

The Yonge/Dundas intersection is one of the busiest intersections in Toronto. It reportedly sees approximately 90,000 people crossing every 24 hours¹; car, truck, taxi traffic in both directions (north/south & east/west), a streetcar running east/west, a large mall with access at the corner and a large gathering space for events in the south east corner. Is it being effectively controlled for the best and safest flow of people and vehicles?



Conduct an assessment of:

- (i) people and vehicles at the intersection and develop a timing schedule for the lights for 24 hours per day over a one week period.**
- (ii) pedestrian safety issues at this intersection and make recommendations for improvements**

1. You are required to conduct research into intersection design and control in general (both in Canada and internationally).
2. Assess the current operation patterns at the Yonge Dundas intersection*.
3. Conduct a software simulation of intersection.
4. Consider safety issues that may arise at such a busy intersection.

**If you are collecting observational data of the intersection you may work in teams (a maximum of 6 per team) to collect data. Then all team members can use that data, just make sure to provide appropriate attribution of that data in your report.*

*** This is a formal report and should include references, bibliography and engineering or software related figures wherever deemed necessary.*

¹<https://www.blogto.com/city/2018/04/map-busiest-pedestrian-intersections-downtown-toronto/>