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SEATTLE, WASHINGTON REGION: GLOBAL ECONOMIC EMPIRE FOR THE TECHNOLOGICAL SPECTRUM

Jarrold P. Echols

Southern Illinois University Carbondale, jpechols@siu.edu

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SEATTLE, WASHINGTON REGION:
GLOBAL ECONOMIC EMPIRE FOR THE TECHNOLOGICAL SPECTRUM

by

Jarrold P. Echols

B.S., Southern Illinois University, 2010

A Research Paper

Submitted in Partial Fulfillment of the Requirements for the
Masters of Public Administration

Department of Liberal Arts
in the Graduate School
Southern Illinois University Carbondale
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RESEARCH PAPER APPROVAL

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GLOBAL ECONOMIC EMPIRE FOR THE TECHNOLOGICAL SPECTRUM

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Jarrood Paul Echols

A Research Paper Submitted in Partial

Fulfillment of the Requirements

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Masters

in the field of Public Administration

Approved by:

Dr. Charles Leonard, Chair

Dr. John Hamman

Ms. Belle Woodward

Graduate School
Southern Illinois University Carbondale
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The Seattle, Washington region has proven to be a fully sustainable metropolitan area, largely based on its attraction to large technology firms. Seattle became an industrial city with the help of its proximity to the ocean and large stands of timber. Once some of these industries died out and moved to other locations, the technology boom began. In 1979, Seattle native Bill Gates moved his Microsoft Corporation from Albuquerque, New Mexico to Bellevue, Washington, a suburb of Seattle. As Microsoft began to grow, the leadership of Seattle recognized the economic gold mine they had in their midst, and if they began to attract other technology start-ups, they could potentially become a global driving force in the technological industry. Seattle and its surrounding suburbs recognized that having technology firms move into their area would provide economic stability, and the city could continue to grow and prosper as these firms continue to expand. The Seattle region began to make changes to its policies and grow its economic infrastructure to accommodate these large technology firms. Accommodations are still being made today that will not only keep these existing firms in the area, but also attract future technological companies.

Literature Review

In Casey's (2013) website article, he describes Seattle as proving to be one of America's most resilient cities. Over the course of two centuries, the city has demonstrated that it can withstand disasters, both natural and economic. Little did Arthur Denny and his group of settlers know when they arrived in the Seattle, Washington area on November 13, 1851, they were the beginning to one of the most successful cities of all time. The Denny party consisted of 22 people: 10 adults and 12 children. When the settlers arrived, according to Pohl (1970),

“In exchange for ship’s bread a few Indians had helped Terry and Denny begin construction of their cabin. At any rate, they were received with mixed feelings, more negative than positive”(p. 59). Many people looking into the past are curious to know where settlers originated from, and how they wound up in locations that turn into huge cities.

Roger Sale (1976) explains:

The closest one can come is noting that Arthur Denny’s direct ancestors had never settled permanently, having gradually worked their way west, approximately a generation at a time, from Virginia to Kentucky to Indiana, to Cherry Grove, Illinois, where they were living when they decided to come to the west coast. (p. 8)

Sale (1976) writes that Doc Maynard and Henry Yesler did not arrive with the Denny party. These men are recognized in history for their unparalleled contributions to Seattle’s initial growth. Maynard had his heart set on developing Seattle the moment he arrived. He started the first store, made one of the first plats, and founded the first hospital in Seattle (Sale, 1976). Yesler arrived shortly after Maynard and began scouring the area to build a sawmill to start a lumber business. When the occupants of Seattle heard of this, they gave him a waterfront property to allow him to spur the economic growth. This event created the first payroll in Seattle in 1853. Shortly thereafter, he built the area’s first restaurant and its first town hall. Seattle was showing signs of economic growth.

However, it had not yet officially become a city; therefore it was limited on the structured growth other cities in the West were already experiencing.

First Seattle Government

According to Bagley (1916), Henry A. Atkins was elected first mayor of Seattle on July 11,

1870. Now that Seattle was an official city and had the beginnings of a government infrastructure, it seemed like nothing could slow down the speed of growth the city was experiencing.

Many resources were available to spur economic growth and bring settlers into the Seattle area. The first of these was Yesler's lumber industry. Sale (1976) describes the vast number of people who flocked to the West in order to seek fortunes in logging, mining, and farming. A month after the landing of the Denny party, a ship called the *Leonesa* stopped in the Alki point area of Seattle and contracted with Denny's party for a load of logs that would be used as pilings for docks in San Francisco. This event began the growth of the lumber industry for Seattle (Sale, 1976).

“In these early years, it must have seemed to some that Seattle’s usefulness might not outlast its supply of timber. Nearly everyone was engaged in one way or another in lumbering” (Pohl, 1970, p. 101). Lumbering continued to be the primary economic activity of Seattle throughout the 1850’s and gave rise to other activities that involved commerce and manufacturing. “Lumber was indeed the mainstay of economic development” (Pohl, 1970, p. 102).

While the boom of the lumber industry spurred economic development, the Klondike Gold Rush of 1887 also contributed to major economic improvements in the Seattle area. It was not only the individuals coming to find gold who profited from the rush, but the merchants and shop owners in the Seattle area profited as well. The gold rush also contributed to population growth and to the development of many businesses that were geared towards miners (Mighetto & Montgomery, 1998).

