

Uniting Families and Celebrating a Third Nation: Bridging the Wall, A True Binational Park for  
the Borderland of Juarez – El Paso

by

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## ABSTRACT

Uniting Families and Celebrating a Third Nation: Bridging the Wall, A True Binational Park for  
the Borderland of Juarez – El Paso

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According to the Migration Policy Institute (MPI), an estimated 11.3 million undocumented immigrants reside in United States (U.S.) of which 53 percent are Mexican (Gelatt & Zong, 2018). Many of these immigrants have not been able to see their families in Mexico for numerous years. Due to the lack of documentation, it is difficult to determine the exact number of separated families. By considering remittance inflow to Mexico, that is, money sent from individuals in the U.S. to individuals in Mexico, the researcher can gain an understanding of how many Mexican families exist in a state of separation (Orozco, 2015). The U.S. is the top remittance-sending country in the world, with over 68 billion dollars sent in 2017 (World Bank, 2020). Mexico is its primary beneficiary, receiving over 30 billion dollars, nearly half of the total amount of remittances sent. Although, Mexican migration into the U.S. has slowed down significantly, with only a one percent increase between 2010 and 2016, the remittance inflow to Mexico has remained constant and not decreased as would have been expected.

According to surveys conducted by political scientist, Manuel Orozco (2015), the median length of time Mexican migrants remain in the U.S. without returning to Mexico has increased from 7 years to 12 years due to stricter immigration enforcement. As a result, a majority of

Mexican immigrants are sending money home via money transfer instead of physically bringing cash home to their families. Most Mexican immigrants fear leaving the U.S. and not being able to return leading to extended periods of family separation (Aizenman, 2017).

As partisan politics divide the nation on various issues, which include immigration and the construction of a wall along the US - Mexican border, the objective of this thesis is to develop a conceptual design that will challenge the interstice of the borderland at El Paso-Juarez. This research is to study and assess the cultural integration of the borderlands to inform the design of a binational park for the El Paso – Juarez region, which reunites people and celebrates the friendship of the two bordering nations.

A description strategy method, which combined multiple sources, was utilized for the development of the design proposal for a binational park in the border region of El Paso and Ciudad Juarez (Deming & Swaffield, 2011). The first step was to collect literature to understand the history and culture of the US- Mexico border region. The second step was to use precedent studies. These precedent studies were a combination of existing binational parks in North America, a pedestrian bridge on the US- Mexico Border, and border wall design concepts for the US-Mexico border. The precedent studies were used to aid the design process for the binational park on the El Paso-Juarez border region. The third step was to utilize two of the binational parks from the precedent studies as case studies. These parks were chosen based on typology and the suitability for the location of the proposed binational park in El Paso- Ciudad Juarez. The case studies were analyzed and evaluated based on: (a) location and context, (b) description, (c) major uses and users, and (d) successful and unsuccessful features. The findings from the design process were then used for a binational park in El Paso- Ciudad Juarez region.

Based on data such as literature review, precedent studies, and in-depth case studies, the research explored the contingency of a landscape for the unity of a third nation, that is a place bridging national boundaries and celebrating the history and cultural ties of the two neighboring cities. The design proposal considered a large gathering space for the celebration of history and culture of the El Paso- Juarez region. The design proposal also provided a variety of spaces for people to engage in social activities and family unification.

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## **Chapter 1**

### **Introduction**

#### **1.1 Background**

The United States (U.S.) and Mexico share an intimate and complex relationship based upon a long and often turbulent history. Regardless of many historical events that lead to diplomatic tensions, the ties between the two nations are strong and bound to happen, impacting both Mexican and American citizens. The two are interlaced through history, culture, commerce, security, education, and environment among other issues.

Unfortunately, the Trump administration's anti-immigrant stance has damaged that relationship and incited anti-Mexican sentiment (Rivas, 2019). His administration has made it difficult for any and all immigrants, legal or illegal, to enter the U.S. Numerous families have been separated through the Zero Tolerance policy of his administration, and nearly 5,500 children have been separated from their parents when families have tried to cross the border (Aguilera, 2019). Denial rates have increased for most immigration categories cutting all legal immigration in half from 2017 when Donald Trump was inaugurated until 2021 (Forbes, 2020). Refugees and asylum seekers have experienced a significant denial rate, and highly skilled foreign nationals (such as doctors) have experienced a 6% denial increase (Forbes, 2020). Even those serving in the US Armed Forces have experienced difficulties in becoming naturalized citizens. Applications fees for naturalization citizenship have increased by 80% (Forbes, 2020). Tighter immigration policies have alarmed many undocumented Mexicans; therefore, leaving the U.S. and not being able to come back is a risk they are not willing to take. Consequently, undocumented immigrants are willing to stay in the U.S. without any plans of ever coming back, leaving their families behind physically in order to support them economically.



### **1.2.1 Problem statement.**

The problems of illegal immigration and drug trafficking at the border, does not start at the border. This is a more complex problem that needs to be dealt with on a national level in collaboration of both the U.S. and Mexican federal governments. The borderland communities do not have the capacity to exercise self-determination in these matters (Dear, 2013). It is important to have a better understanding of how the border region works. Twin cities on the border thrive on international collaboration, which has been their way of life for centuries. The belief that undocumented immigrants are smuggling majority of the drugs during the cross over by land is a myth; most illicit drugs pass undetected through Ports of Entry (POE) (Kiely, 2017). According to the U.S. Sentencing Commission, 77 percent of federal drug trafficking convictions involve U.S. citizens attempting to smuggle drugs through airports and POEs at the border (Bier, 2019). The belief that a “big, beautiful wall” will stop most of the illegal drug flow became problematic in light of research; thus, showing that the majority of drugs are coming through POEs. The focus should be shifted towards the social fabric that overlaps the international boundary to commemorate and strengthen the shared interests and collaboration between the US and Mexico.

### **1.2.2 Historical ties.**

Historical events shared by the United States and Mexico date back to the 19<sup>th</sup> century, but it was a collaboration between the two nations. The United States supplied Mexican troops with weaponry in an effort to drive out the French invading forces. In the early 1900s, it was not until the time of Mexican president Porfirio Diaz (1830-1915) that foreign investing was encouraged into Mexico in pursuit of economic growth. According to Public Broadcasting Services (PBS) (2013), during this time American companies invested nearly 2 billion dollars in

Mexican mining, commercial agriculture, and railroads. Furthermore, the Mexican railroad system expanded to nearly 15,000 track miles (Meier & Ribera, 2001) connecting with the U.S. for the exportation of minerals, coffee, and oil in exchange for the machinery that modernized Mexico (PBS, 2013).

During World War I (1914-18), Mexican labor was utilized to fill in for absent American workers who had been sent off to war or were working on war production. At the same time, through the Selective Service Act of 1917, Mexican immigrants were obligated to register for the draft regardless of their eligibility. About five years after deporting hundreds of thousands of Mexicans and Mexican Americans, the U.S. needed the Mexican manpower to fill in the labor shortage during World War II (PBS, 2013). In the 1950's the Braceros program was created to allow Mexicans to work in the U.S. temporarily (Meier & Ribera, 2001). Yet again, in 1954 through Operation Wetback, 3.8 million Mexicans were deported, continuing the cycle (PBS, 2013).

Research demonstrated that immigrants of all skill levels continue to be vital to the United States economy and these workers contributed more to society than they consume (Selee, 2018). Immigrants increased the productive capacity of the economy and raised gross domestic product (GDP); as their income rose so did the income of U.S. natives (Orrenius, 2016).

During this unprecedented time as the world continues to battle COVID-19, Mexican immigrants have come forward to contribute to the essential workforce. In an interview, Wisconsin dairy farmer stated that he has relied on Mexican immigrants for years and that the industry would not exist without the immigrant labor (Krauze, 2020). Immigrants in Wisconsin harvest 80 percent of the milk produced there, considered the "Dairy State" (Krauze, 2020).

Close to 20 percent of food processing workers and over 36 percent of agriculture workers are undocumented immigrants (Krauze, 2020).

In the meat packing industry, there are 175,000 immigrants that make up about 40 percent of the total workforce (Groves & Tareen, 2020). Analysis by the Center for Disease Control and Prevention states that 90 percent of all coronavirus cases in the meatpacking industry are Hispanics, African Americans, and recent immigrants (Schlitz, 2020). Meatpacking workers have been facing dangerous working conditions well before the pandemic and the government has done very little to correct the problem (Groves & Tareen, 2020). Hispanic workers wishing to remain anonymous in fear of losing their jobs are among the more than 4,600 infected poultry plant workers in Arkansas, the second largest poultry producing state by weight (Schlitz, 2020). In the face of the pandemic (2020), Americans have relied on these frontline workers to put food on their tables regardless of the dangerous conditions faced by the workers.

During this pandemic, even Mexicans across the border have become a critical element to the U.S. economy. Factories in Mexico are being pressured by the U.S. government to reopen and start production regardless of the current spectra of COVID-19 deaths, and recommendations by Mexican health officials (Linthicum, Fry, & Minjares, 2020). Many U.S. corporations rely on the supply chain with Mexico for products such as: automobile parts, parts for defense contractors, medical equipment and are concerned that the halt in production may cause permanent damage to the free trade zone of North America (Linthicum et al., 2020). American corporations with factories in Mexico benefit from paying lower wages and being subject to more lenient health, safety, and environmental regulations than would be the case in the U.S. (Linthicum, 2020). Numerous of these factories are located in COVID-19 hot spots and many Mexican workers are afraid to return to work. Disregarding health authorities' recommendations, Mexican officials

and more than a dozen Mexican plants have agreed to reopen while others, which never closed, will not face punishment, and remain opened in spite of the prevalence of COVID-19 (Linthicum et al., 2020).

### **1.2.3 Cultural ties.**

Mexicans have been some of the first immigrants to enter U.S. In the course of history, their contributions to the U.S. have been crucial elements in shaping the country. Many can see the Mexican culture and their influence on the United States in a variety of ways. For instance, the origin of cowboys on U.S. ranches has derived from the Mexican vaqueros, who were hired by ranchers to care for their livestock due to their superior roping, riding, and herding skills (History, 2019). Even Mexican holidays have been adopted by Americans. Cinco De Mayo, a minor holiday in Mexico, is highly celebrated throughout the United States. Just as Saint Patrick's Day has evolved to Irish American culture, Cinco De Mayo has come to celebrate Mexican American culture. In recent years, El Día De Los Muertos (Day of the Dead), a Mexican holiday to honor and remember their dead has gained popularity as well. Major cities to include Chicago, Los Angeles, San Antonio, and Fort Lauderdale have held Día De Los Muertos parades (History, 2019). Another import from Mexico is Mexican cuisine and tequila. One can enjoy a wide range of styles throughout the country from Tex-Mex to Cali-Mex, or a more traditional Mexican style.

The Mexican American borderland region has a unique culture and lifestyle. It is estimated at 129.2 million, a combined number of pedestrians and people in personal vehicles crossed the Mexican American border in 2019 (Bureau of Transportation Statistics, 2020). According to the Department of State (2019), the border region represents a combined population of approximately 15 million people. In the El Paso-southern New Mexico Region, there are more

than one million people and another 1.3 million across the border in Ciudad Juarez, Mexico (Gannon, 2018).

Many of these citizens of El Paso and Ciudad Juarez have a transborder identity, which means, their daily life extends across the border and many of them hold dual citizenship (Eastaugh, 2017). Although Juarez and El Paso are on opposite sides of the border, they are defined as a transborder agglomeration, one region. The surrounding mountains give this region a sense of remoteness, farther away from their national capitals. For hundreds of years, people of the region have been crossing the border on a daily basis for work, education, shopping, or entertainment. Early in the morning, long lines of people wait to cross the U.S. Custom's checkpoint on their way to work or school. After the September 11, 2001 attacks on the U.S., things have become harsher for the local citizens and commercial vehicles because of longer wait times to cross the border every day.

While millions of Mexicans have made the U.S. their home, 1.5 million Americans have settled in Mexico. Many American expatriates are drawn to Mexico for the warmer climate, abundance of coastline, cheaper standards of living, affordable healthcare, and excellent food. Some are in search of a slower, more tranquil lifestyle while others are in larger cities for business. Many Americans settle in places like Rosarito and Ensenada for the beaches, and others are drawn to larger cities, including Mexico City, Guadalajara, and Monterrey for jobs with global corporations (Selee, 2018).

#### **1.2.4 Commercial ties.**

The 2,000-mile U.S.-Mexican border has 55 active Ports of Entry (POE). Some of these ports are among the busiest land border crossings in the world. The Port of Laredo is the world's busiest land border in terms of traffic (Owuor, 2019), and totaled more than \$230 billion dollars in 2019 (U.S. Trade Numbers, 2020). The United States, with its No. 2 trade ranking partner, Mexico, generated more than \$243 billion dollars in the first six months of 2020 (U.S. Trade Numbers, 2020). During the same period in 2019, the prior year, Mexico was ranked No. 1 U.S. trading partner with a total of more than \$614 billion dollars in trade (Forbes, 2020).

#### **1.2.5 Security ties.**

In more recent years, the violence in Mexico, the anti-immigration climate, and the efforts to build a wall have made things more difficult for the people of the borderland. Ironically, the relationship between the two nations continue to grow stronger (Selee, 2018). Through The Merida Initiative of 2008, law enforcement contribution from both sides of the border have been working together to fight drug trafficking. Through Merida, Mexico has received 2.8 billion dollars from the U.S. in efforts to train and equip Mexican Law Enforcement (Bureau of Western Hemisphere Affairs, 2019). Border security has improved not because of a wall but because of the joint effort and state of the art equipment invested on border security.

#### **1.2.6 Educational ties.**

According to the Department of State, The United States has a robust series of educational exchange programs with Mexico working with a number of young leaders, students, civil society, and entrepreneurs (Bureau of Western Hemisphere Affairs, 2019). In the Juarez-El Paso region, The University of Texas at El Paso (UTEP) and the Universidad Autonoma de Ciudad Juarez (UACJ) have had a close relationship before the interruption of the cartel violence of

Juarez in 2007, but in 2019 the two institutes have planned to restore their academic relationship (Carmona, 2019). During the same year, the University of San Diego (USD) School of Business and Centro de Enseñanza Técnica Y Superior (CETYS) of Mexicali signed an agreement to offer a dual graduate business degree. Students from CETYS will be able to obtain the USD Master of Science in Global Leadership and an MBA from CETYS from their own campus. According to the University of San Diego, this is the first time that a USD degree is offered outside the U.S. (Martinez, 2019).

### **1.2.7 Environmental ties.**

International cooperation between Mexico and the United States for the environment has been taking place for many years. La Paz agreement of 1983 signed by Presidents, Ronald Reagan, and Miguel de la Madrid, became the framework for the protection and improvement of the environment in the border region (La Paz Agreement, 1983). Today, there are a number of organizations that are dedicated to help preserve and protect the natural environment of the southern border region. The North American Development Bank (NADB), a financial institute, was established in 1994 to provide financial support for the development and implementation of infrastructure projects within 62 miles of the Mexican American border, as well as to provide technical and other assistance for projects and actions that preserve, protect, or enhance the environment in order to advance the well-being of the United States and Mexico (North American Development Bank, 2020). The United States Environmental Protection Agency (EPA) funds and administers the U.S.-Mexico Border Water Infrastructure Program (BWIP) with the cooperation of the NADB and Mexico's CONAGUA to develop projects along the southern border (United States Environmental Protection Agency, 2020).

### 1.3 Research Purpose

This design thesis is to study and assess the cultural integration of the borderlands to inform the design of a binational park for the El Paso – Juarez region that reunites people and celebrates the friendship of the two bordering nations. It is to determine the most effective park typology in response to the site opportunities for the development of a binational park for the El Paso – Juarez borderland region. This thesis is also to develop a design proposal for the interspace between El Paso, Texas and Ciudad Juarez, Chihuahua.

### 1.4 Research Questions

This research poses three critical research questions:

1. How can the design of a binational public open space respond to the cultural integration of the El Paso – Juarez region?
2. How can the characteristics of the physical environment create opportunities for the design of a binational park?

### 1.5 Definitions of Terms

**Third Nation:** A community carved out of the territories between two existing nation-states. Communities from these territories can identify with one another on basis of shared history, culture, and ethnic traits (Dear, 2015, p. 71).

**Borderland:** The region along the dividing line between two countries (Rael, 2017).

**Twin Cities:** Two neighboring cities divided by a border who rely on each other (Dear, 2015).

**POE:** Port of Entry; a place where customs officials are stationed to oversee the entry and exit of people and merchandise (Selee, 2018).



**Californios:** Mexican Americans originally from California (Meier & Rivera, 1999).

**Tejanos:** Mexican Americans originally from Texas (Meier & Rivera, 1999).

**Transborder students:** Students who live in Mexico and commute across the U.S.-Mexico border for school (Ortiz, 2018).

## 1.6 Methodology

A descriptive strategy (Deming & Swaffield, 2011), that is, a research approach that combines data from multiple sources was used as part of the design process for a binational park in El Paso, Texas and Ciudad Juarez, Chihuahua, Mexico. The combined sources are published literature, precedent studies, and case studies. Literature was collected on Mexican American history, immigrants, and third nations to understand the history and culture of the US- Mexico border region. Furthermore, this literature helped develop the programming for activities and special events for the binational park. A combination of three types of precedent studies were used to inform the design for the binational park for El Paso-Ciudad Juarez region. These precedent studies were binational parks of North America, The Cross Border Xpress, and border wall concepts. The precedent studies served as examples of current binational parks, innovated ideas both existing and conceptual and helped solve issue such as security and connectivity between the binational park and the twin cities of El Paso and Ciudad Juarez. Finally, two of the binational parks from the precedent studies were for more in-depth case studies. These parks were chosen based on typology and suitability of the location for the proposal of the binational park for El Paso and Ciudad Juarez. The cases studies were analyzed and evaluated based on location and context, description, major uses and users, and successful and unsuccessful features. The researcher then used the findings for the design process for a binational park in El Paso-Ciudad Juarez region.

## **1.7 Significance and Limitations**

The significance of this research is that it highlights the relationship and historical ties that bind the United States and Mexico for the celebration of their friendship and collaboration through the design of a binational park. Moreover, the research further signifies the practical need of a binational space for families to reunite despite their immigration status in the United States. A greater significance is that this research can also serve as a model to promote friendship and unity among other bordering regions.

In regard to limitations, there is limited number of known binational parks in the world for case studies. The case studies used for this research are in North America and related to the proposal for the border of El Paso, Texas, and Ciudad Juarez, Mexico. Through precedent studies, four binational parks and one potential binational park were analyzed. The two that were suitable by scale and park typology were used for the case studies. The other two out of the four parks are large National Parks that are not suitable to the region of El Paso- Ciudad Juarez due to their large size. A third was more suitable by scale, but it was in a more rural areas that did not relate to a larger urban region such as, El Paso and Ciudad Juarez. On the border of Norway and Sweden there is Morokulien, a nearly 15-acre international park along the border (Morokulien, n.d.). Many people know it as a “country,” The Scandinavian Republic of Peace (Morokulien, n.d.). Although this park celebrates the peace between two countries, it is not suitable for a case study. Unlike the borders in North America where people need a passport to travel between countries, the two European countries are part of the Schengen Area. This area is a zone of 26 European countries which allow people to move freely between these countries (Schengen Visa

Info, n.d.); therefore, they do not experience the security restraints as people do on the Mexican American border.

## **1.8 Summary**

According to the U.S. government website, *Whitehouse*, the primary goal of immigration reform under President Donald Trump is to restore the law and secure the borders through construction of a border wall (Immigration, 2018). Research revealed that most Americans were oppose to Trump's wall. Studies demonstrated that two-thirds of undocumented immigrants enter the U.S. legally (Semotiuk, 2019) and that most of the illicit drugs entering the U.S. are smuggled in through POEs. It should be further noted that there are environmental issues the wall will create such as, the taking of private land and the billions of dollars needed to build the wall.

Despite the racism and tensions demonstrated throughout U.S.-Mexican history, the collaborative forces that bring the two nations together outweigh the more negative moments of their past. In present time, as the Trump administration continues to fuel the U.S. with anti-Mexican sentiments, private and public entities communicate across the border in efforts to improve twin city's infrastructure, boost international tourism, promote international investment and economic development, and lastly, construction of ports and freeways to ease commercial and public border crossing (Dear, 2013).

El Chamizal, a landscape claimed by both El Paso and Juarez in the late 1800s, where a series of historical events unfolded between the United States and Mexico, presents an opportunity to create a binational park that allows people to unite and celebrate the friendship and cultural ties that bind these two nations together. Furthermore, the shared landscape can serve both the local community and tourist visitors with a variety of educational, recreational,

and cultural amenities. It can set an example for international collaboration and serve as an instrument to educate people on the relationship between Mexico and the U.S. in an effort to improve anti-Mexican sentiment in the U.S. El Chamizal is the chosen site for the binational park proposed in this thesis.

## Chapter 2

### Literature Review

#### 2.1 Mexican American History

For many years after the first known settlers, waves of immigrants from many parts of the world have continued to migrate to America. People of Mexican descent, tracing their origins to Central Mexico and Spain, have occupied the southwest of modern-day United States since before the Mayflower reached New England (Meier & Rivera, 1993). The history of Mexican Americans began after the Mexican American War of 1846-48, which led to the Treaty of Guadalupe Hidalgo giving the U.S. approximately 50 percent of Mexican territory. The annexation of this land consists of modern-day California, Arizona, Nevada, New Mexico, Utah, Colorado, and Texas. Mexicans living on the annexed land were given the choice to remain and become United States citizens, or to keep their Mexican citizenship and move south into Mexican territory. Nearly 80,000 of Mexican citizens living in this territory became U.S. citizens (Meier & Rivera, 1993).

With the arrival of Anglo Americans into the annexed land, Mexican Americans faced cultural challenges and discrimination. Despite these challenges and the overwhelming population of Anglo Americans, Mexican culture remained and continued to influence the region. Anglo's adapted traditional Mexican techniques in mining, ranching, and agriculture. (Meier and Rivera, 1993). The U.S. borderland along the southern border continues to have strong cultural ties to Mexican culture. Acknowledging the history of Mexican Americans through the binational park for the borderland of El Paso and Ciudad Juarez can give the people of the region a sense of attachment (Project for Public Spaces, n.d.). These important historical events for a region whose majority are of Mexican descent can also shed light and educate

people about the U.S.-Mexico border region. Furthermore, these historical events can also be celebrated in the proposed binational park for El Paso-Juarez border region.

### **2.1.2 Contributions of Mexican American's / Mexican immigrants.**

From the 1848 signing of the Treaty of Guadalupe Hidalgo to present day, Mexican American and Mexican migration contributions have had a significant impact on U.S. history. The political and economic ties between the two neighboring countries have always been inevitable. In the 1850s, rancheros (Mexican American ranchers) in California supplied beef in high demand for markets during the gold rush. During the civil war, Mexican Americans served in the union forces while others served as politicians for the Republican Party. In the Mexican War of 1867, Californios (Mexican Americans from California) and Anglos volunteered to help Mexico fight the French. Since the 19<sup>th</sup> century, Mexican immigrants continued to come to the United States due to the high demand for labor in farm work, day labor, slaughterhouses, domestic services, mining, and railroad. (Meier and Rivera, 1993).

In the early 1900s, the expansion of the Mexican railroad and the Mexican Revolution led a large wave of Mexican immigrants into the southwest of the United States. Mexico had built 15,000 miles of railroad connecting many mines in the country with the United States (Meier and Rivera, 1999, p. 105). Mexican President, Porfirio Diaz, attracted many American investors to help transform his country. While American companies invested in Mexican mines, agriculture, and the railroad to export goods into the U.S., machinery was imported to Mexico to modernize the country. The experienced Mexican railroad laborers were offered higher wages to construct and maintain the railroad on the American side. In New Mexico, the Mexicano labor had a deep impact on the railroad industry (Meier and Rivera, 1993). Because of the agricultural U.S. booming economy of the southwest and the Mexican revolution, a large portion of Mexicans saw

the U.S. as their only option for a better life. An estimated one million people fled north into the United States during the Mexican revolution. As a result of this movement, in California the central valley towns were born, the great aqueducts were built and in Texas, desert lands were reclaimed for farming (Public Broadcasting, n.d.). In Texas, the cattle industry was being replaced by cotton farming while in Arizona and Southern California land acreage for cotton growth increased, leading for a high labor demand to keep up with the rapid growth of these industries in the southwest (Meier and Rivera, 1993).

Before entering World War, I, the United States became the Allies' main supplier, applying heavy pressure on the labor demand for industrial and agriculture companies. When the U.S. finally entered the war in 1917, the labor force lost most of their young American workers to the military service and Mexican immigrants filled those gaps (Meier and Rivera, 1993). In 1921, President Warren Harding signed a bill known as "The Quota Act," restricting the number of immigrants to 357,000 per year, and also set down an immigration quota by which only 3 percent of the total population of any ethnic group currently in the U.S.A. in 1910, could be admitted to America after 1921 (Immigration History, n.d.). Since Mexicans were exempted from this law, not only did Mexican immigrants fill labor positions in the southwest, but they were also being recruited for companies in the Midwest. In Iowa and Minnesota, the Mexican labor was used in the sugar beet fields (The University of Iowa Libraries, 2016). In Michigan, they worked in the auto industry, and others worked in government construction. By May of 1917, The Selective Service Act was passed, and Mexican immigrants were obligated to register for the military draft despite their legal status (Public Broadcasting, n.d.). Many Mexican Americans along with Mexican immigrants who fought bravely facing great danger were not honored for their

exceptional valor, although some of them received multiple medals from other Allied countries (Young, 2020).

According to Meier & Ribera (1993) in the book titled, *Mexican Americans/ American Mexicans*, despite their loyalty to the U.S. military and civilian support of the war effort, Mexican Americans continued to experience discrimination and racism (Meier and Rivera, 1993).

Despite their contribution to the U.S. efforts during WWI, in 1930s about 1.8 million people were deported to Mexico, of which 60 percent were United States citizens (Little, 2019). The U.S. deported a million of its own citizens to Mexico during the Great Depression. The goal was to eliminate the Mexican workforce and give those jobs to Americans. A decade later, as World War II sets in, Mexican Americans were ready to step up to the plate to fight and die for their country regardless of the discrimination they lived through. An estimated 500,000 Mexican Americans served in the armed forces during WWII (Oropeza, 2015). As a result of the war, Mexican manpower was needed to fill in those voids in agriculture and railways maintenance (Bracero History Archives, 2020). The Bracero Act was signed to guarantee the legality of about 4.6 million Mexican nationals to work in the United States (Bracero History Archives, 2020).

