

# Economic Outreach Plan

Economic and Air Quality/Climate Impacts of  
Delays at the Border

*San Diego, CA*

November 28, 2016



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## 1. Introduction

Studies completed in 2006 showed that inadequate infrastructure capacity at the principal border crossings between San Diego County and Baja California led to losses of US\$6 billion in gross economic output and around 50,000 jobs in the United States and Mexico due to traffic congestion and delays during 2005.<sup>1</sup> A separate study for Imperial County found that delays at the three ports of entry along the Imperial County-Baja California border led to an output loss of \$1.4 billion and 11,600 jobs in the United States and Mexico during 2007.<sup>2</sup> Much has changed since these studies were developed—the economy rebounded from the recession and new industry clusters dependent on crossborder trade have emerged.

Given the significant impact of infrastructure capacity on the regional economic output, SANDAG hired the HDR team to assess and develop an up to date understanding of the situation by conducting the Economic and Air Quality/Climate Impacts of Delays at the Border study. This Plan will provide the basis for completing interviews with businesses operating in the border region of San Diego and Imperial counties. Through these interviews we will collect data that will be used to prepare case studies that will shed light on the impact of crossborder delays on local businesses.

Sutra Research & Analytics and Crossborder Group, members of the HDR team for this study, will lead the interviews with oversight from HDR and participation from partner agencies' staff. Sutra Research & Analytics is based in San Diego, California and has worked extensively with private and public organizations in the binational region. Crossborder Group has more than 28 years conducting market research of companies operating in the region. Sutra Research & Analytics and Crossborder Group will leverage their extensive network of contacts of businesses operating in the region across key sectors to aim at covering all key industries and complete the interviews within the proposed schedule. In addition, SANDAG and partner agencies will conduct outreach to local and regional economic development agencies in the San Diego region, Imperial County, and in Baja California to solicit input on key industries and businesses to be interviewed. The agencies that provided input are shown in Appendix 1.

This Plan presents an overview of the approach we have developed to conduct these interviews. In particular, the Plan presents the list of industries we will target, the businesses we intend on interviewing, and the questions that will guide the interviews. The Plan is organized as follows:

- Identification of Potential Interviewees
- Interview Process
- Discussion Topics and Sample Questions

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<sup>1</sup>SANDAG, Caltrans District 11, "Economic Impact of Wait Times at the San Diego—Baja California Border: Final Report," January 2006.

<sup>2</sup>Imperial Valley Association of Governments, Caltrans District 11, "Imperial Valley-Mexicali Economic Delay Study: Final Report," November 2007.

## 2. Identification of Potential Interviewees

This section presents the process for selecting those businesses we intend on interviewing as part of the Economic Outreach task. To identify these targeted businesses, we first identify Key Industries. Key Industries are those that are most affected by crossborder delays, contribute significantly to the local economy, and employ a large portion of the workforce. We then identify a group of businesses operating within those Key Industries. This group of businesses becomes the main source for selecting potential interviewees. The selection of individual businesses within the identified group relies on a series of socio-economic indicators (including the amount of trade by LPOE and industry, the ratio of industry sales and purchases to average sales and purchases and geographical location) as well as our previous experience collecting information from them for similar exercises.

### Identification of Key Industries

We identified Key Industries through a two-pronged approach. First, we identified the industries that are most affected by crossborder delays by identifying industries with a high volume of crossborder trade (and therefore with high potential to be impacted by border-crossing delays). Second, we identified industries that account for a large portion of local gross domestic product (GDP) and employ a large portion of the labor force. We consolidated the results of these two sets of analyses and combined it with a literature review to validate the results. The following section presents the steps we followed in our analysis and is organized as follows:

- Industries Vulnerable to Cross-border Delays
- Industries with Significant Impact on GDP and Workforce
- Literature Review

#### INDUSTRIES VULNERABLE TO CROSSBORDER DELAYS

We first estimated the industries with the largest dollar value of binational trade for intermediate goods. To do so, we identified the industries that have a large volume of crossborder sales and purchases in both sides of the border. The analysis is based on the Production Sharing Methodology developed by SANDAG. The analysis was carried out in five steps, as follows:

- **Step 1:** For each industry we determined the dollar value of crossborder transactions for goods and services in both sides of the border. This includes crossborder purchases and sales. We also calculated the average dollar value of cross border transactions for all industries;
- **Step 2:** We divided the dollar value of crossborder transactions for each industry by the average dollar value of crossborder transactions for all industries. That is, for each industry we divided the crossborder purchases by the average cross border purchases of all industries. We also divided the crossborder sales by the average cross border sales of all industries. We did these calculations for both streams of binational trade. For example, we calculated the ratio of industry purchases to average purchases for purchases made by San Diego and Imperial County to Baja California, and for purchases made by Baja California to San Diego and Imperial County. Upon completing this step we had four groups of ratios:

