

Appendix A: Conformance with Federal Planning Requirements

(2022 Washington State Freight System Plan Update)

Appendix A: Conformance with Federal Planning Requirements specifies the 2022 Washington State Freight System Plan Update's conformance with federal planning requirements including the 2015 Fixing America's Surface Transportation (FAST) Act, 2021 Infrastructure Investment and Jobs Act (IIJA), national multimodal freight policy goals, and national highway freight program goals.

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

Conformance with Planning Requirements

The United States Code (c) contains specific requirements for state freight transportation plans. These requirements were established in the 2015 Fixing America's Surface Transportation (FAST) Act, and expanded in the 2021 Infrastructure Investment and Jobs Act (IIJA). Fulfilling these requirements is necessary to receive federal funding for the National Highway Freight Program.

There are seventeen minimum requirements for state freight plans, and the following table summarizes the requirements and their corresponding information in the 2022 FSP.

Federal Requirement	Corresponding FSP Elements
Multimodal critical rural freight facilities and corridors designated within the State under section 70103 of title 49.	 The FSP main body chapter A system that requires investment has a call-out box summarizing the Interim National Freight Network (page 19-20). Appendix D provides a description of the interim National Multimodal Freight Network (NMFN) established by USDOT, and shows WSDOT's proposed designations of multimodal freight facilities and corridors for addition to NMFN (pages 13-14)
Critical rural and urban freight corridors designated within the State under section 167 of title 23.	 The FSP main body chapter A system that requires investment references the designated critical rural and urban freight corridors on page 68, and refers readers to Appendix G for detailed information on the specific elements that make up this network. The selected NHFP local projects on page 69 are designated as CUFCs and CRFCs. Appendix G provides detailed information on critical rural and urban freight corridors designated within the State under section 167 of title 23 (pages 15-37)
4. A description of how the plan will improve the ability of the State to meet the national multimodal freight policy goals described in section 70101(b) of title 49, and the national highway freight program goals described in section 167 of title 23.	 The FSP main body chapter: A freight plan for Washington describes how the plan will fulfill Washington's ability to meet national highway freight program goals (pages 4-6) Appendix A further details how the FSP's elements improve Washington's ability to meet National Multimodal Freight Policy and National Highway Freight Program goals.
5. A description of how innovative technologies and operational strategies, including freight intelligent transportation systems, that improve the safety and efficiency of freight movement, were considered.	 The FSP main body chapter A system facing a changing world summarizes how innovative technologies and operational strategies can improve the safety and efficiency of freight movement. Key technology discussions include: Connected and autonomous vehicles and WSDOT's policy on technology development (page 64) Electrification and alternative fuels (pages 64-65) The FSP main body chapter A system that requires investment summarizes WSDOT's current operational strategies and intelligent transportation systems improve safety and efficiency of freight movement, including weigh-in-motion systems for safety enforcement, the border crossing wait time system, a freight and a system delay notification system (pages 74-75) Appendix F describes in further detail how innovative technologies and operational strategies, including freight intelligent transportation systems, can improve the safety and efficiency of freight movement.
6. In the case of roadways on which travel by heavy vehicles (including mining, agricultural, energy cargo or equipment, and timber vehicles) is projected to substantially deteriorate the condition of the roadways, a description of improvements that may be required to reduce or impede the deterioration	 The FSP main body chapter A system that requires investment summarizes WSDOT's ongoing efforts to reduce roadway deterioration from trucks, and how truck-related considerations are incorporated into pavement preservation decisions (page 73) Appendix E describes asset maintenance performance measures and highway system condition, including pavement conditions on high-tonnage truck corridors and oversize-overweight vehicle permitting statistics (pages 22-28) Appendix F summarizes the asset maintenance issues and needs identified in Appendix E (pages 9-11), WSDOT's preservation investment approach, and state's commercial vehicle permitting and enforcement efforts to reduce or impede deterioration from truck traffic (pages 11-12)

