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Ecolopolis 2.0

Portland State University

CASCADIA ECOLOPOLIS 2.0

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Table of Contents

I. Introduction: The Cascadia Ecolopolis

Imagine boarding a high-speed train in downtown Portland. Your coffee steams while you sit down to open your laptop. As the train's speed increases, rivers and snowy volcanic peaks come in and out of view. The city vanishes into a mossy haze of temperate rainforest.

This is Cascadia. It encompasses two states (Oregon and Washington), one province (British Columbia) and an international border (USA/Canada). After just over two hours, the train pulls up amidst the sleek high-rise towers of Vancouver. Roundtrip your travel tops 600 miles, but high-speed rail will allow you to return to Portland after your meeting in time for dinner.

Fact or fiction? For this tale to become true, the fundamental underpinnings of Cascadia, and the identity of the region as a place, would need to become much stronger and more carefully articulated. From the outside, we are one region. From the inside, it's difficult to get the citizens of the Portland metropolitan region today to embrace the issues (let alone the professional sports teams) of the Seattle and Vancouver, BC metropolitan areas as their own.

A MEGALOPOLIS IN OUR FUTURE?

Jean Gottman's "megalopolis," first described in 1964 as the continuously urbanized area stretching from Boston to Washington, DC, has inspired the contemporary use of the term "megapolitan" to describe networked metropolitan areas and the micropolitan areas between them.   Between now and 2050, 70% of the nation's population growth and 80% of its economic growth is expected to occur in ten proposed megapolitan areas in the continental US (America 2050, 2006).   One of those proposed megapolitan areas is Cascadia, the subject of this report.

Polyurban megalopolises are emerging and growing across the United States and the world.
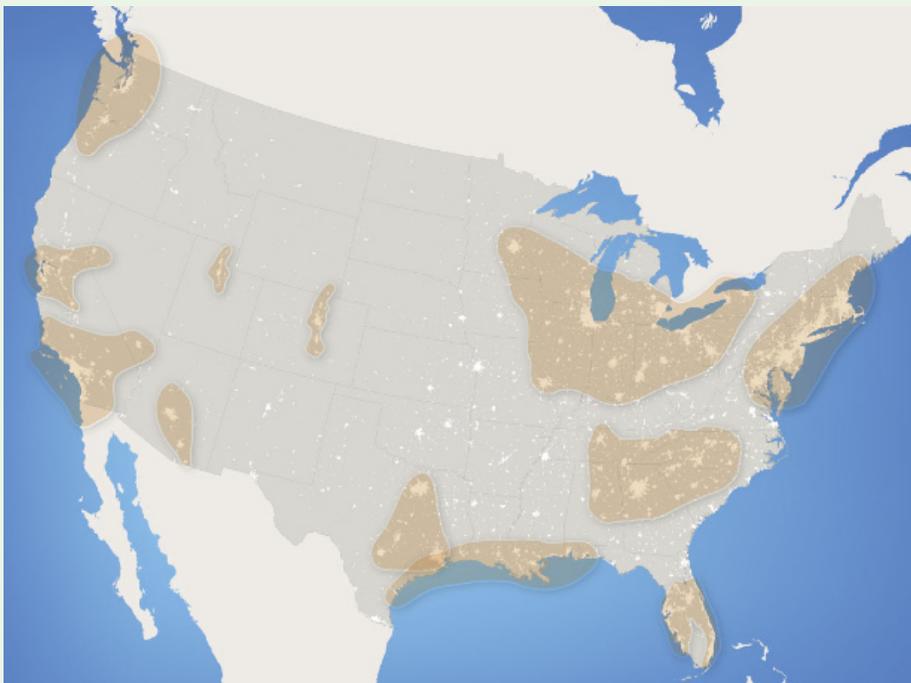
However, does the East Coast's "megalopolis" provide a model for Cascadia?   Is there a megalopolis in Cascadia's future? The heavily urbanized nature of megalopolis immediately seems to clash with Cascadian sensibilities. After all, access to the outdoors, open space and preservation of agricultural land provide many residents here with a strong sense of place and pride. People are attracted to the quality of life in our cities. Their proximity to pristine mountains, rivers and forests is a top draw for skilled workers and young people. Cascadia's competitive advantage lies in the fact that it is NOT a continuously urbanized region yet still provides cosmopolitan amenities like arts and culture, fine food, shopping and a diverse economy.

The plans of city, state and provincial governments in the Northwest are proof Cascadians strive to curb urban sprawl. Washington, Oregon and British Columbia have all made cutting edge commitments to growth management. Oregon and Washington have established urban growth boundaries around cities and towns. Portland and Vancouver are celebrated as two of North America's most successful examples of Smart Growth. The human scale of relationships in the built environment is celebrated here.

If we compare populations of the primary global cities with their Cascadian counterparts, the contrasts are stark (table below). The combined population of Portland, Vancouver and Seattle does not even equal half

the population of the list's smallest global city – Los Angeles. While the metropolitan regions of Cascadia each encompass about 2-4 million residents, adding an additional 3-5 million people to each metropolis would exert a monumental strain on our landscape.

Ask your typical Cascadian if they would like Portland to be as dense as Tokyo, or Vancouver to sprawl to the size of Los Angeles, and they will most likely cringe.

Population of Global Cities and Cascadian Cities by city limit.
Sources: US Census 2000, UK Census 2001, UN Population Division 2000, Japan Ministry of Internal Affairs and Communications 2001.

Global City	Population
Los Angeles	3,694,820
London	7,172,091
New York	8,008,278
Paris	9,638,000
Tokyo	12,138,000
Average	*8,130,238*

Cascadian City	Population
Portland	529,121
Seattle	563,374
Vancouver	545,674
Total	*1,638,169*

WELCOME TO ECOLOPOLIS

What kind of Pacific Northwest do we want to live in? Can celebrating our uniqueness be our strategy to boost our competitiveness? How can we prosper, accommodate a growing population and remain livable? The answer lies in the commitment of decision makers, landowners, developers, investors, and citizens to develop the region in a different way.

In this paper we suggest that Cascadia could find its future in the form of what we've come to call an "ecolopolis." We define an ecolopolis as a region of networked metropolitan areas found within a common bioregion, where the individual metropolitan areas are separated by working and wild landscapes.

In this case, an ecolopolis differs from its older cousin, the megalopolis, by the fact that it is not characterized by continuous urbanization. Like a megalopolis, the ecolopolis, too, is a region of networked metropolitan and micropolitan areas. However, it attains its megapolitan status not merely through size, but through strategic efforts to link metropolitan areas via infrastructure, landscape, and culture.

A rationale for Cascadia-scale planning can be found at global, national, and regional scales.

Global Issues

Around the world, "mega-cities" are the newest phenomena in the worldwide urbanization process, and their prominence makes it increasingly difficult for smaller cities, like those in Cascadia, to gain visibility and a competitive niche. Mega-cities are the result of globalization and are generators of global ecological, socio-economic and political change. Competitiveness in the global market for labor, investment and goods requires a certain level of visibility, typically achieved through an exceptional level of population, innovation, productivity, or wealth.

Some nations or groups of nations are already recognizing the strategic value of a megapolitan framework, In the European Union, the European Spatial Development Perspective attempts to intervene in growth patterns to balance competition and disparities among the regions of Europe through greater cooperation. This plan is intended to create a balanced and sustainable development scheme that will further Europe's ability to participate in the global economy (Kou, n.d.).

China's program of urban system planning has similar goals, including fostering the emergence of new metropolitan clusters, coordinating

urban and rural development, and supporting the operation of existing megapolitan regions centered on Beijing, Shanghai and the Pearl River Delta. Each of these megapolitan regions has a plan for regional spatial development, emphasizing regional cooperation, and focusing on industries with local comparative advantages, environmental protection and natural resource management (Kou, n.d.).

Cascadian cities may have trouble competing with "global cities" like New York and London. They will have to develop new strategies to find a place in the global economy.

Further, in addition to economic significance, megapolitan regions and mega-cities are having a tremendous impact on ecological systems and natural resources. As rural populations increasingly move to cities in search of employment and other opportunities, urban development in response to this migration is creating environmental impacts of a magnitude previously unknown to the planet's ecosystem. Pollution from mega-cities impacts human health locally, and contributes to climate change at the global scale. While the debate on how best to address the environmental impacts of human settlements is far from over, the solution will inevitably require coordination at a megapolitan level, as well as a united effort among megapolitan regions (Chow et al, 2004).

Cascadia, with its desire for environmental stewardship and growth management, may have a unique opportunity to take a leadership role in the increasingly vital global environmental movement. Megapolitan-scale cooperation directed at marketing Cascadia as a global green capital could overcome the global market's tendency to largely overlook Cascadia's component cities.

National Roles

Currently, few structures exist to facilitate megapolitan decision-making with any enforceable authority. The federal government is the only body with the ability to oversee the coordination of infrastructure plans, development and sustainability strategies at a megapolitan scale, like Cascadia. Cascadia's status as an international border region requires the coordination of American and Canadian federal governments.

