**Analysis**

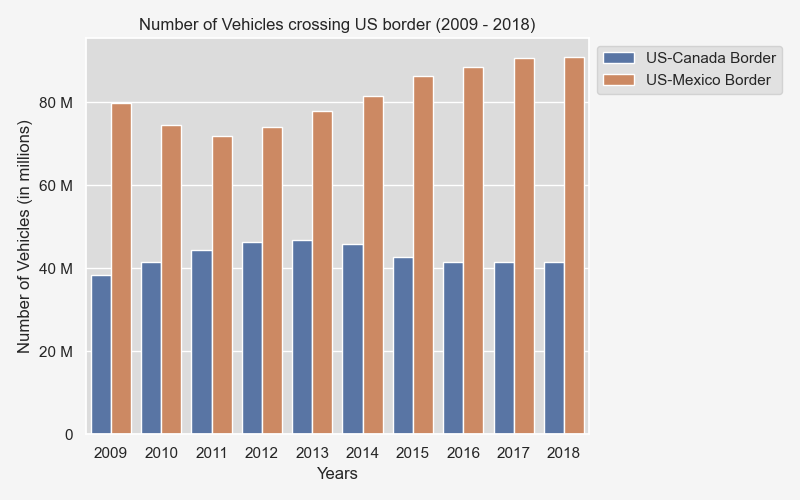
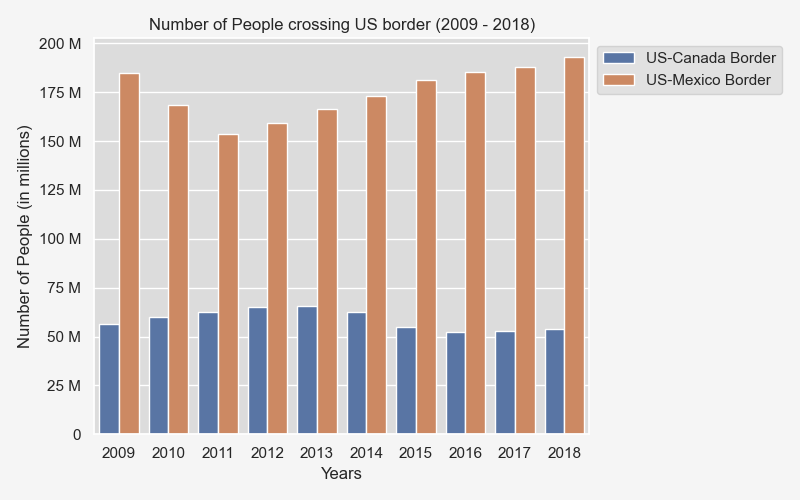
**Introductions**

* Elevator pitch
* Data collection
* Data cleaning
* Data limitations
* High-level summary of findings

