

OREGON AND WASHINGTON STATE COMPARATIVE ANALYSIS OF
INFRASTRUCTURE AND THEIR TRADE RELATIONSHIP WITH CHINA

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ABSTRACT

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Abstract

The Preservation and expansion of infrastructure and global trade remain hot-button policy issues for nations across the globe. A beneficial way of approaching the infrastructure and trade question is to commence a comparative analysis of different local government jurisdictions with similar institutional characteristics. My thesis analyzes and considers the domestic infrastructure shortcomings in the states of Oregon and Washington, which both act as the gateway to Asia. With an emphasis on the People's Republic of China, given the intrinsic trade relationship between the States of Oregon and Washington and its pivotal role in the Global Economy. We explore how both states fund their local infrastructure systems, with emphasis on their respected port systems, and the vital attention that it needs for both Oregon and Washington State to increase their trade intakes.

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Chapter 1

Introduction

In 2050 the United States, despite a ballooning Trade Deficit, will be one of the top trading nations in the world. Research spearheaded by Citigroup's chief economist revealed that world trade (the total sum of exports and imports) would swell from \$37 trillion in 2010 to \$287 trillion by 2050 (Badkar & Ro, 2011). Other countries that will join the United States as the top trading nations will include the United Kingdom, Germany, Japan, South Korea, Hong Kong, Indonesia, India, and China. Trade data from the U.S. Commerce Department reveals that the bulk mentioned above are some of the top trading partners of the United States. Most of them are countries based on the continent of Asia. A significant chunk of these goods and services are coming from Asia, making the West Coast a pivotal player in ensuring that the cargo makes it in and out of the ports. The only puzzle that hinders the U.S. from successfully achieving this goal in the long-term is the nation's decaying infrastructure. The vast network of roads, bridges and rail systems that connect Americans to our ports, suburbs, metropolitan, and rural areas are in dire need of repair and investment.

The United States, without one iota of doubt, is still one of the world's most robust and vibrant economies. The size of our overall economy in terms of Gross

Domestic Product (GDP) stands at \$18 trillion, our unemployment rate stands at 3.9%, and Consumer Confidence remains high. Nonetheless, our economy, which values at \$18 trillion is reliant on our infrastructure, which includes our roads, bridges, rail, and ports to keep the economy afloat. Congestion continues to rise on our roads, and a lapse in inadequate oversight to maintain these structures is causing our infrastructure to decay at a quicker pace. The American Society of Civil Engineers (ASCE) every year releases a state by state report of infrastructure conditions across the entire country. Last year ASCE gave the United States a D+ ranking after they examined all our infrastructure components, which comprised of roads, bridges, rail, and other miscellaneous parts of our infrastructure. Former Secretary of Transportation Ray LaHood worked vigorously with the Obama Administration to reinvest in U.S. infrastructure under the American Recovery and Reinvestment Act (ARRA). LaHood bluntly stated in an interview with 60 minutes that U.S. infrastructure is on “Life Support” (LaHood, 2014, Page 1). Besides, LaHood emphasized that a lack of investment is causing our infrastructure to falter. LaHood is not alone in his assessment as several economists, engineers, and historians back his claim. Most notably American engineer and historian Henry Petroski in his book *The Road Taken: The History and Future of America's Infrastructure*, insufficient infrastructure levies burdensome costs of the economy and public safety is placed into dire situations as well. Roads and bridges remain deficient resulting in longer wait times, which adversely affects businesses. Businesses will be forced to raise prices to produce and distribute their goods. In the United States, the state and local governments are the majority stakeholders of the nation’s roads, highways, transit, and water systems. Funding for these infrastructure projects and operations has been on a steep decline since

the 1930s. During the New Deal era, more specifically the late 1930s, infrastructure investment peaked at 4.2% of GDP and fell to less than 3% by the 1960s (Stupak, 2018). As of 2016, the number stands at 1.5% of GDP.

The West Coast most notably serves as a gateway to Asia and is crucial in terms of ensuring trade remains healthy, reciprocal and robust to satisfy the needs of both parties. The United States West Coast consists of five states, Alaska, California, Hawaii, Oregon, and Washington. Only California, Oregon and Washington are considered major players in the vitality of the trade relationship with Asia though. These ports in the three states mentioned above provide a vital connection between the United States consumer, industrial, and agricultural sectors and Asia. As several Asia economies are still in the "developmental" stage, there remains a high degree of salience of the West Coast ports. Not only do these ports symbolize a growing Trans-Pacific relationship that provides jobs and an economic catalyst that strengthens the agricultural, industrial, and retail sectors of the United States economy. In 2013 the Pacific Maritime Association estimated that cargo handled along the West Coast ports International Longshore and Warehouse Union (ILWU) supported over 9 million jobs throughout the United States. When dealing with the consumption aspect, about \$35.2 billion of direct, induced/consumption expenditures and indirect personal income was generated locally once handling cargo at the West Coast was added. When focusing on how containerized cargo impacts employment, estimates reveal that containerized cargo handled at these ports supports nearly 9 million jobs. Those specific jobs are with the manufacturers producing Asian Exports, retailers importing numerous and miscellaneous items that include apparel, shoes, furniture, and toys. These products are not just limited to consumer items, auto parts, computer

components, and agricultural items are also pivotal goods being shipped off to Asian markets.

West Coast State's Analysis

In a state by state economic analysis, these ports are crucial to the economic viability when concerning California, Oregon, and Washington. In California, port activity at the State ILUW maritime terminals supported 3.7 million jobs and contributed \$743 billion in economic output. In total, port activity represents 37% of the Golden State's Gross State Product. Oregon and Washington, given their respected sizes, do not rely on ports as much as California, given the Golden States size. Still, port activity is a crucial determinant in generating economic activity. In Oregon, ILUW terminals were responsible for 68,600 jobs and contributed \$9.6 billion to the Beaver State's Economy (Martin Associates, 2014). The port activity represents less than 5% of Oregon's State Gross Product. In Washington state, ILUW terminals helped employ 524,736 individuals and port activity represented 60% of the state's GDP (Martin Associates, 2014). These findings should not only underscore the vitality of the U.S.'s economy, but these ports act as a pivotal driver to the respected State and Local economies. Services that suffer from disruption or hindrance in the form of a shutdown or slowdown will have an adverse effect, not only on the National Economy but individual state economies as well (Martin Associates, 2014). Though not directly due to inadequate infrastructure, the 2002 work shutdown at the West Coast Ports had a gigantic on supply chain decisions of the crucial importers and exporters. Such structural slowdowns will not only dilute the economic importance of these ports to these respected states but to the United States Economy as well.

The Federal Maritime Commission in a report released in the summer of 2015, backs the Pacific Maritime Association by pointing out the shortcomings in U.S.'s port infrastructure. Improved Ocean shipping and Port standards will contribute lead to more efficient international supply chains. Improving Supply chains will not only increase trade volumes by lowering the costs of imported and exported good, but the distance that these goods travel to be sold and sourced also increases (fmc.gov, 2015). The report underscores the need to curtail congestion, as it goes hand in hand in improving efficiency standards, and salient in most trade-related issue today. Transportation costs, which are directly related to infrastructure quality, have become more of a burden than the implementation of Tariffs on goods coming in from other countries in a Study by Bensassi, Marquez-Ramos, Martinez-Zarzoso, etc. Their research investigated the relationship logistics infrastructure and trade by looking at a regional export from Spain. The research team cited a study from Jacks and Pendakur from 2010 – found that growth in global trade correlates with technological improvements in communication and transportation sectors. They use the United Kingdom as an example from the years of 1870-1913 during the transportation revolutions. The results were not able to definitively prove that maritime revolution was a catalyst in the shaping of the late-nineteenth century trade boom (Bensassi, Marquez-Ramos ect al, 2015). Though the authors point out that the decline of maritime freight rates across other miscellaneous countries may reveal a new and compelling story. Work from Bernhofen tells a different story, as their work focuses on containers and the intermodal transport system. Bernhofen's et al. found that containerization had a considerable effect on world trade during the time of 1962-90. The study states that containerization had a significantly impacted on the operation and

relocation of ports, but the entire transportation sector that went in tandem with the creation of a new and more efficient intermodal transport system.

The state of Washington established a unique position in the Pacific Northwest as an integral player in the movement of goods, people and services. The State is known for its two seaports in both Seattle and Tacoma, and together the two ports represent the third largest shipping hub in North America (www.fmc.gov, 2015). Today the Port of Seattle is the leading economic driver of the Pacific Northwest. The state of Washington is home to corporate giants such as Boeing & Microsoft. Those same firms designed the products in the U.S. and made in Asia. Infrastructure is crucial to the longevity of these respected firms. The port drives regional growth by generating 9.6 billion in personal income, 20 billion in real business income, employing 216k individuals and establishing a tax base of nearly 900 million in state and local taxes. Trade flows in terms of cargo currently represent \$47.4 billion of economic activity or 11.6 percent of the state's GDP. These impressive economic numbers, however, are not only being hindered by decaying infrastructure but are outright jeopardizing the state's economy. In 2017 ASCE released their state by state analysis of infrastructure standings across the Union. The ASCE overall gave the United States a D+ ranking. Fortunately, ASCE gave Washington a C ranking, higher than the national average. Long before ASCE conducted their report on infrastructure, the Washington State Department of Transportation (WSDOT) and Washington State University (WSU) held a joint study/survey of freight dependent firms and transportation costs. The numbers vary depending on what study and report one view, but WSU & WSDOT hold that congestion on our urban road networks costs U.S. businesses \$85 billion annually. The wasted money is a direct reflection on wasted motor

fuel, lost productivity, and vehicles using a public road network. The study surveyed over 1,000 different Washington State private businesses and found that fifty-six percent would raise prices on the consumer to make up for the rising cost of doing business. Rising Business costs due to congestion and poor infrastructure standards will be passed onto the consumers causing spending to plunge. Given that consumer spending makes up two-thirds of the economy and when you add up all the direct, indirect and induced impacts – the state is projected to lose up to 27,250 jobs and \$3.3. Billion (2011 Dollars) in economic output (WSDOT, 2011).

Case in point the United States must start to invest in its infrastructure network to alleviate these obstacles. Research done Jeffrey Stupak from Congressional Research service reveals that allocation of these funds has been in decline since the 1960s. In numerical terms, Non-Defense gross investment has gone from 4% of GDP to about 2.5% in 2016 (Stupak, 2018). Stupak further reveals that these investments in Non-Defense spending were even higher during the 1930s, as was the case given the New Deal policies coming from Franklin Delano Roosevelt. Stupak holds that more funding towards the public capital stock, which would include improved roads, bridges, waterways, etc. Raises output in the near term and also allows individuals and businesses to be more productive in the future. Thus, allowing more time and additional resources that can be utilized to generate more economic output. Through a meta-regression analysis done by Stupak, found that on average for the United States, a 1% increase in the public capital stock (in real terms as of 2015: \$134 billion), resulting in a higher level of private sector economic output by 0.083% or in real monetary terms \$12.7 billion. When conducting the Meta-Regression in the long-term, a 1% increase would result in private-

sector economic output by 0.122% or \$18.7 billion. The Congressional Budget Office (CBO), estimates that a 1% increase in public capital would increase the long-term level of private sector output by 0.06% or in monetary terms \$9.2 billion. Stupak in his research does, however, note that these regressions were limited in scope and solely focused on the effect it would have on private-sector economic output (Stupak, 2018). Did not study what effect it would have on total economic output, given that the impact would be substantially more significant.

Importance of Trade to the U.S. & China

The United States must keep up with its infrastructure network to not only retain its economic edge but to remain a mixed economy as well. Given the waning state of the U.S.'s infrastructure, the additional transport cost will affect international trade prospects. Behar & Venables from the University of Oxford holds that trade flows depend on Characteristics of a source and destination countries, includes their economical size as reflected in income. Transport Costs shape the prospects of trade and go by variables such as distance, geography, infrastructure quality, trade facilitation measures, cost of fuel and transport technology (Behar & Venables, 2011). Distance, according to Behar & Venables, the distance will impede trade by increasing the cost of freight and the length of transit. With Asia China, rising in the ranks as a significant economic player the United States will have to look for ways to enhance its infrastructure to compete at a global level. Research by Marcus Noland, in 2009, from the Asian Economic Policy Review underscores the value of a robust trade relationship between the U.S. and Asia. The United States and Asia have equal footing in continuing their goals for shared prosperity and what links the two together is their stalwart belief trans pacific integration

is vital. U.S. leadership for the past half a century regardless of what political party dictates policy from Washington has continued to advocate for the liberalization of markets, trade and a financial system that made Asia the economic juggernaut that it is today (Noland, 2009). U.S. Policy has never solely focused on regional issues in Asia, instead, we have set our eyes on global economic matters that affect the world. Likewise, many governments within Asia take bilateral problems with the United States at the highest level of concern. Strengthening economic relations between the two has always been a top policy initiative for the two entities, especially in the realm of trade. In his testimony in front of the House Ways & Means Committee – Subcommittee on Trade Matthew P. Goodman the William E. Simon Chair in Political economy spoke extensively on the salience of expanding trade in the Asia-Pacific region. Goodman holds that the massive and mounting economic structure drives U.S. trade and investment in the Asia-Pacific area. Since the end of Cold War, the region has grown three-fold in economic size and the 21 nations who are joint members of the Asia-Pacific Economic Cooperation Group (APEC) – today make up over two-thirds of global gross domestic product (GDP). Today APEC accounts for nearly half of all global trade, totaling a mass sum of \$20 trillion worth of goods and services flowing around the Pacific Ocean last year (Goodman, 2017).