### **2.1.3 Tejanos and Mexican immigrants in Texas.**

After the Mexican American War, in Texas the Tejano (descendent of original Spanish-speaking settlers of Texas) population continued to grow. The first federal census documented a 14,000 Tejano population in Texas and over the next 30 years this population quintupled to nearly 70,000. Mexican migrants accounted for a large portion of the population growth (De Leon, 1999). Post American Civil War, Mexican Americans and Mexicans immigrants played a major role in the economic development of the state. Many Tejanos and Mexicans replaced the



ex-slaves and became the labor force for the Euro-Americans. During the Texas cattle boom, the high employment demand was fulfilled by the Mexican vaqueros (Mexican cowboys), the Mexican labor and expertise on sheep was crucial for the growth of the industry, and in the mid-1880s, cheap Mexican labor increased the growth and distribution of cotton (Meier & Rivera 1993). According to the United States Census Bureau, Hispanics are the largest ethnic minority group. From that group, people of Mexican origin make up 63.2% of the population (2017). Mexican immigrant history in Texas can be traced back to the late 1800s (De Leon, 1999). Their contribution to the economy has made an impact on multiple industries, from seasonal farming in the late 1890s to modern day construction, an industry who relies on a third of its workforce (Sherman, Trisi, Stone, Gonzales, & Parrott, 2020).

#### **2.1.4 Tohono O’odham nation.**

On the border of Arizona and Sonora, Mexico reside the Tohono O’odham Nation. A Native American tribe of the Sonoran Desert whose ancestors have occupied the land for thousands of years (Tohono O’odham Nation, 2016). In 1853, their land was split by an international border created by the Gadsden Purchase, the acquisition of the Mesilla Valley in New Mexico and Arizona (Meier & Ribera, 1993). The Tohono O’odham Nation has a population of 34,000 of which 2,000 live on the Mexico side. The borderline intersects 62 miles of their sacred land, separating them from their cemeteries, water wells, and ceremonial sites (Rocha, 2017). Before the border, they did not have to worry about a border patrol check point to visit their families or ceremonial sites. Nowadays, the citizens have to carry an identification card to cross a fence that divides their land. According to Tohono O’odham Nation council member Verlon Jose, in the past people would walk a few steps across the border to get water from a well, but now the citizens would have to drive 4 miles north to access water from a water

well on the U.S. side (Rocha, 2017). The livestock and agriculture of the Tohono O’odham depend on natural water flow from the Mexican side into the U.S. Furthermore, replacing an existing 5-foot fence and vehicular barriers with a border wall would hinder the natural flow of the water and the migration of the wildlife.

This is a nation that has been opposed to the Trump wall and has set an example of how to improve border security through collaboration. With vehicular barriers along the border and their partnership with multiple law enforcement agencies, the Tohono O’odham nation has effectively reduced 84% of migrant apprehension from 85,000 in 2003 to 14,000 in 2016 (Tohono O’odham Nation, 2016). There are plans of introducing a more sophisticated surveillance technology within the Tohono O’odham territory to enhance border security. This technology is known as Integrated Fixed Towers (IFTs), they are solar powered surveillance systems with infrared and video technology to detect movement. The towers will be able to monitor any kind of movement 24/7. While the proposal of this new technology has created controversy between the citizens of the Tohono O’odham, the efforts and collaboration between the community and agencies involved have proven that there are many other solutions for border security than the use of a wall.

### **2.2.1 Binational Parks in North America**

A binational park is a park shared by two nations. There is a total of 5,078 miles of border shared by the United States with Canada and Mexico, 1,933 between Mexico and United States (National Geographic, n.d.) and 3,145 miles between the United States and Canada (International Boundary Commission, n.d.). Along the United States and Canadian border, there are shared parks or gardens that bring both nations together to celebrate their friendship.

### **2.2.2 Binational parks shared by Canada and the United States.**

Between the Canadian Province of British Columbia and Washington State there is the Peace Arch Provincial Park. It was the first peace monument in the world, dedicated in 1921. An American businessman by the name of Sam Hill had a vision for the arch (Washington State Parks, n.d.). To celebrate peace between the two countries, Mr. Hill laid a hollow cornerstone within which he placed a hammered steel box made from the steel of a slave ship. The box stored a piece of the ships, *Beaver* and *Mayflower*. An arch with two iron gates was placed to symbolize peace between the neighboring nations. The land surrounding the Peace Arch was purchased with donations from school children from the United States and Canada. In 1939, the Canadian side was officially dedicated. On the Washington side of the arch, there is an engraving that reads, “Children of a Common Mother,” and on the British Columbia side it reads, “Brethren Dwelling Together in Unity.” Among other features, the park offers broad lawns, public areas, a lily pond, and a flower garden in the shape of the Canadian flag. Several events are held there annually to celebrate peace and friendship between the two nations. Celebrations began to take place there in 1937; the first official Peace Arch Celebration was a joint U.S.-Canadian Armistice Day. At the Peace Arch, there has been gift exchanging between children, parades through the Arch portal, flag raising, veterans’ ceremonies, and playing the national anthems of both nations. From May 1<sup>st</sup> to October 1<sup>st</sup>, 2019, the twenty- second annual International Sculpture Exhibition took place there. This event had been a catalyst in the development of international fine artists. More than 500,000 people visit the international park for this annual event (Washington State Park, n.d.).

Between the States of Montana and Alberta Province, lies the Waterton – Glacier International Peace Park; another binational park shared by Canada and the United States.

Waterton Lakes National Park is on the Canadian side and Glacier National Park is on the American side. Both parks are considered world heritage sites. These parks help improve and protect the biodiversity of the region, which are recognized as a biosphere reserve by United Nations Educational, Scientific and Cultural Organization (UNESCO). The main mission statement shared by several Rotary Club Districts (an organization of professionals interested in serving their community and the promotion of peace) is for both Waterton Lakes National Park and Glacier National Park to serve as a symbol of friendship, cooperation, and commitment to building peace initiatives whenever possible (Waterton-Glacier International Peace Park Association, n.d.). This mission statement is accomplished by the following (Waterton-Glacier International Peace Park Association, n.d.):

- Supporting the work and mandate of both parks to provide educational opportunities for park visitors and the general public to preserve the flora and fauna and the lands which make up the parks.
- Advocating with Rotarians and other groups who have similar goals for the promotion of peace, freedom, and equal opportunities for all.
- Monitoring all proposed developments both inside and outside of the boundaries of both national parks and support changes which ensure the long-term ecological integrity of Waterton-Glacier International Peace Park for future generations.
- Working with organizations that have similar interests in conservation and support the expansion of Waterton Lakes National Park to encompass the Flathead River Valley in British Columbia.

During the great depression of the 1930s, 100 members from seven Rotary Clubs from Alberta, Saskatchewan, and Montana met on July 4 – 5, 1931 at the Prince of Wales Hotel in Waterton for a goodwill meeting. At this gathering, as citizens of both nations sang along to anthems they both knew, *God Save the King* and *My Country Tis of Thee*; they also shared their wishes as the idea of a Peace Park was introduced (Waterton-Glacier International Peace Park Association, n.d.). The 100 members of the Rotary Clubs decided to hold an annual meeting held alternatively between the two national parks, Glacier Park in Montana, and Waterton Park in Alberta. A petition to relevant authorities was introduced in pursuit of a permanent International Peace Park between the two countries. Government officials from both sides of the border were lobbied by Rotary Club members, and within a year the Waterton-Glacier International Peace Park was dedicated on June 18<sup>th</sup>, 1932.

Combined, the binational park comprises just over 1,800 square miles of which 1,600 square miles are in Glacier National Park. Although both parks collaborate on common issues such as: publications, research, and interpretive activities; each park operates as a separate entity and is responsible of maintaining its own physical park property, budget, and administration. Since 1931 the Waterton-Glacier International Peace Park Association has met every September for ceremonies designated as “Hands Across the Border,” honoring the friendship between the two nations, and discussions are conducted to promote peace. According to Waterton- Glacier International Peace Park Association (n.d.), the members, through their pledge, promote their ideology of a peace park in other places.

Further east, on the border of North Dakota and the Canadian province of Manitoba, another idea of creating a place to celebrate the friendship between the United States and Canada was born. In 1928, Dr. Henry from Islington, Ontario envisioned a garden for the people of both

countries to come and share interests. The proposal was introduced to the National Association of Gardeners and in a year, they were able to approve the plan for the International Peace Garden. About 50 thousand people from the United States and Canada came to the dedication ceremony of the international garden on July 14, 1932 (International Peace Garden, n.d.). With land donations between Manitoba and North Dakota along the borderline, the International Peace Garden gained 2339 acres. Despite the economic struggles and the Great Depression, in 1934 a landscape architect from Minneapolis was hired to design the garden and the Civilian Conservation Corp was tasked to provide the physical labor to build the garden. During the construction phase the first building was constructed to house the Civilian Conservation Corp workers. After the barracks were built the Historic Lodge was built which still stands today. This building is still utilized for many events held by the International Peace Garden. Other significant features and structures have been implemented into the garden throughout the years. The most significant of the structures is the Peace Chapel, which was built in 1968. The chapel has both local materials and imported materials like the French-colored glass panels. The local limestone used on the building is inscribed with quotes of peace from international leaders. The garden can be experienced year-round and has multiple attractions for different age group, ranging from formal gardens to hiking and biking trails. The cairn, a symbol of hope, has been standing at the gate to the International Peace Garden since its dedication in 1932.

### **2.2.3 Binational parks between Mexico and the United States.**

Following the successful collaboration on joining Glacier National Park and Waterton Lakes National Park, the creation of the first international peace park in the world, President Franklin Roosevelt had the same vision for the southern border between Texas and Mexico. In 1936, both countries on the southern border established a commission for the work on Big Bend International Park. In June 1944, President Roosevelt signed a legislation establishing Big Bend National Park, almost a million acres along the Rio Grande in West Texas (Reicher, 2019). Both President Roosevelt and Mexican President, Manuel Avila Camacho, agreed that Big Bend could not be complete without the entire region, including the Mexican side, creating an international park. After Roosevelt's death in 1945, Vice President Harry S. Truman became the 33<sup>rd</sup> president. He reached out to President Camacho for the continuation on the efforts of a binational park. Unfortunately, Mr. Camacho's presidential term ended and due to other challenges President Truman was taking on, the plan for the binational park was shelved. Both countries have continued their effort for the conservation of the region. In 1983, President Ronald Reagan and President Miguel de la Madrid Hurtado signed an agreement for protection, improvement, and conservation of the border area. On the Mexico side, the Madera del Carmen protected area was established and in 2000, the Mexican corporation, Cemex, conserved additional borderlands that helped re-establish bighorn sheep and black bears (Reicher, 2019). Since the establishment of Big Bend National Park, more than three million acres on both sides of the border and more than 250 miles of river frontage are now protected. After the election of President Trump and the push for a wall across the entire southern border, the decades of work to protect this regional ecosystem is now vulnerable to the political fight over a wall.

After the Mexican American War ended in 1846, a new international boundary was negotiated by both countries, by way of the Treaty of Guadalupe-Hidalgo. A series of monuments were set to establish the new boundary between Mexico and the United States. The first monumental boundary established by the boundary survey was at the Pacific Ocean and renumbered from monument # 1 to monument # 258 after the treaties of 1882-1889 (Dear, 2013). At the same location on August 18, 1971, First Lady Pat Nixon inaugurated Friendship Park as a symbol of friendship between Mexico and the United States and declared the park a national monument. In marked contrast to the friendship parks and gardens along the U.S.-Canadian border, a barbed wire fence separated the U.S. and Mexico. Under the supervision of border patrol agents, Americans and Mexicans were permitted to meet without crossing the border boundary.

As fear of illegal immigration and drug trafficking increased, security became tighter throughout the years. In 1994, a fence across the Mexican American border was undertaken to address these concerns. Plates manufactured during the Vietnam War for temporary landing strips were used to fence off major border cities because of the simplicity of bolting them together (Dear, 2013). Fourteen miles of fence were set between San Diego and Tijuana. The fence replaced the barbed wire fence at Friendship Park. Despite the new fence, people were still able to visit the park and interact with each other.

Things continued to worsen for park visitors. In 2009, not only was Friendship Park closed, but a second more sophisticated fence was set, fitted with sensors, surveillance cameras, and barbed wires. A third twenty-foot steel bar fence was built parallel to a 20-foot-wide road for border patrol access. Between 2011 and 2012 the fence was extended 300 feet into the ocean.



During the same time frame, activist groups pressured the federal government into reopening the park. A fenced area was built, which would only be accessible to the public when allowed by the U.S Border Patrol. Every year, during the Mexican celebration of Children's Day in the month of April, a door within the fence is opened and certain families can meet for a very short period of time. Thanks to Enrique Morones and his organization, "Border Angels," beginning in 2013, the United States government has allowed this event to happen multiple times until 2018. In 2018, the San Diego Chief Border Protection (CBP) Sector, Rodney Scott, cancelled the door opening event due to a local scandal – the wedding of a convicted, major drug smuggler held at the door of the border wall, organized by Border Angels, which became an embarrassment for the San Diego CBP sector command (Bravo, 2018). At present, though the park on the American side remains inaccessible, there are limitations on number of visitors, set time and dates for visiting, and ID requirement. On the Mexico side, there are no restrictions or limitations to the park.

Within Friendship Park, in 2007, a garden along the border was planned out by students from Colegio de Tijuana and Kearny Mesa High School from San Diego. The installation of this garden occurred despite adversity throughout the years, until January 2019 when the border patrol demolished the American side of the garden.

In 2011, with the help of Dan Watman, the coordinator of the Friendship Garden, a team of landscape architects, native plant experts, gardeners, and volunteers from both sides of the border, challenged the border patrol by storing plants at nurseries on both sides of the border in preparation of the construction of a new garden as the border patrol was getting ready to set another barrier. The design's composition was of circles intersecting the barrier and uniting the two cities through the garden, giving ownership to the people from both sides of the border. The

circles had the same plant species on either side of the border and each circle created a unique theme. The first circle was called the “Mirror Garden.” The second circle was called the “Yellow Flower” garden made of native plants producing yellow flowers. The last circle is the Cactus/Wish garden made up of succulents, cacti, and rocks. Here, a visitor can write a wish on one of the rocks. A “White Sage River” curving tangent to the circles goes back and forth through the borderline representing the Tijuana River. This symbolic representation of the river is implemented to raise awareness about its preservation (Friends of Friendship Park, n.d.). Unfortunately, after all these years of hard work, the garden on the American side has been demolished due to a security compromise. According to San Diego Sector Chief Patrol Agent, Douglas Harrison, of the Border Patrol, there were smugglers exploiting the area. Therefore, it was deemed necessary to demolish the garden to eliminate the smuggling problem. Chief Harrison said they were committed to work with Friends of Friendship Park on a solution for the future of the garden (Mendoza, 2020).

### **2.3 The Two U.S. International Borders: The Contrast**

It is interesting how on the Canadian American border, in times of hardship despite the great depression and world wars, people were motivated to celebrate peace and friendship between two neighboring countries, and with their effort and dedication, created these spaces for people to enjoy for many years to come. Citizens invite other countries to follow their ideology of an international park to promote peace, but on the southern border people were opposed to any effort in a binational park. The question remains: Has Friendship Park ever been a true binational park? Unlike the binational parks in Canada, when First Lady Nixon inaugurated Friendship Park, there was still a barbed wire fence which kept individuals on their own side of the border. As organizations continue to fight for a real binational park on the border of San Diego and

Tijuana, President Donald Trump claimed that terrorist is pouring through the southern border and had been fighting for a wall on the Mexican border. According to the Federal Bureau of Investigations' (FBI) data, more are concerned with terrorists crossing through the Canadian side, which most of them are doing it by air, with only a small percentage crossing the border by land. According to Senator Gary Peters, criminals will try to find the least resistance to enter the US. There for both the northern and southern border should equally have the necessary tools and resources to secure the border (Winter, 2017). In the opinion of many experts, the problem cannot be contained by a border wall. This is evidenced by the manner in which undocumented migration from Mexico increased in the early 1990s because of the demand for low-wage Mexican labor and the downturn in Mexican economy (Dear, 2013). Giovanni Peri, an economist at the University of California, compared labor markets in states with high immigration levels versus states with low immigration levels (Davidson, 2013). He concluded that undocumented workers instead of competing with skilled laborers and taking away jobs from Americans, the undocumented workers complement skilled workers (Davidson, 2013). Labor workers who help skilled workers like electricians or plumbers, allow the skilled worker to focus more on their expertise. This immigration problem is more internal, a broken immigration system, and it needs to be addressed in many other ways than spending billions of dollars on a wall.

There already are millions of Mexican immigrants in the country and they are being targeted by the cyclical negative consequences of American immigration policy and legislation. In the 1960s, the U.S. began to restrict the number of immigrant visas for Mexicans and in 1977, congress capped the number of such visas for Mexican workers at 20,000 despite labor demand (Planas, 2014). Improving the social infrastructure that joins cities on the border will improve the security along the border (Rael, 2017). US-Canada border is the least resistant and efforts to

secure the border by a wall are non-existent. There was concern about border security and the US – Mexico border is the main focus. However, there was concern by FBI that terrorists were entering the country from Canada by air contradicting President Trump’s claims of their entering through Mexico (Winter, 2017). Furthermore, when binational parks with Canada were compared to Friendship Park on the US – Mexico border, the comparison revealed that enormous disparity exists in favor of the US – Canada border. The results can be interpreted as valuable support for the proposal of a true binational park on the southern border.

#### **2.4 Unauthorized Immigrants In The U.S.**

According to the United States Census Bureau, the United States has an unauthorized immigrant population of 11.3 million. Mexico is the largest migrant group with 53 percent of all unauthorized population. Though it is hard to determine an accurate number of families that are separated due to the legal status of unauthorized Mexicans in the United States, the researcher can get an idea of the magnitude of this family separation by considering remittance inflow; that is, money sent from individuals in the US to individuals in Mexico. Mexico has the highest remittance inflow from the United States and the 4<sup>th</sup> highest total remittance inflow in the world. In 2004, Mexican emigrants sent nearly 6 billion dollars to Mexico, a 26 percent increase over previous years (Dear, 2013). This information suggests there are many immigrants working in the U.S. and sending money back to their families in Mexico. Many are not able to see their families for years due to their illegal status in the United States.

In 2013, Human Impact Partners, a human rights advocacy group estimated that 4.5 million U.S. citizen children have at least one parent who is undocumented and potentially deportable (Satinsky, Hu, Heller, & Farhang, 2013). Deportations can create a domino effect impacting the current health, behavior, education, adult health, lifespan, poverty, and access to

food of the children and families. If this potential for deportations continues, children of undocumented immigrants will suffer from mental health issues such as post-traumatic stress disorder. They will be prone to behavioral problems, become more aggressive, tend to have anxiety and withdrawals, all of which will create educational challenges (Satinsky, Hu, Heller, & Farhang, 2013).

There are also public health issues associated with deportation. A survey conducted by the Human Impact Partners (2013) found that 40 percent of children of undocumented parents did not see a doctor in the past year. Undocumented parents of U.S. citizen children will also tend to have poor health due to the deportation of their partner. Loss of household income due to the deportation of their partner will create higher rates of poverty among these separated families. It is estimated that 83,000 partners will remain in the U.S. if all the primary earners are deported. Without the support of the primary family supporter and the decrease in household income, the remaining parent and children will not have sufficient food, and many of these children will experience malnutrition (Satinsky, Hu, Heller, & Farhang, 2013). The fear of being deported takes a toll on the entire family. The survey findings estimate that about 30 percent of undocumented parents reported that their children are afraid either all or most of the time (Satinsky, Hu, Heller, & Farhang, 2013). These health risks not only affect the families, they can become a problem with an individual's ability to work which can also affect the economy and other social aspects (Satinsky, Hu, Heller, & Farhang, 2013).

### **2.5.1 A Third Nation**

According to Merriam-Webster dictionary (2020), a nation is a community of people composed of one or more nationalities and possessing a more or less defined territory and government. A “third nation” is a community carved out of the territories between two existing nation-states (Dear, 2013). Third nations have a unique identity different from a single nation. A third nation breaks that boundary between two international cities. Mexico and the United States already share a great deal of history dating back to the Mesoamericans. Even the Aztecs civilization, who established Tenochtitlan (modern day Mexico City) are believed to come from earlier tribes in northern Mexico and southwest United States. The Tohono O’odham Indian nation is considered a third nation located on both sides of the border in the Mexican state of Sonora and the U.S. state of Arizona. Each possess a long-standing strongly developed sense of nationalism, autonomous tribal institutions, laws, and formal territorial jurisdiction (Dear, 2013).

### **2.5.2 A third nation culture.**

Shannon Rieger, (Dear, 2013) at University of California - Berkeley undergraduate, interview discussed cross-border commuters about the Tijuana-San Diego connections and explored ideas about a third nation mentality in the twin cities. One of the persons interviewed was a woman living in San Diego who would cross the border (to “the other side,” as border people called it) at least once a week. The woman liked going to Tijuana to visit family, eat out, catch a movie, get a haircut, go to church, or see friends. To the interviewee, crossing the border once a week was an ordinary thing, like going anywhere in San Diego. She mentioned that some commuters moved to Tijuana because rent was cheaper. She even talked about wealthy people who had houses on both sides of the border and crossed back and forth frequently (Dear, 2013).

In border towns culture and history overlap each other. According to another woman Rieger interviewed, San Diego and Tijuana were more similar than different and the things that divide these cities were deterioration in public safety in Tijuana and the racist manners of border crossing officials toward Mexican people (Dear, 2013). Culture celebrations are shared between the two countries and not only on the borderlands. For instance, Cinco de Mayo, a Mexican holiday is widely celebrated throughout the United States. The Mexican Quinceanera, a celebration for girls coming of age is another custom in which many people of various ethnicities participate in. It has become so popular that Walmart has stocked Quinceanera gowns in 200 stores across thirty U.S.

Spanglish, a mix of English and Spanish, and diverse cultural words is very common in the Latino communities. It originated in agricultural areas and spread out to the streets of Los Angeles and Chicago; and is now found in smaller towns of the U.S. (Dear, 2013).

In the state of Texas, the Tex-Mex regional cuisine has emerged, created by Tejanos. A group called the “Chili Queens” from San Antonio, Texas created chili con carne, which became very popular and is now one of Tex-Mex signature dishes. Another popular Tex-Mex food known in every state of the U.S., are nachos. It is known that nachos were discovered in 1943 by a group of military wives from Eagle Pass, Texas. In one of their short trips across the border into Piedras Negras Coahuila, they stopped at the old El Maderno restaurant where they met Ignacio Anaya, the restaurant’s manager. “Nacho” is a nickname for Ignacio, and it is very common in Mexico to hear that name. Due to the absence of any of the restaurant kitchen employees, Nacho made a quick appetizer for the ladies, frying sliced tortillas and topping them with melted cheese and jalapenos. The military wives liked it so much that they spread the word about Nacho’s special.

### **2.5.3 A third nation economy.**

Before December 2015, the city of San Diego was exploring solutions to the need for a larger airport to handle larger aircraft and provide the ability to connect to Asian cities without the need of larger airports as a secondary tier. The current airport was very near to downtown San Diego, and this location was an obstacle the city faced. It was not possible to expand the airport. San Diego, between the 1990s and 2000s, had become a strategic place for innovation biotechnology, software, communications technology, and sound equipment. The airport was not able to keep up with the economic growth (Selee, 2018). Regardless of having a large Mexican community, and trade ties with their neighboring country from the south, there was not any flights to parts of Mexico other than the Federal District. Fortunately, neighbors across the border had a larger airport right by the border, capable of accommodating larger airplanes with connections to China and Japan. The solution was to build a bridge that crosses the border and connects directly to the Tijuana airport. Concerned about the outcome of the bridge, private investors from both sides of the border took on the challenge to build this structure. The bridge turned out to be a complete success for the investors and the public sector on both sides of the border. People can park their car on the United States side of the bridge, check-in, and walk over to the Tijuana International Airport. This bridge has become symbolic of the relationship between two border cities, a third nation which continues to grow together into one metropolitan area. The international airport is not the only thing the two cities share. They also share high-tech production chains and even a proposal to host the Olympics as an international event.

The two cities have become the world's largest binational metropolitan in the world with a population of about 5 million (Selee, 2018). Tijuana has had a bloody past due to the narcotics violence that has plagued the city. It once was a place for U.S. manufacturing companies to find



cheap outsourced labor, and a place with a reputation for cheap drinks, open prostitution, and illegal drugs. There was no good connection between the two cities, but now Tijuana has become one of the most livable cities in Mexico (Selee, 2018). Manufacturers no longer come to Tijuana for cheap labor but for advanced manufacturing. Companies like Plantronics or Parker, have a binational team of engineers who meet weekly to design products for plants on either side of the border.

The living conditions of citizens throughout the city have improved thanks to the economic growth. Consequently, to address the inefficiency of delays at border crossings, the Smart Border Coalition was created (Selee, 2018). One of the most successful real estate developers of San Diego, Malin Burnham, knew that the more time trucks were delayed at border crossings, the higher the total cost of the transported products. In 2017, Burnham united with other business leaders from Tijuana and San Diego to champion the idea of crossing the border more quickly and efficiently. Burnham believed that immigrants are not the danger, instead inefficient security measures are more dangerous to the economy of the two cities. It is estimated that 6 billion dollars of gross domestic products was reduced due to the slow border crossings (Selee, 2018). With lobbying from the Smart Border Coalition for more truck transport express lanes to expedite border crossings, it became a prominent cross-border organization (Dear, 2013).

The North American Free Trade Act (NAFTA) has had a positive outcome for California at a state level. In the ten years from 1993 to 2003, trade with both Mexico and Canada has more than doubled from 12 billion to 26 billion annually (Dear, 2013). In 2000, Mexico surpassed Japan and became California's number one export market. These are just a few examples of what can be accomplished when two neighboring nations come together to overcome economic

inequalities and environmental threats. Rather than spending billions of dollars to build a wall and trying to divide a third nation; that is, a cultural tissue that has existed long before the U.S. - Mexican border boundary line (Dear, 2013). The U.S. and Mexico need to take advantage of these driving factors to improve the relationship, economy, and environment between the nations.

In the words of author, Guillermo Gomez-Pena (2001), “It is time to face facts: Anglos will not go back to Europe, and Mexicans and Latinos (legal or illegal) won’t go back to Latin America. We are all here to stay. For better or worse, our destinies and aspirations are in one another’s hands” (Dear, 2013, p 71.).

