



# Survey Methodology and Plan

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

*San Diego, CA*  
August 11, 2016



**Contents**

- 1. Introduction ..... 3
- 2. Overview of Project At-Border Survey Activities ..... 4
- 3. Sampling Strategy ..... 5
- 4. Timing of At-Border Surveys..... 6
- 5. Survey Goals and Data Collection ..... 7
  - A. Regional Border Crossings ..... 7
  - B. Survey Goals ..... 8
- 6. Data Collection Monitoring & Post-Survey Cleansing ..... 13
- 7. Security & Safety Protocols ..... 14
- 8. Appendix ..... 15

## 1. Introduction

The California – Baja California border region is one of the most important and dynamic economic zones in North America. However, demand is posed to outstrip supply at the region's border crossings. While the crossings have become a critical element of the bi-national region's economic integration and competitiveness, growing demand has led to increased congestion at border crossings and generated delay and unreliable crossing times for cars, trucks and pedestrians at California-Baja California land ports of entry (LPOEs). These delays and unreliability at the border have the potential to reduce the region's economic competitiveness and attractiveness to business, which can translate into lower levels of economic activity and growth.

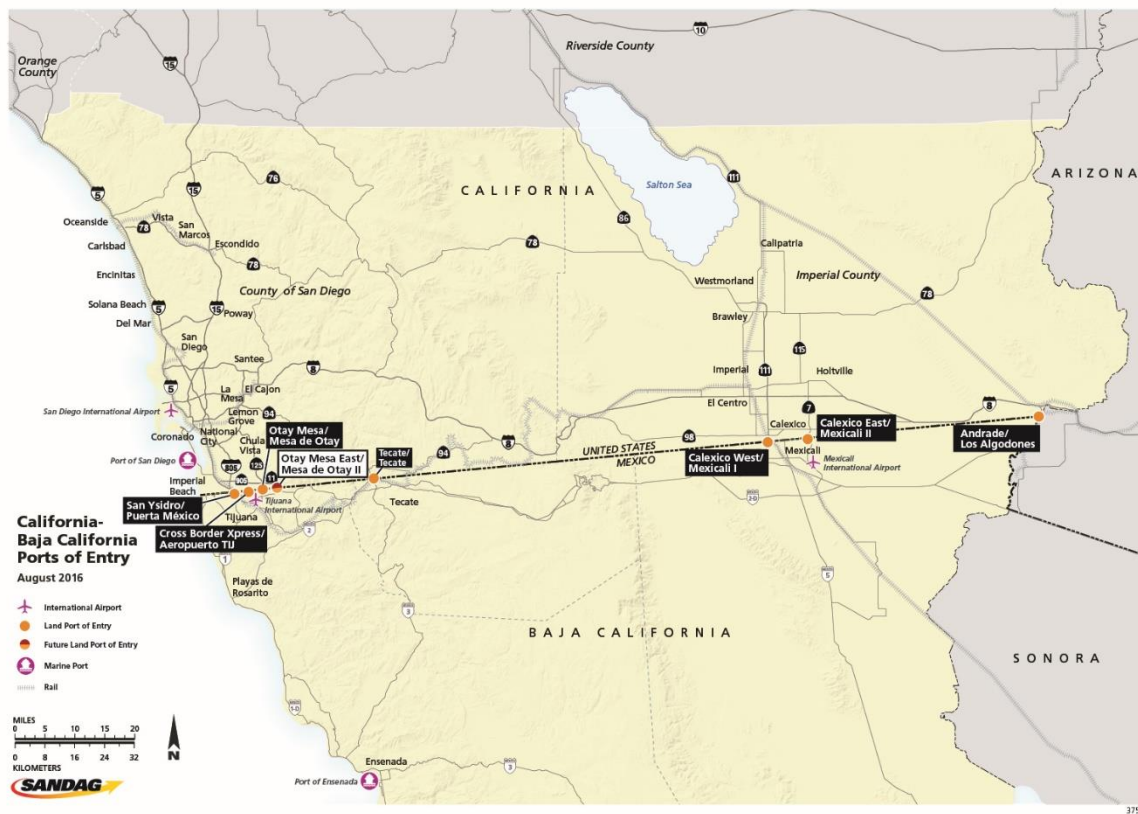
In 2006, SANDAG and Caltrans conducted studies that showed how border delays cause significant reductions in economic output and employment. These studies highlighted the need for improving border crossings and helped make the case for developing a third crossing between San Diego and Tijuana (the planned Otay Mesa East-Mesa de Otay II border crossing). Similarly, in 2007, the former Imperial Valley Association of Governments and Caltrans conducted an economic delay study for Imperial County border crossings. Much has changed since these earlier studies – the local economy has rebounded from the Great Recession and there are new emerging industry clusters that depend on cross-border trade.

As a result, SANDAG has commissioned the HDR team (led by HDR Inc., and supported by T. Kear Transportation Planning and Management, Inc., Crossborder Group and Sutra Research) to conduct the study on Economic and Air Quality/Climate Impacts of Delays at the Border. The current document was developed by Crossborder Group and is part of this effort, providing an overview of the survey activities that will be undertaken as part of the study. The surveys will be used to collect key information necessary to assess the economic and air quality/climate impacts of delays at the border.

## 2. Overview of Project At-Border Survey Activities

As part of this study, the consulting team led by HDR Inc., worked with staff from SANDAG, Caltrans, and ICTC to develop a data collection approach and survey instruments that maintain consistency with previous SANDAG and ICTC efforts (including the 2006 study, *Economic Impacts of Wait Times at the San Diego - Baja California Border*), while addressing several new factors. These factors include border wait time and queue data, air emission modeling, and regional changes in border infrastructure (including not only major improvements implemented between San Diego and Tijuana at El Chaparral and San Ysidro POEs, but also the opening of the Cross Border Xpress [CBX] airport terminal in Otay Mesa).

A map of the seven Land Ports of Entry between California-Baja California that are central to this study are shown below, with the survey goals and at-border sampling activities outlined on the following pages.



### 3. Sampling Strategy

In order to adequately survey the broad range of crossers along the California-Baja California border by geography, mode (privately-owned vehicle or POV, pedestrian, or commercial), and crossing type (General, Ready, SENTRI; or, for commercial crossings, FAST or *Free and Secure Trade*, Regular and Empty), it is necessary to divide the population of each of these into groups – or clusters. For purposes of this study, the first-stage cluster is essentially the LPOE; the second-stage cluster is the mode or vehicle type; and the third-stage cluster is the lane or classification type (when applicable).

In all cases, each of the individual survey targets in these clusters and subunits are sampled in a similar fashion, to increase randomization and avoid potential survey bias (as much as possible). In the case of northbound POVs and pedestrians, border queues are utilized to provide access to potential participants; in the case of commercial vehicles, either queues or dedicated pull-out areas can provide the opportunity to apply questionnaires. Although for safety and logistical reasons surveys are not conducted on southbound flows, economic and GHG information from U.S. residents visiting Mexico is collected as part of the returning leg of their trip.

Consistent with past at-border surveys undertaken by SANDAG and others, the two- and three-stage cluster sampling selection procedure will have some variation based on each POE's conditions and locations of queues; however, the core selection process includes choosing a preliminary target, then counting to the  $n^{\text{th}}$  target ( $2^{\text{nd}}$  or  $3^{\text{rd}}$ , depending on the volumes of potential participants) following that one (to reduce selection bias). Should that  $n^{\text{th}}$  target be unresponsive, each subsequent vehicle/pedestrian is asked to participate until a response is positive (at which point, the survey is applied). This method balances reducing possible selection bias, while also increasing efficiency by not skipping too many potential survey participants.



## 4. Timing of At-Border Surveys

The current study includes two specific types of at-border survey targets: passenger vehicles and pedestrians (many of whom schedule their border crossings in relation to seasonal patterns that vary during the Summer, Fall/Spring and Winter seasons), as well as commercial shipments whose border crossing patterns tend to follow more consistent production schedules (although there are seasonal variations, not necessarily consistent with those of individual crossers). The content and aim of each survey is also slightly different:

- For pedestrian crossers, the focus is on the economic impacts created by delays.
- For POVs, the focus is on economic impacts and air emissions related to the vehicles, created by delays.
- For commercial vehicles, the focus is on air emission impacts created by delays.

In order to secure both samples that reflect seasonal variations of individual crossers, as well as take into account increased commercial crossings toward the end of each year, the timing of at-border economic and air emission surveys for POVs and Pedestrians (including at the CBX airport facility) is proposed for late-Summer, Fall, and peak Holiday time periods as shown below. Likewise, commercial truck (and bus) surveys (which, again are focused more on green house gas emissions or GHG and air emission topics) are proposed for the two time periods of early-September and mid-November:

Border Survey Target Periods	Aug-16					Sep-16				Oct-16				Nov-16					Dec-16				
	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 1	Wk 2	Wk 3	Wk 4	Wk 1	Wk 2	Wk 3	Wk 4	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 1	Wk 2	Wk 3	Wk 4	
Imperial County-Mexicali Metro - POVs/Pedestrians		■	■						■	■										■	■		
San Diego-Tijuana Metro - POVs/Pedestrians			■	■						■	■										■	■	
Cross Border Xpress (CBX)										■	■										■	■	
Imperial County-Mexicali Metro - Trucks/Bus								■	■						■	■							
San Diego-Tijuana Metro - Trucks/Bus								■	■						■	■							

From a logistical perspective to accommodate field work needs, at-border surveys have been grouped into general regions – combining San Ysidro-El Chaparral, Otay Mesa-Mesa de Otay, and Tecate-Tecate LPOEs into the “San Diego-Tijuana Metropolitan” region, and the Calexico West-Mexicali I, Calexico East-Mexicali II, and Andrade-Los Algodones LPOEs into the “Imperial County-Mexicali Metropolitan” region.

Each wave of POV/pedestrian surveys will include at least 3-4 weekdays and one weekend (Saturday, Sunday) of data collection; commercial truck/bus surveying will occur during 4-5 weekdays (coinciding with associated data collection of border wait time and queuing data, which is discussed elsewhere). Data collection waves have been adopted to account for seasonal changes in border crossing motivations and economic impacts that have varying peaks during the year; field data collection occurs during daylight hours, with surveys being applied relatively equally throughout the day (typically from approximately 6:00am to 7:00pm). For security purposes, non-daylight surveying is not anticipated.

## 5. Survey Goals and Data Collection

### A. Regional Border Crossings

An appropriate survey sampling plan must take into account the scale of border crossings between California and Baja California. In 2015, over 72 million individuals<sup>1</sup> crossed northbound from Mexico into the United States through the six Land Ports of Entry (LPOEs) of San Ysidro-El Chaparral, Otay Mesa-Mesa de Otay, Tecate-Tecate, Calexico West-Mexicali I, Calexico East-Mexicali II, and Andrade-Los Algodones<sup>2</sup>:

Land Port of Entry (California)	2015 Northbound Border Crossings (CBP/BTS data)				
	Vehicles		Individuals		
	Cars/POVs	Buses	Car/POV Passengers	Pedestrians	Bus Passengers
San Ysidro	14,435,252	51,693	25,646,073	7,056,022	440,033
Otay Mesa	6,933,472	38,303	12,225,410	3,411,485	138,590
Tecate	908,482	176	1,776,948	608,359	4,306
Andrade	523,059	0	1,036,699	817,866	0
Calexico West	4,294,156	0	7,644,148	4,498,322	0
Calexico East	3,622,215	3,064	6,744,400	223,374	122,873
<b>Total</b>	<b>30,716,636</b>	<b>93,236</b>	<b>55,073,678</b>	<b>16,615,428</b>	<b>705,802</b>

As seen above, over 99% of non-cargo related vehicles crossing northbound into California in 2015 were cars or POVs. Also notable, approximately 76% of individuals crossed northbound in POVs, while approximately 23% entered as pedestrians, and just under 1% of arriving individuals entered as bus passengers. This data demonstrates both the scale of border crossings between California and Baja California as well as the significant role that POVs play at LPOEs.

In addition to personal crossings at California-Baja California LPOEs, in 2015 there were also over 1.2 million northbound border crossings made by commercial vehicles<sup>3</sup> (typically trucks and cargo vans):

Commercial Land Port of Entry (California)	2015 Northbound Border Crossings (CBP/BTS data)			
	Total	By Lane/Classification		
	Commercial Vehicles	FAST	Standard	Empty
Otay Mesa	829,581	165,956	474,802	188,823
Tecate	52,090	NA	33,947	18,143
Calexico East	337,474	78,461	115,270	143,743
<b>Total</b>	<b>1,219,145</b>	<b>244,417</b>	<b>624,019</b>	<b>350,708</b>

While approximately 20% of cargo vehicles entered California utilizing the FAST pre-clearance program for low-risk shipments, over 51% of northbound commercial entries took place through

<sup>1</sup> Based on historic data from U.S. Customs and Border Protection (CBP) and the U.S. Department of Transportation's Bureau of Transportation Statistics (BTS).

<sup>2</sup> Note: The CBX airport terminal was opened in late-2015, and as such is not included here.

