Washington State
House of Representatives
Office of Program Research

BILL ANALYSIS

Technology, Economic Development, & Veterans Committee

HB 2446

Brief Description: Developing the quantum technology industry into the state's economic development and workforce.

Sponsors: Representatives Barnard, Ryu, Salahuddin, Shavers and Donaghy.

Brief Summary of Bill

- Requires the Department of Commerce (Commerce) to develop a state quantum strategy by June 30, 2026.
- Specifies issues to be included in the strategy, such as projected growth of the quantum technology industry and strategies to increase jobs and capital investments in the state.
- Allows Commerce to contract with a quantum computing manufacturer or a regional organization to develop the strategy.
- Requires Commerce to seek non-state funding to develop the strategy.

Hearing Date: 1/20/26

Staff: Martha Wehling (786-7067).

Background:

Quantum Technology.
The principles of quantum mechanics are used to develop quantum technologies. Quantum mechanics are the laws of physics that apply to subatomic particles. Examples of quantum technologies include quantum computing, communication, and sensing:

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- *Quantum computing* uses "qubits," a chip different from conventional semiconductors, which allow faster processing than traditional computers. Possible applications of quantum computing include climate models, medicine development, development of traffic systems, and a resilient energy grid.
- *Quantum communication* uses key distribution for enhanced security. Possible applications of quantum communication include protecting consumers from financial fraud and preventing interception of sensitive information.
- *Quantum sensing* allows high precision measurements at the level of individual atoms. Possible applications of quantum sensing include healthcare, medical research, environmental monitoring, construction, energy, navigation, and defense.

Governments began to establish quantum hubs to explore quantum technologies about 15 years ago. In 2018 the federal National Quantum Initiative Act provided $1 billion annually for quantum research. In the fall of 2024 the United States Commerce Department published a rule controlling quantum computing, semiconductor manufacturing, and other advanced technologies.

Private companies have formed partnerships and investments to develop quantum technology. The Northwest Quantum Nexus includes the University of Washington, Pacific Northwest National Laboratory, and Microsoft Quantum. It was formed to develop a quantum-fluent workforce and economy in the Pacific Northwest by accelerating research, technology development, education, and training in the quantum information sciences.

The workforce for the quantum ecosystem will rely on a variety of skilled workers, including technicians, programmers, engineers, business developers, marketers, and sales. Two universities in Washington currently have programs for quantum research: the University of Washington and Washington State University.

Economic Development.
The Department of Commerce is responsible for promoting community and economic development, assisting businesses in the state to maintain and increase economic competitiveness, and expanding the state's role in trade promotion and marketing. It does this through a variety of programs, including technical assistance, grant inventories, and innovation partnership zones.

Existing programs that promote quantum-adjacent technologies include the life sciences discovery fund, which provides research grants; the Washington State Broadband Office, which develops broadband accessibility and economic vitality; the Digital Equity Forum, which develops recommendations to advance digital connectivity; and a workforce innovation sector lead, which develops and retains research and development employers and workforce.

Summary of Bill:

The Department of Commerce (Commerce) is required to develop a state quantum technology strategy by June 30, 2026. Commerce is required to seek gifts, grants, and contributions from

non-state sources to prepare the strategy. Commerce may contract with an external entity to prepare the strategy, including: a quantum computing manufacturing entity or a regional organization.

The strategy must:

- provide an overview of the quantum technology industry (QT Industry), projected growth, and strategies to increase jobs and capital investments in the state;
- identify projects and programs that will most quickly improve the economic vitality of the QT Industry;
- identify public-private partnerships that will provide funding and partnerships to accelerate the QT Industry;
- analyze state policies, including regulatory reforms, tax and financial supports, and education and workforce programs, to grow the QT Industry;
- explore quantum research into specific industry areas;
- identify research and development opportunities in public universities and regional organizations;
- identify partnerships to attract federal investment; and
- identify the economic and workforce impacts of a QT Industry in the state.

Appropriation: None.

Fiscal Note: Requested on January 13, 2026.

Effective Date: The bill takes effect 90 days after adjournment of the session in which the bill is passed.