Idaho Transportation Department

2023 Strategic Freight Plan

24 March 2023

Idaho's 2023 Strategic Freight Plan

Freight Partners and Stakeholders

ITD would like to thank all the agencies and businesses below that contributed their expertise, time, and commitment to the development of the 2023 State Freight Plan.

Burgess & Niple, Inc
Kootenai Metropolitan Planning Origination
Lewis Clark Valley Metropolitan Planning Origination
Community Planning Association of Southwest Idaho (COMPASS)
Bannock Transportation Planning Origination
Montana Department of Transportation
Washington Department of Transportation
Oregon Department of Transportation
Idaho Department of Agriculture
Idaho Department of Labor
Idaho Office of Mineral and Energy Resources
Idaho Office of Emergency Management
Idaho Manufacturing Alliance
Idaho Public Utilities Commission
Idaho Department of Lands
Idaho Local Highway Technical Assistance Council
Idaho Association of Local Highway Districts
Idaho Trucking Association
Idaho Freight Advisory Committee
Idaho Trucking Advisory Council
WATCO & Eastern Idaho Railroad
Port of Lewiston
Boise Airport
Idaho Transportation Department, Department of Motor Vehicles, Motor Carrier Services
Michael Miller, ITD GIS

Idaho's 2023 Strategic Freight Plan

Table of Content

Figures

Tables

Maps

Idaho's 2023 Strategic Freight Plan

1.0 Introduction

Idaho is a diverse and growing state—both in terms of population and economic production. Idaho's population reached more than 1.9 million in 2023 and is projected to reach 2 million by 2030. Much of the gain is centered in Ada and Canyon counties, and this population growth is both driving and being driven by employment growth. To meet these growing needs and to plan for the future of goods movement in the State, the Idaho Transportation Department (ITD) updated the 2017 Strategic Freight Plan to meet Bipartisan Infrastructure Law (BIL) and to provide guidance to ITD in setting performance goals and shaping investment in accordance with the vision and goals of the department.

ITD Freight Vision: *An innovative and resilient multimodal Freight Transportation System that promotes Idaho's Freight Transportation users and consumers.*

To reach this vision, the department is focused on four goals:

Safety – Improve the safety of operations for freight carriers in Idaho;

Mobility – Enhance Idaho's freight system mobility for industries to efficiently transport goods to market, reduces the impact of extreme weather and stormwater runoff/flooding events;

Economy – Support the economy and the vitality of Idaho and its communities, improve local air quality, reduce impact on wildlife habitat;

First and Last Mile Connectivity – Improve access/connectivity to and from production, processing and manufacturing facilities to distribution centers and consumers.

ITD developed the Strategic Freight Plan using a multi-step approach using both quantitative and qualitative analysis (FAF5.2), supplemented by private and public sector stakeholder input through three public open houses held in Lewiston, Idaho Falls and Twin Falls, six Board workshops, surveys and a freight summit held in August 2021.

The Freight Plan is organized into the following sections:

- **Section 2**: Provides how ITD conducted stakeholder engagement to gather public and stakeholder comments.
- **Section 3**: Explores Idaho's economy, how freight moves through Idaho including the supply chain flow.
- **Section 4**: Explores Idaho's freight transportation infrastructure including highway, rail, air, water, and pipeline assets;
- **Section 5**: Explores freight performance measures, policy analysis, environmental stewardship, equities and partnership coordination
- **Section 6**: Explores Idaho's freight needs
- **Section 7:** Recommends a multi-year Implementation Plan including projects that will improve goods movement in the state;
- **Appendix A: Pubic Outreach**

- **Appendix B: Freight Formula Project Application**

- **Appendix C; Freight Formula Project Scoring**

The ITD Statewide Freight Strategic Plan reflects the freight-related considerations included in the Bipartisan Infrastructure Law (BIL), which was signed into law in November of 2021. This bill updated the provisions found in the previous surface transportation bills, Fixing America's Surface Transportation (FAST) Act and the Moving Ahead for Progress in the 21st Century (MAP-21). Among its many requirements, the BIL updated elements for a State Freight Plan. This plan meets BIL requirements, shown in **Table 1.2**. Goals in the National Freight Policy established in 23 U.S.C. 167 are incorporated throughout the Idaho's Freight Plan.

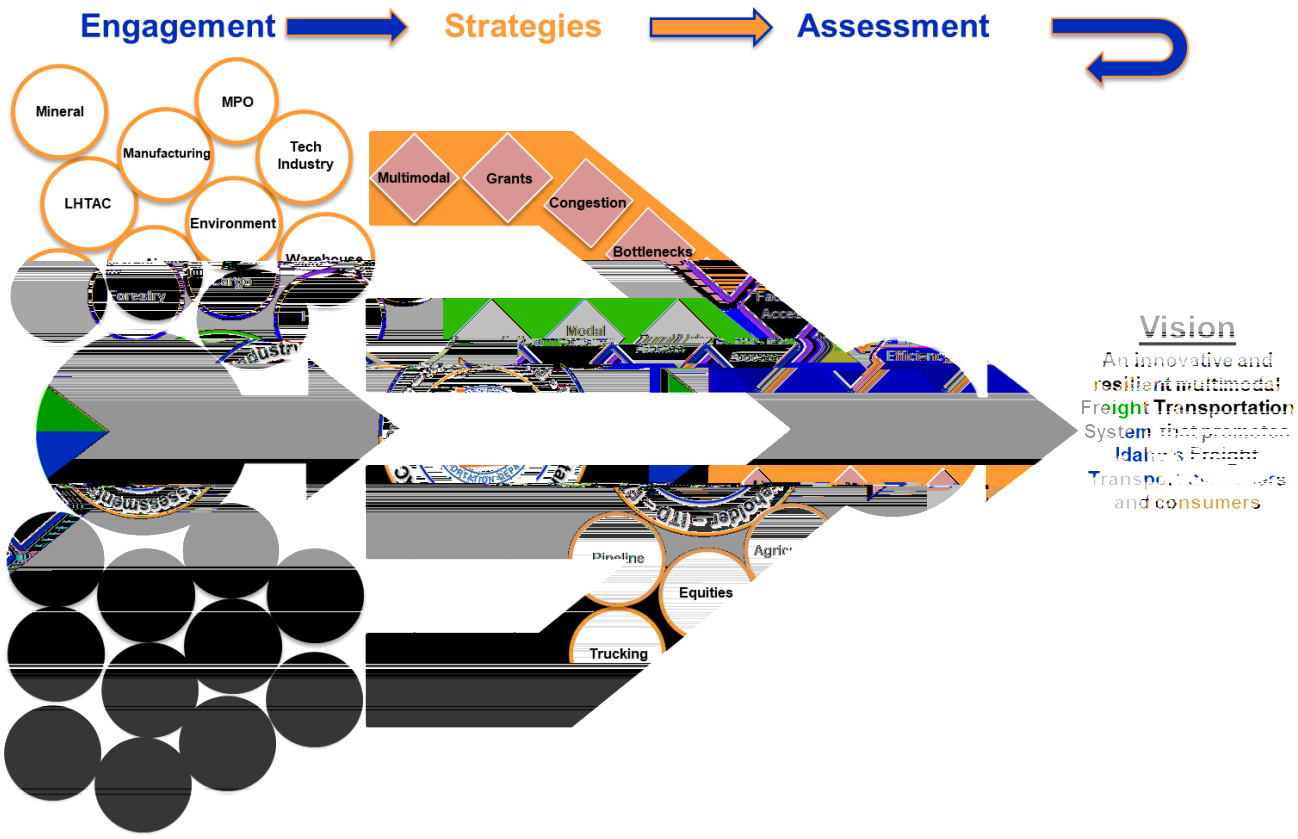
Table 1.2 Map-21, FAST Act and BIL State Freight Plan Requirements Crosswalk

BIL Act State Freight Plan Requirements	Section of Freight Plan
Identification of significant freight system trends, needs, and issues	3 & 4
A description of the freight policies, strategies, and performance measures that will guide the freight-related transportation investment decisions of the State;	5
A listing of— (A) multimodal critical rural freight facilities and corridors designated within the State under section 70103 of this title; and (B) critical rural and urban freight corridors designated within the State under section 167 of title 23;	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 this title and the national highway freight program goals described in section 167 of title 23;	2, 5 & 6
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;	4
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;	4
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;	4
Consideration of any significant congestion or delay caused by freight movements and any strategies to mitigate that congestion or delay;	4 & 5
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	7
The most recent commercial motor vehicle parking facilities assessment conducted by the State under subsection	4
The most recent supply chain cargo flows in the State, expressed by mode of transportation	3
If applicable, consideration of the findings or recommendations made by any multi-State freight compact to which the State is a party under section 70104;	Not Applicable
The impacts of e-commerce on freight infrastructure in the State;	3
Considerations of military freight;	4
Strategies and goals to decrease— (A) the severity of impacts of extreme weather and natural disasters on freight mobility; (B) the impacts of freight movement on local air pollution; (C) the impacts of freight movement on flooding and storm water runoff; and (D) the impacts of freight movement on wildlife habitat loss; and	5
Consultation with the State Freight Advisory Committee	2

2.0 Stakeholder Engagement

This Freight Plan seeks to be inclusive of Idaho's freight stakeholders; operates of the various modes of transportation, those that are supported by the freight system (warehouses, distributors and manufactures) and Idahoans that rely on consumer goods being delivered by the various freight modes. ITD created several opportunities for the plan development team to meet with and interview freight stakeholders. Engagement opportunities includes in-person interviews at the State Freight Summit, regional freight meetings, online/mail surveys, and meetings with ITD's Freight Advisory Committee (FAC) & Trucking Advisory Committee (TAC) and multiple freight related stakeholders. Figure 2.1 represents ITD's Freight Stakeholder Engagement and Investment Assessment Framework.

Figure 2.1: Freight Stakeholder Engagement and Investment Assessment Framework



2.1 Idaho's Freight Advisory Committee (FAC)

Idaho's FAC consists six members and one chair with each member representatives one of Idaho's six Transportation Districts, Table 2.1. ITD created the FAC to guide freight investment in the state with the following objectives:

- Serve as a forum for discussion regarding freight movement and freight infrastructure within Idaho
- Advise ITD on freight-related issues, priorities, projects and funding needs
- Educate freight stakeholders, the public and decision-makers on the importance of freight, its connection to the economy and its reliance on the transportation system

- Collaborate with other agencies and organizations on data and information sharing to promote informed decision making
- Work with ITD to incorporate freight interests into transportation planning to improve freight infrastructure
- Advise ITD and other public agencies regarding local, regional, statewide, and national transportation planning processes
- Promote the cross-sharing of information between private and public sections (e.g. local, state, and federal government agencies) on freight issues
- Evaluates and recommends priorities of freight projects

Table 2.1 FAC Membership

Member	Position	Industry
Winston Inouye	Chairman	Logistic/Warehousing
Alan Harper	District 1	Forestry
Scott Corbitt	District 2	Port of Lewiston
Robert Roe	District 3	Manufacturing
Gary Halverson	District 4	Dairy
Vacant	District 5	
Kurtis Lindsey	District 6	Rail

2.2 Idaho's Trucking Advisory Committee

The Trucking Advisory Council shall advise the Board on issues and policies concerning freight transportation, trucking safety, and services in Idaho. Such advice shall include laws, rules, regulations, policies, and procedures affecting motor carrier operations within the State of Idaho. The TAC shall provide leadership, recommend law, administrative rule, and/or procedural changes to improve customer service, promote safe trucking practices, identify transportation needs, recommend highway safety improvements, and promote coordinated freight transportation systems.

Table 2.2 TAC Membership

Member	Position	Industry
John Pocock	Chairman	Pocock Trucking
Frank Buell	District 1	Buell Trucking
Wall Burchak	District 2	KBC Trucking
Tony Black	District 3	Independent Operator
Kevin Iverson	District 4	Transystems LLC.
David McNabb	District 5	McNabb Trucking
Troy Thurgood	District 6	Thurcorp

2.3 Idaho Transportation Board Open House and Workshops

In 2023, the Idaho Transportation Board hosted six Idaho Transportation Board workshops. The purpose of these outreach meetings was for Idaho Transportation Board Members and ITD to listen to the transportation needs of local communities across the state, share funding updates and discuss what projects are scheduled and ready to advance during the next several years. Stakeholders from local elected officials to local transportation agencies, business owners and residents attended these meetings along with District FAC members and ITD's Freight Program Manager to discuss freight related concerns and needs within the respective district. The attendees shared insights on ideas that will help ITD develop future transportation investment project and plans. In addition, ITD Freight Manager presented information about 129,000 Pound Route Program, future freight related projects and Critical Rural and Urban Corridor program.

2.4 Freight Summit

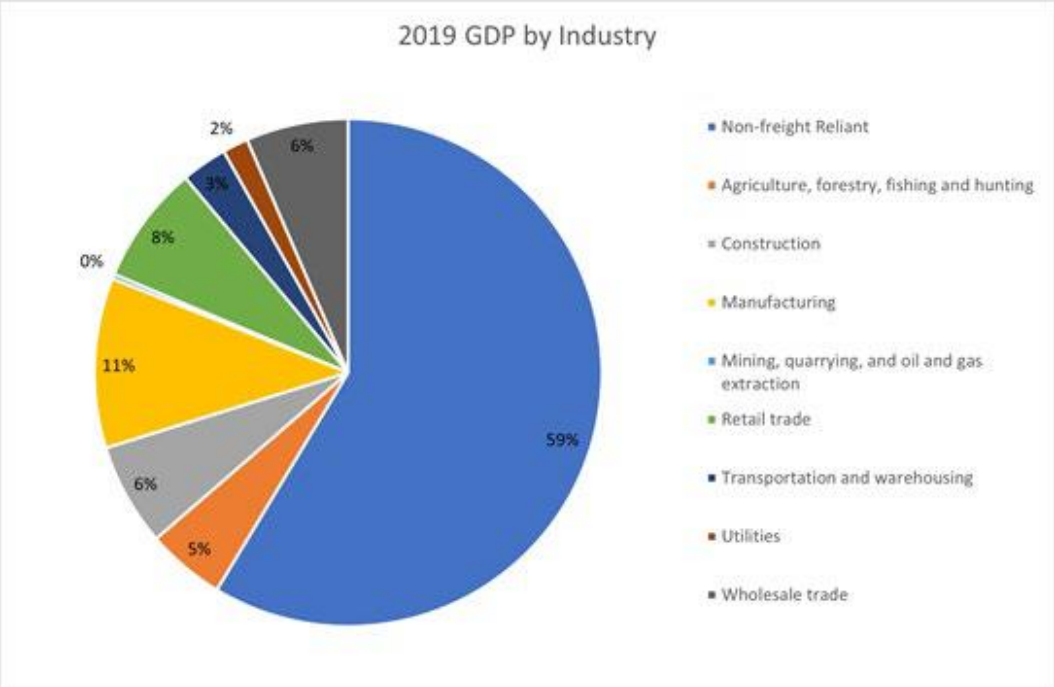
The Freight Summit was held in Boise August 10, 2021. Representatives from private and public sectors attended, including trucking, rail, metropolitan planning organizations, and others. Small group and individual stakeholder interviews were conducted as part of the Freight Summit. Notably, almost all stakeholders commented on the rapid rate of growth and how it has influenced them.

3.0 Idaho's Economy and Freight Flows

3.1 Idaho's Freight-Reliant Industries

Idaho's multimodal freight network is a vital component in the State's current and future economic success, servicing the more than 64,945 companies[1], 924,000[2] employees, and $74.08 billion in 2020[3] Gross Domestic Product (GDP) that call Idaho home. Of all the industries in the state, there are ten that are considered freight-reliant or freight-intensive. These industries utilize the State's multimodal transportation infrastructure daily for their basic operations and produce, ship/receive, or transport the majority of goods within Idaho. These industries are Agriculture, Forestry, Fishing and Hunting, Mining, Utilities, Construction, Manufacturing, Wholesale Trade, Retail Trade, and Transportation and Warehousing. These ten industries account for approximately 33.2 percent of the firms, 35.8 percent of the employees, 70.1 percent of sales revenue, and 40 percent of 2019 GDP in the state. Wholesale and retail businesses alone were responsible for more than $58.7 billion in sales. **Figure 3.1.** shows the GDP produce by each of the freight reliant industries in 2019. [4]

Figure 3.1: Percent Idaho GDP by Industry



Source: U.S. Bureau of Economic Analysis

[1] On line at: https://commerce.idaho.gov/

[2] Idaho Economic Situation Report, March 2022. On line at: https://lmi.idaho.gov/

[3] On line at: https://www.statista.com/statistics/187861/gdp-of-the-us-federal-state-of-idaho-since-1997/#:~:text=In%202020%2C%20the%20real%20Gross,at%2074.94%20billion%20U.S.%20dollars.

[4] Idaho Department of Commerce InfoUSA (2019) for employment, firms, and revenue. GDP from U.S. Bureau of Economic Analysis (2019).

3.2 Transportation Used by Freight Reliant Industries

Businesses in Idaho use many different modes to import and export products. Within the freight transportation, each mode (i.e., truck, rail, water, air and pipeline) plays an important role in moving goods efficiently. Each mode has unique characteristics that, in turn, affect the types of goods that are transported. All modes must work together seamlessly. While air cargo is costly, it provides the most reliable service for time-sensitive transport for healthcare, hi-tech manufacturing and hi-cost repair parts used in manufacturing. Truck, rail, pipeline and water are used to move goods less time-sensitive or bulk commodities at a lower cost, with water transport being the slowest but least costly.

Table 3.1 provides an overview of modal usage by Idaho freight reliant industries. Trucks are key to all industries, as even goods moving via other modes often use trucks for last mile connections. Rail and water serve the agriculture, mining, manufacturing and trade sectors, while air is mostly used for the transport of high value manufactured goods, healthcare product with a short shelf life and consumer products, including agricultural goods. Pipeline transport is important for moving crude oil and other energy sector goods.

Table 3.1: Modal Usage by Freight-Reliant Industries

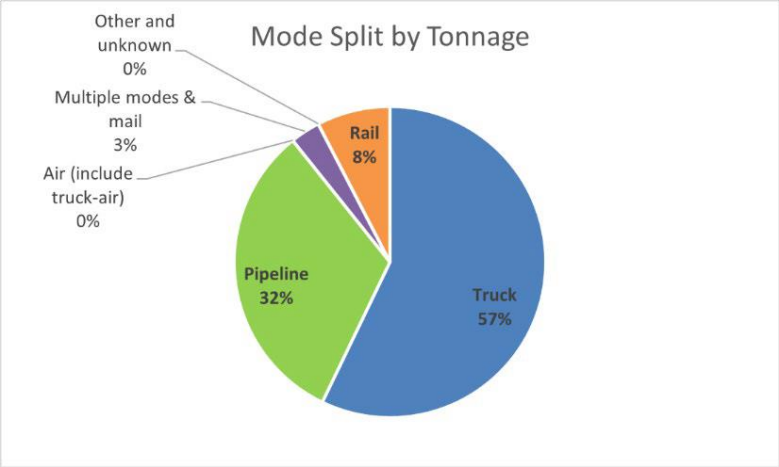
(NAICS) Industry	Highway	Rail	Water	Air	Pipeline
(11) Agriculture, Forestry, Fishing and Hunting	●	●	◑	◑	○
(21) Mining	●	●	◑	○	●
(22) Utilities	●	●	◑	○	●
(23) Construction	●	◑	○	○	○
(31-33) Manufacturing	●	●	○	◑	○
(42) Wholesale Trade	●	●	○	○	○
(44-45) Retail Trade	●	◑	○	◑	○
(48-49) Transportation and Warehousing	●	●	○	◑	○

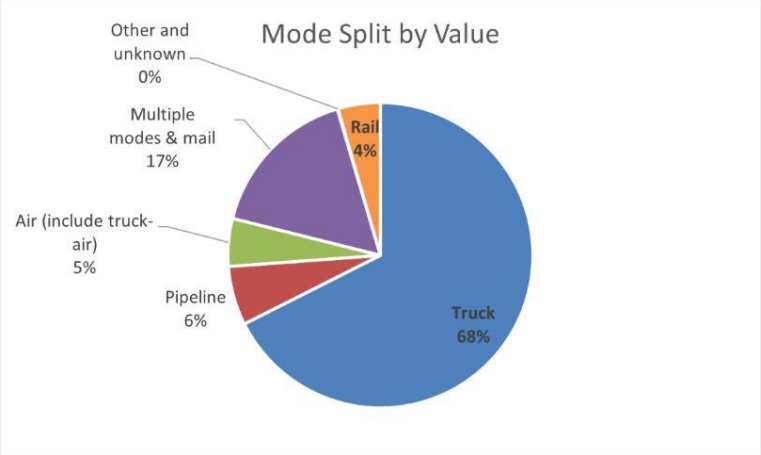
Key: ○ Less important ◑ ● More Important

3.3 Idaho Freight Flows

As shown in **Figure 3.3** truck freight dominates the mode split by both value and tonnage. This coincides with the fact that most freight trips in Idaho either begin or end with a truck movement. Of the 198 million tons of freight originating in Idaho in 2017, trucks carried 57 percent. And, of the nearly $115 million in value of freight originating in Idaho in 2017, 68 percent was carried by trucks. By 2050, trucks share is expected to slightly decrease (56 percent by tonnage and 65 percent by value); however, total freight is expected to grow substantially in both tons (49 percent) and value (91 percent).

Figure 3.3: Idaho Mode Split by Tonnage and Value





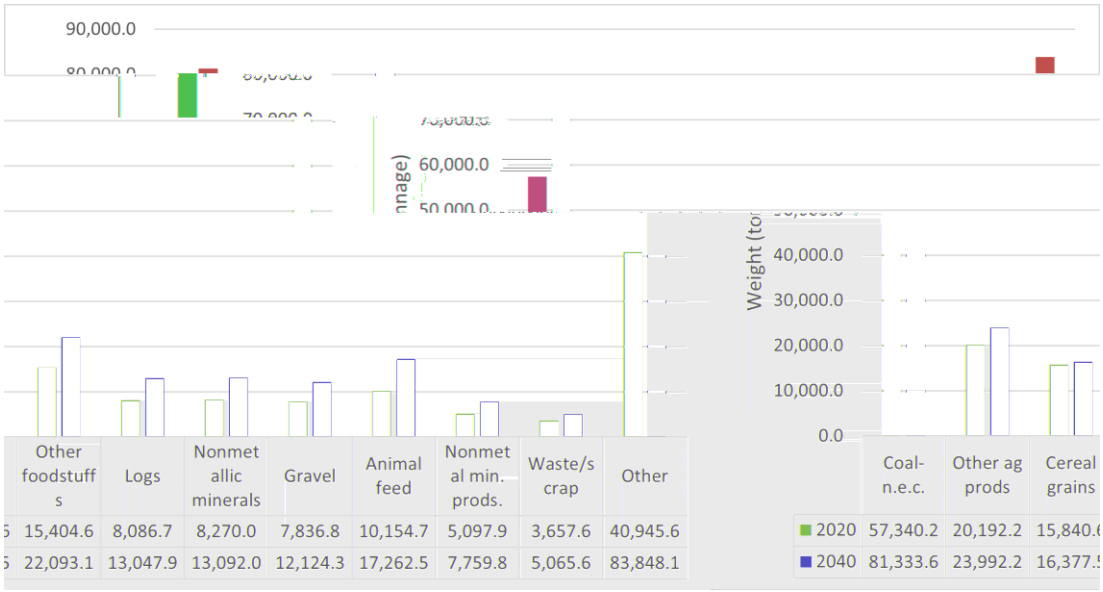
Source: FHWA Freight Analysis Framework v5.2

Figure 3.4 and **Figure 3.5** highlight Idaho's Top 10 commodities in 2020 and 2050 by tonnage and value, respectively. Coal and petroleum products n.e.c.[5] are among the top commodities, both by value and tonnage – driven by consumer use of motor vehicle fuels. Coal and petroleum products n.e.c. had the highest tonnage in 2020 and is expected to remain the highest commodity by tonnage in 2050, accounting for nearly 40 percent of the top 10 commodities.

The Top 10 commodities by tonnage are directly related to Idaho's agricultural industry, whether harvested (e.g., cereal grains or logs) or as inputs into the process (e.g., fertilizers and animal feed). The Top 10 commodities by value are centered more around manufacturing and high-tech industries. Cereal grains likely show up as a top commodity by value, simply due the sheer volume of product transported, not due to it being a high value commodity.

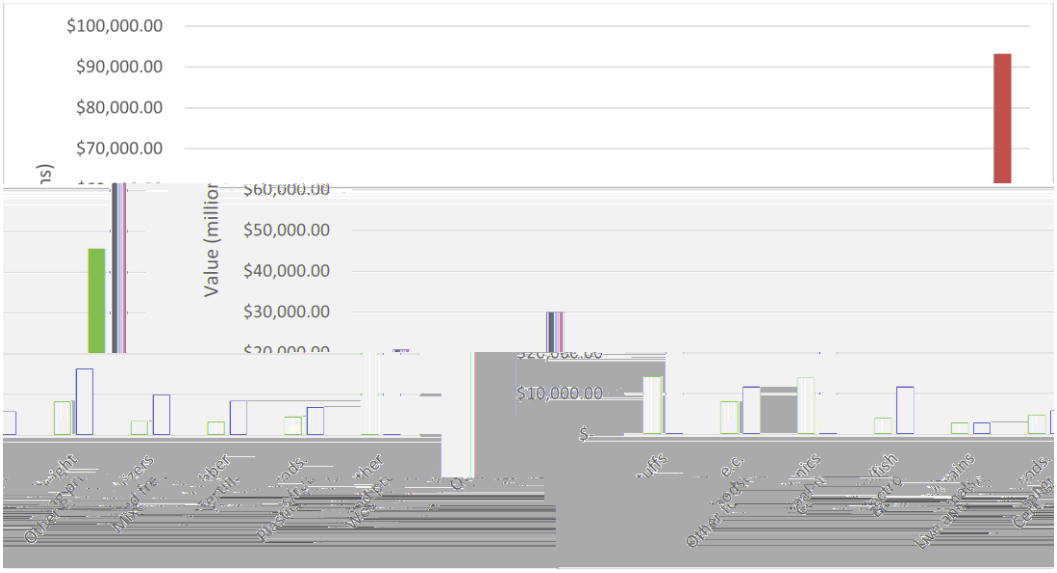
[5] N.E.C. means Not Elsewhere Classified. Also called "Other Coal and Petroleum Products," this category includes natural gas, petroleum asphalt, lubricating oils and greases, and others. For a full description, see: https://bhs.econ.census.gov/bhs/cfs/Commodity%20Code%20Manual%20(CFS-1200).pdf

Figure 3.4: Idaho Top Commodities by Tonnage



Source: FHWA Freight Analysis Framework v5.2

Figure 3.5: Idaho Top Commodities by Value



Source: FHWA Freight Analysis Framework v5.2

On the domestic side, the majority of Idaho's trade occurs within its borders. Trade within the state of Idaho during 2017 accounted for 66 percent of tonnage and 50 percent of value among the top 5 domestic trading partners. This drops to 62 percent by tonnage in 2050, though value stays approximately the same. Idaho's largest U.S. trade partners by value are, except for near-neighbor California, neighboring states but all with values lower than 11 percent in 2017, and below 10 percent by 2050 as shown in **Figure 3.6.**

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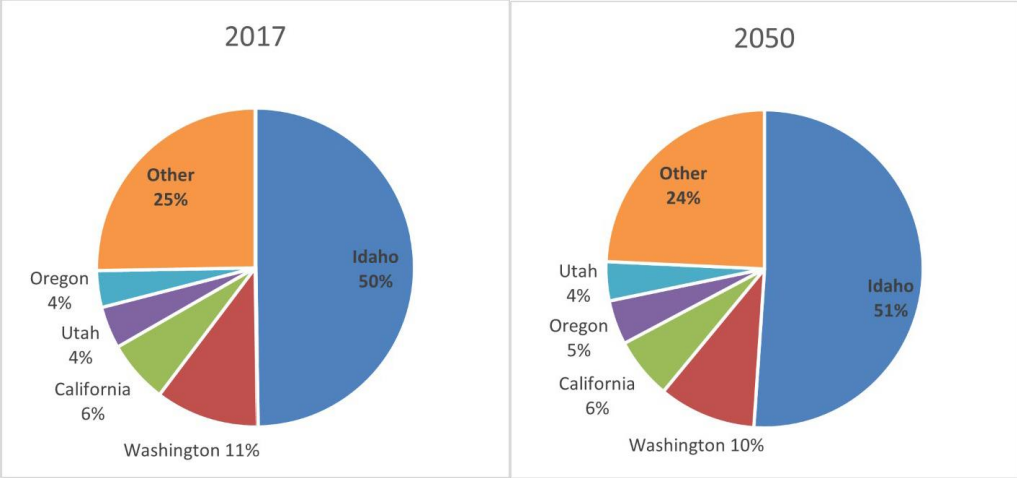
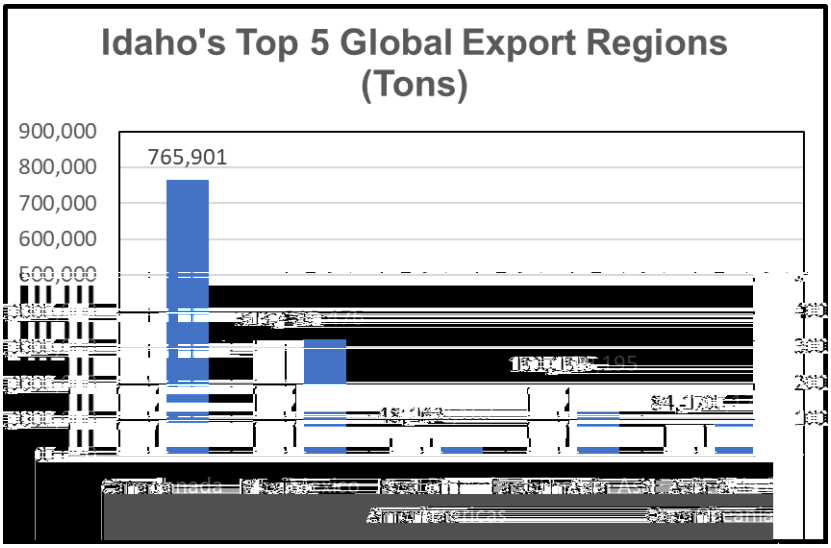
Figure 3.6: Idaho Domestic Trade Partner by Value



Source: FHWA Freight Analysis Framework v5.2

In 2020, Idaho exported over $3.4 billion dollars of commodities to over 165 global partners. Mining (156.34%) along with food and agricultures (3.18%) exports increased in 2020, while semiconductors and industrial manufacturing exports decreased by (-20.81%). The top three commodities by value are semiconductors and industrial items ($1.2 billion), food and agriculture items ($927 million) and mining products ($500 dollars). Given Idaho's proximity to Canada, a large portion of trade flows between the two countries via Idaho ports of entry. Trade with Canada ($1.1 billion) continued to dominate international movements in 2020 and is expected to remain so in the future. Idaho's other top trade global partners are Taiwan ($400 million), Singapore ($332 million) and Mexico ($224 million).[6] Idaho's top 5 global export regions are shown in **Figure 3.7**

Figure 3.7 Idaho Top 5 Global Export Regions



Source: FHWA Freight Analysis Framework v5.2

[6] 2020 *Idaho-USMCA Trade*. Idaho Department of Commerce. On line at: https://commerce.idaho.gov/idaho-business/international-trade/top-export-destinations/

3.4 Idaho's Supply Chain Flows

Idaho's supply chain flows are split between its rural and urban micro economies. Rural areas support agricultural and resource-based activates while urban areas support high-tech and industrial manufacturing.

Agricultural and resource-based freight activities are more geographically diverse and linked to those regions where production activity is concentrated. The characteristics of this type of movement from fields, farms and forests are relatively short distance truck trips to processing facilities that possess wide seasonal fluctuations associated with the production characteristics of the crop produced. Many of these trips originate on roads and highways that are not primary freight corridors and often under the jurisdiction of local cities/counties to maintain. Generally, first and last mile transportation requirements are based on commodity movements to the closest processing facility (grain to grain elevator, potato to cold storage or processing plant, hay to dairy, timber to sawmills, etc.) Public investments that facilitate greater efficiencies for this freight activity should focus on maintaining access and capacity (weight limits) connecting these production locations and limiting closures (highway construction) during peak harvest or seasonal freight activity. These improvements will benefit the producers most directly, allowing greater access and efficiency to markets.

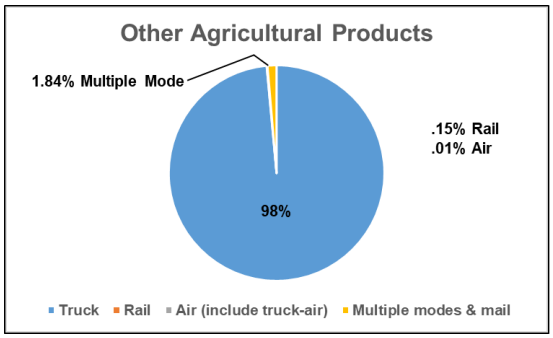
The agricultural and resource-based processing facilities are more concentrated near major transportation corridors (often multi-modal) due to the need to distribute year-round, even as inbound product is seasonal. The outbound/distribution freight activity from these processing facilities is much longer trips to markets far beyond the state borders thus requiring the cost efficiencies associated with rail or barge, in addition to the dependable service attributes of truck. Freight volumes leaving these processing facilities are influenced by a wider array of factors outside the state as these products compete in domestic and international markets. The export component is linked with the ocean ports at Seattle/Tacoma, WA and to a lesser degree the ports in Oakland, CA whereas the domestic markets are primarily urban centers in the west (Salt Lake City, UT, Seattle, WA, Portland, OR, Denver, CO).

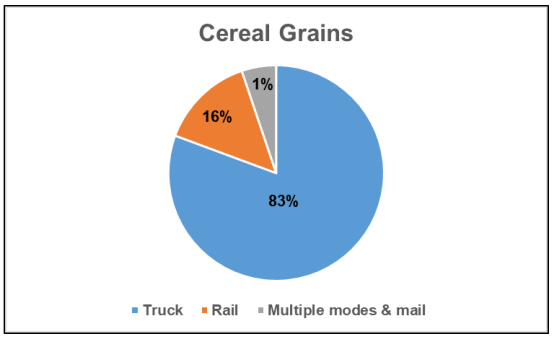
Manufacturing/warehouse distribution centers are primarily concentrated around Boise/Nampa, Twin Falls and Idaho Falls along I-84, I-15 and I-86 and differ from the freight needs of the agricultural and resource based industries. The large volumes of both inbound/outbound shipments require transportation that is dependable, resilient and accessible at all times. This is primarily due to the greater importance of timing in warehouse/distribution activities and manufacturing processes that are expensive to start/stop.[7]

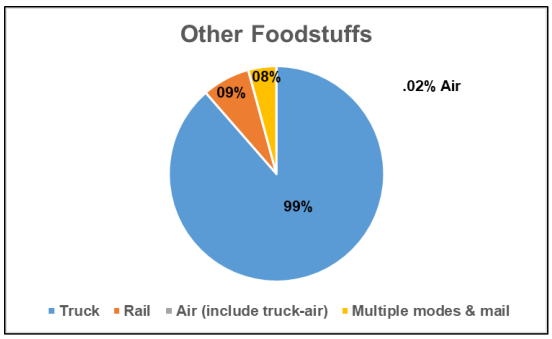
Idaho's commodity transportation modes flow are dominated by agricultural and natural resource industries. Figure 3.8 shows the commodity flow by transportation mode.