The Railroad Arrives

One of the most prevalent developments was the arrival of the railroads (Mighetto & Montgomery, 1998). The progress of the railroad's expansion west had slowed due to conflicts with Indians and the Civil War. The cities of Seattle and Tacoma were in competition to become the next terminal city for the railroad on the West Coast. Tacoma would eventually win this battle, as the Northern Pacific Railway felt that city showed greater opportunities for land speculation than Seattle did. This spurred the residents of Seattle to build their own railway, the Seattle & Walla Walla Railroad (Mighetto & Montgomery, 1998). In 1874, men of the city began laying track; this showed the positive spirit of Seattle's residents (Jones, 1972). Soon the city ran out of funds due to the high cost of trying to cross the mountains outside of the city. However, this lack of funds did not last long.

The railroad tracklayers discovered coal deposits, which would also provide an economic upturn for Seattle. "By the 1870's Seattle had nearly exhausted its supply of timber... the coal... presented the opportunity for an additional export" (Mighetto & Montgomery, 1998). During the 1880's, the city's population grew from 3,500 residents to more than 43,000 due to the railroad expanding to Seattle, and to the Pacific Coast Steamship Company providing the first direct service from Seattle to Alaska in 1886 (Mighetto & Montgomery, 1998). This direct service allowed Japanese imports and exports from Alaska, and therefore began the advanced commerce of the city.

Seattle Residential Layout

During the gold rush and the boom of the lumber industry, many pioneers traveled from states that already had a governing body in place. This allowed them to bring their ideas to the

Seattle area, and become involved in the up-and-coming political setup of Seattle. “On January 14, 1865, the Territory of Washington Legislature incorporates the Town of Seattle for the first time, adopting a city charter that puts the municipal government in the hands of a board of five trustees, to be elected annually” (Lange & Tate, 1998). According to Pohl (1970), “Immediately upon their arrival in the Puget Sound area, those settlers who had come intending to make this their new home involved themselves in politics and government” (p. 240). Initially the Seattle area was set up as a series of counties and territories, which contained a series of commissioners and representative figures for their designated areas. One of these settlers was Reginald H. Thomson, the city engineer from 1892-1911. He helped start the city’s urban development with the help of the city council (Berner & Dorpat, 1991).

Seattle had a city council structure with representation for each part of the city. According to Berner and Dorpat (1991), the city acquired its own electric and water company from third party entities in 1900. They made this acquisition because the city government felt there was an absence of regulation by the current owner of the electric and water company and the city could do better and regulating the entities.

The population and immigration increase in the city contributed to the gold rush and the railroad. Several different immigrant ethnicities populated the city. According to Whitney and Broom (2001), the first trans-Pacific steamship departed from Seattle in December of 1882, the first step in the city’s ambition to become the gateway to the Pacific Rim. Chinese merchants developed Chinatown in downtown Seattle, followed shortly by the Japanese (Berner & Dorpat, 1991). Near the end of the 1800's, the Japanese community began to settle in the Beacon Hill and Broadway districts of Seattle. The Jewish community developed with the increase of small

businesses in Seattle. In 1906, the majority of the Jewish community settled in a group of rental houses near 12th and Washington Streets. This rental facility was called the Settlement House, and is known today as the Neighborhood House.

The Italians, along with the other immigrants, congregated in separate sections of the city that were geared more towards the mining of coal to the north and west of the city. Because of the location of the jobs, most Italians resided outside the city limits on farms and rural areas. In 1958, William Gross, an African American, decided to move to the Seattle area and begin development of land to the south of the city. This began the immigration of the black community to the Seattle area, where most of the jobs were in the shipyards.

Structure of Seattle Government

In 1865, the Washington Legislature agreed to charter Seattle as a city. With this charter, the people of Seattle were required to elect five trustees, who would be elected annually; appoint a town clerk, a magistrate, and a city marshal. The five elected trustees adopted 14 ordinances within a two-year period. One of these ordinances was designed to implement a municipality tax, which led to resentment from the city's residents and the eventual dissolution of the first municipal government, as the city lost its charter.

A second city charter began in 1869, this time with requirements to implement a more traditional style of government. This included a mayor and a town council consisting of seven members, elected by the people at large to one-year terms instead of a board of trustees (Bagley, 1916).

According to Seattle City Archives (2013):

The City Charter was amended at the election of November 25, 1883, dividing the City

into three wards and providing that the Common Council be increased to nine members, elected for two-year terms... At the 1884 election, one member was elected from each of the City's three wards for one year, and two others from each ward were elected for two-year terms. Thereafter, all members were elected to two-year terms. Seattle once again changed its government setup in 1890.

A new Freeholders Charter was adopted in 1890, which increased the number of wards to eight and created a bicameral City Council, composed of a Board of Aldermen and a House of Delegates. The nine-member Board of Aldermen was elected at large to four-year terms. The House of Delegates was composed of two members elected from each of the City's eight wards. At the first election after adoption of the amendment, eight members of the House of Delegates and all members of the Board of Aldermen were elected.

The split bicameral city council was not well received by the people of Seattle, and so in 1896 the city changed back to a single body consisting of 13 members.

With a government in place, the city was beginning to grow economically by the late 1800's. According to Crowley (2006), the city began to "buzz" with private ferries and steamships. The railroad was beginning to spread all across the area as well.

Seattle was growing rapidly; however, it faced its tragedies and triumphs just as any other large city. In 1889, fires broke out in downtown Seattle from an overheated pot of glue and engulfed 64 acres of wood-framed buildings and docks (Crowley, 2006). After this tragic event, Seattle became known as a city that could overcome disaster and jump right back on its feet. The Great Fire of 1889 helped the city's newly established government shape its future

growth. Crowley (2006) explains, “One month after the fire, voters approved the city government’s development of a public water system. City Engineer R. H. Thomson began laying pipe to tap a vast watershed on the Cedar River 40 miles to the southeast. He consciously planned it to serve a metropolis of one million.”

