

EXECUTIVE SUMMARY

About this Report

Alaska's economy is challenged to provide quality jobs for the state's residents, cover the costs of government services, and build the economic infrastructure needed to be globally competitive. With support from the Denali Commission, the Alaska Partnership for Economic Development (APED) has initiated a multi-phase process to analyze the economy, create an economic development strategy and identify action initiatives to address the state's challenges.

This report is a first step in that process. It is a situational analysis that describes and analyzes the current economic development system in Alaska and the state's unique set of economic and business climate factors. Along with a suggested path forward, the report is designed to inform a next phase of collaborative formulation of practical strategic and tactical action initiatives to safeguard the future success of Alaska.

APED is a 501(c)(3) umbrella organization consisting of the 12 designated Alaska Regional Development Organizations (ARDORs). APED selected a team to undertake this report consisting of IHS Global Insight (lead consultant), the Economic Competitiveness Group, and Alaska's McDowell Group. The project's steering committee comprised representatives of the ARDORs, as well as representatives of other industry and public sector organizations, such as the State Chamber of Commerce, the University of Alaska, Western Alaska Community Development Association, Office of the Governor and the Economic Development Administration.

The research for the report was conducted from September to December 2009. The team collected and analyzed existing information and insight, conducted surveys and interviews, presented and discussed preliminary results at conferences, and engaged in a wide variety of discussions with steering committee members and other public sector and business stakeholders.

Key Findings

The economic development system in Alaska is largely ineffective both from the perspective of Alaskans as well as in comparison to best practices in other jurisdictions. A web survey of 300 business and community leaders showed that 52% of them felt that economic development efforts in Alaska have been ineffective and 61% of them felt that, at best, the outlook for Alaska's economy over the next 10 years is uncertain.

Alaskans should worry not because of any immediate economic crisis, but because of the accumulating levels of future risk and declining economic resiliency associated with:

- Poor relative economic performance compared to the rest of the country.
- A high level of dependence on the price of oil, federal government spending, and natural resource industries facing supply or regulatory/legal constraints.
- Weak linkages to rapidly expanding global market opportunities.
- Ignoring opportunities for diversification and increased resiliency by optimizing the needs and linkages within and among the state's existing portfolio of export-oriented industry "clusters."
- Weak culture of entrepreneurship.
- Sub-par support from the state's economic foundations compared to other peer states in the area of transportation and other infrastructure, quality of workforce/education, and technology.

This risk represents the basis of our call to action for a different approach to economic development. Oil prices may stay at or above current levels, significant new sources of oil and gas may be tapped, and federal government spending may keep rising. However, the probability that these events will not happen is uncomfortably high.

The path forward involves moving away from competition among industries, regions, and communities. It involves moving towards a more collaborative, state-wide approach to economic development that is focused on developing a stronger portfolio of export-oriented industry clusters. The effort should be lead by the private sector and supported by the public sector and to take a state-wide approach knowing that a stronger portfolio of industry clusters will benefit all the regions of the state.

Existing Economic Development Objectives and Strategies

The economic development system in Alaska is decentralized and fragmented with little overarching structure tying the pieces together to foster a sustainable and resilient economy for the future. Only 2.5% of the respondents to our survey felt that economic development efforts have been very effective and only 6% felt that the economic outlook over the next 10 years was very good. Interviews with economic development professionals and business leaders produced a more detailed diagnosis of the situation, but overall painted a consistent picture of generally ineffective economic development efforts and concern about the longer term outlook for the state's economy.

Past development efforts have come up short largely because of poor implementation planning and resourcing, inadequate consideration of market fundamentals, and shifting political priorities. Furthermore, it is clear that very few economic development best practices from other regions are being deployed or even tested in the state. There is no shortage of imaginative economic development ideas across the state. However, without a framework for action, these ideas are just biding their time in reports on shelves or flowing in the daily stream of ad hoc policy discussion.

While the interviews and web survey uncovered a broad range of views and insights, the following common themes were identified:

Alaska's Economic Development Organizations (EDOs) operate in an extreme environment. Alaska is a relatively new state that is remote from other business or industrial regions and has under-developed infrastructure, high energy and labor costs, and severe geographic and climate conditions.

Large-scale development of publicly owned resources has been a dominant theme in the Alaska economy. This includes seafood harvesting, mining, timber harvesting, oil exploration and, most recently, large-scale tourism. Alaska's economic development efforts have evolved, in part, around how to minimize regulatory restrictions and how to siphon off local benefits from these large, externally driven industries.

Government funding of local services, particularly rural healthcare and local and tribal government is another dominant theme. Federal funding has the greatest impact, but state employment is also very significant.

Alaska has established a workforce training infrastructure, but some question whether the types of training available are strategically targeted to support development. Although many say that consolidation of the Alaska community colleges within the University of Alaska in the 1980s was a setback to vocational education, workforce training efforts are now wide-spread. Training typically has focused on replacing imported labor with resident labor in existing industries. Critics say that training gaps include higher level technical and professional education. Other criticisms are that entry-level workers lack basic reading and math skills and what are often referred to as "soft skills" or "work ethic" by employers.¹

¹ These criticisms are typical of feedback obtained during workforce assessments and training program evaluations performed by McDowell Group.

