
Feasibility of an East-West Intercity Passenger Rail System for Washington State

Study overview and update

March 2020

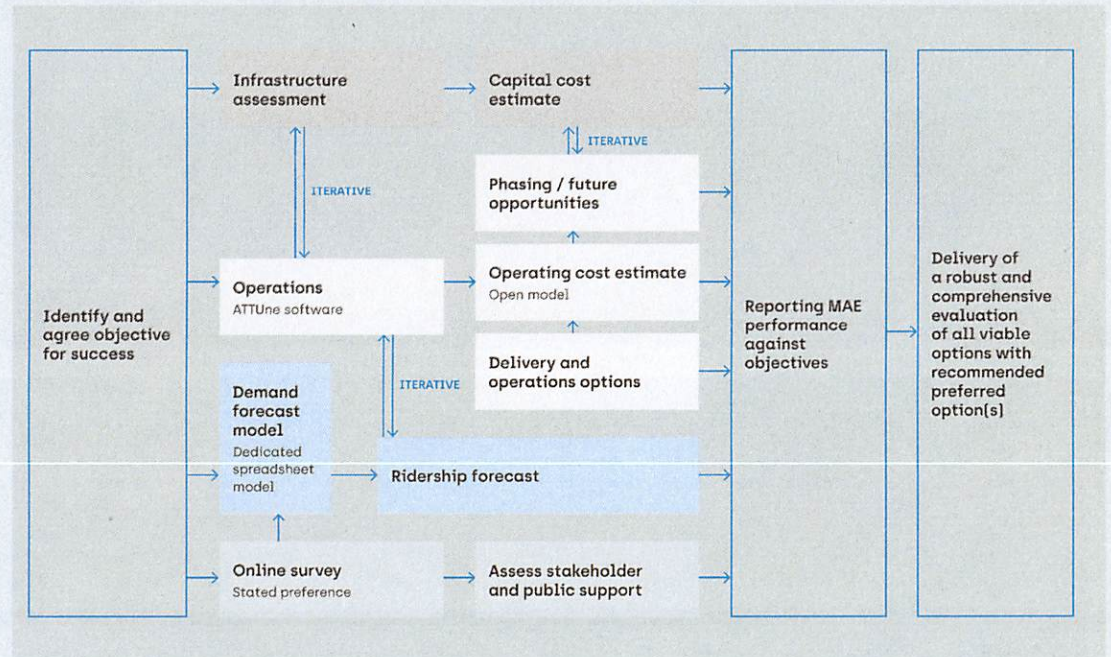
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Study Scope

The key elements of the study include:

- Undertake an iterative process to:
 - Identify possible operating strategies and schedules
 - Undertake an assessment of the current infrastructure
 - Estimate potential ridership
 - Identifying any infrastructure needed
 - Capital costs
 - Ridership
 - Options for operation
 - Equipment needs
 - Operating costs

- Completion in June 2020



Works Undertaken or Ongoing

- Engagement / stakeholder outreach
 - Engaged with the JTC Workgroup
 - Met with BNSF and gained their support for the study
 - Undertaken two stakeholder events in Yakima and Pasco
 - Public and Stakeholder questionnaire online:
Steer.sawtoothsoftware.com/EastWest
Survey Code: Train
500 + responses by 24 – Feb (still open)
- We have obtained the information to develop a ridership model for the corridor
 - Model development is ongoing
 - Final stage will be the incorporation of the results from the Questionnaire
- We have obtained track data from BNSF and field visits
 - Scheduling model constructed and ready to test options
 - We have developed passenger journey times for corridor
 - We have identified where alignment or speed improvements are possible

Potential Schedule and Services

- Considerations
 - Avoiding Amtrak and Sounder Trains times between Seattle and Auburn
 - Stress testing possibility of freight conflicts between Auburn and Pasco to understand potential infrastructure needs
 - Hourly freight trains Auburn to Pasco
 - Passenger trains limited to 79 mph

