

Welcome!

Behind the Numbers: Exploring Transportation Statistics
BTS Webinar Series

April 26, 2016

BTS Border Crossing/Entry Data and TransBorder Freight Data

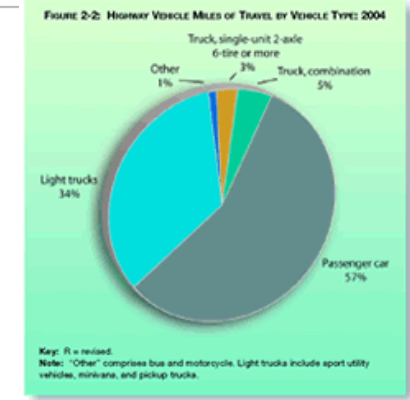
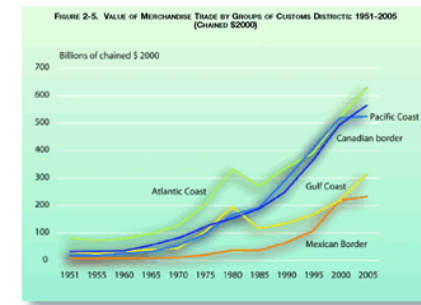
Steven Beningo



U.S. Department
of Transportation

Bureau of
Transportation Statistics

April 26, 2016



Agenda

- Introduction to the Border
- TransBorder Freight Data
- Border Crossing/Entry Data



U.S. – Canada Border

- 5,525 Miles/8,891 Kilometers in Length
- 11 U.S. States Border by Land (includes bridges over rivers), 2 additional States have Borders in Lake Erie.
- 7 Canadian Provinces and the Yukon Territory are on the Border.



U.S. – Mexico Border

- 1,954 Miles/3,145 Kilometers in Length
- 4 U.S. States Border Mexico
- 6 Mexican States are on the Border.



TransBorder Freight Data



**Bureau of Transportation Statistics
U.S. Department of Transportation**

TransBorder Freight Data

- Data collected as part of required import and export trade filing.
- Census extracts and tabulates the TransBorder Freight Data from the official U.S. foreign trade statistics for BTS.
- TransBorder Freight Data are the exclusive source of trade data by land mode of transportation.

Data Elements

- Mode of Transportation
- Value
- Weight (U.S. imports only)
- Commodity Classification (2-digit Harmonized Tariff System)
- State and Province in U.S., Canada and Mexico
- Port of Entry or Exit
- Freight Charges (raw data only)

Data Tabulation and Limitations

Data can be tabulated by:

- State and Port
- State and Commodity
- Port and Commodity

- Cannot combine all three - State, Port and Commodity in TransBorder, however these can now be combined in the Freight Analysis Framework, Version 4

Main TransBorder Interface

INSTRUCTIONS: Make your selections using the dropdown boxes, you can make multiple selections in the boxes by clicking on selections while holding down the **Shift** key (continuous) or the **Ctrl** key (discontinuous), and then push submit button. Use the scroll bar or mouse wheel to page down to see the results (table). The system will retain your selections in order to speed up the process if you want to change one or more items for another query. [Click here for step-by-step help.](#)

U.S. State	Trading Partner	Year	Month
Aggregate all U.S. States	NAFTA (Canada and Mexico)	All Years Detail	Annual Summary
All US States Detail	Canada	2015 (Jan-Dec)	All 12 Months Detail
Alabama (AL)	Mexico	2014	January
Alaska (AK)	All Canada Provinces Detail	2013	February
Arkansas (AR)	All Mexico States Detail	2012	March
Arizona (AZ)	Alberta (CAN)	2011	April
California (CA)	British Columbia (CAN)	2010	May
Colorado (CO)	Manitoba (CAN)	2009	June
Customs Port	Mode	Measure	Data Display
Delaware (DE)	Aggregate All Modes	Value (in US Dollars)	Actual
District of Columbia (DC)	Aggregate All Except AV	Weight (in Pounds)	In Thousands
Florida (FL)	Aggregate All Surface Modes (TF)	Weight (in Kilograms)	In Millions
Georgia (GA)	--Truck (T)	Weight (in US Short Tons)	In Billions
Hawaii (HI)	--Rail (R)	Trade Type	Output Option
Idaho (ID)	--Pipeline (P)		Table w/o % Change
Iowa (IA)	Aggregate All AV Modes		Table w/ % Change
Illinois (IL)	--Air (A)	Total Trade	Other Options
Indiana (IN)	--Vessel (V)	--Exports	Suppress Zero and NA
Kansas (KS)	Aggregate MOF Modes	--Imports	Show Commodity Desc
Kentucky (KY)	--Mail (M)		
Louisiana (LA)	--Other (O)		
Maine (ME)	--Foreign Trade Zones (F)		
Port Name, Code and Type	Commodity		
~Make Selection Below~	~No Selection Here~		
Eastport - Idaho			
Porthill - Idaho			

Table and File Download Option Small Data Query - Show Table with File Download Option

Submit Reset

TransBorder Results

List of Tables

Clicking any link below will bring you to the selected table.

[Table 1: Trade between USA and Canada/Mexico \(Annual\)](#)

Table 1: Trade between USA and Canada/Mexico (Annual)

[Back to top](#)

Suppress zero and NA values

Rotate Table(s)

Download the tables (csv)

[Go to bottom](#)

Value (in Actual of US Dollars)

Trade Type and Mode	Trader	Partner	Port/District Code	Port/District Description	2014	2015	Percent Change between 2014-2015
Total Trade Value by Truck	USA	CANADA	3302	Eastport, Idaho	2,763,220,478	2,421,161,206	-12.38
Total Trade Value by Truck	USA	CANADA	3308	Porthill, Idaho	35,239,224	27,162,039	-22.92

Notes: Surface modes are defined as truck, rail and pipeline. For additional detail refer to the metadata.

Numbers may not add to totals due to rounding if the "Actual" option is not selected in the Data Display box. Percent changes are based on numbers prior to rounding (if applicable).

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, TransBorder Freight Data.

Report created: Fri Mar 04 08:23:41 EST 2016

Instructions for file download and printing

[\[Show\]](#)

[Back to top](#)

[Click here to preview and print](#)

[How to make note section appears in one cell or multiple merged cells in Excel or Access for the download .csv file](#)

Transshipment Data

- Transshipments are shipments of merchandise from a country of origin to a country of ultimate destination through an intermediary country.
- BTS transshipment data are annual data that provide information on U.S. international merchandise transshipped through an intermediary country (Canada or Mexico) prior to reaching its ultimate destination, as well as shipments from their ultimate origin through Canada or Mexico to the U.S.

