

ACKNOWLEDGMENTS

My profound gratitude goes to the following people and organizations:

Dr. Juan Pernia, my supervisor, for the support and guidance provided on this project.

The thesis committee members, Dr. Michel Bedard, and Dr. Liang Cui, as well as the Master's Program Graduate Coordinator for the Department of Civil Engineering Dr. Jian Deng, for their time and help.

The Department of Civil Engineering and the Faculty of Engineering at Lakehead University for having me as a graduate student.

Lui Greco of CNIB for commissioning and guiding the work of this project.

Tanis Boardman, Kiri Butter, Bernard Akuoko, and Shanna Cameron-Picard from CNIB, for their help in facilitating various aspects of this project.

All the volunteers who participated in the workshop, discussions, opinion survey, and onsite data collection sessions.

Cory Hubbard and Morgan Ellis, Technologists in the Department of Civil Engineering at Lakehead University, for relentlessly providing technical support for this project.

The City of Thunder Bay including Kayla Dixon, and the traffic control team for their help.

The manager at Pioneer Construction, Fred Hakala, and his crew for assisting in installing the strips.

Aseer Masnoon, a graduate student of Lakehead University, for helping with strip installation.

Valerie Gibbons and Lakehead University Makerspace for helping to print the 3D model.

Roy Teniuk of Lakehead University for providing logistical support.

Mark Antony Mastroionni of Lakehead University Starbucks for providing logistical support.

Dr. Shaw of Lakehead University for facilitating the process for testing at Lakehead University Parking Lot 5.

Robin Canuel and Garth Galvin of Lakehead University Library for providing helpful feedback.

Heather Moynihan, Brenda Magajna, and Femi Mirshekari of Lakehead University for providing some helpful feedback.

Kim Salamon of Lakehead University for providing some helpful feedback.

Sarah Barclay and Suman Poudel of Lakehead University for guiding me through the paperwork.

Pearla Martine Badio for technical support and guidance on the paperwork.

Michael Stewart for guiding me through the paperwork.

Tristen Brown of Lakehead University for providing Information Technology and technical support.

Dr. Bob Aghdashi, Dr. Gustavo de Andrade, Dr. Fabio Sasahara, and the Mc Trans

Center of the University of Florida for providing me their Highway Capacity Software (HCS) for free.

Thunder Bay Police Department for providing collision reports that were reviewed for this project.

National Traffic Research Institute in the United States for providing the 3D model file that was printed.

Everyone who helped with this project.

All my friends and family members, for their good wishes, prayers, and support.