The city of Seattle started as a machine government structure and had corruption deep within its political roots (Berner & Dorpat, 1991). “Mayor Hiram Gill was elected to the City Council, and became embroiled in a battle over whether Seattle should be an 'open town,' as in open to gambling and prostitution. Mayor Gill appointed a police chief who collected bribes from prostitutes and tolerated gambling at about 40 joints downtown. In 1911, after less than a year on the job, voters forced a recall election and dumped him” (Anderson, 2001). Putman (2008) elaborates on the corruption by describing the City’s Police Chief, C. W. “Wappy” Wappenstein: “Walking the streets in his pinstriped suits and derby, Wappy learned the name of every prostitute and gambling den owner. Apparently his regulation of the district went as far as the imposition of a ten-dollar-a-month “fee” on local harlots, which he deposited in his own pocket.” In addition to problems with high-ranking politically appointed officials, politicians also had ties to construction companies that were accused of fixing prices and distributing work. Putman (2008) explains that the amount of political corruption caused a rise of women’s interest in politics and began change the entire political scheme.

In 1910, the city amended its charter to end the ward system and start the process of non-partisan elections (Seattle City Archives, 2013). According to Berner and Dorpat (1991), “1911 marked a high point of reform accomplishment within the city and in the city’s relationship to the state legislature” (p. 116). After the 1911 election, the city turned around

from the police chief and mayor having ties with prostitutes and the gambling business to beginning to see a positive increase in the city's use of funds and distribution of work across the city's construction companies. The city was now in transition from a machine city run by a corrupt mayor and police chief to a reform city that was responding to the public's needs and development of the downtown Seattle area.

Growing in a new century

With the turn of a new century, Seattle was growing rapidly. There was a surge economically in addition to population, making it one of the fastest growing cities in the Pacific North West. According to Berner and Dorpat (1991), "The arrival of the SS Portland from the Klondike on 17 July 1897, with its 'ton of gold,' launched Seattle's twentieth-century economy" (p.4). Berner and Dorpat elaborate on Seattle's expanding economy by explaining that Seattle controlled 90 percent of all the ships involved in Alaskan trade after 1905. In addition, between 1895 and 1900, water-based commerce in Seattle had grown nearly eightfold. According to Putman (2008), "In 1910, Seattle leaders still yearned for a stronger manufacturing base, but were hardly disappointed with the city's economic and demographic growth in the previous decade. The city's economy appeared strong and Seattle had become a true metropolis" (p. 34). Putman (2008) explains that by 1910, Seattle was a vibrant and rapidly growing city that was now divided up into fourteen political wards, populated by a vast number of ethnic groups and several different classes of people.

Even with the positive outlook, Seattle had its economic scares. According to Putman (2008), "As the first decade of the twentieth century came to a close, a stubborn depression punctured the city's buoyant and confident outlook" (p. 54). In 1907, the nation went into an

economic panic, which caused Seattle its worst unemployment since the 1890's. However, the city of Seattle could see the bright future ahead, and the local Chamber of Commerce officials took it into their own hands to publicly campaign and persuade people and businesses to keep working and keep hiring, as, in their minds, the economic downfall would be temporary. The Chamber of Commerce proved to be correct, according to Putman (2008): "By 1909, the city's economy rebounded from the Panic of 1907..." (p. 61). Seattle was once again back on its feet and rapidly growing.

The Boeing Era

Between World War I and World War II, Seattle re-developed from being a raw materials provider to a raw materials shipping city. According to Berner and Dorpat (1991), "At the turn of the century, construction firms dominated Seattle's manufacturing sector, as the city's population boomed from 80,671 in 1900 to 237,000 in 1910" (p. 7). As construction and industry began to take precedence in Seattle, the United States military began to take notice and started placing large contracts for shipbuilding with Seattle-based ship manufactures. As Seattle continued to add jobs and industrial opportunities, other West Coast cities were growing as well. "While it was the climate that attracted Midwesterners to Southern California, it was the opportunity for jobs as well as business and professional careers that brought them to the Pacific Northwest"(Berner and Dorpat, p. 34). With this change in industry came a decrease in employers and jobs offered to the people of Seattle. During the Great Depression, studies showed that the migration of people going west had re-focused on going to California rather than Washington.

The settlement pattern coming out of the depression and into WWII kept the population

low until the Boeing Corporation began receiving military contracts for planes, which then increased the population of Seattle and spurred new economic development. According to Sale (1976), Seattle was strong enough to withstand the economic downturn that crushed other cities. During the twenties, the recession was felt hard in Seattle, but during the Depression of the thirties Seattle was at its low, along with every other city in the country. During the war, the Royal Air Force decided to contract with the Boeing Corporation. This increased the demand for planes, which rapidly increased the staffing at Boeing. Sale (1976) writes that, in 1939, Boeing employed 4,000 people. By September 1941, that number had increased to 30,000. Few industries had ever employed such a large payroll, much less a company in the Northwest.