There is a lack of state-wide planning, leadership and coordination. Although Alaska has a large number and variety of economic development entities, their focus is local or regional, rather than statewide, and this limits their effectiveness.

Alaska has a wide diversity of economic interests that must be aligned for major development efforts to succeed. For example, the large oil and gas producers and the largest seafood and shipping companies are multi-national corporations for which Alaska is only one of a portfolio of operating venues.

Within the environment described above, Alaska EDOs typically:

- Have small staffs and uncertain funding.
- Have limited established networks with other EDOs, federal and state economic development programs, businesses, or the University of Alaska. However, there has been some recent progress in this area.
- Can find themselves overwhelmed by the sheer size and number of challenges they face. For example, EDOs are largely unequipped to have an impact on natural resource development.
- Have often focused on infrastructure projects because basic issues like transportation and energy cost seem to preclude more typical business development efforts.
- Feel the State should provide more strategic direction and resources for economic development.
- Have a hard time attracting enough resources (of all kinds) to have a statewide impact.
- Have been frustrated by the financial, regulatory and practical barriers to developing projects, especially larger ones.
- Have been frustrated by what many consider an over-reliance by Alaskans in general on government, rather than business, to take the lead in economic development.
- Have had success in helping to foster workforce development programs.
- Have had some success working with the oil, mining and seafood industries (primarily) to maximize employment and other benefits to Alaskans.
- Have had limited success at fostering in-state value-added industries, either for purposes of export or for import-substitution.

In summary, the effectiveness of Alaska's EDO's is subject to six key overarching economic development issues:

1. **Need for leadership and coordination.** Lack of high-level leadership and coordination was among the most-cited challenges facing Alaska's development efforts. This leaves local, regional and statewide efforts fragmented and potentially contradictory.
2. **Need for explicit goals and strategies.** Economic development is an incremental process that requires long-term consistency and commitment.
3. **Need to integrate short-term and long-term initiatives.** Economic development is a long-term undertaking, but funding and local priorities tend to be driven by short-term needs.
4. **Challenges of geographic isolation.** EDOs have no choice but to try to address the fact that geography and climate define much of Alaska's development potential. Transportation was identified as one of the state's most significant barriers in both EDO and industry interviews.

5. **Challenges supporting and adding value to existing industries.** Import substitution, value-added processing, and support services have been widely recognized as key to Alaskans reaping more of the benefits of in-state development.
6. **Developing an institutional framework to elevate the impact of knowledge within all industries.** Alaska's next-generation economy must be one that produces and utilizes knowledge workers to facilitate growth in traditional industries and emerging industries.

Comparison with Best Economic Development Practices in Other Regions

Much can be gained by an inward analysis of Alaska's economic development system. However, a look at how other regions have tackled similar issues is also informative. From these insights and "best practices," a number of lessons for Alaska are drawn. Each should be instructive as leaders grapple with the question of how to organize for, and improve the state's economy.

In highlighting best practices, we have focused on leadership approaches, systemic changes and/or institutional efforts that were implemented in order to transform the subject region's economy. Of course, there is no single domestic or international best practice that aligns perfectly with Alaska's particular situation. But there are no doubt elements within these models that are appropriate to Alaska's particular context and the state's long-term goals.

Six regions were examined in this overview of best practices:

- Puget Sound Region—Economic development leadership and coordination
- Oregon—Explicit economic development goals and strategies
- Alberta, Canada—Integration of short- and long-term initiatives
- Chile—Addressing the challenge of geographic isolation
- Austin, Texas—Adding value to existing industries
- North Carolina—Institutional framework to elevate the impact of knowledge in its industries

Some leaders may feel that Alaska's unique history and atypical development challenges are such powerful constraints on economic development that the system and approaches that have evolved over the years are the best way forward. But the examples show that other regions having different fundamental characteristics than Alaska's have nevertheless been successful in overcoming barriers to economic development. In many instances these barriers are not so different than those faced by the state. All of the cases presented have just a few themes in common, and each theme is relevant to Alaska.

Leaders can take steps to affect the trajectory of an economy—the destiny of a state's economy is not preordained. Interventions in the status quo in the form of new public policies, bold private sector initiative, new public-private partnerships and strategic resource allocation can all affect the trajectory of an economy. The province of Alberta in Canada is a good example. The vision of a single leader in the 1970's drove new thinking in the 1980s about how to achieve a far more diverse economy. Subsequent policy initiatives launched new economic development organizations with new missions. New initiatives in education and training and in science and technology began to shift the structure of the economy in the 1990s. Analysts looking at the province's economic transformation typically note that its success relative to neighboring provinces can be attributed to successful diversification into new economic sectors that now complement resource extraction and industrial manufacturing.

Strategic planning can have a payoff—Economic analysis cannot end with a simple statement of the problems. The Situational Analysis contained in this report is meant to be a foundational document

upon which a strategic plan will be based. The situation analysis is necessary but insufficient to spark the new thinking and new behaviors that will be needed to move Alaska's economy in new directions. In every best practice case analyzed, leaders took steps to design, launch and implement a comprehensive strategic plan to guide their region's development.

