

# Pedestrian Refuge Island Safety Audit

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## **ABSTRACT**

Public agencies have a growing awareness of the need to better accommodate the safety and security of pedestrians in the roadway environment. There are a number of road features that aid pedestrians to cross major roads. The use of refuge islands on their own or in conjunction with pedestrian crossovers, has been considered as a method of enhancing pedestrian safety in the City of Toronto, Canada. Over the past 10 years, more than 60 islands have been implemented in Toronto and surrounding jurisdictions. This paper summarizes a comprehensive safety review of pedestrian islands, assessing the collision history, human factors aspects, design, and operational characteristics of the islands. The implications of design elements and design approaches are discussed in terms of the pedestrian usage and safety. The paper will present the findings with respect to driver safety experience, and on the driver's ability to recognize and react to the potential interaction with pedestrians, the island, and surrounding vehicles. Recommended standards for pedestrian islands and environmental conditions have been developed and will be presented.