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WASHINGTON STATE ECONOMIC DEVELOPMENT BOARD

PREFACE

ashington Works Worldwide is the fifth and final report issued by the Washington State Economic Development Board. The report should be viewed as a summary of the entire project to develop a long-term economic development strategy for Washington State.

Readers wishing more detailed expositions of the themes contained in this report and supporting evidence for the strategy and recommendations should consult the Board's first four volumes:

Volume I (January 1987)
Washington's Challenges and Opportunities in the Global Economy

Volume II (January 1987)

The Washington State Economy:

An Assessment of Its Strengths and Weaknesses

Volume III (January 1988)

Washington's Distressed Areas:

Recommendations for Economic Recovery

Volume IV (November 1988) Citizens Choose the Future

In addition, the Board formed task forces in agriculture, forest products, education, energy, telecommunications, training and retraining, and transportation to assist it in its work to develop its strategy for Washington State. A list of the reports prepared by the task forces may be found in the Appendix.

Finally, the Board held a series of public meetings in communities throughout Washington State to develop preferred economic future visions from a regional perspective. More than 1,700 community leaders and citizens attended the meetings that took place from June 1987 to September 1988 in Aberdeen, Bellevue, Bellingham, Edmonds, Kennewick, Oak Harbor, Olympia, Port Angeles, Seattle, Spokane, Tacoma, Vancouver, Walla Walla, Wenatchee, and Yakima. In addition, the Board held a special Youth Leadership Conference in July 1988 with high school students from throughout the state who were attending the annual Washington Governor's School in Seattle. The future visions developed by the attendees at these 16 meetings formed the basis for the Board's vision for Washington State presented in this report.

SUMMAK

S U M M A R Y

he globalization of the economy has ushered in a new epoch of intense international competition. Fueled by the worldwide proliferation of education, capital, information, and the new microelectronic technologies, the new international economic competition challenges the United States, not only in international markets but also in America's domestic market. Today, the U.S. faces stiff competition in resource-based, manufacturing, and service industries from Japan, the Western European nations, and a number of newly-industrialized countries such as South Korea and Taiwan.

A combination of factors—falling world commodity prices; the rising value of the U.S. dollar; maturing foreign economies—brought the harsh realities of the new global economy to Washington State in the early 1980s. Unemployment grew, personal income declined, welfare caseloads increased—particularly in rural areas dependent upon agriculture and resource-based industries. Although Washington is recovering from the recession of 1981-82, the state needs to re-evaluate the basis of its economy if it is to be competitive in the future.

The globalization of the economy has ushered in a new epoch of intense international competition that challenges us in international and domestic markets.

The Washington State Economic Development Board was created in 1985 by the state legislature to assist in this important task. The Board was charged with creating a long-term economic development strategy.

From the beginning, the Board's aim has been a strategy that:

- achieves balanced statewide economic growth;
- creates opportunities for good-paying jobs for all Washingtonians; and
- develops an environment that increases the competitiveness of the state's businesses in the new global economy on a long-term basis.

Achievement of the Board's long-term strategy may take two decades of cooperation and collaboration among the state's institutions—between the private and public sectors, between labor and management, and between education and business. It is an ambitious strategy, not for the faint-hearted or narrow-minded. It requires Washingtonians to rethink the future.

The Board's future vision for the state is bold: a Washington that has become an international crossroads of world trade and world cultures; a Washington where globally-competitive businesses produce high value-added, high-quality, highly-innovative, and constantly-improved goods and services for the global marketplace; a Washington where well-paid workers are highly educated, multiskilled, and adaptable to the new challenges of an information-intensive, ever-changing international economy; and a Washington where the quality of life, communities, natural environment, and standard of living are known and admired throughout the world.

The Board's recommendations have three main goals:

- to maintain and enhance Washington's quality of life, its people, communities, and natural environment;
- to develop a more competitive business climate by developing the state's capital foundation and reforming its tax system and regulatory functions; and
- to create the technological, information, and physical infrastructure to assist Washington's businesses and workers to compete in the global economy.

The board believes that it is people—more so than money or machines—that drive economic development. In today's global economy, a highly-skilled workforce is the competitive edge. The Board recommends reforming educational, training, and retraining systems in the state to assist business and workers to become and remain globally competitive.

The Board believes that, while state programs must provide leadership and assistance in promoting economic development, what matters in the long run is what takes place at the local level among local entrepreneurs, officials, workers, educators, and citizens. The Board recommends building local economic development capacity throughout Washington State with major functions for local economic development councils and the ports.

The Board believes that, for the first time in the history of the industrial age, business climate and quality of life are becoming increasingly synonymous. Today, a quality environment is an economic asset. It is also an ecological necessity. If it is to err at all, economic planning should err on the side of conservation and caution. The Board recommends protecting the environment through the wise and efficient use of Washington's natural resources and a renewed commitment to stewardship for future generations.

The Board believes that innovation is also a major key to competitiveness in the global economy. Too often, however, innovative businesses, especially new and small ones, cannot obtain financing at competitive costs, over the time period needed, or in the form needed. The Board recommends creating the Washington Development Finance Authority to leverage private sector programs to fill the "capital gap" and promote innovative goods and services and technological processes in the economy through a variety of comprehensive financing vehicles.

The Board believes that Washington's current tax structure is unbalanced, unfair, and inhibits economic development. The tax system should ensure adequate public revenues and should be a neutral factor in business investment decisions. The Board recommends reforming the tax structure to make it more mainstream, more balanced, and more competitive with other states and fair to businesses and families.

The Board believes that, just as Washington's businesses and workers need to be more adaptable to changing global conditions, so too must the public sector. While regulations should protect general health, welfare, and the environment, the way they are created and implemented profoundly affects business climate. The Board recommends minimizing the cost and burden of the present regulatory labyrinth.

The Board believes that the commercialization of research and development is critical to achieving competitiveness in the global economy. The Board recommends supporting well-funded delivery mechanisms that transfer technology and new product ideas from Washington State's research institutions to business and entrepreneurs.

It is people—more so than money or machines—that drive economic development. In today's global economy, a highly-skilled workforce is the competitive edge.

The Board also believes that up-to-the-minute market information and analysis, product development and promotion, and state-of-the-art telecommunications are necessary to compete in the global economy. The state's small and medium-sized firms, in particular, require timely market information and export assistance. The Board recommends assisting these firms in this crucial area.

The Board believes that physical infrastructure—roads, bridges, ports, airports, railroads, and energy systems—underlie and support all business and commerce. The Board recommends increasing investment in Washington's ports and upgrading and maintaining the state's transportation and energy networks to accommodate growth into the 21st Century.

Finally, the Board recommends creating an independent "Council for the Future" to oversee and guide the implementation of the long-term economic development strategy.

"People who develop the habit of thinking of themselves as world citizens are fulfilling the first requirement for sanity in our time."

Norman Cousins Human Options (1981)



A Long-Term Economic Development Strategy In 1985, the legislature concluded that Washington "...does not have a long-term economic development policy and has suffered from lack of a long-term plan in its attempt to resolve the economic problems which continue to plague the state." To address this deficiency, the legislature created the Washington State Economic Development Board, a panel of 28 members from the private and public sectors, representing business, labor, education, and government.

Washingtonians need to rethink the future in new, global terms. To do this requires looking at ourselves and the economy differently.

Since the Board started its work in 1985, Washington State has made progress in its recovery from the recession that ravaged its economy in 1981 and 1982. Unemployment has dropped from 12.1 percent in 1982 to less than 7 percent today, and the state's economy has once again begun to produce employment opportunities at a rate higher than the national average. The traditional resource-based industries have taken the first steps toward competitiveness in world markets, thanks partly to restructuring and partly to devaluation of the U.S. dollar; some have even increased their employment levels. The aerospace industry and other new, high-technology industries have also benefited from the drop in the dollar and have significantly increased their workforces as demand has grown for their goods and services.

Though Washington has yet to regain the general prosperity enjoyed by its citizens in 1978 and 1979 (the best years in the state's economic history), hard work and creative measures by the public and private sectors have resulted in better times for many people.

Underlying Washington's recovery, however, are two realities that point to fundamental problems within the economy. First, the recent gains have not been shared equally by all the geographic regions of the state. And second, the gains have not been well-distributed throughout Washington's workforce.

Washington's recovery has occurred in a proportionally-small geographical area of the state. The central Puget Sound area has experienced rapid economic growth. However, much of western and eastern Washington continues to languish, experiencing declining per capita income, persistently high unemployment, increased welfare case loads, and continued out-migration. The symptoms of economic distress are still found in many Washington counties.

Recent economic gains have not been distributed equitably throughout the population. Too many Washingtonians have not participated in the



Our children are our future. The young people pictured throughout this report represent the next generation of leaders in Washington State. This report is dedicated to them.

state's overall recovery. Far too many Washingtonians live in urban pockets of distress or in economically-moribund rural areas, where resident industries and businesses have not grown or prospered. Despite the strongest economy since 1979, there are over 150,000 state residents who are unemployed. Also, despite the creation of many good-paying jobs, far too many Washingtonians are still underpaid or underemployed.

The Washington State Economic Development Board believes that these economic problems are deep-seated and resistant to short-term measures. The Board also recognizes that global realities have contributed to the economic hardship endured by many Washingtonians, just as these same global realities have spurred the growth of prosperity enjoyed by many others. Some important factors, to be sure, are beyond the control of Washingtonians—interest rates, trade practices by overseas competitors, protectionist measures imposed by the federal government, and the strength of the American dollar, to name several. But the Board believes that an appropriate long-term economic strategy, vigorously pursued by government and the private sector, will enable the state to adapt its economy to the new global realities that have so radically altered America's economic outlook during the past two decades. By adapting successfully and taking steps to cure the structural weaknesses that deny the fruits of economic growth to many of its people, the Board believes that Washington State can prosper on a long-term basis.

The Board's aim has been a strategy to achieve the following:

- achieve long-term economic growth throughout the entire state and not merely within a few geographic pockets;
- create enduring economic conditions that provide the opportunity for living-wage jobs for all Washingtonians; and
- ensure that Washington businesses are competitive in the new global economy on a long-term basis.

To achieve these strategic goals, Washingtonians must jettison the mind-set that has befallen so many Americans—a mind-set that seeks to blame overseas competitors for "unfair" trade practices or to blame the federal government for "unwise" trading policies. Such thinking misses the critical reasons why American goods and services have failed to compete in domestic and international markets. Washingtonians must also end the traditional animosity between "business" and "government," and recognize that the challenge of this age lies in mastering the dynamics of the new global economy—a challenge that demands collaboration and cooperation among the private and public sectors, labor and management, education and business.

Washingtonians need to recall what the economic theorist Jane Jacobs pointed out so well—but what is all too often forgotten: economic development is a "do-it-yourself process." What happens, for example, in Bellingham or Walla Walla, or in Longview or Colville, among local entrepreneurs,





government officials, workers, educators, and citizens is what ultimately matters. No matter how good state programs are, economic development is, in the last analysis, a process of building local capacity.

Since conditions change over time, Washingtonians need to go beyond the popular themes of the economic literature of our day. The only strategy that will work over the long term is one that is flexible. Instead of targeting specific products or industries or specific regions or populations, processes that contribute to innovation need to be targeted. Instead of targeting small or large companies, or new or mature ones, Washingtonians need to keep firmly in mind that enlarging and diversifying our economic base is what matters in the long run.

Washingtonians need to rethink the future in new, global terms. To do this requires looking at ourselves and the economy differently. The Washington State economy no longer exists in isolation; neither does the American economy. They have both been replaced by a new global economy. This new economic reality requires accepting new ways of doing business and new ways of working, a new definition of what it means to be educated people and trained workers in today's world, and measurement by world standards.

We are now part of a new global economy, one that will last for our lifetimes, at least. We must adapt to it and must learn how to be competitive within it, or we face second-class status in the world.

The new economic reality requires accepting new ways of doing business and new ways of working, a new definition of what it means to be educated people and trained workers in today's world, and measurement by world standards.

The influence of outside forces on Washington's economy are indeed daunting—foreign trade practices, a protectionist Congress, the fluctuation of the dollar—but throughout its history Washington has demonstrated a strength of character borne of its pioneer heritage and maritime tradition, a determination to control its own destiny. The Board believes that Washingtonians will never cede control of their future to outside forces, never lose their hunger to compete, to excel, to prosper. The people of Washington are ready and eager to face the global challenge, to take hold of the future and shape it according to their own needs and dreams. The long-term strategy outlined in these pages represents the path toward that goal.