Transshipment Interface

Trade Type	Trading Partner	U.S. Port (Entry/Exit)	U.S. State (Import/Export)
Total Trade	Anguilla	Newark - New Jersey	Michigan (MI)
-Exports	Antigua and Barbuda	John F. Kennedy Airport - New	Minnesota (MN)
-Imports	Argentina	Baltimore - Maryland	Mississippi (MS)
Data Element	Armenia	Winston-Salem - North Carolin	Missouri (MO)
State - Port Table	Aruba	Greenville-Spartanburg - Soutl	Montana (MT)
State - Commodity Table	Australia	Atlanta - Georgia	Nebraska (NE)
Port - Commodity Table	Austria	Gulfport - Mississippi	Nevada (NV)
Transshipment Country	Azerbaijan	Memphis - Tennessee	New Hampshire (NH)
Canada	Bahamas	Nashville - Tennessee	New Jersey (NJ)
Mexico	Bahrain	Brownsville - Texas	New Mexico (NM)
Mode of Transportation	Bangladesh	Del Rio - Texas	New York (NY)
Aggregate all Modes	Barbados	Eagle Pass - Texas	North Carolina (NC)
--Mail	Belarus	Laredo - Texas	North Dakota (ND)
--Truck	Belgium	Hidalgo - Texas	Ohio (OH)
--Rail	Belize	Rio Grande City - Texas	Oklahoma (OK)
--Pipeline	Benin	Progresso - Texas	Oregon (OR)
--Foreign Trade Zone	Bermuda	Roma - Texas	Pennsylvania (PA)
--Other	Bhutan	El Paso - Texas	Rhode Island (RI)
Year	Bolivia	Presidio - Texas	South Carolina (SC)
All Years Detail	Bosnia and Herzegovina	Fabens - Texas	South Dakota (SD)
2015	Botswana	Columbus - New Mexico	Tennessee (TN)
2014	Brazil	Albuquerque - New Mexico	Texas (TX)
2013	British Indian Ocean Territorie	Santa Teresa - New Mexico	Utah (UT)
2012	British Virgin Islands	Santa Teresa Airport - Santa T	Vermont (VT)
2011	Brunei	San Diego - California	Virginia (VA)
Measure	Bulgaria	Andrade - California	Washington (WA)
Value (in U.S. Dollars)	Burkina Faso	Calexico - California	West Virginia (WV)
Weight (in Kilograms)	Burma	San Ysidro - California	Wisconsin (WI)
	Burundi	Tecate - California	Wyoming (WY)
	Cambodia	Otay Mesa - California	State unknown (DU)
Commodity Name			
~No Selection Here~			

View Data Clear All

Transshipment Results

Transshipment Data Online Query Results

[Download Data \(CSV\)](#)

Aggregation Item(s): No Aggregation Item(s).

(Trade Value in Actual of Current U.S. dollars and Weight in Kilograms) [Click any column header to sort the clicked column.](#)

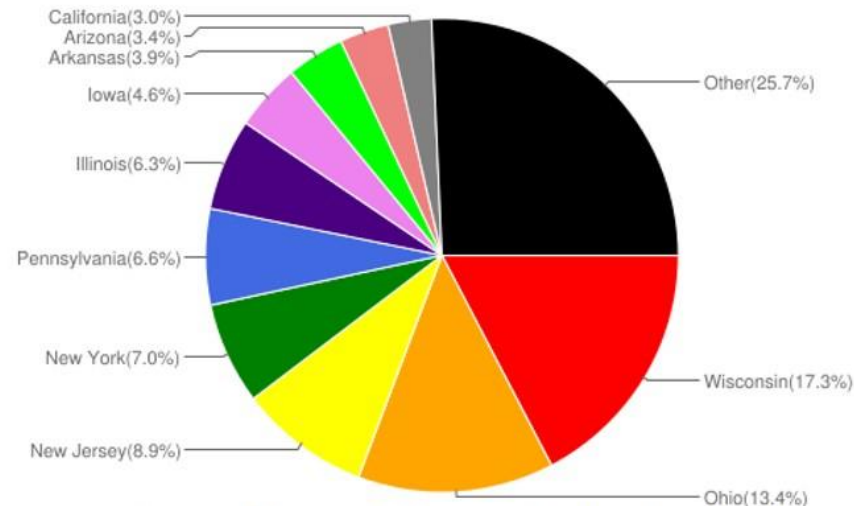
Country ▲	Transshipment Country	Statistical Year	U.S. State	Customs Port Code	Total Trade Value by Truck
Australia	Mexico	2015	Oklahoma	Laredo - Texas	27,758
Australia	Mexico	2015	Texas	Brownsville - Texas	72,995
Australia	Mexico	2015	Texas	Laredo - Texas	810,564
Australia	Mexico	2015	Texas	El Paso - Texas	9,265
Austria	Mexico	2015	Oklahoma	Laredo - Texas	78,887
Austria	Mexico	2015	Texas	Brownsville - Texas	45,836
Austria	Mexico	2015	Texas	Laredo - Texas	207,749
Austria	Mexico	2015	Texas	El Paso - Texas	1,054,015
Belgium	Mexico	2015	Texas	Brownsville - Texas	21,401
Belgium	Mexico	2015	Texas	Laredo - Texas	742,291
Belgium	Mexico	2015	Texas	El Paso - Texas	422,205
Brazil	Mexico	2015	Oklahoma	Laredo - Texas	79,876
Brazil	Mexico	2015	Texas	Brownsville - Texas	928,909
Brazil	Mexico	2015	Texas	Laredo - Texas	18,144,380
Brazil	Mexico	2015	Texas	El Paso - Texas	395,982

Other Aspects of TransBorder Freight Data

- Search by port and commodity
- Pie charts
- Top 10, Top 20, etc. lists
- Value to weight ratios for imports
- Data indexed to inflation
- Download raw data
- Trend analysis

Pie Charts

Top 10 U.S. States and Other Governmental Units Trading with Canada by All Modes
Ranked by Trade Value (in Actual U.S. Dollars)(Total Trade) for December 2015
By the Commodity of: HTS - 04 Dairy Products
View as Thematic Map Table Chart All



[How to make note section appears in one cell or multiple merged cells in Excel or Access for the download .csv file](#)

NOTES: Aggregated data are available by month from April 1994 to the current release month. Air and vessel data by month or year are not available prior to 2004. Export weights for land modes are not available. NaN or NaN.N=not available or not applicable. HTS=Harmonized Tariff Schedule.

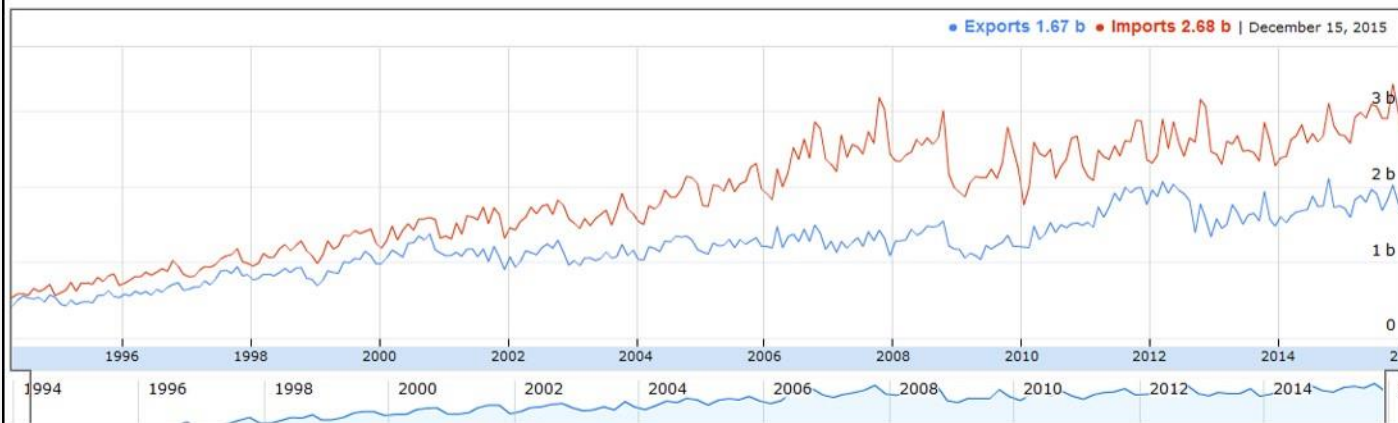
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, TransBorder Freight Data.

