

The Washington Innovation Economy

Executive Summary

February, 2009

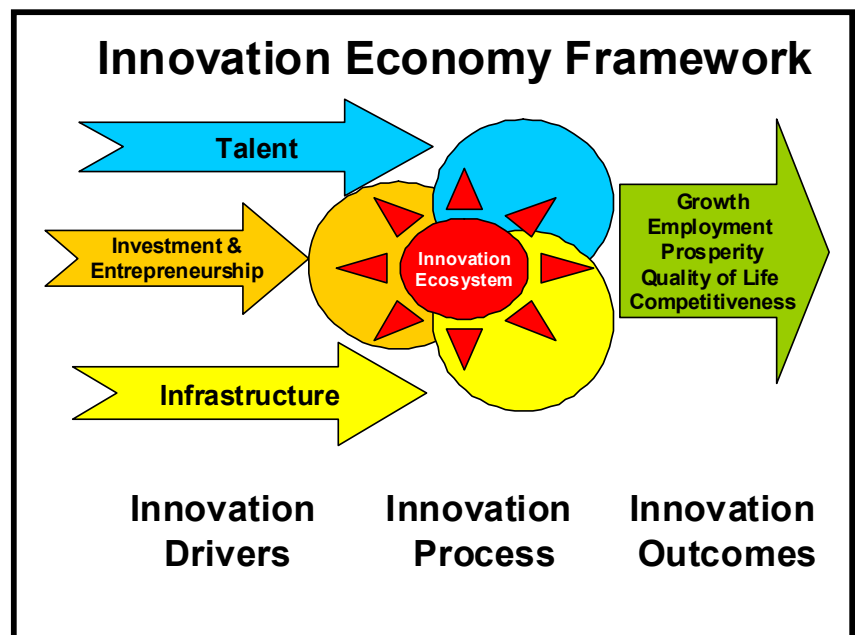
Our vision for Washington

Make Washington the most attractive, creative and fertile investment environment for innovation in the world as a means of achieving long-term global competitiveness, prosperity and economic opportunity for all the state's citizens.

Washington State is in the midst of an unprecedented economic crisis that increases the need for a framework to guide policy choices and investment priorities. While policy attention will necessarily focus on the immediate and short term, we must also address longer term challenges. Our economy is undergoing a profound structural adjustment and facing new global realities. Our enterprises need to be focused on the technologies and markets that will grow in the future to create jobs, raise living standards and finance necessary public services. The current crisis can serve as an opportunity for Washington to emerge from this time of troubles stronger and more competitive.

The Washington State Economic Development Commission has proposed a new economic development strategy that seeks to unleash the innovation capacity of businesses, institutions and communities in our state. The state needs a new strategic approach for economic development, with a whole new way of thinking, operating and interacting.

The Commission addressed three key drivers of an innovation economy—talent, investment and entrepreneurship, and infrastructure – and proposes specific ways to address those drivers. Over time we have an opportunity for our business, research, government, and education leadership to step forward to implement revolutionary—not incremental—change. This change will be facilitated by a perspective and capability of seeing the innovation system as a whole, and collaborating across boundaries.



New Approach for Economic Development

Economic development has long been seen as a series of real estate deals in a zero-sum game of “smokestack chasing.” It is time to put to rest this old idea that prosperity is based on low cost inputs, and place new emphasis on improving the quality of inputs and facilitating innovation outcomes as the driver of long-term competitiveness, growth and employment. The innovation model aims to create a new dynamic of relationships – the “innovation ecosystem” – that can link all the capabilities of the state to generate new knowledge, start and grow a business, utilize infrastructure and transform existing businesses.

Traditional Model	Innovation Driven Model
Attracting companies	Investing in talent and infrastructure
Jobs	Quality of jobs, per capita incomes
Lowest cost of business inputs	Higher value inputs, increasing productivity
Focus on skills and single occupation	Focus on learning and career flexibility
Large corporations, economies of scale	Entrepreneurs, agile businesses, free agents
Top down economic development	Bottom-up partnerships and organic growth
Investing in technology inputs	Investing in innovation outcomes
Competing regions: zero sum game	Collaborating regions: value creation game
Closed innovation system	Open innovation systems, networks
Locally focused clusters	Globally focused clusters

We need to encourage a variety of innovation ecosystems to emerge around the state as local players begin working more closely together within the context of their local assets. New innovation ecosystems will emerge organically as various players share a common vision and realize the advantages of collaboration. The Commission does not envision the state commanding the formation of specific innovation ecosystems, but rather brokering regional capabilities to draw strength from each other to exploit new opportunities.

