

Summary of the National Context for I/M programs in the United States

Once a vehicle is in use in the United States, it may or may not have to undergo periodic emissions testing. There are no federal emission standards for “in-use” vehicles. The federal Clean Air Act requires that states establish emission standards and testing programs for “in-use” vehicles in selected geographic areas of each state under certain conditions.

Thirty-three states have established such standards and programs. Those programs apply only in particular portions of those states, and each program can differ.

Under the Federal Clean Air Act, states must establish emissions standards and testing programs **in those geographical areas that are in nonattainment at a “moderate” level or above** with respect to the National Ambient Air Quality Standards for ozone or carbon monoxide (the levels of classification of nonattainment begin with marginal, and proceed up through moderate, serious, severe, and extreme).¹ If a vehicle is registered in a geographical area covered by such a requirement, then with certain exceptions (see below) it must undergo a periodic test.

Thirty-two of the U.S. states plus the federal District of Columbia (see Table 1) have such programs, usually referred to as inspection and maintenance programs, or “I&M.”²

Table 1. States that have Inspection and Maintenance Programs

Alaska	Louisiana	Ohio
Arizona	Maine	Oregon
California	Maryland	Pennsylvania
Colorado	Massachusetts	Rhode Island
Connecticut	Missouri	Tennessee
Delaware	Nevada	Texas
District of Columbia	New Hampshire	Utah
Georgia	New Jersey	Vermont
Idaho	New Mexico	Virginia
Illinois	New York	Washington
Indiana	North Carolina	Wisconsin

Source: “Major Elements of Operating I/M Programs,” U.S. EPA website, accessed on November 21, 2011: <http://www.epa.gov/oms/epg/420b03012.pdf>. Note that Kentucky is included on that EPA site but no longer has an I&M program.

¹ “Considerations for State I/M Program Optimization,” U.S. EPA website, accessed on November 21, 2011: <http://www.epa.gov/oms/epg/imattach-100302.pdf>

² “Major Elements of Operating I/M Programs,” U.S. EPA website, accessed on November 21, 2011: <http://www.epa.gov/oms/epg/420b03012.pdf>

With a small number of exceptions, those programs are applicable only in non-attainment areas. Generally, these areas are located in and around major population centers, because of the preponderance of emission sources in those areas. The testing requirements may be on an annual basis (such as in Texas) or on a biennial basis (such as in California), or may differ between geographical areas in a state (for instance, the requirement is biennial in Phoenix but annual in Tucson).³

Appendix C contains a list of the specific geographical areas within those states that have required I&M programs, and the amount a vehicle owner was being charged in 2005 for an inspection in each of those areas.

It is important to note that a certification with respect to an I&M program is separate from the certification for a safety inspection that is required in some states (including Texas), although they are typically offered at the same time.

An I&M program can be either a centralized or a decentralized type of program. Centralized programs are operated by the state or city or by a private contractor; decentralized programs are made up of privately operated garages licensed by the government agency that is in charge of the program.

The states that have I&M programs differ greatly with respect to what percentage of each state (area or population) is covered, and they differ with respect to the types of tests required and the standards applied.

All four of the U.S. border states—California, Arizona, New Mexico, and Texas—have I&M programs in one or more geographical areas. In California, all of the medium to large urban areas are in non-attainment status. Arizona requires inspections for residents of Tucson and Phoenix. In New Mexico, emissions testing is only required in Bernalillo County (where the City of Albuquerque is located). The State of Texas requires only the metropolitan areas of Houston, Dallas, and El Paso to have I&M programs (El Paso is not currently in non-attainment for ozone, but an I&M program is part of a “maintenance” program in that county). In addition, the jurisdictions in the Austin metropolitan area have voluntarily established an I&M program as part of an effort to keep ozone concentrations below the threshold for nonattainment.

An important technological development has been the computerized “On-Board Diagnostic” system that can monitor the emissions controls. Starting in 1988, new vehicles were equipped with On-Board Diagnostics (OBD-I) systems, and in 1996 a second generation of OBD-II systems were introduced. There are now 22 states that are using only OBD-II testing for 1996 and newer vehicles. The tail-pipe test is not used.