Trend Analysis

Monthly Trade between California (U.S.) - MEXICO by Truck (T) Commodity: all Commodities

(Trade Value (U.S. Dollars) in Actual Number)

Data Month	Exports	Imports	Total Trade = Exports + Imports	Balance = Exports - Imports
Dec 15, 2015	1,666,384,242	2,676,995,614	4,343,379,856	(1,010,611,37)
Nov 15, 2015	1,781,158,867	2,987,275,848	4,768,434,715	(1,206,116,98)
Oct 15, 2015	2,031,191,645	3,373,327,331	5,404,518,976	(1,342,135,68)
Sep 15, 2015	1,835,995,265	2,912,051,358	4,748,046,623	(1,076,056,09)
Aug 15, 2015	1,691,656,194	2,915,571,525	4,607,227,719	(1,223,915,33)
Jul 15, 2015	1,917,503,899	3,073,247,068	4,990,750,967	(1,155,743,16)
Jun 15, 2015	1,974,489,120	3,102,876,336	5,077,365,456	(1,128,387,21)
May 15, 2015	1,804,232,173	2,915,011,318	4,719,243,491	(1,110,779,14)
Apr 15, 2015	1,889,266,324	2,993,468,709	4,882,735,033	(1,104,202,38)
Mar 15, 2015	1,837,054,272	2,933,898,350	4,770,952,622	(1,096,844,07)
Feb 15, 2015	1,596,464,836	2,580,362,516	4,176,827,352	(983,897,68)
Jan 15, 2015	1,720,935,959	2,684,268,807	4,405,204,766	(963,332,84)
Dec 15, 2014	1,751,261,664	2,699,730,846	4,450,992,510	(948,469,18)



TransBorder Freight Data Latest Activities

- BTS is beginning work to migrate TransBorder Freight Data into Tableau (data visualization software)
 - Easier data uploading
 - More visualization options for users
- Extended our Interagency Agreement with Census through February 28, 2018.




Freight Analysis Framework

The Federal Highway Administration's (FHWA's) Freight Analysis Framework (FAF) integrates data from a variety of sources to create a comprehensive picture of freight movement among states and major metropolitan areas by all modes of transportation. TransBorder data are a major input into the FAF.

http://www.ops.fhwa.dot.gov/freight/freight_analysis/faf/

FAF Template

Freight Analysis Framework Version 4 (FAF4)



Freight Analysis Framework Data Tabulation Tool (FAF4)

[Total Flows](#) [Domestic Flows](#) **[Import Flows](#)** [Export Flows](#)

This option is provided for users interested in tabulating FAF⁴ data to examine import flows moved from foreign regions to domestic destinations. Geographies for this type of flow include foreign origin region, zone of entry (State or region), and domestic destination. Mode of transportation consists of two types, the domestic mode and the inbound mode used between a foreign origin region and the zone of entry. Import shipments that do not move beyond the zone of entry are classified as "No domestic mode" under the "domestic mode" category.

Note: The units of measure are **thousands of tons** for weight, **millions of dollars** for value, and millions for ton-miles. Forecasts for 2020 and beyond are for the baseline scenario.

Year	Foreign Origin	US Entry Region	Foreign Mode	Measure
1997	Combine total (no specific infc)	State-specific Port Zone	Combine total (no specific infc)	Select All
2002	Select all	Tennessee	Select all	Tons
2007	801 Canada	Texas	1 Truck	Ton-Mile
2012	802 Mexico	Utah	2 Rail	Values
2013	803 Rest of Americas	Vermont	3 Water	
2014	804 Europe	Virginia	4 Air (include truck-air)	
2015	805 Africa	Washington	5 Multiple modes & mail	

Domestic Distance	Domestic Destination	Commodity	Domestic Mode
Combine all (no specific infc)	state-specific info	Combine total (no specific infc)	Combine total (no specific infc)
	New York	Select all	Select all
	North Carolina	01 Live animals/fish	1 Truck
	North Dakota	02 Cereal grains	2 Rail
	Ohio	03 Other ag prods.	3 Water
	Oklahoma	04 Animal feed	4 Air (include truck-air)
	Oregon	05 Meat/seafood	5 Multiple modes & mail

Clear Results [>>Download Results as a CSV file](#) Submit

FR	ORIG	FR INMODE	DMS ORIG	DMS DEST	SCTG2	DMS MODE	Total M\$ in 2015
Canada	Truck	Washington	Oregon	Newsprint/paper	Truck	26.35	

- Freight Analysis Framework Version 4
 - Overview
 - Version
 - Descriptions
 - Summary
 - Statistics
 - Data Tabulation Tool
 - FAF⁴ Maps
 - Network Database and Flow Assignment
 - Documentation
- Related Links
 - FHWA Freight Analysis Framework home
 - FAF at Bureau of Transportation Statistics
 - Freight at U.S. DOT
 - CTA/ORNL

FAF Data Results

[Freight at U.S. DOT](#)
[CTA/ORNL](#)

Ohio
 Oklahoma
 Oregon


03 Other ag prods.
 04 Animal feed
 05 Meat/seafood

3 Water
 4 Air (include truck-air)
 5 Multiple modes & mail

[>>Download Results as a CSV file](#)

FR	ORIG	FR	INMODE	DMS	ORIG	DMS	SCTG2	DMS	MODE	Total M\$ in 2015
Canada		Truck		Washington	Oregon		Newsprint/paper		Truck	26.35
Canada		Truck		Washington	Oregon		Paper articles		Truck	4.98
Canada		Truck		Washington	Oregon		Printed prods.		Truck	2.20
Canada		Truck		Washington	Oregon		Textiles/leather		Truck	0.86
Canada		Truck		Washington	Oregon		Nonmetal min. prods.		Truck	3.42
Canada		Truck		Washington	Oregon		Base metals		Truck	17.97
Canada		Truck		Washington	Oregon		Articles-base metal		Truck	22.92
Canada		Truck		Washington	Oregon		Machinery		Truck	60.52
Canada		Truck		Washington	Oregon		Electronics		Truck	8.67
Canada		Truck		Washington	Oregon		Motorized vehicles		Truck	48.28
Canada		Truck		Washington	Oregon		Transport equip.		Truck	8.43
Canada		Truck		Washington	Oregon		Precision instruments		Truck	8.59
Canada		Truck		Washington	Oregon		Furniture		Truck	5.34
Canada		Truck		Washington	Oregon		Misc. mfg. prods.		Truck	11.13
Canada		Truck		Washington	Oregon		Waste/scrap		Truck	17.23
Canada		Truck		Washington	Oregon		Mixed freight		Truck	4.02
Canada		Rail		Washington	Oregon		Alcoholic beverages		Truck	2.32

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[ORNL](#) | [CTA](#) | [Security Notice](#)

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Developed by the [Center for Transportation Analysis](#) in the [Oak Ridge National Laboratory](#) with funding from the [Bureau of Transportation Statistics](#) and the [Federal Highway Administration](#)

Border Crossing/Entry Data



**Bureau of Transportation Statistics
U.S. Department of Transportation**

Border Crossing/Entry Data

Count data for vehicles, containers, passengers and pedestrians entering the United States through land ports and ferry crossings on the U.S.-Canadian and U.S.-Mexican border

- Monthly and Annual data since 1995
- Port and State Data
- New data added approximately six months after the month from which collected

Border Crossing/Entry Data: Data Sources

- BTS provides monthly border crossing/entry data for the U.S.-Canadian and the U.S.-Mexican border at the port level
- Customs and Border Protection collects border crossing/entry data at land and ferry ports of entry
- Count data for trucks, trains, containers, personal vehicles, buses, passengers and pedestrians

Border Crossing/Entry Data: Data Limitations

- Only incoming data
- Data do not represent the number of unique vehicles, equipment, or individuals
- Port level data (not facility)
- Basic data definitions

Border Crossing/Entry Data: Data Coverage

- Freight Data Elements:
 - Truck
 - Truck crossings
 - Truck containers loaded and unloaded
 - Rail
 - Train crossings
 - Rail containers loaded and unloaded