- *Group 1:* 
$$\frac{\text{Industry Purchases (SD\&IC to BC)}}{\text{Average Purchases All Industries (SD\&IC to BC)}}$$

- *Group 2:* 
$$\frac{\text{Industry Purchases (BC to SD\&IC)}}{\text{Average Purchases All Industries (BC to SD\&IC)}}$$

- *Group 3:*  $\frac{\text{Industry Sales (SD\&IC to BC)}}{\text{Average Sales All Industries (SD\&IC to BC)}}$
  
- *Group 4:*  $\frac{\text{Industry Sales (BC to SD\&IC)}}{\text{Average Sales All Industries (BC to SD\&IC)}}$

- **Step 3:** We removed those industries with ratios below 1 since they represent below-average purchases or sales;
- **Step 4:** We compared Group 1 to Group 2 and Group 3 to Group 4 to identify industries that are present in both groups—i.e., duplicate or overlapping industries. Duplicate industries represent industries that account for a large volume of cross border transactions in both sides of the border. We included duplicate industries in the list of Key Industries;
- **Step 5:** We reviewed the list of duplicate industries to remove those industries we consider are not impacted significantly by crossborder delays, based on our regional expertise acquired through working on other bi-national projects. These industries include:
  - Government,
  - Lessors of Real Estate,
  - Architectural, Engineering, and Related Services,
  - Lessors of Nonfinancial Intangible Assets (except Copyrighted Works),
  - Bakeries and Tortilla Manufacturing, and
  - Commercial and Industrial Machinery and Equipment Rental and Leasing.
- **Step 6:** We reviewed the list of non-duplicate industries and, based on our regional expertise, we identified additional industries we consider are highly dependent on cross border trade. These industries are marked with an [N] in Table 1.

This analysis suggests that the Key Industries should include the industries presented in Table 1.

**INDUSTRIES WITH SIGNIFICANT IMPACT ON LOCAL GDP AND EMPLOYMENT**

We also identified industries that contribute significantly to local GDP and employment. To do so, we first ranked industries based on their contribution to GDP and number of workers they employ (see Figure 1 and Figure 3) at the county level. We then removed those industries that are unlikely to be affected by cross border delays. For example, in the case of San Diego we removed the finance, insurance, real estate, rental, and leasing industry because we do not expect the impact of cross border delays on this industry to be large. Finally, we selected the top five remaining industries from the two rankings (GDP and employment) for San Diego and Imperial Counties.

Figure 1 through Figure 4 show the results of our analysis. We have marked in dashed lines those industries that are unlikely to be affected by cross border delays and that we are not considering in our analysis. We highlighted in light blue the industries that contribute the greatest amount of GDP and employ the greatest amount of people.



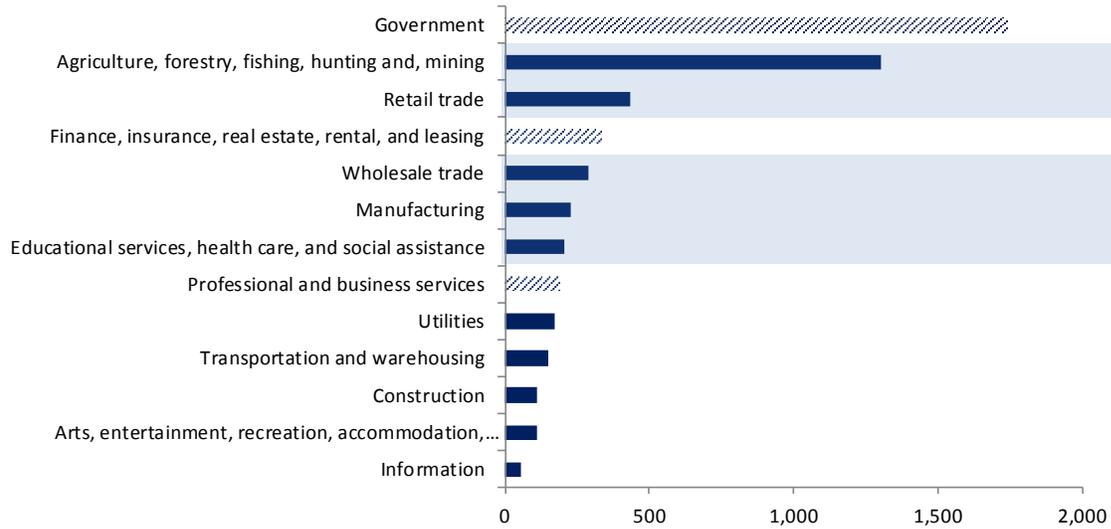
**Table 1: Preliminary List of Key Industries**

