

AI-based Traffic Signal Control

Systems & Electronics Division
Sumitomo Electric Industries, Ltd.

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AI-based Traffic Signal Control using Probe Data

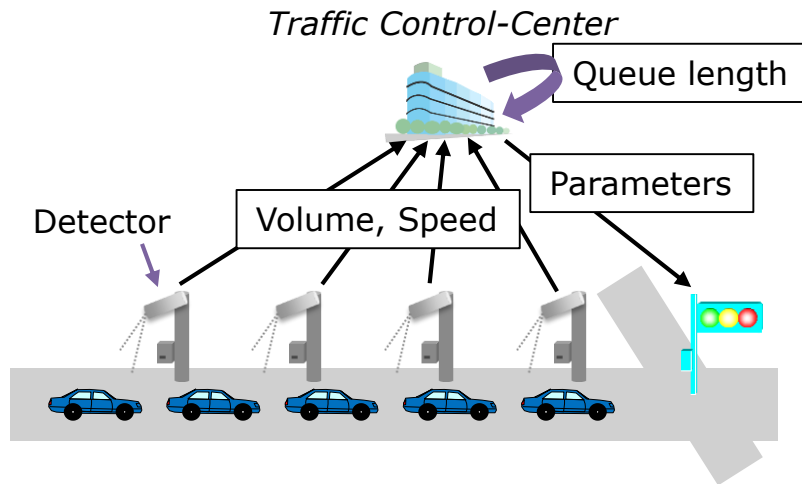
Overview

Lower cost traffic signal control system using probe data and AI.

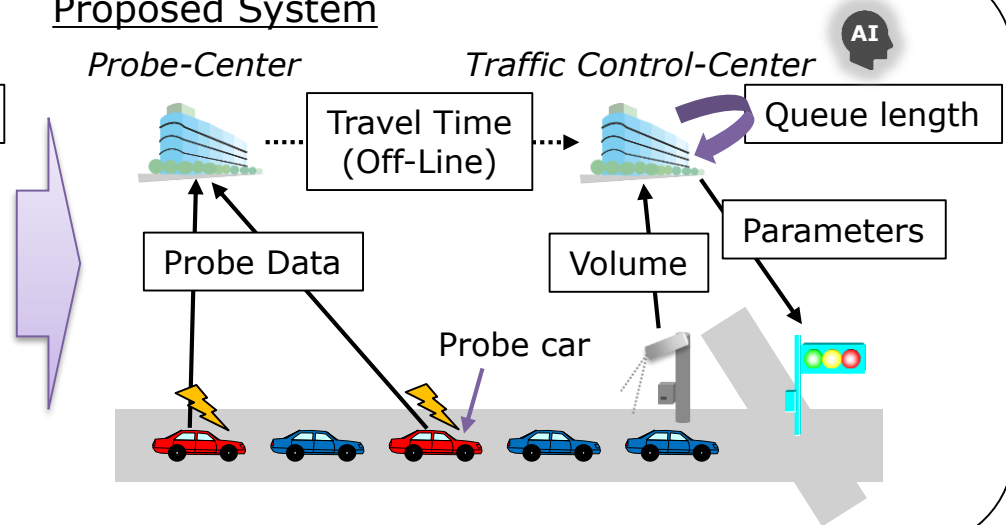
Features

- Low cost
- Performs as good as detector-based system

Conventional System

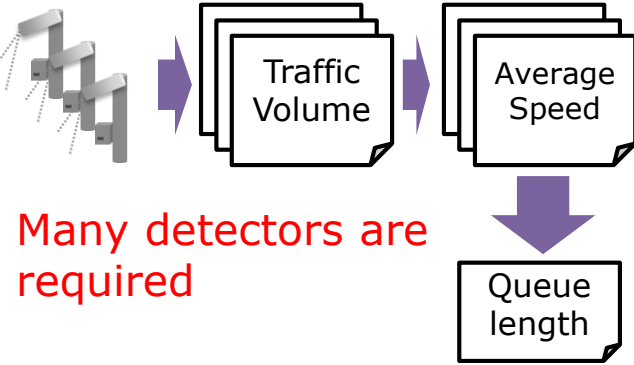


Proposed System

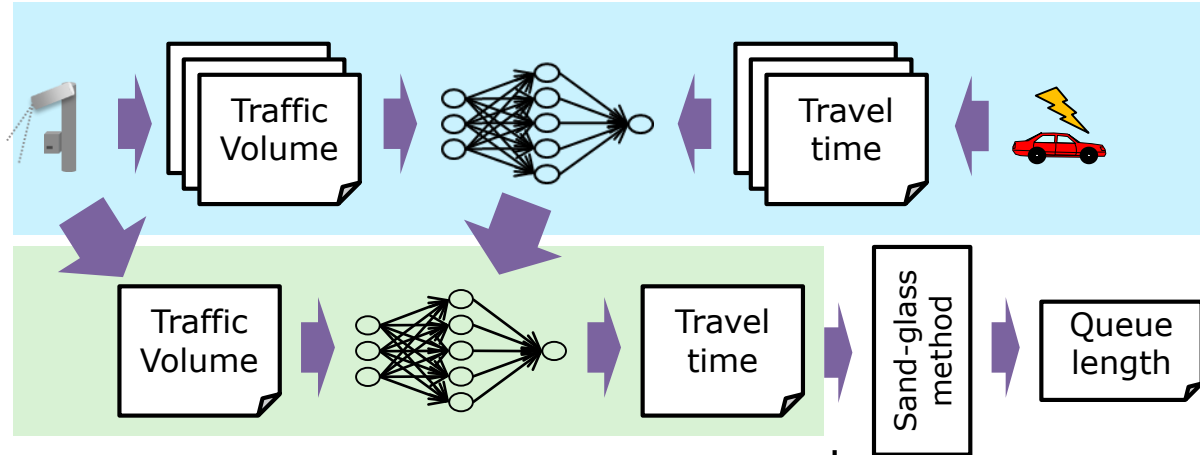


How We Estimate Queue Length

Conventional Method



Proposed Method



Evaluation (3 months)

Evaluation Conditions

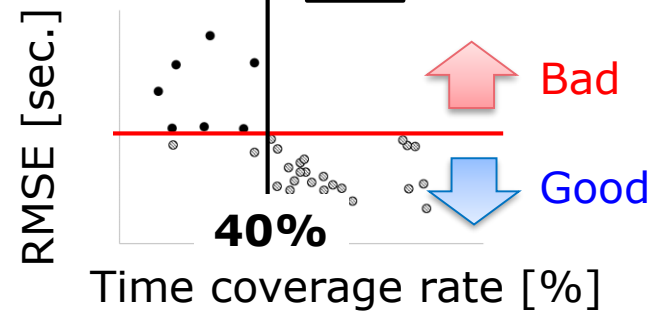
- 32 inflow roads in Okayama Prefecture, Japan
- 1 year (April 1, 2017 – March 31, 2018)

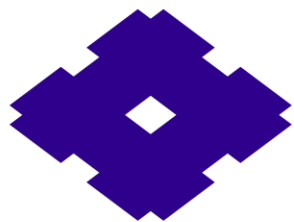
Field Operational Tests

Object: Verification evaluation of traffic signal control

Test Area: 2 intersections in Okayama city

Period: 2021/4~





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