<sup>3</sup> Again, using CBP and BTS historic data sets.



LPOE “standard” lanes, and nearly 29% of commercial crossings were of “empty” vehicles (i.e.: vehicles with no cargo). Also of note, over two-thirds of commercial traffic was concentrated at the Otay Mesa LPOE, followed by over 27% at Calexico East, and approximately 4% at the Tecate LPOE.

**B. Survey Goals**

This project includes two major types of survey instruments: an economic impact survey (to provide key information necessary to inform the economic modeling for the project), and a GHG/air emission survey for vehicles (to provide data necessary for air emission modeling related to border crossings and delays). Survey goals for each of the core surveys are shown below, based on consideration of volumes at each of the LPOEs, the various modes (vehicles or pedestrians), and the types of lanes at each of the LPOEs (Regular, Ready, SENTRI), when applicable.

While using volumes of border crossings allows for calculating the mathematical proportions of surveys for each LPOE and type of crosser, in some cases it is necessary to adjust these numbers in order to assure a basic level of statistical validity for data collected at low-volume LPOEs. As such, in addition to showing the approximately 2015 volumes of each lane type by LPOE<sup>4</sup> and the calculated Proportional Sample Goals that would result, also shown are Adjusted Oversampling Goals (that increase the sampling at certain LPOEs, and of specific lane types). In addition, GHG/air emission survey goals were also adjusted to reflect the planned use of comparable, recently-collected air emission surveys from 2014 at the San Ysidro and Calexico West POEs for cars (over 2,100 surveys total), and the Calexico East POE for trucks (over 200 surveys total). A copy of those previous survey questionnaires can be found in the Appendix.

**POVS & PEDESTRIANS**

Below are the proposed Survey Goals for POV and pedestrian surveying – first for the economic survey:

Land Port of Entry (California)	2015 Northbound Border Crossings (CBP/BTS data)								
	Cars/POVs					Pedestrians			
	Total	% of Total	General / Regular %	ReadyLane %	SENTRI %	Total	% of Total	General / Regular %	ReadyLane %
San Ysidro	14,435,252	47%	34%	32%	34%	7,056,022	42%	NA	NA
Otay Mesa	6,933,472	23%	23%	53%	24%	3,411,485	21%	NA	NA
Tecate	908,482	3%	100%	NA	NA	608,359	4%	NA	NA
Andrade	523,059	2%	100%	NA	NA	817,866	5%	NA	NA
Calexico West	4,294,156	14%	58%	NA	42%	4,498,322	27%	NA	NA
Calexico East	3,622,215	12%	26%	58%	16%	223,374	1%	NA	NA
<b>Total</b>	<b>30,716,636</b>					<b>16,615,428</b>			

<sup>4</sup> Source: HDR data based on information provided by U.S. Customs and Border Protection. Please note: Volumes by lane type were not available for pedestrian crossings at the time this document was developed; as such, survey samples of Regular/General and ReadyLane pedestrians is applied evenly (where such facilities exist). Because of the relatively small number of SENTRI pedestrians, this flow type is not considered a potential target for surveying.





Calculated Proportional Sample Sizes - Economic Surveys									
Land Port of Entry (California)	Cars/POVs - Calculated Samples					Pedestrians - Calculated Samples			
	Proportional Sample	% of Total	General / Regular	ReadyLane	SENTRI	Total	% of Total	General / Regular-50%	ReadyLane-50%
San Ysidro	2,538	47%	868	806	864	934	42%	467	467
Otay Mesa	1,219	23%	283	647	289	452	21%	226	226
Tecate	160	3%	160	NA	NA	81	4%	81	NA
Andrade	92	2%	92	NA	NA	108	5%	108	NA
Calexico West	755	14%	439	NA	316	596	27%	298	298
Calexico East	637	12%	167	370	100	30	1%	30	NA
<b>Total</b>	<b>5,400</b>		<b>2,009</b>	<b>1,822</b>	<b>1,569</b>	<b>2,200</b>		<b>1,209</b>	<b>991</b>

Adjusted Oversampling Survey Goals - Economic Surveys									
Land Port of Entry (California)	Cars/POVs - Final Samples					Pedestrians - Final Samples			
	Oversampling Goals	% of Total	General / Regular	ReadyLane	SENTRI	Oversampling Goals	% of Total	General / Regular @50%	ReadyLane @50%
San Ysidro	2,050	38%	800	800	450	800	36%	400	400
Otay Mesa	1,300	24%	400	600	300	500	23%	250	250
Tecate	400	7%	400	NA	NA	100	5%	100	NA
Andrade	300	6%	300	NA	NA	100	5%	100	NA
Calexico West	700	13%	500	NA	200	600	27%	300	300
Calexico East	650	12%	200	300	150	100	5%	100	NA
<b>Total</b>	<b>5,400</b>		<b>2,600</b>	<b>1,700</b>	<b>1,100</b>	<b>2,200</b>		<b>1,250</b>	<b>950</b>

Approximate Confidence Levels for Oversampling Goals									
Land Port of Entry (California)	Cars/POVs					Pedestrians			
	Oversampling Goals		General / Regular	ReadyLane	SENTRI	Oversampling Goals		General / Regular @50%	ReadyLane @50%
San Ysidro	95% +/-3%		95% +/-4%	95% +/-4%	95% +/-5%	95% +/-4%		95% +/-5%	95% +/-5%
Otay Mesa	95% +/-3%		95% +/-5%	95% +/-4%	95% +/-6%	95% +/-5%		95% +/-7%	95% +/-7%
Tecate	95% +/-5%		95% +/-5%	NA	NA	95% +/-10%		95% +/-10%	NA
Andrade	95% +/-6%		95% +/-6%	NA	NA	95% +/-10%		95% +/-10%	NA
Calexico West	95% +/-4%		95% +/-5%	NA	95% +/-7%	95% +/-5%		95% +/-6%	95% +/-6%
Calexico East	95% +/-4%		95% +/-7%	95% +/-6%	95% +/-8%	95% +/-10%		95% +/-10%	NA
<b>Total</b>	<b>95% +/-1%</b>		<b>95% +/-3%</b>	<b>95% +/-3%</b>	<b>95% +/-3%</b>	<b>95% +/-2%</b>			

Below are the proposed survey goals for the GHG/air emissions survey (limited to POVs, and not to be applied to pedestrians)<sup>5</sup>:

<sup>5</sup> Please note: While these goals and associated confidence levels do not include approximately 2,100 air emission surveys collected for studies by the BECC/IVAPCD at Calexico West POE, and the CEC at San Ysidro POE in 2014, they do affect the proposed adjusted goals for these two POEs (they are reduced, given the existing 1,000+ vehicle profiles that already exist for each of those LPOEs).

	2015 Northbound Border Crossings (CBP/BTS data)				
Land Port of Entry (California)	Cars/POVs				
	Total	% of Total	General / Regular %	ReadyLane %	SENTRI %
San Ysidro	14,435,252	47%	34%	32%	34%
Otay Mesa	6,933,472	23%	23%	53%	24%
Tecate	908,482	3%	100%	NA	NA
Andrade	523,059	2%	100%	NA	NA
Calexico West	4,294,156	14%	58%	NA	42%
Calexico East	3,622,215	12%	26%	58%	16%
<b>Total</b>	<b>30,716,636</b>				

	Calculated Proportional Sample Sizes - GHG/Air Emission Surveys				
Land Port of Entry (California)	Cars/POVs - Calculated Samples				
	Proportional Sample	% of Total	General / Regular	ReadyLane	SENTRI
San Ysidro	1,222	47%	418	388	416
Otay Mesa	587	23%	136	311	139
Tecate	77	3%	77	NA	NA
Andrade	44	2%	44	NA	NA
Calexico West	363	14%	211	NA	152
Calexico East	307	12%	80	178	48
<b>Total</b>	<b>2,600</b>		<b>967</b>	<b>877</b>	<b>756</b>

	Adjusted Oversampling Survey Goals - GHG/Air Emission Surveys				
Land Port of Entry (California)	Cars/POVs - Final Samples				
	Oversampling Goals	% of Total	General / Regular	ReadyLane	SENTRI
San Ysidro	800	31%	250	300	250
Otay Mesa	750	29%	200	300	250
Tecate	100	4%	100	NA	NA
Andrade	100	4%	100	NA	NA
Calexico West	350	13%	250	NA	100
Calexico East	500	19%	150	200	150
<b>Total</b>	<b>2,600</b>		<b>1,050</b>	<b>800</b>	<b>750</b>

	Approximate Confidence Levels for Oversampling Goals				
Land Port of Entry (California)	Cars/POVs				
	Oversampling Goals		General / Regular	ReadyLane	SENTRI
San Ysidro	95% +/-3%		95% +/-7%	95% +/-6%	95% +/-6%
Otay Mesa	95% +/-3%		95% +/-7%	95% +/-6%	95% +/-6%
Tecate	95% +/-10%		95% +/-10%	NA	NA
Andrade	95% +/-10%		95% +/-10%	NA	NA
Calexico West	95% +/-6%		95% +/-7%	NA	95% +/-10%
Calexico East	95% +/-5%		95% +/-8%	95% +/-7%	95% +/-8%
<b>Total</b>	<b>95% +/-2%</b>		<b>95% +/-3%</b>	<b>95% +/-4%</b>	<b>95% +/-4%</b>



**TRUCKS/COMMERCIAL VEHICLES**

Similar to the approach taken to calculate survey goals for cars and pedestrians, commercial traffic at California-Baja California LPOEs also must take into consideration different geographies and lane types, as well as modify calculated survey goals to oversample enough participants to generate statistically relevant results. Below are the overall commercial vehicle volumes, the proportion of trucks by lane/classification at each LPOE, and both the calculated survey goals (assuming 400 total surveys) plus the modified survey goals incorporating oversampling:

			2015 Northbound Border Crossings (CBP/BTS data)		
Commercial Land Port of Entry (California)	Total		% By Lane/Classification		
	Commercial Vehicles	%	FAST	Standard	Empty
Otay Mesa	829,581	68.0%	20%	57%	23%
Tecate	52,090	4.3%	NA	65%	35%
Calexico East	337,474	27.7%	23%	34%	43%
<b>Total</b>	<b>1,219,145</b>				

			Calculated Proportional Sample		
Commercial Land Port of Entry (California)	Total		Calculated Samples - By Lane/Classification		
	Proportional Sample	%	FAST	Standard	Empty
Otay Mesa	272	68.0%	54	156	62
Tecate	17	4.3%	NA	11	6
Calexico East	111	27.7%	26	38	47
<b>Total</b>	<b>400</b>		<b>80</b>	<b>205</b>	<b>115</b>

			Adjusted Oversampling Goals		
Commercial Land Port of Entry (California)	Total		Final Samples - By Lane/Classification		
	Oversampling Goals	%	FAST	Standard	Empty
Otay Mesa	200	50.0%	60	100	40
Tecate	90	22.5%	NA	50	40
Calexico East	110	27.5%	30	40	40
<b>Total</b>	<b>400</b>		<b>90</b>	<b>190</b>	<b>120</b>

			Approximate Confidence Levels for Oversampling Goals		
Commercial Land Port of Entry (California)	Total		By Lane/Classification		
	Oversampling Goals		FAST	Standard	Empty
Otay Mesa	95% +/- 7%		90% +/-11%	90% +/-8%	90% +/-13%
Tecate	95% +/-10%		NA	90% +/-12%	90% +/-13%
Calexico East	95% +/-10%		90% +/-15%	90% +/-13%	90% +/-13%
<b>Total</b>	<b>95% +/- 5%</b>		<b>95% +/-10%</b>	<b>95% +/-7%</b>	<b>95% +/-9%</b>

*Note: does not include impact of additional 203 data samples from trucks at Calexico East collected in 2014 from previous BECC/IVAPCD study, which would increase the confidence levels for Calexico East*

#### CBX AND BUSES

Given the relative size of the current flows of CBX passengers using the airport terminal, as well as the relatively small number of buses that use the California-Baja California border (in context to their air emission impacts relative to both POVs and trucks), the Team proposes undertaking a modest economic survey sample of CBX users (400 total over the course of the project, for a confidence level of 95% +/-5%), as well as for applying the GHG/air emission surveys to a total of 120 buses (50 at San Ysidro, 50 at Otay Mesa, and 20 at Calexico East LPOEs; providing a confidence level from a statewide perspective of 95% +/-5% [albeit only an estimated 90% +/-10% at San Ysidro and Otay Mesa, and 90% +/-20% at Calexico East], which is sufficient for air emission modeling under this project.

## 6. Data Collection Monitoring & Post-Survey Cleansing

In order to ensure proper data collection, survey workers undergo two training sessions: an in-office training, where bilingual capabilities are assessed, participants are provided an overview of the project and the questionnaire (including its purpose), as well as survey selection and safety protocols for the field work. These in-office sessions are approximately two hours, and include applying the survey using field equipment (Android-based tablets), as well as confirming and understanding of the survey procedures and safety issues.