DIAGNOSIS

The diagnosis leads to a vision of Washington as an important hub of world trade and cultural flow, as an international crossroads through which people and goods pass *en route* to virtually all the world's major markets. The vision embodies balanced statewide economic growth and the creation of living-wage jobs. This section includes "dateline" reports from the year 2008, which reduce the abstract vision to concrete examples of the successes to which Washingtonians can realistically aspire.

VISION

Finally, the vision gives rise to a plan of action. The recommendations contained in the plan emphasize collaboration between the public and private sectors in pursuit of three main goals: to maintain and enhance the quality of life in Washington, with measures aimed at the protection and proper use of human resources, community resources, and natural resources; to bring about a more competitive business climate by developing the state's capital foundation and reforming its tax system and regulatory functions; and to create a new developmental infrastructure to help businesses and workers succeed in the global economy.

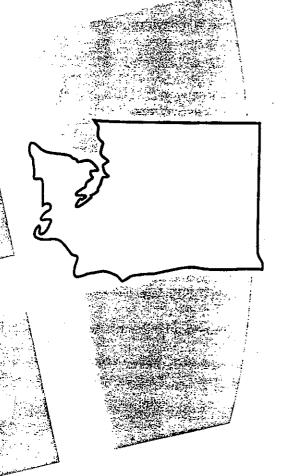
PLAN OF ACTION

"Domestic economic policies will succeed only if they strengthen, or at least do not impair, the country's international competitive position. This may be the most important—it is certainly the most striking—feature of the changed world economy."

Peter F. Drucker, "The Changed World Economy" (1986)

DIAGNOSIS

The New Global Economy



The New International Competition

he most important fact of economic life during the past 25 years has been the emerging global economy. Two phenomena have attended that emergence, both defining and driving it, and each has posed a difficult challenge to America's economic institutions and dreams.

The first of these is an intense international economic competition that began in the 1960s. In the two decades following World War II, Japan and Western Europe mustered the public and private capital needed to rebuild their economies. During the next decade, they gained access to state-of-the-art technology, scientific education, and management training that enabled them to mount a competitive challenge to the United States, not only in international markets but also in America's domestic market. Simultaneously, a number of less-developed countries began to modernize and position themselves for entry into the competition.

The second phenomenon was the development of new microelectronic technologies that dramatically altered the production of goods and services. As computer technology began to be applied throughout the world's economies, it directly challenged the industrial basis of advanced economies. It called into question how business was conducted, how firms were organized, and how workers performed their jobs.

Both the new economic competition and the new microelectronic technology would alter the balance of economic power in the world. A new era had begun, one which would dramatically affect the lives of all Americans.

The New Economic Reality

The United States emerged from World War II with virtually no economic scars, unlike most other combatant-nations, whose economies suffered near-total devastation. At war's end, the U.S. possessed the world's premier economy and the world's largest domestic market. During the early post-war years, few goods of foreign manufacture entered the U.S., and only a tiny percentage of American goods found markets overseas.

As late as 1960, scarcely a fifth of all American-made products competed directly with foreign-made goods. By 1980, however, nearly three-fourths of American-made goods faced an aggressive challenge from foreign competition in domestic and international markets.

As late as 1970, the United States exported only 9 percent of the goods it produced and imported only 9 percent of the goods sold within its borders. During the following decade, exports rose to 19 percent, and sales of imported goods reached 22 percent of all goods sold to American consumers.

Since the early 1960s, American exports and imports have doubled as a percentage of the gross national product (GNP), which is a clear indication that America has entered a new era—one with rules very different from those of the previous era. Long-dominant American industries have seen their shares of the domestic market plummet. The makers of steel, automobiles, and machine tools—once the titans of industrial America—have lost much of

the domestic market to foreign producers. In international markets, too, Americans have suffered great setbacks at the hands of fiercely-competitive foreign manufacturers, which the bloated U.S. trade deficit clearly confirms. For a time, Americans managed to stave off the competition and retain markets in agricultural and nonfarm, resource-based goods; but by the mid-1980s, the U.S. was losing business even in these once-secure domains. Today, all industries—resource-based, manufacturing, high-technology, and services—face increased competition. Despite the drop in value of the U.S. dollar and a slightly improved trade balance since 1985, these manifestations of the new global economy show no signs of receding.

The Challenge of the Newly-Industrialized Countries

A striking feature of the new global economy is the rapid transformation of once economically-backward nations into serious competitors in international markets. Within the past decade, many newly-industrialized countries (NICs) have moved from producing simple goods such as clothing and textiles to capital-intensive goods such as steel. Within an even shorter period, many have moved into still more complex goods such as automobiles and sophisticated electronics. The "Four Tigers of Asia"—South Korea, Taiwan, Hong Kong, and Singapore—are perhaps the most notable NICs, but the category includes such countries as Brazil and India.

The NICs enjoy distinct advantages in making and marketing the low-cost, high-volume standardized goods that were once the exclusive province of Western Europe, North America, and Japan. Among these advantages are the recent liberalization of international trade, access to raw materials, 24-hour capital markets, easy availability of innovative technologies, untapped domestic markets, and comparatively-low wage levels. Mass production of standardized products will likely never again occur in the developed nations.

The new international competition and the new microelectronic technologies have altered the balance of economic power in the world.

The economic success of the NICs has brought widespread technological progress to the developing world, as well as vast improvements of domestic infrastructures. These improvements, in turn, have resulted in massive increases in agricultural production. Many nations have become self-sufficient in basic foodstuffs; some are now even agricultural exporters. Since the mid-1970s, world agricultural production has increased by more than a third, and nonfarm commodities have increased 20-30 percent. Markets for America's agricultural and resource-based exports have seriously eroded.



The Response of the Developed Countries

In today's world, technology and capital are easily exported to the makers of low-cost, high-volume standardized products, with the result that developed nations no longer enjoy overwhelming advantages in access to these two important resources. Unable to match the low wage rates of the NICs in the mass production of such products, the developed nations have faced the need to reorient their industries and work forces in order to produce entirely different types of products.

Led by Japan and Western Europe, the developed economies have shifted to the manufacture and delivery of more complex goods and services. Making and marketing these new products require highly-skilled and flexible work forces, the application of new technologies, and the reorganization of the production process.

Throughout the developed world, structural changes have occurred in the way firms produce goods and services. The products of today utilize vastly-improved materials and designs; they are "information-intensive" rather than "energy-intensive" or "materials-intensive." The processes utilized to turn out the new products rely not on the rigid, single-purpose or "dedicated" technologies of old, but rather on multi-use, programmable automation. Today's worker is not the traditional low-skilled laborer who knows only one task, but rather a highly-skilled and adaptable individual who is knowledgeable about the entire production process, a worker who can perform multiple tasks.

To a large extent, Japan and Western Europe have been successful in this transformation. The result is that they have largely abandoned the production of high-volume, low-cost standardized products to the NICs and increasingly concentrate on high-quality, highly-innovative, and constantly-changing specialized goods and services for niche markets worldwide.

As with the new challenges posed by the NICs, the dramatic changes in the world's developed economies have posed a significant challenge for the U.S. economy, its industries, and its workforce.

To understand why, we must turn to our past.



The world's individual economies have become interrelated, interdependent, and integrated. National markets have become international ones, inasmuch as nearly every "home" market is now an arena for competition from manufacturers and suppliers who reside outside the borders of the home country. In a real sense, the entire globe has become a single marketplace in which money and technology flow freely across national borders.

The ideal location for a firm that does business in the global marketplace is equidistant from the three largest segments of the market—the United States, Japan, and the European Economic Community. Washington State is that location.

The following facts illustrate and prove both the challenge and the opportunity posed to Washington by the new global economy:

- The combined gross national products of the United States, Japan, and the European Economic Community represent nearly half the total GNP of the entire world.
- The United States, Japan, and the European Economic Community produce and consume 85-95 percent of all the world's high value-added manufactured goods.
- Eighty-five percent of all patents are filed in Japan, the United States, France, West Germany, and Great Britain.
- In today's global economy, product design occurs in one country, engineering in another, and assembly in yet another; sales of that product occur worldwide.
- National Semiconductor's microchips are designed in California, fabricated in Scotland, and assembled in East Asia.
- Factories in the United States assemble Nissan, Honda, and Volkswagen cars.
- Boeing has 4,000 suppliers in 38 countries.
- Multinational companies based in Japan, Western Europe, and the United States have teamed up with distant competitors.
- Chrysler and Mitsubishi have joined forces to produce autos.
- AT&T has joined forces with Olivetti and Phillips in Europe and with Toshiba in Japan.
- Allis-Chalmers and Fiat have exchanged 10 percent stock ownership.
- Weyerhaeuser has joined the Bank of Tokyo in a venture to produce veneer in Aberdeen, Washington.
- PACCAR has joined a truck-building venture in Brazil.
- More than 50 percent of Boeing sales are outside the U.S.
- In a recent year, Japanese firms broke ground for 50 new plants in the United States.
- American firms have invested more than \$60 billion in overseas factories.

The Integrated World Economy

The New Production Technologies



The Industrial Era

The Industrial Revolution began in Great Britain but matured in America. By 1870, America had overtaken Great Britain to become the world's premier industrialized society, thanks to abundant natural resources, unlimited low-cost energy, and a seemingly endless supply of cheap immigrant labor. American industrialists achieved preeminence by perfecting and utilizing "economies of scale"—high-volume, low-cost production that featured standardization throughout the production process. Responding to a large and ever-growing domestic market, they turned out goods in a torrential stream, built bigger and bigger factories, consumed ever greater supplies of raw materials and energy. They used stable technology and employed low-skilled, easily-replaceable labor.

Though the business organization of American enterprise evolved over time, the basic industrial model endured. This basic model, after all, had proved itself admirably in the minds of most Americans. Since the Industrial Revolution, the American economy had achieved unparalleled production, consumption, and prosperity. American industrial output had been the single most potent factor in winning two world wars. That the other industrialized nations looked to the American model for guidance was no surprise, because Americans were simply the world's best in the industrial era. American industry wore the mantle of leader and guide well into the 1950s.

The Information Era

Just when the "American Century" seemed destined to become the "American Millennium," a new revolution took hold and gathered strength, one that transformed industrial economies across the face of the globe. Microelectronics and programmable automation found wide application in the production process. The semiconductor, the computer, the robot, and innovative combinations of these technologies dramatically changed the way goods and services were produced.

Machines that could perform only one function quickly became obsolete. The traditional dedicated automation, though ideally suited to the old model based on economies of scale, was both costly and time-consuming to modify and lost ground to the new automation of the Information Age. Computer-aided design (CAD) and computer-integrated manufacturing (ClM), on the other hand, proved well-suited to the needs of the new markets. Programmable automation shortened production runs and lowered the cost of producing high-quality products (even one-of-a-kind items), freeing capital to fuel continuous innovation.

In a short period of time, advancements in technology have led to today's knowledge-intensive economies in which information is central. All industries, not just high-technology ones, have benefited from these advances. Applying the new technologies to either product, process, or service has led to new market offerings, clearly unique and innovative on a global basis.

In *The Next American Frontier*, Robert Reich declares that the competitive edge among the developed economies will go to the makers of precision products that are customized and technology-driven, those that can be made only by highly-skilled labor and with advanced technology. The setting for the production of these products, says Reich, is highly integrated; that is, all facets of the production process—development, design, manufacturing, marketing, and distribution—are merged.

This new model of production on which competitiveness depends is called "flexible specialization."

Flexible Specialization

Flexible specialization is more than the application of new technology. It is a model in which the production process is information-intensive rather than materials-intensive or energy-intensive. Instead of emphasizing capital, it emphasizes the organization of production, relying on smaller plants, more efficient supplier networks and production-sharing—all in stark contrast to the vertically integrated, self-contained model of the industrial era. It demands a thorough reorganization of the workforce. Workers themselves must be highly-skilled and capable of understanding all aspects of the production process in order to effect continuous incremental improvements in both process and product.

The competitive edge among the developed economies will go to the makers of customized precision products made by highly-skilled labor.

The new model also demands a new type of management—less hierarchical, more "hands-on," and collaborative. It calls for firms with fewer layers of management, guaranteeing that the various aspects of production—development, design, manufacturing, marketing, and distribution—proceed simultaneously and not sequentially. This feature eliminates the waste of precious time and resources that the old model institutionalized by delaying work on one aspect of production until work was finished on another. It also insists on a new philosophy of labor-management relations, substituting a "partnership for productivity" in place of the old adversarial relationship between labor and management. In short, the new model represents a totally-reformed industrial culture.

