



Washington state & Israel Trade: Leveraging opportunities for innovation and growth

Executive Summary

Washington state and Israel are globally recognized as centers of innovation, entrepreneurialism, and cutting-edge technology. Indeed, both followed a similar formula to achieve sustained economic success: a dynamic technology sector, international trade-driven growth, and an innovative culture that leverages the opportunities of the digital age.

While both regions benefit from bilateral trade ties fostered by the United States-Israel Free Trade Agreement (FTA) and existing research and development (R&D) cooperation programs, some striking similarities between Washington state and Israel reveal an effective roadmap to catalyze economic growth and innovation. A likeminded business approach and shared entrepreneurial spirit – combined with world-class education, strategic incentives, and public and private capital investments – create a favorable environment that make Washington state and Israel global leaders in technology and innovation.

Israel's thriving startup ecosystem has already attracted the attention of leading Puget Sound-based corporations contributing to significant advancements in areas shaping the digital economy such as, cloud computing, artificial intelligence, and climate technologies. In addition to opening offices in Israel to be closer to the "action," Washington state companies regularly partner with and acquire innovative Israeli startups to expand their portfolio of high-tech products and services. In turn, these acquisitions have given Israeli companies a path to greater market access. This mutually beneficial relationship has further strengthened the existing cultural and economic ties between Israel and the Puget Sound region.

There are opportunities for Washington and Israel to build off already-strong economic ties to the benefit of both economies. For example, bilateral R&D investment foundations help fund cooperative efforts to develop "game changing" technologies. By actively pursuing prestigious grants for academic research and private sector opportunities, Washington and Israel can not only develop solutions for some of the most pressing real-world problems, but also expand demand for Washington state and Israeli exports.

To advance opportunities for mutually beneficial innovation and economic development, policymakers should:

- Modernize the existing United States-Israel FTA to meet the challenges of the digital age;
- Position Washington state’s businesses and academic institutions as U.S. leaders in cooperation with Israeli counterparts; and
- Proactively address impediments to digital trade to enhance cooperation between Washington and Israeli businesses.

Introduction

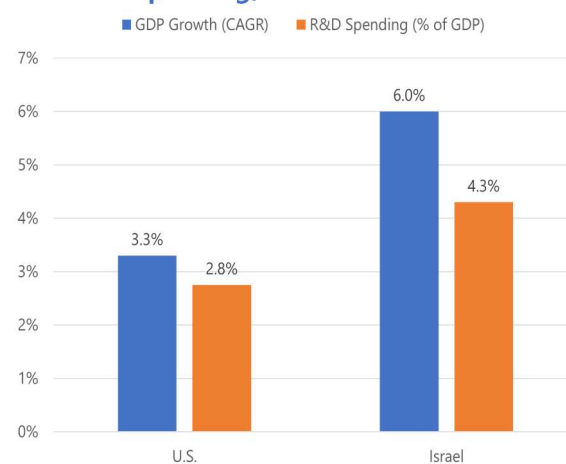
Situated more than 6,500 miles apart and shaped by different histories, geographies and cultures, the transformative journeys both Israel and Washington state have taken to become centers of innovation and economic growth bear some striking similarities. Both regions are heavily exposed to and reliant on international trade for economic growth, are fueled by a dynamic technology sector and entrepreneurial spirit, and are well positioned to leverage opportunities in the growing digital economy. Their economic strengths also symbiotically complement one another. Washington state provides market access for emerging technologies developed by Israel’s thriving startup scene; meanwhile, innovative Israeli startups provide acquisition and investment opportunities for Washington state’s high-tech businesses. Further, their similar recipes for economic vitality and success depend heavily on education, incentives, and public and private capital investments that foster a favorable environment for technology and innovation in both regions.