Field supervisors are present at all times during actual field data collection activities to ensure that security and safety protocols are followed, as well as to provide continuous review and assessment of the application of the surveys from a quality perspective. While survey training occurs prior to fielding a survey, additional in-field training is also undertaken during the first hours of a project to confirm understanding of the sampling methodology and that questions are applied correctly using electronic tablets (both with several initial “test” surveys, and supervised application of the actual survey to the public).

In addition, each day data is uploaded from the field and checked to measure daily survey production, and to assess various metrics (including length of time of survey application, and time between surveys) within the survey software that can identify potential errors and/or application problems. Such errors (as well as normal “test surveys” which are conducted during field training) are deleted from project analysis during the post-survey data cleansing process and prior to data delivery.

## 7. Security & Safety Protocols

Another critical aspect of planning for at-border surveys relates to the unique conditions and security issues that are present at LPOEs. Not only do data collection activities have to take into consideration the strict need of not interfering with the work of law enforcement and border agencies, but they must also ensure that field crews operate with the lowest-risk possible (in terms of vehicle safety and interactions with the public). As such, standard at-border security and safety protocols include staff training, safety equipment, hydration and respiratory breaks, and limiting operations to daylight hours (which, during Summer periods can include surveying between approximately 6:30am through 7:00pm; and during Fall and Winter, from approximately 7:00am through 6:00pm). Field worker safety is a primary consideration when conducting at-border surveys, and field crews are instructed to pull-back from survey locations should any security incidents or concerns arise (which on rare occasions may impact survey plans).



## 8. Appendix

Copies of the approved survey instruments are included in the next pages.

**Final Summer Econ/GHG Questionnaire - San Diego/Tijuana Metro  
POVs/Pedestrians/CBX  
Version 5**

The following is the proposed final version of the survey questionnaire for the San Diego-Tijuana Metro surveys for the study, A Fresh Look at Impacts of Border Delays at California-Baja California Ports of Entry. It incorporates input and changes following feedback and activities of the Otay Mesa Pre-Test in late-June, 2016. **Changes from the previous version are highlighted.**



**Section A: Initial Core Questions (All Participants)**

**A-1: For demographic purposes**, if you are 18 or over, in what year were you born?: \_\_\_\_\_

**A-2: On average, how frequently do you cross the border to the U.S.?** [PAUSE, READ OPTIONS ONLY TO PROMPT; ONE WAY]

- |                                       |  |  |
|---------------------------------------|--|--|
| <input type="checkbox"/> 7+ times/wk  | <input type="checkbox"/> 6 times/wk        | <input type="checkbox"/> 5 times/wk        |
| <input type="checkbox"/> 4 times/wk   | <input type="checkbox"/> 3 times/wk        | <input type="checkbox"/> 2 times/wk        |
| <input type="checkbox"/> 1 times/wk   | <input type="checkbox"/> 3 times/month     | <input type="checkbox"/> 2 times/month     |
| <input type="checkbox"/> 1 time/month | <input type="checkbox"/> Less than 1/month | <input type="checkbox"/> 1st time crossing |
| <input type="checkbox"/> Other:_____  | <input type="checkbox"/> DK/NA             |  |

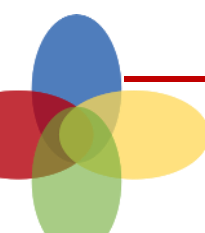
**A-3: In what city or county do you have your primary residence or do you live most days?** [IF RESPONDENT STATES THAT THEY LIVE EQUALLY IN TWO LOCATIONS, MARK BOTH]

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Tijuana               | <input type="checkbox"/> San Diego County | <input type="checkbox"/> Tecate                         |
| <input type="checkbox"/> Rosarito              | <input type="checkbox"/> Ensenada         | <input type="checkbox"/> Mexicali                       |
| <input type="checkbox"/> San Luis Rio Colorado | <input type="checkbox"/> Imperial County  | <input type="checkbox"/> Los Angeles County             |
| <input type="checkbox"/> Orange County         | <input type="checkbox"/> Riverside County | <input type="checkbox"/> Arizona [Yuma, Maricopa, Pima] |
| <input type="checkbox"/> Other:_____           | <input type="checkbox"/> DK/NA            |   |

**A-4: What is the zip code or colonia of your principal residence?:**\_\_\_\_\_

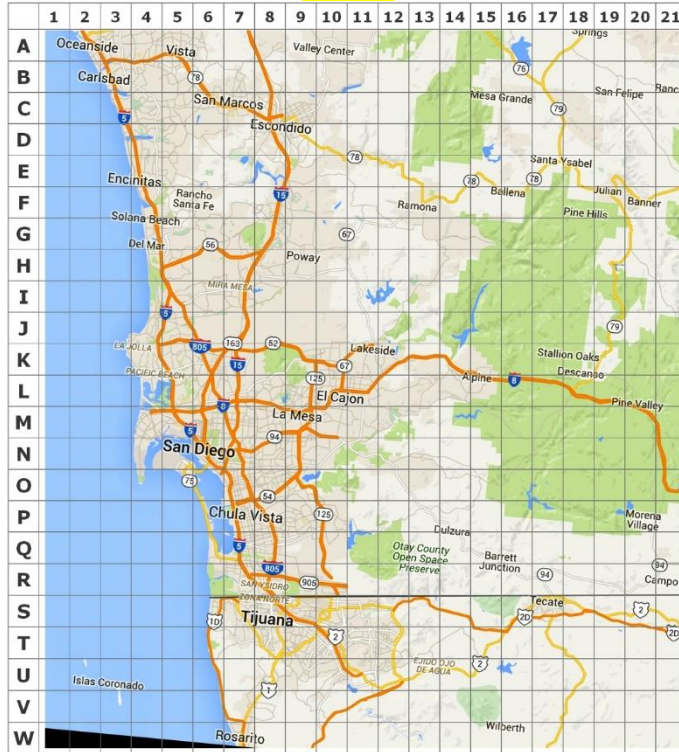
**A-5a: Looking at the maps** [SEE NEXT PAGE; SURVEYOR WILL HAVE LAMINATED, LETTER-SIZED VERSION, WITH LOCAL REGION ON ONE SIDE, SOCAL/AZ ON OTHER], **what zip code or from approximately where did you start your trip from today?:** \_\_\_\_\_ [OPEN ENDED; SURVEYOR WILL RECORD COORDINATES; IF OUTSIDE OF MAP, WILL RECORD STATED CITY/LOCATION]

**A-5b: ...and approximately where will your trip end today?:** \_\_\_\_\_ OPEN ENDED; SURVEYOR WILL RECORD COORDINATES OR STATED; IF OUTSIDE OF MAP, WILL RECORD CITY/LOCATION MENTIONED]





**Grid SD**



**Grid SoCal-AZ**



**A-6: [SURVEYOR INSTRUCTION: BASED ON QUOTA ASSIGNMENT, CHOOSE ECONOMIC, EMISSIONS OR CBX SURVEY]**

- SDTJ-Economics (JUMP TO SECTION B)
- SDTJ-Emissions (JUMP TO SECTION C)
- CBX (JUMP TO SECTION D)

**Section B: Economic Impact Questions**

**B-1: To confirm, in which country do you typically live: Mexico, the US, or another?**

- Mexico (JUMP TO *Mexico-Residing Only*)
- United States (JUMP TO *US-Residing/Intl Visitor Only*)
- Other Country (JUMP TO *US-Residing/Intl Visitor Only*)

***Mexico-Residing Only (All MX Residents)***

**B-2: What is the principal reason for your trip today to the US? [NOTE: OPTIONS WILL BE RANDOMIZED, BUT READ IF PARTICIPANT HESITATES TO ANSWER]**

- Shopping
- Work or business [JUMP TO SUBSAMPLE SECTION BW]
- Family or Social Visit
- Medical or Health
- Recreation/Vacation
- School
- Airport
- Other: \_\_\_\_\_

**B-3: [Using those same options] Is there another or secondary reason for your trip today? [NOTE: OPTIONS WILL BE RANDOMIZED]**

- Shopping
- Work or business
- Family or Social Visit
- Medical or Health
- Recreation/Vacation
- School
- Airport
- No Secondary Reason
- Other: \_\_\_\_\_

**B-4: During this trip, approximately how many hours or days do you plan to stay in the US?:**  
\_\_\_\_\_ HR DAY [OPEN ENDED, **WITH HOUR/DAY CHECKBOX**]

**B-5: Before you started this trip, did you look for information on border wait times, for example on a website, radio, television, a smartphone app, or other?**

- No
- Yes-Website
- Yes-Radio
- Yes-TV
- Yes-App on Smartphone
- Yes-Other: \_\_\_\_\_

**B-6: Did that border wait time information cause you to change the time of your trip to the US or use a different border crossing?**

- No
- Yes-Change Time
- Yes-Change POE
- Yes-both Time/POE

**B-7: Before arriving at the border today, how long did you think your border wait would be?**

- 0-9 MIN
- 10-19 MIN
- 20-29 MIN
- 30-39 MIN
- 40-49 MIN
- 50-59 MIN
- 1 HOUR
- 1.5 HOURS
- 2 HOURS
- 2.5 HOURS
- 3 HOURS
- 3.5 HOURS
- 4 HOURS
- MORE THAN 4 HOURS

**B-8: If today you knew the border wait would be longer, how many additional minutes of delay would cause you to decide NOT to cross the border?**

- WOULD CROSS ANY WAY
- 1-9 MIN
- 10-19 MIN
- 20-29 MIN
- 30-39 MIN
- 40-49 MIN
- 50-59 MIN
- 1 HOUR
- 1.5 HOURS
- 2 HOURS
- 2.5 HOURS
- 3 HOURS
- 3.5 HOURS
- 4 HOURS
- MORE THAN 4 HOURS

**B-9: In dollars, approximately how much do you estimate you will spend during this trip to the US? \_\_\_\_\_**

**B-10: [NOT ASKED] DEPENDING ON LENGTH OF QUEUE, SURVEYOR CHOOSES BETWEEN OPTION 1 & OPTION 2**

- Option 1 [SHORT LINES - JUMP TO END/SECTION O]
- Option 2 [LONGER LINES - CONTINUES TO SECTION BX]
- Option 3 [ANSWERED 'ZERO' EXPENDITURE IN B-9, JUMP TO END/SECTION O]

**Section BX: Mexico-Residing Sub-Sample - Economics/Shopping**

**BX-1: Of the amount you just mentioned, approximately how much will you spend on the following:**

- BX-1A - ... how much on Groceries? \_\_\_\_\_
- BX-1B - ... how much on Restaurants? \_\_\_\_\_
- BX-1C - ... how much on Gas? \_\_\_\_\_
- BX-1D - ... how much on Shopping? \_\_\_\_\_
- BX-1E - ... how much on Entertainment? \_\_\_\_\_
- BX-1F - ... how much on Hotels? \_\_\_\_\_
- BX-1G - ... how much on Public Transportation (bus, trolley, taxi)? \_\_\_\_\_
- BX-1H - ... how much on Other: \_\_\_\_\_

**BX-2: Imagine you had decided NOT to take your trip to the US today because of extremely long border waits. Of the amounts you just mentioned for each category, how much would you have spent in Mexico instead of the US - or would you have spent the same in the US another day? [SURVEYOR WILL HAVE BOTH BX-1 & BX-2 ON SAME SCREEN TO ALLOW CROSS-REFERENCING]:**

Sector	Would Spend in MX Instead	Same Spend in US Other Day	Zero/0 Spent on This	Don't Know/NA
Groceries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restaurants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shopping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hotels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Transportation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**BX-3: In a normal month, how many times do you cross the border to go shopping in the US?:**

\_\_\_\_\_

[JUMP TO SECTION O - OBSERVATIONALS]

**Section BW: Mexico-Residing Sub-Sample - Work/Business & Economics**

**BW-3: [Using those same options] Is there another or secondary reason for your trip today?**

[NOTE: OPTIONS WILL BE RANDOMIZED]

- [ ] Shopping
- [ ] Work or business
- [ ] Family or Social Visit
- [ ] Medical or Health
- [ ] Recreation/Vacation
- [ ] School
- [ ] Airport
- [ ] No Secondary Reason
- [ ] Other: \_\_\_\_\_

**BW-4: During this trip, approximately how many hours or days do you plan to stay in the US?:**  
\_\_\_\_\_ HR DAY [OPEN ENDED, WITH HOUR/DAY CHECKBOX]

**BW-5: Before you started this trip, did you look for information on border wait times, for example on a website, radio, television, a smartphone app, or other?**

- No [JUMP TO BW-7]
- Yes-Website
- Yes-Radio
- Yes-TV
- Yes-App on Smartphone
- Yes-Other:\_\_\_\_\_

**BW-6: Did that border wait time information cause you to change the time of your trip to the US or use a different border crossing?**

- No
- Yes-Change Time
- Yes-Change POE
- Yes-both Time/POE

**BW-7: Before arriving at the border today, how long did you think your border wait would be?**

- 0-9 MIN
- 10-19 MIN
- 20-29 MIN
- 30-39 MIN
- 40-49 MIN
- 50-59 MIN
- 1 HOUR
- 1.5 HOURS
- 2 HOURS
- 2.5 HOURS
- 3 HOURS
- 3.5 HOURS
- 4 HOURS
- MORE THAN 4 HOURS

**BW-8: If today you knew the border wait would be longer, how many additional minutes of delay would cause you to decide NOT to cross the border?**

- WOULD CROSS ANY WAY
- 1-9 MIN
- 10-19 MIN
- 20-29 MIN
- 30-39 MIN
- 40-49 MIN
- 50-59 MIN
- 1 HOUR
- 1.5 HOURS
- 2 HOURS
- 2.5 HOURS
- 3 HOURS
- 3.5 HOURS
- 4 HOURS
- MORE THAN 4 HOURS

BW-9: In dollars, approximately how much do you estimate you will spend today in your trip to the US? \_\_\_\_\_

BW-10: [NOT ASKED] DEPENDING ON LENGTH OF QUEUE, SURVEYOR CHOOSES BETWEEN OPTION 1 & OPTION 2

- Option 1 [SHORT LINES - JUMP TO END/SECTION O]
- Option 2 [LONGER LINES - CONTINUES TO BW-11]

BW-11: Previously, you mentioned you were crossing for work or business reasons. Would you say you are visiting the US on a business trip, or you are commuting to work?