Of all the developed economies, the United States, best at the old industrial model, has been the slowest to adopt the new model of production and transform its economy. We have wasted much valuable time blaming external or internal villains, and we have spent many years trying to rationalize away our poor performance. It is now imperative that we come to terms with the real causes for our economic difficulties.



The Age of Information

In *The Next Economy*, Paul Hawken offers a useful definition of a key component of the new global economy. "Information," writes Hawken, is "design, utility, and durability or, to put it another way, the application of knowledge of how to best make or accomplish something." The goal, he says, is "to produce more using less."

The following facts illustrate the changes and realities imposed by the new model of production that characterizes today's global economy:

- Today's industrial products require only 40 percent of the raw materials needed in 1900.
- Fifty to 100 pounds of fiberglass cable can transmit as many messages as a ton of copper, using only 5-10 percent as much energy.
- While aluminum has largely replaced traditional materials like iron and steel for many purposes, even newer materials like plastics and ceramics are now replacing aluminum.
- A 1976 Chevrolet Caprice Classic weighed 4,424 pounds; a 1986 Chevrolet Caprice Classic weighed 3,564 pounds, or 860 pounds less.
- During the decade between 1975 and 1985, the average weight of American-made automobiles fell from 1,727 kilograms to 1,450 kilograms.
- The radial tire is more durable than the old bias-ply tire and uses less material, thanks to improved design.
- New products such as pharmaceuticals and semiconductors are knowledge-intensive and have a low-materials content from the beginning.
- A quarter of a century ago, 54 percent of the employees who worked for John Fluke Manufacturing Company in Everett, Washington, worked directly in manufacturing; today the total is 28 percent. The firm predicts that within the next 20 years, the total will be half what it is today.
- Developed economies today produce more goods with fewer people. In 1947, the share of the American work force in manufacturing was 28 percent. By 1983, that figure had dropped to 19.5 percent.
- The United States is not deindustrializing. Total volume of manufacturing has increased every year since 1947 and has remained relatively unchanged as a percent of the total economy—roughly 23 to 24 percent.
- Today, the contest is not "goods versus services." Americans now produce "service goods," adding value to goods by tailoring them to specific customer needs.
- Manufacturing still matters. The economy that loses manufacturing eventually loses the services associated with it.

DIAGNOSE

The Evolution of an Economy

From territorial days to the present, Washington's economy has been largely resource-based. Felling timber, mining metals, harvesting crops, and fishing were the economic mainstays during much of the first century of Washington's history. Maritime trading grew steadily as demand rose throughout the rest of the country for the products of the state's resource-based industries, and itself became a mainstay. Trade became even more important as inland transportation facilities improved, as Washington ports received goods and shipped them to land-locked markets throughout the country. These ports also became important jumping-off points for American exports.

World War II brought major changes to the Washington State economy. Almost overnight, the federal government added a major manufacturing sector to the state economy. By 1945, the successful national war effort had poured \$8-10 billion into the state economy and added aerospace, aluminum, electronics, and shipbuilding industries to the economic base. Greatly-expanded secondary retail and service sectors accompanied this dramatic change.

Today, Washington is in the midst of a third dramatic change due to the impact of the new global economy. While foreign competition began to make itself felt in the rest of the U.S. in the 1970s, Washington's mix of resource-based and technology products—typical of the western states—seemed, at first, immune to its influences. In the early 1980s, however, a combination of factors—the decline of world commodity prices, the rising value of the U.S. dollar, and the maturation of foreign competition—brought the harsh realities of the new global economy home to Washington State and to the entire American West.

The "Two Washingtons"

Today, six years after the 1981-82 recession, the economic picture is mixed.

On the one hand, employment growth is strong, and unemployment has declined significantly statewide. Traditional industries have restructured and have attained new levels of productivity. Exports are up, due largely to the decline in the U.S. dollar. The service sector is growing rapidly, with export-oriented producer services a significant part of this phenomenon.

On the other hand, employment growth has not translated into income gains. Wages and salaries per employee have declined. While other components of personal income (interest, dividends, rents, and transfer payments) have risen, wages and salaries per employee have fallen by 5.5 percent since 1979. Virtually every sector of the economy has been affected by this downward trend.

Rural areas that rely on resource-based industries continue to suffer most. As resident industries were forced to restructure in order to remain competitive on a global basis, they reduced their work forces. Unemployment has

The Washington State Economy



skyrocketed, and personal income has declined; welfare caseloads have increased, and people have moved away. At the height of the recession crisis, 21 of Washington's counties met the qualifications for classification as "distressed"—i.e., their unemployment rates were at least 20 percent above the statewide average for three consecutive years. Today, many of these same counties have still not recovered.

Elsewhere in Washington, employment has grown at an impressive rate. But the gains have been confined to the central Puget Sound region, which accounted for 98 percent of all new jobs in the state between 1982 and 1986.

A long-term economic development strategy must be based upon a clear and specific vision of what Washingtonians want the future to be and a consensus of how to get there.

Yet, even in the areas that experience growth, the picture is spotty. "Pockets of distress" dot the landscape. Despite the significant drop in unemployment since the recession, there are still 150,000 Washingtonians unemployed. In addition, the fastest growing areas of employment—services and retail trade—are, on the whole, relatively low-paying sectors. Though these sectors have brought both higher- and lower-wage jobs into the economy, on the whole, their growth has translated into lower average wages.

The term "two Washingtons" is not a cliche; it is economic reality.

The Future Agenda

The agenda that addresses the present economic problems and prepares the state for long-term competition in the global economy is one and the same.

A long-term economic development strategy must be based upon a clear and specific vision of what Washingtonians want the future to be and a consensus of how to get there.



DIAGNOSIS

Since territorial days, trade has been vitally important to Washington. Over the past two decades, trade has grown dramatically and has become the engine of growth of Washington's economy. The value of Washington's imports and exports has risen faster than its gross state product. Washington State has the most trade-dependent economy in the United States.

The following facts illustrate the critical importance of foreign trade to Washington's economy—past, present, and future:

- In Washington State, trade has risen from \$3.1 billion in 1971 to \$46.5 billion in 1987.
- In 1987, exports through Washington were \$17 billion; imports through Washington were \$30 billion.
- Between 1963 and 1985, Washington's foreign exports grew at an average rate of 7.7 percent, compared to the national average of 5.3 percent.
- With 1.8 percent of the national population, Washington State accounts for nearly 4 percent of all American exports.
- Washington State ranks first in the nation in per capita income earned through foreign exports (\$2,352), more than twice the national average (\$1,100).
- One in six Washingtonians owes his or her employment to international trade.
- Washington ranks sixth among all states in the export of manufactured products to foreign countries, and fourteenth in the foreign export of agricultural commodities.
- In 1982, for the first time in history, the volume of American products that crossed the Pacific Ocean exceeded the volume that crossed the Atlantic Ocean.
- The Pacific Rim is home to eight of Washington State's ten biggest trading partners.
- In 1987, nearly 70 percent of Washington's recorded trade was with countries in East Asia—a total of \$32.7 billion.
- Washington State's top trading partner is Japan, which in 1987 accounted for \$5 billion in exports from Washington and \$13.5 billion in imports through Washington's ports.
- In 1985, Washington exported all of its wheat, 94 percent of its logs, and 54 percent of its aerospace products to Asia.
- In 1987, Sea-Tac Airport handled more than \$2.5 billion in international air freight; 60 percent of the volume went to, or came from, Europe.
- The central Puget Sound area accounts for 68 percent of Washington's exports, while other western Washington counties account for 16 percent. Eastern Washington also accounts for 16 percent.
- Six hundred foreign corporations have invested over \$3 billion in the state and directly employ 35,000 people.

The Trading State

"Our vision is bold: a Washington State that has become an international crossroads of world trade and world cultures. Our vision is attainable: to create globally-competitive industries, balanced statewide economic growth, and living-wage jobs for all Washingtonians."

Washington State
Economic Development Board (1988)

VISION

A Crossroads of World Trade and World Cultures



n defining its vision for the state's economy, the Washington Stat Economic Development Board did not attempt to predict the future. Rather, the Board sought to establish realistic goals that are attainable through an appropriate strategy, together with an idea of the benefits that are possible by reaching those goals. This section includes "dateline" reports that help imagine the vision—glimpses of Washington's future from the perspective of writers and analysts in the year 2008. The first concerns the state as a whole, but subsequent reports deal with specific communities, regions, and industries—as they could be two decades from now.

Dateline: Washington State—January 2, 2008 The Washington Crossroads

Located at the geographical intersection of routes to the world's three largest markets, Washington State has become a crossroads of international trade.

Each day, an abundance of commercial goods flows through the state's ports and airports to and from the United States, the Asia-Pacific region, and the European Economic Community. Washington State's own high-quality products comprise a sizable share of the trade—commodities and goods shipped by air or sea and highly innovative services transmitted via a state-of-the-art telecommunications network. As one of the American West's two major gateways to the Asia-Pacific region, Washington has enjoyed one of the world's fastest economic growth rates over the past two decades.

More than 50 nations operate consulates in the state. Because the metropolitan areas are centers of trade and investment, businesses from every corner of the globe have established headquarters in Washington cities, giving an international atmosphere to the entire state. Known worldwide for its understanding of how the global economy operates, and no less for its hospitality to visitors of all cultures, Washington State regularly hosts international meetings on such diverse topics as world trade, health, and the environment.

World class tourist facilities have made Washington a prime international tourist destination, while the fabled Northwest lifestyle—complemented by



the cultural amenities of its cities and towns—has made the state a highly desirable place in which to live and work. The education system is widely recognized for its exacting standards, world-class graduates, and internationalized curriculum. Computer proficiency is a requirement for graduation and a major reason why so many international businesses place a premium on people trained and educated in Washington.

The Board's vision: the state's workforce is its competitive edge. Skilled in the very latest technologies, adaptable, and flexible, Washington's workforce has proved itself able to thrive in the ever-changing conditions of the global marketplace. Investors throughout the world have recognized this edge and have invested heavily in Washington's economy.

The state's workforce is its competitive edge. Skilled in the very latest technologies, adaptable, and flexible, Washington's workforce has proved itself able to thrive in the ever-changing conditions of the global marketplace. Investors throughout the world have recognized this edge and have invested heavily in Washington's economy. During the past decade alone, Washington-based joint-ventures among Asian, European, and American firms have increased tenfold.

Washington State has led the way in reforming labor-management relations, overcoming the labor problems that plagued America throughout so much of the 20th Century. While the work force has become more capable and highly-skilled, management has become more collaborative and "hands-on." Managers and business leaders have recognized workers as a valuable resource and not a cost to be cut. Profit-sharing plans and worker-owned enterprises abound throughout the state.

Other factors, too, have contributed to the success story. Washington's research institutions have become world models, owing to their continuous innovation and ability to solve problems in the rapid commercialization of new products and technological processes. During the past two decades, Washington's academic community has aggressively pursued both pure research and applied science, serving as a clearinghouse for innovative technology and knowledge needed by the state's businesses.

Credit must also go to the diverse cadre of firms that have provided the seed capital and venture capital to finance so many innovative businesses over the past 20 years. Washington business people take pride in stressing the ready availability of financing for good ideas in their state.

During the last decade of the 20th Century and the first eight years of th 21st, Washington's traditional agricultural and resource-based industries have revamped their operations to produce high value-added products for markets throughout the world. The newer high-technology and biotechnology industries have achieved world leadership by producing widely-diverse goods and services during the same period. The number of small firms that produce goods and services for export has risen 500 percent over the last two decades. The combined effect has brought prosperity to areas of the state that were economically depressed in the 1980s, where employment opportunities now rise annually.

While the trend throughout most of Washington State has been economic diversification, several regions of the state have gained international recognition for the production of specific goods and services. Seattle is a center of "producer services" for the western United States. The central Puget Sound area is known for its aerospace, computer software, health care, and clothing design industries. Snohomish County has become an international biotechnology center and a leading exporter of electronic measuring and testing instruments. The Pacific Coast region is a center of value-added forest products. The Aberdeen-Raymond area competes with Scandinavia in the production of high-quality furniture.

The Board's vision: located at the geographical intersection of routes to the world's three largest markets — the U.S., the Asia-Pacific region, and the European Economic Community — Washington State has become an international crossroads of world trade.

