

Lifeline Snapshot Transportation

All forms of transportation necessary for moving resources and people to enable continuous operation of JBLM, critical business and government functions and is essential to human health and safety

JBLM Lifeline Representative

Army Field Support Battalion (AFSBn-JBLM)

Lifeline Partners

Pierce Transit, Sound Transit, Intercity Transit, Local Transportation Planners and Engineers, WSDOT, Port of Seattle, Northwest Seaport Alliance

Key Issues

- Flooding on Interstate 5 at Nisqually Bridge and Clover Creek crossing
- Consistent congestion along Interstate 5

Knowledge Gaps

- Which area control points experience the highest volume of vehicles?
- Is there a significant portion of off-base, active-duty personnel that rely on public transit?

Components and Subcomponents

Highway/Roadway/Motor Vehicle	Mass Transit
Roads	Bus
Bridges	Rail
	Ferry
Railway	Aviation
Freight Passenger	Commercial (e.g., cargo / passenger)
	General
	Military
Maritime	
Waterways	
Ports and Port Facilities	



Energy

Infrastructure involved in the production and distribution of electricity and fuel to a community

JBLM Lifeline Representative

Army Field Support Battalion (AFSBn-JBLM)

Lifeline Partners

Tacoma Public Utilities, Puget Sound Electric, Local Public Utility Departments, Local Utility Districts

Key Resilience Issues

- Wildland Urban Interface (WUI) areas have been identified around the base
- Supply chain issues have delayed transmission line repairs for Lakewood Light and Power

Knowledge Gaps

- Status of emergency fuel management plans and location of identified fuel points of distribution.
- Availability of critical asset data for electric and natural gas utility providers

Components and Subcomponents

Power Grid	Fuel
Generation Systems	Refineries / Fuel
Transmission Systems	Processing
Distribution Systems	Fuel Storage
January Systems	Pipelines
	Fuel Distribution (e.g., gas stations, fuel points)
	Off-shore Oil Platforms



Lifeline Snapshot Water Systems

Natural resources and infrastructure needed to produce and deliver potable water for consumption, treat and return used water, and mitigate flooding

JBLM Lifeline Representative

Directorate of Public Works, American Water

Lifeline Partners

Washington State Department of Health, Local Public Works Departments, Local Water Districts/Public Water Systems, Tacoma Public Utilities

Key Resilience Issues

 Local aquifers have shown signs of contamination by polyfluoroalkyl substances (PFAS), man-made chemicals known to cause a range of health impacts in humans

Knowledge Gaps

None at this time.

Components and Subcomponents	
Law Enforcement / Security	Fire Services
Police Stations	Fire Stations
Law Enforcement	Firefighting Resources
Site Security	Hazardous Materials Cleanup
Correctional Facilities	and Response
Search and Rescue	Government Services
Local Search and Rescue	Emergency Operations Centers
	Essential Government Functions
	Government Offices
	Schools
	Public Records
Initial Critic Historic Cultural Resources	
Community Safety	741 7 1000 to 1
Protective Actions	



Safety and Security

Systems and assets that ensure responder and survivor safety as well as the continuity of government.

JBLM Lifeline Representative

Directorate of Emergency Services

Lifeline Partners

Local Emergency Management, Law Enforcement, Fire Services, Dispatch Centers

Key Resilience Issues

- · Understaffing of local law enforcement and fire service agencies.
- Behavioral health supports for first responders including peer support
- Critical safety and security assets (e.g., Fire Station No. 5) within 10-year coastal storm elevation and at risk of tidal flooding by 2100

Knowledge Gaps

• Formal mechanisms (e.g., MOUs, MAAs) between JBLM and local public safety agencies.

Components and Subcomponents

Components and Subcomponents	
Law Enforcement / Security	Fire Services
Police Stations	Fire Stations
Law Enforcement	Firefighting Resources
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Correctional Facilities	and Response
Search and Rescue	Government Services
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	Schools
	Public Records
Initial Critical: Assets 1:150t Resources	
Community Safety	
Protective Actions	



Communications

All the different types of communication needed to respond and help survivors during an emergency

JBLM Lifeline Representative

Network Enterprise Center (NEC)

Lifeline Partners

South Sound 911, Thurston 911 Communications, Local Communications Directors

Key Resilience Issues

- Fiberoptics cables running below Nisqually Bridge are at risk of flooding
- SS911 and TCOMM 911 each operate out of a single building which makes the region's dispatch capabilities vulnerable to events that impact these buildings

Knowledge Gaps

 Interoperability of radio communications between installation and local public safety partners **Components and Subcomponents**

Components and Subcomponents	
Infrastructure	Responder Communications
Wireless	Land Mobile Radio (LMR)
Cable Systems and Wireline	Networks
Broadcast (TV and Radio)	
Satellite	
Data Centers / Internet	
Alerts, Warnings, and Messages	Finance
Local Alert / Warning	Banking Services
Ability	Electronic Payment
Access to IPAWS (WEA, EAS, NWR)	Processing
NAWAS Terminals	
Tsunami Warning Sirens	
911 and Dispatch	
Public Safety Answering	
Points (PSAP)	
Dispatch Initial Critica	Assets: 22



Health and Medical

All aspects of medical services required during an emergency such as survivor care, fatality management, public health, and the medical supply chain

JBLM Lifeline Representative

Madigan Army Medical Center

Lifeline Partners

State and County Health Departments, Veteran's Clinics and TriCare Facilities, Local Hospitals, Nonprofits

Key Resilience Issues

 Lack of integration between installation information and referral system and community system (Washington 211).

