Data-Driven Waste Management Solutions

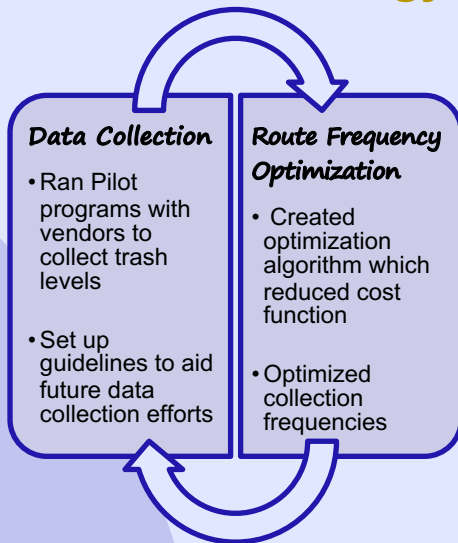Seattle Public Utilities

The task

Revamp SPU's Public place can program by deploying a data-driven model to optimize pickup frequencies and routes
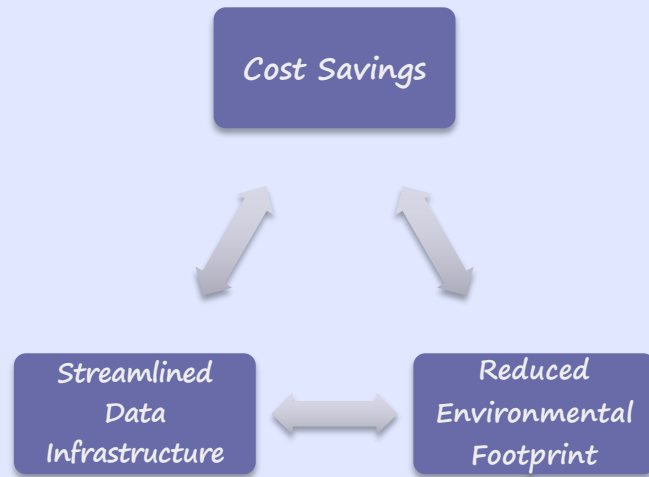
The problem

- No historical data about trash levels
- Expensive, Wasteful Routes
- Empirical collection frequencies

Our Methodology

Data Collection
- Ran Pilot programs with vendors to collect trash levels
- Set up guidelines to aid future data collection efforts

Route Frequency Optimization
- Created optimization algorithm which reduced cost function
- Optimized collection frequencies

Benefits

- Cost Savings
- Streamlined Data Infrastructure
- Reduced Environmental Footprint

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