Leaders in states whose economies are threatened cannot afford to be idle and wait for economic conditions to improve—Waiting for new economic conditions is not a strategy. Oil prices might go up, and that would be good. But they might, as they have in years past, go down. By their nature commodity prices will vary according to demand conditions far removed from Alaska's control. Alaska's leaders need to inform residents of the "razors edge" on which the economy rests and organize for new collective action.

Assessment of Entrepreneurship and Business Climate

Alaska doesn't appear to have a particularly good climate for business risk-taking. We are told by interviewees that Alaskans do not have a willingness for "change," "innovation" or "rejuvenation." Many informed leaders told us that Alaskans seems to have an "entitlement mentality."

Ultimately, the goal is to provide a good environment for innovation—for new companies to start-up and grow and for new thinking and new behavior within and among the state's EDOs and other development organizations. This will require a significant shift in both how leaders think about the economy and in economic policies going forward. On the other hand, if incentives in the economic system can be fundamentally altered, the entrepreneurial spirit is never lurking far below the surface, and can rise to strike at good economic opportunities and to meet new economic challenges.

The Economy

Alaska weathered the Great Recession of 2009 well compared to other parts of the U.S. economy and Alaska will be participating in the global recovery. However, from a longer term perspective there are risks and concerns that ultimately provide a rationale for a new approach to economic development to deal with potential risks and a loss of economic resiliency.

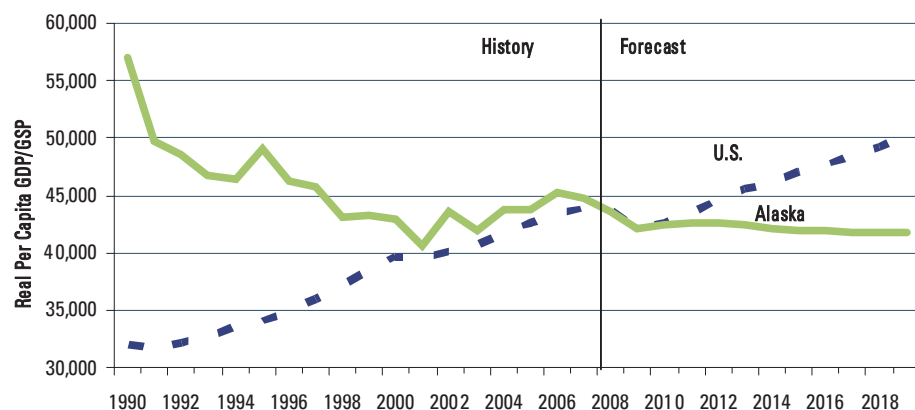
The top line view of Alaska's economy is one of stagnation and lagging economic performance in large part due to declining oil production.

Gross state product (GSP) measures the output or total value added of all industries in Alaska. By this measure, Alaska's economy has been stagnating for the past 20 years. Over the 1990 to 2020 period we expect the U.S. economy to have doubled in constant dollar terms.

Over the same period, Alaska will have barely returned to its level of total economic activity in 1990.

Overall employment in the state economy may reflect more directly how people feel about the economy's performance. The oil industry is very capital intensive, so both increases and decreases

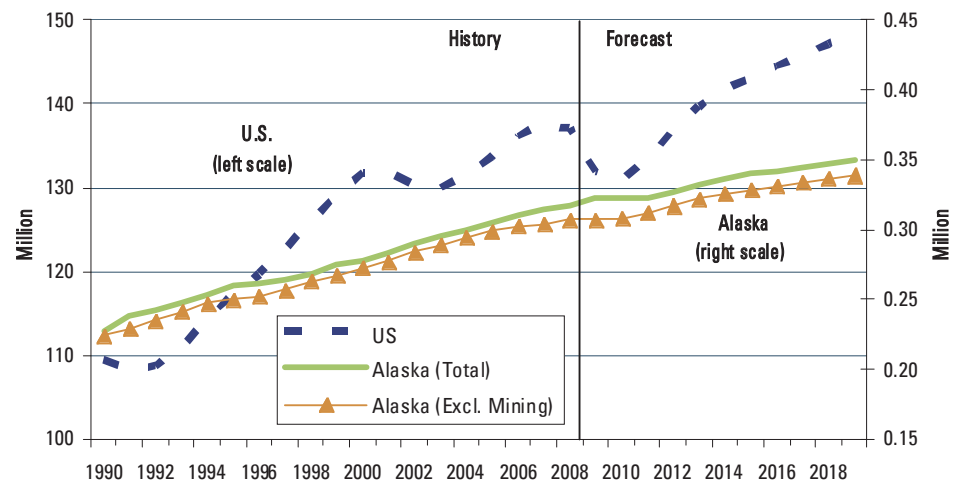
Figure 1. Twenty Years of Comparative Stagnation



Sources: BEA and IHS Global Insight

in output have a more muted impact on employment than in labor-intensive industries. Second, sectors with large numbers of workers like travel and tourism have been growing and generating jobs. Third, while prices of the state's commodities are lower than the highs of 2008, they are still at historically high levels. These high price levels are supporting income and employment across the state. In this way Alaska is doing better than the GSP data alone suggests.