Industry	Average Ratio
Construction	65
Wholesale and Retail Trade	31
Medical Equipment and Supplies Manufacturing	5
Animal Production and Aquaculture [N]	4
Audio and Video Equipment Manufacturing	5
Semiconductor and Other Electronic Component Manufacturing	4
Crop Production	4
Offices of Physicians	4
Animal Slaughtering and Processing	4
Beverage Manufacturing	3
General Freight Trucking	3
Restaurants and Other Eating Places	3
Pharmaceutical and Medicine Manufacturing [N]	2
General Medical and Surgical Hospitals	2
Warehousing and Storage	2
Other Miscellaneous Manufacturing	2
Traveler Accommodation [N]	2
Plastics Product Manufacturing	2
Motor Vehicle Manufacturing [N]	2
Aerospace Product and Parts Manufacturing	1
Engine, Turbine, and Power Transmission Equipment Manufacturing [N]	1

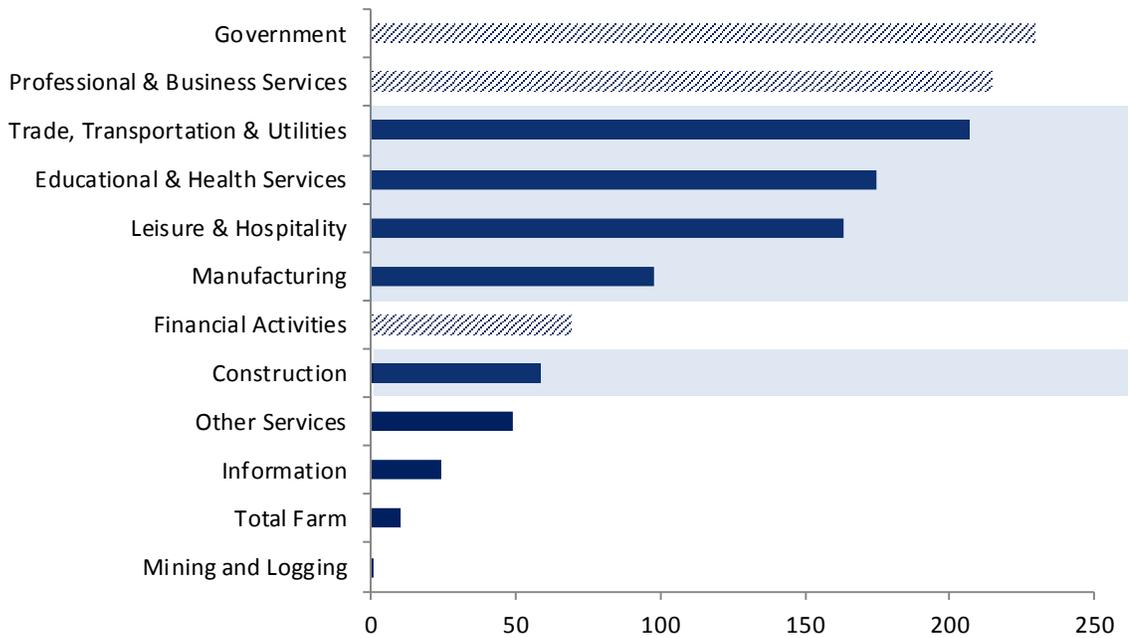
**Figure 1. Ranking of Industries by Level of GDP Contribution in San Diego County (US\$ Billions)**



