Traffic data collection is the main issue that scientists and researchers are facing when trying to perform traffic engineering. Traditional manual counting is to forget, given the amount of data to treat. Several mechanical methods are currently tested and established but multiple issues, malfunctions, and lack of efficiency are noted. Indeed, fixed sensors, cameras or loop detectors are distributed over urban networks to count down the passing vehicles. These practices are costly, and several malfunctions are noted. An alternative new solution involving a swarm of drones may help and give a real push to the research in this topic. In fact, using drones to film the traffic is a way to collect the data easily, with no heavy cost. The challenge is to find a way to do it appropriately, with the optimal deployment.

**Small Scaled Network (SSN)**

- **Objective function = 48**
- **Optimality Gap = 19.2%**
- 5h run (same obj after 20mins)

**Doubled SSN**

- **Objective function = 52**
- **Optimality Gap = 15.5%**
- 5h run (same obj after 20mins)

**CG SSN**

- **Objective function = 48**
- **Optimality Gap = 1%**
- 1 min run

**CG doubled SSN**

- **Objective function = 58**
- **Optimality Gap = 1%**
- 1 min 22 s run

**Conclusion**

- **Number of drones selected** 19
- **Optimality gap estimated** 31%
- **Total kilometers covered** 65.5 kms
- **Total kilometers saved from initial solution** 16.1 kms
- **Running time** 31 min 28 sec

**References**