The surge in economic activity within the Asia-Pacific region has led to rapid economic growth, and U.S. exports growth to the Asia-Pacific economies continues. Despite the habitual rhetoric of a ballooning Trade Deficit, especially in Asia, U.S. goods which consisted of agricultural products, manufactured goods, and services that totaled \$452 billion in 2016 (Goodman, 2017). Trade within the Asia-Pacific Sphere has a clear

linkage of not only benefiting U.S. based firms but American workers as well. Trade with the Asia-Pacific region has led to 3.4 million jobs thanks to exports transported to the region. These reasons alone are not the only reasons to have a healthy trade relationship with Asia. Within the next Decade or 2030, Asia's middle class is expected to swell to 3.2 billion, which is eight times the current projection of the U.S's population during that same period (Goodman, 2017). A growing Middle-Class benefit not only the global community but the United States as well. A growing middle class in Asia will indeed have the disposable income to purchase U.S. goods and services, which will lead to more U.S. exports. More U.S. exports will translate into rising incomes and job creation. The United States should continue to ratify more Free Trade deals to remain on the pathway to prosperity.

With the Doha International Trade talks in a never-ending standstill due to agricultural disputes, the necessity of Bilateral Deals seems to be the only feasible path to success in cultivating growth. Robert McMahon of the Council on Foreign Relations wrote extensively on Bilateral Free Trade deals and primarily focused on Past Presidential Administration's efforts to get Free Trade deals implemented. He notes that broader trade deals are seldom ratified into law, making it necessary for countries to implement smaller trade deals to achieve trade liberalization with other markets (McMahon, 2006). McMahon's research reveals that the very first Free Trade Agreement (FTA) implemented by the U.S. was a pact with our longtime ally Israel. The FTA with Israel or better known as the U.S.-Israel Free Trade Agreement was signed into law in 1985 under the Reagan Administration (McMahon, 2006). Post 1985 the United States the United States has ratified multiple FTA's with other countries such as Australia,

Bahrain, Chile, Colombia, Jordan, Morocco, Oman, Panama, Peru, and South Korea.

Seldom, because multilateral FTA's are often onerous to implement due to various major parties expressing different objections. Nonetheless, the North American Free Trade Agreement (NAFTA) and the Central American Free Trade Agreement (CAFTA) have successfully become part of U.S. trade law.

Presidential Administration's according to McMahon focused on Free Trade deals in different parts of the globe which consisted of the Middle East, the Pacific Rim, and Latin America. The goal of FTA's is not merely for economic reasons. As mentioned above multilateral deals are often difficult to ratify, smaller deals often act as catalysts to improve the standings in developing and emerging market countries. The U.S. implements these FTAs not merely for economic integration, but to expand our national security strategy across the globe. The U.S. recognizes that national security and international trade impact on another, given that trade measures have often been used to safeguard national security (Sohn & Yeo, 2005). National Security talks between the U.S. and South Korea played an instrumental role in the negotiations for a trade pact between the two. Bringing national security to the table would act as a catalyst to enact a trade deal and stabilize the Korean Peninsula (Sohn & Yeo, 2005). Like our trade talks with South Korea, our trade pact with Singapore has produced related benefits. The implementation of the FTA has quelled the fears of many in Southeast Asia that the U.S. has immersed itself too deeply in the affairs of the Middle East. By July 2005 the U.S. and Singapore signed a Strategic Framework Agreement that expanded diplomatic and military operations between the two (Nanto. 2010). Robert McMahon

McMahon in his research cites work by Jeffrey Schott, a senior fellow at the Institute for International Economics, whose research focuses on international trade policy. Schott holds that "These deals are essentially about provoking domestic reform in the partner countries which will make it easier for them to pursue further trade liberalization at the multilateral level if they introduce more market-orientated reforms in their domestic policy" (McMahon, 2006, Page 2). The United States has experienced success in implementing trade deals in the Middle East, most notably with the ratification of FTA's with Bahrain, Israel, Jordan, Morocco, and Oman. Going back to Asia, the U.S. is replicating this strategy in that region of the world as they're doing with the Middle East according to research done by Douglas Holtz-Earlin. The U.S. currently has two FTA's in the region with Singapore and South Korea. Holtz-Earlin holds that applying the same logic to the Middle East makes sense, given that the U.S. is expanding its influence in the Asia-Pacific by expanding trade ties with China's neighbors. As mentioned at the beginning of my thesis I mentioned that the U.S. along with nine other countries will become the top trading nations of the global community by 2050. The bulk of those nations, not surprisingly, come from Asia with China being destined to become number one in that timeframe.

Chapter 2

U.S.-Sino Relations

The history and economic relations between the United States and China are rich and helped shape the trade relationship between the two. Relations between the United States and China dates to the late 18th century at the Guangzhou Province; upon the arrival of Protestant Missionaries, whose goal was to establish a clinic, which would later manifest into Guangzhou Hospital given the influx of patients (Monroe, 2014). To better understand the intrinsic relationship between the United States and the People's Republic of China, we must also look at China's relationships with other countries as well.

Between 1839 through 1949 China went through what is better known as its "Century of Humiliation," during that time China lost large portions of its territory to foreign entities (Monroe, 2014). With multiple nations claiming a stake in China's territory, then U.S. Secretary of State John Hay presented his idea of an "Open Door" policy. The Open-Door policy would keep China open to trade with all countries on an equal basis. Done so that no country would have complete control over China. Then-Secretary Hay sent notes those powers occupying land in China including Great Britain, Germany, France, Russia, and Japan. The notes were not legally binding; nonetheless, they marked the beginning of the U.S.'s trade Policy towards East Asia (Monroe, 2014).

Early 20th Century Relations & Nixon Visit

Strengthening trade relations, however, was not enough yet to appease the Chinese. By the late 1890s, despite all the goodwill to enhance trade relations, anti-foreign was mounting amongst the Chinese. Ultimately, leading to the Boxer Rebellion, named after a famed martial artist who started the group. The Rebellion gained steam, not just for its anti-foreign and anti-Christian beliefs, but for its overwhelming support towards the Qing Dynasty. Notably, the slogan around the Boxer Rebellion was called “support the Qing, destroy the foreigner.” (Monroe, 2014, Page 4). The Rebellion was short-lived, however, thanks largely due to the combined military strength of multiple other nations, this included the U.S. Marines. By 1901, the Qing Dynasty was forced to sign a settlement known as the “Boxer Protocol.” Upon signing the protocol, the Qing Dynasty would go on to lose its legitimacy. Multiple events followed that would undermine any hope in U.S.-Sino relations.

The most notable would include the “Red Scare.” Upon the end of WWII, the United States and the Soviet Union became rivaled nations as they entered the Cold War. The friction between the two World Powers caused a great deal of anxiety to grow amongst Americans who believed that communists and communist sympathizers were secretly penetrating the U.S. government as spies for the Soviet Union, compromising the country’s security and military secrets. China was grouped into the “Red Scare” due to the Chinese Communist under Mao Zedong, winning the Chinese Civil War over the Western-backed Kuomintang. Relations further deteriorated by 1950 during when the North Korean People’s Army invaded South Korea. The United States military with the assistance of the United Nations (U.N.) defended South Korea from the North Korean

Army. China, however, came to the aid of North Korea, which was later aided by the Soviet Union. America's fear reached a fever pitch after the Soviet Union, joined China & North Korea exacerbating concerns that communism was on the rise on another side of the world (Monroe, 2014). By 1953, the Korean War had ended in a stalemate with the ratification of an armistice treaty, thus dividing the Korean Peninsula into two nations, the Democratic People's Republic of Korea (North Korea) and the Republic of Korea (South Korea). Before the Korean War outbreak, President Truman declared that the United States would no longer interject itself into the affairs of the People's Republic of China and the Republic of China. Given China's support towards North Korea, Truman reversed that policy after the Korean War, by seeking the neutralization of the Taiwan Strait, the water channel separating Taiwan and China. Believing it to be in the United States best interest, Truman ordered that the U.S. Navy Seventh Fleet shield Taiwan from a tentative attack from the Chinese. The Taiwanese government under Chiang Kai-shek sent thousands of military troops to the offshore islands of China. China responded by shelling the islands, the U.S. countered by threatening to use its Nuclear Defense Apparatus towards China. By 1955 Congress passed the Formosa Resolution, authorizing then-President Dwight Eisenhower to authorization to defend Taiwan and the other miscellaneous islands of the coast of China. Three years the People's Republic of China once again used proactive force against Taiwan by shelling the islands. The United States once again threatened to use its nuclear arsenal against China. The strategy proved useful, until 1964, when the People's Republic of China successfully tested its atom bomb and became a nuclear power (Monroe, 2014).

Five years later President Richard Nixon was inaugurated as the 37th President of the United States on January 20th, 1969. In his inauguration speech, Nixon said, “We seek an open world – a world in which no people, great or small, will live in angry isolation” (archives.gov, 2019). There were no lines of Communication between the United States and China – given their isolationist stance under Chairman Mao Zedong. Nixon embarked on an ambitious world tour during the Summer of 1969, some of the most salient trips were to Pakistan and Romania. Those two respective countries had the strongest ties with China, and Nixon empathically stated his belief that “Asia could not move forward if a nation as large as China remained isolated” (Jian, 2003, Page 34). Nixon decided to keep all actions related to China a secret from the State Department, by using foreign nations as a line on talks. Notably, Nixon used President Yahya Khan of Pakistan to channel through him a solemn commitment to meet with Mao (Ghosh, 2013). Nixon did not shy away from wanting to speak to Mao while speaking to the public. However, Mao refrained from engaging with Nixon, believing that it would hinder his image as a communist leader.

By the Spring of 1971, “Ping-Pong Diplomacy,” became a pivotal step forward in forging diplomatic relations between the two. Japan that year was hosting an international Ping-Pong tournament. Glenn Cowan, an American Player, hitched a ride on a bus to sight-see China. While on the bus Cowan meets with Chinese Champion Zhuang Zedong. The two created a friendship and pictures of Cowan and Zedong made their way to media outlets in both countries. Mao in a move that astounded the international community began allowing American players to come to China. The final step that paved the way for Nixon to visit China would be Kissinger’s Secret Trip to China. Kissinger met with Zhou

Enlai, who served as China's Vice Chairman of the Communist Party. Kissinger arrived in the People's Republic of China on July 9th, 1971, with Enlai he meets with high-level Chinese Officials to make arrangements for President Nixon to visit China. Kissinger attended six different meetings during his two-day trip. Although the trip was significant Beijing was adamant that no meeting between Mao and Nixon would happen, unless the U.S. kept their word regarding Taiwan. Kissinger pledged that the United States would withdrawal two-thirds of U.S. forces out of Taiwan once the Vietnam War had ended. Kissinger also reiterated that the U.S. would not recognize Taiwan as an independent nation and would continue to see it as part of China. Upon Kissinger's successful mission to China Nixon had announced that he was invited to China and had accepted Mao Zedong's invitation. In addition to his announcement to visit China, Nixon vowed to normalize relations with China. President Nixon, his wife, and First Lady Pat Nixon, along with the U.S. delegation which included Kissinger arrived in China in February of 1972. The language barrier and Mao's frail health had at one point put the historic meet in jeopardy. Nixon prevailed by turning a fifteen-minute meeting with Mao, into an hour plus. Mao did not want to commit to anything at that point, and the two only spoke on general terms. Their talks were depicted as full of laughter and exchanging of jokes. The ground-breaking meeting marked a new chapter in U.S.-Sino relations. By February 28th after several meeting, Nixon and Mao came to together and signed a document known as the Shanghai Communique, which outlined areas of agreement and disagreement between the two nations (Jian, 2003).

The biggest takeaway from the summit was the agreement that trade between the two countries would benefit one another and that exchanging representatives with one

another would only improve communications. The Shanghai Communique, however, was non-binding, purely symbolic at face value. The two countries would go onto exchange diplomats, as these talks established a precursor to full diplomatic negotiations that began under President Carter in 1979. Historians lauded the Nixon trip as the first substantial step in solidifying U.S.-Sino relations. Before these meeting, the U.S. and China viewed each other with disdain and hostility. Without this meeting, there would be no dialogue between Washington and Beijing. To further extrapolate the significance of the trip, from 1970 to 1979 trade volumes went rose significantly. Starting at zero in 1970 to \$2.378 billion in 1979 (Juebin & Renyi). Three years earlier the Cultural Revolution under Mao officially ceased upon his death in 1976, which brought renewed leadership under Deng Xiaoping. The top leadership officials supported Deng within the communist party of China. Most importantly, however, many sought changes within the country due to the tepid state of the economy. The notion was supported by Chinese economic planners who learned that a planning system was far too arduous to implement and inefficient to satisfy the needs of most people in China.