Understanding and advancing the prospects for megapolitan regions provides Federal decision makers with a solid rationale for the strategic distribution of Federal resources. Current US practice directs appropriations to projects and programs in states and districts with well-positioned congressional delegations rather than overarching national importance. Prioritizing appropriations based on megapolitan significance and to serve global competitiveness, rather than on lobbying power, is essential for enabling the US national economy to effectively compete in a global economy.

Interstates have played an important role in the emergence of megapolitan regions, and many of those megapolitan areas identified by in the literature are easily identifiable by their unifying highway. This is certainly the case in Cascadia, where I-5 passes through all three major metropolises. Growth patterns around I-5 have not reached the level that they have on the Eastern Seaboard, but they do create interesting and sensitive dynamics of development and economic growth among the macro- and micropolitan settlements in the corridor.

Reducing the inequalities between highly developed, growing urban areas and slowly declining cities and towns requires sensitive planning from a broad perspective that many state governments alone cannot accomplish. Identifying megapolitan clusters of influence among urban and non-urban areas under conditions of growth and decline will be a critical component of the government's response to these trends.

In Cascadia, many cities and towns are experiencing rapid growth, but the priorities of urban and non-urban citizens do not always coincide. Balancing the demands of urbanites and rural citizens is an enormous challenge in any jurisdiction, and federal policy toward polyurban regions will be instrumental in shaping the future of that balance.

Regional Opportunities

At a regional level, Cascadian cities have unique incentives to engage in a corridor-wide planning process. Compared to other North American cities, Vancouver, Seattle, and Portland are progressive in their urban growth management policies, emphasizing infill development over ex-urban expansion. The Cascadian region is characterized by its love for scenic open spaces within easy reach of its cities. Much of its appeal as a place to live, work and visit is derived from that quality.

However, even in Cascadia, growth management policies across state and municipal boundaries are not always compatible, and may under-mine each other. Megapolitan scale planning could make the effort to keep urban areas from overrunning the landscape much more effective.

The Cascadian region also has the opportunity to better integrate its economies through megapolitan level planning—both among major cities and between those cities and their smaller neighbors and surrounding ru-ral areas. If transportation and communication infrastructure can make markets for labor, goods and services throughout the region more acces-sible, the potential economic benefits could be significant.

For example, better access to the region's farm products could reduce regional dependence on comparable imported products, and help keep money circulating locally. This kind of integration can also reduce the need for the local duplication of services that are more efficiently pro-vided elsewhere in the region, allowing for greater exploitation of com-parative advantages. An integrated Cascadian economy can be stronger than its component economies can be separately.

High-speed transportation between urban centers in Cascadia and else-where can have the additional benefit of creating new connections between a greater variety of working and housing locations. As Robert Lang puts it, "It's in your interest to redistribute housing opportunities" (El Nasser, 2005). The modern job market allows for an increasingly diverse set of commuting patterns, while the breakneck pace at which workers change positions and careers often makes it difficult to find a housing situation that will allow a quick commute to every job location.

Integrated megapolitan transportation infrastructure can, for example, enable mobile workers based in Seattle to compete for work in Portland, Vancouver and everywhere in between. At the same time, it offers a city like Portland the opportunity to consider a strategic alliance with Seattle as a means for creating global links for its people and industries. By joining together at a megapolitan scale, Portland, for example, can choose to piggyback its aspirations on Seattle's global "brand", a real

strategic choice that is available only in a megapolitan framework.

To be sure, the Cascadia ecolopolis faces many of the same challenges faced by every other proposed megapolitan region in America. In 2000, about 55% of the population in Cascadia was found in its three major metropolitan areas. By 2030, about 60% of Cascadia's population will be found in the Portland, Seattle, and Vancouver, BC metropolitan areas. How that growth occurs will have a lot do with the sustainability of these places, and the ways in which they retain global recognition for growing "smart and green".

Population growth in its cities is forecasted to occur at a fast clip:

|	Greater Vancouver (BC)	Puget Sound (WA)	Portland 5-county (OR)	Cascadia
2000	2,041,399 (4,039,200)	3,275,809 (5,894,121)	1,874,500 (3,421,399)	7,304,284 (13,354,720)
2030 (2025)	2,856,554 (5,350,800)	4,535,087 (7,975,471)	2,955,300 (4,626,015)	10,346,941 (17,952,286)
#	702,579	1,259,278	1,080,800	3,042,657
Percent Increase	40% (32%)	38% (35%)	58% (35%)	42% (34%)

In addition, the economic transition in the rural areas surrounding these metropolitan areas continues. Rural resource economies have changed substantially in the last 30 years, with more change on the way. An uncertain future for rural economies creates further uncertainty for the communities between the metropolitan regions, for the landscape, and for the future of the Cascadian urban/rural relationship. It wasn't long ago that Portland was the service center for the resource-based economies of the Columbia basin. Whether it will serve that purpose and retain those relationships in the future remains to be seen.

Finally, "Mainstreet I-5" is under tremendous stress. The ability to move goods and people through utilizing the system is a hot topic of debate and discussion throughout Cascadia. The next investments made in corridor-wide infrastructure will be crucially important to the future of

Cascadia, and whether it emerges as an ecolopolis in the years ahead.

Certainly, pursuing Cascadia as an ecolopolis is no panacea for these challenges. Further, Cascadia is not alone in confronting them. These are issues among those at the forefront of metropolitan and megapolitan discussions nationwide. Nonetheless, we believe that there is value to each of the places in Cascadia and to Cascadia as a whole to seek a better understanding of what might be our shared destiny in this ecolopolis. To do less would be to prematurely, in our assessment, give up on a response to globalization and national trends of real strategic promise.

It is in this sense of promise, of strategic value to a better future, that we have prepared this paper. We begin by reviewing the origin and definition of "Cascadia" as a named place. We then move to a description of the Cascadian landscape, and the issues and conditions in both its metropolitan and nonmetropolitan areas. We then present four strategies for growing, stewarding, and sustaining Cascadia along "ecolopolitan" lines. We conclude with the next steps for this project.

II. Cascadia, Urban and Rural

THE ORIGINS OF CASACADIA

Early Use of the Term Cascadia

The term "Cascadia," like its borders, has an imprecise history. An obvious origin of the word derives from the name of the mountain range running the length of the region. Geologically, western North America has been known as the Cascadian Orogeny. The term "orogeny" translates simply to "mountain building" (McKee, 1972). Reflecting the area surrounding the Cascade Mountains, Cascadia encompasses approximately 150 miles east and west of the range.

This mountain chain was explored by Scottish naturalist David Douglas in 1825. Douglas experienced the breadth of the mountains and witnessed the numerous waterfalls in the area. He spent a great amount of time at the "Grand Rapids" or "Cascade Rapids" of the Columbia River, which is known historically as Celilo Falls. It is gathered that from these experiences that Douglas named the adjacent mountain range "The Cascades." Historians find only a small reference in Douglas' journals, but it is the first recorded use of the name (Oldham, 2005).

Celilo Falls was a popular fishing spot for Native Americans before the construction of The Dalles Dam flooded the falls in 1957 (Bonneville Power Administration, 2001).


Surprisingly, Lewis and Clark, who explored the area 20 years earlier, did not register a name for the mountain range. Likewise, British mariner George Vancouver, who named the tallest peaks in the Cascade Range during his explorations in 1792, did not document a name for the range itself.

During geologic investigations in the early

1900s, "Cascadia" was the name given to a mythical landmass located in the northeastern corner of the Pacific Ocean, just beyond the existing shoreline (McKee, 1972). This landmass was thought to have eroded, depositing sediment upon what is now Oregon, Washington and British Columbia. While geologists and historians continue to debate the origin of Cascadia's soils, the name has remained a permanent descriptor of the region.

While the term "Cascadia" may have been used by scientists, locals or historians since the early 1800s, it was not until 1970 that the term was

