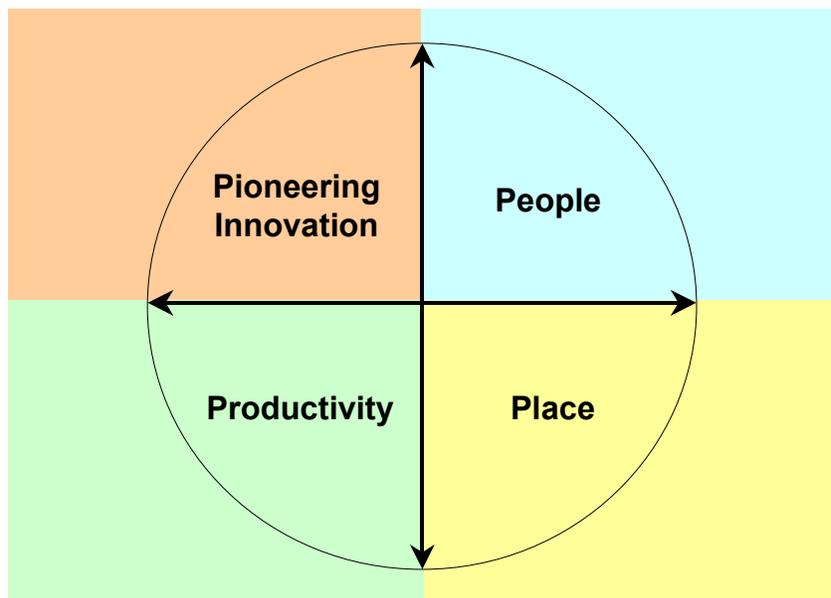


Stepping Up



A Plan for Growing Quality Jobs
And Statewide Prosperity

January 2003

INITIATIVES TO ACT ON RIGHT AWAY

STABILIZE OUR PUBLIC FINANCE SYSTEM. Vital public services demand it. Fix PERS, look for cost savings, and get serious about revenue reform.

EXPAND OREGON'S CAPACITY FOR INNOVATION. Ideas and talent build leading-edge economies. Increase research, technology transfer, access to capital, and workforce skills at all levels.

REFOCUS ECONOMIC DEVELOPMENT. Get back to basics. Help businesses and industries compete. Recruit companies and attract investment in Oregon.

KEEP BUILDING A WORLD-CLASS K-12 EDUCATION SYSTEM. Improve our results, our assessment system, and our tools for making public investments in K-12.

INVEST DIFFERENTLY IN POST-SECONDARY EDUCATION. Make choices from one budget, give state universities more authority, and consider new models of governance and investment.

RAMP UP GRADUATES, CAPACITY IN ENGINEERING EDUCATION. Double the output of engineering and computer science graduates. Build a top-tier engineering school. Attract more youths to these professions.

GET MORE BENEFIT FROM OUR FOREST RESOURCES. Seize opportunities to improve forestland production, environmental enhancement, fire prevention, and conflict resolution.

MAINTAIN OUR ROADS AND BRIDGES. They're vital to the economy. Update ways and means to make this investment.

STRENGTHEN FREIGHT AND AIR CONNECTIONS. Upgrade infrastructure to move goods, especially by water. Build better air service within Oregon and to the world.

UPDATE OUR LAND USE LAWS. They've worked three decades to preserve forest and farm lands. It's time to adapt them for newer industries with land needs.

STREAMLINE PERMITTING ACROSS JURISDICTIONS. A system that's predictable, uniform, and fast aids capital planning and avoids costly delays.

BRAND AND MARKET OREGON MORE AGGRESSIVELY. Times have changed, so should our identity. Tell a new story for recruiting, tourism, and marketing Oregon products.

CONTENTS

Executive Summary: A Choice of Futures	1
1. Oregon’s Opportunity	9
2. Oregon's Economy Today	11
3. New Game for Business	15
4. Framework for Success	21
5. How Oregon Stacks Up	25
6. Key Policy Recommendations	29

Appended White Paper Recommendations

Providing Stable and Adequate Funding for Public Services	33
Expanding Our Capacity for Innovation	41
Refocusing Economic Development	53
Building High Performance K-12 Education	59
Investing Differently in Post-Secondary Education	71
Enhancing Engineering and Computer Science Education	81
Achieving More Benefit From Our Forest Resources	85
Strengthening Our Investment in Roads and Bridges	91
Enhancing Carso and Air Passenger Service	99
Strengthening Our Trade Infrastructure	105
Securing Land for Traded-Sector Development	111
Streamlining Permitting	117
Branding and Markeking Oregon	123

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EXECUTIVE SUMMARY: A CHOICE OF FUTURES

Oregon stands at an economic crossroad. Changes sweeping the global marketplace offer us a choice between two futures. One path presents an Oregon defined by thriving businesses that lead their industries in ideas, innovation and design, market reach, and staying power. This path heralds a future of well paying jobs that resist migration and sustain local economies and communities.

On the other path, Oregon becomes strictly a regional consumer market and a branch-office outpost for industries whose key ideas, research, decisions, innovations, and initiatives occur elsewhere. It becomes a commodity producer whose industries pay average or low wages and are always vulnerable to cheaper sources of labor and supply elsewhere.

We're Aiming High

Evidence suggests that many players in Oregon's business community have embarked on the high road. The proof can be seen statewide in clusters of both traditional and new-economy businesses that are at the forefront of their industries with cutting-edge products, services, processes, and marketing strategies. Industrial clusters are those with critical mass in their areas of specialty. They comprise not only producers, but also suppliers, competitors, and allies who share proximity and its benefits. They are often knowledge centers for their industries. Successful clusters in Oregon include semiconductors, sports apparel and footwear, engineered wood products, electronic display products, creative services, fruits and vegetables, test and measurement equipment, nursery products, and recreation vehicle manufacturing.

Key Challenges Facing Oregon's Economy	Successful Firms Are Responding By:
<ul style="list-style-type: none"> • Every business confronts change • Every industry is restructuring • Competition is now global • Commodity production is going to cheapest locations • Technology is pervasive in every business 	<ul style="list-style-type: none"> • Developing new products • Going up market • Moving routine work off shore • Recruiting the best talent • Pursuing best practices and productivity

At the core of these successful clusters are "traded-sector" businesses – those that sell their products and services outside the state, bringing in fresh dollars that directly sustain high-paying jobs while spurring growth and good jobs among local suppliers, retailers, and service businesses. These leading-edge, traded sector businesses are so successful and beneficial to the Oregon economy that they offer a model by which Oregon can achieve its primary economic goal: *growing well paying jobs that go to Oregonians*. The jobs themselves will change as Oregon companies innovate and evolve, but Oregonians will have the knowledge, skills, and confidence to grow with those changes.

We Must Nurture Knowledge-Based Traded Sectors

As a broad strategy to revitalize and sustain the Oregon economy, we should position Oregon in fact and reputation as a state unique in its passion and ability to nurture clusters of innovative industries. This includes clusters we have already, those we can attract, and those we can build from scratch. It includes clusters in new technologies as well as traditional industries producing new products in new ways.

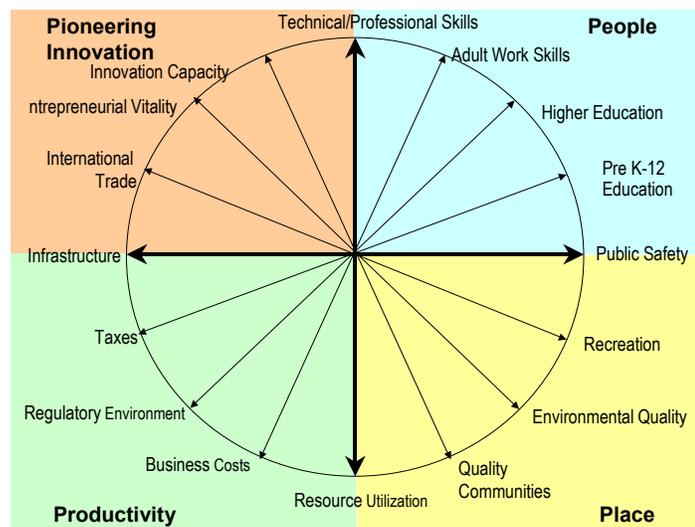
In order to thrive, leading-edge clusters depend on the people and resources in their surroundings. They need access to ideas and capital. They need skilled people. They need communities whose schools, neighborhoods, roads, recreational amenities, and civic life appeal to talented people. They need energy, telecommunications, transportation, and health care. They need to operate in a regulatory environment that enables them to do their work efficiently while meeting environmental responsibilities. Thus, it is important for all of Oregon to pull together to support leading clusters that create good jobs.

The Stakes Are High

Against a global backdrop, we face a high-stakes struggle. Not only must we fight to keep the successful, innovative industries that now fuel our economy, we must also capture and grow more that are equally adept. Competition for such industries is fierce and will intensify in the next 20 years. Recent forums with business leaders throughout Oregon have surfaced repeated and deep-seated concerns about the threat *from* national and global competitors *for* national and global markets. If Oregon doesn't maintain a setting in which its businesses can compete effectively against their global rivals, they will be more apt to go to a state or nation that offers such a setting.

Four Ps for Getting It Right

To create the uniquely supportive environment needed by competitive Oregon businesses, Oregon should focus on what might be called the Four Ps for Prosperity – *pioneering innovation, people, place, and productivity*. All industries need these supportive conditions in different degrees and ways. Leading-edge, knowledge-based industries cannot succeed without them.



Pioneering Innovation. Oregon’s economic vitality is propelled by knowledge-based industries, not only electronics, software, and electronic commerce, but also new products and process innovation from manufacturers and service businesses that have long been established. Necessary infrastructure for knowledge-based industries includes critical mass in ideas, research, product and process innovation, market creation, support for business formation, availability of investment capital, and education systems attuned to the needs of a knowledge economy.

People. Just as knowledge-based industries are key to our economic future, skilled and talented people are key to our knowledge-based industries. Employers say so repeatedly. Education and training are essential infrastructure for this aspect of our economy because they help develop, attract, and retain knowledge workers. They also lift up segments of the Oregon population and communities throughout the state that have had the greatest difficulty connecting with better opportunities in the knowledge economy.

Place. Oregon is a special place to live, and Oregon’s quality of life helps attract and retain talented people who drive our economy and enrich our life with ideas, knowledge, skills,

and investment. One of the key demographic groups in this respect is 20- to 35-year-old professionals and entrepreneurs. Along with good schools, such people value safe, civically engaged communities, a clean environment, capable government, well-maintained public infrastructure, and access to arts and culture, entertainment, and outdoor recreation.

Productivity. The cost and availability of a range of public and private services influence the competitiveness of Oregon businesses in national and international markets. The infrastructure that helps businesses increase efficiencies, hold down costs, and attract investment and expansion includes reliable transportation and port facilities, energy at competitive rates, adequate access to natural resources, and manageable costs in health care, worker compensation, taxes, and regulatory compliance.

How Oregon Stacks Up

Despite the current recession, Oregon has benefited from significant strengths in the Four Ps. It was no accident that between 1983 and 2000, the state added 670,000 jobs at a rate of more than 35,000 per year, outperforming the nation and raising per capita income significantly. This period of growth yielded an array of very strong companies that shore up the economy now while providing a foundation for future prosperity. Oregonians may be unaware of the extent to which state businesses lead their industries in such fields as semiconductors, custom millwork, sports apparel, nursery products, and precision metals.

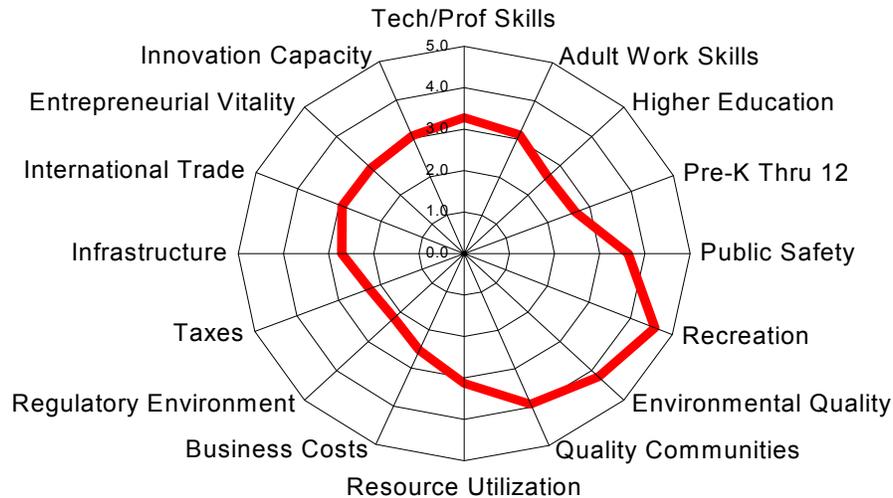
We still have many of the advantages that drove Oregon's expansion in the 1980s and 1990s, including a well-educated workforce, an exceptional quality of life, rich natural resources, sound infrastructure and public services, and reasonable business costs. But our competitive assets are changing, and recent events have exposed some weaknesses that need to be addressed. For example:

- Our public finance system is in current crisis and long-term imbalance.
- In the face of our fiscal crisis, our education systems are at risk.
- Legal and regulatory gridlock is harming our ability to take advantage of forest, water and other natural resources in a way that would benefit both the economy and our natural environment.
- We are losing our traditional cost advantages in energy supply, and we can no longer take water supply for granted.
- We are running out of land for key industrial development.

Our challenge for the years ahead is to build an economic strategy for Oregon that recognizes our changed competitive assets, minimizing or eliminating our weaknesses—particularly in public finance and resource management – and building on our strengths as a place with talented workers, a great quality of life, and innovative businesses. If we do this well, Oregon can thrive as a center of leading-edge, knowledge-based industry clusters.

The spider diagram below illustrates the perceptions of Oregon business leaders about how we stand on important indicators of the Four Ps. These perceptions of our strengths (0, very poor, to 5, excellent) match up with a number of actual indicators gathered by the Oregon Progress Board, including infrastructure, international trade, entrepreneurial vitality, innovation capacity, and technical/professional skills. The data suggest Oregon is better off in business costs, taxes, and regulation than business leaders think, and not as

well off as business leaders believe in regard to higher education, public safety, quality communities, environmental health, and resource utilization. (See more detailed Progress Board data at <http://www.econ.state.or.us/opb/OBCplan/OBCplan.htm>.)



A Need for Renewed Vision

Besides protecting our strengths and addressing our deficiencies, we also need to refresh the picture of what we want our future economy to look like, as well as how we can get there.

As we look ahead, it is clear that our economic success must be built upon the capacity of our traded-sector industries to innovate – to think up new products, to find better ways to produce them, to add value, and to move up market. Most of that innovation will come from individual firms themselves. But we need to make their vision and struggle our own, and to bolster their efforts through the supportive environment outlined in the Four Ps. Other states are pursuing such agendas, and we must do so as well if we hope to compete.

What Oregon Should Do

We propose that Oregon position itself as one of the best places on earth for innovative industries to flourish. In fact, we should be considered exceptional in this respect. We should use our unique mix of characteristics to attract, grow, and retain the kinds of businesses and talent that places us on the cutting edge in a number of knowledge-based industries. By doing this well, we will we can have the kind of economy that provides a wide range of quality jobs for all Oregonians, throughout Oregon.

Positioning Oregon this way will require a commitment to do the following:

Rigorously support and build on the success of such established industry clusters as forest products, agriculture, semiconductors, sports apparel, and specialty metals, and nurture emerging clusters. Oregon’s economic future hinges on the ability of our companies to stay at the forefront in developing new products, applying technology in new ways, and increasing productivity.

Make smart, strategic investments in K-12 and higher education institutions – and directly in students – that yield graduates educated in a variety of disciplines and skills to world-

class standards. We are getting traction with K-12 reforms that stress high standards, but we can't let up. We need to make higher education more accessible to adults and make better use of our higher education investment and resources.

Strengthen Oregon's quality of life through policies that promote safe, engaging communities and inviting outdoor recreation. This will help retain and attract the talented, well-educated people needed to run a knowledge-based economy. Recognize our quality of life as a key asset for growing the economy.

Use natural resources in ways that protect their health and sustainability while yielding benefits to our economy. We are one of the best places in the world to grow trees, and we have productive farmland and a plentiful supply of water. We need to find a path through the polarization in environmental protection and resource use that has kept us from making policy decisions that would benefit both the environment *and* the economy.

Continuously improve our public infrastructure, services, and regulatory procedures in ways that enhance the productivity of business. Both existing and emerging industry clusters need access to suitable land. And new or expanding businesses need a permitting process that is fair, efficient, and uniform across jurisdictions.

Stabilize the revenue side of our public finance system and make services on the expenditure side more efficient. Unless we act decisively, Oregon public services will soon deteriorate so badly that we will imperil our economy for years to come. The extraordinary drop in public revenue created by the current recession was far greater than ever anticipated. The most immediate impact will fall on our education systems, public safety, and social services. The long-term damage to these and other public services will hurt the economy by making Oregon a less desirable place to live and by creating a climate of uncertainty that discourages investment. The solution must include an aggressive effort to contain public service costs, particularly the unfunded PERS liability, to review spending priorities, and to re-examine our tax highly volatile tax structure.

Immediate Initiatives

Within this framework we have identified 12 initiatives to pursue immediately in order to support this vision for Oregon's economic future. These initiatives draw on the priorities recommended in interviews and focus groups with business leaders and validated in regional meetings. The list here is not exhaustive, but each initiative, if pursued, will make a great deal of difference over the years ahead. The key is execution. The white papers prepared in conjunction with this draft offer more detailed proposals on how to proceed. They are posted at http://www.oregonbusinessplan.org/plan_view.html. Our task is to turn these drafts into action plans, a process that started with the December 9 Leadership Summit. Many of these priorities, it should be noted, are already being advocated and pursued by groups and organizations affiliated with the Oregon Business Plan. Oregon has much to build upon.

1. Stabilize public services financing and budgeting.

- Fix the Oregon Public Employee Retirement System.
- Make a concerted effort to improve performance in public services for the long-term.
- Propose ways to overhaul our tax system to provide long-term revenue stability and to create stronger incentives to stimulate economic growth.

2. Expand Oregon's capacity for innovation.

- Invest in university research in targeted fields and improve technology transfer and commercialization of ideas.
- Strengthen our technical and engineering offerings to support a wide range of industries.
- Promote the growth of venture capital resources in Oregon through tax incentives and direct state and private investment in Oregon-focused venture funds.

3. Refocus economic development.

- Focus Oregon Economic and Community Development Department efforts on traded-sector business retention, expansion, and recruitment statewide.
- Assign the Department responsibility for measures to enhance business competitiveness.
- Through the Governor and the Department, build relationships with existing and emerging industry clusters, and work with the Oregon Council on Knowledge and Economic Development to promote technology-based industries.

4. Continue to build a world-class K-12 education system.

- Build a state-of-the-art assessment and management information system.
- Use tools created by the Quality Education Commission to establish a performance budget.
- Establish a commission to examine more effective models of education delivery, to clarify roles of state government, local districts, education services districts, and other education providers.

5. Redesign Oregon's investment in post-secondary education.

- Set the goal that all Oregonians should have access to education beyond high school and throughout adult life, regardless of financial circumstances or location.
- Organize funding around categories of student support rather than institutional budgets to ensure that goals for access and quality are met.
- Give state universities more local autonomy to operate efficiently, maintain program quality, and meet market needs.

6. Expand engineering and computer science education.

- Double the number of undergraduate engineering and computer science degrees granted in Oregon by 2009.
- Achieve high national rankings for key colleges, departments and programs, including a top-tier engineering college.

7. Achieve higher resource and environmental benefits from our forestlands.

- Build on the Oregon Plan for salmon and watershed health to make it the designated plan by the federal agencies to address clean water and salmon restoration objectives.
- Increase contributions of federal forests to Oregon's wood supply and the state's environmental goals, and improve the productivity of private forest lands.

- Manage Oregon's federal forests to restore health, reduce the risk of severe fire and create jobs in rural communities.
- Improve public-private collaboration on forest resource issues, and move beyond conflict as a means of resolving issues.

8. Maintain our investment in roads and bridges.

- Start meeting the large backlog of needed maintenance and upgrades to our roads and bridges.
- Deploy this investment as an additional way to give a boost to the economy.
- Pilot new forms of revenue generation.

9. Improve our air connections and trade infrastructure.

- Build on the momentum of the recent decision by Lufthansa to establish a direct connection between Oregon and Germany.
- Expand our water, rail, and air infrastructure to move freight and passengers both within Oregon and beyond.

10. Make land available for industrial development and other important uses.

- Update our land use system to provide adequate land for location and growth of traded-sector industries while protecting open space and encouraging livable communities.

11. Simplify and streamline permitting.

- Improve the responsiveness and efficiency of permitting in all jurisdictions to enable businesses to hold down costs and be more competitive.

12. Brand and market Oregon more aggressively.

- Rethink Oregon's brand identity. Reposition Oregon for attracting leading-edge industries, talented people, and tourists, and for marketing of Oregon products.

How to Get Organized and Proceed

These priorities and action items were offered for consideration and refinement at the December 9, 2002, Economic Leadership Summit. Many of them were later refined based on comments received at the summit and further review by business plan participants. We recommend that the new governor and state and federal legislative delegates incorporate the recommendations in this plan into their own policy proposals in 2003 and beyond. Members of the business community stand ready to assist with that effort.

1. OREGON'S OPPORTUNITY

About a year ago a number of business and industry associations, new economy advocates, and economic development agencies began to take stock of Oregon's economic performance and prospects. Some focused on related groups of industries, some on the economies of particular cities, and some on regions in Oregon. These efforts were driven in part by concern with the recession, but also by a sense that fundamental shifts were altering global markets and the competitive environment. There seemed to be a consensus that a new game plan was in order to help Oregon businesses thrive and compete. The importance of this effort is underscored by recent job losses from the recession and industry restructuring, and Oregon's enduring official goal of creating well paying jobs for Oregonians.

With that thought in mind, a coalition of business leaders launched the Oregon Business Plan process to assess Oregon's overall economy and our strategic opportunities in the next decade and beyond. The project did that by talking to business and civic leaders in one-on-one interviews, focus groups, and regional meetings held statewide over the spring, summer, and fall. The project also measured benchmark data on Oregon's assets as a location to do business, and it received white papers from various groups concerned about issues that affect business success in Oregon. This document, the product of that effort, represents the business community's statewide effort to assess its circumstances, successes, needs, and opportunities, and then to brief policy makers on what should be done to make sure that Oregon steps up to the challenge.

This document also addresses an important concern expressed repeatedly by Oregon business leaders the past year. Business owners and managers want Oregon's public officials be aware of what Oregon's enterprises are up against and how they are succeeding. They want to see that awareness incorporated in the state's vision of economic development.

Compelling Stories

While the Oregon Business Plan benefits from fresh economic analysis and position papers from various groups, its most striking findings come from stories told by Oregonians. The project heard scores of stories from business leaders about how their worlds are changing and how they are responding.

The findings of this process, which unfold in the following pages, suggest that Oregon has an ideal opportunity to do what its leading industries are doing: grasp the changes taking shape and adapt to them in a way that puts Oregon out in front.

The priorities and action items presented in this plan are not exhaustive, just those that Oregon should move on right away. Additional ideas were considered at the summit and in subsequent public forums held to continue the work of the Oregon Business Plan. We suggest that the summit itself be repeated in some form on a semi-annual or annual basis as a way to assess progress on initiatives and inject fresh thinking into the plan. Other issues that need to be developed for further work include the following:

- Agriculture as a part of Oregon's natural resource base
- Reliable, affordable energy supply

- Water supply and policy
- Affordable health care and health care cost containment
- Enhancement and marketing our quality-of-life advantage
- Building on our telecommunications advantages, especially in rural communities
- Building quality early childhood programs.

In each of these areas, we propose that teams be established to examine the opportunities and come back with recommendations at future public forums.

Additional information about the Oregon Business Plan can be found at <http://www.oregonbusinessplan.org/>.

2. OREGON'S ECONOMY TODAY

One of the most common questions about the Oregon economy is whether the current recession marks a fundamental change in our prospects or merely a temporary interruption in a long period of expansion.

Two Decades of Growth and Transformation

Oregon's economy started rebounding from the last recession in 1983, and it recorded nearly nonstop growth for the next 18 years. Between 1983 and 2000, the Oregon economy added 670,000 jobs (an average of more than 35,000 annually). But the economy that Oregon grew in the 1980s and 1990s was very different than it had in the boom of the 1970s.

The forest products industry never again reached the levels of employment it enjoyed during the late 1970s. Just as importantly, real wages, adjusted for inflation, fell through the 1980s. Agriculture, particularly commodity crops like wheat, continued to fluctuate due to seasonal factors and changes in international markets, but have never reached the levels of output of the late '70s.

The transformation of the Oregon economy is reflected in the kinds of goods and services we export to other nations. In the 1980s, two-thirds of our exports were raw materials, mostly logs, lumber, and grain. Today state exports exceed \$11 billion. Two-thirds of that total come from high tech and metals industries.

Oregon's economy has been transformed by the growth of knowledge-based industries. High technology – manufacture of computers, semiconductors, instruments and software – has added 35,000 jobs to the state's economy in the past decade and is now the state's largest exporter and employer, dwarfing traditional industries. High technology employment has grown more than 6 percent annually over the last decade and is now Oregon's largest manufacturing industry, accounting for more than 70,000 jobs, the bulk of Oregon exports, and more than 10 percent of U.S. semiconductor production. Average wages in high tech are more than \$58,000 annually.

Through the 1990s, the state's metals industry outperformed the nation. Transportation equipment manufacturers like Freightliner, Gunderson and RV manufacturers also grew, based on the strength of market leading products and their technological prowess. Metals, machinery and transportation equipment producers, making everything from aluminum to trucks to aerospace parts, have increased employment 3.7 percent annually since 1988, employ about 45,000 Oregonians, and account for \$1.5 billion in exports. Oregon metals firms have outperformed their counterparts nationally.

Agriculture and food products have grown slowly, mostly tracking national averages. Traditional commodity crops have declined somewhat, while specialty crops and nursery products have grown.

The importance of the service sector continues to grow in Oregon. While many service sector jobs serve local markets and offer only modest pay, two major segments of the sector illustrate the potential for creating high-wage jobs and businesses that export services to other states and countries. Professional and creative services firms have been growing rapidly and adding jobs that generally pay well. The creative services industry

(advertising, public relations, film and video, and multimedia software) has grown more than 10 percent per year in the 1990s, and pays average annual wages exceeding \$40,000. Other professional services, including engineering, architecture, and management consulting employ more than 28,000 Oregonians at an average wage of more than \$40,000 per year. Employment in this segment of the economy has increased by more than 50 percent in the past decade.

The Recession in Perspective

Clearly, Oregon has suffered from the recession. Our unemployment rate is still at 7 percent, (above the national average of 5.7 percent). About 114,000 Oregonians are unemployed, and overall state employment is down about 20,000 jobs from the peak reached in late 2000, a decline of about 1.2 percent.

Oregon's economic structure made it particularly vulnerable to the leading edge of this recession. The national recession was prompted by a collapse in private business investment, which caused a big decline in spending in industries that produce durable goods and machinery. This hit Oregon's high tech industry and other important producers, including metals and transportation equipment. Because we are proportionately more dependent on these industries than other states, we saw job losses here before the recession was felt elsewhere. In early 2002, Oregon, and Washington, which also depends on durable goods manufacturing, led the nation in unemployment.

The impact of this recession has been amplified in Oregon by the high dependence of our public finance system on income taxes. The recession has lopped more than \$1.9 billion from anticipated revenues for this biennium, prompting five special sessions of the Legislature to balance the budget. The state budget will face a gap of more than \$300 million if voters decline to approve a special tax measure on January 28.

That's the bad news.

The good news is that this is not an unusually severe recession, and Oregon, especially of late, is no worse off than other states. Also, there are signs in recent months that Oregon's economic performance is turning around as the recession eases. A number of Oregon manufacturers have begun to rehire laid off workers. Oregon's unemployment rate has declined more than a full percentage point from its peak earlier this year. Total employment has remained basically flat over the twelve months. October 2002 employment was just two-tenths of one percent (about 3,000 jobs statewide) lower than in October 2001. Oregon's performance over the last 12 months (September 2001 to September 2002) has been better than other western states, including Washington, Idaho, Colorado, and Arizona, and about the same as California. Though weak, metro Portland's economy has outperformed other West Coast metro areas in the past year, including Seattle and San Francisco.

Despite the pain suffered by the unemployed, this is a relatively mild recession by historical standards. (In the current downturn we have lost about 1.2 percent of our pre-recession employment. By contrast, the 1980-82 recession saw a 10 percent drop in employment.) In a way, this recession has been magnified by the long period of prosperity in Oregon. For most of two decades we have had no significant decline in employment. Over the 1990s, Oregon was one of the fastest growing states in the nation. We were barely grazed by the national recession of 1990-91, a slump that hit neighboring California

very hard. Between 1990 and 2000, we added more than 350,000 jobs to our economy. Our per capita income, which had languished as much as 10 percent below the national average in the late 1980s, closed nearly half that gap, rising to about 95 percent of the U.S. average. As recently as 2000, Oregon had the third fastest growing state economy in the nation.

If the last decade is any indicator, Oregon's economy is particularly well structured to prosper when the nation is doing well. Whether we're successful in organizing our state to prosper in the coming economic recovery depends on how well we meet the economic challenges of a new, knowledge-based economy.

3. NEW GAME FOR BUSINESS

Conversations with business leaders the past year suggest that they are in a new and changing game, particularly those in traded-sector industries. These are industries whose companies sell their products and services beyond Oregon's borders, bringing in revenues that directly sustain high-paying jobs while spurring growth in other good jobs among local suppliers, retailers, and service businesses. [See box.]

Major Trends Confronting Oregon Businesses

Change Is a Constant. The last two decades have been an era of continuous, often turbulent change. Technological change, in particular, has been profound. Just 20 years ago, there was no Internet or email. Fax machines were a rarity. Only hobbyists had personal computers, and they couldn't do much. Corporations ran data on mainframes.

Rapid technological change has forced businesses to change what they produce and how they produce it. Companies that stand still find their markets taken away by hungrier, more creative competitors. Almost every industry in the state has had to cope with big changes in technology, markets, and competition in the past decade. In forest products, Oriented strandboard (OSB) and lower cost Canadian and southern forests have cut into the market share and prices for Oregon plywood. In the 1960s, we produced two-thirds of U.S. plywood. Today we make less than a sixth. Food processors have had to cope with changing consumer demand (declining markets for canned vegetables, for example) and with increasing competition from places like Mexico, Chile, and recently China.