Washington state particularly benefits from strong trade ties between the United States and Israel, formalized by the 1985 United States-Israel Free Trade Agreement (FTA). This landmark free trade agreement – the first the U.S. ever signed – removed trade barriers and solidified a thriving relationship between the two economies. Since 1985, the U.S. has consistently been the largest export market for Israeli goods.¹ It is within this backdrop that Washington state and Israel are particularly well-positioned to drive shared growth through increased economic cooperation and bilateral investment in research and development (R&D). Many of the existing formal R&D partnerships between the U.S. and Israel offer a template for how to catalyze growth and innovation in both economies. Washington state should capitalize on opportunities to more actively engage with Israeli businesses and academic institutions to drive mutually beneficial economic growth.

Israel and Washington’s Startup Ecosystems

Israel’s transition from agriculture to a technology and aerospace powerhouse closely mirrors the diversification of Washington state’s economic reliance on agriculture and forestry to a more globally linked economy. In the 1970s, a concerted effort by Israeli policymakers

U.S. and Israel: Average Economic Growth and R&D Spending, 2008-2018



Sources: OECD (2021). OECD Data Portal. [Link](#); World Bank (2021). R&D Expenditure as a Percentage of GDP. [Link](#)

successfully diversified the country's economy away from agricultural dependence. As a result, Israel emerged as a thriving modern economy dominated by services and industrial sectors. The country is consistently among the fastest growing Organization for Economic Cooperation and Development (OECD) economies, likely due in part to world leading investment – as a share of total Gross Domestic Product (GDP) – into R&D.^{2,3,4}

Israeli Startups: Investment and Acquisitions

Since 2014 Washington-based companies and venture capital firms have:

- Invested over **\$1.3B** in Israeli startup companies.
- Acquired **18** Israeli startups in transactions worth **~\$2.7B**.

Statistics provided by Meir Valman, Startup Nation Central (2022).

By creating a favorable mix of policies and mechanisms to direct foreign and domestic investment to Israeli R&D, Israel has created a pervasive culture of innovation and entrepreneurship resulting in a dynamic startup environment. As of 2021, Israeli born and educated founders have produced 29 “unicorns” – privately-owned startup ventures worth \$1B or more.⁵ For comparison, the Puget Sound startup scene, which has a history of producing many of the world's most valuable companies, currently hosts 12 “unicorns”.

The Israeli and Puget Sound startup ecosystems have a symbiotic relationship. The Israeli technology sector is seen as a growing source of investment-ready innovative products and service for U.S. businesses. In turn, acquisitions by U.S. companies are seen as a viable path to expanded market access for Israeli companies; Microsoft alone has acquired nine Israeli startup ventures since 2014.⁶ Efforts to encourage flows of capital and management expertise from United States-based technology sector leaders to Israel has supported a cluster of technology and innovation in Israel, expanding growth opportunities for companies in both countries.

Driving Mutually Beneficial Outcomes for Washington and Israel Through Startup Cooperation

In 2019, Vancouver, WA based DiscoverOrg – a business-to-business (B2B) analytics firm – acquired Israeli company ZoomInfo to create a singular B2B information database of the “highest quality, quantity, and depth.” The combined entity (still known as ZoomInfo) made its debut on Nasdaq in June 2020 with an initial public offering valuing the company at more than \$13B. By leveraging the complementary strengths of ZoomInfo and by increasing investment in Israeli innovation, DiscoverOrg has emerged as a clear market leader in B2B intelligence.

Source: ZoomInfo (2019). “DiscoverOrg Acquires Zoominfo”. [Link](#); Levy, A. (2020). “ZoomInfo Rockets Over 60% in First Tech IPO of Covid-19 Era.” CNBC. [Link](#)

Reaping the Economic Benefits of Strong Cultural Ties and Business Connections

Washington state and Israel have strong cultural ties driven by the state's vibrant and active Jewish communities: Seattle is home to the largest Jewish community in the Pacific Northwest and the third largest Sephardic Jewish community in the country.⁷ Jewish cultural organizations and events (including the Stroum Jewish Community Center's annual Seattle Jewish Film Festival) actively foster a closer relationship between the state and Israel's Jewish population.⁸ While Jewish population growth in the metro Seattle area is a more recent phenomenon (increasing by 70% since 2001),⁹ Jews have played a prominent role throughout the city's history. For example, Bailey Gatzert, the 8th mayor of Seattle (1875-1876) and second Jewish mayor in the country, helped develop Washington state's nascent economy as a charter member of the Seattle Chamber of Commerce and president of Puget Sound National Bank and Peoples Savings Bank.