Knowledge Gaps

- Establish better understanding of capabilities and Madigan and where the installation relies on support from outside healthcare systems
- Status of regional or local medical surge, mass casualty, and mass fatality planning.

Components and Subcomponents

Components and Subcomponents	
Medical Care	Public Health
Hospitals	Epidemiological Surveillance
Dialysis Centers	Medical Laboratories
Pharmacies	Clinical Guidance
Long-Term Care Facilities	Assessment/Interventions/Treatmen
VA Health System	ts
Veterinary Services	Human Services
Home Care	Behavioral Health
Urgent Care	Vaccination Clinics and Programs
1 or delice core	
Patient Movement	Medical Supply Chain
	Medical Supply Chain Blood/Blood Products
Patient Movement	
Patient Movement	Blood/Blood Products Manufacturing (Pharmaceutical
Patient Movement	Blood/Blood Products Manufacturing (Pharmaceutical Device, Medical Gases)
Patient Movement	Blood/Blood Products Manufacturing (Pharmaceutical Device, Medical Gases) Distribution Centers
Patient Movement	Blood/Blood Products Manufacturing (Pharmaceutical Device, Medical Gases) Distribution Centers Critical Clinical Research
Patient Movement	Blood/Blood Products Manufacturing (Pharmaceutical Device, Medical Gases) Distribution Centers Critical Clinical Research Sterilization



Food, Hydration, and Shelter

Traditional feeding and hydration services that are routinely paired with sheltering as well as the agricultural infrastructure required to meet those needs

JBLM Lifeline Representative

Directorate of Plans, Training, Mobilization and Security (DPTAMS)

Lifeline Partners

United Way of Pierce County, Operation Red Dot, Emergency Food Network, Local Emergency Management

Key Resilience Issues

- Thurston County does not currently have any mass sheltering locations identified
- Housing affordability, housing supply, and affordable housing are key legislative priorities of the South Sound Housing Affordability Partners.

Knowledge Gaps

- Need to align MIRR effort with results of SSMCP Housing Study 2.0
- Facilities that have been identified as potential locations for mass sheltering operations.

Components and Subcomponents

Food	Hydration
Commercial Food Distribution Centers	Drinking Water Delivery Systems (public water
Commercial Food Supply Chain	fountains, spouts, and water bottle refilling
Food Distribution Programs (e.g., Food Banks)	stations)
Emergency Supply Staging Areas	
Shelter	Agriculture
Housing (e.g., homes, emergency shelters)	Animals and Agriculture
Commercial Facilities (e.g., hotels)	



Lifeline Snapshot Hazardous Materials

Management, containment, and removal of all hazardous substances

JBLM Lifeline Representative

Directorate of Emergency Services

Lifeline Partners

Local Emergency Planning Councils

Key Resilience Issues

 Several facilities in the Port of Tacoma handle or store hazardous materials; tidal flooding and storm surges experienced in the port could release these materials

Knowledge Gaps

 Movement of hazardous materials along the BNSF railway and communication with JBLM on hazardous cargo. **Components and Subcomponents**

Facilities	HAZMAT, Pollutants, Contaminants
	Oil/HAZMAT/Toxic Incidents from Non-Fixed Facilities Radiological or Nuclear
	Incidents



Lifeline Snapshot Natural Resources

All the critical ecosystems that support listed species and unique vegetation communities, ecosystem assets that enhance resilience, tribal 'usual and accustomed' hunting and fishing areas, wildlife refuges and nature reserves, parks and recreational areas, and agricultural areas

JBLM Lifeline Representative

Army Compatible Use Buffer (ACUB) Program, Sentinel Landscape Partnership

Lifeline Partners

Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Nisqually Tribe, US Fish and Wildlife Service, Washington State University Agricultural Extension, Climate Pierce County, Ecostudies Institute

Key Resilience Issues

 Critical habitats for ESA-listed species exists in and around the training grounds of the base; this designation limits the installation's disturbance to the training grounds

Knowledge Gaps

Need to integrate cultural resources into study.

Components and Subcomponents

Designated Areas	Sensitive Ecosystems
National, State, and Municipal Parks and	Areas Containing ESA-Listed Species
Recreational Areas	Floodplains
Wildlife Refuges and Nature Reserves	Riparian Zones
	Pollinator Habitats
Tribal Resources	Agriculture
Usual and Accustomed	Farms
Hunting and Fishing Areas	Grazing Lands
Cultural Sites	