

Oregon Coast Telecommunications Economic Development Strategy



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During Ben Doty’s tenure as IT (information technology) manager for Central Lincoln Public Utility District (PUD) in Newport, Ben helped PUDs deploy fiber optics throughout their system. Ben also played an important role—along with people like Ed Parker—in the formation of CoastNet, an ORS Chapter 190 that promoted telecommunication deployments on the central Oregon coast. From 1998 to 2005, Ben Doty served as the Chief Executive Officer (CEO) of NoaNet of Oregon. In the spring of 2005, Ben joined the telecommunications consulting community. Ben resides in Albany, Oregon.

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LIST OF ACRONYMS AND ABBREVIATIONS

ASAP	As soon as possible
ATM	Asynchronous Transfer Mode or Automatic Teller Machine
BPL	Broadband over Power Lines
CBDD	Center to Bridge the Digital Divide
CCC	Clatsop Community College
CCEC	Coos-Curry Electric Cooperative
CLEC	Competitive Local Exchange Carrier
CD	Computer Disc
COCA	Central Oregon Coast Association
CSU	Colorado State University
DLCD	Oregon Department of Land Conservation and Development
DSL	Digital Subscriber Line
DSLAM	Digital Subscriber Line Access Multiplexer
EDA	Economic Development Administration
EDALC	Economic Development Alliance of Lincoln County
EOU	Eastern Oregon University
EWEB	Eugene Water and Electric Board
FBI	Federal Bureau of Investigation
FRB	Federal Reserve Board
FTTH	Fiber to the Home
FTTP	Fiber to the Premises
Gbps	Billion bits per second
GED	General Education Development
GAS	General Administration Services
HDTV	High Definition Television
HFC	Hybrid Fiber Coax
HMSC	Hatfield Marine Science Center
H-P	Hewlett-Packard
IBM	International Business Machines
ILEC	Incumbent Local Exchange Carrier
ISP	Internet Service Provider
IT	Information Technology
LA	Los Angeles
LAN	Local Access Network
LCC	Lane Community College
Kbps	Kilobits per second
MB	Megabyte
Mbps	Megabits per second
MCEDD	Mid Columbia Economic Development District
MOU	Memorandum of Understanding
NGA	National Governor's Association
NOAA	National Oceanic and Atmospheric Administration
NPR	National Public Radio
OAD	Oregon Aviation Department
OCA	Oregon Coast Aquarium
OCCE	Oregon Coast Community College
OCZMA	Oregon Coastal Zone Management Association
OCVA	Oregon Coast Visitors Association
ODE	Oregon Department of Education
OECCD	Oregon Economic and Community Development Department
OED	Oregon Employment Department

OPUC	Oregon Public Utility Commission
ORS	Oregon Revised Statutes
ORTCC	Oregon Telecommunications Coordinating Council
OSU	Oregon State University
OTC	Oregon Transportation Commission
PC	Personal Computer
PCINW	Preferred Connections, Inc. Northwest
PDA	Personal Digital Assistance
PDX	Portland, Oregon International Airport
POP	Point of Presence
PSU	Portland State University
PUD	Public Utility District
RFI	Request for Information
RFP	Request for Proposal
ROI	Return on Investment
RUS	Rural Utilities Service
RV	Recreational vehicle
SBA	Small Business Administration
SCADA	Supervisory Control and Data Acquisition
SCDC	South Coast Development Council
SOCC	Southwestern Oregon Community College
SONET	Synchronous Optical Network
SOU	Southern Oregon University
SPWF	Special Public Works Fund
TBCC	Tillamook Bay Community College
TC	Timber Conservation
TV	Television
UGB	Urban Growth Boundary
UO	University of Oregon
UPS	United Parcel Service
USA	United States of America
USDA	U.S. Department of Agriculture
VA	Veteran's Administration
VC	Venture Capitalists
VoIP	Voice over Internet Protocol
WIB	Workforce Investment Board
WISP	Wireless Internet Service Provider
WSU	Washington State University

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ABSTRACT

This report outlines a comprehensive coastwide economic development strategy to retain and attract knowledge-based businesses to the Oregon coast. The report identifies opportunities and makes recommendations for the economic development of the Oregon coast through information and telecommunications technology and infrastructure.

EXECUTIVE SUMMARY

Today, because of broadband technologies, leaders on the Oregon coast have an unprecedented opportunity to diversify the region's economy. Many entrepreneurs today can conduct business from almost any place in the world. They will choose to work and live on the Oregon coast because they seek a high quality of life that coastal communities offer.