Scenes of the Northwest, *circa 1869 (Union Pacific, n.d.) highlights artistic renderings of the bountiful Northwest for rail riders.*
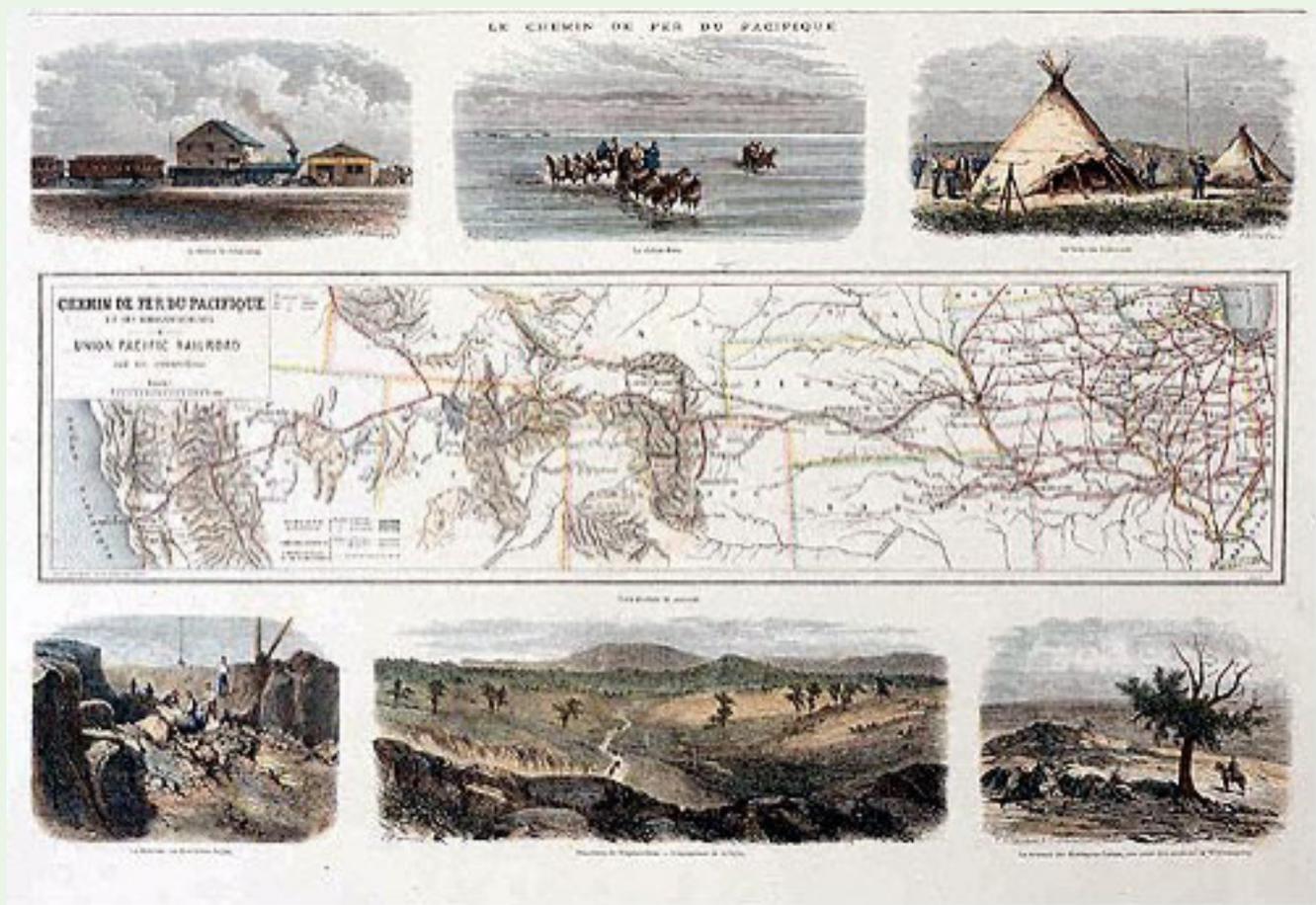
used by David McCloskey, a Seattle University professor, to describe or name a region. McCloskey describes Cascadia as "a land of falling waters." He notes the blending of the natural integrity and the sociocultural unity that gives Cascadia its definition (McCloskey, 1998). During the course of his research, McCloskey also formed the Cascadia Institute, a grassroots organization dedicated to preserving all that is Cascadian (Luk, 2006).

Railroad Advertising for the Northwest, *circa 1946 (Ad* Access, n.d.)*

A more commonly understood name for the region is "Pacific Northwest". This term has direct roots in a marketing effort produced by the transcontinental railroads, headquartered on the east coast (Findlay, 1998). As the rail lines to the region were completed in the later decades of the 1800s, publicists launched campaigns to bring Americans to Oregon, Washington and Idaho. They called this place the "Great Northwest" or the "Great Pacific Northwest".

Research by Professor John Findlay at the University of Washington found that the publicists explicitly meant "to introduce the word 'Pacific Northwest' into the popular vocabulary – to make it convey a definite, clean-cut meaning. To make it stand for an idea." Even in the absence of national borders, the Pacific Northwest was intended to describe an impression, laying the foundation for a regional identity.

Flags created for a hypothetical independent Cascadia

Using the natural environment as a foundation, Cascadia can be further defined as a bioregion. Planet Drum defines this region as the watershed of the Columbia River, substituting the term 'Columbiana' for 'Cascadia' (Columbiana, 2001). This group defines a "bioregion" as follows:

Bioregions are geographic areas having common characteristics of soil, watershed, climate, native plants and animals that exist within the whole planetary biosphere as unique and contributive parts.

A bioregion refers both to geographical terrain and a terrain of consciousness - to a place and the ideas that have developed about how to live in that place.

A bioregion can be determined initially by use of climatology, physiography, animal and plant geography, natural history and other descriptive resonance among living things and the factors that influence them which occurs specifically within each separate part of the planet.

Discovering and describing that resonance is a way to describe a

bioregion."

Peter Berg & Raymond Dasmann
Reinhabiting a Separate Country, Planet Drum Foundation, 1978
(Columbiana, 2001)

Columbiana Bioregion, (Columbiana, 2001)

A strong identification with the "Great River of the West, the Columbia River and its tributaries," the Columbia River Bioregional Education Project strives to bring about a reunification of humans with nature to build harmony (Columbiana, 2001).
A map of the "Columbiana Bioregion" is shown at left. The boundaries match those found on several Columbia River watershed maps, as well as Bonneville Power Administration service maps, coincidentally.

Earlier, in the mid-1970s, author Ernest Callenbach wrote Ecotopia, a book that weaves a tale of the secession of Cascadia from the Union to build a sustainable state. This reorganized state used technology in concert with natural resources to increase quality of life, decrease reliance on automobiles and ultimately to create an environmental utopia.

In the subsequently published prequel, Ecotopia Emerging, Callenbach tells the story which leads up to Ecotopia's secession from the United States. Among the many shared regional values he cites, alternate methods of commuting, anti-nuclear sentiments, recycling, abundant natural resources and similarity of climate top the list. In Callenbach's case, the boundary for his fictitious country "Ecotopia" is not by chance. He stated in a recent interview:

"Ecotopia is a kind of bioregion. At the time I was writing Ecotopia, the term 'bioregion' had not yet been invented, although it followed very soon after. But we now see that the Cascadia bioregion, as the zoologists and botanists now call it, stretches north from the Tehachapi Mountains in southern California all the way up through British Columbia and into the Alaskan panhandle. And this is an area that's defined by a fairly uniform climate; and the animals are pretty much consistent throughout—meaning animals of all kinds including insects and so on—as well as the plants. So there's a certain geographical unity to the area. And my contention, as well as that of a lot of professional geographers, is that in the long run the characteristics of your bioregion help to determine what you might call your regional character."
(Parrish, 2005)

A decade later, Joel Garreau in Nine Nations of North America further discusses this idea. While introducing his regional method for understanding North America he says, "Consider, instead the way North America really works. It is nine nations. Each has its capital and its distinctive web of power and influence" (Garreau, 1981). Garreau speaks to the way his vision of the Pacific Northwest (for which he borrows the name "Ecotopia") is characterized. "The forests of the Pacific Northwest are sufficiently blessed with resources to inspire thoughts of husbanding what exists, where it exists, in order to make it last forever" (Garreau, 1981).

Throughout Garreau's description of Ecotopia, he focuses on people's commitment to the outdoors, sustainability, dedication to alternative lifestyles such as holistic medicine, new age religions and disdain of dams. Garreau's boundaries for this empire differ only slightly from others. In this case, he considers the region to follow the coast, stretching to the coastal range as the eastern boundary from northern California to the southern portion of Alaska.

The political views of the region have generally developed to reflect and act upon quality of life, a major attraction for the regional economy. In the late 1970s, a New Scientist article noted that Oregonians "are an outdoor people, and are willing to follow their love of nature to its political conclusions," (Garreau, 1981). Natural resources have always been a strong driver of the politics of the region, dating back to the middle of the century and even earlier.

As a region where extraction of natural resources was the original economic driver, the land was viewed as an opportunity partially due to its distance from the nation's capital. The area was viewed as "boasting the highest standard of living in the nation or for that matter, in the world," but the difficulty of travel might "afford an excellent example of the dangers of sectionalism if too large a number of states should be merged into the proposed regional government" (Odum, 1938).

The Modern Cascadian Brand

Though it may not have clear boundaries to draw on a map, Cascadia remains a part of the West Coast psyche. It is a quixotic concept that bonds the areas of the Pacific Northwest together, transcending a conventional geographic definition (Luk, 2006). In 1999, Seattle mayor Paul Schell told American Planning Association members, "Cascadia represents better than states, countries and cities the cultural and geographical realities of the corridor from Eugene, [Oregon] to Vancouver, B.C." (Goldsmith, 1999).

What exactly does the world envision when they think of "Cascadia"? One method for determining how Cascadia is marketed to the world is to examine guidebooks for the region. According to Excellent-Romantic-Vacations.com, in the Pacific Northwest "the air is fresh, the people are interesting, and the outdoors are accessible and perfect ... Pacific Northwest travel offers a really good balance of interesting cities to explore and fantastic outdoor adventures" (original emphasis, 2004).

