Eglinton Crosstown LRT

Project Overview
The $9.1B Eglinton Crosstown Light Rail Transit (ECLRT) line is one of the largest infrastructure projects in North America. It is being funded by the province of Ontario and implemented by the provincial transit agency Metrolinx. It is being designed, constructed and maintained for 30 years by Crosslinx Transit Solutions (a consortium of Aecon, SNC-Lavalin, ACS-Dragados and Ellis Don). WSP is a member of the 4Transit Joint Venture, which is providing Technical Advisory Services to Metrolinx for the ECLRT project.

The ECLRT line will run 19km through the heart of Toronto, and make travel by transit up to 60 per cent faster along the Eglinton Avenue corridor. The ECLRT will be linked to 54 local bus routes, three TTC interchange subway stations and various GO Transit lines.

What innovations and future trend(s) did we consider?
— Need to mitigate climate change impacts
— Increasing income inequality
— Increasing urban growth
— Increasing need to construct large transit infrastructure projects in an urban environment

How were they considered?
By providing an alternative to car travel, the electrified ECLRT will reduce greenhouse gas emissions. The ECLRT line will provide better access to reliable high speed transit to several low income neighbourhoods.

The population of Toronto is projected to rise from 2.88 million in 2016 to 3.89 million in 2041. Providing additional high speed mass transit to accommodate this population growth is critical to the success of the City. Station design requirements accounted for future development plans. For example, the Main Entrance of the Leaside LRT station is designed to accommodate a future development overbuild.

It is increasingly necessary to construct large transit infrastructure projects in dense urban environments. This was the case for a 10km portion of the ECLRT line. To mitigate impacts to the public and existing infrastructure, this portion of the ECLRT line is located in twin tunnels that were bored using four Tunnel Boring Machines.

How was our approach better?
Given public concerns over traditional Design-Bid-Build projects running late and over-budget, the move to AFP delivery is a radical development in the delivery of large-scale transit infrastructure projects in Ontario. The successful management and delivery of the ECLRT will be a benchmark for all future transit projects.

Our involvement with developers, the community and a variety of City departments will ensure the ECLRT is integrated with existing and planned communities. This will provide these communities with a viable alternative to travel by car. By providing an alternative to car travel, the electrified ECLRT will reduce greenhouse gas emissions.

In addition to the LRT, the project includes implementation of the City's Eglinton Connects vision; which includes reconstructing portions of Eglinton Avenue to include dedicated bike lanes and generous pedestrian space. This provides flexible methods of mobility and improved access to transit nodes.

WSP have been involved in every step of the process. Starting with preliminary design, environmental assessment and support during procurement, we are currently working with the Design-Build consortium to ensure the project is implemented properly. Our expertise and history of the project will ensure this landmark project is completed successfully and to the satisfaction of the public.

The outcome
As construction progresses, WSP continues to play a critical role in ensuring the successful delivery of this project. We are part of an integrated project team with other consultants, the Design-Build consortium, multiple government agencies, operators, and the public, all vital to building to building this one-of-a-kind project. When completed in 2021 the ECLRT will support future growth across Canada's biggest and fastest-growing city.

For more information:
Paul.Nimigon@wsp.com

We see the future more clearly and design for it today.