

Border Crossing Vehicles 2

The table below is a **partial** capture of the border-crossing travelers in different types of transport mode at Champlain Rouses Point, New York at the US-Canada border for the 13-year period from 2000 to 2012.

The complete table is available on the LMS as brdrxingusc_dataset.pdf and as brdrxingusc_dataset.csv.

Type	2000	2001	2002	2003	2004
Bus Passengers	317205	291421	282859	234620	277018
Buses	11728	10374	10415	11290	8345
Personal Vehicles	980130	1012592	1039135	999836	1001278
Loaded Trucks	432097	342618	323495	350893	351224

In this project, your Python program is required to:

- Initialise appropriate lists with the **full** data
- Show four different menu options plus a Quit option.

Based on the user's selection, your program shall

1. Display the number of Buses crossing the border for each year, for the 13-year period.
2. Of the user's selected type of the border-crossing transport (e.g., Buses), display
 - a) the mean number of the vehicles in that transport mode for the 8-year span of 2000 to 2007.
 - b) the maximum number of vehicles in that transport mode in that period and the year that the maximum occurs.
3. Of the user's selected type of the border-crossing transport, display the percentage change in the number of vehicles in that transport mode from year to year. List the year(s) where the change is above 5%.
4. Make the following plots
 - a) Average number of Bus Passengers per Bus vs Year as a line plot.
 - b) Number of Personal Vehicles vs Year as a bar chart.

You will be awarded higher marks based on the quality of your program. Refer to the rubric for more information.

Clarify any doubts about the requirements with your tutor.