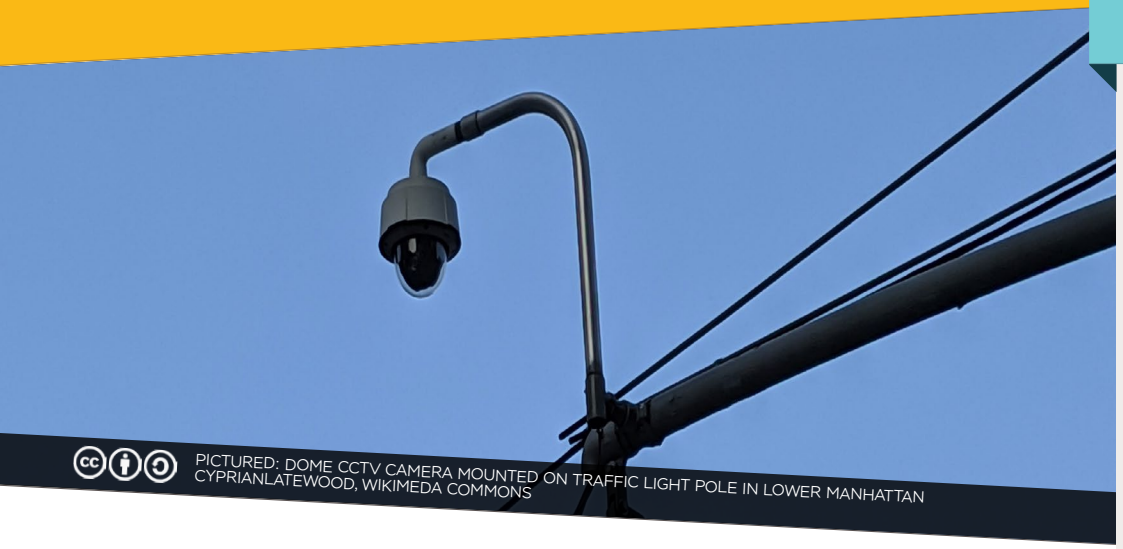
Connected & Automated Vehicle Technology

An emerging solution to congestion, incidents, and other challenges to transportation systems.



PICTURED: DOME CCTV CAMERA MOUNTED ON TRAFFIC LIGHT POLE IN LOWER MANHATTAN
CYPRIANLATEWOOD, WIKIMEDA COMMONS

HOW WILL THIS HELP?

- Improves safety by eliminating driver error via automation.
- Will improve mobility as automation enhances traffic flow and network capacity.
- Reduces fuel consumption and gas emissions.

HOW DOES IT WORK?

- Interconnected and automated vehicle and infrastructure operations.
- Vehicles to communicate with one another and with transportation infrastructure, reducing the rate of incidents.
- Public and private sectors must collaborate to ensure safe and efficient implementation.

CONSIDERATIONS

+ PROPER TESTING OF CAV SYSTEMS MUST BE COMPLETED TO DEMONSTRATE SAFE IMPLEMENTATION.
+ RESOURCES NECESSARY FOR IMPLEMENTATION, OPERATIONS, AND MAINTENANCE OF CAV SYSTEMS MUST BE IDENTIFIED.

TSMO
MARYLAND TRANSPORTATION SYSTEMS MANAGEMENT & OPERATIONS

TRANSPORTATION NEEDS ADDRESSED

- Capacity & Demand
- Reliability
- Travel Times
- Mobility
- Work Zones
- Safety
- Economic Development
- Freight
- Environmental Impact
- Multimodality

COST MAGNITUDE

CAPITAL COST	$$$
OPERATION AND MAINTENANCE COST	$$$

WHEN TO CONSIDER THIS STRATEGY

- RESEARCH AND TESTING APPLICATIONS
- ROADWAYS SUITABLE FOR DEPLOYMENT OF VEHICLE-TO-INFRASTRUCTURE TECHNOLOGIES

COMPLIMENTARY STRATEGIES

- TRANSIT PRIORITY
- SMART SIGNALS
- TRAVELER INFORMATION
- SMART WORK ZONE
- WORK ZONE MANAGEMENT

MDOT MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION