

# Calibration and Sensitivity Analysis Report

Sadman Ahmed Shanto

July 2020

**REQUIREMENT:** Could you actually try and put together some sort of summary with where we're at wrt the calibration and a good error function?

## Plan

- Go over to do list in VU
- Go over all README.md's
- Select materials from the above two
- Look at latest version of manuscript
- Explain the story behind Calibration
  - Explain the results of different calibration
  - Explain the various objective functions used and their results
- Think about which plots to include (figure files in local, figure files in lica, slack files to GG)

## Introduction

Flow of report:

- Programs that I have written
- Lessons from shell script sensitivity analysis (congestion only)
- Calibration attempts
  - solvers
  - attempts
  - success
  - takeaway from each attempt

- Optimization codes and results from congested flow regime
- Partial differential analysis
- IDM parameters recovery
- Good Calibration routine
- Objective Function