2022 Arterial Optimization Program

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Agenda

- What is an Arterial Optimization Program
- Levels of Service
- Ingredients
- Centralized Traffic System – Centracs
- CCTV Traffic Monitoring
- Measures of Effectiveness
- 2022 Corridors for Review
- Questions

Levels of Service

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FREE FLOW Low volumes and no delays.	LOS **A**
STABLE FLOW Speeds restricted by travel conditions, minor delays.	LOS **B**
STABLE FLOW Speeds and maneuverability closely controlled because of higher volumes.	LOS **C**
STABLE FLOW Speeds considerably affected by change in operation conditions. High density traffic restricts maneuverability; volume near capacity.	LOS **D**
UNSTABLE FLOW Low speeds; considerable delay; volume at or slightly over capacity.	LOS **E**
FORCED FLOW Very low speeds; volumes exceed capacity; long delays with stop-and-go traffic.	LOS **F**

▶ **Level of Service** means a quantitative standard for transportation facilities describing operational conditions. Level of service may be described for intersections (signalized or unsignalized) or street segments (between signalized intersections)
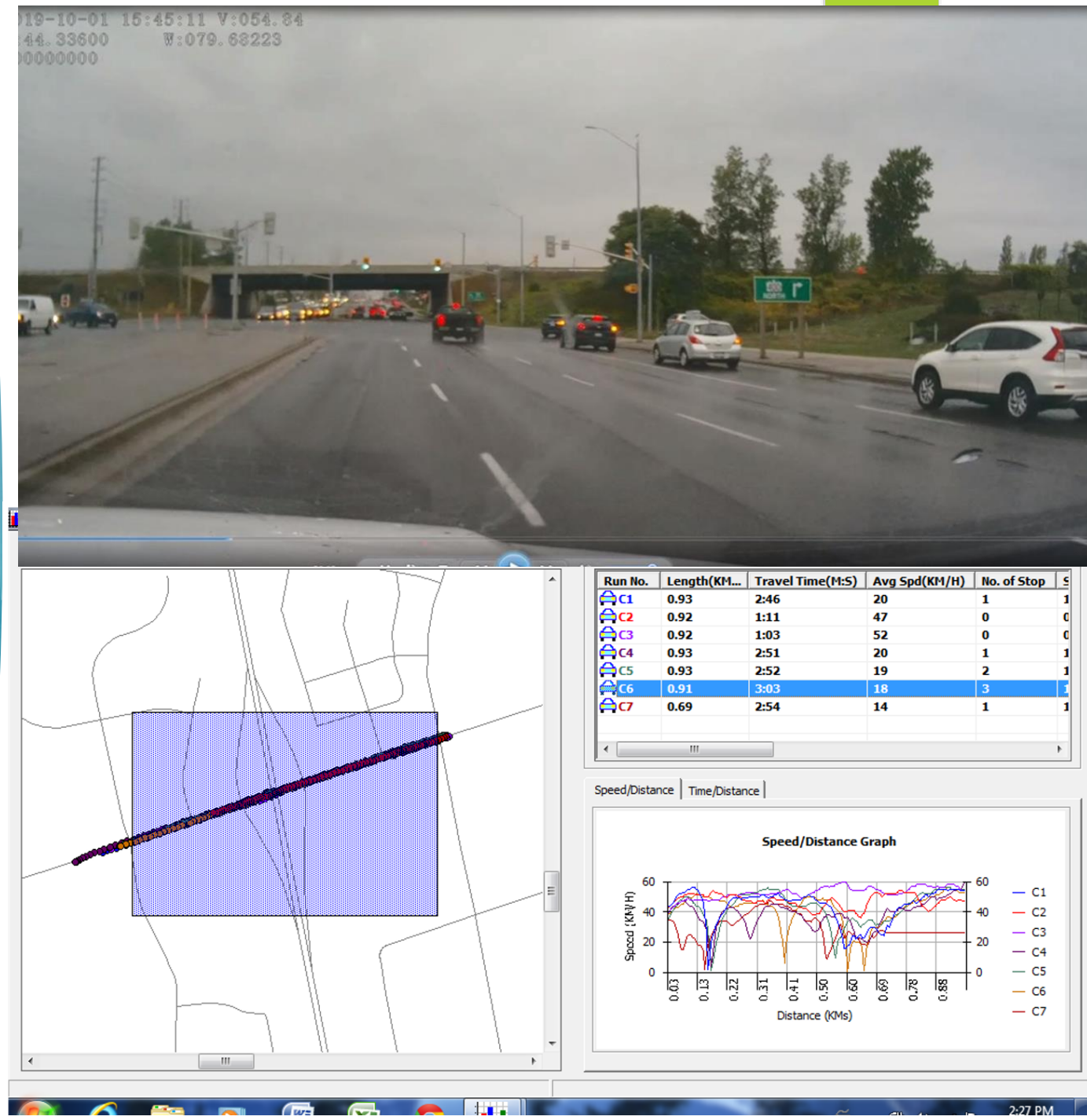
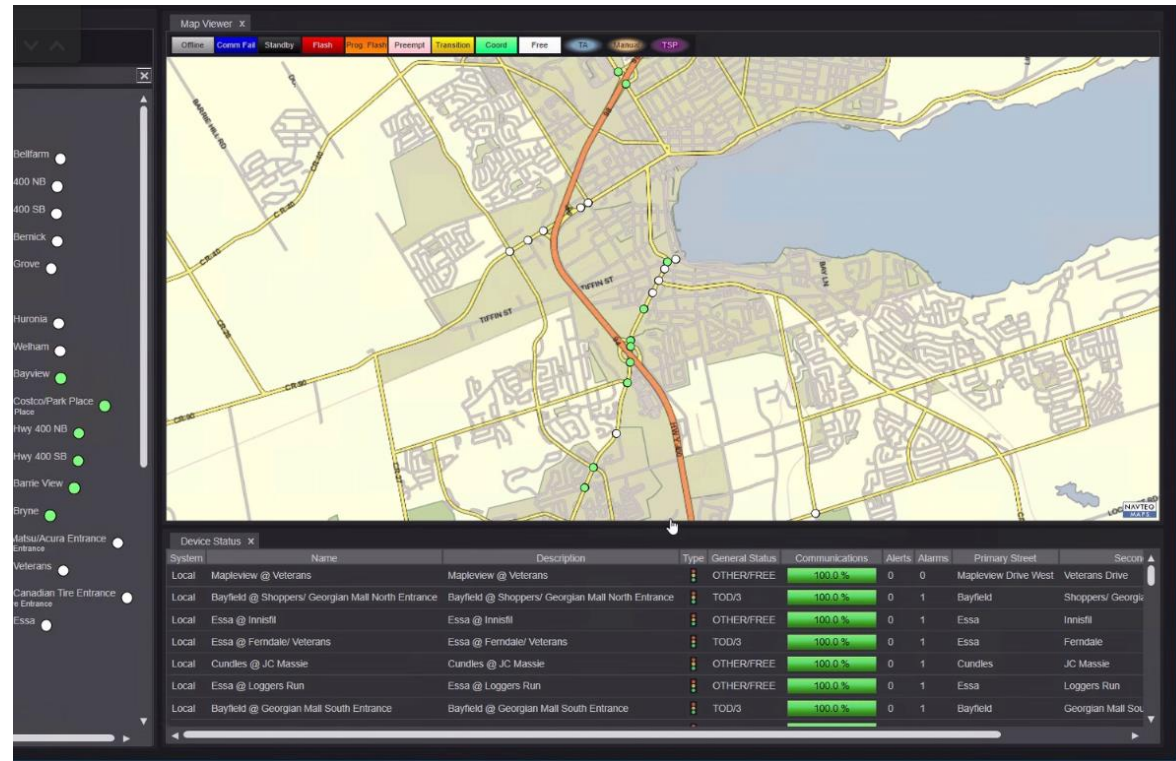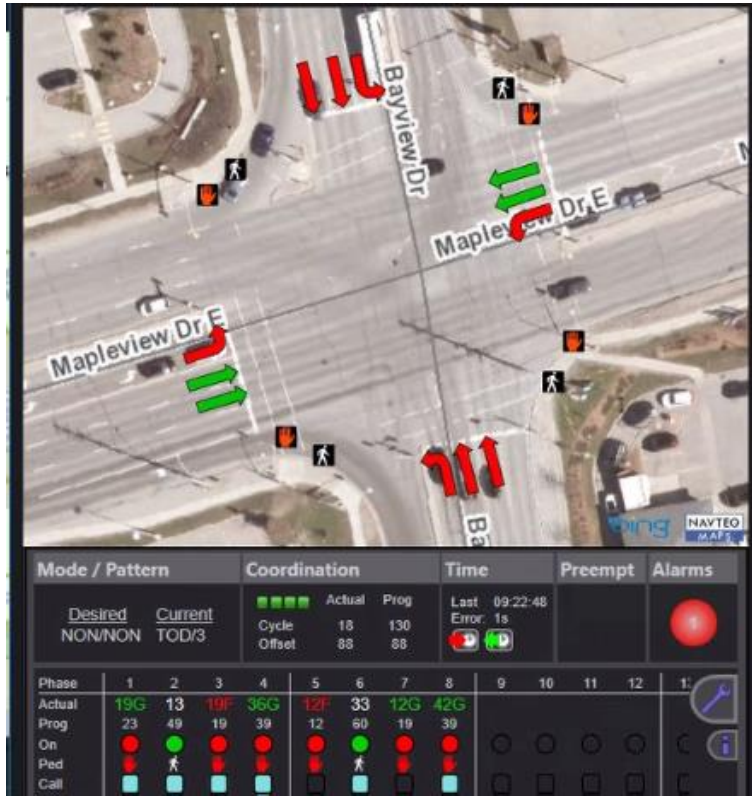# Steps Involved
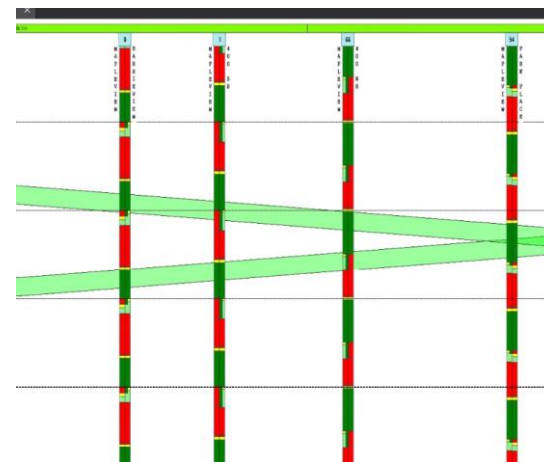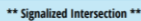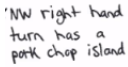
- Operational Checklist
- Turning Movement Counts
- Geometric Conditions
- Existing Concerns
- Phase Changes
- Offset Optimization
- System Integration
- Implementation