## **2.6 Instead of Building Walls**

Migration and drugs are issues that range far beyond the border; these problems did not originate on the borderland. Citizens from the borderland are the main victims of the political fight over a fortified wall and many of them have also been victimized by the drug cartels. As walls are being built and fences fortified, binational cities like Tijuana and San Diego are building bridges to create a pair of international twin city partners. Many of such twin border cities have developed plans to improve their infrastructure to boost international tourism, promote international investment and economic development, and build ports and freeways to facilitate trade and speed vehicle and pedestrian crossing (Dear, 2013). The Tijuana and San Diego network extends from Los Angeles on the north to the Valle de Guadalupe on the southern Mexico side. The Valle de Guadalupe is becoming a wine growing region rivaling California’s Napa Valley. Border barriers are creating difficulties for the two cities. If these boundaries did not exist, Tijuana and San Diego would function as an international metropolitan area.

In the state of Texas, McAllen and its Mexican neighbor, Reynosa, provide another example of how two border towns have expanded their demographic and economic networks beyond their city limits. This network has reached the city of Monterrey, the second most productive industrial city in Mexico. These border regions have become strategic places to foster economic growth for both nations; disconnecting these cities from one another would damage the future of both countries.

The border wall fortification between the two neighboring countries can potentially jeopardize growth and the relationship between two great nations. Immigrants have always been part of the workforce of the United States. At the moment, Mexico is going through many changes, becoming a global economic player and a democratic society (Dear, 2013). It is ironic how adamant the U.S. White House is about building the wall, while at the same time, a real need exists to increase the number of POEs. We cannot deny the economic growth between the two countries and with increasing trade will come a need for more POEs. Both private and public sectors are interested in opening more POEs to keep pace with the economic growth. Additional POEs will speed transportation of goods and increase profits, making daily border crossing more efficient for citizens of the borderlands, and increase revenues from border crossings tolls (Dear, 2013).

## **2.7 Border Wall Alternatives: Concepts**

In his book, *Borderwall as Architecture*, Ronald Rael (2017) wrote about ways to reconfigure the border wall to perform a multitude of functions that improve, interact with, and contribute positively to specific issues presently existing in the wall's immediate context, and how it can be embodied with new meaning. The bicycle and pedestrian wall project are parts of a border wall concept that would if a border wall were to create paths along the border as an urban

linear park where people on both sides can circulate by foot or bicycle. The design would allow property value to increase, improve the quality of life for both sides of the border. Traffic would be reduced (or rerouted) and municipalities could benefit from a green corridor (Rael, 2017).

In the Sonoran Desert, the Organ Pipe Cactus National Monument has been preserved since 1937 and became an International Biosphere Reserve by the United Nations Educational Scientific and Cultural Organization (UNESCO) in the late 1960s (National Park Service, n.d.). 330,000 acres have been preserved since 1937. Unfortunately, due to the Secure Fence Act of 2006, the National Monument has been compromised by more than 2,500 miles of unauthorized roads and trails. Most of the trails, 96% to be more exact, are made by border patrol vehicles. In addition to the roads there is a 23-mile-long vehicular wall to prevent illegal crossings. Both the wall and the road are damaging the ecosystem of the region. Rael's (2017) conceptual solution to the problem would be to introduce more native plants on the unauthorized roads created by smugglers and border patrol agents. Along the steel fence a Cactus Wall can be planted on both sides of the fence creating a more natural and sustainable way to protect the ecosystem from further damages.

Along the Rio Grande at the El Paso-Juarez border water collection can be very beneficial for this desert region. The Rio Grande which divides the borderland is a long dry concrete basin that has not had water flow in many years. There are plans for the construction of a large storm-water catchment to improve flooding conditions and retain rainwater that would otherwise quickly run off as sheet flow. The cost of 650 million dollars will have to be paid by local landowners. By creating a linear water park where the Rio Grande once flowed, a riparian ecology could be created, allowing water to flow once again and enhance security. Providing shade roofs along the existing wall can create spaces for social gatherings and collect the roof

water as well. The Department of Homeland Security has said that the purpose of the fences/walls is not to stop immigrant crossing but to slow them down (Rael, 2017). This would give border patrol agents enough time to stop them from crossing. The river can be an additional obstacle that will give border patrol agents additional time. Overall, the conceptual design will create a secure, tactical, social, ecological, and hydrological infrastructure (Rael, 2017).

On the U.S. – Mexico border, local and international artists have used the border wall as a canvas to express themselves (Sandeman, 2017). Some commemorate the death of immigrants, while others protest against the anti-immigrant agenda of the Trump Administration. Others tell stories about the borderland people. The following artists in this section have had a major impact around the world through their art installations along the US- Mexico border region.

In 2017, a French street artist known as J.R., created a 70-foot image of a one-year-old boy looking playfully over the border wall into the United States. The installation was called “Kikito,” the name of the toddler (Morrissey, 2019) (see Figure 2.1). In addition to Kikito, on the last day of the installation the artist displayed a second project. This was an international picnic with hundreds of people sharing food, drinks, and music across the fence (Morrissey, 2019). The tarp with the image of a pair of eyes was used for the picnic. On the Mexican side one eye was sitting on a table and on the American side the other eye on the ground were people gathered for the picnic (Morrissey, 2019) (see Figure 2.2). The art installation drew much attention around the globe on Instagram and the artist examined the comments left by the viewers. The artist broke down the viewers’ feedback into three categories based on their reactions to the installation (Morrissey, 2019). Many of them engaged with the value of community and human connection over national security, while others with the themes of neighbors and friends. Finally, the third category reflected on physical, spiritual, and emotional responses (Morrissey, 2019).

**Figure 2.1** *Giants, Kikito*



*Source: jr-art.net.*

**Figure 2.2** *Migrants, Picnic Across The Border*



*Source: jr-art.net.*

On the San Diego – Tijuana border, a Mexican visual artist by the name of Ana Teresa Fernandez, painted a section of the border wall sky blue to create an illusion of a hole in the wall

(see Figure 2.3). The piece was named ‘Erasing the Border’ (Walsh, 2015). As the artist painted the wall, a jogger looked from a distance thinking a section of the wall had been removed (Fernandez, 2020). This gave people in Tijuana a sense of unity, of what it could be to have a border free of barriers. The artist did the same thing on the border of Arizona and Sonora. People from both sides of the Nogales border volunteered in the 6-hour project which covered 50 feet of the 2,000-mile fence (Fernandez, 2020). The community effort represents the reflection on the experience of the border and connecting with others whose lives are impacted by the fence (Fernandez, 2020).

**Figure 2.3** *Borrando La Frontera*



*Source: Ana Teresa Fernandez.*

Ronald Rael, architecture professor from the University of California, Berkeley and Virginia San Fratello, a design professor from the San Jose State University, placed a custom-built teeter-totter between the border wall of Sunland Park New Mexico and Ciudad Juarez Chihuahua (Rael, 2017). Successfully, adults and children from both sides of the border came out to played, as it required people from each side for the teeter-totter to function. Like the teeter-totter the border line represents the fulcrum for the two interdependent countries (Rael, 2017). (see Figure 2.4)

**Figure 2.4** *Teeter-Totter Wall*



*Source: blog.timesunion.com.*



## **2.8 Literature Review Summary and Conclusion**

The historical and cultural ties that interlink the United States and Mexico and the contribution by Mexicans and Mexican Americans have all had a significant impact on the shaping of the U.S. The existing physical barrier between the two nations may delay, but it cannot stop the interrelationship of the nations. Even though there is a physical barrier between the two nations, the social fabric, and economic ties between the two nations are stronger than ever and yet, unlike the Canadian border, there is not a space dedicated to the friendship of the bordering nations. The separation between the two countries would not only hurt our friendship, but it would also have a negative impact on our economy. Given the opportunity, there are great innovators ready to take on the borderland challenges.

In conclusion, there is ample rationale to construct a southern border binational park along the Rio Grande River at the El Paso – Ciudad Juarez border. Such a park could serve many practical, symbolic, political, and philosophical objectives. The process for selecting and designing such a park is documented in the subsequent chapters of this thesis.

## **Chapter 3**

### **Methodology**

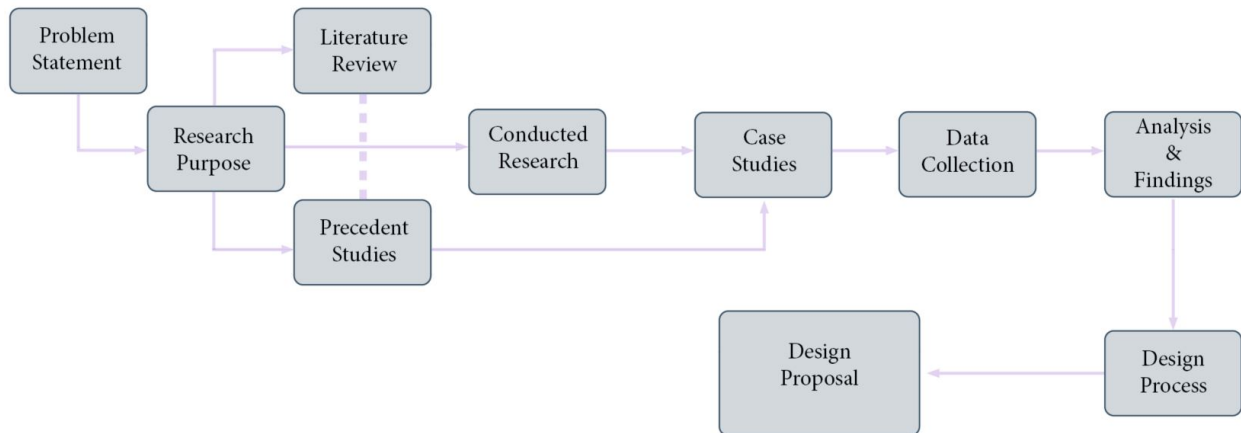
#### **3.1 Introduction**

For the methodology, the researcher used a description strategy, which is a research design that combines different sources in an effort to have a better understanding by providing complementary accounts of different aspects of landscape topics (Deming & Swaffield, 2011). The main focus is on binational parks of North America. In this chapter the researcher will address the research design, study population and location, the data collection methods, the data analysis methods, design process, and bias and errors.

#### **3.2 Research Design**

The combined data of the descriptive strategy method (Deming & Swaffield, 2011) for the binational park of the El Paso-Juarez region was literature review, precedent studies, and more in-depth case studies. The reviewed literature covered Mexican American history, immigrants, and third nations to understand the history and culture of the US- Mexico border region. A combination of three types of precedent studies were used to inform the design for the binational park for El Paso-Ciudad Juarez region. The precedent studies served as examples of current binational parks of North America, innovated ideas both existing and conceptual. Two of the precedent studies were selected for more in-depth case studies based on data collection methods by Marcus & Francis (1998). The following graphic illustrates the research design process adopted in this study (see Figure 3.1).

**Figure 3.1** *Research Process to Develop Design Proposal for Binational Park*



*Source: adapted from Microsoft Word.*

### **3.3 Study Population and Location**

The population studied for this research were people from the borderland region of El Paso-Juarez. Although the studied population was of Mexican Americans and immigrants in the U.S., given that the majority of people are of Mexican descent, this park is to serve all the people of the borderland and visitors of the region. Through the variety of spaces and activities provided in the design proposal the park serves people of all ages and abilities.

Before the Rio Grande divided two sovereign nations, the river has preserved human life for thousands of years (National Park Service, 2020). The El Paso – Juarez region has been the home to numerous native American tribes: the Suma, Manso, Piro, Jano, Jacomano, Jornada, Comanche, Kiowa, and the Lipan, Chiricahua and Mescalero Apaches (National Park Service, 2020). Although many of these tribes have roamed the region for many years, the Suma and Manso tribes settled in permanently around the same time the Spanish conquistadors had established their settlement (Zanetell, 2011). The Spanish arrived in 1581 and named their new settlement El Paso Del Norte (The Pass of the North) and not until 1598, did Juan de Onate formally proclaim the territory as part of New Spain (Timmons, 2020). In 1659, the mission of

Our Lady of Guadalupe was established by Fray Garcia de San Francisco in what is now known as downtown Ciudad Juarez and is the oldest structure in the region (Timmons, 2020).

In 1680 as a result of the Santa Fe Pueblo Revolution, the most successful Native American up rise, the Spanish along with the Tigua tribe retreated south to El Paso Del Norte (Timmons, 2020). The newly settled Native Americans established five different missions along the Rio Grande: El Paso Del Norte, San Lorenzo, Senecu, Ysleta, and Socorro. The five communities, through their agricultural practices, created a thriving commercial center for travelers of the Camino Real de Tierra Adentro (Zanetell, 2011), a trade thoroughfare along the Rio Grande Valley stretching from north of Santa Fe to Mexico City (see Figure 3.2).

Figure 3.2. Camino Real de Tierra Adentro



Source: Adapted from National Park Service

Apart from their commercial contribution to the region, the Tigua tribe protected colonists and travelers from hostile Native tribe, outlaws, and bandit attacks along the Camino Real trails. Once their territory became part of the United States, the Tiguas served in the U.S. Army and Texas Rangers as scouts (Zanetell, 2011). After 400 years later, in part of the Tigua settlements and their significant contribution to the region has evolved into two international twin cities with one of the busiest border crossings in the world.

El Paso Del Norte had been part of New Mexico during Spanish rule. After Mexican independence from Spain in 1821, the region was ceded to the Mexican state of Chihuahua. Finally, as a result of the Treaty of Guadalupe the region was divided by international border determined by the Rio Grande. Five new settlements were established along the Rio Grande on the U.S. side (Timmons, 2020). The new settlement across the river from Paso Del Norte was known as Franklin until the name was changed to El Paso in 1859, by Anson Mills, a district surveyor (Texas Beyond History, 2008). After many years of confusion between the names of the bordering towns, in 1888 El Paso Del Norte became Ciudad Juarez (Timmons, 2020).

El Paso became a boom town during the 19<sup>th</sup> century and served as a strategical point for the trade between the United States and Mexico. In addition, a trade route connected to St. Louis Missouri bringing scores of Anglo entrepreneurs (Texas Beyond History, 2008). The railroad arrived in 1881 and strengthen commercial and agricultural development as a result the town's population grew to 10,000 people. However, with its good fortune came Anglos from other parts of the country creating tension between them and the natives. Consequently, many of the natives lost their land and turned to the cotton industry (Texas Beyond history, 2008).

In the 20<sup>th</sup> century El Paso, along with other towns of the border region experienced a massive migration wave from Mexican. The Mexican revolutionary war of 1910 forced many

Mexicans refugees to migrate north across the border to escape the horrors of the war, hunger, and unemployment (De Leon, 1999). During the 1920s El Paso continued to experience an economic boom and Mexican migrants continued to make their way to El Paso in search of a better quality of life. American industries would look for Mexican labor, especially after The Immigration Act of 1917, which put a stop to European immigrants (De Leon, 1999). El Paso had become the Ellis Island for Mexican immigrants, recruiters from different parts of the U.S. would come to El Paso to recruit Mexican workers, sometimes bidding for the Mexican laborers (Public Broadcasting Services, 2013).

In present day, the ties between Juarez and El Paso continue to be strong. El Paso's economy main forces are Fort Bliss, one of the largest military bases in the country and trade with its neighbor Ciudad Juarez (World Guides, 2019). Furthermore, El Paso has the largest bilingual and bi-cultural workforce in the Western Hemisphere (City of El Paso, 2008). Together with Juarez, the sister cities form the largest bi-national community in the world known as the borderplex region (Industry Today, 2016). El Paso, Texas; Las Cruces, New México; and Ciudad Juárez constitutes the borderplex. Juarez has the manufacturing institutes, El Paso the logistics hub, and New Mexico the research laboratories and applied technology, together they formulate a superior high technology force to substantiate North America and global industries (Industry Today, 2016).

Each year thousands of migrant workers cross the El Paso border to harvest crops around the region. Sin Fronteras, a non-profit organization was established in 1993 to protect and educate agricultural workers. They advocate for about 14,000 farm workers in the three states and two countries of the region: Southern New Mexico, West Texas, and Northern Chihuahua (Sin Fronteras, n.d.). In downtown El Paso, near the POE, Sin Fronteras has been running a

shelter for many short-term farm workers, providing them with shelter, food, and social services (KVIA ABC-7, 2020).

Numerous Juarez restaurants have been sprawling throughout the city of El Paso since 2009, due to the Juarez violence of that era (Resendiz, 2020). Restaurants like Carnitas Queretaro have been multiplying across the city and have created jobs for El Pasoans (Resendiz, 2020). Many Juarez residents continue to cross the border daily. An estimated 15,000 to 20,000 Mexicans cross the border every day for work and another 15,000 for education. In addition to that, 75% to 80% of Juarez residents have family and friends in El Paso.

### **3.4.1 Data Collection Methods**

#### **3.4.2 Case studies.**

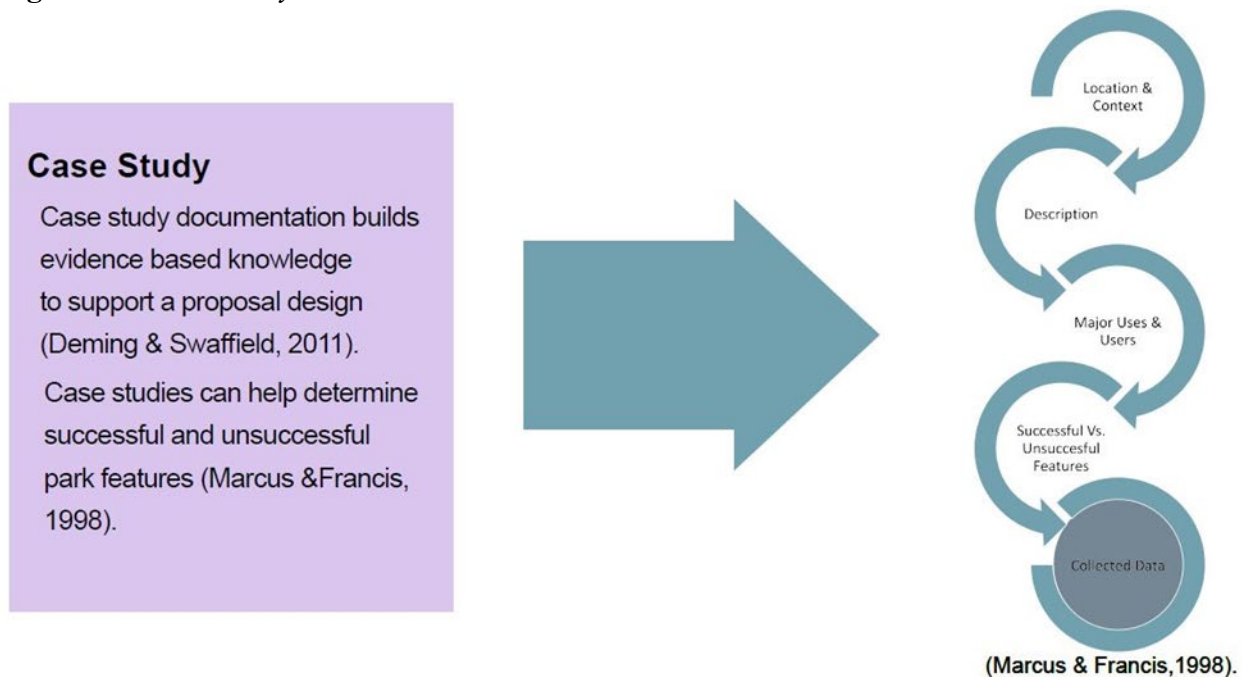
The case studies used for this research focus on two binational parks on border regions of North America. One is on the U.S.- Canada border and the second one on U.S. – Mexico border. The parks are also classified based on the National Park and Recreation Association (NRPA). Case study documentation builds evidence-based knowledge to support a proposal design (Deming & Swaffield, 2011). The case studies are evaluated to develop a design strategy for El Chamizal, a site with historical significance between El Paso, Texas and Ciudad Juarez, Chihuahua. Through the evaluation process the following data was collected:

1. Location and context
2. Description
3. Major Uses and Users
4. Successful features vs. unsuccessful features



When examining a case study, the location and context are useful in determining whether a site ties into the surroundings or not, or whether the location will attract people (Marcus & Francis, 1998). A good understanding of the site and how people use it can help you determine the successful and unsuccessful features (Marcus & Francis, 1998) which in return will be beneficial for the develop an effective proposal (see Figure 3.3).

**Figure 3.3.** *Case Study Data Collection Methods*



*Source: adapted from Marcus & Francis*

### **3.4.3 Archival and secondary data.**

This thesis has explored literature that highlights historical events, and cultural and economic ties between Mexico and the United States dating back to the Mexican American War of 1846. The literature also draws attention to the cultural impact and contribution by Mexican Americans and Mexican immigrants (documented and undocumented) to the United States. The social fabric of the southern transborder agglomeration was analyzed to develop a better understanding of its complex system. It is crucial to understand the borderland, its relations, and historical events in an effort to honor the relationship and collaboration between the two nations. In addition, research of a border wall cutting through third nations was carried out to raise awareness on the negative impact a wall could have on the border region. Furthermore, the collaboration between communities of these third nations and law enforcement agencies have improved security measures. Additionally, a comparison between the two North American borders was conducted using binational parks on the US - Canada border compared to Friendship Park and Big Bend National Park on the US – Mexico border.

An array of precedent studies has been investigated, ranging from smaller-scale local art installations, and recreational activities, to large scale proposals for border wall alternatives, and a trans-border bridge that directly connects an American city to a Mexican airport. Some are innovative proposals that aim for environmental and ecological improvements benefiting both sides of the border and others are alternatives to the hardscape of a border wall. Additional exploration found local art installations can raise awareness and promote social justice. Through these precedent studies certain criteria were identified to explore design methods and programming for the proposed site.

### 3.5.1 Data Analysis Methods

#### 3.5.2 Case study analysis.

In this section the researcher describes the analysis methods used for this research. To determine successful and unsuccessful features of the case studies, the researcher adapted the data collection methods of Deming and Swaffield (2011). These methods are to collect data of the location and context; a description of the park; what are the major uses and users of the park; and finally, what are the successful and unsuccessful features of the park. The collected data builds evidence based on knowledge to support the proposal design for the binational park of El Paso and Ciudad Juarez (Deming & Swaffield, 2011). See Figure 3.3.

Additionally, a matrix with a qualitative rating scale was adapted from LaGro (2013) based on a three-level evaluation from good being the highest, acceptable medium, and unacceptable being the lowest. The evaluate criteria (see Table 1) were activities, accessibility, subspaces, circulation, public art, program, vending, and amenities. Furthermore, a section for notes was used to compare the criteria between the two parks.

**Table 1.** *Evaluated Criteria*

Levels of Evaluation	Criteria	Peace Arch State Park	Friendship Park	Notes
Good	Activities			
Acceptable	Accessibility			
	Subspaces			
Unacceptable	Circulation			
	Public Art			
	Program			
	Vending			
	Amenities			

*Note.* Adapted from LaGro

### 3.5.3 Case study evaluation criteria.

The findings of the collected data from the two case studies based on the four categories from Deming & Swaffield (2011) and the qualitative rating scale from LaGro (2013) were then used to create a set of goals, objectives, and program elements based on LaGro (2013). See Figure 3.4.

**Figure 3.4.** *Goals and Objectives Based on Literature and Case Studies*

#### Goals and Objectives based on Literature and Case Studies

1. Unite separated families through the use of a binational space.
2. Commemorate friendship and collaboration between the two nations.
3. Enforce security through the partnership of American and Mexican law enforcement.
4. Connect El Chamizal Federal Park to Chamizal Memorial through the binational park.
5. Provide space for art installations.
6. Promote native flora & fauna.
7. Generate profits to pay for security and maintenance.
8. Provide a flexible space adaptable to various activities and events.
9. Provide rentable spaces for special events.
10. Educational features throughout the park.



#### Program Elements

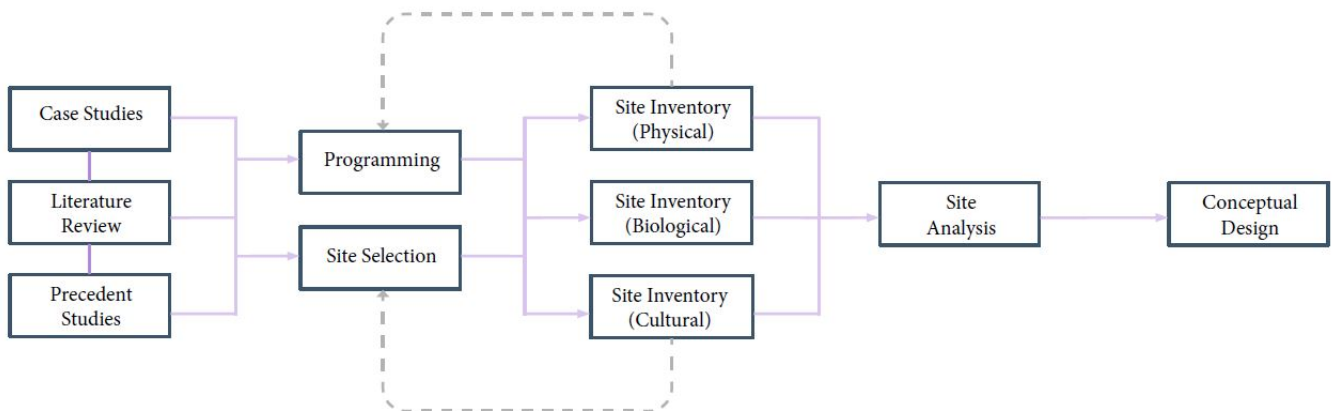
- |                      |                |
|----------------------|----------------|
| Bridge park          | Shaded seating |
| Port of Entry        | Lawns          |
| Conference rooms     | Trails         |
| Museum               | Plazas         |
| Educational elements | Gardens        |
| Art Installation     | Water feature  |
| Food Stands          |                |
| Restaurants          |                |

**Source:** adapted from Google images

### 3.6 Design Process

The process for the conceptual design (Figure 3.5) was to conduct research through literature review, precedent studies and in-depth case studies which lead to a site selection and the appropriate programmatic elements for a successful design. Following that process was a site inventory which leads back to the programming and site selection based on the inventory findings. The next step was to analyze the site to determine if the suitability of the site for the design proposal. Once the site and program were determined appropriate for the proposal, based on the research findings a conceptual design began (LaGro, 2013).

