A3 No. and Name
Group 2: **V-Track**

Team Leader (name & 'phone ext)
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Team members (name & role)	
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Stakeholders (role & department)	
1	AI & ML Coordinator, Conestoga College
2	Other Conestoga College stakeholder(s)
3	Government
4	Administrative & Policy Stakeholders

Company objective
Canada Government

Start date & planned duration
2025-05-13
14 weeks

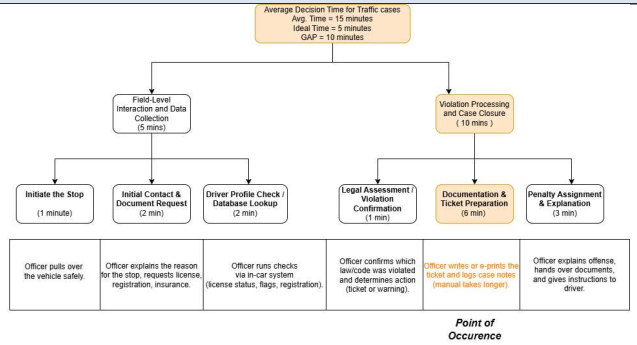
1. Clarify the problem

Current Situation
Traffic violation penalties are assessed manually, taking an average of **15 minutes** per case. Officers rely on spreadsheets and disconnected databases, making it hard to access full driving histories. This leads to inconsistent penalties and delays in decision-making.

Ideal Situation
An AI-powered Decision Support System would reduce decision time to **5 minutes**, integrating driver history, offense context, and risk factors. It would ensure fair, consistent penalties and improve efficiency across jurisdictions.

Gap
There is a **15-minute** time gap per case between manual and AI-based assessment. The current system lacks data integration and standardization, while the ideal setup enables fast, data-driven decisions with unified driver profiles.

2. Breakdown the problem



3. Set the Target

Reduce the average decision time for traffic offense penalty assignment from 15 minutes to 5 minutes by the end of 2025, by standardizing the evaluation process and ensuring consistency in fairness and speed.

4. Analyse the Root Cause

Why does the process take too long at Documentation & Ticket Preparation?
→ Because officers manually write or e-print the ticket and log case notes, which is time-consuming.

Why is manual writing or e-printing so time-consuming?
→ Because there is no integrated or automated system to auto-fill or generate tickets and notes.

Why isn't there an integrated system for ticket generation?
→ Because current systems are outdated or lack real-time synchronization with driver databases and violations.

Why are systems outdated and not synchronized?
→ Because budget constraints and limited digital infrastructure have prevented modernization.

Why hasn't the budget been allocated to modernize this process?
→ Because of low awareness of how AI-driven automation can reduce case handling time and improve decision-making.

5. Develop Countermeasures

	Criteria >	Time Efficiency	Consistency	Implementation	Scalability	Integration	Legal Compliance	Overall Score (/100)	Ranking	Potential Problems
	Weight (/100)	25	25	15	10	10	15			
	Min Score (/10)	8	8	6	6	6	8			
1	AI Automated Enforcement Cameras	10	10	4	6	6	6	77	3	Below the minimum desired score for: Cost of Implementation; Legal Compliance High setup cost; legal limits on where AI enforcement is permitted in Ontario.
2	Electronic Ticketing (e-Citation)	10	6	6	8	8	9	80	2	Below the minimum desired score for: Fairness & Consistency Standardizes ticketing but does not eliminate profiling in who gets stopped.
3	Policy Reform - End Minor Stops	8	10	10	9	10	6	89	1	Below the minimum desired score for: Legal Compliance Requires legislative support; may face resistance from police unions or legal barriers.
4	Status Quo + Officer Training	2	4	10	10	9	10	65	5	Below the minimum desired score for: Time Efficiency; Fairness & Consistency Training alone shows minimal impact on bias or time. No systemic change.
5	RAG-Based Judicial Retrieval System	8	6	5	7	6	7	66	4	Below the minimum desired score for: Fairness & Consistency; Cost of Implementation Bias risk in outputs; initial development and integration are costly and complex.

7. Monitor Results & Process

8. Standardise & Share Success