

Graduate Students,  
Energy, Environment & Resource Sustainability

# Operational Performance and Safety Assessment of Signalized Roundabout

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## Introduction

- Qatar installed traffic signals on important roundabouts to enhance operational and safety performance.
- Performance evaluation is commonly done using historical data, however to provide countermeasures in a more timely manner, simulating traffic conflicts from the observed roundabout operation is used to suggest operational and safety improvement.

## Objective

- Assess safety and operational performance of a signalized roundabout in the City of Doha through the simulation approach and applying the surrogate safety assessment model

## Study site characteristics



Fig. 1. The studied signalized roundabout and legs directions

## Traffic demand and signal timings and phasing

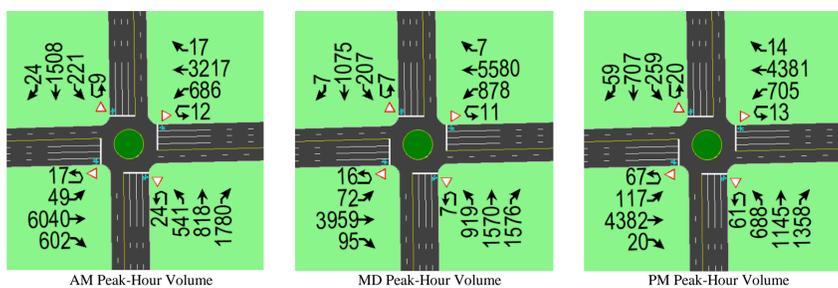


Fig. 2. Traffic Volumes for AM, MD, and PM Peak Hour