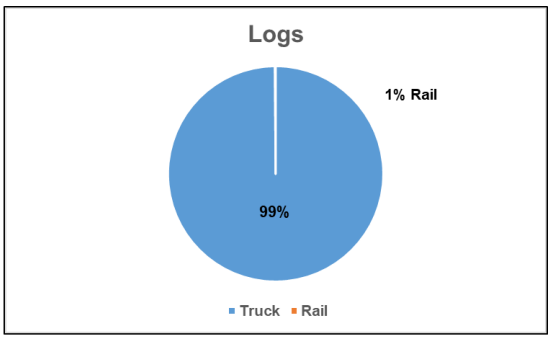
Figure 3.8 Idaho Top Commodities Transportation Mode Flows (Source FAF5.2)

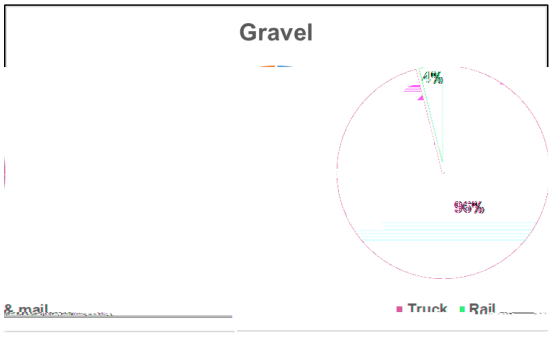
[7] ITD Research Report; "*Idaho Statewide Freight Data and Commodity Supply Chain Analysis."* September 2019. Accessed at" https://apps.itd.idaho.gov/apps/research/Completed/RP272.pdf

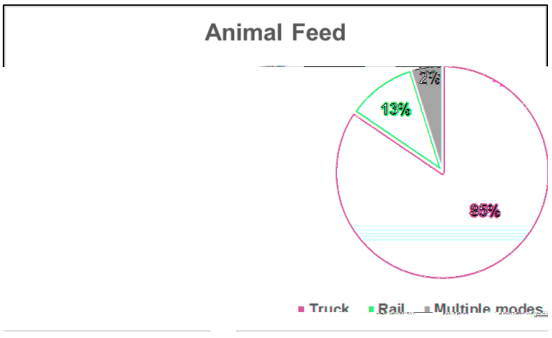

Other Agricultural Products
1.84% Multiple Mode
.15% Rail
.01% Air
98%
Truck
Rail
Air (include truck-air)
Multiple modes & mail

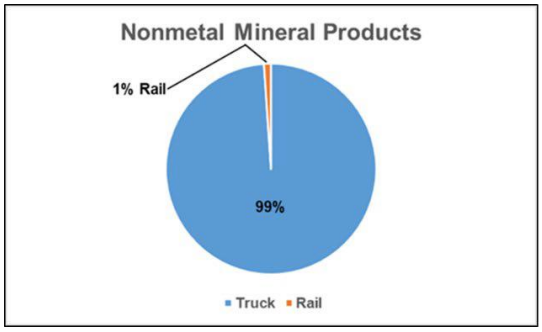

Cereal Grains
1%
16%
83%
Truck
Rail
Multiple modes & mail

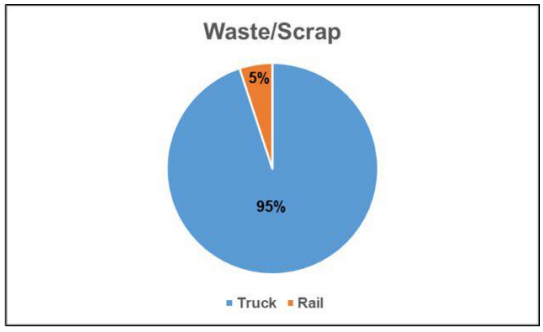

Other Foodstuffs
08%
09%
.02% Air
99%
Truck
Rail
Air (include truck-air)
Multiple modes & mail


Logs
1% Rail
99%
Truck
Rail


Gravel
Truck
Rail


Animal Feed
2%
13%
85%
Truck
Rail
Multiple modes


Nonmetal Mineral Products
1% Rail
99%
Truck
Rail

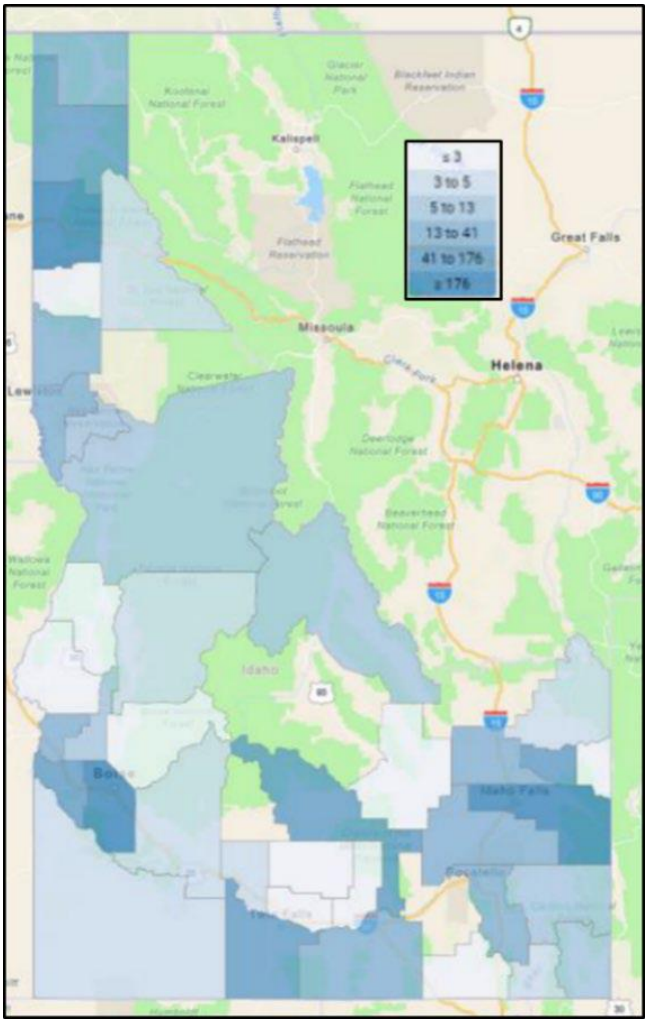

Waste/Scrap
5%
95%
Truck
Rail

3.5 Idaho E-Commerce and Mail-Order House Outlook

According to a July 2020 survey of 5,000 consumers in North America and Europe, 36% of respondents shop online weekly, up from 28% pre-COVID-19. In addition, 29% of consumers say they shop more online than in-person.[8] Between 2002 and 2021, Idaho's E-Commerce and Mail-Order Houses industry have grown by 2.8%, slightly less than the National average of 5.8%. Currently, Idaho's E-Commerce industries employs 2,059 or 2% of Idaho's work force. In 2020, E-commerce accounted for 0.3% of Idaho industry and approximately 0.2 billion dollars of Idaho's GDP. [9]

Not unlike the top 10 industries in Idaho, the E-Commerce industry is primarily focused in the larger population centers of Ada, Kootenai, Bonneville, and Canyon Counties. **Map 3.2** shows the geographic distribution of Idaho's E-Commerce industries.

Map 3.2 Idaho's E-Commerce and Mail-Order House Geographic Distribution.



Source: How COVID-19 Is Affecting Reverse Logistics Process

[8] *How COVID-19 Is Affecting Reverse Logistics Process*. Dr. Emmet Fritch. Accessed on line: https://medium.com/@AmericanPublicU/how-covid-19-is-affecting-reverse-logistics-processes-e9a052a9d4a6

[9] Ibid.

While public outreach done through surveys, the Freight and Trucking Advisory Committees and the Idaho Trucking Association (ITA) shows no impact of E-Commerce on Idaho's SHS, there is increasing congestion on the local networks. E-commerce relies extensively on trucking to get goods to consumers. From over the road trucking to regional and then the last mile – home delivery. The key to success is the increase number of distribution centers as sellers are augmenting their reliance on million-plus square foot facilities, adding smaller sorting and delivery hubs and locating them closer to their consumers. Moreover, while retailers continue to employ traditional delivery services like FedEx, UPS and USPS, they are also looking to increase their own fleets and add independent contractors to transport packages.[10] An example is Amazon's expansion in Treasure Valley. Amazon has built distribution centers in Boise and Nampa and an air hub at the Boise Airport. As demand increase the additional transportation requirements will increase overall traffic on Idaho's transportation system causing an increase in congestion while impacting pavement and bridge conditions. ITD will have to partner with, E-commerce operators, MPOs, local highway districts and regional economic development organizations to successfully mitigate the increase in demand on Idaho highways while ensuring public safety and economic viability.

[10] *How Will E-commerce Growth Impact Our Transportation Network*. Texas A&M Transportation Institute. Allan Rutter et al. 2017. Accessed on line at: https://policy.tti.tamu.edu/freight/how-will-e-commerce-growth-impact-our-transportation-network/

4.0 Current Conditions and Network Analysis

Idaho's multimodal freight network consists of road, rail, air, water, and pipeline assets as well as the terminals and connecting points that link the various modes together. This section contains an inventory of Idaho's freight infrastructure assets and a description of the needs and issues facing the state's freight infrastructure.

4.1 Highways

4.1.1 Highway Infrastructure

Trucks move the majority of raw, manufactured and natural resources in Idaho. The Interstate system, consisting of I-15, I-84, I-184, I-86, I-90 encompasses 612 miles connecting Idaho to domestic and global international points of origins and destinations. Idaho has 13 U.S. Highways consisting of 1,890 miles. Most notably are US-20, US-30 US-93 and US-95. These U.S. Highways provide linkage in Idaho, through areas that are not well served by Idaho portion of the Interstate system. U.S. 93 and U.S 95 provide a north/south connection while U.S. 20 and U.S. 30 provide and east/west connection. Idaho has a total of 68 State Highways consisting of 2,430 miles. Idaho State highways are the key to connecting Idaho's first and last, agricultural, manufacturing and natural resource industries to Idaho's numerous processing, manufacturing and warehousing/distribution centers as well as both domestic and foreign consumers. Together, Idaho's Interstate, U.S. Highways and State Highways consist of 4,932 miles providing Idaho a redundant and resilient network linking freight stakeholders to Idaho. U.S. and global supply chains and consumers.

Beyond the state and federal system, the role of local roads encompassing 38,397 miles cannot be overlooked in connecting Idaho's first and last miles. Many of the freight-reliant businesses in Idaho, especially those in the agriculture, natural resource and mining sectors are not located on the State Highway System (SHS) and rely on local roads to connect their business to state, national, and international supply chains. Businesses in the retail and construction sectors also use these roads to reach sites and customers, especially with the growth of E-commerce deliveries to individual homes.

4.1.2 Idaho's Primary Highway Freight System

The FAST Act established the National Highway Freight Network (NHFN) **(Map 4.1.2)** to assist States in directing resources towards improving the efficient movement of freight that moves within, out of or through a State. The NHFN includes the following subsystems of roadways:

- **Primary Highway Freight System (PHFS):** This is a network of highways identified as the most critical highway portions of the U.S. freight transportation system, determined by measurable and objective national data. **(Table 4.1.1)**
- **Other Interstate portions not on the PHFS:** These highways consist of the remaining portion of Interstate roads not included in the PHFS. These routes provide important continuity and access to freight transportation facilities. **(Table 4.1.2)**
- **Critical Rural Freight Corridors (CRFCs):** These are public roads not in an urbanized area that provide access and connection to the PHFS and the Interstate System with ports, public transportation facilities, or other intermodal freight facilities **(Table 4.1.3).**

- **Critical Urban Freight Corridors (CUFCs):** These are public roads in urbanized areas that provide access and connection to the PHFS and the Interstate System with ports, public transportation facilities, or other intermodal transportation facilities. **(Table 4.1.4).**

The PHFS is designated by the FHWA every five years. Both CRFC and CUFC are designated by respective States and MPOs. In 2023, Idaho Transportation Department, Idaho's five MPOs and the Local Highway Technical Assistance Council (LHTAC) with the endorsement of Idaho's FAC updated Idaho's CRFC/CUFC in accordance with 23. U.S.C. 167(e) and (f). Combined, Idaho's NHFN consist of approximately 957 miles; CRFC miles 259, CUFC miles 85, and Interstate and other Interstate portions not on the PHFS 613 miles. **Map 4.1.2** shows Idaho portion of NHFN.

Table 4.1.1 Idaho's Primary Highway Freight System (PHFS)

Primary Highway Freight System (PHFS)				
Route	Start Point	End Point	Route Description	Length
I15	I86	ID/MT Line	I15 from I86 to ID/MT Line	124.24
I84	OR/ID Line	ID/UT Line	I84 from OR/ID Line to ID/UT Line	275.59
I86	I84	I15	I86 from I84 to I15	63.23
I90	WA/ID Line	ID/MT Line	I90 from WA/ID Line to ID/MT Line	73.74
PHFS Total				536.81

Table 4.1.2 Idaho's Other Interstates Not on the PHFS

Other Interstate Not On The PHFS				
Route	Start Point	End Point	Route Description	Length
I15	UT/ID Line	I86	I15 from UT/ID Line to I86	71.57
I184	I84	U20	I184 from I84 to U20	3.57
NON-PHFS				75.14

Idaho's 2023 Strategic Freight Plan

Table 4.1.3 Idaho's Critical Rural Corridors

Critical Rural Freight Corridor				
Route #	Start Point	End Point	Length	CRFC ID
US95	Lancaster Rd	SH-63	2.080	F, G
SH53	Washington Border	US95	14.310	D, F
SH54	SH41	US95	7.890	A, D
US95	451.1	454.51	3.410	K,K
US12/95	Urbanized Area Border	Lewiston POE	0.800	C, D, F, G
Mill Rd	Urbanized Area Boarder	Jct Mill Rd and Potlatch Wy	1.770	F
SH3	Jct US12 & SH3	Deary	29.000	D
US95	Jct US95 & SH66	Jct US95 & Chaney Rd	1.000	F, G
Simco Rd	Jct Simco Rd & I84	Jct Simco Rd & SH167	20.115	D,G
Highway 30	Jct Hwy 30 and 1St Ave	Jct Hwy 30 & East Pasadena Valley Rd	1.800	D, G
S. Lincoln Rd	I84	E100S	1.540	D, F
US93	Jct US95 & US30	I84	11.890	G
US30	Jct US30 & SH50	Jct US93	6.610	D, F, G
SH50	Jct SH50 & US30	I84	4.800	D, F, G
Bedke Blvd	Jct SH27 & Bedke Rd	US30	1.550	D, F
US30	Jct S 400 W & US30	SH27	4.110	A, D, E, F, G
100W	US30	SH27	7.110	D, E
Idahome Rd	I84	Dairy	0.000	D, F
S 2750 E	Idahome Rd	East Valley Dairy	0.000	D, F
3700N	Jct US93 & 3700N Rd	Jct 3700N & 1700E	7.000	D, G
300W	Jct 300W & US30		0.250	D, G
400W	Jct US30 & 400W Rd	Jct 400W Rd & SH27	11.250	D, G
Idahome Rd	SH81 & Idahome Rd	Jct I84 & Idahome Rd	4.030	D, F
1500E	Jct 1500E & 2950S	Jct 1500E & 3600S	5.420	D, G
3500S	Jct SH46 & 3500S	Jct 3500S & 1500E	2.026	D, G
Crestview Rd (2700E)	Jct Crestview Rd & 990S	Jct Crestview Rd & 500S	5.040	D, G
Ritchie Rd (1200E)	Jct Ritchie Rd (2100E) & Tuttle Rd	Jct Ritchie Rd (2100E) & Hagerman Hwy (2900S)	5.250	D, G
Hagerman Hwy (2900S)	Jct Hagerman Hwy & Ritchie RD	Jct Hagerman Hwy & I84	6.400	D, G
Tuttle Rd (2350S)	Jct Tuttle Rd & 1300E	Jct Ritchie Rd (2100E) & Tuttle Rd	1.020	D, G
1300E	Jct 1300E & Tuttle Rd	Jct S1300E & Shoe String Rd (2300S)	0.270	D, G
Shoestring Rd (2300S)	Jct Shoestring Rd & 2300S	Jct Shoestring Rd & SH45	6.080	D, G
1000W	Jct 100W & 1500W	Jct 1000W & SH27	12.200	D,G
3200N	Jct 3200N & 4475E	Jct 3200N & 4200E	2.750	D, G
2900N	Jct 2900N & 4900E	Jct 2900N & 4200E	7.200	D, G
4475E	Jct 4475E & US30	Jct 4475E & 4500E	1.490	D, G
4500E	Jct 4500E & 4475E	Jct 4500E & 2900N	2.700	D, G
4900E	Jct 4900E & US30	Jct 4900E & 2900N	3.994	D,G
1500W	Jct 1500W & 2900N	Jct 1500W & 1000S	1.988	D, G
US30	Georgetown Summit	Wyoming	35.480	D, F, G
US26	W100N. Blackfoot	I-15	1.850	D, F
W. Bridge St	West Side of RR Crossing	SH39	0.288	F, G
Lamb Weston Rd	Jct SH39 & Lamb Weston Rd	Lamb Weston & Borah Rd	2.727	D, G
US20	Chester	Henry's Folk River	10.500	A, D, F, G
100 West	Jct 100 W & SH-25	Jct 100 W & W51 Ln	1.500	D, G
Peckham Rd	Jct Peckham Rd & US-95	Jct Peckham Rd & Notus Rd	5.500	D, G
		Total =	263.988	

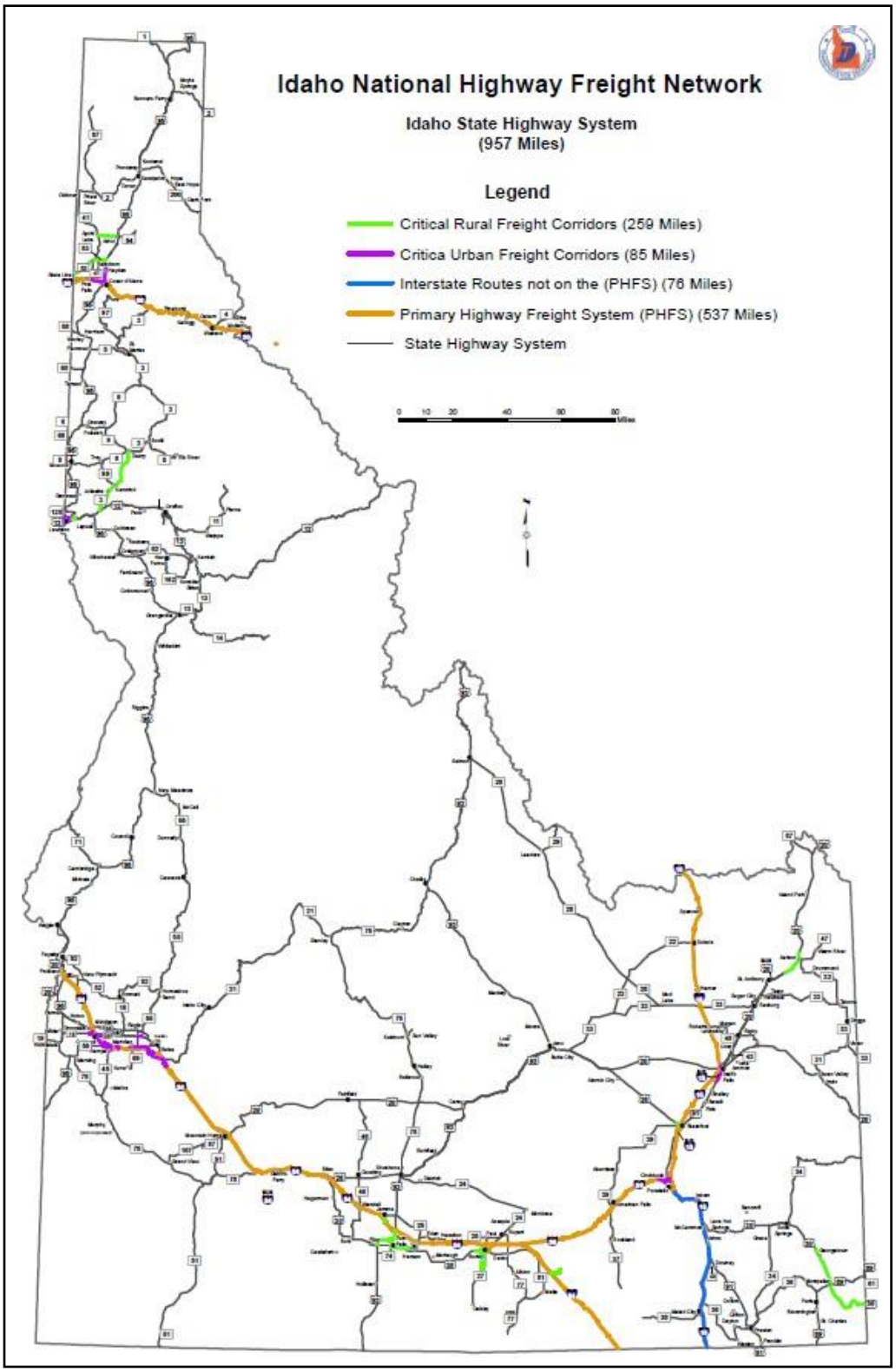
Idaho's 2023 Strategic Freight Plan

Table 4.1.4 Critical Urban Freight Corridors

Critical Urban Freight Corridor				
Route #	Start Point	End Point	Length	CUFC ID
Solstice Way	S. Ross Point Rd	Northwest Rd	4.350	I, J
US95	I90	US53	6.300	K, K
Prairie Ave	Jct SH41 & Prairie Rd	US95	4.770	K,K
SH128	Washington Border	US12	2.090	H, K
3rd Ave N	6th Ave N	US12	0.730	H,J
US12	Washington Border	Urbanized Area Boundary	5.250	H, J, K
Southway Bridge	Washington Border	Snake River Ave	0.160	K, K
Main St / Main St Bypass / Mill Rd in Lewiston	Jct US12 & Main St	Access road on east side of Clearwater Paper Reservoir	1.090	J
Northside Blvd	Jct I84 & Northside Blvd	Jct Northside Blvd & Birch Ln	2.669	C, I, E
Franklin Blvd	Birch Lane	Garrity Blvd	1.800	J
Chinden / US20/26	Midland Blvd	I84	3.410	H, K, J
SH55	Middleton Rd	Cherry Lane	1.710	J, K
SH19	Farmway	Centennial	0.860	I, J, K
Gowen Rd	Gowen Interchange	Orchard Interchange	5.470	H, J
Cole Rd	Victory Rd	I84	1.190	J
Franklin Rd	Linder Rd	I184	6.850	J
Victory Rd	Cole Rd	Orchard St	1.490	J
S. Federal Way	SH21	Memory Rd / I84	2.760	J
Franklin Rd	Star Rd	McDermott Rd	1.000	D, E
7th Ave/Yale St/Northside Blvd	12th Ave	2nd St S	1.010	C
I84B	Centennial Way	Midland Blvd	7.130	D, E
Northside Blvd	Jct Northside Blvd & Birch Ln	Jct Northside Blvd & Ustick Rd	4.042	C, I, E
Eisenman	Gowen Rd	Eisenman IC	2.730	J
US91	US30	I86	3.130	I, J
US30	US91	I86	4.840	J, K
I15B / US91 / US26	81st Str	Pancheri Dr	4.560	I, J, K
Lindsey Blvd	Iron Mule Saloon	Wardell Ave	1.110	J
Bedke Blvd	US30	SH27	1.570	I, J, K
		Total =	84.071	

CRFC ID	Route/Facility Disciprtor
A	Rural principle arterial roadway with a minimum of 25% of the annual average daily traffic of the road meassured in passenger vehicle equvalent units from trucks
B	Provides access to energy exploration, development, installation, or production area
	Connects the PHFS or the Interstate System to facilities that handle more than: 50,000 TEUs (20-foot equivalent units per year: or 500,000 tons per year of bulk commodities
D	Provides access to grain elevator, an agriculutural facility, a mining facility, a forestry facility, or an intermodal facility
E	Connects an international port of entry
F	Provides access to significant air, rail, water, or other freight facilities
G	Corridor that is vital to imporiving the efficient movement of freight of importance to the economy of the State
CUFC ID	**Route/Facility Disciprtor**
H	Connects an intermodal facility to the PHFS, the Interstate System, or an intermodal freight facility
I	Located within a corridor of a route on the PHFS and provides an alternative highway option important to goods movement
J	Serves a major freight generator, logisitcs center, or manufacturing and warehouse industrial land
K	Corridor that is important to the movement of freight within the region, as determinded by the MPO or the State

Map 4.1.2 Idaho's National Highway Freight Network



4.1.3 Idaho's 129,000 Pound Truck Routes State Highway System Network

In 2003, ITD studied the impacts of 129,000 pound trucks on the highway system when the Idaho Legislature directed ITD to conduct a Pilot Study[11] of trucks weighing up to 129,000 pounds on Idaho highways. During that pilot study, ITD did not observe any significant effects of the 129,000 pound pilot project trucks on pavements, bridges or roadway safety. CMV fleet owners reported economic benefits associated with the pilot projects resulting in a 12-22% average reduction of trucks on the roadway, which reduces the number of trips which enhances reducing carbon emissions while transporting the same amount of freight.

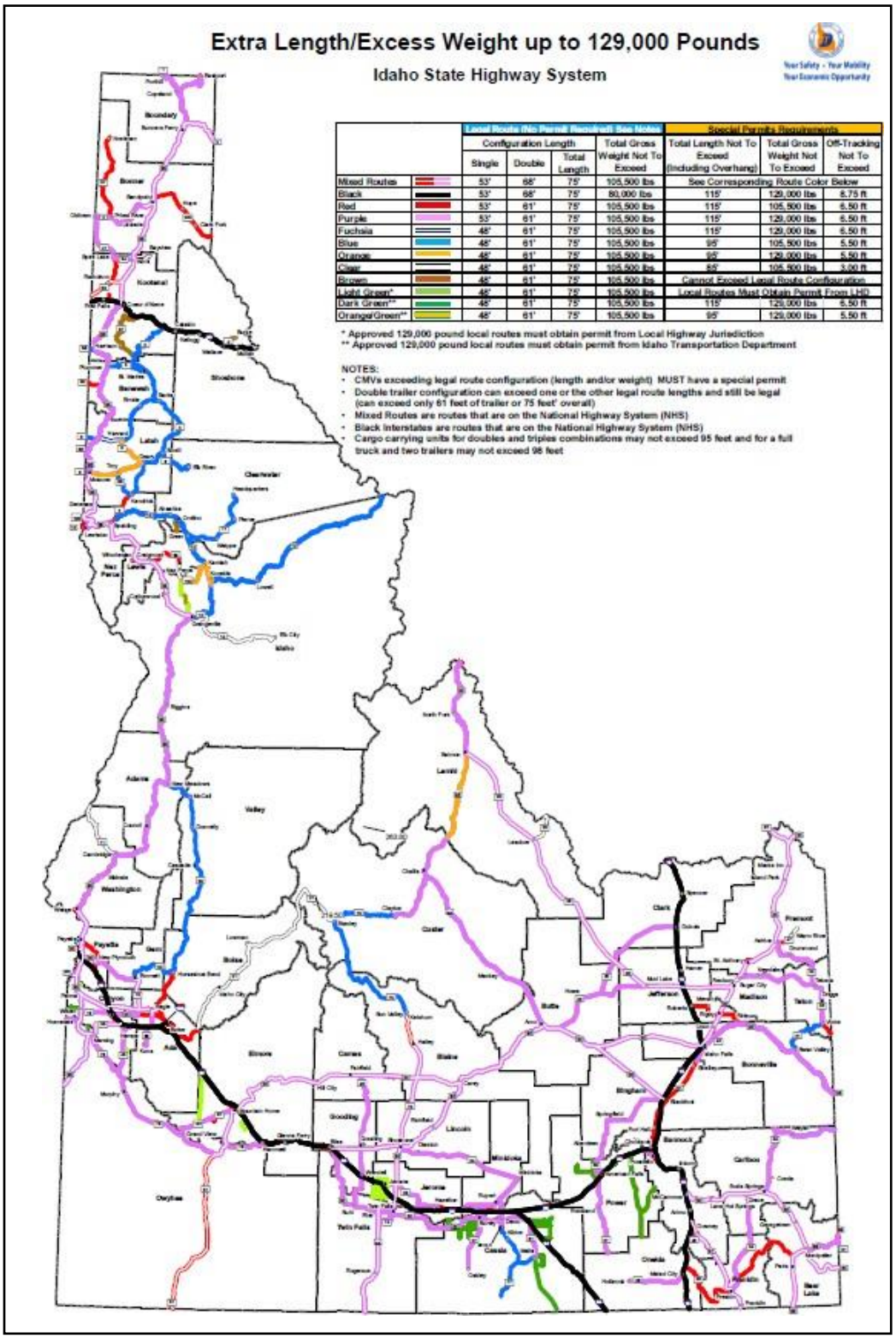
In 2013, Idaho Legislature made permanent the 129,000 Pound Pilot Routes process in Idaho Code; Title 49, Chapter 10, para 49-1004. This legislations also established a process by which to expand the 129,000 Pound Truck Route Pilot Project to additional eligible state (Idaho Code 49-1004A) and local (Idaho Code 49-1004B) highways. The authority for approving additional 129,000 Pound Routes on the state system is granted to the Idaho Transportation Board and the criteria must be based upon "road and bridge structural integrity engineering standards, as well as public safety engineering standards. Currently, Idaho has designated over 2,851 miles of Interstate, United States and State Highways as 129,000 pound routes.

Idaho's 129,000 pound route program is providing redundant west to east and north to south CMV capacity. U.S. Highways 20, US-26, US-30 along with State Highways SH-78, SH-24, SH-33 and SH-34 provide alternate routes to I-84/I-86 for west/east transportation. U.S. Highways US-93, US-95, US-91 and State Highway 28, SH-75, SH-45 and SH-46 provide intrastate and alternates to I-15 for north/south travel. **Map 4.1.3** shows Idaho 129,000 pound route network.

[11] "129,000 Pound Pilot Project." Idaho Department of Transportation. Online at:

Idaho's 2023 Strategic Freight Plan

Map 4.1.3 Idaho's 129,000 Pound Truck Routes State Highway System Network



4.1.4. Truck Parking

Numerous stakeholders expressed concern regarding truck parking availability and accesses both within urban and rural areas. Currently, Idaho has 836 official truck parking spaces spread across 44 facilities Figure 4.1.4. These facilities are a combination of State Safe Rest Area, private Oasis partners and Ports of Entry (POE). The State Rest Areas have a total of 430 truck spaces, Oasis partners have 265 spaces and the POEs have 141 spaces. There are 755 spaces on the Interstate system, 14 on the State highway system and 67 on the U.S. highway system. Map 4.1.4 shows Idaho's distribution of truck parking locations. Currently, ITD has one truck parking expansion project being funded using Freight Formula Funds. This project will add 18 truck parking spaces, nine in each direction to the Bliss Safety Rest Area. Idaho classifies the State's Safe Rest Areas into three categories:

BASIC PLUS – a public roadside facility that is in areas directly accessible to low to a medium volume State or US highways. A Basic Plus Safety Rest Area will provide the basic human needs to the traveling public plus furnish other amenities such as potable water, flush toilets, and picnic tables.

DELUXE – a public roadside facility that is in areas directly accessible to a medium to high volume State, US, or Interstate highways. A Deluxe Safety Rest Area will include all the amenities of a Basic Plus Safety Rest Area plus vending machines, designated pet areas and traveler information. The preferred design includes vestibules, where climactic conditions warrant, and at least one family-assist restroom to accommodate people with small children and those assisting others with disabilities.

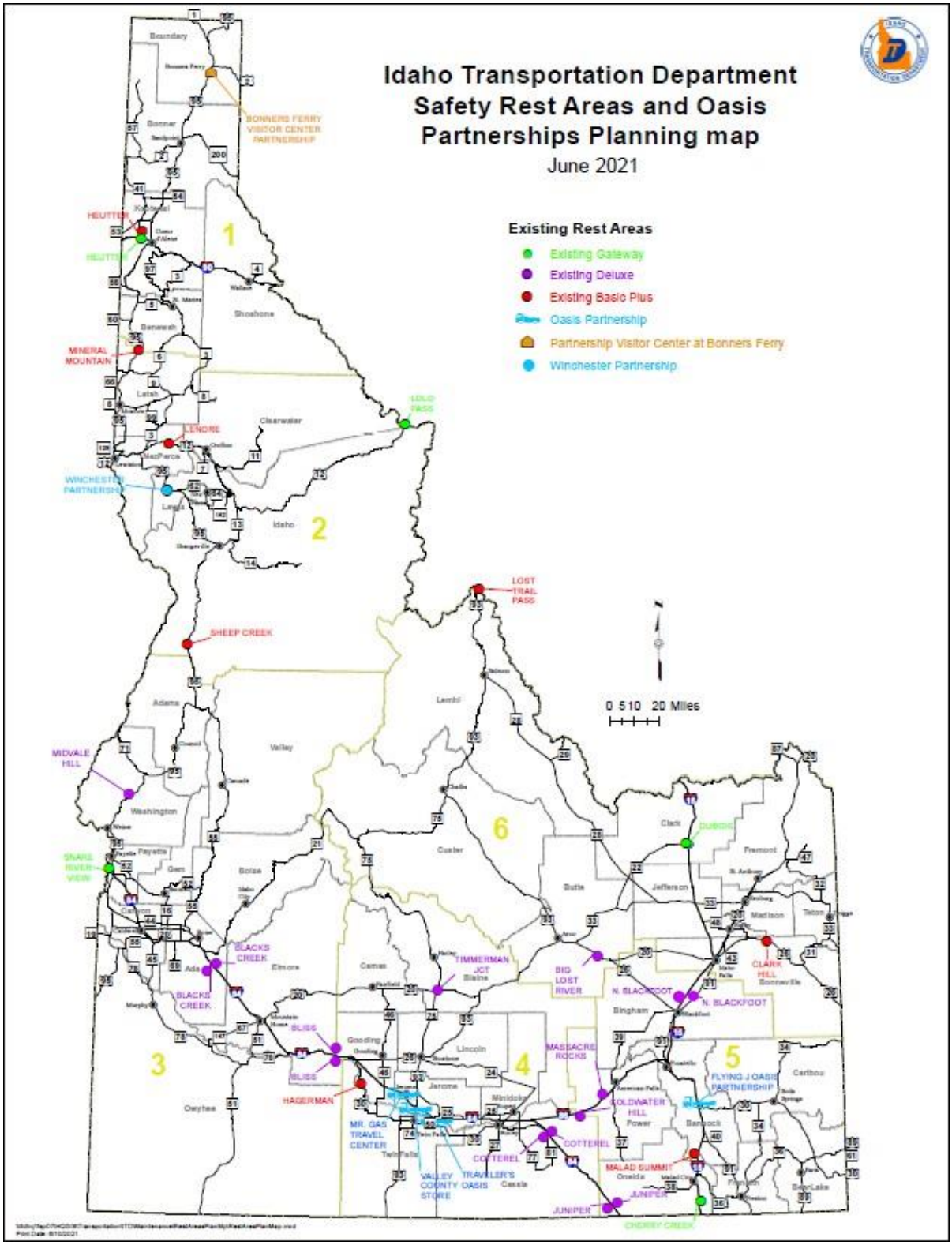
GATEWAY – a public roadside facility that is in areas directly accessible to a medium or high-volume State, US or Interstate highway and located near important regions of the state or tourist entrances into the state. A Gateway Safety Rest Area will include all the amenities of a DELUXE Safety Rest Area plus adequate space for a staffed Visitor Information Center.

ITD is currently developing a truck parking plan to gain a greater understanding of truck parking needs and locations throughout the State. The study completion date is September 2023. The objectives of the truck parking study are three-fold. First, enhance safety on Idaho's highways by reduce accidents related to drive fatigue. Second, identify the demand associated locations where additional truck parking is needed. Lastly, examine the ways in which "urbanized" truck parking can be achieved that allows truck drivers "call forward parking" prior to picking up or making deliveries to distribution center, processing and/or manufacturing facilities. Since ITD is primarily responsible for the state highway system, this information will allow the state to make more informed investment decisions regarding driver safety, proposed truck parking locations, truck parking automation systems and public/private parking partnerships. Further, it will allow investment and expansion of that system in a way that supports the state's economic prosperity by focusing upon those needs which yield the greatest economic benefit throughout the state and region.

