NEVADA DIVISION OF
ENVIRONMENTAL PROTECTION

STATE OF NEVADA
Department of Conservation & Natural Resources
Brian Sandoval, Governor
Leo M. Drozdoff, P.E., Director
David Emme, Administrator

June 15, 2016

Mr. Richard Combs, Director
Legislative Council Bureau
401 S. Carson Street
Carson City, NV 89701

RE: Transmittal of the *Report on Assembly Bill 146 Study Concerning the Inspection and Testing of Motor Vehicles and Systems for the Control of Emissions from Motor Vehicles in Nevada* on behalf of the Advisory Committee on the Control of Emissions from Motor Vehicles

Dear Mr. Combs:

In accordance with the provisions of AB146 passed during the 2015 Legislative Session, and on behalf of the Advisory Committee on the Control of Emissions from Motor Vehicles, I wish to transmit to you the *Report on Assembly Bill 146 Study Concerning the Inspection and Testing of Motor Vehicles and Systems for the Control of Emissions from Motor Vehicles in Nevada*. Also in keeping with the requirements of AB146, please see that the report is transmitted to the chairs of the Senate and Assembly Standing Committees on Transportation.

If you have any questions on the report, please direct those to either myself at 775-687-9392 or to the Department of Motor Vehicles to be forwarded to the Advisory Committee.

Sincerely,

Sig Jaunarajs
Chairman, Advisory Committee on the
Control of Emissions from Motor Vehicles

SJ:
Encl.

Report on Assembly Bill 146 Study Concerning the Inspection and Testing of Motor Vehicles and Systems for the Control of Emissions from Motor Vehicles in Nevada

ACRONYMS AND ABBREVIATIONS

Acronyms

AB	Assembly Bill
AQMD	Washoe County Health District Air Quality Management Division
BCC	Clark County Board of County Commissioners
CAA	Clean Air Act
CFR	Code of Federal Regulations
CPI	Consumer Price Index
CY	Calendar Year
DAQ	Clark County Department of Air Quality
DMV	(Nevada) Department of Motor Vehicles
EGU	electric generating unit
EPA	U.S. Environmental Protection Agency
FR	Federal Register
FY	Fiscal Year
GVWR	Gross Vehicle Weight Rating
I/M	inspection and maintenance (program)
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standards
NAC	Nevada Administrative Codes
NO_x	nitrogen oxides
NRS	Nevada Revised Statutes
OBD-II	On-Board Diagnostics (Phase II)
RS	Remote Sensor
SB	Senate Bill
SEC	State of Nevada Environmental Commission
SIP	state implementation plan
SUV	sport utility vehicle
TSD	technical support document
VID	Vehicle Information Database
VIR	Vehicle Inspection Report
VOC	volatile organic compound

Abbreviations

gpm	grams/mile
ppb	parts per billion
ppm	parts per million

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1.0 EXECUTIVE SUMMARY

During the 2015 legislative session, Nevada's legislators passed Assembly Bill 146 (AB 146) requiring the *Advisory Committee on the Control of Emissions from Motor Vehicles* (I/M Committee) to study the inspection and testing of motor vehicles and emissions control systems in Nevada. The legislature directed the I/M Committee to report the study's results and propose an updated, modernized inspection and testing plan to the director of the Legislative Counsel Bureau on or before June 30, 2016, for transmittal to the chairs of the Senate and Assembly Standing Committees on Transportation.

To meet the objectives of AB 146, the I/M Committee formed a subcommittee (I/M Subcommittee) to conduct the study and periodically report to the I/M Committee on its progress. Beginning in July 2015, the I/M Subcommittee met on a monthly basis to review not only Nevada's I/M program, but those of other states. I/M emissions testing station owners regularly participated throughout the study process. They provided a list of proposals and requests to improve and modernize the I/M program. This list and DMV's responses are included as an appendix to the report. Industry additionally provided a report describing the fiscal impacts to the industry if the recommended exemption changes were adopted. This report and an assessment of the report made by the I/M Committee is also included as an appendix.