Southwest Washington is home to a prosperous industry that produces new high-strength industrial metals and nonferrous ceramics, while the vast agricultural lands of central Washington produce specialty foods for export. The new international freight airport at Moses Lake is one of the busiest in the American West. Northwest Washington has a flourishing aquaculture industry that ships its highly-prized products to five continents. The Tri-Cities area of Richland, Pasco, and Kennewick supports thriving energy research and waste-disposal technology enterprises and regularly hosts international conferences for scientists and engineers in these fields.

The list goes on, attesting to the fact that Washington's economy is fully-diversified and internationally competitive. Worthy of special notice, however, is Spokane, which has become the hub of the Inland Northwest. With its



new international airport and its resident producer services industry, Spokane serves as a gateway to the world for eastern Washington and large areas of Idaho, Montana, British Columbia, and Alberta.

A major factor in Washington's rise to international prominence has been a network of state government agencies, ports, and local development councils. In partnership with the private sector, this network provides direct support to

The Board's vision: a major factor in Washington's rise to international prominence has been a network of state government agencies, ports, and local economic development councils. In partnership with the private sector, this network provides direct support to innovative local enterprises.

innovative local enterprises in the production of goods and services, as well as up-to-the-minute information about global markets. Washington-based businesses have made excellent use of these services, and business people rount the public-private partnership among the reasons the state has largely achieved the goals it set two decades ago—globally-competitive industry, balanced statewide growth, and living-wage jobs for all Washingtonians.



Globally-Competitive Businesses

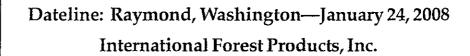
Adding Value to Washington Products

What would an economic analyst say about Washington's economy 20 years from now? The Washington State Economic Development Board hopes that its vision of the future becomes reality, and that an observer in the year 2008 would see things the following way:

Washington's businesses and firms have become, for the most part, high value-added enterprises that are competitive in the global economy. The traditional resource-based industries have automated, and they have reorganized their production processes while retraining and expanding their work forces. These measures have enabled the resource-based industries to maintain their role as important contributors to the state's economy.

Many new small, innovative firms have appeared, specializing in high-quality products to sell in "niche" markets throughout the world. Many have joined manufacturing networks for mutual benefit.

The following "dateline" report is a realistic glimpse forward in time, a look at a company that exemplifies the challenge and the success of global competitiveness.



International Forest Products, Inc. (IFP) resides in the heart of western Washington's timber country. Its managers and employees are too busy filling orders to ponder the fact that IFP is a shining example of how Washington's forest products industry has reorganized and diversified. If asked, though, they'll tell you that their industry has moved into a wide variety of secondary products—no longer limiting itself to primary products like lumber and plywood. This flexibility, they'll say with pride, is the reason they have good-paying jobs today. By emphasizing design and engineering of new products like distinctive furniture, wall systems, and flooring systems, IFP has achieved a solid foothold in markets throughout the world.

A host of new wood products companies has sprung up throughout the region during the past two decades, most employing fewer than 50 people. Like IFP, they use advanced technology to add value to primary wood products and sophisticated marketing techniques to sell those products around the world. With help from the University of Washington's Center for



International Trade in Forest Products (CINTRAFOR), the new companies frequently shift their production efforts according to international market demand.

To enhance profitability, IFP and other small companies in southwest Washington have formed a manufacturing network through which they share support services such as accounting, payroll, marketing, and new technology. Member companies often team up to produce a specific product in response to a hot demand that has emerged somewhere in the world. By teaming up, they keep production costs low; and with shrewd marketing help from the network, they maximize their return.

The Board's vision: many new small, innovative firms have appeared, specializing in high-quality products to sell in "niche" markets throughout the world.

Some of the new wood-working technology that the network finds so useful is developed locally. In the Tacoma area, for example, a firm has adapted radio-frequency laminating to laminate furniture squares of alder, a Washington-grown hardwood used by several network members to make furniture and household items. International markets change rapidly, requiring new manufacturing machinery that uses microelectronic components. Local firms now design and fabricate this sophisticated new machinery and supply it to local manufacturers who, in turn, use it to produce value-added wood products. A major spin-off of the new forest products industry is one that designs and produces wood-machining technology, incorporating computer-aided manufacturing (CAM) and other microelectronic applications.

The success of IFP and similar small, innovative companies has bolstered employment throughout western Washington and stimulated business in general. Young people no longer seek to leave the area. Instead, they are finding attractive career paths into the new enterprises through vocational-technical training centers and community colleges. Many have gone on to form their own companies. Much has changed in a short 20 years.



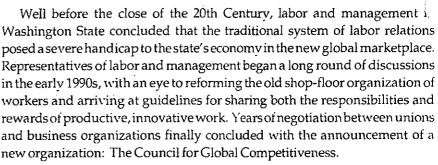
Improving Partnerships for Growth

The Board's vision extends to the realm of relationships. If the vision materializes, this is what an observer would see 20 years from now:

New partnerships among the institutions of Washington State have created productive, profitable relationships. The prospects of long-term economic growth become brighter as these partnerships proliferate among the public and private sectors, education and business, labor and management.

The following "dateline" report looks ahead to the year 2008 for clues about how to assist the process of forming these "partnerships for growth," and what to expect from them.

Dateline: Seattle, Washington—March 12, 2008 The Council for Global Competitiveness



The Council's chief tasks, said labor and management in a joint statement, are to oversee all contract negotiations in order to ensure that contracts meet the agreed-upon guidelines and to adjudicate all labor disputes.

Today, labor and management agree on the need for competitive business and industry in Washington, and, equally important, they agree on what constitutes fairness in the labor-management relationship. Labor has receded from its traditional insistence on strict job classifications and work rules, in favor of a more flexible system that allows tasks to be performed when and where needs arise. Management has discarded its long-held view of labor as a cost to be cut, and now sees workers in the same way it sees executives—as assets that generate both innovation and profit.

Other traditional assumptions have also fallen away. Management has recognized that those who are closest to the production process are best able to recommend and make on-the-spot changes for better, more competitive



products. Thus, management has granted much greater decision-making authority to the work force. The organizational structure of companies has become far less hierarchical, and managers have become far more collaborative.

Old beliefs about rewards have fallen away. These days, workers share not only in the responsibilities, but also in the profits of firms through employee stock option programs (ESOPs) and year-end productivity profits. Such programs were once rarities, but today they exist throughout the industries and businesses of Washington State.

The Board's vision: long-term economic growth becomes brighter as new partnerships proliferate among the public and private sectors, education and business, labor and management.

Worker-owned enterprises also abound, many of which have received financing through the Council's Fund for the Future. Made up of worker pension funds and corporate contributions, the Fund lends money to worker-owned businesses and helps them obtain seed capital and venture capital from banks and other lending enterprises, as well as start-up management assistance from the business community. Thanks in large part to the Council for Global Competitiveness, old labor-management animosities are virtually extinct in Washington.



Marketing Washington State to the World

Networking is a vital aspect of the Board's vision of Washington's future—not a single, all-encompassing network, but many smaller ones that are flexible and highly specialized. If the vision comes to pass, an observer in the year 2008 would offer the following remarks about the effects of networks on the marketing of Washington State:

Washington's businesses export their goods and services worldwide. They are active participants in the global economy. Thousands of innovative small and medium-sized firms have joined Washington's large firms as exporters.

State government is an active participant in international trade. The state's Economic Development Cabinet has taken a leadership role in mobilizing the resources of state government to promote Washington and its products to the world. Other state agencies, local economic development councils, and private business organizations are also active in the cause, promoting not only Washington's goods and services but the entire state as an international tourist destination.

The Association of Washington Ports has formed a federation through which its members have strengthened their international trading capacities and marketed the region's products worldwide. The following "dateline" report examines the new federation.

Dateline: Olympia, Washington—March 13, 2008 The Federation of Washington Ports

The movement to establish a federation of Washington ports began in the late 1990s and culminated in formation of an entity that functions in every respect as an international trading company. The present Federation of Washington Ports is a full-capacity network that has maintained individual port authority while pooling its members' bonding capacities and international marketing capabilities.

In order to facilitate its marketing efforts and gather worldwide market intelligence, the Federation and state government have set up offices around the world—in Tokyo, Bangkok, Stuttgart, Moscow, and other trading centers. Making full use of Washington's state-of-the-art telecommunications system, the network gathers timely intelligence on markets, technologies, and the commercial requirements of foreign governments; it uses that information to hone its competitive strategy in the ever-changing global marketplace.

VISION

Within the borders of Washington State the Solection works on a contract basis with local economic development, countries and a contract basis with local economic development, countries and a contract basis with local economic development, countries are also global markets for small and medium-sized businesses. Among the withable services the Federation provides are market identification, export financing, freight-forwarding, letters of credit, it solected and the role, a sistance—along with the full spectrum of help that washin, con becomesses need to succeed in today's ultra-competitive global environment.

The Federation also puts together experiments to package and premote new Washington-based ventures to foreign in several. The advictional figured

The Board's vision: Washin, wondered in the eformed a federation through which its members have surjugitured their international trading capacities and marketed the region's products worldwide

prominently in the dramatic rise in foreign investment in Washington businesses (from \$4 billion in 1990 to \$25 billion today). The marrier of foreign companies in the state is now 3,500—up from 650 just 18 years ago.

The Federation of Washington Ports can lake much chedic for the real in Washington's trade over the same period —from 550 absolution—by to more han 5175 billion over the past two decades. Thanks in large part to its aggressive marketing program, the percentage of exports produced within the state and the Pacific Northwest has the reproceed within cooperation with the Economic Development Cabit to the provides the state with full-time trade representation in Washington, D.C. and at the offices of the General Agreement on Trade and Tariffs (CATT). It has also taken the lead in linking together the Pacific Northwest states and verter that are the lead in linking together the Pacific Northwest states and verter our Capacital provinces into a regional trade and economic development betwork.



Balanced Statewide Economic Growth

Targeting Development Processes

State government must play an expanded role in economic development, the Board believes. In order to facilitate the innovation and institutional reform examined earlier, state government must assume the roles of catalyst and broker in order to assist private enterprise. The imperative of government is not to plan economic activity, but rather to promote the processes of development: to assist existing businesses; to promote the creation of new businesses; to promote the availability of capital; to promote development and use of new technology; to promote the reorganization of enterprises in order to transform local economies into winners in the game of global commerce.

The following "dateline" report articulates the Board's vision with respect to that role.

Dateline: Spokane, Washington—May 1, 2008 Northwest Biotech, Inc.

In 2007, *Inc. Magazine's* list of the nation's 500 fastest-growing companies included 35 firms based in Washington State. One of these was Northwest Biotech of Spokane, which manufactures industrial enzymes for export throughout the world.

Five years ago, Northwest Biotech was a mere dream to researchers Joseph Dorigo and Louise Trent, both of whom worked for the state's largest biotech firm at the time. In 2003, however, they left their jobs, pooled their savings and their dreams, and took a proposal to the Spokane Area Economic Development Council (EDC). They needed help in finding additional capital to finance the start-up of their new firm.

The EDC evaluated Dorigo's and Trent's business plan and its long-term prospects, decided it was worthy, and found a local venture-capital firm that was willing to provide 30 percent of the additional money needed. Their next stop was the state Department of Trade and Economic Development, which runs a venture-capital network. The network located five individual investors willing to put up 10 percent each, or half the needed amount.

Having found four-fifths of the additional money required to start the enterprise, Dorigo and Trent visited Pacific Ventures, an investment firm that handles state pension funds, and received a commitment for yet another 10 percent. The final 10-percent share came from a foreign source, a venture firm in Fukuoka, Japan.

The Spokane EDC then steered Dorigo and Trent to the Spokane Exchange, which was converted to a small issues stock exchange from a commodities exchange in 1993. Regional sale of Northwest Biotech stock to investors generated the long-term investment capital needed to assure the new firm's enduring success. More help came from the Federation of Washington Ports, which evaluated the marketability of Northwest Biotech's product and engaged its sophisticated marketing apparatus to sell it worldwide. The Federation also took care of the foreign licensing requirements.

The Board's vision: government does not plane conomic activity, but rather promotes the processes of development to transform local economies into winners in global commerce.

The Northwest Biotech story proves that good things come from good ideas, but it also proves that good ideas need help to become reality. Fortunately for Dorigo and Trent, and for their many employees, that help is available in Washington State.