Border Crossing/Entry Data: Data Coverage

- Passenger Data Elements:
 - Personal vehicles
 - Passengers in personal vehicles
 - Train crew and passengers
 - Bus crossings
 - Bus passengers
 - Pedestrians

Border Crossing/Entry Interface

Port Location	Year	Month
Alaska (AK)	All Years Detail	Annual Summary
Arizona (AZ)	2015 (Jan-Dec)	All 12 Months Detail
California (CA)	2014	January
Idaho (ID)	2013	February
Maine (ME)	2012	March
Michigan (MI)	2011	April
Minnesota (MN)	2010	May
Montana (MT)	2009	June
New Mexico (NM)	2008	July
New York (NY)	2007	August
North Dakota (ND)	2006	September
Texas (TX)	2005	October
Vermont (VT)	2004	November
Washington (WA)	2003	December

Port Name	Measure
Aggregate all Texas Ports	All Measures Detail
All Texas Ports Detail	Trucks
Boquillas, Texas (Mexico Border)	Loaded Truck Containers
Brownsville, Texas (Mexico Border)	Empty Truck Containers
Del Rio, Texas (Mexico Border)	Trains
Eagle Pass, Texas (Mexico Border)	Loaded Rail Containers
El Paso, Texas (Mexico Border)	Empty Rail Containers
Fabens, Texas (Mexico Border)	Train Passengers
Hidalgo, Texas (Mexico Border)	Buses
Laredo, Texas (Mexico Border)	Bus Passengers
Presidio, Texas (Mexico Border)	Personal Vehicles
Progreso, Texas (Mexico Border)	Personal Vehicle Passengers
Rio Grande City, Texas (Mexico Border)	Pedestrians

Border Crossing/Entry Results

Border Crossing Data Online Query Results

Preview and Print Data

Download Data (CSV)

Table 1: Border Crossing/Entry Query Results at Port Level (Yearly)

Click any column header to sort the clicked column.

Port Name	Year	Trucks	Loaded Truck Containers	Empty Truck Containers	Trains	Loaded Rail Containers	Empty Rail Containers
TX: Brownsville	2014	209,989	130,913	75,341	685	10,947	54,346
TX: Brownsville	2015	205,159	128,024	71,927	749	8,887	64,672
Total		415,148	258,937	147,268	1,434	19,834	119,018

Border Crossing/Entry Data Can Be Found In:

- Annual Data Compilations
 - Transportation Statistics Annual Report (TSAR)
 - National Transportation Statistics (NTS)
 - Pocket Guide to Transportation Statistics
 - State Transportation Statistics (STS)
- Major Reports
 - Passenger Travel Facts and Figures
 - Freight Facts and Figures

Border Crossing/Entry Data

Current Activities

- BTS is beginning work to migrate Border Crossing Data into Tableau
 - Easier data uploading
 - More visualization options for users
- BTS is currently asking Customs and Broder Protection for data on a quarterly basis.



Thank you for your attention!



**Bureau of Transportation Statistics
U.S. Department of Transportation**

Q&A



BTS Border Crossing and Transborder Data: A Regional Perspective

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Things I Care About: Goats & Data.

In that order.



Many Goat Pics, Few Goat Databases



Month	Acquired	Adopted	Passed
Jan	11	11	1
Feb	4	10	
Mar	9	6	1

2015 started with 27 goats and 4 sheep up for adoption.

Month	Acquired	Adopted	Passed
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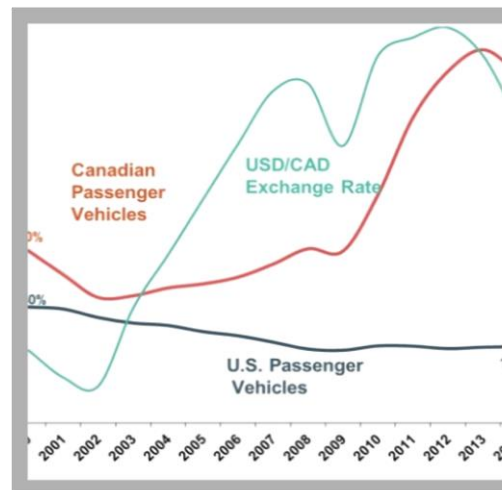
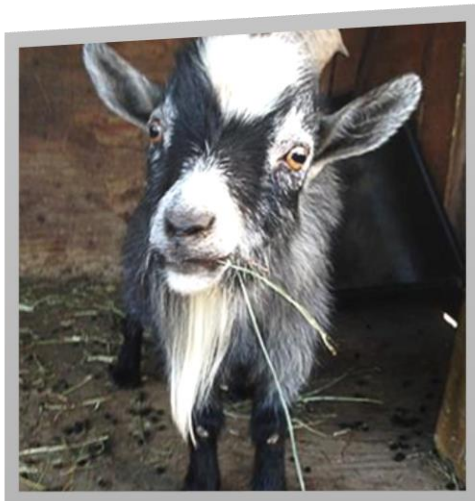
Many Databases, Few Data Pics

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Pacific Highway													
Southbound (CBP)													
Cars: General	71,002	68,302	77,380	76,253	83,387	89,585	98,163	91,139	96,035	67,656	67,003	72,049	957,954
Cars: NEXUS	48,619	45,366	52,761	52,640	58,069	56,342	55,869	49,453	44,557	44,953	45,234	47,724	601,587
Cars: % NEXUS	41%	40%	41%	41%	41%	39%	36%	35%	32%	40%	40%	40%	39%
Cars: TOTAL	119,621	113,668	130,141	128,893	141,456	145,927	154,032	140,592	140,592	112,609	112,237	119,773	1,559,541
Trucks	30,541	29,439	33,595	33,341	33,281	33,839	33,597	30,903	31,312	31,218	28,955	28,726	378,747
Buses	831	904	1,007	1,183	1,572	1,487	1,589	1,785	1,785	1,197	935	940	15,215
Northbound (CBSA)													
Cars: General	72,411	70,244	80,139	75,915	87,509	89,321	102,563	99,253	74,371	64,661	64,234	72,028	952,649
Cars: NEXUS	51,148	47,652	54,386	55,163	62,516	61,959	62,099	56,532	49,926	49,441	49,456	53,489	653,767
Cars: % NEXUS	41%	40%	40%	42%	42%	41%	38%	36%	40%	43%	44%	43%	41%
Cars: TOTAL	123,559	117,896	134,525	131,078	150,025	151,280	164,662	155,785	124,297	114,102	113,690	125,517	1,606,416
Trucks	33,043	31,670	35,741	35,352	35,470	36,125	35,801	33,772	33,593	34,116	31,086	31,438	407,207
Buses	814	826	923	1,062	1,433	1,433	1,766	1,695	1,358	1,098	899	861	14,168
Northbound (Statistics Canada)													
Cars: USA	23,413	25,339	25,430	25,800	30,000	33,654	40,131	39,647	30,125	25,618	23,999		323,156
Cars: Canada	100,180	92,394	109,851	105,019	119,563	117,445	124,016	115,832	94,050	88,328	89,556		1,156,234
Cars: Total	123,593	117,733	135,281	130,819	149,563	151,099	164,147	155,479	124,175	113,946	113,555	0	1,479,390
Trucks: USA	11,965	11,246	12,512	11,830	11,837	12,027	11,538	10,598	10,618	10,558	9,641		124,370
Trucks: Canada	21,054	20,377	23,306	23,434	23,667	24,060	24,195	23,164	22,904	23,599	21,353		251,113
Trucks: Total	33,019	31,623	35,818	35,264	35,504	36,087	35,733	33,762	33,522	34,157	30,994	0	375,483



