Ultra-High-Speed Ground Transportation

BUSINESS CASE AND FRAMEWORK FOR THE FUTURE

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Progress to date

**Momentum behind transportation corridor**
- WA and B.C. sign agreement
- WA Legislature asked WSDOT to study feasibility

**Conduct feasibility study**
- 2017 Feasibility report submitted to the WA legislature
- Confirmed the viability and demand for this project

**Economic impacts addendum**
- Economic impacts addendum published
- WA legislature directs WSDOT to conduct a business case study

**Business case study**
- The 2019 business case explored benefits of the project

**Framework for the Future**
- Decision-making framework
- Financial strategy
- Strategic engagement plan

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**2016**

**2017**

**2018**

**2019**

**2020**
Ultra-High-Speed Ground Transportation (UHSGT)

Overview

- Linking Seattle, Portland, and Vancouver, BC, with possible additional stops in between
- Speeds up to 250 mph, using rail, maglev, or hyperloop
- Separate new right-of-way
- Connections to existing trains, transit, and rideshare options
- Anticipates public and private investment

Goals

- Provide efficient and sustainable mobility
- Promote regional integration
- Stimulate economic growth and innovation
UHSGT by the numbers

- Vancouver, BC to Seattle in 47 minutes; Seattle to Portland in 58 minutes
- Evaluated 21 to 30 daily round trips traveling at speeds up to 220 mph
- Conservatively estimated 1.7 and 3.1 million riders annually
- Estimated between $160 and $250 million in annual ticket revenue
- Economic growth potential in excess of $355 billion, with 200,000 new jobs related to construction and ongoing operations
- Avoids release of estimated six million metric tons of CO2 emissions
Anticipated ridership and revenue

Stated preference survey of leisure and business travelers in the corridor

• 2,400 respondents
• Significant interest, 74% would “definitely try” ultra-high-speed system

Estimates

• Riders: 1.7 – 3.1 million/year (conservative)
• Revenue: $160-$250 million/year (dependent on service type)
• Estimate between 12 and 20% of total current intercity trips would shift to UHSGT, mostly from private vehicles

Enhancement opportunities

• High capacity corridor and transit integration
• Multimodal connectivity
• Land use planning
Conceptual corridors

Scenarios and considerations

- Evaluated scenarios and services with up to nine stations and modal connections
- Compared stations in downtown cores vs suburban sites vs airport locations
- Analyzed ability to construct a fairly straight alignment that’s necessary for some of the technologies being considered
- Looked at topography of corridor that will require tunneling, elevated tracks, bridges, and grade separation from roadways
- Sought sweet spot between benefits and costs of adding more stations and/or increasing speed of travel
Maximizing value and benefit

Socio-economic analysis

- Ensuring equity is at the forefront of decisions
- Analyzed region’s future growth potential in global market
- Looked at enhanced connections across industry clusters
- Examined more infill development possibilities and opportunities for innovative start-ups
- Considered possible transformations in small towns and weighing job opportunities with quality of life issues
Governance considerations in project initiation

**Creation of a Coordinating Entity**
- Build support from political leadership
- Develop enabling agreement
- Secure resources for the coordinating entity

**Coordinating Entity Governance Activities**
- Refine project vision, goals, and identity
- Formalize membership and decision making

**Establishment of a future Development Entity**
- Determine governance structure for the formal entity
- Prepare legislation to establish the development entity
Financial strategy considerations for project initiation

- Continue working to secure funding from established state/provincial funding programs to further project initiation
- Pursue federal funding from relevant established programs
- Actively encourage U.S. and Canadian federal action to establish new funding programs aimed at providing substantial support to UHSGT projects like the Cascadia corridor
- Engage state/provincial governments and regional stakeholders to develop action plans for corridor funding
- Initiate conversations with interested private parties regarding private contributions
- Lay the foundation to maximize value capture from the project
- Align financing strategy with project delivery approach

**Value Capture**

Refers to a set of techniques that aim to monetize increases in property values, economic activity, and growth linked to infrastructure investment
Outreach series

**PROJECT INITIATION**

- Engage political leaders at the federal, state, provincial and local level
- Initiate conversations with Tribes and Indigenous Communities prior to required consultation
- Begin to build a broad coalition in support of the project
- Develop a vision and identity

**PROJECT DEVELOPMENT**

- Continue the deep and equitable engagement through EIS/IA activities
- Continued dialogue at the regional and local level along the entire corridor will be required

**CONSTRUCTION**

- Focus on mitigating construction impacts to the local community, aligning workforce needs with equitable project goals, and celebrating project milestones
- In the O&M stage, the engagement strategies can support public education and explore partnership models to promote ridership

**OPERATIONS**

- Implementation of agreements and commitments from previous project stages
# Key project scope and milestones

## Project Initiation
- Pre-Environmental Clearance;
- Conceptual Engineering;
- Stakeholder Engagement;
- Future Project Governance;
- Funding Strategy

## Project Development
- Environmental Clearance;
- Preliminary (NEPA/CEAA) Engineering/Design;
- Risk Assessment;
- Procurement and public-private partnership (P3) Policies

## Construction
- Land Acquisition;
- Vehicle Procurement;
- Final Design;
- Construction

## Operations
- Operations and Maintenance

## Scope/Project Activities
- Select UHS GT Technology
- Scenario planning

## Project Milestones
- Station siting and design
- Groundbreaking

## Entity
- Coordinating Entity
- Development Entity

## Cost Magnitude
- Development Entity
- Entity TBD
2020 Framework: next steps

**GOVERNANCE FRAMEWORK**
- G1 Develop enabling agreement between the three jurisdictions
- G2 Develop governance structure for the Project Development Stage

**STRATEGIC ENGAGEMENT PLAN**
- S1 Build support from decision-makers for Coordinating Entity
- S2 Develop/refine a project identity and vision
- S3 Initiate equitable local engagement
- S4 Initiate ongoing consultation with Tribes and Indigenous Communities
- S5 Build a broader coalition of support

**FUNDING AND FINANCE STRATEGY**
- F1 Establish funding for Coordinating Entity
- F2 Evaluate federal and state/provincial funding options and develop a strategy for securing funding commitments
- F3 Pursue and secure federal and state/provincial funding opportunities
- F4 Evaluate best techniques for capturing value

**DEVELOPMENT ENTITY**
- Environmental Clearance
- Preliminary (NEPA/CEQA)
- Engineering/Design
- Risk Assessment
- Procurement and P3 Policies

**CONSTRUCTION**
- Land Acquisition
- Vehicle Procurement
- Final Design
- Construction

**FEASIBILITY STUDY**
(2017-2018)

**BUSINESS CASE ANALYSIS**
(2019)

**FRAMEWORK REPORT**
(2020)

**COORDINATING ENTITY**
- Pre-Environmental Analysis
- Conceptual Engineering
- Stakeholder Engagement
- Future Project Governance
- Funding Strategy
Questions?

Ultra-High-Speed Ground Transportation Study
wsdot.wa.gov/planning/studies/ultra-high-speed-travel/ground-transportation-study

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