Concurrence

Q: What is Chapter 30.66B SCC?
A: Chapter 30.66B SCC is the chapter in Title 30 SCC, the County’s Unified Development Code (UDC), that contains the Concurrence and Road Impact Mitigation requirements relating to new development. Chapter 30.66B SCC includes requirements for concurrence to comply with the Washington State Growth Management Act (GMA) and requires developers to mitigate the traffic impacts on the County’s arterial road network from new development.

Q: What is the concurrency management system?
A: The Snohomish County concurrency management system provides the basis for monitoring the traffic impacts of land development, and helps determine if transportation improvements are keeping pace with the prevailing rate of land development. In order for a development to be granted approval it must obtain a concurrency determination.

Q: What is a “concurrency determination”?
A: Each development application is reviewed to determine whether or not there is enough capacity on the County’s arterial road network in the vicinity of the development to accommodate the new traffic that will be generated by the development, without having traffic congestion increase to levels beyond that allowed in Chapter 30.66B SCC. Simply stated, if there is sufficient arterial capacity, the development is deemed concurrent and can proceed.

Q: How does the County measure concurrency?
A: Over the years, traffic engineers have developed various methods for measuring and estimating congestion levels on roads. These methods are used in the Concurrency Management System. The unit of measurement used to express the amount of congestion is known as the Level of Service.
Level of Service

Q: What do you mean by “Level of Service?”

A: The GMA requires individual jurisdictions to adopt Level-of-Service (LOS) standards for their roads. Level-of-Service (LOS) is an alphabetical grading scale that measures the number of vehicles a road can accommodate over a certain period of time. The scale is similar to a school grading system, with LOS A being the least-congested and LOS F for urban and LOS D for rural being the most-congested. As traffic volumes increase, they begin to reach the capacity of the road; traffic congestion increases, the average speed of vehicles drops, and causes the LOS “grade” to fall. At LOS E for an urban arterial, the volumes have reached capacity and cars are moving slowly, but they are still moving consistently. At LOS F vehicles are moving in a “stop and go” manner, and average speeds are low.

Q: What are the County’s adopted LOS standards?

A: The County’s Level-of-Service (LOS) standards are established in the Transportation Element of the County’s Comprehensive Plan, then adopted in Chapter 30.66B SCC. The LOS for some urban arterials may vary according to whether or not the arterial unit is designated as being multimodal, i.e. (a road on which a viable transit alternative along with adequate pedestrian and bicycle facilities exists for users in the area around the arterial).

Snohomish County’s lowest tolerable levels-of-service are as follows:

<table>
<thead>
<tr>
<th>Categories</th>
<th>Regular Arterial</th>
<th>Multimodal Arterial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Arterial Unit</td>
<td>LOS E Peak Hour</td>
<td>5 mph Below LOS E Peak Hour</td>
</tr>
<tr>
<td>Rural Arterial Unit</td>
<td>LOS C Peak Hour</td>
<td>N/A</td>
</tr>
</tbody>
</table>

The term “peak hour” refers to those one-hour periods during the day when congestion is the worst. For most arterials, there are two peaks, or “rush hours,” which are typically for the AM peak hour between 6:30 a.m. and 8:30 a.m. and for the PM peak hour between 4:00 p.m. and 6:00 p.m.

The adopted LOS standards allow lower levels of service (more congestion) in urban areas than is allowed in the rural areas. An even lower LOS standard (below LOS E) is allowed for urban arterials if the arterial is designated as multimodal.

Q: How does the County determine Levels of Service (LOS)?

A: The County’s LOS standard is measured on arterial units (i.e. predefined segments of the entire arterial) and is based on a two-step evaluation process. Step one determines whether or not average daily traffic (ADT) volumes on an arterial unit exceed predefined thresholds. (See tier 1 Screening on page 3). If they do, then step two evaluates whether or not the average travel speed on the arterial unit falls below the predefined minimum speed. (See tiers 2 – 4 on page 3). NOTE: The LOS for rural arterials designated to carry urban traffic, is calculated the same as urban arterials.

Some important points of information with respect to the LOS standards are:

- The LOS standard for most urban arterials is LOS E, which in most cases translates into a numerical equivalent of 13 miles per hour (mph), and
- The LOS standard for most rural arterials is LOS C and the numerical travel speed equivalent of LOS C for rural arterials varies depending on the length of the arterial unit and the number of controlled intersections.
Transportation Concurrency Requirements

Tier 1. Screening. The first (and lowest) tier compares current peak-hour traffic counts with estimated capacities for each arterial unit, screening out units operating at very high levels of service that are not at risk for concurrency. Most arterial units fall into this tier, which requires an updated traffic count only every few years.

Tier 2. Monitoring. The second tier compares those arterial units whose traffic counts are approaching the estimated capacity fall into the next (middle tier, which consists of more-frequent traffic counts and refinements of the capacity estimates. In some cases, travel-time studies may be performed for arterial units being monitored.

Tier 3. Operational analysis. The third tier provides travel-time studies, investigation of the causes of congestion, traffic models and other traffic engineering analyses. These will determine whether the LOS has fallen or soon will fall below the code adopted standard.

Tier 4. Future Level-of-Service Forecast. The fourth (and highest) tier is used to determine whether or not the LOS within six years is likely to be operating below the adopted standard with the addition of new trips expected to be added to the arterial road network by developments already deemed concurrent (pipeline trips).

