



## **CITY OF KIRKLAND**

**Department of Public Works**

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**To:** Houghton Community Council

**From:** Transportation Commission, Jon Pascal Chair

**Date:** September 17, 2007

**Subject:** A PROPOSED CONCURRENCY SYSTEM

### *Introduction*

This memo describes a proposed concurrency update the Transportation Commission is developing. Although some details are yet to be resolved, the Commission has agreed on a method we believe to be viable. Now that a firm proposal has been developed we would like to get comment from the Planning Commission and the Houghton Community Council. The proposed system begins with the premise that concurrency is not the sole system for controlling growth or mitigating its impacts. Other regulations such as Commute trip reduction, SEPA and Impact Fees play critical roles in this regard.

### *Background*

Concurrency was put in place as a requirement of the Growth Management Act. The general concept is that concurrency will prohibit the rate of land use growth from exceeding the rate of completion of transportation facilities. Each city can develop its own concurrency system and standards. Kirkland's concurrency system has undergone only one substantial change since it was first adopted in 1997, that is the introduction of a second standard that must be achieved for concurrency to be passed. Under the current system, each development proposal is evaluated to determine the number of trips it will add. These impacts are summed across developments to determine the cumulative effect of approved projects. For each signalized intersection, performance is measured by comparing the number of trips that exist to the number of trips to be added with the capacity of the network that will be in place when the development is complete. If the performance of the system with the project meets standards, the project passes concurrency. Otherwise concurrency is not passed and the development cannot go forward without being modified.

At direction of the City Council, The Transportation Commission began examining ways to improve the concurrency system in early 2006. In December 2006, the Commission agreed that the new concurrency system should have the following attributes:

- Concurrency should be a broad tool which gives an overall view of capacity for trips as opposed to a very detailed project level tool.

- Concurrency should not be counted on to construct a certain amount of projects or generate funds
- For road/street concurrency our acceptable level of service is driven primarily by the amount of funds available, and the acceptable network. There is some minimum level of service that must be maintained however.
- Concurrency should be flexible, allowing us to approve desirable projects even if it means that concurrency is “out of whack” for a short time.
- Moratoria are not desirable
- The concurrency system needs to give a yes or no answer
- Options for passing concurrency should be given to the developer
- The Comprehensive Plan should drive Concurrency rather than Concurrency driving the Plan.
- Concurrency should be multimodal and recognize the value of other modes
- Concurrency tests are easy to administer
- Principles behind the tests are easy to understand. Policy decisions that structure the types of standards to be created are well documented.
- The results of concurrency are easy to predict; easy for participants to understand.
- Its not how you measure it, its where you set the standard.
- All other things being equal, it would be helpful to use systems similar to those of our neighboring cities.

The system we are proposing meets most of the attributes listed above. An overview of the new system is shown on the next page

*A report card*

A new feature of the proposed system is a report card that is prepared annually. It's tentative outline includes:

- Existing level of service at signalized intersections based on actual counts.
- Expected impacts of traffic which is permitted but not yet built
- Location and intensity of development that has occurred in relation to where it was forecast to occur.
- For the funded CIP, project milestones that have been accomplished relative to what was planned.
- Suggestions for how the 2022 land use and/or network should be modified based on what has happened over the past year.
- Level of bicycle and pedestrian facilities that have been constructed relative to goals.