**Figure 3.5.** *Design Process*



*Source: adapted from InDesign*

### 3.7 Bias and Errors

Due to time constraints and availability, some of the research was restricted to data collected from secondary sources such as websites, new articles/opinion pieces, and journals can be prone to bias and errors. Therefore, the researcher has attempted to provide a variety of data from multiple sources to lessen the probability of bias and error.

### **3.8 Conclusion**

The research method for the design process of a binational park on the border region of El Paso – Juarez was a descriptive strategy. That is a research design that combines literature review, precedent studies, and in-depth case studies to build up a rich understanding by providing complementary accounts of different aspects of a landscape topic (Deming & Swaffield, 2011). Through examination of case studies, documentation was built to support a proposal by determining successful and unsuccessful features. Additionally, different criteria were evaluated through a three-category qualitative rating scale for the design process. Finally, once an appropriate site was chosen as appropriate location for the design proposal a site inventory and analysis were conducted to determine the suitability for the design proposal.

## **Chapter 4**

### **Analysis and Findings**

#### **4.1 Introduction**

Two of the binational parks from the literature review were selected for further in-depth case studies. The findings based on the collection methods from Marcus & Francis (1998) and the evaluated criteria from the qualitative rating scale (LaGro, 2013) were used for the binational park on the borderland of El Paso and Ciudad Juarez. Data from the case studies findings, literature review, and precedent studies were used to create a set of goals, objectives, and program elements (LaGro, 2013) to inform the design for the binational park of El Paso and Juarez.

#### **4.2.1 Case Study 1: Peace Arch State Park / Province Park**

##### **4.2.2 Place and context (figure 4.1).**

Peace Arch Park is comprised of two adjoining parks at the border of Washington State, U.S. and British Columbia, Canada. On the American side, located in the city of Blaine, WA is Peace Arch State Park and on the Canadian side, in the City of Surrey, BC, is Peace Arch Province Park. The Canadian park is the larger of the two with 22 acres (BC Parks, n.d.) while the American side consists of 19 acres (Washington State Parks, n.d.). On both the U.S. and Canadian sides, the surrounding areas are primarily residential with smaller pockets of commercial. On the west of the park is the Semiahmoo Bay. The Canadian park is adjacent to the Semiahmoo Indian Reservation on the northern side. Within a 5-minute walk is the Peace Arch Golf Course and further along within a 10-minute walk, there is a small neighborhood park. The parks have good accessibility and plenty of parking. Visitors can access the park by vehicle or by foot for most of the local people. The border crossing intersects the park and unless you are

crossing the border, park visitors must enter and exit the park from the same location (BC Parks, n.d.).

Peace Arch lawn is the main binational space shared by the two countries. In addition to the binational space, each side of the border has its own lawn and gardens. Entering from the north on the Canadian side, visitors coming to the park from the parking lot will enter the West Lawn, a large open lawn surrounded by trees. This lawn provides 37 picnic tables placed throughout the open space (BC Parks, n.d.). As visitors continue to move south, they will find Peace Heritage Hall and a picnic shelter with public restrooms (BC Parks, n.d.). This space can be used for cookouts and large gatherings. Further south visitors will enter the Peace Arch Lawn. This is the large binational space. The space has two flag gardens representing each country and on the center of the borderline sits the monumental Peace Arch. East to the Peace Arch Lawn but still on the Canadian side is a lush garden with a small pond, shade structure, and the Peace Arch Park sign. North of the garden is the East Lawn, a smaller lawn surrounded by trees and shrubs.

West of Peace Arch Lawn, on the U.S. side, there's a small building with restrooms. A garden is located behind the building with large trees and a small gazebo. Furthermore, there is a building called the Kitchen. Like the Heritage Hall, this building can be rented for ceremonies and other celebrations. Lastly, the farthest part of the park to the west is the large open lawn. This space has 85 picnic tables with Americans with Disabilities Act (ADA) access and a small playground with a swing set (Washington State Parks, n.d.).



**Figure 4.1** *Peace Arch Park Location and Context*



*Source: adapted from Open Street Maps*

#### **4.2.3 Description (figure 4.2).**

When people first arrive to the park or enter the border crossing the primary visual focus is the iconic Peace Arch. The Peace Arch is the main attraction and focal point of the park. It is the representation of peace between Canada and the United States (BC Parks, n.d.). From this binational space people can enjoy the surrounding views. On the west of the main lawn is the bay, from here views reach out to Vancouver Island and Port Roberts. To the east one can enjoy the view of the park's gardens and the tree canopy as the backdrop. The majority of the park is surrounded with vegetation which serves as a buffer zone between the park and its environment.

The combination of the tree canopy, gardens, and change in elevation creates a screen from the residential area on the east of the park and enhances the aesthetics of the site. On the west side shrubs and trees screen the railroad tracks between the park and the bay without hindering the views to bay, Vancouver Island and Port Roberts. The spaces form a cluster organization in which the spaces relate to one another based on proximity. The circulation is organized as a path network with internal circulation (Robinson, 2016).

**Figure 4.2** *Description*



*Source: adapted from Open Street Maps and Google Maps*

#### **4.2.4 Major uses and users.**

Peace Arch Binational Park receives more than 500,000 people each year from locals to international tourists (City of Surrey, n.d.). Each year the park hosts a number of international events. Hands Across the Border, an annual celebration for the friendship and peace between Canada and the United States has been taking place since 1937 (Dougherty, 2015). In May, the park holds the International Sculpture Exhibition. This event has been taking place for 23 years (International Peace Arch Association, 2020). During this event work by Canadian and American artists is displayed throughout the park. The mission is a catalyst in the development of international fine artists while creating greater awareness and appreciation of the Peace Arch and International Park (International Peace Arch Association, n.d.). In June, the International Arts and Music Festival takes place in the U.S. side (Washington State Park, n.d.). The festival is a three-day event to exhibit works of visual arts, textiles, sculpture, music, dance, gourmet food, and more (The Bellingham Herald, 2015). In addition to all the festivals which take place in the Peace Arch Park, other celebrations like weddings and reunions take place in this park. With reservations and a small fee, people can rent the Heritage Hall or the American Kitchen for special events. The American Kitchen has a capacity of 400 people (Washington State Park, n.d.) and the Heritage Hall has a capacity of 150 people (BC Parks, n.d.). For those who want to enjoy the surroundings and want to experience a more passive activity, the park features a horticultural display and historical signage (Washington State Park, n.d.) and seating with views to the ocean and Peace Arch.

### 4.3.1 Case Study 2: Friendship Park / Parque de la Amistad

#### 4.3.2 Place and context (figure 4.3).

Along the border of San Diego California and Tijuana Baja California is Friendship Park. The American side of the park is about half an acre within the 800-acre Border Field State Park (California Department of Parks and Recreation, 2020). It is about a 15-minute drive southwest of San Diego. On the other hand, the Mexico side is within the City of Tijuana and is much smaller. The Mexico side is more active, within a 10-minute walk there are restaurants, shops, a boardwalk, Los Arcos de Tijuana Amphitheater, and the disused Monumental Plaza de Toros (bull fighting arena). The surrounding area is primarily commercial with a residential gated community to the east (Friends of Friendship Park, n.d.).

**Figure 4.3.** *Friendship Park Location & Context*



*Source: adapted from Open Street Map*

The park on the U.S. side sits atop of Monument Mesa and has terraces with views out to the Pacific and the surrounding Border Field State Park (Friends of Friendship Park, n.d.). There are a total of 4 terraces surrounding the top of the mesa with a trail system that connects all the spaces and continue down to the beach or the state park (see Figure 4.4). Visitors can drive or hike to the park from the state park’s main entrance. If visitors arrive by vehicle, the park has a parking lot on the center of the mesa. The trail system wraps around the parking lot and next to the parking lot to the west is a large shade structure with picnic tables and grills. A circular lawn abuts the picnic area. The park provides two restroom structures, one to the south of the shaded picnic area and the other north east at the bottom of the mesa. Secondary pathways connected to the trail system penetrating into the vegetated areas of the park. Small spaces with concrete benches and tables are spread out within these vegetated areas.

**Figure 4.4.** *Spatial Hierarchy and Trail System*



*Source: adapted from Google Maps*

South of park is the binational space along the borderline (Figure 4.5). This area is fenced in by the main border wall and a secondary fence. The secondary fence has a gate with the Border Patrol controlling the access. This space serves as an international meeting area. The binational space is a circular paving pattern with the Monument Marker 258 in center with the wall intersecting the space. Although the marker is positioned on the borderline, the marker actually sits on the southern side of the fence and is only accessible from Mexican territory. Along the border wall, on the east of the binational space is the Friendship Garden. The garden was a binational garden until the Border Patrol had it removed on the American side. On the Mexican side of the park sits the Lighthouse of Tijuana's Beaches. The lighthouse and the bull fighting arena are the parks landmarks. To the west of the binational space and the lighthouse is a terrace with a view to a fountain and the Pacific Ocean as the backdrop. Public bathrooms are located underneath the terrace at the ground level where the fountain sits. This oval shaped space has an array of palm trees surrounding the fountain which frames the view of the fountain and the ocean. Food vendors usually congregate around this space as people move from this space to the beach or the boardwalk.

**Figure 4.5.** *Aerial View of Friendship Park*



*Source: change.org*

### **4.3.3 Description.**

Visiting Friendship Park from San Diego can be challenging at times. Vehicle access to the park is only available on the weekends between the months of April and November (Friends of Friendship Park, n.d.). When the park is closed to vehicular traffic people must hike for 30 to 45 minutes through the Border Field State Park. The binational space is the most important and most utilized space of the park. This is the space where people come to meet with their loved ones on the other side of the fence. Since the Border Patrol has total control of the binational space, access can be denied to the space at any given time and is not guaranteed that people will be able to meet with their loved ones. On the other hand, the Mexico side is more active and accessible any time of the day. It is much smaller but more dynamic and has more visual interesting. Artists utilize the border wall as a canvas for their art, as advocates of social justice (Figure 4.6). The park has colorful benches and tables along with art pieces throughout the park.

**Figure 4.6.** *Public Art Exhibit Wall in Friendship Park*



*Source: Katherine Belarmino*

Until January 2020 before the removal of the U.S. side, a binational garden along the fence, about 100 yards from the Historical monument was shared by the communities of San Diego and Tijuana. The garden was composed of three circles bisected by the border wall (Friends of Friendship Park, n.d.). Each circle had a theme, the first one was called the “Mirror Garden,” due to the fact that both sides of the wall had the same plant species (Friends of Friendship Park, n.d.). The second circle was called “Yellow Flower” garden, as all the native plants bloomed yellow flowers. Finally, the third circle was the “Cactus/Wish” garden arranged of succulents and rocks. In this garden visitors are given the opportunity to make a wish and write it on one of the rocks. The last element to the binational garden was the “White Sage River.” This S-shaped drift of *Salvia* weaved tangent between the three circles (Friends of Friendship Park, 2020). Although the American side of the park has been removed, the Mexican



side is still active (Figure 4.7). People continue to meet every Wednesday and Sunday to maintain and harvest the garden (Friends of Friendship Park, n.d.).

**Figure 4.7.** *Community Gardens at Friendship Park*



*Source: nuvo.net*

#### **4.3.4 Major users and uses.**

For many years this has been a federally designated binational meeting place for separated families (Friends of Friendship Park, n.d.). Unlike the Canadian side, people who come to reunite with their families have a barrier between them at all times. A wall that has been modified by adding layers of mesh only allowing fingertips to touch (Lewis, 2016). People travel from many parts of Mexico and the U.S. to meet with their loved ones, many will travel for hours to have that opportunity (Hoppough, 2020). This place has been utilized by numerous binational events. Along the beach people have played a volleyball game over the border wall, others have united for a binational yoga session on the binational space before the second wall fence barrier was erected (Dibble, 2017). People continue to reunite for special ceremonies,

every December La Posada Sin Fronteras is held on the second week of the month. This is a traditional Latino celebration of the birth of Christ and the journey of Joseph and Mary from Nazareth to Bethlehem in search of a safe place for the birth Jesus. This celebration includes roll playing, singing, breaking of a star pinata, and feasting at the end of the night (Britannica, 2020). People also unite every Sunday for prayer service. Together two pastors on each side of the fence unite to give the prayer service (The Border Church, n.d.).

#### **4.4.1 Analysis and Findings Synthesis**

In this section the combination of case study findings, literature review, and precedent studies were evaluated to create a set of goals, objectives, and program elements for the binational park of the El Paso-Juarez border region.

#### **4.4.2 Peace Arch Park: successful features.**

The composition of the entire park has a successful hierarchy order of spaces (Robinson, 2016). The largest space is the binational space which is the most important space of all. This space has the Peace Arch and most of the major events that celebrate the peace and friendship of the two countries. As secondary spaces, there are two large open lawn spaces on each side of the border. These spaces are flexible spaces that can be used for many active and passive activities. In between these spaces, there are smaller more passive tertiary spaces. These spaces are gardens, the East Lawn, pavilions, the American Kitchen, and Heritage Hall (see Figure 4.8).

**Figure 4.8.** *Spatial Hierarchy*



*Source: Adapted from Open Street Map and Google Maps*

The composition and location of the park creates visual interest of its surroundings. There are multiple locations where people can sit down and enjoy views to the ocean, sunsets, Peace Arch, or gardens. Although the park is suitable for large gatherings and can be highly active at times, attracting thousands of tourists, this place also serves the local community and can create a sense of security and serenity (See Figure 4.9). The park is also accessible with adjoining parking from either side of the border. The park is well-maintained, which makes it a pleasant and safe place for visitors.

**Figure 4.9.** *View From the Vicinity of Peace Arch Toward Bay*



*Source: msn.com*

#### **4.4.3 Peace Arch Park: unsuccessful features.**

The main lawn and Peace Arch are located between the two border crossing roads leading to the port of entry. At times traffic can be heavy as vehicles wait to reach the checkpoint (See Figure 4.10). The space can benefit from a partial visual and physical enclosure to screen off the traffic but does not hinder the views to the bay (Robinson, 2016). This can enhance the aesthetics and spatial experience of the space. Overall, the park can take advantage of a good trail system. Especially around the large open spaces. The large lawn on the American side is static bare. Adding a trail system and plant diversity can improve the aesthetics and users experience. A green buffer zone between the park and the road can create a sense of separation or enclosure as well as a transition into the park from adjacent neighborhood. The playground can also be

improved given that there is plenty of space for expansion. More playground equipment can be added to include equipment accessible to children with disabilities. Adding more seating options and shade structures around the playground can be more enjoyable for the parents as well.

**Figure 4.10.** *Traffic Congestion Near Peace Arch*



*Source: clovedalereporter.com*

#### **4.4.4 Friendship Park: successful features.**

In spite of the inactive parts of Friendship Park on the San Diego side, the park has many opportunities for improvement. The park has Scenic views to the ocean, the mountains, and the State Park's terrain. There are many spaces within the park connected by trail system giving users options for gathering and exploration. The bending of trails and irregularity of spaces creates the desire of exploration (Robinson, 2016). The large, shaded picnic area and the adjoining lawn can hold large groups of people. The park is a walking distance to the beach and withing the Border State Park which provides additional amenities like horse corrals and

camping sights (California Department of Parks and Recreation, 2020). In Tijuana, the park is accessible all the time. For being a small park, it has plenty of seating and lighting. At a walking distance the park connects to the beach, the board walk, restaurants, and shops. Food vendors are available around the park, as they typically do in Mexican culture. Volunteers continue to maintain the Mexican side of the garden despite of the demolition of the American side. The design of the park takes advantage of the sloping terrain creating level changing of spaces as well as visual interest. The terrace which has the fountain creates a picturesque scene as the surrounding palm trees frame the fountain and the ocean becomes the backdrop of the fountain. The colorful benches and public art bring life to the space and allows artists to advocate for immigrants and the community through their art. Finally, the binational through binational activities and ceremonies has been bringing together people from both sides of the border (Friends of Friendship Park, n.d.).

#### **4.4.5 Friendship Park: San Diego unsuccessful features.**

The main problem with Friendship park is that it is not a real binational park. Unlike the binational parks between the U.S. and Canada, the divisive barrier at Friendship Park does not permit physical contact between the users of opposite sides of the border. The binational space is fenced in, resembling that of a prison yard. According to Architect James Brown, Friendship Park is one of the most important meeting places in the world, but at the same time, it is one of the least humane (Dibble, 2017). In addition to that, the binational space is only open during the weekends for a certain amount of time. Even when the park is open, vehicular access is closed at times, and therefore people hike between 30 to 45 minutes to get to the park.

As far as physical conditions of the park, it is noticeable that the park is poorly maintained (see Figure 4.11). Some of the concrete benches are cracking and weathered. Most of

the plants in the planters are dead and the coping on some of the planters is loose, the grout is cracking, and some of the brick is separating. Some of the secondary trails are overgrown with vegetation and light poles removed. Lastly, just recently this year, the binational garden was demolished by the Border Patrol.

**Figure 4.11.** *Weathered Concrete Benches*



*Source: Google Maps*

#### **4.4.6 Friendship Park: Tijuana unsuccessful features.**

Although the Tijuana side still has their part of what was known as the binational garden, the park can benefit from additional planting in other areas of the park. Especially in the open space to the east of the light tower. The spaces have several unshaded picnic tables and the only separation between the street and the space is a sidewalk. By adding shrubs and trees the space can have a buffer zone and natural shade. The transition between the street's sidewalk and the parks paving is weak and can be improve by articulating the difference in material between the two. The benches and tables in the park are made from concrete, a cold and hard material.

Replacing the benches with more contemporary materials that are more comfortable can be more inviting. Lastly, the park has a monotonous stone pattern used on the paving and walls that dominates the materiality of the space (see Figure 4.12).

**Figure 4.12.** *Monotonous Stone Patterns*



*Source: Google Maps*



#### 4.4.7 Qualitative Rating Scale.

Additionally, certain criteria were identified to explore design methods and programming for the proposed site. These criteria were:

**Table 2. Evaluated Criteria**

Criteria	Peace Arch State Park	Friendship Park		Notes
Activities	High	High	Medium	Friendship park on Mexican side is more active than U.S. side
Accessibility	High	High	Low	Vehicular access on U.S. side of Friendship Park is only permitted in the summer.
Subspaces	High	High		Vehicular access on U.S. side of Friendship Park is only permitted in the summer.
Circulation	Medium	High		Peace Arch has a good network of spaces but a lack of trails for its size
Public Art	High	High	Low	Mexican side of Friendship Park displays are year round.
Program	High	High	Medium	Most of the activities in Friendship Park on U.S. side are on weekends.
Vending	Medium	High	Low	Friendship park on Mexican side has vendors and restaurants.
Amenities	Medium	High		Peace Arch has large open spaces which can provide more amenities.

*Note.* Adapted from LaGro

- Both, Peace Arch Park and Friendship park have multiple activities throughout the year. Peace Arch Park is much larger and holds larger events than Friendship Park. At Friendship Park the Mexican side is more active due to its location and accessibility. The American side of Friendship Park is not always accessible by vehicle and the border patrol can close the binational space at any time.
- Peace Arch Park has a high rating, it is easily accessible from either side of the border with plenty of parking adjacent to the park. Friendship Park on the American side has a low rating given that it is only accessible between April and November. The Mexican side connects to the Tijuana beach, boardwalk and is adjacent to Faro street with plenty of parking.

- Both parks have a high subspaces rating offering a variety of spaces. Peace Arch Park has large lawns, gardens, and building structures for private events. Friendship park in San Diego sits on a mesa with multiple terraces surrounding the top of the mesa with multiple views to the ocean and state park. Although the Tijuana side is small, the park has a sequence of spaces changing in elevation creates a more dynamic experience.
- Peace Arch Park has two major events throughout the year with art displays throughout the park. Friendship park has art sculptures throughout the park and artist use the border wall as a canvas to display their artwork. On the other hand, the San Diego side does not have any art whatsoever.
- Peace Arch Park has is rated high for program. The park has multiple international events and smaller private events every year. Despite that the binational space at Friendship Park is smaller, many events take place as well. Unfortunately, the American side Friendship Park is not always open there for it has a medium rating for program.
- The Mexican side of Friendship Park has a high rating for the vendor criteria. The park has many food vendors and is at a walking distance from multiple restaurants and shops. Peace Arch Park only has vendors during larger events, therefor it has a medium rating. Since Friendship Park in San Diego does not have vendors, it is given a low rating.
- Both parks have plenty of amenities. Peace Arch Park has a medium rating because the American side has such a large open space which can benefit from a larger playground, more shading and plant diversity.

#### 4.5.1 Summary and Synthesis of Case Study Data

##### 4.5.2 Findings: goals, objectives, and programmatic elements.

The following are the considerations based on the studied research on two case studies, literature review, and precedent studies for the binational park of El Paso-Juarez borderland. The following are the goals, objectives, and programmatic elements for the binational park of El Paso-Juarez borderland:

- The main goal is to commemorate friendship and collaboration between the two nations and reunite families through the use of a binational space in the borderland of El Paso and Ciudad Juarez.

The three binational parks along the US-Canadian border promote friendship and celebrate peace and friendship between the two countries. Since they were first dedicated, people from both nations have been traveling to Peace Arch Park and International Peace Garden for ceremonial events that commemorate their friendship. To respond to the cultural integration of the El Paso-Juarez region, the proposed binational park will incorporate this ideology of peace and friendship through the conceptual design and programmatic elements.

- Enforce security through the partnership of American and Mexican law enforcement.

From the research it is known that through the Merida Initiative of 2008 law enforcement from the United States and Mexico work together to fight drug trafficking. Research also shows that through the collaboration of various law enforcement agencies and the Tohono O'odham Police force they were able to significantly reduce migrant apprehension.

- Connect El Chamizal Federal Park to Chamizal Memorial through the binational park.

Peace Arch binational Park is composed of two parks, Peace Arch State Park in the US, and Peace Arch Provincial Park in Canada. They both share a binational space that unites both parks. El Chamizal, a significant historical site of the El Paso-Juarez region has been divided by the Rio Grande. El Chamizal National Memorial Park in the US and El Chamizal Federal Park in Mexico. Through the precedent study of the Cross Border Xpress, this momentous landscape can again be connected through a binational park that straddles the border of El Paso and Ciudad Juarez.

- Provide space for art installations throughout the park.

Literature research confirms that art is a powerful tool and people react to it. For example, the art installation of Kikito, the Mexican toddler looking over the border wall drew much attention worldwide through social media. Both case studies also use art as a representation of peace and friendship, or as a political statement of social justice.

- Promote native flora and fauna

At Friendship Park a binational garden allowed people from either side of the border to collaborate, as well as serve as an educational element for people to learn about native plants. El Chamizal National Memorial also promotes the use of native plants and the richness and diversity of plants and animals of the Chihuahuan Desert. Additionally, it allows people from both sides of the border to collaborate

- Generate Profits to pay for security and maintenance.

The Cross Border Xpress, the bridge that connects San Diego directly to the Tijuana airport generates enough profits to pay for the maintenance and port of entry security.

- Provide a flexible space adaptable to various activities and events.

Despite of the differences in scale, each case study has a space where international events and celebrations take place bringing people together from either side of the border.

- Provide a rentable space for special events.

Peace Arch State Park and Province Park both offer a rentable space for smaller more private events. The more activities for a wider range of uses keeps a space more active (Project for Public Spaces, 2020).

- Educational features throughout the park.

Educational features can teach people about the native flora and fauna or regional history.

Based on the goals and objectives the following Program Elements were developed:

Port of Entry, conference rooms, Museum, giftshops, food stands, educational signs, art installation, plazas, gardens, lawns, shaded seating, and trails.

#### **4.5.3 Summary.**

This chapter covered the data collection process the Deming and Swaffield method (2011). The two case studies were analyzed through five different categories used by Marcus and Francis (1998). Additionally, certain criteria were evaluated using a qualitative rating scale by LaGro (2013). The findings from the case studies, literature review, and the Cross Border Xpress precedent were synthesized to create a set of goals, objectives, and programmatic elements to inform the design of the binational park for the borderland of El Paso-Juarez.

## **Chapter 5**

### **Design**

#### **5.1 Site: El Chamizal**

The Interstice between El Chamizal Federal Park and El Chamizal Memorial was the selected site for a binational park on the El Paso – Juarez border based on the significant historical background and heritage. This disputed site is the pride of many citizens of the borderland (Sanchez Soledad, 2020).

Based on the precedent study of the Cross Border Xpress connecting San Diego and the Tijuana Airport, the conclusion was made that a bridge could serve as the binational park connecting El Chamizal Memorial and El Chamizal Federal Park. This strategy would have a less impact on the infrastructure of the interstice between the two parks. The access and security to the binational space can be controlled by the US and Mexican Customs.

#### **5.1.2 History of el chamizal.**

El Chamizal is an area over a thousand acres along the Rio Grande on the border of El Paso, Texas and Ciudad Juarez, Chihuahua. After the Treaty of Guadalupe Hidalgo, the Rio Grande became the new boundary between the United States and Mexico for the State of Texas. Throughout the years the flooding and erosion of the riverbanks shifted the river. An international law states that if the river as a border boundary changes its course gradually through erosion, the border boundary does too but if the river radically changes course through avulsion, the border should not remain (Jacobs, 2010). Unfortunately, for Mexico the Rio Grande had shifted 600 acres south into Mexican territory by 1864, an agricultural land owned by Pedro Garcia. The U.S. government ignored Mr. Garcia's request for the return of his land and residents of El Paso began to move in (Sanchez-Soledad, 2020). Additionally, a peninsula called

Cordoba Island had also become part of El Paso after a flood changed the course of the river in 1897 (Sanchez-Soledad, 2020). The situation intensified when the U.S. government ignored the request by the Mexican government to return of the lost territory.

The first meeting between U.S. and Mexican presidents occurred in 1909. U.S. President William Howard Taft and Mexican President Porfirio Diaz agreed to meet on the border region of El Paso – Juarez (Sanchez Soledad, 2020). Although the dispute of El Chamizal was not the main reason for the visit, both governments agreed for the Chamizal to be neutral during their meeting. During their meeting at the Chamizal neither country flags were to be raised (Roosevelt Institute for American Studies, n.d.). Each president had their own political interests for this meeting. President Diaz’s unpopularity in Mexico lead to the organization of the Mexican Liberal Party in an effort to oppose his regime (Roosevelt Institute for American Studies, n.d.). Diaz hoped that this summit would show the Mexican people that he was still in control of the country and that he had the United States support (Roosevelt Institute for American Studies, n.d.). At the same time, President Taft wanted to protect the investments of U.S. companies in Mexico (Roosevelt Institute for American Studies, n.d.).