Deng Xiaoping

Reforms Deng Xiaoping sought to introduce a series of market reforms to reshape the economic landscape radically. He looked to what was going on in North vs. South Korea and East vs. West Germany and compared & contrasted how each was performing economically. The Chinese under Mao suffered under the economic consequences of central planning, which included a shortage of consumer goods, limited variety, and no quality. Deng unveiled his four-point plan which included reforms in Agriculture, State-Owned Enterprises, Open Door Policy (Trade) and the Price System (Chow, 2004). Deng

first rewarded households with the responsibility of managing their land for agricultural purposes. Initially under the Maoist system farmers worked as teams and could be paid under an individual basis for working harder than others due to their shared output among one another. Deng changed this to reward individual farmers and with that change saw a monumental increase in agricultural production rose in China and farmers saw their incomes rise. State-owned enterprises were given more autonomy in terms of marketing, and production rather than having the central planning commission make those decisions. By 1980 over six thousand industrial enterprises obtained autonomy and in turn produced nearly half of the total output of all state industrial enterprises (Chow, 2004). Other reforms included financial independence, giving the enterprises the ability to keep their earnings as their profits upon payment of taxes to the government.

The third implemented reform became known as the “Open-Door” policy – under Deng Xiaoping foreign trade and investment were encouraged. Under Mao, China’s economy was mainly a closed market before the reforms took effect. Deng’s opening of China invited more imports to come into the country and promoted exports to be shipped out. By 1987, the foreign trade volume increased swelled to 25% and by the late 1990s to 37% of GDP (Chow, 2004). With the opening of China, foreign companies/investors were encouraged to set up factories in Export Processing Zones (EPZ). These zones had a history of success, particularly in neighboring Taiwan, which established the Kaohsiung Export-Processing Zone in 1966 (Chow, 2004). These EPZs lead to joint ventures and brought in investors from outside the zones. The second pivotal component was utilizing the capitalist system as an economic engine for continued development. By 1982 the Shenzhen economic zone was entirely constructed and was strategically placed in one of

the most central trading hubs in all of Asia – Hong Kong. The investment brought along an infrastructure system for China to use. The final component of Deng Xiaoping's economic reform consisted of reforming the Chinese Price System. The main goal for the Chinese administration was to decontrol prices gradually and allow the market forces to determine costs (Chow, 2004). These reforms, ironically, not only benefited the People's Republic of China, the reforms benefited the United States economy as well. Despite continued anxiety from policymakers, media, and the public over the U.S. trade deficit with China, which currently stands at \$334 billion, or 1.9 percent of GDP (Chow, 2004).

The United States enjoys a myriad of benefits from its trading relationship with China. After Canada and Mexico, whom the U.S. enjoys a free trade deal with, China is the third largest purchaser of U.S.-made products (goods and services). China in total, as of 2015, purchased \$165 billion worth of goods from the United States. Economist and trade analysts predict that in the next twelve years, the United States will export \$369 billion in products and services to China, with the figure swelling to \$525 billion by 2030. That latter figure will represent 10 percent of U.S. exports, symbolizing an enormous size of China's market. Trade is only one example of the U.S.-Sino economic relationship. U.S. businesses since 2000 have seen their business income from direct investment triple, which has added 2.4 percentage points towards our GDP growth. U.S. businesses now have the incentive to spend their earnings toward smaller suppliers and subcontractors at home, given the lucrative earnings potential overseas. As the middle class in China, particularly throughout Asia, investors should remain confident in China's ability to consume more U.S. exports.

In a more in-depth analysis of China's economic performance, the country's entrance into the World Trade Organization (WTO) has further enhanced its economic clout. GDP growth since 2000, has averaged almost 10 percent annually, even when you add in the slowdown it experienced, which reflects the country maturation into a developed economy (U.S.- China Business Council, 2017). The country continues to outpace the United States and the Eurozone, in terms of world economic output. Worth noting however that China's living standards are lower than that of the U.S. and the Eurozone. The United States continued integration with the People's Republic of China has come with a plethora of economic benefits. In 2015 U.S. goods and services to China totaled \$165 billion, which accounts for seven percent of all U.S. exports. These products consist of agricultural products (soybeans, pork products, etc.) and a string of manufactured products (transport, construction equipment, and high-valued electronic) (U.S.-China Business Council, 2017). U.S. exports to China directly employ 1.5 million jobs and contribute \$128 billion to the United States economy. Trade relations with China also benefits productivity here in the United States as well, which is the cornerstone of generating wealth. Empirical studies have proven that openness to trade stimulates a country's competitive edge and entrepreneurship, which in essence leads to productivity growth. Thus, thanks to trade relations with China, U.S. productivity has increased by 0.17 – which in turn boosts economic growth (U.S.-China Business Council, 2017). But perhaps the most pivotal benefit from the U.S.-Sino trade relationship would be that now Chinese firms are investing in the United States. In 2015 alone, the People's Republic of China spent \$15 billion in the United States, a colossal jump from the paltry \$277 million invested during the year 2000. According to the Bureau of Economic Analysis (BEA),

more than 38,000 Americans work at U.S. affiliates of Chinese Firms. When taking the supply chain into effect and it's overall interaction with these affiliate firms, our best estimates reveal that Chinese investment in the United States in total supports 104,000 jobs and contributes \$11 billion towards GDP.

The United States, while still the largest economy in the world, must look to the long run to maintain the competitive edge. It can only be done by growing and repairing its infrastructure network. Freight dependent businesses that deal with congestion and long roadways are experiencing higher costs when delivering these items to the ports. Asia's middle class is growing, and the United States economy is becoming an integral part of it. With China being a core player in that relationship. The economic reforms under Deng Xiaoping not only opened China to the global economy. The country itself began to implement several structural reforms to enhance its economic prose. Most notably the Chinese, since the 1990s have started investing in infrastructure to make their economy competitive within the global environment. Over a decade ago the country unleashed a four trillion-Yuan package towards infrastructure and social welfare development (Chow, 2004). The main idea was to promote connectivity and boost urbanization to bolster the country's living standards and economic development. Chinese investment projects towards infrastructure were not merely limited to roads; they also included metro, bridges, rail, and utilities. The People's Republic of China in their own right has also built the world's most extensive high-speed rail system (The Economist, 2017). Infrastructure has become so pivotal to the Chinese that they added it as an initiative to their Foreign Policy in 2013 upon the arrival of their new President Xi Jinping. That same year the People's Republic of China launched the One Belt Road

Initiative (OBOR), the ambitious project hopes to resurrect trade channels across the region of Eurasia. Scholars from across the globe lauded the project, including Harvard Law Professor Noah Feldman, who described it as being an “Eisenhower Interstate System for an entire region of the planet” (Feldman, 2017, Page 1).

The People’s Republic of China has invested heavily in infrastructure across various parts of the globe over the past several years. Those areas include Europe, Asia and the continent of Africa. The OBOR initiative includes Latin America as well under the "Trans-Pacific Maritime Silk Road." Another ambitious plan by the People's Republic of China calls for the construction of a "Polar Silk Road" in the Arctic region as well. With the Arctic waters no longer staying frozen all-year-round, China is attempting to ship goods from Asia to Europe via the top of Russia. The Russian Federation is joining the People’s Republic of China in this venture, as Russia hopes to reap the benefits of oil, natural gas and profitable transport routes all in part thanks to the thawing ice (Johnson & Standish, 2018). The Russian Government by 2030 hopes to invest billions in the creation and development of new ships, ports and navigation technology to make these routes viable in the long-term. The United States, Canada, and Japan are the only countries not to join the OBOR initiative. Beijing has stated on numerous occasions that they’re willing to participate in President Trump’s plan to modernize the United State’s infrastructure network. China and other countries have indicated that they’re eager to assist in such an overhaul. Revitalization of the U.S. infrastructure network is mutually beneficial to all. Chen Jie, the current director of the municipal commission of commerce, is confident that Chinese firms are willing to compete to sign onto U.S. infrastructure projects. What is impeding the United States from joining one of China’s OBOR’s initiatives is Trump’s

chronic scolding of China. He is not wrong; however to chastise China, given their underhanded tactics of counterfeiting, regulatory uncertainty and intellectual property theft (Clark, 2018). These are underhanded tactics often the chief complaints U.S. companies have on China and Trump wants to stifle such tactics by the Chinese.

Chapter 3

Research Methodology

The Research question at hand centers on comparing infrastructure and transportation systems in the States of Oregon and Washington, and how it affects trade with Asia. We look at and compare how each state funds their respected infrastructure projects, especially among the ports. Additionally, I analyze state and local funding levels in terms of GDP and assess whether funding those levels heighten trade volumes with Asia. Notably, we look at the unique ways each state funds infrastructure, whether it be the gas tax or through their essential natural resources. In addition to analyzing the methods, each state pays for the infrastructure we briefly look at the condition each state is in, what improvements are needed to keep up with future demand and how economically pivotal these ports are to the individual state's economy given that each state acts as a gateway to Asia. We achieve our understanding of this by reviewing the nations in Asia that trade with the U.S. the most, assessing the trade volume that each port respected receives and from what country and by analyzing what the size of trade has been like over a decade. Lastly, I will also assess what affect congestion has on these ports and how much of an impact it has on trade with Asia.

Chapter 4

Oregon & Washington State Overview

Washington State

The State of Washington currently moves over \$70 billion worth of goods through its ports each year, is home to ten Fortune 500 companies, and has over 7,000 small businesses throughout its respected territory (awb.org, 2017). The State also contributes over \$300 billion to the United States economy, making it a pivotal player in the nation's overall GDP growth. Despite a vibrant economy, the state is not immune to infrastructure shortcomings. The State has made a solemn commitment to its residents to make transportation funding and infrastructure maintenance/repair a top priority. In 2015 Governor Jay Inslee (D) and the State Legislator implemented several reforms to invest in the state's multimodal transportation system. Those reforms consisted of an infrastructure package referred to as "Connecting Washington," which includes a \$16 billion investment that bolsters transportation development and maintains critical infrastructure structures pivotal to the state's economy. The main drawback to the program, however, is its reliance on gas taxes. The funds for "Connecting Washington" initiative primarily come from the implementation of an 11.9-cent gas tax increase that became law on July 1st, 2016 (WSDOT).

The federal government's lackluster support to give each state the adequate funding necessary to support transportation projects, maintenance and operation are becoming more evident due to higher gas taxes. Washington state, however, is projected to oversee continued gas tax deficits due to more fuel-efficient cars on the road and the 2003 Nickel Account, along with the 2005 Transportation Partnership Account (TPA), are not generating enough funds for these projects. In retrospect, the 2003 Nickel Account is 10 percent below the necessary funding levels, and the 2005 Transportation Partnership Account is 21% below adequate funding levels (WSDOT). The State currently has 75 port authorities located in 33 of its 39 counties. These ports serve as the gateway to trade routes and the overall supply chain. In 2014, Washington Ports ranked 4th in terms of commerce (measured by weight) and ranked 5th in terms of Cargo in terms of importance. The State of Washington is home to the largest locally controlled public ports systems in the world – the Northwest Seaport Alliance (NWSA) consisting the Port of Seattle and Port of Tacoma. Marine Cargo in this part of the United States support 48,000 jobs, generated \$4.3 billion in economic activity and produced \$379 million in state and local tax revenue (www.portseattle.org, 2014). The state's maritime sector enables economic activity in a variety of industries throughout the State of Washington and the greater United States. Ports are pivotal towards the viability of the Washington State economy and need a robust transportation network to cultivate the freight movement to and from various destinations. Maintenance and repair of road and rail infrastructure are pivotal to continued port competitiveness and maintaining the region's economic mobility.

A bulk of the goods exported and imported via the Washington Ports are carried by the state's one of the many freight rail connections. The rail system transports close to two-thirds of the international containers that move to and from the NSWA ports. The Washington State rail system is the most economically feasible way to transport vast quantities of goods and materials over the land. The Freight transportation network itself contributes over \$28 billion to the Washington economy or 7.5 of the State's GDP (Matsuda & Rothberg, 2016). We should note that the relationship between the maritime sector and rail network is essential to the vibrancy of Washington's economic performance. In 2013 Washington State's "Rail Plan" revealed that the state must necessitate a reliable rail network in order attract more economic activity towards the Washington Ports and would augment the competitive nature of other ports located within the Pacific Northwest. The Rail Plan further states that if the surface transportation network impaired, Washington ports could become less attractive to ocean carriers, which could result in a mass exodus of business and export opportunities (Matsuda & Rothberg, 2016). Indeed, the Washington Freight rail network has expedited the process to move products across the state to and out of the marine ports. Washington State has also invested heavily into tractor-trailer trucks to ship goods. Tractor trailers and other heavy transport vehicles based in the state of Washington ship an estimated \$42 million worth of freight on the roads every hour of the day (Matsuda & Rothberg, 2016). The State currently has nearly 1,800 trucking firms, which generate roughly \$5 billion in gross business income. As of 2012, over 372 million tons of freight valued at \$342 billion is being transported by trucks within the state of Washington and accounting for over

two-thirds of the total freight shipment by weight within the state (Matsuda & Rothberg, 2016).