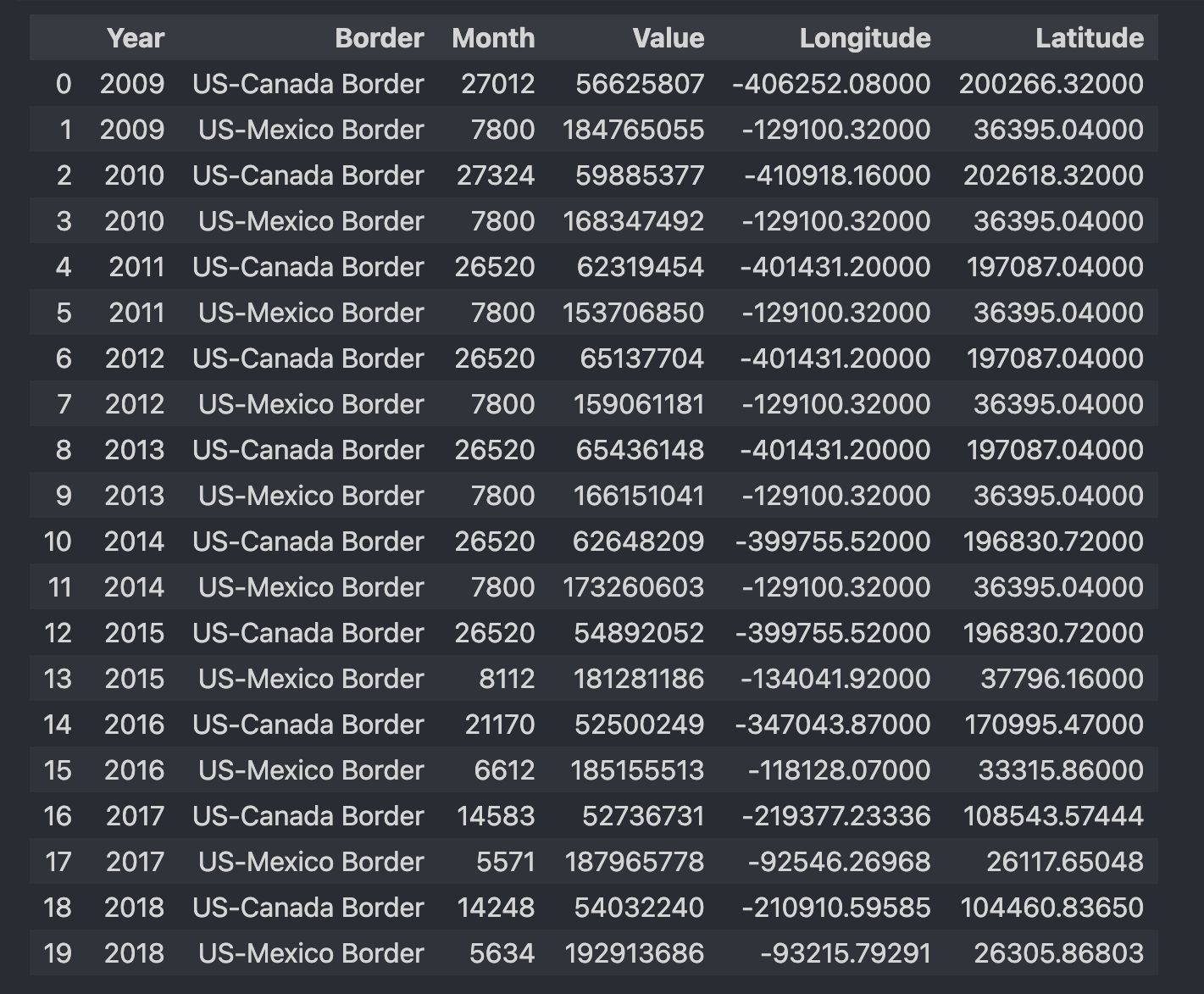
**Findings**

**Question 1 - What’s the busiest border for the US?**

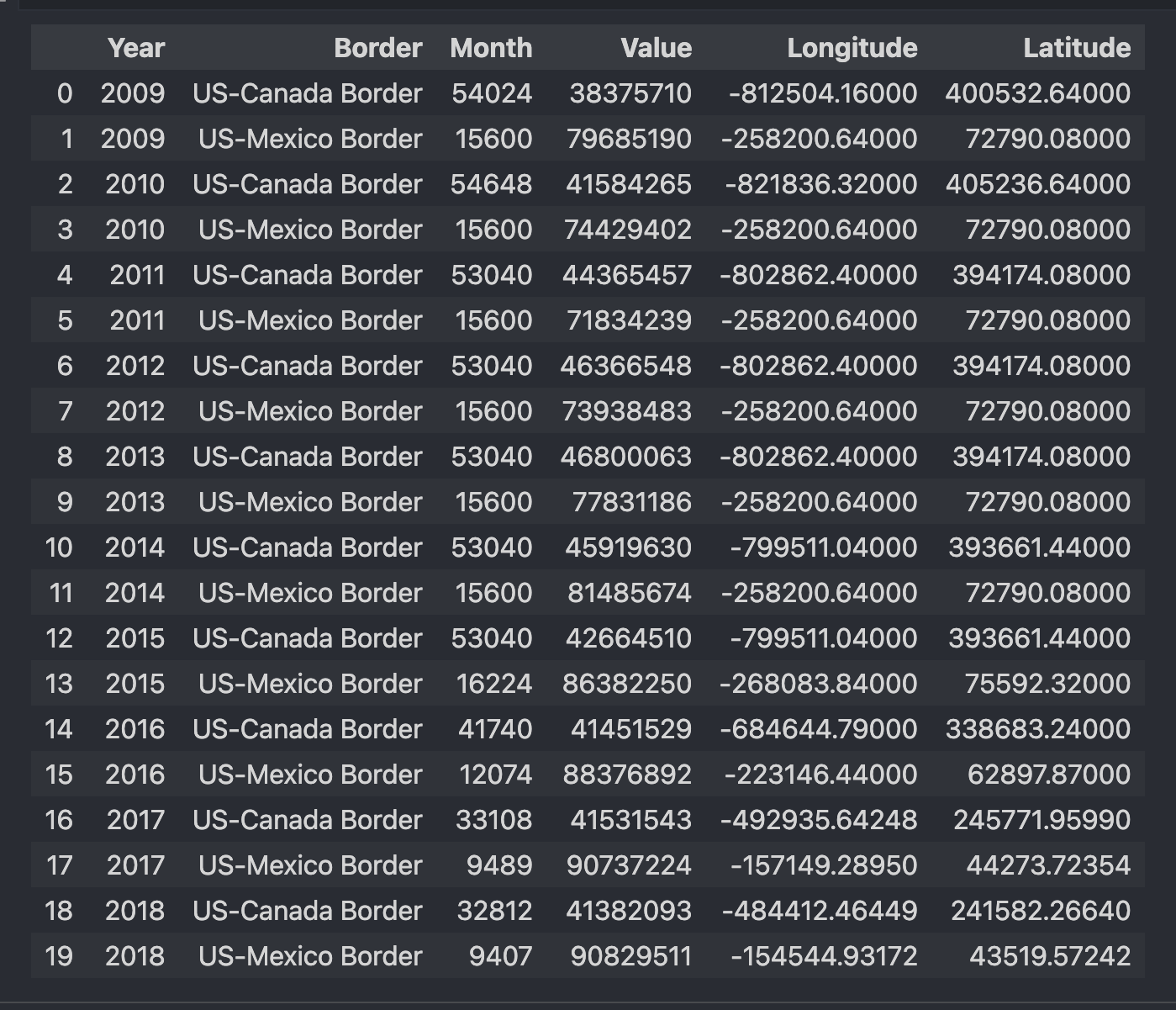
* There are two borders for the US; the US-Canada Border and the US-Mexico Border. Busy is defined as the volume of vehicle traffic and people traffic across these two borders.
* The people traffic for the US-Mexico border is 3 times higher than the US-Canada border across the 10 years analyzed i.e. 2009-2018. The US-Mexico border has 1.2 billion more people crossing the border overall..
* The vehicle traffic for the US-Mexico border is higher than US-Canada border.
* The vehicle traffic for the US-Canada border is higher than its people traffic.
* There is an upward trend starting in 2012 to 2018 for both people traffic and vehicle traffic along the US-Mexico border.