Federal Requirement	Corresponding FSP Elements
	 Appendix G provides information how roadway condition was incorporated into the NHFP project scoring criteria to inform investment decisions (page 38)
7. An inventory of facilities with freight mobility issues, such as bottlenecks, within the State, and for those facilities that are State owned or operated, a description of the strategies the State is employing to address the freight mobility issues	 The FSP main body chapter: A system facing a changing world describes the top mobility issues within the state across all modes. Trucking mobility issues and bottlenecks are summarized on pages 26-27 Rail mobility issues are summarized on page 34 Maritime mobility issues are summarized on page 38 Aviation mobility issues are summarized on page 40 Pipeline mobility issues are summarized on page 42 The FSP main body chapter A system that requires investment summarizes: Ongoing WSDOT efforts to address freight mobility issues (pages 73-74) The potential strategies the State may employ to address freight mobility issues and bottlenecks (pages 13-21) Appendix E describes in further detail the strategies the State may employ to address freight mobility issues and bottlenecks (pages 13-21) Appendix F describes in further detail the strategies the State may employ to address freight mobility issues (pages 32-42) Appendix G provides information how congestion and reliability were incorporated into the NHFP project scoring criteria to inform investment decisions (pages 40-41)
8. Consideration of any significant congestion or delay caused by freight movements and any strategies to mitigate that congestion or delay	 The FSP main body chapter: A system facing a changing world summarizes Washington's notable congestion and delay issues caused by freight movements (page 55) as part of a broader discussion of economic shocks The FSP main body chapter: A system that requires investment summarizes: WSDOT's current work to mitigate congestion or delay (pages 73-74) Appendix F's "Mobility" chapter provides further detail on congestion and delay caused by freight movements and projects being implemented to address these issues (page 33)
9. A freight investment plan that, subject to subsection (c)(2), includes a list of priority projects and describes how funds made available to carry out section 167 of title 23 would be invested and matched	 The FSP main body chapter: A system that requires investment summarizes WSDOT's freight investment plan in terms of NHFP funds allocated and matched by year, and locations of NHFP funded projects (pages 65-66) Appendix G provides further detail on the freight investment plan, including a fiscally constrained list of priority freight projects for NHFP investment, the process for identifying and selecting priority projects, and NHFP project scoring criteria.
10. The most recent commercial motor vehicle parking facilities assessment conducted by the State under subsection (f).	 The FSP main body chapter: A System that is interconnected and multimodal describes the commercial motor vehicle parking facilities assessment conducted by the State during the FSP planning process (pages 28-31) Appendix H contains the full commercial motor vehicle parking facilities assessment. Appendix G provides further detail on how truck parking considerations were incorporated into NHFP project scoring criteria to inform investment decisions (pages 43 and 44)
11. The most recent supply chain cargo flows in the State, expressed by mode of transportation.	• The FSP main body chapter: A system that sustains communities and commerce summarizes how select Washington supply chains utilize Washington's freight transportation system (pages 9-16)