The introduction to The Rough Guide to the Pacific Northwest (Jepson and Lee, 2001) begins with:

The stunningly verdant terrain of the Pacific Northwest is one of North America's scenic gems, a highly varied realm of striking forests, beaches, and mountains, where the outdoors in all its rugged glory is always close at hand. Nestled between the Pacific Ocean and a lengthy line of craggy peaks, the region's isolated geography preserved within it abundant flora and fauna- from wolves to whales and wildflowers to Western hemlocks— and a formidable landscape of active volcanoes, sheer cliffs, towering waterfalls and untouched wilderness.
(emphasis added, p.iii.)

Travel Smart: Pacific Northwest (MacPherson, 2001) warns, "Here Nature rules. Strictures of weather and terrain are part of the trade-off for a vast, masterful blueprint that melds forests, waters, mountains, deserts, volcanoes, and creatures—from eagles to orcas—in a vital, awe-inspiring way" (emphasis added, p.1). The author also advises that "if you don't bring your hiking boots to hit a trail, or plan to paddle a boat, or explore the backcountry of the region, you're missing the true personality of the Northwest" (emphasis added, p.9). These three examples show that the natural environment is marketed as the very essence of the region. The marketed image is of a landscape almost savage in its beauty in which humanity's footprint is minimal.

There have been attempts to unite Cascadia in a joint tourism effort. In 1996 the Discovery Institute's Cascadia Center sponsored a conference to

promote the "Two-Nation Vacation" concept. The excitement generated by the conference did not last long however, primarily because public agencies in British Columbia, Washington, and Oregon had invested heavily in promoting their own regional, state and provincial marketing plans. The notion of adopting a common marketing plan was felt to undercut these individual efforts.
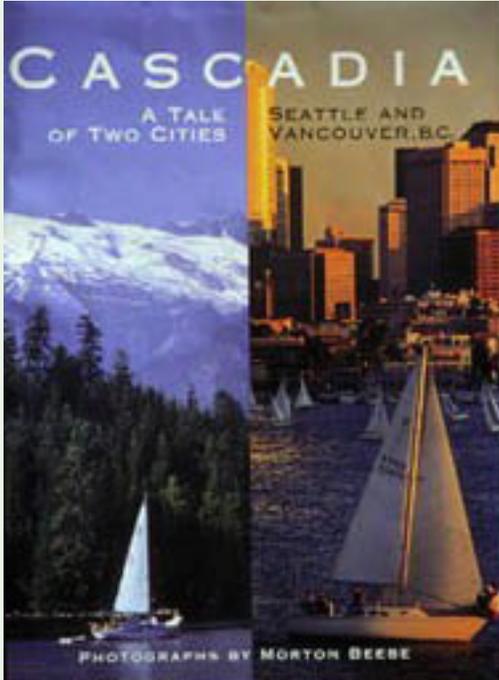
Consequently, the initiative was put on hold except for the publication of a photographic tour of Seattle and Vancouver (see Figure 2) and the development of Cultural Cascades, an initiative that coordinates cultural activities in five Cascadian cities by way of the Amtrak Cascades Passenger Train route. Recently, however, enthusiasm for the Two-Nation Vacation was renewed with the announcement of the 2010 Olympic Winter Games in Vancouver, resulting in discussions of more Two-Nation Vacation maps and guidebooks (Cascadia Center/Discovery Institute, 2006).

There are several observed effects of promoting the image of the "awe-inspiring" Cascadian environment. The first is the benefit to regional economies in ways other than tourism generation: "A high quality of life, including... recreational and cultural activities and a healthy environment, attracts 'high quality people', who will want to live, work, and stay in a particular region, thereby contributing to its continued economic development" (Moll, n.d.).

A second effect of promoting the environmental image is the attraction of other environmentally conscious people to the region. The natural environment is important to current Cascadian residents. Marketing the Cascadian environment, especially through job recruitment, can result in the immigration to the region of people with similar values. A healthy Cascadian environment and environmentally friendly culture can form a positive feedback loop drawing in more environmentally friendly people who will likely support policies and programs that maintain and improve the environment.

In concept and in name, "Cascadia" is defined by the natural glory of its terrain, from its beginnings to its contemporary marketing. This value is expressed in the region's rural economic activities as well as its urban land use policies. The next two sections will explore both of those connections.

RURAL CASCADIA: WORKING AND WILD

What exists in the landscape of over 18 million acres that lies outside and between the bustling, growing metropolitan areas of Vancouver, British Columbia; Seattle, Washington; and Portland, Oregon? The answer is a rich and complex pattern of small towns and cities, rural communities, federal and state lands, farms and forests, and Indian reservations. It is a landscape that is continually changing, filled with communities that are adapting to that change and often striving to preserve their landscape and sense of place.

Rich soils contribute to productive agricultural lands. Timber and fisheries products support local economies. Natural landscapes provide a diverse playground for outdoor recreation. Whether valued for its productive potential or pristine natural features, the land provides a unifying connection for residents of the Cascadian region.

Rural Cascadia is currently experiencing a period of transition and conflict in its relationship with the landscape. Urbanization is threatening natural resources. Shifting markets for resource-based industries threaten the vitality of many communities. Farmers are struggling to remain viable in a changing agricultural setting.

Timber

After the Depression, conservation movements worked to mitigate unsustainable timber harvests and destructive farming practices. Conservation was seen as a method of tourism promotion. Fishing and hunting enthusiasts chimed in with mixed environmental results. In the 1950s Richard White noted, "Northwesterners have frequently acted as if the natural world exists largely as something to buy and sell and as if the regional ecology were infinitely malleable" (Robbins, et al., 1983). This practice, he also notes, is dangerous for an area which relies on its landscape for symbols of unique character, especially as the environment grows increasingly unstable and maintenance costs increase, most of which are borne publicly (Robbins et. al., 1983).

Cascadia is rich in natural resources, including millions of acres of private and public forests. Vast timber resources in the region have historically been a source of economic vitality for residents, but since the early 1990s this livelihood has been threatened by a variety of factors. Mark McDonald, manager of the Sweet Home, Oregon Thriftway grocery store comments that in the 1980s "you could never be out front [of the store] without seeing seven or ten logging trucks go by." In the 1990s the only crowds he saw were those coming to get moving boxes (McClure, 2000).

In the western portions of Washington, Oregon and Northern California, more than 10% of the total workforce was employed in the timber industry in the early 1970s, totaling 150,000 to 160,000 workers (Tuchmann, 1996). Annual timber harvest levels for western Oregon and Washington were consistently above twelve billion board feet in the 1960s and 1970s (Phillips, 2006). However, the timber industry lost 30,000 jobs in the 1990's with employment falling to 3% of the total workforce, and harvests dropped below eight billion board feet annually (Tuchmann, 1996).

Factors contributing to the sharp declines in the 1990s include decreased demand related to national recessions, employment reductions due to increasing technological improvements, shifts to products requiring less labor, and decreased timber supplies due in part to federal forest policies relating to endangered species protection. Changes in world timber markets also contributed to declines.

A history of timber harvesting has been fundamental in shaping Cascadia's landscape and recovering from over-logging has helped the region develop as a center of environmentally sustainable practices.

Cascadian costs of timber production are substantially higher than those in Alberta and the South Central United States. Increasing competition from South American and Russian timber sources also threatened the viability of the Cascadian timber industry. Projected industry trends show the decline continuing for several years, but then stabilizing and potentially increasing in 2030 due to forest management policies enacted in the 1960s (Tuchmann, 1996).

Although Cascadia has experienced declines in the timber industry in recent years, regional residents and economies remain closely tied to the forests as both a working landscape and valued natural resource. Businesses, policymakers, community organizations and residents alike have been working to help the region transition to new forest practices and economies that can support the residents of rural Cascadia.

Sustainable forestry practices are gaining ground in Cascadia as a strategy to combat shrinking timber supplies and capitalize on environmentally conscious consumers. Under pressure from consumers and the environmentally minded investment firm, Cal-

vert Group, Home Depot recently stopped selling products obtained from old-growth forests (Little, 2004). Staples has also moved toward supporting sustainable forestry by only selling paper processed from forests certified under the American Forest and Paper Association's Sustainable Forest Initiative (Little, 2004).

Longtime Oregon loggers participating in retraining also see the value of sustainable forestry and ecological practices, as they hope it will provide new jobs in forest and watershed restoration (Knickerbocker, 1995). Supporters of sustainable forestry hope that these new practices will allow timber workers to continue utilizing their skills and help revitalize rural communities despite declines in timber harvests.

The 2005 Cascadia Scorecard issued by Northwest Environment Watch reported that clear-cutting of Cascadian forests, which slowed in the 1990s has sped up again in recent years. They state, "tracking clearcuts provides a rough gauge for how extensively humans have altered the forests of the Northwest—and for how effectively Northwesterners are safeguarding their distinctive natural heritage." Nonetheless, the Scorecard reports some positive news as well: the number of acres of forests managed in compliance with the demanding standards of the Forest Stewardship Council, the organization that certifies sustainable forestry practices, is increasing.

Cascadian communities are also turning to the natural value of forests and the landscape for revitalization. Natural resources located near distressed communities, such as mountains, streams and the Pacific Ocean, support a wide variety of outdoor recreation activities. Increasing numbers of tourists are drawn to rural areas to fish, hike, ski, hunt and surf. New hotels and destination resorts are being developed to support the increasing tourism.

