



## **TIJUANA-SAN DIEGO BINATIONAL BRIDGE "CROSS BORDER XPRESS (CBX)". REFLECTIONS ENVIRONMENT AT ITS SETTING UP**

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### **ABSTRACT**

The following document is an approach to the perception that has been made of the “CROSS BORDER XPRESS (CBX)”, a pedestrian bridge that connects an airport of the city of Tijuana (Mexico) with a terminal located in the county of San Diego (United States) whose objective is to identify the perception of the people of Tijuana regarding to if the binational bridge has economic impact in the city, in the generation of greater opportunities of businesses, new jobs, a favorable projection of the city of Tijuana at national and international level and the generation of greater traffic of passengers in the air terminal. The results aim that the perception is divided in positions in favor and against itself. In the same way it happens to the aspects related to the generation of greater businesses opportunities and the generation of new jobs. Nevertheless, the balance of percentage tilts more towards the people that approve the project as a beneficial option for the city economy and that, combined with it, it can also boost certain businesses.

**Key Words:** tourism, transport, airport, perception

### **Introduction**

In each of the border cities of Mexico it is possible to find pedestrian crossings and bridges that allow access to the United States through the migration booths. Cross Border Xpress (CBX) is a work characterized by a bridge that connects the Tijuana International Airport

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with a terminal on the San Diego, California side. It is a closed pedestrian bridge for passengers of the Tijuana Airport (TIJ) that cross the border between the United States and Mexico, which began operating in December 2015.

CBX is unique in its style both nationally and internationally, since along the border between Mexico and the United States, it is not possible to find another pedestrian bridge that connects an airport in a city with a terminal located in an adjoining city. With an area of 119 meters, the CBX overpass is the first in history to connect a building in the USA. UU directly with a foreign airport terminal and helps prevent passengers from having unforeseen delays, and often, a long wait in the congested land ports of entry of San Ysidro and Otay Mesa, in Tijuana; is for the exclusive use of passengers arriving at the Tijuana airport who wish to enter the United States immediately, or for persons from the United States, who wish to travel through an airline departing from Tijuana.

### **Background**

When looking for similar projects developed in other parts of the world, some were not identified as comparable to the CBX. Only results from hundreds of bridges connecting one city to another, located even in different countries, located on streets, houses and / or rivers and seas were found. The bridges have been constructed of different materials such as wood, iron or concrete and the most impressive ones even merge with tunnels, as is the case of the Oresud bridge that joins the countries of Denmark and Sweden, which consists of three main sections, begins with a bridge, an artificial island and later, the tunnel (Lara, 2015). All these are used for the transfer of both land vehicles, as well as pedestrians, and they do not have any connection with airport terminals.

One of the works that could be similar but not entirely to the CBX, is the EuroAirport Basel-Mulhouse-Freiburg, which consists of a shared airport between two European countries, France and Switzerland, which has operated since mid-1946. For the realization of This project, France contributed the land where the construction of the tracks and buildings was carried out by the Swiss government. After that, it has undergone several modifications and extensions in different years, until the airport is technically divided into two, with an area within the Swiss territory and the other belonging to the French government. This airport was built in this way with the aim of representing a tri-national corporation worldwide, since subsequently Germany also became involved, as well as being an international symbol of cooperation among the mentioned nations, which became vital since the end of World War II in that region (EuroAirport, 2016).

### **Contextualization of Tourism in Mexico**

According to the data provided by the Ministry of Tourism (SECTUR) "The growth of tourism and the diversification of the offer in Mexican destinations have made the sector continue to participate actively in the economy of the country." In the latest data reported in the Tourism Satellite Account of Mexico, the Tourism Gross Domestic Product (GDPT) had a participation of 8.7% of the total economy in current values for the year 2013. In the