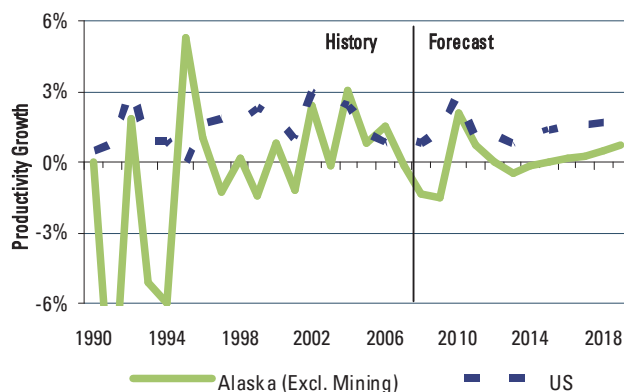
Figure 2. Steady, but Lagging, Employment Growth



It's important to notice that per capita income and non-mining labor productivity is lagging. High commodity prices are hiding structural problems and of course commodity prices can quickly become a curse when they start to fall. IHS CERA has published a number of alternative scenarios for world energy markets and not all of these scenarios envision higher prices for crude into the future. The Global Fissures Scenario has West Texas Intermediate (WTI) averaging only about \$40 per barrel. In addition there is significant risk that future cutbacks in federal government spending will have a large impact on Alaska.

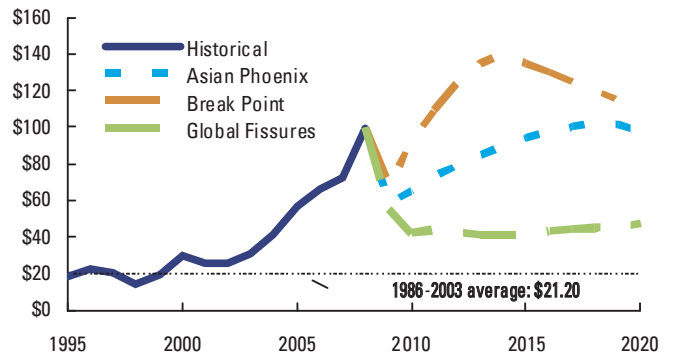
Figure 3. Future Risk: Lagging Labor Productivity and Oil Price Risk

Labor Productivity, Excluding Mining and Oil and Gas



WTI Price Scenarios to 2020

(Nominal US\$ per barrel)



Global Opportunities

There are many attractive market opportunities around the world for a resource-rich state like Alaska. However, the state is in danger of letting those opportunities go to competing regions around the world. Alaska's trade with the rest of the world expanded at a compounded annual rate of 6.2% over the period from 2000 to 2008. Most of the peer states² we selected for this study had considerably stronger export performances.

