

7. Summary

The generation, screening, assessment, and evaluation of alternative routes were carried out in accordance with the approved 407 East EA ToR. A long list of route alternatives was generated based on both previous MTO studies as well as current information taking into consideration the guiding principles and objectives established in the approved 407 East EA ToR. Next, the generated long list of route alternatives was screened based on seven criteria reflecting transportation, environmental, and land use features and constraints in the study area to arrive at a short-list. This final short-list of alternative routes was sub-divided into seven sections comprised of the Mainline and Link routes.

The established short-list of route alternatives was then assessed through a “net effects analysis” based on the application of thirty-one criteria grouped within five Factors: Natural Environment, Social Environment, Economic Environment, Cultural Environment, and Technical Considerations. The “net effects analysis” was then followed by a detailed comparative evaluation using two evaluation methods: reasoned argument and arithmetic evaluation methods.

By identifying the potential effects on the environment (both positive and negative) for each ‘short listed’ routes (by mainline and link routes) and then applying (where applicable) appropriate avoidance/mitigation/compensation /enhancement measures, the relative merits of each mainline and link route were compared on the basis of net effects. Following this, each mainline and link route was ranked from most preferred to least preferred within each Factor and a subsequent overall ranking was identified based on these Factor-specific rankings.

Using the results of both evaluation methods, a technically recommended route was selected for the proposed east-west transportation corridor and two north-south links. Subject to comments received, this “technically recommended route” will be either confirmed as the “Preferred Route”, or another route will be identified as the “Preferred Route”.