The Transportation initiative ratified by the Washington State Legislature continues the state's commitment to ensuring the public has access to efficient modes of transportation. Such methods of transit include walking paths, bicycle routes, transit and other miscellaneous modes of transportation. Over \$9 billion will go directly to the state for highways and local roads and another \$1.4 billion will towards maintaining, preserve and other miscellaneous operations that support Washington State roads. Additionally, the legislation will fund a variety of different grants and programs to finance infrastructure and transportation across the state. They include allocating \$200 million towards the Regional Mobility Grant Program and \$111 million towards transit-related projects. The former fund's local efforts to expand transit mobility and curtail congestion on the roadways where traffic is prone to be massive. The allocated funds will also go towards transit programs and services that will connect urban centers while the latter will provide funding for improving public transportation within rural communities in the state. Washington State will also spend upwards of \$41 million to fund the Commute Trip Reduction Program. The program will implement tax credits towards businesses that find solutions to curtail air pollution and ease road congestion.

The plan comes off the heels of a Federal Law that was passed a decade ago, known as the Passenger Rail Investment and Improvement Act of 2008. The law requires states to become more aggressive when setting up a statewide rail policy and creation of a state rail plan that includes proposed improvements for freight and passenger rail systems

and includes an examination on how freight and passenger systems function together. Washington state's rail network is critical to the state's economy, given that the same rail network in 2007 transported 83 million tons and 40 percent of all interstate freight associated with a Washington state origin or destination (www.wsdot.wa.gov/rail, 2014). Washington State, despite prominent urban hub dominating the western side, the rest of the state is an agricultural powerhouse. The State is the 4th largest producer of wheat in the United States, producing more than 167 million bushels in 2011(www.wsdot.wa.gov/rail, 2014). The Washington Grain Commission in 2011, reported that 27 percent was transported by rail at some point towards the ports. The state's rail network is pivotal to the ongoing strength of the state's major industries, which includes manufactured aircraft products and forest-related goods.

The benefits of maintaining quality rail service in Washington are vital, given that rail is generally the most cost-effective mode for shipping goods and services over land. A variety of Washington firms rely on rail networks to stay in the black and without a rail network they relinquish their competitive edge. Rail augments the ability for Washington firms to attract new clients and industries, which empirical research has discovered to exist in studies of rail service and economic growth in other regions. Washington State's rail transportation relies on numerous partnerships between government agencies, private industry, and other miscellaneous stakeholders. The State Rail plan, implemented in 2013, was coordinated via the active participation of numerous stakeholders and will not be viable in the future without constant feedback from stakeholders. The Washington State Rail Plan outlines essential findings and underscores priorities for the state to respond in the coming years. WSDOT (Washington State Department of Transportation)

broke the rail plan into five parts. First, WSDOT drafted the program by incorporating state transportation goals and previous rail policies that the state has used in the past. With the proposals in mind, WSDOT examined the current state of Washington's rail system for its strengths and weaknesses. The examination included technical analysis of infrastructure and usage, with demographics and economic trends being used to determine how influential the Washington Rail network is toward the state's economy. The state added stakeholder interviews and perspectives to the analysis of the rail network's strength and weaknesses, given that their responsibilities ranged from investment decisions, operations, and planning. The feedback is pivotal towards the overall performance of the rail network and how it's currently serving the current transportation needs of Washington State.

Washington's freight rail network incorporates two Class I railroads, one regional railroad, various short-line railroads, and intermodal facilities. The state has over 3,000 miles of railroad lines that provide mobility for goods and services to move in and out of the state. The State's freight transportation system is pivotal for industries, such as agriculture, construction, forest products, manufacturing, and wholesale trade. These industries help employ more than 1.2 million people, which is equivalent to 40 percent of the state's total employment (www.wsdot.wa.gov/rail, 2014). Freight Intensive industries provided about 41 percent of the state's total GDP in 2010, which totaled \$106 billion.

State and Local Capital Spending in Washington State since 2010 as Percent of Gross Domestic Product

2010 3.14%

2011 2.92%

2012 2.66%

2013 2.71%

2014 2.31%

Oregon State

Oregon's economic clout while not as encompassing as Washington's still delivers a vital jolt to the overall U.S. economy. The state is currently home to seven Fortune 500 companies, and its location along the Pacific coast has enabled the state to become a diversified economy. 1 in 6 jobs in Oregon are port-related and are either directly or indirectly related to the goods going in and out of the ports, the industrial and commercial activities and recreation (Brinckerhoff, 2010). Like many other states within the Union, Oregon's over-dependence on gas taxes is adversely affecting existing infrastructure and current and near future projects. Gas Tax revenues are not only declining because of reduced buying power, but more fuel-efficient vehicles are also enabling cars to enhance their mileage standards. Oregon's rural communities are no strangers to the infrastructure shortfall given that the timber funds that help finance road repair and maintenance are evaporating. In those same rural communities, the land does not qualify for taxation nor can it be taken over by a private enterprise. Due in part

because federal laws prohibit such transactions from taking place in Oregon. Despite, the creation of numerous tourism and recreation jobs in Oregon that safeguards the state and federal lands, those very same jobs have been there since the 1990s. Additionally, those very same jobs have not generated the income earned at the paper mills and woods that were meant to support county services related in part to infrastructure. Oregon has increasingly relied on borrowing to cover real-time construction and maintenance costs. A recent report from the state's financial condition revealed that in the past decade, Oregon had borrowed \$2 billion to fund bridge and road repair. Such shortfalls in transportation funding inhibit available funds for future infrastructure needs.

The State of Oregon's maritime sector consists of 23 ports that play a pivotal role in the state's economy. As the State of Washington, Oregon's ports also act as a "gateway to Asia." The State agricultural, manufacturing, and timber sectors rely on these ports, and other modes of transportation to successfully move these goods. Oregon being a part of the Western Seaboard is a trade-dependent State, with the People's Republic of China being a pivotal player in Oregon's economy. In the last ten years of trade between China and Oregon has amplified to the point where Oregon has a Trade Surplus with the country. Data from the U.S. Census Bureau in 2012 revealed that exports from Oregon to China have amplified by 1 percent in the last decade, surpassing the \$4 billion-dollar mark in 2010 (census.gov, 2017). Former President of China Hu Jintao stated in 2011 that China would be importing more than \$8 trillion worth of goods, making port-related infrastructure a pivotal initiative in the coming years. Oregon's largest Port, the Port of Portland, today transports over 25.5 million tons of goods each year (Read, 2012). The Port of Portland carries 12 million of the 25.5 million tons of

products to Port of Portland-owned facilities. The exports include an array of agricultural products, such as hay, potash, and wheat. The imports consist of automobiles, machinery, and steel. Oregon's transportation network, with an efficient system needed to deliver goods and services, consists of roads and highways, railroads and waterways. With one in six jobs being port-related, Oregon's marine sector is pivotal towards the state's economic vibrancy. Oregon's six primary marine ports, in terms of trade volumes, consist of Portland, Coos Bay, Morrow, Umatilla, Astoria, and St. Helens. These ports play a vital role in transporting these goods and services in and out of the state. A report from ODOT reveals that one in five imported and exported goods advance in and out of Oregon's top six ports (Brinckerhoff, 2010).

Recent data from 2010, reveals that the value of these goods coming in and out of these ports stands at \$50 billion. Employment and wages that come from these ports contribute \$4.5 billion towards Oregon's overall economic health. The state's most lucrative port in terms of trade volumes is the Port of Portland, which is of itself generates over 3 billion a year in direct, indirect and induced job wages and injects over 6 billion towards the Portland economy. The State's marine sector relies on two modes of transportation (Highways/Road & Rail) to get all shipped goods to and out of the ports. Most trucking firms in Oregon rely on the I-5 corridor to transport all the traded exports and imports in and out of the marine ports. The area in the state with the most substantial amount of truck volume in the State goes to the Portland Metro area, which is also home to the Port of Portland. The Port of Portland is the state's bustling port in terms of products that are shipped in and out of Oregon.

Despite reports of prolonged congestion and other issues facing trucking firms, truck movements within the state are expected to grow inbound by 1.3%, outbound by 2.8% and the internal flows by 1.9% by the year 2035 (Brinckerhoff, 2010). Oregon's Transportation plan, despite the maturity of the plan, predicts a near 80% increase in freight tonnage by trucks between 2006 and 2030. In stark contrast to the State of Washington, Oregon does not have a strong dependence on using rail as a means to transport products in and out of the marine ports. The state itself ranks 39th when compared to other states in terms of rail tonnage (originating, terminating, and carried through traffic) (Brinckerhoff, 2010). The rail networks share of transporting freight within the I-5 corridor remains relatively modest when one assesses and reviews the distance involved. Transporters in the state are reluctant to use the north-south corridor as a means to ship goods, due to the lack of investment by the state. Despite, a heavy dependence on trucks to transport goods, a commodity flow analysis conducted by the state revealed that rail carriers handled 15 percent freight originating in or destined for Oregon (Brinckerhoff, 2010)

Like the State of Washington. Oregon has also begun diving into Public-Private Partnerships to curtail congestion and improve infrastructure quality. Bottlenecks caused by heavy traffic in the Portland Metro Area throughout the Oregonian Coast has been gradually increasing in the past decade. Traffic Congestion comes with an array of economic and environmental costs, and failure to address these problems will lead to heighten travel delays and drop-in market access. In 2017, traffic caused by congestion in Portland cost \$3.9 billion in freight delays, fuel and lost time (Oregon.gov). Oregon, like many states, has suffered from an array of budget shortfalls that have adversely affected

transportation funding for infrastructure. That is why in 2003 the Oregon Legislative Assembly implemented the Oregon Innovative Partnership Program (OIPP), which allowed for more innovative approaches to fund and finance infrastructure and transportation projects (Walker, 2013). Since the early 2000's Oregon has suffered from stressed financial resources to support transportation needs; given that the average infrastructure project in the state cost's seven hundred dollars apiece. The OIPP will play in a pivotal role in reconciling these financial burdens and gives the state options outside of traditional funding models. The program streamlines the process for private partners to participate in the project development process (Walker, 2013). Best value and qualifications choose partners for these potential projects and avoid the methodology the private sector uses when examining the project's viability. The Oregon Legislature realizes that all plans do not attract the same business interest as others. That is why Tolling has been a possibility for OIPP, but not yet a formal proposal. Tolling is frequently used to fund an array of projects in Oregon. By January 2005, the Oregon Transportation Commission (OTC) began gaining approval via ODOT and the Oregon Innovative Partnership Program to lay the groundwork for three major highway projects. These projects were entitled the: Sunrise Project, the Newberg-Dundee Transportation Improvement Project and the South I-205 Corridor Project.

The Sunrise Project – Will construct a new four-lane, limited access roadway from I-205 to SE 172nd and the additional transportation infrastructure will benefit the newly incorporated city of Damascus located in Clackamas County.

Newberg-Dundee Transportation Movement Project – Traffic Congestion levels have risen nearly 40% in the towns of Dundee and Newberg, both located in Yamhill County. The state of Oregon has proposed an alternative corridor(bypass) that is approximately 11 miles long.

South I-205 Corridor Project – This project pertains to the freight transportation and commuter routes within the Portland Metro area. The project hopes to shorten the number of lanes from six to four near the Willamette River Crossing, due to rising levels of congestion by the corridor. ODOT has performed an analysis of the project and has confirmed that widening the South I-205 Corridor to three lanes in each direction will be feasible and will not result in any adverse effects towards transportation.

State and Local Capital Spending in Oregon since 2010 as Percent of Gross Domestic Product

2010	2.40%
2011	2.08%
2012	1.94%
2013	1.75%
2014	1.97%

Chapter 5

Importance of PPPs

With state, local and municipal governments facing limited resources and tight budgets, there is no clear timeline for when we'll be able to fund infrastructure in the future entirely. The dilemma in funding goes beyond maintenance and refurbishing our roads. It extends to public capital investments for Airports, school transportation, and wastewater treatment. For years the allocation of funds for infrastructure projects by the Federal, State, and Local governments and the way they go about constructing and maintaining these projects has led to the dilemma. Implementing new levels of spending, at times, will go into inefficient construction expenses on repairing existing infrastructure. The government's pattern in improving infrastructure has not changed, and such traditional practices hinder the initial investment. The inefficiencies will lead to dismal rates of return on public capital investments. One popular alternative in alleviating the inefficiencies in funding infrastructure would be to implement public-private partnerships (PPP). Many countries across the world have undergone implementing PPPs to lift the burden off the taxpayers to fund for infrastructure and to bring in private sector resources to enhance efficiencies. A study by the Mckinsey & Company reveals that PPPs in Europe have increased six-fold on an annual basis from the period of 1990 to

2006 (Rocca, 2017). PPPs have a long history of being implemented to fund projects in the transportation sector. European countries have used PPPs to fund projects in defense, environmental protection, government & municipal buildings, prisons and schools. The countries that have used and benefited from PPPs the most are the United Kingdom, and Portugal, PPPs in those two countries account for 32.5 and 22.8 percent, respectively, with infrastructure underscored the most during the 2001-06 period (Rocca, 2017).

P3 Model Benefits

Research done by Syracuse University in 2016 found that states that implement the P3 model for infrastructure projects have a higher rate of success when considering cost objectives and meeting deadlines. The United States when constructing large and expensive infrastructure-based projects, policymakers and elected officials have often come up short to conjure up the gumption to develop a partnership with the private sector and investors to deliver on these potential investments. The University study further emphasized that the standard measures that the U.S. government has gone by to develop infrastructure cause projects to go over their important deadlines and are not cost-effective to the taxpayer. In 2015 the United States accounted for a quarter of nominal GDP and 18% of global construction spending. Only accounted for 9 percent of the worlds nominal total costs of P3 infrastructure investment at the same time (Rocca, 2017). The implementation of the P3 model for state governments to use to fund infrastructure can mitigate delays in scheduling and overruns that are often the culprits for the hindrance in the government in completing these infrastructure projects.