The I/M Subcommittee was guided by some basic principles, including that any recommendations should:

i. Ensure that the changes do not result in an appreciable emissions increase of harmful pollutants or lead to violations of the National Ambient Air Quality Standards (NAAQS);

ii. Take into account the I/M programs of other western states; and

iii. Decrease the regulatory burden imposed on the motoring public.

Several different exemption scenarios were considered by the I/M Subcommittee when proposing an updated, modernized inspection and testing plan for Nevada's I/M program. In its consideration, the subcommittee gave special emphasis to assessing the viability of the concepts brought forward during past legislative session efforts—especially the two I/M program elements that had received the most attention: test frequency and new vehicle exemptions.

It was found that among the western states, Nevada stands alone as the only state with an I/M program that requires annual testing exclusively. Nationwide, almost two-thirds of the states operating I/M programs have either biennial testing or a combination of annual and biennial testing. The I/M Subcommittee compared the areas in the western states that most closely resemble the air quality conditions of Clark and Washoe counties. Among these areas, the most common testing frequency was a combination of annual and biennial testing.

When considering the biennial portion of a combined annual/biennial testing program, two options were evaluated. The first option was biennial testing for the first eight years of a

vehicle's life, and then annual testing thereafter. The second option was biennial testing for 2004 and newer model year vehicles, and annual testing for older model year vehicles.

The rationale for considering biennial exemptions for the first eight years of a vehicle's life is that residents of areas with I/M programs that meet federal guidelines are eligible for warranty protection for specified major emission control components for the first 8 years or 80,000 miles (whichever occurs first). According to federal law, warranty failures due to a defect in materials or workmanship, must be repaired or replaced by the vehicle manufacturer free of charge as long as the vehicle has not exceeded the warranty time or mileage limitations.

The rationale for considering biennial exemptions for 2004 and newer model year vehicles is that the 2004 model year vehicle was the first model year for which federally-mandated Tier 2 standards were applicable. The Tier 2 vehicle standards represented a significant emissions reduction as compared to the Tier 1 standards which were applicable to 1994 and newer model year vehicles.

The age at which new vehicles are initially subject to testing nation-wide, varies from 0 to 7 years. The average new vehicle exemption period for all of the states participating in the I/M program is approximately 3.1 years. However, this includes the Ozone Transport Region (OTR) states which are subject to more stringent control measures under the Clean Air Act. When the OTR states are excluded, the national average new vehicle exemption period is 3.7 years. The average new vehicle exemption period for all of the western states, is approximately 4.4 years.

In Clark and Washoe counties, there is a strong correlation between inspection failure rates and the age of the vehicle being inspected. The data also shows that for the first six years, the inspection failure rate is nominal (< 1%).

When considering new vehicle exemption periods, the I/M Subcommittee evaluated the impact of changing the new vehicle exemption period from two years to four years based on the exemption periods adopted in western states, and from two years to six years based on the nominal failure rates through the first six years of vehicle ownership. The resulting permutations of testing frequency and new vehicle exemption were run through an EPA-approved computer model to estimate the effect on mobile source emissions within the urban areas of Clark and Washoe counties.

The I/M Subcommittee reported the findings to the I/M Committee, who then agreed to recommend changing the new vehicle exemption period from two years to four years, and changing the vehicle testing frequency for year's five through eight of a vehicle's life from annual to biennial testing.

From an air quality perspective, the recommendation was justifiable for several reasons. First, a comparison with other state I/M programs suggests that the recommended changes would fit well within the norm of other western state I/M program areas with similar air quality conditions.

Second, the nominal emission increases could be offset, at least in part, by local emissions reductions such as the shutdown of the Reid Gardner electric generating facility in Clark County

and participation in the EPA Ozone Advance Program which promotes voluntary emission reductions.