In Search of a Year-Round Economy

Again, because of broadband, the Oregon coast can support a range of business and educational activities that used to only occur in urban areas. If leaders in coastal communities work together—locally and regionally—to implement a strategy to retain and attract knowledge-based businesses, firm steps can be taken to make the Oregon coast's economy less seasonal and more year-round. The ultimate goal is to create a more prosperous and equitable economy on the Oregon coast while retaining our regional culture and quality of life.

A Tough, Decades-Long Economic Transition

The Oregon coast economy has not recovered from the deep recession in the early 1980s. Then, profound changes in federal policies toward timber harvest on federal lands and stricter fisheries management policies caused a sharp contraction in these important coastal industries.

The impacts on the regional economy have been lasting. Today, fully a third of the 200,000 plus people living on the Oregon coast are one paycheck away from financial disaster. In some coastal communities, 70% of the enrolled students in the schools qualify for assisted school lunch programs. For two decades now, many young people with families have left the Oregon coast in search of family-wage jobs. A steady wave of older retirees has replaced these younger people. By 2000, the Oregon coast's population became, on average, 10 years older than the rest of the state of Oregon. This led to declining school enrollments, which in turn diminished state financial support for coastal schools.

The tourism and retirement living industries on the Oregon coast—very important sectors—have not replaced the family-wage jobs lost in the wood products, fisheries and agriculture industries. Today, half of the earned income on the Oregon coast originates from transfer payments (social security) and investment income (401k plans) and other private retirement plans).

At the same time, many trophy homes and condominiums are being built on the Oregon coast. For the most part, these homes are seasonally occupied by people who do not live or work on the Oregon coast. As such, there is a veneer of prosperity on the Oregon coast that masks poverty in our rural region. And, the increased demand for vacation property is driving up housing prices for coastal residents.

Making the Most Out of Telecommunications

During these same years, the New Economy (the emerging global information economy which depends on computers and the Internet) has become a major force. Indeed, the landscape of the

world's economy has literally been reshaped. Many experts believe we have just begun to experience how these new business and lifestyle practices will change our lives.

If coastal community leaders work together, locally and as a region, to implement a strategic plan to make the most of telecommunications, we can reverse the unfortunate economic and demographic trends that have impacted so many people on the Oregon coast. Because of broadband, the trajectory of the Oregon coast's economy can be changed to provide employment and educational opportunities for many more coastal residents.

Transformative Technology: The Killer Applications

Killer telecommunications applications will drive this transition. The telegraph and the telephone are examples of killer applications from earlier eras—new technologies that proved so useful they transformed the world forever. Here is a short list of today's fast-emerging killer applications:

Telemedicine and Electronic Medical Records

Soon, individual medical histories will be available on-line to health care professionals when they need them, because medical records will be digitized. Strong security protocols will guard how this patient information is used (similar to safeguards used in electronic financial transactions). Patients will strictly control who sees their medical records. Accurate information will sharply reduce medical errors and unnecessary hospitalizations. Experts predict a potential cost savings of 30%. Moreover, because of broadband, coastal residents will gain access to medical specialists from around the world. And, telemedicine will enable seniors to stay in their homes much longer because health care professionals and family members can monitor how they are getting along from a remote location.

Distance Learning

A growing number of people believe the education system in the United States must be reformed. Distance learning—classes held on-line and/or by live video conferencing technology—will give coastal people unprecedented access to some of the world's finest instructors and educational materials. Through the use of these technologies, career and education pathways will be tailored to meet the needs of individual coastal residents and the businesses they work for or hope to work for.

E-Commerce

E-commerce rates around the world are exploding. By 2008, experts expect 10% of all retail commerce will be transacted on-line. By 2007, two-thirds of households will be on-line with an average income of \$59,000. And, today, because of broadband, coastal businesses have access to a wealth of suppliers that will help make them more competitive. Moreover, the diversity of the "New Economy" is breathtaking. Today, nearly every business uses information technology in some capacity. As the Oregon coast becomes home to more knowledge-based businesses, our economy will not be as vulnerable because it will be more diversified.

A Framework for Action: Oregon Coast Telecommunications Economic Development Strategy

The Oregon coast needs access to reliable, route-redundant broadband technologies through multiple private sector providers. The region is fortunate because major route redundant fiber optic backbones or networks connect most Oregon coastal communities to the outside world.

The major exception is southern Coos County and Curry County near the California border, where a lack of route redundancy periodically causes major service outages isolating the region. We recommend local governments on the Oregon coast establish local telecommunication committees and seek to become “cutting-edge” telecommunication communities. What does that mean? It means coastal communities should strive to have roughly the same quality of broadband offerings in their area—wireline and wireless—that is found in major urban centers.

Telecommunications Infrastructure

A digital divide exists in America that cuts across income, age, and regional lines. Leaders in coastal communities should engage coastal people in a dialogue about telecommunications.