Federal Requirement	Corresponding FSP Elements
	• The FSP main body chapter: A system facing a changing world summarizes and maps current and forecasted freight flows (pages
	 48-52) Appendix C provides detailed information on the supply chains of Washington's major industries, and how these supply chains utilize different modes of transportation to move different types of goods Appendix F provides further detail on current and forecasted freight flows (pages 76-83)
	 An ESRI ArcOnline Storymap provides users with interactive visualizations on how select Washington supply chains utilize the freight transportation system
12. An inventory of commercial ports in the State.	 Appendix D's reference chapters provide an inventory of: Public port authorities (Reference chapter E) Maritime terminals (Reference chapter F)
13. If applicable, consideration of the findings or recommendations made by any multi-state Freight compact to which the State is a party under section 70204.	 Washington does not have a multi-state freight compact as defined under 70204. However, Washington's multi-state collaboration efforts on freight-related topics are profiled in a callout box on page 72 of the FSP main body. Appendix F also contains in-depth information on Washington's freight-related collaboration with its neighbors (pages 70-73).
14. The impacts of e-commerce on freight infrastructure in the state.	 The FSP main body chapter: A system facing a changing world summarizes the impacts of e-commerce on freight infrastructure and land use, as well as emerging trends and technologies in e-commerce (pages 55-57) Appendix F provides further detail related to the impacts of e-commerce on freight infrastructure in the state (pages 89-96)
15. Considerations of military freight.	 The FSP main body chapter: A system that is multimodal and interconnected has a call-out box summarizing how Washington's freight network supports military freight, including summaries of the STRAHNET and STRACNET networks (page 23) Appendix D describes Washington's strategic defense system, including maps and descriptions STRAHNET and STRACNET elements and major military facilities (pages 10-12)
16. Strategies and goals to decrease:	
The severity of impacts of extreme weather and natural disasters on freight mobility.	 The FSP main body chapter: A freight plan for Washington summarizes the Washington Transportation Plan's policy goal areas, including the environment policy goal of "enhance Washington's quality of life through transportation investments that promote energy conservation, enhance healthy communities, and protect the environment" (page 3). This overarching environmental goal guides WSDOT's approach to decrease environmental impacts like air pollution, flooding, stormwater runoff, and wildlife habitat loss. The FSP main body chapter: A system facing a changing world summarizes the severity of impacts of extreme weather and natural disasters on freight mobility (pages 57-59) The FSP main body chapter: A system that requires investment summarizes: Existing WSDOT efforts to decrease the severity of impacts of extreme weather and natural disasters (pages 74-75) Potential strategies to address the impacts of extreme weather and natural disasters and natural disasters on freight mobility (page 77)

Federal Requirement	Corresponding FSP Elements
	Appendix G describes how system resiliency considerations were incorporated into the NHFP project scoring criteria to inform investment decisions (page 44)
The impacts of freight movement on local air pollution.	 The FSP main body chapter: A system facing a changing world summarizes the impact of freight movement on local air pollution (pages 61-63). The FSP main body chapter: A system that requires investment summarizes: Existing WSDOT and other agency efforts to reduce the impacts of freight movement on local air pollution (page 74). Appendix F provides further detail related to trends, issues, needs, and strategies related to the impact of freight movement on local air pollution as part of a broader discussion on freight and environmental justice (page 60-65). Appendix G describes how environmental justice (page 43) and greenhouse gas emission reductions (pages 44-45) were incorporated into the NHFP project scoring criteria to inform investment decisions.
The impacts of freight on flooding and stormwater runoff.	 The FSP main body chapter: A system facing a changing world summarizes the impact of freight on flooding and stormwater runoff (page 60) The FSP main body chapter: A system that requires investment summarizes: Existing WSDOT efforts to reduce the impacts of freight on flooding and stormwater runoff (page 74) Potential strategies to address the impact of freight on flooding and stormwater runoff (page 77) Appendix F provides further detail related to trends, issues, needs, and strategies related to the impact of freight on flooding and stormwater considerations were incorporated into the NHFP project scoring criteria to inform investment decisions (page 42)
The impacts of freight movement on wildlife habitat loss.	 The FSP main body chapter: A system facing a changing world summarizes the impact of freight movement on wildlife habitat loss (page 60) The FSP main body chapter: A system that requires investment summarizes: Existing WSDOT efforts to reduce the impacts of freight movement on wildlife habitat loss (page 74) Potential strategies to address the impact of freight movement on wildlife habitat loss (page 77) Appendix F provides further detail related to trends, issues, needs, and strategies related to the impact of freight movement on wildlife habitat loss (page 57-60) Appendix G describes how wildlife habitat considerations were incorporated into the NHFP project scoring criteria to inform investment decisions (pages 42-43)
17. Consultation with the State freight advisory committee, if applicable.	 Appendix B provides a summary of the public outreach process and findings from stakeholders Pages 7-8 list the industry, labor, government, community, and other stakeholders who participated in consultations Pages 8-11 summarize the key findings of these consultations Appendix G provides details on how WSDOT consulted with freight partners and stakeholder to support identification and