Tensions were high on either side of the border, including threats of an assassination attempt on both presidents. Security was high, military troops from both countries, the Texas Rangers, FBI agents, U.S. Marshals, and the Secret Service were all present to provide security (Harris & Sadler, 2009). On the day of the summit, October 16, 1909, the Texas Rangers apprehended a man holding a pistol at the El Paso Chamber of Commerce building a few feet away from the presidents (Harris & Sadler, 2009).

Although tensions continued to be high after the summit, this meeting had many positive outcomes. For the first time in history a United States President and a Mexican President met and

for the first time a U.S. president crossed into Mexican territory. Both leaders, in despite of the tension, were able to set their differences aside and express their gratitude to each other. The security efforts for the summit were a success due to the collaboration between the United States Department of the State and the Mexican Ministry of Foreign Affairs (Timmons, n.d.). The El Paso committee was able to obtain a commitment from the president to act on the deserted project of the Elephant Butt Dam, which had deprived the people of the valley on both sides of the border from water rights (Timmons, 2020). Lastly, although it is unclear what was discussed behind closed doors, it is believed that this led to the treaty of arbitration to resolve the Chamizal dispute signed by both parties the following year (Timmons, 2020).

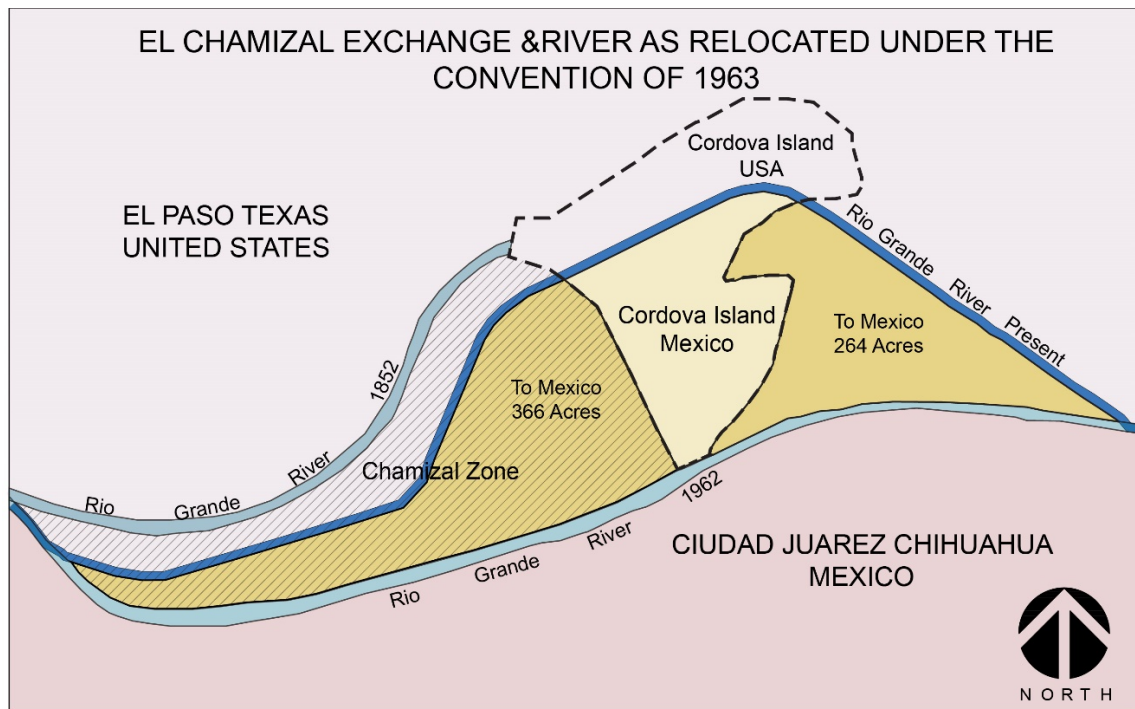
In 1889, the United States and Mexico had established the International Boundary (IBC) Commission, which became the International Boundary and Water Commission (IBWC) in 1944 (National Park Service, n.d.). The United States and Mexico both agreed to have the IBC vote on the decision for the disputed territory of El Chamizal (National Park Service, n.d.). In 1911, commissioners Eugene Lafleur from Canada, Anson Mills from the United States, and Fernando Beltran y Puga from Mexico voted for the resolution on the disputed land (National Park Service, n.d.). The U.S. rejected the split decision of awarding Mexico with the lost territory of the 1864 flood and because Mexico was engaged in a revolutionary war, the struggle for a compromise continued for another fifty years (Sanchez Soledad, 2020).

Ultimately, in 1963 President John F. Kennedy and President Adolfo Lopez Mateos agreed to put an end on the prolonged conflict of El Chamizal (Sanchez Soledad, 2020). Once signing an agreement on August 29 of that year, it took several months to figure out what will be returning to Mexico and what will happen to the 5 thousand El Pasoans living in El Chamizal (Sanchez Soledad, 2020). They concluded that 333 hectares would be returned to Mexico (see



Figure 5.1), unfortunately for the family of Pedro Garcia with title in hand, lost most of their land which is now part of downtown El Paso (Sanchez Longoria, 2017). Both countries would split the cost of displaced citizens of El Paso and the construction of a canal through Cordoba Island to avoid any shifting of the Rio Grande (Sanchez Soledad, 2020).

**Figure 5.1. Chamizal Settlement**



*Source: Adapted from Association for Diplomatic & Studies & Training*

This area is composed of approximately 250 acres, of which 55.9 acres are on the American side (Gregory & Liss, n.d.). On the Mexican side the Chamizal Federal Park is about 4 kilometers north east of Ciudad Juarez’s downtown. It is adjacent to Olympic Stadium Benito Juarez and Municipal Syndicate Sports Complex on the west side and the Autonomous University of Ciudad Juarez on the east side. The major streets abutting the site are Avenida de las Americas on the west, which leads to the major port of entry. Avenida Perez Serna which

runs along the border on the north side of the park. Carlos Pellicer, a smaller local road bisects the park from east to west and intersects Avenida Heroico Colegio Militar on the south side of the park. On the US side The Chamizal National Memorial Park is about 2 miles east from downtown El Paso. It sits within 3 major highways; Cesar E. Chavez Border Highway along the southern portion of the park; Interstate highway 110 on the east connecting to the port of entry (south) and Interstate highway 10 (north); and US highway 62 on the north side. Bowie High School, one of the oldest high schools of El Paso is adjacent to the west side of the park (Figures 5.2 and 5.3).

**Figure 5.2.** *Site Study Area: El Chamizal*



*Source: Adapted from Google Earth Map*

**Figure 5.3. Site Area Enlargement**



*Source: Adapted from Google Earth Map*

### **5.1.3 El Chamizal Federal Park renovation plans.**

The president of Mexico has approved more than 125 million dollars in federal funding for a five-year renovation plan of El Chamizal Federal Park. (Gobierno del Estado de Chihuahua, 2020). The park is the largest and most important public space of Ciudad Juarez and its cultural heritage (Cambio, 2019). The governor of Chihuahua said that his administration will build wildlife passage and a loop bridge that will connect east to west for pedestrians coming from El Paso, Texas (Cambio, 2019). The park will also have a large trail network connecting to a plaza for social gathering, active recreational spaces, educational spaces, and perhaps a small amusement park. Additionally, improvements to the poor conditions of the roads and accessibility to the park will be addressed (Gobierno del Estado de Chihuahua, 2020). This plan to renovate the Mexican park, opens an opportunity to collaborate with other designers, the

government of Chihuahua, and other stakeholders to incorporate the binational bridge to the master plan of El Chamizal Federal Park.

### **5.2.1 Site Analysis and Inventory.**

In addition to the literature review and case studies, a site inventory and analysis were conducted for the suitability and development of the design. The inventory and analysis categories were selected as major factors to inform the ultimate site selection and site design.

These categories were:

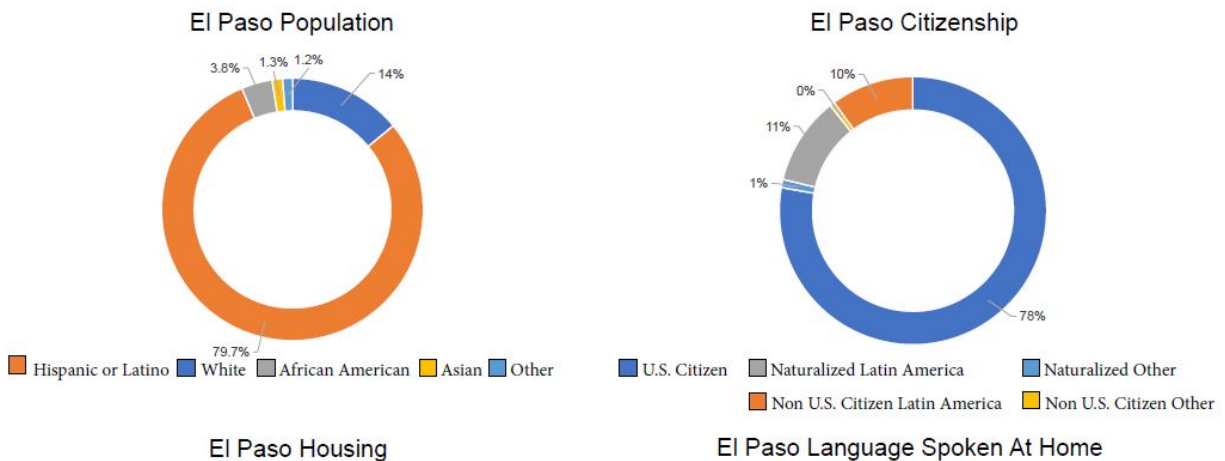
- Demographics
- Border crossing
- Circulation
- Public transportation
- Figure ground
- Land use
- Flora and Fauna

### **5.2.2 Demographics.**

Ciudad Juarez has a population of 1,448,859 people (Asi Estamos Juarez, 2019) and El Paso has a population of 839,238 people (United States Census Bureau, 2020). Hispanics are the majority ethnic group of El Paso – accounting for 79.7% of the population. The two largest minority ethnic groups are White with a 14% and African Americans with a 3.8% (see Figure 5.4). Despite of being part of the borderland, 89% of El Paso’s population is here legally. The majority are United States citizens with a 78% of the total population and 11% naturalized Latin Americans. Undocumented Latin Americans only make up a 10% of the entire population (see

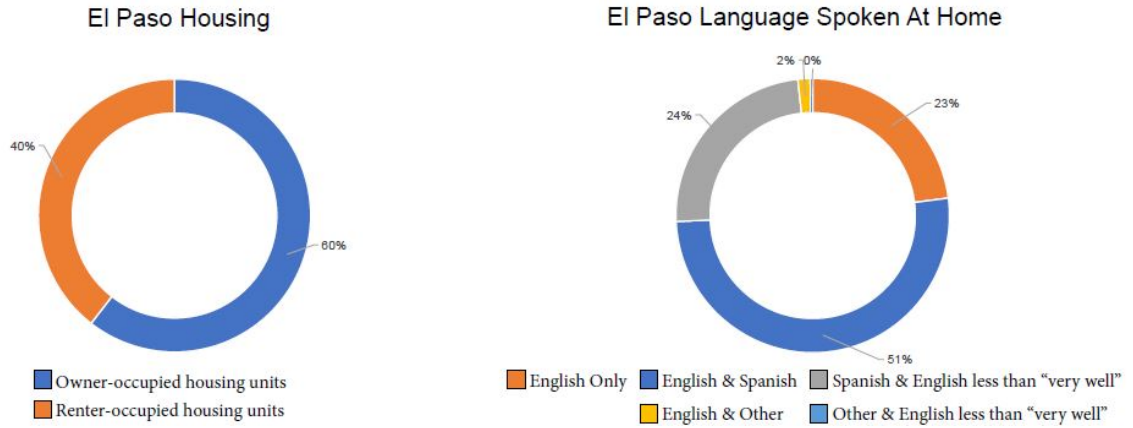
Figure 5.4). Over half of the population is bilingual, fluent in English and Spanish – accounting for a 51%. Another 24% speaks Spanish and English less than “very well.” A 23% of the population are only English speakers (see Figure 5.5). In the city of El Paso 60% of the people are homeowners (see Figure 5.5). The age groups were divided into the following categories. The youngest group is 19 years old and under. In El Paso, this group makes up 30% of the population and in Juarez 33%. The next group is between 20 to 64 years old. In El Paso, the group makes up 58% and in Juarez 62%. Finally, 65 and plus in El Paso makes up 13% and 5% in Juarez (see Figure 5.5).

**Figure 5.4. El Paso Population and Citizenship**



*Source: Adapted from United States Census Bureau*

**Figure 5.5.** *El Paso Housing and Language Preference*



*Source: Adapted from United States Census Bureau*

**Figure 5.6.** *El Paso and Juarez Population Age Categories*



*Source: Adapted from United States Census Bureau*

### **5.2.3 Border crossing.**

El Paso and Ciudad Juarez share 4 border crossings, all of which are bridges over the Rio Grande. Starting from the west and moving east, the westernmost is El Paso del Norte bridge, it is located downtown Juarez-El Paso (Texas Department of Transportation, 2015). The bridge is used by privately owned vehicles (POV) only going northbound and by pedestrians going both northbound and southbound. The port of entry (POE) here is opened Monday to Friday between 6:00 a.m. to midnight. On the weekends it is open from 8:00 a.m. to midnight. There is a .50 cent fee for pedestrians and \$3.50 dollars for vehicles.

Moving east the second crossing, Good Neighbor Bridge/Staton Bridge is less than a 5-minute walk east from the first bridge (Texas Department of Transportation, 2015). The POE for this bridge has three lanes for POVs going southbound and a single lane for Secure Electronic Network for Travelers Rapid Inspection (SENTRI) members going northbound with a \$3.00 fee. SENTRI members can reduce wait times by using dedicated lanes at designated ports of entry (U.S. Customs and Border Protection, 2020). To become a member the applicant must go through a background check, pay an application and member fee (U.S. Customs and Border Protection, 2020). The hours of operations of this POE are Monday to Friday 6:00 a.m. to midnight and weekends 8:00 a.m. to midnight. For pedestrians it is open 24 hours a day and has a crossing fee of 50 cents.

The third bridge is adjacent to El Chamizal, named Bridge of The Americas (Texas Department of Transportation, 2015). This four-structure bridge is the only free crossing for pedestrians and POVs and the largest commercial POE. Two of the structures are used for commercial vehicles only. There are four POV lanes each way, a pedestrian walkway each way, and four commercial lanes. The POE is opened 24 hours a day for POVs and pedestrians. The

hours of operation for commercial vehicles are Monday to Friday 6:00 a.m. to 7:00 p.m. and Saturday 6:00 a.m. to 2:00 p.m.

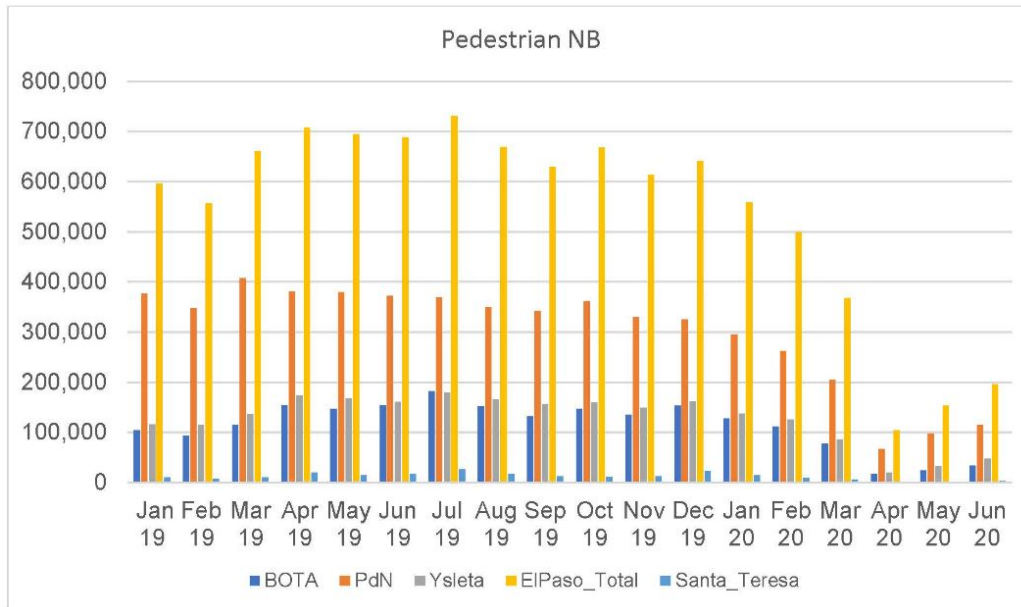
The easternmost crossing in the El Paso-Juarez bridge is the Ysleta-Zaragoza bridge, located about 12 miles southeast from the Bridge of The Americas (Texas Department of Transportation, 2015). This bridge has a total of 5 lanes for POVs (including SENTRI members), 2 pedestrian walkways, and 4 commercial lanes. The fees are \$3.00 for POVs, .50 cents for pedestrians, and between \$4.00 to \$7.00 for commercial. It is open 24 hours a day for POVs and pedestrians. For commercial vehicles, the hours of operation are 6:00 a.m. to midnight Monday to Friday, and 8:00 a.m. to 4:00 p.m. on Saturday.

Considering all four POE's in this area, approximately 20,000 pedestrians and more than 35,000 passenger vehicles cross the border every day (Lewkowicz & Stochlic, 2020). About half of pedestrians crossing northbound into El Paso cross through the Paso del Norte POE and the Ysleta-Zaragoza POE has the largest number of crossings going southbound (PDN Uno, 2020) (see Figures 5.7 and 5.8).

Vehicular traffic fluctuates between the POEs, but the border crossings with the most traffic are the Bridge of The Americas and the Paso del Norte bridge (see Figure 5.9). Border crossers of the region are always looking for the shortest wait time to cross to El Paso. They use a website called "El Reporte de Puentes" (the report of the bridges), this report gives you live updates and images of the wait times at each POE (El Reporte de Puentes, 2020). Therefore, this report may have a partial effect on the fluctuation of traffic from one POE to another (see Figures 5.9 and 5.10).

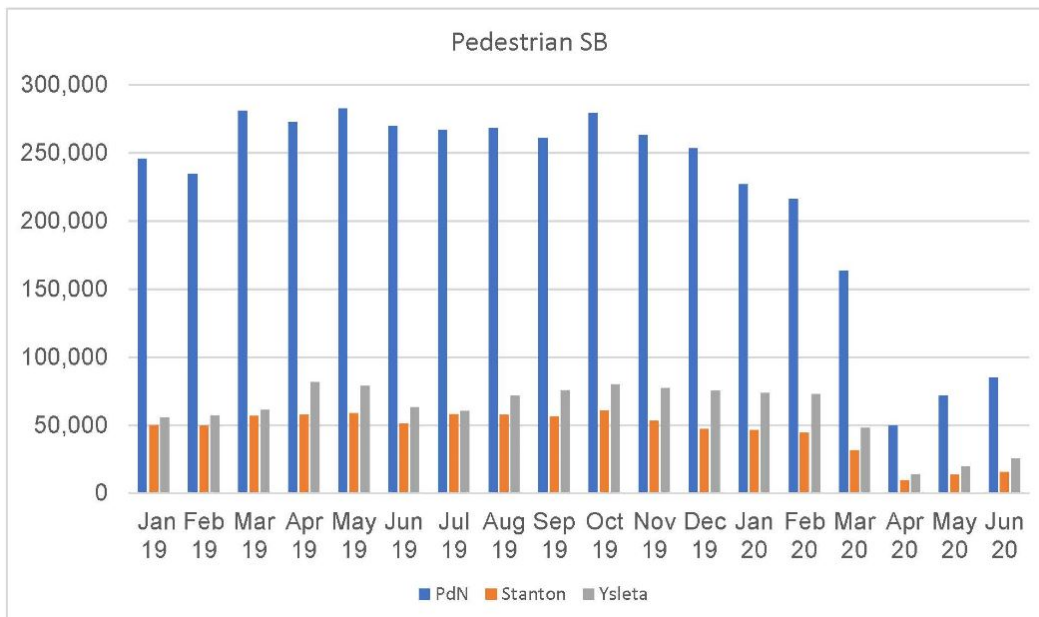


**Figure 5.7. Pedestrians Northbound**



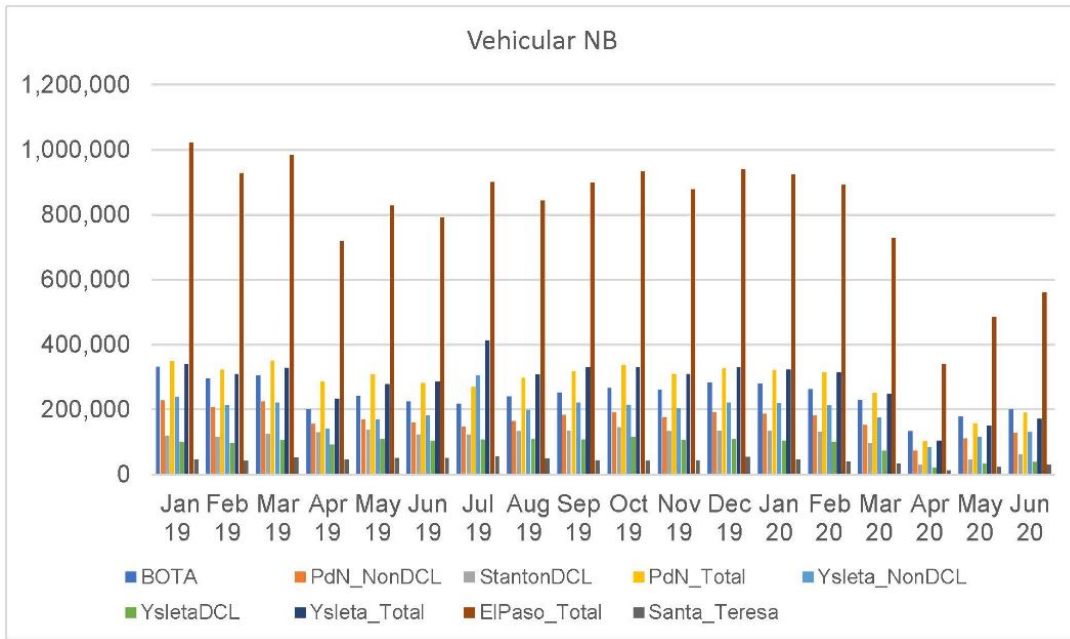
Source: PDN Uno

**Figure 5.8. Pedestrians Southbound**



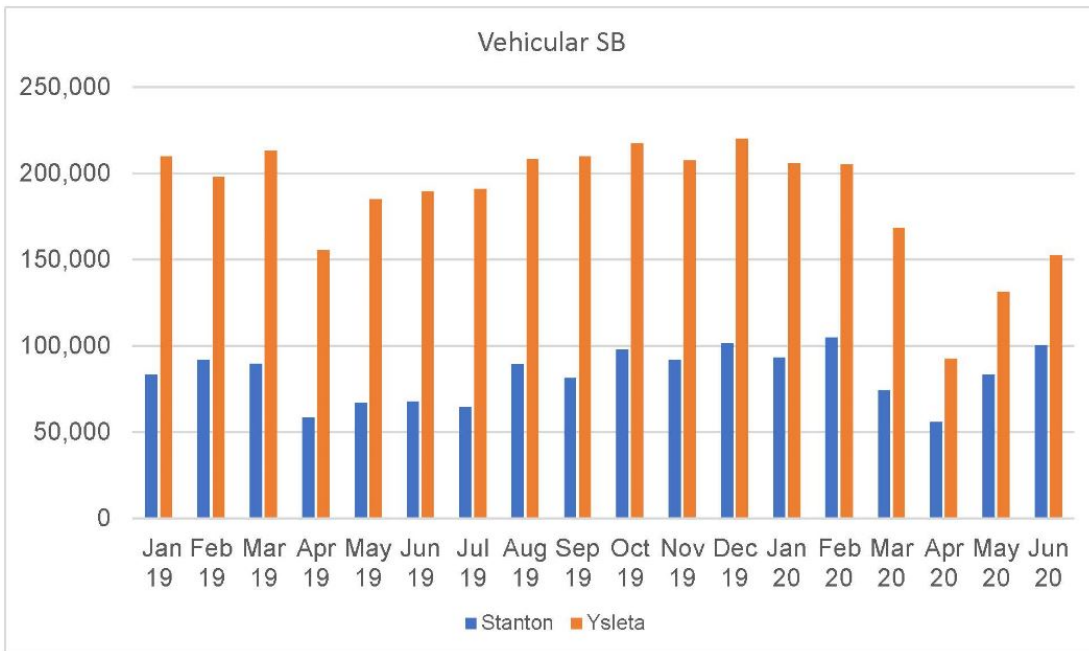
Source: PDN Uno

**Figure 5.9. Vehicular Traffic Northbound**



*Source: PDN Uno*

**Figure 5.10. Vehicular Traffic Southbound**



*Source: PDN Uno*

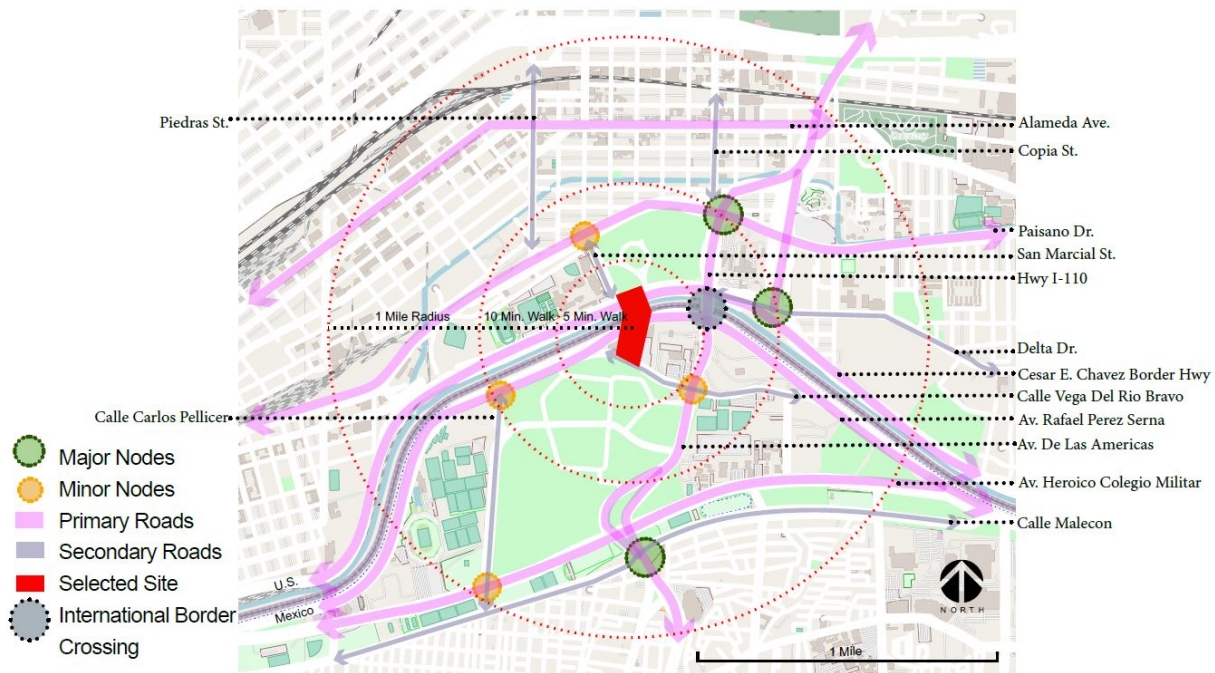
Currently the POEs of the region are understaffed, impacting the border crossing wait times by increasing from 45 minutes to 2 hours (Sacchetti, Lynch, Miroff, & Popescu, 2019). The slowdown has affected 1.7 billion a day in goods for the auto industry, technology companies, and farmers (Sacchetti et al., 2019). These long wait times also affect 6,000 students that cross the border on a daily basis (Fox News Staff, 2020). The majority of them are United States citizens. Some students have to start their journey to school as early as 4:30 a.m. to have plenty of time to cross the border (Lewkowicz & Stochlic, 2020).