Together, we can help people understand how they can use broadband to better their lives and make their businesses more profitable.

Public Education about Broadband

Local institutions such as the libraries and schools must provide ready-access to the Internet and introductory training. And, local leaders in our region need to understand that they have a tremendous opportunity to raise the standard of living on the Oregon coast. The new opportunities range from e-Bay moms who use the Internet to supplement their family’s income, to the establishment of branch offices of technology-dependent industries, modest-sized businesses that will support a number of employees and coastal families.

Knowledge-based businesses from other regions can be attracted to the Oregon coast through a coastwide marketing campaign. We should be selective and invite modest-sized businesses from overheated technology regions to establish a presence on the Oregon coast.

Marketing the Oregon Coast

To make this effort successful, the message needs to go forth that the Oregon coast is a great place to live and work—year round—and not just visit in the summer. Coastal leaders can start by forging new partnerships with community and business leaders in the Silicon Forest (area of metropolitan Portland in Oregon and southwest Washington known for its cluster of high technology companies). And, coastal leaders must be prepared to carry out the follow-up work needed to compete with other beautiful regions that will be making the same appeal to these urban-based enterprises.

Knowledge-based business people will want attractive neighborhoods to live and work from.

Coastal cities can review their comprehensive plans to see if new, mixed-use communities can be established for these entrepreneurs.

Attractive Workspaces and Neighborhoods

In addition, local governments should update zoning codes to facilitate the increasing number of home-based businesses (made possible by broadband) in our residential neighborhoods.

There are five community colleges on the Oregon coast. They each have a key role to play in skill training for the New Economy. A trend is underway to provide career pathways for young people and others to take full advantage of new opportunities.

The Evolving Role of Coastal Community Colleges

The many accomplished retirees who have moved to the Oregon coast can serve as valuable mentors and role models for young people who are looking to understand their place in an increasingly technology-dependent economy.

Oregon is a national leader in developing a truly multi-modal transportation system. And, an important statewide effort has been initiated at the Oregon Aviation Department (OAD) to develop a strategy to enhance rural airports in Oregon.

A Network of Fully-Functional Coastal Airports

Indeed, the movement of people, goods and services by air is a key feature of the burgeoning “Just in Time Economy.” Coastal leaders should continue to support improvements to the Oregon coast’s network of airports.

Action Items: The Next Steps

Initiate Community-Level Dialogues on Telecommunications

We ask coastal leaders to read this report and share it with others. Help people in your community understand the major new opportunities to diversify our region’s economy. Community leaders will discover, no doubt, that they are already making major progress on some of elements of the coastal telecommunications strategy.

Form Local Telecommunications Committees

Local governments should form local telecommunication committees to spearhead local telecommunications infrastructure needs assessments. These efforts should be inclusive and geared to spark new telecommunications infrastructure deployments through public-private partnerships. The goal is to increase the number of coastal communities that have telecommunications infrastructure roughly comparable to urban areas. OCZMA will provide staff and technical support for local telecommunication committees. And, local telecommunication committees should work with leaders from schools and libraries to boost telecommunications literacy and awareness programs.

***Participate in a Coastwide
Marketing Effort***

Most marketing efforts about the Oregon coast today are carried out community-by-community. And, the focus is largely upon tourism marketing. A coastwide marketing committee will gather the best marketing minds on the Oregon coast. Together, the marketing committee will develop a campaign that will resonate with knowledge-based entrepreneurs that the Oregon coast is the “next-great place” to run a New Economy enterprise.

***Hold High-Level Meetings Between
Oregon Coastal Leaders and
Community and Business Leaders
from the Silicon Forest***

A number of coastal communities are less than a two-hour drive to the Silicon Forest on the I-5 corridor. It makes sense to begin by initiating a dialogue between coastal leaders and leaders from the Silicon Forest. These meetings are set to begin in the fall of 2005 and will lay the groundwork to bring more technology-dependent businesses to the Oregon coast.

Work to Improve Education

This fall, a meeting of leaders from the five coastal community colleges will be held. The focus will be on how the coastal community colleges and other colleagues in education can work together to optimize IT (information technology) training opportunities on the Oregon coast. And, we need to approach business people and retirees on the Oregon coast and recruit them to help us get the message to our young people so that they can improve their lives if they gain IT skills. Local government officials should also have a dialogue about preparing a coastwide workforce analysis that incorporates IT training themes.

Review of Local Land Use Plans

Review local land use plans and try to create mixed-use neighborhoods that will appeal to knowledge-based business people.

***Support for Improvements to
Coastal Airports***

Continue to support state and local efforts to improve Oregon coastal airports.