Every Industry Is Restructuring. Mergers, acquisitions and corporate consolidation have affected the competitive landscape in nearly every industry. Many of the mainstays of the Oregon corporate community have been bought by or merged into larger, out-of-state headquartered companies. Banks, utilities, grocery stores, sawmills, and car

Traded-Sector and Local Economies

"Traded-sector" businesses are those whose product is sold in national and international markets. Local sectors of the economy consist of businesses, like grocery stores, dry cleaners, or car dealerships that sell their products mostly to local consumers.

The composition of the traded sector varies from place to place, while local sector businesses look much the same everywhere. Most workers, perhaps about two-thirds, are employed in the local sector of the economy, and about a third are in the traded sector.

The traded sector is particularly important because it can grow faster or slower than the state or local economy by increasing its sales to the rest of the world. Local sector businesses, in aggregate, grow only as fast (or as slow) as the overall local economy.

Traded sector and local economies depend on one another. Traded-sector sales bring in fresh dollars that support high-wage payrolls within the company and among local suppliers. A portion of company revenues pays for public infrastructure and services in the form of taxes.

Traded-sector dollars circulate through the local economy as employees use their paychecks to buy goods and services in the community. Just as local businesses depend on traded-sector industries for prosperity, the industries, in turn, depend on local businesses for everything from housing to professional services to electric energy.

In the same vein, both traded sector and local businesses depend on the public sector for such necessities as water and sewerage, schools, roads, libraries, and police and fire protection.

Traded-sector and local economies face different challenges. It's important for traded sectors to build clusters that are as competitive as possible in the national or world marketplace. The challenge in the local sector of the economy is to be as efficient as possible, both to enhance the competitiveness of the traded sectors, and because efficiency effectively raises the standard of living of consumers.

dealers once locally owned and operated now report to managers and owners in other states, and sometimes other nations.

Restructuring is also changing the marketplace for many Oregon businesses. The consolidation of some industries, such as grocery stores, and the emergence of big-box retailers like Home Depot means Oregon producers have to develop whole new ways of selling their products. A few corporate buyers, mostly located out of state, have extraordinary make-or-break power over what shows up on shelves around the country. Those who simply sell their products to a wholesaler and hope for the best are struggling. Those who can build new connections to their customers, and develop a distinctive brand are faring better. Restructuring is changing the rules of the game in many industries, and forcing companies to come up with new ways to compete and get their products and services to market.

Globalization Is Reshaping Competition, Markets And Who We Are. Free trade and global economic integration are changing the physical boundaries of markets, forcing companies to adapt and change.

Increasingly, Oregon companies depend on the global marketplace to generate the sales on which Oregon jobs depend. Hewlett-Packard derives 65 percent of its revenue from sales outside the U.S. Nike and Intel have both reached the point where sales outside the U.S. are larger than domestic sales.

Globalization has blurred the definition of what it means to be an Oregon company. Steel products maker ESCO and rail car builder Gunderson have international operations. Reser's Foods is still headquartered in Beaverton, but a majority of its employment is out of the state. For some time, Freightliner has been a subsidiary of Daimler Chrysler, and Bear Creek Corporation is a Japanese-owned company.

While globalization opens new markets to our firms, it also opens the U.S. market to foreign competitors, many of whom have successfully copied the production and marketing techniques pioneered by U.S. companies. Falling transportation costs give global competitors easy access to markets previously dominated by U.S. producers. It's cheaper, for example, to move a container of produce from China to the U.S. West Coast, than from Portland to Pittsburgh.

Like or it not, globalization of economic activity seems to be an irreversible process. And while there are some exceptions, Oregon's economy, on balance, has generally thrived in a more open world marketplace. Oregon exports have increased dramatically in the past decade, and a number of Oregon firms have proved they can compete successfully on a larger scale.

Commodity Production Is Migrating to the Lowest Cost Places. The chief downside of globalization is that it has created a wave of lower cost competitors. The United States is no longer the least expensive place for routine mass production of commodity products, whether shoes, computer printers, or supermarket produce. Wages in China, a growing competitor to many Oregon firms, average \$2 to \$3 per day.

The threat of global competition has been compounded for Oregon by the erosion of our cost competitiveness relative to other states. Our housing costs are no longer as low as they were in the 1980s, energy rates have risen considerably, and some resources, like water,

are no longer as abundant. In industry after industry, these trends have forced companies to find new ways to grow their business and remain profitable.

Technology Is Pervasive and Evolving Rapidly. Technological change is creating products and services that are spawning whole new industries and radically changing others. Lasers have emerged as a tool to drill complex circuit boards, correct vision, and remove facial wrinkles. The Internet has created a need for servers and switching systems, web and ecommerce developers, and sophisticated security systems. Genetic research has given rise to new medical therapies. Farmers use sophisticated computers linked to global positioning systems to enhance crop management and yield.

Little if nothing about business has been untouched by technology. Information technology has yielded higher productivity among managers and support staff. Automation, especially robotics, has revolutionized manufacturing. Information systems have enabled supply chain integration and just-in-time delivery. Information systems linked to new communications capabilities, such as intranets and wireless devices, have tied together geographically dispersed business operations. End users have unprecedented access to comparative pricing and product information. Customer service through call centers can be handled just as easily in India as in Indiana. With all these tools, companies can stay in closer touch with markets, customize products more efficiently, make faster and more accurate decisions, shorten design and production cycles, get higher yield from resources, better monitor performance, and improve cost control. Running smarter, faster, and leaner ups the competitive ante for everyone in business and places a premium on talented, knowledgeable personnel.

How Oregon Companies Are Meeting These Challenges

Moving Up Market and Adding Value. In a world full of aggressive, low-cost competitors, Oregon businesses, like others in the U.S., have had to develop new strategies for success in the global marketplace. Whether through customized design, proprietary technologies, a strong brand reputation, superior customer service, or other means, firms are succeeding by developing distinctive offerings and market positions that can't easily be imitated. In general, this has led firms toward high-end and specialized markets, where consumers value better product performance, richer features, and more responsive customer service. Some Oregon producers can, however, remain competitive in commodity sectors where they possess a hard-to-replicate advantage. These might be high tech devices protected by patents, modular houses too expensive to ship overseas, or nursery products barred by customs.

Moving Routine Work Off Shore. Faced with overseas competitors who have lower costs, a number of Oregon-based companies have responded by pursuing their own global production strategies, shifting high volume but low-skill routine work overseas to tap labor advantages, while keeping high-skilled creative work in the U.S. A variety of industries can no longer carry out low-value work in Oregon. As a result, over the past decade, many firms, including manufacturers of apparel, electronic assemblers, and some food processors have closed up shop. Those who remain in business have concentrated their efforts on higher value production.

Recruiting the Best Talent. Although the recession has decreased the immediacy of the labor force problem, companies around the state put a premium on attracting talented workers who can help them develop new products, fully exploit the potential of complex

new technologies, and build stronger relations with their customers. Many companies now see their workforce as a key asset and an important competitive advantage: if they can develop and effectively deploy new ideas more quickly than their competitors, they will have a better chance at success in the marketplace.

Innovating Products and Process. Moving up market and adding value to one's products depends directly on the ability to innovate: to develop new and improved products, and better and more efficient ways of making them. And innovation has to be continuous, because the competition isn't standing still.

Oregon is rapidly becoming a hub for new ideas. Hewlett-Packard's Corvallis operation, for example, has shifted from being a producer of inkjet cartridges to a leading research and development center for a range of new products. As a consequence, Corvallis ranks number four in the nation in patents per capita. HP's Steve Nigro predicts Corvallis will become number one in the nation in five years. Intel already receives more patents for its research work in Oregon than for the rest of its U.S. operations combined.

New product ideas are not confined to high technology industries. Nursery producers cross breed various plants to produce hardier and more attractive trees and shrubs. This appeals to builders of premium homes in the Midwest and Northeast, who pay top dollar for Oregon trees and ornamentals. Oregon firms have developed a range of new engineered wood products that get more value from every log.

New technology enables Oregon producers to become much more efficient, allowing them to compete in the global marketplace. Specialty foods producer Stahlbush Island Farms replaced nine conventional tractors with five new GPS controlled tractors that do the same work, faster, more efficiently and more cheaply. Historically, lumber mills depended on ample supplies of large-diameter old-growth logs, but the surviving firms have invested in new technologies that let them manufacture valuable products out of logs with as little as a two-and-a-half-inch core diameter. Increased mechanization, and laser guided, computer controlled saws enable mills to get maximum product and value out of every log harvested.

Connecting with Customers. Providing greater customer value requires firms to establish new and better ways of connecting with end consumers. Harry & David in Medford still delivers more than 100 million catalogs a year, but now sells over the Internet, through its own chain of stores, and through high-end national retailers such as Saks Fifth Avenue. While commodity producers of pears are struggling with record low prices and aggressive international competition, sales are growing for Bear Creek, and a number of other Oregon food processors that are targeting the high end of the consumer market. Oregon Country Beef, a cooperative of Eastern Oregon ranchers headquartered in Brothers, has forged new linkages with customers throughout the West who are seeking lean, grass-fed, hormone free beef raised in an environmentally sustainable fashion. A key part of its marketing effort is sending its member ranchers to supermarkets to offer customers product samples and answer their questions – a process that builds brand image and gives ranchers invaluable insights into consumer preferences.

Succeeding in Clusters. Oregon's economy is driven primarily by the success of clusters of businesses in its traded sector (see box). Clusters are firms in similar and related activities that share common technologies, markets, and sets of skills. In this environment,

competitors, allies, and their vendors form a critical mass of expertise, innovation, production capability, skilled labor, and financing. This critical mass is self-perpetuating. It gives rise to new businesses, stimulates expansion of existing businesses, and attracts relocation or expansion of businesses established in other places. The forest products industry, for example, includes not just sawmills and veneer plants, but also logging contractors, transportation firms, manufacturers of machinery, wholesalers and distributors of forest products, and legal and accounting services.

Ranked in order of overall economic output, Oregon's major industry clusters are high technology (\$13.2 billion), forest products (\$4.1 billion), agriculture and food processing (\$3.8 billion), and metals, machinery, and transportation equipment (\$2.4 billion). The state's economy is supported by other industry clusters as well, including sports apparel, creative services, professional services, and interstate tourism.

What Oregon Businesses Say They Need To Succeed

Access to Talented People. Innovation doesn't happen without talented people who can see and implement new possibilities. Time and time again, Oregon business people told us that one of their most pressing challenges continues to be "How do I find, develop and retain workers with the specific skill sets needed in our industry?"

The application of computers to a wide range of industries has raised skill levels in most businesses. Even jobs that used to require only modest education now require computer literacy. This is true whether operating and maintaining sophisticated sawmill machinery, running a GPS-controlled tractor, or tracking inventory or sales.

In the years ahead, access to talented labor is likely to be a major issue. The baby boom generation is aging, and starting to approach retirement age. The generation behind them is less numerous, meaning there will likely be fewer workers to take their place. Already, there are 3.5 million fewer 25 to 34 year olds in the U.S. than a decade ago. Especially when the economy recovers, access to talent will be a major consideration in determining where firms choose to grow.

Quality of Life. Because talented workers are a critical ingredient for continuous innovation in many industries, anything that helps attract and retain them is important to business. One of Oregon's most important assets in this respect is its quality of life.

While quality of life means somewhat different things in different parts of the state, it is a common theme businesses use in describing their competitive advantage in attracting skilled workers. In Medford, Bear Creek Corporation relies on the region's quality of life to attract high demand IT workers. It was a pivotal element in recruiting an experienced food industry executive from Chicago. European-headquartered firms with local operations report that it's easy to get their workers to accept rotations to Portland because it is the most European-like city in the U.S.: progressive, compact, with good mass transit, restaurants, and culture.

Another example: Although Intel is headquartered in Santa Clara, many of its key managers, including the company's chief technology officer, chief financial officer, and its venture capital operation are located in Oregon, in part because of the attractiveness of the local quality of life. In professional and creative services, Oregon is a location of choice for established mid-career professionals tired of the stress and intensity of larger urban environments like San Francisco, Los Angeles, and New York.

Resource Base. A big part of the state's perceived quality of life stems from our natural resource endowment, our inheritance as Oregonians. The state's climate, diverse regions (mountains, coast, valleys, high desert) and especially the recreational opportunities they afford, are important to long time residents and newcomers alike.

Oregon's natural resource base is still an important factor in the continued success of industries such as wood products, food processing, and nursery products. But in none of these industries does access to resources by itself confer an automatic competitive advantage. Firms have to be able to use those resources more effectively to create value added products in order to be competitive. In this respect, Oregon's national reputation for environmental consciousness could become a marketing asset. There is a growing demand for wood products and food products that are produced in an environmentally responsible and sustainable fashion. Many Oregon producers meet this requirement and could make this a part of their products' appeal. Some are doing so already.

Business Climate. The business climate broadly includes a range of costs for common purchases like labor, health care, energy, and other inputs, and the costs of complying with government regulation. It can greatly influence the ability of businesses to compete.

In industry after industry, we heard that firms couldn't be world-class competitors unless they had world-class suppliers. Many suppliers of Oregon companies are, by necessity, local businesses. Oregon firms have to get their energy locally, buy their employees health care from local hospitals, and depend on local providers of telecommunications and transportation services.

Government is, in a sense, an important supplier to Oregon businesses. Not only does it build and maintain the transportation system, it also controls whether business regulation is a competitive advantage or disadvantage. Regulation is something of a mixed bag for Oregon businesses. Some regulatory procedures, for example those administered by the state Occupational Safety and Health Division, have improved, and they are viewed as helpful rather than a problem in promoting workplace safety. Other regulations, including some aspects of land use laws and local permitting processes, are viewed as obstacles.

While many companies recognize that Oregon is not the lowest cost place to do business, they nevertheless want Oregon to make an effort to minimize regulatory inefficiency, confusion, and cost.

4. FRAMEWORK FOR SUCCESS

Our aspirations for Oregon's economy are anchored in the vision for Oregon expressed in *Oregon Shines II*, the state's strategic plan. This document envisions a vital prosperous Oregon that excels in all spheres of life:

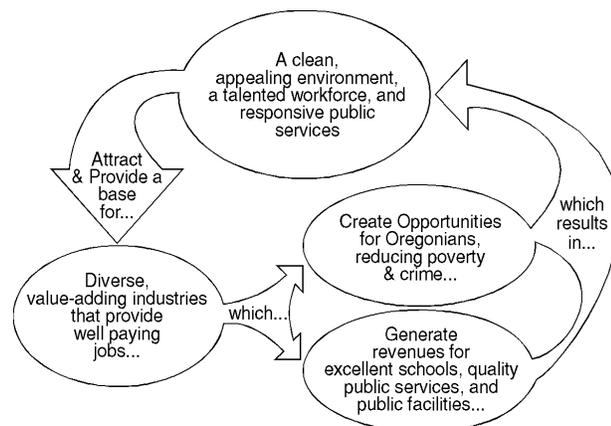
Oregon has diverse businesses providing quality jobs and a talented workforce able to perform those jobs well. It has communities that are safe, caring, and engaging places to live. It has quality public infrastructure and services. It has healthy and sustainable natural surroundings.

The Oregon Progress Board has translated this vision into three interrelated goals.

- Economy: Quality jobs for all Oregonians
- Community: Safe, caring and engaged communities
- Environment: Healthy and sustainable surroundings

The Oregon Business Plan is specifically focused on the goal of providing more quality jobs for Oregonians. But while our focus is on an economy that creates good jobs, we recognize that all goals under the vision of Oregon Shines II are important and interdependent. Community health and environmental health are both key ingredients for a healthy economy, just as a healthy economy is critical for strong communities and healthy environments.

“The Circle of Prosperity” diagram at right shows how economic growth and quality public services reinforce each other. A strong economy not only creates jobs, but also generates revenue to pay for public services. As job growth reduces poverty, demand for poverty-related public services is reduced. In turn, quality public services are critical for economic growth. In particular, schools are essential for educating the workforce needed for companies to compete successfully, and transportation services are vital for movement of goods and services. The quality of communities is critical for retaining and attracting talent.



Within this framework, job creation is a direct function of business success. The critical question, then, is what can Oregon do to help its businesses succeed, especially its traded-sector clusters?

The Four Ps

The ability of Oregon’s traded-sector industries to produce economic prosperity and quality jobs for Oregonians calls for creating an economic framework with the right mix of innovative, entrepreneurial spirit, education and workforce capabilities, an attractive quality of life, and reasonable business costs. We call this the Four Ps – pioneering innovation, people, place, and productivity. As charted in the adjacent figure, the Four Ps form four quadrants of a diagnostic circle that enable us to assess the balance in our economic strategy. This is how the Four Ps contribute to a healthy economy:

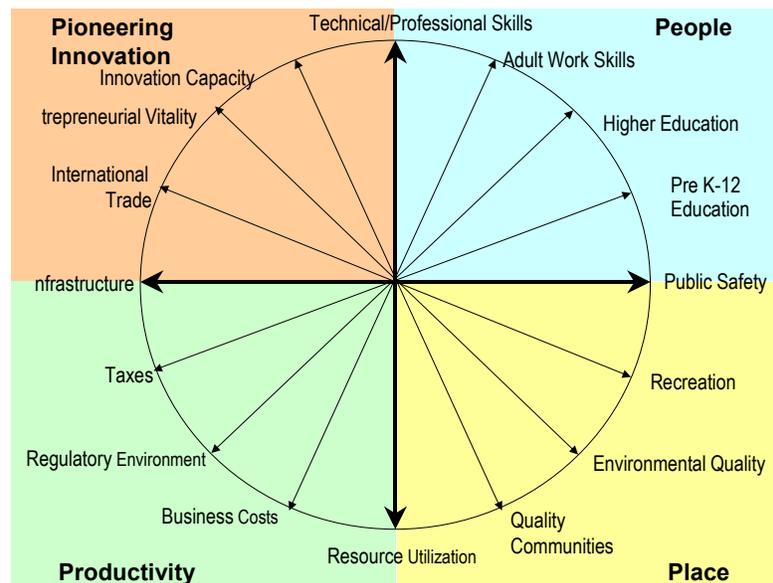
Pioneering Innovation and Entrepreneurship. Much of the recent growth in the Oregon economy has been propelled by knowledge-based industries such as electronics, software, and electronic commerce – and through innovation and new products from all industries. Prosperity will grow out of our work to hone our collective capability to continuously learn and adapt in an ever-changing economic world. Necessary infrastructure for knowledge-based growth includes strong private sector research activities, a good entrepreneurial climate, and the availability of investment capital for new ventures.

People – Workforce and Education. Great education is a powerful magnet for knowledge-based industry because employees value education (making them easier to attract and retain) and because talented graduates fuel the economy. In addition, a quality education system can help segments of the Oregon population and communities throughout the state that have had the greatest difficulty connecting with better opportunities in the knowledge-based economy.

Place – Quality of Life.

Oregon is a special place to live, and Oregon’s quality of life helps attract and retain talented people who drive our economy. Access to the outdoors and recreation, arts and culture and safe communities are among the many features that can support economic prosperity.

Productivity – Business Costs and Business Climate. The cost and availability of a range of public and private services influences the competitiveness of Oregon businesses in national and international markets. Environmental regulations and natural resource policies designed to sustain quality of life and a healthy economy build a climate for business expansion. Competitive rates for quality health care, energy, and worker compensation encourage investment and expansion, as do tax policies that keep business taxes competitive with other states.



Four Ps – pioneering innovation, people, place, and productivity– contribute in the right mix to Oregon’s economic success.

The Fifth, Overarching P – Public Finance. Maintaining a sound public finance system is essential to the Oregon economy because our ability to provide public services vital to businesses and the economy depends on stable, predictable revenue and budgeting. Perhaps nothing underscores this point as much as the recent growing shortfall in the state's revenue receipts, triggering five special sessions of the Legislature to balance the budget.

5. HOW OREGON STACKS UP

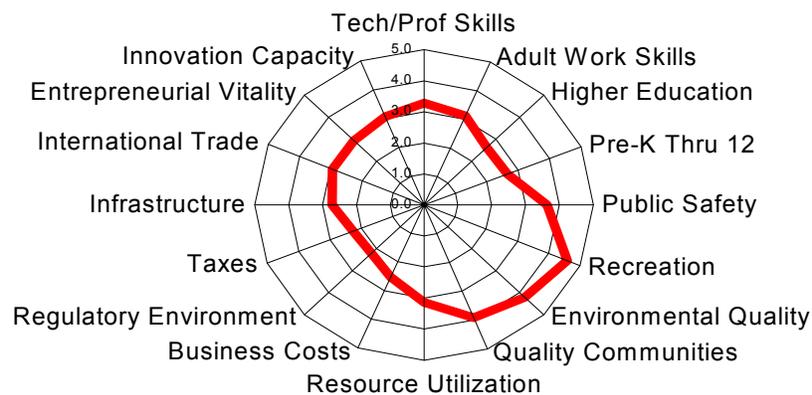
Over nearly two-decades of nonstop growth, Oregon has benefited by having most, if not all, of the Four Ps in place. It was no accident that between 1983 and 2000 the state added 670,000 jobs at a rate of more than 35,000 per year, outperforming the nation and raising per capita income significantly. This run was built on significant advantages, including location on the burgeoning Pacific Rim, a well-educated workforce, an exceptional quality of life, rich natural resources, sound infrastructure and public services, and reasonable business costs, including low energy prices.

We still have many of the advantages that drove Oregon’s expansion in the 1980s and 1990s, including a well-educated workforce, an exceptional quality of life, rich natural resources, sound infrastructure and public services, and reasonable business costs. But our competitive assets are changing, and recent events have exposed some weaknesses that need to be addressed. The question is, where are we still strong, where are we in danger of falling down, and what deficiencies do we have to correct right away?

We looked at this question from two perspectives. First, we asked business leaders in moderated regional meetings across the state* to rate Oregon's strengths and weaknesses, using the Four Ps framework. Then we asked the Oregon Progress Board to gather hard data indicating how Oregon is doing on the same issues. Many of these issues were also treated in white papers contributed by groups participating in the Oregon Business Plan. The white papers are summarized in the next section of this document.

How Business Leaders Rate Oregon

The spider diagram below illustrates the perceptions of Oregon business leaders about how we stand on important indicators of the Four Ps. These perceptions of our strengths (0, very poor, to 5, excellent) match up with a number of actual indicators gathered by the Oregon Progress Board, including infrastructure, international trade, entrepreneurial vitality, innovation capacity, and technical/professional skills. The data suggest Oregon is



* Regional meetings were held with business owners and managers, civic leaders, and interested citizens in Medford (Southern Oregon region), Portland (Portland Metropolitan region), Eugene (Southern Willamette Valley region), and Bend (Central Oregon region) during September and October 2002.

better off in business costs, taxes, and regulation than business leaders think, and not as well off as business leaders believe in regard to higher education, public safety, quality communities, environmental health, and resource utilization. (See more detailed Progress Board data at <http://www.econ.state.or.us/opb/OBCplan/OBCplan.htm>.)

What the Benchmarks Data Say

The Oregon Progress Board rated Oregon's standing on select indicators in the quadrants of the Four Ps using comparative data of the 50 U.S. states. While this is a useful starting point for these comparisons, in many cases the appropriate comparison may be to other nations, because so many Oregon businesses now compete internationally. The Progress Board has published these rankings, in the form of detailed tables and charts, at the URL noted in the paragraph above.

Pioneering Innovation

Strengths. Oregon is among the top ten in the nation in exports as a fraction of state output and in the share of exports that go to "non-primary" trading partners. This suggests that we are well integrated into the global economy. Although not among the top states, we rank above average in venture capital investment in new private sector technology oriented businesses, a critical indicator of the ability to thrive in a knowledge-based economy. We also rank somewhat above average in the number of patents per capita, indicating that we are relatively inventive. Our conversations with Oregon businesses confirmed this view. In each of our major traded sector clusters, from high technology, to traditional industries like lumber and agriculture, businesses are prospering by developing and deploying new production techniques and products.

Weaknesses. For the past two years, Oregon has been without direct international passenger air service to Europe or Asia, a problem that will be only partially corrected with the commencement of Lufthansa flights from Portland to Frankfurt next spring. Relatively few Oregonians speak a language other than English. We rank relatively low in official tabulations of research and development spending per capita, particularly in federally funded research activities. While we have a strong high tech industry, the birth rate of new high tech firms has been relatively low in the past few years. We rank very low in the relative strength of the professional services sector.

People

Strengths. Education is still one of our strong suits. Our K-12 system has been producing measurably improved results in recent years. Student skills at 3rd, 4th and 8th grades are above the national average, and Oregon is particularly strong in reading and math scores in the 8th grade. The share of Oregonians who have completed a four-year degree puts us solidly above average (though not among the top ten states in the nation). Surveys of adult literacy show that Oregonians as a group are also somewhat above average in literacy, though these data are more than a decade old. More focused measures of technical skills show that Oregon also ranks somewhat above average in the portion of the population with a recent bachelors, masters, or doctoral degree in science and engineering.

Weaknesses. Oregon's public school dropout rate is above the national average. K-12 class sizes (measured by the student/teacher ratio) are among the highest in the nation. In the

particularly critical area of undergraduate and graduate engineering education, Oregon is consistently weak, with fewer students enrolled, fewer graduates, and few women in these disciplines than is the case nationally. Oregon is rated among the ten least affordable states to get a college education.

Place

Strengths. Oregon ranks among the best places in the nation for recreation, as measured by visits to state parks and recreational areas per capita. We also rank highly on a number of measures of environmental quality, with relatively few toxins released per square mile, and a low rate of industrial emissions per capita. We have a diverse range of native wildlife and many unique species. We rank high nationally for efforts in community, transportation and land use planning, and we have a very high level of citizen involvement in public policy.

Weaknesses. Oregon has a relatively high overall crime rate. We are average in incidence of violent crime but have one of the higher crime rates per 100,000 population. In the environmental arena, we have a fairly high number of native plant and animal species at risk (although this may be due in part to the fact that there are more remaining species in Oregon than in some other states where native plants and animals have been long lost. We rank relatively low on measures of financial support for the arts.

Productivity

Strengths. Oregon does well in a head-to-head comparison with other states on many common business costs, including state and local taxes. Our aggregate business cost index, a weighted average of wages, energy costs and taxes, ranks among the bottom ten in the nation. Our overall tax burden, measured as a fraction of total personal income paid in state and local taxes, is also among the ten lowest states. (Like other data, these statistics are averages, so in some cases the costs paid by individual Oregon businesses may be more than in other states, but on average, are less).

Oregon's infrastructure, another critical component in productivity, is also ranked above average. We rank above average in accessibility of mass transit. We are also above average in the deployment of digital infrastructure, and we are among the top five in the percentage of people with an Internet connection.

Weaknesses. We are making only partial use of our natural resource base. Timber harvests on public lands, in particular, have fallen well below the levels of sustainable harvest set out in their adopted management plans. Health of marine species, particularly wild salmon and steelhead, is a problem for both recreational and commercial fisheries, and the necessity of remedial measures to restore these species imposes major costs on other sectors of the economy.

Recent trends suggest that some of Oregon's historic productive advantages have weakened. Energy rates, long an advantage relative to other states, have increased sharply in the past few years. Health care premiums are also rapidly rising.

Regulation. Reliable comparative information on state regulation is not available, so we relied on conversations with business leaders to determine the extent to which regulation hurts or hinders business productivity in Oregon. Regulatory performance appears to be mixed. In some cases, Oregon regulation has dramatically improved (as in occupational

safety and workers compensation). In other cases, including local land use policies, Oregon regulations are regarded as a significant barrier to industry growth.

6. KEY POLICY RECOMMENDATIONS

The Oregon Business Plan process revealed remarkably common concerns among Oregon industries and communities about the big problems and opportunities that Oregon must step up and address to help business succeed. Time and again in industry focus groups and regional meetings, participants said things like,

- Fix our broken public finance system, especially OPERS, so it doesn't damage needed public services.
- In particular, don't let up on improving K-12 and post-secondary education. Our knowledge-based businesses – which means most of our businesses – depend on skilled people, especially in engineering and the sciences.
- Nurture innovation. Talent, capital, research, and commercialization of ideas create companies and industries and good jobs. Success breeds success as critical mass leads to more critical mass.
- Keep our high quality of life. It's one of the main things that attracts and holds knowledge workers who are so vital to our success.
- Make sure we have enough land for industrial development.
- Keep our transportation infrastructure up to date.
- Natural resources are still a major part of our economy, especially in rural Oregon. Manage them better, in particular our vast forestlands, for both economic and environmental benefit.
- Streamline permitting and make it more uniform so businesses can plan for growth and avoid costly delays.

Recommendations

White papers prepared as part of this draft offer more detailed proposals on how Oregon proceed in taking its economy forward. The most prominent recommendations are listed below. Many of these recommendations, it should be noted, are already being advocated and pursued by groups and organizations affiliated with the Oregon Business Plan.

1. Stabilize public services financing and budgeting.

- Fix the Oregon Public Employee Retirement System.
- Make a concerted effort to improve performance in public services for the long-term.
- Propose ways to overhaul our tax system to provide long-term revenue stability and to create stronger incentives to stimulate economic growth.

2. Expand Oregon's capacity for innovation.

- Invest in university research in targeted fields and improve technology transfer and commercialization of ideas.
- Strengthen our technical and engineering offerings to support a wide range of industries.
- Promote the growth of venture capital resources in Oregon through tax incentives and direct state and private investment in Oregon-focused venture funds.

3. Refocus economic development.

- Focus Oregon Economic and Community Development Department efforts on traded-sector business retention, expansion, and recruitment statewide.
- Assign the Department responsibility for measures to enhance business competitiveness.
- Through the Governor and the Department, build relationships with existing and emerging industry clusters, and work with the Oregon Council on Knowledge and Economic Development to promote technology-based industries.

4. Continue to build a world-class K-12 education system.

- Build a state-of-the-art assessment and management information system.
- Use tools created by the Quality Education Commission to establish a performance budget.
- Establish a commission to examine more effective models of education delivery, to clarify roles of state government, local districts, education services districts, and other education providers.

5. Redesign Oregon's investment in post-secondary education.

- Set the goal that all Oregonians should have access to education beyond high school and throughout adult life, regardless of financial circumstances or location.
- Organize funding around categories of student support rather than institutional budgets to ensure that goals for access and quality are met.
- Give state universities more local autonomy to operate efficiently, maintain program quality, and meet market needs.

6. Expand engineering and computer science education.

- Double the number of undergraduate engineering and computer science degrees granted in Oregon by 2009.
- Achieve high national rankings for key colleges, departments and programs, including a top-tier engineering college.