Federal Requirement	Corresponding FSP Elements
	selection of NHFP projects and development of the Freight Investment Plan
 (Other) PRIORITY -Each state freight plan shall include a requirement that the State, in carrying out the activities under the State freight plan: Enhance the reliability of redundancy of freight transportation Incorporate the ability to rapidly restore access and reliability with respect to freight transportation 	 The FSP main body chapter: A system facing a changing world describes some of the major threats to system resiliency, such as labor force shortages and climate change (pages 57 – 59) The FSP main body chapter: A system that requires investment describes WSDOTs ongoing efforts to enhance reliability and redundancy (pages 74-75) Appendix E provides further detail on freight reliability performance Appendix F provides further detail on trends needs and issues that impact resiliency and reliability. Appendix G provides further detail on how freight system resiliency was incorporated in to NHFP project scoring (page 44)
 (Other) RELATIONSHIP TO LONG- RANGE PLAN 1. INCORPORATION – A freight plan describe in subsection (a) may be developed separate from or incorporated into the statewide strategic long- range transportation plan required by section 135 of title 23. 2. FISCAL CONSTRAINT – The freight investment plan component of a freight plan shall include a project, or an identified phase of a project, only if funding for completion of the project can reasonably be anticipated to be available for the project within the time period identified in the freight investment plan. 	 The Washington State Freight System Plan is separate from the Washington Transportation Plan. However, the FSP supports WTP's six transportation policy goal areas, and the WTP's goal areas were used as the framework for examining freight needs and issues and organizing potential strategies. Fiscal constraint is demonstrated in Appendix G
(Other) A State freight plan described in subsection (a) shall address an eight-year forecast period	 This plan utilizes Freight Analysis Framework data to forecast future freight flows for Washington state through 2050. This plan identifies freight system trends, needs, issues, and potential strategies for both short term and long-term perspectives exceeding an eight-year period

Conformance with National Policy Goals

This section describes how the plan improves the ability of Washington State to meet the national multimodal freight policy goals as described in Section 70101(b) of title 49, and the National Highway Freight Program goals described in Section 167 of title 23.

National Multimodal Freight Policy Goals:

National Multimodal Freight Policy Goal	Corresponding FSP Elements
1. Identify infrastructure improver	nents that:
Strengthen the contribution of the National Multimodal Freight Network to the economic competitiveness of the United States.	 The FSP main body chapter: A system that requires investment describes infrastructure improvements to support economic vitality through the National Multimodal Freight Network. Appendix G provides further detail on specific projects within the freight investment plan.
Reduce congestion and eliminate bottlenecks on the National Multimodal Freight Network.	 The FSP main body chapter: A system that requires investment describes potential strategies to address mobility, reduce congestion, and eliminate bottlenecks on the National Multimodal Freight Network. Appendix G provides further detail on specific projects within the freight investment plan.
Increase productivity, particularly for domestic industries and businesses that create high-value jobs.	 The FSP main body chapter: A system that requires investment describes infrastructure improvements to strengthen economic vitality for domestic industries and businesses that create high-value jobs. Appendix G provides further detail on specific projects within the freight investment plan.
2. Improve the safety, security, efficiency, and resiliency of multimodal freight transportation.	 Appendix E describes in detail the notable safety, efficiency, security, resiliency, and mobility issues within the state across all modes. The FSP main body chapter: A system that requires investment describes potential strategies to improve safety, security, efficiency, and resiliency of the freight system. Appendix G provides further detail on specific projects within the freight investment plan.
3. Achieve and maintain a state of good repair on the National Multimodal Freight Network	 The FSP main body chapter: A system that requires investment describes potential strategies to improve asset maintenance on the freight system. Appendix G provides further detail on specific projects within the freight investment plan.
4. Use Innovation and advanced technology to improve the safety, efficiency, and reliability of the National Multimodal Freight Network	 The FSP main body chapter: A system that requires investment describes potential strategies that use technology to improve safety, efficiency, and reliability of the freight system. Appendix G provides further detail on specific projects within the freight investment plan.
5. Improve the economic efficiency and productivity of the National Multimodal Freight Network	 Appendix D provides a description of Washington state's Multimodal Freight System Appendix F provides a listing of potential strategies to improve economic efficiency and productivity on the freight system.
6. Improve the reliability of freight transportation.	 The FSP main body chapter: A system that requires investment describes potential strategies that improve the reliability of freight transportation, within the mobility section. Appendix G provides further detail on specific projects within the freight investment plan.
7. Improve the short- and long-dis	stance movement of goods that:

National Multimodal Freight Policy Goal	Corresponding FSP Elements
Travel across rural areas between population centers	
Travel between rural areas and population centers	 Appendix F provides a listing of potential strategies to improve goods movement. Appendix G provides further detail on specific projects within the freight
Travel from the Nation's ports, airports, and gateways to the National Multimodal Freight Network	investment plan.
8. Improve the flexibility of States to support multi-State corridor planning and the creation of multi-State organizations to increase the ability of States to address multimodal freight connectivity	 The FSP main body chapter: A system that requires investment describes potential strategies to improve multi-state planning efforts. Appendix F describes in more detail the issues, needs, and strategies related to multi-state corridor planning.
9. Reduce the adverse environmental impacts of freight movement on the National Multimodal Freight Network	 The FSP main body chapter: A system facing a changing world describes the impact of freight movement on the environment. The FSP main body chapter: A system that requires investment describes strategies to address the impact of freight movement on the environment. Appendix F provides further detail related to trends, issues, needs, and strategies related to the impact of freight movement on the environment.
10. Pursue goals described in a manner that is not burdensome to State and local governments.	 The FSP main body chapter: A system that requires investment describes stewardship strategies related to facilitating state-local government relations and freight planning efforts. Appendix F provides further detail related to trends, issues, needs, and strategies related to state-local government relations and freight planning efforts.

National Highway Freight Program Goals

National Highway Freight Program Goal	Corresponding FSP Elements
	ents and to implement operational improvements on the highways of the
A) Strengthen the contribution of the National Highway Freight Network to the economic competitiveness of the United States.	The FSD main body chapters A system that requires investment
 B) Reduce congestion and bottlenecks on the National Highway Freight Network. 	 The FSP main body chapter: A system that requires investment describes infrastructure improvements to strengthen these factors through freight system investments, including on the NHFN. Appendix G provides further detail on specific projects within the
C) Reduce the cost of freight transportation.	freight investment plan. In addition to alignment with the overall FAST and BIL planning goals listed above, the evaluation and
D) Improve the year-round reliability of freight transportation	selection of NHFP projects are broadly aligned with NHFP goals as well.
E) Increase productivity, particularly for domestic industries and businesses that create high-value jobs.	
2. Improve the safety, security, and efficiency of freight transportation in rural and urban areas.	 The FSP main body chapter: A system that requires investment describes potential strategies to improve safety, security, efficiency, and resiliency of the freight system. Appendix G provides further detail on specific projects within the freight investment plan.
3. Improve the state of good repair of the National Highway Freight Network.	 The FSP main body chapter: A system that requires investment describes potential strategies to improve asset maintenance on the freight system. Appendix G provides further detail on specific projects within the freight investment plan.
4. Use innovation and advanced technology to improve the safety, efficiency, and reliability of the National Highway Freight Network.	 The FSP main body chapter: A system that requires investment describes potential strategies that use technology to improve safety, efficiency, and reliability of the freight system. Appendix G provides further detail on specific projects within the freight investment plan.
5. Improve the efficiency and productivity of the National Highway Freight Network.	 The FSP main body chapter: A system that requires investment describes potential strategies that improve the reliability of freight transportation, within the mobility section. Appendix G provides further detail on specific projects within the freight investment plan.
6. Improve the flexibility of States to support multi-State corridor planning and the creation of multi-State organizations to increase the ability of States to address highway freight connectivity	 The FSP main body chapter: A system that requires investment describes potential strategies to improve multi-state planning efforts. Appendix F describes in more detail the issues, needs, and strategies related to multi-state corridor planning.
7. Reduce the environmental impacts of freight movement on the National Highway Freight Network.	 The FSP main body chapter: A system facing a changing world describes the impact of freight movement on the environment. The FSP main body chapter: A system that requires investment describes strategies to address the impact of freight movement on the environment.