Table 4.1.5 Idaho's Truck Parking Locations

NHS Public Rest Stop	Highway Route #	Mile Post	Municipality	County	ITD District	# of Truck Parking Spaces
Huetter Rest Area WB	I-90	8.000	Huetter	Kootenai	1	10
Huetter Rest Area EB	I-90	8.000	Huetter	Kootenai	1	20
Bonners Ferry POE	US-95	510.500	Bonners Ferry	Boundary	1	10
Bonners Ferry VC Partnership (Oasis)	US-95	507.380	Bonners Ferry	Boundary	1	5
Lenore Rest Area	US12	28.000	Lenore	Clearwater	2	9
Lolo Pass Rest Area	US-12	147.340	ID/MT Border	Idaho	2	6
Sheep Creek Rest Area	US-95	188.790	Pollock	Idaho	2	3
Mineral Mountain Rest Area	US-95	370.520	Potlatch	Latah	2	8
Kooskia POE Rover Site	US-12	73.800	Kooskia	Idaho	2	3
Riggins POE Rover Site	US-95	198.500	Riggins	Idaho	2	12
Winchester Partnership (Oasis)	US-95	278.000	Winchester	Lewis	2	9
Snake River View Rest Area	I-84	1.000	Fruitland	Payette	3	10
Midvale Hill Rest Area	US-95	100.000	Midvale Hill	Washington	3	7
Blacks Creek Rest Area EB	I-84	62.070	Boise	Ada	3	34
Blacks Creek Rest Area WB	I-84	62.000	Boise	Ada	3	26
Boise POE EB	I-84	66.300	Boise	Ada	3	56
Boise POE WB	I-84	66.300	Boise	Ada	3	38
Horseshoe Bend POE	SH-55	65.400	Horseshoe Bend	Boise	3	6
Marsing POE	US-95	18.300	Marshing	Owyhee	3	12
Bliss Rest Area EB	I-84	133.000	Mellon Valley	Gooding	4	40
Bliss Rest Area WB	I-84	133.000	Mellon Valley	Gooding	4	40
Cotterell Rest Area WB	I-84	229.000	Idahome	Cassia	4	25
Juniper Rest Area EB	I-84	268.820	ID/UT Border	Oneida	4	20
Juniper Rest AreaWB	I-84	268.820	ID/UT Border	Oneida	4	25
Timmerman Rest Area Junction	SH-20	177.940	Jct SH-20 & SH-75	Blaine	4	8
Traveler's Oasis (Oasis)	I-84	182.000	Hansen	Twin Falls	4	55
Mr. Gas Travel Center (Oasis)	I-84	165.000	Jerome	Jerome	4	100
Massacre Rocks Rest Area WB	I-86	31.000	American Falls	Power	5	22
Coldwater Rest AreaEB	I-86	18.850	Heglar	Power	5	19
Malad Summit Rest Area SB	I-15	24.830	Malad Summit	Bannock	5	8
Cherry CreekRest Area SB	I-15	6.600	Malad	Oneida	5	18
Flying J (Oasis)	I-15	47.500	McCammon	Bannock	5	80
North Blackfoot Rest Area NB	I-15	100.890	Blackfoot	Binghim	5	12
North Blackfoot Rest Area SB	I-15	100.890	Blackfoot	Binghim	5	13
Inkom POE NB	I-15	59.100	Inkom	Bannock	5	5
Inkom POE SB	I-15	59.100	Inkom	Bannock	5	5
Big Lost River Rest Area	US-20	264.930	INL	Butte	6	8
Clark Hill Rest Area	US-26	357.380	Iona	Bonneville	6	8
Dubois POE	I-15	166.850	Dubois	Clark	6	50
Lost Trail Pass Rest Area	US-93	350.800	ID/MT Border	Lemhi	6	6
Sage Junction POE	I-15	143.100	Sage Junction	Jefferson	6	10
Arco POE	US-20	255.800	INL	Butte	6	3
Salmon POE	US-93	308.000	Salmon	Lemhi	6	2

Map 4.1.4. Idaho's Truck Parking Network



4.1.5 Idaho's Ports of Entry and Data Collection Network

Idaho checks the size, weight, registration, credentials, and safety of commercial motor vehicles through a system of 17 fixed Ports of Entry (POE) and multiple mobile enforcement units, identified in **Map 4.1.5** below. These facilities are a crucial component in preserving the state's transportation infrastructure, protecting the motoring public from unsafe vehicles, and maintaining a level playing field for companies that use Idaho's transportation assets. ITD and the Idaho State Patrol (ISP) use a growing set of technologies to increase the efficiency of their operations, including Weigh in Motion (WIM) sensors, Automatic Vehicle Identification (AVI) systems such as License Plate Readers (LPR), and are part of the Federal Motor Carrier Safety Administration Commercial Vehicle Information Systems and Networks (CVISN) program. Idaho is also home to two international ports, Porthill on SH 1 and Eastport on U.S. 95. Both Ports allow truck and railroad traffic to transit between the U.S. and Canada. In 2020, over 681,000 million[12] tons of commodities crossed between Idaho and Canada. Eastport processed over 449 million tons of cargo using 57,120 trucks and 1,048 trains. At Porthill over 232,000 million tons of cargo crossed the border using 3,115 trucks.[13] Live animals, machinery and mechanical parts for reactors, and vehicles are the top commodities by value moving through Eastport.

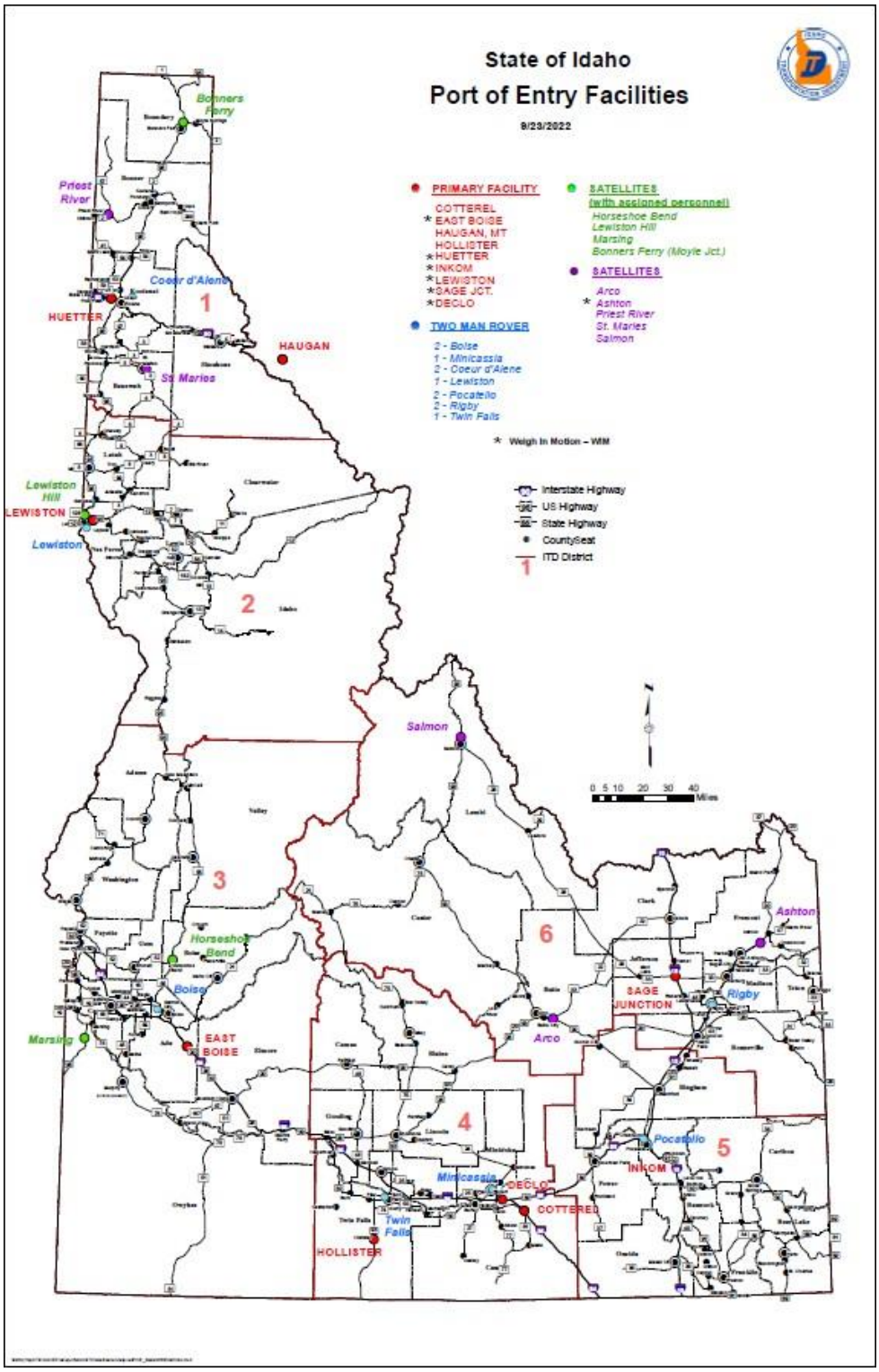
Idaho uses pre-clear devises at six of the State's fixed POEs (East Boise, Huetter, Inkom, Lewiston, Sage Jct. and Declo). Idaho is moving towards a License Plate Reader (LPR) system as our main identifier for bypass opportunities that, in conjunction with the pre-clear devises and PrePass will enable CMVs greater POE bypass opportunities.

In the spring of 2022, ITD opened the West bound Declo POE on I-84 and in the spring of 2024, ID will open the East bound Declo POE. The Declo POE will replace the Cotterel POE on I-84. The goal of these POE projects is to install WIMS so to reduce mandatory stops for CMV as well as to capture west bound CMV traffic on I-86 in Idaho's POE network. Additionally, in 2025, the Lewiston POE is being updated.

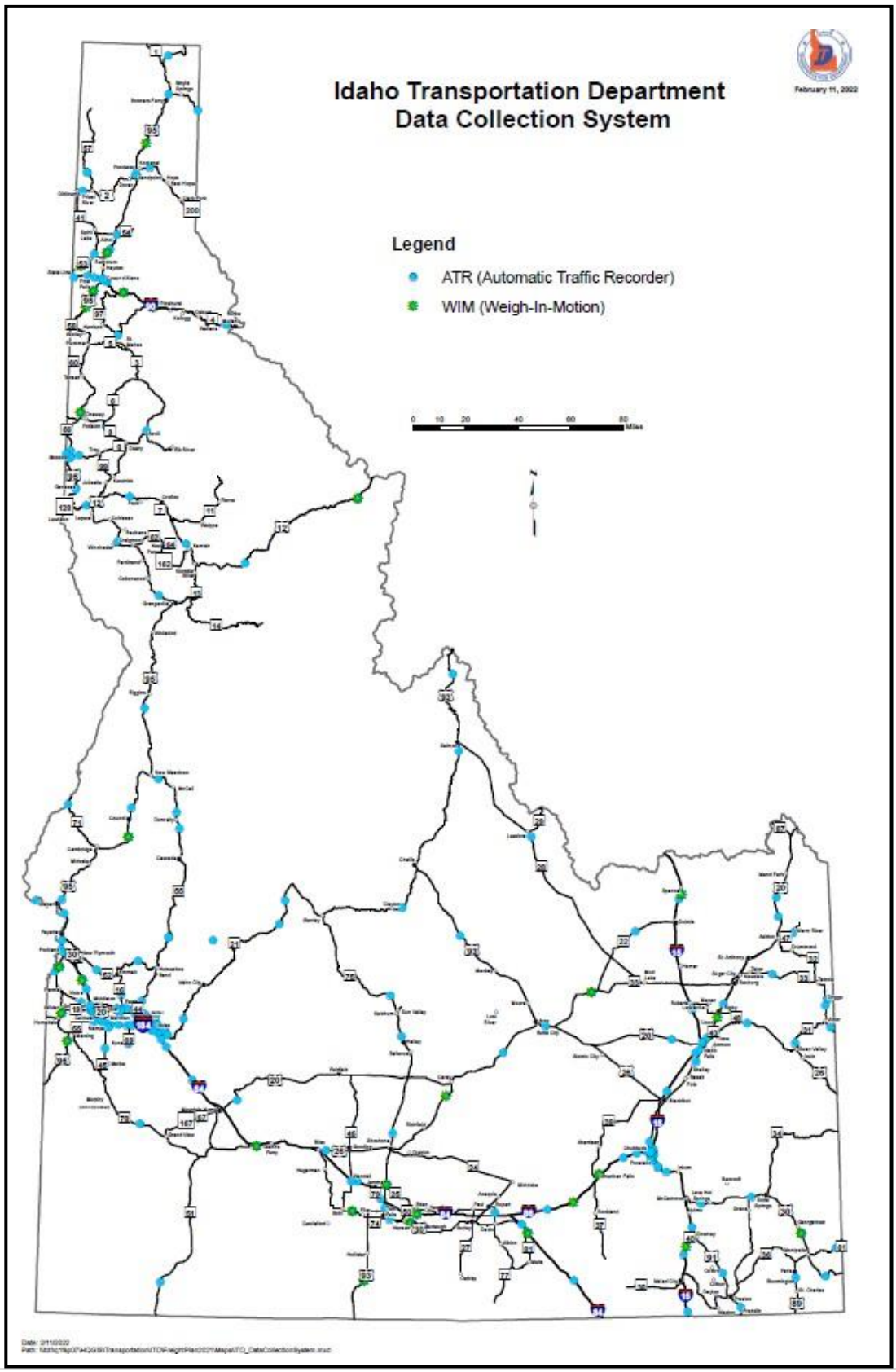
Idaho relies on a network of Continuous Count Devices to gauge traffic volume on the State's highway system. Currently, Idaho has 241 Automatic Traffic Readers and 24 Weight In Motion systems. **Maps 4.1.5** and **Map 4.1.5.1** shows the dispersion of these systems.

[12] Source: FHWA FAF5.2
[13] U.S. Bureau of Transportation Statistics, Idaho Profile. February 11, 2022. Online at; https://explore.dot.gov/views/BorderCrossingData/Annual?:isGuestRedirectFromVizportal=y&:embed=y

Map 4.1.5 Idaho's Ports Entry Network



Map 4.1.5.1 Idaho's Data Collection System Network



4.2 Highway Condition

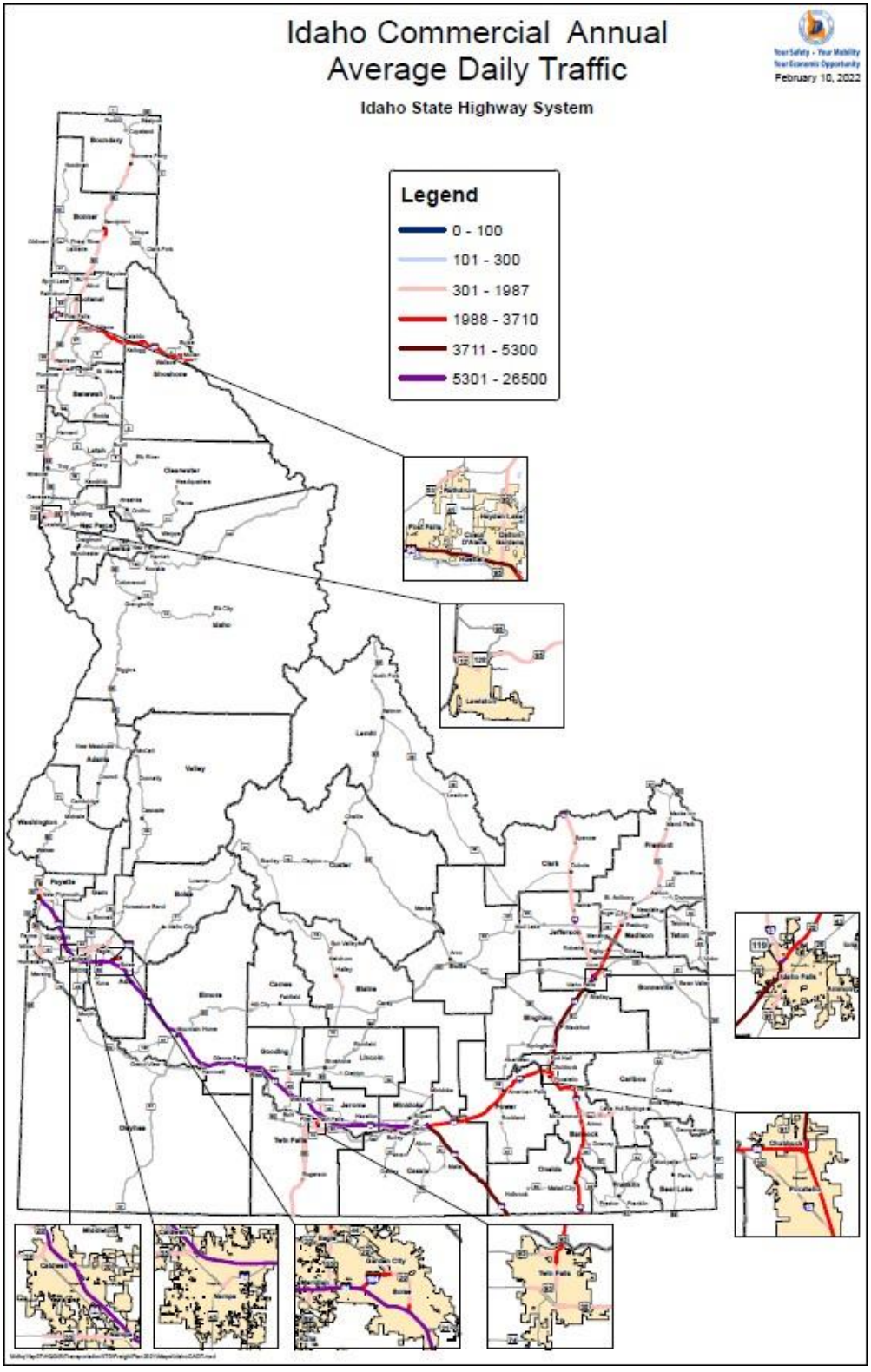
4.2.1 Commercial Average Annual Daily Traffic (CAADT)

According to both stakeholders and truck speed data, I-84 and segments of I-15 and I-90 are the main stretches of highways in Idaho that experience congestion on a recurring basis. I-84 from the I-84 / I-86 junction to the Idaho and Oregon border routinely sees a CAADT between 5,000 and 10,000 CMVs. The highest portion of I-84 remains in the Boise to Caldwell area with an average of 7,600 CMVs. This portion of the interstate system serves the largest urban area in the State linking it to other State urban areas including Twin Falls and Pocatello, as well as serving as the main truck route to Salt Lake City, Portland's and Seattle's intermodal facilities with access to global markets. I-15 from Pocatello to Idaho Falls has an average CAADT of 4,300 CMVs. This can be attributed to being the main artery to the two largest urban areas in eastern Idaho, serving one of the State's largest agricultural producing regions and growth in manufacturing. I-90 from the Idaho / Washington border to Coeur d'Alene has a CAADT 4,100. This segment of I-90 serves as the main link between Coeur d'Alene and Spokane, WA. Also contributing to the higher CAADT is Coeur d'Alene being at the crossroads of I-90 and US-95 with US-95 serving as the major north/south freight artery in northern Idaho while competing urban and tourist traffic.

The highest non-interstate truck volume is found on U.S. 20 north of Idaho Falls. Segments of this route carry an average of 2,000 to 2,500 CMVs per day. Four other route segments in the state see commercial average annual daily traffic volumes above 1,500: U.S. 20 near Boise, SH 44 near Boise, U.S. 93 south of Twin Falls, US-30 near McCammon and SH 128 near Lewiston. Slow speeds on a number of segments are attributed urban congestion, geography or other non-congestion related factors. U.S. 93 north of SH-75 and the northern sections of U.S. 95 and U.S. 2 fall into this category. There are other locations where low truck speeds are likely due to urban commuting patterns but truck volumes are relatively low. U.S. 30 west of Twin Falls, U.S. 26 north of Twin Falls and SH 33 at I-15 are examples of this.

Map 4.2.1 shows Idaho's Routes with the Highest Commercial Average Traffic

Map 4.2.1 Idaho's Routes with the Highest Commercial Average Traffic



4.2.2 Idaho's Pavement Conditions

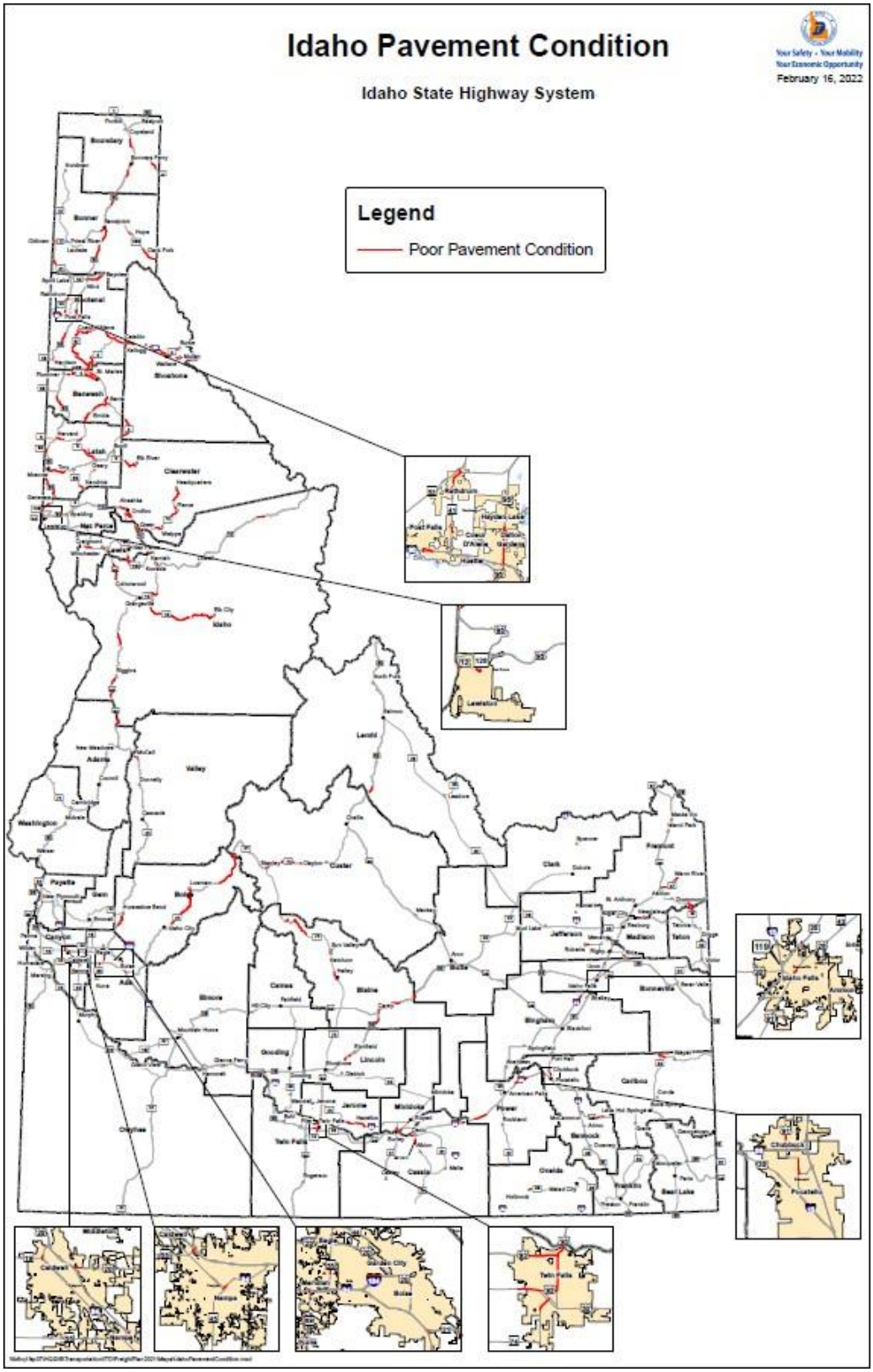
Overall, highway conditions on the state highway and Interstate system in Idaho are generally very good. This conclusion is reinforced by stakeholder comments that the condition of the road network in the state is generally adequate to meet needs and so these do not appear to be a major need or issue for the state currently. Pavement conditions are meeting ITD Performance Measure goals.

Pavement surface quality is an issue of concern to both the public and private sectors. Poor conditions can cause delays, damage vehicles, and damage goods in transit. Idaho uses "Good", "Fair", and "Poor" to categorize pavement conditions. 2022 pavement data shows 94% of Idaho's highways as good or as fair condition, 16% above ITD's goal. 6% of the highway system is rated as poor. Of the highways with poor rating 6.0% are on the Interstate system, 9.0% on the U.S. highways and 17.3% on the State highways. Overall, major freight routes are meeting pavement performance measures and fully supporting freight movements within Idaho. Sections of highway with "poor" pavement conditions exist on Interstate 90, Interstate 84B (Caldwell), business loops on US20B (Idaho Falls) and US-30B (Twin Falls), SH-4 (Wallace), SH-47 (Ashton). Map 4.2.2 shows locations in Idaho with pavement ratings of "poor". Further information can be found in ITD's 2022 Transportation Asset Management Plan.

However, stakeholder input paints a different picture for Idaho's first and last mile connectors of the Local Highway Jurisdiction (LHJ) (off State Highway System) network of roads that provide access to many of the farms, agricultural processing, and forestry, mineral and manufacturing stakeholders in the State needs further attention. Numerous LHJs continually express concerns about the impact of agricultural implements, heavy truck traffic and seasonal freeze and thaw cycles have on pavement conditions in rural Idaho.

Pavement conditions in rural Idaho. 3700 North near Twin Falls, ID.

Map 4.2.2 Idaho's Pavement Locations Rated a "Poor"

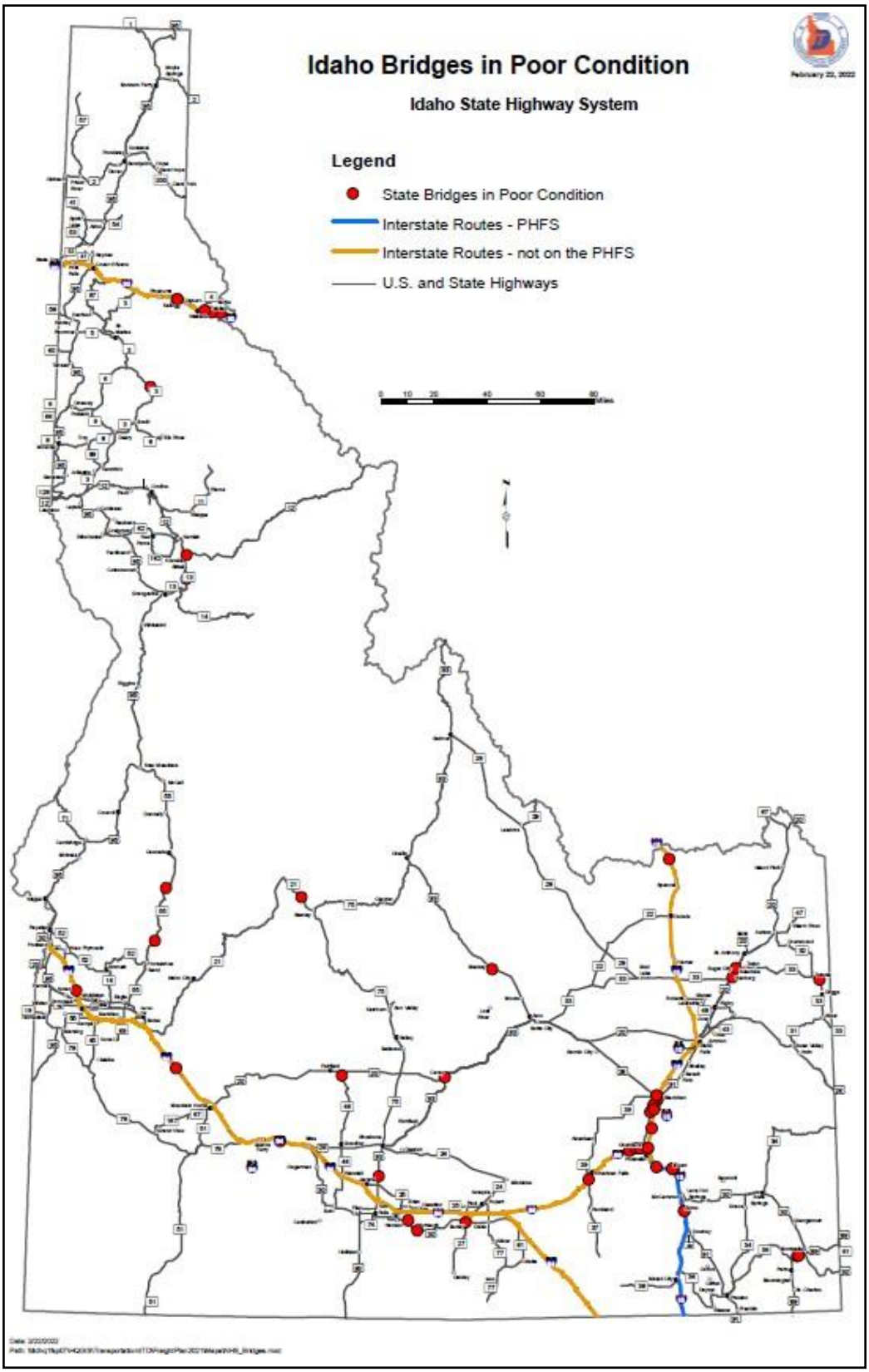


4.2.3. Idaho's Bridge Conditions

Map Figure 4.2.3 shows bridges on the State Highway System listed in poor condition. According to the National Bridge Inventory (NBI), a bridge is listed in poor condition when its deck, superstructure, or substructure are rated a "4" or lower on a scale from 0 to 9. These bridges are still safe, but they are identified for rehabilitation or replacement. Currently, 44 (3%) of Idaho's 1,839 State Highway System are classified as "poor condition." [14] Further information can be found in ITD's 2022 Transportation Asset Management Plan.

[14] ITD measures the ratio of deck area of bridges in "good" condition vs. deck area of the entire inventory of bridges on the State Highway System.

Map 4.2.3. Idaho's Bridge Conditions



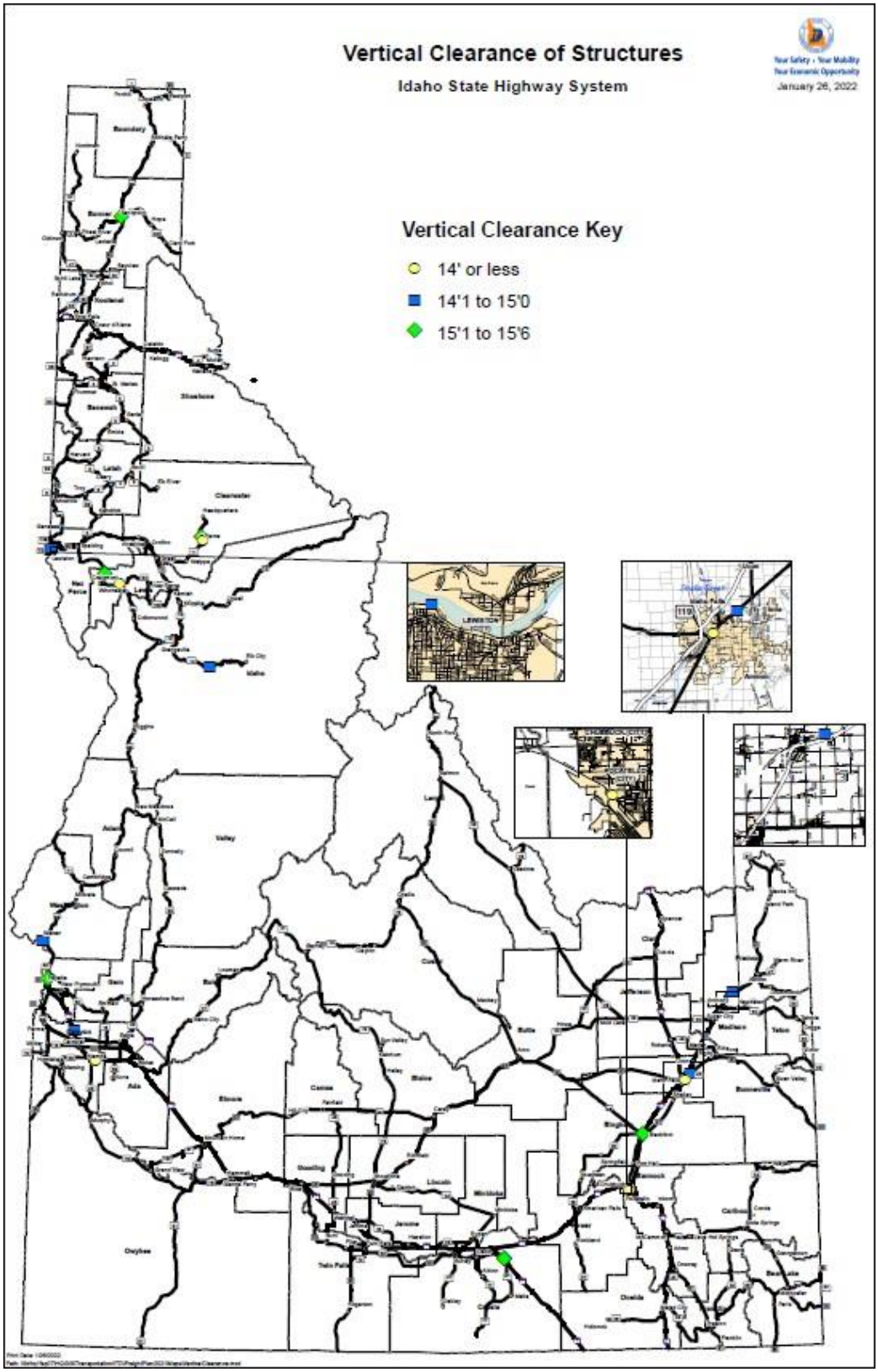
4.2.4 Idaho's Highway Vertical Clearance

In addition to the bridge measures, ITD also maintains vertical clearance restrictions on bridges. **Map 4.2.4** identifies routes subject to weight restrictions for overweight vehicle travel.

There are 5 routes with a clearance less than 14 feet, which is the minimum recommendation for urban areas. These routes are; SH-11 in Pierce, US-95 near Winchester, I-84B in Nampa, US-30 in Pocatello, US-20 in Idaho Falls. There are 4 routes with a clearance restriction between 14'1" to 15'0" located on US-12 in Lewiston, SH-14, US-95B in Weiser and on I-84 east of Caldwell. Lastly, there are 6 routes with a restriction between 15'1" to 15'6" located on SH-2 near Sandpoint, US-95 in Craigmont, US-30 in Payette, I-84 near Albion and US-26 in Blackfoot. In Idaho Falls, U.S. 20/26 has a vertical clearance of 13'8". There are no crashes/strikes at any of these height restricted locations indicating that these routes are currently being used without incident.

Map 4.2.4 shows all vertical clearances in the State.

Map 4.2.4 Idaho's Highway Vertical Clearance



4.2.5 Impact of Heavy Vehicles on the State Highway System

Between 2003 and 2013, ITD conducted an extensive study on the impacts of trucks weighting up to 129,000 pounds on the SHS. The study encompassed 35 routes and examined pavement, bridge and culvert and safety impacts heavy trucks have on the SHS. Between fiscal years 2004 and 2012, there were 264,169 pilot project trips made by 1,359 trucks from 127 different shipping companies. The main commodities hauled were sugar beets, hazardous waste, aggregates, agricultural feed, coal, and hay. Additional analysis expanded commodities hauled to raw and finished lumber products, gravel and dairy products.