At the peak of the war in 1944, employment at Boeing in Seattle was up to 50,000, with contracts totaling over \$600 million in sales. The rest of Seattle's manufacturing totaled over \$70 million, one-eighth of Boeing's 1944 figures. With the Boeing Corporation employing so many staff, people flocked to Seattle to work for the company. This in turn increased the city's economic status dramatically during the war. Nevertheless, this boom was short-lived, as the Boeing Company laid off three-quarters of its workforce after the war ended in 1945. However, after the war, the manufacturing industries in Seattle began to produce various types of goods and absorbed Boeing's laid off workers. "...it was not defense (budgets) that would maintain the boom but houses, cars, highways, refrigerators, television sets, washing machines" (Sale, 1976, p. 186).

During the war, the Seattle Housing Authority decided to build new housing for the city's poor families that were living in "shanties" on the dockside of the city. Additionally, the

city recognized that the industrial market was beginning to grow; with the decision to build new housing for the city's poor families, they were able to use that space for more manufacturing warehouses in an effort to continue the growth of Seattle's dockside industry. "Seattle was one of few American cities at the time to build high-quality, publicly funded accommodations at a price the poor could afford and without regard for race or national origin" (Klinge, 2007, p. 198). This began the trend of pushing residential areas outside the downtown central city and central business districts.

"The late 1940s saw real growth in the suburban areas around Seattle including Shoreline, White Center, Highline-Burien, Northshore-Bothell, Kirkland, Bellevue, Kent, and Auburn. Many areas that had recently been farmed were now becoming residential developments" (Payton 2000). The town of Bellevue was the first in the Seattle area to construct a shopping area.

In 1950, the Northgate Shopping Center opened just outside the city of Seattle. This began the migration of residents from the inner city to the suburbs and neighborhoods located outside the downtown area. The building of shopping centers outside the Lake Washington and Seattle area began to expand the growth of the city to new suburbs and unincorporated King County, which began seeing dramatic gains of smaller towns and new residential areas (Klinge, 2007).

These construction projects continued to increase the population of Seattle and its surrounding areas and led to more ethnically diverse cultures. These cultures included large numbers of African Americans that had arrived to work during the war. They occupied the homes of Japanese-Americans that were placed into internment camps during World War II, by

order of the president. “In 1950, the Eastside population stood at nearly 33,000. By 1960, it had doubled” (Klinge, 2007, p. 206). The owner of one of the malls outside the city had converted acres of former farmland into wide-open lots that were ready to be developed into new homes. The city reached its booming period directly after World War II and into the 1960’s. Around 1965 the city had already grown by 750,000 people, and there were proposals for a rail transit system, new city parks, arterial highways, new flood control systems, new storm sewer separation systems, and a new domed stadium for major league sports (Sale 1976).

There were many factors politically, economically, and socially which began the postwar growth outside the Seattle metropolitan area. The city of Seattle was growing more rapidly than it had ever before in its history. The suburbs were thriving, infrastructure was being constructed to connect downtown to the suburbs, and the business sector was expanding. “...cities never grew naturally, like ripples in a pond. Even planning alone was insufficient. Politics and economics, plus the physical environment itself, dictated where the waves would flow” (Klinge, 2007, p. 207).

The implementation of the G.I. Bill put cash in the hands of veterans returning from war, which helped boost the economy of the United States as a whole, but Seattle saw its fair share of it. Low-interest housing loans helped spur residential development in the new subdivisions within suburbs outside the city. With these types of development happening in Seattle, the need for easier access from the heart of downtown to the suburbs had to be constructed in the form of bridges. This prompted the construction of the Mercer Island Floating Bridge to connect the eastern towns to the city and remove the cost and time of using ferries to cross the

lake. In addition, the implementation of Greater Seattle, Inc. was established as a business development group that set forth to get the residents involved with the aspects of nature that Seattle's waterways had to offer.

As Klinge (2007) explains, "Seattle became the nexus of the Pacific Northwest's 'military-metropolitan-industrial' complex, mirroring the Los Angeles-San Diego and San Francisco Bay areas" (p. 206). Seattle had decided to follow the plan of its neighboring major cities that seemed to be thriving on the utilization of its waterfront access and its ability to expand its residential areas. During Seattle's growth into suburbs, it began to encounter the problem of continuing development on the thin strip of land between Lake Washington and the Puget Sound where industries had taken over.

With the installation of new infrastructure outside the metropolitan area of Seattle, urban sprawl was almost impossible to prevent. "The growth at the edges of previous urban development began much earlier but become more pronounced with mortgage insurance programs that favored suburban locations and with heavy investment in the interstate highway system of the mid 1950s..." (Richardson and Bae, 2004, p. 255). With these incentives, it was hard or nearly impossible to deter urban sprawl in the postwar era.

The city of Seattle created a comprehensive plan that aimed at building up the core portions of Seattle, including Capitol Hill, First Hill, and Downtown. By focusing on the core of the city, they had aspirations that it would begin retaining some of the population that had left the center of the city and keep them from sprawling to the outskirts where the suburbs were spreading out. The majority of the Seattle population lived outside the lakes, which in return meant that they did not live within the downtown area of the city after WWII. The new cities of

Renton and Bellevue were connected to the interstate highway system to allow easier access to and from Seattle. These Seattle suburbs were incorporated to help shape the community and its development. The new towns were selling homes quickly and their population and stores were flourishing (Punter 1999). The creation of these new suburbs, according to Klinge (2007), caused the creation of over 180 separate agencies, excluding school districts. This was more than any other county in the nation, except Cook County, Illinois.