Potential Schedule

- Potential Travel Times

Seattle to Spokane

Station	Morning	Midday
Seattle	8:15 AM	12:15 PM
Tukwila	8:29 AM	12:29 PM
Auburn	8:39 AM	12:39 PM
Cle Elum	11:35 AM	3:35 PM
Ellensburg	12:08 PM	4:08 PM
Yakima	12:58 PM	4:58 PM
Toppenish	1:14 PM	5:14 PM
Pasco	2:20 PM	6:20 PM
Spokane	4:50 PM	8:50 PM

Spokane to Seattle

Station	Morning	Midday
Spokane	7:45 AM	11:45 AM
Pasco	10:16 AM	2:16 PM
Toppenish	11:22 AM	3:22 PM
Yakima	11:38 AM	3:38 PM
Ellensburg	12:28 PM	4:28 PM
Cle Elum	1:01 PM	5:01 PM
Auburn	3:55 PM	7:55 PM
Tukwila	4:08 PM	8:08 PM
Seattle	4:19 PM	8:19 PM

Potential Service Patterns to be Tested

- Possible Individual Service Patterns (two-way)

Seattle to Spokane

Station	Daily	Twice Daily	Daily	Twice Daily	Daily	Twice Daily	Daily	Twice Daily
Seattle	*	*	*	*	*	*	*	*
Tukwila	*	*	*	*	*	*	*	*
Auburn	*	*	*	*	*	*	*	*
Cle Elum	*	*	*	*	*	*	*	*
Ellensburg	*	*	*	*	*	*	*	*
Yakima	*	*	*	*	*	*	*	*
Toppenish	*	*	*	*	*	*		
Pasco	*	*	*	*				
Spokane	*	*						

Infrastructure Improvements

- Speed improvements
 - Identified opportunities provide limited benefit given the possible cost only 3 to 4 locations – without significant rail right of way diversion
- Additional sidings for passing moves potentially needed (depends on freight frequency around passenger service)
 - Between West Easton and Cle Elum
 - Possible options could include modest speed improvement
 - At Cle Elum
 - At Thorp

Infrastructure Improvements – Station stops

- Cle Elum – North side of railway, east of Bullit Ave
- Ellensburg – East side of railway, south of West 5th Ave
Connection to existing transit service
- Yakima – East side of railway, between W Martin Luther King Jr Blvd and W Yakima Ave
Connection to existing transit service
- Toppenish – Northeast side of railway, south of S Toppenish Ave
- Station amenities would include simple heated shelters
(Example Leavenworth Station)
- Provision for an eight car train
(Platform would be built to required train length, TBD based on ridership)

Leavenworth Station



Next Steps

- Identify additional operating strategies and schedules
 - Consider one or two trains per day in each direction – Spokane to Seattle via Pasco
 - Consider truncated service options to Seattle
 - Consider service connectivity to provide east connection to
 - Empire Builder
 - Cascades services
 - Sounder services (Commuter and LRT)
 - Amtrak services
- Test possible options within scheduling tool (ongoing) and ridership model
- Identify infrastructure improvements and adjust operating strategies and schedule to optimize (ongoing)
- Capital cost estimates for track and stations (ongoing)
- Operating costs (Ongoing)

Deliverables - Early Summer

- Report, including
 - Ridership chapter detailing:
 - Methodology
 - Assumptions
 - Ridership projections
 - Operations chapter detailing:
 - Options developed
 - Results
 - Infrastructure chapter detailing:
 - Current conditions
 - Improvements needed
 - Costs
 - Equipment chapter detailing:
 - Equipment needs
 - Costs
 - Operator options chapter detailing:
 - Possible options for service operation
- Community support chapter detailing:
 - Outreach undertaken
 - Results
- Multiple account evaluation chapter detailing:
 - Metrics identified
 - Overview of the options considered
- Draft; and,
- Final report

Account	Criteria	Option 1	Option 2
Financial	Capital Cost	\$350 M	\$400M
	Operating cost	\$8 M	\$12 M
	Revenue	\$2.5 M	\$4.0 M
Transportation	Service Quality		
	Journey time	7 ½ Hrs	6 ¾ Hrs
	Ridership	125,000	200,000
	Catchment	1.5 M	1.5 M
	Connectivity (wider)		
	Connectivity (transit)		
Economic	Equity		
	Economic benefits		
	Journey time reliability		
Deliverability	Complexity of infrastructure		
	Phasing Opportunity		