7. Achieve higher resource and environmental benefits from our forestlands.

- Build on the Oregon Plan for salmon and watershed health to make it the designated plan by the federal agencies to address clean water and salmon restoration objectives.
- Increase harvests from public forests and improve the productivity of private lands.
- Manage Oregon's federal forests to restore health, reduce the risk of severe fire and create jobs in rural communities.
- Improve public-private collaboration on forest resource issues, and move beyond conflict as a means of resolving issues.

8. Maintain our investment in roads and bridges.

- Start meeting the large backlog of needed maintenance and upgrades to our roads and bridges.
- Deploy this investment as an additional way to give a boost to the economy.

- Pilot new forms of revenue generation.

9. Improve our air connections and trade infrastructure.

- Improve air connections with trading partners and markets, building on the momentum of the recent decision by Lufthansa to establish a direct connection between Oregon and Germany.
- Upgrade our infrastructure and facilities for transporting, handling, warehousing, and distributing freight.
- Assure availability of industrial lands adjacent to transportation corridors and facilities.

10. Make land available for industrial development and other important uses.

- Update our land use system to provide adequate land for location and growth of traded-sector industries while protecting open space and encouraging livable communities.

11. Simplify and streamline permitting.

- Improve the responsiveness and efficiency of permitting in all jurisdictions to enable businesses to hold down costs and be more competitive.

12. Brand and market Oregon more aggressively.

- Rethink Oregon's brand identity. Reposition Oregon for attracting leading-edge industries, talented people, and tourists, and for marketing of Oregon products.

How to Get Organized and Proceed

These priorities and the action items recommended in the matrix of initiatives were offered for consideration and refinement at the December 9, 2002, Economic Leadership Summit. We recommend that the new governor and state and federal legislative delegates incorporate the recommendations in this plan into their own policy proposals in 2003 and beyond. Members of the business community stand ready to assist with that effort.

Oregon Business Plan White Paper

PROVIDING STABLE AND ADEQUATE FUNDING FOR PUBLIC SERVICES

Objective

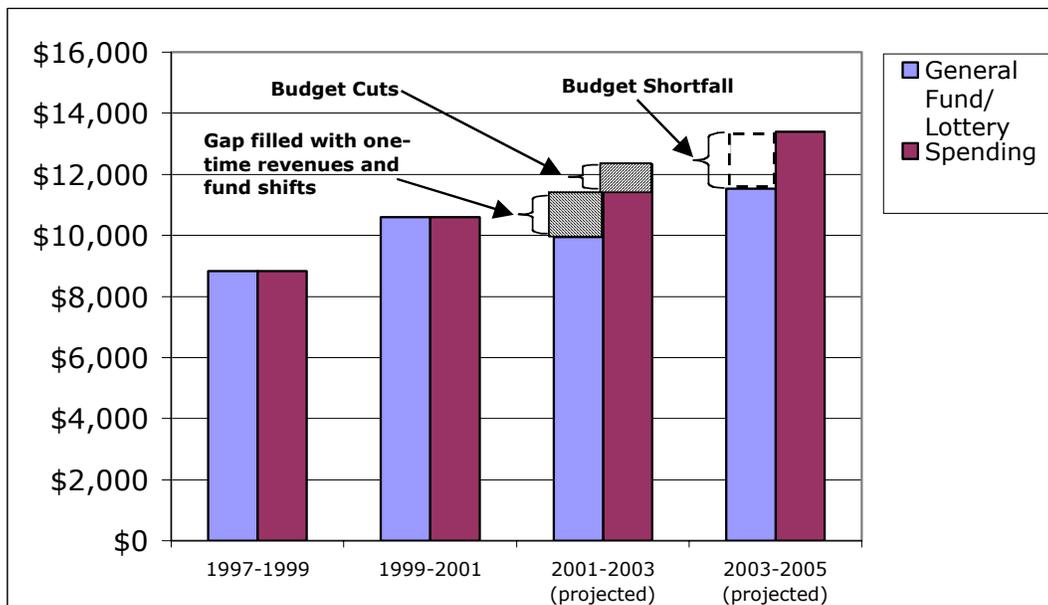
Revamp our system of public finance and budgeting to provide stable funding for critical public services and to create strong incentives for economic growth.

Background

A healthy economy and an efficient system for providing and financing essential public services are vitally interdependent. A high-wage, high-skill economy enables us to finance needed public services with relatively low tax rates. Good public services, including education, infrastructure, public safety, and transportation, are critical to a growing and prosperous economy. Today, our economy is neither growing nor prosperous, and our ongoing budget crisis has undermined our ability to provide essential public services.

Figure 1 illustrates the problem facing Governor Kulongoski and the new Legislature. The paired bars compare the *permanent* resources (the left bar) that compose the state’s general/lottery fund with associated spending (the right bar). In the previous two biennia (1997-99 and 1999-01), permanent resources (e.g., personal income, corporate income, capital gains taxes, and lottery proceeds) were sufficient to maintain – and, in some cases – increase the levels of service for the so-called general/lottery fund programs.

Figure 1. Permanent General Fund/Lottery Sources and Associated Spending, in millions (1997-2005).



Source: ECONorthwest based on data from the Legislative Fiscal Office and Office of Economic Analysis.

In the current biennium, the permanent resources and spending diverged. Resources dipped (from \$10.6 billion to \$9.9 billion) while the spending, deemed necessary to hold services constant, ballooned. The result was a roughly \$2 billion gap between resources and estimated program needs. As the figure shows, the Legislature filled the gap through a combination of program cuts and discretionary revenues (i.e., revenues that are not

traditionally or permanently part of the general/lottery funds). The Legislature relied largely on one-time revenues, which will not be available in future biennia.

Despite the work of five special sessions, lawmakers are not out of the woods for the 2001-03 budget. The state economist is expected to announce yet another downward revision in revenues, and voters will decide the fate of Ballot Measure 28 – a temporary income tax increase that will either provide \$300 million in revenues (if passed) or trigger an equal amount of program cuts (if rejected).

The outlook for the 2003-05 biennium is similarly bleak, even though the budget forecast assumes a turnaround in our economy. Even if voters pass an income tax surcharge in January, the state will face a shortfall in excess of \$1.5 billion next biennium.

There are two things wrong with the situation depicted in Figure 1. First, the state’s general fund resources are highly volatile. Second, growth in spending – despite a cut in 2001-03 – is too steep to be sustained. Oregon’s path out of this fiscal crisis requires reform of our revenue base *and* spending habits. Below, we further define our fiscal problems and then propose solutions to jump-start the reform.

Oregon’s Revenue System: Highly Concentrated, Highly Volatile

The current recession has drawn into sharp focus problems that have been building in our system of public finance and budgeting for many years. A poorly structured tax system undermines government’s ability to provide critical services that Oregon needs to prosper. Fixing our public finance system is the single most important issue facing Oregon right now.

One of the most distinct features of our system is its reliance on a single tax source. In fact, we lead the nation in single tax source reliance. Personal income taxes represent 74 percent of the state’s revenue. Washington, which collects 64 percent of state revenues through a sales tax, ranks a distant second. Furthermore, there is ample evidence that an income tax is the most volatile of any major tax source.

States Ranked by Largest Tax as a Percentage of State Tax Collections

State	Tax	% of State Tax Collections
Oregon	Personal Income	74.4
Washington	Sales	63.6
Alaska	“Other”	59.4
Florida	Sales	59.0

Source: Legislative Revenue Office based on U.S. Census data.

The reason we rely so heavily on income taxes is that we limit the use of other options. In the 1990s, Oregon reduced property tax rates in a series of ballot measures. The state income tax took on more and more of the load in supporting K-12 and community colleges. With limits on property tax rates and the absence of a sales tax (Oregon is one of five states without one), we place an unusual burden on one source of revenue.

During the 1990s this system of revenue collection worked reasonably well for Oregon. As the economy grew, income tax receipts soared. Collections were especially robust from capital gains (due to a healthy stock market) and corporate income taxes. This income tax

growth was largely able to offset the revenue reductions associated with property tax decreases. Had it not been necessary for the state to assume a greater burden in school funding, it arguably should have been setting aside some funds in reserve from this unusually robust period.

Unfortunately, the current recession reveals the fundamental instability of the system. A 1 percent decline in employment yielded a 6 percent decline in public revenues – 15 percent below expectations for the current budget period. Oregon’s disproportionate reliance on income taxes is now coming back to haunt us. In particular, capital gain taxes (down 82 percent from 2000 to 2001) and corporate taxes (down 47 percent) have proved to be unreliable. Strong cyclical in the state government tax sources has resulted in a sharp General Fund decline.

Oregon’s public finance system clearly creates extraordinary challenges during downturns. But it will also pose challenges in normal times, as well. Because of the limitations on property taxes imposed by the voters during the 1990s, taxation as a percentage of personal income has decreased in relation to other states. During FY 98-99, for example, the percentage of Oregon’s general revenues produced through taxes lagged behind the national average by 11 percentage points, and Oregon ranked 45th in taxation per capita. The state offset those declines substantially through greater use of federal funds (for health and social services), user charges (such as increased tuition and fees), and lottery proceeds. But it is very unlikely that we will be able to generate the high levels of revenue achieved during the economic boom of the 1990s, especially in capital gains, which rose largely on the back of a bull stock market. The state revenue office estimates that capital gains receipts were about \$670 million higher in the 1999-01 biennium than would occur in a normal biennium.

Spending: Addressing Runaway Growth Categories

Oregon’s general and lottery funds finance hundreds of individual programs in a range of areas, but nearly 75 percent of all spending fall into the following three categories:

- Education (K-12 and higher education)
- Medicaid (state’s share of the Oregon Health Plan and Long-Term Care)
- Corrections.

Among these three expenditure categories, policymakers must curb growth in the following particular areas:

PERS. The Oregon Public Employees Retirement System is in crisis, and its rising costs have hit the education budget particularly hard, given the large numbers of teachers and staff enrolled in the plan. Poor stewardship and unforeseen consequences of program rules have produced an estimated unfunded actuarial liability of between \$15 billion and \$20 billion. The liability automatically drives up the retirement costs, which are paid by state and local government employers. Today, state officials estimate that employers will contribute amounts equal to 20 percent or more of employees’ salaries and wages – or about twice the contribution rate of a typical state’s retirement plan. Each percentage point increase in the employer’s contribution rate increases state General Fund spending by \$60 million per biennium (when the costs to K-12 and community colleges are included).

It is likely that this liability will be even higher in the future. A recent projection of rates provided by PERS

staff suggests that rates could climb to 30 percent of payroll early in the next decade, and there is a very real possibility that the state will be required to fund one or more "calls" amounting to \$1.5 billion to \$2.5 billion to maintain the system.

Medicaid. State officials predict the Department of Human Services' budget would have to increase by 24 percent in the next biennium – or by \$600 million – to maintain existing programs. Virtually, all of the expected increases are related to

Medicaid – and most of the Medicaid increases are tied to the Oregon Health Plan (OHP). With no change in program rules, the state forecasts the number of OHP beneficiaries will increase between 3 and 4 percent annually through 2005 – well above the growth rate of the general population. More damaging to the budget, the amount spent on each OHP beneficiary will increase by nearly 10 percent each year due to rising hospital, physician, and drugs costs.

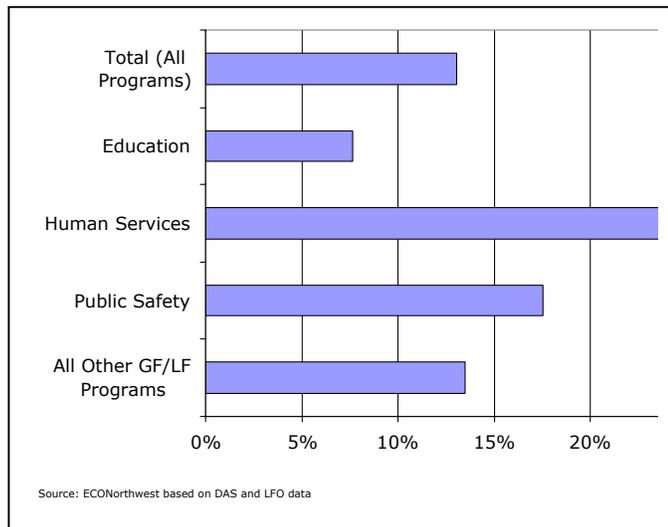
Corrections. Mandatory minimum prison sentences, enacted through Ballot Measure 11, significantly increased Oregon's corrections population. In January 2002, the state estimated that minimum sentences added 4,000 inmates to Oregon's prison system. The state predicts the so-called Measure 11 population to continue to grow through the decade and reach 7,000 inmates by 2012. Growth in corrections spending has outpaced state spending overall. Recent spending growth is driven by debt service related to the construction of new prisons, which will approach \$110 million in 2003-05.

Any serious effort to address Oregon's spending must examine ways to curb growth in PERS, Medicaid, and corrections, which crowd out dollars for the other services essential to our quality of life and economic health, notably K-12 and post-secondary education.

Breakthrough Opportunity

While the state's fiscal crisis presents the new Governor and Legislature with a serious challenge, it also offers an historic opportunity to overhaul the state's finance system and to reconsider it's spending priorities. Oregon's economic future and quality of life depend on how we address this challenge.

Figure 2. Estimated Percentage Increase in General/Lottery Fund Budget Expenditures Between 2001-03 and 2003-05 Biennia, by Program Area.



Recommendations

We recommend a four-step process to meet this challenge:

1. Fix PERS first. The retirement system is broken. If left as is, it would deliver retirement benefits well in excess of those either originally intended by its legislative authors or supported by taxpayers, and it would cripple the state. With anticipated increases in contribution rates, Oregon will have by far the highest expenses for retirement benefits in the nation. Even with those dramatic increases, there is little chance to eradicate the unfunded liability, which now exceeds the total state biennial budget. A recent court ruling directed the PERS Board to make major modifications. In addition, lawmakers must consider all remedies allowed by the Oregon Constitution, including potential dissolution and reorganization of the system. The 8 percent guarantee is not realistic or consistent with other retirement plans, whether public or private. PERS beneficiaries should share in the ultimate cost of repairing the system. Our goal should be to bring our costs in line with other states, while providing a reasonable retirement for public employees. Specifically we should:

- Develop a full accounting of the liability. The plan is staggeringly complex and opaque. Only in recent months has the full extent of the liability become apparent. As alternatives are considered, the value of each proposed change must be analyzed using a well-designed, actuarially sound simulation. An independent review team should oversee the work.
- Two broad alternatives should be considered. The first is to adjust balances (an action contemplated by a recent court decision) and make a series of changes to the program going forward to reduce anticipated liabilities in areas such as health benefits, cost of living adjustments, and guaranteed account increases. The second alternative is to terminate the program and transform it into a 401(k)-type program, providing PERS members the current value of their accounts and a defined contributions plan going forward. These alternatives should be weighed against the goals established above.
- A comprehensive resolution of the PERS system must be completed before the end of the 2003 legislative session, in order to proceed with other critical work to stabilize our state finances.

2. Launch a process to revamp the revenue system to increase incentives for economic growth and provide stable and adequate resources for essential public services. Oregon is overly reliant on personal income and capital gains as a source of revenue. Both of these revenue sources are highly volatile and discourage investment. HB 3941, enacted by the Legislature as a platform to study the system, lays out the goals:

- Diversify the tax base.
- Stabilize the revenue system.
- Encourage capital investment and economic growth.
- Reduce regressivity for low-income taxpayers.

As we diversify the tax base, we must focus on reducing capital gains and income tax rates as part of the package. The first priority should be to reduce capital gains rates, which would propel economic growth and reduce reliance on our most volatile revenue source.

We should also consider lowering the tax brackets as part of an overall effort to reduce our reliance on income taxes.

To achieve these and other goals, Oregon should take a fresh look at alternative sources. In particular, we must be open-minded about a sales tax. A broad-based sales tax, for example, could lower income tax rates, reduce or eliminate capital gains, and provide more reliable revenues for public services. Adoption of such a measure could enhance our quality of life and position Oregon much more favorably for long-term prosperity. We should consider other sources, as well. And part of the review should examine creation of additional reserve funds to support basic services during economic downturns.

The 2003 Legislature should review options with an eye towards submitting a measure on the ballot in the fall of 2003.

3. Craft the budget for 2003-05.

- **Develop a long-term fiscal vision.** Establish, at the beginning of the 2003-05 budget process, goals for where the state aims to be on revenues and expenditures in the future. The Governor and Legislature should establish a "preferred budget" for the years 2005-07 and 2007-2009 that is based on strong economic growth, and on the assumption that we will achieve breakthroughs in service quality and efficiency in major expenditure categories. This interim, the Senate Long-term Budget Committee set the stage for this kind of approach. As part of this long-term budget process we should:
 - Establish a set of performance measures for state agencies that connect with the Oregon Benchmarks.
 - Create "reengineering teams" composed of business and public sector leaders to investigate ways to improve effectiveness and reduce cost of services in five key areas: K-12 education, higher education, public safety, health care, and public employee benefits. As the work is completed, policymakers should also readjust the 2003-2005 budget and long-term budget forecast based on these analyses.
- **Develop an "Essentials Only" 2003-05 budget.** The Governor should develop and submit an "essentials only" budget for 2003-05 within the roughly \$12.2 billion forecast for the traditional general and lottery funds. Lawmakers should resist across-the-board cuts that reduce all agency budgets by a similar percentage. Rather, Department heads should employ a zero-based budgeting approach, justifying each program and activity as if it were being funded for the first time. Such a process would, and should, generate significantly different levels of cuts across departments and agencies. In addition to addressing PERS, any serious attempt to balance the budget without new resources needs to include slowing growth in the two fastest growing spending areas: Medicaid and corrections. For K-12 and post-secondary education expenditures, we recommend use of the tools recommended elsewhere in the Oregon Business Plan to help determine the reasonable level of funding necessary to provide a quality education

4. After PERS is reconfigured and the 2003-05 budget is balanced, present a tax overhaul plan to the voters in the fall of 2003. The primary focus of this effort should be to stabilize the revenue base without increasing total taxes. After careful examination, however, the Legislature may conclude that additional dollars are necessary to provide for

services critical for Oregon's quality of life and prosperity beyond what is covered in the essentials budget. If so, a tax package presented to the voters should include revenue to support those additional expenditures. However, the Legislature should balance the budget *first* without new revenues and leave it to voters to decide whether incremental increases in expenditures are warranted as part of an overall tax-restructuring plan.

White Paper Summary: Stabilize public services financing and budgeting.	
<p>Specifically: Revamp our system of public finance and budgeting to provide stable funding for critical public services and to create strong incentives for economic growth. In particular, overhaul the state's finance system and reconsider its spending priorities.</p> <p>Why: A healthy economy and essential public services are vitally interdependent. A high-wage, high-skill economy enables us to finance needed public services with relatively low tax rates. Good public services, including education, infrastructure, public safety, and transportation, are critical to a growing and prosperous economy. Today, our economy is neither growing nor prosperous, and an on-going budget crisis has undermined our ability to provide essential public services.</p>	
Initiatives	Top Action Items
Fix the Oregon Public Employee Retirement System.	<ul style="list-style-type: none"> • Develop a full accounting of the liability. • Consider two alternatives for solving the problem: 1) adjusting balances and making program changes to reduce liabilities, and 2) terminating the program and transforming it into something along the lines of a 401(k). • Resolve this problem before the end of the 2003 legislative session in order to accomplish other critical work in stabilizing state finances.
Revamp the revenue system to increase incentives for economic growth and provide resources for essential public services.	<ul style="list-style-type: none"> • Stabilize the revenue system. Take a fresh look at alternative revenue sources, including a sales tax. Reduce capital gains and income tax rates as part of the package to stimulate economic growth. • Examine creation of additional reserve funds to support basic services during economic downturns. • After balancing the 2003-05 budget, present a tax overhaul plan to the voters.
Develop preferred and essentials-only versions of the 2003-05 budget.	<ul style="list-style-type: none"> • Develop a fiscal vision out to 2007-09 that ties budgeting to Oregon Benchmarks performance measures and that employs "re-engineering" teams of public- private leaders to look for efficiencies and cost savings in key public services that can be used to fine tune the 2003-05 budget. • Develop an essentials-only 2003-05 budget within the \$12.2 billion revenue forecast, resisting across-the-board cuts and instead employing zero-based budgeting submitted by agency heads. • Look for ways to slow spending growth in Medicaid and corrections. • Budget K-12 funding employing the Quality Education Model and related tools.

Oregon Business Plan White Paper
EXPANDING OUR CAPACITY FOR INNOVATION

Oregon Council for Knowledge and Economic Development

“Today, a new economy is clearly emerging: it is a knowledge and idea-based economy where the keys to wealth and job creation are the extent to which ideas, innovation and technology are embedded in all sectors.” — *The State of the New Economy Report*

The Objective

A knowledge-based economy is everyone’s agenda. It affects all industries in all parts of the state. The ability to innovate and stay competitive is just as important to agriculture and retail as it is to high technology. We know that industries developing and applying technology to increase their competitiveness will lead to future job growth and wealth creation. Investments in research and development, ready access to capital, world-class technical talent, and mature entrepreneurial networks are now prerequisites for economic development.

The Oregon Council for Knowledge and Economic Development (OCKED) is committed to helping the state establish a competitive climate and build the asset base required for the knowledge economy. Our focus is on promoting leadership and collaboration for economic development and investing in the three issues that drive quality job growth and wealth creation: enhancing the skills of Oregon’s knowledge-based workforce throughout the state, commercializing research into profitable business ventures, and accessing capital and business expertise to ensure our businesses thrive.

Oregon’s economic health and national and global competitiveness is relatively poor. The Council recognizes that economic development efforts need to be a combination of short- and long-term strategies that systematically invest in building our competitiveness and sustaining our capacity to create new businesses and jobs. OCKED members agree that there is an extreme sense of urgency to address the issues contained in this report. Now is the time to invest in a sustained effort to enhance Oregon's economy.

The OCKED Mission

The Oregon Council for Knowledge and Economic Development (OCKED) was established by the 2001 Legislature under Senate Bill 273. The mission of the council is to promote knowledge-based economic development in the state of Oregon. To this end, the council will: *“focus specifically on ways to increase high-quality research and development; develop successful private-public models for intellectual property and profit sharing; increase technology and knowledge transfer; provide sufficient capital for investment in and commercialization of technology developed by higher education; and promote the development of a technologically skilled workforce.”*

The Oregon Council for Knowledge and Economic Development is a collaborative effort among Oregon’s public and private higher education institutions, economic development leadership, and the private sector. Legislation calls for the Council to act as an “early warning system and play an advisory role, providing guidance and leadership to state officials and state agencies on issues, plans, and the necessary infrastructure for

improvement in the areas of knowledge-based economic development and the creation of knowledge-based initiatives.” The Council provides a unique forum for discussing issues, encouraging the interplay of university knowledge and emerging growth industries, and coordinating the application of the state's assets in higher education, business, industry, and capital resources.

Why It’s Important

The influence of technological innovation on our economy and our society proliferates each year. Information and technology have driven economic growth in all industries, reduced inflation, and fueled productivity gains. Technology is expected to have an even more profound impact on the economy in the 21st century.

The knowledge economy has redefined the rules of economic development with continual and ever-more rapid change in markets, technology, and firms. During the twentieth century, economic advantage moved from the Henry Ford era of scale and mass production to an era of “dynamic efficiency” where innovation and agility are most important. Finding new ways to add value, streamline operations, and develop new goods and services is at the core of this innovation-oriented economy.

The clearest lesson about the knowledge economy is that those who have more knowledge and those who are good at creating new knowledge and ideas will be in the best position to prosper.* Places that invest more in research and development seem to have more sustained economic activity. Over the past several decades, the return on investment in human capital has never been higher. This is highlighted by the fact that:

- The largest part of the growth in America’s real gross domestic product is the result of new insights [discovery and commercialization of ideas]. (Greenspan, 2000);
- Income levels in regions with high overall educational attainment grew at a rate almost double the growth of areas with lower educational attainment. (Gottlieb and Fogerty, 1999).

As economist Joe Cortright notes, “Places seeking economic development need to assure that they are good locations for the development of new ideas and the formation of new firms if they are to be able to succeed in an increasingly global, knowledge-based economy... . Efforts to maintain a region’s current [traditional] arrangement of firms, markets and technologies may have the effect of retarding the development of more efficient and sustainable activities.”

How Oregon Measures Up

Oregon currently ranks in the middle of all states on key measures that indicate our ability to compete in a global and knowledge-based economy. OCKED recommends that Oregon adopt the explicit goal of being a top 10 ranked state in new economy measures. States with high rankings in knowledge-based measures also tend to have higher incomes, net wealth, and stable business growth. Looking at data on Oregon compared to other states, OCKED has found that investment in and focus on the critical drivers of a knowledge economy has as much or more impact on economic competitiveness than a state’s population and geographic size.

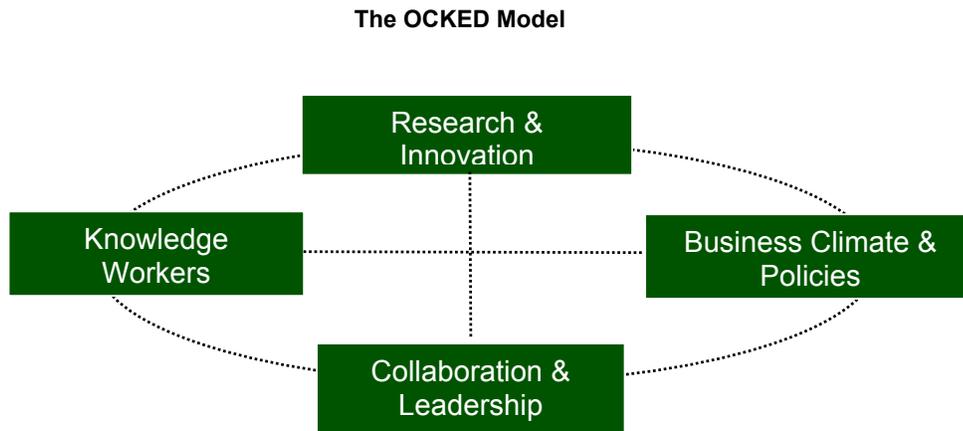
* Cortright, 21st Century Economic Strategy

Research & Development Measures	Oregon Rank	Value of OR Measure	Value of 10th ranked state
Total R&D Dollars per \$1,000 of GSP	26	\$ 18.00	\$35.43
Federal R&D Obligations per \$1,000 of GSP	32	\$ 3.72	\$8.03
SBIR Awards per 10,000 businesses (1998-2000 avg)	17	5.8	8.2
STTR Awards per 10,000 businesses (1998-2000 avg)	19	0.4	0.8
Capital Measures	Oregon rank	Value of OR Measure	Value of 10th ranked state
VC Funds per \$1,000 of 1999 GSP	16	\$5.41	\$8.16
IPO funds per \$1,000 of GSP	22	\$2.45	\$5.45
Business Formation Measures	Oregon rank	Value of OR Measure	Value of 10th ranked state
US Patents per 10,000 businesses	13	147	169
“Gazelle” jobs	19	13.7%	14.4%
% of technology company births (% tech start-ups compared to all start-ups)	29	6.5%	9.77%
Net technology company creation: net formation per 10,000 establishments (comparison of births over deaths--ability to sustain firms)	41	11.7	37.8
Workforce Measures	Oregon Rank	Value of OR Measure	Value of 10th ranked state
Employment in IT occupations in non-IT industries as a share of total jobs	25	1.5%	2.1%
Civilian scientists and Engineers as a percentage of the workforce	14	.52%	.62%
Managers, professionals and technicians as a share of total workforce	1	31.4%	27.8%
% of civilian workforce with a recent bachelor’s degree in science or engr.	14	1.65%	1.92%
% of civilian workforce with a recent master’s degree in science or engr.	18	.31%	0.38%
Higher Education Measures	Oregon Rank	Value of OR Measure	Value of 10th ranked state
Bachelor’s degrees granted as a percent of the 18-24 year old population (1997-98)	31	4.5 % (13,652 degrees)	5.86%
Percent of bachelor’s degrees granted in science and engineering (1997-98)	31	17.40% (2,369 degrees)	19.30%
Science and engineering graduate students as percent of the 18-24 year old population (1999)	31	1.20% (3,733 students)	1.78%

Sources: U.S. Department of Commerce, State Science and Technology Indicators, 2001; Milkin Institute, 2002; New Economy Index, 2002.

The Unfinished Agenda

Oregon’s economy requires an integrated system that equally and fully invests in the key drivers of business and job growth: research and innovation, knowledge workers, business climate and policies, and leadership and collaboration. OCKED established separate committees to work on each of these issues, engaging other experts from around the state to assist the council in developing specific action-oriented recommendations.



Research and Innovation (OCKED Research & Tech Transfer Committee): Our capacity to translate ideas into businesses is critical for economic development. Basic research (in universities and industry) produces new insights that, in turn, are refined into practical applications through applied research. The idea is then commercialized and diffused into widespread use, creating new businesses and jobs. This economic cycle is dependent on the research and technology transfer strength of our universities, the ability for universities and industry to collaborate on new ideas, the depth of talent in our entrepreneurial community, and institutions that support commercialized research.

Creating knowledge and ideas and transforming them into new companies and jobs requires:

- Increasing the capacity to conduct research, including more research dollars and in-depth expertise.
- Focusing our research on areas with high returns on investment, such as well-paying jobs, viable businesses, and new wealth that build on Oregon’s strengths.
- Expediting and streamlining the research and development process to more quickly and effectively move ideas into commercial products and services.

Business Climate and Policies (OCKED Capital & Business Formation Committee): Oregon continues to be at a significant disadvantage for starting or relocating a knowledge-based company. Investors and industry leaders perceive Oregon as a place that does not welcome business development. The lack of focused economic development programs and funding is compounded by out-of-date policies that are not in line with national best practices. Our high personal income and capital gains tax rates inhibit entrepreneurs and venture capital investors from staying in or moving to Oregon. With fewer scientific researchers and senior management and investors, we also have fewer spin-off companies

from existing firms and fewer new start-ups, thus further eroding our ability to develop a competitive advantage.

In a time of slow economic development, key sources of business growth become critical. Our ability to foster a risk-tolerant, growth-oriented investment environment will be key to Oregon's economic recovery. The primary objective of the OCKED's capital and business formation recommendations is to stimulate economic activity in Oregon. We believe that if these priorities are implemented they will achieve the following direct benefits:

- Provide revenue stability to the state by removing or reducing the volatility of capital gains tax receipts,
- Leverage multiple increments of additional private sector investment by removing the barriers to early stage venture capital,
- Create new jobs and businesses in industries that have high multiplier effects and that pay family wages,
- Expand Oregon's entrepreneurial capacity by attracting people with senior management experience and investment income, and
- Enhance the benefits to higher education created by recent legislation that allows institutions to hold stock in companies that spin off from tech transfer efforts.

