

The Vancouver Fraser Port Authority is advancing a new Active Vessel Traffic Management Program in collaboration with industry and other agencies, and through engagement with Indigenous groups, municipalities, and community stakeholders.

Cargo volumes through the Port of Vancouver continue to grow, increasing the need to optimize the flow of traffic in and out of the port. As many parties work together to ensure that trade through the gateway is fluid, it is important to coordinate

the movement of vessels through increasingly busy and confined waterways.

That's why the port authority is taking an active role in the strategic and operational planning of marine traffic through the Port of Vancouver with the development of the Active Vessel Traffic Management (AVTM) Program. The program will support future trade growth, improve supply chain efficiency, and reduce the environmental and social impacts of trade activity.



Program goal

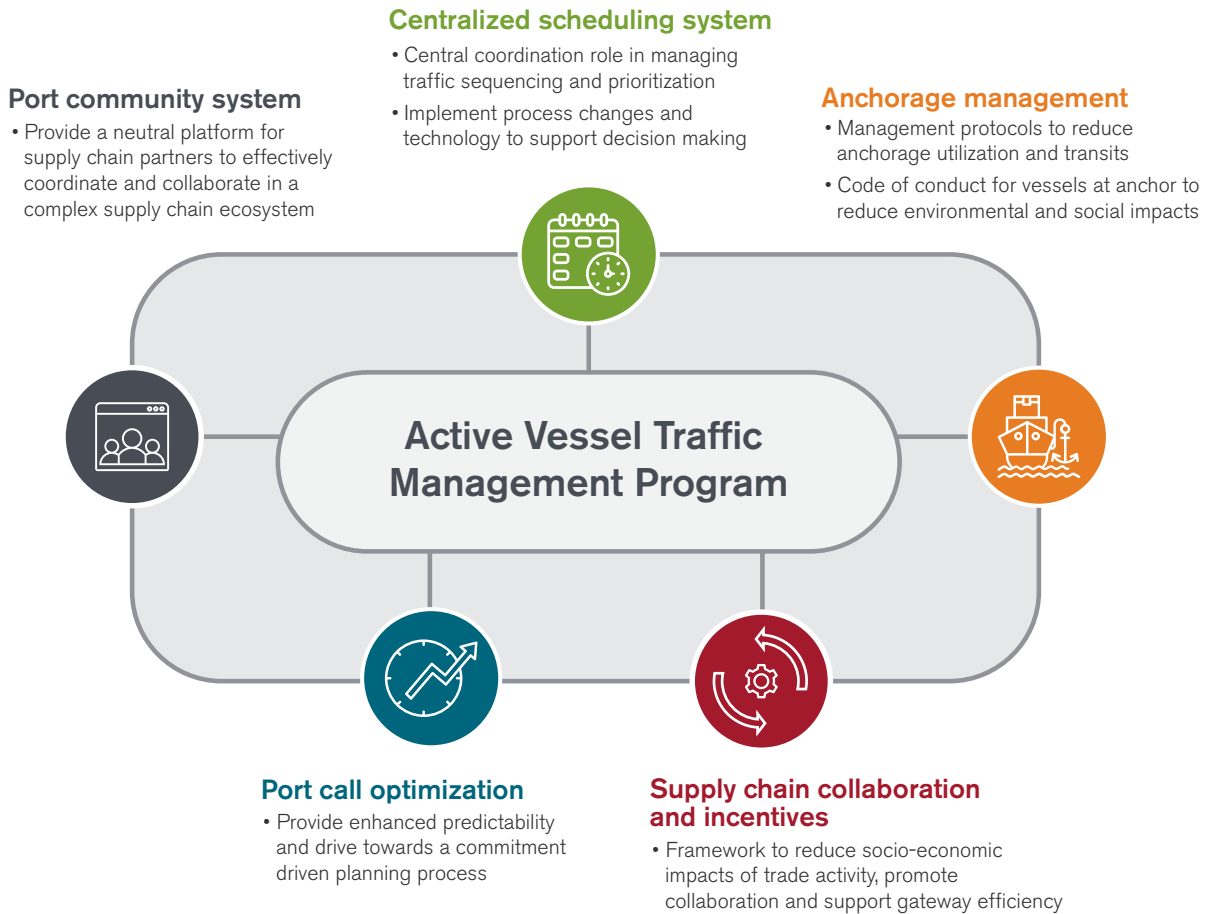
The goal of the AVTM program is to implement a collaborative traffic-management system, supported by process improvements and digital technology, that creates benefits for all partners, and also reduces the environmental and community impacts of trade activity in our gateway.

A successful program will play an important role in the gateway and associated supply chain in meeting the demands of future growth in Canadian trade. The program will further support the port authority's vision of being the world's most sustainable port: delivering economic prosperity through trade, maintaining a healthy environment, and enabling thriving communities through meaningful dialogue, shared aspirations, and collective accountability.