P3's accomplish this by delineating governance, allocating shared risk, integrating resources, applying best practices, and establishing a life cycle—a long perspective of costs and accountability (Rocca, 2017).

Research by McKinsey Group underscores several challenges with their portfolios that are mostly related to monetary issues. The study by McKinsey clearly outlines eight recurring themes that the public sector frequently runs into when constructing infrastructure projects. 1. The responsibilities that are assigned by the government are often murky when it comes to decision making, and that leads to the impediment of the project's delivery. The P3 model addresses these challenges by requiring the owner to document and convey the standards of performance, all risk-allocation mechanisms, requirements, repercussions, and rewards. It is done to reinforce transparency and maintain the commercial aspect of the project. 2. Support for an infrastructure project can quickly dissipate when a robust commitment does not back them. P3s, however, have been examined meticulously by portfolio officials investments that are known by the public at large, ensuring that the project commits a sponsor that will come with a strategy on how they intend on completing the project. 3. Often we hear and read that the most significant detriment to the public sector is the lack of innovation and the excessive amounts of "red tape." The P3 model, however, encourages innovation by implementing problem-solving tactics during the bidding, construction and the operations of the project (Rocca, 2017). 4. Lack of ownership in the mid during the implementation. Going by conventional project delivery methods frequently leads to friction between the contractor and the proprietor. The P3 model avoids this kind of conflict, given that the concessionaires will implement the perspectives of the proprietors, sponsors and often

both because of the performance standards and obligation to let all the assets go to a state of good repair.

5. The absence in Execution. Often large infrastructure projects run into conflicting objectives, tight schedules, and scarce resource commitments. P3s rectify these issues by offering accountability and transparency by defining what the delivery should look like an extrapolation of what the major contractual components are for each party. These would include managing the supply chain, procurement, and design of each project. 6. Lack of project control. Having numerous participants, with a diverse grouping of systems can equate in different modes of progress and truth of the status of the pending project. Which leads to misuse in time for the parties to reconcile and will create friction among each participant. The P3 model allows the concessionaires to deploy the necessary resources and project systems needed to identify, manage, and mitigate deviations from the plan (Rocca, 2017). Ultimately, leading to inefficient contingency planning and adaptability to change. 7. Low initial costs. The orthodox approach to the procurement of each project will usually award contracts to the lowest bidder, without considering what the real costs will be during the entire cycle of operation and maintenance (O&M). P3s are designed to home in on the long-term costs of ownership, which includes the O&M component, before the allocation of awarding contracts. Thus preventing the concessionaire from using the minimum required capital, now they will be able to maximize all capital given to them during the initial period of each project. 8. No resource enhancement. A recurring problem for proprietors is the lack of resources that ensure the projects growth and the decisions in a satisfactory manner. P3s rectify this

challenge by delegating delivery responsibility to a team of well-resourced individuals who will incentivize the negotiated terms that contract obligates.

Trump Admin Infrastructure Initiative

Shortly, after his historic win, Trump began naming individuals to serve in his cabinet. For the Department of Transportation Trump nominated former Secretary of Labor and Director of the Peace Corps Elaine Chao (Jacobs, 2016). Chao's nomination drew bipartisan praise from Republicans and Democrats alike, given her colossal amount of experience regarding infrastructure and transportation. During the 1980s under the Reagan Administration, Chao served as the Chair to the Federal Maritime Commission and served as the Deputy Secretary of the Department of Transportation under President George H.W. Bush (Jacobs, 2016). In the Spring of 2017, Chao delivered a series of speeches to discuss the Administration's plan to implement infrastructure projects across the nation. Chao cited 16 different proposals that she and the Administration are reviewing and has admitted that none of them have received universal support. One funding mechanism of the chronic debate has been the vehicle miles traveled fee, which would have sparked indignation from privacy groups, given that it would charge drivers for the miles they travel (Lamb, 2018).

Earlier that year the White House revealed that they would rely heavily on nonfederal funds to reach the \$1.5 trillion thresholds/price-tag over the next decade. Chao has further stated that the federal government should look extensively into Public-Private Partnerships as a source of funding for infrastructure projects. She did acknowledge that the public sector often is reluctant to work with the private sector on these types of projects, given trust issues. Chao believes that the private sector offers immense sources

of capital. In her speech, Chao said quote “We need to be more open-minded in terms of finding more sources of financing for the infrastructure.” (Lamb, 2018, Page 1).

Washington State since the early 1990s has experimented with Public-Private Partnerships (PPP) to fund public works projects. In 1993, the Washington State Legislature ratified the Public-Private Initiatives in Transportation (PPI) Act, which generated the legal parameters for transportation P3s. Around that time fourteen transportation projects came to the state legislature for an approval process, with six receiving the green light. Unfortunately, controversy arose when the state started imposing highway tolls on existing road networks(bridges and highways), with a private business playing a pivotal (and profitable) role in their management and procedure was too heavy of a burden that the public was ready to handle. Resulting in all but one project receiving continuance. The sole Public-Private Partnership that went into construction was the Tacoma Narrows Bridge (TNB). The project scrapped the use of highway tolls and relied on an alternative financing source from the State Treasurer’s office. Due to the headache and controversy that developed in implementing PPPs under the law, the Washington State legislature ceased continuance of the 1993 legislation and barred further infrastructure projects from being established under the current law as written. Nine years later the state legislature agreed to amend that law to allow the implementation of tolls on the existing bridge, but only if state-issued bonds were used to finance the construction of the bridge. The amended law further gave Washington state operational and maintenance responsibilities from the private consortium.

One of President Trump’s cornerstone campaign promises during the 2016 Presidential election was to invest and refurbish the United States infrastructure network.

Empirical economic research indicates that a strong infrastructure network for any country bolsters economic growth and lessens congestion. Ding Xuedong, the chairman of China's sovereign wealth fund, China Investment Corp. (CIC), bolsters the point further by holding. That the United States plan to fortify its infrastructure network will bring about immense investment opportunities between the two, Xuedong, however, warns thought that such investments come attached with a lot of anxiety for policymakers, to reiterate the U.S. government does not have the money, and private industry funds can be murky. China is salivating over any opportunity that it may be granted to partake in the tentative U.S. infrastructure boom. Such an occasion, however, will not come easy, as Beijing will need to streamline the process for American companies to gain access to Chinese markets. During his run for President and as President Donald Trump made a solemn promise to the American public to make upgrades in the transportation sector of U.S. infrastructure. Trump has sought help from Shinzo Abe, the current Prime Minister of Japan, in exploring the country's technical expertise in the areas of high-speed rail and what it could do to bring high-skilled jobs to the United States. China, however, has not steered away from inserting their expertise in transportation, with Chen Jie, the director general of the municipal commission of commerce of Guangzhou is confident that China has the power to compete for U.S. based infrastructure projects. Policymakers and Experts agree that China has the capability and the expertise to make inroads in the transportation networks of other countries.

Chapter 6

China's Role as a Global Investor

By the end of 2016, China was awarded the number 1 world ranking according to its National Development and Reform Commission in terms of urban transit systems, high-speed railways, and expressways. Renovation of the New York Verrazano-Narrows Bridge in 2013 offers insight on how arduous it is to negate the expertise of Chinese construction officials. The Verrazano-Narrows Bridge is one of the New York City's pivotal transportation networks as it connects the Brooklyn Borough to Staten Island. Notwithstanding criticism from U.S. companies, local authorities in New York purchase \$34 million in steel products from two Chinese companies. New York purchased the steel from China Railway Shanhaiguan Bridge Group and the Anshan Iron & Steel, and the local officials cited lower expense costs and vague delivery schedules. Referring to the high price of U.S. made steel, over the past six decades the industry has become less competitive as the United States become more conscious in other sectors of the economy. Thus, transforming into a service orientated economy. Chinese officials have stressed U.S. lawmakers and resident Trump that China is the destination to repair and revitalize U.S. infrastructure and transportation networks. Mei Xinyu, an associate research fellow

of the Ministry of Commerce, has noted that Chinese companies are highly enthusiastic over the prospect in helping rebuild U.S. infrastructure.

Given that as of today China is the world's largest infrastructure market, given their recent advancements in Africa and South America. However, Mei has noted that regulatory barriers placed by the United States make the task cumbersome in becoming a reality. Mei believes that the best way to bridge this gap is for a Chinese company to buyout a U.S. company and use it as a proper channel to get the ball rolling. Mei has urged U.S. policymakers and politicians to avoid keeping the door closed on China as U.S. infrastructure needs the boost. To avoid immersing, into the reasons why hyper-partisanship is the new norm in the United States Congress for the past four decades. During the tail end of 2015, before the complete depletion of transit funds, the Congress passed a \$305 billion highway bill, that funded the nation's road and transit programs hours before the deadline. Although the highway funding legislation was the first long-term spending bill in over a decade, compared to how other nations fund their transportation systems, the United States falls short. To extrapolate on the literature review, both the American Enterprise Institute (AEI) and the American Society of Civil Engineers (ASCE), give the United States dismal reports on how we handle transportation and infrastructure issues. AEI finds that government expenditures towards our highways have dropped by 50% in proportion to other various government expenditures. ASCE has studied the current condition of infrastructure in each of the fifty states, and the United States received an infrastructure grade of a "D+." ASCE also suggests that we must spend \$3.6 trillion by 2020 to refurbish U.S. infrastructure to ensure it's condition and stability. With the polarization in Congress hampering any

meaningful implementation of reforms toward the U.S. Transportation network, many policymakers and city planners have looked to seek outside help. Notably, the People's Republic of China.

China has invested immense amounts of money in infrastructure, both domestically and abroad, the country is now seen by many as being the largest investor and builder of infrastructure in the world. Unearthing the necessary funds for infrastructure projects in the United States has been described as arduous, where China frequently appropriates the funds to invest in prominent transportation projects. Empirical research describes U.S.-China economic relations as crucial for U.S. workers (U.S.-China Business Council, 2017) 1.5 million U.S. jobs are dependent on trade with China and in 2017 Foreign Direct Investment (FDI) from China to the United States totaled \$29 billion. Despite, the impressive statistics, the United States has seldom outsourced few infrastructure projects overseas to Chinese firms. The scarcity of bridge and road projects amounts to a feeble \$100 million being financed by Chinese firms, which is equivalent to a mere 1% of China's total investment in their respected engineering contracts across the globe (Walling, 2013). China as a country has invested itself in over 70 countries to help assist with their essential infrastructure projects. By investing in these projects, they have brought with them the expertise and efficiency necessary to bring about high-grade and cost-effective plans, granting them the significant leverage to assist the United States with our infrastructure shortfalls. Some, however, view a partnership with China with a high degree of skepticism given the national security and funding concerns. However, the United States had the same kind of discontent toward the Japanese during the Post-War World II era. Today however Japan, next to the Republic of Korea, is considered to be

one of our greatest allies in the East Asia region and our economic ties are pivotal to the commercial success here at home. There are clear benefits of a U.S.-China partnership to fund infrastructure projects here at home. Still, we must realize that Chinese involvement in global infrastructure projects, has yielded positive results. These projects are still in the early stages. Compared to other foreign capital sources, numerous hurdles and trials are specific to the People's Republic of China. For instance, Chinese capital controls restrict the free movement of capital and involve investors to secure the green light from the Chinese regulators before they send the funds overseas. These limitations have been longstanding on the books to prevent capital flight and illicit outflows of capital, have become arduous as they require the input of multiple government agencies and hamper flexibility and timeliness (Walling, 2013).

Private Chinese companies must also deal with these taxing “red-tape” regulations because they want to insert their funds overseas as well. Even though China has implemented market-based economic policies, several institutions are still state-owned, which includes their banking sector, Chinese banks have put in place stipulations for conditions when other state-owned firms obtain contracts in connection with the project. One notable example was in 2013, a near \$2 billion infrastructure deal between the China Development Bank (CDB) and American real estate company Lennar Corp. Regulatory barriers began to impede the project, once the Chinese National Railway Company began procuring itself as a contractor. Tax and Transparency regulations also act as a roadblock from more considerable financial investments coming into fruition. In the Spring of 2010, Congress passed the Foreign Account Tax Compliance Act, requiring foreign financial institutions (FFIs) to report to the IRS information about financial accounts held by U.S.

taxpayers, or by foreign entities in which U.S. taxpayers hold a substantial ownership interest. FFIs are encouraged to either directly register with the IRS to comply with the FATCA regulations (an FFI agreement, if applicable) or comply with the FATCA Intergovernmental Agreements (IGA) treated as in effect in their jurisdictions (treasury.gov, 2016). When it comes to China, overseas financial institutions like the China Development Bank (CDB), are required by the law to provide the federal government a list of all their U.S. clients. China has not been compliant, and their domestic laws related to the matter give them cushion room to argue against it. Example Liu Xiangman, the deputy director of legal affairs at People's Bank of China once said: "China's banking and tax laws and regulations do not allow Chinese financial institutions to comply [with this demand]," (Walling, 2013, Page 55). Many who heard those words believe it to be one of the many factors that lead to the demise of the Lennar Corp-CDB project. In the aftermath of the 2008 Financial Crisis, China has taken the steps necessary to move away from its export-led growth model to transition into a domestic consumer-led model. That is why the country is starting to become more invested allocating funds and resources abroad, more recently in infrastructure. One part of the world where China has been keen on in terms of financing infrastructure has been the continent of Africa. Years of mismanagement and internal strife have plagued Africa due to Imperial powers began exploiting the wealth of the continent.