- Business Trip [JUMP TO BW-18]
- Commuting to Work

BW-12: In what industry or sector is your job? \_\_\_\_\_

BW-13: In dollars, what is your approximate monthly wage or salary? \_\_\_\_\_

BW-14: Approximately how many hours per week do you work at your job? \_\_\_\_\_

BW-15: If you arrive to work one hour late because of a long border wait, can you make up that one hour of work, will you be paid one hour less, or will you lose a day of work?

- Can make up hour of work
- Paycheck will be one hour less
- Will lose day of work
- Other: \_\_\_\_\_
- NA/DK

BW-16: How many additional minutes or hours would your daily border wait have to be for you to decide to either stop working in the US and work in Mexico, or to move to the US?

[SURVEYOR TO RECORD MINUTES]

- No Change - Would keep crossing from MX to work
- Additional minutes to stop working in US: \_\_\_\_\_
- Additional minutes to move to US: \_\_\_\_\_

**BW-17: [SURVEYOR INSTRUCTION: CHOOSE IF POV/CAR OR PEDESTRIAN]**

- POV/CAR [JUMP TO BW-17A]
- Pedestrian [JUMP TO BW-17B]

**BW-17A:** How many additional minutes or hours would your daily border wait have to be for you to decide to change from crossing the border in a car to another method of crossing - and what would that method be?:[RECORD MINUTES & METHOD, OR NO CHANGE] \_\_\_\_\_ [JUMP TO SECTION O]

**BW-17B:** How many additional minutes or hours would your daily border wait have to be for you to decide to change from walking across the border to another method of crossing - and what would that method be?:[RECORD MINUTES & METHOD, OR NO CHANGE] \_\_\_\_\_ [JUMP TO SECTION O]

[FOR BUSINESS VISITORS ONLY - NOT COMMUTERS]

BW-18: In what industry or sector do you work? \_\_\_\_\_

BW-19: What title or type of position do you have? \_\_\_\_\_

[JUMP TO SECTION O]

**Section BU: US-Residing/Intl Visitor Only [NOTE: FOR US-RESIDING AND NON-US/NON-MX (“INTERNATIONAL”) VISITORS]**

**BU-2: What was the principal reason for your trip to Mexico? [NOTE: OPTIONS WILL BE RANDOMIZED, BUT READ IF PARTICIPANT HESITATES TO ANSWER]**

- Shopping
- Work or business [JUMP TO SUBSAMPLE SECTION BUW]
- Family or Social Visit
- Medical or Health
- Recreation/Vacation
- School
- Airport
- Other: \_\_\_\_\_

**BU-3: [Using those same options] Was there another or secondary reason for your trip to Mexico? [NOTE: OPTIONS WILL BE RANDOMIZED]**

- Shopping
- Work or business
- Family or Social Visit
- Medical or Health
- Recreation/Vacation
- School
- Airport
- No Secondary Reason
- Other: \_\_\_\_\_

**BU-4: During this trip, approximately how many hours or days did you stay in Mexico?:**  
\_\_\_\_\_ HR DAY [OPEN ENDED, WITH HOUR/DAY CHECKBOX]

**BU-5: Before you started your trip to the US, did you look for information on the border wait times, like on a website, radio, television, a smartphone app, or other?**

- No
- Yes-Website
- Yes-Radio
- Yes-TV
- Yes-App on Smartphone
- Yes-Other: \_\_\_\_\_

**BU-6: Did that border wait times information cause you to change the time of your return to the US or to use a different border crossing?**

- No
- Yes-Change Time
- Yes-Change POE
- Yes-both Time/POE

**BU-7: Before arriving at the border today, how long did you think your border wait would be?**

- 0-9 MIN
- 10-19 MIN
- 20-29 MIN
- 30-39 MIN
- 40-49 MIN

- 50-59 MIN
- 1 HOUR
- 1.5 HOURS
- 2 HOURS
- 2.5 HOURS
- 3 HOURS
- 3.5 HOURS
- 4 HOURS
- MORE THAN 4 HOURS

**BU-8:** If today you knew the border wait would be longer, how many additional minutes of delay would have caused you to decide NOT to cross the border?

- WOULD CROSS ANY WAY
- 1-9 MIN
- 10-19 MIN
- 20-29 MIN
- 30-39 MIN
- 40-49 MIN
- 50-59 MIN
- 1 HOUR
- 1.5 HOURS
- 2 HOURS
- 2.5 HOURS
- 3 HOURS
- 3.5 HOURS
- 4 HOURS
- MORE THAN 4 HOURS

**BU-9:** In dollars, approximately how much do you estimate you spent during this trip to Mexico? \_\_\_\_\_

**BU-10:** [NOT ASKED] DEPENDING ON LENGTH OF QUEUE, SURVEYOR CHOOSES BETWEEN OPTION 1 & OPTION 2

- Option 1 [SHORT LINES - JUMP TO END/SECTION O]
- Option 2 [LONGER LINES - CONTINUES TO SECTION BUX]
- Option 3 [ANSWERED 'ZERO' EXPENDITURE IN BU-9, JUMP TO END/SECTION O]

**Section BUX: US/Intl-Residing Sub-Sample - Economics/Shopping**

**BUX-1:** Of the amount you just mentioned, approximately how much did you spend in Mexico on the following:

- BUX-1A - ... how much on Groceries? \_\_\_\_\_
- BUX-1B - ... how much on Restaurants? \_\_\_\_\_
- BUX-1C - ... how much on Gas? \_\_\_\_\_
- BUX-1D - ... how much on Shopping? \_\_\_\_\_
- BUX-1E - ... how much on Entertainment? \_\_\_\_\_
- BUX-1F - ... how much on Hotels? \_\_\_\_\_
- BUX-1G - ... how much on Public Transportation (bus, trolley, taxis)? \_\_\_\_\_
- BUX-1H - ... how much on Other: \_\_\_\_\_



**BUX-2:** Imagine you had decided NOT to take your trip to Mexico because of extremely long border waits. Of the amounts you just mentioned for each category, how much would you have spent in the US instead of in Mexico - or would you have spent the same in Mexico another day? [SURVEYOR WILL HAVE BOTH BUX-1 & BUX-2 ON SAME SCREEN TO ALLOW CROSS-REFERENCING]:

Sector	Would Spend in US Instead	Same Expend in MX Other Day	Zero/0 Spent on This	Don't Know/NA
Groceries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restaurants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shopping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hotels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Transportation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**BUX-3:** In the last three months, how many times have you crossed the California-Baja California border **northbound** to make a trip similar to the one you are returning from now?:

\_\_\_\_\_

[JUMP TO SECTION O - OBSERVATIONALS]

**Section BUW: US-Residing/Intl Visitor Sub-Sample - Work/Business & Economics**

**BUW-3:** [Using those same options] Was there another or secondary reason for your trip to Mexico? [NOTE: OPTIONS WILL BE RANDOMIZED]

- Shopping
- Work or business
- Family or Social Visit
- Medical or Health
- Recreation/Vacation
- School
- Airport
- No Secondary Reason
- Other: \_\_\_\_\_

**BUW-4:** During this trip, approximately how many hours or days did you stay in Mexico?:

\_\_\_\_\_ HR DAY [OPEN ENDED, WITH HOUR/DAY CHECKBOX]

**BUW-5:** Before you started this trip to the US, did you look for information on border wait times, for example on a website, radio, television, a smartphone app, or other?

- No [JUMP TO BUW-7]
- Yes-Website
- Yes-Radio
- Yes-TV
- Yes-App on Smartphone
- Yes-Other: \_\_\_\_\_



**BUW-6: Did that border wait times information cause you to change the time of your return to the US or to use a different border crossing?**

- No
- Yes-Change Time
- Yes-Change POE
- Yes-both Time/POE

**BUW-7: Before arriving at the border today, how long did you think your border wait would be?**

- 0-9 MIN
- 10-19 MIN
- 20-29 MIN
- 30-39 MIN
- 40-49 MIN
- 50-59 MIN
- 1 HOUR
- 1.5 HOURS
- 2 HOURS
- 2.5 HOURS
- 3 HOURS
- 3.5 HOURS
- 4 HOURS
- MORE THAN 4 HOURS

**BUW-8: If today you knew the border wait would be longer, how many additional minutes of delay would have caused you to decide NOT to cross the border?**

- WOULD CROSS ANY WAY
- 1-9 MIN
- 10-19 MIN
- 20-29 MIN
- 30-39 MIN
- 40-49 MIN
- 50-59 MIN
- 1 HOUR
- 1.5 HOURS
- 2 HOURS
- 2.5 HOURS
- 3 HOURS
- 3.5 HOURS
- 4 HOURS
- MORE THAN 4 HOURS

**BUW-9: In dollars, approximately how much do you estimate you spent during this trip to Mexico? \_\_\_\_\_**

**BUW-10: [NOT ASKED] DEPENDING ON LENGTH OF QUEUE, SURVEYOR CHOOSES BETWEEN OPTION 1 & OPTION 2**

- Option 1 [SHORT LINES - JUMP TO END/SECTION O]
- Option 2 [LONGER LINES - CONTINUES TO BUW-11]

**BUW-11:** Previously, you mentioned you were crossing for work or business reasons. Would you say you were visiting Mexico on a business trip, or were you commuting to work?

Business Trip [JUMP TO BUW-18]       Commuting to Work

**BUW-12:** In what industry or sector is your job? \_\_\_\_\_

**BUW-13:** In dollars, what is your approximate monthly wage or salary? \_\_\_\_\_

**BUW-14:** Approximately how many hours per week do you work at your job? \_\_\_\_\_

**BUW-15:** If you arrived to work one hour late because of a long border wait, can you make up that one hour of work, will you be paid one hour less, or will you lose a day of work?

- Can make up hour of work
- Paycheck will be one hour less
- Will lose day of work
- Other: \_\_\_\_\_
- NA/DK

**BUW-16:** How many additional minutes or hours would your daily border wait have to be for you to decide to either stop working in Mexico and work in the US, or to move to Mexico?

[SURVEYOR TO RECORD MINUTES]

- No Change - Would keep crossing from US to work
- Additional minutes to stop working in MX: \_\_\_\_\_
- Additional minutes to move to MX: \_\_\_\_\_

**BUW-17:** [SURVEYOR INSTRUCTION: CHOOSE IF POV/CAR OR PEDESTRIAN]

- POV/CAR [JUMP TO BUW-17A]
- Pedestrian [JUMP TO BUW-17B]

**BUW-17A:** How many additional minutes or hours would your daily border wait have to be for you to decide to change from crossing the border in a car to another method of crossing - and what would that method be?:[RECORD MINUTES & METHOD, OR NO CHANGE] \_\_\_\_\_ [JUMP TO SECTION O]

**BUW-17B:** How many additional minutes or hours would your daily border wait have to be for you to decide to change from walking across the border to another method of crossing - and what would that method be?:[RECORD MINUTES & METHOD, OR NO CHANGE] \_\_\_\_\_ [JUMP TO SECTION O]

[JUMP TO SECTION O]

[FOR BUSINESS VISITORS ONLY - NOT COMMUTERS]

**BUW-18:** In what industry or sector do you work? \_\_\_\_\_

**BUW-19:** What title or type of position do you have? \_\_\_\_\_

[JUMP TO SECTION O]

## Section C: Emissions/GHG Impact Questions (10 Questions)

C-1: What is the model year of this vehicle? \_\_\_\_\_

C-2: Is your odometer in miles or kilometers?

Miles (JUMP TO C-3A)

Kilometers (JUMP TO C-3B)

C-3A: Approximately how many miles does the odometer of this vehicle currently show?: \_\_\_\_\_ [SURVEYOR ENTERS NEAREST 1,000]

C-3B: Approximately how many kilometers does the odometer of this vehicle currently show? \_\_\_\_\_ [SURVEYOR ENTERS NEAREST 1,000]

C-4: Which type of fuel does this vehicle use?

hybrid electric

Natural Gas

100% Electric

Gasoline

Diesel

DK/NA

C-5: The last time you purchased fuel for this vehicle, you purchased it in...?