Figure 4. Export Performance of Peer States

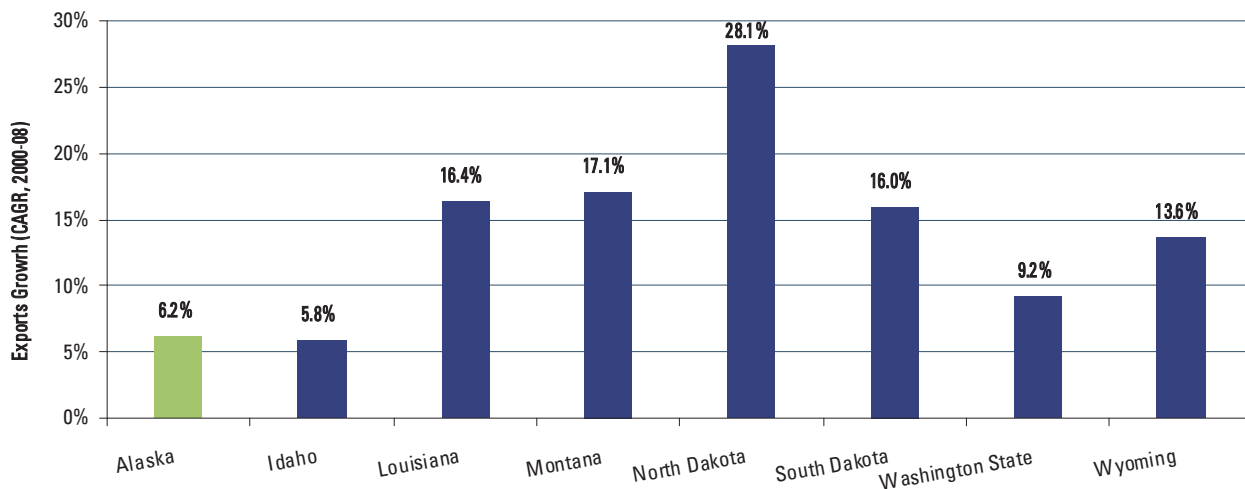


Table 1. Top-Five Exports, 2008—Alaska and Peer States

Alaska	Idaho	Louisiana	Montana
Fishing and Seafood Processing (50.6%) Mining (20.2%) Oil and Gas Extraction (8.6%) Transportation Equipment (6%) Primary Metal Manufactures (4.2%)	Computer and Electronic Products (58.6%) Processed Foods (9.3%) Chemical Manufactures (5.2%) Paper Products (4.6%) Transportation Equipments (4.4%)	Crop Production (37.7%) Petroleum and Coal Products (23.9%) Chemical Manufactures (16.9%) Processed Foods (8.9%) Machinery Manufactures (3.0%)	Chemical Manufactures (25.3%) Mining (15.8%) Machinery Manufactures (13.3%) Transportation Equipment (10.9%) Primary Metal Manufactures (8.2%)
North Dakota	South Dakota	Washington State	Wyoming
Machinery Manufactures (42.7%) Crop Production (22.1%) Transportation Equipment (8.4%) Processed Foods (7.9%) Oil and Gas Extraction (7.5%)	Computer and Electronic Products (30.7%) Processed Foods (21.0%) Machinery Manufactures (15.7%) Beverage & Tobacco Products (7.2%) Transportation Equipment (5.7%)	Transportation Equipment (41.1%) Crop Production (20.9%) Computer and Electronic Products (5.9%) Processed Foods (4.9%) Petroleum and Coal Products (4.9%)	Chemical Manufactures (73.1%) Oil & Gas Extraction (7.4%) Machinery Manufactures (6.6%) Mining (5.4%) Fabricated Metal Products (1.2%)
Note: number in parenthesis is the share in total exports Source: U.S. Census Bureau, Foreign Trade Division			

² The peer states chosen for this study include Idaho, Louisiana, Montana, North and South Dakota, Washington and Wyoming. The criterion used for selecting the peer states is explained in Economic Foundations.

There are many countries around the Pacific Rim that offer export opportunities for Alaska. However, taking advantage of these opportunities will require more of a state-wide approach to focusing on Alaska's position in the global market.

The growth prospects for Alaska's exports depend on the economic outlook for its major trading partners. These are the important end markets for Alaska's exporters. The outlook for certain industry sectors is also important.

Real GDP contracted in most of Alaska's export markets in 2009 however China and South Korea managed to avert a recession. As the world economy recovers from recession demand for Alaska's key exports will revive. The recovery patterns differ significantly across the countries. China will be leading the recovery with real GDP growth forecast of 9.8% for 2010. For Germany and Japan real GDP growth is expected to stay below 2% until 2012.

Table 2. Real Global GDP Growth
(% change)

Alaska's Trading Partners	2009	2010	2011	2012	2012	Real GDP, CAGR 2009-19
Canada	-2.6	2.2	3.4	3.6	3.2	2.7
China	8.5	9.8	8.5	8.6	8.6	8.4
Germany	-4.8	1.5	1.6	1.8	1.9	1.6
Japan	-5.3	1.4	1.3	1.9	2.3	1.5
South Korea	0.1	4.1	3.2	4.3	3.9	3.7
Belgium	-3.2	1.2	1.5	1.5	1.9	1.8
France	-2.3	1.1	1.3	1.7	2.2	1.9
Netherlands	-4.1	1.1	1.2	1.7	1.9	1.7
Portugal	-2.7	0.9	1.1	1.4	2.2	1.7
Switzerland	-1.2	1.5	1.7	1.6	1.8	1.5
Taiwan	3.8	4.4	5.7	5.3	4.7	4.3

Source: IHS Global Insight

Alaska's Clusters

The consulting team has identified 11 industry clusters that can serve as a powerful focus for a new approach to economic development. By developing strategic and tactical action initiatives on expanding and deepening the capabilities, foundations, and linkages within and among its "portfolio" of clusters, Alaska can start down the road of diversification and increased value added.

The clusters that have been identified are

- Fishing and Seafood Processing
- Oil and Gas Extraction / Pipeline / Refinery
- Military
- Mining
- Federal Government

- Tourism
- Logistics and International Trade
- Community and Social Services
- Advanced Business Services
- Specialized Machinery/Capital Goods
- Forestry and Wood Products

The clusters are grouped into four segments based on employment concentration in Alaska compared to the U.S. national average and the estimated dynamism, or growth potential over the next 10 years. This segmentation is an important consideration when formulating strategic economic development policy.