Building Local Capacity

The Board envisions a state government that is committed to building the capacity of local communities in order to achieve local economic development. This means cooperation and partnerships with local institutions: the governments of counties, cities and towns; Chambers of Commerce; economic development councils; ports; local businesspeople, educators, workers and bankers.

In addition, twenty years from now, an observer will note that local taxing authorities have greatly assisted the economic renaissance that has swept the state of Washington.

The following "dateline" report examines a concrete example of how local people, with help from statewide institutions, can take hold of their destiny and transform their community.

Dateline: Goldendale, Washington—June 24, 2008 Small Town Renaissance

Goldendale, a small town in Klickitat County, is a good example of the economic renaissance that has swept the communities of the Evergreen State. Where people—particularly young people—once left to seek their economic fortunes elsewhere, residents have been joined by many new arrivals.

Goldendale's comeback began with a plan conceived and coordinated by the local economic development council, a plan aimed at retaining existing industry while diversifying the local economic base. The planners envisioned their town as a center for tourism, senior retirement communities, and the manufacture and export of new industrial materials.

State agencies helped with all aspects of the effort. The Employment Security Department helped retrain the local workforce for new industries, and the Department of Trade and Economic Development provided international marketing information as well as analysis and export assistance. The state university system provided technology research and new product development services.

As the plan unfolded, the local aluminum manufacturer saw that its own interests converged with those of the rest of the community. In the past, Goldendale's resident aluminum plant, under contract with ore producers, had converted ore concentrates to aluminum ingots for remanufacture elsewhere. In order to mesh with the town's overall economic development plan,



the company formed a subsidiary to make aluminum castings for the aerospace industry. During the early 1990s, a new aluminum casting process similar in principle to the "lost wax" process used by sculptors—became the basis of the new subsidiary casting company which, in turn, stimulated the incubation of several specialty machine shops that use computerized numerical controls (CNC) to refine the castings for markets in the aerospace industry.

The Board's vision: state government assists in building the capacity of local communities to achieve local economic development.

The current phase of the economic development plan calls for yet another manufacturing element in the cause to diversify—a carbon fiber molding plant. Having foreseen the day when new nonmetals would replace aluminum in aerospace and other applications, the aluminum company cooperated in research and development aimed at establishing a local carbon fiber parts producer.

Tourism and retirement facilities figured jointly into Goldendale's plans to diversify the economic base, so the town entered into a contract with the state tourism division, which helped establish a program to bring older people on ours of the area. The tour packages included visits to a new, self-contained retirement community, which was part of the original diversification plan. The state's Department of Community Development helped local real estate developers raise the capital to build the retirement community, which is a model by any standard. The two-stage tourism effort has succeeded not only in increasing tourism, but has also helped publicize Goldendale as a highly-desirable place to live, work, invest, and retire.

Goldendale's economic renaissance continues, as it does in many communities throughout Washington, fueled by the creative dreams and energies of local people, helped on its way by public and private institutions statewide.



Fostering Innovation and Entrepreneurship

Twenty years from now, according to the Board's vision, economic analysts will report that entrepreneurship is alive and well in Washington. The only entrepreneurship that will flourish and succeed, however, will be the kind that is both innovative and responsive to the realities of global markets and competition. Traditional industries will adjust their approach to production, marketing, and innovation, as revealed in the following "dateline" report.

Dateline: Yakima, Washington—July 7, 2008 Integrated Agriculture, Inc.

Integrated Agriculture, Inc. (IAI) is the brainchild of Peter Hernandez and brothers George and John Alkins, all Yakima-area farmers. For years, the three had suffered the frustration of being unable to make good farming decisions because of their reliance on others to process and market their products. Having earlier considered and rejected the idea of forming a cooperative, Hernandez and the Alkins brothers decided to establish a forprofit corporation, IAI, an idea that appealed to the other area farmers who bought stock in the enterprise.

The company's key element is its marketing department. The three founders knew that they needed the best available marketing information in order to make good decisions on crop-planting. They also knew that success depends on quick response to market demands for new or different agricultural products. Getting usable market information requires the kind of close contact with buyers that only a marketing company can establish. But control over processing the raw product is also vital in order to take advantage of fast-breaking openings in the domestic market and in the Pacific Rim. Hence, IAI is truly "integrated." It grows farm produce, processes it, and markets the value-added products.

Rapid response to introduction of new products and processes was essential to IAI's long-term success. The company worked closely with a council comprising experts from the state Department of Agriculture and from Washington State University's International Marketing Program for Agricultural Commodities and Trade (IMPACT) on commercialization of research and development activities. Because the company's management has stressed new products, its investor-farmers now exercise a high degree of crop differentiation, and the company prospers by continuously adjusting its processing operation to turn out products needed by fast-breaking, short-lived markets.



Traditional crop cycles often leave processing facilities idle for extended periods. In order to keep its plants running, IAI has encouraged local farmers and its suppliers in Idaho, Montana, and Canada to grow the new "temperature-resistant" crops that biogenetic companies have developed. Harvest of these crops can occur in time segments that allow IAI's processing facilities to operate for longer periods.

Early in its corporate history, IAI found that local farmers were either unable or unwilling to invest in the specialized machinery needed to plant and harvest the specialized crops demanded by the markets of the new global economy. When experiments with shared machinery failed, the company bought its own equipment and set up a program that allows farmers to lease it. The program has succeeded, and local farmers now grow crops that they might have been reluctant to grow before, using machinery leased from IAI. Fabrication of this highly-specialized machinery has itself become a local industry, and, in some cases, IAI owns patents jointly with local manufacturers.

The Board's vision: entrepreneurship is alive and well in Washington. It is innovative and responsive to the ever-changing demands of the global marketplace.

The strategy of IAI is to grow crops, process them into a wide array of products, package them, and market them in the Pacific Rim and throughout the United States. For more than a decade, IAI has proven that the agriculturalist can make intelligent and profitable farming decisions by participating in the marketing process and in the value-added phase of the production chain.

Living-Wage Jobs



Educating for Competency

The Board's vision for Washington includes an education system admired worldwide for its high-quality curriculum, the innovativeness of its teachers, and the caliber of its graduates. A glimpse into the future reveals that all students, grades K through 12, receive instruction in the "core competencies" needed to prepare them for citizenship and careers. Graduates enter the workforce with a readiness to become the multiskilled and flexible workers that Washington's economy must have in order to compete successfully in the global economy. Washington students will be unique, in fact, because of their internationalized education and basic computer proficiency before graduation from high school.

The following "dateline" report examines this aspect of the vision more closely.

Dateline: Bellingham, Washington—July 9, 2008 Cascades Elementary School

"School was never like this!" exclaimed a visiting parent of one of the 435 children at Bellingham's Cascades Elementary School. And she was right, of course. The learning environment here is nothing like the environment in elementary schools a generation ago.

At Cascades Elementary, children learn the "core competencies" from the very beginning, starting with basic literacy and numeracy—reading, writing, and computing, in other words. The goal is to develop those intellectual skills needed to be lifelong learners, since anyone who stops learning becomes inflexible and incapable of adapting to the changing demands of today's ultracompetitive world. From the first day of classes at Cascades Elementary, the emphasis is on rigorous thinking and reasoning, analysis and synthesis, calculating and measuring.

As the education process continues, students receive a thorough grounding in the values and institutions of the society and economy. They learn "citizenship skills." And yes, even here in elementary school they embark on courses in basic science and technology, as well as the arts and humanities. As in every other school in Washington State, each student has his or her own personal computer, and within a short period of time he or she knows how to use it.

The curriculum includes instruction about good work habits, teamwork, and personal responsibility. Students learn cooperative problem-solving and

self-reliance, how to challenge assumptions and take risks. They learn how to be dependable and resilient, how to persevere in seeking solutions. Embedded in the curriculum is the goal of imparting the attitudes for productive work in this age, along with a desire to become a highly-skilled and flexible member of the workforce.

The Board's vision: all graduates of Washington's schools enter the workforce with the preparation to become the multiskilled and flexible workers needed to compete in the global economy.

Instruction here is individualized. The system measures progress not by issuing "grades," but through periodic testing for the core competencies. Students learn at their own speed via a range of teaching methods—lectures, discussions, and self-study using individualized computer programs. Naturally, the school boasts telecommunications links to instructional data bases throughout the world.

Visitors often remark about the extent to which the curriculum is internationalized. The students learn about foreign cultures through the study of the history, culture, geography, politics, and economics of other countries. The tudents at Cascades Elementary focus on the Pacific Rim. All begin study of a second language during the first year, and a large percentage choose Chinese, Japanese, or Korean, planning to participate in an exchange program that Washington's high schools maintain with secondary schools throughout East Asia.

At day's end, the Cascades Elementary School falls quiet, but not for long. Evening classes in adult literacy soon get under way, as do the lifelong learning classes. The building is actually in use all day long and year-round, for neighborhood preschool sessions, summer academics, and a host of specialty courses.

That's life at Cascades Elementary School in Bellingham, Washington. And you're absolutely right, Mom: School was never like this!



Training and Retraining for Lifelong Learning

The Board envisions greatly expanded training and retraining programs to impart the skills and knowledge that workers need in the ever-changing global economy. The programs would receive financial support from state government and from employers and employees. Legislation would empower the state Employment Security Department to authorize use of unemployment benefits to pay for training, if the job for which the participant is training meets the following test: It is a job in an industry that the Department expects will increase employment during the following five years.

The following "dateline" report explores this aspect of the vision more fully.

Dateline: Walla Walla, Washington—Sept. 4, 2008 The Weston Family

For the Weston family, the state's job training and retraining programs are not mere abstractions, not mere vehicles to subsistence survival; they are hope and the promise of fulfillment, a chance to prosper in these ever-changing times.

Ann Weston is a full-time computer design specialist, and is presently the only one of the three-member family who is employed. The two other members—husband Paul and son Mike—are participating in training and retraining programs.

Paul Weston worked 15 years for an agricultural implement manufacturer. Last year, the company introduced new technology into its production process, making Paul's job unnecessary. Fortunately, he had invested in an individual training account (ITA) while employed, so his termination was not a disaster—he had money to help pay for training in a new career. His former employer had also contributed to a fund that helps pay for retraining displaced workers, earning state tax credits in the process, so Paul was not out in the cold. Today, he is hard at work in the retraining program, looking forward to graduation and a new job.

After graduating from high school, Mike Weston held different jobs, none of which seemed very promising to him. Today, he attends the local community college and participates in a training program that is a joint venture of industry and education. The program uses local support money, community college instructors, and equipment contributed by companies in



the industry for which the students are training. Since state government has projected a 10 percent increase in that industry's workforce over the next year, Mike expects to land a job with one of the program's contributing companies after graduation. This particular training program, like many others before it, materialized after the Employment Security Department issued the data it had collected on employers' present and future needs.

The Board's vision: greatly expanded training and retraining programs exist throughout Washington to impart the skills and knowledge that workers need in the ever-changing global economy.

Mike survives on his unemployment benefits and supports his young daughter from a former marriage with child-care assistance. His parents provide a roof and meals for him and his daughter while he is busy with his training. All things considered, the future looks bright for the Westons, thanks to their own foresight and the vision of the educators, industrialists, and state government officials who joined forces to meet the need for training and retraining. For the Westons, that vision means more than mere survival. It means the prospect of prosperity and a fulfilling life as productive citizens of e new economy.



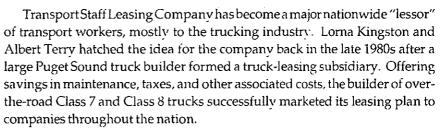
Developing with Equity

Throughout the narratives and visionary examples presented thus far, the term innovation has occurred repeatedly. If Washington State is to have an economic renaissance over the next 20 years, as the Board believes possible, innovation will be chief among the forces that drive that renaissance.

The fruits of innovation will be especially apparent in those urban areas that were previously designated "low income." As will happen in rural areas of the state, revitalization will occur as a function of building local capacity, of channeling the energies of local people toward expanding their economic activities.

The following "dateline" report looks ahead 20 years to the experience of one company that innovated its way to success, both for itself and the local community in which it resides.

Dateline: Tacoma, Washington—December 15, 2008 Transport Staff Leasing Company



Kingston and Terry reasoned that the same principle would work for a business that provided qualified over-the-road drivers, and formed TSL as a minority business enterprise under section 8a of the Small Business Act. They approached the managers of the new truck-leasing subsidiary and persuaded them that a leasing plan to provide drivers made as much sense as one that provided trucks. The truck-leasing executives agreed to include TSL's marketing materials with their own company's, thus offering prospective clients a complete leasing package that included both trucks and drivers.