Overall, ITD has not observe any significant effect of the 129,000 pound pilot project trucks on pavement, bridges or safety. As a result, the state enacted legislation permitting ITD to allow trucks weighing 105,500 to 129,000-pounds GVW on designated routes on state highways in Idaho (see section 4.1.3 Idaho's 129,000 Pound Truck Routes State Highway System Network). That legislation also authorized local highway jurisdictions to allow trucks weighing up to 129,000-pounds on additional routes approved by each jurisdiction. ITD examines three criteria during 129,000 Pound trucks analysis processing: pavement, bridge and safety:

- **Pavement**: For pavements, axle weight is a more significant determinant of pavement damage than gross vehicle weight. Truck weight limits that allow a higher GVW distributed over more axles do not necessarily lead to higher pavement costs and can even produce savings. Pavement damage typically varies by design/road classification; the same weight vehicle will do exponentially more damage to a rural road than an interstate highway. During the pilot study ITD used the Equivalent Single Axle Loads (ESALs) to estimate the effect of truck load on pavement structures. "The damaging effect of the passage of an axle of any mass can be represented by a number of 18,000-pounds single axle loads". [AASHTO Guide for Design of Pavement Structures]. The ESAL provides a comparison between an axle load and a standard 18 kip axle. For example, the ESALs for the 80,000-pounds truck is 2.38 and for the 129,000-pounds truck is 1.87. This means that the impact of the 129,000-pound truck on pavement structure is less than the 80,000-pounds truck by 21.4%.

- **Bridges**: the proposed increases to truck size and weight limits are consistently predicted to increase infrastructure costs. The number of axles on a truck has little impact on bridges; bridge stress is affected more by the total amount of load than by the number of axles. Bridge stress generally increases with axle group weight and, except on some continuous bridges with long spans, generally decreases with the separating distance. All the truck configurations permitted by ITD – 80,000-pounds and 105,500-pounds up to 129,000-pounds – satisfy a criterion known as the Federal Bridge Formula B. This criterion governs axle weights and spacings, originally for the safety of bridges on U.S. highways. This formula requires more axles on trucks carrying heavier loads. The result is that individual axle loads for trucks weighing from 105,500 to 129,000-pounds do not exceed the axle loads for the 80,000 pound trucks or the agricultural exempt trucks permitted on Idaho highways.

- **Safety:** with some consistency, heavier trucks were associated with less crashes due to fewer trucks needed, but higher crash severity. Oversized, overweight trucks were observed to have slightly higher crash rates due to vehicle handling and stability characteristics. ITD found that additional axles on the 129,000-pound trucks are outfitted with brakes providing extra stopping power for the truck compared to 80,000-pound trucks. Overall, results relating to truck configuration are inconclusive.

Further information can be found at: https://itd.idaho.gov/freight/ under the "Background & Manual tab.

4.2.6 Idaho's Freight Bottleneck Analysis

Idaho uses two methods to identify truck bottlenecks; one method for interstates and another method for state highways. Interstate bottlenecks are defined by truck speeds and truck travel time reliability. ITD compares the two data sets to identify the most significant truck bottlenecks. For non-Interstate highways, the state uses truck speed during peak periods. **See Table 4.2**

Table 4.2.6 Bottleneck Analysis Criteria

Interstate	
Truck Travel Speed	Identifies reduced speeds causing truck delays
Truck Travel Time Reliability	Identified routes with unpredictable travel times
State Highways	
Truck Travel Speed	Identifies reduced speeds causing truck delays

Once ITD identified bottlenecks for both interstates and state highways, the department coordinated the findings with the Idaho Freight Advisory Committee and through bi-annual Freight Summits where stakeholders provided input and guidance on the analysis and on Idaho's freight system as a whole to identify freight flow improvement projects. The ITD Districts confirmed bottlenecks and identified locations where data analysis may indicate a bottleneck, but none actually exists.

The following sections describe the analysis for interstates and state highways.

4.2.6.1 Interstates Bottlenecks

Reduced Travel Speeds

The ITD identified the sections of interstate with reduced speeds which are depicted in the map at the end of this report. This analysis focused on interstate speeds below 35 miles per hour during peak afternoon travel times.

Truck Travel Time Reliability (TTTR)

TTTR challenges on Idaho's interstates ITD are shown in the map at the end of this report. This map uses red to indicate "Poor" which is defined as having a TTTR of 1.5 or greater.

Table 4.2.7 Idaho's Interstate Freight Bottlenecks:

ITD identified the following interstate locations as freight bottlenecks.

Highway	Geographic Points	Bottleneck Analysis	Mitigation Measures (If Applicable)
I-15	Inkom and McCammon (Southeast Idaho)	ITD believes the bottlenecks on three segments of I-15 are an anomaly. Segments of I-15 at McCammon, Inkom, and Sage Junction west of Rexburg are identified as having poor TTTR. This is due to the increasing number of oversized trucks moving windmill components through Idaho to Montana and Canada. These trucks stop at the Flying J Travel Center in McCammon and the POEs in Inkom and Sage Junction for required rest breaks. Also impacting these movements is the I-15 corridor work being done in Montana. Due to associated route constraints, Montana DOT requests these trucks stop in Idaho to meet constrained movement windows in Montana. It just so happens that the location that can handle these outsized loads is McMannon Flying J, Inkom POE and Sage Junction POE. The oversized truck movements into and out of these location is sufficient to reflect a bottleneck issues where no bottlenecks exist.	None
I-15	Sage Junction to Hammer (Eastern Idaho)	This segment of I-15 is experiencing a bottleneck due environmental conditions. Specifically, decreased visibility caused by blowing dust from agricultural activity and sand blowing from the St. Anthony Sand Dunes in spring, summer and fall as well as snow blowing over the Interstate in winter.	ITD's District 6 has increased snow fencing along this segment of I-15. ITD will continue to monitor this situation.
I-84	Boise to Caldwell (Southwest Idaho)	ITD identified I-84 between US-20 (Caldwell, Idaho) and ID-55 (Boise, Idaho) as Idaho's most significant truck freight bottleneck. This section of interstate has a "Poor" TTTR rating, and as the route with the highest daily truck traffic. Over 8,000 trucks a day with an afternoon peak travel speeds below 35MPH. This section of interstate is the top priority bottleneck in the state.	Idaho is using a $90.2M INFRA Grant and GARVEE funding totaling over $150M to address a 2.8 mile segment of I-84. Projects focus on major widening of both east and west bound lanes, bridge replacement/upgrades as well lane widening on freight arterial collectors (US-20/26, SH-44 & SH-55 as well as connecting US-26 and I-84 via SH-16 extension) used to connect regional industries to processing and manufacturing facilities throughout the Treasure Valley. These projects will also greatly enhance the National Freight Network's freight traffic transiting the Treasure Valley. Projected completion for the I-84 corridor projects is 2024/25.
I-90	Idaho/Montana Boarder	I-90 is identified as having peak hour truck travel speed below 35 MPH due to geography. This segment of I-90 passes through high mountain passes (specifically,	None

		Lookout Mountain Pass), extreme curves and steep acceding and descending segments.	

4.2.6.2 State Highways Bottlenecks

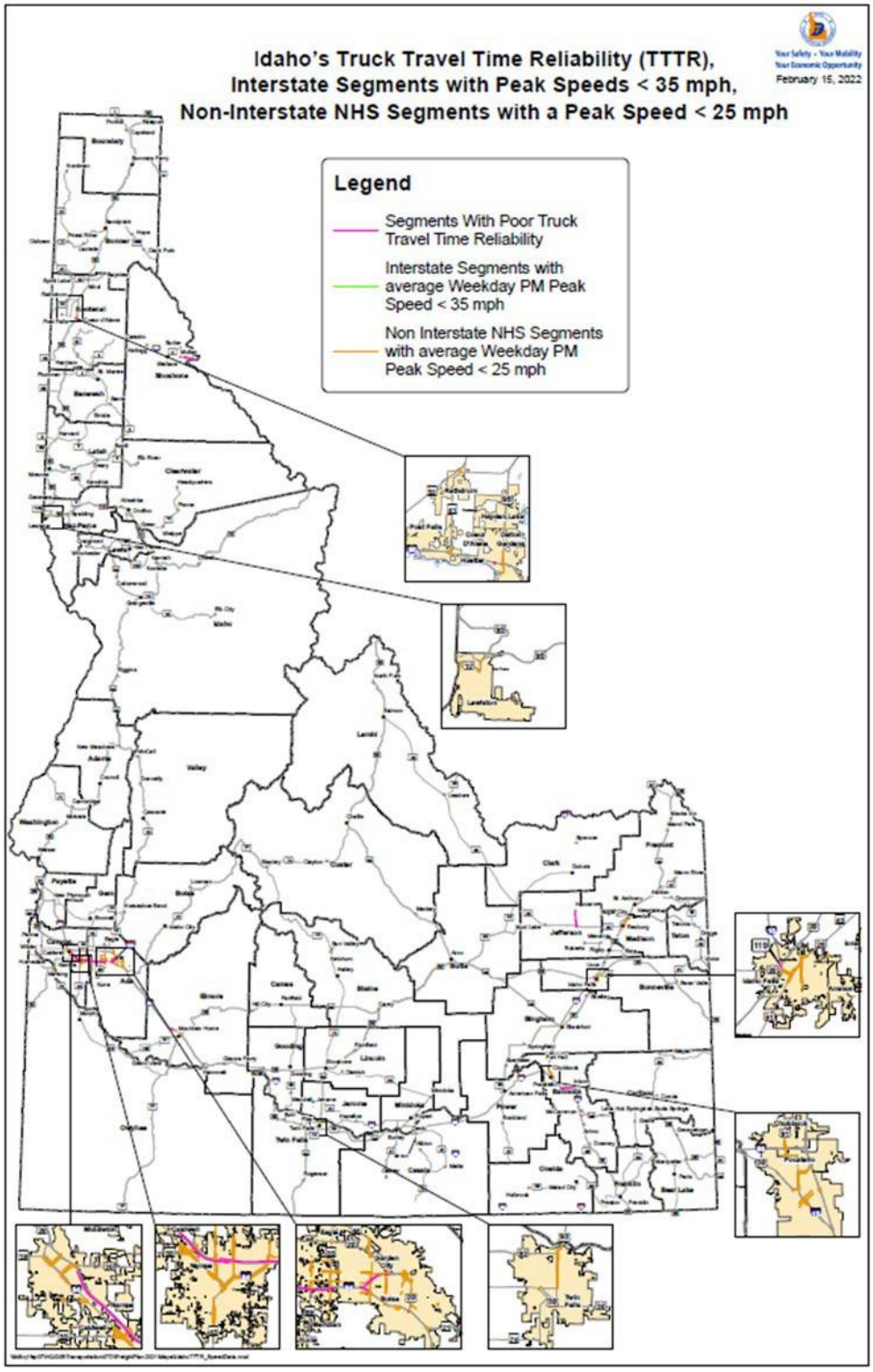
To identify truck freight bottlenecks on Idaho's state highway system, ITD uses afternoon peak traffic truck speeds below 25MPH. Slow speeds on a number of segments are attributed urban congestion, geography or other non-congestion related factors. U.S. 93 north of SH-75 and the northern sections of U.S. 95 and U.S. 2 fall into this category. There are other locations where low truck speeds are likely due to urban commuting patterns but truck volumes are relatively low. U.S. 30 west of Twin Falls, U.S. 26 north of Twin Falls and SH 33 at I-15 are examples of this. Table 4.2.8 identifies the following highway locations as freight bottlenecks.

Table 4.2.8 Idaho's Highway Freight Bottlenecks

Highway	Geographic Points	Bottleneck Analysis	Mitigation Measures (If Applicable)
US-20	At I-84	High truck volume with low truck speed as freight trucking transits between the Boise metropolitan area and I-84 in Southwest Idaho.	A $7M route widening project is scheduled to begin in 2022. The US-20 expansion project located in Ada County will add an additional westbound and eastbound lane to improve mobility and reduce crashes along the corridor. It is located on US-20 between Phyllis Canal Br (MP 32) and SH-16 (MP 34). Project start date is 2022.
US-20/26	North Boise	High traffic volumes create truck speeds below 25MPH during peak hours.	A $22.2M route widening project began in 2022. The project will widen US-20/26 to six lanes. The location of this project is from I-84 (MP 24) to Middleton Rd (MP 27) on US20/26 located in Canyon County. Project completion is scheduled for 2022.
US-95	North Coeur d'Alene	This US-95 corridor routes through a highly dense populated urban community heavily dependent on tourist, forest products and agricultural industries. High traffic volumes for both freight trucking and traveling public result in "stop and go" traffic slowing truck speeds during much of the day and more significantly during peak traffic periods.	A $2.3M FASTLANE Grant will provide adaptive technology to the signals to improve the flow of traffic through this corridor. The US-95, Ironwood (MP 430) to SH-53 (MP 438), will upgrade the signal cabinets to include battery backup to keep the signals operational during power outages and to provide adaptive technology to the signals to improve the flow of traffic through the corridor. Other improvements include converting the signal stop bar detection to radar and adding reflective back-plates to all the traffic signal heads and LED illumination. These improvements will reduce the rear end and angle turning crashes, especially during low visibility and bad weather. Projected completion is scheduled for 2028.
US-20	Rexburg	US-20 north of Idaho Falls has the highest truck volume for a non-interstate route in Idaho as freight transits between Idaho, Montana and Wyoming. In this area of Idaho, US-20 and SH-33 intersect and both routes become agricultural freight arteries moving harvests to	A project to reconstruct the intersection at the ramp location on US-20 and SH-33 (MP 78) is in the conceptual stage. Project start and end date is TBD.

		and from producers and processing facilities along with agricultural equipment. Also, US-20 is a major tourist route into Yellowstone National Park.	
US-12/95	Lewiston and east bound US-95 & US-12.	Both US-95 and US-12 serve as the primary freight routes in middle-north Idaho supporting the Nez Pierce Tribe and Idaho's forestry and agricultural industries. Reduced truck speeds in the City of Lewiston are caused by three factors; 1) The unique geographic restrictions caused by the confluences of the Clearwater River and Snake River valley causing both truck and public traffic to reduce speed for safety purposes while navigating ascending and descending grades. 2) Palouse and Camas Prairies account for 2/3 of Idaho wheat production and from June through November trucks haul wheat from numerous farms to the Port of Lewiston for distribution to consumers and processing plants. 3) Truck traffic from numerous logging areas use US-95 and US-12 to delivery woodchip to the Clearwater Paper mill and raw lumber to numerous lumber mills in Idaho and Washington. Geography and the dense truck traffic supporting forestry and agricultural industries makes it highly unlikely US-95/US-12 will meet the goal of truck speed above 25mph.	Idaho is currently developing a five phased $32M highway widening/passing lane project on US-95 (MP 283 to MP 289) east of Lewiston. The projects window is 2022 thru 2027. An $8.2M widening and passing lane project is scheduled to begin in 2027 for US-12 (MP 10 to MP 14) east of Lewiston.

Map 4.2.5 Idaho's Freight Bottleneck Analysis



4.2.7 Commercial Motor Vehicle Safety

In 2005, Congress passed legislation which required states to develop Strategic Highway Safety Plans (SHSPs). Idaho's SHSP is updated regularly to reflect new crash data and associated safety trends, incorporate accomplishments, and revise strategies. The current SHSP can be accessed online at https://itd.idaho.gov/safety/. The SHSP evaluates safety performance measures set by Congress, establishes targets, and tracks performance.

4.2.7.1 Statewide CMV Crash Data

To understand the relationship between CMV-related crashes and all crashes that occur on the State Highway System, the five-year crash history from 2016 through 2020 was analyzed to develop descriptive statistics about CMV-related crashes. Crash reports and a crash data map can be accessed at https://itd.idaho.gov/safety/.

State wide, between 2016 and 2020, 11,862 crashes were CMV-related. Of these, 192 crashes resulted in a fatality; 42 fatalities occurred in 2020 alone, representing 20 percent of all motor vehicle fatalities in Idaho. Of the person killed in crashes with commercial motor vehicles, 71 percent were occupants of passenger cars, vans, sport utility vehicles, or pickup trucks. Approximately 88 percent of CMV-related crashes occurred on a weekday, and 21 percent were rear ends. Inattention was cited as the most common contributing circumstance at 17 percent, with following too close (14 percent), failure to yield (13), and failure to maintain lane (11 percent) as the next common contributing factors.

In 2020, 48 percent of all crashes and 81 percent of fatal crashes involving CMVs occurred on rural roadways, which are defined as any roadway located outside the city limits of cities with a population of 5,000 or more. Local roadways experienced the highest proportion of CMV-related crashes (44 percent), while U.S. and State highways experienced the highest proportion of fatal CMV-related crashes (54 percent). CMV-related crashes cost nearly $559 million in 2020, representing 16 percent of the total economic cost of crashes.

4.2.7.2 State Highway System CMV Crash Locations

CMV crash locations were identified using the five-year crash history from 2016 through 2020 for the State Highway System, with focus on fatal/injury crashes and total rates from CMV-related crashes. Through this analysis, 19 locations were identified, accounting for 233 crashes, 93 injuries, and 5 fatalities. The locations are listed in **Table 4.2.7.**

Table 4.2.9 State CMV Crash Location 10 Or More Crashes

Street 1	Street 2	City	County	Number of Accidents	Number of Fatalities	Number of Injuries
Karcher Rd	Nampa-Caldwell Blvd	Nampa	Canyon	16	0	5
Centennial Way	Simplot Blvd	Caldwell	Canyon	15	0	0
Chinden Blvd	Eagle Rd	Boise	Ada	15	0	6
11th South Ave	2nd South St	Nampa	Canyon	13	0	5
3800 East Rd	SH 50	Hansen	Twin Falls	13	0	11
Appleway Ave	US 95	Coeur D Alene	Kootenai	13	1	6
Centennial Way	I 84 IC 27 WB Off Ramp	Caldwell	Canyon	13	0	1

Eagle Rd	Pine Ave	Meridian	Ada	13	0	5
Eagle Rd	SH 44	Eagle	Ada	13	0	0
I 84	MP 36	Nampa	Canyon	13	0	7
Cole Rd	Overland Rd	Boise	Ada	12	0	15
Blue Lakes Blvd	Poleline Rd	Twin Falls	Twin Falls	11	0	3
Century Way	Cole Rd	Boise	Ada	11	0	2
Eagle Rd	Fairview Ave	Meridian	Ada	11	0	1
Poleline Rd	Washington St	Twin Falls	Twin Falls	11	0	5
Expo Pwy	Pleasant View Rd	Post Falls	Kootenai	10	0	0
Franklin Rd	Maple Grove Rd	Boise	Ada	10	0	8
Franklin Rd	Orchard St	Boise	Ada	10	0	4
I 84	MP 46	Meridian	Ada	10	4	9

4.3 Rail

4.3.1 Railroad

Rail represents the largest modal alternative to trucks in Idaho. It carries the second largest quantity of goods (in tons) in the state, and is used for intrastate, interstate, and through state movements. Idaho has two Class I, one Class II and eight Class III, as well as AMTRAK's Empire Builder line operating in Idaho. Table 3.3.1 show the railways operating in Idaho.

Rail is particularly suited to carry bulk products that are heavy but relatively low in value—coal, fertilizer, grains, lumber. Freight-reliant industries including agriculture, mining and utilities, construction, and manufacturing all rely on rail to move goods to/from destinations and origins within the state. Wholesale and retail supply chains also utilize rail, though the location of major intermodal yards in states adjacent to Idaho, which means that intermodal container usage within the state is relatively low.

Table 4.3.1 Idaho's Railroad Partners

Railroad		Class	Track Miles	Train Movements Per Day	Annual Car loadings	Commodities
Union Pacific RR	UPRR	1	575	60-90	84,761	Feed & Animal Protein, Fertilizer, Wheat & Flour, Grain, Dry Goods
Burlington Northern Santa Fe RR	BNSF	1	123	32	11,089	Fertilizer, Wheat & Flour, Grain, Dry Goods, Coal
Boise Valley RR	BVRR	3	36	4	9,092	Potatoes, Onions, Asphalt, Feed, Lumber, Propane
Boutiful Grain & Craig Mountain RR	BGCM	3	128	1	225	LPG, Peas, Telephone Poles
Eastern Idaho RR	EIRR	3	286	15	44,000	Sugar, Corn, Potatoes, Wheat, Barley, Cotton Seed, Petroleum, Fertilizer
Great Northwest RR	GRNW	3	83	2	15,500	Paper, Lumber, Grain
Idaho Northern and Pacific RR	INPR	3	102	2	2,500	Lumber, LPG
Montana Rail Link	MRL	2	34	27	125	Grain, Mixed Freight, Coal, Oil
St. Maries River RR	STMA	3	81	1	2,650	Lumber
Washington and Idaho RR	WIR	3	17	N/A	N/A	Not In Operation
Pend Oreille Valley RR	POVR	3	24	1	2,279	Lumber
AMTRAK	AMTRAK	N/A	123	2	N/A	Passenger

Map 4.3.1 shows the locations rail lines operating in Idaho. Union Pacific is heavily focused in the southern portion of the state along the Snake River Valley though it also operates a line from the Washington State border near Coeur d'Alene northeast to the Canadian border at Eastport. BNSF's Great Northern Corridor operates through the northern section of Idaho, running parallel to U.S. 2 and U.S. 95 in most of the state. Idaho's Class II line, the Montana Rail Link follows SH 200 from the Montana border to an interchange with BNSF in Sandpoint and has trackage rights on the BNSF mainline to Spokane, WA. Idaho's short lines serve as feeder and distribution routes to many companies in the state and provide a crucial link to the nationwide Class I system.

Weight restrictions on some of the shortline railroads is a concern. The national rail network has moved to a 286,000 pound standard for railcars. Shortline Railroads throughout the U.S. have struggled to

keep up with the demand for higher weight limits, leading to additional costs for shippers/receivers and/or the need to use other modes of transportation. Upgrading Idaho's shortline rail lines to 286,000 pounds is prime opportunity for to private/public partnerships that will ensure shortline railroad operator's economic competitiveness while greatly reducing Idaho's agricultural and manufacturing industries associated transportation costs.

In 2020 Idaho, in partnership with Eastern Idaho Railroad (EIRR), was award a $7,491,315.00 Federal Railroad Administration Consolidated Rail Infrastructure and Safety Improvements (CRISI) grant. This public/private partnership project called the Magic Valley Rail Safety and Capacity Expansion is expanding EIRR's Gular Yard facility in Rupert, Idaho. The project consists of extending and upgrading 10,000 feet of yard track and adding new passing track to relocate switching operations that currently block the crossing at State Highway 24/8th Street. It also includes rail replacement on the main line track through the yard, removal of two of the four tracks at the 8th Street crossing, and upgrades at the 100 North crossing. This project is projected to decrease the SH24/8th Street crossing by 58% from 102 minutes to less than 43 minutes per day, increase carloads by 15% from 30,777 to 35,571 carloads per year and increase the annual average tons per mile by 15% from 3.0 to 3.5M ton miles per year.

SH-24/8th Street in Rupert, ID. EIRR Magic Valley Rail Safety and Capacity Expansion.

In 2021 Savage Services, in partnership with Union Pacific RR, opened Idaho's first multimodal railport in Pocatello, ID., *Savage Railport – Southern Idaho*. The facility's 12,000 feet of track offer outbound truck to train container transfer of hay, grain and bulk dry commodities transported by UPRR to the *Northwest Seaport Alliance* in Tacoma and Seattle, WA.[15] Thus far, Savage's handles an average of 200 20' shipping containers per week.

[15] Savage and Union Pacific Collaborating to Build and Operate Idaho's First Intermodal rail Terminal in Pocatello. On line at: https://www.savageservices.com/news/savage-union-pacific-intermodal-rail-terminal-pocatello-idaho/

4.3.2 Highway Rail Crossing Safety

Rail safety is also a key concern, especially at at-grade rail crossings where lower levels of grade crossing protection exist. The level of protection is based in part on traffic volume—given the relatively low traffic volumes found in much of the state, many of Idaho's crossings have passive warning systems only. The State has a total of 2,373 highway-rail crossings. Of these highway-rail crossings, 56 percent (1,334) are public roadways while the remainder, 44 percent (1,039) are on private roadways. Of highway-rail crossings, only seven percent (156) are grade separated: meaning the railroad tracks or roadway is either bridged over or under. A significant majority of highway crossings (93 percent) are at grade.
Between 2011 and 2020 there were a total of 44 incidents involving CMVs on the State Highway System at road-rail crossings. Of these 44 CMV incident, three locations had more than one incident, one in Minidoka County and two each in Paul and Dietrich Idaho. There were six fatalities from train-truck incidents between 2011 and 2020 and an additional 12 injuries. The fatalities occurred on Old Highway 30 Pocatello, US-95 in Careywood, US-20 in Caldwell, SH-36 in Dayton and two on SH-24 in Minidoka. The absence of active grade crossing protection can be seen in many of the report narratives—the failure of drivers to yield/stop at a crossing was a common causal factor. For incidents involving trucks, 5 incidences occurred at crossings without any protection, 4 had flashing beacons, 7 had gates/signals, 22 had stop signs and 9 had yield signs only.[16]

In 2021, Idaho received an additional $2 million from Building Idaho's Future, one-time State funds for the specific purpose of growing safety at Rail-Highway crossings throughout the state. ITD Board approved the addition of seven new crossing projects and cost increase to one Local Highway Technical Assistance Council project in June 2021 utilizing those $2 million in state funds.

In 2022, Idaho again received additional funds, this time it was $8 million from Leading Idaho, one-time State funds for the specific purpose of growing safety at Rail-Highway crossings throughout the state. ITD Board approved the advancement of nine projects, project budget increases and seven new projects with this funding in September and October 2022.

Educating motorist, cyclists, and pedestrians in the safe use at Crossings is provided by various entities including Idaho Operation Lifesaver (IOL). Education provided by IOL stresses that trains cannot turn left or right to avoid an object on the track and emphasizes the long distances required to stop a train (typically a combination of locomotives and rail cars) can be a mile or more depending upon train speed and total train weight. ITD supports IOL's educational activities through an annual State funded education-focused grant, membership on the IOL Board of Directors and providing the annual salary for the IOL State Coordinator position.

IOL works with law enforcement and railroad owners on numerous activities, such as: the Officer On A Train program, railroad right-of-way trespass violations and awareness, Adopt a Crossing program, short-length television and radio Public Service Announcements, participation in community events, social media postings, etc. To share the safety message as far and wide as possible, IOL uses a priceless tool -- Volunteers, who:

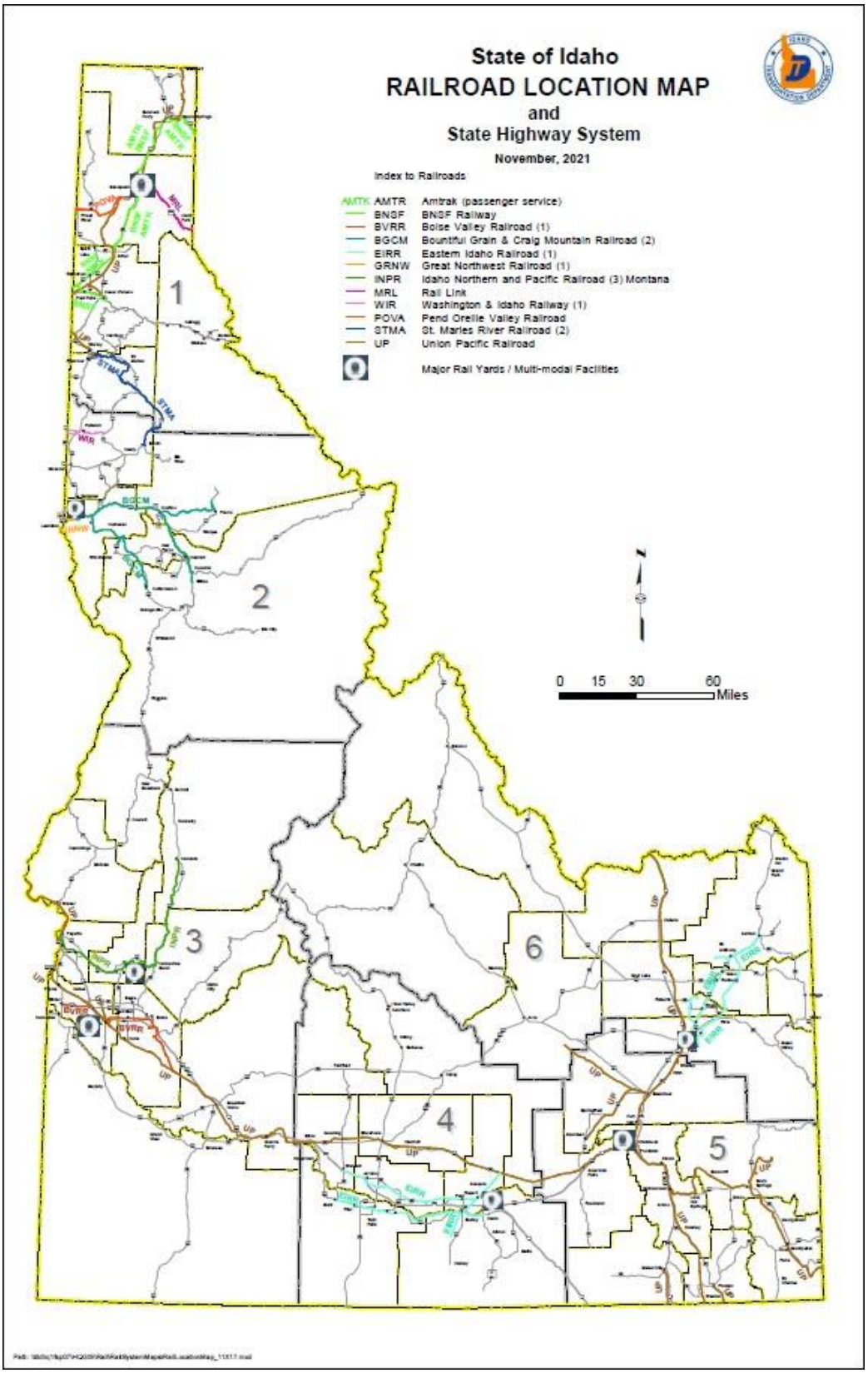
- Make presentations to schools, school bus drivers, trucking firms, and other interested parties

[16] Idaho Transportation Department Office of Highway Safety

- Operate informational booths at regional fairs, city/county safety events, and other public events
- Engage with young and old via community parades and local events

Idaho's Highway Rail Grade Crossing Action Plan can be accessed at: https://railroads.dot.gov/sap

Map 4.3.1 Idaho Railroad Network



4.4 Water (Port of Lewiston)

The Columbia Snake River System, through the Port of Lewiston, provides Idaho with a water access to the Pacific Ocean. The Port of Lewiston is the eastern end of the commercially navigable Columbia Snake River System, 465 miles from the Pacific Ocean. It is the most inland port on the U.S. west coast and serves as a hub for the export of wheat, barley, and peas/lentils.[17] The Port of Lewiston's main waterfront site is Northport, located on the north side of the Clearwater River across from the City of Lewiston. The site hosts a container yard, 150,000 square-feet of warehousing, and grain storage areas with a capacity of 6.2 million bushels.[18]

The Port of Lewiston suspended container on barge service in April 2015 due to the withdrawal of Hapag- Lloyd's container service from the Port of Portland in March 2015. To date, this service has not returned to the Port of Lewiston. Grain shipments remain a key strength of the Port, with 772,729 bushels of wheat/barley shipped in 2020 through two major grain facilities—Lewis Clark Terminal and CLD Pacific Grain, LLC. Along with wheat/barley, the Port of Lewiston also shipped 184,844 tons of breakbulk cargo in 2020. Although these terminals are privately owned and operated, the economic activity is an indicator of regional economic health[19].

One other service historically offered by the Port of Lewiston is acceptance of oversize and overweight cargo such as windmill components. A 2013 court-imposed order restricting mega-load travel on U.S. 12 remains in effect. The Port has received inquiries about accepting oversize cargo, but until this restriction is lifted, opportunities to move oversized cargo are limited. In 2020, Siemens Gamesa Renewable Energy moved 129 blades and 172 tower sections through the Port of Lewiston bound for Canada. These components were successfully routed from Lewiston through Coeur D'Alene using U.S.-93 to I-90 to the Idaho/Montana border.

In addition to its shipping operations, the Port of Lewiston also plays an important economic development role for Nez Perce County, the surrounding region, and the state of Idaho. The Port owned parcels Business & Technology Park and the Harry Wall Industrial Park provide for future development opportunities near the Port. These locations several different businesses including logistics and engineering and manufacturing for hi-tech products including medical devices. All freight moving in and out of the industrial parks travels by truck. The Harry Wall Industrial Park located on SH 128 is expected to expand in the near future.[20]

Stakeholders did not identify any major concerns with the waterways connecting the Port of Lewiston to the Pacific Ocean.

[17] Pacific Northwest Waterways Association. "Columbia Snake River System Facts." Online at: https://www.pnwa.net/

[18] Port of Lewiston. "Port of Lewiston Strategic Plan." December 2020. Online at: https://portoflewiston.com/wp-content/uploads/2020/12/Strategic-Plan-2020-DRAFT-12.07.2020-3.pdf

[19] Port of Lewiston. "The 2021 Port of Lewiston Economic Influence on the Regional Economy." Online at: https://portoflewiston.com/wp-content/uploads/2021/11/POL_2021_Final_v1-1.pdf

[20] Ibid.

4.5 Air

In a state as large and geographically diverse as Idaho, airports serve a critical role for the freight industry. Typically, cargo with high value, high time sensitivity and/or high security requirements move by air as it is the fastest and often best-tracked method to move goods. High value electronics, pharmaceuticals and essential replacement parts for manufacturing lines are examples of goods commonly moved by air. Additionally, airports that do not (or only rarely) support cargo flights still help freight-related businesses in the state by providing transportation access for clients, company employees, or business partners.

Air accounts for less than 1 percent of trade by weight in Idaho, but 2 percent by value, again reflecting the high value/low weight cargo typical of air shipments. Air is expected to grow to 6 percent of cargo by value by 2050[21].

The 2020 Idaho Airport System Plan (IASP) identifies 75 public use airports in the state and divides them into 5 categories: Commercial Service; Regional Business; Community Business; Local Recreational; and Basic Service. These airports are identified in Map 3.5 below.

Of the 75 locations in the study, 18% report some amount of freight activity. The airports with the most significant freight activity are the commercial service airports with scheduled national or regional/commuter air

[21] Source: FAF5.2

service (5 sites). These are:

- Boise Airport, Boise, ID
- Friedman Memorial Airport, Hailey, ID
- Lewiston-Nez Perce County, Lewiston, ID
- Pullman-Moscow Airport, Pullman, ID
- Joslin Field-Magic Valley Airport, Twin Falls ID

Another important airport located outside of Idaho but serving the freight needs of the state is Spokane International Airport in Washington. For cities in Idaho's panhandle and I-90 corridor such as Coeur d'Alene, Sandpoint, and Bonner's Ferry, Spokane is the closest airport with regular cargo service.