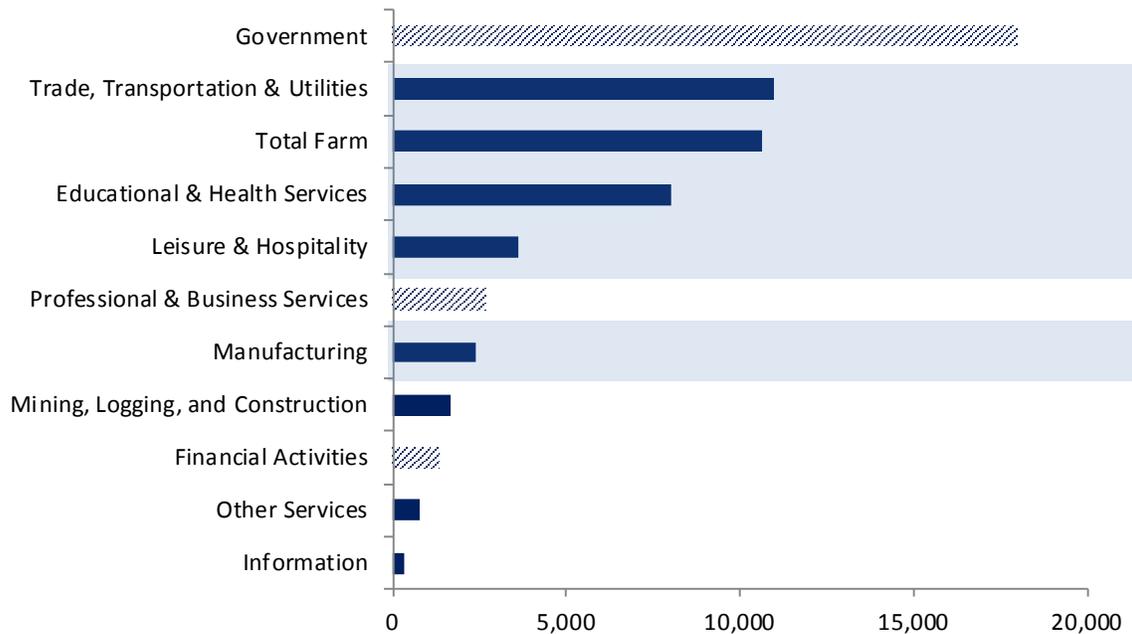
**Figure 2. Ranking of Industries by Level of GDP Contribution in Imperial County (US\$ Billions)**



**Figure 3. Ranking of Industries by Employment in San Diego County (Persons Employed)**



**Figure 4. Ranking of Industries by Employment in Imperial County (Persons Employed)**



This analysis suggests that the Key Industries for San Diego and Imperial Counties should include the following:

- Manufacturing
- Educational services, health care, and social assistance
- Trade, transportation, and utilities (includes retail trade and wholesale trade)
- Recreation and entertainment/leisure and hospitality
- Construction<sup>3</sup>
- Agriculture<sup>4</sup>

**KEY INDUSTRIES**

To select the list of Key Industries we consolidated the results of both analyses and found the results coincide. Table 2 presents a comparison of the Key Industries identified through the two sets of analyses. The two sets of analyses use different industry classifications, so we matched the industry classifications used to identify industries vulnerable to crossborder trade to the broader industry classifications used to identify industries with significant impact on local GDP and employment.

<sup>3</sup> Construction is a key industry for San Diego County but not for Imperial County. As such, we will only target businesses from the construction industry for San Diego County.

<sup>4</sup> Agriculture is a key industry for Imperial County and, to a lesser extent, for San Diego County. As such, we will primarily target businesses from the agriculture industry for Imperial County.

**Table 2: Cross-Check of Key Industries**

Industries with Significant Impact on Local GDP and Employment	Industries Vulnerable to Crossborder Delays
Manufacturing	<ul style="list-style-type: none"> <li>▪ Medical Equipment and Supplies Manufacturing</li> <li>▪ Audio and Video Equipment Manufacturing</li> <li>▪ Semiconductor and Other Electronic Component Manufacturing</li> <li>▪ Beverage Manufacturing</li> <li>▪ Pharmaceutical and Medicine Manufacturing</li> <li>▪ Other Miscellaneous Manufacturing</li> <li>▪ Plastics Product Manufacturing</li> <li>▪ Motor Vehicle Manufacturing</li> <li>▪ Aerospace Product and Parts Manufacturing</li> <li>▪ Engine, Turbine, and Power Transmission Equipment Manufacturing</li> </ul>
Educational services, health care, and social assistance	<ul style="list-style-type: none"> <li>▪ Offices of Physicians</li> <li>▪ General Medical and Surgical Hospitals</li> </ul>
Trade, transportation, and utilities (includes retail trade and wholesale trade)	<ul style="list-style-type: none"> <li>▪ Wholesale and Retail Trade</li> <li>▪ General Freight Trucking</li> </ul>
Recreation and entertainment/leisure and hospitality	<ul style="list-style-type: none"> <li>▪ Restaurants and Other Eating Places</li> <li>▪ Traveler Accommodation</li> </ul>
Construction	<ul style="list-style-type: none"> <li>▪ Construction</li> </ul>
Agriculture	<ul style="list-style-type: none"> <li>▪ Crop Production</li> </ul>

Table 3 presents the consolidated list of Key Industries, which we have organized by parent industry categories.