Mexico

the United States

Other

DK/NA

C-6: In a typical month, approximately what percentage of the fuel you purchase for this vehicle comes from gas stations in Mexico?

0%

1-9%

10-19%

20-29%

30-39%

40-49%

50-59%

60-69%

70-79%

80-89%

90-99%

100%

DK/NA

C-7: To the best of your knowledge, the country in which this car was sold for the first time as a new car was in...:

Mexico

the United States

Other/DK/NA

C-8: In the last 12-months, has this vehicle passed a vehicle smog-check or participated in a smog check program?

Yes

No

DK/NA

C-9: In the last 3-months, how many times have you walked or used a bike to cross the border?: \_\_\_\_\_

C-10: For you to change from using a car to cross the border to walking, bicycling, or using public transportation (bus, taxi, trolley), how short of a border wait in minutes would the pedestrian crossing need to be?

Wouldn't change from car

0 delay

1-10 minutes

11-20 min

21-30 min

31-40 min

41-50 min

51-60 min

60+ min

[JUMP TO SECTION O - OBSERVATIONALS]

## Section D: CBX Economic Impact Questions

D-1: To confirm, which best describes where you live: Mexico, the US, or another country?

- Mexico (JUMP TO *Mexico-Residing Only* [DM-2])
- United States (JUMP TO *US-Residing/Intl Visitor Only* [DU-2])
- Other Country (JUMP TO *US-Residing/Intl Visitor Only* [DU-2])

### CBX - Mexico-Residing Only

DM-2: What is the principal reason for your trip today to the US? [NOTE: OPTIONS WILL BE RANDOMIZED, BUT READ IF PARTICIPANT HESITATES TO ANSWER]

- Shopping
- Work or business
- Family or Social Visit
- Medical or Health
- Recreation/Vacation
- School
- Other: \_\_\_\_\_

DM-3: [Using those same options] Is there another or secondary reason for your trip today? [NOTE: OPTIONS WILL BE RANDOMIZED]

- Shopping
- Work or business
- Family or Social Visit
- Medical or Health
- Recreation/Vacation
- School
- No Secondary Reason
- Other: \_\_\_\_\_

DM-4: During this trip, approximately how many hours or days do you plan to stay in the US?: \_\_\_\_\_ HR DAY [OPEN ENDED, WITH HOUR/DAY CHECKBOX]

DM-5: Approximately how many nights during this trip will you stay at a hotel in the US?: \_\_\_\_\_ [OPEN ENDED, WILL RECORD]

DM-6: In dollars, approximately how much do you estimate you will spend during this trip to the US? \_\_\_\_\_

DM-7: Of the amount you just mentioned, approximately how much will you spend on the following:

- D-7A - ... how much on Restaurants/Food? \_\_\_\_\_
- D-7B - ... how much on Shopping? \_\_\_\_\_
- D-7C - ... how much on Entertainment? \_\_\_\_\_
- D-7D - ... how much on Hotels? \_\_\_\_\_
- D-7E - ... how much on Public Transportation (bus, trolley, taxi)? \_\_\_\_\_
- D-7F - ... how much on Other \_\_\_\_\_

DM-8: What cities or regions of the US do you plan to visit during this trip? \_\_\_\_\_ [OPEN ENDED, RECORD CITIES/LOCATIONS MENTIONED]

DM-10: In the last 90 days, how many times have you used the CBX Cross Border Xpress airport terminal?: \_\_\_\_\_

DM-11: Before the CBX binational terminal opened, had you ever flown into the Tijuana Airport before to visit the US?

- No [JUMP TO SECTION O]
- Yes
- Unsure/DK/NA [JUMP TO SECTION O]

DM-12: In the past, when flying to visit the US before the CBX binational terminal opened, would you typically enter San Diego through a border crossing here in Tijuana, would you fly directly into the San Diego or a Southern California airport, or a mix of these? [CHOOSE MULTIPLE OPTIONS BASED ON RESPONSE]

- After flying to TIJ, would cross border from Tijuana
- Would fly directly into San Diego (SAN)
- Would fly directly into other SoCal airport

[JUMP TO SECTION O - OBSERVATIONALS]

**CBX - US-Residing/Intl Visitor Only [CURRENTLY ASSUMES NORTHBOUND INTERVIEWS IN CBX OR TIJ TERMINAL, POST-TRIP]**

DU-2: What was the principal reason for your trip to Mexico? [NOTE: OPTIONS WILL BE RANDOMIZED, BUT READ IF PARTICIPANT HESITATES TO ANSWER]]

- Shopping
- Work or business
- Family or Social Visit
- Medical or Health
- Recreation/Vacation
- School
- Other: \_\_\_\_\_

DU-3: [Using those same options] Was there another or secondary reason for your trip?

- Shopping
- Work or business
- Family or Social Visit
- Medical or Health
- Recreation/Vacation
- School
- No Secondary Reason
- Other: \_\_\_\_\_

DU-4: During this trip, approximately how many days did you stay in Mexico?: \_\_\_\_\_  
[OPEN ENDED, WILL RECORD AS APPROPRIATE]

DU-5: Approximately how many nights during this trip did you stay at a hotel in Mexico?: \_\_\_\_\_  
[OPEN ENDED, WILL RECORD]

DU-6: In dollars, approximately how much do you estimate you spent during this trip to Mexico? \_\_\_\_\_

DU-7: Of the amount you just mentioned, approximately how much will you spend on the following:

- DU-7A - ... how much on Restaurants/Food? \_\_\_\_\_
- DU-7B - ... how much on Shopping? \_\_\_\_\_
- DU-7C - ... how much on Entertainment? \_\_\_\_\_
- DU-7D - ... how much on Hotels? \_\_\_\_\_
- DU-7E - ... how much on Public Transportation (bus, trolley, taxis)? \_\_\_\_\_
- DU-7F - ... how much on Other \_\_\_\_\_

DU-8: What cities or regions of Mexico did you visit during this trip? \_\_\_\_\_ [OPEN ENDED, RECORD CITIES/LOCATIONS MENTIONED]

DU-9: In the last 90 days, how many times have you used the CBX Cross Border Xpress airport terminal?: \_\_\_\_\_

DU-10: Before the CBX binational terminal opened, had you ever flown into the Tijuana Airport before to visit Mexico?

- No [JUMP TO SECTION O]
- Yes
- Unsure/DK/NA [JUMP TO SECTION O]

DU-11: In the past, when flying to Mexico before the CBX binational terminal opened, would you typically fly from Tijuana's airport after crossing the border here in Tijuana, would you fly directly to Mexico from the San Diego or a Southern California airport, or a mix of these? [CHOOSE MULTIPLE OPTIONS BASED ON RESPONSE]

- Would fly from TIJ, after crossing border into Tijuana
- Would fly directly from San Diego (SAN)
- Would fly directly from other SoCal airport

[JUMP TO SECTION O - OBSERVATIONALS]

## Section O: Observationals (All Participants)

[SAY TO PARTICIPANT: "Thank you for participating!"]

O-1: Language used for survey

- Spanish
- English

O-2: Gender/Sex of participant

- Male
- Female

O-3: General location of survey

- San Ysidro
- Otay Mesa
- Tecate
- Calexico West
- Calexico East
- Andrade
- CBX [Inbound to SD]

O-4: Traveler type

- Pedestrian [JUMP TO O-9]
- Ped. w/Bike [JUMP TO O-9]
- Pedestrian at CBX [JUMP TO O-9]
- Car-SENTRI
- Car-ReadyLane
- Car-Regular
- Car-MedicalLane
- Bus PAX [JUMP TO O-9]

**O-5: General POV Type**

							
1. Hatchback, Coupe, Sedan	2. SUV - Compact	3. SUV - Large	4. Light Pickup Truck	5. Heavy Duty Truck	6. Mini Van	7. Commercial Van	8. Other

- Car-Hatchback/Coupe/Sedan       SUV-Compact/Crossover       SUV - Large  
 Light Truck       Heavy Duty Truck       Mini Van  
 Commercial Van       RV/Recreational Vehicle/Motor Home       Other

**O-6: License plate of vehicle**

- Baja California       California       Arizona       Sonora       South Dakota  
 Other US       Other MX       Canadian       Ped/Bus       Not Observed

**O-7: Number of adults in car**

- 1       2       3       4       5+

**O-8: Number of children in car**

- 1       2       3       4       5+

**O-9: Day Surveyed**

- Saturday       Sunday       Monday       Tuesday       Wednesday  
 Thursday       Friday

**O-10: Time Survey Started**

- 6:00AM-6:59AM       7:00AM-7:59AM       8:00AM-8:59AM       9:00AM-9:59AM  
 10:00AM-10:59AM       11:00AM-11:59AM       12:00PM-12:59PM       1:00PM-1:59PM  
 2:00PM-2:59PM       3:00PM-3:59PM       4:00PM-4:59PM       5:00PM-5:59PM  
 6:00PM-6:59PM       7:00PM-7:59PM

**O-11: Time to Complete Survey**

- 3 minutes       4 minutes       5 minutes       6 minutes       7+ minutes

**O-12: Survey Is**

- Complete       Incomplete       Test

**END**





## Final Summer Econ/GHG Questionnaire - Imperial County/MXL Metro POVs/Pedestrians Version 5

The following is the proposed final version of the survey questionnaire for the Imperial County-Mexicali Metro surveys for the study, A Fresh Look at Impacts of Border Delays at California-Baja California Ports of Entry. It incorporates input and changes following feedback and activities of the Otay Mesa Pre-Test in late-June, 2016. **Changes from the previous version are highlighted.**



### Section A: Initial Core Questions (All Participants)

A-1: **For demographic purposes**, if you are 18 or over, in what year were you born?: \_\_\_\_\_

A-2: On average, how frequently do you cross the border **to the U.S.**? [PAUSE, READ OPTIONS ONLY TO PROMPT; ONE WAY]

- |                                       |  |  |
|---------------------------------------|--|--|
| <input type="checkbox"/> 7+ times/wk  | <input type="checkbox"/> 6 times/wk        | <input type="checkbox"/> 5 times/wk        |
| <input type="checkbox"/> 4 times/wk   | <input type="checkbox"/> 3 times/wk        | <input type="checkbox"/> 2 times/wk        |
| <input type="checkbox"/> 1 times/wk   | <input type="checkbox"/> 3 times/month     | <input type="checkbox"/> 2 times/month     |
| <input type="checkbox"/> 1 time/month | <input type="checkbox"/> Less than 1/month | <input type="checkbox"/> 1st time crossing |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> DK/NA             |  |

A-3: In what city or county do you have your primary residence or do you live most days? [IF RESPONDENT STATES THAT THEY LIVE EQUALLY IN TWO LOCATIONS, MARK BOTH]

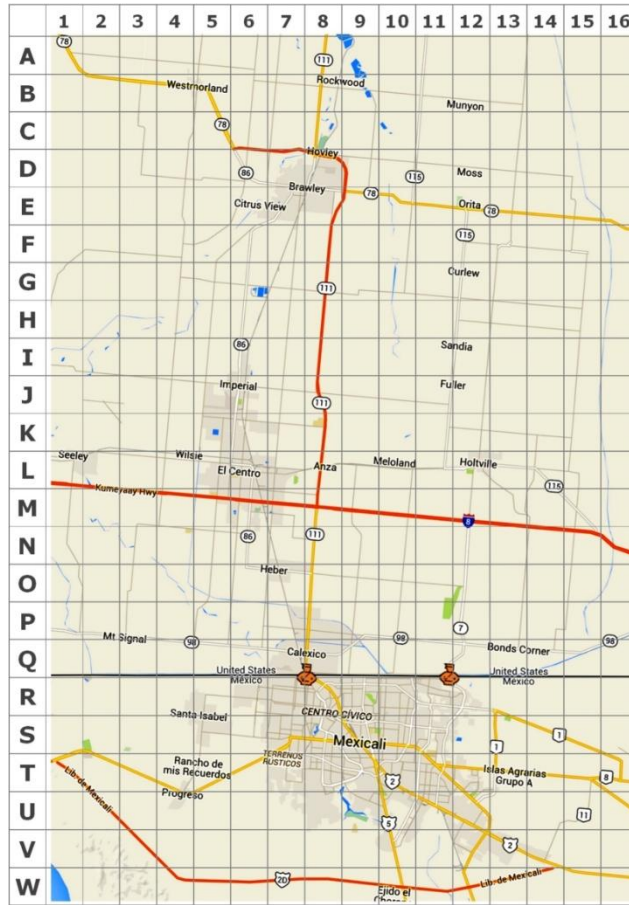
- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Tijuana               | <input type="checkbox"/> San Diego County | <input type="checkbox"/> Tecate                         |
| <input type="checkbox"/> Rosarito              | <input type="checkbox"/> Ensenada         | <input type="checkbox"/> Mexicali                       |
| <input type="checkbox"/> San Luis Rio Colorado | <input type="checkbox"/> Imperial County  | <input type="checkbox"/> Los Angeles County             |
| <input type="checkbox"/> Orange County         | <input type="checkbox"/> Riverside County | <input type="checkbox"/> Arizona [Yuma, Maricopa, Pima] |
| <input type="checkbox"/> Other: _____          | <input type="checkbox"/> DK/NA            |   |