Having put this hurdle behind them, Kingston and Terry undertook to solve an even bigger problem—obtaining qualified people with competitive salaries and benefit packages. They consulted with state government and the local vocational technical center to devise a public-private training program. The truck-leasing company furnished previously-owned trucks, and training



soon got under way. Before long, TSL boasted a steady supply of qualified drivers who were available for assignment to leasing clients.

The Board's vision: revitalization will occur as a function of building local capacity, of channeling the energies of local people toward expanding their economic activities.

Over the years, the U.S. Department of Transportation tightened its regulations concerning the maximum amount of time truck drivers can spend on the road during any one period. Trucking companies throughout the nation felt the impact of the reduced maximums and became prospective lessees of TSL's drivers. Moreover, TSL's ability to provide drivers at many locations nationwide has proven to be a major competitive advantage that has served the company well.

The Board believes that its vision is possible to achieve. It can only become reality, however, if Washingtonians have the political will to make it happen.

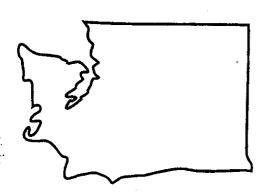
What follows are the Board's recommendations, which, if implemented over the next two decades, can provide the tools and the capacity to make the vision a reality throughout Washington State.

"The most sensible kind of economic strategy is like using a compass to point direction rather than wandering aimlessly over uncharted territory or, at the other extreme, following a detailed map that is well out of date."

Committee for Economic Development Leadership for Dynamic State Economies (1986)

PLAN OF ACTION

The Trading State



he era of mass production, stable markets, and slow-moving tech nology has slipped into America's past, along with unchallenged domination of the world economy. To survive and prosper amid today's feverish competition and rapidly evolving markets, America should heed the good sense that Robert Reich offers in *Tales of a New America*:

In this integrated world economy, Americans must live by their wits. If they hope to command a premium wage, their labor must generate more value. They must produce goods that continuously embody new innovations that workers in less complex and more distant economic systems cannot easily or quickly match.

The Washington State Economic Development Board has taken this advice to heart in devising a strategy for Washington State. And, in accordance with the legislature's charge, the Board has fashioned a plan consistent with the preservation of Washington's environment and quality of life. Most Washington residents, after all, live in the state by choice. They place immeasurable value on the physical beauty of the Pacific Northwest and the cultural amenities of Washington's communities. These values define Washingtonians and give meaning to the spirit of their society and region.

In its search for cures to economic ills, the Board has not forgotten the fundamental reasons why people choose to live and work in Washington. Neither has the Board forgotten that economic development is a means to an end, to a higher quality of life, and not an end unto itself. Degradation of the environment is not only inconsistent with pursuit of that goal, but also contrary to the values of modern Washington.

Fortunately, for the first time since the dawn of the industrial age, the requirements of a good business climate and a high quality of life are increasingly becoming the same. Economist David Birch says that the successful businesses of today are shifting their focus from simply cutting costs to improving the quality of their products. High-quality and highly-innovative products demand better-educated and trained workforces. Higher-skilled workforces, in turn, demand high-quality living environments.

What is now needed is a fresh understanding of Washington's economic imperative within the context of the global economy. That understanding can lead to a recognition of converging interests, to new partnerships among state and local governments, the public and private sectors, labor and management, education and business. Understanding can lead to coordinated action unhindered by past animosities and mistrust.

The people of Washington must put aside old controversies—east versus west, urban versus rural—over economic themes. Washingtonians must form a consensus in support of an aggressive response to the challenge facing them and must move beyond partisan politics to a common search for economic solutions. Washingtonians must cooperate and collaborate with one another if they hope to regain their economic strength. Otherwise, the children of today will be the first generation to enter adulthood with a standard of living lower than their parents'. The actions of the present will determine whether our children can realistically hope to attain, much less surpass, that standard.

Human Resources

In the new global economy, the advantage for developed countries lies in the production of products and processes that are high quality, highly innovative, and constantly changing. But products and processes rely on people, the most important element of any economy. It is people—more so than money or machines—that drive economic growth. Today's market environment demands a workforce that is highly educated and multiskilled, one that is flexible and adaptable to rapidly changing needs and technology.

The state must close the gap between present-day job skills and those skills needed to compete and prosper in the new global economy. Wide-ranging and comprehensive changes must occur in education, training, and retraining in order to produce a work force that can be measured by world standards.

Long-Term Goal for Washington State

 $To \, create \, a \, work force \, that \, will \, give \, Washington \, State \, a \, competitive \, edge \, in \, the \, new \, global \, economy.$

Develop a Highly-Educated, Multiskilled, and Flexible Workforce

The Board recommends instituting a core competencies curriculum for grades K-12. This curriculum should impart the new knowledge, high-level skills, and cooperative attitudes that competition in the global economy requires.

Core competencies should include, but not be limited to, the following:

- Basic literacy and numeracy needed by all citizens—that is, the abilities to read, write, and compute;
- Critical intellectual skills required for lifelong learning—to think and reason, to analyze and synthesize, to calculate and measure;
- Communication skills—oral, written, and listening—necessary for the transmission of knowledge;
- Basic citizenship knowledge, together with understanding of our society's values, institutions, and economy;
- Basic knowledge of the sciences and modern technological processes;
- Proficiency with calculators and computers prior to graduation from high school;
- An appreciation of the arts and humanities and their central role in society;
- Basic attitudes needed in a highly-competitive workplace—good work habits, an appreciation of teamwork and personal responsibility, cooperative problem-solving and self-reliance; knowledge of how to resolve conflicts and challenge assumptions; knowledge of how to take risks, be resilient, and to persevere in a constant search for solutions.

Maintain and Enhance the Quality of Life

Recommendation

In addition, the curriculum should include participation by all students in community projects, beginning in the early grades.

The Board recommends individualizing the K-12 curriculum in public schools to allow students to learn at their own speeds. To accomplish this, the Board recommends using a variety of teaching methods, including lectures, discussions, and self-study through the use of individualized computer programs.

The Board recommends that students be evaluated by comprehensive periodic testing, and that students be graduated from high school only after they have passed tests for achievement of the core competencies.

The Board recommends providing a personal computer for every teacher and student in grades K-12. The Board also recommends creating telecommunications capabilities to link individual schools to computerized education programs and data bases worldwide.

The Board recommends internationalizing the public school curriculum in grades K-12 to include mandatory study of foreign cultures and their history, geography, politics, and economies. Every student should be required to learn a language other than his or her native tongue and to achieve proficiency in reading, writing, and speaking that language before graduation from high school.

The Board recommends immediate increased attention to and funding for international education and language training at the university and college level to enhance the state's ability to be competitive in the new global economy.

The Board recommends instituting a core competencies curriculum for grades K-12 that imparts the new knowledge, high-level skills, and cooperative attitudes that competition in the global economy requires.

The Board recommends creating a committee of curriculum advisors comprised of educators and employers to oversee establishment of the K-12 core competencies curriculum. The committee should ensure that the curriculum accurately addresses marketplace changes and developments on a continuous basis.

The Board recommends increased training for teachers of grades K-12 to improve not only their academic knowledge but also their familiarity with new teaching discoveries and methods, curriculum designs, educational technology, and methods to help train teachers to assist parents in helping their children to learn.



The Board recommends raising the starting pay of teaching professionals a grades K-12 to match the salary levels of private industry. The Board believes that this measure will attract and retain high-quality teachers in the profession.

The Board recommends basing the salaries of all K-12 teachers and administrators on performance criteria to ensure that schools turn outstudents who are competent citizens and who can function effectively in the new economy.

The Board recommends expanding publicly-supported preschool programs for disadvantaged children to ensure that all students arrive at grade school similarly prepared to learn.

The Board recommends internationalizing the public school curriculum in grades K-12 to include mandatory study of foreign cultures and their history, geography, politics, and economies. Every student should be required to learn a language.

The Board recommends increasing parental involvement while expandg the range of experimentation and diversity in Washington's schools by instituting a system allowing parents to send their children to the public school of their choice.

The Board recommends expanding the role of community colleges and vocational-technical schools in training and retraining the present and future workforce. The focus of that role should be in areas on the cutting-edge of economic development—international trade, entrepreneurship, office and production technologies, health care, and tourism, among others.

The Board recommends implementing uniform statewide vocationalcounseling guidelines in the state's education and training systems. Moreover, the Board believes that the education and training systems need more counseling resources, as do local employment security offices.

The Board recommends establishing strong partnership agreements between the public and private sectors to maintain communication and cooperation among employers, trainers, educators, and workers. The partnerships should ensure that education and training match employer demands and needs.



The Board recommends funding retraining programs in Washington State that will provide an incentive to encourage workers to avail themselves of training and encourage employers to participate. Viewed from both the short-term and long-term perspectives, the plans could have the following features.

Short-term plans could include:

- The offset of a portion of the current employer unemployment tax for providing assistance with retraining and reemployment.
- An arrangement in which education and industry share equipment, space, and instructors for retraining programs.
- A state general fund appropriation to support the plans. Long-term plans could include:

Worker contributions through payroll deductions.

- Modification of income-maintenance programs to expand training options and employment opportunities.
- Tax credits and other incentives to encourage investment by employers in continuing education, training, and child care.
- Modification of the education funding process to allow more flexibility.

The Board believes that state government should focus attention on the needs of the current workforce to avoid dislocation and, until such time as sufficient funding is available, give priority in its targeting of training resources to disadvantaged urban and distressed rural populations to facilitate their full participation in the labor force. Such training programs should be congruent with the Family Independence Program and provide necessary support services.

The Board recommends that the state take a leadership role in helping individuals, employers, and both public and private providers find solutions to the problems of day-care for children. Safe, affordable, and available day care has become a major issue for workers in this age, owing to sweeping changes in demographics and economic conditions that call for working mothers and two-income families. Solutions should include tax measures to offset day care costs for parents and employers. Government should minimize regulatory and licensing requirements for day-care centers, maintaining only those rules that are necessary to ensure a safe, healthy, and nurturing atmosphere for children. Policy should strive to support the survival of independent, private child care providers.

The Board recommends that Washington's business, education, and political leadership take steps to achieve appropriate levels of workplace literacy and numeracy in the workforce with a commitment to the elimination of illiteracy in the state by the year 2008.



Higher Education

The new global economy imposes new roles for universities in economic development. Intense foreign competition and focus on global markets requires knowledge of the world and other cultures and languages. Rapid technological change requires increased research and the commercialization of research and development. Rapidly changing skills require lifelong learning opportunities for the state's workforce.

In its first report, Washington's Challenges and Opportunities in the Global Economy (January 1987), the Board acknowledged the critical importance of higher education to Washington's economic competitiveness. Specifically, the Board recommended increased funding for university and college instruction, equipment, and support services.

Since publication of our first report, the Higher Education Coordinating Board has developed and published a comprehensive strategy for improving higher education in Washington State. Citizens are directed to the report, Building a System: The Washington State Master Plan for Higher Education, for specific recommendations.

The Washington State Economic Development Board has, therefore, limited its recommendations regarding higher education to increased support for international education and language training at the university and college level (see page 46) and to modifying the evaluation and rewards system to allow and encourage greater faculty involvement in technology commercialization and in economic and community development (see page 60).



Community Resources

State programs do much to promote economic development, but in the final analysis, economic development is primarily a local phenomenon. What matters in the long run are actions taken in cities and towns. Growth occurs when local citizens are energized to pursue local goals, when hometown business people, government officials, workers, educators, and bankers work together to improve the economic life of their particular community. Although state government must play an important leadership role in program development and assistance, its best contribution lies in helping and encouraging Washingtonians to think globally while acting locally.

In the final analysis, economic development is primarily a local phenomenon. What matters in the long run are actions taken in cities and towns among business people, government officials, workers, educators, and bankers.

Such help is needed in new business formation, management systems, capital formation, procurement of new technologies, and exporting. Local economic development councils can coordinate these important endeavors at the local level. In addition, the Board envisions a new and expanded role for the state's ports in funding local economic development councils.

Long-Term Goal for Washington State

To create the processes and systems that can offer coordinated and comprehensive economic development help to local businesses and entrepreneurs.

