1. Background and Problem Statement

Conventional intergreen time design (Gaza, D., Hermand, R., and Manzolino, A., 1986)

2. Objective

To develop a safety reliability based intergreen design method, enabling to account for the randomness of traffic and driver decisions.

3. Methodology

Safety reliability: Occurring probability of risky behavior at the change of phases
- Risky behavior related to yellow time design:
  - Abrupt stop ➔ line crossing collision, etc.
  - Red-light running ➔ right-angle collision, etc.
- Clearance failure (PET<t):
  - Right-angle collision, etc.

4. Validation of the Proposed Method

Uncertainty analysis of input variables

5. Conclusions and Future Works