Knowledge Workers (OCKED Workforce Development Committee): Knowledge workers hold the jobs that invent new products, translate data and information into usable services, and manage businesses. They are key to a company's productivity, competitive edge, and ability to adapt to changes in markets and customers. Knowledge and technology workers are employed in places like banks, hospitals, manufacturing firms, trucking and distribution companies, high tech establishments, law offices, ad agencies, government and agriculture. Like certain industries that tend to lead economic growth, these occupations are indicators of a state's competitive advantage and economic sustainability.

The demand for qualified technology and knowledge-based workers continues to grow despite the recent economic downturn and high unemployment rate. In fact, the majority of the top ten family-wage, high demand jobs are technology-related occupations. More than 90 percent of these jobs found throughout the state are in industries outside high technology (insurance and financial services, health care, wholesale trade, transportation services, etc.). *Despite this widespread need, Oregon has no statewide workforce strategy to address the needs of these occupations and their industries of employment.*

Future job growth depends on having a critical mass of highly skilled workers supported by:

- A flexible and responsive training system for our existing workforce to help employees obtain up-to-date technical and entrepreneurial skills, as well as continue to stay marketable when looking for new employment.
- Adequate funding and support for higher education to significantly increase the effectiveness of and access to technology, sciences and business management programs throughout the state, thereby growing and employing our own knowledge-based workers.

- A system that prepares the next generation for well-paying jobs by ensuring our K-12 system teaches math, science, problem-solving and technology skills early and consistently; exposes students to hands-on experiences and the variety of technology and science careers; and provides teachers with adequate and ongoing training in these same areas.

Collaboration & Leadership (The OCKED Council, Advisors, and Partners): The ability to implement and realize the benefits of our research, workforce, and business formation recommendations depends on the state’s willingness to make economic development a priority in Oregon. Oregon needs a shared economic vision among public and private sector leaders and collaboration among higher education, government and industry to work towards a set of common economic goals. OCKED views its role as an active player in convening and leading efforts to enhance Oregon’s economy.

Research & Technology Transfer Priority Recommendations

Goals and Objectives

Dramatically increase high quality research and development efforts that will create new products, services and businesses leading to high paying jobs and sustained economic growth for Oregon:

- Increase the capacity for high quality research and development;
- Facilitate the translation of research into commercial applications;
- Increase the value and economic benefit of research and technology transfer.

Desired Outcomes

By 2010, Oregon will have established at least three fully funded and operational Signature Research Centers that will significantly increase our research capacity and competitiveness while directly contributing to the economic growth of Oregon industries. In doing so, Oregon will:

- Double federal, state, and industry research and development dollars;
- Double the number of Small Business Innovation Research (SBIR) and Small Business Technology Transfer Research (STTR) awards;
- Double the number of university-based spin-offs; and
- Double license income per \$100M of sponsored research.

Recommendations

Priority A: Establish nationally recognized “Signature Research Centers” (focal points) that concentrate people, funding, facilities, and support on building a competitive advantage in specific research areas that have strong commercialization potential.

Centers should be targeted on research expertise directly linked to Oregon’s knowledge-based industries and that have the greatest possibility of creating new businesses and competitive wage jobs and increasing public and private investment. Centers will be collaborative efforts among various public and private research institutions.

- Pilot an initial Signature Research Center in *Multiscale Materials and Devices*
- Identify and establish plans for up to three additional Centers

- Establish a “development corporation” to provide technical and managerial support to Centers.

Priority B: Direct the missions and functions of the State Boards of Education, Oregon Health & Science University and Oregon Economic and Community Development Department to promote the creation, dissemination and commercialization of ideas.

Higher Education:

- Continue to ensure the protection of the Bayh-Dole Act.
- Revise missions to include specific language about commercialization of research.
- Streamline state-level review of research and technology transfer agreements and bring into alignment with best practices nationwide. Exempt university contracts from legal sufficiency review by the Oregon Attorney General.
- Create yearlong entrepreneurial leaves-of-absence and “industry experts in residence” programs.

OECD:

- Create a statewide Technology Roadmap that identifies barriers to and opportunities for Oregon’s knowledge-based industries, and develops tech transfer and knowledge-economy strategies.
- Develop a supporting database of R&D assets and actively market those assets.
- Establish a commercialization liaison within the agency.

Priority C: Provide adequate seed funding for technology transfer efforts throughout the state including OECD’s support for Higher Education Technology Transfer (HETT) fund and tech transfer efforts in rural Oregon and traditional industries, as well as the Oregon University System’s continued pursuit of alternative funding sources including philanthropic resources.

**Capital & Business Formation Priority Recommendations
Goals and Objectives**

Enhance the ability to start and grow companies and to promote entrepreneurs willing to commercialize ideas in Oregon:

- Increase amount of pre-seed, seed and institutional venture capital available for Oregon’s technology and bioscience business sectors;
- Remove the barriers to business formation and modify state policies to reflect current best practices; and
- Enhance the entrepreneurial and management capacity in Oregon by increasing the depth of existing talent and attracting additional world-class executives and researchers.

Desired Outcomes

Oregon must achieve the following capital and business formation goals by 2010:

- Double the amount of venture capital funds per \$1,000 of GSP
- Increase the rate of US patents per 10,000 businesses by 50%

- Double business start-ups per \$100M of sponsored research
- Double the net formation (comparison of births over deaths) of technology and bioscience companies.

Recommendations

Anticipated results: Every dollar of early stage capital has a high multiplier effect in terms of additional investment, new jobs and personal income created. Example: An Oregon Seed Fund with \$20M in capital helped 50 Oregon companies create over 3,000 jobs, realize revenues of over \$798M, and leverage over \$570M of additional investment. According to the National Venture Capital Association, venture-backed companies in Oregon accounted for over 23,000 jobs and \$3.3B in revenues during 2000.

Priority A: Significantly increase investment and the presence of institutional venture capital firms in Oregon

- Work with philanthropic foundations and state retirement funds already investing in private equity funds to encourage their venture capital partners to establish an Oregon office staffed by a partner-level investor who will review Oregon investment deals on a regular basis.
- Reduce or eliminate capital gains to remove existing barriers to private investment and be more competitive with other states.
- Work with OECCDD to treat venture capital as an industry cluster and to develop a strategy to expand and recruit a larger venture capital industry sector in Oregon.

Priority B: Enhance the depth of management and entrepreneurial capacity

- Develop an “Invest in Oregon” incentive package that would attract highly qualified venture fund managers and world-class researchers. The objective of this package is to increase new investments and attract key talent that will directly result in the creation of new jobs and wealth and increase our competitiveness and ability to attract additional firms.
- Establish training and networking programs to develop qualified CEOs and help train companies in various aspects of business management, technology assessment and project planning, company formation and capitalization, regulatory requirements and other skills.

Knowledge-Based Workforce Development Priority Recommendations

Goals and Objectives

- Develop an integrated workforce strategy, aligned with Oregon’s leading industries, that keeps current workers on the leading edge, expands the ability to educate knowledge workers in Oregon, and prepares Oregon youth for the knowledge-based jobs of the future.

Quality: Raise Oregon’s commitment to excellence in educating and training knowledge- and technology-based workers.

Capacity: Expand Oregon’s capacity to meet the growing demand for knowledge- and technology-based workers.

Capability: Provide quality education and training for knowledge- and technology-based occupations in all geographic regions of the state.

Desired Outcomes

Oregon must achieve a world-class competitive workforce by 2010; Specifically, the state must dramatically increase:

- The number of skilled and qualified Oregon workers able to fill rapidly growing and changing technology-based jobs;
- The number of Oregon students entering and graduating from Oregon universities with Bachelor's, Masters and PhDs in technology, engineering, science and business management fields; and
- The awareness of and interest in science and technology among K-12 students, and the competency of teachers in the knowledge and application of technology, math and science.

Recommendations

These recommendations address incumbent workers, higher education and K-12 issues as an integrated system. They are intended as a package of strategies each contributing to both immediate and long-term workforce needs and should not be interpreted as stand alone projects.

Priority A: Qualified and Skilled Workers For Today's Jobs: Immediately enhance the skill level of the current workforce by developing a statewide roadmap for a knowledge-based workforce focusing on high demand occupations critical to multiple Oregon industries in all parts of the state.

- Develop a statewide action plan for high demand technology-reliant occupations that increases both technical and entrepreneurial and business management skills;
- Coordinate the development and delivery of curriculum in a manner that reduces redundant programs and increases the capacity to train workers; and
- Develop a statewide strategy to more effectively utilize distance and e-learning.

Priority B: Higher Education Capacity and Effectiveness: Actively support higher education efforts that significantly increase the capacity and quality of people graduating with degrees in technology, engineering, sciences, and business programs.

- Support the full set of recommendations of the Engineering and Technology Industry Council (ETIC) to double engineering graduates, create top-tier academic programs, expand labs and facilities, and enhance pre-college programs.
- Increase the quality and depth of programs in business and information management to increase Oregon's capacity for entrepreneurial development and successful commercialization of ideas.
- Ensure Joint Boards of Education leadership commitment to and policies that ensure full transferability of accredited courses, promote collaboration and minimize the development of redundant curriculum and fully utilize distance and e-learning capacity.

Priority C: K-12 Capabilities: Increase the number of students aware of and prepared to enter science and technology fields, and increase the number of teachers who are competent in the use and application of technology in the classroom.

- *Students:* Dramatically increase Oregon’s participation in the International Science and Engineering Fair (ISEF). Establish ongoing industry and higher education involvement and a sustained funding source for student participation in science and technology fairs.
- *Teachers:* Enhance the capacity of teachers to use technology in classrooms by supporting an additional 250 teachers per year to complete technology, math, and science training with at least 60% of these teachers from economically distressed communities. Support “teachers in industry” internship programs for at least 100 additional teachers each year.

General Council Recommendation

Continue the work of the Oregon Council for Knowledge and Economic Development.

The mission and recommended course of the Council represents issues essential to Oregon’s immediate and long-term economic vitality. As the state seeks direction for an economic recovery, leadership must focus its attention on the issues and industries that lead economic growth and provide the basis for sustained competitiveness. The Council’s mission and the state’s need for economic growth have resulted in an intersection that is both timely and critical.

- To ensure full implementation of strategies and a continued focused on economic development issues, the Council recommends the continuation of the Oregon Council for Knowledge and Economic Development until January 2, 2008.

For additional information relevant to this white paper, the reader may wish to visit the following site:

Oregon Council on Knowledge and Economic Development

<http://www.ous.edu/cpa/OCKED/>

White Paper Summary: Expand Oregon's capacity for innovation. (Recommendations from the Oregon Council for Knowledge and Economic Development)	
<p>Specifically: Create quality jobs and businesses by increasing the state's research and development efforts, enhancing the commercialization of ideas, providing sufficient capital and management capacity, and increasing the technology skills of the Oregon workforce.</p> <p>Why: Knowledge-based industries are central to a state's job growth and overall competitiveness. States with knowledge-based economies tend to have higher incomes, greater net wealth, and stable business growth.</p>	
Initiatives	Top Action Items
Increase high quality university research and commercial applications of that research.	<ul style="list-style-type: none"> • Establish "signature research centers" which focus on the commercialization of ideas directly related to Oregon's knowledge-based and emerging industries. • Integrate research and the commercialization of ideas in the missions and operations of state universities and the Oregon Economic and Community Development Department. • Provide \$5 million in seed money to fund the Higher Education Technology Transfer (HETT) fund and tech transfer efforts in rural Oregon and traditional industries
Build capital support and managerial capacity for Oregon's businesses.	<ul style="list-style-type: none"> • Treat venture capital as an industry cluster, and leverage existing Oregon-based investments to encourage growth of an Oregon venture capital industry. • Eliminate or reduce capital gains to stimulate investment in Oregon companies and new technologies. • Offer incentives to attract to Oregon highly qualified venture fund managers and signature researchers. • Establish training and networking programs to enhance entrepreneurial capacity and management depth in Oregon.
Strengthen education at all levels to develop a knowledge-based workforce for a wide range of industries.	<ul style="list-style-type: none"> • Develop a statewide workforce education strategy for high-demand, technology- and knowledge-based occupations that are central to the competitiveness of multiple industries across the state. • Increase the capacity of higher education to support knowledge-based industries. Support the recommendations of the Engineering and Technology Industry Council (ETIC) for increasing the number of people graduating with degrees in technology, engineering, and sciences. Increase the capacity and quality of business and information management programs. Increase access to college degrees through coordinated curriculum, distance learning, and transferability of credits among higher education institutions. • Increase the number of students aware of and prepared to enter science and technology fields, as well as the number of teachers who are competent in the use and application of technology in the classroom. Do this through industry- and university-sponsored involvement, and a scholarship fund and industry internships to upgrade the technology skills of teachers.

Oregon Business Plan White Paper

REFOCUSING ECONOMIC DEVELOPMENT

Objectives

Without relinquishing its long-term commitment to rural community development, Oregon should redirect its economic development resources, both within the Economic and Community Development Department and other state agencies, to core responsibilities for growing traded-sector industries, jobs, and investment in Oregon's urban areas. The state, with the leadership of the Governor and the resources of the OECD, should play a lead role in working with the business community to enhance the competitiveness of Oregon's traded-sector businesses and industry clusters.

Why This Is Important

Oregon's economy is driven by the success of its traded-sector businesses. Their ability to compete in the global marketplace is increasingly shaped by their ability to continuously innovate products and more efficient production methods. While much important work to assure business competitiveness is done at the local and regional levels, some policy issues and opportunities can be addressed effectively only at the state level, where we can marshal a statewide constituency, gubernatorial leadership, and legislative support. Tax and regulatory policy, incentives, and a wide range of policy decisions that affect the competitiveness of Oregon businesses need strong advocacy in state government; this is a critical role for the Governor and the Economic and Community Development Department.

What We've Done So Far

The record of the past decade shows that Oregon's economic growth has been driven principally by the success of a few major industry clusters. To date, these clusters have established themselves and flourished largely as a result of private sector initiative, although in several cases, government policy has played an important supporting role. The growth in semiconductor manufacturing, for example, was driven by private sector investment encouraged by a state law capping property taxes on large strategic investments. Bolstered by funding from the state lottery, the Oregon Economic and Community Development Department has implemented a number of creative and effective initiatives. Among other things, it has:

- Established regional business development officers to support business deals, and created strategic reserve investment funds as large as \$18 million per biennium to facilitate deals.
- Formed and funded regional strategies with focus on industries; projects included marketing Oregon for business and tourism.
- Began active international recruitment.
- Established key industries and associations, provided funding and staff support to convene interested parties, including NW Aerospace Association, Oregon Bioscience Association, NW Environmental Business Council, NW Wood Products Association, Semi-Conductor Workforce Consortium, Professional Services Coordinating Council, and the Software Association of Oregon.

- Helped fund a number of industry-wide training efforts to improve worker skills and raise productivity, including training for secondary wood products workers and workers in the recreational vehicle manufacturing industry.
- Kept a focus on helping Oregon companies to expand, but also on international export sales and recruitment of foreign companies; this built upon Intel's investments in Washington County, which greatly expanded the high technology cluster in Oregon.

Results of These Efforts

During the mid-1990s, these development efforts were extraordinarily successful at the statewide level. Oregon's economy consistently outpaced the nation's and Oregon was among the fastest growing states. This record shows that when we focus our attention on these issues, we generate tremendous success. In the early to mid-1990s, our systematic efforts to boost business competitiveness, encourage investment, and develop a strong cluster in high tech led to a record \$12 billion in private investment in semiconductor production facilities.

The Unfinished Agenda

In the late 1990s, during the height of the state's economic boom, the emphasis in the metro area turned to growth management and state economic development efforts shifted to dealing with the problems of smaller communities that had not shared in the state's economic expansion. Legislative and executive attention to the challenge of promoting competitiveness statewide declined. Several successful efforts to work with particular industries continued at a diminished level, but around the state, many business leaders came to feel that there is no concerted state effort to address the competitiveness of their industry or address its future role in the state's economy.

Breakthrough Opportunities

We need to refocus the activities of the state, particularly the Oregon Economic and Community Development Department, to address statewide considerations of business and economic competitiveness. Priority should be placed on implementing the Oregon Economic and Community Development Department's newly produced strategic plan, which makes it clear that the agency's key functions include:

- Promoting business competitiveness
- Encouraging investment, and
- Organizing the state's leading industry clusters.

This need not diminish the Department's role in helping communities throughout the state to share in growth. It merely restores attention to the traded-sector businesses and industry clusters which drive prosperity. This refocus is critical to the success of community development efforts. Effective advocacy for competitiveness, investment, and strong industry clusters at the state level will bolster the economic position of all parts of the state, including smaller communities and distressed regions.

This refocus has broad implications for economic development. Enhancing business development and investment attraction can produce short-term results. Promoting business competitiveness of the state's leading industry clusters will strengthen Oregon's economy in the longer term.

The Department has a key role to play in leading state government's efforts to work more closely with the private sector, particularly in industry clusters, to identify economic opportunities. The Governor can set the tone for this approach by meeting regularly not just with individual business leaders around the state, but by meeting periodically with groups of executives in each of the state's industry clusters.

To support this activity, the Economic and Community Development Department should be the lead agency in developing a close ongoing relationship with each of the state's principal traded industry clusters, relying wherever possible on existing industry trade organizations. The OECD should work with these organizations to promote private sector participation in discussions about the cluster's current health and future outlook, and develop an agenda of actions for the industry and the state. While the OECD may be the lead agency for most industry interaction with the state government, other departments, such as agriculture and forestry, have missions that directly affect particular industries. In these instances, agencies should partner in their efforts.

Industry cluster organizations should be expected to largely self-organize, with assistance from the state. Clusters exist only where a critical mass of firms in a traded-sector industry recognize their common self-interest. Clusters can't be created by government policy; they require an objective comparative advantage. We envision an open-ended process where any group of traded sector firms in Oregon with a common set of interests could organize themselves and work with the Economic and Community Development Department to assess their competitive situation, set benchmarks for their future development, and develop a public-private agenda for action.

There are several specific things a state or region can do to develop its industry clusters, including:

- Promote cluster awareness.
- Engage in ongoing diagnosis of a cluster's competitive position.
- Develop training and management programs.
- Actively engage in recruitment efforts.
- Widen institutional membership to include all cluster constituents.
- Set and monitor benchmarks for cluster contributions to the Oregon Economy. For each industry cluster, our objective should be to measure consistently how well Oregon's industry clusters stack up against the best in the world. Oregon's Employment Department, with a wealth of statistical data on Oregon firms and workers, should work with industry experts to develop and periodically update these measures, and report them to the industry and to the public.

Recommendations

1. Refocus state economic development. The Governor and the Legislature should formally declare that the Economic and Community Development Department should return to its role in actively focusing on business retention, expansion and recruitment statewide, particularly for traded-sector businesses. The Department should be staffed to fulfill this role, and be provided a substantial "strategic reserve" fund to work with industry.

2. Advocate for measures to support the competitiveness of Oregon businesses. In support of this advocacy responsibility, the Department should work with the Governor to

systematically build relationships with existing and emerging industry clusters to address key issues. Existing industry associations should be engaged in building these relationships and other state and local agencies should be enlisted in the effort

3. Support technology as a catalyst for economic growth. OECDD should play a key role in implementing the Oregon Council on Knowledge and Economic Development's recommendation that the state place more emphasis on the development and application of new technology as a means of promoting economic objectives.

4. Continue to support rural community development. Oregon should continue to utilize the Community Solutions Team model to act on economic opportunities in rural communities. The Governor should make certain that there is a staffed process in place to address rural policy concerns and to coordinate policies across state agencies that affect rural community and economic development.

For additional information relevant to this white paper, the reader may wish to visit the following sites:

New Economy Coalition

<http://www.neweconomycoalition.org/>

Oregon Economic and Community Development Department

<http://www.econ.state.or.us/>

White Paper Summary: Refocus economic development.	
<p>Specifically: Refocus the Oregon Economic and Community Development Department to play a lead role in working with the business community to grow traded-sector industries, jobs, and investment in Oregon's urban areas. Also, enhance the competitiveness of the state's traded-sector industry clusters.</p> <p>Why: Certain policy issues and opportunities can be addressed effectively only at the state level, where we can marshal a statewide constituency, gubernatorial leadership, and legislative support. Tax and regulatory policy, incentives, and a wide range of policy decisions that affect the competitiveness of Oregon businesses need strong advocacy in state government. This is a critical role for the Economic and Community Development Department.</p>	
Initiatives	Top Action Items
<p>Refocus state-level economic development.</p>	<ul style="list-style-type: none"> • The Governor and Legislature should formally declare that the Economic and Community Development Department is returning to its role in business retention, expansion, and recruitment. • Staff the Department to fulfill this role, and provide a substantial "strategic reserve" fund to work with industry. • Assign the Department and the Economic and Community Development Commission to be advocates for measures to enhance business competitiveness. • The Department should work with the Governor to systematically build relationships with existing and emerging industry clusters, and their associations, to address key issues. • Support technology as a catalyst for economic growth, particularly recommendations by the Oregon Council on Knowledge and Economic Development.
<p>Maintain a long-term commitment to rural community development.</p>	<ul style="list-style-type: none"> • Oregon should continue to utilize the Community Solutions Team model to act on economic opportunities in rural communities. • The Governor should make certain that there is a staffed process in place to address rural policy concerns and to coordinate policies across state agencies that affect rural community and economic development.

Oregon Business Plan White Paper
BUILDING HIGH PERFORMANCE K-12 EDUCATION

The Objective

In 1991, Oregon set an ambitious goal to create a K-12 education system that results in “measurably the best educated and prepared students in the nation and equal to any in the world.” While Oregon has made progress toward the objective, we have not yet reached it. With education more important than ever for building a strong economy and ensuring productive lives for Oregonians, we need to recommit to the goal.

Why This Is Important

Our economic goals are inextricably tied to our education goals. Thirty years ago, it was possible for Oregonians with a good work ethic to earn a good living with rudimentary reading and math skills. Well paying jobs that require such meager skills are scarce in Oregon today, as production has migrated to lower wage areas around the world. Across nearly every industry, we find the growing demand for well-educated employees and a stronger connection between education and earnings.

K-12 education is by far the largest area of public expenditure. Skills and knowledge acquired at this level represent the platform for all further education and work. In addition, the reputation and quality of our schools is also critical for attracting and retaining businesses and talented people to our state.

What We've Accomplished So Far

In 1991, Oregon embarked on a journey toward a fundamentally different kind of K-12 education. The foundation of Oregon’s vision is a system where students demonstrate academic competence against clear standards, replacing one where expectations and results varied widely by school, classroom, and socio-economic group. Oregon’s reforms also called for contextual learning and real-world experiences that connect classroom activities with community- and work-based learning. Through contextual learning, students gain more of the skills they need to navigate the complex demands of modern life, including problem solving, critical thinking, teamwork and effective communication.

In 1991 Oregon also set out on another journey that would greatly complicate K-12 finance. In passing Ballot Measure 5, voters dramatically limited local property taxes to fund schools. K-12 school funding became a state responsibility and the largest expenditure in the General Fund. State government spent much of the decade adjusting to this reality. Today, the state decides the total dollars available to schools and divides those dollars directly to districts, with various adjustments. School districts, in turn, decide how to spend the dollars they receive from Salem.

School reform and property tax limitation began on largely separate tracks. By the end of the decade they came together through Ballot Measure 1, a constitutional amendment passed in 2001, which directed the governor and the legislature to provide funding sufficient to meet our education goals, or explain why they weren’t doing so. The measure, in effect, ratified the work of the Quality Education Commission, which built a tool designed to establish the link between school funding and results.

As budgeting and performance measurement come together, a new and very important issue emerges: governance and accountability. During the 1990s, state government has taken on vastly greater responsibility in K-12 education, but the roles of the participants have not been formally redefined. With the state taking on the responsibility for setting funding levels and performance expectations, the roles and responsibilities of school districts, education services districts and charter schools need to be clarified. In particular, we should be clear about how much flexibility schools have in spending the dollars allocated, and what accountability they face for meeting state (and soon federal) expectations for results.

Progress on Standards and Assessments

Oregon has made enormous progress in implementing the Education Act for the 21st Century, achieving results that too few Oregonians understand or appreciate.

From elementary to high school, new benchmarks have been set that clearly spell out the skills and knowledge students need for a strong academic foundation – to read well, speak and write persuasively, use math to solve problems, and understand important aspects of science and history. These standards also require students to apply what they've learned in the context of complex, real-life problems – to investigate, analyze, test, and propose solutions. These benchmarks will measure our progress towards meeting recently mandated federal standards, as well.

According to *Education Week's* annual "Quality Counts" review, Oregon's education improvement plan is one of the best-conceived strategies among states for improving public schools and ensuring that every student in public schools graduates with the skills and knowledge to succeed.

Oregon's teachers and school leaders are striving to help students meet the new standards. They have redesigned classroom materials and retooled instruction practices. They have investigated which strategies work best for which kids. They are offering more challenging classes to more students.

Two credentials – the Certificate of Initial Mastery (CIM) and the Certificate of Advanced Mastery (CAM) – have been incorporated into these education improvements. Although not required today for graduation, they represent the fullest achievement of higher standards set out in the Education Act. By earning these certificates, students prove what they've learned. Rather than earning credits for "seat time," students show – through their classroom work, through performance on tests, and in presentations to teachers and others – what they actually know and can do. CIM and CAM represent a much higher level of achievement than the current high school diploma (see comparative table below).

The Oregon University System (OUS) is phasing in a new admission system that recognizes student achievement of these higher standards. This alignment allows students to build on the standards they have met for CIM and CAM and to use this information as part of university admission. Businesses are starting to consider achievement of CIM in their employment and hiring practices, as well.

CIM vs. DIPLOMA

Writing	Scores on work samples and essay writing tests emphasizing ideas & content, organization, sentence fluency, conventions and citations.	Grade of “D” in 3 credits of language arts. No level or breadth of study specified.
Math	Scores on work samples, problem solving tests and multiple choice tests emphasizing conceptual understanding, process & strategies, communications and accuracy.	Grade of “D” in 2 credits of math. No level or breadth of study specified.
Speaking	Scores on unrehearsed and rehearsed speeches emphasizing ideas & content, organization, delivery, and language.	No requirement.

The results of these policies are positive. Test scores are up across the board, more students are engaged in learning, dropout rates are down, and more schools are focused on continuous improvement. Despite substantial funding challenges, described below, Oregon schools are performing at higher levels today than a decade ago.

On the other hand, after the same decade of effort, we still face significant challenges. Questions remain regarding the sustainability of the improvements that have been seen, since they may be in part related to changes in reporting practices. And many of our students are still not reaching the new standards. At the high school level, a majority of students do not meet the tenth grade math standards, and just under half do not meet state reading standards. Over four in ten middle school students fail to achieve math standards. More than a third of the state’s eighth graders do not meet reading standards.

There are other shortcomings in the performance of our K-12 system. African-American and Hispanic students remain below state averages on state assessments in all subjects at all benchmark levels. Oregon’s dropout rate stands at almost exactly the same point it was over a decade ago. So does the difference in the dropout rate between white students and African-American and Hispanic youth, who continue to quit school at over twice the rate of white students

The achievement gap is not spread evenly throughout the state, but instead is concentrated in a subset of districts and schools. For example, 56 percent of all Hispanic dropouts can be found in 40 high schools or district programs out of the 263 in the state. Ten high schools or district programs account for 77 percent of African-American dropouts. State policies designed to address all Oregon schools overlook the special needs of these schools and do little to help them retain their students and close the gap. Oregon must consider strategies to change those schools and programs that account for the largest part of the achievement gap so that no children of a particular race, ethnicity, or socioeconomic status are less likely to meet state standards.

Currently, no statewide plan exists to close the achievement gap or to reduce the dropout rate. In the absence of a commitment and concrete strategy to close the achievement gap and reduce the dropout rate, little further improvement can be expected.

Results of Education Reform in Oregon			
Indicator	1991		2002
Oregon Reading Benchmarks			
3 rd Grade	52%		85%
5 th Grade	51%		79%
8 th Grade	40%		63%
10 th Grade	31%		53%
Oregon Math Benchmarks			
3 rd Grade	35%		77%
5 th Grade	47%		75%
8 th Grade	40%		56%
10 th Grade	34%		44%
National and International Comparison			
Indicator	Oregon	United States	Rank
NAEP Reading 4 th Grade	28%	31%	9 higher / 19 same
NAEP Reading 8 th Grade	33%	33%	2 higher / 19 same
NAEP Math 4 th Grade	21%	21%	4 higher / 23 same
NAEP Math 8 th Grade	26%	24%	2 higher / 18 same
TIMSS 8 th Grade Science	564	534 (World: 516)	World: -1 higher/10 same
TIMSS 8 th Grade Math	525	500 (World: 513)	World: 8 higher/16 same
SAT Verbal	528	505	First
SAT Math	528	512	First

Along with the student assessment system, Oregon also built a powerful system to measure school and district performance. At the beginning of the decade, no data were available to enable comparisons of school level expenditures or student performance among individual schools or between districts. The statewide assessment system and a new system of financial accounts have changed this completely. Today, the Database Initiative now collects standardized data on a wide range of school expenditures, practices, and learning outcomes, which allows schools to be compared to one another. All this information is available at the Oregon Department of Education website. The Oregon Report Card, sent to each parent during the fall, contains information on measures which indicate how our schools are functioning, with data at the state, district, and school level. This information allows parents and school site councils to reach more informed judgments about the performance of their schools.

In 2002, President Bush signed the "No Child Left Behind" Act aimed at improving education across the United States. The Act's provisions parallel remarkably what Oregon has accomplished over the past decade. Provisions include:

- Annual assessments in core subjects at grades 3 through 8 and during high school
- Measurement of school performance aimed at 100 percent achievement of benchmarks in 12 years
- Options for parents of students in schools that aren't making adequate progress
- A focus on grade 3 reading as an early target for success.

While our system is highly compatible with this design, we can use the Act to accelerate our progress. In particular, the annual testing requirement creates the opportunity to streamline and automate our assessment system to make it more useful for individual schools, teachers, and students in providing timely performance information. Oregon is at the forefront nationally in developing electronic assessment systems (TESA), which could reduce costs, provide more timely information, and save classroom time for testing.