Recommendation

Build Local Capacity

The Board recommends centralizing the coordination of local economic efforts in the local economic development councils. The Board also recommends two measures to strengthen the local councils. For the short term, the Board recommends increasing the maximum amount of matching grants for each local council to \$100,000 a year for three years with maximum local discretionary authority for the use of these funds. For the long term, the Board recommends expanding the role of local ports in funding and participating in local economic development councils. The taxing authority of local ports should be increased, with the additional amount earmarked specifically for the local economic development councils.

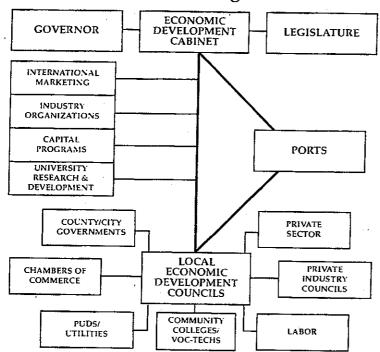
The Board recommends that the Washington Public Ports Association become a Federation of Washington Ports in order to provide a single network to market the services of all Washington's ports to the rest of the world and assist Washington businesses to export. The Federation would also provide a pooled bonding capacity for appropriate investments. Though the Federation would promote cooperation among ports, it would still allow each port district to retain its sovereignty.

The Board recommends that the Federation, in cooperation with state government, establish trade offices where needed throughout the world and maintain full-time trade representatives in Washington, D.C. and at the offices of the General Agreement on Tariffs and Trade (GATT). The Federation and state government should also take the lead in seeking cooperation and participation from other Pacific Northwest states and Canadian provinces to create a regional economic development and trade network.

The Board recommends increased decision-making authority for local governments in deciding how to structure themselves and in deciding which services their communities want and need. Local governments should have authority to determine how to provide services and who should provide them. The Board also believes that local governments should be able to determine how to tax their citizens in order to furnish essential services and promote economic growth.



Team Washington



Natural Resources

In the new global economy, a quality environment is as much an economic asset as an ecological necessity. But the Board strongly believes that Washington's physical environment is incalculably valuable in its own right. The present-day problems of hazardous and toxic waste clearly prove that economic planning should err on the side of conservation and caution, if it is to err at all.

Long-Term Goal for Washington State

To direct the wise and efficient use of Washington State's natural resources without endangering the physical environment.

Protect the Morthwest Environment

The Board recommends an annual study and report on the quality of Washington's air, water, and land resources. The report should assess the state's progress in mitigating the threats to all aspects of its natural environment and wildlife.

The Board recommends development of a comprehensive land-use plan for Washington, involving participation of federal, state, and local jurisdictions. The plan should provide guidelines that are reliable, predictable, and

The present-day problems of hazardous and toxic waste clearly prove that economic planning should err on the side of conservation and caution, if it is to err at all.

balanced, and should serve as a basis for intelligent decisions by government and business on such issues as the preservation of community character and cultural heritage. The plan should also assist decision-makers in setting policy on the use of agricultural, forest, and recreational lands.

The Board recommends the development of a comprehensive forest resource information plan, including the establishment of a task force to study long-term timber supply in all ownership classifications. The task force should also carry out an ongoing, comprehensive review of planned timber harvest yields, with attention to the impact of timber supply requirements on land-use planning as well as the projected effects on future environmental impact statements. The task force should report to the people of Washington State on the costs—both to the public sector and the private sector—of regulation and planning.

Recommendation

The Board recommends formation of a statewide mediation service to help resolve disputes over natural resources and development in a timely way. Use of the service should be voluntary. The Board recommends aggressive marketing of the service as a means to avoid and resolve disputes that could otherwise prove long and costly.

The Board recommends development of a management plan for hazardous and toxic wastes. The plan should identify specific strategies for waste reduction efforts, recycling treatment, incineration, and disposal. The plan should also set forth strategies for expanding present efforts to complete local and statewide hazardous and toxic waste planning, in order to ensure an integrated management approach; for funding programs aimed at educating labor and management on the proper handling of hazardous and toxic substances, including transportation, storage, and disposal; for supporting programs of technology-transfer and research into alternative technologies to minimize and reduce such wastes; for support of hazardous and toxic waste planning; for support of programs to serve small generators (including home generators); and for establishing a Regional Hazardous and Toxic Waste Management Advisory Council.



The Board recognizes that tourism is among the fastest-growing industries in the nation and the world. Several forecasters have predicted that tourism will be the world's leading industry by the year 2000. Visitors spend nearly \$4 billion annually in Washington and provide employment to nearly 90,000 citizens. Washington's tourism industry comprises more than 13,000 businesses, or 12 percent of all the state's businesses. Annual state tax revenue from travel and tourism is more than \$170 million.

The Board recommends that the state create a more comprehensive and aggressive program to develop the travel and tourism industry. The public and private sectors have already invested heavily in facilities and transportation services that complement Washington's outstanding natural attractions. Needed now are marketing programs, supported by both the private and public sectors, to increase awareness and stimulate interest in Washington as a travel destination. Further development will require more facilities, attractions, and services, as well as a more aggressive marketing program.

The state must recognize that competition for tourism dollars is global in nature. To compete, the state must identify its unique market niches. It needs an aggressive program to market its travel and tourism assets.



Develop a More Competitive Business Climate

Recommendation

Capital Structure

Small, new, and innovative businesses often have trouble obtaining the financing they need to bring their ideas to market. Equity and debt financing are too often unavailable. In many cases, financing cannot be obtained at a competitive cost, over the time period it is needed, or in the form it is needed.

Long-Term Goal for Washington State

—To create comprehensive financing vehicles to fill the "capital gap" and to promote innovative products and processes in Washington State's economy.

Invest in Innovation

The Board recommends that the state create a Washington Development Finance Authority (WDFA) capable of employing modern sophisticated financing mechanisms to facilitate access to capital markets by businesses and communities. The Board does not recommend putting the state in the banking business. Instead, it recommends using the state's leverage to create financing mechanisms with the private sector.

The WDFA should facilitate capital information for business, employment, and community interests through financings that do not allow recourse to the credit of the State of Washington. The WDFA should be restricted to financial practices that benefit Washington businesses and communities not otherwise served by the private sector. Furthermore, WDFA should be restricted to financial practices in which access to capital markets could be enhanced by such state agency capabilities.

The WDFA should design and conduct studies of capital access programs and design and administer specific finance programs. The WDFA should have authorization to sell debt securities to carry out its capital access and financial programs. The WDFA should be authorized to enter into loan agreements with financial institutions, businesses, private parties, and local governmental jurisdictions that participate in its financial programs. The WDFA should be empowered to enter into contracts necessary to perform financial transactions including lines of credit, insurance policies, guarantees, and leases.

The WDFA should be authorized to accept grants and to obtain the services of advisors and consultants necessary to conduct its business. The WDFA should be empowered to contract with the federal government and its agencies for the purpose of obtaining federal guarantees for financial programs. The WDFA should also be empowered to operate federally-supported financial programs, such as the Small Business Authority's (SBA) 7(A) loan program through which long-term loans to qualifying businesses are partially purchased by the SBA.

The WDFA should investigate the feasibility of creating a small issues regional stock exchange to provide equity markets for regional entrepreneurs and investors.

Finally, the WDFA should continually examine development finance programs in other states and nations to recommend changes to Washington's constitutional limitation on lending of credit.

The Board recommends development of a cash-back incentive program for entrepreneurs who create a specified number of jobs over a specified time period in an area that qualifies for the official designation of economically-distressed. The primary requirement should be the creation of long-term, living-wage jobs.

The Board recommends creation of business and industrial development corporations (BIDCOs) to provide capital to small and medium-sized companies in the form of equity investment or loans. The BIDCOs should be capitalized from private sources, and tax incentives should be available to participating financial institutions.

The Board recommends investing more state pension funds in qualified businesses that generate jobs and meet the criteria set by the State Investment Board. Small ventures could be pooled to meet the State Investment Board's minimum threshold.

The Board does not recommend putting the state in the banking business. Instead, it recommends using the state's leverage to create financing mechanisms with the private sector.

The Board recommends creating a program that recruits domestic and foreign investment for joint ventures located in Washington. This program should emphasize ventures that build new plants and equipment, modernize existing plants, and provide technological improvements. Special effort should be made to attract investment in value-added, resource-based industries, particularly in economically-distressed areas.



Tax Structure

The current tax structure, which has remained basically unchanged since 1935, is unbalanced, unfair, and inhibits economic development. Washington's tax structure inhibits new business investment by existing firms and investment by out-of-state firms. The purpose of the tax system should be to ensure adequate public revenues for efficient public infrastructure and services. Washington's tax system should be a neutral factor in business investment decisions and somewhere near the middle in comparison with other states' taxes.

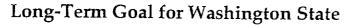
The current tax structure, which has remained basically unchanged since 1935, is unbalanced, unfair, and inhibits economic development.

The Board has developed the following set of principles and objectives to guide tax policy:

- Make the tax system more competitive with the systems of other states. The Business and Occupations Tax (B&O) and the state's high sales tax (50 percent of general fund revenue) put Washington out of the mainstream.
- Eliminate primary disincentives to economic development.
 The B&O tax and the sales tax on manufacturing plants, construction, equipment, labor, and research and development are disincentives to business investment.
- Minimize business tax exemptions, deferrals, and credits. To
 offset Washington's out-of-balance tax system, the legislature
 has created tax credits for new business development and job
 creation. The effectiveness of tax credits, exemptions, and
 deferrals is doubtful and is unfair, because credits given to one
 business must be made up elsewhere. A better basic tax system
 will minimize the need for "gimmicks" and constant tinkering
 with taxes.
- Establish a single tax system for business. There are now 11 different arbitrary B&O tax rates. All businesses should pay a minimum tax, because all benefit from public services and infrastructure whether or not they are profitable.
- Establish a tax system that is stable and predictable over the business cycle. The B&O tax, which all businesses pay whether or not they make a profit, makes Washington's tax system stable, but the over-dependency on the general sales tax makes it vulnerable.



Taxes should grow with the economy and personal income. A good business climate now depends upon high-quality education and training programs, public transportation, and public services. The tax system must provide adequate revenues for increased demands on these and other public programs as the economy grows.



To create a tax structure that is more mainstream, more balanced, and more competitive with other states—a tax structure that has been reformed to promote greater business investment, more economic diversity and stability, and fairness to businesses and families.

Reform the Tax Structure for Competitiveness

The Board recommends eliminating the sales tax on plant, equipment, and labor for manufacturers and research and development firms and abolishing the Business and Occupations Tax.

The Board recommends adopting a business profits tax, which includes a minimum tax level in recognition that all businesses benefit from government services and infrastructure. Business taxation should bear a relation to ability to pay and should be uniform in application with minimum exemptions, deferrals, and credits.

The Board recommends creating a balanced tax system by broadening and stabilizing the tax base and by reducing the sales tax rate and instituting a flat-rate income tax. The present sales tax burden should be lowered to produce approximately 20-30 percent of state general fund revenue. A flat-rate personal income tax should be enacted at a rate sufficient to produce approximately 20-30 percent of general fund revenue when combined with business taxes. Property, user, and excise taxes should make up the balance.



Recommendation

Regulatory Structure

Just as businesses and firms must become more flexible and adaptable to the imperatives of the new global economy, so too must the public sector. While regulations are necessary for the safety, health, and welfare of our people, our communities, and our natural resources, the way they are designed and the manner in which they are implemented is critical to business climate and competitiveness.*

Long-Term Goal for Washington State

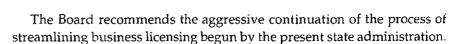
To minimize the cost and burden of the regulatory process for Washington businesses and to assist in making them more competitive in the new global economy.

Recommendation

Reshape the Regulatory Environment

The Board recommends developing specific means as well as an ongoing forum for the design and implementation of state and local regulations in consultation with affected parties. Such approaches should emphasize the values of timely response, predictable outcomes, and direct input by those affected by the decisions.

Just as businesses and firms must become more flexible and adaptable to the imperatives of the new global economy, so too must the public sector.



The Board recommends establishing mandatory time limits for the resolution of regulatory disputes and the periodic sunsetting of regulations to ensure the elimination of unnecessary and obsolete regulations.



^{*} Of the many attempts to minimize the cost and burden of Washington's regulatory laborinth, one of the most successful examples of public-private cooperation to streamline the development permitting process is the Seattle-King County model. While not complete, it moves in the right direction.