PIBT rental and business services they represent 21.8% of the total; passenger transport participates with 17.4%; goods and crafts 16.0%; restaurants, bars and nightclubs 10.0%; trade 8.6%, housing 8.4%; second homes 3.6%; entertainment services 1.8%; Travel agencies and tour operators, as well as 0.9% timeshares, respectively. In 2013, tourism generated around 2.3 million jobs, representing 5.9% of the country's total. The greatest contribution to the interior of the sector corresponds to restaurants, bars and nightclubs with 36.3%, followed by passenger transportation in order of importance, with a 15.7% share, goods and crafts with 13.6%, trade 11.0% , accommodation 6.0%, rental and business services 3.8%, leisure services 2.3%, travel agencies and tour operators 0.8%, timeshares 0.5% and second homes 0.1%. The remaining 9.9% are diverse services. "(SECTUR, 2015). This is where you can see the great importance of tourism in the country's economy and how it relates to stability, development and improvements in the quality of life of people.

Importance of air transport in the economic and social development of cities Aviation is one of the fastest and safest means of transportation that currently exists. For this reason, it is very common to be used in the transfer of people due to its efficiency and mainly because the use of this means of transport entails a great benefit to different sectors of the population.

*"In Mexico, the development of air transport began in 1924 and covered the Mexico-Tampico trajectory, after which the Mexico-Tuxtán and Tampico-Matamoros routes were added.*

*In 1927 the first airports were located, located in Pachuca, Guadalajara and Torreón; the one in Mexico City was finished and inaugurated in 1929.*

*As of 2005, there are 53 international airports in Mexico. Those with the highest number of passengers are, in order of importance: those of Mexico City, Cancun, Guadalajara, Monterrey and Tijuana, which together handle almost 68% of the total passengers. "(INEGI, 2005).*

The General Directorate of Civil Aeronautics, a unit of the Ministry of Communications and Transportation (SCT), published in a report called: Mexican Aviation in figures, 1993- 2015 that during 2015 in Mexico "national and foreign companies in international domestic regular operation , transported more than 73 million passengers, this is equivalent to a growth of 12.5% more than in 2014. The national companies achieved a growth of 15.4%, going from 40.7 to 47.0 million passengers transported from 2014 to 2015. On the other hand foreign companies grew by 7.6%, mobilizing 26.3 million passengers from and to the national territory compared to the 24.4 million passengers transported in 2014. "(SCT, 2016)

### **International efforts**

On March 18, 2013, the World Tourism Organization (UNWTO) and the International Civil Aviation Organization (ICAO) signed a joint special declaration on aviation and tourism, recognizing the intention of the two United Nations agencies to improve the conditions and

provide facilities for the improvement of conditions in both areas. According to this, the Secretaries General of both organizations affirm that in 2012 more than one billion tourists crossed international borders and more than half by air, which allowed an estimate of 1.8 billion passengers in 2030, including business travelers and pleasure. This will promote the increase in demand for air transportation services and double the number of aircraft take-offs per year from 30 million to 60 for the same date. Likewise, they make reference that "While ICAO generates security policies and standards for aviation security, safety, efficiency, environmental protection and the economic development of air transport, the WTO promotes tourism as a driver of economic growth and sustainable development, offering leadership and support to the sector in advancing knowledge policies and tourism around the world. Consequently, ICAO and UNWTO have decided to strengthen their collaborative efforts through the construction of a more sustainable future in the three pillars of the definition of sustainability of the United Nations (UN): Social, environmental and economic and position air transport and tourism as a strategy of interrelated sectors that benefit the global society they serve "(ICAO & WTO, 2013). With this information it can be shown that tourism and air transport are very much related to each other, and above all, that air transport is the most used to make tourist trips.

### **Efforts made in Mexico**

The Ministry of Tourism reports that "air tourists, the main segment of hospitalization tourism, increased by 9.4%, from 11.0 to 12.0 million in the aforementioned period from September to June 2015; while in 2014, 13.5 million people were admitted to the country through this channel. "(SECTUR, 2015). In the Comprehensive Tourism Analysis of the same Secretariat, it is indicated that "air connectivity is an element that helps three fundamental aspects: it supports the economic growth of the country, contributes to the competitiveness of the tourism sector and feeds the demand that tourism needs . "(DATATUR, 2015). Starting from this, tourism can be considered as the main motivator of air transportation and, mainly, to identify the great correlation between both items that bring economic benefits for the different sectors of the population involved with tourism and air transport.