An overview of the proposed concurrency system

<b>Step</b>	<b>Description</b>	<b>Example</b>
1. Define a future year land use plan and capacity network	This specifies what concurrency is trying to balance. This is where level of service is established.	For land use we have a 2022 land use scenario and a set of capacity projects to be completed by 2022.
2. Based on the information from step 1, for the period between now and the future year, estimate how many new peak hour auto trips are expected and how much of the network needs to be built.	Essentially we're determining "how much is left" for both trips and network. Trips are straightforward. The number of trips forecast for existing land use is subtracted from the number of trips forecast for the future land use. Network completion needs an extra step to translate the amount of network left to build into a measure of completeness. Details of this translation are described below.	We expect 7200 more trips between now and 2022. There are 12 capacity projects that need to be completed. This is translated into 1000 <i>completion points</i> , weighted by project value.
3. Calculate the concurrency ratio. Divide the number of trips in step 2 by the completion points in step 2. This is the concurrency ratio	The <i>concurrency ratio</i> explains how many trips are allowed for each unit of project completion if the 2022 land use were built and the 2022 network were complete.	In this case the concurrency ratio is 7200 trips divided by 1000 completion points or 7.2
4. Get the number of trips that are allowed based on the extent that the funded CIP is completing the network.	The concurrency ratio is the ratio that indicates a balanced system. This ratio multiplied by the completion points funded in the CIP give the cumulative number of trips that can be allowed.	The proposed funded CIP for 2008-2013 has 370 completion points. Multiplying 370 by the concurrency ratio 7.2 gives 2,664 trips.
5. Monitor concurrency by tracking the number of cumulative trips that are applied for by development.	Each project that is approved adds its trips to the cumulative total. As long as the total is less than the number of trips allowed in step 4, concurrency is passed.	About 800 trips are approved each year. A 1000 sq ft of office produces about _____ trips. 1000 sq ft of retail produces about _____ trips.
6. Prepare concurrency report card.	Various measures of effectiveness. Shows intersection level performance that is not explicitly monitored in concurrency. Adds multimodal component.	

*A timeline*

The illustration on the next page shows how the new concurrency system would interact with updates to long range land use plans and networks and how it would interact with changes to the funded CIP.

*Developing a measure for network completion.*

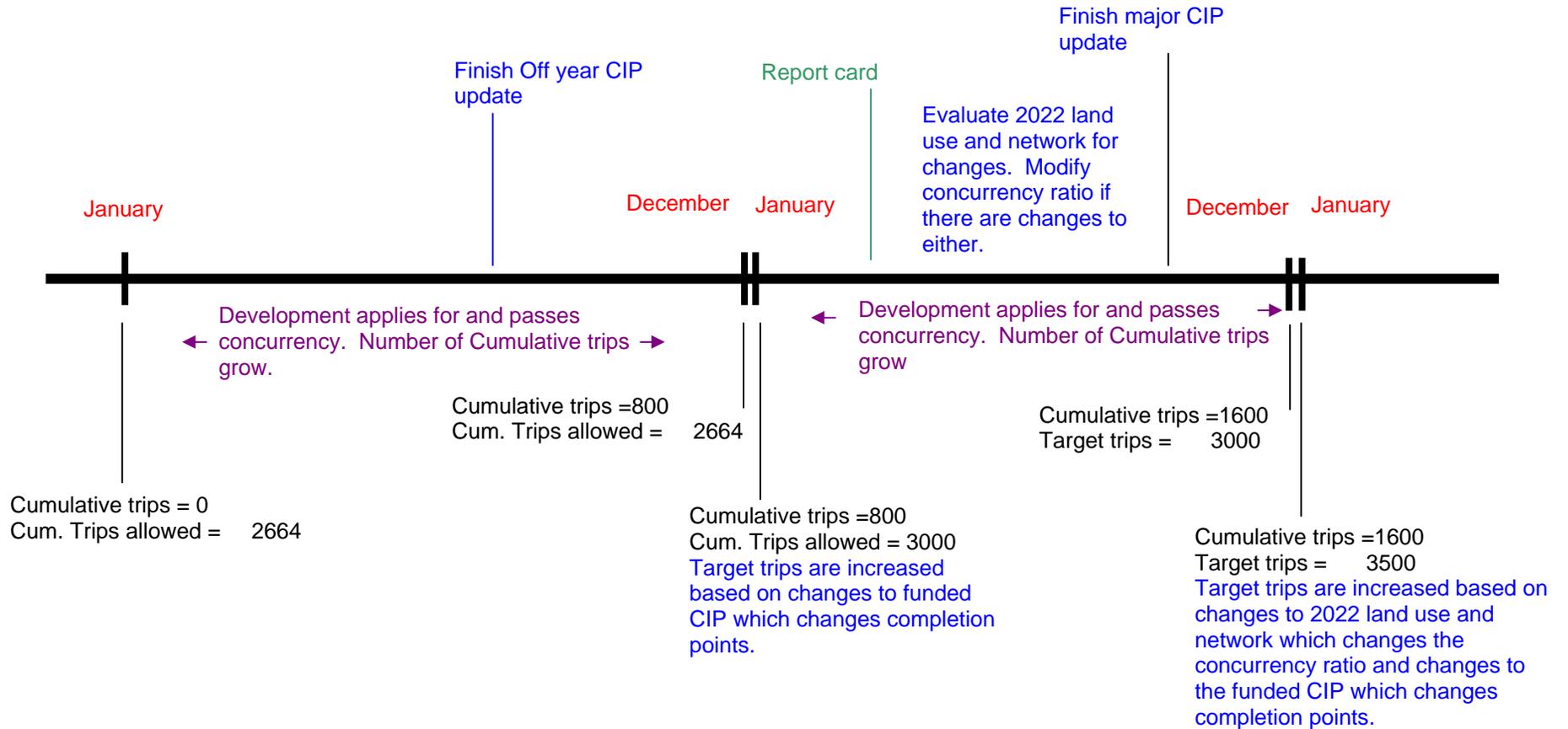
The proposed system requires that we have a measure for project completion. The Transportation Commission has looked at a couple of ways of doing this. One approach values all projects equally and measures the amount of the projects that are completed. For example if there are 12 projects to be completed and each must be 100% complete this could be considered 1200 completion points. A more sophisticated approach weights the projects by the capacity each provides (see step 2 above). More completion points are associated with projects that add more capacity. The cost of each project can be used as a proxy for the amount of capacity it provides assuming that more expensive projects provide more capacity. This is an imperfect but simple improvement on the all-projects-are-the-same idea. The number of completion points is set to be 1000 as an arbitrary base that makes calculation easy.