The Budget Challenge

This progress on standards and assessments is particularly remarkable in the context of the challenging fiscal times in which Oregon schools have struggled to achieve the mandates of reform. A recent report from ECONorthwest concluded that while personal income in Oregon grew 5.7 percent annually over the past decade, the percentage of income devoted to public schools decreased from 4.6 percent to 4.2 percent.* This shifted Oregon from 12th to 23rd in national rankings of K-12 expenditures as a percentage of personal income. Oregon moved down from 15th to 20th in per pupil spending ranked nationally. Growth in spending per student can be computed in several ways, but when using operating revenue per weighted average daily student, a broad measure that captures special education and other weightings, funding increased 20.6 percent during the decade 1991-2001. This increase lagged behind the regional consumer price inflation rate, which increased at 36.4 percent, and the national rate, which increased 30.0 percent.

These aggregate numbers mask the revenue volatility experienced by individual districts. During the 1990s, the legislature equalized funding among districts as the state took responsibility for setting the level of K-12 funding. The results were that some districts experienced substantial funding reductions while others fared relatively well. These numbers also mask cost increases in categories such as PERS, health care, and energy that are largely outside of district control. These, too, have added to the financial challenges facing most districts.

Since the state assumed responsibility for K-12 funding, debates on appropriate funding levels has been heated in Salem. In 2001, the voters passed Ballot Measure 1, which directed the Governor and the Legislature to adopt a funding level adequate to meet Oregon's education goals, or alternatively explain why such a funding level could not be achieved.

The Quality Education Model (QEM) has been developed to detail the level of investment needed to meet our education goals and to establish a link between funding and school performance expectations. Through the Quality Education Model, the impact of increases or decreases in educational funding can be analyzed in terms of the programs schools can provide and the performance that can be expected. Using this tool, for example, the

* ECONorthwest. (2002). *Comprehensive Analysis of K-12 Education Finance in Oregon*. Portland, OR.

Legislature can easily determine the impact of a \$100 million increase in budget on class size, or cost out the statewide impact of additional resources for reading instruction. The model relies on sophisticated data showing how schools use funds and how well they perform. This information is invaluable both to policymakers, who can use it to help guide budget decisions, and educators, who can use it to help improve efficiency and effectiveness.

This model needs to be strengthened if Oregon is to have any real control over education spending now and in the future. It allows policy makers to analyze current costs of the school system and understand in very clear terms how the total state funding level relates to program levels at individual schools. It can be used to analyze system costs and to challenge certain components if they appear to be out of line. And it allows the Legislature to set performance expectations associated with the level of funding selected.

The Quality Education Commission report suggests that there is a substantial funding gap between the level of funding now provided to schools and the level necessary to meet our very ambitious education goals. This gap can be filled either through more dollars or improved efficiencies in the system. Most likely, it will require a combination of the two.

The Immediate Challenge

All these tools were put to work in the budget for the 2001-03 biennium. The Governor proposed, and the Legislature adopted, a budget that included additional dollars to be flexibly used by schools to focus on a critical performance goal, third grade reading. At the same time, the governor's budget anticipated more modest gains in other test scores because of insufficient funding to provide programs for accelerated improvement. For the first time, budgets and performance were linked.

Subsequent special sessions removed dollars in support of grade 3 reading goals and made further cuts to the K-12 budget. The budget outlook for the next biennium looks bleak as well. The Quality Education Commission suggests that we face more than a \$1 billion gap. This much will be needed in revenues, cost savings, or a combination of the two to fund schools at a level required to meet Oregon's high standards. Given the current revenue crunch and rising costs for public employee retirement and health care benefits, that gap is growing.

Some may argue that in the face of the current downturn, we should abandon the assessment and database development systems we created over the past decade. The effect of such a decision would be short sighted and inefficient. Schools have spent a decade responding successfully to the challenges of reform, as evidenced by rising test scores and other indicators cited above. They have organized their instructional programs around state assessment data and have learned to use the data to allocate resources and adapt instruction. This has yielded more efficient use of existing dollars and an ability to prioritize to accommodate budget reductions.

If the state's sophisticated and widely recognized system of standards and assessments is abandoned or gutted, little savings will result. Districts will need to implement their own local assessment programs, thus transferring costs from the state to the local district without providing resources, thereby creating what amounts to another unfunded mandate. In addition, the federal No Child Left Behind legislation includes requirements that standards-based assessments be conducted at grades 3 through 8 and once between grades 9 and

12. Rather than abandoning statewide assessments, Oregon must now plan how to expand them to meet federal requirements. Even if Oregon did eliminate CIM, CAM, and benchmark assessments, the state would have to begin constructing new assessments immediately, and have the new system approved by the federal government to ensure compliance with federal standards. This is a recipe for further loss of state and local control and perhaps even higher assessment costs.

Rather than going backward, Oregon should accelerate its efforts to build an electronic assessment and database information system. TESA, an electronic assessment, was successfully piloted last year and will be rolled out to more than 500 Oregon schools during this school year. This system is much less burdensome for teachers to administer than the old paper-based system. It is cheaper to operate and allows much quicker results as students take the state assessments online and receive immediate feedback on their scores.

In addition, we have the opportunity to present and transmit secure student records electronically across the K-16 system, which will dramatically reduce workload by schools, community colleges, and universities. We will be able to follow individual student progress over time and as students move within the state. Finally, the database project is poised for streamlining to enable much easier comparisons among schools and school districts. An investment of \$20 million in these areas could reap savings in school administrative costs in the first biennium, as well as improve the quality of instruction.

The information provided by the database, in turn, provides the Governor and the Legislature the information they will need to make intelligent choices about funding. The database provides information about the cost of employee benefits, for example, which is one of the more rapidly growing categories of spending. It contains information on overhead, maintenance and many other categories that warrant careful budget analysis.

Recommendations

1. *Build a state-of-the-art assessment and management information system to save dollars, support school improvement, and increase the usefulness of information.*

Translate Oregon's paper assessment system into an electronic system that provides each student online assessments and an individual learning profile and education plan.

- Develop an accompanying integrated data management system that provides schools with student performance data in forms that can be used easily for school improvement planning.
- Engineer the data management and transfer infrastructure required to enable Internet-based assessment and electronic learner profiles.
- Pilot this system in 2003 and fully implement it by the 2004-05 school year.
- Adjust and modify the state assessment system so that it is in full compliance with the federal "No Child Left Behind" legislation.

2. *Use the tools of the Quality Education Model to establish the 2003-05 Budget and in meeting the requirements of Ballot Measure 1.*

- Establish key learning goals to be accomplished, including continued gains at all grade levels.

- Use the data from the Quality Education Model database as a tool to help identify opportunities for cost savings and to set priorities and performance expectations.
- Actively encourage schools and districts to seek waivers and legislative change to help them meet standards as part of the budget discussion.
- As part of setting the funding level, the Legislature should define program levels necessary to meet performance expectations and allocate funding to meet those goals.
- Continue to track school spending and performance using the Database Initiative. Identify patterns of effectiveness from the Database initiative and share these best practices statewide.
- Expand the data collected by the Database Initiative to include information on how well schools are functioning as measured by the QEM Quality Indicators.

3. *Develop a statewide strategy to close the achievement gap significantly and reduce the dropout rate dramatically.*

- Identify the districts and schools that account for the majority of the achievement gap and dropout rate.
- Using the Quality Education Model, conduct an intensive, comprehensive data collection and analysis to diagnose the current state of functioning and the necessary changes that need to occur in these schools for them to close the achievement gap and reduce the dropout rate.
- Institute policies, allocate resources, and provide technical assistance to enable struggling schools to redesign themselves in ways that enabled them to close the achievement gap and reduce the dropout rate
- Closely monitor their progress and make necessary modifications to the plan, based on additional data collected at regular intervals. Hold local central administrators and boards of education accountable for implementation of changes leading to improvements.
- Involve the local parent and business community in these efforts and keep them well informed of plans and progress.
- Identify successful practices that lead to the eventual closure of the achievement gap in these schools and require all schools with an achievement gap to implement these practices or provide a comparable plan to close the gap and reduce the dropout rate.

4. *Reconfirm and communicate the vision for education among all stakeholders, particularly focusing on teachers as key drivers of reform.*

- Develop a clear, consistent message regarding the vision and successes of school reform and communicate it broadly throughout the state.
- Encourage employers, foundations, individual philanthropists, and community groups to take the lead in developing this communication.

5. *Focus on the underlying governance systems for education, both K-12 and post-secondary, and re-evaluate the roles of schools, districts, education service districts, post-secondary education providers, the Department of Education, the state boards of education and higher education, the Governor, and the Legislature.*

- Appoint a task force or commission to study thoroughly the entire educational governance and policy system. This panel should make comprehensive recommendations for redesign and improvements that help streamline the policy and governance process and align them with the goal of improved student achievement in all Oregon schools.

For additional information relevant to this white paper, the reader may wish to visit the following sites:

Oregon Department of Education

<http://www.ode.state.or.us/>

Quality Education Commission

<http://dbi.ode.state.or.us/qualityed/>

E3 (Employers for Education Excellence)

<http://www.e3oregon.org/>

White Paper Summary: Continue to build a world-class K-12 education system.	
<p>Specifically: Press the quest to achieve measurably the best educated and prepared students in the nation and equal to any in the world.</p> <p>Why: Our economic goals, among others, are inextricably linked to the performance of our education systems, especially as all aspects of our economy become increasingly knowledge based. With education more important than ever for building a strong economy and ensuring productive lives for Oregonians, we need to recommit ourselves and redouble our efforts to achieve world-class K-12 education. In particular, we need to adopt ways of measuring progress and matching expectations to funding levels.</p>	
Initiatives	Top Action Items
<p>Build a state-of-the-art assessment and management information system to save dollars, support school improvement, increase the usefulness of information.</p>	<ul style="list-style-type: none"> • Develop a data management system that provides schools with student performance data in forms that can be easily used for school improvement planning. • Engineer the data management and transfer infrastructure required to enable Internet-based assessment and electronic learner profiles. • Pilot this system in 2003 and fully implement it by the 2004-05 school year. • Adjust and modify the state assessment system so that it is in full compliance with the federal "No Child Left Behind" legislation.
<p>Use the tools of the Quality Education Model to establish the 2003-05 budget and meet mandated requirements for matching Oregon's K-12 funding to its K-12 goals.</p>	<ul style="list-style-type: none"> • Establish key learning goals to be accomplished, including continued gains at all grade levels. • Use the data from the Quality Education Model database as a tool to help identify opportunities for cost savings and to set priorities and performance expectations. • Actively encourage schools and districts to seek waivers and legislative change to help them meet standards as part of the budget discussion. • As part of setting the funding level, the Legislature should define school program levels and performance expectations and allocate funding to meet those expectations. • Continue to track school spending and performance using the Database Initiative. Identify patterns of effectiveness from the Database Initiative and share these best practices statewide. • Expand the data collected by the Database Initiative to include information on how well schools are functioning as measured by the QEM Quality Indicators.
<p>Develop a statewide strategy to close the achievement gap significantly and reduce the dropout rate dramatically.</p>	<ul style="list-style-type: none"> • Identify the districts and schools that account for the majority of the achievement gap and dropout rate. • Diagnose the current state of functioning and the necessary changes that need to occur in these schools for them to close the achievement gap and reduce the dropout rate. • Institute policies, allocate resources, and provide technical assistance to enable struggling schools to close the achievement gap and reduce the dropout rate. • Closely monitor their progress and make necessary modifications to the plan, based on additional data collected at regular intervals. Hold local central administrators and boards of education accountable for results. • Involve the local parent and business community in these efforts and keep them well informed of plans and progress. • Identify successful practices that lead to the eventual closure of the achievement gap in these schools and require all schools with an achievement gap to implement these practices or provide a comparable plan to close the gap and reduce the dropout rate.

<p>Reconfirm and communicate the vision for education among all stakeholders, particularly focusing on teachers as key drivers of reform.</p>	<ul style="list-style-type: none"> • Develop a clear, consistent message regarding the vision and successes of school reform and communicate it broadly throughout the state. • Employer, philanthropy and community groups should take the lead in developing this communication.
<p>Re-examine the underlying governance systems for education, both K-12 and postsecondary, looking at the roles of all officials and organizations involved.</p>	<ul style="list-style-type: none"> • Appoint a task force or commission to study the entire educational policy and governance system and to make recommendations to streamline this system and align it with the goal of improving student achievement in all Oregon schools.

Oregon Business Plan White Paper

INVESTING DIFFERENTLY IN POST-SECONDARY EDUCATION

Objectives

Our economic health depends more than ever on the services provided by our public universities, community colleges, and private colleges and universities. They have a central role in producing the well-educated workforce that is vital to a knowledge-based economy. Yet, state dollars for public universities and community colleges have not and will not keep up with the demand for these services. Indeed, during the current recession there has been a significant decline in state support despite increasing demand. Oregon now provides less than one-fifth of the operating funds for the seven state universities. Because the state no longer has the capacity that it once did to be a primary provider of higher education, it must acknowledge that it is now essentially a *buyer of higher education services*.

Because Oregon no longer has the capacity that it once did to be a primary provider of higher education, it must acknowledge that it is now essentially a buyer of services.

Given its inability to keep up with rising costs and market demand in post-secondary education, the state has an opportunity to think of itself and to act as an investor in post-secondary education. Instead of trying to fund and manage institutions, which it is no longer able to do adequately, the state should make targeted investments in increased student access (through greater financial aid) and particular outcomes in research and services. As tuitions rise to cover program quality and operating costs that the state can no longer finance, the state should shift its investment focus to student aid to be sure that the greatest number of students possible have access to a post-secondary education.

This will require the state to:

- Build an integrated investment framework for all of post-secondary education that targets dollars to highest priority public needs.
- Give OUS campuses greater flexibility to control tuition, enrollment, programs, and the majority of funds that the schools generate on their own. (Community colleges now have such flexibility.)
- Utilize the entire mix of post-secondary resources: state universities, community colleges, and private colleges and universities.

As we change the way the state invests its available post-secondary dollars, we need to reaffirm our commitment that every Oregonian, regardless of financial circumstances, should have access to education beyond high school, whether college or professional-technical education. We also should pursue key post-secondary education investments, such as research and engineering education, that will support our economic growth.

Background

Oregon is blessed with a mix of quality public universities, community colleges, and private four-year institutions that are located throughout the state. The state supports post-secondary education through the Oregon University System, the Department of Community Colleges and Workforce Development, the Oregon Student Assistance Commission, and the Oregon Health and Sciences University. The state-governed university system consists of seven institutions and one branch campus in central Oregon.

There are 17 locally governed community colleges, for which the state has been the primary source of funding since 1990. Community colleges carry a significant load in educating Oregonians for technical occupations and providing a cheaper alternative to baccalaureate students in their first two years. OSAC provides need and merit scholarships to students who attend independent colleges, public institutions, and the Oregon Health and Sciences University. OHSU is an independent public corporation. In addition, Oregon has 16 private, nonprofit colleges and universities which now enroll some 30,000 students and graduate more than 6,000 annually, providing 30 percent of Oregon's baccalaureate degrees, 32 percent of its masters degrees, and the majority of its professional degrees.

Post-secondary education is increasingly central to the lives of Oregonians and the Oregon economy.

- Access to post-secondary education is critical to Oregonians to secure well-paying jobs and career advancement.
- Further education broadens the personal horizons of Oregonians, enriching their personal growth and community lives as much as their occupational opportunities.
- High quality institutions are a magnet for the talent that drives the economy.
- Ideas and research that emerge from our institutions give rise to new products and industries.
- Engineering talent from our universities is particularly important across many critical industries.

With post-secondary education ever more central to Oregon's economic future, it is critical that the state manage its resources in a way that provides the highest possible return for its investment. State policy and funding has huge influence over the quality of all post-secondary education in Oregon, yet state investment and oversight have become, over decades, balkanized and inconsistent. Each agency prepares its budget separately from one another, and each has a different governance model. The state's current method of budgeting and governing its investment in post-secondary education may simply not be up to the challenges now emerging.

The first challenge relates to access and quality. Demand for higher education is growing at the same time that public finances are increasingly constrained. Under these circumstances, we will be hard pressed to accommodate enrollment growth, maintain program quality, and still make enrollment financially accessible to students of limited means. Modest state financial support is a given. That creates troublesome "hydraulics" at the campus level in balancing these values. Permitting enrollment growth while constraining the price of tuition sacrifices program quality in a number of ways that are not acceptable. Raising tuitions can protect program quality but limit student financial access. Capping enrollment can stabilize quality and financial access, but limit program access.

Students of limited means are most vulnerable. Studies confirm that cost increases directly force many of them to increase their student debt loads, drop out, or not attend to begin with. There are also inter-system hydraulics. Tuition increases or enrollment caps in the Oregon University System can raise enrollments at community colleges. Tuition increases and enrollment caps among community colleges can push out the working student and

others who cannot attend full time or who otherwise cannot qualify for federal and state financial assistance. Consequences for access and quality are harder to anticipate in a situation where state investment and budgeting is not integrated, and where governance systems are separate.

As the state's investment in post-secondary education decreases in the face of demand growth, we should look for better ways to determine priorities and trade-offs, allocate dollars, buy services, and assure financial access to students who need it the most. We must make sure that our highest priorities can be met by drawing on the strength of both our public and independent institutions. We also should give the institutions themselves flexibility to seek additional dollars to cover the costs of providing services should the state be unable to do so.

The second challenge facing post-secondary education particularly relates to campuses of the Oregon University System. At one time state government was the primary funding source for the Oregon University System, with tuition making up most of the rest. The state oversight for public university paralleled the oversight of other state agencies. Today, state government covers less than 20 percent of university budgets, with the rest coming from tuition, federal, and philanthropic funds. Yet many state government requirements are still imposed on campuses, even though the state provides a minority of funds. The state requires approval, for example, for campus expenditures even if state dollars aren't involved. The net effect of the state requirements is to slow down campus ability to respond to opportunities in areas ranging from technology transfer to building construction to program development.

The contrast with community college local governance is striking. Today, the majority of community college funding comes from state government. Yet, the state affords community colleges great flexibility on how to handle their affairs, under the oversight of locally elected boards. Community colleges are widely heralded for their flexibility and responsiveness. Public universities receive a smaller share of their total revenues from the state, yet are encumbered by far more administrative and oversight requirements. And community college boards are afforded complete flexibility in setting tuition.

Facing these encumbrances, Oregon Health and Sciences University in 1997 was given the opportunity by the Legislature to become a public corporation with its own board of directors and with freedom from most administrative requirements. OHSU has prospered under this model.

Building a New Framework

These challenges have not been ignored. Throughout the 1990s Oregon has adjusted the delivery model under the theme of providing greater incentives for all schools to meet changing needs and to do so with greater institutional autonomy. Oregon has made great improvements, including the following:

- Prior to the 1999 legislative session, the Board of Higher Education adopted a new Resource Allocation Model (RAM) to allocate funds to each campus based on student enrollment (for example, \$3,500 per freshman) and specific services that the state wants to buy from schools (such as agricultural extension). As a corollary to the budget model, individual institutions now keep on campus those funds that they take in from

student tuition payments. This gave much stronger incentives to campuses to attract students and meet their needs.

- An additional benefit to the RAM model is that for the first time it is clear what the state is allocating on a per student basis for different programs and services. This kind of information had already been available for community colleges. The RAM creates a framework allowing the governor and legislature to evaluate higher education in terms of student access rather than current services budgets and to review all investments in a common format. Tables 1 and 2 illustrate what such a format might look like.
- In recent years, public universities have been accorded greater autonomy and flexibility in meeting growing needs. Most notably, the state allowed the Oregon Health and Sciences University to become a public corporation with an independent governance structure. In the case of the remaining public universities, the Legislature has provided some waivers from state administrative requirements. In turn, the State Board of Higher Education and the Chancellor's Office are shifting more responsibility for program and administrative decisions to the campus level.
- The state has made a substantial effort to strengthen engineering education under the Engineering Technology and Industry Council, which has allocated additional funds to the Oregon University System and independent schools to achieve the goal of doubling engineering output and increasing quality. This targeted effort illustrates how the state can use budgeting to shift resources to high priority needs.
- Recognizing the change in direction, the 2001 Legislature enacted HB 2015 to investigate how the new budgeting models might be better integrated. HB 2015 authorized creation of a Post-Secondary Education Opportunity Commission to help the Governor, among other things, develop a consolidated post-secondary budget, consider measures to expand campus autonomy, examine alternative governance structures to oversee the state's interest in post-secondary education, and recommend how the state can better achieve its interests in post-secondary student access, research, and community services.

Unfortunately, the commission, an early casualty of budget reductions, was not formed. However, a strategic planning committee under the Board of Higher Education has been looking at many of the issues central to HB 2015, in particular campus administrative flexibility. The Joint Committee of the Boards of Education and Higher Education has been addressing how to build a consolidated budget.

- As a result, the State Board of Higher Education has recently proposed greater flexibility for OUS campuses to cope with declining state investment in the university system. "The Deal," as the proposal is called, would accord each OUS campus with greater responsibility for determining what levels of tuition and enrollment are needed to balance state support and maintain program quality. The proposal makes it clear that enrollment limits and tuition increases must become part of the higher education funding equation in Oregon. The proposal, which also calls for greater campus flexibility in spending money and contracting services, will be introduced for enactment in the 2003 Legislature.
- Recognizing the need for greater access for students of limited financial means, a broad coalition representing students, the public university system, community colleges, and

independent colleges has emerged to support increased funding for need-based scholarships. Oregon's level of support for need-based scholarships (which are granted for access to public or private Oregon institutions) is among the lowest in the nation, despite increases in tuition experienced in recent years in public universities and community colleges.

All of these developments set the stage for a major re-evaluation of the state's funding and governance policy pertaining to post-secondary education.

Dimensions of the Challenge

The long-term challenges facing post-secondary education are intensified by the current state budget shortfall.

- The Oregon University System budget has been cut \$50 million, or 6 percent, in the current biennium, effectively denying access to some 3,000 students. Engineering and graduate programs are losing \$2 million. If voters reject the income tax surcharge this coming January, another \$25 million will be cut, which would bring total OUS cuts to \$77 million or almost 10 percent of the system's budget. These cuts loom at a time when Oregon's seven state universities have the lowest faculty salaries among their peer groups and more than \$500 million in deferred facility maintenance.
- Community colleges have already seen \$17 million in cuts, and they stand to lose another \$14 million if the income tax surcharge doesn't pass. In response to the first cuts, tuition increases have exceeded 12 percent this year on average, and more may be pending. Many campuses are also considering capping enrollments.
- Enrollments among all levels and types of post-secondary education in Oregon are growing at a strong pace and demand will continue to grow in the coming decade as increasing numbers of high school students enter college age years. Between fall 1998 and fall 2004, for example, OUS will have gone from a headcount of nearly 65,000 to over 82,200, an increase of over 17,000, the equivalent of adding an enrollment the size of Oregon State University in six years. Yet it is unlikely that the state budget will provide resources to keep up with this growth in demand. Rather, either the amount of state support per student will decline or the state will need to choose to limit support for some students.
- State support to state universities and community colleges is eroding on a per student basis, putting the institutions in the position of doing *some combination* of three things: 1) sacrificing quality, 2) raising tuition to meet rising costs not covered by state support, or 3) limiting enrollment growth. All of these measures work against an important public goal: providing Oregonians greater access to a quality higher education.

Recommended Actions

1. Oregon state government should stop thinking of itself as an owner and manager of post-secondary institutions, and begin thinking of itself and acting as an investor in post-secondary services and outcomes. Oregon cannot respond adequately to its post-secondary education challenges until it accomplishes this shift in perspective and action.

2. The state should develop a consolidated state funding menu for post-secondary education that allows policy-makers to target the highest needs for student access, research, and public services across community colleges, public universities, and

independent institutions. In light of constrained post-secondary education budgets, the most critical state funding priorities are:

- Helping students of limited financial means gain access to higher education. This is particularly important as tuition rises to offset declining state support.
- Supporting continued investment in engineering and computer science education, which are critical to Oregon's knowledge-based economy.

The Governor should ask the Joint Boards to develop such a funding menu as he prepares his 2003-05 budget, bringing together the budgets of the Oregon University System, the Office of Community Colleges, Oregon Health and Sciences University, and the Oregon Student Assistance Commission to consider the trade-offs.

3. Release public universities from various administrative requirements that impede their flexibility to respond to a variety of needs and to seek and use funds from other sources. This includes giving OUS institutions explicit authority to increase tuition or cap enrollments in the event state dollars do not cover the increasing costs of operations or access. These and other flexibility initiatives recently put forward by the State Board of Higher Education provide a good starting point for the 2003 Legislature.

4. Activate and fund the Post-Secondary Education Opportunity Commission authorized by the 2001 Legislature in HB2015 or charge an equivalent body to address three issues:

- Propose a budget model that organizes the state's investment in post-secondary education in categories that include, but are not limited to: student access, need-based and merit-based student assistance, statewide and community services, research support, individual campus support, state administration, and other categories necessary to fulfill our post-secondary education agenda. The menu should include all state dollars received by community colleges, public universities, and independent colleges and universities. This new process should include conversion of the budgets for the community colleges and OUS, OHSU, and OSAC from a traditional format (current services budgeting) into one organized by support for student access, public services, research and other investments.
- Provide recommendations on the extent of institutional autonomy and governance that should be afforded to state universities.
- Recommend a governance structure that better enables the state to manage its overall post-secondary education investments and responsibilities.

Table 1. 2000-01 Estimated Total State Appropriations to Higher Education Budget

Category	Community Colleges	OUS	OHSU	Student Assistance Commission	TOTAL
Student Access					
	\$209,293,662	\$255,559,722	\$50,498,871	\$16,646,400	\$531,998,655
Investments and Program Enhancements					
College of Engineering & Computer Science		\$8,220,828			\$8,220,828
Engineering Graduate (\$4,000 per FTE)		\$1,667,054			\$1,667,054
Engineering Tech Undergrad (\$5,000 per FTE)		\$2,341,138			\$2,341,138
Nonresident Masters (\$500 per FTE)		\$951,064			\$951,064
Central Oregon University Center	\$134,630				\$134,630
Community College Skill Centers	\$1,661,320				\$1,661,320
Oregon Advanced Technology Center	\$883,211				\$883,211
Regional CC/OUS Partnerships	\$2,962,005				\$2,962,005
Contracts for Corrections, Out-of District Students	\$960,621				\$960,621
Owen Sabin Skill Center	\$1,339,775				\$1,339,775
New Community College Partnerships		\$439,613			\$439,613
Community College Partners Transition		\$300,000			\$300,000
Collaborative Programs		\$703,381			\$703,381
Subtotal	\$7,941,562	\$14,623,078		\$0	\$22,564,640
Adjustments to Student Centered Model					
4.0% Sponsored Research		\$5,087,258			\$5,087,258
3%/2% Faculty Salaries		\$2,942,378			\$2,942,378
Regional Access		\$4,985,228			\$4,985,228
Economy of Scale		\$938,396			\$938,396
Transition Funding		\$3,718,357			\$3,718,357
WUE Program Support		\$1,120,000			\$1,120,000
Fee Remission Equity		\$1,349,000			\$1,349,000
Subtotal	\$0	\$20,140,617		\$0	\$20,140,617
Public Services					
Campus Public Service Programs		\$3,816,726			\$3,816,726
Agricultural Experiment Station		\$26,859,266			\$26,859,266
Extension Service		\$18,325,564			\$18,325,564
Forest Research Laboratory		\$2,554,314			\$2,554,314
Statewide Public Services Facilities to OSU		\$2,416,113			\$2,416,113
Subtotal	\$0	\$53,971,983		\$0	\$53,971,983
Financial Aid					
Oregon Nursing Loan				\$178,270	\$178,270
Barber and Hairdresser Grant				\$50,400	\$50,400
Oregon National Guard (State)				\$200,300	\$200,300
Oregon Youth Conservation Corp.				\$12,200	\$12,200
Subtotal	\$0	\$0		\$441,170	\$441,170
Other					
OHSU Education Assistance		\$300,000			\$300,000
Internships		\$263,768			\$263,768
OWEN		\$521,048			\$521,048
Systemwide Expenses		\$10,913,250			\$10,913,250
Performance		\$730,000			\$730,000
Subtotal	\$0	\$12,728,066		\$0	\$12,728,066
Administrative Support					
Chancellor's office operations		\$12,782,626			\$12,782,626
Community College Administration	\$1,165,517				\$1,165,517
Subtotal	\$1,165,517	\$12,782,626		\$0	\$13,948,143
Reserve Fund					
Undistributed FTE		\$925,541			\$925,541
Total	\$218,400,741	\$370,731,633	\$50,498,871	\$17,087,570	\$656,718,815

Note: These numbers were provided by the Oregon University System, the Department of Community Colleges and Workforce Development, the Oregon Student Assistance Commission, and the Oregon Health Sciences University. They represent estimates, but should roughly represent the budget. Note: OHSU figures from 1997-99; OSAC, from 1999-2000. All other data represent 2000-01.