Tijuana: tourism and air transport The Tijuana International Airport belongs to Grupo Aeroportuario del Pacífico which is the second most important after the International Airport of Mexico City (AICM) and is located within the 5 most important international airports in Mexico. In the official page "Discover Baja California" it is mentioned that the main air port of the state is this same airport where 6 airlines operate that connect with different parts of the country and where "an average of 120 daily flights are made" (Discover Baja California , 2011). It is worth mentioning that currently the airport has the installed capacity to provide the service "up to 10 million passengers per year and 360 flights per day." (Grupo Aeroportuario del Pacífico, 2015).

The information presented shows that during the months prior to the opening of the CBX, the flow of passengers maintained constant highs and lows. However, the number of airport users increased since the start of bridge operations. The report published by the Grupo Aeroportuario

del Pacífico (2016) indicated that for the month of December 2015 a historical record was established in the number of operations up to that time.

### Current diagnosis of CBX (SWOT)

Threats	Opportunities
1.- Rejection of the project by some economic sectors of the city. 2.- New immigration policies. 3.- Possible economic crises.	1.- 60% of the users of the international airport of Tijuana cross the border towards San Diego. 2.- Tijuana is the most important border in Mexico.
Weaknesses	Strengths
1.- Bad organization of the airport staff. 2.- Congestion of airport users. 3.- Failure to indicate the airport. 4.- Little diffusion of the bridge.	1.- Low cost (16 dollars) 2.- 120 meters of route. 3.- Estimated time of crossing (5 minutes) 4.- Variety of commercial options. 5.- Access to public and private transportation at the San Diego terminal.

Sectors and / or people that are favored / disadvantaged by the implementation of the CBX The number of people who transit the San Ysidro and Otay transit posts annually exceeds two million people. By means of the CBX, an option for all the people traveling through the international airport of Tijuana, looking to enter the United States, is a direct solution to reduce the number of waiting hours involved in waiting the turn at the crossing. From the point of view of the Mexican and US authorities, the number of people in pedestrian or vehicular rows decreases and therefore the processes of prevention, review and control of irregular situations. One of the most important elements is the reduction of CO2 generated in the environment by the vehicle fleet used for vehicle crossings.

Food and beverage stores, souvenirs, travel agencies, clothing stores, car rentals, self- service stores and restaurants located at the Tijuana airport are other players that will benefit, since people will spend more time inside the airport. if you want to take this bridge. For American citizens, the bridge has become a convenient and safe option to access the different destinations offered by Mexico through this air terminal, since using it, it is not necessary to go out to the street to get a taxi or have to arrive with more time in advance to it (James, 2015).

One of the sectors most threatened by the construction and commissioning of this bridge, is the private land transport (taxis), because thousands of people will no longer move from the airport to the port and vice versa, guaranteeing what it was up to now it was his usual route. The hotels, restaurants, and several businesses that obtained in these clients are also considered to be affected, the possibility of increasing their sales, due to the logistics involved in their trip.

## **Goals**

The purpose of the research presented was to determine the perception of the population of the city of Tijuana regarding the implementation of the binational air bridge between the cities of Tijuana and San Diego. In this first approach, it was proposed to identify the perception of the Tijuana community regarding whether the binational bridge has an economic impact on the city, on the generation of greater business opportunities, new jobs, a favorable projection of the city at national and international and the generation of greater passenger traffic in the air terminal.

## **Methodology**

The document presented in this opportunity, corresponds to a first approximation to the macro research defined as non experimental, transversal, exploratory and descriptive called Impact of the Binational Bridge Tijuana-San Diego (CBX), whose objective is to know the perspective that the community Local of Tijuana has on the bridge, evaluating the three approaches that according to the Organization of the United Nations (UN), conform the definition of sustainability: social, economic and environmental. For the survey of information, surveys were applied both personally and virtually through the Internet in various sectors of the locality and to citizens of different socioeconomic levels.