Third, the nominal emission increases could be offset by the emission reductions resulting from federal rules. EPA has estimated that all of the areas that will likely be designated nonattainment of the 2015 70 ppb ozone NAAQS will attain the standard by 2025. EPA has projected the 2025 ozone design value in Clark County will be 69 ppb, and in Washoe County will be 59 ppb.

If the emissions testing changes recommended by the I/M Committee were adopted by the legislature, the change would reduce government revenue into the Pollution Control Account by nearly $1.75 million.

By statute, local air pollution control agencies that receive revenue generated by the I/M program (i.e., Clark County DAQ and Washoe County AQMD), are required to submit annual reports on the use of that money to the Director of the Legislative Counsel Bureau (NRS 445B.830.5). The revenue is utilized for various air quality improvement programs, to include public education and outreach, air complaint response, small business assistance, permitting and planning activities.

Since the emissions increases associated with the recommendation would not reduce the need for air quality improvement programs, air complaint responses, small business assistance, permitting and planning activities, the I/M Committee recommends that any changes made to the I/M program should be made in a manner that maintains revenue neutrality. This can be accomplished by increasing the cost of each form certifying emission control compliance from $6.00 to $7.75.

Adoption of the I/M Committee's recommendations would result in an estimated 22 percent reduction in annual vehicle tests and will therefore undoubtedly have some negative impact on the emissions testing industry. The I/M Committee is sensitive to this economic impact since a viable and competitive private testing industry is vital for keeping testing fees and wait times at reasonable levels.

The I/M Committee is also providing recommended changes to the special license plate program that exempts certain vehicles from emissions testing requirements. The I/M Subcommittee determined that, following the changes made to the program during the 2011 legislative session, there had been a significant increase in the number of vehicles with classic vehicle, classic rod, and Old Timer license plates.

The increase is problematic from an air quality perspective because older vehicles emit significantly more emissions on a per-mile basis than newer vehicles. In addition, older vehicles fail emissions tests at a much higher rate than newer ones, and they fail those tests while being subject to far less stringent emissions standards. In order to close the exemption loophole, the I/M Committee recommends three changes to the program.

First, the I/M Committee recommends adoption of a statutory definition for classic rods, classic vehicles, and Old Timer vehicles similar to that which has been adopted by the western states

surrounding Nevada, and which Nevada has used for Old Timer vehicles (1973 to 1991), and which Nevada currently utilizes for replica vehicles.

Second, the I/M Committee recommends requiring owners of classic vehicles and classic rods to have their odometer readings annually certified at I/M inspection stations prior to obtaining a special license plate renewal sticker.

Third, the I/M Committee recommends bringing back the requirement that owners applying for classic vehicle or classic rod special license plates first pass an emissions testing prior to issuance.

Finally, the I/M Committee also recommends consideration of several future modernizations to the I/M program. These include an expansion of the voluntary program of electronic monitoring of emissions information to private-party individuals; modernizing the emissions testing process by utilizing remote sensor testing as an alternative to the inspection component of the I/M program; and modernizing the emissions testing requirements for diesel and heavy-duty gasoline vehicles.

2.0 INTRODUCTION AND BACKGROUND

2.1 PURPOSE OF THE STUDY

Assembly Bill 146 (AB 146), passed by the 2015 Nevada Legislature, requires the Advisory Committee on the Control of Emissions from Motor Vehicles (I/M Committee) to study the inspection and testing of motor vehicles and emissions control systems in Nevada. The legislature directed the I/M Committee to report the study's results and propose an updated, modernized inspection and testing plan to the director of the Legislative Counsel Bureau on or before June 30, 2016, for transmittal to the chairs of the Senate and Assembly Standing Committees on Transportation.