Today the continent is a land full of nation-states with several illegitimate governments, and understandably the people are skeptical of western influence coming in their homeland. Many view China as the next challenger to the United State's title as the world's superpower, African Nations now have a choice, other than a western power to

bring in development strategies. China funding infrastructure projects within the continent of Africa is viewed by many the most crucial aspect of their relationship. Starting in 2001 Chinese infrastructure investment in Africa began at around \$500 million, ten years later in 2011, that figure swelled to \$14 billion. Two-Thirds of the investment made by the Chinese went into two sectors, energy and transportation. China and Africa share several economic complementariness, which acts as one of the main points of motivation for China to finance infrastructure in the continent. To extrapolate, both China and Africa have been exploited by Imperial forces for hundreds of years. Today the continent of Africa is severely deficient in the realms of energy, telecommunications, transportation and of course healthcare. China, while a notable laggard in the healthcare sector due in part due to air pollution, the country has implemented a highly skilled construction industry. Primarily, focusing on infrastructure development within its nation. China's expanding middle class and manufacturing sector dependent on natural resources requires not only an efficient transportation network but access to natural resources as well from other countries. Africa is a continent already overflowing with natural resources, and they're indeed of a viable infrastructure network to facilitate the extraction and transportation of these precious resources. Exim Bank of China finances the bulk of these infrastructure projects. The China Exim Bank's central devotion is to provide export seller's and buyer's credits to support the trade of Chinese goods (Walling, 2013).

The People's Republic of China's rise to Prominence has been a miraculous story of ingenuity and innovative economic reforms that were pioneered by Deng Xiaoping. Opening the gates so to speak to allow firms to expand their manufacturing base was part

of the equation. The other was China's thirst for raw materials that were necessary to retain their competitive edge and invite more capital into the country. As we mentioned earlier, many economists and policymakers have been cognizant over their tightening relationship with the African continent and of course their improving relations with their East Asia neighbors. Now the country has targeted a new region in the world to focus their energies on, Latin America. China's economic ties with Latin America reached a fever pitch in 2004 when former President of China Hu Jintao visited the region for the first time to begin a new relationship – in the form of amplifying economic relations (Rother, 2004). These efforts proved successful as bilateral trade between China and Latin America stood at \$180 billion in 2010, a fifty percent jump from the previous year. A remarkable achievement given those trade volumes a decade ago stood at a feeble \$13 billion (Feinberg, 2019). FDI flows coming out of China to Latin America have bolstered the economic ties the two share.

Chinese investment in Latin America stood at \$15 billion by 2010, with most of it going to resource extraction (Dollar, 2016). Bolstering of trade and heightened FDI investment, however, is just one of China's priorities in the region. China also hopes to invest in the region's infrastructure by inviting it to join its "One Belt, One Road" (OBOR) initiative. OBOR is an ambitious infrastructure project spearheaded by Chinese President Xi Jinping, to promote economic links between Asia, Africa, and Europe. As of 2017, the China Global Investment Tracker indicates that Chinese related infrastructure projects total \$700 billion and account for more than 1,280 projects across the globe. Latin America and the Caribbean Islands account for 107 of these projects that total close

to \$60 billion. Argentina, Bolivia, Ecuador, and Venezuela have been the most active participants of these projects.

Argentina

Commercial and Financial ties between Argentina and China were reestablished forty-five years ago and bolstered by a series of economic reforms that the Argentinean Government implemented to make it more open to the global economy. China's rapid rise in the worldwide economy has replaced some of Argentina's trading partners, which included the United States and some European countries, to become the country's number two trading partner after Brazil (Narins, 2017). The trade relationship Argentina has with China accounts for 6.5% of its exports and 17 percent of its imports. Still, Argentina's overall economic dependence on China is still minuscule. Nonetheless, according to figures from the 2006-15 period, Argentina has received \$19.7 billion in overseas foreign direct investment (OFDI) (Peters, Enrique Dussel, 2018). These include direct investments and merger acquisition operations, and the rest are resource seeking. Argentina is rich in the oil and gas industry and the agriculture business, making Chinese investments essential to advance their strategic interests in Latin America. These investment patterns created by the Chinese are subject to change based on the preservation and the continuance of investment for future participation in infrastructure projects by Chinese firms.

China is Argentina's top foreign investor, outpacing the flows coming from the United States and the European Union. The reason for this lies with the default Argentina faced in 2001, cutting the country off from the global economy and allowing China to come in and become Argentina's top lender (Richards, 2018). Trade, investment and

financial flows coming from China to Argentina symbolize a variety of framework agreements that exemplify China's growing influence across the globe. Shortly after Argentina's default in 2001, Argentina signed with China the "cooperative partnership" (Richards, 2018). Three years later then President of China Hu Jintao and then President of Argentina Nestor Kirchner signed the "Strategic Partnership," which expanded economic ties in the realms of education, infrastructure, tourism and space technology. With Xi Jinping now the new President of the People's Republic of China, he has begun a new chapter in its relationship with Argentina. In 2012 the two countries approved nearly two dozen agreements, most notable was the Industrial and Commercial Bank of China (ICBC) received approval from the Argentinean government to acquire 80% stake in the Standard Bank Argentina. These agreements opened the floodgates of investment of Chinese engineering and construction companies to develop Argentina's economic clout, whether it be financial, logistical or technological (Ge, 2018). These are positive developments given that Argentina still lags in infrastructure investment and is far below the recommended replacement standards. A notable example would include Argentina's rail network, which at one point in time was the most envied and extensive rail networks in the world. Today Argentina's rail network is in a state of perpetual decline (Ge, 2018). An analysis conducted by the United Nations Economic Commission for Latin America and the Caribbean reveals that the yearly average for infrastructure investments over GDP figures from 2000 to 2015 was just 2.7 percent (Peters, Enrique Dussel, 2018). The commission recommends that each country hit a 6 percent threshold, in terms of spending, to close the gap. Argentina itself lacks the resources and entrepreneurial expertise necessary to keep up with infrastructure demands. These shortfalls have given

China the go-ahead to step in and launch an infrastructure program to alleviate Argentina's shortcomings. It is resulting in China inserting \$25 billion worth of public works projects to the country that will be implemented by the national government or the provincial administrations.

These Projects coming from China total \$7.6 billion in new projects:

*Construction of new dams (Chihuido I in the Patagonian province of Neuquén [\$2.2 billion],

*El Tambolar in San Juan [\$1.1 billion],

*Los Blancos in Mendoza, Quines in San Luis [\$300 million]),

*The Potrero del Clavillo reservoir between Tucumán and Catamarca (\$1 billion),

*Cuenca del Salado in Buenos Aires Province waterworks (\$1 billion)

*San Martin rail line for freight transportation, including renovation work (\$2 billion)

These pivotal projects consist of a large chunk of Argentina's federal budget, with China acting as a primary source of the infrastructure funding. Meanwhile, local infrastructure firms and public works groups based in the country will be activated seldom as Chinese firms will continue their comparative advantage in government infrastructure plans, especially if they come attached with foreign funds to ease the cost burden. Regardless of the country, politicians will always push for short-term results that cultivate financial investments of some sort, but neglect the for long-term capabilities remains prevalent. China has stepped in to improve Argentina's rail network by

implementing a series of joint projects to modernize the country's rail network. One of those projects includes revamping Argentina's cargo rails. These renovations will comprehensively strengthen connectivity between the export hubs in Rosario and the northern agricultural provinces (Arguello). In the case of Argentina, the infrastructure gaps that they face further necessitates the need for China's involvement. The Argentinean Transportation ministry has gone as far as to seeking a Public-Private Partnership with Chinese companies to rebuild the country's declining infrastructure. Guillermo Dietrich, the current transport minister, is in talks with China to implement a plan that will revamp its highway infrastructure (Richards, 2018). The project hopes to lower transport costs to ease the burden on its agricultural sector. During the summer of 2018, the transport ministry ratified the first of two Public-Private Partnerships (PPP) projects for new highways, valued at \$2 billion (Richards, 2018). The company overseeing this project is known as the China State Construction Engineering Corp. (CSCEC) and has committed to building the new highway over the next five years that will consist of over 300 miles of road. Upon completion of the way, the contract included language that not only guarantees construction of new roads but continual upgrades and maintenance of infrastructure (Peters, Enrique Dussel, 2018). The project by CSCEC is the first of its kind in not only Argentina but all Latin America as well.

Bolivia

In December of 2013, President Evo Morales of Bolivia signed an economic cooperation agreement with President Xi Jinping of China, which opens the country to more business investment from Chinese companies and funds an array of infrastructure projects in the country itself. The cooperation framework pledges that the two countries

will develop several cooperative projects in the vital sectors of Bolivia's economy. Those sectors include the aerospace, high-technology and mineral sector, with an emphasis on building up Bolivia's infrastructure. Bolivia and China have already had some successful joint ventures in satellite technology and developing a rail network; both are crucial to improving the landlocked country's access to the outside world. The cooperation framework also benefits China exports, especially high-technology sector, given that those same exports are going to Bolivia. China sees the economic potential in Bolivia with Xie Wenz, an economist from the Chinese Academy of Social Sciences saying quote "Bolivia is rich in natural resources, such as natural gas and iron. There is a lot of potential in China-Bolivia trade" (Fan & Jiao, 2013, Page 1). Bolivia's geography, being a land-locked country, hampers any success it might achieve in a trade partnership with other countries

China currently enjoys a trade surplus with Bolivia (Ellis, 2016). In 2014, the People's Republic of China exported \$1.82 billion in goods to Bolivia and received \$434 million in imports from Bolivia. That same year China exceeded Brazil as the number one destination for Bolivian imports (Ellis, 2016). Bolivia's top exports to China were precious metals, such as zinc, silver, tin, copper, and lead. Limitations to how much Bolivia can transport in terms of goods and services make infrastructure development vital for the overall health of Bolivia's economy. Xie has noted that Bolivia's infrastructure is exceptionally deficient, creating economic development an arduous task. To alleviate infrastructure deficiency, Bolivia is investing more in its highway and rail networks. In the Fall of 2015, President Morales announced that China would substantially expand its economic and financial support with Bolivia. China's Export-

Import Bank mentioned in its 2016-2020 National, and Social Development Plan pledged \$7.5 billion in loans to fund several strategic infrastructure projects (Ellis, 2016). The infrastructure projects were not only financed by China, but Chinese companies would primarily be involved in the construction. The Chinese rail company, China Railway Group, and China CAMC Engineering corp both won the bid to construct a railway project valued at \$250 million (Fan & Jiao, 2013). Neither Chinese firm, however, was successful in completing the project, with China Railway Road and CAMC Engineering finishing less than 30 of its assigned work, respectfully. Failure of both firms to complete the highway project prompted the Bolivian Ministry of Public Works to rescind the contracts (Ellis, 2016).

Current miscellaneous projects include the following

- A \$253 million China Railway Road contract for a 158 kilometer El Espino–Charagua–Boyube highway in the Department of Santa Cruz.
- An 86.9 million to Sinohydro in November 2015 for a 49-kilometer highway segment of from Padilla to El Salto.
- A \$179 million to Nuclear Industry Nanjing Construction Group contract for a 74-kilometer highway segment from Santa Cruz to Cochabamba.

Ecuador

Ironically, Ecuador established ties with the People’s Republic of China on the same year when then U.S. President Richard Nixon made his historic trip to China.

Events that led up to this relationship was the United Nations acceptance of China and Ecuador stifling its ties with Taiwan. A series of trade deals quickly followed and by

1980 diplomatic relations between China and Ecuador were successfully forged when China opened an Embassy in Quito. As of 2015, China's foreign direct investment (FDI) to Ecuador represented 10 percent of the country's total, while The Netherlands FDI totaled 22 percent, United States 14 percent, and Peruvian 13 percent, making these countries Ecuador's most pivotal investors. China currently is allocating most of its FDI to Ecuador's energy sectors (mining and oil), by 2015 China began revamping its FDI towards Ecuador by inserting 15 percent of it to the service sector. Trade relations between the two have grown tremendously during the past decade. Ecuador's exports to China intensified 242.1 percent from \$191.9 million in 2011 to \$656.4 million in 2016 (Blivas & Koleski).

Political ties between China and Ecuador were further enhanced in 2007 when then President of Ecuador Rafael Correa broke relations with World Bank, and a year later Correa outright refused to make its scheduled interest payment on its foreign debt. Correa did not pin the blame on Ecuador for failure to pay these debts, rather his refusal to pay debts that he viewed as being "obviously immoral and illegitimate" (Watkins & Anderson, 2008, Page 1). Correa two months before the 2008 Financial Crisis began, Correa visited China and inked numerous bilateral agreements between the two countries. The language in these deals included letters of intent, memoranda of understanding and lines of credit that included but were not limited to the financing of construction for different types of infrastructure (Castro & Garzón, 2018). Chinese firms have invested themselves into developing infrastructure in Ecuador but have made inroads in expanding these economic times by investing in the country's natural resources, technical training, cultural exchange, information and communication technologies, and foreign aid.