BTS Border Crossing and Transborder Data – *A Regional Perspective*

(with occasional goats)



(More info about goat rescue at www.NewMoonFarm.org)

Two ways of using Transborder Freight Data:



Alabama (AL)	Mexico	2010	January
Alaska (AK)	All Canada Provinces Detail	2014	February
Arkansas (AR)	All Mexico States Detail	2013	March
Arizona (AZ)	Alberta (CAN)	2012	April
California (CA)	British Columbia (CAN)	2011	May
Colorado (CO)	Manitoba (CAN)	2010	June

Customs Port	Mode	Measure	Data Display
Northern Border Ports	Aggregate All Modes	Value (in US Dollars)	Actual
Southern Border Ports	Aggregate All Except AV	Weight (in Pounds)	In Thousands
Ports by State Order	Aggregate All Surface Modes (Weight (in Kilograms)	In Millions
Alabama (AL)	--Truck (T)	Weight (in US Short Tons)	In Billions
Arkansas (AR)	--Rail (R)	Weight (in Metric Tons)	
Arizona (AZ)	--Pipeline (P)		Output Option
California (CA)	Aggregate All AV Modes		Table w/o % Change
Colorado (CO)	--Air (A)		Table w/ % Change
Connecticut (CT)	--Vessel (V)		Other Options
Delaware (DE)	Aggregate MOF Modes	Trade Type	Suppress Zero and NA
District of Columbia (DC)	--Mail (M)	Total Trade	Show Commodity Desc
Florida (FL)	--Other (O)	--Exports	
	--Foreign Trade Zones (F)	--Imports	
Port Name, Code and Type	Commodity		
--Make Customs Port Selection First--	--Make Customs Port Selection First--		

Date	Total Trade of commodity by All Modes through Blaine	Total Trade of commodity by All Modes through Sumas
January 2016	\$180,963.00	\$2,478,348.00
February	\$0.00	\$0.00
March	\$0.00	\$0.00
April	\$0.00	\$0.00
May	N/A	N/A
June	N/A	N/A
July	N/A	N/A
August	N/A	N/A
September	N/A	N/A
October	N/A	N/A

Using the online database

- ✓ What it provides
- ✓ What it doesn't provide
- ✓ Examples of analyses

Using data in data warehouse

- ✓ Benefits of a data subset
- ✓ Challenges of data "screen scrapes"
- ✓ Improvements for the future

Search

OST-R > BTS

North American Transborder Freight Data: Port and Commodity Data

North American Transborder Freight Data, including Port and Commodity

Use this **North American Transborder Freight Data, including Port and Commodity** page to find the following Transborder freight data:

1. **Total(Measure):** U.S. Transborder freight by dollar value and export weight (see NOTES below for exceptions)
2. **Border(Trading Partner):** Canadian or Mexican border
3. **Annual(Year):** Land modes since 1994 and air/vessel since 2004
4. **Monthly(Month):** Land modes since 1994 and air/vessel since 2004
5. **Modal(Mode):** Land modes since 1994 and air/vessel since 2004

http://transborder.bts.gov/programs/international/transborder/TBDR_QAPC07.html

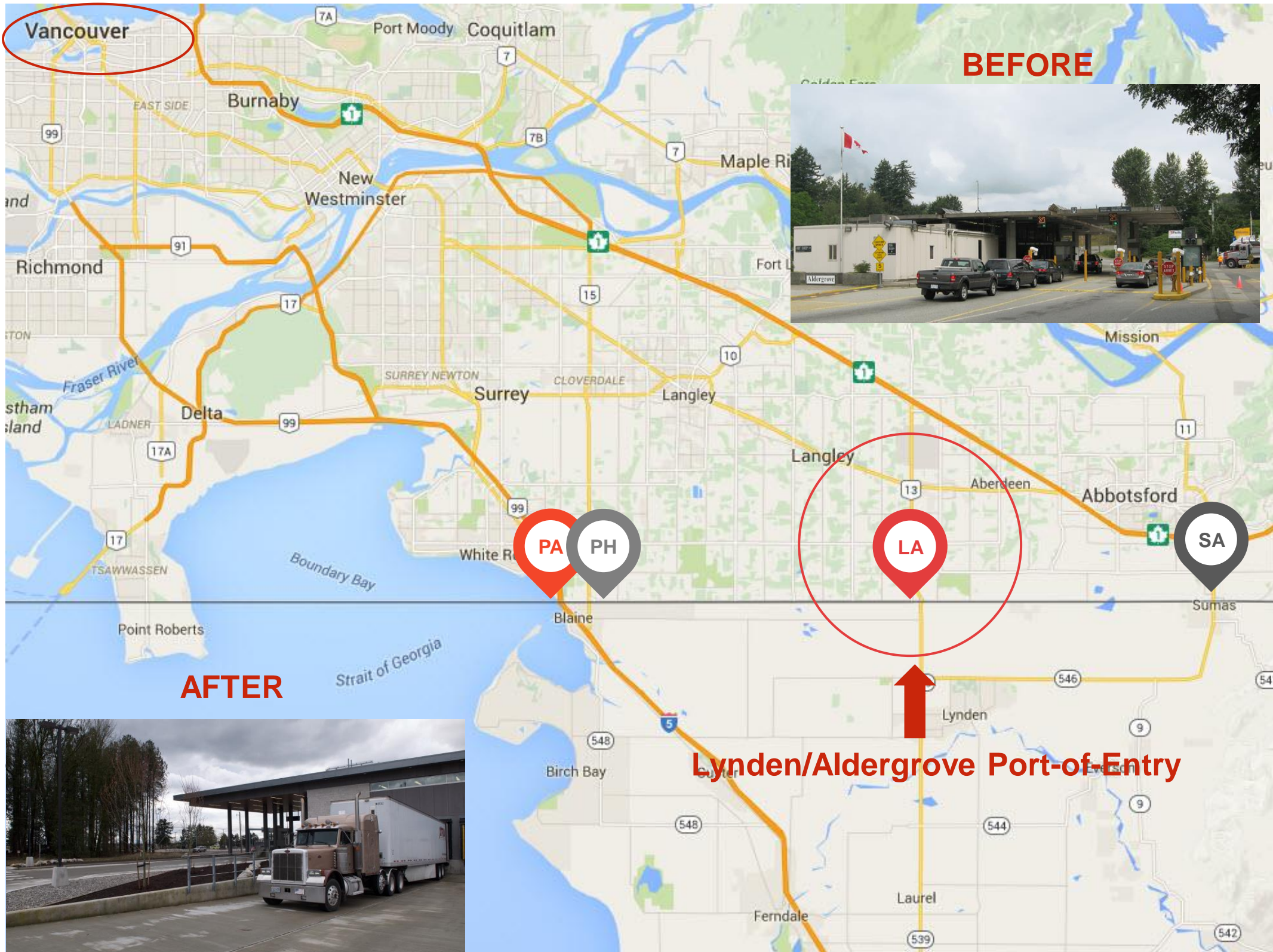
State Origin/Destination page. Commodity data by port of entry/exit are not available on the state data page (see NOTES below).