Innovation is more than invention. It is the process by which knowledge is created and transformed to some useful purpose. Innovation has traditionally been characterized as a linear, systematic, centrally directed, process. The reality, however, is very different. Innovation is:

- Open.** Companies seek sources of knowledge outside their organizational boundaries.
- Faster.** The cycle of invention-to-product is happening at an accelerated pace.
- Distributed.** Vertical integration has given way to distributed networks.
- Global.** New economic players are capturing a larger share of private R&D investment.
- Co-creative.** New models of innovation incorporate the customer into the design process.
- Multi-disciplinary.** An intense pace of knowledge requires insight from several disciplines.

The Commission’s vision recognizes the difficulty of predicting the future of Washington’s economy with any great specificity: we will not be able to see important technological, environmental and social developments that will give rise to new opportunities over the next 20 years. But we can be prepared for the opportunities that arise, with an “attractive, creative and fertile investment environment for innovation.”

The innovation economy will be established through thousands of daily decisions made over a period of many years. If current and future decision makers are committed to the vision in this report they will act with a full understanding of their impact on Washington’s goal of becoming the world leader in innovation. The Commission’s vision also suggests intentionality. The state needs sustained leadership and action and to overcome any complacency that puts our future at risk.

How We Will Get There

Washington can pioneer an innovation ecosystem model that more rapidly integrates capabilities within and outside the state to create new value for its global customers. The Commission's first round recommendations focus on augmenting three interdependent components of the ecosystems which innovation needs to thrive: talent, investment and infrastructure. Taken together these form the pillars of the comprehensive and integrated approach the commission has adopted.

Talent and Workforce Development

While Washington will continue to welcome new residents who bring their talents to our state, we need to maximize the opportunity for Washington residents to gain the qualifications to be competitive within the state's talent clusters. This applies both to young people coming out of high school and college, and to older workers who seek a more promising future.

Recommendations:

- Develop home-grown talent and attract talent from around the world.
- Build a strong framework for the coordination of economic and workforce development
- Ensure that K-12 schools are preparing students for post-secondary education and work.
- Improve the output of the state's post-secondary system.
- Ensure that working adults can learn new skills and move up a career ladder.
- Communicate the need for change, discovery, life-long learning, and entrepreneurship.
- Facilitate job transitions and continue modernizing unemployment insurance.
- Strengthen apprenticeship programs.

Investment and Entrepreneurship

Washington needs to be at the forefront of science and emerging technologies that will form the foundation of whole new markets, product categories and industry clusters. But to take advantage of our many capabilities we need stronger mechanisms for commercialization. No matter how good the ideas and how dedicated the entrepreneurs, all ideas face the "Valley of Death" where good ideas fall to their doom from a lack of capital at the earliest stage of development. A critical component of the innovation ecosystem will be capital to bridge the gap between good ideas and product development.

Recommendations:

- Compete for federal R&D funds in strategic areas.
- Expand STARS Program.
- Strengthen Innovation Partnership Zones.
- Create innovation awards.
- Implement a real time Innovation Dashboard.
- Increase access to entrepreneurial capital.

Infrastructure

The State can be a leader in the design and construction of smart infrastructure that takes full advantage of communications and information technologies to perform more effectively. Smart infrastructure supports a distributed model for work, more energy efficient personal transportation systems, and high speed broadband infrastructure for a vast array of new digital applications and services, and an energy grid that is smarter, reliable and reduces carbon emissions. Smart infrastructure minimizes its environmental footprint, anticipates its lifecycle maintenance needs and remains highly flexible and adaptable so it can evolve as new energy technologies and environmental practices arise.

Recommendations:

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- Ensure infrastructure supports innovation.
- Provide smart utility services.
- Promote next generation broadband.
- Leverage transportation spending to enhance the state's economy.
- Reduce dependence on oil.
- Enhance the state's air and marine transportation facilities.
- Provide adequate tools for infrastructure funding.
- Streamline regulatory process.

Conclusion

After a century of economic experimentation, the evidence is now in: the great successes in economic development in the past decades have combined excellent education and infrastructure with an open financial and regulatory climate in which entrepreneurship thrives. This conclusion supports the Commission's vision for Washington: a diverse array of innovation ecosystems flourishing across the state. These ecosystems are based on the excellent education and infrastructure provided by state and local governments, and seeded with a steady stream of new ideas from research institutions. The targeted deployment of investment capital allows good ideas to jump across the "valley of death" and become the foundation for promising businesses.

Successful economies require strong leadership. Regions and nations that have made great economic strides have done so because their strategies and goals became embedded in their cultures and successive governments sustained investments and a favorable business climate. Washington needs to commit to making innovation a long term strategic priority through the ups and downs of the state, national and global economy. Washington has all the ingredients for a very promising future, but perhaps the most important lesson the world economy is teaching right now is that nothing can be taken for granted and success must be earned every day.

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