**Table 3: List of Key Industries**

Parent Industry Category	Key Industry
Agriculture, Animal Slaughtering, Seafood	Animal Production and Aquaculture Crop Production Animal Slaughtering and Processing
Manufacturing	Audio and Video Equipment Manufacturing Semiconductor and Other Electronic Component Manufacturing Beverage Manufacturing Other Miscellaneous Manufacturing Plastics Product Manufacturing Motor Vehicle Manufacturing Aerospace Product and Parts Manufacturing Engine, Turbine, and Power Transmission Equipment Manufacturing
Restaurants and Traveler Accommodation	Restaurants and Other Eating Places Traveler Accommodation
Construction	Construction
Wholesale and Retail Trade	Wholesale and Retail Trade
Healthcare Services	Offices of Physicians General Medical and Surgical Hospitals
General Freight, Customs Brokers, Warehousing	General Freight Trucking Warehousing and Storage
Biomedical Manufacturing	Pharmaceutical and Medicine Manufacturing Medical Equipment and Supplies Manufacturing

## LITERATURE REVIEW

We also conducted a literature review based on the studies identified in the Scope of Work and other studies to confirm our findings. The results of our literature review generally coincide with the Key Industries we identified. The literature explains that visitors from Mexico entering the United States generally spend on retail trade, recreation and entertainment, and food and accommodation. The list of key industries includes Restaurants and Eating Places and Travel Accommodation to account for tourism-dependent industries.

A 2014 study finds that the ten industries with the greatest employment concentration in San Diego and Imperial Counties compared to other regions of the United States include:<sup>5</sup>

- audio and video equipment manufacturing,
- ship and boat building,
- communications equipment manufacturing,
- wireless telecom carriers,
- other telecommunications,
- scenic and sightseeing transportation
- amusement parks and arcades, and
- scientific research and development services,
- vegetable and melon farming,
- support activities for crop production.

When we group the industries above by parent industry categories, the industries of the 2014 study and the Key Industries fall within many of the same categories. The industries of the 2014 study share characteristics with the Key Industries that belong to the same parent industry group. For example, it is likely that cross border delays affect communications equipment manufacturers similarly to how they affect medical equipment and supplies manufacturers. As such, we expect that the results of interviewing businesses within each of the parent industry groups will illuminate the issues faced by other industries within the same group.<sup>6</sup> Table 4 shows how we matched parent industry categories with industries of the 2014 study and the Key Industries.

## List of Potential Interviewees

This section presents a list of the businesses from which we will select the 20 businesses we will interview as part of the Economic Outreach task. The list includes businesses from the Key Industries identified in the previous section. Table 5 identifies the names, locations, and industries of the businesses.

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<sup>5</sup> CaliBaja Region Initiative; Center for US-Mexican Studies, UC San Diego; Colegio de la Frontera Norte; “Jobs Without Borders: Employment Concentrations and Comparative Advantage by Industry in the CaliBaja Region,” 2014, [http://ucsdnews.ucsd.edu/pressrelease/first\\_of\\_its\\_kind\\_study\\_reveals\\_san\\_diego\\_and\\_imperial\\_counties\\_and\\_baja](http://ucsdnews.ucsd.edu/pressrelease/first_of_its_kind_study_reveals_san_diego_and_imperial_counties_and_baja), accessed 5 August 2016

<sup>6</sup> For example, other industries such as wireless telecom carriers and other telecommunications are not as vulnerable to crossborder delays.

**Table 4: Broad Industry Classifications**

Parent Industry Category	Industry with High Employment Concentration (2014 Study)	Key Industry
Agriculture, Animal Slaughtering, Seafood	Vegetable and melon farming Support activities for crop production	Animal Production and Aquaculture Crop Production Animal Slaughtering and Processing
Manufacturing	Audio and video equipment manufacturing Ship and boat building Communications equipment manufacturing	Audio and Video Equipment Manufacturing Semiconductor and Other Electronic Component Manufacturing Beverage Manufacturing Other Miscellaneous Manufacturing Plastics Product Manufacturing Motor Vehicle Manufacturing Aerospace Product and Parts Manufacturing Engine, Turbine, and Power Transmission Equipment Manufacturing
Restaurants and Traveler Accommodation	Scenic and sightseeing transportation Amusement parks and arcades	Restaurants and Other Eating Places Traveler Accommodation
Construction		Construction
Wholesale and Retail Trade		Wholesale and Retail Trade
Healthcare Services		Offices of Physicians General Medical and Surgical Hospitals
General Freight, Customs Brokers, Warehousing		General Freight Trucking Warehousing and Storage
Biomedical Manufacturing		Medical Equipment and Supplies Manufacturing Pharmaceutical and Medicine Manufacturing



