https://www.tvanouvelles.ca/2019/05/29/le-nouveau-pont-samuel-de-champlain-devoile-ses-couleurs

TRAGIC TRAFFIC
CAR COMMUTE AWARENESS

KEVIN MAINS & FLORENCE SIMARD

With the partnership of the federal government and the city of montreal along with proper communication between public transport services, this project could realistically be completed in a short period of time. Being students at Concordia University we (Kevin Mains and Florence Simard) would be helped by instructors: Carmela Cucuzzella and Morteza Hazbei along with City Studio staff members: Véronique Dufort and Samuel Rancourt.

TRAFIC TRAGIQUE
SENSIBILISATION AU TRANSPORT EN VOITURE

What is it?
With the new controversial lights on the Champlain Bridge, we wish to develop a motion detector that will be able to count the number of cars that pass everyday and have the ability to change the colour of the lights on the bridge in order to represent the damage cars cause to the city of Montreal and the Saint-Lawrence river. We also want to install electronic signs that would tell drivers how many cars have passed on the bridge since the beginning of the day, the amount of fuel consumed by cars along with the amount of CO_2 produced by cars.

Why is it needed?
We are working with an existing modern structure and improving the awareness of issues caused by cars without changing any basic elements of said structure. We are focusing on people who come from outside of the city, since only 1% of people who live on the south shore opt for public transport. With the future plans of extending the metro and train lines into Brossard, this project would influence more people to use these services once they open.

How it works?
With license plate scanners, the billboards and lights will receive data such as the number of cars that pass the bridge. While multiplying the average amount of gas used by cars with the number of cars and the length of the bridge, a counter would give the users basic information about the damage they are causing. With the average car consuming 9.2 litres of gas for every 100 km and the length of the bridge being 3.4 kilometers, a simple algorithm would be able to give users a rough average of their impact.

Outcomes and next Steps
The Champlain bridge is the most used bridge in Canada and brings over 150 000 vehicles from the South Shore to Montreal and back everyday. 66% of users are commuters. The issue with this bridge is the fact that under 0.5% of users are buses. Our project would decrease two key aspects; air toxication and traffic. Hopefully systems such as the RTL would react well and add more buses in order for people to have the ability to maintain their schedule while using public services.