Uphold the integrity of your HOV and HOT lanes with Xerox® Vehicle Passenger Detection System.

High Occupancy Vehicle (HOV) and High Occupancy Toll (HOT) lanes are key components to fighting congestion and improving the performance of our transportation system.

However, their benefits are severely limited when violators have a slim chance of getting caught. Currently, police officers have to park on the shoulder and visually confirm whether or not there are enough passengers in the car. When they see a violation, they have to act fast—dangerously pushing their vehicle to its limits in order to merge into traffic and get up to highway speeds quickly.

Xerox® Vehicle Passenger Detection System identifies the number of occupants in a vehicle with 95% accuracy, at speeds ranging from stop and go to 100 mph. The high-quality images provided by the system, along with the evidence package enable full automation of violations as legislation allows.

Putting the minds of honest riders at ease.

Enforcing the regulations of the HOV/HOT lanes improves the driving experience for those who abide by the rules. Before now, frustrated drivers might pick up their cell phone to report violators, or could end up expressing their resentment while driving. A dangerous situation is presented in either scenario. With Xerox® Vehicle Passenger Detection System, upholding the integrity of HOV or HOT lanes is back in the hands of law enforcement.

Using video analytics to determine occupancy.

The Xerox® Vehicle Passenger Detection System uses video analytics to identify the number of occupants in a vehicle. Geometric algorithms detect whether a seat is vacant or occupied without using facial recognition.

If the setting on the HOT lane transponder doesn’t match with the number of occupants, the system will take a snapshot of the vehicle’s license plate and alert law enforcement to the violator.

Privacy advocates would be happy to know that we do not connect transponder IDs with location data. The data is encrypted and stored locally. No data is saved for non-violators.

Additional Benefits:

Enforcing the rules of the HOV/HOT lanes improves the customer experience for those who abide by the rules. It helps governments validate the integrity of HOV lanes.

- Available as a stand-alone product
- Uses commercially available camera equipment
- Easy to setup – roadside or overhead camera
- Determines windshield location with 99% accuracy
- High accuracy at highway speeds
  - HOV2 lane: 98.9% accuracy
  - HOV3 lane: 95.1% accuracy

Schedule a product demonstration by emailing us at: TLGMarketing@xerox.com