#### **5.2.4 Circulation.**

El Chamizal Memorial is between three major highways, Interstate Highway I-110 to the west, Cesar E. Chavez Border highway south along the border, and Paisano Drive on the northside of the park. Furthermore, within a 10-minute walking distance are primary roads Alameda Avenue and Delta Drive. Secondary roads within the 10-minute walk are Copia and Piedras Streets. Three major nodes and one minor north with in the 10-minute walking radius.

El Chamizal Federal Park is surrounded by three major Avenues, Avenida Rafael Perez Serna to the North along the border, Avenida de Las Americas, on the east connecting to the international border crossing, and Avenida Heroico Colegio Militar along the south of the park. Secondary roads within the 10-minute walking radius are, Calle Vega Del Rio Bravo, Calle Malecon, and Calle Carlos Pellicer (see Figure 5.11).

**Figure 5.11. Circulation**



*Source: Adapted from Open Street Map*

### **5.2.5 Public transportation.**

There are 6 bus routes with 33 bus stops in a mile radius of El Chamizal Memorial (see Figure 5.12). At a 10-minute walking distance there are 3 routes and 11 stops. Within a 5-minute walking radius there are 2 routes and 2 stops. Route 24 stops on San Marcial Street (stop #3), between Bowie High School and El Chamizal Memorial and on the corner of Paisano Drive and Marcial Street (stop #6). Buses run from Monday to Saturday. The first stop on Paisano Drive and Marcial Street is at 5:19 a.m. and every hour and 20 minutes after that until 7:51 p.m. On stop #3 the first bus arrives at 5:54 a.m. and runs until 7:14 p.m. every hour and 20 minutes (Sun Metro, 2020).

**Figure 5.12. Public Transportation**

**Public Transportation**

El Paso bus stops

- Route 24
- Route 61
- Route 24
- Route 65
- Route 62
- Route 4

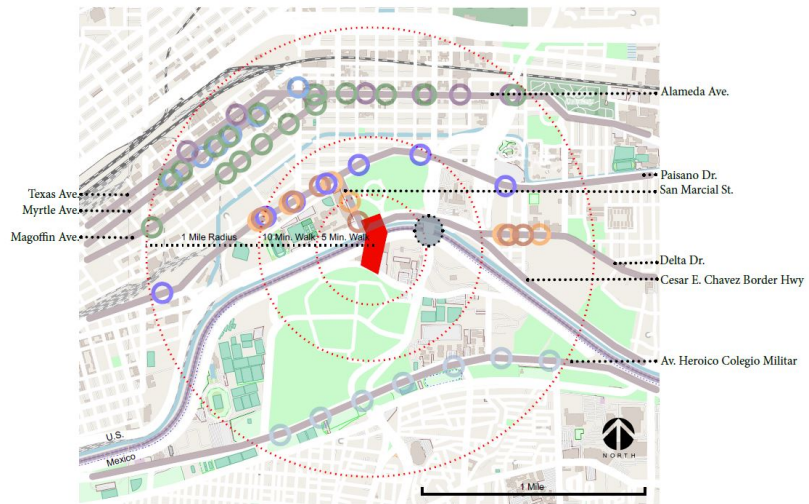
5 Min. distance	2 routes	2 stops
10 Min. distance	3 routes	11 stops
1 Mile radius	6 routes	33 stops

Juarez bus routes

- Ruta 4

1 bus route with multiple stops along Av. Hererico Colegio Militar

Bus Routes



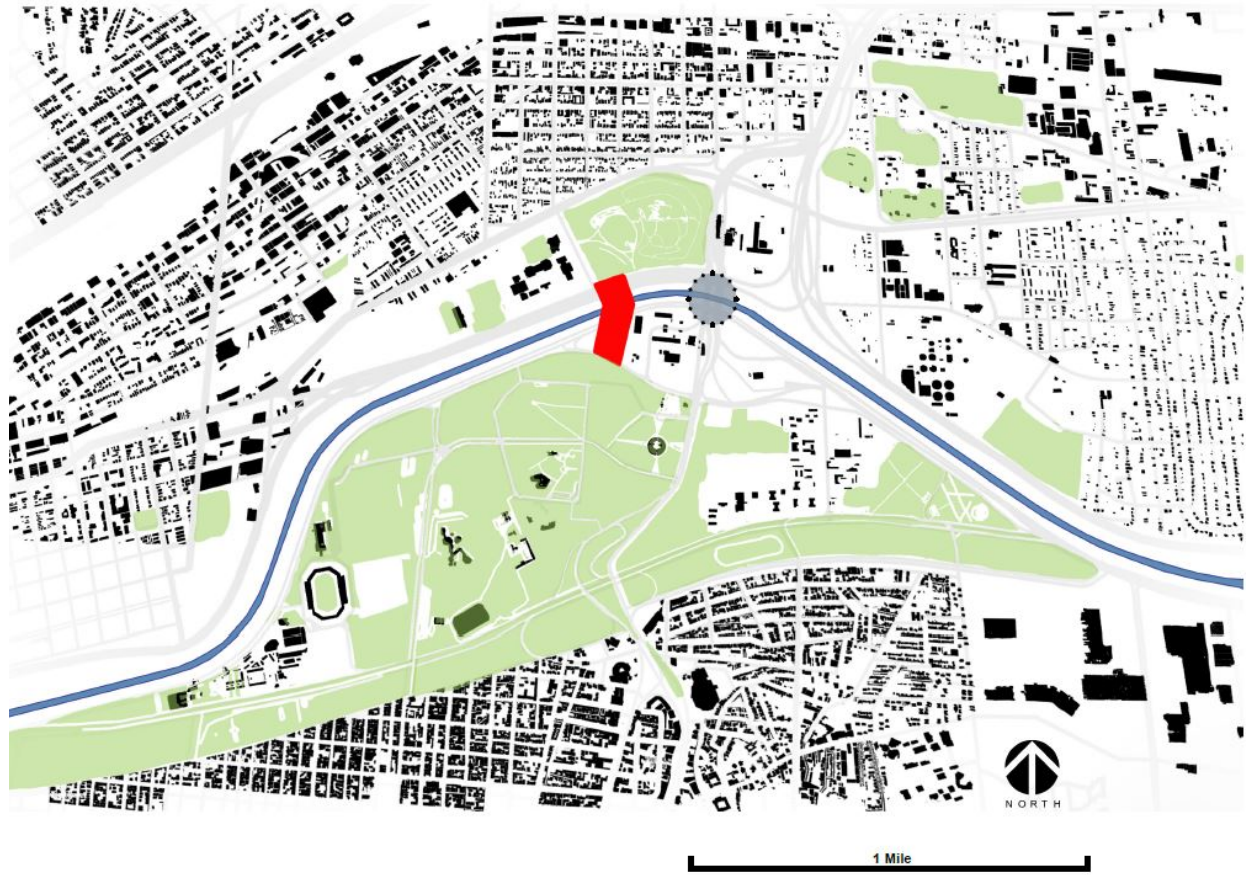
*Source: Adapted from Open Street Map*

**5.2.6 Figure ground.**

A figure-ground diagram is a mapping technique used to illustrate the relationship between the built and unbuilt environment in a city (Morphocode, 2020). The figure ground in this section also illustrates the green spaces to show the connection or proximity of parks within the vicinity of El Chamizal (see Figure 5.13). The figure ground shows the change in scale and density correlating to the land use. The larger masses are industrial buildings, and the smaller scale footprint are residential areas. The northside of El Chamizal Memorial in El Paso is predominantly residential buildings. On the westside it is residential with larger commercial buildings and small industrial buildings. The POE is to the east and furthermore, predominantly residential, some commercial, industrial, and more green recreational spaces. Most importantly, you can see the strong connection between the green spaces on the Mexican side. South to El Chamizal there is a greenway of parks running east to west on the southside of El Chamizal. To

the west there are soccer fields and the Benito Juarez Olympic Stadium. Further south is primary residential with small pockets of commercial buildings.

**Figure 5.13.** *Figure Ground*



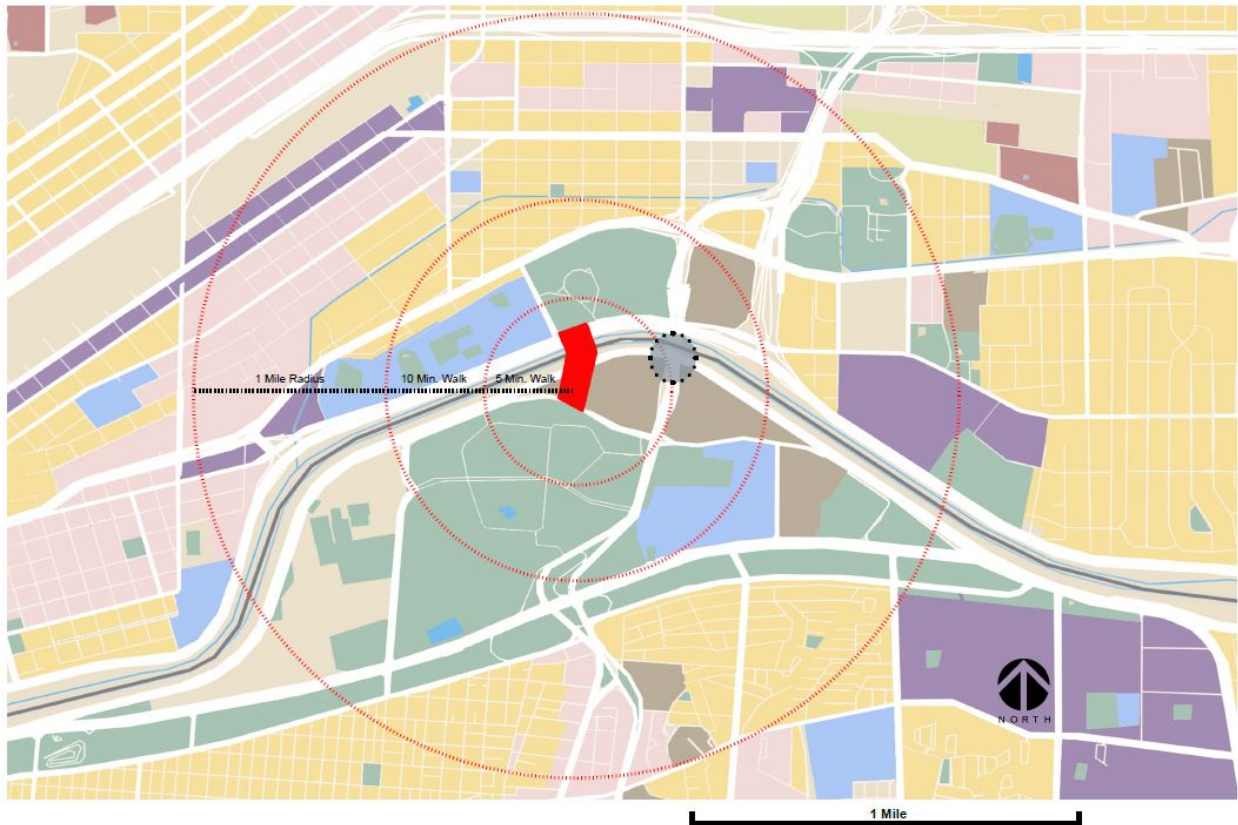
*Source: Adapted from Open Street Map and Google Earth*

### **5.2.7 Land use.**

Within a 10-minute walk radius, the proposed site for the binational park is predominately recreational and institutional with a small section of residential zone (see Figure 5.14). The recreational zone is composed of both, El Chamizal Memorial and El Chamizal Federal Park. The institutional zone includes the port of entry, Bowie High School in El Paso, the Autonomous University of Ciudad Juarez, and Plantel SEA High School in Juarez. Within a

mile radius Juarez is mostly residential. In El Paso it is a mixture of residential, commercial, and small portions of industrial.

**Figure 5.14.** *Land Use*



- Residential
- Commercial
- Industrial
- Institutional (schools)
- Institutional (government)
- Institutional (hospitals)
- Parks

*Source: Adapted from Open Street Map*

### 5.2.8 Flora and fauna.

El Paso and Ciudad Juarez are within the Chihuahuan Desert, one of the largest deserts of North America, twice as large as Florida (National Park Service, 2020). The pockets of moisture called “sky islands,” sustain a diverse community rich in plants and animal life (National Park Services, 2020). In the El Paso- Juarez region, there is a large community of small leafed and mostly thorny plants and at El Chamizal National Memorial you can find a lot of the following these native plants and animals (see Figures 5.15 and 5.16).

**Figure 5.15.** *El Chamizal Flora*

#### El Chamizal Flora

Scientific Name	Common Name
1. <i>Populus deltoides</i>	Cottonwood
2. <i>Chilopsis linearis</i>	Desert Willow
3. <i>Quercus virginiana</i>	Live Oak
4. <i>Pinus eldarica</i>	Mondell Pine
5. <i>Parkinsonia aculeata</i>	Palo Verde
6. <i>Prosopis glandulosa</i>	Honey Mesquite
7. <i>Fourquieria splendens</i>	Ocotillo
8. <i>Hesperaloe parviflora</i>	False Yucca
9. <i>Dasyliirion wheeleiri</i>	Desert Spoon
10. <i>Agave americana</i>	Century Plant
11. <i>Agave lechuguilla</i>	Lechuguilla
12. <i>Ferocactus wislizenii</i>	Barrel Cactus
13. <i>Opuntia ficus indica</i>	Prickly Pear
14. <i>Atriplex canescens</i>	Four-Wing Saltbush



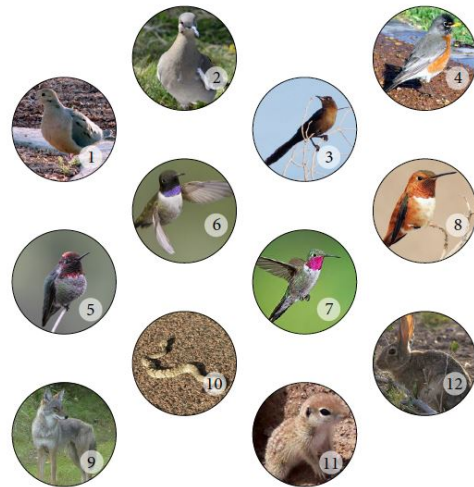
*Source: National Park Services*



**Figure 5.16. *El Chamizal Fauna***

**El Chamizal Fauna**

Scientific Name	Common Name
1. <i>Zenaida macroura</i>	Mourning Dove
2. <i>Zenaida asiatica</i>	White-winged Dove
3. <i>Quiscalus mexicanus</i>	Great-tailed Grackle
4. <i>Turdus migratorius</i>	American Robin
5. <i>Selesphorus platycerus</i>	Broad-tailed Hummingbird
6. <i>Archilochus alexandri</i>	Black-chinned Hummingbird
7. <i>Calypte anna</i>	Anna's Hummingbird
8. <i>Selesphorus rufus</i>	Rufous Hummingbird
9. <i>Canis latrans</i>	Coyote
10. <i>Crotalus durissus</i>	Rattlesnake
11. <i>Spermophilus spilosoma</i>	Spotted Ground Squirrel
12. <i>Sylvia Audubon</i>	Desert Cottontail



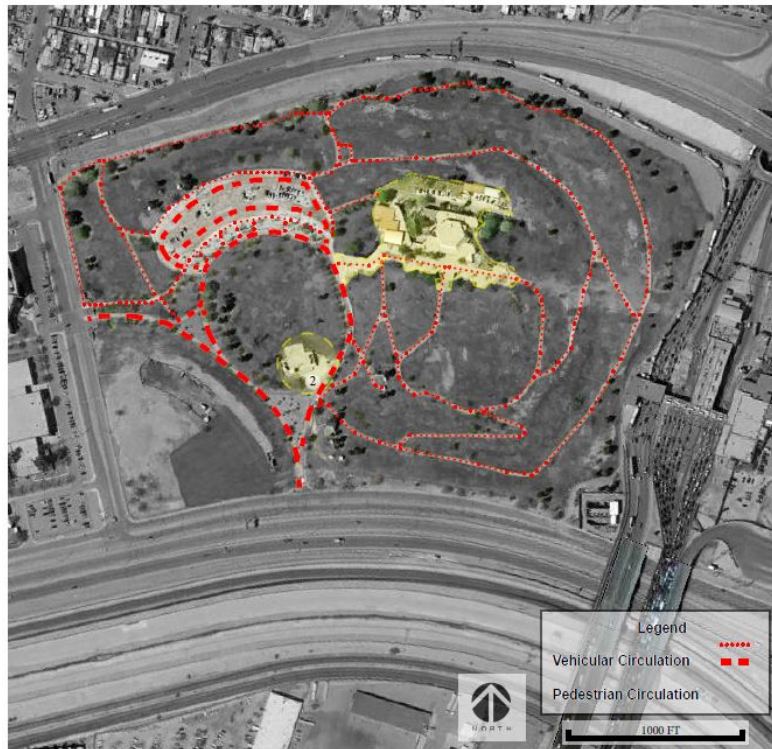
*Source: National Park Services*

**5.2.9 El chamizal and the interstice.**

The conditions of the existing site and the surroundings influenced and guided the narrative, design process, and programmatic elements. Connecting the two parks through the binational park on the interspace of the two was one of the main goals, so understanding the constraints and opportunities helped shape the design for this particular site. Before the design process, it is necessary to collect all the given parameters of the site.

El Chamizal National Memorial has a large trail system with seating and trees along the trails, and mostly large lawn open spaces. In the Middle of the park stands El Chamizal National Memorial Cultural Center which contains an art gallery, a theater, and museum. In front of the cultural center is the original Boundary Monument after the Treaty of Guadalupe Hidalgo of 1848. The park provides parking on the west side of the Cultural Center (see Figure 5.17).

**Figure 5.17.** *El Chamizal National Memorial*



*Source: Adapted from Google Earth*

On the Juarez side El Chamizal Federal Park is larger than its counterpart in El Paso. The park has a large monument coming in from Avenida de Las Americas on the west of the park. The Benito Juarez Monument has several terraces with views to all directions. West of the monument is Archaeology Museum. Other elements of the park are indoor and outdoor soccer field, a swimming park, water fountains, large shade structures, and playground equipment throughout the park. Northeast from the park is the Mexican border crossing port of entry and an abandoned building with a small parking lot (see Figure 5.18).

**Figure 5.18.** *El Chamizal Federal Park*

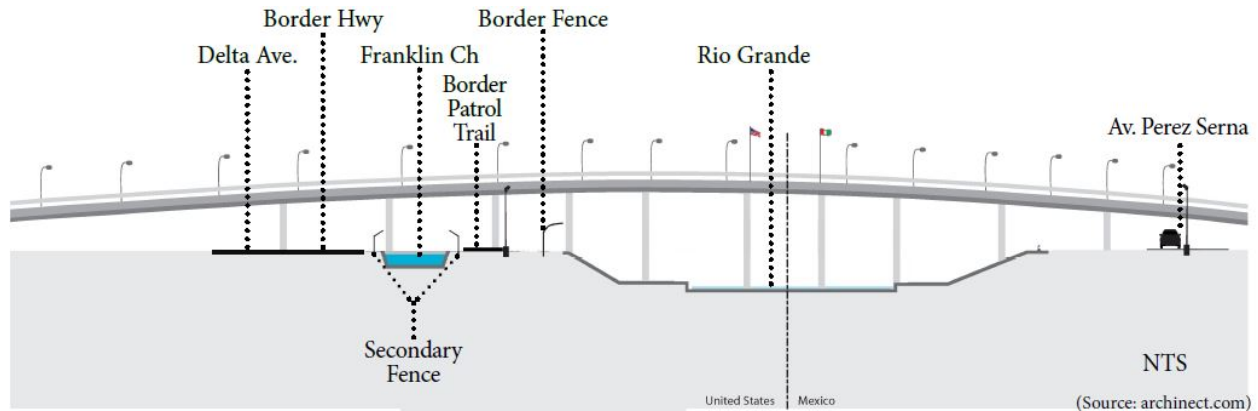


*Source: Adapted from Google Earth*

The two parks have been separated since the agreement of 1963. Between El Chamizal Federal Park and the border is Perez Serna Avenue. The Mexican side does not have a fence, only a car barrier along the open space between the road and the river. From the American side, there are two roads between El Chamizal National Memorial and the border. The closest to the park is Delta Avenue and moreover towards the border is the Border Highway. Before the Rio Grande there is a fenced in canal, then a Border Patrol trail, and finally the border fence. On the

other side of the border fence is the Rio Grande, the actual borderline in the middle of the river (Figure 5.19).

**Figure 5.19.** *El Paso-Juarez Border*

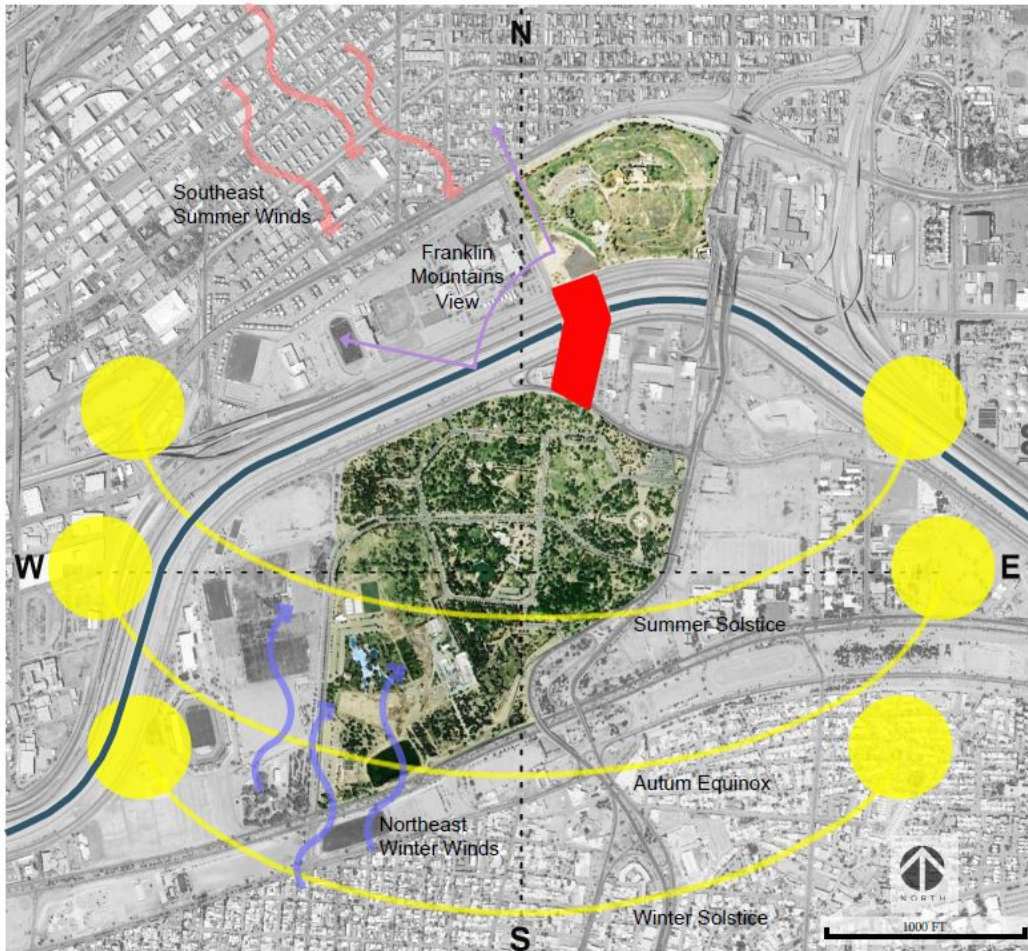


*Source: archinect.com*

### **5.2.10 Natural elements of the site.**

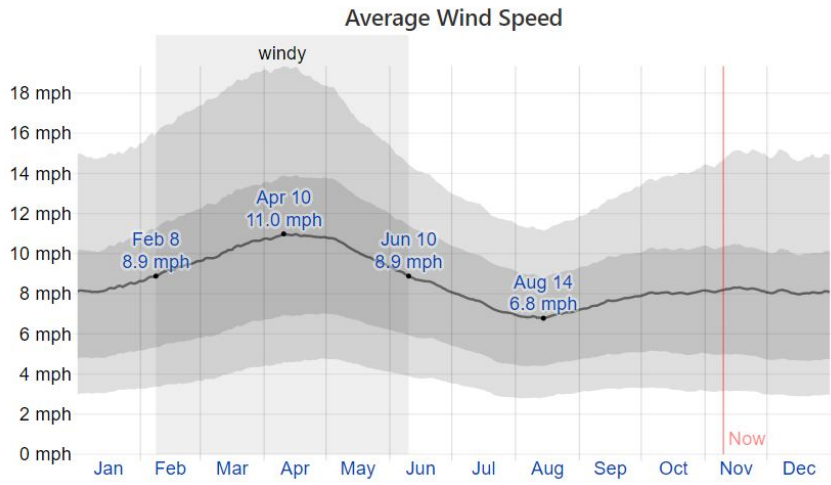
An analysis diagram of the natural elements is helpful during the design process. It can determine the location and orientation of manmade features and plants, or the type of plants to use. The analysis includes a sun/shade study, average wind speeds and direction, average rainfall, and average temperature (see Figures 20, 21, 22, and 23).