In Seattle, urban sprawl continued well into the late 1980's without much movement to curtail it. In the 1990's, sprawl-intensive development began to threaten the area's quality of life and the economy (Fox, 2010). Seattle and its surrounding suburbs began facing traffic congestion, population growth that put a strain on the environment, and depletion of the area's natural resources (Fox, 2010). The Washington State legislature responded to these concerns by implementing the Washington Growth Management Act (GMA). This act was designed to help reduce sprawl by encouraging developments that were already being served by public facilities and services (Fox, 2010). "With Washington's passage of the GMA in 1990, Greater Seattle was required to institute binding comprehensive plans at the municipal and regional levels" (Fox, 2010,p. 54). Fox (2010) continued to explain that under this new act, "a Vision 2040" was created and revised in 1993 to focus on growth and development in central places to better interconnect the city and suburbs through transit, to improve access to housing, continue economic growth, and to provide a safe, clean, integrated, sustainable, and efficient transportation system. With these goals, the city of Seattle began resisting future urban sprawl. Fox (2010) writes that the new development methods for the inner city include a mixed-use pedestrian friendly area where residents can live, work, shop, and participate in

cultural and recreational activities to draw the population more towards the center of the city. The city continued to prosper through the end of World War II all the way through the technological boom in the 1970's and 1980's with Seattle's newest company, Microsoft.

Seattle and the Technology Industry Join Forces

Little did anyone know, in 1979 when Seattle natives Paul Allen and Bill Gates moved their Albuquerque, New Mexico, company, Micro-Soft back to Seattle, that they would start the largest economic boom Seattle had ever seen (BBC News, 2006). The year 1979 was just the beginning for the technology industry in Seattle. Seattle through the years would become known as a world-class technological destination. A report by Community Attributes International (2010) explains:

Seattle offers access to the largest tech community of people with actual experience commercializing innovation. Amazon, Google, and the wireless industry, which has a notable history in Seattle, are all assets that make Seattle nationally competitive. The presence of wealth and leaders who created tech companies also makes Seattle a world-class destination for continued Cluster growth. (p. 17)

Seattle has continued to profit since the day the Microsoft founders made the decision to move back to their home city and establish their already multi-million dollar start-up. Since then, Microsoft co-founders have looked at Seattle as the world leader in technology. They continue to invest in local start-ups and university programs to train the entrepreneurs of the future.

According to Reuters columnist Bill Rigby (2011):

Money from Microsoft co-founders Gates and Allen is evident all around the city, from the University of Washington's computer science department to the new Gates

Foundation building opposite Seattle's iconic Space Needle. Microsoft directly helps startups by giving them free software through its BizSpark program, while its millionaire alumni quietly guide the next generation.

As discussed in a report for the City of Seattle's Economic Development Office, Sommers, Carlson, Stanger, Xue & Miyasato (2000), "Seattle is in the midst of a new Gold Rush that has resulted in the creation of thousands of new companies in rapidly growing software, biotech and electronic commerce industries" (p. 5). Seattle is a perfect use-case example of how geographic distribution of growth, leaders with a focus of how to grow the city, and investment into the future of a city's businesses pays off (Sommers et al., 2000).

The technology industry in Seattle is surging tremendously. According to Sommers et al. (2000), "Looking at the growth by sector, Seattle itself saw 6,000 new high tech jobs from 1995 to 1998, while the region as a whole saw 27,000 new high tech jobs" (p. 9). Seattle is home to some of the largest technology industries, causing the city to be placed on the radar of entrepreneurs, investors, and economists worldwide. According to a recent Puget Sound Business Journal article (2011), "Seattle's demand for tech workers is scorching. The job-growth rate among these workers hit 5.1 percent recently, nearly four times the national average. Discovery Bay and other companies are scrambling to appeal to applicants in every way they can. And culture and amenities near a workplace make a big difference, said Sam Grocott, vice president of EMC Isilon."

Seattle is not just seeing growth in specific neighborhoods, but across the entire interior and exterior of the city. With help from the Washington Growth Management Act of 1990, the city has been able to reduce urban sprawl and continue building inside the city by utilizing

abandoned buildings to house new businesses. “The transformation of Seattle’s South Lake Union district stands as a metaphor for this city’s emergence as what some would argue is the West Coast’s second most important hub of technology and entrepreneurship” (Rigby, 2011). With a title of “hub of technology,” Seattle has grabbed the attention of investors from across the country and world. Rigby (2011) elaborates; “Last year, Venture Capitalists (VC) invested \$620 million in 95 companies in the Seattle metro region, up 11% from \$558 million that went to 86 companies in the area in 2009.” Seattle is a perfect example of homegrown innovation. As large technology firms grew in the Seattle area, their founders began to invest in the region to continue growing their company, and started investing in start-up organizations (Florida, 2002).

Public Policy for Economic Technology Development

“Since it (Seattle) first burst onto the world scene with the Klondike Gold Rush... growth has been marked by innovation, aggressiveness, risk-taking, and the self-confidence to assert leadership from the far corner of the map” (Puget Sound Regional Council, 2011). Seattle has shown great progress toward offering assistance and information to start-up technology companies with an attraction to moving into the Seattle downtown area. One of the major incentives that new companies look for is tax breaks.

According to Seattle Business Initiatives (2013):

The City of Seattle prioritizes long term economic development planning that promotes job growth, attracts new businesses, and helps existing businesses expand and grow profitably. To support the efforts of the Office of Economic Development (OED), Washington State offers a number of flexible business incentive programs. These

programs include a wide variety of industries, including aerospace, renewable energy, high technology, and more.

