections are summarized below in Table 6-2 (see Appendix B - Existing & Future Conditions for further

details). This analysis showed that in 2025 most intersections will continue to operate at a relatively high level-of-service as summarized below:

<i>LOS</i>	<i>Number of intersections</i>	<i>% of intersections</i>
A	39	51%
B	27	35%
C	9	12%
D	0	0
E	2	2%
F	1	1%
TOTAL	77	100%

In Washington State, growth in travel demand has exceeded the capacity of the transportation system. In Kittitas County, the system is responsive today but may become sluggish in the future - primarily in areas just east of Ellensburg – if traffic flow is not addressed. The three intersections that are projected to be below level of service standards in 2025 are shown in the following figure and described below.

1. **Kittitas Highway-No 6 Road.** This intersection is estimated to operate at LOS “C” in the current PM peak hour. With the anticipated growth in traffic volume, the intersection is projected to degrade to LOS “E” in the 2025 time horizon. It currently operates as a two-way stop sign-controlled intersection with a single lane on each approach. The stop signs are supplemented with a four-way flashing beacon mounted over the center of the intersection. The posted speed on Kittitas Highway is 50 miles per hour. The Kittitas County standard for this intersection is LOS “C.”

This intersection’s future LOS “E” can be improved to LOS “B” if it is converted to a four-way stop sign-controlled intersection. Special advance signing will be required to install stop signs on Kittitas Highway with the existing 50-mph posted speed. The four-way stop can be supplemented with a flashing red beacon by converting the existing yellow flashing beacon at this location.

Estimated Cost: \$1,000.

2. **Brick Mill Road-Wilson Creek Road.** This intersection is estimated to operate at LOS “B” in the current PM peak hour. With the anticipated growth in traffic volume, the intersection is projected to degrade to LOS “F” in the 2025 time horizon. It currently operates as a two-way stop sign-controlled intersection with a single lane on each approach. The posted speed on Wilson Creek Road is 50 miles per hour. The County standard for the intersection is LOS “C.”

This intersection’s future LOS “F” can be improved to LOS “B” if it is converted to a four-way stop sign-controlled intersection. Special advance signing will be required to install stop signs on Wilson Creek Road with the existing 50-mph posted speed. The four-way stop can be supplemented with a flashing red beacon to enhance the posted signs and enable approaching vehicles better visibility of the stop condition.

Estimated Costs: \$500 - stop signs. \$20,000 - flashing beacon.

3. **University Way – Reecer Creek Road.** This intersection is estimated to operate at LOS “C” in the current PM peak hour. With the anticipated growth in traffic volume, the intersection is projected to degrade to LOS “E” in the 2025 time horizon. It currently operates as a T-intersection with a stop sign controlling southbound traffic. The posted speed on University Way is 40 miles per hour and on Reecer Creek Road is 50 miles per hour. The County standard for the intersection is LOS “C.”

This intersection’s future LOS “E” can be improved to LOS “B” if a traffic signal is installed at this intersection. Special advance signing will be required on University Way.

Estimated Costs: \$200,000.

Although the above intersections just east and west of Ellensburg are the only significant county road intersections identified as having a LOS below standard, there are three other locations outside of the County's jurisdiction that will fall below the LOS standard of LOS C (rural) and LOS D (urban) in 2025:

- I90 EB ramps / Bullfrog Road (Exit 80) west of Cle Elum
- Canyon Road / I90 EB ramps in Ellensburg
- Alder Street / 14th Avenue in Ellensburg

Another area of emerging concern for increasing traffic levels is the Cle Elum-Roslyn-Suncadia sub-area. The Suncadia Master Planned Resort, at build out, will add 3,785 new residential units and will have a ripple effect on the population growth in the cities of Cle Elum and Roslyn. The County should carefully monitor the traffic impacts on County roads in this sub-area as growth occurs.

Operating conditions of intersections throughout the county will continue to be monitored and addressed as needed.

Goals-Policies-Objectives, Costs, and Funding

6-1 GPO: Kittitas County roads shall be well maintained and operate efficiently. The level-of-service (LOS) standard for roadways in rural areas shall be LOS“C.” The LOS standard for roadways in urban areas shall be LOS “D.”

6-2 GPO: Kittitas County shall ensure that intersections and roads that are projected to decrease below a LOS “D” in urban areas and below a LOS “C” in rural areas shall be improved to maintain the LOS standard or proposed development that would utilize those facilities shall not be approved.

Estimated Costs: \$21,500 – combined costs for 2 locations.

Funding Sources¹: (Federal) Intersection and Corridor Safety Program, Rural County Two-Lane Roadway Program, STP Regional Program
(State)Rural Arterial Program
Local Funds

¹ Federal and state grants are generally only available for roads that are on the federal functional classification system.