Table 2. Public Support for Student Access						
Education Stage	Number of Students	State Support/ Student	State Support to Schools	Local Support/ Student	Local Support to Schools	Total Public Support to Schools
Community College						
	91,894	\$2,278	\$209,293,662	\$944	\$86,769,589	\$296,063,251
Oregon University System*						
Freshman/Sophomore	17,383	\$3,498	\$60,805,734	\$0	\$0	\$60,805,734
Junior/Senior	23,490	\$4,704	\$110,498,397	\$0	\$0	\$110,498,397
Masters/Professional	7,196	\$5,898	\$42,444,214	\$0	\$0	\$42,444,214
Doctoral	2,885	\$10,935	\$31,546,083	\$0	\$0	\$31,546,083
Law	326	\$10,220	\$3,331,720	\$0	\$0	\$3,331,720
Pharmacy	297	\$10,270	\$3,050,122	\$0	\$0	\$3,050,122
Vet Medicine	109	\$35,628	\$3,883,452	\$0	\$0	\$3,883,452
Total OUS	51,686		\$255,599,722	\$0	\$0	\$255,599,722
Oregon Health Sciences University						
Medicine	1,725	\$17,101	\$29,499,225	\$0	\$0	\$29,499,225
Nursing	684	\$14,912	\$10,199,808	\$0	\$0	\$10,199,808
Dentistry	378	\$28,571	\$10,799,838	\$0	\$0	\$10,799,838
Total OHSU	2,787		\$50,498,871	\$0	\$0	\$50,498,871
Student Assistance Commission (Undergraduate Need Grant)						
	17,340	\$960	\$16,646,400	\$0	\$0	\$16,646,400
Total	143,367**	n/a	\$531,998,655	n/a	\$86,769,589	\$618,768,244
<p>*State support per student above is expressed as a weighted average. The reader can see that instruction costs more and involves more state support at higher levels of study. Costs of instruction and state support also vary according to courses of study. For example, support in literature ranges from \$2,967 per year for a freshman to \$9,001 for a doctoral candidate. Comparable support in engineering ranges from \$5,311 to \$13,595.</p> <p>**Excludes student count under Student Assistance Commission.</p>						

For additional information relevant to this white paper, the reader may wish to visit the following sites:

Oregon University System

<http://www.ous.edu/>

Department of Community Colleges and Workforce Development

<http://www.odccwd.state.or.us/>

Oregon Student Assistance Commission

<http://www.osac.state.or.us/>

White Paper Summary: Redesign the way Oregon invests in post-secondary education.	
<p>Specifically: Build an integrated investment framework for all of post-secondary education that targets dollars to highest priority public needs – and which gives our institutions greater flexibility to meet those needs.</p> <p>Why: Post-secondary education is vital to Oregon's knowledge-based economy and to students who aspire to play a role in that economy. As state investment in post-secondary education trails demand, the state must target its investments more carefully, especially to student access, and give campuses greater flexibility to operate efficiently and respond to growing market needs.</p>	
Initiatives	Top Action Items
Oregon state government should recast its role in supporting higher education.	<ul style="list-style-type: none"> • The state should stop thinking of itself as an owner and manager of post-secondary institutions, and begin thinking of itself and acting as an investor in post-secondary services and outcomes.
Look at all of the state's 2003-05 post-secondary education budgeting as a single menu.	<ul style="list-style-type: none"> • For 2003-05, develop a consolidated state funding menu for post-secondary education that helps policy-makers target the highest needs for student access, research, and public services across community colleges, public universities, and independent institutions. • Give priority to access for students of limited financial means and continued investment in engineering and computer science education.
Accord OUS campuses greater flexibility.	<ul style="list-style-type: none"> • Adopt new legislation and rules granting OUS schools greater flexibility to set tuition and enrollment levels. • Also accord them greater flexibility to determine program offerings, buy and sell property, raise and spend money, keep interest earned on their own funds, and contract legal and construction services.
Study and propose permanent new integrated models of post-secondary education budgeting and governance.	<ul style="list-style-type: none"> • Activate and fund the Post-Secondary Education Opportunity Commission authorized by the 2001 Legislature in HB2015 (or form an equivalent panel). • Propose an integrated zero-based post-secondary education budget model and process • Recommend the extent of institutional autonomy and governance that should be afforded to state universities. • Recommend a governance structure that better enables the state to manage its overall post-secondary education investments and responsibilities.

Oregon Business Plan White Paper

ENHANCING ENGINEERING AND COMPUTER SCIENCE EDUCATION

Objectives

Double the number of undergraduate engineering and computer science degrees granted by Oregon colleges and universities by 2009.

- Improve the quality of all Oregon college and university engineering and computer science education programs.
- Enhance the technical readiness of all college and university graduates through teaching in state of the art laboratories and research facilities.
- Provide a robust network of degree and non-degree continuing professional education programs for working engineers, computer scientists, and other knowledge workers.

Accomplish these objectives by:

- Expanding the number of top-rank engineering and computer science faculty at Oregon Colleges and universities
- Creating new and upgraded engineering and computer science teaching and research facilities on all Oregon campuses, bringing them up to state-of-the-art levels
- Expanding the scope and reach of continuing professional education programs offered through the Oregon Center for Advanced Technology Education
- Increasing the number of students entering college and university engineering and computer science programs from Oregon high schools through an expansion of pre-college science and math programs.

What We Are Trying To Accomplish With the Initiative

Oregon's goal is to increase the number of highly skilled engineers and computer scientists available to Oregon employers and expand opportunities for Oregonians to pursue high wage and prestigious professions.

Investments in engineering and computer science education are critical to Oregon industry's need to hire increasing numbers of engineers and computer scientists. An expanded pool of well-trained, local talent lowers recruiting costs for employers and increases retention rates among critical employee groups. It also makes Oregon more attractive to outside investment and more likely to produce homegrown technical innovations that spawn new companies.

- Investments in engineering and computer science education are investments in people. By growing the capacity and quality of engineering and computer science education resources at all of Oregon's colleges and universities, more Oregonians will have the opportunity to enter high-paying technical professions.

Why It's Important

The innovations of engineers and computer scientists are the future of the Oregon economy. Companies across industry lines, from high technology to wood products, from service providers to tourism and government, rely on engineers, computer scientists and knowledge workers to keep their enterprises competitive and profitable.

Why It Matters In Meeting Oregon's Economic Goals

Increasing the number and quality of Oregon educated and trained engineers and computer scientists will address the needs of Oregon industries for highly skilled employees.

What We've Done So Far

The Legislature began making investments in engineering education during the 1981 special legislative session. Since then, every session has made special investments to build Oregon's capacity to educate and train engineers.

In 1997 the Legislature committed the state to a pioneering 10-year plan to double the number of engineers graduating from the state's universities through investments in new faculty hires, new teaching and research laboratories, and expanded pre-college science and math programs. Dr. Robert Dryden was appointed Vice Chancellor of Engineering and Computer Science to administer the program and guide investments. A new advisory group, the Engineering and Technology Industry Council (ETIC), was created to provide counsel to the vice chancellor about investment targets.

The 1997 initiative was based on a public-private partnership designed to significantly improve engineering and computer science education in Oregon. Over the past five years, the commitment of \$60 million from public resources has attracted an additional \$60 million from private sources to build the capacity and quality of all engineering and computer science teaching and research programs. Investments have gone to all seven Oregon University campuses and to Oregon Health & Science University's Oregon Graduate Institute.

Oregon's investment strategy is producing results significant to the state and its companies:

- Forty-six new faculty have been hired to teach and conduct research at Oregon universities.
- Thirty-six engineering and computer science laboratories have been upgraded or built.
- One hundred and eleven new scholarships have been given by Oregon industry to students to study engineering and computer science education.
- The Oregon University System has built a comprehensive engineering and computer science website (OregonEngineer.org) that serves as the front door for all engineering and computer science programs in Oregon.

The effectiveness of Oregon's investment strategy has been benchmarked through the use of market research.* Quantitative and qualitative studies have shown:

- The number of engineering and computer science degrees granted by Oregon University System institutions has climbed 35 percent since 1997.
- Fall 2002 undergraduate enrollments in engineering and computer science programs are up over fall 2001 at Portland State University and at Oregon State.

* The Oregon University System Office of Institutional Research and Conkling Fiskum & McCormick have conducted telephone and Internet studies designed to benchmark educational performance. The results of the studies are posted on: www.oregon.engineer.org.

- Employers rank the job readiness of Oregon University System engineering and computer science graduates as equal to graduates from out-of-state schools.
- Oregon's college-bound high school students interested in engineering and computer science majors are more likely to choose to attend an Oregon University System institution than are liberal arts and social science students.
- The number of students participating in pre-college science and math programs has continued to increase, especially among women and minorities.
- Research shows that students, parents, and the general public have a high regard for the quality of Oregon higher education institutions and their programs.
- Oregon's investments in engineering and computer science education are helping the state buck a 15-year downward trend in the number of engineering graduates from U.S. colleges and universities.

The Unfinished Agenda

Oregon has five years to go on the 10-year engineering education investment commitment it began in 1997. The first five years show that Oregon's efforts are producing positive results. Continued investment in a manner consistent with the 1997 legislation is critical to maintain the state's progress toward its goals.

Recommendations

- Invest \$40 million in public funding and match this with over \$67 million in private funding for the 2003-2005 biennium to implement the ETIC proposals for engineering education summarized in the points below.
- Complete new engineering buildings at Oregon State University and Portland State University.
- Add 61 new high quality engineering and computer science faculty.
- Add or upgrade 30 engineering and computer science teaching and research laboratories and signature research centers beyond those planned for the new PSU and OSU buildings.
- Increase industry-sponsored undergraduate student scholarships from 110 to 150 annually.
- Increase student participation in pre-college science and math programs by 50 percent – from 2,000 to 3,000 students annually.
- Expand professional development offerings through the Oregon Center for Advanced Technology Education by 25 percent.

For additional information relevant to this white paper, the reader may wish to visit the following sites:

Engineering and Technology Industry Council

<http://www.oregonetic.org/>

Oregon University System, Vice Chancellor For Engineering and Computer Science

<http://www.oregonengineer.org/>

White Paper Summary: Strengthen engineering and computer science education.	
<p>Specifically: Increase the number of highly skilled engineers and computer scientists available to Oregon employers, and expand opportunities for Oregonians to pursue high wage and prestigious professions.</p> <p>Why: Investments in engineering and computer science education are critical to Oregon industry which will continue to hire increasing numbers of engineers and computer scientists. An expanded pool of well-trained, local talent lowers recruiting costs for employers and increases retention rates among critical employee groups. It also makes Oregon more attractive to outside investment and more likely to produce homegrown technical innovations that spawn new companies.</p>	
Initiatives	Top Action Items
<p>Double the number of undergraduate engineering and computer science degrees granted by Oregon colleges and universities.</p> <p>Improve the quality of all Oregon college and university engineering and computer science education programs.</p> <p>Increase the technical readiness of all college and university graduates for the workplace.</p>	<ul style="list-style-type: none"> • Invest \$40 million in public funding for the 2003-2005 biennium to implement the ETIC proposal for engineering education. • Match public dollars with over \$67 million in private funding. • Complete new engineering buildings at Portland State University and Oregon State University. • Add 61 new high quality engineering and computer science faculty. • Add or upgrade 30 engineering and computer science teaching and research laboratories and signature research centers beyond those planned for the new PSU and OSU buildings. • Increase industry-sponsored undergraduate student scholarships from 110 to 150 annually. • Increase student participation in pre-college science and math programs by 50 percent – from 2,000 to 3,000 students annually.
<p>Provide a robust network of degree and non-degree continuing professional education programs for working engineers, computer scientists and other knowledge workers.</p>	<ul style="list-style-type: none"> • Expand professional development offerings through the Oregon Center for Advanced Technology Education by 25 percent.

Oregon Business Plan White Paper

ACHIEVING MORE BENEFIT FROM OUR FOREST RESOURCES*

The Objective

Achieve the environmental, economic and social potential of our rich forest resource to enhance prosperity and quality of life for Oregonians.

What We Are Trying To Accomplish

Develop public policies that enable sustainable use of Oregon's forest resources. Specifically, build economic strategies on Oregon's strong environmental performance resulting in market advantages for Oregon wood products, landowner rewards for environmental contributions, encouragement of new forestry investments, reduced risk of catastrophic wildfire, and public-private collaboration on conservation solutions. These include:

- Develop an understanding among Oregonians about the potential of Oregon's forest assets to make enhanced contributions to statewide prosperity, especially in rural communities, along with the environmental benefits of utilizing the productive capacity of our forests.
- Replace *disincentives* to environmentally desirable actions on the part of landowners with real and positive *incentives* through public-private partnerships such as The Oregon Plan for Salmon and Watersheds and the Applegate Fire Project in southern Oregon.♦
- Market Oregon wood as produced under some of the world's strongest environmental laws, requiring successful reforestation, protection of streams and fish and wildlife habitat, and protection from conversion to non-forest use (a "Brand Oregon" associated with sustainable forest management).
- Manage Oregon's federal forests to restore health, reduce the risk of severe fire and create jobs in rural communities.
- Increase contributions of federal forests to Oregon's wood supply and environmental goals.
- Build understanding that forests managed for a variety of environmental, social and economic objectives across the landscape are more likely to result in long-term sustainability than if all forests are managed to produce identical benefits. While not mutually exclusive, focus on high-yield, intensive forest management in some areas (primarily on suitable private lands), and provide a management emphasis on mature forest habitat or other conservation and recreation values in other appropriate areas (primarily on federal land legally designated to meet goals other than wood production.)

* The recommendations presented in this paper are specific to Oregon's forest cluster, but many of them are applicable to agriculture and other natural resources.

♦ NOTE: The Oregon Plan is a unique state-led conservation strategy to restore salmon and watersheds. Adopted by the Legislature in 1997, the Oregon Plan is based on public/private collaboration and encourages proactive, voluntary restoration efforts that are providing real and quantifiable results. The Applegate Fire Project is based on similar principles of collaboration.

- Continue to move Oregon wood to higher value and specialty products (e.g., research-based engineered products) in addition to commodity products.
- Build solutions to conservation priorities through public-private collaboration that moves Oregon beyond conflict and its huge drain on time, money, human energy, and good will.

Why It's Important

Oregon's greatest natural asset, along with its people, is its tremendous forest endowment. Almost half, or 28 million acres, of the state's land base is forestland.

This includes some of the most productive forestlands in the world, where trees grow larger and faster than most other places. Nearly 57 percent of Oregon's forestland is federal, with large portions either reserved from timber harvest or managed primarily for fish and wildlife habitat. About 40 percent of Oregon's forestland is privately owned.

Forests are important to Oregonians for many reasons. They provide clean water and air, fish and wildlife habitat, recreation, scenic beauty, jobs, wood products and revenues to support schools and government services.

The economic contribution of Oregon's forests has declined in recent decades. Oregon forestland available for commercial harvest has declined dramatically, resulting in decreased timber harvests. Primarily, this is due to government decisions and legal conflicts that have resulted in reduced timber harvest from federal land (from around 5 billion board feet in the 1980s to 173 million board feet in 2001). Harvest levels on private land have remained relatively stable for several decades; most of Oregon's recent timber harvest (3.4 billion board feet in 2001) now comes from private lands.* Employment in the forest sector has fallen during this period, creating significant economic challenges for rural communities.

Public expectations that forest products will play a significant role in Oregon's economic future also have declined, threatening the forest sector's potential for optimal contributions. This has been exacerbated by a conflict model for addressing environmental concerns, resulting in higher relative costs for Oregon-grown wood products, as well as regulatory and legal burdens and uncertainties that discourage future investment.

Initiatives to turn this situation around are important for environmental as well as economic reasons:

- Private forestlands need to remain economically viable, or pressure will mount to convert them to less environmentally friendly uses (e.g., urban development) as has happened in other states.
- Research confirms that wood, a fully renewable resource manufactured in a low pollution process, is environmentally superior to alternative products such as steel, cement, and plastic for most purposes. In addition, wood grown in Oregon meets some of the highest environmental standards in the world. Oregon has a responsibility to meet its fair share of world demand, recognizing that the U.S. is a net importer of wood from other countries where environmental standards may not be as high.

* Source: Oregon Dept. of Forestry

- Even though the U.S. has established standards that apply to the import of foreign wood, logs and other natural resources, many scientists are concerned that imports that don't meet the standards have the potential to introduce invasive, damaging species, pests, and diseases, putting Oregon's resources at risk and limiting the ability to export Oregon products.
- Incentive-based public-private partnerships such as the Oregon Plan have been shown to be a highly effective means of stimulating positive conservation and restoration efforts by private landowners. Top-down regulation can only prevent adverse actions.
- The combination of fire suppression and inadequate forest management has left about 75 percent of Oregon's federal forest at moderate to high risk of fire. Thinning and other management activities needed to restore healthy conditions in federal forests will not only reduce fire risk and create jobs in rural communities, but also will help protect forest ecosystems, including old growth habitat, over the long-term.

Why It Matters in Meeting Oregon's Economic Goals

Oregon's prosperity must extend statewide. Natural resources remain the economic foundation of many rural communities. These resources and the businesses built on them constitute the "traded sector" or export economy for smaller communities throughout the state. They are the primary source of outside dollars coming into many Oregon communities and hold the greatest potential for creation of family wage jobs.

Even with the recent reductions in timber harvest, Oregon's wood-processing industries annually generate around \$13 billion in total industrial output, provide nearly 75,000 direct jobs and contribute approximately \$2.8 billion in labor income in addition to substantial indirect jobs and income.*

Oregon is still the largest producer of forest products among the 50 states. The scientific expertise exists to double or triple forest productivity on lands managed primarily for wood production, while providing the environmental protection required by Oregon law.

What We've Done So Far

In addition to our substantial natural resource assets, Oregon has a well-developed set of human created assets that support them. Oregon has always been at the forefront of change in the natural resource sector, and continues to be a leader in sustainable resource management. We have:

- Land use planning to prevent conversion of our forest and agricultural lands to urban development
- Forest products industry infrastructure and know-how that excels at growing, processing, and marketing high-quality, high-value goods, including research-based engineered products
- Growth in secondary wood products manufacturing, recovery of more product per board foot of wood harvested, and state-of-the-art processing of smaller timber and recycled fiber
- A diverse mix of ownerships that provides the flexibility to meet and sustain a variety of forest contributions, from wood products to old growth habitat

* Source: Dr. Rebecca Johnson, Oregon State University College of Forestry.

- The Oregon Forest Practices Act that encourages and enforces sound, sustainable forest management
- World class academic institutions with depth and breadth in forest resource and agriculture teaching, research, and extension
- The Oregon Plan for Salmon and Watersheds, a national model as a state-led strategy for addressing conservation priorities through voluntary actions and incentives
- The Forestry Program for Oregon, the state’s strategic forest plan, which is being revised to incorporate internationally accepted guidelines of sustainable forestry
- Programs to promote public forestry education
- The Oregon Sustainability Act of 2001 that requires state government to encourage activities that “best sustain, protect and enhance the quality of the environment, economy and community for the present and future benefit of Oregonians.”

Some results of these efforts include:

- High-quality water on Oregon forestlands, and water quality improving statewide
- Over 90 percent of Oregon’s historical forestland base still available for forest use
- Forest contributions to a diverse range of economic, social and environmental values
- Substantial, ongoing investments in fish habitat restoration under The Oregon Plan and a network of community-based watershed councils
- Prompt, successful reforestation after harvest
- Statewide timber growth significantly in excess of harvest, and
- Growing public support for balanced forest management.

Breakthrough Opportunities

There are several high-potential opportunities Oregon leaders can seize to create momentum for positive change in Oregon’s natural resource economy:

- Support and improve The Oregon Plan at the state and local level and work toward a full federal buy in. The Oregon Plan represents the best opportunity for achieving outcomes that meet and surpass the requirements of federal law (e.g., Endangered Species Act, Clean Water Act) while retaining the productive capability of forestland.
- Build public consensus for a forest management approach to the “working landscape” that balances and integrates conservation and wood production priorities in alignment with the goals of private, state and federal landowners. Maintaining a strong forest economy goes hand in hand with conservation planning.
- Develop a marketing strategy (e.g., as part of the state’s Brand Oregon program) associating Oregon wood products with sustainable forest management.
- Renew investments in forestry related higher education, research, tech transfer for innovators, new knowledge-based resource businesses and continual improvement in existing businesses. (This is complements the Oregon Business Plan white paper “Expanding Our Capacity for Innovation.”)
- Revise federal laws so that “static” forest management strategies and protection of single species are not pursued at the expense of long-term forest ecosystem health,

including failure to address conditions that increase the risks to Oregon forests from severe fire, pests and drought.

- Move quickly to implement thinning and other management actions needed to create federal forest conditions that will be less vulnerable to severe fires, disease and other threats. Expedite essential environmental assessments and enable proactive, collaborative citizen involvement to reduce appeals and time consuming review procedures. Focus strategically on federal forests in areas of highest risk and where the greatest community and conservation benefits will accrue.
- Provide the right incentives for productive, environmentally responsible forest management, recognizing that “all lands are not created equal” in terms of productive capacity or conservation values. Use incentives to align management regimes with a range of desired outcomes (e.g., wood production, multi-value, conservation). If necessary, arrange land exchanges to better match forest ownership with management objectives.
- Promote collaboration among government agencies, private landowners and solution-oriented conservation advocates, marginalizing “either/or” perspectives. The vast majority of Oregonians wants forest management and other decisions to be balanced and fair, and is increasingly alienated by conflict.

What Can Be Done In the Near Term to Address the Overall Issue?

Develop and promote a statewide vision and understanding of the role of forests and other natural resources in Oregon’s economy – a role that recognizes and rewards environmental and social contributions, locally as well as beyond our state borders.

Encourage solution-oriented parties, both private and public, to work in collaborative partnerships to address each of the breakthrough opportunities.

For additional information relevant to this white paper, the reader may wish to visit the following site:

Oregon Forest Resources Institute

<http://www.oregonforests.org/>

White Paper Summary: Enhance forest resource benefits to the economy and the environment.	
<p>Specifically: Build economic strategies based on Oregon’s strong environmental performance, resulting in market advantages for Oregon wood products, landowner rewards for environmental contributions, encouragement of new forestry investments, reduced risk of catastrophic wildfire, and public-private collaboration on conservation solutions.</p> <p>Why: Oregon's forests provide clean water and air, fish and wildlife habitat, recreation, scenic beauty, jobs, wood products, and revenues to support schools and government services. They can and should be managed to achieve all of these benefits in a compatible manner.</p>	
Initiatives	Top Action Items
Replace <i>disincentives</i> to environmentally desirable actions on the part of landowners with <i>incentives</i> through public-private partnerships such as The Oregon Plan for Salmon and Watersheds and the Applegate Fire Project in southern Oregon.	<ul style="list-style-type: none"> • Support and improve the Oregon Plan at the state and local level and work toward a full federal “buy in.” The Oregon Plan offers the best opportunity to surpass federal environmental requirements while retaining the productive capability of forestland. • Provide the right incentives for productive, environmentally responsible forest management, recognizing that “all lands are not created equal” in terms of productive capacity or conservation values. Use incentives to align management regimes with range of desired outcomes. If necessary, arrange land exchanges to better match forest ownership with management objectives.
Help Oregonians understand both the economic and environmental benefits of utilizing the productive capacity of our forests.	<ul style="list-style-type: none"> • Build public consensus for a forest management approach to the “working landscape” that balances and integrates conservation and wood production priorities in alignment with the goals of private, state and federal landowners.
Identify Oregon wood products with environmentally responsible forest management.	<ul style="list-style-type: none"> • Develop a marketing strategy associating Oregon wood products with sustainable forest management.
Manage Oregon’s federal forests to restore health, reduce the risk of severe fire and create jobs in rural communities.	<ul style="list-style-type: none"> • Revise federal laws so that “static” forest management strategies and protection of single species are not pursued at the expense of long-term forest ecosystem health, including protection of forests from severe fire, pests, and drought.
Increase Oregon’s federal forestland contribution to available timber supply without compromising environmental goals.	<ul style="list-style-type: none"> • Move quickly to implement thinning and other management actions needed to create federal forest conditions that will be less vulnerable to severe fires, disease and other threats. Expedite essential environmental assessments and enable proactive, collaborative citizen involvement to reduce appeals and time consuming review procedures. Focus strategically on federal forests in areas of highest risk and where the greatest community and conservation benefits will accrue.
Build solutions to conservation priorities through public-private collaboration that moves Oregon beyond conflict and its huge drain on time, money, human energy, and good will.	<ul style="list-style-type: none"> • Promote collaboration among government agencies, private landowners and solution-oriented conservation advocates, marginalizing “either/or” perspectives. The vast majority of Oregonians wants forest management and other decisions to be balanced and fair, and is increasingly alienated by conflict.
Continue to move Oregon wood to higher value and specialty products (e.g., research-based engineered products) in addition to commodity products.	<ul style="list-style-type: none"> • Renew investments in forestry related higher education, research, tech transfer for innovators, new knowledge-based resource businesses, and continual improvement in existing businesses.

Oregon Business Plan White Paper

STRENGTHENING OUR INVESTMENT IN ROADS AND BRIDGES

Objective

Secure funding adequate to maintain our roads and bridges and to provide for new projects to enhance capacity critical for moving goods and services and maintaining our quality of life.

Why Roads and Bridges Are Important

Economic opportunity and a healthy road transportation system are undeniably linked. The road system moves a big portion of the economy. It connects markets, moves goods, and gets people to their work and other pursuits. Tourists reach our state by auto and bus as well as by air and rail. Millions of Oregonians use cars, transit, bicycles and walking to get to and from work.

Transportation systems of every kind are a major contributor to land use patterns and livability. Even with the increased attention paid to public transportation and alternative modes, roads (from interstate freeways to local streets) continue to serve as the backbone of the transportation system. In rural areas they often provide the only means of travel. In urban areas they are equally important. Implementation of "Metro 2040" in the Portland area will require additional investments of more than \$3 billion in roads and streets as well as \$2 billion for public transit. By targeting these investments Metro hopes to contribute to the development of new growth centers, enhancing the economy as well as livability, and reducing the tendency toward urban sprawl.

What Is Happening Now

The economic importance of the road system is reflected in the growth of transportation demand. Demand grew steadily during the 1990s. Between 1989 and 2001, the number of motor vehicles increased by approximately 30 percent and vehicle miles of travel by 31 percent, outpacing population, which grew by about 24 percent. Transit ridership between cities grew by 50 percent, though transit still accounts for only a small percentage of passenger trips except in higher density areas.

The state highway system, which includes interstate highways and most other freeways and major arterial highways, comprises less than 10 percent of the state's road miles, but carries 60 percent of the traffic. As Oregon traffic has grown the past decade, total lane miles of capacity has barely increased.

Traffic congestion and deterioration of the system are increasing. They are exacting a heavy price. Given the value people place on their time and the cost of delay to shippers and truckers, a single traffic tie up on a major freeway can easily cost tens of thousands of dollars in lost time and productivity. The typical delay cost associated with passenger vehicles is about \$15 per vehicle per hour. For trucks and other commercial vehicles, delay can cost \$16 to \$25 per hour per vehicle. These figures only estimate the value of driver and passengers time. Even with this narrow view, the implications are staggering since over 60 percent of our urban freeway system is rated as congested during peak hours. As an example, an hour-long tie-up on I-5 between Salem and Wilsonville at rush-hour costs about \$112,000 in lost time.

Bridges are an essential, if often overlooked, component of the state's road system. Roughly 25 percent have been in place for 50 years and are rapidly reaching the end of their design life. That said, perhaps the biggest challenge related to highway bridges has arisen in the last few years. ODOT has discovered a serious problem with bridges built during the 1950s and 1960s.

Many of these bridges, especially on our Interstate highways, are experiencing problems with cracking. The problem is more severe in Oregon than in our neighboring states because we used a construction technology that was not used widely elsewhere and which, we have learned, is not able to withstand the heavier loads on today's roads. So far, ODOT has identified about 500 bridges with potential for cracking, with over 200 of these as likely candidates for repair or replacement.

Weight restrictions have been placed on some of these bridges, which has meant long out-of-distance travel for goods and people and, for some communities, much more traffic than they normally experience. Without an increase in the current level of investment, ODOT is projecting that up to 30 percent of Oregon's state bridges will be weight-restricted by 2025. Freight moves the Oregon economy. It is estimated that about 28 percent of all freight tonnage travels Oregon's highways travels in loads of more than 80,000 pounds. And, Oregon-based companies hold 80 percent of permits for trucks carrying more than 80,000 pounds. One strategy to make the state's resources go further is to extend the useful life of the cracked bridges by limiting loads to 80,000 pounds. It becomes obvious that shortcomings in the state's bridge infrastructure hinder Oregon's business competitiveness as well as efforts to spur economic development.

Deterioration of road surfaces is also expensive. Engineers estimate that \$1 worth of preservation work left undone when a road surface first starts to deteriorate can cost \$4 or more to repair later. Deferring such work makes no sense; the higher cost will have to be paid since no one plans to close any state highway.

The Oregon Department of Transportation is responsible for constructing and operating the state highway system. The Department, cities, and counties have a limited ability to invest in the system to support use by people and businesses. Our economic investment is slipping away.

How Things Got This Way

In the 1980s and early 1990s the Legislature passed a series of highway revenue bills increasing fuel taxes from 7 cents per gallon to 24 cents per gallon, with corresponding increases in weight-mile taxes. At the same time, constitutional restrictions on use of highway funds were strengthened to assure the funds would be used only for highways. The backlog of roads and bridges in need of repair was reduced and an ambitious modernization program, "Access Oregon Highways," was undertaken. However, since the last of these increases was approved in 1991, several trends have significantly affected the fund:

- Inflation reduced the purchasing power of the highway fund. Even moderate inflation of 3 to 4 percent requires the equivalent of a one-cent-per-year increase in the gas tax just to stay even. Unlike many other states, Oregon has no inflation-sensitive highway taxes such as vehicle excise taxes or sales taxes on gasoline.

- Fuel economy has increased. The result is that the taxes contributed by light vehicles on a per-mile-of-travel basis have actually declined. In 1993, when the last fuel tax increase went into effect, the average passenger vehicle paid the equivalent of 1.28 cents per mile in fuel taxes. Today, because of higher miles per gallon, the average is 1.23 cents per mile. At the same time, the costs of road construction and maintenance have increased.
- Cost responsibility adjustments resulted in lowering of weight-mile rates. In order to maintain parity between light vehicles and trucks, the Legislature has twice lowered weight-mile tax rates. An 80,000-pound tractor-trailer that once paid 14.5-cents per mile to use Oregon's roads now pays 11.9-cents per mile.
- An aging system is more expensive to maintain. Generally speaking, the components of the road system have been in place for 30 years. A significant portion has been in service for more than 50 years. We must expend more effort simply to maintain the system in a safe and useable condition. Nothing illustrates this better than the condition of Oregon's bridges. Many bridges on the interstate highway system are reaching the end of their useful design life and must be replaced.

These trends have collided. State highway and bridge conditions are reaching a critical point where there will be a rapid decline without substantial additional investment. County roads and city streets are reaching a similar point. Under these circumstances, congestion is increasing, the personal safety of road system users is less secure, the economy is suffering more frequent delays that impair productivity, and Oregonians are experiencing a declining quality of life. And failure to address maintenance needs in a timely manner produces a three-way drain on system resources. It defers upkeep to a point where it is much more expensive, it leads to system failures that require replacement (which is even more expensive than delayed maintenance), and it robs resources needed to increase capacity for economic growth.

Recent Progress

Response to the state's transportation vision and needs has not been entirely flat. The 2001 Legislature pieced together small increases in fees to finance the \$500 million state bond program, the Oregon Transportation Investment Act. The Legislature also passed funding bills to assist passenger rail, transit, and aviation in the last two sessions. Funding is being used to add additional rail service, to carry more senior and disabled transit passengers, and to improve the state's network of general aviation airports. The airport spur of the MAX light rail system was completed with private funding and the north-south Interstate MAX is being built with a combination of local and federal funding.

The Oregon Transportation Commission's conscious effort to increase road surface preservation treatment and repair or replace bridges has slowed deterioration of the road system. However, these projects compete with capacity improvements to relieve congestion.

What Oregon Should Do Next

Oregon needs to build on the success of the Oregon Transportation Investment Act . The state's basic system of roads and other transportation infrastructure is essential to the future well being of all Oregonians. Its deterioration is a serious threat to our economy and livability.