For the past eight years, China has become Ecuador's top lender and contractor in terms of infrastructure projects. The three types of loans that China grants to Ecuador are 1. Public Debt loans, financing is not conditioned and are available to the public; 2. Financial advances for the sale of oil, which do not meet the standard of foreign debt, with payments made in advance through the obligation to buy and sell oil. 3. Public debt loans for the construction of infrastructure projects, which as of recently have consisted of mostly hydropower projects, but also in transportation sectors as well (Castro & Garzón, 2018). The lines of Credit that China has offered Ecuador has caused many Ecuadorians to feel apprehensive due to the burden placed on them as taxpayers. Given that most of these operations are commercial and not public debt contracts thus lacking a sovereign guarantee. The current Ministry of Finance segregates these agreements into different groupings. Some of these agreements receive the registered status of public debt loans, while others are commercial transactions under PetroChina International and PetroEcuador (Castro & Garzón, 2018). The lack of information on oil sales does not release information regarding potential sales of oil and does not give a definitive classification between commercial and public debt loans. A bulk of the investments that China has forged with Ecuador have a grace period of two and four years. Loans granted at the highest grace periods are the infrastructure projects, specifically the projects related to hydroelectric dams and plants. The rationale for the long grace periods lies in the fact that generating profits for these projects and allow for savings in the imminent face of flood disasters was the purpose for the extended wait period (Castro & Garzón, 2018).

The "One Belt, One Road" initiative by China under the presidency of Xi Jinping is yet another way China and Latin America are enhancing their strategic partnership.

Ecuador has responded positively to the project and hopes that the infrastructure project will open Ecuador to new and emerging markets. Ecuador's own Ambassador to the People's Republic of China Jose Borja emphasized that getting their exports to China under One Belt, One Road will move their commodities to China's neighboring countries. By the tail end of 2018, both China and Ecuador had signed yet another cooperative agreement to advance the One Belt, One Road infrastructure initiative jointly. The main objective for China to have Ecuador together work with them on the Belt and Road Initiative is to promote cooperation between the two sides in the areas on agriculture, information, technology, new energy, environmental protection and of course infrastructure (Li, 2018). Ecuador, in the end, received a USD 900 million-dollar loan from China and with it, according to Chinese and Ecuadorian officials, the lowest interest rate in history. As of 2017 30 percent (\$8 billion) of Ecuador's \$26.4 billion external public debt is owned by the China Development Bank and the Export-Import Bank of China. Just a decade ago China owned less than 1 percent of Ecuadorian debt. Ecuador's loans from China have an interest rate of 6-7.25 percent (Blivas & Koleski, 2018). Ecuadorian exports in the form of oil are used to pay the Chinese firms for these loans.

Chapter 7

Conclusion

The comparative analysis between Oregon and Washington State show's what each state is doing to fulfill their infrastructure needs and how dependent their respected economies are on trade with China. Both realize that trade is a crucial component of their respected economies and they must keep up with their infrastructure needs to keep economic growth afloat. Both remain innovative in their approach to funding infrastructure and are beginning to realize that raising the gas tax is an outdated and unpopular decision as it shifts the cost to the consumer. While still a smart way to bring in funds, such mechanisms will soon bring in less money due to reduced buying power and more fuel-efficient vehicles on the road. Both states realize this and are bringing in the private sector for help, given that budget shortfalls in each state are inevitable and such agreements ease that burden. My analysis's greatest weakness, however, is the failure to address how much port investment weighs in on trade. We're able to discover how trade-dependent each is and found out how valuable each state's transportation system was in terms of carrying freight. But we failed to learn how investing in these ports impacts trade as a whole. In the future, an in-depth study on comparing ports in each state must be done to pinpoint such connections.

Regarding the People's Republic of China, the United States in the coming years must be cognizant on infrastructure; especially as it pertains to the Pacific Northwest States. The trade relationship between the two accounts for 2.6 million jobs in the United States and given China's middle class is growing; the United States has an immense opportunity to invest in their customer base. Global connections in the Pacific Northwest will be pivotal for our trade relationship with China. Given that there were 2.5 million outbound trips from China to the United States in 2015 and many analysts believe that number will grow two-fold by 2020. If the United States Congress ever considers implementing an Infrastructure package to repair and revitalize our transportation network. We should seriously consider using outside help to make this initiative a reality. The People's Republic of China would be an excellent source, for not only financial resources, but for logistics and expertise in constructing new transportation networks. Given the amount of money and projects that they have agreed to finance and build. China's investment in Argentina, Bolivia, and Ecuador have already yielded results. The country's "Belt and Road Initiative" is both ambitious and appealing, given the number of countries that are signing on to it and has avoided the western model approach for construction. The country has instead borrowed heavily internally to pay for it, surprisingly though the country has a low Debt/GDP ratio of 17.7% and the United States currently stands at 93.6% (Ye). The United States is not spending its way into debt to finance infrastructure, and I am not in this thesis suggesting that it should. However, the United States must address our infrastructure needs sooner rather than later.

Beijing has repeatedly said that they're willing to participate in the United States plan to refurbish and repair our infrastructure and transportation networks. China's

Transport Minister once said quote “We are willing to work with the US side, under the framework of China’s Belt and Road Initiative and the US plan for rebuilding infrastructure.” (Wong, 2018, Page 1) Signing on to such a project would be an outstanding opportunity for U.S. firms and their respected infrastructure, financial, energy, and environmental initiatives. Chinese companies are no stranger in assisting the United States for help in constructing infrastructure projects. For example, the Chinese firm known as China Construction America (CCA) built the Alexander Hamilton Bridge that connects Manhattan and the Bronx. Chinese companies are often attracted to U.S.-based infrastructure due to the steady cash flow that in essence will translate into more investment opportunities and acts as a safeguard against inflation. Beyond revitalizing U.S. internal infrastructure, the One Belt, One Road project will bring a necessary jolt to U.S. firms and how they do business abroad. A variety of U.S. firms want to take part in China’s One Belt, One Road project and have been making these strategic investments for the past several years. In 2014 various Chinese construction and engineering firms purchased \$400 million worth of equipment from G.E. to install overseas. In addition to G.E. Honeywell International is selling equipment to the Central Asia region to help process natural gas and Citibank won a contract from Bank of China to open up more branch offices across Asia.

While this sounds and looks good on paper, questions over the feasibility of a U.S.-China relationship remain if we join One Belt, One Road. The grandiose spending by U.S. firms to invest in China’s infrastructure project does not necessarily mean a profit. The money spent by these firms, some of it, has yet to be earmarked. Besides, China continues to watch over itself by having it’s factories ramp up steel and cement

production, and China will make sure that those companies receive the preferred treatment over U.S. companies. The U.S. has a right to remain overly cautious given that we're not alone in their trickery. Several South and Southeast Asian countries have signed onto One Belt, One Road to enhance their port infrastructure needs. As of 2016 none of these projects in the Indian Ocean have been met with financial success. The United States should not shy away from Chinese help, given the success of projects like Alexander Hamilton Bridge, but must remain vigilant. Joining One Belt, One Road seems to be more of a foreign policy initiative to monitor Chinese activity and to learn what we must do to curtail their influence in the region.

REFERENCES

- “2003 ‘Nickel’ Funding Package.” *WSDOT*, Washington State Department of Transportation , 27 June 2018, www.wsdot.wa.gov/construction-planning/funding/2003-nickel-funding-package
- “2005 Transportation Partnership Program (TPA).” *WSDOT*, Washington State Department of Transportation , 27 June 2018, www.wsdot.wa.gov/construction-planning/funding/2005-transportation-partnership-program.
- Arguello, Victoria. “Interview: China Is Key Partner in Argentina's Development Projects, Expert Says.” *Xinhua*, Xinhua, 9 Sept. 2018, www.xinhuanet.com/english/2018-09/05/c_137445875.htm.
- Badkar, Mamta. “These 10 Countries Will Command World Trade In 2050.” *Business Insider Australia*, Business Insider Australia, 29 Dec. 2011, www.businessinsider.com.au/countries-leading-world-trade-2050-2011-12.
- Behar, Alberto, and Anthony J. Venables. “Transport Costs and International Trade*.” <https://www.economics.ox.ac.uk>, University of Oxford , 2011, www.freit.org/WorkingPapers/Papers/TradePatterns/FREIT179.pdf.
- Bensassi, et al. “Relationship between Logistics Infrastructure and Trade: Evidence from Spanish Regional Exports, Transportation Research Part A: Policy and Practice.” *DeepDyve*, Wiley Subscription Services, Inc., A Wiley Company, 1 Feb. 2015, www.deepdyve.com/lp/elsevier/relationship-between-logistics-infrastructure-and-trade-evidence-from-W2P0N9j584.
- Blivas, Alec, and Katherine Koleski. “China’s Engagement with Latin America and the Caribbean.” *U.S.-CHINA*, U.S.-China Economic and Security Review

Commission , 17 Oct. 2018, www.uscc.gov/Research/chinas-engagement-latin-america-and-caribbean.

Brinckerhoff, Parsons. "Oregon's Freight Profile - Library.state.or.us."

Http://Library.state.or.us, Oregon Department of Transportation, 1 June 2010, library.state.or.us/repository/2010/201008121316004/index.pdf.

Brown, Thomas R., and Anthony B. Hatch. *The Value of Rail Intermodal to the U.S.*

Economy. Strategic Directions LLC, 19 Sept. 2002, intermodal.transportation.org/Documents/brown.pdf.

"Building the Economy: Infrastructure Needs in Washington." *Www.awb.org*,

Association of Washington Business, Mar. 2017,

www.awb.org/file_viewer.php?id=9601.

Chaturvedi, Saurabh. "What Singapore Tells Us About the Global Economy." *The Wall*

Street Journal, Dow Jones & Company, 13 Oct. 2017,

www.wsj.com/articles/singapore-economy-accelerates-but-central-bank-stands-pat-1507855557.

"China Has Built the World's Largest Bullet-Train Network." *The Economist*, The

Economist Newspaper, 13 Jan. 2017,

www.economist.com/china/2017/01/13/china-has-built-the-worlds-largest-bullet-train-network.

Chow, Gregory C. *Economic Reform and Growth in China - Down.aefweb.net*. Peking

University Press, 2004, down.aefweb.net/AefArticles/aef050107.pdf.

Clark, Grant. "What Is Intellectual Property, and Does China Steal It?" *Bloomberg.com*,

Bloomberg, 4 Dec. 2018, www.bloomberg.com/news/articles/2018-03-22/what-

s-intellectual-property-and-does-china-steal-it-quicktake.

Cohen, Spencer, et al. "Washington State Maritime Cluster." *static1.Squarespace.com*, Economic Development Council of King County Seattle, Nov. 2013, [static1.squarespace.com/static/53c04ba6e4b0012ad48d079e/t/54e50fb4e4b0719e5312f057/1424297908332/CAI EDC Maritime Cluster Study 2013 1119.pdf](http://static1.squarespace.com/static/53c04ba6e4b0012ad48d079e/t/54e50fb4e4b0719e5312f057/1424297908332/CAI+EDC+Maritime+Cluster+Study+2013+1119.pdf).

"Congestion (Value) Pricing." *Oregon Department of Transportation : Congestion (Value) Pricing : State of Oregon*, Oregon Department of Transportation, 2018, www.oregon.gov/ODOT/Pages/VP-Feasibility-Analysis.aspx.

"Connecting Washington." *WSDOT*, Washington State Department of Transportation , 1 Nov. 2018, www.wsdot.wa.gov/construction-planning/funding/connecting-washington

Dollar, David, et al. "Why Is China Investing in Africa? Evidence from the Firm Level." *Brookings*, Brookings, 28 July 2016, www.brookings.edu/research/why-is-china-investing-in-africa-evidence-from-the-firm-level/.

Donohue, Thomas J. "From International to Interstates Assessing the Opportunity ..."
Uschamber, U.S. Chamber of Commerce, 2013, www.uschamber.com/sites/default/files/documents/files/ChinaInfrastructure_Final_0.pdf.

Economic Impact and Competitiveness of the West Coast ... Pacific Maritime Association, Martin Associates , 30 Apr. 2014, www.pmanet.org/wp-content/uploads/2014/11/West-Coast-Ports-Economic-Impact-Competition-and-Costs-of-a-Shutdown.pdf.

Ellis, R. Evan. "Volume 28, Issue 2 - 2nd Trimester 2016." *Air University (AU)*, Air

University, 1 June 2016, www.airuniversity.af.edu/ASPJ_S/Article-Display/Article/1548435/volume-28-issue-2-2nd-trimester-2016/.

Feinberg, Richard. "The Future of Latin America and the Caribbean in the Context of the Rise of China; Latin America–China Trade and Investment Amid Global Tensions: A Need to Upgrade and Diversify." *Foreign Affairs*, Center for Strategic and International Studies, 12 Feb. 2019, www.foreignaffairs.com/reviews/capsule-review/2019-02-12/future-latin-america-and-caribbean-context-rise-china-latin.

Feldman, Noah. *Bloomberg.com*, Bloomberg, 17 May 2017, www.bloomberg.com/opinion/articles/2017-05-17/china-is-building-its-way-to-an-empire.

