

Signal Optimization as a Safety and Operations Countermeasure

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Project Goal

- Evaluate whether existing signal timing at signalized intersection(s) contains inefficiencies or latent safety risks and do a literature review to identify optimization strategies using field-collected dataset.

Key Tasks

- Collect existing-condition field data in NJ
- Identify ineffective or “wasted” green time
- Diagnose hidden operational and safety risks
- Do a Literature Review for signal optimization strategies
- Evaluate signal optimization as a safety countermeasure emphasizing low-cost, no-infrastructure solutions