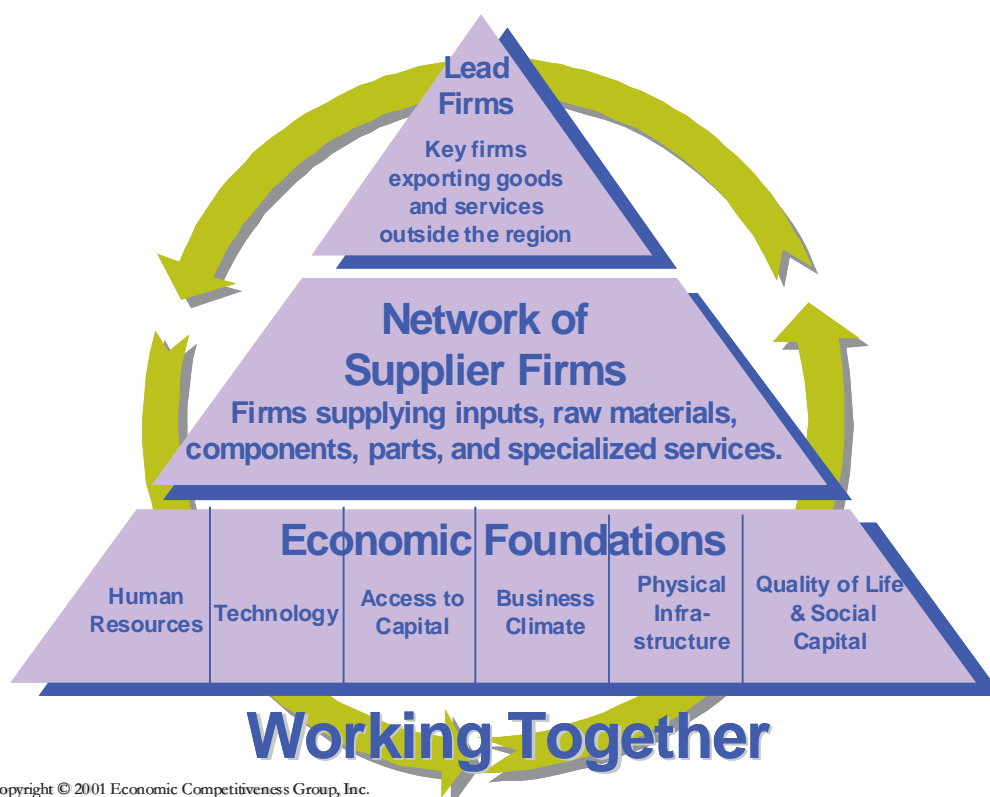
In addition, we found evidence of some unique, technology-based capabilities in the state that can serve as potential future seed clusters or assets to potentially aid the 11 identified clusters. These are: Cold climate technology, Rocket launch technology, Cold climate housing, Specialized super computing capabilities, Distance delivery – education, medical, and management services, Alternative energy and Clean-energy (bio fuels, clean coal/coal gasification, etc), Specialty solvents, Light aircraft operations and maintenance/navigation, Marine and arctic biological sciences/potential for aquaculture, Remote communications technologies/systems, Aerospace technology/operations, and Naturally grown/grazed food products.

Economic Foundations

Six key economic foundation areas underpin the development of these clusters. A strong foundation is a vital element for cluster development. Alaska's economic foundations are evaluated against a set of peer states including North and South Dakota, Louisiana, Idaho, Montana, Washington and Wyoming. The selection of these states was based on a number of factors that include: (1) population and urban orientation; (2) cluster structure; (3) economic performance; (4) strategy-oriented economic development; and (5) multi-modal transportation issues.

Underpinning every successful cluster are the economic foundations of a region as described here and shown as the base of the pyramid in the cluster diagram below.

- **Human Resources:** an educated and productive workforce.
- **Technology:** the quality of research and development and other sources of innovation.
- **Access to Capital:** the ability of firms in the region to obtain financing.
- **Business Climate:** a competitive business climate; adequate funding for necessary services.
- **Physical Infrastructure:** well-developed, cost-effective and efficient roads, highways, transit, ports, and airports that meet the transit and transportation needs of both workers and business.
- **Quality of Life and Social Capital:** The quality of life a region offers its residents is comprised of many things—many of them intangible. It also consists of what is known as "social capital"—the inter-personal and organizational networks that enhance a region's ability to facilitate transactions and investment due to trust and access to information.

Figure 5. Economic Foundations of a Cluster-Based Economic Development Framework

Relative to the peer regions, Alaska offers a low tax business environment and a high level of quality of life for those that have settled in the state. In addition, the state's workforce is relatively well-educated.

Relative weaknesses of the state are its high secondary school dropout rate and the associated need of its resident workforce for educational remediation for employment. Cluster development would benefit from a tighter linkage between education and industry so that specific occupational skills are targeted. There is also evidence of a relative lack of technological commercialization within the state. Indicators such as per-capita or per-employee R&D spending show an average level of innovative activity. Data on the number of patents registered shows challenges related to the commercialization of new technology within the state. Finally, a poor system of roads and highways is a unique challenge that Alaska faces.

Conclusion: A Path Forward

Alaska's EDOs and approaches to economic development have evolved according to the state's unique characteristics and needs. This report analyzed the current situation from several perspectives. In the first section, we looked at the array of EDOs in the state and provided an outline of their various strategies and objectives. We then looked at the strengths and weaknesses of today's organizational structure and provided comments on the main features of Alaska's approach to economic development. Our findings in these two sections came from a review of past reports as well as from input from informed leaders in interviews and surveys.

From these analyses, we developed six overarching economic development themes for continuing study. Each theme highlights a critical issue for Alaska, ranging from the need for more leadership and coordination of Alaska's economic development infrastructure, to the need for new thinking about how to add more value to Alaska's important natural resource sectors. Finally, we looked at how other

states and regions have addressed similar challenges. There are lessons here for Alaska's leaders that focus on how the state should organize its efforts and work toward a more competitive economy.