(People Table- supports graphs above)

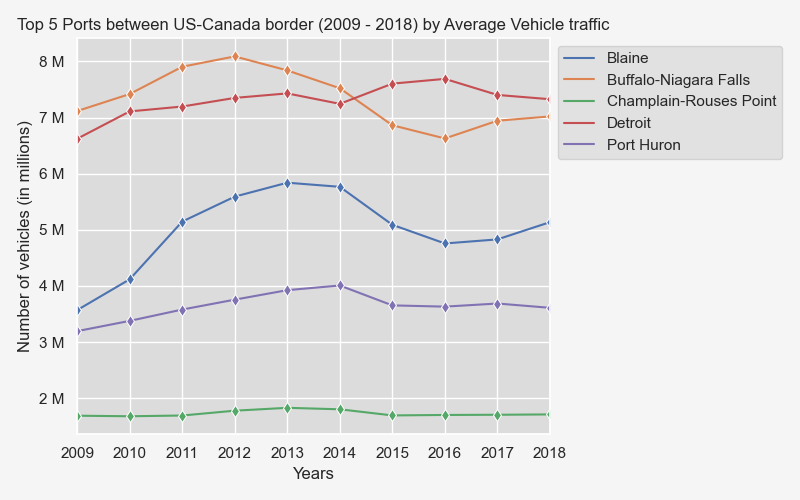
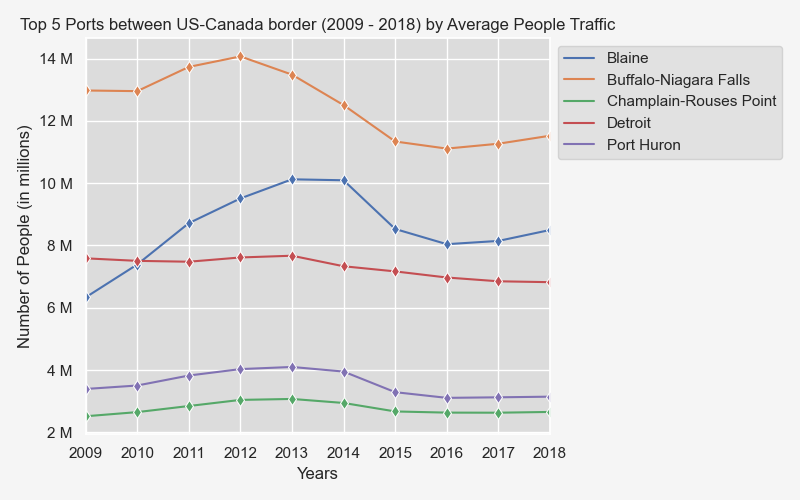


(Vehicle Table supports graphs above)



**Question 2 - Which are the top five busiest ports between US and Canada between 2009-2018?**

*People versus Vehicle traffic by port for US-Canada Border*



* Across the US-Canada border, for the people traffic, the top two busiest ports are Buffalo-Niagara Falls and Blaine. There is an increase in people traffic from 2010-2012, then there is a decline and another uptick starting in 2017.
* For its vehicle traffic, the top two busiest ports are Buffalo-Niagara Falls and Detroit.
* The people and vehicle traffic for the Detroit port stays relatively steady across the year compared to the other active ports.

Observation

- Zooming out, the busiest states also coincide with the business ports along the US-Canada border i.e. New York and Washington

Observation

- There is an upward trend of people traffic from 2009 to 2012 then there is a decline up until 2016 then an uptick from 2016 onward