The business community has been perhaps the staunchest proponent of modest increases in fuel taxes. We need to search further for transportation financing solutions. Even if we did achieve a modest increase in fuel taxes, the increase would be insufficient to meet our needs in the near term and longer term. A system based on gasoline taxes is likely to become obsolete with the advent of alternative fuel and highly fuel-efficient cars. Whatever short-term decisions are made for transportation funding, Oregon needs to continue the work started in 2001 to explore options to meet long-term needs.

New Ways To Collect Revenue. The 2001 Legislature embarked on a long-range effort (Road User Fee Task Force) to explore alternatives to current transportation funding sources: the gasoline tax (for cars), weight mile fees (for trucks), registration fees, and property taxes (for local roads). The tollbooth is a thing of the past. Systems are in place elsewhere in the nation to collect tolls electronically. New automobiles are coming with navigation systems to help drivers route around traffic congestion. Assessment of mileage fees for light vehicles is technically feasible and fees could be pegged to peak usage. These fees could generate revenues to make highway system improvements, reduce congestion, and avert the need to build costly new facilities. The Legislature must stay the course as the Road User Fee Task Force works through the difficult organizational and political issues that surround new ways of charging for road use.

Contracting. State and local government agencies have made limited use of contracting methods, such as design build. It is time to go beyond pilot efforts and incorporate these methods into the normal way of doing business.

Privatization. Experiments in privatizing parts of the transportation system are cropping up all over the nation and world. It is time to investigate the possibilities in Oregon. The Governor, Legislature, and the Oregon Transportation Commission should move aggressively forward to see if Oregon has the conditions necessary to successfully privatize part of the road system. Studies for a new Columbia River crossing, OR 217, and the Newberg-Dundee Bypass would be good candidates; there may be others. Privatization may encourage management innovations to increase productivity and will encourage more creative financing arrangements. SR-91 (a private toll road in Riverside, California) illustrates the ability of the private sector to generate economic return on highway investments. Closer to home, MAX light rail to the Portland airport is another example of private sector participation in infrastructure development.

Senate Bill 966, passed by the Legislature in 2001, directed that the Oregon Transportation Commission and the Oregon Department of Transportation explore the feasibility of public-private transportation projects for Oregon. SB 966 required formation of the Innovative Finance Advisory Committee to advise the OTC and ODOT on how to fashion an Oregon program that will encourage private sector involvement in Oregon.

The Innovative Finance Advisory Committee finds transportation projects that engage the private sector in a mutually beneficial way tend to be built in shorter time and for less cost than if built in a traditional manner. Private investment in a public-private transportation project also benefits other, more traditional projects by requiring fewer public dollars in the public-private funding mix. When properly conceived and implemented, the public-private transportation project optimizes the satisfaction of the citizenry, the transportation agency, and the private sector parties.

The Innovative Finance Advisory Committee recommends a new ODOT program for facilitating private sector involvement in Oregon transportation projects.

Demand Management. One way to avoid the need for expensive new facilities is to use our existing system more efficiently. Oregon should explore car pooling, aided by sophisticated telecommunications and scheduling technology, to bring riders together as a way to do more with existing facilities. We also should explore ways to provide higher quality (faster) transportation options for those willing to pay more.

Dialogue With Customers. As Oregon examines alternatives it is very important to understand customer needs. The public at large does not place transportation high on its list of priorities and does not see the need for large amounts of additional funding. Oregon does not need to repeat an experience like the defeat of Measure 82 in 1999, which would have raised the gas tax by 5 cents, or the 2002 defeat of Resolution 51, a similar measure in Washington. We should conduct detailed research on public attitudes. We also need to explore in much greater detail the variety of business needs surrounding transportation. Many Oregon businesses are deeply concerned about the trends in transportation on their businesses. As we learn more about specific needs, we may be able to craft solutions that facilitate commerce and support the overall transportation infrastructure. For example, for some companies, moving freight within the urban areas during peak hours is a critical priority. It may be possible to address those needs through creation of special lanes, which could also be available for buses, high occupancy vehicles, and other users willing to pay an extra fee.

We also should examine transportation needs by region. Governor Kitzhaber undertook such a review six years ago. The time may be right to update it.

A Transportation Agenda for 2003

1. Repair Oregon's bridges through a \$15-per-year increase in the vehicle registration fee. The revenue collected can be used for about \$840 million in bonding for bridge improvements. This would be major investment in addressing a \$4 billion repair challenge. Federal funds should be sought to support this effort. The initial priorities should be in the critical freight corridors, I-5 and I-84, along with other hot spots identified by the Department of Transportation. We recommend that the Legislature pass this within the first 45 days to give Oregon's economy a boost while addressing a critical priority for the state.

2. Provide for general road maintenance and system improvements through a 2-cent gas tax increase, and index the gas tax to compensate for inflation. This would generate roughly \$50 million per year, and would be dedicated to both state and local road repair and modernization. This would be a good first step in addressing unmet highway, road, and street system maintenance and repair needs exceeding \$500 million per year.

3. Through innovative financing that might include tolls, earmarked federal funds, and state highway funds, complete eight projects of statewide significance identified in the Statewide Transportation Investment Plan. These projects, selected by the Transportation Commission as high priorities for livability and economic impact, cannot be achieved within the standard funding allocations. They are:

- I-5 Columbia River Crossing (Portland/Vancouver).

- Sunrise Corridor (between I-205 and U.S. 26).
- I-5 to Highway 99W (Tualatin – Sherwood Bypass).
- I-205 from the Columbia River to I-5. (Eight sections of I-205 are currently experiencing serious congestion. A traffic study is needed to prioritize specific projects.)
- I-405 Loop. (An analysis of the I-5/I-405 freeway loop’s future performance and prioritization of locales for project development is needed).
- Newberg Dundee Transportation Improvement Project
- Highway 20 (Corvallis/Newport) Eddyville next phase
- Highway 62 units 2 and 3 (Medford).

4. Aggressively pursue federal funding for high-priority Oregon highway projects. The federal Transportation Equity Act for the 21st Century (TEA-21) is up for reauthorization in 2003, creating an opportunity for Oregon to aggressively compete for its fair share of funding intended to improve highway safety and efficiency, and homeland defense. Congress is already taking testimony on the reauthorization bill. State and local transportation officials should identify projects of statewide significance eligible for such funding, and they should develop a coordinated strategy with the Oregon congressional delegation to seek authorization for these projects.

5. Pilot new metering technology based on vehicle miles traveled to learn the feasibility of this revenue collection system as an alternative to the gas tax. A pilot test of metering technology would prove the technological feasibility and practicality of a new road revenue mechanism -- a charge per mile driven. The idea is to develop a mileage-based fee to replace the fuel tax on gasoline once road revenues begin to decline because of fuel efficiency improvements to passenger vehicles. Many technological improvements to automobile fuel consumption are already entering the marketplace.

6. Obtain cost efficient and speedy delivery of transportation projects much sooner than can be accomplished with traditional approaches. Create within ODOT an Innovative Partnerships Unit to facilitate private sector involvement in Oregon Transportation Projects. The unit would have the authority to move qualifying projects in new, flexible ways.

7. Reduce project delays and contain costs by getting all interested parties, particularly permit-granting agencies involved as early as possible in projects. Obtaining permits and clearances will be expedited when regulatory agencies have early input, understanding of the project challenges, and an active role in decision making.

Strengthen relationships between local and state transportation agencies and permit-granting agencies at all jurisdictional levels.

Educate and inform personnel at permit-granting agencies about project needs, design, cost benefits, and impact mitigation.

Where necessary, assist permit-granting agencies in building project expertise and review capacity.

For additional information relevant to this white paper, the reader may wish to visit the following sites:

Oregon Department of Transportation

<http://www.odot.state.or.us/>

Road User Fee Task Force

<http://www.odot.state.or.us/ruftf/>

Bridge Strategy Task Force

<http://www.odot.state.or.us/tsbbridgepub/>

White Paper Summary: Maintain our investment in roads and bridges.	
<p>Specifically: Start meeting the large backlog of needed maintenance and upgrades to our roads and bridges.</p> <p>Why: Economic opportunity and a healthy transportation system are undeniably linked. Transportation moves the economy. It connects markets, moves goods, and gets people to their work. Traffic congestion and deterioration of the system are increasing. They are exacting a heavy price. Given the value people place on their time and the cost of delay to shippers and truckers, a single traffic tie up on a major freeway can easily cost tens of thousands of dollars in lost time and productivity. In addition, roughly 25 percent of bridges have been in place for 50 years and are rapidly reaching the end of their design life.</p>	
Initiatives	Top Action Items
Fill backlog of the most critical maintenance needs and upgrades to roads and bridges.	<ul style="list-style-type: none"> • Increase vehicle registration fee from \$15 to \$30 per year to enable \$840 million in bonding to fund projects. • Use bonding capability to immediately raise revenue for critical road and bridge projects. • The Legislature should enact this action item within the first 45 days of the 2003 session. • Provide for general road maintenance and system improvements through a 2-cent gas tax increase, and index the gas tax to compensate for inflation. This would generate roughly \$50 million per year.
Through innovative financing that might include tolls, earmarked federal funds, and state highway funds, complete eight projects of statewide significance identified in the Statewide Transportation Investment Plan.	<ul style="list-style-type: none"> • Work with Congressional delegation to ensure federal matching funds on important road construction projects. • I-5 Columbia River Crossing (Portland/Vancouver). • Sunrise Corridor (between I-205 and U.S. 26). • I-5 to Highway 99W (Tualatin – Sherwood Bypass). • I-205 from the Columbia River to I-5. (Eight sections of I-205 are currently experiencing serious congestion. A traffic study is needed to prioritize specific projects.) • I-405 Loop. (An analysis of the I-5/I-405 freeway loop’s future performance and prioritization of locales for project development is needed). • Newberg Dundee Transportation Improvement Project. • Highway 20 (Corvallis/Newport) Eddyville next phase. • Highway 62 units 2 and 3 (Medford)
Aggressively pursue federal funding for high-priority Oregon highway projects.	<ul style="list-style-type: none"> • Identify projects of statewide significance eligible for federal TEA-21 funding. • Develop a coordinated strategy with the Oregon congressional delegation to pursue such funding.
Pilot new forms of revenue collection.	<ul style="list-style-type: none"> • Pilot new metering technology based on vehicle miles traveled to learn the feasibility of this revenue collection system as an alternative to the gas tax.
Obtain cost efficient and speedy delivery of transportation projects much sooner than can be accomplished with traditional approaches.	<ul style="list-style-type: none"> • Create within ODOT an Innovative Partnerships Unit to facilitate private sector involvement in Oregon Transportation Projects.
Reduce project delays and contain costs by getting interested parties, particularly permit-granting agencies, involved as early as possible in projects.	<ul style="list-style-type: none"> • Strengthen relationships between local and state transportation agencies and permit-granting agencies at all jurisdictional levels. • Educate and inform personnel at permit-granting agencies about project needs, design, cost benefits, and impact mitigation. • Where necessary, assist permit-granting agencies in building project expertise and review capacity.

Oregon Business Plan White Paper

ENHANCING CARGO AND PASSENGER AIR SERVICE

Objective

Oregon will retain its existing international, regional, and in-state air connections, and will add to them. Specifically we must strive to:

- Retain nonstop passenger service to Europe with Lufthansa.
- Secure nonstop passenger service to Asia.
- Retain existing air freighter services to China, Korea and Europe; expand market-based freighter service to South East Asia.
- Secure nonstop passenger service to Mexico.
- Expand air service to Canada.
- Preserve and improve air service to Oregon's smaller communities.

Why It's Important

Efficient air service to markets in which Oregon businesses are active, or wish to be active, is critical to our state's prosperity.

- The Port of Portland estimates the new nonstop Lufthansa service from Portland to Frankfurt starting March 31, 2003, could have a \$90 million-per-year benefit to the local economy, and could provide up to 1,500 local jobs. The first year of Lufthansa service is critical to Portland because if this service should fail, as did Asian service, our ability to attract additional international service in the future could be jeopardized.
- During the years Delta served the Asian market, the Portland region enjoyed tremendous economic growth, particularly in the high tech sector, with many companies from Asia choosing to locate in and around Portland. The Delta Asian activities at Portland International Airport produced a direct impact of over \$200 million. There are still over 100 Japanese affiliated companies operating in our region, in addition to many other non-Japanese companies with ties throughout Asia, who need passenger access to their partners, subsidiaries, and customers.
- Oregon's leading position in the high tech sector, combined with our unique mix of high-value agricultural products, makes us an ideal candidate for international air freight movement.
- As a result of NAFTA, there are growing trade relationships between Oregon, Western Canada, and Mexico, increasing the need for convenient air access by business travelers.
- Economic diversification in many non-urban Oregon communities hinges in part on the ability to get to and from those areas efficiently. Regular air service is not available at all in most of rural Oregon. Where it is available, it is increasingly threatened by the trend in the airline industry toward larger aircraft serving larger communities, coupled with more demanding security provisions.

What We've Done So Far

- The Port of Portland, the state, and the City of Portland and its business associations have worked for over 15 years to attract a carrier to serve the Portland-Europe market, including U.S. and foreign flag carriers.
- With respect to Asian air passenger service, the Port of Portland has maintained relationships and contacts with the Asian carriers servicing the Asia-U.S. market, with calls made in Asia to Japan Airlines, All Nippon Airlines, and Korean Airlines in an effort to convince one of them to make PDX a "spoke to an Asian hub".
- The Port of Portland has worked closely with local companies for several years to attract carriers to serve the Portland-Asia and Portland-Europe markets, securing freighter service from Korean Airlines and Cargolux Airlines. Nippon Cargo Airlines provided freighter service between Portland and Japan for over three years, but recently withdrew from the market due to the depressed Japanese economy and excess Pacific Northwest cargo capacity to Japan.
- The Port of Portland has worked for several years to attract a carrier to serve the Portland-Mexico market. Mexicana Airlines recently has expressed interest in looking at serving Portland.
- The Port of Portland has worked closely with officials from Horizon Air to evaluate service opportunities to key Canadian markets for future expansion utilizing Horizon's expanding fleet of regional jets.
- The Oregon State Aeronautics Department has been helping small Oregon communities with existing but threatened air service from Horizon and SkyWest to make their best case to keep those carriers, and, perhaps, to add a new potential provider, Blue Sky Airlines. The other alternative being explored in these communities, and others without existing service, is on-demand charter aircraft service. The state has helped smaller airports with the infrastructure necessary to support frequent service by providing matching grants for instrument approach systems, automated weather reporting equipment, and improved terminal facilities. The Small Airport Transportation System has developed a vision for modern, efficient aircraft providing direct point-to-point service in Oregon at a cost comparable to airlines.

Results of These Efforts

- Through the development of a strong business case, a strong community partnership effort, and a highly innovative risk mitigation program, PDX will have daily Lufthansa passenger service to Europe starting next spring. These flights also will provide additional daily cargo lift between the local region and Europe.
- Representatives of Mexicana Airlines have said they will make a decision by early Spring 2003 on whether to provide direct service from Portland to Mexico.
- On November 17, 2002, Air China Cargo began new, twice-weekly freighter service between Portland and China, the first ever nonstop air service of any kind between Oregon and China.
- A new Oregon company called SkyTaxi has developed a network of charter operators linked through a common reservation system.

The Unfinished Agenda

In order to assure Lufthansa's success:

- "Travel Bank" participants must meet the commitments they made to purchase business travel on the new service, and the rest of the local community must "use it or lose it," meaning they must travel and ship cargo on the new service or risk its financial failure and closure.
- The state must provide the funding for tourism promotion in Europe it committed to.
- The Port of Portland must successfully negotiate the PDX fee relief it committed to.

To secure new or better Asia passenger air service:

- The Port of Portland, the state and the business community should leverage the Lufthansa success to attract Lufthansa's Star Alliance partner, All Nippon Airways, or another carrier, for daily, nonstop service to Asia.
- The Port of Portland should develop a new Asian traffic analysis and forecast and complete a comprehensive study of available route authorities and eligible carriers.
- The Port of Portland should determine the feasibility of a business jet service to Tokyo.
- The Port of Portland should continue to work to enhance connections to other gateway airports.

In order to ensure the success of Air China Cargo and the retention of Korean Air service:

- Local freight forwarders and companies whose products are destined to China will need to be educated about the new service.
- Air China Cargo will need ongoing education about "doing business in Oregon" and the support available to the carrier from local entities such as the Port of Portland, City of Portland, and the State.
- Working with local forwarders, the Port of Portland should help Korean Airlines understand the "leakage" of local Asia-destined freight from the PDX market to other gateway airports, enabling KAL to capture a greater share.

In order to retain Cargolux service to Europe in the light of new competition from Lufthansa:

- The Port of Portland and State of Oregon should to help Cargolux better understand potential business ties and commodity types moved to the regions served by Cargolux (main-deck cargos).
- Working with local forwarders, the Port of Portland should help Cargolux understand the "leakage" of local Europe-destined freight from the PDX market to other gateway airports, enabling the carrier to capture a greater share.
- The Port of Portland should help Cargolux educate local shippers and the public about its services and markets.

In order to attract Mexico service, over the next several months:

- The Port of Portland must present a compelling business case to Mexicana Airlines.
- A risk mitigation plan must be developed and approved by Port staff.

- The state, the City of Portland, and the local community must show support.

To retain and enhance intrastate air service:

- The state and the communities with small airports must find ways to add infrastructure to support frequent air passenger service.
- The state and the communities with small airports should support charter aircraft services.

Breakthrough Opportunities

- Leverage the new Lufthansa service to expand and develop business opportunities in Europe for regional companies.
- Leverage the new Lufthansa service to Germany with fellow Star Alliance carriers All Nippon Airways and Singapore Airlines, or another carrier, for daily, nonstop service to Asia.
- Position PDX for expanded air cargo service to Southeast Asia by monitoring bilateral treaties and initiating relationships with countries such as Vietnam.
- Present a compelling business case and risk mitigation plan to Mexicana Airlines in the next few months.
- Make air charter service to Oregon's rural airports a noteworthy success through frequent usage.

For additional information relevant to this white paper, the reader may wish to visit the following sites:

Port of Portland

<http://www.portofportlandor.com/>

Oregon Department of Aviation

<http://www.aviation.state.or.us/>

White Paper Summary: Improve air access and trade infrastructure.	
<p>Specifically: Retain Oregon's existing international, regional, and in-state passenger and freight air connections, and add to them. Improve the market reach and productivity of Oregon businesses through efficient trade related transportation infrastructure investments.</p> <p>Why: Efficient air and waterborne carrier service to our current or potential international markets is critical to Oregon's prosperity. Companies and farms throughout Oregon and the Pacific Northwest rely on efficient multi-modal transportation systems, distribution facilities, and warehousing to reach international and domestic markets.</p>	
Air Service Initiatives	Top Action Items
Assure Lufthansa's success.	<ul style="list-style-type: none"> • Encourage "travel bank" participants to meet the commitments they made to purchase business travel on the new service; also encourage wider community use. Obtain promised state funding for Europe tourism promotion. Negotiate PDX fee relief promised in the Lufthansa deal.
Build on the Lufthansa deal.	<ul style="list-style-type: none"> • Leverage the new Lufthansa service to Germany with fellow Star Alliance carriers All Nippon Airways and Singapore Airlines, or another carrier, for daily, nonstop service to Asia. • Leverage the new Lufthansa service to expand and develop business opportunities in Europe for regional companies. • Position PDX for expanded air cargo service to Southeast Asia by monitoring bilateral treaties and initiating relationships with countries such as Vietnam. • Present a compelling business case and risk mitigation plan to Mexicana Airlines in the next few months.
Promote the viability of in-state air service.	<ul style="list-style-type: none"> • Make air charter service to Oregon's rural airports a noteworthy success through frequent usage.

Oregon Business Plan White Paper

STRENGTHENING OUR TRADE INFRASTRUCTURE

Objectives

Retain our competitive strength as a distribution point within the global trade network. Improve the market reach and productivity of Oregon businesses through efficient trade-related transportation infrastructure investments. Specifically:

- Prioritize and fund transportation projects that demonstrably contribute to economic vitality.
- Deepen the Columbia River navigation channel.
- Ensure that an adequate supply of suitable industrial land is available for warehousing and distribution and other specialized industrial uses.

Why It's Important

Trade-related infrastructure is comprised of not only the transportation infrastructure such as freeways, railroads and a deepened Columbia River Navigation Channel, but also the distribution and warehouse facilities that accommodate the growing international flow of cargo.

Companies and farms throughout Oregon and the Pacific Northwest rely on efficient multi-modal transportation systems, distribution facilities, and warehousing to reach international and domestic markets. With rail, barge and highway connections to other parts of the state and region, and ship and air connections to global markets, Portland currently serves Oregon and much of the Pacific Northwest as a specialized distribution point within the global trade network. This gateway function is a strategic economic advantage for the state. To build this region's economic base and serve the access needs of the state's industries, it is critical to maintain and enhance this natural advantage.

Regional and national forecasts show cargo volumes nearly doubling in the western U.S. in the next 20 years. Regional and national forecasts show the warehouse/distribution sector as a growth area, and freight transportation and logistics as a key focus for businesses seeking to improve productivity.

Freight transportation systems expand the region's market beyond the local consumption base, bringing outside revenues into the local economy. By enhancing freight transportation facilities (air cargo, marine, barge, road, and rail), the Portland region and state can take full advantage of its strategic position in the global trade network, supporting productivity gains for new and existing industries, while growing its economic base.

The Challenge

Diminishing resources, multiple priorities, and growing congestion on all transportation systems are challenging our ability to ensure efficient connections to domestic and global markets for industry and agriculture. In addition, the state -- and especially the Portland area -- is running out of land suitable for siting major distribution and warehouse facilities critical to maintaining and growing the diversity of cargo carriers serving the freight movement needs of Oregon's manufacturers and shippers. Addressing our trade-related infrastructure needs will require creative and targeted infrastructure investment strategies, extraordinary intergovernmental and public/private coordination, and tough choices about priorities.

What We've Done So Far

Planning. In the past five years, both the Portland region and the state have identified key freight corridors through their system planning efforts, which serve trade-related activities. More than ten years ago, ODOT undertook a statewide effort to examine all trade-related transportation facilities in conjunction with the development of the Oregon Transportation Plan. That effort considered marine, air, road, and rail facilities and their role in serving the state's passengers and businesses. Additional work on the sufficiency of the connections between modes (Intermodal Management System) was completed eight years ago. Through that work and other efforts, some assessment of bottlenecks on the corridors has been done. The Oregon Transportation Commission's (OTC) Freight Advisory Committee established by the Legislature in 2000 will advise ODOT and the OTC on the status of the freight transportation system in Oregon by early 2003.

The state's international air terminal (PDX) and marine operations (T-2, T-4, T-5 and T-6) are owned and managed by the Port of Portland. The Port routinely updates master plans for the facilities, identifying capacity improvements, operational upgrades, and access needs, based on forecasted demand for the terminals. The Port is currently completing its Marine Terminals Masterplan, and the U.S. Army Corp of Engineers is near completion of its Final Supplemental Feasibility and Environmental Impact Study for the Columbia River Channel Deepening Project.

With respect to sites for warehouse and distribution uses, much of the suitable serviced and available industrial land for these purposes is gone, and the legal processes for replenishing the land supply by bringing appropriate new parcels into the UGB is outdated and ineffective. A number of efforts -- notably including the Regional Industrial Land Supply Study in the Portland area -- have been undertaken to assess the sufficiency of the supply of specific types of industrial land.

Research. Cargo forecasts (and related traffic models) for the Portland region, updated in August, 2002, considered freight volumes by mode and by industry moving into, through, and out of the Portland region through 2030. The state will be completing a similar statewide effort by June 2003. This information will help identify future bottlenecks on most aspects of the state's freight (road, rail, marine and air) transportation system.

Investment. Historically, public funds for freight transportation improvements have been primarily limited to road (truck freight) use and marine navigability projects. The only statewide effort to fund freight related infrastructure occurred through the recent Oregon Transportation Investment Act, which gave priority to freight projects through their screening criteria. General improvements on the highway network are considered by many to benefit freight (trucks moving freight) even though the long-term benefit may diminish as auto traffic grows in the specific corridor.

For other modes the opportunities for funding improvements are even less certain. No public source exists specifically for freight rail improvements. The state has used general funds to make some improvements for passenger service on the freight rail system, but an ongoing source for freight rail investments does not exist at the state level. The Class 1 rail carriers are ultimately responsible for investment on the system they own and operate. However recent analysis shows that the carriers do not currently have adequate capital to meet forecasted needs, resulting in under investment in much of their systems. For

waterway improvements such as channel deepening, a coalition of sponsors has developed a funding strategy that includes federal, state and local funds.

Results of These Efforts

- Key freight corridors in the state and the Portland region have been identified.
- An assessment of bottlenecks has been completed for some of the corridors; including an identification of structurally deficient bridges.
- Port of Portland's Marine Terminals Master Plan and PDX Master Plan identify improvements necessary to meet operations needs and projected demand.
- Oregon has committed to its local matching share of the cost of the Columbia River Channel Deepening project.
- Awareness of the shortage of specific types of industrial land is now widespread, and Metro and the State Legislature have taken some steps to address it.

The Unfinished Agenda

- Complete and use a statewide commodity flow forecast to further refine information on freight corridors and the chokepoints on those corridors.
- Coordinate the designation of freight corridors with a statewide economic strategy for industrial development. For example, identify freight corridors critical to the statewide economy and target transportation investments and land acquisition and development on those corridors. For example, dedicate a portion of the existing infrastructure bond program for industrial development and redevelopment in critical locations (e.g., near interchanges and in brownfield areas) to enable industrial uses with special access requirements to trump "higher value" commercial uses.
- Develop a funding strategy to address a short list of freight needs. Consider a mode neutral funding source and public private partnerships as a means to target funds to a set of important projects critical to meet the state's economic objectives. Create a Portland-area "transportation authority" to issue bonds and charge tolls to repay bonds for certain types of defined transportation projects.
- Identify operational efficiencies (non-capacity improvements) and designs that directly benefit freight, to provide faster, more predictable and efficient movements on key corridors and between modes.
- Ensure Oregon and Washington regulatory authorities complete their reviews of the Columbia River Channel Deepening project in a timely yet thorough manner.
- Establish greater planning control over industrial lands to prevent conversion to other uses, including preservation of large lots in the industrial land division process, protection of key freeway interchanges, and other key industrial access streets from encroachment by non-industrial uses.
- Develop planning mechanisms that would enable and require planning jurisdictions to create a phased urban growth plan for at least 50 years into the future (in order to inform and hopefully de-polarize the incremental decisions currently made every 5 years).

- Require adjoining planning jurisdictions to consult and agree on the scope and shape of overlapping and adjoining agricultural and forest preserves and on the type of urban growth each will accept.
- Develop and implement a better regulatory screen for identifying the most important agricultural land for protection.
- In addition to requiring a minimum 20-year supply of residential land, require a minimum 20-year industrial and commercial land supply.
- Allow industrial land divisions to be handled with more flexibility than residential or commercial land divisions, reflecting the far greater range of dimensional requirements and time-sensitivity of industrial uses.

Breakthrough Opportunities

1. *Prioritize and fund transportation projects that demonstrably contribute to economic vitality.*

- Identify key freight corridors and chokepoints statewide based on the statewide commodity flow forecast and clear economic objectives for industrial growth. Define the corridors that industry needs to reach markets and the bottlenecks impacting their ability to rely on the system. Include the highway and rail corridor along the lower Columbia River to extend the potential for marine cargo distribution.
- Develop a funding strategy for a short list of rail and road improvements. Identify public private/partnership opportunities.
- Use the next statewide transportation funding effort (OTIA II) to fund targeted improvements, especially those intended to provide efficient access to multi modal-facilities.
- Coordinate the use of federal transportation funds to support the targeted list of improvements.
- At the regional level, coordinate and target MTI P and other funds to transportation improvements that provide the region with a sustainable economic return.

2. *Deepen the Columbia River navigation channel.*

- As the final step in the regulatory approval process, complete the state coastal zone and water quality reviews for the deepening project on their current schedules, allowing Oregon to issue lottery backed revenue bonds committed by the 2001 Legislature and Governor. If that schedule cannot be met, the 2003 Legislature must act to reauthorize Oregon's \$24.4 million share of the project cost.

3. *Ensure an adequate supply of suitable industrial land is available for warehousing and distribution and other specialized industrial uses.*

- Establish greater planning control over industrial lands to prevent conversion to other uses, including preservation of large lots in the industrial land division process and protection of key freeway interchanges and other key industrial access streets from encroachment by non-industrial uses.
- Require in statute a minimum 20-year supply of industrial and commercial land.
- Identify infrastructure needed to serve both existing industrial development and new industrial sites.

For additional information relevant to this white paper, the reader may wish to visit the following sites:

Port of Portland

<http://www.portofportlandor.com/>

Columbia River Channel Coalition

<http://www.channeldeepening.com/>

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Trade Infrastructure Initiatives	Top Action Items
<p>Prioritize and fund transportation projects that demonstrably contribute to economic vitality.</p>	<ul style="list-style-type: none"> • Identify key freight corridors and chokepoints statewide based on the statewide commodity flow forecast and clear economic objectives for industrial growth. • Develop a funding strategy for a short list of rail and road improvements. Identify public private/partnership opportunities. • Use the next statewide transportation funding effort (OTIA II) to fund targeted improvements, especially those intended to provide efficient access to multi modal-facilities. • Coordinate the use of federal transportation funds to support the targeted list of improvements. • At the regional level, coordinate and target MTI P and other funds to transportation improvements that provide the region with a sustainable economic return.
<p>Deepen the Columbia River navigation channel.</p>	<ul style="list-style-type: none"> • As the final step in the regulatory approval process complete the state coastal zone and water quality reviews for the deepening project on their current schedules, allowing Oregon to issue lottery backed revenue bonds committed by the 2001 Legislature and Governor. • If that schedule cannot be met, the 2003 Legislature must act to reauthorize Oregon's \$24.4 million share of the project cost.
<p>Ensure an adequate supply of suitable industrial land for warehousing and distribution and other specialized industrial uses.</p>	<ul style="list-style-type: none"> • Establish greater planning control over industrial lands to prevent conversion to other uses, including preservation of large lots in the industrial land division process and protection of key freeway interchanges and other key industrial access streets. • Require a minimum 20-year supply of industrial and commercial land. • Identify infrastructure needed to serve both existing industrial development and new industrial sites.

*Oregon Business Plan White Paper***SECURING LAND FOR TRADED-SECTOR DEVELOPMENT****The Objective**

Develop goals, policies and legal procedures to ensure that Oregon's land use system provides an adequate short- and long-term supply of land for traded-sector industries and critical wholesale, distribution, and warehousing. This effort will not only support industry, but will also protect other values important to Oregon's quality of life.