However, critics worry that increasing use will deteriorate pristine wilderness areas, and low paying service sector jobs associated with the tourism industry are often unable to support families. Additionally, rural communities must be easily accessible in order to take advantage of the economic benefits of tourism. Nevertheless, Cascadian communities are increasingly preserving the very resources that have been historically extracted for economic gain, in order to support a transition to at tourism-based economy.

Agriculture

When one thinks of a region or a country, its foods frequently come to mind. The regions of France have very specific associations with wines: Champagne, Bordeaux, etc. In the United States, several regions have well-recognized food traditions: Louisiana, New Mexico, etc. Though its cuisine is perhaps still in its formative stages, Cascadia is no exception and has the added benefit of the many fresh ingredients at its fingertips.

For Cascadia, evocative foods include salmon, berries, hazelnuts, oysters, Dungeness crabs, wines, microbrews (and hops), apples, pears, and dairy products (Tillamook Cheese and smaller, artisanal producers). The promotion of a Cascadian cuisine and its raw ingredients holds the possibility of bolstering the region's identity and providing urban/rural linkages.

Rural Cascadia is covered with lush working landscapes, yielding a wide variety of fresh, healthy produce.

Bessière (1998) suggests that these linkages may be achieved through "heritage" foods and farm-fresh products which are appealing not only for their wholesomeness, but because of the "...short-lived appropriation of a rural identity" that accompanies their consumption. This appropriation serves to "produce and reproduce identity and unity" in a region. More tangibly, the promotion of specialty crops and a regional cuisine may serve to increase the profitability of small-scale agriculture, thereby providing a compelling reason to preserve the region's farmlands and fisheries.

There are a number of different ways of measuring the economic importance of various agricultural products in Cascadia. Different agencies have applied different methods, making a summarization of Oregon, Washington, and British Columbia's agriculture somewhat difficult. However, sales figures are particularly important when one considers that many of the products are sold out of state and country, creating a multiplier effect. For instance, 80% of Oregon's agriculture products are shipped out of state and 40% of that is exported out of country.

Cascadia produces a tremendous variety of crops and foods. Oregon is second only to California in diversity of agricultural commodities grown. Many of the specialty crops are being grown on a smaller scale than

some of the aforementioned commodities, but are still of great economic and symbolic importance. In describing the region's agriculture and foods, it is perhaps more useful to look at the products that are unique to the region rather than focusing on those grown in large quantities.

Oregon ranks first in the U.S.A for a number of these specialty foods including blackberries, loganberries, black raspberries, dried herbs, pears, hazelnuts, and Dungeness crab. Washington ranks first in the nation for production of 12 commodities, including red raspberries, hops, spearmint oil, apples, wrinkled seed peas, sweet cherries, lentils, pears, concord grapes, dry edible peas, processing carrots, and processing sweet corn. British Columbia ranks first in Canada for production of blueberries, apples, raspberries, and greenhouse peppers and tomatoes. B.C. ranks second for cranberries, grapes, and nursery products (British Columbia Ministry of Agriculture and Lands, 2006). Many of these foods are primarily grown in Cascadia and are the foods that are most evocative of the region.

Hazelnuts are one such crop. The hazelnut industry farm gate (the total value growers received for their crops) has averaged $30,000,000 during the last five years. Using a conservative multiplier, this translates into a total economic impact of $75 million in Oregon (over the last five years) (Brand Oregon, 2006).

Wine is also gaining importance in Cascadia's agricultural economy. Grapes are noteworthy because they are frequently grown in areas that are otherwise marginally productive for agriculture. Thus, the wine industry provides a profitable use of lands that may otherwise face development pressure.

Wine grapes
Photo from Columbia Cascade Winery Assn.

Oregon is second in the United States in number of wineries, and fourth in the country for gallons of wine produced. The total value of Oregon wine grapes harvested in 2004 was $32.2 million. The total annual economic impact (including supporting industries) to the state from the Oregon wine industry is approximately $1 billion. There are over 700 vineyards in Oregon, planted on over 13,700 acres, and growing over 40 varietals of grapes. In 2004, there were 19,400 tons of wine grapes harvested, and nearly 1.2 million cases of wine made (Oregon Department of Agriculture, 2006).

Washington is second in the country in wine production. The state has over 400 vineyards, planted on over 30,000 acres, and growing over 20 varietals of

grapes. While most of the state's nine appellations are outside of the Cascadia region, the Puget Sound appellation is home to 35 wineries. The state's total annual wine production totals approximately 18 million gallons with a 2004 retail value of $684.9 million and a total annual economic impact of over $3 billion (Washington Wine Council, 2006).

British Columbia's wine industry, though smaller than Oregon and Washington's, is noteworthy. With five appellations, there are 32 wineries that occupy 5,462 acres of land and make $131 million in annual sales. While these numbers are considerably smaller than those for Oregon and Washington, it should be noted that there were only 13 wineries in 1984 and sales have doubled in the last six years products (British Columbia Ministry of Agriculture and Lands, 2006).

Determining agricultural employment numbers for Cascadia is difficult. However, such numbers are available by state and province. Agriculture plays an important role in the employment of Oregonians with 50,000 on-farm employees and 150,000 employees in agriculture-related industries (including processing). Oregon is also notable for the character of its farms. 89% of Oregon farms are owned or operated by families and less than 2% of farms are operated by non-family corporations. In Washington, with over 175,000 jobs, agriculture is the top employer (Washington State Department of Agriculture, 2006). In B.C., 30,100 people were employed in agriculture and related services in 2002.

One of the primary threats to Cascadian agriculture is sprawl. Though not the only measure of sprawl, the amount of land converted from rural to urban uses is one metric. Washington had a 49% increase in urban land between 1982 and 1997. Oregon has witnessed a 32.11% increase in urban lands from 1982 until 1997. Population density is a good measure of the efficiency of the conversion of rural land to urban use. Unfortunately, Oregon has seen a decrease, albeit small at -2.02%, in population densities during the years 1982 to 1997 (Anthony, 2004).

Suburban sprawl eats up the supply of available farmland. Photo from plannersweb.com

In addition to converting land from agricultural to urban uses, urban growth presents conflicts with agricultural land uses. The smells and noises of agriculture are frequently

at odds with the bucolic ideal of farming held by suburban and exurban pioneers. Furthermore, like many industries, agriculture benefits from agglomeration economies, whereby the presence of many farms creates the need for supporting industries such as the transportation of agricultural goods or sale of farming equipment. Absent a critical mass of farms, such supporting industries disappear, thereby making agriculture yet more vulnerable.

Within the next decade, 25% of Oregon's farmers will retire and 70% of Oregon's agricultural land will change ownership (Oregon Department of Agriculture, 2006). Though much of this agricultural land is protected by the statewide planning system, such protection is not necessarily permanent as it relies on zoning and UGBs that can be amended. Furthermore, the expected change in ownership of Oregon's agricultural lands presents the possibility of fewer family-owned and run farms.

On Washington's Puget Sound, agriculture is facing similar pressures. During the period of 1982 through 1997, more than 20% of Puget Sound's farmland, amounting to more than 100,000 acres, was converted to other uses. King and Snohomish counties have witnessed some of the greatest losses of farmland with 30% being converted to other uses in the same time period. This loss amounts to 32,000 acres in Snohomish County alone (Canty, 2004).

In addition to losses measured in acres of farmland, Puget Sound has seen a substantial decrease in its number of farms, amounting to a 25% decrease over the period of 1982 through 1997. As with the loss of farm acreage, the decrease in farm numbers is particularly stunning in the central Puget Sound area, losing between 31% and 36% of farms (varying by county). It is also noteworthy small farms have faced the greatest losses. Contrastingly, there has been a 39% increase in the number of farms that are over 1000 acres. This figure should, however, be kept in perspective given that the total number of these large farms is relatively small (38 farms of 1000+ acres in 1997) (Canty, 2004).

The demise of small farms and the accompanying rise in numbers of large farms is likely related to the consolidation of food retailing. According to Canty and Wiley (2004), Wal-Mart is currently the number one food retailer in the United States and over 40% of the retail grocery business is conducted by just five firms. This consolidation has given retailers considerable control over the prices that agricultural commodities command. Given the need to compete on price alone, farms with economies of scale have prevailed. Beyond the argument that larger farms are more efficient (which is contested by some), large retailers such as Wal-Mart are inclined to do business with large-scale farms that produce one crop, thereby avoiding reliance on many small suppliers.

Many challenges face Cascadia's working and wild rural landscape in the coming decades. Planning on a Cascadian scale can help to ensure that the region's unique relationship between its urban and rural populations and economies continues to enable the quality of life that the region has grown famous for. We have explored a few major issues facing rural Cascadia, but what are the corresponding trends in metropolitan Cascadia? Read on to find out how the largest cities in the region are responding to the pressures of population growth and economic development while at the same time defending the continued prosperity and health of its rural territories.