Before vs After Studies

▶ Travel Time

▶ Number of Stops
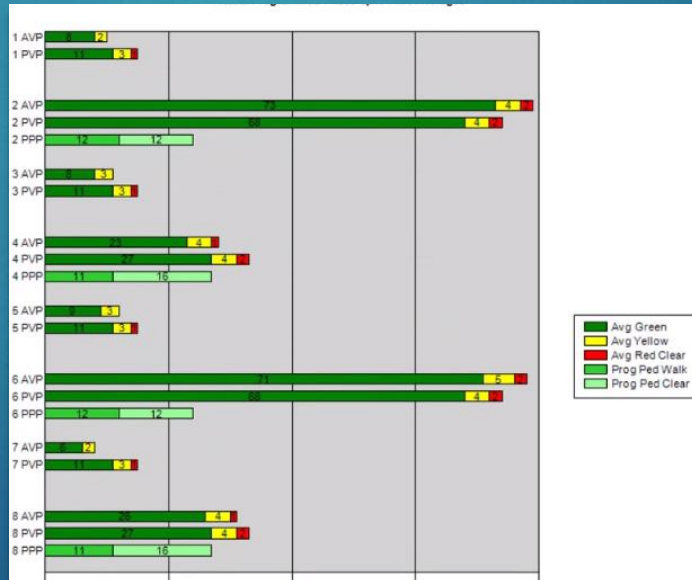
▶ Stopped Delay

▶ Average Speeds

CENTRACS

▶ **A centralized traffic control system package using cellular modems providing 24 hour connection and monitoring tools at key intersections.**