The Seattle Business Initiatives (2013) further explains that Seattle is thriving with entrepreneurship and has new business starting up every day. New businesses face challenges, such as where to locate the business, how to pay for the business, how to attract quality employees, and how to file for city permits. “Tax exemptions and credits, customized employee training, and low interest loans are just some of the incentives for doing business in the Seattle-King County area” (Economic Development Council of Seattle and King County, 2013). Washington State and Seattle have made this an area of focus and has made it very convenient for any new business starters to reach out and discover all the incentives that are offered.

The state of Washington and metropolitan area of Seattle both offer businesses a number of incentives to move to the area. “Beyond the usual programs of federal government assistance, ... state and local governments in the area have responded with a package of incentives designed to meet the individual needs of business and industry” (Economic Development Council of Seattle and King County, 2013). The State of Washington does not have a personal income tax; therefore, businesses are spared from the additional burden of withholding, remitting, and reporting the income tax (Economic Development Council of Seattle and King County, 2013). The Seattle area (King County) offers businesses the benefit of no corporate income tax, no inventory tax, no tax on interest, dividends or capital gains, and no sales or use tax on machinery and equipment used in manufacturing operations (Economic Development Council of Seattle and King County, 2013). The State of Washington and the

Seattle area have focused on these tax incentives, as they have seen the increase of businesses coming into the state and Seattle metropolitan area dramatically increase since these were put into place (Economic Development Council of Seattle and King County, 2013). The Seattle area is an economically and fiscally strong area with the businesses that are already in place; therefore, they are able to waive the tax requirements that most other cities and states are not able to waive. Washington State also worked on reforming their Workers' Compensation System, which makes it one of the lowest cost programs in the country (Economic Development Council of Seattle and King County, 2013). This program is based on hours worked, rather than the wages paid, which exempts tax from being paid on vacation, sick leave, or time-off (Economic Development Council of Seattle and King County, 2013). With this structure in place for the State of Washington, they are able to continue to draw businesses into the state and the Seattle region.

Urban Renewal

“Almost all the Seattle firms interviewed spoke of the desirability of urban amenities such as excellent public transportation, a mix of restaurants, retail stores, and entertainment and the diversity of Seattle and its neighborhoods” (Sommers et al., 2000, p. 15). This report was used by the city of Seattle's Economic Development office to focus on what they needed to focus on in order to bring more companies into downtown and suburbs of Seattle. “Creative people, in turn, don't just cluster where the jobs are. They cluster in places that are centers of creativity and also where they like to live” (Florida, 2002, p. 7).

Seattle recognized this theory many years ago, and in addition to increasing the city as a center of technical innovation and high-tech industry, they are striving to become a broadly

creative community (Florida, 2002). Seattle recognized that if it let its downtown deteriorate, the city would begin collapsing in and would lose a lot of the technology industry that it worked so hard to build up all these years. With this “urban renewal,” Seattle has been able to continue to build its downtown, which attracts many companies each year. “Seattle illustrates the trend. Nearly half of all high-tech jobs in Seattle are located in the city versus 35 percent in the suburbs” (Florida, 2002, p. 289). In Seattle, small businesses prefer to locate in the city rather than the suburbs. This is because they do not have to focus on offering internal amenities such as health clubs and restaurants as they are already in the area (Florida, 2002).

Seattle knew that in addition to taxes and finance, education was another investment that needed to be made to continue to grow the city’s educated workforce for new companies coming into the city. Sommers et al. (2000) explains, “Seattle’s Office of Economic Development, through its Seattle Jobs Initiative (SJI), brings together employers looking to hire skilled entry-level workers and Seattle residents seeking living wage employment” (p. 28).

A perfect example of this education initiative in action is how, over the past several years, large Web companies such as Facebook Inc. and Google Inc. have begun opening satellite offices in the Seattle area due to the easy recruitment of highly trained technical workers (Wingfield, 2011). In addition to employee recruitment, large web companies have their eye on Seattle due to the lower wages they have to pay their employees and lower costs for office space or building permits (Wingfield, 2011). “Regional planning agencies, local governments, and economic development organizations across the country recognize the benefit of aligning the academic and research missions of colleges and universities with regional economic development objectives” (Puget Sound Regional Council, 2012, p. 56). In an attempt to align

Seattle's education institutions with the industries in the area, the Puget Sound Regional Council has worked with institutions to create Innovation Partnership Zones (IPZ). "The Washington Department of Commerce is utilizing IPZ's to bring together the private sector workforce and university researchers to develop new methods of innovation" (Puget Sound Regional Council, 2012). "Washington's Innovation Partnership Zones are one example where universities, businesses, and communities are partnering to foster new innovation-led economic development" (Puget Sound Regional Council, 2012, p. 56).

Seattle is one of America's most educated cities. A recent study of *Kiplinger's* 10 best cities showed that over 54% of Seattle's adult residents possess a Bachelor's degree or higher, which is almost twice the national average (Economic Development Council of Seattle and King County, 2013). Employers in Washington State have access to over 30 state and federal programs that provide assistance with accessing labor market information, the recruitment of new employees, and the ability to design custom training for their staff (Economic Development Council of Seattle and King County, 2013). This means that the education and public policy infrastructure is in place to train new employees for technical firms that have located to the Seattle region.