The specific pollutants and standards included in I&M programs vary from state to state. The standards in each case are designed to reduce the air pollution that causes the violations to the clean air standards in each particular area. For example, in the state of Alaska, the cities of Anchorage and Fairbanks exceed the carbon monoxide standard. In California, air quality standards are exceeded for ozone. Table 5 shows examples of four different state programs.

³ Ibid.

Table 5. Examples of differing state-specific in-use emissions regulations

Vehicle Type	Model Year	Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	State
Light-duty	1994+	0.8	12.0	2.0	Arizona
Light-duty	1994	2.0	20.0	6.0	Colorado
Note: The above are in grams per mile					
Light-duty	1981+	220	1.2	---	Ohio
Light-duty	1981+	220	1.0	---	Oregon
Note: The above are in ppm and %					

Source: Paul Hughes of the California Air Resources Board

States differ in what they exempt from testing requirements. Here are examples among the border states:

- **Age of vehicle.** In California, gasoline-fueled vehicles six years old or newer are exempt from emission testing.⁴ In Arizona the exemption is for the last five model years,⁵ and in New Mexico it is for the last four model years. Texas requires an inspection for cars beginning with 2-year-old models. States typically exempt very old cars from inspections, largely because there are so relatively few of them. In California, model years prior to 1976 are exempt,⁶ and in Texas cars older than 24 years are exempt.⁷
- **Diesel-fueled vehicles.** Texas exempts light-duty diesel-fueled vehicles from testing requirements.⁸ Diesel-fueled vehicles were exempt in California until 2010, when all such vehicles beginning with model year 1998 became subject to emissions inspections.⁹ In New Mexico, diesel vehicles must undergo an OBD-II test only when there is a transfer of title.¹⁰

⁴ "Frequently Asked Questions (Part 1)," website of the California Bureau of Automotive Repair, accessed on November 22, 2011:

http://www.bar.ca.gov/80_BARResources/02_SmogCheck/Frequently_asked_Questions_Part_1.html

⁵ "Air Quality Division: Vehicle Emissions: Exemptions from Testing," website of the Arizona Department of Environmental Quality, accessed on November 22, 2011:

<http://www.azdeq.gov/environ/air/vei/exempt.html>

⁶ "Frequently Asked Questions (Part 1)," website of the California Bureau of Automotive Repair, accessed on November 22, 2011:

http://www.bar.ca.gov/80_BARResources/02_SmogCheck/Frequently_asked_Questions_Part_1.html

⁷ "Inspection Criteria," website of the Texas Department of Public Safety, accessed on November 18, 2011:

http://www.txdps.state.tx.us/vi/inspection/item_insp.asp

⁸ Ibid.

⁹ "Frequently Asked Questions about the Inclusion of Light-Duty Diesel Vehicles in the Smog Check Program," website of the California Bureau of Automotive Repair, accessed on November 21, 2011:

http://www.bar.ca.gov/80_BARResources/05_Legislative/RegulatoryActions/FAQs%20for%20Diesels%2012-24-09_Final.pdf

¹⁰ Ordinance 20.11.100.23, Albuquerque/Bernalillo County Air Quality Control Board.

<http://www.nmcpr.state.nm.us/nmac/parts/title20/20.011.0100.htm>

- **Hybrid vehicles.** California exempts all hybrid vehicles (the first hybrids were available in fall 2000) from emissions testing.¹¹ New Mexico has exempted all hybrid vehicles, but new hybrids will not be exempted beginning in 2012 (older models will still be exempt). Hybrids are not exempt in Arizona or Texas.
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¹¹ “Frequently Asked Questions (Part 1),” website of the California Bureau of Automotive Repair, accessed on November 22, 2011:
http://www.bar.ca.gov/80_BARResources/02_SmogCheck/Frequently_asked_Questions_Part_1.html