METROPOLITAN CASCADIA

In July 2000, the Greater Vancouver Regional District, Portland Metro, and Puget Sound Regional Council participated in the Cascadia Metropolitan Forum. The purpose of the forum was to establish an understanding of the Cascadia region within its "main street" corridor. From North to South, it covers areas along U.S. Interstate Highway 5 from the southern part of Vancouver Island in British Columbia, Canada to Lane County in Oregon (Discovery Institute, 2000). Demographic statistics are provided in the table below.

The Greater Vancouver Regional District (GVRD) is a district located in the Southwestern corner of the Canadian province of British Columbia, with a board of directors made up of elected representatives. GVRD

Vancouver, British Columbia

is centered on the metropolitan core of Vancouver, with eight town centers surrounding it. The area is bounded by the Strait of Georgia to the West, the Coast Mountains to the North, the Fraser Valley Regional District to the East, and the United States border to the South, spanning approximately 1,089 square miles. The designated urban area makes up approximately 30% of the metropolitan area and houses half of its population of about 2 million people (Greater Vancouver Regional District, 1996). The functions of the GVRD include providing services such as regional parks, water supply and distribution, air quality management, industrial wastewater control, administration of 911 emergency phone system, solid waste management/recycling coordination, wastewater collection/treatment/disposal, strategic planning for growth management, regional social housing, and labor relations for municipalities (Discovery Institute, 2000). The GVRD 2006 budgeted expenditures are $448.6 million, primarily recovered through user fees and property taxes.

Regional planning in the GVRD dates back to approximately 1967, but in 1990, the Greater Vancouver Regional District Board adopted a Creating Our Future vision to protect the natural environment and provide access to all basic necessities. In 1996, after a four-year public and in-

Metropolitan Cascadian Demographics (2000 data except where noted)

	Vancouver Regional District	Central Puget Sound Region	Portland Metro Area
Size Metropolitan Area (square miles)	1,121 (2005)	6,290	463 (2005)
Size of Metropolitan Urban Area (square miles)	338 (30%) (2005)	1,170 (17%) (1995)	398 (86%) (2005)
Population of Metropolitan Area	4,039,198	3,275,847	1,444,219
Population in Metropolitan Urban Area	2,041,399 (50%)	2,784,470 (85%)	1,305,574 (90%)
Population Density in Metropolitan Urban Area (persons/ acre)	2.7 (2005)	0.81	0.74
Dwelling Units in Metropolitan Urban Area (units)	758,390 (2001)	1,348,146	705,218
Dwelling Unit Density in Metropolitan Urban Area (dwelling units / acre)	1.06 (2001)	0.33	0.31
Net Migration (in Metropolitan Area) (from previous year)	27,402 (2001)	26,000 (2001)	9,377
Hispanic or Latino population (in Metropolitan Area)	-	172,062	116,086
Minority population (in Metropolitan Area) (non-white race)	1,494,503 (2001)	599,077	290,928
Median household income (in Metropolitan Area)	$63,003 (2001)	$51,386	$48,434
Median Age (in Metropolitan Area)	37.4 (2001)	35.8	35.6

tergovernmental consultation process, the Livable Region Strategic Plan was created to help realize this vision through the Greater Vancouver Region's land use and transportation development (Greater Vancouver Regional District, 1996).

Early in the process, the public rejected a business-as-usual approach to regional growth that would spread population throughout the Fraser Valley because it would put development pressure on farmland, increase the distance between jobs and housing, cost too much for public services and utilities, and result in worsening air pollution from increased automobile use. The Strategic Plan provides a clear alternative that is more in keeping with the values of Creating Our Future.

The Central Puget Sound Region encompasses Snohomish, King, Pierce, and Kitsap counties in the state of Washington, for a total of 6,290 square miles. It is set in a basin between the Cascade and Olympic mountain ranges, and is bisected by the salt-water inlets of the Puget Sound and numerous rivers and lakes. Major cities in the region include Seattle, Bellevue, Everett, Tacoma, and Bremerton. The Central Puget Sound Region is described as an area of "mountains and waterways, abundant natural resources, and economic opportunities" (Puget Sound Regional Council, 1995:6). The Puget Sound Regional Council is "an association of cities, towns, counties, ports, and state agencies that serves as a forum for developing policies and making decisions about regional growth and transportation issues in the four-county central Puget Sound Region" (Puget Sound Regional Council, 2006). The Regional Council reviews policies and plans to ensure coordinated and consistent planning among jurisdictions, acts as the Regional Transportation Planning Organization (RTPO) and develops the Transportation Improvement Program, collects regional data, and monitors regional action. The annual budget is about $20.1 million from federal and state grants. In addition, it gets about $160 million dollars a year from the Federal Highway Administration and Federal Transit Administration for

Seattle, Washington

transportation projects (Puget Sound Regional Council, 2005).

Vision 2020 is the long-range growth management, economic and transportation strategy policy plan for local and regional planning for the Central Puget Sound Region. The vision calls for "diverse, economically and environmentally healthy communities framed by open space and connected by a high-quality, multimodal transportation system that provides effective mobility for people and goods" (Puget Sound Regional Council, 1995:2). It aims to preserve communities, conserve natural and financial resources, and maintain the quality of life within the Central Puget Sound Region.

The planning process for Vision 2020 started in 1987. Efforts included an analysis of alternative growth and mobility scenarios and involved public participation. Policy implementation occurs through local comprehensive plans and other regional and state plans. The eight components of the Vision 2020 strategy include the identification of urban growth areas, contiguous and orderly development of urban growth areas, locating regional capital facilities, providing housing, preserving rural areas, protecting open space, natural resources and critical areas, retaining and expanding the metropolitan area's economy, and managing a multimodal transportation system.

The Portland metropolitan area primarily encompasses Clackamas, Multnomah, and Washington Counties. This area is approximately 400 square miles (Metro, 2000). It is adjacent to Washington State, separated from it by the Columbia River. The Portland area is bisected East and West by the Willamette River. It is approximately equidistant to the Pacific Ocean and Mt. Hood, Oregon's tallest peak. Its regional planning body and elected regional government, Metro, is led by six councilors that represent the entire Portland metropolitan area. The Metro region includes 3 counties and 24 cities, and oversees the Urban Growth Boundary. Metro has the ability to enforce rules regarding local jurisdictions' development patterns. The Portland area is known nationally for its high levels of citizen participation, and many attribute this to its political structure (Johnson, 2004).

Portland, OR

The Metro Charter was adopted in 1992 and established Metro's primary function as "planning and policy making to preserve and enhance the quality of

life and the environment for ourselves and future generations" (Metro, 1992). It also established the need for the Regional Framework Plan. The Urban Growth Management Functional Plan lists the legal statutes which are designed to implement the Regional Framework Plan.

The Regional Framework plan includes eight chapters outlining strategies for land use,

transportation, open space preservation, water quality, and relationships with neighboring areas. These include policies on the built environment, affordable housing, consistency between land use and transportation planning, protection of open areas, maintenance of water quality and supply, hazard mitigation, coordination with Clark County, and management and implementation of the plan.

We found three major features shared by the planning processes within the three metropolitan areas: 1) growth management strategies, (2) preservation of open space, agriculture, and rural lands, and (3) transportation planning.

Each of the three major metropolitan areas within the Cascadia study area (Vancouver, Seattle, and Portland) has adopted growth management strategies in response to its booming population. While the strategies are not identical, they speak the same language, promoting alternatives to automobile travel, promoting compact growth and infill development, minimizing urban sprawl, and creating complete communities through multiple town or regional centers within the metropolitan urban area.

The slight difference in strategies reflects the higher levels of government that drive the political process. The states of Oregon and Washington adopted growth management goals and regulations at different times while the province of British Columbia relies on its Growth Strategies Act and Agricultural Land Reserve Act. In Oregon, the state planning goals developed in the 1970's paved the way to the current use of urban growth boundaries (UGBs) while Washington's Growth Management Act prescribed slightly different methods of managing growth, though essentially seeking the same compact urban form.

The urban areas of Cascadia place a heavy emphasis on careful urban planning.

The emphasis on denser and richer urban life through urban planning is also an effort to preserve the abundant open space characteristic of the Metropolitan Cascadia Region. This desire to protect natural resources and open space reflects the abundance of scenic and recreational opportunities that surround these places, including streams, rivers, snowy mountains, hiking, and fishing. Without this strong

human-nature connection, the urban areas might grow laterally without regard for the loss of pristine land. Despite the myriad of land conservation practices employed by each metropolitan area, they each anticipate and welcome new growth in the hopes of developing a denser but richer quality of life through urban planning.

Because Cascadia is endowed with such generous natural beauty, Cascadian cities have a strong incentive to promote infill development and preserve open and wild spaces.

The preservation of open space and agricultural land is an important mission in the goals and visions of the three metropolitan area plans. Although the specific focus of their efforts vary, they all share a common ethic recognizing the importance of planning for preservation in rapidly growing metropolitan areas. All plans strive to protect and enhance quality of life, all connect good quality of life with healthy open space, and all are doing so despite significant population growth projections.

The plans and visions are being successfully implemented in varying degrees in the four metropolitan areas; however that is a governance issue. Seattle's actual efforts towards preservation have been weaker than Vancouver's and Portland's. The important point in terms of arguing for a Metropolitan Cascadian Region is how closely aligned the visions of the metros are. If all three metropolitan areas were able to implement their visions, the areas would look similar in terms of preservation of open space.

