Case Study: Helsinki Multi-Vehicle Route Optimization

This case study demonstrates an optimization solution for delivery routing across Helsinki. We solved a Vehicle Routing Problem (VRP) with multiple vehicles, using real geographic data and realistic constraints including travel time and vehicle capacity.

Key Features:
- 3-vehicle VRP optimized using Google OR-Tools
- Real Helsinki coordinates (Espoo, Vantaa, Pasila, Tapiola, etc.)
- Time-dependent travel durations computed using Haversine distances
- Visual multi-route map generated (PDF + PNG)
- Balanced load distribution and minimized total route duration

This project serves as a representative example of G-OPT's capabilities in routing, logistics, and optimization solutions for small businesses and local delivery services in Finland.