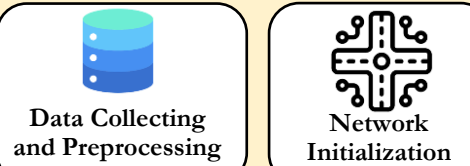
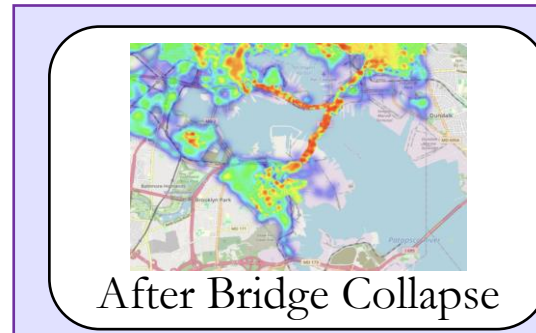
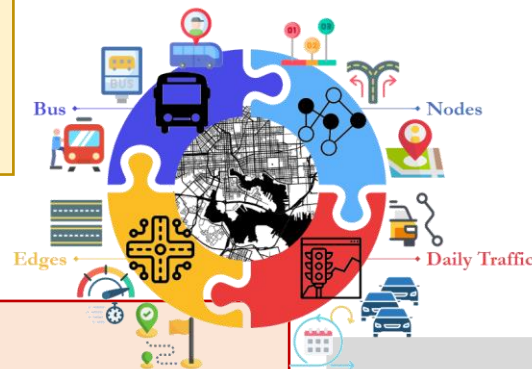


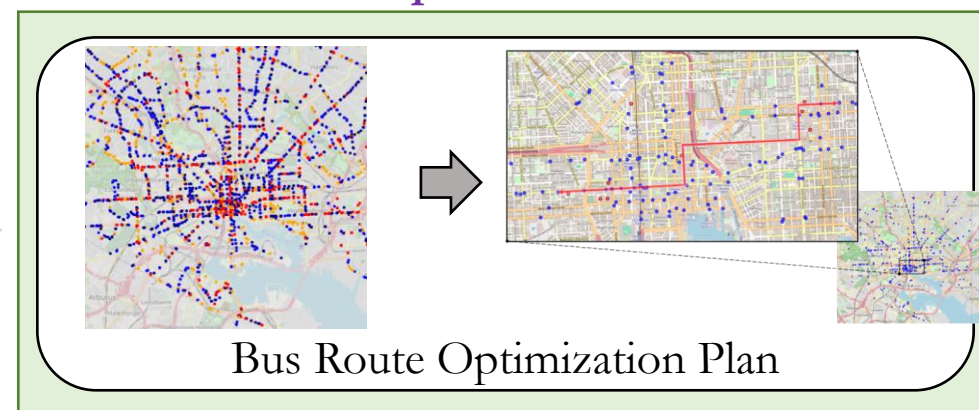
Our Work



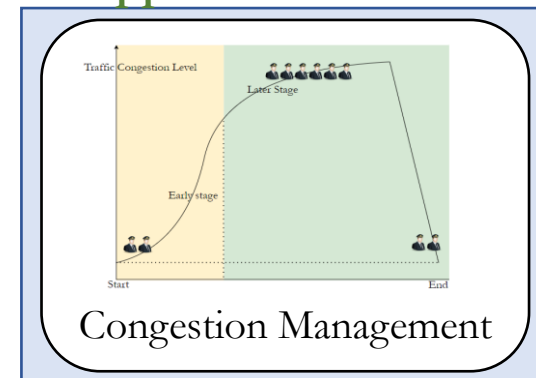
Model Preparation



Problem 1: Network Importance Increase



Problem 2: Application of the Network



Problem 3: Best Improvement of the Network

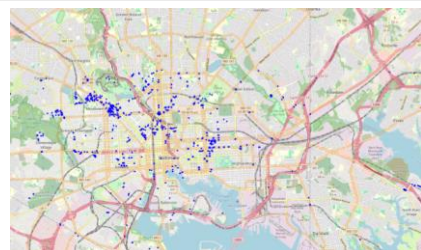
Improved K-Shell Algorithm

Node Weights and Edge Weights based on
Baltimore Transport Network

$$s_i = \alpha d_i^{(w)} + (1 - \alpha)n_i$$

BPR Function
AADT Fast Filling, etc.

Stakeholder Groups	Main Concerns	α	GDP Proportion
Local Residents	Convenience	$\alpha_1 = 0.7$	$GDP_1 = 35.55\%$
Freight Enterprises	Transportation Efficiency	$\alpha_2 = 0.1$	$GDP_2 = 60.54\%$
Tourists	Balanced Demands	$\alpha_3 = 0.5$	$GDP_3 = 3.91\%$



Visualization of the Baltimore
Transportation Network

Sensitivity Analysis