Seattle's sister city relationship with Be'er Sheva, Israel further demonstrates the growing economic and cultural ties between the Puget Sound region and Israeli centers of innovation. Be'er Sheva, the fourth largest metro area in the country, is home to Ben Gurion University and is an innovation center for high tech Israeli companies. Policy measures by the Israeli government have further supported the development of the city's technology, education, and medical sectors.¹⁰

Strong Trade Ties: Despite the distance between the two regions and the northwest region's geographic proximity to Asian markets, Washington state and Israel enjoy an active and thriving trade relationship. Washington regularly exports several hundred million dollars of locally produced goods to Israel and typically imports \$60M to \$100M of Israeli produced goods every year. Washington's top exports to Israel in 2020 included apples, semiconductor manufacturing equipment, and chemicals. In turn, Washington's imports from Israel were mostly electronic integrated circuits, quartz, and airplane and helicopter parts. Notably, exports to Israel have steadily increased over the last five years. Excluding aircraft, exports to Israel have increased from \$65M in 2016 to \$93M in 2020 – a 43% increase.^{11,12}

**Washington and Israel:
Trade by the Numbers, 2020**

Total Exports to Israel: \$249.6M

Top Export Categories:

- Transportation Equipment
- Agricultural Products
- Chemicals

Total Imports from Israel: \$61.6M

Top Import Categories:

- Computer & Electronic Products
- Manufactured Commodities
- Nonmetallic Mineral Products

Source: US ITC (2021). ITC Dataweb Portal. [Link](#)

Bilateral trade between the two economies has benefited from the rich history of commerce between the U.S. and Israel. As the first U.S. agreement of its kind, the United States-Israel FTA expanded bilateral trade and investment between the two countries by reducing barriers to trade and promoting regulatory transparency. Furthermore, an Agreement on Trade in Agricultural Products (ATAP) negotiated in 2004 has been extended by both nations every year since and has expanded access to the Israeli market for U.S. producers of agricultural goods.^{13,14}

Many of Washington state's largest business also have a substantial presence in Israel and recognize the mutual benefit of R&D cooperation with Israeli businesses and institutions. Decades ago, Microsoft opened a research and development center in Israel, the first facility outside of the company's HQ in Redmond, Washington. Today, Microsoft and Amazon operate regional offices in Israel, providing critical funding to scale up Israeli startups.¹⁵ F5 Networks, a Seattle-based network technologies company, has used its Israeli presence to expand its portfolio of cybersecurity and network solutions by investing in and acquiring several Israeli businesses.¹⁶ Cooperation between the Israel and Washington state's aviation sectors has also been a force for economic growth. For example, a recent joint investment from Boeing and the Israeli government increased the value of the Israeli aerospace industry by \$1B in the span of three years.¹⁷ And the benefits of this cooperation flow both ways: Israel-based Xsight provides the technology used at Seattle Tacoma International Airport that helps pilots avoid hazards on runways and adjacent airspace.¹⁸

Washington state's political representation is actively engaged in cultivating mutually beneficial political and trade relations with Israel. Presently, Senator Maria Cantwell is the sponsor of a bill that would establish a joint U.S. – Israel Artificial Intelligence Center to enhance AI R&D cooperation. There have been other notable engagements over the years, to include then Washington Attorney General Christine O.

Gregoire’s participation in a delegation of state attorneys general that traveled to Israel in 1999 to discuss legal affairs and pressing issues affecting both countries, and Washington state representative participation in congressional delegations to get a better understanding of regional politics, including a recent visit by representatives Jaime Herrera Butler (R-WA) and Adam Smith (D-WA). Building on the foundations of cooperation and trade between the two regions has reinforced the idea that increased collaboration and investment between Washington state and Israeli businesses can help scale emerging technologies and provide mutually beneficial economic growth.