Q: What happens when a road is approaching capacity?
A: When a road is approaching capacity, the County conducts further analysis to determine whether there are funded improvements that would remedy the problem within six years (the “window” of time provided by the GMA during which roads must be improved to meet code requirements for acceptable standards). If such funding for the needed improvements is forthcoming the arterial unit is not considered to have a concurrency problem. However, if no such funded improvements are available, the deficiency creates a potential concurrency problem for some developments. The County has coined the term “Arterial Unit In Arrears” (AUIA) to refer to such arterials, that is, roads that are over capacity with no improvements funded to add more capacity.

Q: What happens when a road is forecast to be over capacity within six years?
A: In some cases, roads may have enough capacity to accommodate existing traffic, but forecasts of future traffic show that the road will be over capacity within six years. These arterials can also be declared “in arrears” if funding for the needed improvements is not available. The concurrency management system deals with monitoring the LOS of the arterial roadway network and provides input into the program planning process that leads to the annual preparation of the County’s Transportation Improvement Program (TIP). Each year in late fall the County Council adopts a TIP for the next six (6) year period. Section D of the TIP sets out the capacity projects that are expected to sustain the adopted LOS on the County’s arterial road network.
Q: How does the County forecast future traffic volumes?

A: Traffic engineers take into account current volumes (based on actual counts), volumes expected to be generated by a proposed development, and volumes from other developments that have been deemed concurrent but are not yet occupied (pipeline trips).

When a developer submits an application for a proposed development, the application must include a traffic study that estimates the number of new vehicle trips expected to be generated by the development when it is fully occupied. For all but the smallest developments (i.e., developments generating fewer than three directional peak-hour trips), the traffic study must also include a trip distribution analysis. A trip distribution analysis estimates the most likely destinations of trips generated by a proposed development and the likely traffic routes to reach those destinations.

The trip distribution analysis results in a map and/or list indicating the number of trips likely to be added to the road system from the proposed development, including the trips added to individual traffic movements on arterial units and at intersections.

The trip distributions from all developments that have been deemed concurrent are combined to show the cumulative traffic volumes forecast on arterial units and at intersections (the pipeline). The county tracks all of these volumes in a forecast traffic database. Once a development is occupied, however, the trips from that development are captured in the actual traffic counts, and the development then is taken out of the database.

Q: How does the County convert forecast traffic volumes into future levels of service?

A: Most congestion occurs at intersections, so traffic engineers identify the key intersections that contribute to congestion for each arterial unit. They then take the forecasts for all of the turning movements at the key intersections and estimate the congestion levels using traffic modeling programs. These models then estimate the average travel speeds of vehicles operating under the projected conditions. The average travel speeds are the final basis for determining the LOS on an arterial unit.
Concurreny Determinations and Appeals

Q: How does the County make concurrency determinations?”
A: A traffic study is submitted with the development application and, based on that traffic study, the County determines whether the development will impact an arterial units in arrears (AUIA). Developments that generate less than 50 peak hour trips and don’t impact an AUIA within their transportation service area with three or more directional peak-hour trips are deemed concurrent. The traffic study for developments that generate more than 50 peak-hour trips must include a future level-of-service forecast. These large developments cannot be deemed concurrent unless the future LOS forecast establishes that the development will not create congestion levels below the County’s standard on the arterial roads in the developments TSA. If a development is not deemed concurrent, it cannot be approved until the development is either changed to lessen its traffic impact or funding for improvements are in place to fix the problem arterial unit.

Q: How long is a concurrency determination good for?
A: A concurrency determination shall remain valid until the underlying development application, approval, or permit expires, is withdrawn, or is denied by the County. If the development approval does not have an expiration date, the concurrency determination shall expire either three years from the date of development approval or the resolution of any appeals, whichever is later.

Q: What review standards does the Hearing Examiner use?
A: The Examiner can overturn a concurrency determination only if it is proven to be “clearly erroneous.” The County’s professional judgment and traffic engineering expertise are given “substantial weight” in the Examiners decision making process, and the party challenging the concurrency determination has the burden of proof.

Q: Can a developer get a concurrency determination before submitting a development application?
A: Yes. Developers obviously do not want to spend a lot of time and money conducting site analysis and preparing detailed site plans only to find out after applying that their development cannot be deemed concurrent. As the name implies a pre-application concurrency determination review only deals with making sure there is sufficient capacity on the arterial road network to accommodate the development and DOES NOT review or assess other impacts from the development such as access, construction of improvements, etc.

Q: How long is a pre-application concurrency determination good for?
A: A pre-application concurrency determination shall expire either six months from the date of approval of the determination or upon the resolution of any appeal of that determination, whichever is later. A developer can initiate this process simply by requesting a traffic study scoping meeting with PDS.

Q: Can a concurrency determination or a pre-application concurrency determination be appealed?
A: PDS provides all parties of record a public notice of the concurrency determination including information on how an appeal may be filed. Only a party of record may appeal a concurrency determination and have it reviewed by the county Hearing Examiner. Depending on the type of development proposed, appeals of the Examiner’s decision will be either sent directly to Superior Court, or first to the County Council and then ultimately to Superior Court.