

Electronic Barrier and Enforcement System and Method (#4613)

An automated enforcement system that prevents weaving of traffic between lanes while reducing the need for constructing physical barriers separating HOV/HOT and general purpose lanes

Researchers at Georgia Tech have developed a novel automated enforcement system that prevents weaving of traffic between lanes while reducing the need for constructing physical barriers separating HOV/HOT and general purpose lanes. The invention also addresses enforcement problems through the implementation of automated electronic enforcement of barrier integrity. The proposed system consists of a number of sensing devices located in series along one or more lanes of travel of the roadway system which are connected to computers. Sensors are configured to detect vehicles that may be entering and leaving the managed lanes.

Benefits/Advantages

- Improve overall performance of the transportation system while reducing enforcement costs and need for law enforcement resources
- Reduces the need for a physical barrier between the HOV/HOT and general purpose lanes
- Addresses traffic management problems through the implementation of automated electronic enforcement of barrier to integrity
- Increases automation

Potential Commercial Applications

- Improved safety
- Increased efficiency
- Less manpower required

Background/Context for This Invention

A common problem with enforcing the rules around managed lanes is the need for visible law enforcement presence and additional manpower resources to collect and process information connected with the violations. Frequently, these resources may not be able to perform their functions in situations such as

extensive traffic congestion or if road work results in lack of sufficient space to pull vehicles over and issue citations. This invention provides a methodology to address all these issues without the need for enhanced manpower resources or increased danger to these resources

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Patent/IP Information

U.S. Patent Issued

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<https://patents.google.com/patent/US8044824B2/en?q=8044824>

Publications

For more information about this technology, please visit:

<https://licensing.research.gatech.edu/technology/electronic-barrier-and-enforcement-system-and-method>