**Table 5. List of Potential Interviewees**

Geography		Construction	Wholesale/ Retail Trade	Bio- Medical	Agriculture	Manufacturing	Healthcare	Freight	Restaurant	#
Baja California	Tijuana	Corporación Inmobiliaria Vesta				FoxConn (Sony)	Simnsa/Scripps			3
	Tecate					Tecate Brewery Toyota				2
	Mexicali					Honeywell	Mexicali Healthcare			2
	Ensenada				Baja Seas					1
San Diego County	City of San Diego	B&G Consultants	Las Americas Plaza	Medtronic Greatbatch Medical	Andrew & Williamson Fresh Produce (Strawberries)	Aerodesign Sony (Rancho Bernardo) Samsung Solar Turbines Panasonic Kyocera	UCSD Healthcare	Fedex Fletes Esquer/CANACAR	Hyatt Hotcakes, Inc.	16
	South County (Coronado, Imperial Beach, Chula Vista, National City)		Costco			UTC Aerostructures				2
	East County (Lemon Grove, La Mesa, El Cajon, Santee)			Scantibodies		Taylor Guitars				2
	North County (Carlsbad, Del Mar, Encinitas, Oceanside, Solana Beach)			Thermo Fisher		TaylorMade				2
	North County (Coastal Escondido, Poway, San Marcos, Vista)			DJO Global (formerly DJ Orthopedics)		Hunter Irrigation* Watkins Wellness				3



Geography		Construction	Wholesale/ Retail Trade	Bio- Medical	Agriculture	Manufacturing	Healthcare	Freight	Restaurant	#
Imperial County	El Centro		Imperial Valley Mall		Brockway Farms OWB Packers LLC LaBrucherie Produce		El Centro Regional Medical Center	RL Jones	Applebee's Carrows	8
	Calexico	Aggregate Products	Walmart Grand Plaza Outlets	Allesee Orthodontics		Sewing Experts		Am-Mex International Brokerage	Denny's Burgers and Beer	8
	Other	Superior Ready Mix US Gypsum								2
#		5	5	6	5	16	4	4	6	

Appendix 1 presents a list of the agencies and government officials SANDAG staff contacted for input in completing Table 5.

We selected the businesses in Table 5 using the following approach:

- **Step 1:** Based on discussions with the client, local economic development agencies, government entities, and our team, we identified a list of businesses from the Key Industries and organized them by geography and industry.
- **Step 2:** We compared the number of businesses included in the list for San Diego and Imperial Counties against the target percentage breakdown of businesses between San Diego and Imperial counties.<sup>7</sup> We removed and added businesses to approximate the breakdown of businesses included in the list for San Diego and Imperial Counties to the target percentage breakdown. We also included businesses from the Baja California region to ensure we included input provided by Mexican economic development agencies.
- **Step 3:** We reviewed the businesses per county and industry and compared this against the industries with the highest GDP and employment contribution in each county. We removed and added businesses to ensure the industries with the highest GDP and employment contribution in each county were represented among the list of businesses.

We will select the 20 businesses to interview from the list of businesses in Table 5. In selecting the list of 20 businesses we will match the percentage breakdown of industry and geography of Table 5 as much as we can. We will present the list of 20 businesses to the Client for final approval before beginning interviews.

### 3. Interview Process

The interview process includes three major phases: 1) coordinating and planning the interviews; 2) conducting the interviews, including any follow-up for clarifications as needed; 3) preparing case studies. More details on these phases are presented below.