A-4: What is the zip code or *colonia* of your principal residence?: \_\_\_\_\_

A-5a: Looking at the maps [SEE NEXT PAGE; SURVEYOR WILL HAVE LAMINATED, LETTER-SIZED VERSION, WITH LOCAL REGION ON ONE SIDE, SOCAL/AZ ON OTHER], what zip code or from approximately where did you start your trip from today?: \_\_\_\_\_ [OPEN ENDED; SURVEYOR WILL RECORD COORDINATES; IF OUTSIDE OF MAP, WILL RECORD STATED CITY/LOCATION]

A-5b: ...and approximately where will your trip end today?: \_\_\_\_\_ OPEN ENDED; SURVEYOR WILL RECORD COORDINATES OR STATED; IF OUTSIDE OF MAP, WILL RECORD CITY/LOCATION MENTIONED]

Grid IV/MXL



Grid SoCal-AZ



**A-6: [SURVEYOR INSTRUCTION: BASED ON QUOTA ASSIGNMENT, CHOOSE ECONOMIC, EMISSIONS OR CBX SURVEY]**

- IVMXL-Economics (JUMP TO SECTION B)
- IVMXL-Emissions (JUMP TO SECTION C)

**Section B: Economic Impact Questions**

**B-1: To confirm, in which country do you typically live: Mexico, the US, or another?**

- Mexico (JUMP TO *Mexico-Residing Only*)
- United States (JUMP TO *US-Residing/Intl Visitor Only*)
- Other Country (JUMP TO *US-Residing/Intl Visitor Only*)

***Mexico-Residing Only (All MX Residents)***

**B-2: What is the principal reason for your trip today to the US? [NOTE: OPTIONS WILL BE RANDOMIZED, BUT READ IF PARTICIPANT HESITATES TO ANSWER]**

- Shopping
- Work or business [JUMP TO SUBSAMPLE SECTION BW]
- Family or Social Visit
- Medical or Health
- Recreation/Vacation
- School
- Airport
- Other: \_\_\_\_\_

**B-3: [Using those same options] Is there another or secondary reason for your trip today? [NOTE: OPTIONS WILL BE RANDOMIZED]**

- Shopping
- Work or business
- Family or Social Visit
- Medical or Health
- Recreation/Vacation
- School
- Airport
- No Secondary Reason
- Other: \_\_\_\_\_

**B-4: During this trip, approximately how many hours or days do you plan to stay in the US?:**

\_\_\_\_\_ HR DAY [OPEN ENDED, **WITH HOUR/DAY CHECKBOX**]

**B-5: Before you started this trip, did you look for information on border wait times, for example on a website, radio, television, a smartphone app, or other?**

- No
- Yes-Website
- Yes-Radio
- Yes-TV
- Yes-App on Smartphone
- Yes-Other: \_\_\_\_\_

**B-6: Did that border wait time information cause you to change the time of your trip to the US or use a different border crossing?**

- No
- Yes-Change Time
- Yes-Change POE
- Yes-both Time/POE

**B-7: Before arriving at the border today, how long did you think your border wait would be?**

- 0-9 MIN
- 10-19 MIN
- 20-29 MIN
- 30-39 MIN
- 40-49 MIN
- 50-59 MIN
- 1 HOUR
- 1.5 HOURS
- 2 HOURS
- 2.5 HOURS
- 3 HOURS
- 3.5 HOURS
- 4 HOURS
- MORE THAN 4 HOURS

**B-8: If today you knew the border wait would be longer, how many additional minutes of delay would cause you to decide NOT to cross the border?**

- WOULD CROSS ANY WAY
- 1-9 MIN
- 10-19 MIN
- 20-29 MIN
- 30-39 MIN
- 40-49 MIN
- 50-59 MIN
- 1 HOUR
- 1.5 HOURS
- 2 HOURS
- 2.5 HOURS
- 3 HOURS
- 3.5 HOURS
- 4 HOURS
- MORE THAN 4 HOURS

**B-9: In dollars, approximately how much do you estimate you will spend during this trip to the US? \_\_\_\_\_**

**B-10: [NOT ASKED] DEPENDING ON LENGTH OF QUEUE, SURVEYOR CHOOSES BETWEEN OPTION 1 & OPTION 2**

- Option 1 [SHORT LINES - JUMP TO SECTION D]
- Option 2 [LONGER LINES - CONTINUES TO SECTION BX]
- Option 3 [ANSWERED 'ZERO' EXPENDITURE IN B-9, JUMP TO END/SECTION O]

**Section BX: Mexico-Residing Sub-Sample - Economics/Shopping**

**BX-1: Of the amount you just mentioned, approximately how much will you spend on the following:**

- BX-1A - ... **how much on** Groceries? \_\_\_\_\_
- BX-1B - ... **how much on** Restaurants? \_\_\_\_\_
- BX-1C - ... **how much on** Gas? \_\_\_\_\_
- BX-1D - ... **how much on** Shopping? \_\_\_\_\_
- BX-1E - ... **how much on** Entertainment? \_\_\_\_\_
- BX-1F - ... **how much on** Hotels? \_\_\_\_\_
- BX-1G - ... **how much on** Public Transportation (bus, trolley, taxi)? \_\_\_\_\_
- BX-1H - ... **how much on** Other: \_\_\_\_\_

**BX-2: Imagine you had decided NOT to take your trip to the US today because of extremely long border waits. Of the amounts you just mentioned for each category, how much would you have spent in Mexico instead of the US - or would you have spent the same in the US another day? [SURVEYOR WILL HAVE BOTH BX-1 & BX-2 ON SAME SCREEN TO ALLOW CROSS-REFERENCING]:**

Sector	Would Spend in MX Instead	Same Spend in US Other Day	<b>Zero/0 Spent on This</b>	Don't Know/NA
Groceries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restaurants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shopping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hotels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Transportation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**BX-3: In a normal month, how many times do you cross the border to go shopping in the US?:**

\_\_\_\_\_

[JUMP TO SECTION O - OBSERVATIONALS]

**Section BW: Mexico-Residing Sub-Sample - Work/Business & Economics**

**BW-3: [Using those same options] Is there another or secondary reason for your trip today?**

[NOTE: OPTIONS WILL BE RANDOMIZED]

- [ ] Shopping
- [ ] Work or business
- [ ] Family or Social Visit
- [ ] Medical or Health
- [ ] Recreation/Vacation
- [ ] School
- [ ] Airport
- [ ] No Secondary Reason
- [ ] Other: \_\_\_\_\_

**BW-4: During this trip, approximately how many hours or days do you plan to stay in the US?:**

\_\_\_\_\_ HR DAY [OPEN ENDED, **WITH HOUR/DAY CHECKBOX**]

**BW-5: Before you started this trip, did you look for information on border wait times, for example on a website, radio, television, a smartphone app, or other?**

- No [JUMP TO BW-7]
- Yes-Website
- Yes-Radio
- Yes-TV
- Yes-App on Smartphone
- Yes-Other:\_\_\_\_\_

**BW-6: Did that border wait time information cause you to change the time of your trip to the US or use a different border crossing?**

- No
- Yes-Change Time
- Yes-Change POE
- Yes-both Time/POE

**BW-7: Before arriving at the border today, how long did you think your border wait would be?**

- 0-9 MIN
- 10-19 MIN
- 20-29 MIN
- 30-39 MIN
- 40-49 MIN
- 50-59 MIN
- 1 HOUR
- 1.5 HOURS
- 2 HOURS
- 2.5 HOURS
- 3 HOURS
- 3.5 HOURS
- 4 HOURS
- MORE THAN 4 HOURS

**BW-8: If today you knew the border wait would be longer, how many additional minutes of delay would cause you to decide NOT to cross the border?**

- WOULD CROSS ANY WAY
- 1-9 MIN
- 10-19 MIN
- 20-29 MIN
- 30-39 MIN
- 40-49 MIN
- 50-59 MIN
- 1 HOUR
- 1.5 HOURS
- 2 HOURS
- 2.5 HOURS
- 3 HOURS
- 3.5 HOURS
- 4 HOURS
- MORE THAN 4 HOURS

BW-9: In dollars, approximately how much do you estimate you will spend today in your trip to the US? \_\_\_\_\_

BW-10: [NOT ASKED] DEPENDING ON LENGTH OF QUEUE, SURVEYOR CHOOSES BETWEEN OPTION 1 & OPTION 2

- Option 1 [SHORT LINES - JUMP TO END/SECTION D]
- Option 2 [LONGER LINES - CONTINUES TO BW-11]

BW-11: Previously, you mentioned you were crossing for work or business reasons. Would you say you are visiting the US on a business trip, or you are commuting to work?

- Business Trip [JUMP TO BW-18]
- Commuting to Work

BW-12: In what industry or sector is your job? \_\_\_\_\_

BW-13: In dollars, what is your approximate monthly wage or salary? \_\_\_\_\_

BW-14: Approximately how many hours per week do you work at your job? \_\_\_\_\_

BW-15: If you arrive to work one hour late because of a long border wait, can you make up that one hour of work, will you be paid one hour less, or will you lose a day of work?

- Can make up hour of work
- Paycheck will be one hour less
- Will lose day of work
- Other: \_\_\_\_\_
- NA/DK

BW-16: How many additional minutes or hours would your daily border wait have to be for you to decide to either stop working in the US and work in Mexico, or to move to the US? [SURVEYOR TO RECORD MINUTES]

- No Change - Would keep crossing from MX to work
- Additional minutes to stop working in US: \_\_\_\_\_
- Additional minutes to move to US: \_\_\_\_\_

**BW-17: [SURVEYOR INSTRUCTION: CHOOSE IF POV/CAR OR PEDESTRIAN]**

- POV/CAR [JUMP TO BW-17A]
- Pedestrian [JUMP TO BW-17B]

**BW-17A:** How many additional minutes or hours would your daily border wait have to be for you to decide to change from crossing the border in a car to another method of crossing - and what would that method be?:[RECORD MINUTES & METHOD, OR NO CHANGE] \_\_\_\_\_ [JUMP TO SECTION D]

**BW-17B:** How many additional minutes or hours would your daily border wait have to be for you to decide to change from walking across the border to another method of crossing - and what would that method be?:[RECORD MINUTES & METHOD, OR NO CHANGE] \_\_\_\_\_ [JUMP TO SECTION D]

[FOR BUSINESS VISITORS ONLY - NOT COMMUTERS]

BW-18: In what industry or sector do you work? \_\_\_\_\_

BW-19: What title or type of position do you have? \_\_\_\_\_

[JUMP TO SECTION D]

**Section BU: US-Residing/Intl Visitor Only [NOTE: FOR US-RESIDING AND NON-US/NON-MX (“INTERNATIONAL”) VISITORS]**

**BU-2: What was the principal reason for your trip to Mexico? [NOTE: OPTIONS WILL BE RANDOMIZED, BUT READ IF PARTICIPANT HESITATES TO ANSWER]**

- Shopping
- Work or business [JUMP TO SUBSAMPLE SECTION BUW]
- Family or Social Visit
- Medical or Health
- Recreation/Vacation
- School
- Airport
- Other: \_\_\_\_\_

**BU-3: [Using those same options] Was there another or secondary reason for your trip to Mexico? [NOTE: OPTIONS WILL BE RANDOMIZED]**

- Shopping
- Work or business
- Family or Social Visit
- Medical or Health
- Recreation/Vacation
- School
- Airport
- No Secondary Reason
- Other: \_\_\_\_\_

**BU-4: During this trip, approximately how many hours or days did you stay in Mexico?:**  
\_\_\_\_\_ HR DAY [OPEN ENDED, **WITH HOUR/DAY CHECKBOX**]

**BU-5: Before you started your trip to the US, did you look for information on the border wait times, like on a website, radio, television, a smartphone app, or other?**

- No
- Yes-Website
- Yes-Radio
- Yes-TV
- Yes-App on Smartphone
- Yes-Other: \_\_\_\_\_

**BU-6: Did that border wait times information cause you to change the time of your return to the US or to use a different border crossing?**

- No
- Yes-Change Time
- Yes-Change POE
- Yes-both Time/POE

**BU-7: Before arriving at the border today, how long did you think your border wait would be?**

- 0-9 MIN
- 10-19 MIN
- 20-29 MIN
- 30-39 MIN



- 40-49 MIN
- 50-59 MIN
- 1 HOUR
- 1.5 HOURS
- 2 HOURS
- 2.5 HOURS
- 3 HOURS
- 3.5 HOURS
- 4 HOURS
- MORE THAN 4 HOURS

**BU-8: If today you knew the border wait would be longer, how many additional minutes of delay would have caused you to decide NOT to cross the border?**