National Highway Freight Program Goal	Corresponding FSP Elements
	• Appendix F provides further detail related to trends, issues, needs, and strategies related to the impact of freight movement on the environment.

Alignment with FHWA 2021 Planning Emphasis Areas:

The Federal Highway Administration and Federal Transit Administration have jointly issued Planning Emphasis Areas – topics that their agency field offices should emphasize when meeting with partners such as state DOTs and Metropolitan Planning Organizations. The WSDOT State Freight Plan update is not required by law to align with these planning emphasis areas, but aligns significantly in multiple ways:

Planning Emphasis Area	Corresponding FSP Elements
Tackling the Climate Crisis – Transition to a Clean Energy, Resilient Future	 The FSP main body chapters A system facing a changing world, and A System that Requires Investment provide an overview of climate change impacts, and WSDOT and private industry's efforts to decarbonize the transportation system. Appendix F provides further information on the expected impacts of climate change on the freight transportation system, and ongoing efforts within WSDOT to support the implementation of alternative fuels including vehicle electrification. The NHFP project selection criteria included a criterion evaluating a project's potential ability to support reduction of transportation air emissions.
Equity and Justice40 in Transportation Planning	 The FSP's outreach process included significant efforts to ensure inclusion of feedback from underserved and disadvantaged communities, including outreach sessions tailored for these communities, and consultations with groups representing these communities. The FSP main body chapter <i>A system facing a changing world</i> and <i>Appendix F</i> detail some of the freight transportation system's impacts on underserved and disadvantaged communities, including environmental impacts.
Complete Streets	 The FSP development process includes an analysis of commercial vehicle-involved crashes, The NHFP project selection criteria included criteria evaluating a project's history of safety concerns and design elements planned to reduce conflict with other transportation users.
Public Involvement	• The FSP public involvement process included early, effective, and continuous efforts to solicit feedback from the public and significant stakeholder groups, and is detailed in <i>Appendix B</i> .
Strategy Highway Network and US Department of Defense Coordination	 Appendix D provides an identification of STRAHNET and STRACNET elements in Washington as well as an inventory of the state's significant military facilities and their transportation connections.
Federal Land Management Agency Coordination	 Engagement for the plan included outreach to major land management agencies in Washington, including tribes and the Washington Department of Ecology.
Planning and Environment Linkages	 Appendix F documents some of the environmental impacts of the transportation system, and efforts to mitigate those impacts. The NHFP project selection criteria included criteria evaluating wildlife, stormwater, and environmental justice impacts or benefits of potential projects.
Data in Transportation Planning	The FSP update leveraged data from multiple federal and state agencies, including the WA Department of Ecology, WA

Planning Emphasis Area	Corresponding FSP Elements
	Department of Public Health, and Bureau of Transportation
	Statistics. This information was also supplemented with data from
	private sources, including INRIX GPS probe data, and Data Axle
	business establishment information.