Office of Air Management

Fact Sheet

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High Occupancy Vehicle Lanes

Description

High occupancy vehicle lanes (HOV) give priority to buses, carpools and vanpools. HOV lanes offer an incentive to commuters through travel time and cost savings, as well as trip time reliability.

Well designed, appropriately-sited HOV lanes have shown a significant increase in transit use and car occupancy for the journey to work in congested urban travel corridors. This in turn results in reduced vehicle trips, vehicle miles traveled and mobile source emissions. HOV lanes are most effective when implemented as a regional network of linked lanes, with a system of supporting facilities and services (park and ride lots and area wide rideshare).

HOV lanes are used in many large urban areas, including Chicago. HOV lanes are typically implemented by the state department of transportation and can be financed through a number of existing federal or state funding programs, including the federal Congestion Mitigation Air Quality (CMAQ) funding program.

Emissions Reductions*

HOV programs reduce volatile organic compound (VOC), nitrogen oxide (NO_x) and carbon monoxide (CO) emissions. HOV programs can reduce mobile source VOC emissions by an estimated 1.1%.

Estimated Cost*

The average cost per daily round trip avoided through an HOV program is estimated to be $4.00. The cost per ton of mobile source VOC emissions reduced is estimated at $141,000.

Indiana Air Facts

Other Benefits and Considerations

In addition to emissions reductions, HOV programs can offer the following benefits to commuters and the community:

- Reduced congestion.
- Less reliance on single occupant vehicle.
- Increased use of transit and rideshare.
- Decreased travel time.

Another consideration associated with HOV programs is that there is a variety of funding options available for related projects.

Implementation Issues

Coordinated programs: HOV programs are most effective when implemented with park and ride lots and single occupant vehicle awareness campaigns.

Start up: HOV projects can take up to ten years to implement. However, if implemented within an existing right-of-way, an HOV project can be implemented within two years.

Enforcement: Enforcement of HOV lanes is essential to assuring success, but is costly and difficult.

Comments

To learn more about transportation control measures, contact Scott Deloney at (800) 451-6027 press zero and ask for extension 3-5684 or dial (317) 233-5684 direct.

* Estimates calculated through analysis of various case studies and Indiana transportation statistics.