

Computer Vision in Transportation Infrastructure



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After a semester of intensive research, we identified a number of **key players dedicated to the safety of transportation infrastructure.**



Advocacy Groups



Traffic Engineers



Urban Planners



Academics



Public Safety

Ensuring constant, effective communication between these groups is essential to progress in transportation safety.



Traffic Engineers



Advocacy Groups

VALUES

Efficiency, Safety, “Boots on the Ground”

NEEDS

Data, Public Support

CHALLENGES

Overloaded with requests, traffic engineers and government officials need a way of assessing which complaints to prioritize.

VALUES

Complete Streets, Environment, Safety

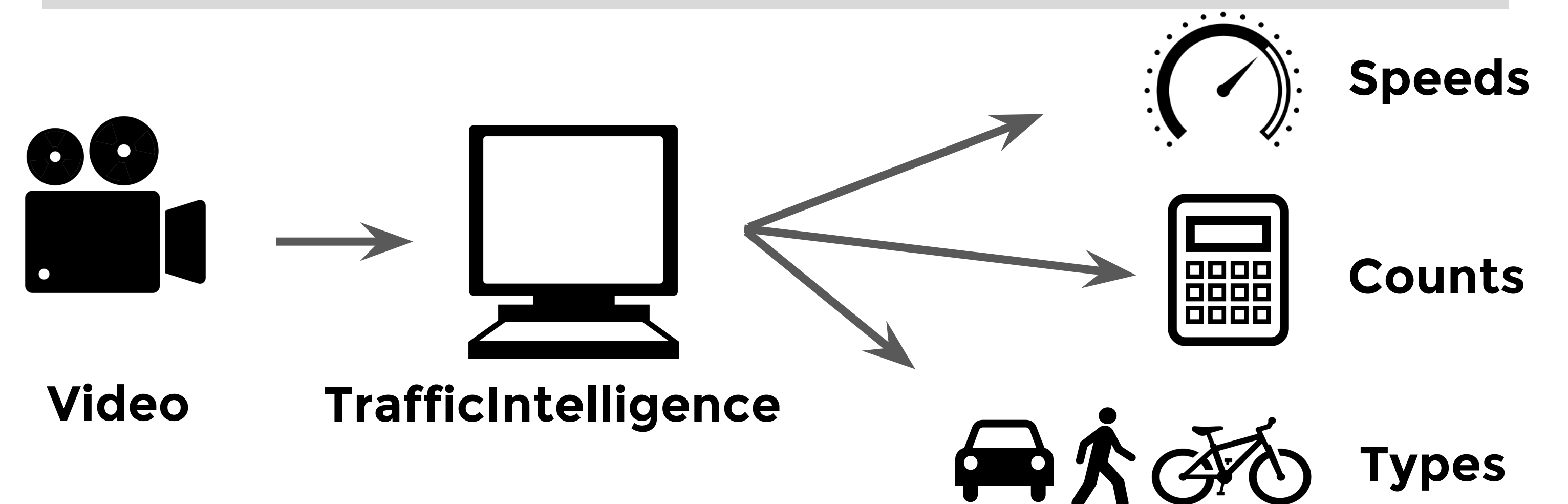
NEEDS

Public Education, Motivated Citizens

CHALLENGES

