

Technology Forecast

OBD-III in the 21st Century

Clean air laws require vehicles to produce as few emissions as possible. They also require owners to keep their cars and trucks in top running condition. On-board diagnostics (OBD) were developed to help consumers know when their vehicles need service. OBD systems light the dashboard's "check engine" lamp when a fault is found.

So far, two generations of OBD systems have been used. OBD-III, now under development, is expected to be phased in early in the 21st century. Many of the details remain to be decided, but some of the proposed requirements are already being discussed.

The major change from OBD-II to OBD-III centers on enforcement of clean air laws. With current OBD systems, vehicle owners can delay having emission problems fixed. OBD-III, however, would force owners to have faults repaired.

If such laws are enacted, an on-board transmitter may send out information about a vehicle's emissions system. This data will be collected by roadside readers, a local station network, or satellites. The vehicle's owner will be notified of a problem by mail and given time to have it fixed. Once a repair is made, the owner will send proof of the service to the state department of motor vehicles.

Action Activity

Find out about the auto emissions standards in your state. Are standards the same for newer and older vehicles? How does Clean Air legislation inform these standards? In class, discuss the pros and cons of stricter standards.