Five program elements

The program will include a set of policies, procedures, practices, incentives, technologies and data-sharing methodologies to create benefits for all partners and stakeholders. As a wide variety of cargo flows through this diversified port, varying approaches will be necessary for tools and processes.

The AVTM program includes five integrated elements that will be delivered in stages to support the evolution of marine traffic management within the Port of Vancouver.



Program benefits

Goals of the AVTM program include:



Strengthened marine safety

Reducing congestion and actively managing marine traffic in the busiest, most confined waters of the port



Improved efficiency and reliability of the flow of goods

Optimizing processes through the gateway, such as vessel-scheduling, for all supply-chain partners



Reduced environmental impacts

Reducing noise impacts to southern resident killer whale habitat by limiting unnecessary vessel movements



Minimized social impacts

Reducing overall anchorage usage in southern BC and implementing a Code of Conduct for vessels at anchorage

Core program principles

The following principles guide the design and development of the program:



Collaboration: promoting interorganizational sharing of data and information for mutual gain in supply chain, environmental, and resource efficiency



Innovation: developing new systems, practices, procedures, and tools to lead digital maturity growth across the gateway



Transparency: establishing accountability in communications, data sharing, impacts on port users, and decision-making



Sustainability: reducing local environmental impacts, such as noise, air quality, and carbon emissions

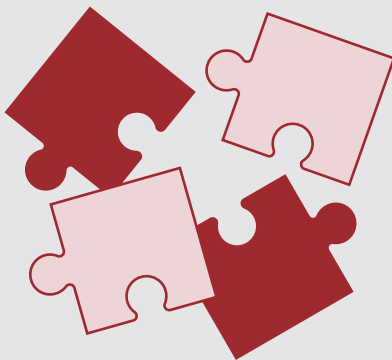


Confidence: communicating and operating in a genuinely transparent and collaborative way to ensure confidence and trust with port users, industry stakeholders, and the general public



Community: improving the operations of port users and supply chain stakeholders, leading to improved efficiencies and commercial results, while balancing the needs and concerns of local communities and Indigenous groups, and aligning national interests with regional priorities

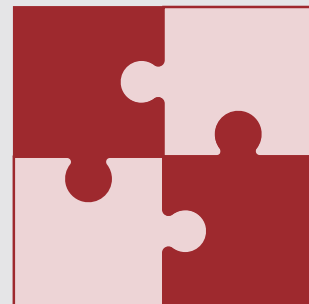
Current state



- Fragmented and siloed process
- Barriers to coordination and collaboration
- Cumulative inefficiencies leading to suboptimal supply chain
- Underutilized supply chain capacity

AVTM program

Future state



- Collaborative decision-making
- Advanced demand planning and optimization
- Common supply chain operating picture
- Integrated process optimization
- Reduced environmental and social impacts

Timeline

Program Element	2022				2023 and beyond
	Q1	Q2	Q3	Q4	
1. Centralized Scheduling System (CSS)	Vendor selection		Design development		• Initial implementation, change management, CSS expansion, evaluation and improvements
	Engagement				
2. Anchorage Management	Planning and preparation			Implementation	• Evaluation and improvements
	Engagement				
3. Supply Chain Collaboration & Incentives					• Framework development • Interaction with West Coast Supply Chain Visibility Program (WCSCVP)
	Engagement				
4. Port Call Optimization (PCO)			Determine data sharing agreements		• Integration with CSS and WCSCVP
	Engagement				
5. Port Community System (PCS)					• Planning of components, data sharing and governance • Rollout and expansion
	Engagement				

Measuring success

To measure progress and to demonstrate benefit to partners, communities and stakeholders, the program will publish and track metrics that align with the desired outcomes of active vessel traffic management, as outlined by the Minister of Transport.

These include:

- Anchorage utilization
- Voyage productivity
- Vessel time at anchor
- Number of transits per vessel call
- Vessel on-time arrival
- Data sharing and collaboration

Additional metrics will be identified and tracked that demonstrate improvements in cargo throughput and efficiency. It is anticipated that metrics will be refined or supplemented over the implementation of the program elements, based on input from partners, communities and stakeholders.

Ongoing engagement

Throughout the development and implementation of the AVTM program, the port authority will continue to collaborate with industry and continuously engage with Indigenous groups, municipalities and community stakeholders.

Engagement will be key to the development and success of a program as large and complex as the AVTM program will be for the Vancouver gateway.

Aligning with supporting and complementary initiatives

The AVTM program will align with other port authority initiatives to make coordinated planning easier and more efficient for parties involved. These include initiatives such as the West Coast Supply Chain Visibility Program, the Port Optimization and Digitalization Visioning Study, and the Supply Chain Innovation Hub.

For more information

Register for newsletter updates: portvancouver.com/marine-operations/avtm
 Email: AVTM@portvancouver.com