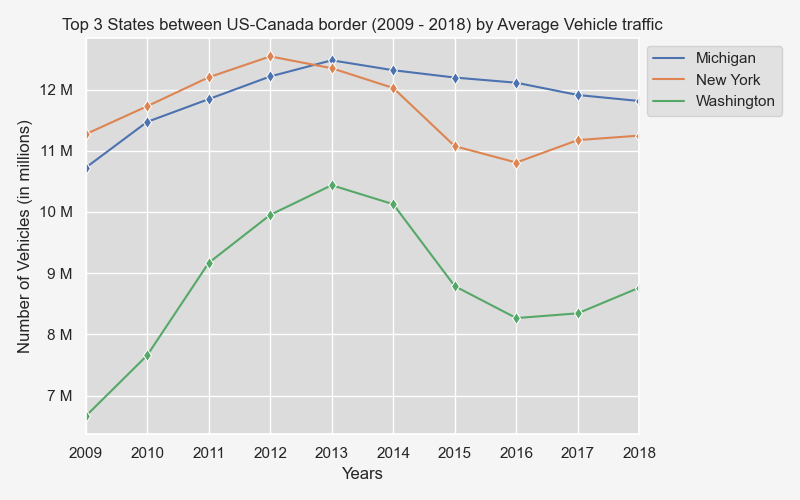
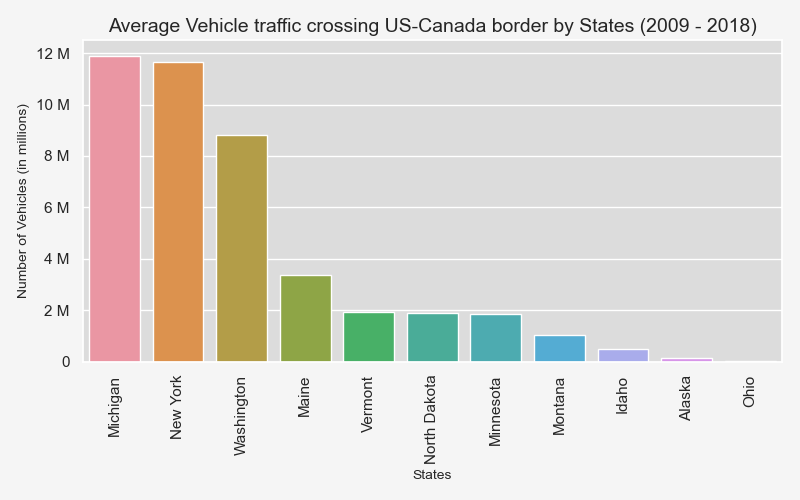
Observation:

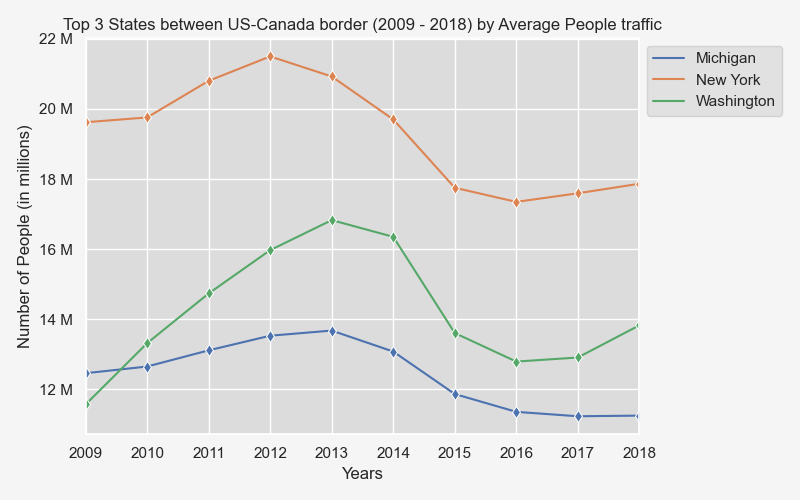
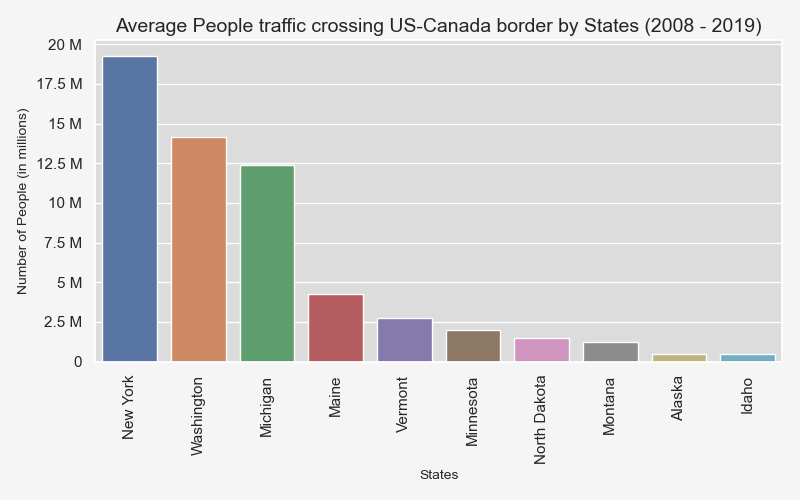
- Both of these ports are close to metropolitan cities

