AccraIQ Municipal Transit Optimization

Comprehensive Analysis Report Generated: July 13, 2025

Executive Summary

ROUTE REDUCTION

38.9% 253 of 651 routes

COVERAGE RETAINED

92.0%

4,328 km maintained

ANNUAL CO₂ SAVED

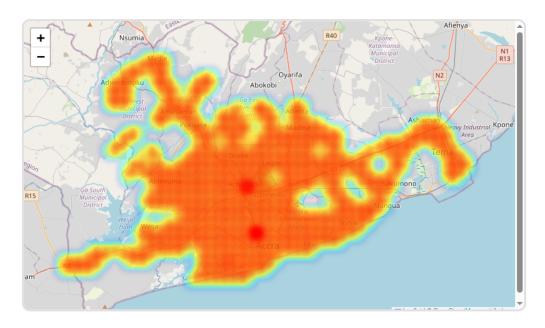
6,049

tonnes per year ANNUAL SAVINGS

¢39,383,5 61

> total economic benefit

Transit Stop Density Heatmap



High-density areas indicate clusters of transit stops across Accra.

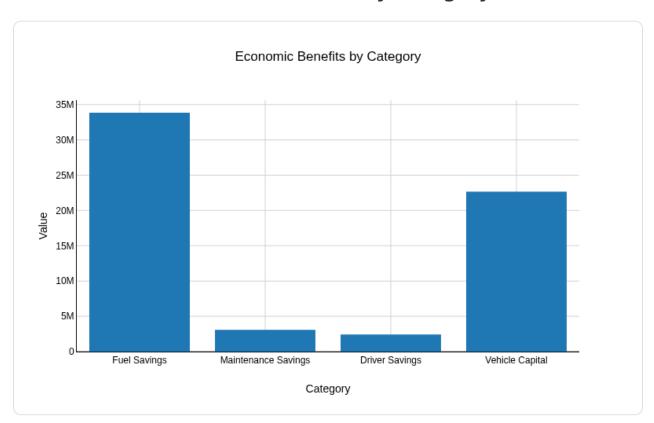
Economic Impact Analysis

• Fuel Savings: ¢33,859,074

• Maintenance Savings: ¢3,095,686

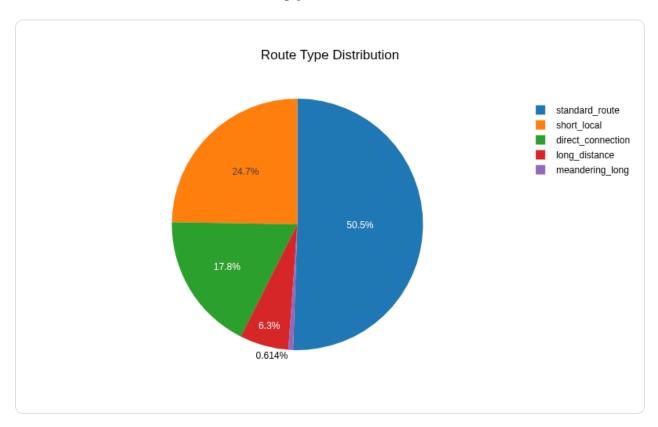
Driver Savings: \$2,428,800Total Annual: \$39,383,561

Economic Benefits by Category



Network Analysis

Route Type Distribution



Original Network: 651 routes, 6537 km
 Optimized Network: 398 routes, 4329 km

• Length Reduction: 33.8%

Network Visualization Comparison

Original Network

Asmankere Asmankere Asmankere Adero Dutte Tescher Matte Dobbore Asmankere Adero Greate Actro Adero

All 651 routes (6537 km total)

Optimized Network



398 selected routes (4329 km retained)