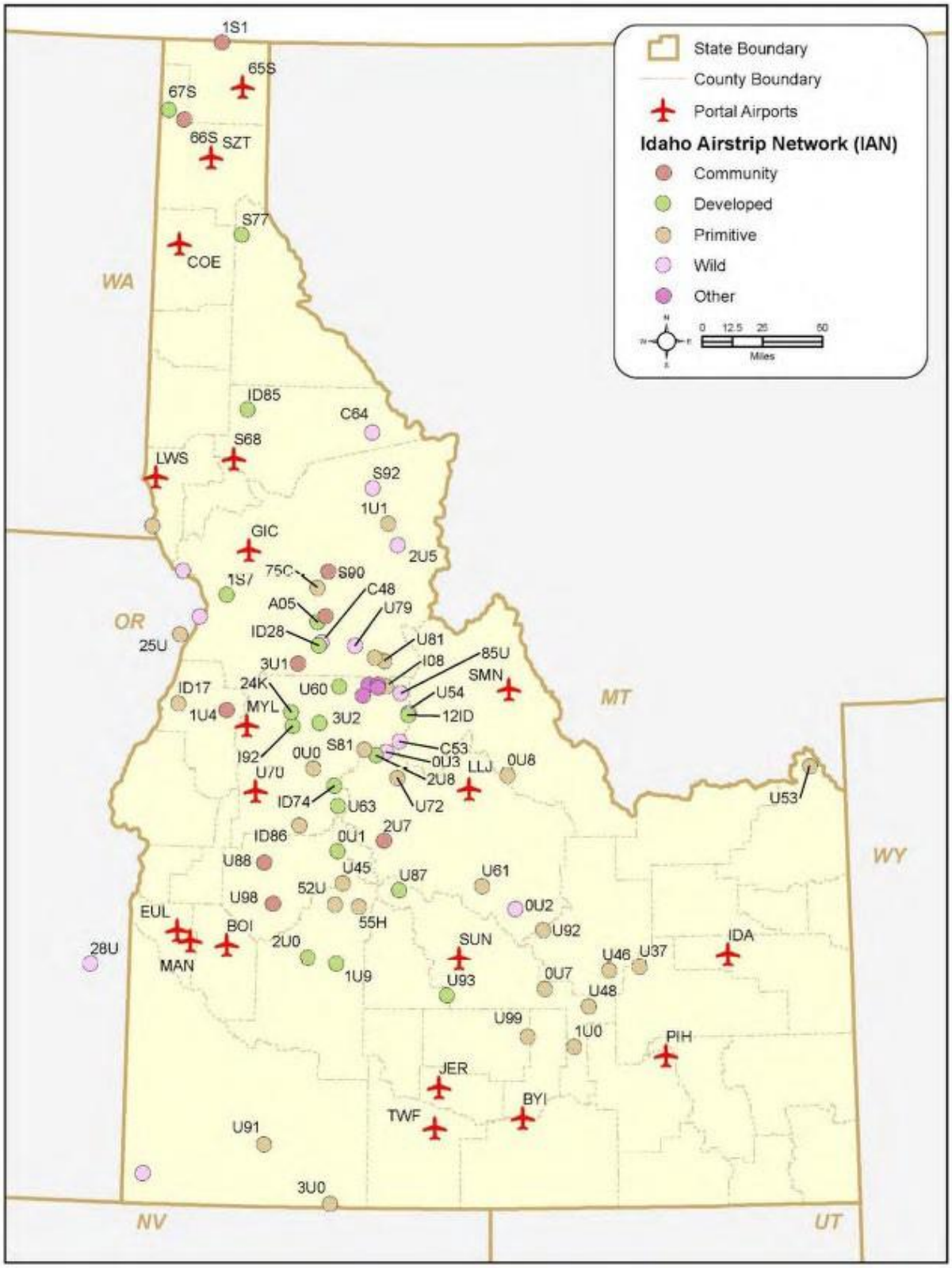
Boise Airport (BOI) plays the central role in moving air freight in the state. Boise is a U.S. Customs and Border Patrol Port of Entry and is staffed by U.S. Customs Agents, allowing it to process passengers and cargo from outside the United States. BOI is served by 6 mainline and regional airlines which offer freight service in the belly of passenger jets. These companies are Alaska Airlines, Allegiant Air, Delta, Southwest, United Airlines, and American Airlines. In addition to these carriers, there are 3 cargo-only carriers with regular service— Federal Express (FedEx), United Parcel Service (UPS) and Western Air Express—plus chartered cargo service availability[22].

Boise Airport handled over 360 million pounds of cargo in 2020[22]. UPS and FedEx handled over 2/3 of the total air cargo at BOI. Parcel service by UPS and FedEx both utilize service centers close to the airport. Interviews with stakeholders revealed no major issues or needs for Idaho's aviation system. One stakeholder expressed a need to upgrade customs processing at BOI for cargo. Currently, BOI uses dogs to clear customs instead of x-ray or other technology. It is worth exploring partnership opportunities for an investment in customs clearance technology.

[22] "Boise Airport Master Plan Update, December 2019." Accessed on-line: https://www.iflyboise.com/media/1588/boi-mpu_full-report_final-sm.pdf

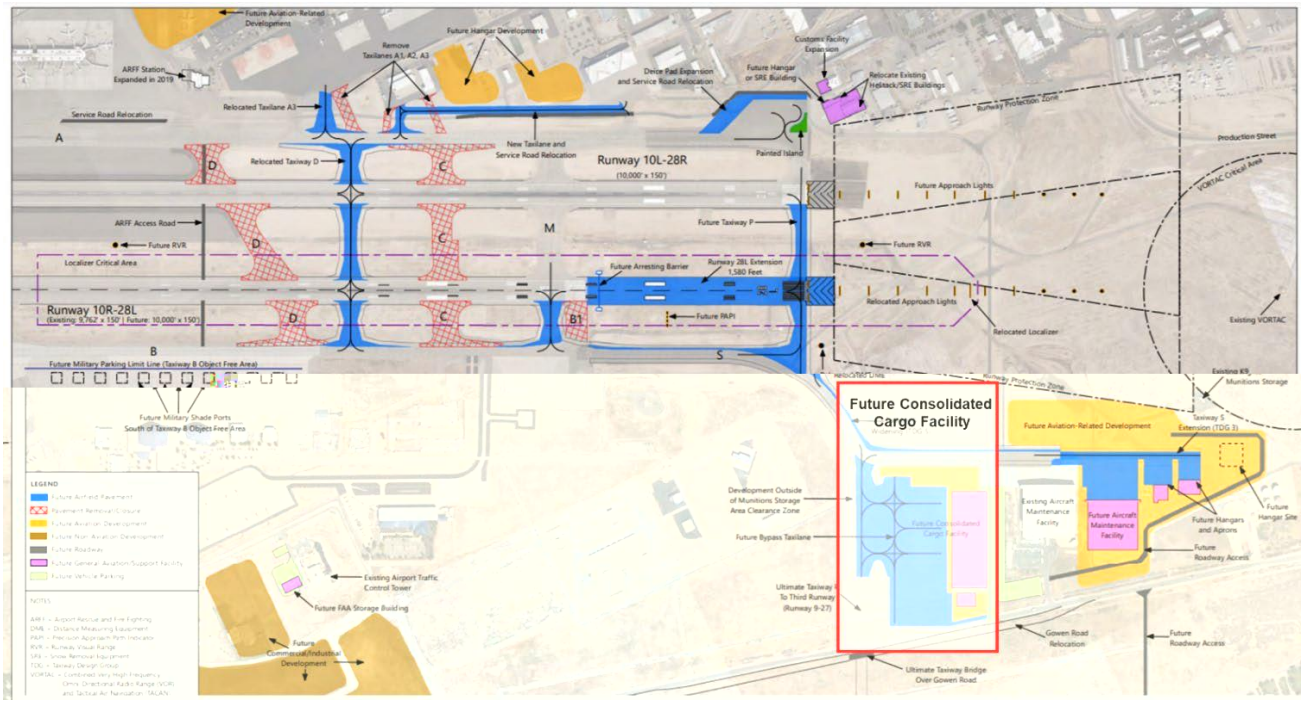
[23] Ibid.

Map 4.5 Idaho's Airport Network



Boise Airport, which is the main cargo destination in the state, reported that overall conditions at the airport were good, runways were adequate, and connections to the road network were sufficient for current and projected freight needs. The 2020 Airport Master Plan made one freight-specific recommendation suggesting the development of a new consolidated cargo facility to allow for future expansion of cargo operations and to increase safety and efficiency by segregating cargo and general aviation aircraft. In November 2021, the City of Boise and Amazon announced that Amazon will build a 30,000 square foot air cargo facility on the location of the BOI planned Consolidated Cargo Facility[24]. See map 4.5.1

Map 4.5.1 Boise Airport Proposed Consolidated Cargo Facility



Source: Boise Airport Master Plan. *https://www.iflyboise.com/media/1588/boi-mpu_full-report_final-sm.pdf*

[24] "Boise Inks Deal With Amazon For Air Cargo Facility With Millions In Infrastructure Improvements." Source: On line at: https://boisedev.com/news/2021/11/19/boise-inks-deal-with-amazon-for-air-cargo-facility-with-millions-in-infrastructure-improvements/

4.6 Pipeline

Over 63 thousand tons of goods worth more than $7.1 billion moved throughout Idaho via pipeline in 2017[25]. The two major commodities transported are natural gas and transportation fuel.

Natural gas moves in two interstate and three intrastate distribution networks. The TransCanda GTN system enters Idaho from Canada and exits around Coeur d'Alene bound for Washington, Idaho, and California. Next, the Williams Northwest Pipeline follows the Snake River Plain in southern Idaho after beginning in the San Juan Basin (northwest NM and southwest CO) towards the Pacific Northwest and Canada. Together there is a total of 6,000 miles of natural gas pipeline providing service to Idaho.

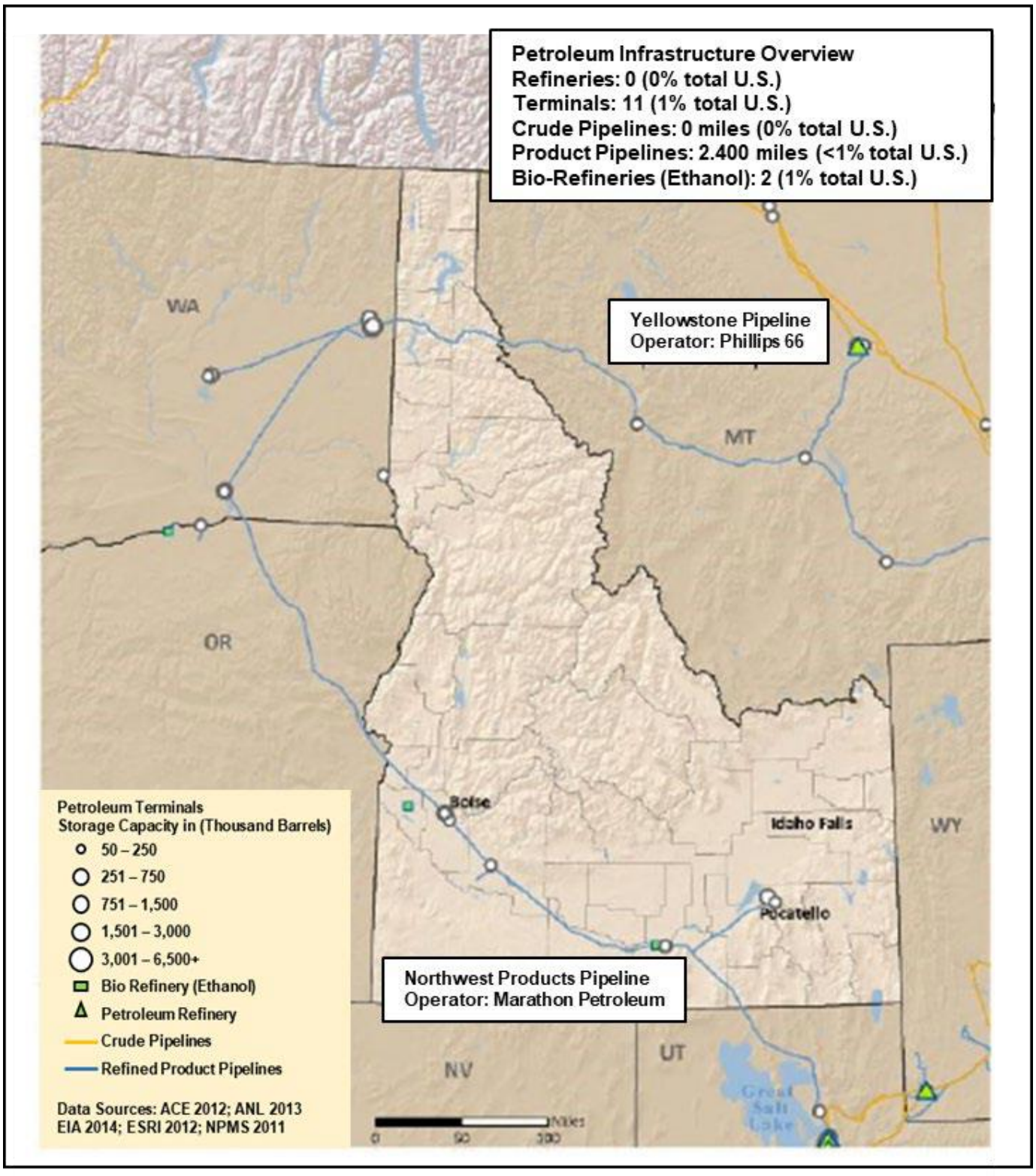
Petroleum is imported by truck, rail, or pipeline into Idaho; the State has 2,400 miles of petroleum pipeline, two bio-refineries (Ethanol) and 11 multimodal (a mix of pipeline, truck and rail) terminals. Two pipelines connect to refineries in Montana and Utah to Idaho. The Yellowstone Pipeline owned by Phillips 66 connects three refineries in Billings, Montana to Spokane, Washington for distribution in northern Idaho. The Northwest Products Pipeline owned by Marathon connects Salt Lake City with Pocatello, Burley and Boise with further service to Pasco, Washington where a single line brings fuel to Spokane, Washington for distribution in northern Idaho.[26]

Stakeholders did not identify any constraints or issues with the existing system.

Idaho's pipelines are shown on **Map 4.6.1** and **Map 4.6.2**

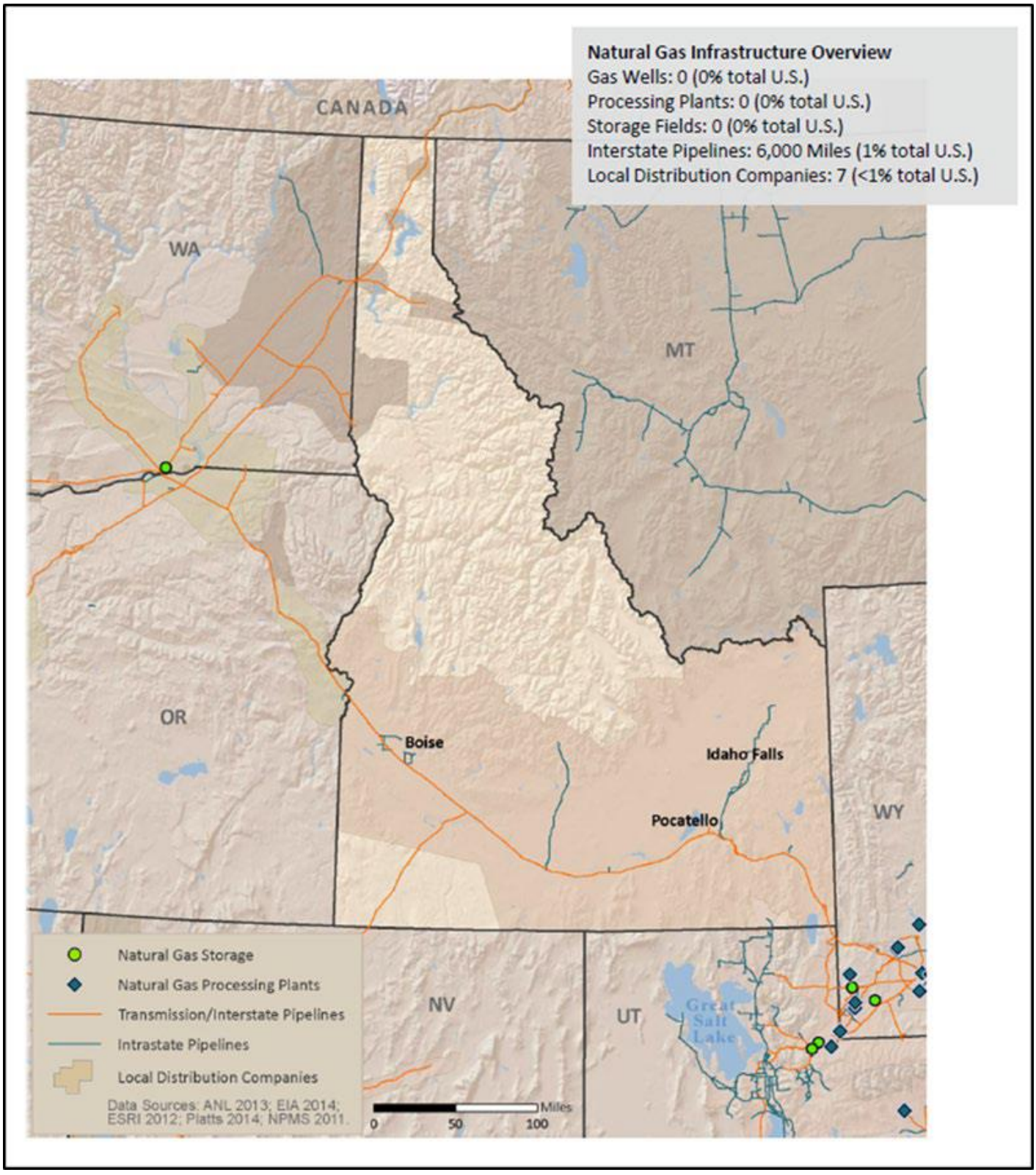
[25] Source: FAF5.2
[26] Source: Idaho Energy Landscape 2021, online at: https://oemr.idaho.gov/wp-content/uploads/Idaho-Energy-Landscape-2021.pdf

Map 4.6.1 Idaho's Petroleum Pipeline Infrastructure



Source: U.S. Department of Energy: State of Idaho Energy Sector Risk Profile

Map 4.6.2 Idaho's Natural Gas Pipeline Infrastructure



Idaho Source: U.S. Department of Energy: State of Idaho Energy Sector Risk Profile's

4.7 Idaho's Segment of the U.S. Strategic Network (Department of Defense)

Idaho's segment of the of the U.S. Strategic Network (STRATNET) is critical to the movement of Department of Defense (DoD) elements stationed in Idaho and supports national emergency movement requirement transiting the State. Idaho's segment of the STRATNET are:

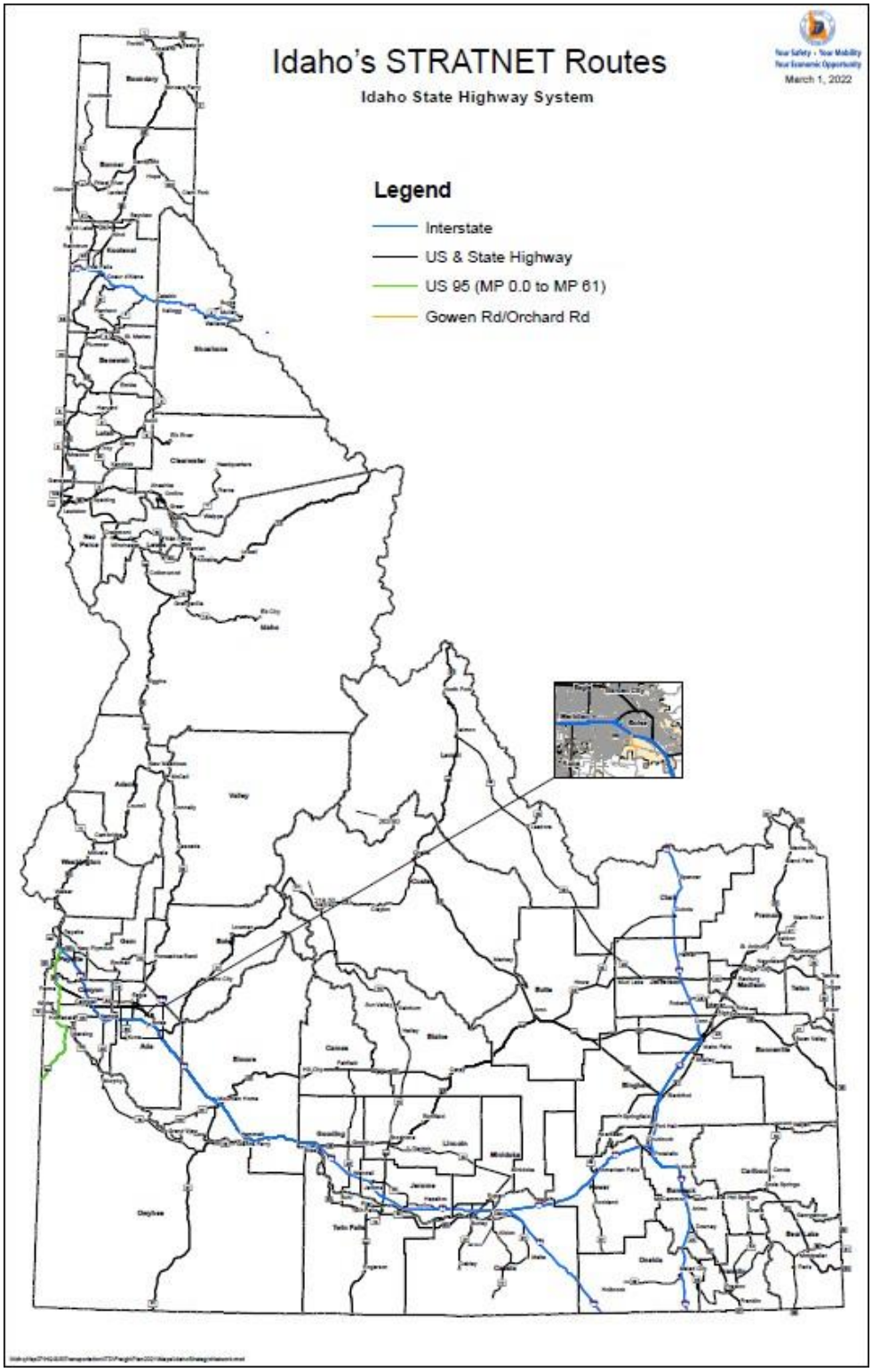
- Interstates: I-15, I-84, I-86 and I-90
- U.S. Highway 95, Idaho/Oregon border to I-84
- Gowen Rd/Orchard Rd linking Gowen Field to I-84

Idaho currently hosts the U.S. Air Force's Mountain Home AFB, Mountain Home, ID., and Idaho's National Guard's main base at Gowen Field for both Army and Air Guard units. Of national importance in Orchard Training Area (OTA) located south of Boise. OTA is a significant national training facility for the States National Guard units and hosts numerous National Guard elements during peak summer training cycles. OTS' transportation needs are serviced by both road and rail. OTA's rail link operated by Union Pacific. The rail system has four siding for railcar loading/unloading and can accommodate up to 84 railcars simultaneously. OTA has two road access point; Orchard Access Rd links OTA to I-84 with Pleasant Valley Rd linking OTA to Gowen Field.

Mountain Home AFB is linked to I-84 by State Highway 67 and linked to the Union Pacific main rail line by a spur owned by Union Pacific.

The Idaho National Guard, U.S. Air Force and U.S. Army Surface Deployment and Distribution Command Transportation Engineering Agency indicated no issues with Idaho's segments of the STRATNET.

Map 4.7 Idaho's STRATNET Network



4.8 Multimodal

Idaho's Multimodal Freight Network (IMFN) consists of highway, rail, airports, inland water port, and petroleum and natural gas pipelines and intermodal terminal. Idaho's multimodal network is imbedded into the interim National Multimodal Freight Network. The IMFN consists of:

- Interstates: 15, 84, 184, 86 and 90
- U.S. Highways: 20, 26, 30, 93 and 95
- State Highways: 55, 75
- Rail: Union Pacific. Burlington Northern and Santa Fe, Eastern Idaho, Boise Valley, Montana Rail Link (see section 3.0, Rail)
- Airports: Boise, Hailey, Lewiston, Pullman-Moscow, Twin Falls and Coeur D'Alene
- Inland Water Port: Lewiston
- Petroleum/Gas Pipeline:
  Petroleum: Yellowstone Pipeline (Phillips 66) and Northwest Products Pipeline (Marathon Pipeline Petroleum)
  Natural Gas: TransCanada' GTN and Williams Northwest Pipeline)
- Idaho's Critical Rural and Critical Urban Freight Corridors (see section 3.1.2, Idaho's Primary Highway Freight Network)

In addition to the federally identified network, the key multimodal freight facilities described above are summarized in **Table 4.8** and shown on **Map 4.8**. The Port of Lewiston is the only water-land multimodal facility in the state and is the furthest inland port on the west coast of the U.S. The Port is a vital link for exporting agricultural products from Idaho and also allows for the transport of oversized goods such as wind mill components, and other project cargo. However, rail connectivity is negatively impacted due to the need for rail shipments to go 135 miles west of the Port to connect to the Class I system. Boise Airport serves as the main air-land multimodal facility in the state, though airports with cargo capabilities in other cities including Hailey, Lewiston, Pullman, Twin Falls and Coeur D'Alene.

Idaho receives petroleum and national gas through a system of pipelines. Currently, Idaho has 1,450 miles of natural gas transmission pipelines and 8,692 miles of distribution pipeline. For Petroleum, Idaho has 11 miles of crude oil pipeline and 2,400 miles of refined product pipeline.[27] Section 3.6 provides further details on pipeline operations.

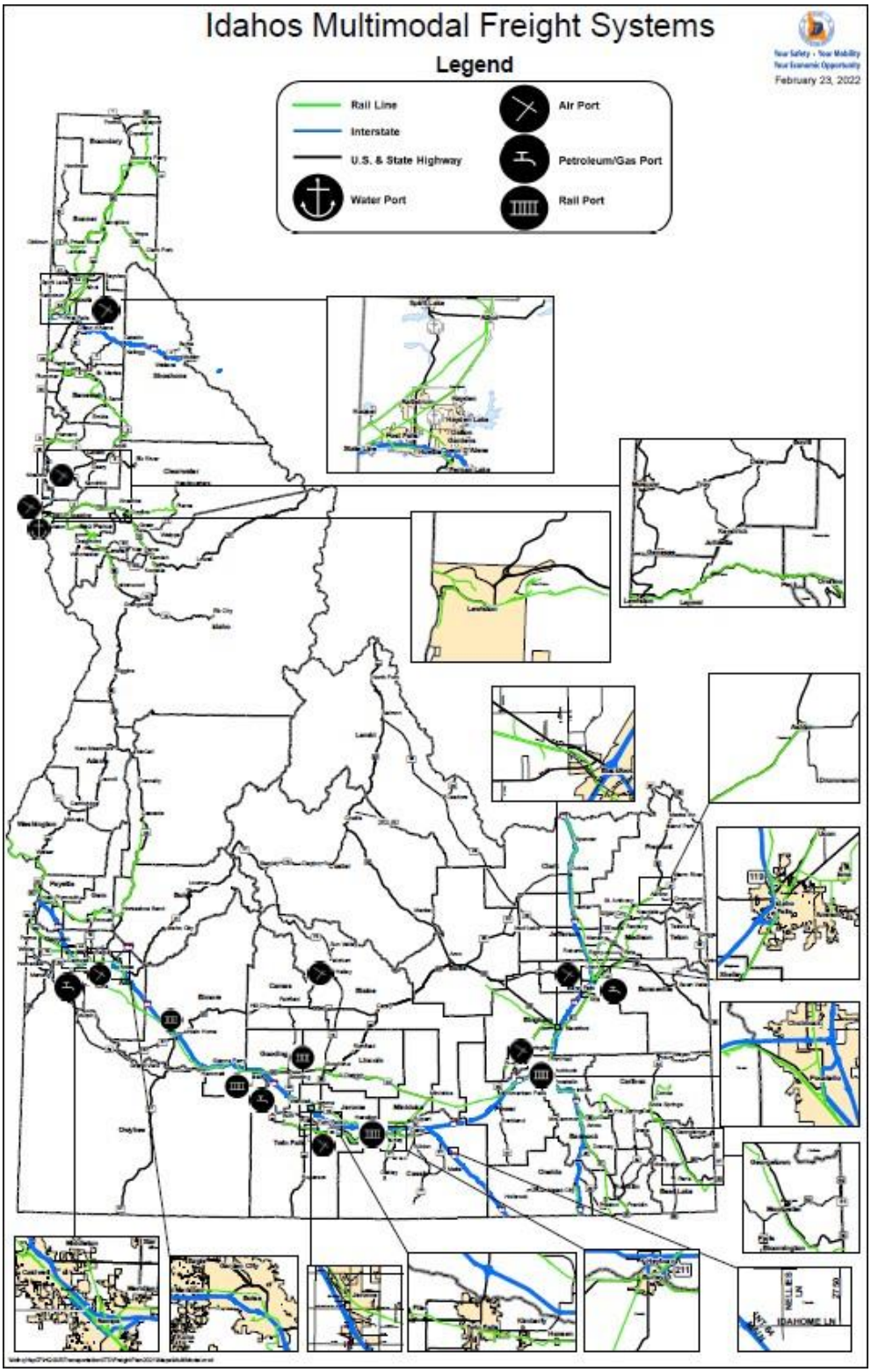
The remaining facilities are rail-truck transload facilities and Idaho's first intermodal rail port in Pocatello, operated by Savage Services. These facilities transfer goods including bulk material such as coal, or other products such as, lumber or construction material that do not move in palletized form between modes. Grain is a common commodity handled at these facilities, and four locations in the state can accommodate 100+ car unit trains of grain: Gavilon Grain in Burley, Land O Lakes Farmland Feed in Gooding, Lansing Grain in Bliss, and Simplot Land and Livestock in Mountain Home. Stakeholders identified the need for intermodal rail port (rail/truck/container) in the Treasure Valley (Boise) and Magic Valley (Twin Falls/Burley). This is an excellent opportunity for public/private partnership development. Rail ports can provide agriculture and manufacturing companies in the area improved access to rail lines.

[27] U.S. Department of Energy. On line at: https://www.energy.gov/sites/default/files/2021-09/Idaho%20Energy%20Sector%20Risk%20Profile.pdf

Table 4.8 Summary of Key Multimodal Freight Facilities in Idaho

Facility Name	Facility Location	Ownership/Access	Modes Involved	Capacity (if available)	Commodities Handled
Port of Lewiston	Lewiston		Water/Truck/Rail		Pulses, Grain, Oversize Cargo
Boise Airport	Boise	City of Boise	Air/Truck		Technology/Medical/ Mail
Freidman Memorail AP	Hailey	City of Haily	Air/Truck		Technology/Medical/ Mail
Lewiston-Nez Perce County	Lewiston	City of Lewiston	Air/Truck		Technology/Medical/ Mail
Pulllman-Moscow Regional	Pullman	City of Pullman	Air/Truck		Technology/Medical/ Mail
Joslin Field-Magic Valley Regional	Twin Falls	City of Twin Falls	Air/Truck		Technology/Medical/ Mail
Coeur D'Alene - Pappy Boyington Field	Coeur D'Alene	City of Coeur D'Alene	Air/Truck		Technology/Medical/ Mail
Gavilon Grain	Burley	EIRR	Rail/Truck	110 railcars	Grain
Land O Lakes Farmland Feed	Gooding	UPRR	Rail/Truck	100 railcars	Grain
Lansing Grain	Bliss	UPRR	Rail/Truck	100 railcars	Grain
Simplot Land and Livestock	Mountain Home	UPRR	Rail/Truck	110 railcars	Grain
Savage Services	Pocatello	Savage Services	Rail/Truck	75 railcars/200 TEU Per Week	Agriculture
Marathon Terminal	Boise Burley Pocatello	Marathon	Pipeline/Truck	Boise: 466,473 MMBL Burley: Pocatello:	Petrolium
Sinclair Terminal	Boise Burley	Sinclair Oil	Pipeline/Truck	Boise Burley	Petrolium
Conrad & Bishoff Terminal	Idaho Falls Nampa	Conrad & Bishoff	Truck/Rail		Petrolium
Holly Engery Terminal	Mountain Home	Holly Energy	Truck/Pipeline	99,780 MMBL	Petrolium
United Oil Terminal	Boise	United Oil	Pipeline/Truck		Petrolium
Nampa LNG Storage	Intermountain Gas	Nampa	Truck/Pipeline	600 Million Cubic Feet	Liquified Natural Gas

Map 4.8 Idaho's Key Multimodal Freight Facilities



5.0 Freight Performance Measures, Policy Analysis, Environmental Stewardship, Equities, Partnership Coordination

This section provides an overview of Idaho's existing structures that impact and influence freight activities, including a list of recommended performance measures for measuring and analyzing the freight system, coordination with varies organizations, and a review of policies, regulations, and legislation that shape freight movement in the state.

Work was performed in the following areas:

- Performance measures – This section explores freight performance measures and how they can be used to guide freight-related investment decision-making. It examines the federal requirements, identifies performance measures that are already in use by ITD, and suggests recommended freight- specific performance measures for ITD; and
- Coordination with partner organizations – This section identifies partner organizations that assist 69ITD in advancing freight related planning, policies, project programming, industry outreach
- Policies, regulations and legislation issues and solutions – This section identifies policies, regulations, and legislative issues that are barriers to the movement of freight in Idaho and between Idaho and surrounding states. This section also highlights potential strategies that could mitigate the policy and regulatory mismatches, gaps and inconsistencies that are identified.
- Environmental, Wildlife and Air Quality – This section identifies environmental, wildlife and air quality challenges in relation to freight movements.

5.1 Freight Performance Measures

The development of freight performance measures to support investment, operations, and policy decisions has attracted considerable interest from both public- and private-sector stakeholders. As such, State DOTs, MPOs, and the Federal government have all contributed to the ongoing dialogue surrounding freight performance measures. The development and application of performance measures enable agencies to gauge system condition and use, evaluate transportation programs and projects, and help decision makers allocate limited resources more effectively than would otherwise be possible. These can be comprised of different individual types of measurement, such as output measures, outcome measures, indicators, or indices, but collectively are generally referred to as "performance measures."

USC 49 Section 70202 provides statutorily required elements for State Freight Plans including a description of how the plan will improve the ability of the State to meet the national multimodal freight goals and national highway freight program goals established under 23 U.S.C. 167. These National Freight Policy goals include:

- Improve the contribution of the freight transportation system to economic efficiency, productivity, and competitiveness;
- Reduce congestion on the freight transportation system;
- Improve the safety, security, and resilience of the freight transportation system;
- Improve the state of good repair of the freight transportation system;
- Use advanced technology, performance management, innovation, competition, and accountability in operating and maintaining the freight transportation system; and
- Reduce adverse environmental and community impacts of the freight transportation system.

A State Freight Plan must also include the performance measures that will guide the freight-related transportation investment decisions of the State. U.S. DOT recommends that this include an analysis of the condition and performance of the State's freight transportation system and that analysis includes the identification of bottlenecks (Section 4.2.6) in the freight transportation system that cause delays and unreliability in freight movements, as well as other specific locations that are in a poor state of good repair, create safety hazards, or create other performance problems. In general, U.S. DOT recommends that measures of conditions and performance reflect the State's freight transportation goals—for each goal, there would be at least one measure that indicates how well the freight transportation system is doing in achieving that goal. State Freight Plans are required under the IIJA for a state to receive apportioned funding under the National Highway Freight Program (NHFP) and must be updated every 4 years at minimum. Progress towards freight-specific performance measures is required within 2 years, or the state must provide an explanation and remedial course of action to FHWA.

ITD uses Truck Travel Time Reliability (TTTR) (Section 4.2.5 provides an in-depth look at Idaho TTTR) as its primary means to measure impacts on freight highway movements in the State. As shown in the **Table 5.1**, select measures/indicators have been identified to capture (and quantify) areas of importance to both public and private sector freight interests – demand, economy, safety, mobility, and infrastructure condition. ITD has the ability through policy and funding decisions to affect change in these performance measures. Rail and Highway safety projects can reduce the number of truck related crashes, crash rate, and at-grade crossing incidents. Modal choice is ultimately a private-sector decision, but investment in non-highway modes and facilities, advocacy for programs such as the return of full container-on-barge service, and additional studies to help identify and promote companies that utilize non- truck modes can help shift modal use in the State. Finally, intersection projects, operational and technology improvements, and limited expansion can help the state meet highway freight mobility measures as well as safety measures.

