Task 1: Planar Facility Location/Layout with Generalized Congested Regions

Task 2: Connection Location Problem Simultaneous Sizing & Location of DCs

Plants

DC

Retailers

Research Motivation

- Traditionally, the location and sizing decision are treated separately
- Do not consider trade-off between Transportation cost, DC sizing and DC operating cost

M/G/c Model

M/G/1 Model

M/G/c Model

Model: An Approximate Formula

Deterministic Equivalent Form

Column Generation Approach

Computational Results

M/G/1 Model

M/G/1 Model