- WOULD CROSS ANY WAY
- 1-9 MIN
- 10-19 MIN
- 20-29 MIN
- 30-39 MIN
- 40-49 MIN
- 50-59 MIN
- 1 HOUR
- 1.5 HOURS
- 2 HOURS
- 2.5 HOURS
- 3 HOURS
- 3.5 HOURS
- 4 HOURS
- MORE THAN 4 HOURS

**BU-9: In dollars, approximately how much do you estimate you spent during this trip to Mexico? \_\_\_\_\_**

**BU-10: [NOT ASKED] DEPENDING ON LENGTH OF QUEUE, SURVEYOR CHOOSES BETWEEN OPTION 1 & OPTION 2**

- Option 1 [SHORT LINES - JUMP TO END/SECTION D]
- Option 2 [LONGER LINES - CONTINUES TO SECTION BUX]
- Option 3 [ANSWERED 'ZERO' EXPENDITURE IN BU-9, JUMP TO END/SECTION D]

**Section BUX: US/Intl-Residing Sub-Sample - Economics/Shopping**

**BUX-1: Of the amount you just mentioned, approximately how much did you spend in Mexico on the following:**

- BUX-1A - ... how much on Groceries? \_\_\_\_\_
- BUX-1B - ... how much on Restaurants? \_\_\_\_\_
- BUX-1C - ... how much on Gas? \_\_\_\_\_
- BUX-1D - ... how much on Shopping? \_\_\_\_\_
- BUX-1E - ... how much on Entertainment? \_\_\_\_\_
- BUX-1F - ... how much on Hotels? \_\_\_\_\_
- BUX-1G - ... how much on Public Transportation (bus, trolley, taxis)? \_\_\_\_\_
- BUX-1H - ... how much on Other: \_\_\_\_\_



**BUX-2:** Imagine you had decided NOT to take your trip to Mexico because of extremely long border waits. Of the amounts you just mentioned for each category, how much would you have spent in the US instead of in Mexico - or would you have spent the same in Mexico another day? [SURVEYOR WILL HAVE BOTH BUX-1 & BUX-2 ON SAME SCREEN TO ALLOW CROSS-REFERENCING]:

Sector	Would Spend in US Instead	Same Expend in MX Other Day	Zero/0 Spent on This	Don't Know/NA
Groceries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restaurants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shopping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hotels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Transportation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**BUX-3:** In the last three months, how many times have you crossed the California-Baja California border **northbound** to make a trip similar to the one you are returning from now?:

\_\_\_\_\_

[JUMP TO SECTION **D** - OBSERVATIONALS]

**Section BUW: US-Residing/Intl Visitor Sub-Sample - Work/Business & Economics**

**BUW-3:** [Using those same options] Was there another or secondary reason for your trip to Mexico? [NOTE: OPTIONS WILL BE RANDOMIZED]

- Shopping
- Work or business
- Family or Social Visit
- Medical or Health
- Recreation/Vacation
- School
- Airport
- No Secondary Reason
- Other: \_\_\_\_\_

**BUW-4:** During this trip, approximately how many hours or days did you stay in Mexico?:

\_\_\_\_\_ HR DAY [OPEN ENDED, WITH HOUR/DAY CHECKBOX]

**BUW-5:** Before you started this trip to the US, did you look for information on border wait times, for example on a website, radio, television, a smartphone app, or other?

- No [JUMP TO BUW-7]
- Yes-Website
- Yes-Radio
- Yes-TV
- Yes-App on Smartphone
- Yes-Other: \_\_\_\_\_



**BUW-6: Did that border wait times information cause you to change the time of your return to the US or to use a different border crossing?**

- No
- Yes-Change Time
- Yes-Change POE
- Yes-both Time/POE

**BUW-7: Before arriving at the border today, how long did you think your border wait would be?**

- 0-9 MIN
- 10-19 MIN
- 20-29 MIN
- 30-39 MIN
- 40-49 MIN
- 50-59 MIN
- 1 HOUR
- 1.5 HOURS
- 2 HOURS
- 2.5 HOURS
- 3 HOURS
- 3.5 HOURS
- 4 HOURS
- MORE THAN 4 HOURS

**BUW-8: If today you knew the border wait would be longer, how many additional minutes of delay would have caused you to decide NOT to cross the border?**

- WOULD CROSS ANY WAY
- 1-9 MIN
- 10-19 MIN
- 20-29 MIN
- 30-39 MIN
- 40-49 MIN
- 50-59 MIN
- 1 HOUR
- 1.5 HOURS
- 2 HOURS
- 2.5 HOURS
- 3 HOURS
- 3.5 HOURS
- 4 HOURS
- MORE THAN 4 HOURS

**BUW-9: In dollars, approximately how much do you estimate you spent during this trip to Mexico? \_\_\_\_\_**

**BUW-10: [NOT ASKED] DEPENDING ON LENGTH OF QUEUE, SURVEYOR CHOOSES BETWEEN OPTION 1 & OPTION 2**

- Option 1 [SHORT LINES - JUMP TO END/SECTION D]
- Option 2 [LONGER LINES - CONTINUES TO BUW-11]

**BUW-11:** Previously, you mentioned you were crossing for work or business reasons. Would you say you were visiting Mexico on a business trip, or were you commuting to work?

Business Trip [JUMP TO BUW-18]       Commuting to Work

**BUW-12:** In what industry or sector is your job? \_\_\_\_\_

**BUW-13:** In dollars, what is your approximate monthly wage or salary? \_\_\_\_\_

**BUW-14:** Approximately how many hours per week do you work at your job? \_\_\_\_\_

**BUW-15:** If you arrived to work one hour late because of a long border wait, can you make up that one hour of work, will you be paid one hour less, or will you lose a day of work?

- Can make up hour of work
- Paycheck will be one hour less
- Will lose day of work
- Other: \_\_\_\_\_
- NA/DK

**BUW-16:** How many additional minutes or hours would your daily border wait have to be for you to decide to either stop working in Mexico and work in the US, or to move to Mexico?

[SURVEYOR TO RECORD MINUTES]

- No Change - Would keep crossing from US to work
- Additional minutes to stop working in MX: \_\_\_\_\_
- Additional minutes to move to MX: \_\_\_\_\_

**BUW-17:** [SURVEYOR INSTRUCTION: CHOOSE IF POV/CAR OR PEDESTRIAN]

- POV/CAR [JUMP TO BUW-17A]
- Pedestrian [JUMP TO BUW-17B]

**BUW-17A:** How many additional minutes or hours would your daily border wait have to be for you to decide to change from crossing the border in a car to another method of crossing - and what would that method be?:[RECORD MINUTES & METHOD, OR NO CHANGE] \_\_\_\_\_ [JUMP TO SECTION D]

**BUW-17B:** How many additional minutes or hours would your daily border wait have to be for you to decide to change from walking across the border to another method of crossing - and what would that method be?:[RECORD MINUTES & METHOD, OR NO CHANGE] \_\_\_\_\_ [JUMP TO SECTION D]

[FOR BUSINESS VISITORS ONLY - NOT COMMUTERS]

**BUW-18:** In what industry or sector do you work? \_\_\_\_\_

**BUW-19:** What title or type of position do you have? \_\_\_\_\_

[JUMP TO SECTION D]

## Section C: Emissions/GHG Impact Questions (10 Questions)

C-1: What is the model year of this vehicle? \_\_\_\_\_

C-2: Is your odometer in miles or kilometers?

Miles (JUMP TO C-3A)

Kilometers (JUMP TO C-3B)

C-3A: Approximately how many miles does the odometer of this vehicle currently show?: \_\_\_\_\_ [SURVEYOR ENTERS NEAREST 1,000]

C-3B: Approximately how many kilometers does the odometer of this vehicle currently show? \_\_\_\_\_ [SURVEYOR ENTERS NEAREST 1,000]

C-4: Which type of fuel does this vehicle use?

hybrid electric

Natural Gas

100% Electric

Gasoline

Diesel

DK/NA

C-5: The last time you purchased fuel for this vehicle, you purchased it in...?

Mexico

the United States

Other

DK/NA

C-6: In a typical month, approximately what percentage of the fuel you purchase for this vehicle comes from gas stations in Mexico?

0%

1-9%

10-19%

20-29%

30-39%

40-49%

50-59%

60-69%

70-79%

80-89%

90-99%

100%

DK/NA

C-7: To the best of your knowledge, the country in which this car was sold for the first time as a new car was in...:

Mexico

the United States

Other/DK/NA

C-8: In the last 12-months, has this vehicle passed a vehicle smog-check or participated in a smog check program?

Yes

No

DK/NA

C-9: In the last 3-months, how many times have you walked or used a bike to cross the border?: \_\_\_\_\_

C-10: For you to change from using a car to cross the border to walking, bicycling, or using public transportation (bus, taxi, trolley), how short of a border wait in minutes would the pedestrian crossing need to be?

Wouldn't change from car

0 delay

1-10 minutes

11-20 min

21-30 min

31-40 min

41-50 min

51-60 min

60+ min

[JUMP TO SECTION D]

## Section D: ICTC Tolling Questions

[INTRODUCTION] If an express lane existed at the Calexico East border crossing with a delay of twenty minutes or less...

D-1: ...how much would you pay each time to use that express lane at Calexico East? [MARK NEAREST AMOUNT]

- Wouldn't Pay/Zero (JUMP TO SECTION O)
- 50 cents
- 75 cents
- \$1
- \$1.50
- \$2
- \$2.50
- \$3
- \$3.50
- \$4
- \$4.50
- \$5 or more

D-2: ...and how many times per month would you use it northbound? \_\_\_\_\_

[JUMP TO SECTION O - OBSERVATIONALS]

## Section O: Observationals (All Participants)

[SAY TO PARTICIPANT: "Thank you for participating!"]

O-1: Language used for survey

- Spanish
- English

O-2: Gender/Sex of participant

- Male
- Female


O-3: General location of survey

- San Ysidro
- Calexico West
- Otay Mesa
- Calexico East
- Tecate
- Andrade
- CBX [Inbound to SD]

O-4: Traveler type

- Pedestrian [JUMP TO O-9]
- Ped. w/Bike [JUMP TO O-9]
- Pedestrian at CBX [JUMP TO O-9]
- Car-SENTRI
- Car-Regular
- Car-ReadyLane
- Car-MedicalLane
- Bus PAX [JUMP TO O-9]

**O-5: General POV Type**

							
1. Hatchback, Coupe, Sedan	2. SUV - Compact	3. SUV - Large	4. Light Pickup Truck	5. Heavy Duty Truck	6. Mini Van	7. Commercial Van	8. Other

- Car-Hatchback/Coupe/Sedan       SUV-Compact/Crossover       SUV - Large  
 Light Truck       Heavy Duty Truck       Mini Van  
 Commercial Van       RV/Recreational Vehicle/Motor Home       Other

**O-6: License plate of vehicle**

- Baja California       California       Arizona       Sonora       South Dakota  
 Other US       Other MX       Canadian       Ped/Bus       Not Observed

**O-7: Number of adults in car**

- 1       2       3       4       5+

**O-8: Number of children in car**

- 1       2       3       4       5+

**O-9: Day Surveyed**

- Saturday       Sunday       Monday       Tuesday       Wednesday  
 Thursday       Friday

**O-10: Time Survey Started**

- 6:00AM-6:59AM       7:00AM-7:59AM       8:00AM-8:59AM       9:00AM-9:59AM  
 10:00AM-10:59AM       11:00AM-11:59AM       12:00PM-12:59PM       1:00PM-1:59PM  
 2:00PM-2:59PM       3:00PM-3:59PM       4:00PM-4:59PM       5:00PM-5:59PM  
 6:00PM-6:59PM       7:00PM-7:59PM

**O-11: Time to Complete Survey**

- 3 minutes       4 minutes       5 minutes       6 minutes       7+ minutes

**O-12: Survey Is**

- Complete       Incomplete       Test

**END**



## Final Econ/GHG Questionnaire - Commercial Truck/Bus Version 5 (Summer Final)

PLEASE SELECT:      Truck [JUMP TO SECTION T]  
                           Bus [JUMP TO SECTION U]

### Section T: For Commercial Trucks Only

**T-1: Which of these best describes the ownership of this vehicle?**

- Owner/operator of single unit    Part of Fleet 2-9 Trucks  
 Part of Fleet 10+ Trucks

**T-2: What general type of cargo or products are you currently transporting?** [MULTIPLE ANSWER; READ OPTIONS IF PAUSE]

- Electronics/Electrical Goods  
 Machinery or Appliances  
 Automotive Components or Vehicles  
 Fresh Produce  
 Plastic Goods  
 Paper or Printed Products  
 Metal Products  
 Processed Foods, Meat or Dairy Products  
 Grains, Nuts or Flour Products  
 Textiles or Apparel Products  
 Furniture  
 Rubber Products  
 Chemical Products  
 Wood Products (non-furniture)  
 Other (describe) \_\_\_\_\_  
 Don't Know/NA