Table 5.1 Proposed ITD Freight Performance Measures

ITD Performance Objective	Recommended Freight Performance Measure	Applicable AASHTO Goal Area	Data Source	Needs and Issues Addressed
Safety	Truck-Involved Crashes/Miles Number of Truck-Involved Crashes	Safety	WebCARS	Highway Safety
	Number of At-Grade Rail Crossing Incidents	Rail Safety	FRA	Rail/Highway Safety
Mobility	% Modal Usage (Tons, Value)	Freight Movement and Economic Vitality	FAF	Intermodal Connectivity
Economic Vitality	Mileage Uncongested on the Interstate System	Freight Movement and Economic Vitality	NPMRDS	Truck Congestion /Reliability/Air Quality

In addition, ITD already tracks several performance measures as part of its general transportation performance measurement. The four measures listed below are important to freight movement in the state and should be tracked as part of the freight network:

- Percent of Time Highway Clear of Snow/Ice During Winter Storms
- Percent of Pavement in Good or Fair Condition
- Percent of Bridges in Good Condition
- Percent of Highway Project Designs Completed on or Ahead of Time

While not unique to goods movement, the four measures above all impact the flow of goods in the State. Roads with snow or ice can force companies to reroute trucks due to the difficult geography found in parts of the state, and generally lead to slower travel and an increased chance of delays due to speed and crashes by both trucks and other vehicles. Poor pavement conditions can slow travel, cause delays or incidents, and damage sensitive goods in transit. Similarly, bridges in poor condition can create delays or force trucks to reroute if a weight limit is placed on the bridge. Additionally, construction projects to completely repair or replace poor infrastructure require more time and money than regular maintenance, increasing the possibility for delay or diversion. Finally, the percent of highway project designs completed on or ahead of time can have an impact on goods movement. Projects that are delayed in reaching the construction phase can impact supply chain decisions that were made to avoid specific construction schedules. This could especially be an issue for large projects such as a bridge replacement on a major state route such as U.S. 95 where detour possibilities are limited. Similarly, delays in a project meant to reduce congestion or increase safety only delays those benefits. Finally, an increase in time required for planning, permitting, and design can also lead to additional costs, reducing funds available to other projects that could aid the system.70

5.2 Policy Issues by Mode

5.2.1 Highway

In addition to infrastructure challenges, there are a number of policy, regulatory, and legislative issues that make freight movement within Idaho and between Idaho and neighboring states, difficult. Until July 2016, trucks on Idaho's Interstate highway system were limited to 80,000 pounds. This limit was lower than Interstate weight limits in several of neighboring states including Utah, Montana, and Nevada while several of state highways allowed trucks weighing up to 129,000 pounds. This meant that trucks at the higher weight limit that would typically use the Interstate system for long-haul trips instead utilized state highways, increasing truck traffic on State routes and negatively impacting communities where State routes serve as a Main Street.

This changed in July 2016 when Idaho's legislature, following Federal approval, permitted 129K trucks to use the Interstate system. Since 2016, Idaho has added over 120 miles to the States' 129k routes while completing two South to North routes: US95 from Idaho/Oregon to Canada and US93 from Idaho/Utah to Idaho Montana.

Another issue facing the State and the U.S is a shortage of truck drivers. Interviews with both trucking companies, Idaho Trucking Association, Trucking Advisory Council, and shippers/receivers indicated this is a pressing concern and is likely to become more acute in the near future. Interviewees indicated two main causes for this decline. The first is an aging workforce; as many drivers in the current fleet are nearing retirement age. Second, there is a significant absence of younger drivers entering the field. Stakeholders blame a general lack of awareness and education about the industry as one cause of the shortfall, with the limited appeal of the industry to a technology-driven generation another issue. The Idaho Department of Labor is working to make the profession more attractive, hosting various industry fairs and events. Several local colleges including the College of Western Idaho, North Idaho College, and Eastern Idaho Technical College offer courses that train new drivers.[28] Nationwide, trucking companies are offering more flexible hours, incentives, and bonuses to try to attract and retain drivers. Receivers are expanding loading hours and days to make conditions more appealing for truckers

[28] Torrie Cope. "Companies use incentives, bonuses to lure new drivers." *Idaho Press-Tribune.* May 18, 2014.

making a delivery. Due to the geographic size, topography, and scope of the State, 72% of communities in Idaho rely solely on trucks for the delivery of freight. A decreasing workforce may hinder the ability of drivers to reach these communities on a regular basis in the future, though changing technology including truck platooning or fully autonomous vehicles may reduce the critical shortage of drivers.

5.2.2 Rail

One federal policy that will likely impact rail freight movement in the state is the mandate to implement Positive Train Control (PTC). PTC refers to technology that prevent train-to-train collisions, overspeed derailments, and casualties or injuries to roadway workers. The technology combines GPS locating of all trains, infrastructure switches, crossings, and junctions; computer cataloging of speed restrictions and traffic conditions; and wireless communications between all operating units, including engineers, dispatchers, and work crews. The Rail Safety Improvement Act of 2008 (RSIA) mandated the widespread installation of PTC systems by December 2015 on all main lines handling passenger trains or hazardous materials, essentially most of the Class I national rail system. Although the implementation deadline was delayed in October 2015 by three years to December 2018, the substantial financial demands placed on the Class I railroads to implement PTC could result in the diversion of capital from other potential investments, including those that would directly benefit capacity and service.

Stakeholders identified a policy change that could impact funding opportunities. Private Activity Bonds (PABs) are debt instruments authorized by FHWA and issued by State or local governments whose proceeds are used to construct projects with significant private involvement. State or local governments issue tax-exempt debt on behalf of the private entity undertaking the project. The private entity finances and delivers the project and is responsible for debt service on the PABs. Bonds are a form of debt, not revenue. They must be backed by revenue that is adequate to repay the debt, such as general fund revenues, property taxes, sales taxes, or impact fees that are charged to developers.

PABs likely have limited applicability in Idaho, as the current state constitution expressly prohibits using public funds for profit. This has commonly been interpreted as a prohibition on public investment in privately-owned properties. While PABs could be used for public infrastructure investments in support of a public/private partnership project, use of PABs for other purposes, such as direct funding of shortline infrastructure improvements, would likely require specific enabling legislation, and/or a constitutional amendment.

Another policy change that could aid the development of rail intermodal and transload facilities is the inclusion of "dry ports" in port district authorization. Idaho Code §70-1101 authorizes the formation of Port Districts explicitly for the construction, operation, and maintenance of "harbor improvements, land and water transfer and terminal facilities, industrial and economic development, and other development, facilities, and services, reasonably incident to a modern, efficient and competitive port in any county bordering upon any continuous waterway system, limited to the port area, which will float commercial tug and barge vehicles to ports handling transoceanic traffic.

In Washington and other nearby states, port districts are open to any community with an airport and significant intermodal freight facilities. Current legislative restrictions on port districts in Idaho place the state at a competitive disadvantage by restricting Port Districts to water ports. Broadening the port district authorization to provide for dry ports in Idaho, especially at rail terminals, could create viable financing alternatives and create significant opportunities for public–private partnerships in expanding

freight rail intermodal and transload opportunities throughout the state.

5.2.3 Water (Port of Lewiston)

The Port of Lewiston is in good physical condition. The limited amount of goods flowing through the Port currently are mostly caused by circumstances outside of its control – the withdrawal of shipping lines from the Port of Portland caused the cessation of container-on-barge service, and the injunction against oversize shipments on U.S. 12. ITD should advocate with the Port of Portland for a long-term solution and return of full container-on-barge service and coordinate efforts to do so with other Ports and states along the Columbia and Snake River system to reduce transportation costs, reduce emissions, save fuel, and reduce road congestion. It should also advocate for the ending of the injunction on U.S. 12 which would allow oversize/overweight shipments to resume using the Port of Lewiston.

5.2.4 Air

For air, one of the policy recommendations in the State Aviation System Plan is to promote the economic and social value of airports for both commercial and general aviation. This policy is closely linked to one of the recommended performance measures in this plan - the percent of tons and value of goods moved by non-truck modes. One way to improve air mode-share is through close coordination between the Division of Aeronautics and key and emerging industries identified by the Department of Commerce that use air tomove goods. Industries such as aerospace, advanced manufacturing, and certain agricultural sectors are more likely to produce or require high value, lower weight, or specialty products that are best suited for air transport.

5.3. Environmental, Wildlife and Air Quality Stewardship

ITD emphasizes balancing transportation needs with responsible stewardship of the environment. This process involves regulatory compliance incorporating environmental sensitivity and sustainability as integral aspects of project decisions and design. While not specific to movement of freight, environmental stewardship is an underlying goal that informs decision-making at a broad level within ITD.

All projects receiving Federal Freight Funding are required to follow the requirements set forth in the national Environmental Policy Act of 1969 (NEPA). NEPA is a procedural statue for decision making on federal projects that assures analysis of social, economic, and ecological impacts a project may have.

ITD's environmental process is detailed in the ITD Environmental Process Manual https://itd.idaho.gov/env/?target=resources located on ITD's website. This manual provides guidance on the process of establishing a purposed and need, the alternatives analysis, and determined the most appropriate form of environmental documentation for each project. If projects are on the local system, the local sponsor will coordinate with ITD district where the project is located to complete the environmental process.

5.3.1 Extreme Weather and Natural Disaster

According to the Idaho Office of Emergency Management's (IOEM) State Hazard Mitigation

Plan[29] (SHMP), Idaho has experienced thousands of hazard events, resulting in millions of dollars in losses and casualties, and 31 major Federal disaster (DR) and emergency (EM) declarations and 15 fire management assistance (FM) declarations since 1954. Based on the data, floods were a component of 21 disasters (45-percent); wildfires were a component of 18 disasters (39-percent); severe storms were a component of 10 disasters (21-percent); landslides and mudslides were a component of three disasters (6-percent); earthquake was a component of one disaster (2-percent); drought was a component of one disaster (2-percent); dam collapse was a component of one disaster (2-percent); and evacuation was a component of one disaster (2-percent). Many of the declarations were classified as a combination of incident types; therefore, the percentages calculated may include the same event in the different declaration types.

IOEM's 2018 SHMP profiles 8 natural and 5 technological and human-caused hazards including: floods (includes dam/levee/canal failure), earthquakes, wildfires, landslides, avalanches, drought, severe storms (includes lightning, winds/tornadoes), volcanic eruptions, hazardous materials, radiological, pandemic, cyber disruption, and civil disturbances. From a statewide perspective, the three most significant are:

- Wildfires
- Floods
- Severe Storms

This conclusion is based on: the types of recent major disaster declarations, an assessment of the types of historical disaster declarations, the results of the vulnerability and loss assessments, the statewide risk factor exercise, and the hazards identified as significant in local plans.

5.3.1.1 Wildfires

The Idaho Department of Land's (IDL) Year-End Fire Report shows that human caused fires are increasingly becoming the primary fire start cause. In Idaho, 46% are human caused and the remaining 54% are initiated by lightning strikes. Wildfires can occur anywhere and at any time within the state. Idaho's climate and ecosystems vary greatly from one area of the state to another, but can be divided into two distinct ecosystems affected by fire: forests and rangelands. More than 50 percent of Idaho is forested (Idaho Firewise 2018). Idaho has over 21 million acres of forest land, from the Canadian border in the north, to the Great Basin in the south. Rangelands form the majority of the remaining land in the State that is not used for agriculture. Rangelands predominate in the Southwest, Central, and Southeast regions of Idaho. See **Map 5.3.1.1** for Major Wildfire Event in Idaho between 2012 and 2017.

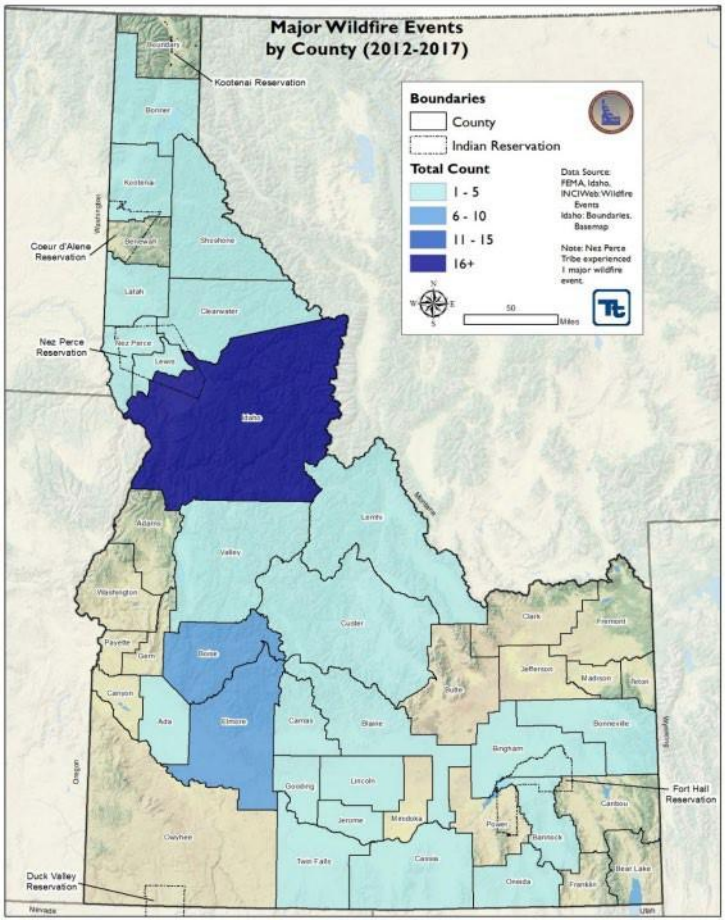
Major highways, railways, and power/communication transmission lines may also be impacted by a wildfire event. Most roads and railroads would not be damaged except in the worst case wildfire scenarios. Fires can create conditions that block or prevent access and can isolate residents and emergency service providers. Power lines are the most at risk to wildfire because most poles are made of wood and susceptible to burning. In the event of a wildfire, pipelines that provide a source of fuel could be ignited, leading to a catastrophic explosion. The wildfire hazard typically does not have a major direct impact on bridges, but it can create conditions in which bridges are obstructed or weakened.

There are many possible ways to mitigate effects of wildfires. ITD, in partnership with multiple State and Federal agencies uses a combination of the following:

[29] Accessed at: https://ioem.idaho.gov/preparedness-and-protection/mitigation/state-hazard-mitigation-plan/

- Reduce fuel loads in critical areas including but not limited to: power corridors, area communication sites, watersheds serving communities, and local and regional transportation routes
- Publish maps identifying areas with a high probability of wildland fires
- Improve land use planning and land use regulatory mechanisms for fire prone areas
- Purchase or obtain easements on fire prone lands
- In partnership with IDL and USFS, identifies and removes excess vegetation and trees along the State Highway System

Map 5.3.1.1 for Major Wildfire Event in Idaho between 2012 and 2017.



5.3.1.2 Flooding

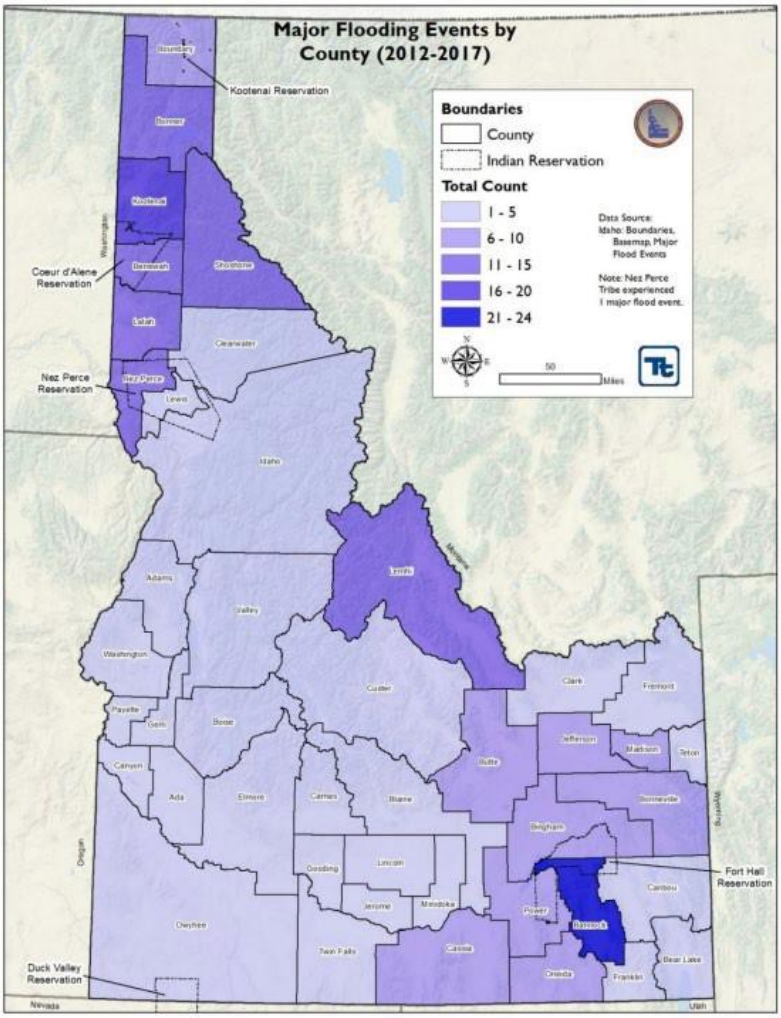
Flooding is the partial or complete inundation of normally dry land. Types of flooding experienced in Idaho are numerous and include riverine flooding, flash floods, alluvial fan flooding, ice/debris jam flooding, levee/dam/canal breaks, stormwater, sheet or areal flooding, and mudflows (especially after a wildfire). Flooding has produced the most damaging and costly disasters in Idaho, and significant events have occurred regularly throughout the history of the State. Freight mobility may be impacted and delayed in the event of flooding where inadequate draining may lead to localized flooding of roadways and bridges rending freight corridors impassable. See **Map 5.3.1.2** for Major Flooding Event in Idaho between 2012 and 2017.

Idaho flood mitigation is principally involved with accommodating desired social and economic goals while preventing losses to life, health, and property. In general, flood damage may be mitigated by protecting life and property from floodwaters through proper floodplain management, actions to increase water storage capacity, structural measures such as levees and dikes, contingency planning by local, county, and state agencies, and educating the public and decision makers to better understand flood hazards.

ITD Environmental Services provides technical guidance and expertise on mechanisms to address stormwater management to ITD's District Engineers, Construction and Maintenance personnel. The purpose is to incorporate stormwater pollution prevention and flooding prevention and water resource protection considerations into ITD's highway design and construction processes with thorough planning, thoughtful design, responsible construction practices and diligent inspection and maintenance of all pollution controls that are needed to meet water quality protection goals and requirements of federal, state and local agencies. Goals of the program are to

- Prevent adverse water quality impacts and minimize unavoidable impacts by developing, implementing, and enforcing practices and procedures to reduce erosion, sedimentation, and pollution in highway runoff
- Protect areas that provide water quality benefits and protect areas that are susceptible to erosion
- Promote the use of structural and operational methods to control erosion, reduce pollutant loadings, and prevent or minimize the amount of sediment reaching surface waters
- Provide assistance and guidance on erosion and sediment control and stormwater management
- Conduct construction project reviews to assist project managers and provide guidance for compliance with stormwater regulations and permit conditions

Map 5.3.1.2 for Major Flooding Events in Idaho between 2012 and 2017



5.3.1.3 Severe Storms

Idaho Office of Emergency Management defines a severe storm is an atmospheric disturbance that results in one or more of the following phenomena: strong winds and large hail, thunderstorms, tornadoes, rain, snow, or other mixed precipitation. Of the 47 Presidential Disaster declarations in Idaho since 1954, 10 have been attributed to include "storms" or "severe" storms. Idaho categorizes winter storms, lightning, hail, straight-line winds, and tornadoes as the severe storms applicable to the State. See **Map 5.3.1.3** for Major Severe Storm Event in Idaho between 2012 and 2017.

A severe winter storm is defined as one that drops 4 or more inches of snow during a 12-hour period, or 6 or more inches during a 24-hour span. A blizzard is a winter storm with winds exceeding 35 miles per hour accompanied by snow or blowing snow and reduced visibility.

Thunderstorms. A thunderstorm is a rain event that includes thunder and lightning. A thunderstorm is classified as "severe" when it contains one or more of the following: hail with at least 1" diameter, winds gusting in excess of 50 knots (58 mph), or tornado. Lightning is defined by the NWS as "a visible electrical discharge produced by a thunderstorm. The discharge may occur within or between clouds, between the cloud and air, between a cloud and the ground or between the ground and a cloud." A lightning discharge may be over 5 miles in length, generate temperatures over 50,000°F, and carry 50,000 volts of electrical potential. Lightning is most often associated with thunderstorm clouds, but lightning can strike as far as 5 to 10 miles from a storm. Lightning strikes themselves have unsubstantial environmental impacts. Isolated, small scale environmental impacts include damaged or killed trees and

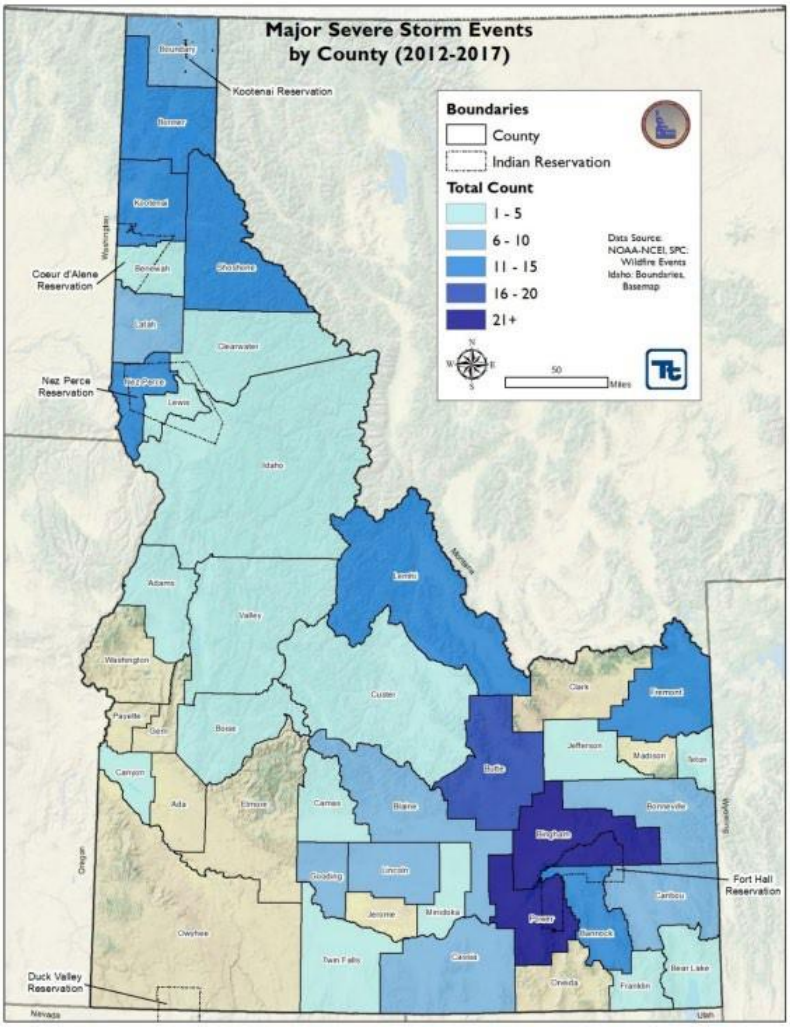
damage to historic structures. Far more substantial are indirect impacts from the ignition of wildfire that can result from lightning. Lightning season coincides with dry season. Major concerns are "dry thunderstorms" or "dry lightning storms", which can produce lightning and high winds with no rain to extinguish or mitigate resulting fires.

Hail. Hail is almost invariably associated with thunderstorms. The NWS definition of "hail" is showery precipitation in the form of irregular pellets or balls of ice more than 5 mm in diameter, falling from a cumulonimbus cloud. The loss of crops or livestock due to hail can have far-reaching economic effects. Damage to trees from hail or heavy snowfall can have a relatively short-term alteration of the visual landscape, but the long-term recovery of natural resources from these effects is likely.

Straight-Line-Winds. The term "straight-line winds" is used to distinguish common, non-rotating winds from tornado related winds. Straight-line winds are responsible for most thunderstorm wind damage, with wind speeds in excess of 100 miles per hour on occasion. Impacts to vegetation and wildlife from high winds can include damage and death. The loss of crops or livestock can have far reaching economic effects. Tree blow downs can alter the visual landscape and dramatically change the local vegetation. Fallen trees can create dams, causing flooding upstream and disruption of aquatic habitats.

Tornadoes. The State of Idaho has a relatively low risk of tornadoes compared to states in the Midwest and Southern United States. Idaho has experienced tornadoes on occasion, with some producing significant damage, injury or death. Multiple tornadoes may occur during a single storm, resulting in highly destructive events. Tornadoes and high winds are unlikely to impact geologic features; however, soils and farmlands could be impacted, particularly in dry seasons. Blowing dust can impact line-of-sight, vegetation and structures. Tornadoes and high winds can temporarily halt freight transportation operations. Severe storms can be particularly difficult to mitigate for and recover from because of their varied and widespread nature. The rural nature and difficult terrain found in much of the State can make highway repairs, maintenance and clearing particularly challenging for utility and transportation resources.

Map 5.3.1.3 for Major Severe Storm Events in Idaho between 2012 and 2017



5.3.2 Wildlife Impacts

Wildlife, fish, and sensitive plants require special consideration during project planning and development. In addition to Endangered Species Act (ESA) compliance, areas of particular concern include:

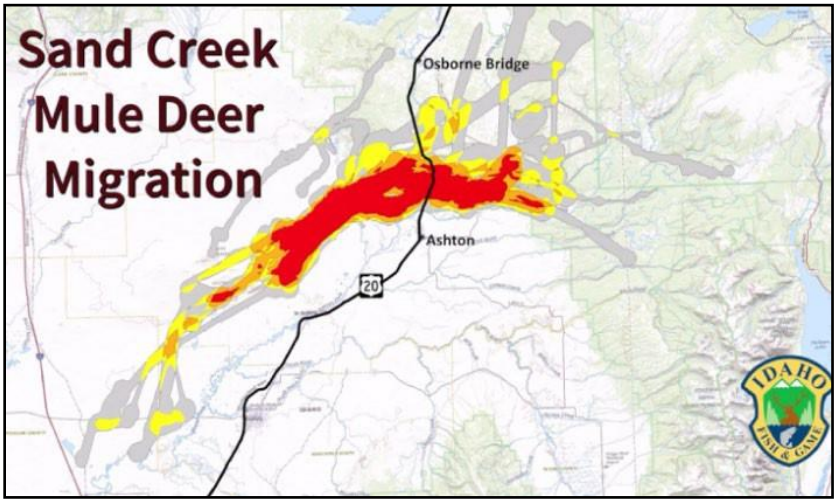
- Direct effects from construction such as noise disturbance or other disruption of habitat
- Interference to essential wildlife functions such as wintering, foraging, migration, breeding and/or rearing
- Degradation or loss of essential habitat
- Habitat fragmentation and edge effects
- Effects related to collisions between vehicles and animals
- Loss of animal or plant populations
- Impacts to wildlife food resources

- Water quality impacts
- Effects on migration or dispersal of organisms including mammals, reptiles,
- amphibians, fish, insects, and/or ground dwelling birds, where the project could create or exacerbate barriers to movement

Mitigation Measures. ITD practice is to first avoid then minimize impacts to wildlife, fish, sensitive plants, and their habitat. Unavoidable impacts generally require mitigation, which is planned during project design. During the mitigation design, coordination between offices is necessary. The designer should work closely with the District environmental office. Mitigation can involve:

- Designing vertical and horizontal road alignment shifts and modifications to avoid sensitive habitats
- Installing wildlife overpasses
- Replacing culverts that impede fish passage
- Including fish baffles in culverts
- Reducing clearing limits to save significant trees and other native habitats
- Installing wildlife reflectors or other measures to reduce vehicle/animal collisions
- Habitat improvements including native plantings and placing large woody debris in streams
- Providing wildlife fencing where accident statistics indicate the need
- Replacement of destroyed or damaged habitat
- Long-term maintenance needs should be considered when designing sustainable mitigation systems

ITD has adopted a strategy to mitigate the impact of freight on wildlife by providing wildlife crossing locations. This promotes the creation of corridors which restore the natural migration patterns for native wildlife. Crossing structures can be above the roadway (overpass) while others can include tunnels, or large drainage structures under the roadway which accommodate the movement of wildlife. Considerations for crossings should include location, size, openness and fencing. Wildlife fences keep animals from entering the road's right-of-way, directing them to safe roadway crossings where wildlife-vehicle conflicts are not possible. ITD has built numerous miles of wildlife fencing to reduce wildlife-vehicle crashes, including portions of US-30 and US-20/26. Currently, ITD is partnering with Idaho Fish and Game to identify numerous wildlife migration patterns. This partnership is informing ITD in locating a wildlife bridge crossing on US20 between Ashton and Osborne Bridge.



5.3.3 Air Quality

According to the Environmental Protection Agency (EPA) CMVs are the largest contributor (about 32 percent) to mobile source emissions of NOx. The transportation sector also contributes to emissions of air toxics, which are compounds that are known or suspected to cause cancer or other serious health and environmental effects. Examples of mobile source air toxics include benzene, formaldehyde, and diesel particulate matter. While the EPA has a variety of standards for emission reduction in place, there are additional mitigation measures that may reduce the impact of freight mobility on air quality. ITD is partnering with Idaho Department of Environmental Quality on refining Idaho air quality as it relates to CMVs. The BIL modified requirements that went into effect after the update was substantially complete. As a result, several of the responses to these requirements are pre-decisions and have yet to be determined and approved by leadership and will be addressed in amendments to the State Freight Plan.

ITD is initiating development of a Carbon Reduction Plan (CRP) and a new, more comprehensive Resiliency Plan. Once completed, those plans will be available publicly and can be updated in future versions of the Statewide Freight Plan. These plans will specifically address emission reductions on Idaho highways, including identifying issues and providing air quality mitigation plans. ITD is limited because most of the trucking activity in Idaho begins and ends outside the state, limiting ITD's ability to control the choices that truckers make regarding clean emissions. Furthermore, ITD is currently studying the State's truck parking needs. The study will inform ITD on truck parking demand and locations for new truck parking spaces thus reducing the need for truckers to drive long distances across a rural landscape and in urban areas to find parking at the end of their in-service limits and during road closures. A goal of the study is to target reducing GHG. ITD is adding 20 new truck parking spaces at the Bliss Safety Rest Area on I-84.

In addition, ITD is working with Utah to evaluate passenger rail from Boise, ID to Salt Lake City, UT. Many people who commute this corridor daily may use rail service, reducing vehicle fuel consumption, CO_2 emissions, and other pollutants. The planning phase of this project has not reached the point where such benefits are quantified.

5.4 Partnership Coordination

ITD works closely with local governments and communities to mitigate freight-related impacts and to inform the selection of freight-related investments. Additionally, ITD coordinates with local governments to mitigate impacts to communities resulting from freight activities.

5.4.1 Northwest Passage Corridor

The vision of the North/West Passage Corridor is to focus on developing effective methods for sharing, coordinating, and integrating traveler information and operational activities across state and provincial borders. In February 2002, state representatives from Idaho, Minnesota, Montana, North Dakota, South Dakota, Washington, Wisconsin, and Wyoming met to develop a program to help states along I-90 and I-94 coordinate the development, deployment, and integration of ITS projects.

5.4.2 Western States Freight Coalition

The Western States Freight Coalition (WSFC) is a partnership between the department of transportation freight program personnel in 11 western states, including Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. The WSFC serves as a forum for peer exchange between states. WSFC representatives discuss on-going freight-related initiatives or projects in each state.

5.4.3 Western Border Working Group

The Western Border Working Group (WBWG) was established in the spring of 2015 and was originally called the Inland Border Working Group. WBWG includes Manitoba Infrastructure and Transportation, Saskatchewan Ministry of Highways and Infrastructure, Alberta Transportation, British Columbia Ministry of Transportation and Infrastructure, Minnesota Department of Transportation, North Dakota Department of Transportation, MDT, Idaho Transportation Department, and Washington State Department of Transportation. The WBWG was established to foster communication and information sharing among jurisdictions and discuss western perspectives related to bi-national border transportation planning issues. WBWG participates directly with the Canada United States Transportation Border Working Group (TBWG).

5.4.4 Great Northern Corridor Coalition

The Great Northern Corridor (GNC) is the east-west freight corridor between Chicago and the Pacific Northwest that supports the economic vitality of more than 38 million Americans across eight states bordering Canada. The states of Oregon, Washington, Idaho, Montana, North Dakota, Minnesota, and Wisconsin have been collaborating informally for several years on the development of the Great Northern Corridor Coalition. This multi-state cooperative is comprised of state departments of transportation, ports, BNSF, and others interested in freight movement between the Pacific Northwest and the Great Lakes.

5.4.5 Local Governments

ITD works closely with communities across the state to develop transportation plans. Coeur D'Alene, Lewiston, Boise, Pocatello, Idaho Falls and soon to be Twin Falls are the six MPOs in Idaho, representing urban areas with populations of at least 50,000. The MPOs are required to develop long-range plans outlining specific strategies and projects to address identified needs within the urban boundary. In accordance with federal requirements each of the MPOs has a current LRTP that, among other goals, directly or indirectly supports the safe and efficient movement of freight. Non-metropolitan communities address transportation needs based on public input and technical analysis. ITD and non-metropolitan also work closely together in developing transportation projects the mutually support the movement of freight in non-metropolitan areas. ITD's Non-Metropolitan Local Official Consultation Process Plan outline the procedures and processes for non-metropolitan coordination. The plan can be accessed at: https://itd.idaho.gov/wp-content/uploads/2022/02/Non-Metro_Plan.pdf

5.4.6 Idaho Trucking Association

The Idaho Trucking Association (ITA) is comprised of over 450 companies representing trucking companies. ITA is a key stakeholder, during ITD's evaluation of infrastructure improvements that may impact the freight industry and was invited to participate in stakeholder activities, during the development of the Montana Freight Plan.

5.4.7 Local Highway Technical Assistance Council (LHTAC)

The LHTAC was established under Chapter 24, Title 40, Idaho Code in 1994. LHTAC advocates, supports, trains and represents over 287 Local Highway Jurisdictions (LHJ) in Idaho. LHTAC develops uniform standards and procedures for highway maintenance, construction, operation and administration; make recommendations to the Idaho Transportation Board for the distribution and prioritization of federal funds for local highway projects; and assist the Legislature by providing research and data relating to transportation matters affecting LHJ within the state. LHTAC also represent its member jurisdictions in conferences, meetings, and hearings relating to highway and street subjects affecting LHJ; maintaining and disseminate information from other states as to similar activities that would affect the LHJ in Idaho.

5.5 Equities

It is the policy of the ITD to comply with Title VI of the Civil Rights Act of 1964 and to adhere to all related nondiscrimination authorities. ITD will ensure that no person in the United States shall, on the ground of race, color, or national origin, sex, age, disability, low-income, and Limited English Proficiency (LEP), "be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity," for which ITD "receives Federal financial assistance." A full description of ITD's goals and policies related to equities can be found at: https://itd.idaho.gov/civilrights/ . In addition to Title VI requirements, ITD assess all federal funded projects for DBE participation, administer the DBE Supportive Services Program, the ICONIC program, and the NSTI program.

