

Assingments

- 1) **Home Depot:** Discover some of what is available to individuals and contractors who are tackling all sorts of projects. Walk the aisles of one of the many Home Depot stores in Toronto (check out this map for locations - <https://www.google.ca/maps/search/home+depot+toronto/@43.7182412,-79.378058,11z/data=!3m1!4b1?hl=en> - visit the one closest to you).



Figure 1 - Home Depot store



Figure 2 - Inside Home Depot

You will find a wide selection of products, along with varying degrees of expertise in the staff as shoppers look to find answers to their home-improvement questions.

You may also find business ideas in terms of management and products for import / export.

2) Regent Park Redevelopment:

One of the most ambitious projects underway in Toronto today is located in the area known as Regent Park. During the first half of the 1900s, this 69-acre piece of land was home to many people who lived in very run-down houses. Many people lived in poverty. In about 1950, a bold new housing initiative was launched to provide social housing for these folks – it was called Regent Park.



Figure 3 - Toronto slums, 1934 social housing



Figure 4 - Regent Park, 1950,

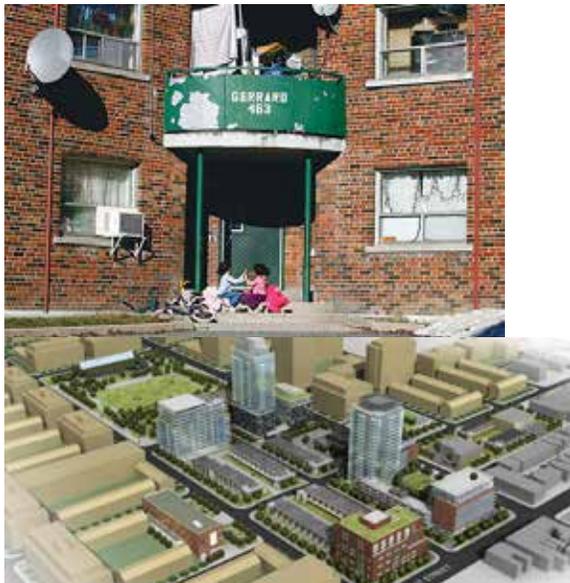


Figure 5 - Regent Park, 1990, a poverty trap Revitalization 2008 to 2020

Figure 6 - Regent Park



The revitalization of Regent Park was considered essential to break the cycles of poverty and crime that had become well established there. The main principles were:

- introduce mixed income population (replace existing population of about 2500 rental units with a combination of rehousing existing subsidized units and add another 5400 market units – rentals and condominiums)
- introduce retail facilities to meet local needs
- add significant community facilities – arts and sports
- bring new jobs into the area
- open up the streets that had been sealed off in the 1950s
- ensure transportation needs are met.

Resource: <http://www.torontohousing.ca/regentpark>

Getting there: Take the Carlton Streetcar eastbound to Gerrard and Parliament. Part of the original Regent Park complex still stands along the south side of Gerrard, east of Parliament. Walk through the complex to get a feeling for the place. Head south and east through the complex. It is very safe during the day. As you go south, you will begin to see areas where brand new neighbourhoods have been created. Make note of the civil and structural engineering work that strikes you in terms of creating a more livable community. This community is powered by a district energy system.

Start Here!

Gerrard St



Stage 1 is now complete; Stage 2 is almost complete; Stage 3 has been started.

3) Toronto Transit Commission – Union Station rail and subway systems

Union Station is the major transit hub for Toronto. It carries a huge number of commuters into the city each day. The regional rail system then intersects with the TTC subway system. For the past 3 years, Union Station has been undergoing massive retrofitting to allow the facility to accommodate the ever increasing demands of systems that well over 50 years old. Go to Union Station, through the Yonge/University subway line. When you exit the system, make note of the spaces, facilities, flow of people, information systems, etc.

Head towards the Go Station to get a feel for the linkages between the local transit and the regional transit. Also go up to the Great Hall to see the main railway gathering place. Beyond this, look at how Front Street has been recently redesigned to make the area better suited to pedestrians and bikes, as well as cars and taxis.



Figure 7 - Union Station, Toronto



Figure 8 - old Union subway platform Figure 9 – New Union subway platform

4) Scarborough Bluffs Erosion Control –

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Towards the east end of Toronto, on the Lake Ontario shore, the Scarborough Bluffs offer a wonderful waterfront landscape. Over the years, the bluffs have been subjected to the forces of waves, wind and storm-water runoff, causing serious erosion that has threatened buildings and human safety. The Toronto Region Conservation Authority (TRCA) has developed and implemented a plan to reduce erosion by installing a set of structures in the lake to . The project is officially called the *Meadowcliffe Drive Erosion Control Project*.

