Comments regarding Oregon's High-Speed Rail Plan

By: Jim Howell, May 18, 2010 jimhowell89@hotmail.com

True high-speed rail (125 mph +) in the Willamette Valley segment of the *Cascades Corridor* can only become a reality after ridership has grown to justify the huge capital cost.

ODOT should concentrate on how to increase frequency and reliability while incrementally reducing trip times on the existing alignment before expending time and money analyzing how to increase top speed to 110 MPH on new alignments.

ODOT's draft goal, to add only four more round trips in the next 20 years, is pathetically inadequate. The ridership estimates used in ODOT's 2009 *Draft Intercity Rail Study*, based on the use of computer models designed for highway planning, are largely irrelevant. The primary determination of future demand will be the availability of actual service. In other words, the demand for rail service in 20 years will be driven by what is done in the interim to improve service. This "feedback" mechanism is ignored in highway modeling, which looks primarily at projected changes in things like population, employment and economy.

AORTA's proposed *Service Improvements for the Cascades High-Speed Rail Corridor*, (attached) which suggests incrementally improving service over the next 5, 10 and 20 years, is a more realistic approach to building an effective rail corridor.

The *Capitol Corridor* Amtrak route, which runs roughly parallel to I-80 between Sacramento and the San Francisco Bay Area, is a good example of incremental development. When service was increased to seven round trips a day, ridership jumped almost threefold within eight years. The corridor is now served by 16 round trips a day and annual ridership is about 1,600,000.

In Europe, passenger demand for high-speed trains came only after frequent (hourly) reliable service on existing routes was provided by incrementally improving infrastructure.

The goal of reducing the trip time between Eugene and Portland to two hours can be accomplished with top speeds of 90 mph (average speed 62 mph) on tracks shared with freight trains. Track capacity can be added as more schedules are added so as not to degrade freight operations. Full bi-directional (2-3 tracks) operation will eventually be needed when train frequency, driven by ridership, requires it.

ODOT should focus on what is needed now to add two to four more schedules within the next five years by working with UP, Amtrak and the FRA, rather than spending precious time and money evaluating new alignments.

The sooner more trains are operating, the sooner more people will ride them and the sooner they will demand true high-speed rail service.

Incremental Service Improvements for

the Cascades® High-speed Rail Corridor

Prepared by AORTA Director Jim Howell (jimhowell89@hotmail.com) August 12, 2009

| Existing Service – 2009 | | | | | | | |
|-------------------------|------------|-----------|------------|-----------|-----------|-------------|--|
| Segment | Type Serv. | Distance | No. Trains | Trip Time | Av. Speed | Inter. Sta. | |
| EUG-PDX | Corridor | 123 Miles | 4 | 2:35 | 48 MPH | 3 | |
| " | Long Dist. | " " | 2 | 2:45 | 45 MPH | 2 | |
| PDX-SEA | Corridor | 187 Miles | 8 | 3:30 | 53 MPH | 6 | |
| " | Long Dist. | " " | 2 | 4:05 | 46 MPH | 6 | |
| SEA-VAC | Corridor | 157 Miles | 2 | 4:20 | 36 MPH | 4 | |
| SEA-BEL | Commuter | 95 Miles | 2 | 2:20 | 41 MPH | 3 | |

Existing Service - 2009

High-speed Rail Development – First Phase (5 years)

| Segment | Type Serv. | Distance | No. Trains | Trip Time | Av. Speed | Inter. Sta. |
|---------|------------|-----------|------------|-----------|-----------|-------------|
| EUG-PDX | Corridor | 123 Miles | 8 | 2:00 | 62 MPH | 3 |
| " " | Long Dist. | " " | 4 | 2:00 | 62 MPH | 3 |
| PDX-SEA | Corridor | 177 Miles | 16 | 2:45 | 64 MPH | 6 |
| " " | Long Dist. | 187 Miles | 4 | 3:00 | 62 MPH | 6 |
| PDX-VAN | Commuter | 10 Miles | 16 | 0:12 | 50 MPH | 0 |
| SEA-VAC | Corridor | 157 Miles | 4 | 3:00 | 52 MPH | 4 |
| " " | Long Dist. | " " | 4 | 3:15 | 48 MPH | 4 |
| SEA-BEL | Commuter | 95 Miles | 8 | 2:00 | 48 MPH | 3 |

High-speed Rail Development – Second Phase (next 5 years)

| Segment | Type Serv. | Distance | No. Trains | Trip Time | Av. Speed | Inter. Sta. |
|---------|------------|-----------|------------|-----------|-----------|-------------|
| EUG-PDX | Corridor | 123 Miles | 16 | 1:45 | 70 MPH | 4 |
| " " | Long Dist. | " " | 6 | 1:45 | 70 MPH | 3 |
| ORC-PDX | Commuter | 15 Miles | 32 | 0:15 | 60 MPH | 1 |
| PDX-SEA | Corridor | 177 Miles | 32 | 2:30 | 71 MPH | 6 |
| " " | Long Dist. | 187 Miles | 6 | 2:45 | 64 MPH | 6 |
| PDX-VAN | Commuter | 10 Miles | 32 | 0:12 | 50 MPH | 0 |
| SEA-VAC | Corridor | 160 Miles | 16 | 2:45 | 58 MPH | 4 |
| " " | Long Dist. | " " | 6 | 3:00 | 53 MPH | 4 |
| SEA-BEL | Commuter | 95 Miles | 16 | 1:45 | 54 MPH | 3 |

High-speed Rail Development – 2030

| Segment | Type Serv. | Distance | No. Trains | Trip Time | Av. Speed | Inter. Sta. |
|---------|------------|-----------|------------|-----------|-----------|-------------|
| EUG-PDX | Corridor | 123 Miles | 32 | 1:30 | 82 MPH | 4 |
| " " | Long Dist. | " " | 8 | 1:30 | 82 MPH | 3 |
| ORC-PDX | Commuter | 15 Miles | 32 | 0:15 | 60 MPH | 1 |
| PDX-SEA | Corridor | 175 Miles | 48 | 2:00 | 88 MPH | 6 |
| " " | Long Dist. | 185 Miles | 8 | 2:30 | 74 MPH | 6 |
| PDX-VAN | Commuter | 8 Miles | 48 | 0:08 | 60 MPH | 0 |
| SEA-VAC | Corridor | 160 Miles | 32 | 2:30 | 64 MPH | 4 |
| " " | Long Dist. | " " | 8 | 2:45 | 58 MPH | 4 |
| SEA-BEL | Commuter | 95 Miles | 32 | 1:30 | 63 MPH | 3 |

Note: VAC = Vancouver, British Columbia, Canada VAN = Vancouver, Washington, USA