## White Paper #3: Demand and Capacity Options Presented - by Mike Skehan- PLIC Secretary

This third in a series of white papers presented by PLIC is intended to promote discussion at our April 12<sup>th</sup>, 2018 Town Hall meeting. Previous papers on events leading to today and population growth projections can be viewed here: plicferry.org.

On March 14, 2018, the Lummi Island Ferry Advisory Committee (LIFAC) hosted a public meeting for KPFF-Group and Whatcom County to present several LOS (Level of Service) options for ferry system improvements. Briefly, KPFF discussed current (2017) levels of service and projected ridership to years 2040 and 2060. These were compared to current traffic levels experienced in August of 2017 in the busiest three hour period, between 4-7 PM, on weekdays, going from Gooseberry to Lummi Island. Vessel capacity for 3 options (20, 28, 34 cars) were then compared to the Whatcom Chief holding 16 cars using currently accepted design standards for vehicle sizes. (Note: KPFF made clear the Chief carries up to 20 cars most times, but using AEQ {Auto Equivalent} design criteria, the Chief would be rated at 16 cars today. All the vessel sizes were expressed in AEQ units for comparison.)

Previous traffic studies over the last 3 years by LIFAC (Bailey/Skehan, 2017) for both directions show the Gooseberry PM runs are slightly busier than the morning runs from Lummi to Gooseberry in the AM hours. The consultant presented their findings in two graphs, where traffic levels from Gooseberry were tallied in 3 hour blocks, with the 4-7 PM periods being the busiest. This was compared to the capacity over that same 3 hour period to show current LOS and LOS expected for each vessel, both in vehicles carried and excess capacity or vehicles left behind at the end of the 3 hour period. Those results are show in the table below for a typical August:

		20-Car	<u> 28-Car</u>	<u>34-Car</u>
Vessel Capacity (AEQ's)	16 Car Chief	<u>Vessel</u>	Vessel	Vessel
Capacity over 3 hours of running	128	160	168*	204*
In 2040 - Cars left from the 1-4 PM period	11	0	0	0
in 2040 - Cars over capacity or (under)	36	4	(4)	(40)
In 2060 - Cars left from the 1-4 PM period	32	8	0	0
in 2060 - Cars over capacity or (under)	68	36	28	(8)

\*30 min. scheduled runs

Looking at the last 2 lines in the table says that about 40 years from now (2060) the Whatcom Chief will begin the 4 PM period with 32 cars left over from the previous 3 hours, and at 7 PM will leave 68 cars waiting for a ferry, which is a 5 trip wait to clear the backlog. The 20 car ferry does better starting the period with 8 waiting and ending with 36 waiting, which is a 2 trip wait. The 28 car ferry starts with no backlog and leaves 28 waiting (a 1 trip wait), while the largest vessel has 8 extra spots left over or excess capacity.

"How to choose the right-size vessel will become clearer when we get detailed costs for all the options, including propulsion systems and operational costs. Then the hard choices begin, balancing needs, wants and financing mechanisms to pay for everything." (PLIC)

In June 2018, the County Council will receive KPFF's, Whatcom County Public Works and LIFAC's recommendations and decide what ferry alternatives to develop. Making your transportation needs and opinions known at this critical junction will greatly help to insure our future. Please join us at the Town

Hall Meeting on April 12th, 2018 at 6:30 p.m. at the Beach School. Our next white paper will discuss Gooseberry Terminal options presented at the meeting on March 14th, 2018.

**Let Your Voice Be Heard**