The next step in the analytical process was to understand the state and global economic challenges and opportunities and match these with our understanding of the state's clusters and economic foundations. For example, we noted in the Economic Profile section of the report that the slowdown in revenues from the natural resources sectors, notably in oil and gas, has caused real GSP to stagnate since 1998-9 when compared to the national economy. Over the last few years GSP has slipped even further behind the national average and the forecast is for this gap to widen. As a result per capita income has also slipped alarmingly. The forecast is for Alaska to fall well below the national average.

Looking Forward

Our comprehensive approach has lead us to conclude that Alaska's economic future is, at best, cloudy we have identified a few significant risks. Going forward commodity prices might work to the state's advantages and push per-capita income higher. Betting on this outcome however would be unwise. The conclusions of our economic research has been largely confirmed by our recent interviews and surveys. Informed leaders in Alaska know that the state is potentially facing serious economic challenges.

It seems that economic development efforts at the state, regional and local levels need to be stepped up however the basic organizational infrastructure and today's typical economic development objectives and strategies are less than optimal. The state's institutional capacity to address fundamental economic problems, while well intentioned and at times successful with tactical interventions, may not have evolved a shared economic vision among key stakeholders. Stronger and higher-level leadership and coordination is needed in order to make the most of efforts expended.

The area where we see opportunity is largely at the statewide level. We believe that a different overarching approach to economic development is needed, perhaps one driven by a public-private leadership group, with the public sector providing the initial funding and the private sector providing its knowledge of how markets work, where the opportunities for diversification lie and what makes an economy competitive. The approach might be based on contemporary economic development models used in other states (such as Oregon's cluster-based economic development networks or the Puget Sound region's well coordinated Prosperity Partnership and industry working groups to define needed policy initiatives).

With a different policy framework, such as a statewide cluster development and leadership and coordination towards this end, regional and local practitioners would have both an overarching policy framework and the flexibility to implement the policy as local needs dictate. A cluster policy strategy would not only outline the main implementation features and suggest tools for regional and local EDOs, but provide a way of coordinating most of the practices of regional and local economic development agencies. It is important to point out that whatever economic development model Alaska's moves toward in the future it needs to be an "Alaska Model." The state is too atypical in too many ways for a textbook approach to have the desired outcomes.

Moving Forward: Toward What Kind of Economy?

If asked, most people in Alaska would say that the state, fundamentally, has a natural resource economy, and that it always will. Our analysis suggests that Alaskans begin looking at the state's economy in a broader way, as a "*natural resources, PLUS*" economy. Oil, gas, mining, and fishing, along with tourism, will be the most important engines of economic growth for as long as one can see into the future. Economic development policy and practice must continue to focus on making the most of these sectors. But the notion of "*natural resources, PLUS*" means that in the future, Alaska will look to its natural resources as the state's primary economic engines while simultaneously developing emerging sectors (e.g., logistics and trade, advanced business services, specialized machinery) where the state has

comparative advantages. Some attention must also be paid to the pre-clusters, where much more research is needed to better define if these or other "faint signs on the radar" can, with the right policy support, be elevated from "radar blips" to something more. To a great degree, economic development efforts should be shifted from the very difficult task of trying to get more job and revenue impact from the state's natural resources sectors to trying to make the most of the PLUS side of the envisioned new economy.

The country's security equation is changing and these changes are likely to affect both the missions of Alaska's military installations as they shift to respond to changing threats as well as the role and reach of the Department of Homeland Security Coast Guard. Keeping abreast of how agency missions are changing, and are likely to change in the future as well as how federal resources will be spent on military and national security priorities should be a high priority of the state's economic development leaders. Federal funding for national security is not likely to decrease in the near- to mid-term.

Developing the PLUS side of the new economy should be a high priority of APED's Phase 2, Strategy Development. But there is little doubt that new strategies will be needed to address the state's climate for business entrepreneurship. For example, young people in Alaska should learn about small business, the pros and the cons, throughout their formal education. They should have a working knowledge of markets and how investment flows to economic opportunity.

New policies are most likely needed at University of Alaska (UA) to try to move basic research closer to commercialization and to support more applied research. The key roles that the university can play in long-term development strategies include: educating and nurturing the next generation of workers and leaders; conducting applied research that is critical to industrial innovation; engaging in transferring new technology and processes to businesses; conducting policy analysis to inform decision-makers; supporting small business development with skills and information and creating forums for networking and information exchange. To perform these roles well, universities must examine and mitigate policies, procedures and organizational structures that could interfere with their economic development functions. Furthermore they should initiate and align internal incentives so that faculty and staff work toward common development goals. This process must be led from the top and must be ongoing.

Putting in place other features in the state's economic environment should likewise be a priority. For example, Alaska doesn't need to lose its applied research investments, or its graduates to other states. Keeping both in-state might require implementing not only technology commercialization strategies but also complementary "technology capture" strategies that work to keep innovation in-state, within existing firms and in the hands of local entrepreneurs. Fledgling entrepreneurs will need help from the state's EDOs to secure financial resources and other pre-requisites for market success, suggesting in this light at least a review of small business programs and state financing programs designed to help launch small businesses. The range of potential new economic development strategies is wide and deep.