Additional efforts by Washington state’s government agencies could further accelerate these trends. Policymakers should more actively advertise the state as a prime destination for Israeli entrepreneurs given Washington’s business and innovation-friendly tax code and human capital advantages.¹⁹

New Tech Growth Opportunities Through Key R&D Funding Organizations

Opportunities to unlock binational R&D funding for research partnerships between U.S. and Israeli academic institutions and companies offer a clear growth opportunity. There are three primary binational foundations funding research and project development that could help Washington state leverage the untapped potential of partnerships with Israeli academic institutions and businesses to develop novel technologies and drive economic growth.



U.S Israel Binational Science Foundation (BSF)

Founded in 1972 to promote U.S. – Israel academic relations by offering funding for innovative, hypothesis-driven, collaborative research across many scientific disciplines.



U.S Israel Binational Industrial R&D Foundation (BIRD)

Founded in 1977 to enhance mutually beneficial cooperation between U.S. and Israeli companies by covering up to 50% of joint project development costs.



U.S Israel Binational Agricultural R&D Fund (BARD)

Founded in 1977 to support collaborative research between U.S. and Israeli scientists pursuing agricultural research through competitive funding opportunities.

Sources: BSF (2021). About [Link](#); BIRD (2021). About [Link](#); BARD (2021). About [Link](#)

The benefits of receiving funding from the binational foundations are multi-faceted and cannot be measured in absolute investment dollars alone. For example, while the funding provided by BSF is modest, the prestigious nature of receiving the award often leads to additional funding that can expand the scope and depth of proposed academic research. Getting a grant from BSF often results in receiving a much larger grant from the U.S. National Science Foundation (NSF). Normally, only 8-10% of applicants are awarded NSF funding; however, about a third of BSF grantees that apply for NSF funding are accepted.²⁰

Although the academic research funded by BSF is not focused on generating immediate commercial applications, the research activities supported by BSF can lead to technological breakthroughs with immense commercial and societal benefits. One prime example is the story of Amnon Shashua. Amnon is an Israeli computer scientist whose initial research into artificial intelligence (AI) was funded by BSF. After his research was complete, he parlayed the expertise he developed into commercial potential by founding the company Mobileye, whose technology has formed the basis of most autonomous driving technology on the roads today. Notably, Mobileye was acquired by the U.S. semiconductor giant Intel, who plans to offer shares of Mobileye to the public in 2022 at an expected valuation of ~\$50B – more than three times the ~\$15B Intel paid to acquire the company in 2017.^{21,22} BSF grantees have also improved cancer treatment. Three professors who received BSF funding were awarded the Nobel Prize for Chemistry in 2004 for their work concerning the ubiquitin system of protein degradation – a discovery that has resulted in the development of innovative cancer treatments and saved the lives of many.²³

Compared to other U.S. states like California, Washington's higher education institutions have not yet fully capitalized on the benefits of prestigious BSF funding and academic cooperation with Israeli institutions. Over the last 20 years, collaborative research between the University of Washington and Israeli universities has totaled a very small share of total BSF grants, receiving 20 awards for around \$1M in total funding.²⁴ Facilitating further cooperation between Washington and Israeli higher education institutions can help expand opportunities to receive BSF grants that can fund the development of innovative technologies feeding the thriving startup ecosystems of both economies.

The other main binational foundations, however, have had a much larger footprint in the state. Since 1979, 53 joint agricultural research projects between Washington state and Israeli academic institutions have received \$12 million in BARD funding. These joint efforts support postgraduate education and mutually beneficial research to strengthen the resiliency and profitability of Washington's agricultural trade, an important export sector for the state.²⁵ Meanwhile, BIRD has funded joint project development costs for 11 Washington-Israeli private sector collaborations. Success stories cover a wide range of industries, including projects in renewable energy optimization, food processing, and telecommunications.²⁶ Additionally, Sagetech Avionics and Ciconia LTD (Washington and Israel based, respectively) received BIRD funding approval to develop a collision avoidance system that allows first responders to safely operate unmanned aerial vehicles in tandem with manned aircraft.²⁷