Figure 5.20. *Natural Elements*



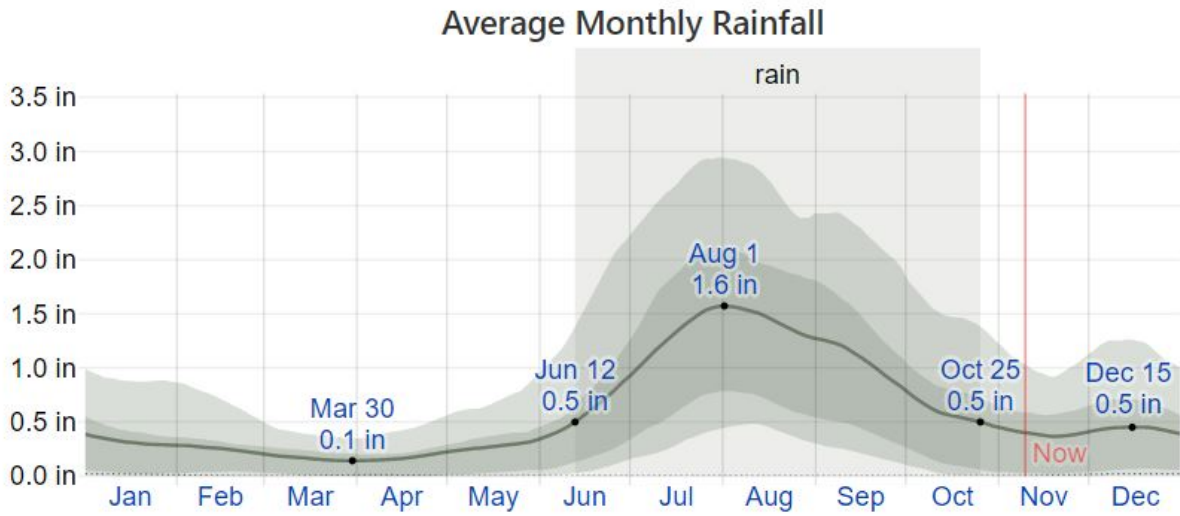
Source: Adapted from Google Earth

**Figure 5.21.** *Average Wind Speed*



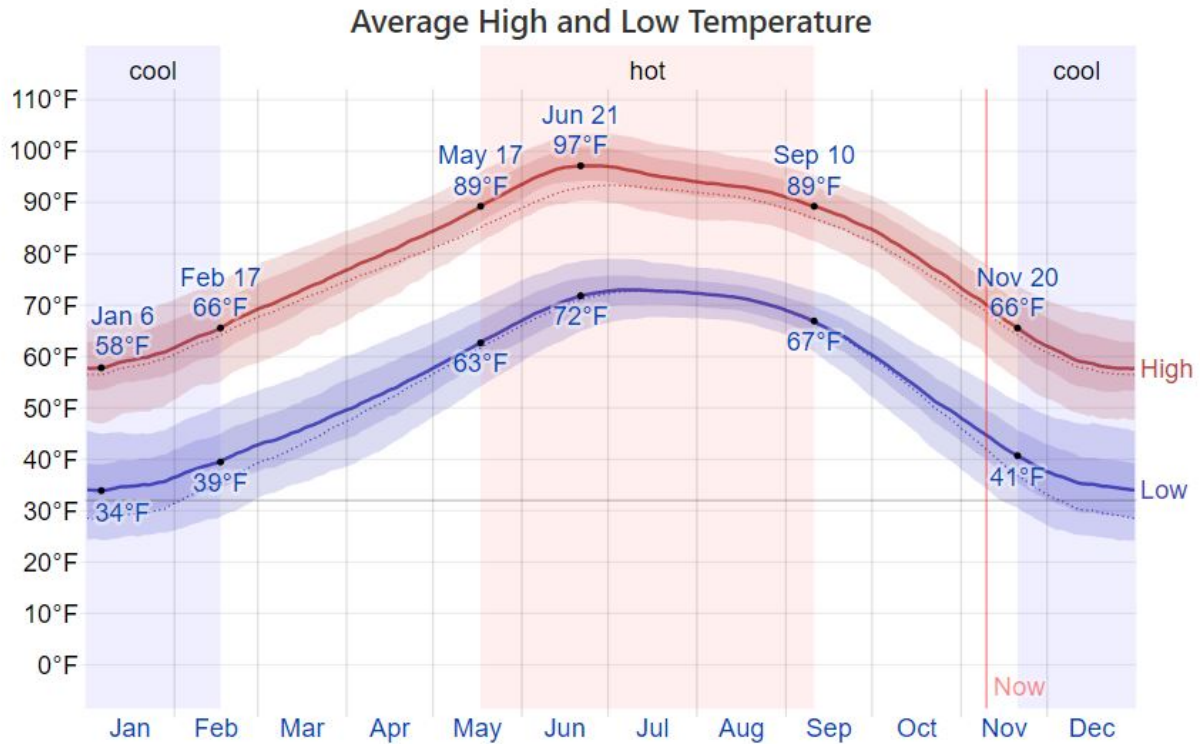
Source: *weatherspark.com*

**Figure 5.22.** *Average Monthly Rainfall*



Source: *weatherspark.com*

**Figure 5.23.** *Average High and Low Temperatures*



*Source: watherspark.com*

### 5.3 Programmatic Elements

The programmatic elements are based off of the goals and objectives from section 5.3.

- Port of Entry

Each side of the bridge has a building with the necessary amenities for a pedestrian port of entry to control access into the binational park and with the proper documentation people can use the bridge as a border crossing.

- Conference rooms & museum

The buildings located on each side of the POE can have a mixed use to generate money for security and maintenance. Many U.S. factories are in Ciudad Juarez and people travel

back and forth between Juarez – El Paso (Linthicum, Fry, Minjares, 2020). The buildings can rent conference rooms for corporations to hold their meetings. Saving people time from having to travel across the border and to deal with the long wait times. These conference rooms can also be used by Bowie High School or any other school who would want to meet with the parents of students living in Juarez. The building on the Juarez side is much larger and can also a museum and giftshop. In this space people can learn about the border region and stories told by immigrants, or victims of the violent past of Ciudad Juarez.

- Food Stands & Restaurant

A restaurant over the border in a unique place gives people another reason to visit the binational park. In Mexican culture it is common to visit a park and have food vendors selling street tacos or other traditional foods. Having food vendors will attract more people and enhance the park experience.

- Native Gardens & Educational signage

People at the binational park can learn about the Chihuahuan desert with the different native gardens throughout the park.

- Art Installations

The park can have designated areas for art installations but during art festivals art can be displayed throughout the entire park.

- Plazas

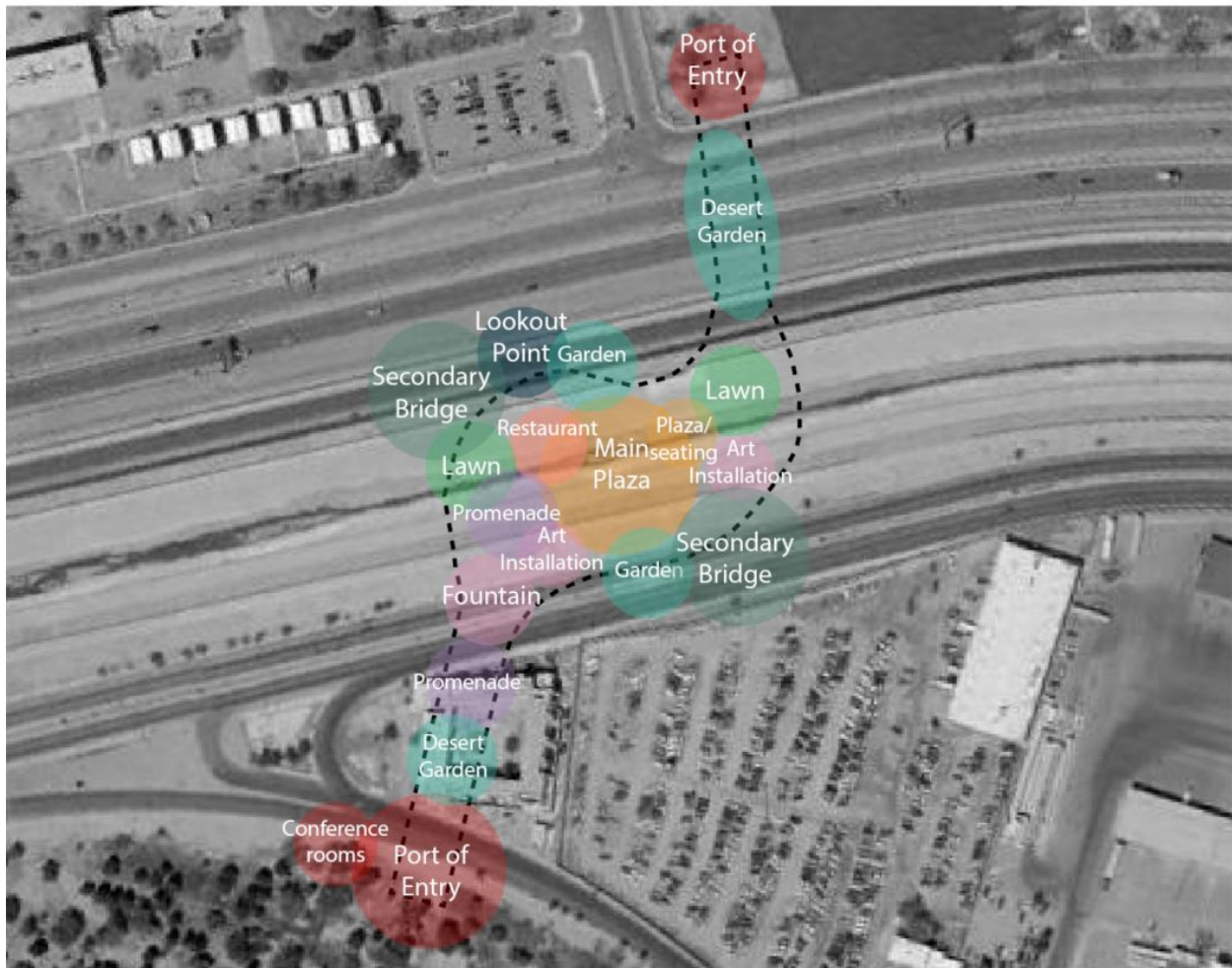
The park needs a main plaza for large international events where the communities of both cities can join in celebration. Smaller plazas can be used for socialization and reunions.



- Lawns, shaded seating, and trails.

Providing these three different elements gives people choices and serve people of all ages and abilities. According to the experts of Project for Public Spaces, the building blocks of great spaces are the activities (Project for Public Spaces, 2020). This will give people reasons to visit. (see Figure 5.24)

**Figure 5.24.** *Programmatic Diagram*



*Source: adapted from Google Maps*

## 5.4 Concept

Based on the Cross Border Xpress bridge of San Diego and the Tijuana Airport, the idea of creating a bridge as a binational park was born. By proposing a bridge many problems would be eliminated. Friendship Park's main problem is the border wall, this wall prevents people to be in the same space and to be able to hug each other, it is not a true binational park. Therefore, by controlling the access and treating the space like a port of entry can be the solution for security concerns. Having a single Customs checkpoint from each side will allow people to come into the space and only allow them to exit from the same checkpoint they came from unless they have the proper documentation to cross.

Research shows that there is a shortage of U.S. customs at the ports of entry in El Paso, Texas extending wait times at the border crossings and affecting the economy significantly (Hill, 2019). In the past, two studies were done on the Bridge of The Americas for the feasibility of expansion and modernization of the vehicular operations. The two studies concluded that due to the constrained site did not allow the expansion (Texas Department of Transportation, 2015). The binational bridge park can be beneficial for the Bridge of the Americas by eliminating the pedestrian checkpoint allowing those border agents to focus more on the vehicular traffic.

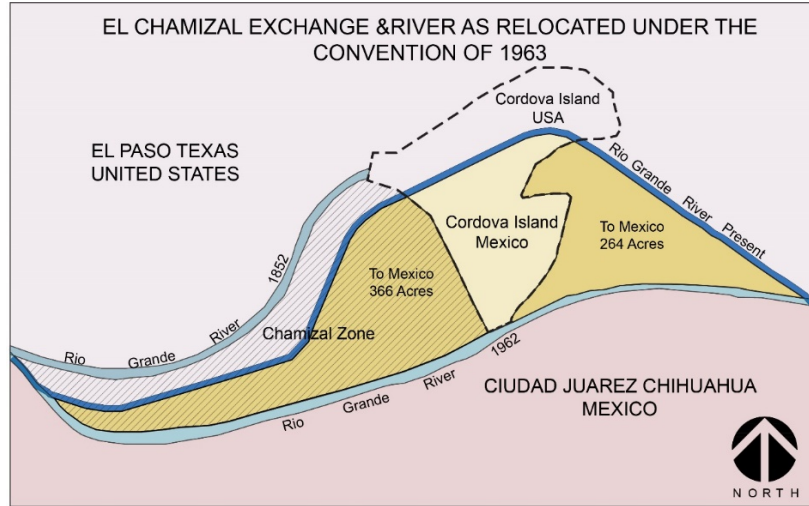
Pedestrians crossing the Bridge of The Americas have to cross through the vehicular traffic of the port of entry or a major intersection along the border highway to get to the bus stop or Bowie High school. There are many Bowie High School students from Juarez who make their daily journey to school. Some students start at 5:45 a.m. to have enough time to catch the bus in Juarez, get to the border, wait in line to cross the checkpoint, and walk to school (Larson & Zuhlke, 2013). The proposed bridge park will connect directly to the bus stop and Bowie High School, making it a safer journey for pedestrians.

One of the most consequential historical events that took place at El Chamizal was the shifting of the Rio Grande. The shifting of the river changed the border and created tension between the two countries, but it also led to a peaceful treaty and collaboration to resolve the problem of El Chamizal. The proposed bridge is divided into three parts representing the three changes of the river (see Figures 25 and 26). The main bridge is in the center, this is where all the programmatic elements are inserted. The two wings on each side are smaller bridges that change in elevation and serve more as boardwalks with native gardens and scenic views to both cities (see Figure 26).

The bridge has two twisting towers in the center as the main structure element of the bridge. The towers represent El Paso and Ciudad Juarez. The towers are twisting trying to become one piece like the yarn of a rope, like Juarez and El Paso was one before the Treaty of Guadalupe Hidalgo, or El Chamizal before the shifting of the Rio Grande.

The bridge connects directly into El Chamizal Federal Park and El Chamizal National Memorial and as the bridge gets closer to the river it shifts and turns into an organic shape as if the flow of the river pushes and transforms the bridge, a representation of the shifting of the Rio Grande at el Chamizal (see Figure 5.27).

**Figure 5.25.** *Shifting of the Rio Grande*



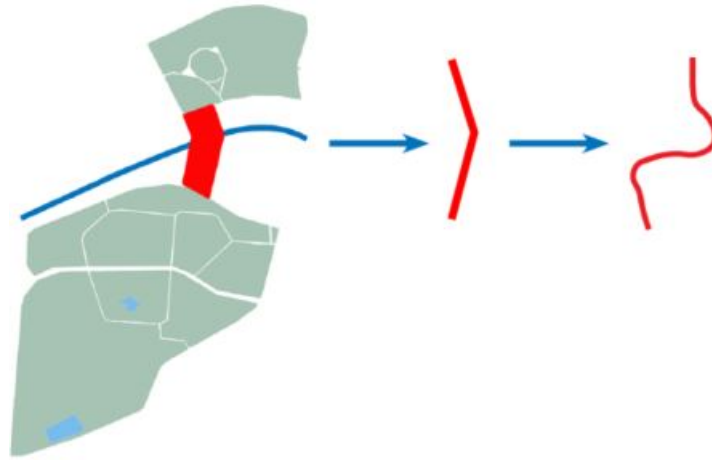
*Source: bbc.com*

**Figure 5.26.** *El Chamizal Binational Park*



*Source: adapted from Lumion*

**Figure 5.27.** *Shifting River Design Reference*



*Source: adapted from Google Maps*

### **5.5 El Chamizal Bridge Park Master Plan**

While the Government of Chihuahua plans on renovating El Chamizal Federal Park, the opportunity arose to make a strong connection to the bridge park by proposing a promenade on the north and south axis of the park. The promenade can have direct connections to other significant spaces like the Benito Juarez Monument or to El Chamizal Archeology Museum (see Figure 5.28). The main entrance to the bridge park becomes the terminus of the promenade, connecting physically and visually to the park from a distance, making it easy to get to (see Figure 5.29). At the end of the promenade, before entering the bridge park there is a plaza with shade structures and trees for natural shading. The plaza can also serve as a bus stop for daily border crosses coming from other parts of the city of Juarez. El Chamizal Park Bridge then connects them directly to a bus stop on the other side of the border making it a safer journey by eliminating the long walk to the Bridge of the Americas (see Figure 5.30). Students from Bowie High School living in Juarez would also benefit by having a direct connection to their school.

On the El Paso side of El Chamizal Bridge Park visitors exit the bridge into a plaza. The plaza has shade structures with seating, a fountain, and trees for the comfort of those who are waiting for public transportation or those who just want to enjoy the space. An array of the same ornamental trees used at the Chamizal Federal Park promenade are used as a continuation into El Chamizal National Memorial. A walkway and the ornamental trees connect all the way to the Cultural Center.

The bridge is similar to the Cross Border Xpress bridge on the San Diego – Tijuana border. It is a bridge connected by two buildings on each side of the border. The main bridge does not arch, it is a straight bridge. The design minimizes construction impact to the infrastructure of the intermediate space between the two parks.

Figure 5.28. El Chamizal Master Plan



Source: adapted from Lumion

The façade of the building, a transparent material of three different colors with a black frame is a representation of the colors of the Tigua Native American, the local pueblo tribe (see Figure 5.29 and 5.30).

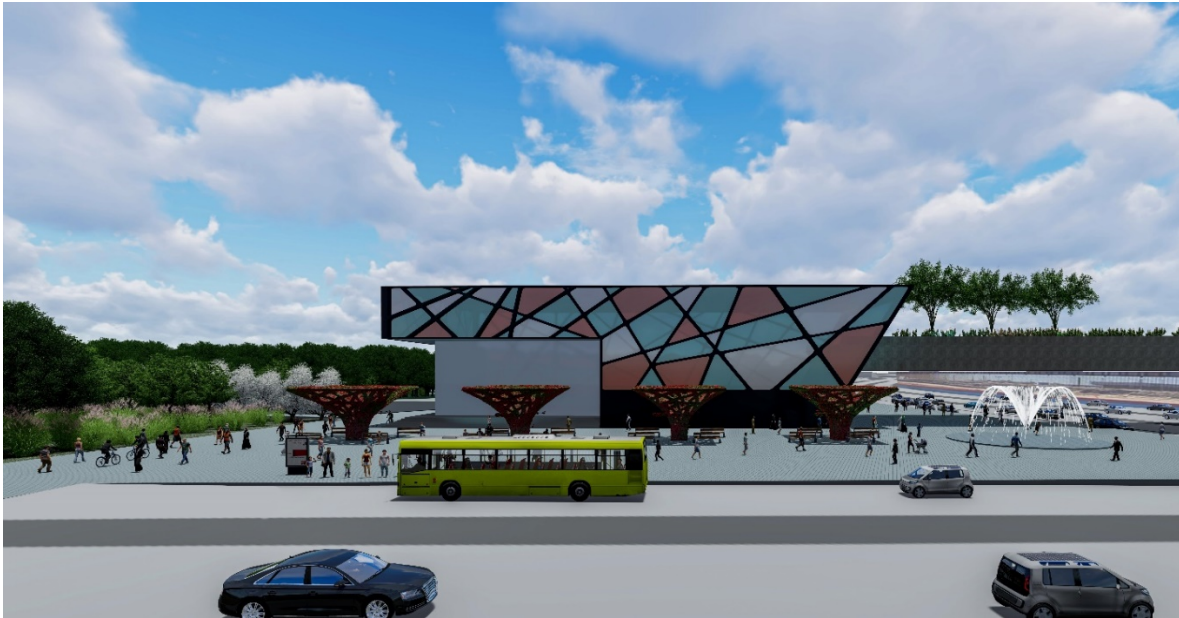
**Figure 5.29.** *El Chamizal Bridge Park Connecting to El Chamizal Federal Park Promenade*



*Source: adapted from Lumion*



**Figure 5.30.** *El Chamizal Bridge Park Connecting to El Chamizal National Memorial*



*Source: adapted from Lumion*

El Chamizal Bridge Park has a variety of spaces to accommodate a wide range of users based on the goals and objectives from chapter 5.3. The park provides a variety of spaces giving people choices for interaction. The promenade on the south side provides plenty of seating and natural shading for those who want to sit with friends and family and a fountain for children to enjoy. Coming in from the north side there is an array of trees with seating and as people continue to move south there is a lawn and smaller plaza. In the center of the park visitors can find the main plaza and the park's restaurant. People can sit around on the surrounding steps of the main plaza. The main plaza is where large activities and celebrations can take place. For those who want to enjoy a stroll along the park, the park offers many paths with native garden displays along the paths. The two smaller bridges also provide native gardens with educational signs and scenic views to both cities. The bridge on the north side has an overlook to transmountain. The overlook has seating for those who want to spend more time there and enjoy

the views. The park has two designated spaces for art installations, although the park has the flexibility to display art in every part of the park. The decking of the two bridges can be used as murals to display public art. As people walk by these displays they can take a picture of a barcode and learn about the art piece and the artist. The main plaza or other smaller places can be rented out for special celebrations or meetings. (see Figures 5.31 through 5.36).

#### El Chamizal Bridge Park Master Plan

1. Promenade
2. Fountain / Art Installation
3. South Lawn
4. Franklin Mountain Overlook
5. Restaurant
6. Native Gardens
7. Main Plaza
8. Art Installation
9. Secondary Plaza
10. North Lawn
11. Port of Entry
12. Shade Structure
13. Fountain

**Figure 5.31.** *El Chamizal Bridge Park Master Plan*



*Source: adapted from Lumion*

**Figure 5.32.** *Birds-Eye View of El Chamizal Bridge Park*



*Source: adapted from Lumion*

Figure 5.33. North Lawn



Source: adapted from Lumion

**Figure 5.34.** *Scenic Walk*



*Source: adapted from Lumion*

**Figure 5.35.** *Promenade & Fountain*



*Source: adapted from Lumion*

**Figure 5.36.** *Main Plaza*



*Source: adapted from Lumion*

## **5.6 Summary**

This chapter discussed the criteria for the site selection based on the historical background of el Chamizal. The goals, objectives, and programmatic elements synthesized in Chapter 4 were adapted to the design of El Chamizal Bridge Park. Additionally, the plan of the State of Chihuahua to renovate El Chamizal Federal Park were considered to strengthen the connection between the parks. This chapter illustrated the culture and history of El Chamizal; demographics of El Paso and Ciudad Juarez; border crossings between the two bordering cities; circulation including public transportation within a mile radius of El Chamizal; and site inventory such as figure ground, land use, and flora and fauna. El Chamizal National Memorial Park and El Chamizal Federal Park along with the interspace between them were analyzed. It is crucial to understand and to incorporate these site conditions to the design process for the

suitability of the design proposal. Once a conceptual design was developed this chapter discussed in detail the spatial sequences, amenities, and programmatic elements that make up El Chamizal Bridge Park.



## **Chapter 6**

### **Conclusion**

#### **6.1 Introduction**

Culture and history define the identity of the people of El Paso and Ciudad Juarez. A border wall may separate them physically but not culturally. The history and cultural integration of this borderland region was studied and assessed to inform the design of a binational space for El Paso and Ciudad Juarez, a space that celebrate friendship between the two bordering countries and reunites families. The bridge park is not a common park typology, but it was considered the most effective park typology in response to the site opportunities and constraints. Creating a bridge park with controlled access from each side of the border challenged security concerns. Connecting the bridge park by two buildings minimized the impact on the interspace along the border and the two parks of El Chamizal. A more conventional arching bridge would require more room and have greater impact on the infrastructure.

#### **6.2 Research Questions Review**

The researcher did an extensive study on the culture integration and history of the borderland between the US and Mexico. Furthermore, the researcher studied one of the most significant historical sites between El Paso and Ciudad Juarez, El Chamizal. The southern border is a unique place where the majority of the people are of Mexican descent and have strong ties to one another despite of the borderline that separates them. Many of these twin cities depend on each other. This research confirms the need of a binational park for the border between the US and Mexico. Research proves that the economic and cultural ties that bind the two countries together cannot be broken by a dividing line.

This design was to assess the cultural integration of the borderlands to inform the design of a binational park for El Paso and Ciudad Juarez. The programmatic elements and conceptual design for El Chamizal Bridge Park respond to the research purpose. The research sheds light to the history and culture of Mexican Americans and Mexican immigrants. Especially for the El Paso-Juarez region whose majority of people are of Mexican descent. The design proposal is to provide spaces to celebrate and honor the friendship of the bordering neighbors and to unite those immigrants on the other side of the border.

1. How can the design of an open space respond to the cultural integration of the El Paso-Juarez region?

Like Peace Arch Park, this binational park bridge is a unique place that connects two parks from two countries. It will celebrate the friendship of both nations and unite the people of the El Paso Juarez region. Each case study provides a landmark that symbolizes the friendship between the neighboring countries. El Chamizal Bridge Park has two dramatic twisting towers on the center of the border, a shared landmark that represent the cultural ties of the two cities. The main plaza will host numerous of cultural events and the park provides the opportunity for local artists from both bordering cities to display public art throughout the park and attract many people from the borderplex region. For many years, the Peace Arch Park has successfully hosted cultural events that allows international artists to display their art throughout the park and has attracted thousands of tourists.