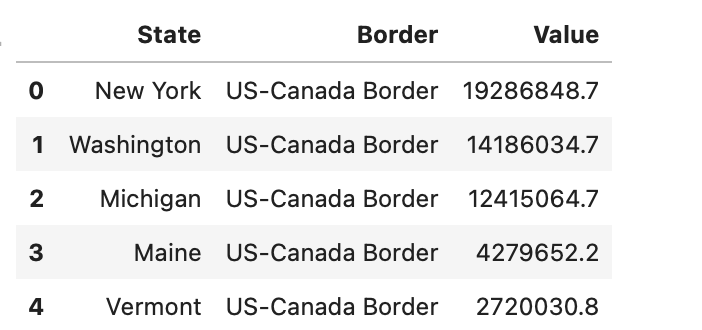
- Both of these ports are towards the end of US-Canada border line

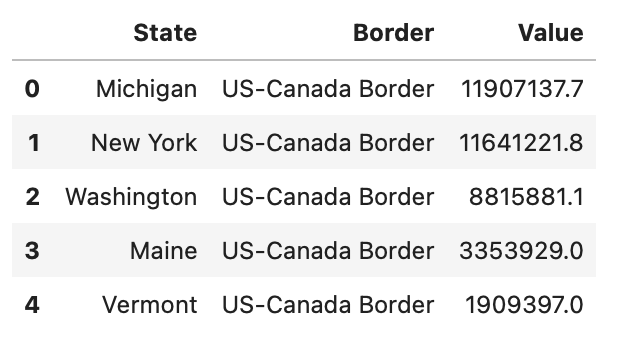
**Question 4 - Which are the top three busiest states between US and Canada between 2009-2018?**

*People versus Vehicle traffic by state for US-Canada Border*





(People table)

(Vehicle table)****

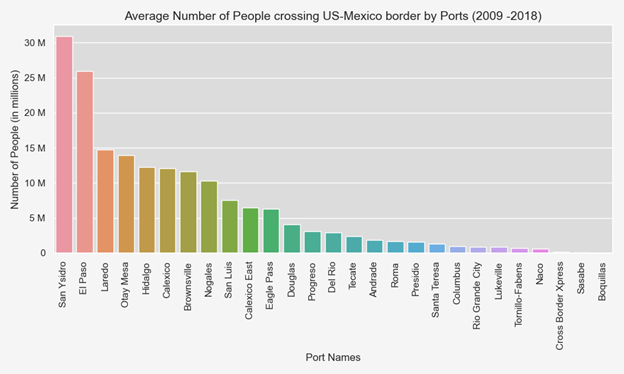
* Michigan has the most vehicle traffic followed by New York at a close second.
* In Michigan, there is a significant difference between the number of people crossing the border versus vehicles crossing the border. There is a higher vehicle traffic volume.
* New York has the most people traffic followed by Washington. There are x percentage more people crossing New York versus Washington.
* In regards to vehicle and people traffic, the volume increased between 2009 and mid-2012 for the top three busiest states and then started to decrease. Of the three, Michigan has remained relatively steady whereas New York and Washington show greater volatility in their decline.
* New York remains the busiest state overall for both vehicle and people traffic showing a more consistent traffic trend line across the years.
* Compare michigan
* Compare busiest state traffic to one of the least busiest on the least