If you want to see a beautiful part of Toronto's natural setting, as well as look at an impressive engineering project to slow/stop shoreline erosion, this is a worthwhile excursion.



Figure 9 - Erosion Control Structures Shoreline, Scarborough

Location of Meadowcliffe

The planning and design process for this project was completed under a Class Environmental Assessment, and the decision making process used to select the preferred course of action was documented in an Environmental Study Report, which is available at: <http://trca.on.ca/protect/environmental-assessment-projects/meadowcliffe-drive-erosion-control.dot>

Getting there: [Click here to see how to get there by TTC](#)

Bloor subway, eastbound, to Warden Station
Bus #102, northbound – or – #102A to Kingston Rd at Fenwood Heights
Walk about 13 minutes to Meadowcliffe Dr.

Consider:

- 1) How these bluffs have changed over the past 1000 years?
- 2) The implications of not being able to stop erosion – e.g. that buildings will be threatened; etc.?
- 3) Alternative ways of controlling erosion?

5) Bloor St Viaduct

Built during the period 1913-18, the Prince Edward Viaduct (also known as the Bloor St Viaduct) spans 494 metres, at 40 metres above the Don Valley. It was designed with great foresight in mind – to accommodate mass transit. The surface was to carry trams as well as cars and trucks, but the structure was also capable of having rail retrofitted into it later on, when it was needed. Almost 50 years after it opened, this well engineered structure saved millions when the city decided to build an east-west subway route and to use the lower level to accommodate it.

Over the years, this tall bridge became the site of frequent suicides. About a decade ago, the city commissioned an artist/engineer, Dereck Revington, was commissioned to build a structure to prevent jumpers from committing suicide. It also is quite a remarkable structure. Recently, this barrier, which was titled “Luminous Veil”, finally was retrofitted with LED lighting technology to create a spectacle during evening hours.



Figure 10 - Bloor St Viaduct being built, 1917



Figure 11 - Bloor St Viaduct, 1917

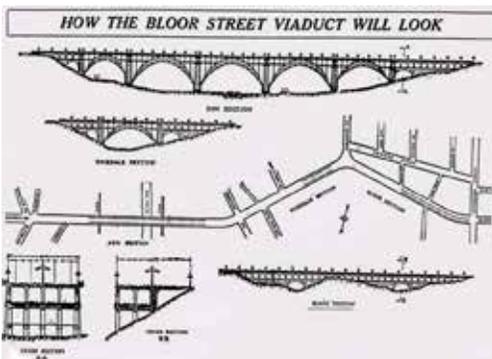


Figure 12 - sketches for Bloor Viaduct
"Veil", Bloor St Viaduct 2005



Figure 13 - "Luminous Veil", Bloor St Viaduct 2005

Getting there: Walk or take the Bloor subway to Castlefrank Station or Broadview Station. You can walk across the viaduct.



Resources: - https://en.wikipedia.org/wiki/Prince_Edward_Viaduct
- https://localwiki.org/toronto/Luminous_Veil

Consider:

- 1) The foresight, and money, required to build a structure with more than a 100 year vision?
- 2) What the impact has been of the Luminous Veil on the problem of suicide rates in Toronto?

6) Harbourfront

Since the city's earliest days, the waterfront has been a very busy place, with transportation, commerce, and residential functions. But by the end of the 19th century, the waterfront had become primarily industrial. Now, at the beginning of the 21st century, the waterfront is seen for the truly valuable asset that it is. Most of the industry has been moved away, replaced with high-density residential facilities, as well as a host of entertainment and recreational focuses.

The city has been struggling for a long time to make sense of the transportation infrastructure so that it serves the many needs related to cars, bicycles, transit, skateboards and, of course, pedestrians. Earlier this summer, the central area of Harbourfront was re-opened after years of chaos associated with rebuilding roadways, paths, transit routes and public spaces.

Have a look at the complexity of this civil engineering project that now accommodates many transportation modalities, but also is able to coordinate and control the interaction of all these transportation systems.



Figure 14 - Harbourfront - New Multi Transportation Systems



Figure 15 - Newly designed pathways and an historical view of Harbourfront, 1918?

Getting There:

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- 1) Bay Bus: Take the Bay bus south to Queen's Quay, cross to the south side of Queen's Quay and walk westward
- 2) Take the Yonge/University subway to Union Station, then transfer to the Harbourfront LRT. It will emerge from an underground tunnel and take you westward. Go as far you want, perhaps to Spadina, then exit the LRT and walk back, eastward.

Consider: How societal needs regularly transform the kinds of built form and public systems that government must provide.