NOTES:

- Surface modes are defined as truck, rail and pipeline, which have been used in press releases since January 2013. Before January 2013, surface modes were defined as aggregating all modes except air and vessel modes in press releases.
- Transborder freight data consist of import value and weight and export value only. Export weight is not available. Data for land modes are available since 1994 and for air/vessel since 2004. Aggregated data are available by month from April 1994 to the current release month. Air and vessel data by month or year are not available prior to 2004. Export weights for land modes are not available. Import values from Mexican states are not available. Export values to Mexican states are not available for air and vessel modes. Export weights to Mexican states are not available for any mode.
- **Commodity** data are not provided by state of origin/destination and by port of entry/exit on the same database because of confidentiality restrictions. This page provides port of entry/exit data for commodities. For commodity data by state, see the [North American Transborder Freight Data, including Port, Commodity, or State Origin/Destination](#) data page. Port-related data are shown for both **Customs Districts** (in upper case) and individual **Customs Ports** (in initial upper case and lower case).
- Beginning with the January 2007, BTS makes available data for commodities handled at the gateway ports of entry and exit at country level, allowing cross-tabulation of **Commodity** by **Customs Port**.

INSTRUCTIONS: Make your selections using the dropdown boxes, you can make multiple selections in the boxes by clicking on selections while holding down the **Shift** key (continuous) or the **Ctrl** key (discontinuous), and then push submit button. Use the scroll bar or mouse wheel to page down to see the results (table). The system will retain your selections in order to speed up the process if you want to change one or more items for another query. [Click here for step-by-step help.](#)

<p>U.S. State</p> <p>Aggregate all U.S. States ▲</p>	<p>Trading Partner</p> <p>NAFTA (Canada and Mexico) ▲</p> <p>--Canada ▼</p> <p>--Mexico ▼</p>	<p>Year</p> <p>All Years Detail ▲</p> <p>2016 (Jan) ▼</p> <p>2015 ▼</p>	<p>Trade Type</p> <p>Total Trade ▲</p> <p>--Exports ▼</p> <p>--Imports ▼</p>
<p>Customs Port</p> <p>Oregon (OR) ▲</p> <p>Pennsylvania (PA)</p> <p>Rhode Island (RI)</p> <p>South Carolina (SC)</p> <p>South Dakota (SD)</p> <p>Tennessee (TN)</p>	<p>Measure</p> <p>Value (in US Dollars) ▼</p> <p>Mode</p> <p>Aggregate All Modes ▲</p> <p>Aggregate All Except AV ▼</p> <p>Aggregate All Surface Modes (▼)</p>	<p>Month</p> <p>Annual Summary ▲</p> <p>All 12 Months Detail ▼</p> <p>--January ▼</p> <p>--February ▼</p> <p>--March ▼</p>	<p>Data Display</p> <p>Actual ▲</p> <p>In Thousands ▼</p> <p>In Millions ▼</p> <p>In Billions ▼</p>



Aldergrove example: Commodity Comparisons by Port

Aldergrove vs. Rest of Cascade Gateway

HTS Commodity		Aldergrove (NB) top 80 percent 2008			Aldergrove's Percent of NB Cascade Gateway kg	Cascade Gateway Totals (commodities that match the top 80 percent at Aldergrove) 2008		
Code	Short Description	Value USD	Weight % of Aldgrove NB Total	Weight Kilograms		Weight Kilograms	Weight % of Cascade Gateway NB Total	Value USD
44	Wood & articles of	\$64,595,884	25.4%	115,682,121	17.1%	678,345,572	12.2%	\$378,782,230
72	Iron & steel	\$88,931,706	18.5%	84,208,600	26.2%	321,461,586	5.8%	\$339,491,777
68	Stone /earth articles	\$39,738,118	17.7%	80,661,827	23.1%	349,293,372	6.3%	\$172,079,678
25	Salt, sulfur, earth, stone	\$9,234,368	11.5%	52,534,194	15.0%	418,160,068	7.5%	\$73,503,440
73	Iron & steel articles	\$31,860,655	2.6%	11,675,916	3.6%	116,509,034	2.1%	\$317,924,015
76	Aluminum & articles	\$38,033,158	2.3%	10,532,971	14.5%	72,773,938	1.3%	\$262,777,011
27	Mineral fuels & products	\$7,335,667	2.1%	9,350,971	2.0%	601,096,732	10.8%	\$471,549,450
Sub total		\$279,729,556	80.1%	364,646,601		2,557,640,301	45.9%	\$2,016,107,601
Remaining commodities comb.		\$216,654,765	19.9%	90,421,040		3,010,067,713	54.1%	\$9,731,726,557
Total		\$496,384,321	100.0%	455,067,641	8.2%	5,567,708,014	100.0%	\$11,747,834,158

Aldergrove Example: Impacts on VMT/VKT and GHG

Added VMT

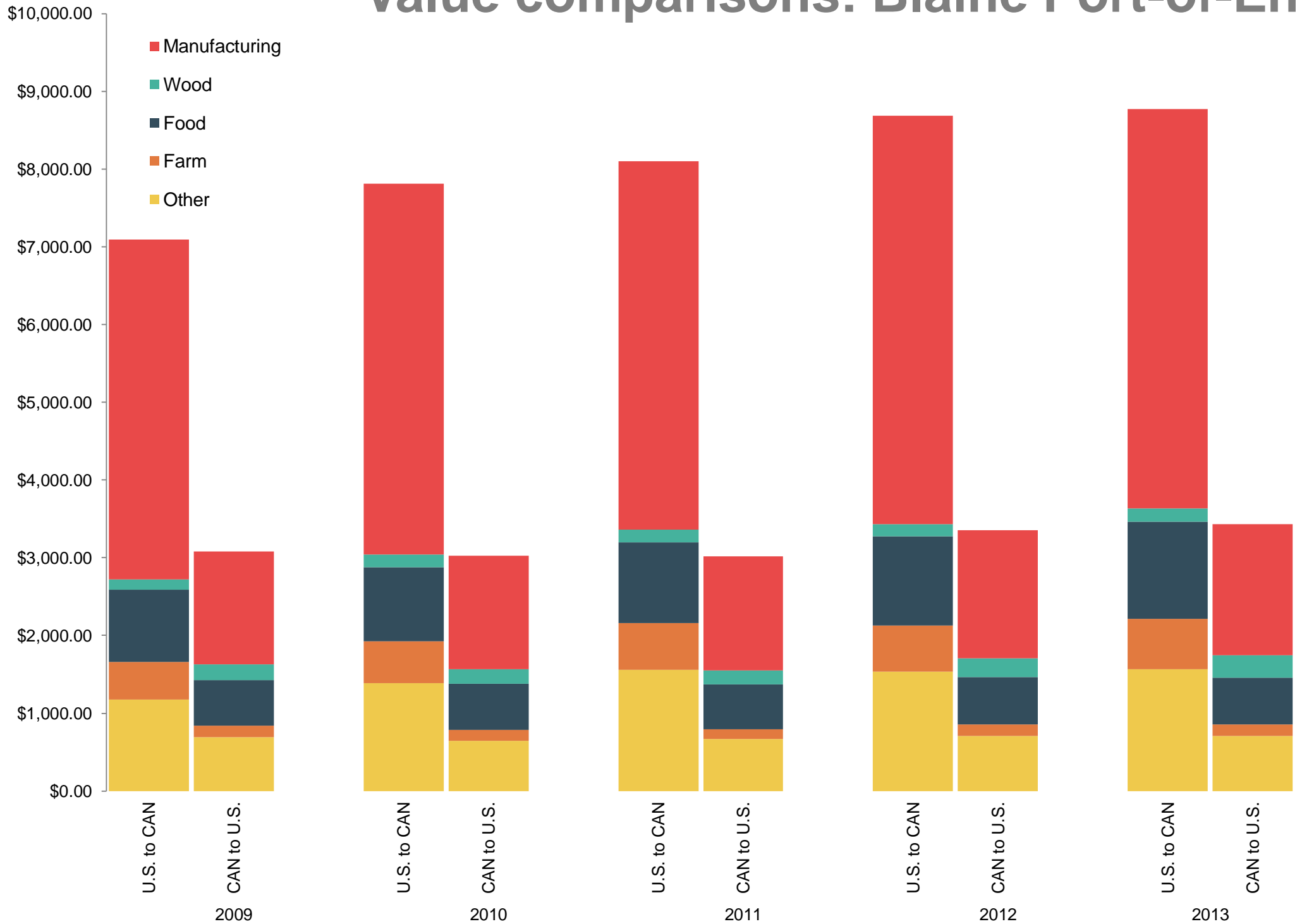
	All crossings open		
	PH	A-L	H-S
NB	1,161	241	378
SB	1,155	314	537
Total	2,316	555	915
	Aldergrove-Lynden Closed		
	PH		H-S
NB	1,304		476
SB	1,329		639
Total	2,633		1,115
Diff.	317		200
	Percent Shift from A-L		
	PH		SH
	61.3%		38.7%
	Est. Monthly Added VMT		
	PH	A-L	H-S
Avg. mo. 2-way trips		9,383	
Diverted per above %	5,753		3,630
Est. added miles	13.4		12.7
Est added VMT	77,093		46,207
Total added mo. VMT	123,300		
Total added mo. VKT	198,433		