Israel is a global leader in innovation in many areas that would benefit Washington state's economy and population. Israeli innovations in agricultural technology have better optimized crop yields and industry management tactics. Leveraging these innovative practices in Washington would accelerate export growth and increase the profitability of the state's global agricultural trade footprint. Israeli companies are also at the forefront of water technology and management that Washington state could use to counteract water supply and reclamation issues. Whether through academic cooperation and funding from binational foundations, or from pursuing opportunities to commercialize Israeli innovations, further cooperation between Washington state and Israel can expand opportunities for shared expertise, innovation, and economic growth.

Cooperation With Israeli Innovators Offers a Path to Digital Trade Growth

Growth in digital trade is particularly promising given Washington's many successful large tech companies. Israeli efforts to become a global leader in cloud, cyber security and AI technology have

created acquisition-ready companies of interest to larger firms in Washington state. Evidence of this symbiotic relationship can already be seen through recent acquisitions by the likes of Amazon and Microsoft. For example, in 2019, Amazon Web Services acquired Israeli company CloudEndure to equip their proprietary cloud platform with more expansive options for flexible migration, backup, and disaster-recovery of data hosted on the platform.²⁸

Amazon Web Services and Annapurna Labs: Expanding Digital Trade with Israeli Innovation

In 2016, Amazon Web Services (AWS) acquired Israel-based chip maker Annapurna Labs for ~\$350 million, catapulting AWS cloud services to its current position as the global cloud leader. What originated as a partnership for computer chips with niche applications that enabled lower cost, faster hardware for AWS Infrastructure-as-a-Service (providing cloud-based infrastructure to reduce businesses needs for physical infrastructure) business model blossomed into a full acquisition. This allowed AWS to surpass competitors in terms of speed, capacity, and cost, propelling the company to new heights.

Source: Janakiram, M.S.V.(2019). "How an Acquisition Made by Amazon in 2016 Became the Company's Secret Sauce." Forbes. [Link](#)

Furthermore, the Seattle-based Allen Institute for AI – created by Microsoft cofounder Paul Allen – recently opened an office in Israel to tap into AI research by Israeli institutes and fund projects for the common good. While many of the projects funded by the Allen Institute are not focused on commercial applications, they are expanding connections between Washington and Israeli researchers. Coordinating on these joint projects helps facilitate the type of information sharing and investment that often lead to the development of novel AI technologies with commercial potential in the digital economy.²⁹

Policy Recommendations

Israel and Washington state can build on stronger international trade ties to spur mutually beneficial innovation and economic growth. To achieve these goals, policymakers should:

- Modernize the existing United States-Israel FTA to meet the challenges of the digital age.
- Identify new market opportunities in Israel for Washington state products and services.
- Position Washington state as a U.S. leader in research and innovation partnerships with Israeli academic institutions and startups through active marketing of the state's favorable conditions for entrepreneurs.
- Emphasize greater cooperation with the Israeli startup ecosystem to expand existing paths to the commercialization of innovative products and services and forge new opportunities for collaborative growth.
- Identify and address headwinds to increased cooperation between Washington and Israeli businesses on digital trade.
- Develop opportunities for government-led private sector trade missions between Washington and Israel.
- Facilitate more efficient travel between the two markets, such as direct flights between Tel Aviv and Seattle.

Conclusion

Washington state and Israel currently enjoy a thriving trade relationship across important export sectors – namely, agriculture, services, and digital trade. However, there is still untapped potential to expand the bilateral relationship and reap mutual benefits from the two regions’ strong cultural ties and favorable tech and startup environments. In addition to capitalizing on existing opportunities for joint R&D and the commercialization of high-tech products and services through Washington’s largest technology companies, the state can benefit from broader academic collaboration and actively position itself as the preeminent destination for United States-Israeli collaboration. In turn, this can drive shared economic growth and increased trade opportunities. The remarkable synergies between the two regions create the right conditions for joint collaboration that can propel goods and services exports to new heights of job creation and economic benefit for all.

End Notes

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