The DBE/SS program is designed to assist DBE contractors in building their businesses. ITD utilizes a contracted consultant; GCAP to assist in this program. DBEs can apply for additional supportive services funding upon attending the courses up to $1000. The $1000 issued under a reimbursement and is used for things like computers, advertising, license and certifications to expand the business, etc.

ICONIC is the Idaho Career Opportunities, Next in Construction. This is the five week construction program used to help Idahoans get into the construction trades. We partner with the Idaho Workforce Development Council to provide CDL training in addition to the five week program we run. Our five weeks consists of heavy equipment operating and cement masonry. The cement masonry instruction includes partnering with the district to identify a sidewalk needing to be replaced to assist (on a small scale) in updating infrastructure. ITD also offers supportive services to applicants in the program – these range from childcare, to housing, to gas, to PPE. This program has trained 105 to date and will be ran again in the Spring of 2022.

Under the ICONIC program ITD is collaborating with the National Governors Association to expand the program. NGA is a cohort made up of Idaho Workforce Development Council, Idaho Department of Labor, and ITD. ITD suggested partnering with the female correction facilities to assist with CDL prior to release and marketing under Woman In Trucking and closely working with the Idaho Colleges and Universities to expand training into the colleges.

The ITD's takes into consideration disadvantages communities when scoring Freight Formula project applications. Using the EPA's EJSCREE ACS Summary reports, the ITD developed a scoring matric that emphasizes disadvantages communities during project scoring and selection. See appendix C: Freight Formula Project Scoring.

6.0 Idaho Freight Needs Assessments and Strategies

6.1 Stakeholder Input

6.1.2 Freight Summit

The Freight Summit was held in Boise August 10, 2021. Representatives from private and public sectors attended, including trucking, rail, metropolitan planning organizations, and others. Small group and individual stakeholder interviews were conducted as part of the Freight Summit. Notably, almost all stakeholders commented on the rapid rate of growth and how it has influenced them. While different sectors expressed unique concerns, some key themes for needs emerged, including:

Policy/Legislative

- No current mechanism to collect funds from vehicle used
- Considerations for Public Private Partnerships (P3)
- Some DOTs have built rail lines to incentivize use by shippers.
- Some DOTs are partnering with private truck stops to provide more parking/places to rest.
- Technology company partnerships – for example, communications between trains and Intelligent Transportation System (ITS) infrastructure

Connectivity/Resiliency

- Need for a redundant north-south connection (rail and truck)
- Mitigate delays from weather, fire, crashes, and other factors
- Need for north-south rail connectivity
- Need for redundancy in the freight network (statewide)
- Lack of passing lanes on U.S. and State Highways.

Trucking

- Need for truck route signage
- Need for truck parking
- Travel time reliability
- Need connectivity on 129k routes
- Some truck routes do not physically accommodate trucks (turning radii, truck landings drag, etc.)

Rail

- Improve rail-grade crossings for safety and congestion
- Due to limited rail resources, trains have more connected cars, which has increased their length. Many of the existing rail sidings are not long enough to accommodate the increased
- Lack of available rail siding available for industrial use – many parcels are now residential uses

Multimodal

- Need for increased access to intermodal facilities/container access and overall improved connectivity to seaports (rail and truck)
- Movement of cargo on water is not problematic; although changes to dams could create problems

Factors that benefit/challenge or attract industry include:

- Excellent labor force

- Business-friendly environment
- Heavy retirement has created staffing challenges for truck drivers and rail maintenance
- Amazon effect - increased traffic on local roads

6.3 Online/mail Surveys

In November, 2021, surveys were distributed to transportation modal operators (truck, rail, water, pipeline, and air cargo) and industries that rely on the transportation system (manufactures, warehousing and distribution centers, natural resource, agricultural and forestry producers) **Appendix A**, for the surveys. Through these survey, some key information and trends emerged, including:

- 70% of respondents feel that the state's transportation system enhances their ability to attract/keep businesses in their industry.
- Nearly 80% of respondents do not feel that there is federal or state policy or regulation issues that impact their representative companies.
- 60% of respondents believe that the state does not have adequate connectivity to national and global markets.
- 80% of respondents believe that the most needed rail improvements are improving vertical clearances and weight limits.
- 65% of respondents feel that the state needs expanded/additional rail/port facilities.
- Nearly 90% of respondents feel the most needed cargo improvement is availability of air cargo facilities.

Respondents were asked what they foresee to be major challenges to Idaho's transportation system over the next 20 years, and the responses are shown in **Figure 6.3.1** Respondents were also asked what highway improvements are needed most in the state, and the responses are shown in **Figure 6.3.2**.

Figure 6.3.1 Challenges to Idaho's Freight Transportation

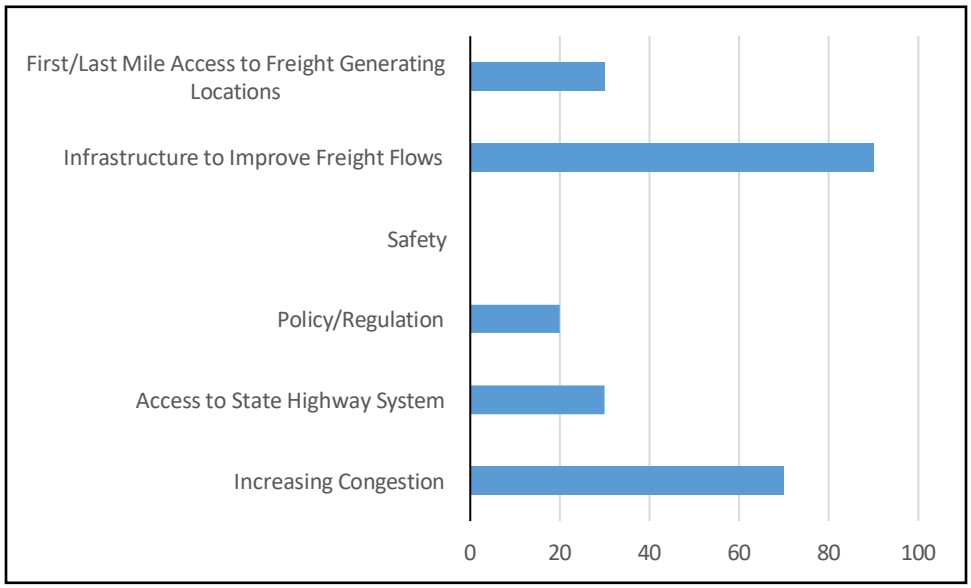
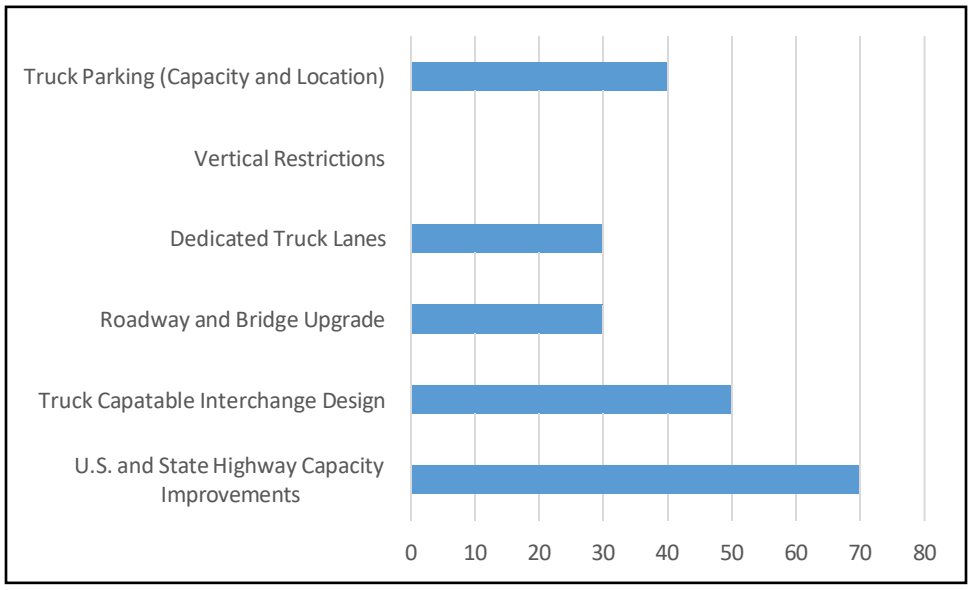


Figure 6.3.2 Needed Highway Improvements



6.4. Idaho Freight System Assessments

Based on Section 4 (Current Conditions and Network Analysis) and input from freight stakeholders, Idaho Transportation Department, Local Highway Technical Assistance Council and Idaho MPOs Idaho's freight network is general in good condition with few capacity constraints. Idaho's non-highway freight assets are in good physical condition with capacity to expand operations. Rail conditions are variable. Class I lines are in good physical shape but capacity can fluctuate depending on factors outside of the State's control. Physical conditions on Class III lines are more varied, though capacity does not appear to be a concern. However, there are still opportunities to enhance the network as well as support the National goals. These opportunities are identified as strategies, actions and partnerships as outlined in **Table 6.1**.

Table 6.1 Idaho Freight System Needs Assessments

Need	Explanation	Strategies, Recommendations and Partnerships
Truck Congestion	Limited areas of congestion concern. Urban area have most of the slow traffic I-84 in Boise and I-90 in Coeur D'Alene. Some rural area CMV flow is limited due to geometric and geography constraints	Idaho is working on congestion mitigation projects in all urban areas of concern through TECM projects. Continue to identify rural locations to provide truck climbing, passing or lane widening projects to reduce congestion.
Overweight and Oversized Routes	Since 2013, Idaho has a total of 2,581 miles of 129K network on the State's Highway System. 129K routes provide west/east and north/south redundant heavy truck load capability.	Continue to monitor.
Size and Weight Harmonization	Idaho has a similar weight limit on state routes as WA/OR, higher if on 129k network; NV/UT allow 129k on all routes; WY has no weight limit on state routes, 117k on Interstates; MT has no weight limits.	Work with neighboring states through WASHTO to harmonize regulations.
Truck Driver Shortage	Shortage of drivers. High turnover.	Work with Idaho Trucking Association to promote and fund training opportunities at high schools, technical and community colleges and veteran employment agencies.
Highway Safety	Accidents involving CMV have increased 3% since 2016 with 2020 accounting for 21.92 of accidents on Idaho's roads. In 2020, 48% of all CMV accidents and 81% of fatal accidents occurred on rural routes. Non-interstates experienced the most CMV accidents (44%), while U.S. and State highways had the most fatal CMV accidents (54%).	Continue to identify locations for projects that enhance highway safety. Work with Idaho Trucking Association, Idaho State Police and CMV stakeholders for public and CMV operator safety education opportunities.
Pavement Conditions	86% good/fair. Green rating from ITD.	Continue road work to improve State Highway System pavement conditions. Work with LHTAC and LHJ to identify and assist with pavement improvement projects.
Bridge Conditions	97% of bridges on the State Highway System at in "Good/Fair" condition. Yellow rating from ITD, goal is 80%.	Continue to work to improve State Highway System bridge conditions. Work with LHTAC and LHJ to identify and assist with bridge improvement projects.
Intermodal Connectivity	In 2021, Savage Service opened Idaho's first intermodal facility in Pocatello. Reduced container-on-barge option from Port of Lewiston.	Continue to seek out rail-truck-water Intermodal opportunities. Currently, there two intermodal/multimodal facilities being considered in Idaho. Idaho should seek out public/private partnership opportunities.

Need	Explanation	Strategies, Recommendations and Partnerships
Rail Safety	Between 2017 and 2021 there were a total of 44 incident involving CMVs and rail lines on the State Highway System. Of these incidents three locations had more than one incident. There were a total of 6 fatalities and 12 injuries involving CMV/trains on the State Highway System.	Continue to remove at-grade crossings in dangerous areas. Upgrade to active at-grade crossing safety devices at high-risk intersections.
Shortline Needs	Lack of North-South route in state. Some routes not capable of 286k. Limits some business growth opportunity in the Treasure and Magic Valleys.	Continue to explore Public/Private Partnership opportunities as well as development of a shortline funding program similar to WA.
Port and Waterways	Return of limited container-on- barge would greatly increase Northern Idaho's ability to transport goods to port in WA and OR gaining access to global markets and enhance economic competitiveness.	Work with OR and WA to promote container-on-barge service.
Aviation	Limited air cargo use in state, BOI has capacity to grow. Airports in good condition.	Stakeholders expressed a concern with customs processing at BOI. Currently, BOI uses dogs to customs clear cargo. Recommend upgrading to x-ray technology. Work with BOI to promote use of planned air cargo terminal.
Pipeline	No noted capacity constraints or issues. Limited in-state production/refining capabilities.	none
STRATNET	Idaho STRATNET meets DoD requirements.	none
Environmental Stewardship	Reduce impact of freight industry on air quality, wildlife, carbon production as well as increase resiliency/reliability of freight network.	A. Explore improvements to the 511 system to facilitate truck communications in the event of natural disasters. B. Continue to explore 129k routes as a redundant backup to the critical freight corridors. C. Research and analyze GHG data to reduce first and last mile emissions and address impacts from E-commerce. D. Support MPOs ITS planning and infrastructure improvement to aid in reducing local GHGs. E. Continue evaluation and analysis of corridors experiencing repeatedly damaged infrastructure due to natural hazards including flooding by partnering with Idaho Emergency Management and asset management systems.

Need	Explanation	Strategies, Recommendations and Partnerships
		F. Prioritize wildlife crossing along key freight corridors.
Data	Increase visibility on truck traffic density, pattern analysis and to assist in prioritization of future infrastructure investments.	A. Partner with ITD's Traffic Services and Data Analytics to identify funding and location for future traffic count system in alignment with critical freight corridors. B. Support MPOs planning analyses of first/last mile movements, specifically related to e-commerce.
Maintenance of Local Roadways Due to Heavy Vehicles	Local Highway Jurisdictions have limited resources to address deterioration of local routes due to heavy vehicles.	A. Continue to support LHTAC effort to identify and implement local truck routing plans. B. Prioritize fright investment to support local routes.

7.0 Infrastructure Implementation Plan

The objective of this Section is to identify projects to include in a multiyear freight implementation plan that will be included in future Idaho Transportation Investment Programs (ITIP) and thus be eligible for funding. These projects are designed to address the multimodal system needs and issues identified in previous tasks. The freight project list also identifies additional potential funding opportunities for the various projects. The following work was performed under this Task:

- Identify routes that could be designated as Critical Urban Freight Corridors (CUFCs) and Critical Rural Freight Corridors (CRFCs) based on FAST Act criteria and with input from stakeholders and the State's MPOs;
- Identify sources used to develop project ideas;
- Explain the evaluation process to screen strategies;
- Compile and evaluate programs, policy changes, and additional studies that would aid freight movement in Idaho;
- Identify freight funding sources;
- Prepare a fiscally constrained, Five-Year Freight Implementation Plan; and
- Identify projects and programs to be included in 10- and 20-year Implementation Plans.

7.1 Freight Project Identification

The multimodal list of potential projects and programs was consolidated from several different sources and documents including technical analysis of existing conditions/constraints, phone and in-person interviews with both private and public sector stakeholders, a literature review of prior studies and reports, industry best practices, and the 2022-2029 ITIP. These projects were combined with select programs, policy changes, and additional studies to create a master list of potential actions for ITD. Project are shown in Figure 7.1 below.

The list of projects then underwent a multi-step scoring process to develop a fiscally constrained list of projects. These projects were combined with select programs, policy changes, and additional studies to create the Final 5-7 Year Freight Implementation Plan list.

7.2 Project Screening

First, in July 2021, project applications were sent to Idaho's five MPOs, six Districts, Tribes, Local Highway Districts (through LHTAC) and numerous freight stakeholders. See Appendix B for project application. The window for application submission was July - December 2021. Once the applications were received, ITD staff conducted a screening for application completeness, ensuring applications met FAST Act and IIJA compliance and that the applications supports ITD's overall goals of safety, mobility, and economic vitality. For applications that where incomplete, ITD reached out to the submitting agency for further data. After the screening process, ITD staff briefed Idaho's FAC on FAST Act and IIJA requirements, application scoring process. Once the FAC completed scoring and prioritization the projects were incorporated into the Freight Plan. **Table 7.1** is the complete list of projects.

To ensure that multimodal freight goals are prioritized, and that funding is effectively obligated to projects, eligible projects were numerically scored and ranked. Scoring is based on FAST Act, BIL and National and State goals. The more criteria that a project meets, the higher the score. Additional considerations were given to projects which address key freight and ITD needs to be viable for NHFP funding. See **Appendix C** for Scoring Criteria.

Goal and criteria:

- Safety
- Economic vitality
- Mobility
- Commercial Annual Average Daily Traffic (CAADT)
- Connectivity
- Access
- Pavement Conditions
- Disadvantage Communities
- Environmental Stewardship
- First and Last Mile

7.3 Programs, Policy Changes, and Additional Studies

In addition to specific projects, there are several programs, policy changes, and additional studies that should occur over in conjunction with the projects identified above. These recommendations address systemic or policy issues that are not easily solved with a single project. Policy changes and programs that do not require direct funding such as advocating for a resolution for the injunction on U.S. 12 are included in Section 6 as recommendations. Although these recommendations are not "on the ground" projects, they do impact goods movement on the NHFN. For example, working with municipalities to develop local truck routes would help direct truck traffic to the most appropriate routes, protecting vulnerable downtown corridors while also providing trucks with information and known routing that will reduce delays.

7.4 Idaho's Financially Constrained NHFP Implementation Plan

The Freight Implementation Plan is in **Table 7.1.** In order to meet reporting requirements under the "fiscally constrained" language in the legislation, **Table 7.1** identifies funding sources, State match requirements, project locations, and other details as necessary. ITD may choose to amend this list in the future as priorities in the State change and other project recommendations are further fleshed out.

Table 7.1 Idaho's Constrained NFHP Projects

Idaho Constrained NHFP Projects 2023-2026				
	2023	2024	2025	2026
Estimated NHFP Project Obligations				
Simco Rd Project 1, Mountain Home HD, Rehabilitation (Total Project $3,350,00.00. NHFP $3,104,110.00 Local Match $245.890.00)	$590	$2,760		
Franklin Blvd & 3rd St, COMPASS (MPO), Intersection Improvements (Total Project $9,668,000.00 NHFP $8,958,368.00 Match $709,632.00)	$900			
100 West Rd, Burley HD, Rehabilitation/Maintenance, 129,000 lbs Route, (Total Project $4,279,000.00 NHFP $3,964,923.00 Match $314,078.00)	$779	$3,500		
Shoestring Rd, Gooding HD, Rehabilitate & Widen (Total Project $1,102,000.00 NHFP $101,113.00 Match $80,887)		$1,102		
Simco Rd Project 2, Mountain Home HD, Rehabilitation (Total Project $3,384,000.00. NHFP $3,135,616.00 Local Match $248,385.00)		$3,384		
US-95, Crooks Hill, ITD. Add 1 Mile of Climbing Lane (Total Project $4,494,000.00 NHFP $4,164,140.00 Match $329,860.00)			$362	
Northside Blvd & Karcher Rd, COMPASS (MPO), Widen & Intersection Improvements, (Total $5,370,000.00 NHFP $4,975,842.00 Match $394,158.00)			$1,030	$4,340
I-84, Bliss Rest Area, ITD, Truck Parking Expansion, (Total $3,250,000.00 NHFP $3,011,450.00 Match $238,550.00)			$4,167	
3700 North Rd, Buhl/Filer HD, Overlay & Reconstruct, (Total $4,485,000.00 NHFP $4,155,801.00 Match $329,199.00)			$350	$4,135
400 West Rd, Oakley HD, Rehabilitation (Total $3,713,000.00 NHFP $3,440,466.00 Match $272,534)			$640	
US-20, ITD, POE Relocation, (Total $4,500,000.00 NHFP $4,169,700.00 Match $330,300.00)	$500		$4,000	
Crestview Rd, Hillsdale HD, Rehabilitation, (Total $3,457,000.00 NHFP $3,221,257.00 Match $235,743.00)				$596
1500W/4900E Rd, Murtaugh HD, Rehabilitation, (Total $4,069,000.00 NHFP $3,770,336.00 Match $298,664.00)				$704
1500 East Rd. Westpoint HD, Rehabilitation, (Total $2,881,000.00 NHFP $2,669,535.00 Match $211,465.00)				$576
Peckham Rd, Golden Gate HD, Rehabilitate 3 Intersection, (Total $5,683,000.00 NHFP $5,265,870.00 Match $417,132.00)	$5,683			
Holister POE, ITD, Concrete base for WIMs instalation, (Total $150,000.00 NHFP $138,950 Match $11,010)			$150	
Idahome Rd, Raftriver HD, Reconstruction (Total $6,6000,000.00 NHFP $6,115,560.00 Match $484,440.00)	$706			
100 West Rd, Minidoka HD, Rehabilitation (Total $3,879,000.00 NHFP $3,594,282.00 Match $284,718.00)	$840			
Hagerman Hwy & Ritchie Rd, Gooding HD Rehabilitation (Total $4,170,000.00 NHFP $3,863,922.00 Match $306,078.00)	$689			
Future Projects Pending Funding (2027-2031)				
US-95, Crooks Hill, ITD. Add 1 Mile of Climbing Lane (Total Project $4,494,000.00 NHFP $4,164,140.00 Match $329,860.00)	$4,132 Construction programed for 2029			
400 West Rd, Oakley HD, Rehabilitation (Total $3,713,000.00 NHFP $3,440,466.00 Match $272,534)	$3,073 Construction programmed for 2027			
1500W/4900E Rd, Murtaugh HD, Rehabilitation, (Total $4,069,000.00 NHFP $3,770,336.00 Match $298,664.00)	$3,365 Construction programmed for 2028			
1500 East Rd. Westpoint HD, Rehabilitation, (Total $2,881,000.00 NHFP $2,669,535.00 Match $211,465.00)	$2,766 Construction programmed for 2027			
Franklin Blvd & 3rd St, COMPASS (MPO), Intersection Improvements (Total Project $9,668,000.00 NHFP $8,958,368.00 Match $709,632.00)	$8,768 TBD			
Prairie Ave, Post Falls HD, Widening	$5,100 TBD			
Atlas Rd, Post Falls HD, Widening	$417 TBD			
SH-3, Bear Ridge, ITD, Escape Ramps	$3,362 TBD			
Hagerman Hwy & Ritchie Rd, Gooding HD Rehabilitation	$4,100 TBD			
Idahome Rd, Raftriver HD, Reconstruction	$5,894 TBD			
100 West Rd, Minidoka HD, Rehabilitation	$3,039 TBD			
Bridge, West Bridge St, City of Blackfoot, Replacement	$9,345 TBD			

7.5 Other Funding Opportunities

The first freight-specific funding program is the National Highway Freight Program (NHFP). The NHFP is a $8.4 billion program over 5 years that will be apportioned between the states by formula based on the number of Primary Highway Freight System miles in the state. Idaho will receive $51.7 million between 2022 and 2026 for projects improving freight movement on the NHFN, of which up to 10% can be spent on rail or intermodal projects.

Goods movement can also be enhanced by projects funded through other sources in the IIJA, many of which are a continuation of FAST Act programs. Projects that are not explicitly freight-related could be considered for funding through these "general" highway programs. For example, safety improvements that benefit both trucks and passenger vehicles (such as a truck climbing lane) or projects that reduce heavy truck delay, reducing idling and decreasing greenhouse gas emissions, could obtain some funding from these sources which include: National Highway Performance Program, Highway Safety Improvement Program, the Surface Transportation Block Program, Railway Highway Crossing Program the Carbon Reduction Program, the Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT).

State Funding is provided through multiple sources. While not specifically identified for freight use, Idaho Governor Brad Little's "Lead Idaho 2022" plan, provides $200M for local bridges, $6M for air, $8M for Rail-Highway Crossing upgrades and $10M for the Port of Lewiston.

The Idaho Legislature established the Transportation Expansion and Congestion (TECM) in 2017. ITD identified corridors that are critical to enhance safety, mobility, and to sustain Idaho's strong economy well into the future. While not specifically identified for freight use, TECM projects will have a direct impact on freight movements. The corridors **(Map 7.2.)** that already have designated TECM funding include:

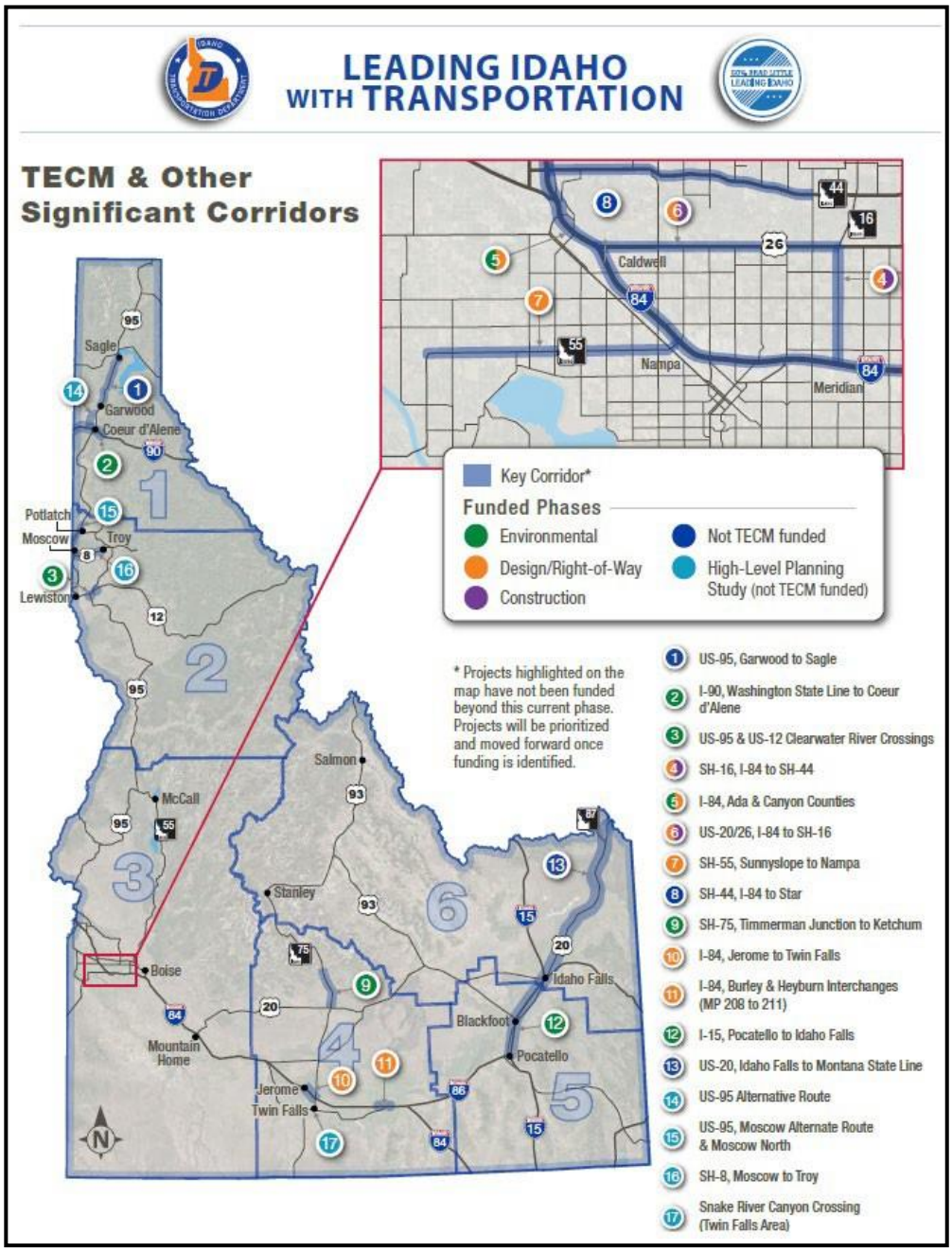
- I-90, Washington State Line to Coeur d'Alene
- US-95 and US-12 Clearwater River Crossings
- SH-16, I-84 to SH-44
- I-84, Ada and Canyon Counties
- US-20/26, I-84 to Star Road
- SH-55, Sunnyslope to Nampa
- SH-75, Timmerman Junction to Ketchum
- I-84, Jerome to Twin Falls
- I-84, Burley and Heyburn Interchanges
- I-15, Pocatello to Idaho Falls

Additional corridors have been identified as critical and don't currently have TECM funding. They are being advanced with other state funds:

- US-95, Garwood to Sagle
- SH-44, I-84 to Star
- US-20, Idaho Falls to MT State Line

- US-95 Alternative Route (North Idaho)
- US-95, Moscow Alternative Route & Moscow North
- SH-8, Moscow to Troy

Map 7.2. Idaho Transportation Expansion and Congestion Mitigation Corridors



Appendix A. Public Outreach Surveys

Over 300 surveys were sent by mail or e-mail in November, 2021. The surveys were sent to each of Idaho's five MPOs, 290 cities, counties and highway districts (through the Local Highway Technical Assistance Council (LHTAC)), ITD's six Districts, numerous trucking, manufacturing and warehouse companies, Idaho's CLI and CLIII railroads, petroleum operators, airports and air cargo carriers, Tribes and State Government Agencies. There were five modal surveys, two transportation user surveys and a general survey developed. Examples of each survey are below.

General Stakeholder Survey

What percentage of your company's outbound shipments are to destinations?

- Less than 50 miles away
- 50 to 250 miles away
- More than 250 miles away

What percentage of freight does your company ship annually by each mode?

- Truckloads
- Rail
- Intermodal
- 20-foot Equivalent Units (TEU)
- Breakbulk
- Water
- Air

Within Idaho, what percentage of your shipping is on:

- Interstate highways
- United States highway
- Idaho State highways

Does the State's transportation system enhance or hinder your business' ability to attracting/keeping businesses to/in your industry? (Yes or No)

Are there Federal/State policy or regulation problems or issues that impact the companies you represent? (Yes or No, What are the policy/regulations that enhance/restrict your company?)

Does the State have adequate connectivity to national and global markets by air, sea, rail, and/or road? (Yes/No)

What do you foresee as the major challenges for Idaho's freight transportation system in the next 5 years? 10? 20? (Select all that apply)

Congestion
Access
Policy/regulation
Safety
Infrastructure
First/last mile access

What improvements do you feel are most needed in the State? (Select all that apply)

- Highway
  - Capacity improvements
  - Interchange improvements
  - Roadway and bridge maintenance
  - Dedicated truck lanes
  - Vertical clearance
  - Truck parking
- Rail
  - Eliminate at-grade crossings (rail-rail or roadway-rail)
  - Improve height clearances and weight limits
- Ports and Waterways
  - Expand/additional port facilities
  - Improved landside access
- Intermodal facilities
- Air cargo
  - Access to air cargo facilities
  - Availability of air cargo facilities
  - Safety

What are the strengths of Idaho's freight system? (Select all that apply)

- Carrier/operator availability
- Access
- Policy/regulation
- Intermodal Connectivity
- Reliability (congestion, travel time, facility connections
- Technology
- Safety and Security
- Environmental impact
- Diversity

What are the weakness of Idaho's freight system? (Select all that apply)

- Carrier/operator availability
- Access
- Policy/regulation
- Intermodal Connectivity
- Reliability (congestion, travel time, facility connections
- Technology
- Safety and Security
- Environmental impact
- Diversity

What strategies would you like to see utilized to promote freight transportation in Idaho? (Select all that apply)

- Pursue public-private partnerships (P3s)
- Encourage accessibility in planning process
- Expand regional capacity
- Promote intermodal connectivity
- Educate public on importance of freight user
- Offer development incentives to freight users
- Offer incentives for enhancements to freight network efficiency and safety
- Access to terminals, ports (water, rail, pipeline, air)

Do any of the following conditions present problems for freight shipments to or from your company and/or facility?

Condition	Rate from 1 to 5 1 - not a problem 5 - very serious problem
Highway congestion	1 2 3 4 5
Merge lanes	1 2 3 4 5
At-grade railroad crossings	1 2 3 4 5
Highway interferences with rail lines (i.e., grade crossings)	1 2 3 4 5
Turning at traffic lights	1 2 3 4 5
Inadequate local streets capacity	1 2 3 4 5
Roadway turning radius	1 2 3 4 5
Insufficient lane width for wide loads	1 2 3 4 5
Insufficient bridge/tunnel clearances (height)	1 2 3 4 5
Lack access from railyards to Interstate highway system	1 2 3 4 5
Lack of trailer drop-off/pickup facilities for trucks	1 2 3 4 5
Curfew restrictions on movement of large and heavy trucks	1 2 3 4 5
Poor truck access to shipping terminals	1 2 3 4 5
Poor truck access to intermodal facilities	1 2 3 4 5
Poor truck access to airports for air cargo purposes	1 2 3 4 5
Poor reliability due to accidents and incidents	1 2 3 4 5
Unsafe roadway geometrics	1 2 3 4 5
Poor reliability due to weather conditions	1 2 3 4 5
Poor freeway ramp design	1 2 3 4 5
Narrow roads	1 2 3 4 5
Lack of roadway connectivity	1 2 3 4 5
Poor Signage	1 2 3 4 5

What improvement in the transportation system would you like to see? (Select all that apply)

- Highway ramps
- Highway/route connectors
- Highway/route lane capacity
- Rest Areas
- Truck parking areas

- Access to Industrial zones for facility/terminal locations
- Intermodal rail facilities
- Information services
- Access to air cargo facilities
- Access to water port facilities

Where are the congestion locations that impact Idaho's freight movements? (Select all that apply)

- Interstate(s)
- United State Highways
- State Highways
- Local Highway Districts
- Ports of Entry
- Truck Parking
- Rail Crossings
- Port Access
- First/Last Mile Transit

Agriculture & Natural Resources Survey

1. What impacts does your industry have on the State's transportation system?

2. Where is your company located in Idaho (refer to map)?

3. How many production facilities does your company own?

4. What products/commodities does your company typically ship/receive?

5. What are the location(s) where your shipments originate from?

6. What are the location(s) where your shipment end?

7. Do you use 129,000 Pound Truck Routes? If so, from where to where?

8. What routes in, out or through Idaho do you use on a regular basis?

9. What are your biggest shipping markets or origin-destination pairs? Where are most of your goods coming from or moving to?

10. What groups do you coordinate with regarding freight transportation on a regular basis? Other businesses? Associations? State agencies? Municipalities?

11. What volume and percentage of freight does your company ship annually by each mode?

- Roadway
- Rail
- Intermodal
- Waterborne
- Air

12. Within Idaho, what percentage of your shipping is on:

- Interstate highways
- United States highways
- Idaho State Highways

13. What is the primary commodity?

14. Are there any other commodities?

15. What impact does the state transportation system have on your industry?

16. Are there operational problems/issues/congestion points that impact your industry?

17. What percentage of your company's outbound truck trips are to destinations

- Less than 50 miles away
- 50 to 250 miles away
- More than 250 miles away

18. What percentage of your company's inbound truck trips are from origins

- Less than 50 miles away
- 50 to 250 miles away
- More than 250 miles away

19. Are there Federal/State policy or regulation problems or issues that impact your industry?

20. Does the State have adequate connectivity to national and global markets by air, sea, rail, and/or road?

21. To what degree does your industry consider the condition and performance of the State transportation system when making location or expansion decisions?

22. What are some of the biggest uncertainties that ITD should take into consideration as this Statewide Freight Strategic Plan is being developed?

23. What do you foresee as the major challenges for Idaho's freight transportation system in the next 5 years? 10? 20?

24. Are you actively involved in transportation planning activities such as meeting with the State Department of Transportation, regional MPOs, highway jurisdictions, or city planning/DOT officials? If yes, what do you gain from these meetings? If not, why not?

25. What do you see as the biggest obstacles to each transportation mode you use?

- Access
- Roadway condition/ maintenance (where?)
- Congestion/reliability (where?)
- Vertical clearance (Where?)
- Size and weight limits (where?)
- Safety, including interaction with other road users (where?)