Greenhouse Gas Emissions

Estimated additional monthly greenhouse gas (GHG) emissions if Aldergrove-Lynden were closed to commercial vehicles (both directions). Based on 2009 truck volumes. (in metric & imperial units)			
1	Added cumulative distance	198,433 Kilometers	123,300 Miles
2	Distance per unit fuel	2.17 Km/Ltr	5.1 MPG
3	Additional fuel used	91,518 Liters	24,177 Gallons
4	GHG emissions per unit of fuel	3.51 Kg/Ltr	29.29 Lbs/Gal
5	CO2 emission per unit of fuel	2.66 Kg/Ltr	22.2 Lbs/Gal
6	Total GHG from diversion	321,227 Kg/mo.	708,185 Lbs/mo.
7	CO2 Component	243,437 Kg/mo.	536,719 Lbs/mo.

- * **Closing the commercial port would amount to an addition of 708k lbs. of greenhouse gas emissions per month.**

Value comparisons: Blaine Port-of-Entry



API

Peace Arch South Cars - August 9, 2015

Crossing: [?]

Peace Arch South Cars

Year: 2015

Month: August

Day: 9

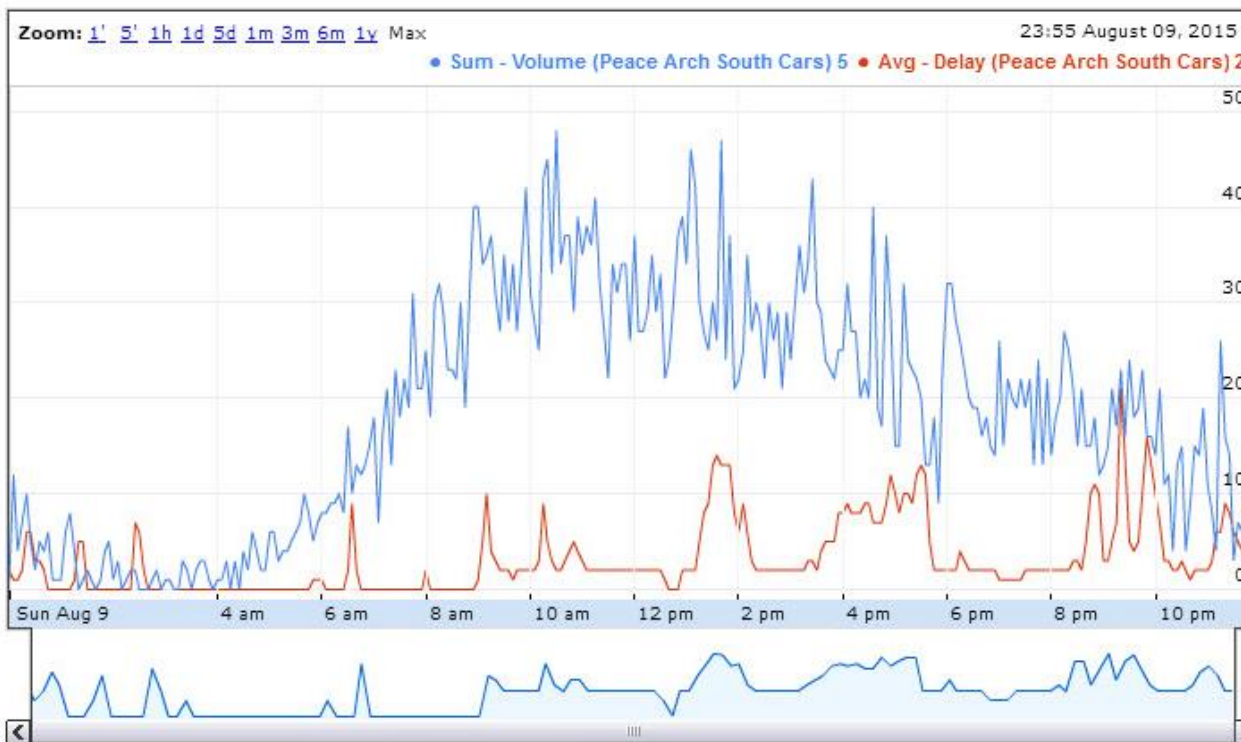
Data Points:

- Volume
- Delay
- Service Rate
- Vehicles In Queue
- Queue Length
- Select all

Table

Chart

Export CSV



Explanation of Measurements

- Volume** *Vehicles*
Total number of vehicles entering the crossing.
- Delay** *Minutes*
Total delay in minutes.

About Cascade Gateway Data



Funding

Transport Canada's BIFA Funding program in 2010, matched with FHWA, WSDOT, WCOG



Data

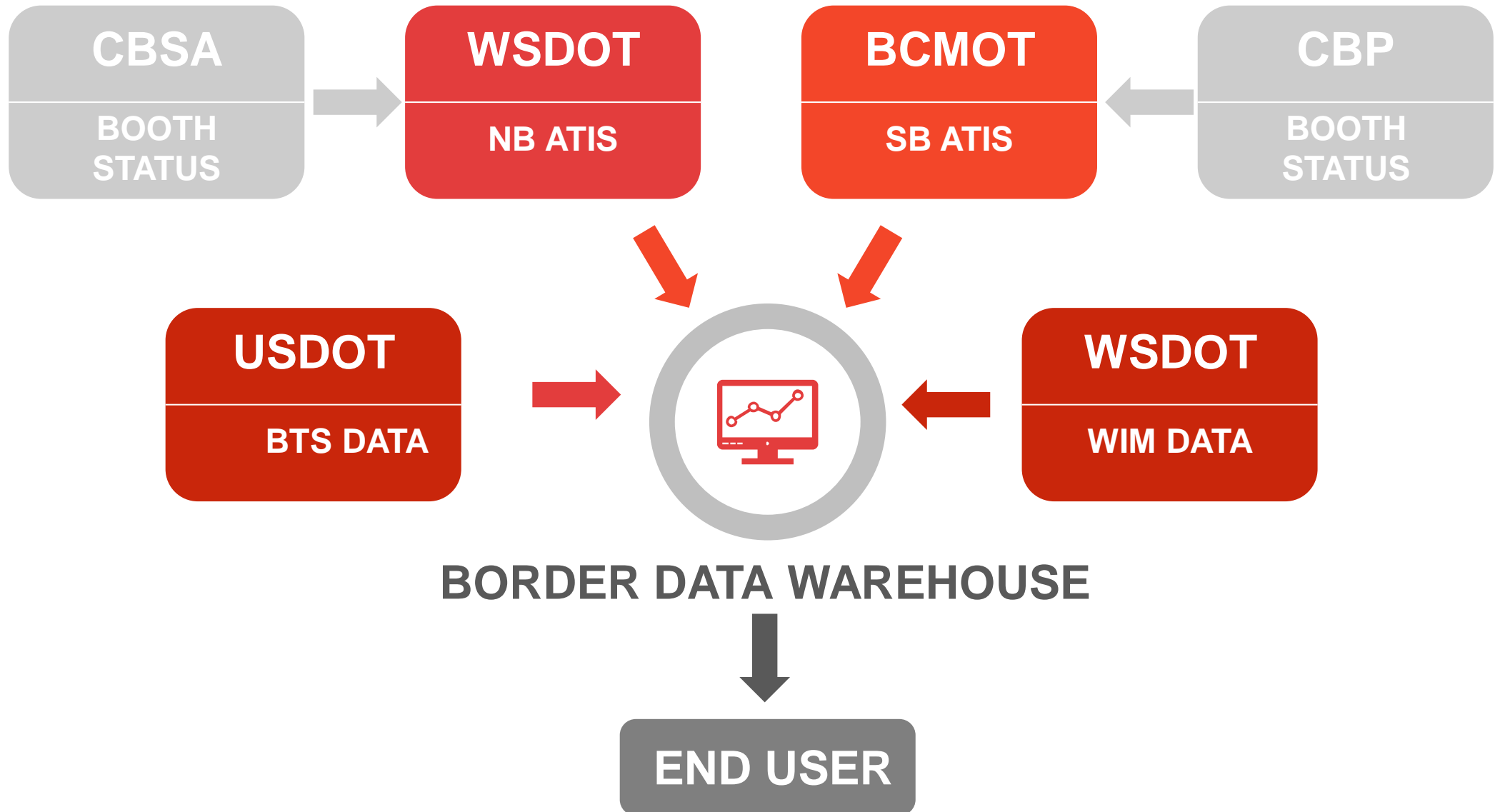
Goes back to 2007. Stores 5 – minute increment data from BCMOT and WSDOT systems



