



The Institute of Transportation Engineers  
Traffic Engineering Council  
presents TIPS on



---

## HOV Lanes

---

### *What is an HOV Lane?*

In recent years, high-occupancy vehicle (HOV) lanes have become a successful alternative transportation mode in areas with heavy traffic congestion. HOV lanes are sometimes termed commuter lanes, busways, or transitways. Although known by several names, they all refer to one or more roadway lanes allocated for special use. Special use may be defined in several ways, including passenger vehicles with 2 or 3+ people, transit vehicles, and sometimes motorcycles, taxis, or trucks. Priority pricing, allowing single-occupant vehicles to “buy into” HOV lanes, is also being evaluated.

HOV facilities may be used to improve the mobility of a corridor by:

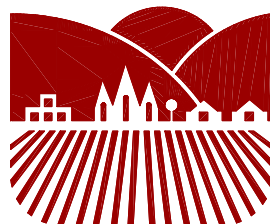
- C Increasing the people-moving capacity of the facility;
- C Providing a reliable travel-time savings to HOV users; and
- C Providing an incentive for people to share rides.



The basic concept of an HOV lane is to encourage an increase in the number of persons traveling in a vehicle by providing a reliable travel time savings to select vehicles (e.g., buses, vanpools, and motorcycles) or other vehicles meeting the minimum occupancy requirement. The occupancy requirement may be as low as 2 persons per vehicle, or may be as high as 4 persons. Increasing the number of HOVs in the corridor increases the average vehicle occupancy for the entire freeway. The increased person-movement results in improved freeway travel times during peak periods, improved transit service, and improved overall traffic flow. It may also decrease overall fuel consumption and vehicle pollution.

There are essentially four different types of high-occupancy vehicles (HOV) lanes used on freeways:

- **Exclusive HOV Facility - Separate Right-of-Way.** A roadway or lane(s) developed in a separate and distinct right-of-way and designated for the exclusive use of HOVs.
- **Exclusive HOV Facility - Freeway Right-of-Way.** Roadways or lanes built within the freeway right-of-way which are physically separated from the other freeway lanes but reserved for exclusive use by HOVs, at least during portions of the day.
- **Concurrent Flow Lane.** A freeway lane in the peak direction of flow (normally the inside lane) that is not physically separated from the other freeway lanes but is designated for use by HOVs at least for a portion of the day.
- **Contraflow Lane.** A freeway lane in the off-peak direction of flow (normally adjacent to the median) that is designated for use by HOVs traveling in the direction of peak flow for at least a portion of the day. Normally, the contraflow lane is “separated” from the off-peak (or opposite) flow by insertable cones or pylons.



**CITY***of* **NAPA**