The instrument used was designed in such a way that it allowed to obtain information categorized in three different areas: economic, socio-demographic and environmental and a Likert scale was managed of five categories that went from totally in disagreement, to totally agree. To corroborate its validity and reliability, it involved the judgment of experts and the application of a pilot test, reaching with this, a Cronbach's alpha of 93%. The population was defined as infinite, since the Tijuana community exceeds 100,000 inhabitants; We worked with a level of reliability of 95% and the size of the sample was determined in 384 individuals. For the receptivity of the people, 405 surveys were applied in different strategic points of the city. Among the places visited, are the Federal Employees neighborhood, the River Zone, the Technology Plaza, the Plaza de la Mujer, Av. Revolución and the facilities of the Autonomous University of Baja California. The field work was possible, thanks to the collaboration of five students participating in the Summer Program of Scientific Research DELFIN 2016 (Carlos Esquivel, Ián Pitma, Diana Martínez, Julián Gómez and Guadalupe González).

## **Findings**

Once the 405 surveys were applied, it was decided to use the PASW Statics software (SPSS) to create a database and analyze them. The sample was characterized by the following data: 47.5% were female and 52.0% were male; 57.1% of the sample is between 18 and 27 years old, 19.5% between 28 and 37 years old and 12.6% between 38 and 47 years old. The activity to which the people who answered the survey are engaged is 28.1% Student and 26.6 Student / worker, 11% small entrepreneur, 9.9% executive employee and 8% independent professional. 16% work in the



academic education sector, and 13.8% in the business sector. 51.7% have a bachelor's degree, 25.6% preparatory and 13.1% post-graduate.

Regarding the analysis of the data, it is possible to identify some contrasts in the position of the respondents regarding the bridge. For example, 43% of citizens working in the Education / Academic sector, as well as 71.4% of workers in the business sector, think that the Tijuana-San Diego Binational Bridge will bring more economic benefits for Tijuana. However, 35.4% of workers in the Education / Academic sector do not agree that the bridge will bring economic benefits for Tijuana and the rest do not know if it will bring benefits or not.

In several sectors we can see a representative percentage of people who disagree with this argument, among which the Commerce sector stands out with 36%, the Restaurant with 25%, the Transport and Telecommunications sector with 36.4%, and the Industrial with 28.6%. When making an analysis of the totals, 51.7% of the people surveyed think that it will bring some economic benefit to Tijuana, 24% are indifferent to the topic and 24.4% think that it will not bring any economic benefit to the city.

El análisis de los reactivos que dicen que si creen que el CBX genera nuevos empleos y mayores oportunidades de negocios también presenta datos contrastantes. Por un lado, el 52.20% y el 57.80% de los encuestados consideran que están totalmente en desacuerdo y moderadamente en desacuerdo de que dicho puente genere nuevos empleos y mayores oportunidades de negocios. De manera contraria, el 72.4% y el 76.10% afirma estar totalmente de acuerdo y de acuerdo en que existe un incremento favorable en estas dos situaciones

## **Conclusions**

Based on the results obtained, it can be concluded that the perception of the benefits generated by the implementation and operation of the binational bridge CBX are divided between positions in favor and against it. In the same way, it happens with the aspects related to the generation of greater business opportunities and the generation of new jobs. However, the balance of percentages is more inclined towards the people who approve the project as a beneficial option for the city's economy and that, together with it, can boost certain businesses.

The people affiliated to the transport sector identify themselves as true detractors of the work, since this directly affected their source of employment and economic stability.

Additionally, of the qualitative exercises that were carried out along with the quantitative research, it can be concluded that there is in many sectors of the city a lack of knowledge of the creation and implementation of this architectural work. Some people indicate that they do not know the work and that they have no reference of the economic impact that it could have for society and all its actors. Some affirm that the greatest of the benefits that can be received thanks to the CBX, is for the neighboring country, the United States.

Due to the size of the project and the importance it has for the city, a greater communication strategy is needed that integrates the community and makes the public domain the information related to the objectives pursued by the airport group that is in charge of the Administration of the International Airport of the city of Tijuana and the authorities involved.

Additionally, it is proposed to analyze data to obtain results on the perception of the dimensions that make up the definition of Sustainability: social, economic and environmental.

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