At the federal level, the Workforce Investment Act (WIA) is used in the Seattle area to train potential employees at community colleges, vocational schools, and with private contractors (Economic Development Council of Seattle and King County, 2013). By using the WIA, businesses and employers can play a major role in determining how the job training funds should be spent. "Programs identified and developed as part of the WIA is administered locally by the Work Source Investment Council America's Jobs Network (formerly the Job Training

Partnership Act)” (Economic Development Council of Seattle and King County, 2013).

At the state level, programs are set up to help educate employees for companies in Washington. One of those companies is called the Job Skills Program (JSP), and is administered by the Board for Community and Technical Colleges (Economic Development Council of Seattle and King County, 2013). Most start-up business are eligible for the JSP training. JSP training offers three different tracks for employees to take: new employee skills training, current employee retaining, and current employee upgrade training (Economic Development Council of Seattle and King County, 2013). This type of state sponsored program is designed to meet the short-term, job-specific training needs of industries and offers a 50 percent matching requirement for customized, quick-start training projects.

Improving the Seattle Infrastructure

Seattle has not focused on taxes and education alone to entice residents and businesses into the city and surrounding suburbs. Seattle requires a transportation infrastructure to accommodate the commuters that live in the suburbs but work at the up-and-coming technology firms in the city. According to a 2011 study of the Seattle region’s transportation options, there are 132 routes on Metro that serve the Downtown area, 14 routes on the Sound Transit line that serve Downtown, and 18 Community Transit Routes that serve the Downtown area (State of Downtown, 2013). Seattle found that two-thirds of those who work in Downtown Seattle now commute by public transportation rather than single-occupancy car (State of Downtown, 2013). The infrastructure that Seattle has in place is currently well ahead of the demand needed by public-transportation riders. In addition, it continues to grow, reaching out to the further suburbs in an effort to bring more business to Downtown Seattle.

With the increasing population in the Seattle region as businesses flock to the area, it is a priority for the Seattle Planning Commission to focus on residential and business zoning districts. Seattle uses incentive zoning in its models and forecasts for the number of residents compared to jobs and businesses moving into the Seattle area. The vision of the Seattle Planning Commission, according to a white paper by the Seattle Planning Commission (2007), “is one in which our city has thriving neighborhoods where residents and businesses work with the City to plan and produce projects that enhance the quality of life for those who live, work and play in Seattle.” Seattle’s incentive zoning plan is focusing on rezoning portions of the city to increase development capacity. Seattle is looking at enacting its incentive-zoning program into multi-family and commercial zones to increase the draw to those regions.

One of the most important zoning projects is that taking place in the Seattle suburbs of Bellevue and Redmond. This zoning project focuses on maintaining affordable housing in the area of large commercial developments, and offers a variety of bonuses to companies that are willing to accommodate this zoning project (Seattle Planning Commission, 2007). In 2007, the Seattle Planning Commission made several recommendations to city officials in assisting the City of Seattle to develop zoning programs to achieve public benefits. According to the white paper study done by the Seattle Planning Commission in 2007, some of those recommendations included maximizing affordable workforce housing, considering new strategies for increasing multi-family development, and including multiple housing choices in already established residential zoning districts.

The Seattle area is recognized as an emerging world leader in technological and healthcare companies. These companies cover a wide range of economic classifications in the

Metropolitan Statistical Area (MSA) for Seattle. These classification areas include aerospace, clean technology, healthcare, marine technology, and software and hardware technologies. According to the Office of Intergovernmental Relations (2011), “The Seattle MSA accounts for 1.93 million jobs and has an estimated gross metropolitan product of \$218.77 billion.” Within the aerospace classification, the Boeing Company is the largest corporation and accounts for over 82,000 employees; the company continues to grow with the addition of new aircraft contracts from the U.S. Navy (Office of Intergovernmental Relations, 2011). The information and communication technology (ICT) companies in the greater Seattle MSA account for one-third of the \$10 billion in annual revenue that comes from the video game industry (Office of Intergovernmental Relations, 2011). The clean technology industry in Washington State operates on 73% hydroelectric power, and the Seattle City Light power entity has been carbon-neutral for several years (Office of Intergovernmental Relations, 2011). Seattle is home to the combined industries of healthcare, biotechnology, and information technology, which are developing new entities such as bioinformatics and health informatics. Much of these industries’ research was created based off a \$36 million endowment fund from the Bill and Melinda Gates Foundation, an avid advocate for global health and biotechnology industries. Seattle’s marine technology is an up-and-coming industry with 100 boat-building firms and 41 building and repair firms across the state of Washington (Office of Intergovernmental Relations, 2011).

Global Recognition and Economic Growth

None of these industries could be possible without the assistance of the state of Washington and the region and metropolitan governments in the MSA. The city of Seattle is part of the Puget Sound Regional Council (PSRC), which consists of cities, towns, counties, ports, tribes, and transit agencies that work together to develop policies and to help grow the cities in an organized and efficient fashion. The PSRC general assembly is the overall governing body to the entire council. This assembly oversees the executive board, which then oversees an operations committee, transportation policy, and growth management policy (Puget Sound Regional Council, 2009). This committee maintains contact with each governing body of the MSA local governments and holds meetings to discuss transportation, economic development, and strategic policy planning.

According to the 2009 highlights publication from the PSRC, “Regional cooperation is more important than ever before as we work together on economic recovery efforts and lay the foundation for future prosperity and a vibrant, livable region” (p. 1). With this council overseeing and providing constant communication with each governing body of local and regional governments, the entire economic development, transportation, and regional coordination and outreach is continuing to prosper.