Three Strategic Thrusts

We envision three main strategic thrusts (similar to the three-legged stool³ suggested by the Institute of Social and Economic Research at the University of Alaska (UAA ISER). The first strategic thrust would be to make the most of the natural resources that have made the state what it is today. Existing priorities will need to be reviewed in the context of economic forecasts and specific tactics will need to be developed to support the strategy of making the most of the state's resource advantages. An essential element of such a strategy would be continued refinement of approaches to natural resource preservation—in which Alaska is already a leader in many respects—so that future generations also derive benefits from those resources.

³This is referenced at <http://www.alaskaseconomy.org/>.

The second strategic thrust would be to work with the federal government in strategic ways to maintain, if not grow, its presence in the state and generate all the public and private sector jobs associated with the government's priorities in Alaska that are possible. While this thrust has been a strategic priority for some time, opportunities noted earlier may exist for new or expanded military and homeland security initiatives as global security threats evolve. Even changes in polar region access can change the military and security calculus, potentially leading to new federal investment in preparedness. Again, specific program tactics will need to be developed to achieve this objective. Keeping track of these opportunities should be a heightened priority of Alaska's Congressional delegation. Put in the context of this initiative, *Alaska Forward: Towards a Next Generation Economy*, elected leaders and their staff should be encouraged to redouble efforts to get inside the decision-making processes of key federal agencies and influence decisions with an aim at securing new jobs and new investment, consistent with broad government needs.

The third strategic thrust would be to create a stronger entrepreneurial climate that is pro-small business. The suggestion is to nurture those that take the risks to create small companies and who most likely live in Alaska because they love it. These business people and entrepreneurs, while present today, are not particularly well-supported with the necessary ingredients for growth-oriented, commercial success. This area is wide open for new, contemporary initiatives designed to achieve the goal of new firms in small population centers. Books have been written on the topic, one published just a few months ago titled "Generating Local Wealth, Opportunity and Sustainability through Rural Clusters," by Stewart Rosenfeld of Regional Technology Strategies, Inc. The author is a thought leader on the topic because his work is empirical, years of study of what kinds of firms cluster in less populated regions, and why. Rosenfeld's conclusions regarding cluster development success factors in places with small populations point to the importance of certain community characteristics including social capital trust and connections to urban centers, all of which can be enhanced through policy interventions and new community and economic development practices.

Next Steps

Can Alaska make the necessary changes in policy and practice to build a more diversified and sustainable economy? This report has made the point that when faced with similar challenges, other regions have made difficult decisions and moved in new directions with new thinking, new economic development policies, and new practices.

This report concludes that Alaska's leaders need to begin to address the risk of declining economic resiliency by transitioning from today's approaches to economic development to new approaches, based in part on the best practices of other regions. Bridging from this Situational Assessment to the upcoming Phase 2 Strategy Development work should begin immediately. We recommend the process start as other regions have started their strategic planning efforts. Puget Sound's Prosperity Partnership, for example, moved quickly from its analysis of economic conditions and opportunities to form a new strategic planning-oriented "Alaska Forward Leadership Council."

This group should be comprised of leaders drawn from companies, institutions and organizations across the state. By virtue of their position and visibility, these leaders would command a degree of authority. Involving high level government leaders who have a strong incentive to address the state's economic challenges would bring resources to the effort. Having top level private sector leaders involved would help assure that market-based principles would guide new initiatives and help avoid undesirable focus on grand, "pie in the sky" efforts. Private sector leadership would also bring executive and managerial talent to the task, helping to keep the strategic planning process lean, focused and "business-like."

From this starting point, the leadership group would prepare to launch Phase 2. If the strategy development process has a significant component which is cluster-based, as we suggest, the next step would

be to select specific clusters for priority attention. All the clusters would eventually be given full attention, but the Leadership Council should not try to take on too much at once. Top-level leaders in each cluster would be identified and briefed on their role to help coordinate and lead from their cluster's perspective an 8-10 month-long cluster development strategy effort. The notion is that each cluster would generate a set of cluster-specific priorities aimed at addressing impediments to growth and development. Facilitated discussions would lead to a shared economic vision for each cluster as well as development of a number of policy initiatives, each designed to address an impediment to the cluster's growth. Each initiative would have its own business plan and an "implementation champion" (i.e., ownership) to help take the initiative forward. In addition, a limited number of cross-cutting initiatives and policy recommendations would also emerge from each cluster group, which would be integrated into the broader state-wide strategy.

With the overall plan to move from Phase 1 to Phase 2 laid out, the Leadership Council should consider launching the effort with a high visibility event, perhaps a statewide Economic Summit. Stakeholders from across the state would be invited to a day-long program, hosted by the Leadership Council who would be introduced to the assembled leaders by the chairman. Presentations of the Situation Analysis would be made with the objective of impacting how the audience hears the messages. Questions would be solicited and answers provided by knowledgeable leaders, economists, and other experts.

In this way, Alaska will have kick-started the needed transition from its current approaches to economic development to a more strategic approach, led by leaders from the private and public sector. Similar approaches have been used, in many cases repeatedly making collaborative strategic economic development planning the prevailing practice in many regions. There is no reason that Alaska's leaders can't move in similar ways, evolving a 21st century "Alaska Model" for economic development and start afresh to build a more diverse and more sustainable economy.