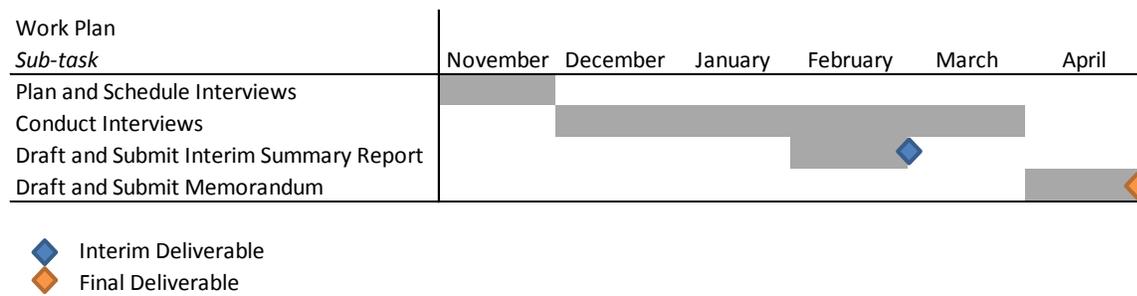
#### Phase 1: Coordinating and Planning the Interviews

Sutra Research & Analytics and Crossborder Group, with participation from staff from partner agencies, will plan and conduct interviews with 20 of the businesses identified in the previous section, during the five-month period from December 2016 to April 2017. We will submit an interim summary report on February 2017 to SANDAG documenting the progress achieved and preliminary findings identified through the business interviews. In April 2017, we anticipate submitting a Memorandum documenting the results of the business interviews, including the case studies. Figure 5 presents the proposed work schedule we will follow to conduct the interviews.

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<sup>7</sup> The target percentage breakdown is based on the breakdown of Mexico-US trade between San Diego and Imperial Counties: Around 70 percent of trade between the US and Mexico travels through ports in San Diego County and 30 percent through ports in Imperial County.

**Figure 5. Proposed Work Plan and Schedule**



HDR will work closely with Sutra Research & Analytics and Crossborder Group to verify the adequacy and quality of the data collected through the interviews. To do so, and in collaboration with them, we have prepared interview questionnaires to ensure that priority discussion topics are covered during the interviews (see Section 0). We also prepared Interview Dataforms to ensure that the data is recorded systematically.

**Phase 2: Conducting the Interviews**

We will send potential interviewees a copy of the Interview Dataforms one week prior to conducting the interviews so that they can review the questions beforehand. Sending the Interview Dataforms before the interviews will allow the interviewees to review their records and gather information they need to answer the questions accurately and completely. Additionally, during the scheduling process the interviewees will be informed of the primary objectives of the interviews so that any other persons that may be able to contribute to the responses can also be contacted or scheduled to join the discussion. During the interview we will ask the questions, and if the interviewees completed some of the questions beforehand, we will review their answers and ask follow-on questions that can complement, clarify, or substantiate their answers. We will conduct interviews over the phone or in person, depending on the interviewees’ preference. We expect the interviews to last around 45 to 60 minutes each.

The interviews will follow a semi-structured format. The starting point will be a questionnaire customized to match the specific situation of each business and that incorporates lessons learned from previous interviews. As part of the semi-structured process, the questionnaire will guide the interview, but the interviewer will have the flexibility to include additional questions to obtain information about unanticipated topics and/or issues that arise during the interview. Allowing for this flexibility is important because the list of interviewees includes businesses from a broad range of industries and of varied sizes. Any required follow-up to clarify responses or obtain additional detail will be conducted by phone.

We will treat responses gathered through interviews as confidential and will amalgamate individual responses into a larger set of responses that will form the basis of the inputs for future tasks of this study. If we need to include a reference to a specific business or person we will request their approval. We will also submit the draft of the results of the individual business interview to the corresponding business for review and will also obtain their permission to acknowledge them in the document.

### **Phase 3: Preparing Case Studies**

We will prepare case studies that will present the findings of the interviews and highlight the dependence of businesses on border crossings. These case studies will serve as a qualitative assessment of the impact of cross border delays on economic activity. The case studies will complement the quantitative results of the economic model by illustrating how cross border delays affect businesses and the decisions they make. The case studies will form part of the Memorandum included in Figure 5.

## 4. Discussion Topics and Sample Questions

The semi-structured interview will cover two broad topics:

- *Measuring economic impact of cross border delays*—this includes understanding the effect of cross border delays on revenues and costs for the interviewed businesses.
- *Determining the impact of cross border delays on business development decisions*—this includes understanding the effect of crossborder delays on strategic decisions such as where to locate future business expansions.

Below we include the questions we will ask the businesses. We include a set of five core questions and four modules of questions. The core set of questions are general questions applicable to businesses in all industries. The four modules capture the impact of delays on four key areas of analysis: supply chain management, logistics, employment, and customers/sales. We will use the core set of questions in all interviews. Before each interview we will review the questionnaire to select the modules that are most relevant to the nature of each business and industry. We will target to ask each business a total of around ten questions (including the core questions) to ensure that the interviews do not exceed the anticipated 45 minutes to one-hour duration.