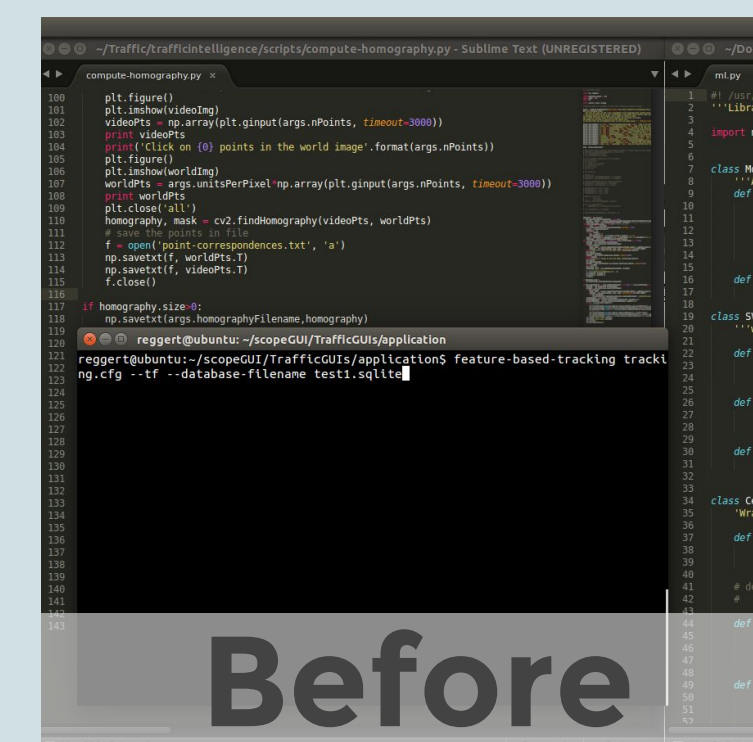
Advocacy groups need a way of providing **data-driven evidence** to make the change they desire in their communities.

With **easier access to data**, our team aims to **bridge the communication gap** between the public and policy makers.

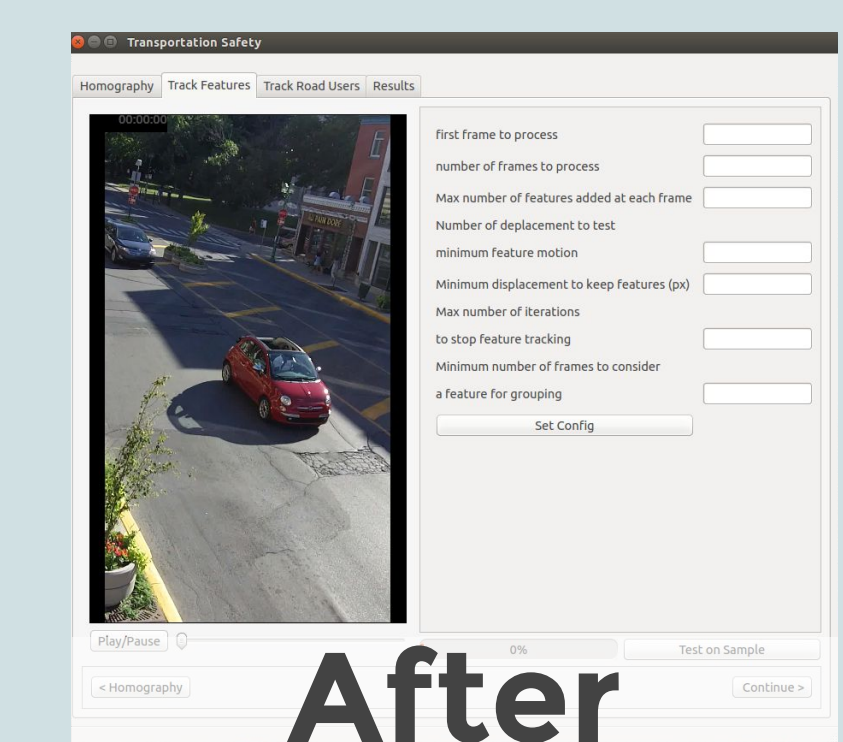


In collaboration with researchers at the Polytechnique Montreal, we created a **free software package** that allows users to **upload a video of an intersection** and **easily collect data** using advanced computer vision algorithms.

Our SCOPE team created a **user interface** to Polytechnique Montreal’s TrafficIntelligence project. This allows users to **easily upload videos and interpret data.**



Before



After

With our graphical user interface, we have made **recent advances in computer-vision research available to the public.**