TESTIMONY OF

RANDY RUSS

RETIRED RAILROAD WORKER

BEFORE THE

JOINT TANSPORTATION COMMITTEE

PUBLIC HEARING ON

HB 2603

I appreciate the opportunity to appear before the committee today. My name is Randy Russ and I am a recently retired railroad worker. I worked for the Union Pacific Railroad for 21 years, the last 15 years as a freight conductor.

I will be speaking today about the increase in train lengths, the issues related to the movement of these longer trains and how these issues contribute to service disruptions, both freight and passenger.

In my career train length has increased from an average train length of approximately 5,000-6,000 feet to a length of 7,000-8,000 + feet on the territory that encompasses the I-5 corridor. Here are some of the logistical issues that relate to the movement of these longer trains.

1) A longer train moves slower. A longer train means a heavier train. It takes longer to start the movement and to attain the prescribed operating speed. Having to slow for any speed restrictions (of which most are permanent) and accelerate takes longer as the entire train must pass through the restriction before accelerating.
2) Almost all the rail main line in Oregon is single track. This means that when one train meets a train operating in the opposite direction one of them must use a siding to accomplish the train pass. On the mentioned I-5 corridor from Portland to Eugene there are 12 sidings. They vary in length from approximately 7,200 feet to 7,800 feet. These lengths do not represent the actual length but the reality of an operational length. The only siding that has the capacity for a train length of 7,800 ft is the Hito siding near Aurora, Oregon.
3) The train operations require that the lead locomotive maintain constant communication with the End of Train (EOT) device located on the rear car or with the distributed power (DPU) on the rear of the train. If that communication is disrupted the train must operate at speed of 30 mph. The longer the train the higher the probability of a communication failure.
4) The braking of a train is controlled by an air system consisting of an air compressor located on a locomotive, with air lines and valves located on each rail car. Longer trains increase the likelihood of a failure of the air system by adding more cars to a train. They also increase the possibility of a break- in two because of the increased draft forces within the train. When there is a failure the train is stopped until the problem is located and repaired. This process can take at least 2 hours or longer. When the problem is repaired it takes longer for the air system to recharge to the proper operating level so that the train can continue.

   The following are some of the examples of how these issues with the movement of train manifest themselves in disruptions of service.

   1) Not having enough siding with the length accommodate the longer trains resulting in both trains having to stop. This directly affects Amtrak service because they either have to stop and wait for a train to enter a siding at 25 or 30 mph or stop and wait because the train was unable to fit in a siding.
   2) When a breakdown inevitably occurs the resulting mainline blockage stops traffic for the duration of the repair.
   3) Trains operating at a slower speed because of air problems or the inability to maintain track speed.

An issue that I need to address about train movements and disruption of service is technology. The implementation of Positive Train Control (PTC), as required by law and the development of Energy Management Systems (EMS) by the railroads has a direct influence on these issues.
PTC, as a safety component, restricts the speed of a train approaching a stop signal either on the mainline or a siding. This feature slows the ability of a train to “get in the clear”. There are additional issues that would require more time to explain so I will move on to the main issue with EMS.
EMS equipped locomotives are being operated by a computer program. The operational issue that directly affects the movement of a train is the program anticipating a speed restriction (both permanent and temporary) and reducing the speed of the train well in advance of when an engineer would slow for the same restriction, thus prolonging the train at a reduced speed.

I want to thank the committee again for this opportunity to speak to this issue and I would hope that this bill is forwarded so that more data can be developed to address this problem.