Audience

Inspection agencies, regional transportation planners, research institutions, tourist agencies, traveling public

Upgraded Data Warehouse Architecture



BTS Data: Collected through Code

```
var baseUrl = "http://transborder.bts.gov/tbdr/tbdrportcommodity.jsp?" +
    "TTMM={TradeTypeMeasureModes}" +
    "&WCF={WeightConversionFactor}" +
    "&CMMC={CommodityCodes}" +
    "&PC={PortCodes}" +
    "&NOP={PortCount}" +
    "&TLY={({StartYears})" +
    "&YRC={Year}" +
    "&MOC=01,%2002,%2003,%2004,%2005,%2006,%2007,%2008,%2009,%2010,%2011,%2012"+
    "&CNTYC=" +
    "&SZV=SZVNo" +
    "&TLM=(statmo%20LIKE%20'__')" +
    "&SIM=statyr,statmo" +
    "&SIY=statyr" +
    "&VF1=portusanaftamonthlycvw" +
    "&VF2=portusanaftacvw" +
    "&VF3=portusamonthlycvw" +
    "&VF4=portusacvw" +
    "&VFP3=cvw" +
    "&DDF=Actual" +
    "&CDYN=NoCD" +
    "&YRN={Years}" +
    "&MON=All%20Months" +
    "&MEN=Value" +
    "&MDN={TransportModes}" +
    "&MNO={TransportModesCount}" +
    "&CTYN=" +
    "&TTN={TradeTypes}" +
    "&TTNO={TradeTypesCount}" +
    "&NOC=0" +
    "&NOYR=1" +
    "&NOM=12" +
    "&NOCMM={CommodityCount}" +
    "&CNTY=()" +
    "&PYN=NoPC";
```

- ✓ Code captures content from BTS site
- ✓ Returned data is processed and used to populate tables on Cascade Gateway Data

CASCADE GATEWAY BORDER DATA WAREHOUSE

Crossings

Detectors

WIM

Reports

Custom Query

Subscriptions

B

API

Crossing: 2

Select

Year:

Select

Month:

Select

Day:

Select

Data Points:

Volume

Delay

Queue Length

Select all

Crossing note





Developer API for Cascade Gateway Data



The Cascade Gateway data warehouse includes a Developer API that allows users to query the data warehouse and retrieve information in various formats including JSON and CSV. The API allows for the retrieval of data for crossings, crossing gates and detectors.

Crossing

A crossing is a border crossing and can be queried for both directions or by a single direction. A crossing can be queried using query string parameters in the format of: `/Crossing?param1=value¶m2=value...`

Crossing Ids can be retrieved using the following call that will retrieve all active Crossings:

```
/Crossing/?format=json
```

Examples

Example 1: Average Delay and Average Service Rate, between Jan 1-2010 and Mar 1-2010, for crossing ID 131. Prepare JSON-formatted response.

```
Crossing/?id=131&start=01/01/2010&end=03/01/2010&data=avg-delay,avg-rate&format=json
```

Example 2: Average Delay and Average Service Rate, between Jan 1-2010 and Mar 1-2010, for crossing ID 131. Group results by day-of-the-week. Prepare JSON-formatted response.

```
Crossing/?id=131&start=01/01/2010&end=03/01/2010&data=avg-delay,avg-rate&dg=DayOfWeek&format=json
```

Parameter Definition

- ✓ Allows any developer to query the database in JSON and CSV formats
- ✓ Queries are written in the URL
- ✓ Reference and instructions for developer on the website

Pros and Cons of a Dynamic Web Feed

to the Transborder Freight Database

BENEFITS

CHALLENGES

Limited regional focus



Easier query tool



One-stop shopping



X

Breaks with change

X

Doesn't store data

Exports of selected commodities by Truck through Blaine	Imports of selected commodities by Truck through Blaine	Exports of selected commodities by Truck through Lynden	Imports of selected commodities by Truck through Lynden	Exports of selected commodities by Truck through Sumas
9,096,149.00	\$435,560,483.00	\$10,567,251.00	\$540,703.00	\$120,284,365.00
1,547,575.00	\$444,560,453.00	\$8,242,353.00	\$586,326.00	\$120,624,919.00
5,231,590.00	\$520,576,402.00	\$9,596,719.00	\$1,317,548.00	\$143,605,079.00
509,248.00	\$543,111,368.00	\$9,420,683.00	\$833,806.00	\$119,413,699.00
77,543.00	\$507,096,446.00	\$8,156,540.00	\$674,426.00	\$128,433,124.00
5,510.00	\$592,513,056.00	\$8,182,481.00	\$832,606.00	\$138,172,420.00
569.00	\$541,524,534.00	\$7,909,800.00	\$1,367,296.00	\$123,258,143.00
8.00	\$520,011,420.00	\$7,684,369.00	\$763,708.00	\$127,719,378.00
503,816,111.00	\$7,443,518.00	\$1,931,676.00	\$113,667.00	\$113,667.00
504,517,504.00	\$8,440,520.00	\$25,845,667.00	\$11,111.00	\$11,111.00
85,116.00	\$4,716,222.00	\$10,487,421.00	\$726.00	\$726.00
8,708,210.00	\$726.00	\$726.00	\$726.00	\$726.00

Challenges could be addressed with API functionality

Two Tools, Same Data Source

BTS Website



*[http://transborder.bts.gov/
programs/international/transborder/](http://transborder.bts.gov/programs/international/transborder/)*

✓ Full range of query tools, guidelines, and summaries



Regional Websites

*<http://www.cascadegatewaydata.com>
<http://www.borderdatawarehouse.com>*

✓ Regional scope, streamlined query tool



Thank You!

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www.theimtc.com

www.CascadeGatewayData.com

www.BorderDataWarehouse.com

Q&A



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