Meeting the demands created by population growth is a concern each of the four metropolitan areas share. The growing population is expected to create traffic problems. It is therefore the mindset of each metropolitan area to implement a transportation system to provide adequate accessibility and mobility to all residents. The common strategy shared is the provision of multimodal transportation options. Transportation issues as a result of growth within each metropolitan area can be addressed at the metropolitan level. However, travel between metropolitan areas is a concern. Transportation behavioral data already shows that as the ability to purchase a car and incomes increase, people will travel more for recreational purposes. Businesses will also increase sales between metropolitan areas.

The three metropolitan areas in Cascadia have much in common. Each area has created a comprehensive regional planning strategy that focuses on growth management, preservation of open space, and innovative transportation solutions. Each seeks to preserve and enhance its quality

of life, and doing so on a mega-regional scale can ensure that communities across the region can work together to enjoy the same benefits of regional planning. Because all three metropolitan areas have already created their own plans, it is clear that they all value large-scale, long-term planning. It is, therefore, a logical step from planning at the metropolitan level to planning at the mega-regional level.

III. Strategies for the Ecolopolis and a Regional Identity

The Cascadian region faces the challenges of unprecedented population growth, an uncertain economic future for rural areas, and an already stressed interstate transportation system that very well may not be able to move the people and goods necessary to compete in a global economy. However, these challenges are primarily defined and approached at a local scale, and local concerns trump Cascadian points of view.

Residents of Portland don't care much about traffic congestion in Seattle, or the opportunities afforded by the dynamic relationships between Vancouver, BC and Asia. But, addressing regional challenges at the local level may not get us where we want to go.

This section outlines a few strategies that could enable Cascadia to approach these challenges as an ecolopolis, in order to avoid becoming a megalopolis. These strategies could strengthen a regional identity, which in turn could allow Cascadia to tackle regional challenges at a regional scale. The roots of these strategies already exist and provide what could become Cascadia-scale initiatives directed at managing growth, strategically building the economy, and improving regional accessibility. To move the Ecolopolis ahead, we propose that Cascadia-scale initiatives should seek to:

1.   Build on the region's strong track record for planning and make Cascadia's growth management a model for the world;
2.   Utilize the Cascadia brand and build on the region's emerging clusters to strategically position the economy at an ecolopolitan scale; and
3.   Increase accessibility throughout Cascadia with high-speed rail.

1. MAKE GROWTH MANAGEMENT A MODEL

As outlined in section I, Cascadia will face unprecedented population growth over the next 20 years. Housing, jobs, transportation, and environmental issues, among others, will increase with the pressures of increased growth. Without managed growth, the working landscape, open space, and natural areas that are the hallmark of Cascadia will disappear.

Addressing the challenges associated with growth at the regional level provides Cascadia the opportunity to create an ecolopolitan-scale learning community associated with the issues, processes, and methods of sustainable development and growth management. Cascadia could become known as the place where the fundamental ideas about sustainable urbanism in the 21st century are being worked out.

What would an ecolopolis learning model provide?   Cascadia has long been described as clean, green, wet, wild, and majestic. With effective growth management carried out in at an ecopolitan scale, Cascadia is poised to add "urban" to that list. In this case, the hallmarks of urban Cascadia could and should be sustainable, innovative, accessible, participatory, socially just, and livable.

The seeds for ecopolitan growth management and ecopolitan style planning already exist in Cascadia. Planners from around the world already travel to this region to learn how we protect the working landscape, revitalize city centers, and increase the use of mass transit. Each of the major metropolitan areas in Cascadia is already engaged in growth management on a scale rarely attempted in the United States.

Individually, each of these regions is recognized internationally as models for sustainable development. Cascadian growth management efforts are anchored by concern for the environment; urban containment and the preservation of greenspace and the working landscape; the desire to create multimodal and balanced transportation systems and sustaining and enhancing the function of mixed-use centers of various scales.

Efforts such as Greenheart planning in Washington, the Cascadia Scorecard of the Sightline Institute in Seattle, and the Salmon Nation effort sponsored by Ecotrust all explore the link between growth management and the landscape in a manner consistent with the notion of an ecolopolis.

To advance this strategy, public agencies, nonprofits, and private industry associated with planning, architecture, and green building need to be convened and supported at a Cascadian scale to raise the bar on the discussion, development, and implementation of ideas associated with creating Cascadian urbanism.

2. STRATEGICALLY POSITION THE ECONOMY: BRANDING AND CLUSTERS

Cascadia faces many economic challenges. Rural areas with predominately resource based industries such as farming and timber have been in a period of economic decline and transition, while urban areas face increasing global competition in attracting trade, specialized labor, new markets, and new industries.

However, just as it is a forerunner in growth management, Cascadia also holds the makings for an economic strategy that could encourage a regional identity and foster green, sustainable industries. The strategy here is to promote and build on the uniqueness of Cascadia using the Cascadia brand for agricultural products, and through the support of existing industry clusters in the region, such as green building and the high-tech industries.

Saving Agriculture with the Cascadian Brand

Agriculture in Cascadia is facing pressures from urban development and global competitiveness. Building on the Cascadia brand could be part of an economic strategy that would strengthen a regional identity and profit from the uniqueness of the region. Foods imbued with regional identity, such as the French Appellation d'Origine Controlee, the European Union's Protected Designation of Origin and Protected Geographical Indication (PGO), and Italy's Denominazione Origine Controllata, offer a number of benefits including added value, increased small-scale agriculture profitability, and the construction or reinforcement of a regional identity.

Specific places, processes, and products define the most successful regional foods. The adoption of labeling schemes, or branding, specific to the Csacadian region could be used to develop a sense of product and place, and could help to create or reinforce a regional identity and assist in preserving farm lands through greater profitability.

As Section II illustrated, the Cascadia brand of salmon, tall mountains, and waterfalls is already well recognized. Many of the existing North American food labeling and marketing campaigns call Cascadia home, including Oregon Tilth, Salmon Safe, Buy B.C., Oregon Bounty, Oregon Seafood, Buy B.C., and Heart of Washington. It would seem that Cascadians have begun taking steps in the direction of strengthening a regional geographical association with its foods.

In Cascadia geographical associations with food have been most clearly expressed in the production of wine and oysters. Cascadian wines are organized by appellation, or growing region. Oysters, though typically represented by three common species, are known variously according to their place of origin. Aficionados claim subtle flavor variations attributable to environmental conditions. Oyster names such as Willapa Bay, Westcott Bay, Umpqua, Yaquina Bay and Quilcenes reflect not only the origin of the oyster, but also the particular flavors associated with that place.

Aside from developing strong place-bound identities, Cascadian farms may realize increased profitability through direct sales to consumers. The growth in farmers markets, community supported agriculture, and direct sales to retailers and restaurants bode well for Cascadian farmers. According to Canty and Wiley, Washington's farmers market sales have grown from approximately $18 million to $80 million between 1997 and 2003.

Restaurants throughout the region have taken note of the opportunity to create a unique cuisine from Cascadian ingredients and frequently make a point of dealing directly with farmers. In Portland, a number of restaurants such as Higgins, Paley's Place, Wildwood, Hot Lips Pizza, and Caprial's Bistro have built reputations on regional ingredients and their support for the farmers that grow them. Seattle has taken it a step further with Cascadia Restaurant that makes explicit references to the Cascadia region on its website.

It should be noted that any assertion of a Cascadian cuisine should be tempered by the reality that a unified and long-standing tradition does not exist at this point. What we do have is unique, high quality ingredients. This uniqueness has, however, found unlikely expression at times, as in the Douglas fir eau-de-vie made by Portland's Clear Creek Distillery or the Douglas fir sorbet at Seattle's Cascadia Restaurant.

This uniqueness may be strategic; if farms on the Puget Sound are an indication, Cascadian farmers are, instead of solely competing in large agricultural commodity markets, becoming increasingly reliant on specialty crops such as raspberries and nursery stock. Puget Sound's nursery stock sales have increased by 212% over the 1982 to 1997 time period. Similarly, sales of organic foods have had a 24% growth rate from 1997 to

2001 (Canty and Wiley, 2004).

Develop Cascadian Style Clusters

The recent emergence of regions as the new competitive unit in the global economy has sparked increasing interest in the capacity of regions to foster clusters, similar groups of companies and institutions that provide a related group of products and/or services, as a way to increase competitive advantage.

As distinct metropolitan areas committed to compact growth management, Portland, Seattle, and Vancouver are too small, alone, to maintain economic competitiveness with the megapolitan economies emerging around the globe. The challenge is to increase the connections between people so that Cascadia can function as a "virtual" ecopolitan economy, one economic unit large enough to be recognized in the global economy. Industry clusters by themselves do not form the basis for regional identity. However, the presence of specialized industry clusters, and the implied relationships and networks within the industry members do have the potential to provide a physical and economic cohesion that would provide regional identity to a place such as Cascadia.