In achieving this objective, Oregon should continue to embrace land use planning. In doing so, however, we should make sure that our land use planning system links to state economic strategy, stays up-to-date and nimble, promotes better partnership between state and local jurisdictions, and employs a more decisive and efficient review and appeals process.

Background

In 1973, the Oregon Legislature enacted Senate Bill 100 establishing Oregon's pioneering statewide land use system. Over the next several years, local governments and the state developed detailed goals and guidelines, rules, and comprehensive plans to implement this system. The new law provided:

- Strong provisions to preserve farm and forest land
- Urban growth boundaries to guide new development
- Policies for environmental protections and practices
- Supportive plans for housing and transportation investment.

As a result, Oregon's system has been widely recognized as a national leader, and has helped to secure and define the state's quality of life. In recent years, many other states, under the banner of "smart growth," have adopted elements of the Oregon system.

SB 100, based on a vision of the world at it appeared in 1973, was a powerful force to help protect the state's major traded sector industries at the time – agriculture and forestry – by ensuring that a sufficient supply of land would be available for their continued operation. In addition, state statutes made specific provision for other industries, such as mining (requiring cities and counties to protect sites with aggregate minerals) and marine commerce (restricting development along deep draft waterways to water-dependent uses). Local plans also were required to include land for industrial development, as well as for other uses.

The Challenge

In the past few years, it has become more apparent that our land use planning system has important ramifications for shaping, growing or limiting our economy. By encouraging development in some places and prohibiting it in others, and by setting guidelines for public investment, land use plans define economic possibilities, community design, and quality of life. In particular, they determine:

- The availability of attractive sites to expand or locate businesses
- The overall character of our state and its communities
- The quality of life that Oregonians enjoy.

Given this influence, land use laws and plans should be an integral part of local, regional, and statewide economic strategies. In particular, they should reflect changing times and realities. Unfortunately, all too often they don't.

Addressing this need does not require running away from SB 100, but rather bringing it up to date. It is clear that the system needs an infusion of goals and policies that serve the state's new and emerging industries as well as its long-established ones.

For example, high technology is the state's largest industry, but its needs are not specifically recognized or provided for in state land use laws. High tech is not alone in this regard. A recent study suggests that most local governments responsible for implementing land use plans do not have a good understanding of the land requirements for today's industrial and commercial traded-sector businesses, including warehousing and distribution. As a result, many local comprehensive plans fall short in addressing several important needs of these industries.

There are other dimensions to this challenge.

First, some communities are reaching or have reached the original planning horizons of many of the land use plans adopted in the late 1970s and early 1980s. In many jurisdictions, and particularly in the Portland metropolitan area, the amount of undeveloped, available, "shovel ready" industrial land inside the existing urban growth boundary is dwindling or is at such levels that opportunities to locate or grow new businesses are limited.

Second, communities reviewing their 20-year land supplies for housing and industry are neglecting the need for land to serve the requirements of traded-sector industries and their suppliers, especially short-term land supplies. As a result, some employers have had to abandon plans to locate or expand in such places as the west Portland metro area. This means that the short- and long term-future of some of Oregon's new and emerging traded-sector industry clusters, including high tech, warehousing and distribution, will be adversely affected.

Third, not all industrial or commercial sites within the state are equally well-suited for every new kind of economic activity. Some firms may require sites with particular characteristics, including "cluster" proximity to other firms in related industries. Land use planning must take this into account.

Such issues put communities and land use planners around the state in a real dilemma deciding whether, how much, or where, to expand local urban growth boundaries.

Finally, anecdotal evidence cited by both business and public sector leaders suggests that there is ample room to streamline and make more decisive the review and appeals process that has evolved as an outgrowth of Oregon's land use laws. This process can take years (in the case of one development project, eight years have elapsed without a resolution). Where broad community consensus exists on a project, a small group or a single opposing party can delay a project on the basis of purely legal technicalities. Project delay, whether caused by protracted administrative procedure or organized opposition, can effectively kill an economic opportunity by causing it to miss a market window or creating uncertainties that cause businesses to lose interest or go elsewhere. When this happens, Oregonians pay

a price in terms of lost job opportunity, and communities lose new sources of revenue to fund public services.

The Opportunity

As we update our land use system, we must provide for traded-sector industries as well as we originally provided for our state's agricultural and forestry industries in 1973. In doing so, we must think both short term and long term.

Some short-term improvements are already under way. The 2001 Oregon Legislature enacted House Bill 3557 with the objective of better understanding the relationship between state land use planning laws and the economy. The purpose of HB3557 was to initiate a study and provide recommendations to the Legislature to help "ensure Oregon communities are providing sufficient buildable commercial and industrial lands."

Two state agencies, the Department of Land Conservation and Development and the Economic and Community Development Department, chaired this effort, which included a working group of diverse citizen, public, and business interests.

A draft report prepared by the group found that while Oregon land use planning has focused, and arguably done a good job, on long-term industrial land supply issues, the system has fallen short in the following areas:

- Insufficient coordination of economic development strategies among various levels of government
- Absence, in most communities, of a short-term land needs analysis
- Lack, in most communities, of a competitive short-term supply of land
- Lack of mechanisms to protect key areas of industrially designated land.

Recommendations

To make Oregon's land use system more responsive to and supportive of economic and community development needs, we should do the following:

1. *Embed in Oregon's economic development strategy a provision for land use policies and procedures that are up-to-date and responsive to Oregon's economic development goals.*

- In Oregon Shines III, its update of Oregon's strategic plan, the Oregon Progress Board should link land use strategies and supporting rules and procedures to the state's economic development goals. In particular, Oregon Shines III should stress that land use laws stay current with changing economic realities and the needs of new and emerging traded-sector industries, and that they provide a swift, decisive approval process.

2. *Make sure that economic development priorities and needs are represented in the development of administrative-level land use policies and rules, and in review of projects with major economic importance, particularly those that create quality traded-sector jobs.*

- Place an economic development administrator within the Department of Land Conservation and Development to work with the department, LCDC, and other state agencies to make sure that land use decisions, state investments in infrastructure, and state economic strategies are linked and addressed in partnership.

- Through DLCD and OECDD, help local governments analyze short-term land needs and supply, prepare economic development strategies, and remove development constraints.

3. *Insure the provision of short-term industrial land supplies for traded-sector industries and supporting businesses in warehousing and distribution.*

- Designate potential sites around Oregon and provide state assistance to make them ready for immediate development. This “shovel ready” strategy for available land would target key areas of Oregon and make them available for special assistance to remove development constraints, such as the lack of needed infrastructure, the assembling of land, and land use zoning designations.
- This should be accomplished by requiring that short-term land supplies are emphasized within state land use goals and guidelines and applicable administrative rules and procedures and by the creation a “Strategic Employment Site Certification Program.” This program should facilitate the removal of site development constraints and should quickly identify at least 20 immediately marketable and developable sites so that Oregon remains competitive for accommodating strategic employers.
- Preserve strategic areas of desired employment and industrial land from use or reduction by other land uses.

4. *Create a capital investment fund and program to provide public infrastructure improvements to industrial sites in a timely way so economic development opportunities can be captured.* Use the fund in part to encourage property owners to participate in the amalgamation of land presently held in multiple ownerships for the purpose of creating needed multi-acre, large-tract industrial land sites.

5. *Authorize and carry out a public-private study of land use administrative and procedural reviews and appeals in order to identify and rectify significant sources of unwarranted project delay.*

6. *Address the state’s long-term land use needs and opportunities by convening a blue-ribbon panel of Oregonians from a wide range of interests and disciplines to set a new 25-year vision for Oregon’s land use planning system.* In particular, this group should investigate and recommend solutions to areas of our land use system where conflicts in economic objectives and other public interests exist or might arise.

Principles of Land Use Policy Revision

All of the recommendations above should be implemented with the following principles in mind:

- *Nimbleness.* Ensure the ability to respond to immediate and specific industrial need opportunities.
- *Accurate evaluation.* Ensure the ability to quickly and accurately measure need, supply, and opportunity, as well as costs and benefits.
- *Balance.* Commit that any evaluation of need, cost, and benefits considers not only economic objectives, but also other public policy issues, including livability and the environment. Oregon’s originating land use plan principles held that no single land use goal was more important than any other, but that all goals created balanced and desirable outcomes.

- *Decisiveness.* Commit to policies and practices that allow for economic strategy and land use decisions to be made quickly and responsibly without protracted administrative review and secondary analysis that paralyzes progress.

White Paper Summary: Make land available for industrial development and other important uses.	
<p>Specifically: Ensure that our land use system provides an adequate short- and long-term supply of land for traded-sector industry and critical wholesale and warehousing that supports industry, while protecting other critical values important to Oregon’s quality of life.</p> <p>Why: Over the past several decades, Oregon’s economic base has changed dramatically. Today, for example, high technology is the state’s largest industry, but its needs are not specifically recognized or provided for in state land use laws. New economy industries have very specific needs, but the land use system is not nuanced in addressing these needs or even recognizing that they exist. Our land use system should provide land for Oregon’s new industries just as it originally did for our traditional industries.</p>	
Initiatives	Top Action Items
Embed in Oregon’s economic development strategy a provision for land use policies and procedures that are up-to-date and responsive to Oregon’s economic development goals	<ul style="list-style-type: none"> • In Oregon Shines III, its update of Oregon’s strategic plan, the Oregon Progress Board should link land use strategies and supporting rules and procedures to the state’s economic development goals.
Make sure that economic development priorities and needs are represented in the development of administrative-level land use policies, rules, and in review of important projects.	<ul style="list-style-type: none"> • Place an economic development administrator within the Department of Land Conservation and Development to work with the department, LCDC, and other state agencies on land use matters with economic implications. • Through DLCD and OECD, help local governments analyze short-term land needs and supply, prepare economic development strategies, and remove development constraints.
Create a capital investment fund and program to provide public infrastructure improvements to industrial sites in a timely way so economic development opportunities can be captured.	<ul style="list-style-type: none"> • Use the fund in part to encourage property owners to participate in the amalgamation of land presently held in multiple ownerships for the purpose of creating needed multi-acre, large-tract industrial land sites.
Identify and rectify significant sources of unwarranted project delay in the land use review and appeal process.	<ul style="list-style-type: none"> • Authorize and carry out a public-private study of land use reviews and appeals.
Address Oregon’s long-term land use needs and opportunities.	<ul style="list-style-type: none"> • Convene a blue-ribbon panel of Oregonians from a wide range of interests and disciplines to set a new 25-year vision for Oregon’s land use planning system.

Oregon Business Plan White Paper

STREAMLINING PERMITTING

The Objective

Oregon will create and maintain an efficient, simple, and streamlined permitting system that makes it easy to start and expand businesses while still protecting public regulatory goals. State and local governments will update or eliminate conflicting, cumbersome, and redundant permit processes.

Why It's Important

Permits are needed for all aspects of business activity and are frequently required by both state and local governments. A uniform and efficient permitting process is critical to business success for two main reasons: businesses need certainty to plan capital expenditures and they need efficient and predictable permitting to avoid costly delays in projects. Permits have increased in number and complexity from 30 years ago. Important goals of conforming to land use, protecting the environment, and assuring public safety have led to a multi-layered and incremental permitting system. It is important for businesses to understand and support the public goals of permitting requirements, but the permitting process itself must be fair, efficient, uniform, and service oriented. Achieving the public goals of regulation are made more difficult if the process is perceived by businesses as indifferent to their needs, or even adversarial.

What's Been Done So Far

As a result of commitments made during the 2001 Legislature, the Department of Administrative Services convened a taskforce of state agency directors – the Regulatory Streamlining Task Force – to “evaluate the impact of state government regulation on the economic climate of Oregon” and to propose “immediate and long-term measures to ensure that” permitting processes “avoid imposing excessive burdens on businesses and the public while still achieving their statutory responsibilities.”

The task force interviewed individuals, business people, legislators, and organizations that interact directly and indirectly with state agencies, and found several problem areas and recurring themes. Those interviewed view the statewide permitting system as neither consistent nor predictable. They said they feel that the system should be flexible, timely, and fair and that government work force attitudes and cultures could be more facilitative and collaborative. The survey group also observed that overlapping state and local permitting systems are not coordinated and clearly communicated to the user. Finally, they noted that better use of technology is needed to speed up permitting and provide better information about it.

The task force report suggests a number of ways these issues can be addressed. They are outlined in the “Unfinished Agenda” portion of this white paper.

The state has made headway in permit streamlining through the Community Solutions Team (CST). Integrated into DAS in 2001, the Community Solutions Office has had notable success in using locally based, collaborative CSTs to improve the delivery and quality of state services to local communities, including permitting. The CST approach to community development became a statewide initiative in 1998 with the organization of the office and the formation of locally based, multi-agency teams around the state. The 1999 Oregon State Legislature expanded the office by providing positions and funding for

five regionally based coordinators. The office collaborates on many aspects of community development projects and has demonstrated particular skill in assisting with permit streamlining.

Working with Oregon Solutions – a spin-off off CST that involves private sector, non-profits, citizen and others in community-based problem solving – the Community Solutions Office has had success in a number of projects:

- Partnering with local landowners, Sherman County, Northwest Wind Power, the Oregon Department of Fish and Wildlife, U.S. Fish and Wildlife, the Audubon Society and others, the Sherman County Wind Farm, a 17-wind-turbine project, was permitted in only four months with no opposition.
- The Opportunity Foundation facilitated a new development in Jefferson County that will provide job training and resources to adults with disabilities. The building, planned on a redeveloped brownfield site, will serve as the cornerstone of a downtown Madras revitalization effort.
- Myrtle Point Biogas connected with state and federal agencies, the City of Myrtle Point, dairy farmers, a local creamery, and Coos County to develop a regional biogas facility using feedstock and manure from local dairy farms. Manure storage has been a barrier to expanding local dairies in the area because of the wet winter climate and Confined Animal Feeding Operation (CAFO) permits.

Local Permitting

Although the Regulatory Streamlining Taskforce focused its efforts on how state services are provided, the report findings recognize that: “In addition to state requirements, local and federal government regulations and processes clearly contribute to the issues and concerns business leaders and other users have with ‘government services’.”

The recession has also increased scrutiny of local and regional permitting systems and their effect on business costs. Business leaders have cited examples of helpful and reliable processes in places such as Hillsboro and Klamath Falls. But significant problem have also been highlighted in the City of Portland’s regulatory system. The loss of Norm Thompson Outfitters to Hillsboro and the cost to a pizza restaurant of moving across the street were the subject of news coverage and conversation for months. In June 2002, the City, in response to such controversy, initiated a process to review and update building and land regulations and “improve regulatory-related procedures and customer services.”

The Unfinished Agenda and Breakthrough Opportunities

The Regulatory Streamlining Taskforce Report calls for specific action in a number of areas and we recommend the adoption of these proposals.

First, the report makes it clear that the Governor should make permit streamlining a priority by issuing an executive order stating that it is the policy of the state to help residents and businesses find solutions to regulatory problems so that they can achieve their goals. This executive order should direct the Department of Administrative Services to provide leadership and oversight in the implementation of the recommendations included in this report. The incoming Governor should issue such an order.

In addition, the task force report recommends a number of initiatives that DAS should take the lead in implementing:

- *Create an ongoing partnership, in the form of an advisory panel, between business and state government leaders.* This group will articulate a shared vision of how business and government should work together, monitor performance against that vision and provide advice and guidance to the director of DAS. Specifically, this group will have project oversight responsibility for the customer service initiative and smart permitting pilot projects described below.
- *Direct the Community Solutions Office (CSO) to adopt, as a primary purpose, the proactive resolution of situations where the implementation of government regulation has the effect of impeding community goals.* The CSO should take a leadership role in troubleshooting and implementing the recommendations of the streamlining task force and the public/private advisory panel. The primary role of the CSO should be to work with agencies to remove barriers, provide clear information on regulations, and solve problems for customers.
- *Implement a customer service initiative throughout the executive branch, with direction from DAS.* The customer service initiative should include training for agency directors, senior management staff and select board and commission members in the principles of customer service and in the governor's expectations relating to those principles. This training should be provided for existing directors and board/commission members, and become a part of orientation for new appointees.
- *Use technology to "speed-up" processes and clarify regulatory information.* Develop a "smart permitting" pilot project to address the structural complexities currently inherent in our regulatory system. Permitting and regulatory process information needs to be mapped, clarified and coordinated with key state agencies with the goal of streamlining and automating processes. Technology and information should be used to coordinate regulatory processes, serve as a clearinghouse for permitting and process information and provide a single point of entry for users to gain information about key state services. Ultimately, this project should also begin to address the multi-jurisdictional issues mentioned earlier in this report through the sharing of information and technology.
- *Feedback mechanisms should be established through DAS with the help of the public/private partnership advisory panel and the CSO, for use by Oregonians receiving state services.* These feedback mechanisms should be developed to measure effectiveness, efficiency and customer satisfaction with our services and programs. Results should be compiled on a regular basis and reported to the governor, the partnership and the legislature.

Follow Through and Future Work

Both the current statewide and City of Portland efforts are promising. It is important that the public/private advisory panel recommended by the state task force include a diverse cross-section of business voices. In addition, many permitting problems are regional or local in nature. We recommend that the advisory panel include members from local government and business interests to ensure that state level work is integrated with regional efforts.

Finally, the task force report is limited in scope. It identifies needed change within *existing* statute. The proposals are important and if adopted, should help businesses operate more efficiently. However, there is no established process for reviewing redundant, conflicting,

or cumbersome regulations that may need to be changed, updated or eliminated altogether. The Governor and Legislature, should consider the establishment of a permanent review board that would undertake a comprehensive assessment of our state regulatory statutes. The board, comprised of public and private interests, would recommend, on an ongoing basis, needed statutory changes and investigate the potential for one-stop permitting, time-certain permit approvals, and limits to appeals.

In addition, the State as a whole has no systematic means of measuring our progress in achieving regulatory and permit streamlining goals. In this area in particular, the Oregon Progress Board – the independent state planning and oversight agency – had trouble establishing measurement indicators and has no way of comparing our system to other states. The advisory panel should consider and recommend effective procedures to benchmark our regulatory system.

Recommended Initiatives

- Adopt recommendations detailed in the Regulatory Streamlining Task Force Report.
- Include members on the public/private advisory panel from a diverse cross-section of business interests.
- Include members on the public/private advisory panel from local government agencies to ensure that state level work is integrated with regional efforts.
- Establish a permanent review board comprised of public and private interests to undertake a comprehensive assessment of our state regulatory statutes and recommend on an ongoing basis, needed statutory and permit processes changes.

White Paper Summary: Simplify and streamline permitting.	
<p>Specifically: Create and maintain an efficient, simple, and streamlined permitting system that makes it easy to start and expand businesses while still protecting public regulatory goals.</p> <p>Why: Uniform and efficient permitting enables businesses to plan capital expenditures with greater certainty and to carry out projects with less chance of costly delay.</p>	
Initiatives	Top Action Items
<p>Make permit streamlining a priority within the Governor’s office and State administrative offices.</p>	<ul style="list-style-type: none"> • Endorse both the spirit and the specifics of the Regulatory Streamlining Taskforce Report by issuing an executive order stating that it is the policy of the State of Oregon to help residents and businesses find solutions to regulatory problems. • Direct the Department of Administrative Services to provide leadership and oversight in the implementation of the recommendations included in the Regulatory Streamlining report. • Create an advisory panel between business and state government leaders to monitor implementation of the report recommendations and to provide advice and guidance to the director of DAS. • Direct advisory panel to consider and recommend effective procedures to benchmark the state regulatory system.
<p>Streamline permitting within existing state statute.</p>	<ul style="list-style-type: none"> • Direct the Community Solutions Office (CSO) to adopt, as a primary purpose, the proactive resolution of situations where the implementation of government regulation has the effect of impeding community goals. • Implement a customer service initiative throughout the executive branch, with direction from DAS. • Develop a “smart permitting” pilot project to address the structural complexities currently inherent in our regulatory system. • Establish feedback mechanisms through DAS with the help of the public/private partnership advisory panel and the CSO, for use by Oregonians receiving state services.
<p>Update, or eliminate, conflicting and cumbersome state and local regulations, and weed out redundant permit processes.</p>	<ul style="list-style-type: none"> • Include members on the state advisory panel from local government and business interests to ensure that state level work is integrated with regional efforts. • Establish a permanent review board comprised of public and private interests to undertake a comprehensive assessment of our state regulatory statutes and investigate the potential for one-stop permitting, time-certain permit approvals, and limits to appeals. • The board would recommend, on an ongoing basis, needed statutory changes.

Oregon Business Plan White Paper

BRANDING AND MARKETING OREGON

The Objective

To harness the marketing prowess of Oregon businesses and industries under a unified brand to better position Oregon as a destination for visitors, a desired site for business investment and relocation, a great place to live for current residents and the future workforce, and a producer of high quality goods and services.

Why It's Important

By developing and successfully marketing a brand image for Oregon, the state's businesses and overall business climate stand to benefit from a unified, coherent message that communicates our high quality of life, excellent workforce capacities, competitive business climate and superior products and services. It is well documented that the tourism sector can positively influence other business development by marketing a unified brand.

What We've Done So Far

The Brand Oregon concept was originally fostered by Governor Neil Goldschmidt at the beginning of his tenure. Governor Goldschmidt's marching orders to the Tourism Commission were fairly simple:

- Create a compelling new image for Oregon.
- Make the image meaningful for all who are marketing Oregon.
- Remember that it's our people who make Oregon different.
- Present our message in a unique and creative way.

In 1987, the Tourism Commission (then Division) of the Oregon Economic and Community Development Department engaged the Portland-based advertising agency Wieden + Kennedy to launch a revitalized marketing campaign with the tagline, "Oregon. Things Look Different Here." The campaign was designed to marry tourism and economic development under the umbrella message that Oregon has a unique lifestyle, natural environment, and sense of place. This campaign not only coordinated the state's business development efforts, but also required all tourism regions receiving lottery funds through the Regional Strategies Program to use Wieden + Kennedy in order to stretch the brand. All state-supported business development materials had the Brand Oregon look developed by the Tourism Commission and its ad agency.

In addition to this initial work in the late 1980s, the OECDD "re-launched" a proactive effort to provide Brand Oregon strategies and materials to the business community in the mid-1990s. The department's basic philosophy was to help businesses position their products in the marketplace by using Oregon's distinctiveness as part of their marketing to increase profitability. OECDD initiated a series of research projects to shed light on how to approach state branding. The research focused on surveying Oregon businesses and other states with branding or logo programs, and conducting focus groups with marketing organizations. As a result of the research effort, a Brand Oregon Toolkit was developed that consisted of helpful hints and case studies. The toolkit contained sections on existing advertising that used a Brand Oregon theme, research data, state and national marketing resources, and the Brand Oregon newsletter. Seminars were conducted throughout

Oregon to help businesses understand the power of marketing under the Oregon brand, and to offer the department's technical expertise.

By late 1990 the Brand Oregon effort put forth by OECD was basically dormant, while the Tourism Commission continued its efforts to brand the state as a visitor destination. Much of the economic development work relating to branding was re-focused on sustainability efforts and messages.

Beginning in July 2001 the Oregon Economic Development Association in partnership with the Economic and Community Development Department launched the Oregon Business Marketing Campaign with direct links to the "Oregon brand" as developed through the Tourism and Oregon product brand initiative. After considering many possible brand strategies for Oregon the Business Marketing Campaign adapted many of the key message and identification icons of the long-standing Tourism campaigns including Oregon. Things look different here. The Business Marketing Campaign, starting with a limited budget for 2001-2002, successfully entered the market with key messages linked to Oregon's quality workforce, quality of living, and competitive business cost environment. For the 2002-2003 year the Business Marketing Campaign has received significant funding from Governor Kitzhaber in the form of a Strategic Reserve grant to match an equal amount of funds raised from private, local, and regional organizations. Building on the Oregon brand as well established for tourism and quality of living, the Business Marketing Campaign will target key business, site consultants, and media publications with strong brand messages to reinforce the Oregon opportunities.

Was It Successful?

From a tourism perspective, the effort to brand the state has had mixed results. Initially, there was resistance from the tourism regions to adopt the state's "look" in travel advertisements and materials. The lesson learned was that a top-down approach will not work. Today, however, several of these regions, as well as statewide tourism trade associations, have adopted a similar look and feel to the state's publications and have created a strong and enviable family look to their publications.

The Tourism Commission's ads are well regarded within the national tourism industry as being first-rate and compelling, and have garnered numerous awards over the past 15 years. Consumer research also shows that the public has a generally favorable image of Oregon, albeit skewed to the outdoors and not oriented to cultural offerings. This same research also reveals that once people had traveled in Oregon, their ratings of the state's attributes soared above its image. In other words, Oregon's image does not live up to its product – a challenge that is more positive than negative.

In response to the image research, the Tourism Commission has continually revamped its advertising, working with Wieden + Kennedy and the statewide industry, in order to deliver messages that reinforce "things to do" and Oregon's enviable lifestyle. The commission also is continually refining the strategies it uses to deliver the Brand Oregon message.

The Business Marketing Campaign began its brand messaging for business investments by conducting focus group and individual interviews with leading corporation executives, third-party site consultants, and Oregon businesses to determine the key top-of-mind recognition for Oregon. Those findings (Oregon has a great workforce, Oregon is a great

place to live, and Oregon has excellent access to domestic and foreign markets) were integrated into the key brand and positioning messages for the campaign. Those messages, which were successfully placed in key, targeted media venues, reinforce the key message of the campaign, Oregon is open for business.

From an economic development standpoint, it is safe to say that the Brand Oregon effort and toolkit was the right start, but it needs much more support and targeted application than one staff person was able to give it in the mid 1990s. It is apparent that there are opportunities to help businesses position their products and services if it makes sense for the business. In particular, natural-resource based products can benefit from a Brand Oregon “halo effect” – these products include, but are not limited to agricultural/culinary products, wood products, and art and hand-crafted products.

A clear example of the power of tourism advertising on Oregon’s brand identity is found in an adjunct report to the tourism image study performed by the Tourism Commission. In this study the Commission asked respondents what their perceptions of Oregon (and its tourism competitors) were on a number of agricultural products.

The general public stated that Oregon has a strong image with regard to Christmas trees, seafood, organically grown food, and locally grown specialty food. As importantly, the state’s image on these items is significantly stronger than the competitive set (with the exception of locally grown specialty food where the image rating is similar to that of the competitors).

But when we compared the agricultural image ratings of respondents who had seen Oregon’s tourism advertising, to those who had not seen it, there was an obvious positive impact on all agricultural products sampled as evidenced by the significantly higher scores. Furthermore, actual recent visitors to Oregon also had a more positive image of Oregon’s agricultural products than those that had never visited.

The bottom line is that Brand Oregon can be successful if it is supported both by reasonable funding and commitment from a variety of constituents, from the governor through to the business community. Some private companies have already embraced the "Oregon" image in their product positioning, and the Tourism Commission and the Oregon Economic Development Association, in partnership with the Oregon Economic and Community Development Department, have the experience and contacts to make the concept come alive – if they have the resources to carry out a successful initiative.

Lessons Learned

- Do not force a branding system on the private sector, business recruitment, or on regional tourism marketing groups. The top-down approach will be seen as restrictive and bureaucratic. Instead, it is important to offer data to support the positive effects of branding, and provide guidelines and resources instead of rules and regulations.
- Build on Oregon’s destination and identified strengths by finding ways to integrate the well known with newer concepts. In the case of Oregon’s tourism, this could mean weaving culture and the built environment into the familiar image of the state’s natural beauty. For business investment marketing, that will mean broadening Oregon’s well established tourism brand recognition to include the state’s excellent workforce, competitive business climate, and the ability of businesses to attract and retain skilled employees based on Oregon’s quality of life.

- Continually evaluate, monitor and adjust what is being done. Do not assume awards mean success in the marketplace. Honestly analyze the effectiveness of marketing efforts.
- Stay the course. Some marketing professionals often want to make changes too quickly, and the reality is that it takes many years to establish a brand image, establish name recognition, and develop strong awareness of a destination or product.

Breakthrough Opportunities

It is apparent, that despite the stops and starts of Brand Oregon over the last 15 years, this idea has legs and can truly help position the state and our products and services positively outside our borders. The challenge is to learn from the past and move on in a way that will make a difference.

The Brand Oregon initiative definitely helped the Oregon Tourism Commission and its industry partners to understand the power of partnerships and cooperation, and the limitations that go along with any effort to brand an entire state with many distinct parts. Brand Oregon has also built alliances between tourism and economic development organizations that would never have materialized without this marketing coordination.

Recommendations

- The Governor should appoint a Brand Oregon Action Team and charge it to develop a unified Oregon brand message to attract tourists, entrepreneurs, future workforce, and business investments, and to help market Oregon products both within and beyond Oregon.
 - Coordinate branding strategy with local initiatives and programs throughout the state.
 - The branding and marketing message should build on core Oregon values including progressive thinking, community pride, innovation, quality, and environmental stewardship.
 - Promote Oregon products and services as high quality, created or produced in a first-rate environment and special place.
- Invest in business marketing, recruitment, and retention at levels comparable to other states.
- Commit \$5 million per biennium to the Oregon Economic Development Association (OEDA) state marketing campaign.
- Institute a 1 percent statewide lodging tax (generating \$7 million to \$7.5 million annually) for the Oregon Tourism Commission (OTC).
- Maintain the OTC's current lottery funding.

White Paper Summary: Brand and market Oregon more aggressively.	
<p>Specifically: Harness the marketing prowess of Oregon businesses and industries under a unified brand to better position Oregon as a destination for visitors, a desired site for business investment and relocation, a great place to live for current residents and the future workforce, and a producer of high quality goods and services.</p> <p>Why: By developing and successfully marketing a brand image for Oregon, the state's businesses and overall business climate stand to benefit from a unified, coherent message that communicates our high quality of life, excellent workforce capacities, competitive business climate, and superior products and services.</p>	
Initiatives	Top Action Items
Build a new multi-purpose state brand.	<ul style="list-style-type: none"> • The Governor should appoint a Brand Oregon Action Team and charge it to develop a unified Oregon brand message to attract tourists, entrepreneurs, future workforce, and business investments, and to help market Oregon products. <ul style="list-style-type: none"> • Coordinate branding strategy with local initiatives and programs throughout the state. • The branding and marketing message should build on core Oregon values including progressive thinking, community pride, innovation, quality, and environmental stewardship. • Promote Oregon products and services as high-quality, created or produced in a first-rate environment and special place. • Invest in business marketing, recruitment, and retention at levels comparable to other states. • Commit \$5 million per biennium to the Oregon Economic Development Association (OEDA) state marketing campaign. • Institute a 1 percent statewide lodging tax (generating \$7-7.5 million annually) for the Oregon Tourism Commission (OTC). • Maintain the OTC's current lottery funding.