In 1985, the city of Seattle began a comprehensive Downtown Restoration project that focused on optimizing the economic strength of the district, while keeping its existing cultural and social resources intact. According to a case study done by the Office of Energy and Environmental Affairs in the Commonwealth of Massachusetts, “The four central goals to the effort are: 1) retain low-income housing; 2) preserve historic landmarks; 3) encourage infill

development in historic districts that is compatible with the district character; and 4) create incentives for varying building scale” (par. 1). The city targeted historic buildings, art institutions, and buildings that provided affordable housing to preserve during the restoration.

The city designed this program in an effort to revitalize the downtown neighborhood districts and make them more attractive to visitors and to new residents to live in the downtown area. Seattle struggled for years trying to figure out how to go about the restructuring of its downtown districts and how to increase residency in the downtown area. According to Wallace Turner (1986), “for decades 'the city couldn't decide what to do' about the downtown, as one proponent of redevelopment put it. Now, Seattle has made up its mind.” Now that Seattle is wrapping up its downtown restoration project, the city is looking at the redevelopment of the south downtown area to increase its population density to continue the track of returning life to its downtown neighborhoods. According to the Department of Planning and Development (2011), “The Department of Planning and Development initiated a planning effort to focus on the neighborhoods of South Downtown. The South Downtown Study was a project of the "Center City Seattle" strategy. The Center City strategy focuses on encouraging economic growth, transportation, new housing and great urban neighborhoods in Seattle's downtown core and the nine centrally located neighborhoods immediately around it” (par. 2).

With the redevelopment plan that took effect in 1985, the city was able to transfer the rights for development between different districts in the downtown area. According to the Case Study done by the Massachusetts Commonwealth, “The Seattle downtown revitalization program created a complex schema of sending and receiving areas based on

specific planning objectives for particular areas of the downtown” (par. 2). This system is designed to maintain a mixed building height appearance in specific development zones for retail use. The city began offering incentives to developers that would include affordable housing, day care facilities in close proximity to commercial and office space. They also offered incentives to developers that would restrict the lower level floors of sky rise buildings to retail use only.

In addition to the “use incentives,” there were also “design incentives.” These included pedestrian or bicycle amenities, atriums, green rooftops, and art display areas. The city of Seattle is known for its “green” building incentives. These include incentives to development companies that create green roofs for buildings, water conservation for new multi-family and commercial buildings, and constructing buildings with energy star compliant equipment (Office of Sustainability and Environment, 2010). Several buildings in the downtown areas of Seattle have been redeveloped to include housing and other residency accommodations that were previously not available in the downtown neighborhoods. The Seattle Office of Sustainability and Environment (2010) is currently working on a citywide plan to create a visionary roadmap of what they want the city to be like by the year 2030 in their Comprehensive Plan.

Future Growth

The city of Seattle is at the top of its globalized economy that encompasses the aviation and technology markets. According to a press release from the POLICOM Corporation, “The Seattle, WA metropolitan area has the strongest local economy in the nation according to POLICOM Corporation’s annual economic strength rankings... The top rated areas have had rapid, consistent growth in both size and quality for an extended period of time” (p. 1). With

the Boeing Corporation and Microsoft Corporation, Seattle is able to maintain its thriving economy even during the downturn of the United States economy. A statement by Stephen Dunphy (2010) explains exactly why this is: “The next time a Boeing jet flies overhead or that little chime sounds as you open Windows 7, give Boeing and Microsoft a cheer. Without those two companies, Washington State and the Seattle area economy could be as dismal as other states on the continental West Coast” (par. 2). The central downtown of the city is undergoing revitalization efforts, the outer parts to the city are thriving off aviation and technology, and the population of Seattle continues to grow.

Seattle’s past has been filled with difficulties, but the great achievements cause the city to be known as the boom and bust city of the West. This is due to the thriving economy that large companies and industries have brought fourth. Sommers et al. (2000) explains, “The wealth generated by Microsoft and other software companies has saved the Seattle metropolitan area from two recessions; in fact, the state has not experienced a recession in 18 years. The region houses the nation’s most valuable company” (p. 5).

It began with lumber and gold, although eventually those industries died out. Today, aviation, technology and the continuing development of large fortune 500 companies make Seattle one of the best economic cities of modern times. Author Paul Schell and Tom Alberg (2002) say it best, “The 21st century hit Seattle like a storm. We had everything -- earthquakes, droughts, riots and a tidal wave of new residents. The upheavals and turmoil put us at the epicenter of changes happening worldwide. We had a decade of economic success, then a rapid economic decline. It's an old story of boom or bust” (par. 1). The forming of a government that collaborates with the other entire surrounding city, county and state

governments works wonders in the city in an effort to continue the increase of population.

Seattle's plan for the future is to continue the tradition of environmental stewardship, continue community leadership development to ensure communication across the city's neighborhoods, and increase infrastructure to develop further transportation routes that assist with increasing the economy further. When the city lost Boeing's headquarters in 2001, most cities would have crumbled; however, with as diverse of an economy that Seattle has, they were able to remain strong and flexible with other industries and continue to increase trade and tourism. Seattle has come to be known as one of America's most resilient and economically sound cities, and it is certain that Seattle will continue to develop as long as the need for technology continues to increase. It is expected that great things will come from Seattle in the near and distant future, and it will continue to be a global economic leader for the technological spectrum.

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VITA

Graduate School
Southern Illinois University

Jarrold P. Echols

Jarrodechols@gmail.com

Southern Illinois University Carbondale
Bachelor of Science, Information Systems Technology, May 2010

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