CENTRACS Functionality

- **Specialized Plans**
- **Modify and implement signal timings**
- **Reporting on vehicle detection, fire preemptions, cabinet alarms…..**
- **Split monitor reporting**
- **Front page displays**
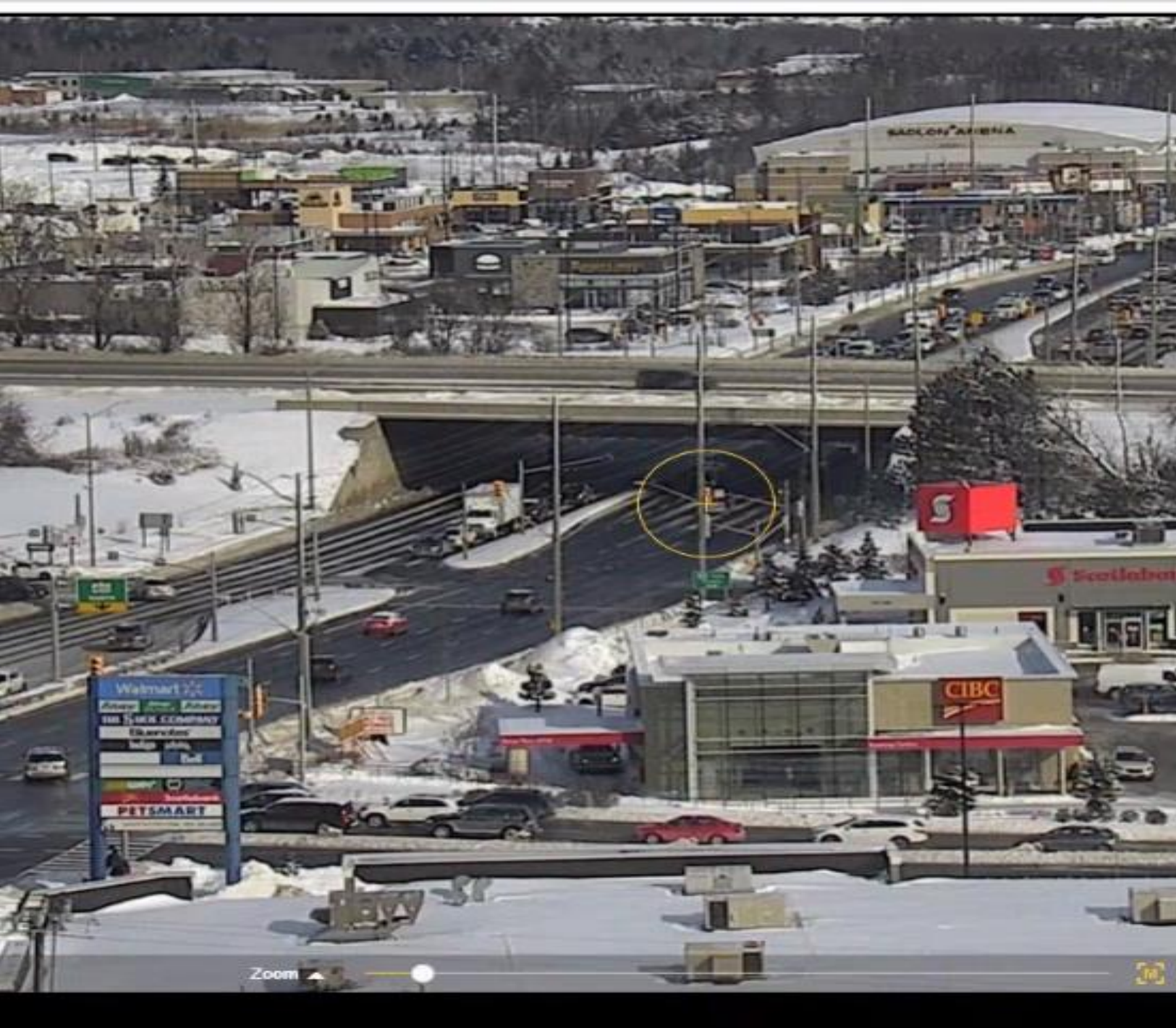- **Daily Maintenance**

CENTRACS ROLLOUT

CCTV

- ▶ Traffic Monitoring
- ▶ Road Operations
- ▶ Emergency Services
- ▶ 12 Existing Locations
- ▶ Expansion
  - ▶ Mapleview Dr & Yonge St
  - ▶ Veterans Drive

2022 Corridors for Review

- ▶ Q1 – Mapleview/Bayfield/Essa
- ▶ Q2 – Harvie Road – Essa to Bayview
- ▶ Q3 – Duckworth Street – Grove to Georgian
- ▶ Q4 – Dunlop Street – Ferndale to Anne

Questions