Executive Summary

The Wyoming County Guide Rail Installation Assessment project was initiated by the Genesee Transportation Council (GTC) in partnership with and on behalf of Wyoming County to update the County-owned guide rail inventory and collect additional data necessary for developing an on-going program of improvements. Prior to this project, the guide rail inventory consisted of a spreadsheet database that identified component data including descriptive locations, length, and type. The new inventory features an expanded dataset and consists of a working geodatabase that will be available in Geographic Information System (GIS) format.

Guide rail type, condition, measurements, and GPS locations were collected at each location during field inspections performed during the fall of 2016 and winter of 2017. The field data was accompanied by photograph documentation and entered directly into an online geodatabase using field data collection software installed on project dedicated smart phones. The field data was supplemented by various available desktop data such as traffic, corresponding County structures, and accident history.

The current guide rail inventory consists of 317 individual segments totaling 61,420 linear feet of roadside barrier. This includes 52,282 linear feet of highway barrier and transitions and 9,138 linear feet of bridge rail. The highway barrier is further broken down by type to 25,749 feet of w-beam, 24,844 feet of box beam, 907 feet of cable, 249 feet of w-beam median, 248 feet of box beam median, 158 feet of jersey barrier, and 127 feet of timber barrier.

Existing conditions were assessed and documented for each highway barrier in order to develop a list of locations recommended for replacement or repair. A total of 53 segments were identified for replacement and 21 segments were identified for repair. A system for ranking locations was developed in order to prioritize improvements based on accident history, existing clear area, and traffic exposure. Using a weighted scoring system, overall scores were assigned to each location.