**T-3: What is this vehicle's model year?:** \_\_\_\_\_ [OPEN - MARK "DK" IF UNSURE]

**T-4: What is the model year of the engine?:** \_\_\_\_\_ [OPEN - MARK "DK" IF UNSURE]

**T-5: Is your odometer in miles or kilometers?**

- Miles (JUMP TO T-6a)                    Kilometers (JUMP TO T-6b)

**T-6a: Approximately how many miles does the odometer of this vehicle currently show?**  
[NOTE: INPUT NEAREST 1,000 - then JUMP TO T-7]: \_\_\_\_\_

**T-6b: Approximately how many kilometers does the odometer of this vehicle currently show?** [NOTE: INPUT NEAREST 1,000]: \_\_\_\_\_

**T-7: What State or States are this vehicle registered in?** [READ, SELECT MULTIPLE]

- Baja California    California    Sonora    Arizona    Other: \_\_\_\_\_

**T-8: This vehicle is FAST certified?**

- Yes            No            DK/NA

**T-9: On this shipment, the vehicle was...?** [IF TRACTOR ONLY, JUST MARK - DON'T ASK]

- Loaded (with cargo)    Empty (no cargo)    Tractor-only



**T-10: What is this truck's Gross Vehicle Weight Rating (GVWR)?**

- 10,000 pounds and less     10,001-26,000 pounds     26,001-33,000 pounds  
 33,001+ pounds

**T-11: In the last 30-days, how many times have long border delays caused a truck you were driving to arrive too late to Aduanas for a shipment to cross that day, or caused the dispatcher / manager to cancel a border-crossing trip for a truck you were driving?**

- 0  
 1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10+

[JUMP TO SECTION V]

### Section U: For Bus/Transit Vehicles Only

**U-1: Which of these best describes the ownership of this vehicle?**

- Owner/operator of single unit     Part of Fleet 2-9 Buses  
 Part of Fleet 10+ Buses

**U-2: What is this vehicle's model year?:** \_\_\_\_\_ [OPEN -MARK "DK" IF UNSURE]

**U-3: What is the model year of the engine?:** \_\_\_\_\_ [OPEN - MARK "DK" IF UNSURE]

**U-4: Is your odometer in miles or kilometers?**

- Miles (JUMP TO U-5a)                       Kilometers (JUMP TO U-5b)

**U-5a: Approximately how many miles does the odometer of this vehicle currently show?**

[NOTE: INPUT NEAREST 1,000 - then JUMP TO U-6]: \_\_\_\_\_

**U-5b: Approximately how many kilometers does the odometer of this vehicle currently show? [NOTE: INPUT NEAREST 1,000]:** \_\_\_\_\_

**U-6: What State or States are this vehicle registered in? [READ, SELECT MULTIPLE]**

- Baja California     Sonora     California                       Arizona     Other: \_\_\_\_\_

**U-7: On this trip, approximately how many passengers is your vehicle carrying?:**

\_\_\_\_\_

### Section V: For All Participants

**V-1: Does this vehicle use diesel, gasoline, or other? [IF OTHER, ASK WHICH TYPE]**

- Diesel     Gasoline     Hybrid     Natural Gas                       100% Electric [JUMP TO V-4a]  
 Other: \_\_\_\_\_     DK/NA

V-2: The last time you purchased fuel for this vehicle, you purchased it in...?

Mexico     the United States     Other     DK/NA

V-3: In a typical month, approximately what percentage of the fuel used for this vehicle comes from gas stations in Mexico?

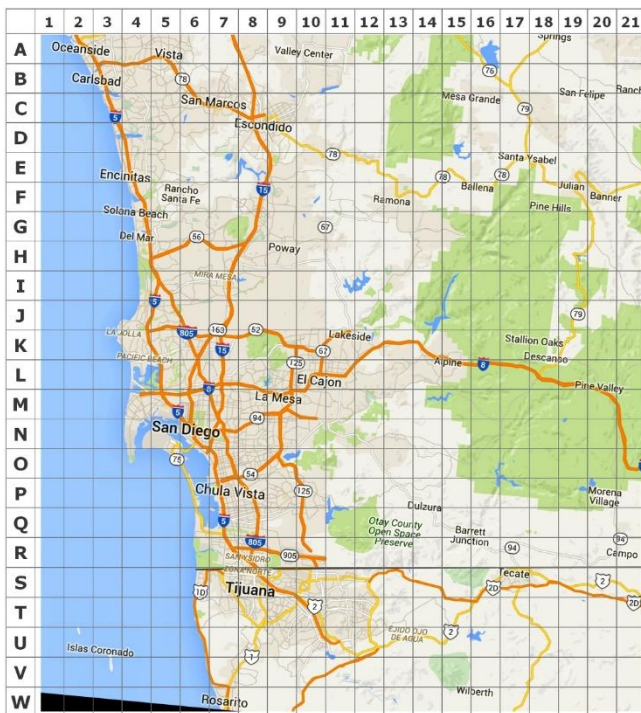
0%     1-9%     10-19%     20-29%     30-39%     40-49%  
 50-59%     60-69%     70-79%     80-89%     90-99%     100%  
 DK/NA

V-4a: Looking at the map, what zip code, or approximately where did you start your trip from?: \_\_\_\_\_ [OPEN ENDED; SURVEYOR WILL RECORD ZIP CODE OR MAP COORDINATES; IF OUTSIDE OF MAP, WILL RECORD CITY/LOCATION OR ZIP CODE]

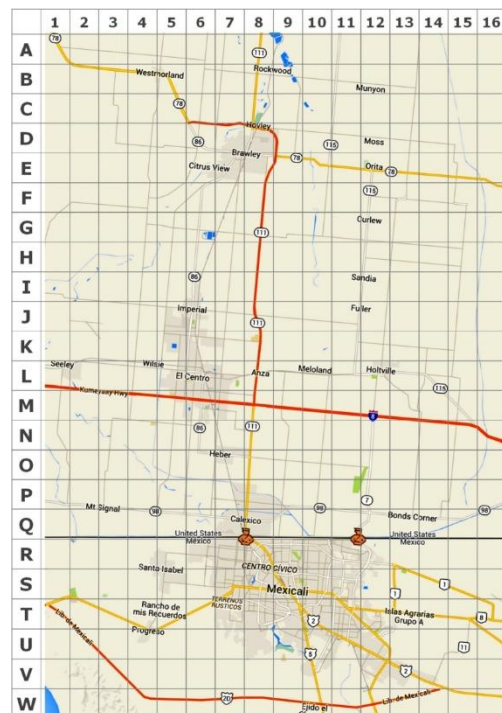
V-4b: ...and approximately where will your trip end, or what zip code will your delivery be?: \_\_\_\_\_ [OPEN ENDED; SURVEYOR WILL RECORD COORDINATES OR ZIP CODE IF PROVIDED; IF OUTSIDE OF MAP, WILL RECORD CITY/LOCATION STATED]

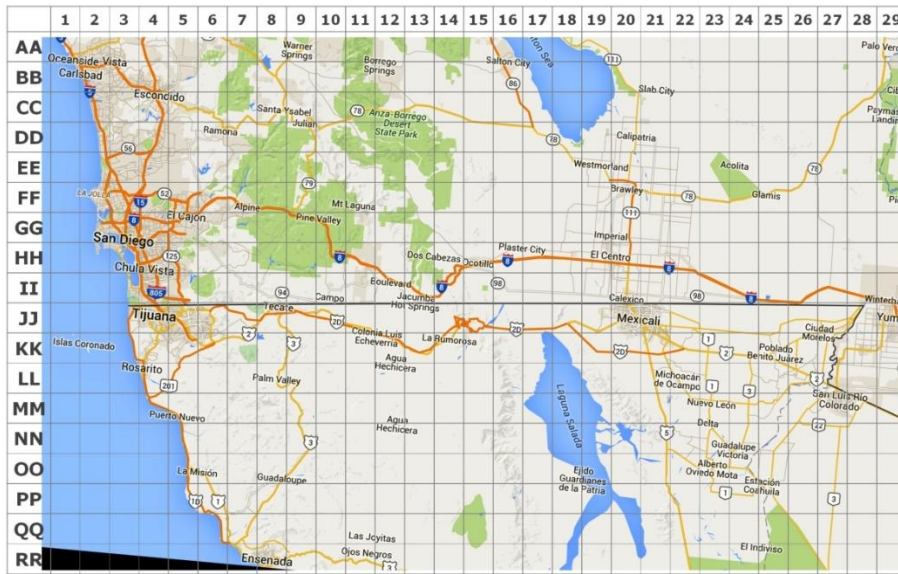
[SURVEYOR WILL HAVE LAMINATED, LETTER-SIZED VERSION WITH SD/TJ FOR SURVEYS IN SD/TJ METRO, IMPERIAL/MXL FOR IVMXL METRO; and SoCal/BAJA REGION ON BACK; POST-SURVEY COORDINATES WILL INCLUDE "SD" OR "IV" FOR ANALYSIS]

Grid SD/TJ



Grid IV/MXL





**V-5: Before you started this trip, did you look for information on border wait times, like on a website, radio, a smartphone app, from the dispatcher, from other drivers, or other?**

[RECORD MULTIPLE IF GIVEN]

- No
- Yes-Website
- Yes-Radio
- Yes-TV
- Yes-App on smartphone
- Yes-Dispatcher
- Yes-Other drivers
- Yes-Other:\_\_\_\_\_

**V-6: Before arriving at the border today, how long did you think your border wait would be?**

- 0-9 MIN
- 10-19 MIN
- 20-29 MIN
- 30-39 MIN
- 40-49 MIN
- 50-59 MIN
- 1 HOUR
- 1.5 HOURS
- 2 HOURS
- 2.5 HOURS
- 3 HOURS
- 3.5 HOURS
- 4 HOURS
- MORE THAN 4 HOURS

**V-7: If today you knew the border wait would be longer, how many additional minutes of delay would cause you to decide NOT to cross the border - or would you cross anyway?**

- WOULD CROSS ANY WAY
- 1-9 MIN
- 10-19 MIN
- 20-29 MIN

- 30-39 MIN
- 40-49 MIN
- 50-59 MIN
- 1 HOUR
- 1.5 HOURS
- 2 HOURS
- 2.5 HOURS
- 3 HOURS
- 3.5 HOURS
- 4 HOURS
- MORE THAN 4 HOURS

V-8: In dollars, approximately how much do you believe you will spend today in the US?

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[THANK PARTICIPANT, FILL OUT OBSERVATIONALS]



**Section OC: Observationals - Commercial [All Participants]**

**OC-1 - Language used for survey**

Spanish  English

**OC-2 - Gender/Sex of participant**

Male  Female

**OC-3 - General location of survey**

- San Ysidro - Bus [JUMP TO OC-8]
- Otay Mesa - Bus [JUMP TO OC-8]
- Calexico East - Bus [JUMP TO OC-8]
- Otay Mesa Commercial
- Tecate Commercial
- Calexico East Commercial

**OC-4: Number of axels (count tractor and container/trailer)**

2  3  4  5  6+

**OC-5: Number of tires**

4  6  8+

**OC-6: Refrigerated vehicle?**



Yes  No  DK/NA

**OC-7: Single-unit or combination**



Single unit  Combination (with trailer/separate container)  
 Tractor only

**OC-8: General type of vehicle**


**Class 8: Tractor 3+ axles; or w/ Trailer 5+ axles**

3 axle Tractor Only 	3 axle tractor w/ trailer, container, tank, etc 
--	--

**Class 7: Tractor 2 axles; or w/ Trailer 3-4 axles**

2 axle Tractor Only 	2 axle tractor w/ trailer, container; 3-4 axle truck 
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**Class 3-6: 2 axles; box truck/combo**

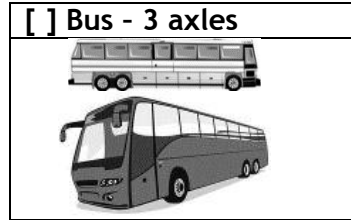
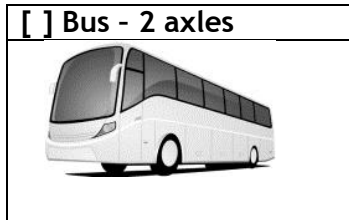


**Van**



**2 axles shuttlebus**





Other:

**OC-9 - Day surveyed**

Saturday  Sunday  Monday  Tuesday  Wednesday  
 Thursday  Friday

**OC-10 - Time survey started**

06:00AM-06:59AM  07:00AM-07:59AM  8:00AM-08:59AM  09:00AM-09:59AM  
 10:00AM-10:59AM  11:00AM-11:59AM  12:00PM-12:59PM  1:00PM-1:59PM  
 2:00PM-2:59PM  3:00PM-3:59PM  4:00PM-4:59PM  5:00PM-5:59PM  
 6:00PM-6:59PM  7:00PM-7:59PM

**OC-11 - Time to complete survey**

3 minutes  4 minutes  5 minutes  6 minutes  7+ minutes

**OC-12 - Survey is**

Complete  Incomplete  Test

END