- Congestion/bottlenecks/reliability (where?)
- Access to ports, road/rail connectors

26. How important is freight to the Idaho economy

- Not very important
- Somewhat important
- Very important
- No opinion

27. What percent of your shipments are domestic versus international?

28. What strategies would you like to see utilized to promote freight transportation in Idaho? Select all that apply.

- Pursue public-private partnerships (P3s)
- Encourage accessibility in planning process
- Expand regional capacity
- Promote intermodal connectivity
- Educate public on importance of freight user
- Offer development incentives to freight users
- Offer incentives for enhancements to freight network efficiency and safety

29. Do any of the following conditions present problems for freight shipments to or from your company and/or facility?

Condition	Rate from 1 to 5 1 - not a problem 5 - very serious problem	Please describe the location and nature of the problem.
1. Highway congestion	1 2 3 4 5	
2. Merge lanes	1 2 3 4 5	
3. At-grade railroad crossings	1 2 3 4 5	
4. Highway interferences with rail lines (i.e., grade crossings)	1 2 3 4 5	
5. Turning at traffic lights	1 2 3 4 5	
6. Inadequate local streets Capacity (first/last mile)	1 2 3 4 5	
7. Roadway turning radius	1 2 3 4 5	
8. Insufficient lane width for wide loads	1 2 3 4 5	
9.Insufficient bridge/tunnel clearances (height)	1 2 3 4 5	
10.Lack access from railyards to Interstate highway system	1 2 3 4 5	
11.Lack of trailer drop-off/pickup facilities for trucks	1 2 3 4 5	

12.Curfew restrictions on movement of large and heavy trucks	1	2	3	4	5	
13.Poor truck access to shipping terminals	1	2	3	4	5	
14.Poor truck access to intermodal facilities	1	2	3	4	5	
15.Poor truck access to airports for air cargo purposes	1	2	3	4	5	
16.Poor reliability due to accidents and incidents	1	2	3	4	5	
17. Unsafe roadway geometrics	1	2	3	4	5	
18. Poor reliability due to weather conditions	1	2	3	4	5	
19. Poor freeway ramp design	1	2	3	4	5	
20. Narrow roads	1	2	3	4	5	
21. Lack of roadway connectivity	1	2	3	4	5	
22. Poor Signage	1	2	3	4	5	
Other (specify)	1	2	3	4	5	

30. What improvement in the transportation system would you like to see? Do you think that Idaho needs additional or improved: (check where applicable?)

- Highway ramps _____
- Highway/route connectors _____
- Highway/route lane capacity _____
- Rest Areas _____
- Truck parking areas _____
- Industrial zones for facility/terminal locations _____
- Intermodal rail facilities _____
- Other infrastructure _____
- Information services _____

Distribution and Warehousing Survey

1. Where is your company located in Idaho (refer to map)?

2. What products/commodities does your company typically ship/receive?

3. What routes in, out or through Idaho do you use on a regular basis?

4. What are your biggest shipping markets or origin-destination pairs? Where are most of your goods coming from or moving to?

5. What percentage of your company's outbound truck trips are to destinations

- Less than 50 miles away
- 50 to 250 miles away
- More than 250 miles away

6. What percentage of your company's inbound truck trips are from origins

- Less than 50 miles away
- 50 to 250 miles away
- More than 250 miles away

7. What groups do you coordinate with regarding freight transportation on a regular basis? Other businesses? Associations? State agencies? Municipalities?

8. What volume and percentage of freight does your company ship annually by each mode?

- Truckloads
- Rail
- Intermodal
- 20-foot Equivalent Units (TEU)
- Waterborne
- Air

9. Within Idaho, what percentage of your shipping is on:

- Interstate highways
- United States highway
- Idaho State highways

10. What do you see as the biggest obstacles to each mode you use? (Interviewer may probe to discuss the following elements. Ask respondents to answer for each mode they use, or suggest that they highlight their "Top 3" infrastructure or operational needs/issues.)

11. What role does the State transportation system play in attracting/keeping businesses or industries to/in your industry?

12. Are there Federal/State policy or regulation problems or issues that impact the companies you represent? (be as specific as possible)

13. Are there any policy changes that could be made to improve modal conditions in the State?

14. Does the State have adequate connectivity to national and global markets by air, sea, rail, and/or road?

15. What connectivity is lacking? Does lack of connectivity affect your ability to attract business in this area?

16. What are some of the biggest uncertainties that ITD should take into consideration as this Statewide Freight Strategic Plan is being developed? (For instance energy issues, environmental regulations, economic uncertainties and changing freight dynamics.)

17. What do you foresee as the major challenges for Idaho's freight transportation system in the next 5 years? 10? 20? (e.g., energy issues, environmental regulations, economic uncertainty, changing freight dynamics, etc.)

18. Are you actively involved in transportation planning activities such as meeting with the State Department of Transportation, regional MPOs, highway jurisdictions, or city planning/DOT officials? If yes, what do you gain from these meetings? If not, why not?

19. Are there any strategies identified by other public agencies that you feel are effective at alleviating state transportation challenges?

20. What modal improvements do you feel are most needed in the State (Interviewer may probe to discuss the following elements)?

(Examples)

- Highway
  - Capacity improvements
  - Interchange improvements
  - Roadway and bridge maintenance
  - Dedicated truck lanes
  - Vertical clearance
  - Truck parking
  - System management/ operational strategies (e.g., congestion pricing, managed lanes, ITS)
  - Centralized information resources (e.g., real-time congestion, truck stop parking availability,
  - etc.)

- Rail
  - Eliminate at-grade crossings (rail-rail or roadway-rail)
  - Improve height clearances and weight limits

- Ports and Waterways
  - Expand/additional port facilities
  - Improved landside access

- Intermodal facilities

- Transload facilities

21. What are the greatest strengths of Idaho's freight system? Please select up to THREE options.

- Carrier/operator availability
- Intermodal Connectivity
- Reliability (congestion, travel time, facility connections
- Technology
- Policy (regulations, incentives)
- Safety and Security
- Environmental impact
- Diversity

22. What are the greatest strengths of Idaho's freight system in the next 5 to 10 years? Please select up to THREE options.

- Carrier/operator availability
- Intermodal Connectivity
- Reliability (congestion, travel time, facility connections
- Technology
- Policy (regulations, incentives)
- Safety and Security
- Environmental impact
- Diversity

22. How important is freight to the Idaho economy?

- Not very important
- Somewhat important
- Very important
- No opinion

23. What strategies would you like to see utilized to promote freight transportation in Idaho? Select all that apply.

- Pursue public-private partnerships (P3s)
- Encourage accessibility in planning process
- Expand regional capacity
- Promote intermodal connectivity
- Educate public on importance of freight user
- Offer development incentives to freight users
- Offer incentives for enhancements to freight network efficiency and safety

23. Do any of the following conditions present problems for freight shipments to or from your company and/or facility?

Condition	Rate from 1 to 5 1 - not a problem 5 - very serious problem	Please describe the location and nature of the problem.
1. Highway congestion	1 2 3 4 5	
2. Merge lanes	1 2 3 4 5	
3. At-grade railroad crossings	1 2 3 4 5	
4. Highway interferences with rail lines (i.e., grade crossings)	1 2 3 4 5	
5. Turning at traffic lights	1 2 3 4 5	
6. Inadequate local streets capacity	1 2 3 4 5	
7. Roadway turning radius	1 2 3 4 5	

8. Insufficient lane width for wide loads	1	2	3	4	5	
9.Insufficient bridge/tunnel clearances (height)	1	2	3	4	5	
10.Lack access from railyards to Interstate highway system	1	2	3	4	5	
11.Lack of trailer drop-off/pickup facilities for trucks	1	2	3	4	5	
12.Curfew restrictions on movement of large and heavy trucks	1	2	3	4	5	
13.Poor truck access to shipping terminals	1	2	3	4	5	
14.Poor truck access to intermodal facilities	1	2	3	4	5	
15.Poor truck access to airports for air cargo purposes	1	2	3	4	5	
16.Poor reliability due to accidents and incidents	1	2	3	4	5	
17. Unsafe roadway geometrics	1	2	3	4	5	
19. Poor reliability due to weather conditions	1	2	3	4	5	
20. Poor freeway ramp design	1	2	3	4	5	
21. Narrow roads	1	2	3	4	5	
22. Lack of roadway connectivity	1	2	3	4	5	
234. Poor Signage	1	2	3	4	5	
Other (specify)	1	2	3	4	5	

24. What improvement in the transportation system would you like to see? Do you think that Idaho needs additional or improved: (check where applicable?)

- Highway ramps? _____
- Highway/route connectors? _____
- Highway/route lane capacity? _____
- Rest Areas? _____
- Truck parking areas? _____
- Industrial zones for facility/terminal locations? _____
- Intermodal rail facilities? _____
- Other infrastructure? (specify) _____
- Information services? _____

1. Where is your company located in Idaho (refer to map)?

2. What products/commodities does your company typically ship/receive?

3. What routes in, out or through Idaho do you use on a regular basis?

4. hat percentage of your company's outbound truck trips are to destinations

- Less than 50 miles away
- 50 to 250 miles away
- More than 250 miles away

5. What percentage of your company's inbound truck trips are from origins

- Less than 50 miles away
- 50 to 250 miles away
- More than 250 miles away

6. What are your biggest shipping markets or origin-destination pairs? Where are most of your goods coming from or moving to?

7. What groups do you coordinate with regarding freight transportation on a regular basis? Other businesses? Associations? State agencies? Municipalities?

8. What volume and percentage of freight does your company ship annually by each mode?

- Roadway
  - Truckloads/Tons
  - Percent of all shipments
- Intermodal
  - 20-foot Equivalent Units (TEU)
  - Percent of all shipments

9. Within Idaho, what percentage of your shipping is on:
- Interstate highways
- United States highways
- Idaho State highways

10. How important is trucking to the Idaho economy
- Not very important
- Somewhat important
- Very important
- No opinion

11. What percent of your shipments are within Idaho versus transit out of Idaho?

12. What do you consider to be the strengths of the State's freight transportation system?

13. What do you consider to be the weaknesses of the State's freight transportation system?

14. What are there operational problems/issues/congestion points that impact the trucking industry in Idaho?

15. Are there policy or regulation/laws/policies problems or issues that impact or enhance the trucking industry in Idaho? (be as specific as possible)

16. Does the State have adequate connectivity to national and global markets by air, sea, rail, and/or road?

17. What connectivity is lacking?

18. To what degree do you consider the condition and performance of the State transportation system when making location or expansion decisions?

19. What are some of the biggest uncertainties that ITD should take into consideration as this Statewide Freight Strategic Plan is being developed? (For instance energy issues, environmental regulations, economic uncertainties and changing freight dynamics.)

20. What are the main operational congestion points or issues with Idaho's freight transportation system?

Examples:

- Interstate(s) in Idaho
- United States Highways
- State Highways
- Local Highway Districts
- Ports of Entry
- Truck Parking
- First/Last Mile

21. What do you foresee as the major challenges for Idaho's trucking industry system in the next 5 years? 10? 20? (e.g., energy issues, environmental regulations, economic uncertainty, changing freight dynamics, etc.)

22. Has your organization identified any improvement projects to Idaho's highway system you would like to share?

23. Are you actively involved in transportation planning activities such as meeting with the State Department of Transportation, regional MPOs, highway jurisdictions, or city planning/DOT officials? If yes, what do you gain from these meetings? If not, why not?

24. What strategies would you like to see utilized to promote truck transportation in Idaho?

Examples:

- Pursue public-private partnerships (P3s)
- Encourage accessibility in planning process
- Expand regional capacity
- Promote intermodal connectivity
- Educate public on importance of freight user
- Offer development incentives to freight users
- Offer incentives for enhancements to freight network efficiency and safety

25. What is the biggest challenge for rural goods delivery?

26. What is the biggest challenge for urban goods delivery?

27. What are your top three safety concerns related to trucking in Idaho?

Examples:

- Conflict with other modes
- Clearance
- Off-tracking
- Lack of delivery space
- Railroad crossings
- Truck Parking
- Congested areas

28. Do any of the following conditions present problems for freight shipments to or from your company and/or facility?

Condition	Rate from 1 to 5 1 - not a problem 5 - very serious problem	Please describe the location and nature of the problem.
1. Highway congestion	1 2 3 4 5	
2. Merge lanes	1 2 3 4 5	
3. At-grade railroad crossings	1 2 3 4 5	
4. Highway interferences with rail lines (i.e., grade crossings)	1 2 3 4 5	
5. Turning at traffic lights	1 2 3 4 5	
6. Inadequate local streets capacity	1 2 3 4 5	
7. Roadway turning radius	1 2 3 4 5	
8. Insufficient lane width for wide loads	1 2 3 4 5	
9.Insufficient bridge/tunnel clearances (height)	1 2 3 4 5	
10.Lack access from railyards to Interstate highway system	1 2 3 4 5	
11.Lack of trailer drop-off/pickup facilities for trucks	1 2 3 4 5	
12.Curfew restrictions on movement of large and heavy trucks	1 2 3 4 5	
13.Poor truck access to shipping terminals	1 2 3 4 5	
14.Poor truck access to intermodal facilities	1 2 3 4 5	
15.Poor truck access to airports for air cargo purposes	1 2 3 4 5	
16.Poor reliability due to accidents and incidents	1 2 3 4 5	

17. Unsafe roadway geometrics	1	2	3	4	5	
18. Poor reliability due to weather conditions	1	2	3	4	5	
19. Poor freeway ramp design	1	2	3	4	5	
20. Narrow roads	1	2	3	4	5	
21. Lack of roadway connectivity	1	2	3	4	5	
22. Poor Signage	1	2	3	4	5	
Other (specify)	1	2	3	4	5	

29. What improvement in the transportation system would you like to see? Do you think that Idaho needs additional or improved: (check where applicable?)

- Highway ramps? _____
- Highway/route connectors? _____
- Highway/route lane capacity? _____
- Rest Areas? _____
- Truck parking areas? _____
- Industrial zones for facility/terminal locations? _____
- Intermodal rail facilities? _____
- Other infrastructure? (specify) _____
- Information services? _____

Rail Survey

1. Where is your company located in Idaho (refer to map)?

2. What is the size of your company in terms of?

- People employed
- Annual revenue
- Rolling Stock
- Engines
- Miles of track

3. What services does your railroad provide in Idaho?

4. What products/commodities does your company typically ship/receive?

5. What volume and percentage of freight does your company ship annually by each mode?

- Rail
- Carloads/Tons
- Percent of all shipments

6. What routes in, out or through Idaho do you use on a regular basis?

7. What are your biggest shipping markets or origin-destination pairs? Where are most of your goods coming from or moving to?

8. What broader statewide trends are affecting the rail industry? For example; demographic, economic, transportation, land use, environmental factors?

9. Would you say that freight movements in Idaho have increased or decreased in the last five years?

10. What do you think are the primary opportunities for freight rail carriers in Idaho?

11. What do you think are the primary constraints for railroad freight carriers in Idaho?

12. What resources or strategies will be necessary to help overcome these constraints?

13. What do you see as the biggest obstacles to the railroad industry in Idaho?

- Access to and capacity on Class I services, short lines, intermodal services
- System condition/ maintenance (where?)
- Congestion/bottlenecks/ reliability (where?)
- Safety (where?)
- Other, i.e., equipment availability

14. What modal improvements do you feel are most needed in the State (Interviewer may probe to discuss the following elements)?

- Eliminate at-grade crossings (rail-rail or roadway-rail)
- Improve height clearances and weight limits
- Bridge repair
- Height restrictions

15. What are the greatest strengths of Idaho's freight rail system? Please select up to THREE options.

- Carrier/operator availability
- Intermodal Connectivity
- Reliability (congestion, travel time, facility connections
- Technology
- Policy (regulations, incentives)
- Safety and Security
- Environmental impact
- Diversity

16. What strategies would you like to see utilized to promote freight rail transportation in Idaho? Select all that apply.

- Pursue public-private partnerships (P3s)
- Encourage accessibility in planning process
- Expand regional capacity
- Promote intermodal connectivity
- Educate public on importance of freight user

- Offer development incentives to freight users
- Offer incentives for enhancements to freight network efficiency and safety

17. Has your company identified any specific improvement projects to counteract challenges faced by the railroad industry in Idaho?

18. Are you aware of any strategies identified by public agencies that you feel are effective at alleviating problems/issues/congestion points?

19. Is there a potential for private-public partnerships to work on any of the issues/challenges faced by railroad operations in Idaho?

20. Are you actively involved in transportation planning activities such as meeting with the State Department of Transportation, regional MPOs, highway jurisdictions, or city planning/DOT officials? If yes, what do you gain from these meetings? If not, why not?

21. Are there any strategies identified by other public or public agencies that you feel are effective at alleviating challenges with the railroad industry?

22. What are your top safety concerns related to freight rail operations?

23. What issues or topics do you feel the ITD Statewide Freight Strategic Plan should address with regard to rail?

24. Are there any laws/policies/regulations/rules that enhance or inhibit the railroad industry operations in Idaho?

Water Port Survey

1. Where is your company located in Idaho (refer to map)?

2. What is the size of your company in terms of?

- People employed
- Annual revenue
- Rolling Stock
- Engines
- Miles of track

3. What services do you provide in Idaho?

4. What products/commodities does your company typically ship/receive?

5. What volume and percentage of freight does your company ship annually by each mode?

6. What routes in, out or through Idaho do you use on a regular basis?

7. What are your biggest shipping markets or origin-destination pairs? Where are most of your goods coming from or moving to?

8. What broader statewide trends are affecting your industry? For example; demographic, economic, transportation, land use, environmental factors?

9. Would you say that freight movements in Idaho have increased or decreased in the last five years?

10. What do you think are the primary opportunities for water freight are in Idaho?

11. What do you think are the primary constraints for water freight are in Idaho?

12. What resources or strategies will be necessary to help overcome these constraints?

13. What do you see as the biggest obstacles to the water port industry in Idaho?

- Access to and capacity intermodal services
- System condition/ maintenance (where?)
- Congestion/bottlenecks/ reliability (where?)
- Safety (where?)
- Other, i.e., equipment availability

14. What modal improvements do you feel are most needed in the State (Interviewer may probe to discuss the following elements)?

15. What are the greatest strengths of Idaho's water port system? Please select up to THREE options.

- Carrier/operator availability
- Intermodal Connectivity
- Reliability (congestion, travel time, facility connections
- Technology
- Policy (regulations, incentives)
- Safety and Security
- Environmental impact
- Diversity

16. What strategies would you like to see utilized to promote water port transportation in Idaho? Select all that apply.

- Pursue public-private partnerships (P3s)
- Encourage accessibility in planning process
- Expand regional capacity
- Promote intermodal connectivity
- Educate public on importance of freight user
- Offer development incentives to freight users
- Offer incentives for enhancements to freight network efficiency and safety

17. Has your company identified any specific improvement projects to counteract challenges faced by the water port industry in Idaho?

18. Are you aware of any strategies identified by public agencies that you feel are effective at alleviating problems/issues/congestion points?

19. Is there a potential for private-public partnerships to work on any of the issues/challenges faced by water port operations in Idaho?

20. Are you actively involved in transportation planning activities such as meeting with the State Department of Transportation, regional MPOs, highway jurisdictions, or city planning/DOT officials? If yes, what do you gain from these meetings? If not, why not?

21. Are there any strategies identified by other public or public agencies that you feel are effective at alleviating challenges with the water port industry?

22. What are your top safety concerns related to water port operations?

23. What issues or topics do you feel the ITD Statewide Freight Strategic Plan should address with regard to water port?

24. Are there any laws/policies/regulations/rules that enhance or inhibit the water port industry operations in Idaho?

Air Freight Survey

1. Where is your company located in Idaho (refer to map)?

2. What is the size of your company in terms of: a) people employed and b) annual revenue?

3. What products/commodities does your company typically ship/receive?

4. What are the airports your company services?

5. What are your biggest shipping markets or origin-destination pairs? Where are most of your goods coming from or moving to?

6. What groups do you coordinate with regarding freight transportation on a regular basis? Other businesses? Associations? State agencies? Municipalities?

7. What volume and percentage of freight does your company ship annually?

8. What do you see as the biggest obstacles to air freight in Idaho?

9. Are there policy or regulation problems or issues that impact the air freight industry in Idaho?

10. Does the State have adequate connectivity to national and global markets for air freight movement?

11. What connectivity is lacking? Does lack of connectivity affect your ability to attract business in this area?

12. What are some of the biggest uncertainties that ITD should take into consideration as this Statewide Freight Strategic Plan is being developed?

13. From your company's point of view, what is the largest issue impacting air freight movement in Idaho?

14. What do you foresee as the major challenges for Idaho's air freight transportation system in the next 5 years? 10? 20?

15. Are there any strategies identified by public agencies in previous planning efforts that you feel are effective at alleviating problems/issues/congestion points identified with Idaho's air freight movements?

16. Are there potential solutions available through interagency cooperation on these issues? Which agencies would need to be involved?

17. Is there a potential for private-public partnerships to work on any of these issues?

18. Are you actively involved in transportation planning activities such as meeting with the State Department of Transportation, regional MPOs, highway jurisdictions, or city planning/DOT officials? If yes, what do you gain from these meetings? If not, why not?

19. What issues or topics do you feel the ITD Statewide Freight Strategic Plan should address?

- Airport landside access
- Availability of air freight and air-freight facilities
- Safety (where?)
- Other

20. What are the greatest strengths of Idaho's air freight system? Please select up to THREE options.

- Carrier/operator availability
- Intermodal Connectivity
- Reliability (congestion, travel time, facility connections
- Technology
- Policy (regulations, incentives)
- Safety and Security
- Environmental impact
- Diversity

21. What are the greatest strengths of Idaho's air freight system in the next 5 to 10 years? Please select up to THREE options.

- Carrier/operator availability
- Intermodal Connectivity
- Reliability (congestion, travel time, facility connections
- Technology
- Policy (regulations, incentives)
- Safety and Security
- Environmental impact
- Diversity

22. How important is freight to the Idaho economy

- Not very important
- Somewhat important
- Very important
- No opinion

23. On a scale of 1 to 5, with 5 being the most important, please rate the importance of air freight transportation in convincing businesses to come to or grow in Idaho.

24. What strategies would you like to see utilized to promote air freight transportation in Idaho? Select all that apply.

- Pursue public-private partnerships (P3s)
- Encourage accessibility in planning process
- Expand regional capacity
- Promote intermodal connectivity
- Educate public on importance of freight user
- Offer development incentives to freight users
- Offer incentives for enhancements to freight network efficiency and safety

25. What are your top safety concerns related to air freight mobility?

Pipeline Survey

1. Where is your company located in Idaho (refer to map)?

2. What is the size of your company in terms of: a) people employed and b) annual revenue? Which category does your company fit into?

- Shipper
- Manufacturer
- Carrier
- 3PL provider
- Other

3. What products/commodities does your company typically ship/receive?

4. What routes in, out or through Idaho do you use on a regular basis?

5. What are your biggest shipping markets or origin-destination pairs? Where are most of your goods coming from or moving to?

6. What groups do you coordinate with regarding freight transportation on a regular basis? Other businesses? Associations? State agencies? Municipalities?

7. What volume and percentage of freight does your company ship annually by each mode?

- Roadway
- Rail
- Tanker/gallons
- Percent of all shipments

8. Within Idaho, what percentage of your shipping is on:

- Interstate pipelines?
- Intrastate pipelines
- Interstate/United States/State Highways?
- Rail

9. What role does the State transportation system play in attracting/keeping businesses or industries to/in your area?

10. What do you consider to be the strengths of the State's freight transportation system? The weaknesses?

11. Are there operational problems/issues/congestion points that impact the industry you represent?

12. Are there policy or regulation problems or issues that impact the companies you represent?

13. Does the State have adequate connectivity to national and global markets by air, sea, rail, and/or road?

14. What connectivity is lacking? Does lack of connectivity affect your ability to attract business in this area?

15. What are some of the biggest uncertainties that ITD should take into consideration as this Statewide Freight Strategic Plan is being developed? (For instance energy issues, environmental regulations, economic uncertainties and changing freight dynamics.)

16. From your industry's point of view, what is the largest issue impacting freight movement in Idaho?

17. What are the main institutional issues in Idaho's freight transportation system?

18. What are the main Federal/State regulatory or policy issues in Idaho's freight transportation system?

19. Has your industry identified any improvement projects to counteract these faced by your industry? Are you involved with helping to implement solutions? How?

20. Are there any strategies identified by public agencies in previous planning efforts that you feel are effective at alleviating problems/issues/congestion points identified in your industry? Are there other strategies that you feel would help to alleviate these locations or issues?

21. Are there potential solutions available through interagency cooperation on these issues within your industry?

22. Are there strategies that you feel could best be implemented by the private sector? Is there a potential for private-public partnerships to work on any of your industries issues?

23. What issues or topics do you feel the ITD Statewide Freight Strategic Plan should address?

24. Has your company identified any improvement projects to counteract issues facing your industry?

25. If some of these improvements were made, what impacts would they have on your business? What is the cost of not making these improvements?

26. Are there any policy changes that could be made to improve modal conditions in the State?

27. Is there a potential for private-public partnerships to work on any of these issues?

28. Are you actively involved in transportation planning activities such as meeting with the State Department of Transportation, regional MPOs, or city planning/DOT officials? If yes, what do you gain from these meetings? If not, why not?

29. What are the greatest strengths of Idaho's freight system? Please select up to THREE options.

- Carrier/operator availability

- Intermodal Connectivity
- Reliability (congestion, travel time, facility connections
- Technology
- Policy (regulations, incentives)
- Safety and Security
- Environmental impact
- Diversity

30. What are the greatest strengths of Idaho's freight system in the next 5 to 10 years? Please select up to THREE options.

- Carrier/operator availability
- Intermodal Connectivity
- Reliability (congestion, travel time, facility connections
- Technology
- Policy (regulations, incentives)
- Safety and Security
- Environmental impact
- Diversity

Appendix B Freight Formula Project Application

Idaho Freight Program
Application Deadline: December 1, 2021

The Idaho Transportation Department (ITD) is now soliciting applications for freight related multimodal transportation projects for 2024-2029. Generally, National Highway Freight Program (NHFP) funds must contribute to the efficient movement of freight on the National Highway Freight Network (NHFN) and be in the freight investment plan included in the State's freight plan. Under this program, Idaho receives approximately $10M annually in freight apportioned (formula) funds, which ITD executes in accordance with the Fixing America's Surface Transportation (FAST) act criteria. ITD may obligate these funds to improve the movement of freight on Idaho's portion of the National Highway Freight Network (NHFN).

Idaho's portion of the NHFN consists of the following designated highway or routes:

Primary Highway Freight System (PHFS) - Highways identified as the most critical highway portions of the U.S. freight transportation system. Idaho Highways on the PHFS are:

- I-15 – I-86 to Idaho/Montana State Line
- I-84 – Idaho/Oregon State Line to the Idaho/Utah State Line
- I-86 – I-84 to I-15
- I-90 – Idaho/Washington State Line to Idaho/Montana State Line

Interstate Routes not on the PHFS - These highways consist of the remaining portion of Interstate roads not designated as part of the PHFS. Idaho Highways not on the PHFS, but eligible are:

- I-15 – Idaho/Utah State Line to I-86
- I-184 – I-84 to US-20

Critical Rural Freight Corridors (CRFC) – These are public roads not in an urbanized area providing access and connection to the PHFS and the Interstate with other important ports, public transportation facilities, or other intermodal freight facilities.

Critical Urban Freight Corridors (CUFC) - These are public roads in an urbanized areas providing access and connection to the PHFS and the Interstate with other ports, public transportation facilities, or other intermodal transportation facilities.

The attached map displays Idaho's CRFC and CUFC.

Eligible projects for uses of program funds are as follows:

- Development phase activities, including planning, feasibility analysis, revenue forecasting, environmental review, preliminary engineering and design work, and other preconstruction activities
- Construction, reconstruction, rehabilitation, acquisition of real property (including land relating to the project and improvements to land), construction contingencies, acquisition of equipment, and operational improvements directly relating to improving system performance
- Intelligent transportation systems and other technology to improve the flow of freight, including intelligent freight transportation systems
- Efforts to reduce the environmental impacts of freight movement
- Environmental and community mitigation for freight movement

Eligible projects for uses of program funds (Cont.):

- Railway-highway grade separation
- Geometric improvements to interchanges and ramps
- Truck-only lanes
- Climbing and runaway truck lanes
- Adding or widening of shoulders
- Truck parking facilities eligible for funding under section 1401 (Jason's Law) of MAP21.
- Real-time traffic, truck parking, roadway condition, and multimodal transportation information systems
- Electronic screening and credentialing systems for vehicles, including weigh-in-motion truck inspection technologies
- Traffic signal optimization, including synchronized and adaptive signals
- Work zone management and information systems
- Highway ramp metering
- Electronic cargo and border security technologies that improve truck freight movement.
- Intelligent transportation systems that would increase truck freight efficiencies inside the boundaries of intermodal facilities
- Additional road capacity to address highway freight bottlenecks
- Physical separation of passenger vehicles from commercial motor freight.
- Enhancement of the resiliency of critical highway infrastructure, including highway infrastructure that supports national energy security, to improve the flow of freight
- A highway or bridge project, other than a project described above, to improve the flow of freight on the NHFN
- Any other surface transportation project to improve the flow of freight into and out of an eligible intermodal freight facility
- Diesel retrofit or alternative fuel projects under the Congestion Mitigation and Air Quality Improvement program (CMAQ) for class 8 vehicles
- Conducting analyses and data collection related to the NHFP, developing and updating freight performance targets to carry out section 167 of title 23
- Idaho may obligate not more than 30% of the total apportionment for freight intermodal or freight rail projects that;
    - Are within the boundaries of public or private freight rail or water facilities (including ports); and
    - That provide surface transportation infrastructure necessary to facilitate direct intermodal interchange, transfer, and access into or out of the facility

Projects selected for freight formula funds require a minimum of 7.73% match for interstate projects and 7.34% match for projects not on an interstate.

Submit applications via electronic means to scott.luekenga@itd.idaho.gov. When transmitting the application include all supporting maps, letters and other documents, as a pdf. If the file size exceeds e-mail transmittal capabilities (15MB), submit using a thumb drive and send via FedEx/UPS delivery to the following address:

Idaho Transportation Department
Attn: Scott Luekenga
HQ – Highway Planning Service
P.O. Box 7129
Boise, Id. 83707-1129

Applicant Information

Applicant:

Mailing Address:
City:
State:
Zip Code:

Contact person:
Title:
Phone:
Email:

Co-Applicant *(if different from Applicant):*

Mailing Address:
City:
State:
Zip Code:

Contact Person:
Title:
Phone:
Email:

Application Specifics

Project Cost Estimate:
Limit: 2 pages
Instructions:

Project estimate must include all related project costs, including administrative. The minimum match amount for the total project cost is 7.73% for interstate projects and 7.34% for projects not on an interstate. Applications should include details on match funding to include amounts and contributing agencies. Details should include, but not be limited to the following:

- Preliminary development cost and year required
- Right of way costs and details
- Status of environmental requirements and costs
- Construction costs and year of execution

Project Details:
Limit: 5 pages
Instructions:

Applicants should provide details on project design to include maps or diagrams depicting the infrastructure improvements.

Safety, Economic and Mobility Improvement Details:
Limit: 3 pages
Instructions:

For ITD to conduct an accurate benefit cost analysis, ITD needs to fully understand the freight related benefits in terms economic benefit to the community, improvements to freight mobility and overall safety improvements. Information should include, but not be limited to:

- The direct economic impact to the community, freight mobility and overall safety improvements to the state. This should demonstrate improvements over current economic conditions and not reflect economic benefits that would occur without the proposed improvements
- Current daily traffic volumes for both freight and non-freight traffic
- Describe the potential increased speed for freight and non-freight traffic associated with the improvements. This should be in terms of speed increases from current average speeds on the roadway if applicable
- If applicable, describe any increased volumes or capacity the project will bring to the state, or if the project will move traffic to other utilized roadways
- Provide historical safety data; state how the project improves safety on the roadway. Information should include, but not be limited to, crash data over the last five years to include total accidents, accidents involving commercial motor vehicles, fatalities and significant injuries
- Identify if the proposed project is on the NHFN

Appendix C Freight Formula Project Scoring

A total of 100 points are possible based on the below criteria.

1. Safety; 10 Points

Based on Commercial Motor Vehicles (CMV) accidents in the 2021 Freight Formula applications.

a. Class O (No Injury, Only Property Damage); 0-2 pts
b. Class C (Possible Injury); 3-5 pts
c. Class B (Minor Injury); 6-7 pts
d. Class A (Serious Injury): 8-9 pts
e. Class K (Fatality): 10 pts

2. Commercial Annual Average Daily Traffic (CAADT) as a percentage of overall Average Annual Daily Traffic (AADT)**; 10 Points**

a. CAADT < 5%; 0-3 pts
b. CAADT 6% - 15%; 4-6 pts
c. CAADT 16% - 25%; 7-9 pts
d. CAADT >26%; 10 pts

3. Pavement Conditions; 10 Points

Rates the route pavement in accordance with ITD's AASHTO pavement rating system. Good – pavement is relatively free of cracks, holes, ruts. Fair – pavement has some cracking, holes and ruts but does not have severe impact of motor traffic. Poor – pavement has cracking, holes or ruts that reduce the capability of the route to safely pass traffic.

a. Good; 0-4 pts
b. Fair; 5-8 pts
c. Poor; 9-10 pts

4. Disadvantage Communities; 10 Points

Base on three factors; percentage minority, percentage not high-school graduate and income < $25,000 average annual income as derived from the 2015-2019 U.S. Environmental Protection Agency's Environmental Justice Screening and Mapping Tool (EJSCREE ACS Summary Report). Projects are placed into category when two of three elements are met.

a. Category 1; Race <20%, Education <10%, Income <20%; 0-4 pts
b. Category 2; Race 21%-30%, Education 11%-20%, Income 21%-25%; 5-7 pts
c. Category 3; Race >31%, Education >21%, Income >26%; 8-10 pts

5. Environmental Stewardship; 5 Points

Does the project address reducing environmental challenges, i.e. carbon reduction, emissions reduction, congestion mitigation, wildlife habitat loss?

a. Addresses Environmental Stewardship; 5 points
b. Does not address Environmental Stewardship; 0 Points

6. Idaho's Primary Highway Freight Network (PHFN); 10 points

As determined by 23 U.S.C, Section 167 (e) and (f) and the Freight Advisory Committee.

a. On the Primary Highway Freight Network (I-15, I-84, I-86, I-90, I-90); 0-4 pts
b. On Critical Urban Freight Corridor; 5-7 pts
c. On Critical Rural Freight Corridor; 8-10 pts

7. Truck Congestion and Resiliency (Bottlenecks); 5 Points

a. Application is on an Interstate segment with an average weekday PM peak speed <35MPH; or on a Non-Interstate NHS segment with an average weekday PM peak speed <25MPH; 5 pts
b. Application is not on an Interstate or Non-Interstate Bottleneck; 0 pts

8. Promotes multimodal freight facilities, facilities improvements or access/connectivity between modes of freight transportation; 5 Points

a. Improves multimodal operations; 5 pts
b. Does not improve multimodal operations; 0 pts

9. 129,000 Pound Truck Route; 5 Points

a. On a 129,000 Pound truck route; 5 pts
b. Not on a 129,000 Pound truck route; 0 pts

10. Truck Parking, Idaho's Safe Rest Area and Oasis; 5 Points

a. Addresses truck parking; 5 pts
b. Does not address truck parking; 0 pts

11. Does the project support "First and/or Last Mile" freight movement; 5 Points

Connects production, processing, warehousing, distribution and/or manufacturing facilities to the NHS.

a. Addresses First and/or Last Mile; 5 points
b. Does not address First and/or Last Mile; 0 Points

12. Freight Advisory Committee Member; 15 Points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TRANSPORTATION DEPARTMENT