Technological Infrastructure

Research and development are critical to achieving competitiveness in the new global economy. Today, technology is creating new products, new processes, new materials, and new lifeforms that together are changing the basic nature of economic production throughout the world. The continuous creation and commercialization of new technology is critical for success, whether it is applied to new, high-technology businesses or mature resource-based industries.*

The continuous creation and commercialization of new technology is critical for success, whether it is applied to new, high-technology businesses or mature resource-based industries.

Long-Term Goal for Washington State

To ensure effective delivery mechanisms that create and commercialize technology and new product ideas and transfer them to Washington businesses and entrepreneurs.

Commercialize Research and Development

The Board recommends expanding efforts to assist technology development in its early stages and to help the movement of innovative ideas from the laboratory to the workplace. The public and private sectors should work together to expand the availability of seed capital. Similarly, a more ready supply of business-development money is essential to firms that are in the early stages of business life, in order to define products, identify potential markets, and obtain other commitments of capital.

The Board recommends coordinating and strengthening technology-licensing organizations, not only to ensure that they are realizing their full potential but also to speed and encourage placement of licensed technologies with firms in Washington State.

Create a New Developmental Infrastructure

Recommendation

^{*} The Board has relied primarily upon the City of Seattle/University of Washington Economic Development Task Force's report, A Proposal for the Establishment of the Evergreen Technology Program (September 1988), for its recommendations in this area.

PLAN OF ACTION



The Board recommends creating strategies to meet the need for largescale facilities and specialized equipment for developing and using advanced technology. The Board further recommends that these strategies feature a sharing arrangement among the new and existing businesses which would use the facilities and equipment.

The Board recommends establishing a Center for Entrepreneurial Studies. In addition to its mission of increasing the number and improving the quality of entrepreneurs in Washington, the Center should complete an inventory of entrepreneurial training presently available in schools and colleges throughout the state. It should also devise a plan to enhance and expand existing programs.

The Board recommends developing an information system for use by the technology-transfer community through which entrepreneurs, businesses, research institutions, and state agencies can share technology and data.

The Board recommends modifying the evaluation and rewards system in Washington's colleges and universities, particularly in the research institutions, to allow and encourage greater faculty involvement in technology commercialization and in economic and community development.

PLAN OF ACTION

Information Infrastructure

Whoever is quickest to bring new ideas, products, and processes to the marketplace gains the advantage in today's environment of intense competition. Market information is of paramount importance in offering the right new product at the right moment. While many of Washington's large companies possess sophisticated market information systems, this is not true of the state's small and medium-sized firms, which must have access to this information to export and remain competitive.

Long-Term Goal for Washington State

To develop a worldwide market information and analysis network that gives Washington producers up-to-the-minute commercial and technological information needed to be competitive both in product and process.

Link Washington State with the World

The Board recommends developing a worldwide market information and analysis network to be used by Washington producers of goods and services. The network should give special emphasis to serving value-added, resource-based businesses. It should also strengthen links among public agencies, universities, and industry-oriented organizations in an effort to improve coordination and prevent duplication.

The Board recommends setting up a formal process to develop and promote all Washington products, giving special emphasis to value-added, resource-based industries. Product development should include an assessment of market potential and the product research needed by businesses to become competitive in international markets.

Whoever is quickest to bring new ideas, products, and processes to the marketplace gains the advantage in today's environment of intense competition.

The Board recommends an ongoing survey and analysis of Washington's telecommunications capacity to identify ways to strengthen the state's economic development network. To stimulate local entrepreneurship, the survey should endeavor to investigate new business opportunities for new telecommunication technology and services.

Recommendation

Physical Infrastructure

Underpinning all business and commerce is physical infrastructure—roads, bridges, ports, airports, railroads, and energy systems. Expeditious movement of goods and people requires continuous financing to build and maintain that infrastructure. A society that grows both in numbers and activity needs additional capacity, but it must also use existing capacity wisely and efficiently. Henceforth, all transportation planning should be integrated with economic development planning.

Long-Term Goal for Washington State

To maintain the continuous development of Washington's ports, and to ensure that the state's transportation, telecommunications, and energy networks will accommodate growth into the next century.

Recommendation

Maintain and Improve the Basics

The Board recommends authorizing publicly-funded capital investments in Washington's port facilities to maintain their primary role in supporting commerce and economic development in the Northwest.

The Board recommends a study to determine the long-term international competitiveness and best use of each Washington port in order to maximize long-term value and capacity utilization.

The Board recommends studying the feasibility of developing additional regional airports to handle passengers and freight in order to reduce pressure on airports in the Puget Sound area.

The Board recommends ensuring adequate revenue and local taxing authority to preserve the existing statewide transportation system.

The Board recommends dedicating funds to enable state and local officials to respond rapidly to unforeseen infrastructure needs of new or relocating enterprises, particularly in economically-distressed areas. Provisions should be included for biennial replenishment of funds as they are expended.

The Board recommends developing comprehensive mass transit systems in the state's metropolitan areas, including, but not limited to, light rail, commuter trains (on existing tracks), lanes for high-occupancy vehicles, parkand-ride lots, flextime, and telecommunications alternatives to commuting. The Board wishes to emphasize that adoption of this recommendation must be based upon a clear certainty of the public's willingness to pay for and to use new additions to mass transit systems.

The Board recommends that the state provide funding for the public preservation of abandoned railroad right-of-ways for future use as transportation, energy, or pipeline corridors.



The Board recommends developing alternative energy strategies to ensure long-term energy supplies at the lowest possible cost. These strategies should address potential changes in the status of the Bonneville Power Administration as well as possible changes in the climate and environment that may impact energy production and costs.

A society that grows both in numbers and activity needs additional capacity, but it must also use existing capacity wisely and efficiently.

The Board recommends that the Washington congressional delegation, the governor, and the state legislature, in conjunction with the private sector, commit to developing a strategy that designates the Tri-Cities area as an international center for energy research and hazardous and toxic waste disposal technology.

The Board recommends adopting the Northwest Power Planning Council's Model Conservation Standards for new home construction.



Implement the Strategy

Recommendation

The Council for the Future

In the fast-changing global economy, it is precarious to predict what industries or specific businesses will be winners or losers over the next two decades. The new world economy requires that we constantly think strategically—i.e., challenge assumptions in the light of new information and new economic realities.

The implementation of the long-term economic development strategy requires the continuous leadership and support of the governor, the economic development cabinet, the legislature, the local economic development councils, the ports, and the entire private sector, including labor and business.

In addition, there is a need for an independent oversight board to keep the vision of the strategy alive and to keep the public and private sectors focused on the long-term horizon.

Long-Term Goal for Washington State

To create an independent council to oversee the implementation of the long-term economic development strategy.

Create an Independent Council to Oversee Strategy

The Board recommends creating a seven-member Council for the Future comprised of men and women who have served Washington State with distinction and who have demonstrated wisdom in day-to-day experience in the public or private sector.

The Board recommends that Council members be appointed by the governor and confirmed by the Washington State Senate. Council members shall serve initial six-year terms. Each member may be appointed for one subsequent six-year term.

The Board recommends funding the Council with a biennial legislative appropriation that is adequate for accomplishment of the following tasks: overseeing implementation of the strategy; investigating innovative economic development strategies throughout the world; and ensuring participation by Washington's citizens. The Council should have authority to solicit and accept private contributions to pay for additional projects as it deems necessary but must have adequate public funding to ensure its independence.

The Board recommends that the Council hold community meetings to ensure continued public participation and to help build local economic development capacity, a key factor in successful implementation of the long-term strategy.

The Board recommends that the Council be required to submit an annual report to the governor, the legislature, and the citizens of Washington State. The report should describe the preceding year's progress in implementation of the long-term strategy.

"The Territory of Washington, though the one most remote from the center of the Union, is destined to assume in a few years a prominence second to none on the Pacific.... Uniting the best opportunities for an immense commerce, extensive manufactures and great agricultural industry, nothing is needed for a rapid growth of the Territory but people and capital."

Henry Howe The Great West (1855)

ue to a history of bold and visionary leadership in the private and public sectors, Washington has come a long way toward achieving Henry Howe's dream of a century ago. If we can now see further into the future with a clear understanding of the challenges before us, it is because, to paraphrase Newton, we are able to stand on the shoulders of giants.

There are still many giants among us. As we've traveled throughout Washington in the course of our work, we have held many public meetings. We've heard the hopes, dreams, and problems of citizens and their aspirations for themselves, their families, their communities, and the state's future. Everywhere we've found individuals, businesses, and community organizations rising to the challenges of the new epoch.

While government at all levels can do much to help create an environment that allows individuals to flourish, to create, and to take new initiatives, we cannot simply legislate our way to a successful future. Ultimately, it is up to each of us to form the new partnerships and to develop the new thinking that will bring us success.

This age of the world requires that we redesign our lives, our careers, our communities, our laws, and our institutions for constant change and renewal, flexibility, adaptability, risk-taking, and bold new initiatives. Our standard of living, quality of life, and the freedoms and liberties upon which these depend are at stake.



APPENDIX

Summary of Recommendations
Acknowledgments
Reports Prepared for the Board

Summary of Recommendations

1. Develop a Highly-Educated, Multiskilled, and Flexible Workforce

Institute a core competencies curriculum in grades K-12. Individualize the public school curriculum in grades K-12.

Change the evaluation of student progress.

Provide a personal computer for every teacher and student in grades

Create a serviceable telecommunications system in schools.

Internationalize the public school curriculum in grades K-12.

Increase funding for international education and language training at the unversity and college level.

Create a committee of curriculum advisors for grades K-12.

Improve training for teachers of grades K-12.

Raise the starting pay of teaching professionals.

Base teachers' and administrators' salaries on performance.

Expand publicly-supported preschool programs.

Institute a system of public school choice.

- Expand the role of community colleges and voc-techs.
- Implement uniform vocational counseling.
- Match training and retraining to employer needs.
- Fund retraining programs. Provide child care.
- Provide workplace literacy.

2. Build Local Capacity

Centralize coordination of local development efforts.

Increase the amount of matching grants for local economic development councils.

Expand the role of ports in funding local economic development

Create a Federation of Washington Ports. Www.

Establish worldwide trading offices.

Increase local government decision-making authority.

3. Protect the Northwest Environment

Issue an annual state-of-the-environment report. Create a comprehensive land-use plan.

Develop comprehensive forest resource information. Institute a service to mediate development disputes.

Develop a hazardous and toxic waste management plan.

Create a more comprehensive program to develop tourism.

4. Invest in Innovation

Create a Washington Development Finance Authority. Create a cash-back incentive program to create jobs. Create business and industrial development corporations. Invest more state pension funds in Washington businesses. Recruit domestic and foreign investment.

5. Reform the Tax Structure for Competitiveness

Eliminate the sales tax on plant and equipment owned by manufacturers and research and development firms.

Abolish the business and occupations tax.

Adopt a business profits tax.

Create a balanced state tax system.

Reduce the sales tax rate.

Institute a flat-rate income tax.

6. Reshape the Regulatory Environment

Design and implement a new process for regulation.

Streamline business licensing.

Establish mandatory time limits for resolving regulatory disputes.

Provide "sunsets" for regulations.

7. Commercialize Research and Development

Expand efforts to assist early stage research and development.

Coordinate and strengthen technology-licensing organizations.

Allow new and existing businesses to share research and development facilities and equipment.

Establish a Center for Entrepreneurial Studies.

Establish a technology-transfer information system.

Modify university evaluation and rewards system.

8. Link Washington State with the World

Develop worldwide market information and analysis.

Formalize a process of product development and promotion.

Strengthen telecommunications capacity.

9. Maintain and Improve Basic Infrastructure

Authorize revenue for ports investment.

Assess long-term international competitiveness and best use of ports.

Develop more regional airports.

Ensure adequate revenues for the transportation system.

Dedicate infrastructure funds for development.

Develop urban mass transit systems.

Ensure long-term energy supplies at the lowest possible cost.

Develop an international center for energy research and hazardous waste disposal technology in the Tri-Cities.

Adopt standards for new home construction.

10. Create an Independent Council to Oversee Strategy

Fund the council appropriately.

Require the council to hold community meetings.

Require the council to submit an annual report.

APPENDIX

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Agriculture

Forest Products

Education

Telecommunications

Energy and Economic

Training and Retraining

Development

Transportation

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Task Force on Training and Retraining. Final Report (June 1988).

Transportation Technical Advisory Group. Final Report (June 1988).

The Board has utilized hundreds of books, articles, and reports in its work. Those readers wishing a copy of our bibliography should write to:

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