In addition to the competitive advantage conferred on the region by their presence, some clusters, especially those tied to other elements of the region such as the natural resources, or those in which the cluster is unique or an industry leader, also provide an opportunity for regional branding. An example of this for Cascadia might be the opportunity to use green industries as a way to brand Cascadia that builds on the synergy of the cluster, the region's natural resources and its lifestyle reputation.

For Cascadia to be viewed as a region that is competitive in the global economy based on the cluster model, it would need to have several identifiable industry clusters that possess the key elements of clusters: geographic proximity, interactions or relationships, and the innovations that result from shared knowledge. Two possible industry clusters are the green building industry and the high tech industry. For example, Cascadia has distinguished itself as the most robust region for green building. At the end of 2004, Oregon, Idaho, Washington and British Columbia were home to nearly 195 certified projects, about 14 percent of the total registrations in the US and Canada, compared with less than 5 percent of the US/Canadian Population (Yudelson, 2004).

3. INCREASE ACCESSIBILITY THROUGHOUT CASCADIA

Increasing transportation accessibility is a strategy that could strengthen a regional identity as people and goods are able to move with greater ease throughout Cascadia. It is evident that Cascadian's travel frequently and widely throughout the reason for pleasure and business. Goods and services utilize Cascadia's transportation systems. Data indicates that people travel between municipalities in the Cascadian region more than they travel from Cascadia to other places (Airport Activity Report 2004). However Cascadia's transportation infrastructure, especially I-5, is under tremendous stress and is reaching or has reached capacity.

Just as in most metropolitan regions nationwide, safety concerns and congestion on Cascadia's highways and in airports require resolution; extra lanes and runways are the usual prescriptions. But highway lanes, runways, and terminals cost billions of dollars, are often nearly impossible to fit in existing urbanized environments, pose environmental problems, and are routinely opposed by citizen and environmental groups.

High-speed rail holds the promise of a fast, efficient, comfortable, and environmentally friendly form of intercity transportation that is highly competitive with cars and planes for trips from Eugene to Vancouver, BC, and points between. High-speed rail (HSR), with trains routinely running in excess of 180 miles per hour, is a reality throughout Europe, Japan and China. Other countries like Korea, Canada, and Mexico are seriously evaluating new lines and systems. Travel statistics from airports, the Federal Aviation Administration, and the International Mobility & Trade Corridor Project (IMTC) strongly demonstrate that demand for high-speed rail travel exists in the Cascadian Region.

How fast does it go? The short answer is that HSR could get a passenger from downtown Portland to downtown Seattle in less than 1 hour and 45 minutes. Express trains that do not stop at any of the cities in between could be expected to make the trip in less time—perhaps nearing one hour.

Currently, flight time between Seattle and Vancouver, BC is approximately 55 minutes, though total air-travel time, including check-in and security checks, can take much longer.

HSR times based on a maximum speed of 185 mph (High Speed Ground Transportation Study pg. III-23, Table III-7)

STATION	POST	MILE	RUN TIME	CUM RUN TIME	EXPR.
Union Station Portland	0	0	0	0	0
Portland Airport Station	8.5	8.5	12.6	12.6	
Clark County Station	24.3	15.8	6.9	19.5	
Thurston County Station	104.3	80	30.1	49.6	
Sea-Tac Airport Station	164.8	60.5	29.7	79.3	60
King County Station	179.3	14.5	17.3	96.6	
Snohomish County Station	205.8	26.5	12	108.6	
Whatcom County Station	268.3	62.5	26.1	134.7	
Whalley, B.C. Station	323.3	55	29.1	163.8	
Vancouver, B.C. Station	336.8	13.5	20.3	184.1	120

The 1992 High Speed Ground Transportation Study illustrates approximate travel times based on a top speed of 185 mph. These figures are accompanied by uncongested highway travel times to further exhibit impacts through comparative travel times (see figure 2).

Based on the above approximations of travel time reductions, high-speed rail could effectively shrink the distance between Portland, Seattle, and Vancouver, thus integrating and creating distinct markets while further unifying the economic region. Such dramatic changes may result in a virtual reconfiguration of the region's spatial dynamics. Travel time and access are key determinants to residential, commercial, and retail markets. For instance, the 57 minute reduction in travel time from Thurston County to Sea-Tac will increase the area's attractiveness for development as HSR expands the market to those now within traveling distance.

Much like TOD (transit oriented development) strategy, HSR stations offer surrounding areas opportunities to concentrate development based on new interconnectivity.

It takes far less energy to move 1,000 people from Portland to Vancouver, B.C. via high speed rail than by car or airplane. A high speed train system can be built to use low or no-carbon emitting energy sources, like natural gas or hydropower, while airplanes are likely to continue to burn tons of jet fuel during each flight.

HSR offers market tendencies that support smart growth/new urbanism land use and growth management strategies. In taking these factors into consideration, HSR in essence provides fundamental infrastructure necessary to creating a sustainable interconnected regional economy that can compete in an ever-increasing global context. Locally, HSR offers a plethora of opportunities to enrich and bolster an urban fabric and system. HSR is an effective, ecologically-friendly way to transport people in keeping with the values of Cascadians, and can provide connections between cities to bolster economic development and open new markets. High speed rail has the potential to transform the three cities of Portland, Seattle and Vancouver, BC into a cohesive region, Cascadia,

an Ecolopolis.

There is already a significant amount of travel and migration between the Cascadia metros that suggest the basis for supporting investments in high(er) speed rail in the I-5 corridor. The distances are right for a range of technologies that work with both the nature of the travel and, again, the brand image of this region.

Conclusion

For a united Cascadia to emerge, public and private efforts at the local, metropolitan, state, and national scales need to be aligned. This is clearly a daunting task and it swims upstream against the history of sustained, multistate/binational regional efforts in North America. Nonetheless, in the face of global competition for talent, and strategic efforts to organize Europe, China, and other key competitors into megapolitan aggolomerations, this may be the time to carefully craft a strategy for building Cascadia from the inside and from the grassroots.

We need to know more about the dynamics within presumed clusters, and about the global prospects for those industries. We need to collect truly comparable data across national and state boundaries upon which strategies and plans can be based. We need better and more compelling information regarding the nature of the challenge posed by regionalization efforts outside of North America. Finally, we need to carefully develop a true Cascadian vision for Cascadia: models developed elsewhere may, in fact, undervalue core values essential to our distinctive identity and concerns.

Ultimately, regions are described both by their role in the larger national and global "whole," and by their own intrinsic qualities. Regional strategies need to understand and address both. Cascadia will succeed, not because of its ability to copy Megalopolis, or the European Spatial Development Perspective, or the recent developments in China, but because of its ability to learn from those regions and to craft a strategy and approach based on keeping Cascadia different and distinct. High-speed rail may be Cascadia's infrastructure of the future, but it might not. It is in this ongoing quest for a strategy based on distinctive traits that we look forward to the next steps.
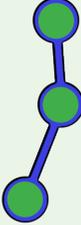
IV. Next Steps

As the megapolitan discussion continues, there will be many questions to answer. Simply improving the data available to show megapolitan-scale interaction and flows is critical. If megapolitan areas are about more than size, then we need to be able to make a more compelling case for the importance of proximity. We also need to better define the audience for the megapolitan agenda. While it obviously concerns the constituent metropolitan areas within each megapolitan area, ultimately this dialogue needs to be directed upwards. Regions, after all, are parts of a whole. In this case, is it the nation? The globe?

Within Cascadia, however, this work suggests four important challenges for version 3.0 of this effort. First, there are already a number of organizations and efforts occurring at a Cascadian scale. The Sightline Institute, Ecotrust and Salmon Nation, the 15-year-old Cascadia Metropolitan Forum that emerged from the Discovery Institute's earlier efforts, the Pacific Northwest Power Planning Council, various salmon and steelhead recovery efforts and continuing efforts to plan for high speed rail and improved function overall in the I-5 corridor, to name a few, are already working to advance what can be described as ecolopolitan principles in Cascadia. We need to convene these groups, and others, to begin the discussion of how and why we engage the megapolitan discussion as a region.

Second, we need to reconfirm the Cascadian "brand". Though we have good information from local planning processes and other sources to suggest that a high value placed on compact cities with healthy relationships with working and wild landscapes form central Cascadian concerns, we need to further develop and describe the roots for this and its meaning. Not wanting to be megalopolis or LA or Houston is one thing. Being able to stand on a solid sense of what we want to be is critical to acting on the strategies presented here, and others likely to arise.

Third, we need to assess the assets that Cascadia currently has for maintaining and enhancing global competitiveness. Each of the communities in Cascadia has strengths and assets of global significance. Understanding what those are, and how they are organized, is the next step towards providing new choices for every community as it confronts the need to distinguish itself in a global economic context. Creating a better under-

standing of these assets also provides communities with a better under-standing of what planning and acting as Cascadia can mean.

Finally, we need to begin to inventory the strategic choices either be-fore decision makers, or soon to be before them. Though Cascadia as an operating idea, much less an institution, may be some way off in the future, decisions are being made now that have Cascadian implications. Illustrating the link between today and the future through the actions soon to be taken is yet another way of understanding and presenting the meaning of Cascadia to Cascadians.

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