### Introduction:

Industry: \_\_\_\_\_

Interview location: \_\_\_\_\_

Company presence in Cali-Baja region (number of establishments / employees / revenues):

\_\_\_\_\_

### Core Questions:

- C 1. Using a scale of 1 to 5, where 1 is not at all important, 3 is neutral, and 5 is highly important, please indicate how important the role of the international border was in your choice of siting your business in the San Diego-Tijuana-Tecate / Imperial Valley-Mexicali region?
- C 2. Over the past five years, have delays at the border affected your business plan or your firm’s productivity? If yes, please describe and prioritize the issues and challenges of crossborder delays in order of magnitude of impact (e.g., unpredictability of waits, wait times, FAST/CTPAT certification requirements, etc.).
- C 3. From today to the coming 3 to 5 years, what short-term impacts might border delays have on your business decisions related to where you are sourcing your supplies from, your manufacturing or distribution operations, your customers, the size of your company, or your workforce?
- C 4. Looking beyond 5 years from today, what long-term impacts might border delays have on your business decisions related to where you are sourcing your supplies from, your manufacturing or distribution operations, your customers, the size of your company, or your workforce?

- C 5. If border delays persist or increase, what kinds of changes, if any, would your company consider making? (i.e.: location of business, sourcing of supplies, changes in activity at current location, hiring, changes in size of company, etc.)

#### **Supply Chain Management Module:**

- SC 1. How specifically have cross border delays affected your decisions about what inputs or supplies you use in operations?
- SC 2. Using a scale from 1 to 5, where 1 is not at all time sensitive, 3 is neutral, and 5 is highly time sensitive, please indicate how time-sensitive is your logistics supply chain to delays at the border?
- SC 3. (For businesses that are conducting crossborder operations) What were three key factors that led to establishing the facility in San Diego / Tijuana/ Tecate / Imperial Valley/ Baja California?
- SC 4. What are the top three markets in San Diego / Tijuana / Tecate/ Imperial Valley/ Baja California that your firm sells goods or raw materials to? What percentage of your sales arise from those markets?
- SC 5. What are the top 3 markets that your shipments are coming from and what percentage of your goods come from those markets?

#### **Logistics Module:**

- L1. How specifically have cross border delays affected your decisions about what services you provide?
- L 2. Using a scale from 1 to 5, where 1 is not at all time sensitive, 3 is neutral, and 5 is highly time sensitive, please indicate how time-sensitive is your value chain to delays at the border?
- L 3. What are the top three markets in San Diego / Tijuana / Tecate/ Imperial Valley/ Baja California that your firm sells services or products to? What percentage of your sales arise from those markets?

#### **Employment Module:**

- E 1. Approximately how many employees do you have at this site, and approximately what percentage of those live in Mexico? Do you know how the employees that live in Mexico commute to your location?
- E 2. How do cross border delays affect your staffing decisions, or your access to regional workforce talent?
- E 3. Do you foresee an impact on your business and on other businesses operating in the industry if due to increasing cross border delays, employees that live on the Mexico side of the border decide to leave their jobs? If yes, define the size of the impact on a scale from 1 to 5 (1 is no impact; 3 is medium impact; and 5 is high impact).

**Customer / Sales Module:**

- CU 1. Approximately what proportion of your customers are visitors from Mexico that cross the border?
- CU 2. Approximately what proportion of your annual sales are sales to visitors from Mexico that cross the border?
- CU 3. How have border delays affected your annual sales, and would shorter border crossing times potentially improve them?
- CU 4. Have you introduced new products or services targeted toward visitors from Mexico that cross the border? If yes, please describe.

**FINAL CORE QUESTION:**

- Do you have any other comments or observations about border delays and how they affect your business here that you'd like us to know about?

## Appendix 1: List of Agencies and Government Officials Contacted in Preparing Potential Interview List

- Asociación de la Industria Maquiladora y de Exportación (INDEX) Tijuana
- Calibaja Bi-National Mega-Region
- Carlsbad Chamber of Commerce
- Comisión de Desarrollo Económico de Mexicali (CDEM)
- Comisión de Desarrollo Industrial de Mexicali (CDI)
- East County Economic Development Council
- Imperial Valley Economic Development Corporation
- Otay Mesa Chamber of Commerce
- San Diego North Economic Development Council
- San Diego Regional Economic Development Corporation
- San Diego-Tijuana Smart Border Coalition
- South County Economic Development Council
- Tijuana EDC (DEITAC)