2. How can the characteristics of the physical environment create opportunities for the design of a binational park?

Through inventory and analyses of El Chamizal and the El Paso- Juarez region the researcher used the existing conditions as an opportunity to incorporate the site conditions to the design criteria found in Chapter 4. Additionally, the design took on challenging constraints which prevented the expansion of the parks without hindering security measures and the river. These constraints created an opportunity to incorporate the Cross Border Xpress bridge as a precedent to inform the park typology and minimize and disturbance to the current infrastructure.

### **6.3 Discussion**

The parks between the US and Canada celebrate the friendship between the two nations and promote other bordering nations to do the same. Unfortunately, on the US- Mexico border it is more challenging due to tighter border security measures and the push for a border wall along the entire southern border. Although there is a “binational park” between San Diego and Tijuana, the conditions and restrictions faced by visitors of Friendship Park are unfortunate. It is a place secured by a large border wall and a secondary fence which does not represent a true binational park and does not send the message of friendship and peace. A binational space should be a place where people can touch and hold their loved ones, not a place where people have to settle for being able to see their loved ones through a fence layered by several mesh panels. At the end of the day this environment brings more tears and mixed emotions for those who travel to Friendship Park to reunite with their loved ones.

The people of the El Paso-Juarez region deserve to have a place that honors their culture and rich history. It is time to commemorate the immigrants that have been contributing to the US, the land of immigrants, to honor the sacrifices they make to live the American Dream. It is heart

breaking to see a family running through the mud towards the borderline at the Rio Grande to use every moment of the 5 minutes they get to hug and touch their loved ones. El Chamizal Bridge Park provides a dignified space where families can reunite. El Paso and Ciudad Juarez need a space that brings their people together, a place that represents their region with pride.

#### **6.4 Implications for Landscape Architecture**

Based on the results of this study, the implications consisted of a space for the borderland of Juarez-El Paso. The Landscape Architect needs to understand the history and culture of the region. Given that there is a limited number of known binational parks in the world, the proposed binational park for El Paso and Ciudad Juarez can serve as a model to promote friendship and unity for other border regions. The site's physical characteristics can inform the design of a unique public space that values the regional context.

#### **6.5 Future Research**

Project for Public Spaces notes (2020), "Great public spaces are those places where celebrations are held, social and economic exchanges occur, friends run into each other, and cultures mix." In the future El Chamizal Bridge Park can be evaluated on the following qualities (Project for Public Spaces, 2020):

Determine if the public space is accessible; are people engaged in Activities; is the space comfortable and has a good image; and finally, is it a sociable place: one where people meet each other and take people when they come to visit.

El Chamizal Bridge Park can also create opportunities for other researchers to study the impact the park might have on the emotional state of those who visit the park to reconnect with their families in a more natural environment.

## References

- Aizenman, N. (2017). Mexicans in the U.S. are sending home more money than ever. *Economics*, NRP. Retrieved from <https://www.npr.org/sections/goatsandsoda/2017/02/10/514172676/mexicans-in-the-u-s-are-sending-home-more-money-than-ever>
- Asi Estamos Juarez. (2019). Datos de percepcion. Retrieved from <https://asiestamosjuarez.org/demografia-y-poblacion/>
- BC Parks. (2020). Peace arch provincial park. Retrieved from [https://bcparks.ca/explore/parkpgs/peace\\_arch/](https://bcparks.ca/explore/parkpgs/peace_arch/)
- Britannica. (2020). Las Posadas, Mexican Festival. Retrieved from <https://www.britannica.com/topic/Las-Posadas>
- Bracero History Archive (n.d.) Bracero Program. Retrieved from <http://braceroarchive.org/about>
- Bravo, C. (2018). CBP closes ‘door of hope’ on cross-border reunification event. NBC San Diego. Retrieved from <https://www.nbcsandiego.com/news/local/cbp-closes-door-of-hope-on-cross-border-reunification-event/164460/>
- Bureau of Transportation Statistics. (n.d.). Border crossing/entry data. Retrieved from <https://www.bts.gov/content/border-crossingentry-data>
- Bureau of Western Hemisphere Affairs. (2020). U.S. relations with Mexico. Mexico, Bilateral Relations Fact Sheet, U.S. Department of State. Retrieved from <https://www.state.gov/u-s-relations-with-mexico/>

- California Department of Parks and Recreation. (n.d.). Border field state park. Retrieved from [https://www.parks.ca.gov/?page\\_id=664](https://www.parks.ca.gov/?page_id=664)
- Cambio. (2019). Informa gobernador apoyo federal de 2 mil 500 mdp para parquet historico de el chamizal. Retrieved from <http://www.cambio.gob.mx/spip.php?article12075>
- Carmona, A. (2019). UTEP and UACJ planning to restore academic collaboration. *Assayer of Student Opinion, The Prospector*, At the University of Texas at El Paso Since 1915. Retrieved from <https://www.theprospectordaily.com/2019/04/02/utep-and-uacj-planning-to-restore-academic-collaboration/>
- Cengage (2020). Latinos, world war I and world war II. Encyclopedia. Retrieved from: <https://www.encyclopedia.com/defense/energy-government-and-defense-magazines/latinos-world-war-i-and-world-war-ii>
- National Park Service. (2020). Century of Conflict, El Chamizal. Retrieved from <https://www.nps.gov/cham/learn/historyculture/conflict.htm>
- City of El Paso. (2008). Economic development. Retrieved from <https://www.elpasotexas.gov/economic-development>
- City of Surrey. (n.d.) Peace Arch. Retrieved from <https://www.surrey.ca/renovating-building-development/land-planning-development/heritage-conservation/heritage-sites/south-surrey/peace-arch>
- Davidson, A. (2013). Do illegal immigrants actually hurt the U.S. economy? *The New York Times*. Retrieved from <https://www.nytimes.com/2013/02/17/magazine/do-illegal-immigrants-actually-hurt-the-us-economy.html>

- Dear, M. (2013). *Why walls won't work*. New York, NY: Oxford University Press.
- DeLeón, A. D. (1999). *Mexican Americans in Texas, a brief history* (2nd ed.). Wheeling, IL: Harlan Davidson.
- Deming E. & Swaffield S. (2011). *Landscape architecture research – Inquiry, strategy, design*. Hoboken, NJ: John Wiley & Sons, Inc.
- Dibble, S. (2017). A proposal for different kind of prototype: A binational border park. *Border & Baja*, The San Diego Union-Tribune. Retrieved from <https://www.sandiegouniontribune.com/news/border-baja-california/sd-me-friendship-park-20171102-story.html>
- Dougherty, P. (2015). Hands across the border revival is held at the peace arch on June 14, 2015. History Link. Retrieved from <https://www.historylink.org/File/11079>
- Eastaugh, S. (2017). The future of the US-Mexican border: Inside the ‘split city’ of El Paso-Juarez. *Border cities*, The Guardian. Retrieved from <https://www.theguardian.com/cities/2017/jan/25/el-paso-juarez-us-mexican-border-life-binational-city>
- El Reporte de Puentes. (2020). Retrieved from <http://reportedepuentes.com.mx/>
- Fernandez, A. (2020). Borrando la frontera. Retrieved from <https://anateresafernandez.com/1718-2/>
- Friends of Friendship Park. (n.d.) A Place of Friendship. Retrieved from <https://www.friendshippark.org/about>

- Gannon, K. (2018). What is life really like in a Texas border city? Identity, Borderzine, Reporting Across Fronteras. Retrieved from <https://borderzine.com/2018/07/what-is-life-really-like-in-a-border-city/>
- Gelatt, J. & Zong, J. (2018). Settling in: A profile of the unauthorized immigrant population in the United States. Migration Policy Institute. Retrieved from <https://www.migrationpolicy.org/research/profile-unauthorized-immigrant-population-united-states>
- Gobierno del Estado De Chihuahua. (2020). Se realizara session del Consejo Nacional de Seguridad Publica en Ciudad Juarez. Retrieved from <http://www.chihuahua.gob.mx/contenidos/se-realizara-sesion-del-consejo-nacional-de-seguridad-publica-en-ciudad-juarez>
- Gregory, G. & Liss, S. (n.d.) Chamizal Dispute. Texas State Historical Association. Retrieved from <https://www.tshaonline.org/handbook/entries/chamizal-dispute>
- Groves, S. & Tareen S. (2020). U.S. meatpacking industry relies on immigrant workers. But a labor shortage looms. Food, Los Angeles Times. Retrieved from <https://www.latimes.com/food/story/2020-05-26/meatpacking-industry-immigrant-undocumented-workers>
- Harris, C. & Sadler, L. (2009). *The secret war in El Paso: Mexican revolutionary intrigue, 1906-1920*. Albuquerque, New Mexico: University of New Mexico Press.
- History (2019). Cowboys. History. Retrieved from <https://www.history.com/topics/westward-expansion/cowboys>



Hope, H. (2020). Border patrol unexpectedly removes ‘friendship garden.’ CBS Local News.

Retrieved from <https://www.cbs8.com/article/news/local/border-friendship-garden-controversy/509-f83ad815-f4f1-43b9-9f19-4ab103fce7ff>

Hoppough, T. (2020). Families use friendship park to reunite along the US-Mexico border.

National News, 4 KXLF Butte. Retrieved from

<https://www.kxlf.com/news/national/families-use-friendship-park-to-reunite-along-the-us-mexico-border>

Industry Today. (2016). El Paso Regional Economic Development Corporation. The Ciudad

Juarez – El Paso Borderplex: The U.S./Mexico done right. Retrieved from

<https://industrytoday.com/the-ciudad-juarez-el-paso-borderplex/>

International Boundary Commission. (n.d.) Boundary Facts. Retrieved from

<http://www.internationalboundarycommission.org/en/the-boundary-and-you/interesting-facts.php>

International Peace Arch Association. (n.d.) The Peace Arch was inspired and created to connect

nations, people, families, and businesses for good. Retrieved from

<https://www.peacearchpark.org/about-us>

International Peace Garden North Dakota. (2020). Retrieved from <http://peacegarden.com>

Immigration. (2018). Responsible Immigration Reform Will Secure Our Borders. Whitehouse.

Retrieved from <https://www.whitehouse.gov/briefings-statements/responsible-immigration-reform-will-secure-borders/>

- Immigration History (n.d.) Emergency Quota Law (1921). Retrieved from <https://immigrationhistory.org/item/%e2%80%8b1921-emergency-quota-law/>
- Jacobs, F. (2010). 252 – A river runs through it: The chamizal dispute (1895-1963). Big Think. Retrieved from <https://bigthink.com/strange-maps/252-a-river-runs-through-it-the-chamizal-dispute-1895-1963>
- KVIA ABC-7 (2020). Afraid of getting sick: Borderland migrant farm workers fearful of returning to field amid viruses. El Paso, ABC 7 KVIA. Retrieved from <https://kvia.com/news/el-paso/2020/05/05/afraid-of-getting-sick-borderland-migrant-farm-workers-fearful-of-returning-to-work-amid-virus/>
- Krauze, L. (2020). Undocumented immigrants, essential to the U.S. economy, deserve federal help too. Global Opinions, Washington Post. Retrieved from <https://www.washingtonpost.com/opinions/2020/04/13/undocumented-immigrants-essential-us-economy-deserve-federal-help-too/>
- LaGro, J. (2013). *Site Analysis: Informing Context-Sensitive and Sustainable Site Planning and Design (3<sup>rd</sup> ed.)*. Hoboken, NJ: J. Wiley & Sons, Inc.
- La Paz Agreement. (1983). U.S. Department of State. Retrieved from <https://www.epa.gov/sites/production/files/2015-09/documents/lapazagreement.pdf>
- Larson, E. & Wachter, A. (Writers). (2013). *Crossing Borders*. [Documentary]. United States: National Geographic.

- Lewis, P. (2016). A wall apart: divided families meet at a single, tiny spot on the US-Mexico border. Retrieved from <https://www.theguardian.com/us-news/2016/mar/29/us-mexico-border-wall-trump-cruz-immigration-friendship-park>
- Lewkowicz S. & Stochlic N. (2020). This cheer squad is caught between two worlds-divided by a border. Reporting, International Women's Media Foundation. Retrieved from <https://www.iwmf.org/reporting/this-cheer-squad-is-caught-between-two-worlds-divided-by-a-border/>
- Linthicum K., Fry W., Minjares G. (2020). US factories in Mexico are still open. As the coronavirus spreads, workers are dying. Yahoo finance. Retrieved from <https://finance.yahoo.com/news/us-factories-mexico-still-open-215311922.html>
- Little, B. (2019). The U.S. deported a million of its own citizens to Mexico during the great depression, up to 1.8 million people of Mexican descent-most of them American-born – were rounded up in informal raids and deported in an effort to reserve jobs for white people. History Stories, History. Retrieved from <https://www.history.com/news/great-depression-repatriation-drives-mexico-deportation>
- Longoria, A. (Host). (2017). Juarez, Tierra de los Indomables T2-E5 – (Entrega de “El Chamizal”). Universidad Autonoma de Ciudad Juarez. [Documentary]. Retrieved from <https://www.youtube.com/watch?v=rDfwJCy15do>
- Marcus, C., & Francis, C., (1998). *People Places (2<sup>nd</sup> ed.)*. Canada: J. Wiley & Sons, Inc.
- Martinez, L. (2019). University of San Diego (USD) and (CETYS) university collaborate in dual graduate business degree – the first of its kind. USD News Center, The University of San Diego. Retrieved from [https://www.sandiego.edu/news/detail.php?\\_focus=72439](https://www.sandiego.edu/news/detail.php?_focus=72439)

- McCarthy, N. (2019). The world's top remittance recipients in 2018. Forbes. Retrieved from <http://forbes.com>
- Meier, M. & Ribera, F. (1993). *Mexican Americans/ American Mexicans from conquistadores to chicanos*. Canada: Harper Collins Canada Ltd.
- Mendoza, A. (2020). U.S. side of a binational garden at Mexico border bulldozed. *Los Angeles Times*. Retrieved from <https://www.latimes.com/california/story/2020-01-09/binational-garden-between-tijuana-and-san-diego-destroyed-on-the-united-states-side>
- Merriam-Webster. (n.d.) Nation. Retrieved from <https://www.merriam-webster.com/dictionary/nation>
- Miroff, N. (2019). Smugglers are sawing through new section of Trump's border wall. *National, Washington Post*. Retrieved from [washingtonpost.com](http://washingtonpost.com)
- Morokulien. (n.d.). Morokulien, The Scandinavian Republic of Peace. Retrieved from <http://www.freinatis.de/morokulien/index-en.html#post>
- Morphocode. (2020). Featured history, the figure-ground diagram. Retrieved from <https://morphocode.com/figure-ground-diagram/>
- Morrissey, M. (2019). How art installations on the US-Mexico border affected people's understanding of the border. *Communication Currents*, National Communication Association. Retrieved from <https://www.natcom.org/communication-currents/how-art-installations-us-mexico-border-affected-peoples-understanding-border>

National Geographic. (n.d.) US-Mexico Border, The fence between the U.S. and Mexico is a political as well as physical border. Retrieved from

<https://www.nationalgeographic.org/media/tijuana-border-fence/>

National Park Service. (n.d.). Chamizal, national memorial Texas. Retrieved from

<https://www.nps.gov/cham/learn/historyculture/conflict.htm>

National Park Service. (n.d.) Organ pipe cactus. Retrieved from

<https://www.nps.gov/orpi/learn/nature/biosphere.htm?ftag=MSF0951a18>

National Park Service. (2020). Water made this place. Retrieved from

<https://www.nps.gov/cham/learn/historyculture/cultural-landscape.htm>

North American Development Bank (2020). About the north American development bank.

Retrieved from <https://www.nadb.org/about/overview>

Omondi, S. (2019). Countries with the longest land borders. World Facts, World Atlas. Retrieved

from <https://www.worldatlas.com/articles/countries-with-the-longest-land-borders>

Oropeza, L. (2015). Fighting on two fronts: Latinos in the military. National Park Services.

Retrieved from <https://www.nps.gov/articles/latinoww2.htm>

Orozco, M. (2015). *The remittances and development in the global economy*. Bolder, CO: Lynne

Rienner Publishers.

Orrenius, P. (2016). Benefits of Immigration Outweigh the Costs. George W. Bush Institute.

Retrieved from <https://www.bushcenter.org/catalyst/north-american-century/benefits-of-immigration-outweigh-costs.html>

Owuor, S. (2019). The busiest border crossings in the United States. World Facts, World Atlas.

Retrieved from <https://www.worldatlas.com/articles/the-busiest-border-crossings-in-the-united-states.html>

Passel, J. & Cohn, D. (2019). Mexicans decline to less than half the U.S. unauthorized immigrant

population for the first time. Fact Tank, News In The Numbers, Pew Research Center.

Retrieved from <https://www.pewresearch.org/fact-tank/2019/06/12/us-unauthorized-immigrant-population-2017/>

PDN Uno. (n.d.). Personal vehicle crossings. Retrieved from

<https://pdnuno.com/data/crossings/personal-vehicles>

Planas R. (2014). 16 Reasons why opening our borders make more sense than militarizing them.

*Latino Voices*, Huff Post. Retrieved from [https://www.huffpost.com/entry/open-borders\\_n\\_5737722](https://www.huffpost.com/entry/open-borders_n_5737722)

Press Release (2019). Record high remittances sent globally in 2018. The World Bank. Retrieved

from <https://www.worldbank.org/en/news/press-release/2019/04/08/record-high-remittances-sent-globally-in-2018>

Project for Public Spaces. (2020). What makes a successful place? Retrieved from

<https://www.pps.org/article/grplacefeat>

Public Broadcasting Services. (n.d.). Timeline of important dates, Latino Americans. Retrieved

from <http://www.pbs.org/latino-americans/en/timeline/>

Rael, R. (2017). *Borderwall as architecture*. Oakland, CA: University of California Press.

- Resendiz, J. (2020). Mexican franchises from Juarez expand into El Paso, beyond. *Border Report*, KTSM. Retrieved from <https://www.ktsm.com/news/border-report/mexican-franchises-from-juarez-expand-into-el-paso-beyond/>
- Reicher D. (2019). Forget trumps border wall. Let's Build F.D.R.'s International Park. *Opinion*, The New York Times. Retrieved from <https://www.nytimes.com/2019/03/14/opinion/trump-wall-big-bend-park.html>
- Rivas A. (2019). Trump's language about Mexican immigrants under scrutiny in wake of El Paso shooting. ABC News. Retrieved from <https://abcnews.go.com/US/trumps-language-mexican-immigrants-scrutiny-wake-el-paso/story?id=64768566>
- Rocha, C. (Reporter). (2017). *El Otro México, La nacion Tohono o Odham* [News Report]. Mexico: Azteca trece.
- Roosevelt Institute for American Studies (n.d.). The Taft-Diaz meeting: the first U.S. President visit to Mexico. Retrieved from <https://www.roosevelt.nl/taft-diaz-meeting-first-us-presidential-visit-mexico>
- Roberts, K. (2020). It's official: Mexico is no. 1 U.S. trade partner for first time, despite overall U.S. trade decline. *Forbes*. Retrieved from <https://www.forbes.com/sites/kenroberts/2020/02/05/its-official-mexico-is-no-1-us-trade-partner-for-first-time-despite-overall-us-trade-decline/?sh=6bcd4cfc3eab>
- Robinson, N. (2016). *The Planting Design Handbook*. New York, NY: Taylor & Francis Group.
- Sacchetti M., Lynch D., Miroff N., & Popescu R. (2019). Wait times at U.S.-Mexico border soars as officers are reassigned to deal with migrants. *Immigration*, The Washington Post.

Retrieved from [https://www.washingtonpost.com/immigration/wait-times-at-us-mexico-border-soar-as-officers-are-reassigned-to-deal-with-migrants/2019/04/10/2d1d30f4-5bae-11e9-842d-7d3ed7eb3957\\_story.html](https://www.washingtonpost.com/immigration/wait-times-at-us-mexico-border-soar-as-officers-are-reassigned-to-deal-with-migrants/2019/04/10/2d1d30f4-5bae-11e9-842d-7d3ed7eb3957_story.html)

Sanchez Longoria (Reporter). (2017). *Juarez, Tierra de los Indomables – T2-E5 – (Entrega de “El Chamizal”)* [Documentary]. Mexico: Universidad Autonoma de Ciudad Juarez.

Sanchez Soledad, J. (2020). Opinion, el chamizal, su historia y una oportunidad. La Verdad Periodismo de Investigacion. Retrieved from <https://laverdadjuarez.com/index.php/2020/06/21/el-chamizal-su-historia-y-una-oportunidad/>

Sandeman, G. (2017). Make art not wall, artists use colourful murals to decorate US-Mexico border wall and clever tricks to make it ‘disappear.’ *The Sun*. Retrieved from <https://www.thesun.co.uk/news/2733997/artists-use-colourful-murals-to-decorate-us-mexico-border-wall-and-clever-tricks-to-make-it-disappear/>

Satinsky, S., Hu, A., Heller, & J. Farhang, L. (2013). *Family Unity, Family Health, How Family-Focused Immigration Reform Will Mean Better Health for Children and Families*. Human Impact Partners. Retrieved from <https://humanimpact.org/wp-content/uploads/2017/09/Family-Unity-Family-Health-2013.pdf>

Schengen Visa Info. (n.d.). Schengen Area- The World’s Largest Visa Free Zone. Retrieved from <https://www.schengenvisainfo.com/schengen-visa-countries-list/>

Schlitz, H. (2020). Arkansas poultry plants hit hard by COVID-19. Hispanic workers are facing the worst of it. *Investigations*, USA Today. Retrieved from



<https://www.usatoday.com/story/news/investigations/2020/08/31/arkansas-poultry-plants-hit-hard-covid-hispanics-bear-brunt/3433543001/>

Selee, A. (2018). *Vanishing frontiers*. New York, NY: Hachette Book Group.

Semotiuk, A. (2019). Trump's Wall with Mexico – Promise Kept – At Least So Far. *Forbes*. Retrieved from <https://www.forbes.com/sites/andyjsemotiuk/2019/02/14/will-trumps-wall-solve-our-immigration-problems/?sh=3b5cd8f956cd>

Sin Fronteras. (n.d.) 15 years of struggle. Retrieved from <http://farmworkers.org/sinfreng.html>

Sherman A., Trisi, D., Stone, C., Gonzales, S., & Parrott, S. (2019). Immigrants Contribute Greatly to U.S. Economy, Despite Administration's "Public Charge" Rule Rationale. Center on Budget and Policy Priorities. Retrieved from <https://www.cbpp.org/research/poverty-and-inequality/immigrants-contribute-greatly-to-us-economy-despite-administrations>

Staff (2020). Study details trends among those who cross border in El Paso-Juarez region. KFOX14. Retrieved from <https://kfoxtv.com/news/local/study-details-trends-among-those-who-cross-border-in-el-paso-juarez-region>

Sun Metro (2020). Routes and schedules. Retrieved from <http://www.sunmetro.net/routes/routes-and-schedules>

Texas Beyond History. (2008). El Paso Missions. Retrieved from <https://www.texasbeyondhistory.net/paso/history.html>

Texas Department of Transportation. (2015). Texas-Mexico international bridges and border crossings. Retrieved from <https://ftp.dot.state.tx.us/pub/txdot-info/iro/international-bridges.pdf>

The Bellingham Herald. (2015). Festival: Arts, music at Peace Arch Park on June 26-28. Retrieved from <https://www.bellinghamherald.com/entertainment/article24801721.html>

The Border Church. (n.d.) Seasonal Events, Annual Events. Retrieved from <https://www.borderchurch.org/copy-of-events>

The Editors of Encyclopedia Britannica. (2020). Las posadas, Mexican festival. Britannica. Retrieved from <https://www.britannica.com/topic/Las-Posadas>

The Tohono O'odham Nation. (2016). History and culture. Retrieved from <http://www.tonationnsn.gov/history-culture/>

The University of Iowa Libraries. (n.d.). The Mexican revolution and world war I, migration is beautiful. Retrieved from <http://migration.lib.uiowa.edu/exhibits/show/early-migration-to-iowa/the-mexican-revolution-and-wor>

Timmons, W. (2020). El paso del norte. Texas State Historical Association. Retrieved from <https://www.tshaonline.org/handbook/entries/el-paso-del-norte>

United States Census. (2020). Retrieved from <https://data.census.gov/cedsci/advanced>

U.S. Customs and Border Protection. (2020). Non-refundable application fees. Retrieved from <https://www.cbp.gov/travel/trusted-traveler-programs/sentri/how-apply-sentri/non-refundable-application-fee>

- United States Environmental Protection Agency. (n.d.) U.S.-Mexico Border Water Infrastructure Grant Program, Small and Rural Wastewater System. Retrieved from <https://www.epa.gov/small-and-rural-wastewater-systems/us-mexico-border-water-infrastructure-grant-program>
- U.S. Trade Numbers. (n.d.). Mexico. Retrieved from <https://www.ustradenumbers.com/country/mexico/>
- Washington State Park. (2020). Retrieved from <https://parks.state.wa.us/562/Peace-Arch>
- Waterton- Glacier International Peace Park Association. (2020). Retrieved from <http://watertonglacierpeacepark.org>
- Winter, J. (2017). FBI reports show terror suspects coming from Canada while trump stares at Mexico. *Politics*, The Daily Beast. Retrieved from <https://www.thedailybeast.com/fbi-reports-show-terror-suspects-coming-from-canada-while-trump-stares-at-mexico>
- World Guides. (n.d.) El Paso History Facts and Timeline. Retrieved from [http://www.world-guides.com/north-america/usa/texas/el-paso/el\\_paso\\_history.html#:~:text=The%20known%20history%20of%20El%20Paso%20dates%20back,cavities%20used%20to%20pound%20maize%20and%20hold%20water.](http://www.world-guides.com/north-america/usa/texas/el-paso/el_paso_history.html#:~:text=The%20known%20history%20of%20El%20Paso%20dates%20back,cavities%20used%20to%20pound%20maize%20and%20hold%20water.)
- Young, R. (2020). Latinos, World War I And World War II. Encyclopedia. Retrieved from <https://www.encyclopedia.com/defense/energy-government-and-defense-magazines/latinos-world-war-i-and-world-war-ii>

Zanetell, M. (2011). Native Americans at the pass of the north. *Top Story*, El Paso Inc. Retrieved from [http://www.elpasoinc.com/lifestyle/local\\_features/native-americans/article\\_617bf9fe-8243-11e0-96f5-0019bb30f31a.html](http://www.elpasoinc.com/lifestyle/local_features/native-americans/article_617bf9fe-8243-11e0-96f5-0019bb30f31a.html)