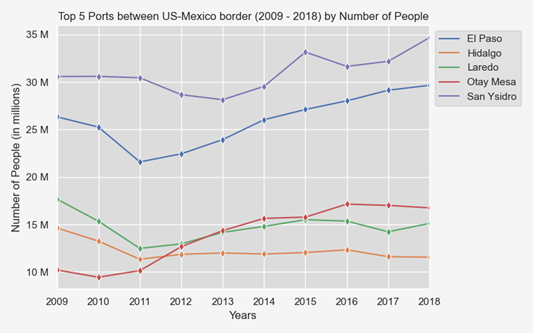
Top 5 busiest ports on US-Mex border during 10 years

(by average number People):

• San Ysidro: 1st

• El Paso: 2nd



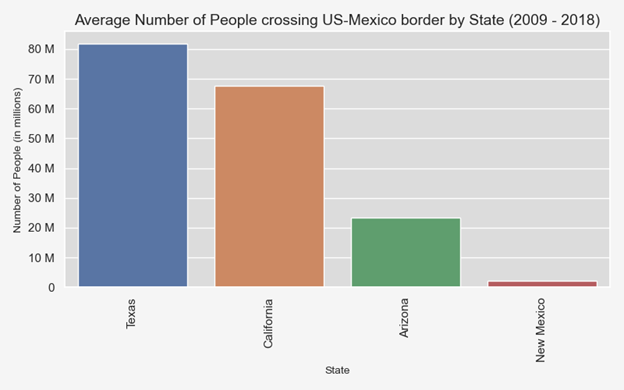


Observations:

- For the busiest ports, there is a decrease from 2009 to end 2012 then a steady increase as of 2013 across both ports.

-

Observation:



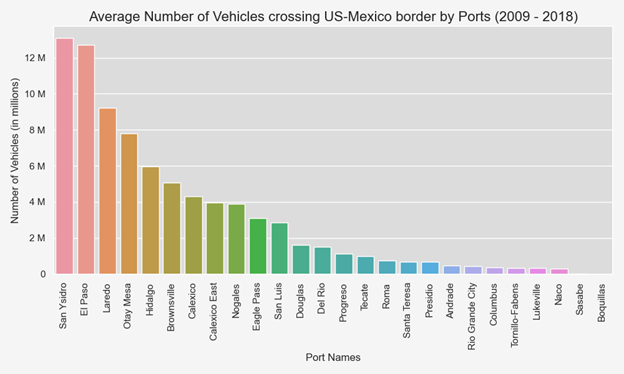
- There are x more people crossing the border from Texas than California (also include percentage difference)

- Also include comparison between Texas and New Mexico

(by average number Vehicles)

• San Ysidro: 1st

• El Paso: 2nd



Observations:

- Add in raw counts to compare to people view

- Overall, it seems like the states have comparable traffic for both vehicle and people

- Compared to the people traffic along this border, the vehicle traffic has remained relatively steady. There is an uptick from 2011 onward.

Observation:

- There is x more number of people who are crossing the us-mexico border than there are vehicles for both busiest ports (also include percentage difference)

- Both these ports draw a lot of people traffic because of the social activities available in those areas.

- Both these ports are also near metropolitan cities

- Zooming out, the busiest states also coincide with the business ports along the US-Mexico i.e. Texas and California

Most used vehicle type across the 10 years

- Personal vehicles represent 79.7% of the vehicle volume across the 10 years followed by trucks at 8.8%.

- For canada, the use of personal vehicles increased from 2009 to 2013 and than has declined

- For Mexico, the use of vehicles declined from 2009 to 2012 and then increased

Busiest month during the year across all borders and years

- July (9.3%)+ August(9.4%) are the busiest months of the year

- February (7.2%) and January (7.8%) are the slowest months of the year

Observation:

- The warmer times of the year garner more traffic because there are less weather concerns and easier mobility.

**Conclusion**