Foreign Trade Div. "State Exports from Oregon." *State Exports from Oregon*, U.S. Department of Commerce, 28 Feb. 2019, www.census.gov/foreign-trade/statistics/state/data/or.html.

Foreword - US China Business Council. U.S.-Oxford Business Council, Jan. 2017, [www.uschina.org/sites/default/files/Oxford Economics US Jobs and China Trade Report.pdf](http://www.uschina.org/sites/default/files/Oxford_Economics_US_Jobs_and_China_Trade_Report.pdf).

Ge, Yang. "'Belt and Road' Drives Into Argentina with \$2 Billion Contract." *Caixin Global*, Caixin Global Limited, 10 Aug. 2018, www.caixinglobal.com/2018-08-10/belt-and-road-drives-into-argentina-with-2-billion-contract-101313794.html

Ghosh, Palash. "Richard Nixon And Pakistan's Yahya Khan: How They Changed History And Ended Up Pariahs." *International Business Times*, IBT Media Inc., 7 Aug. 2013, www.ibtimes.com/richard-nixon-pakistans-yahya-khan-how-they-

changed-history-ended-pariahs-1374435.

- Goodman, Matthew P. ““Opportunities to Expand U.S. Trade Relationships in the ...”
Waysandmeans.house.gov, Center For Strategic & International Studies (CSIS),
11 Oct. 2017, [waysandmeans.house.gov/wp-
content/uploads/2017/10/20171011TR-Testimony-Goodman.pdf](https://waysandmeans.house.gov/wp-content/uploads/2017/10/20171011TR-Testimony-Goodman.pdf).
- Jackson, James K. “The Economic Effects of Trade: Overview and Policy Challenges.”
<https://fas.org/>, Congressional Research Service , 20 Apr. 2018,
fas.org/sgp/crs/misc/R44546.pdf.
- Jacobs, Ben. “Elaine Chao Nominated as Trump's Transportation Secretary.” *The
Guardian*, Guardian News and Media, 29 Nov. 2016, [www.theguardian.com/us-
news/2016/nov/29/elaine-chao-trump-transportation-secretary-nominee](http://www.theguardian.com/us-news/2016/nov/29/elaine-chao-trump-transportation-secretary-nominee).
- Jian, Chen. “THE PATH TOWARD SINO-AMERICAN RAPPROCHEMENT 1969–
19721 - GHI.” *Www.ghi-Dc.org*, German Historic Institute, 2003, [www.ghi-
dc.org/fileadmin/user_upload/GHI_Washington/Publications/Supplements/Suppl
ement_1/supp-01_026.pdf](http://www.ghi-dc.org/fileadmin/user_upload/GHI_Washington/Publications/Supplements/Supplement_1/supp-01_026.pdf).
- Jianguo, HUI. “Chapter 1 The Development of U.S.-China Economic Relations ...”
Www.chinausfocus.com, Chinese Academy of International Trade and Economic
Cooperation (CAITEC), 2013, [www.chinausfocus.com/2022/wp-
content/uploads/Part 02-Chapter 01.pdf](http://www.chinausfocus.com/2022/wp-content/uploads/Part%2002-Chapter%2001.pdf).
- Jiao, Wu, and Zhang Fan. “Beijing Vows to Boost Bolivia Infrastructure.” *Beijing Vows
to Boost Bolivia Infrastructure - Chinadaily.com.cn*, ChinaDaily.com, 20 Dec.
2013, www.chinadaily.com.cn/china/2013-12/20/content_17185667.htm.
- Johnson, Keith, and Reid Standish. “Putin and Xi Are Dreaming of a Polar Silk Road.”

Foreign Policy.com, Foreign Policy, 8 Mar. 2018,
foreignpolicy.com/2018/03/08/putin-and-xi-are-dreaming-of-a-polar-silk-road-
arctic-northern-sea-route-yamal/.

Khachatryan, Hayk, and Ken Casavant. "THE RELATIONSHIP BETWEEN U.S.
TRANSPORT INFRASTRUCTURE ..." *Http://Ses.wsu.edu*, Freight Policy
Transportation Institute - Washington State University, 2011, ses.wsu.edu/wp-
content/uploads/2015/03/7.-FPTI-Working-Paper-2.pdf.

Kuok, Lynn. "The U.S.-Singapore Partnership: A Critical Element of U.S ..."
Https://Www.brookings.edu, Brookings, July 2016, www.brookings.edu/wp-
content/uploads/2016/07/Paper-6.pdf.

LaHood, Ray. "DON'T MISS '60 MINUTES,' SUNDAY, NOV. 23 – AMERICA'S
INFRASTRUCTURE IS 'ON LIFE SUPPORT.'" *NSSGA*, National Stone, Sand
& Gravel Association, 21 Nov. 2014, www.nssga.org/dont-miss-60-minutes-
sunday-nov-23-americas-infrastructure-life-support/.

Lamb, Eleanor. "Transportation Secretary Elaine Chao Keeps All Options Open for
Funding Infrastructure." *Www.ttnews.com*, Transport Topics News, 15 May
2018, www.ttnews.com/articles/chao-promotes-public-private-partnerships-
infrastructure-funding-remains-uncertain.

Li, Weida. "Ecuador Joins China's Belt and Road Initiative." *GBTIMES*, GBTIMES, 13
Dec. 2018, gbtimes.com/ecuador-joins-chinas-belt-and-road-initiative.

Matsuda, Dave, and Steve Rothberg. "Unleashing Washington's Maritime Potential:
Identifying ..." *Www.maritimefederation.com*, Washington Maritime Federation,
Oct. 2016,

www.maritimefederation.com/uploads/2/9/9/6/29962189/wmf_policy_review_-_exec_summary_100316.pdf.

McMahon, Robert. "The Rise in Bilateral Free Trade Agreements." *Council on Foreign Relations*, Council on Foreign Relations, 13 June 2006,

www.cfr.org/background/rise-bilateral-free-trade-agreements.

Monroe, Erin. "U.S.-China Relations: A Brief Historical Perspective." *Http://Uscpf.org*, U.S.-China Policy Foundation, 2014, www.uscpf.org/v3/wp-content/uploads/2014/08/backgrounder-on-US-China-relations.pdf.

Nanto, Dick K. "The U.S.-Singapore Free Trade Agreement: Effects After ..."

Https://Fas.org/, Congressional Research Service , 26 Mar. 2010,

digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1731&context=key_workplace.

Narins, Thomas P. "Chinese Trade in Latin America Compared to the European Union and the United States: The Case of Technology-Intensive Exports."

Www.albany.edu, University at Albany/Routledge - Taylor & Francis Group, 10 Aug. 2017, www.tandfonline.com/doi/abs/10.1080/00330124.2017.1347797.

Noland, Marcus. "Article: American Economic Relations with Asia - PIIE."

Https://Piie.com, Asian Economic Policy Review , 2009,

piie.com/publications/papers/noland1109.pdf.

"OREGON PORTS BACKGROUND BRIEF." *Www.oregonlegislature.gov*, Oregon State Legislature: Legislative Policy and Research Office, Sept. 2016,

www.oregonlegislature.gov/citizen_engagement/Reports/BB2016OregonPorts.pdf.

- Peters, Enrique Dussel, et al. *Building Development for a New Era: Chinas Infrastructure Projects in Latin America and the Caribbean*. Asian Studies Center, Center for International Studies, University of Pittsburgh, 2018.
- Pishue, Bob. "Using Public-Private Partnerships to Improve ..."
Www.washingtonpolicy.org, Washington Policy Center, Nov. 2014,
www.fraserinstitute.org/sites/default/files/using-public-private-partnerships-to-improve-transportation-infrastructure-in-canada-rev.pdf
- "Presidential Inaugurations." *National Archives and Records Administration*, National Archives and Records Administration, 21 July 2017,
www.archives.gov/news/topics/presidential-inaugurations.
- "Public Private Partnerships in Washington State." *Http://Leg.wa.gov*, Washington State Legislature/Transportation Resource Manual , 2013,
[leg.wa.gov/JTC/trm/Documents/TRM 2017 Update/12 - Public Private Partnerships - Final.pdf](http://leg.wa.gov/JTC/trm/Documents/TRM%202017%20Update/12%20-%20Public%20Private%20Partnerships%20-%20Final.pdf).
- "Rail Reports & Plans." *WSDOT*, Cambridge Systematics, Inc., 8 Mar. 2019,
www.wsdot.wa.gov/rail/rail-reports-plans.
- Ramos, Daniel. "Bolivia Says China to Lend \$7 Billion for Energy, Transport..." *Reuters*, Thomson Reuters, 19 Oct. 2015, www.reuters.com/article/us-bolivia-china-loans-idUSKCN0SD2A420151019.
- Read, Richard. "Port of Portland Toasts Economic Growth as International Trade Bounces Back." *Oregonlive.com*, Oregonlive.com, 27 Apr. 2012,
www.oregonlive.com/business/2012/04/port_of_portland_toasts_econom.html.
- Renyi, Mei, and Chen Juebin. "U.S.-China Trade Relations in the 1970s And Hong

Kong's Role." *Www.uscet.org*, Beijing Foreign Studies University, 1999,
www.uscet.org/sites/default/files/u.s.-china_trade_relations_in_the_1970s_and_hong_kongs_role_by_mei_renyi__chen_juebin.pdf.

Richards, Joel. "Argentina Turns to Public-Private Partnerships for Infrastructure Investment." *CGTN America*, CGTN America, 23 July 2018,
america.cgtn.com/2018/07/23/argentina-turns-to-public-private-partnerships-for-infrastructure-investment.

Rocca, Michael Della. "The Rising Advantage of Public-Private Partnerships." *Www.mckinsey.com*, McKinsey & Company, July 2017,
www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/the-rising-advantage-of-public-private-partnerships.

Rother, Larry. "China Widens Economic Role in Latin America." *The New York Times*, The New York Times, 20 Nov. 2004,
www.nytimes.com/2004/11/20/world/asia/china-widens-economic-role-in-latin-america.html.

Sohn, Kiyoun, and Taek Dong Yeo. "Does the International Trade Help to Enhance National ...?" [Https://Faculty.washington.edu](https://Faculty.washington.edu), University of Washington, University of Incheon, Yeungnam University, 2005,
faculty.washington.edu/karyiu/confer/sea05/papers/sohn_yeo.pdf.

Storm, Rex. "Forest Issues | Forest Roads: Oregon Association of Loggers." [Http://Www.oregonloggers.org](http://Www.oregonloggers.org), Associated Oregon Loggers, Inc.,
www.oregonloggers.org/Forest_Issues_Roads.aspx.

- “Study Reveals \$4.3 Billion Economic Impact from Tacoma and Seattle Ports.” *Port of Seattle*, Martin Associates, 30 Sept. 2014, www.portseattle.org/news/study-reveals-43-billion-economic-impact-tacoma-and-seattle-ports.
- Stupak, Jeffrey M. “Economic Impact of Infrastructure Investment.” *Https://Fas.org/*, Congressional Research Service , 24 Jan. 2018, fas.org/sgp/crs/misc/R44896.pdf.
- The Impact of Truck Congestion on Washington State s Economy*. Washington State Department of Transportation , 2011, socialcapitalreview.org/wp-content/uploads/2012/06/WSDOT-TC-IMPACT-WA.pdf.
- “U;S; Container Port Congestion & Related International ...” *Https://Www.fmc.gov*, Federal Maritime Commission, July 2015, www.fmc.gov/assets/1/Page/PortForumReport_FINALwebAll.pdf.
- “U.S. Department of the Treasury.” *Foreign Account Tax Compliance Act (FATCA)*, Department of Treasury, 7 July 2016, www.treasury.gov/resource-center/tax-policy/treaties/pages/fatca.aspx
- Walling, Christopher. “Rom International to Interstates AssessIng the OpportunItY ...” *Www.uschamber.com*, U.S. Chamber of Commerce, Oct. 2013, www.uschamber.com/sites/default/files/documents/files/ChinaInfrastructure_Final_0.pdf.
- “Washington State Rail Plan.” *WSDOT*, Washington State Department of Transportation , Mar. 2014, www.wsdot.wa.gov/NR/rdonlyres/F67D73E5-2F2D-40F2-9795-736131D98106/0/StateRailPlanFinal201403.pdf.
- Watkins, Neil, and Sarah Anderson. “Ecuador's Debt Default: Exposing a Gap in the Global Financial Architecture.” *Institute for Policy Studies*, Institute for Policy

Studies, 8 May 2014, ips-

dc.org/ecuadors_debt_default_exposing_a_gap_in_the_global_financial_architec
ture/.

Wight, Andrew. "China, Eyeing Bolivia's Lithium Riches, Helps Country into Space."

The Sydney Morning Herald, The Sydney Morning Herald, 20 Feb. 2018,

www.smh.com.au/world/south-america/china-eyeing-bolivia-s-lithium-riches-
helps-country-into-space-20180220-p4z0yz.html.

Wong, Catherine. "China Offers to Join US\$1.5 Trillion Plan to Rebuild US

Infrastructure." *South China Morning Post*, Alibaba Group, 20 July 2018,

www.scmp.com/news/china/diplomacy-defence/article/2143586/china-tells-
donald-trump-we-can-help-make-americas.