*A Hypothetical Example*

Today Mr. Dallas Huston met with the Economic Development Manager and the Planning Director. Mr. Huston has recently purchased an option on the Par Mac site south of NE 116th and west of 120th Avenue. His plan is to construct a mixed use project in keeping with the Comp Plan vision for the site but which is a bit larger than what was described in the plan. Project advocates (Some councilmembers, planning commissioners and citizens) are saying "This is perfect!" and "We've got to make this happen!" Project opponents (Some councilmembers, planning commissioners and citizens) are upset. They fear that this big project will add lots of traffic to their streets.

Mr. Huston's traffic engineer Austin Waco has worked with the Public Works Department to test the project to see if it passes concurrency. Because they are hard working and dedicated, Public Works engineers took a look at the project under both the existing and proposed systems.

SCHEMATIC SHOWING HOW PROPOSED CONCURRENCY SYSTEM INTERACTS WITH CIP AND FORECAST YEAR UPDATES  
 (numerical values are estimates)



Concurrency at a hypothetical development

	<b>Current System</b>	<b>Proposed System</b>
Is concurrency passed?	No, level of service standards are violated at two intersections and a subarea average standard is violated.	Yes, the trips are within the number allowed, but in a normal year there are about 800 trips, this project alone will produce about 1200 trips.
What can the developer do?	The developer can add capacity at key intersections, reduce the size of the project or possible phase it in. Projects are scheduled to be built	There is no action required to pass concurrency.
What does SEPA do?	Under either system SEPA will require improvements at locations where major impacts occur.	
Transportation Demand Management	CTR regulations will apply. TDM applies more directly to the new system where trips are measured rather than signalized intersection performance.	
How proponents feel	Confused. The project is in keeping with what we planned for the area. How can we fix concurrency?	Relieved. Concurrency isn't a confusing thing to get around
How opponents feel	Relieved. Concurrency stopped a project that was too big	Confused. Isn't concurrency supposed to stop projects that are too big?
How will the funded CIP change?	Projects that could help meet concurrency will be identified and added.	The report card will reflect capacity project needs based on development. Funded CIP is changed based on new land uses
How will 2022 land use plans change?	No explicit change called for until the next land use update.	Again, the report card should show where land use changes are needed.