2.2 ABOUT THE COMMITTEE AND STUDY APPROACH

Pursuant to the provisions of Nevada Administrative Code (NAC) 445B.853, the I/M Committee consists of representatives of state and local agencies involved in motor vehicle emissions control. Nevada Revised Statute (NRS) 445B.830.7 gives the I/M Committee authority to (a) establish goals and objectives for the program for control of emissions from motor vehicles, (b) identify areas where funding should be made available, and (c) review and make recommendations concerning regulations adopted pursuant to NRS 445B.770 (i.e., the regulations adopted by the State of Nevada Environmental Commission (Commission) that are related to Nevada's inspection and testing program).

To meet the objectives of AB 146, the I/M Committee formed a subcommittee (I/M Subcommittee) to conduct the study and periodically report on its progress. The I/M Subcommittee met on a monthly basis beginning in July 2015. The general approach taken by the I/M Subcommittee has been to assess the viability of the concepts brought forward during past legislative sessions, and then to provide recommendations to the I/M Committee for amending the I/M program.[1]

The I/M Subcommittee reviewed the I/M program's current structure and requirements, the federal authority for the program under the Clean Air Act (CAA), the state's current attainment of federal air quality standards, recent program test failure rates, the exemption of classic vehicles from testing, and other factors affecting the program. Nevada's I/M program was also compared with I/M programs in other states, in particular Western states.

In determining the types of fundamental structural changes that could be made to the I/M program, the I/M Subcommittee was guided by some basic principles, including that any recommendations should:

i. Ensure that the changes do not result in an appreciable emissions increase of harmful pollutants or lead to violations of the National Ambient Air Quality Standards (NAAQS);

[1] The U.S. Environmental Protection Agency (EPA) refers to vehicle emissions inspection and testing programs as "inspection and maintenance programs" or "I/M programs." The general public often refers to Nevada's I/M program as a "smog check program." This report uses the term *I/M program* to refer to Nevada's motor vehicle emissions inspection and testing program.

ii. Take into account the I/M programs of other western states and the cost-effectiveness associated with changing the exemption standards for newer vehicles, which are not only more reliable but emit comparatively fewer emissions than older vehicles; and

iii. Decrease the regulatory burden imposed on the motoring public.

The I/M Subcommittee also considered the merits of other program changes such as: improving testing efficiency and inspection effectiveness, providing necessary updates to heavy-duty vehicle emission standards, adjusting waiver cost limits, revising testing protocols, and implementing the proposed revisions provided by the emissions testing industry. The I/M Committee determined that these program changes could be made directly by the Commission through the regulatory process or by the Nevada Department of Motor Vehicles (DMV) in its implementation policy. The suggested program revisions provided by members of the Nevada Emission Testers Council were reviewed by DMV, and both the proposed revisions and DMV's responses are found in Appendix A.

2.3 HISTORY OF NEVADA'S INSPECTION AND MAINTENANCE PROGRAM

The I/M program is a government-mandated program that requires vehicles to be inspected (the "I" in I/M) and maintained (the "M" in I/M). Certain older vehicles (pre-1996) are inspected to determine whether tailpipe emissions exceed regulatory standards. Other vehicles (1996 and newer) are inspected to determine whether emissions control systems are operating correctly. Those vehicles that fail inspections must undergo repairs, i.e., maintenance.

The basis for Nevada's I/M program is found in the CAA and EPA's regulations. In 1970, Congress adopted language in the CAA that directed the EPA (a federal agency created later in 1970, to implement and regulate the provisions of the CAA and other federal statutes) to promulgate a set of standards (i.e., the NAAQS) in order to protect human health and the environment. In 1971, EPA issued several standards, to include a carbon monoxide NAAQS, setting the standard at 35 parts per million (ppm) for a 1-hour period and 9 ppm for an 8-hour period.[2]

Carbon monoxide emissions are a result of incomplete fuel combustion, and motor vehicles are the largest source of that pollutant. In the 1970s, EPA began mandating emission control devices on new motor vehicles (e.g., catalytic converters). EPA was also developing guidance for the creation of regulatory programs (i.e., I/M programs) intended to identify and repair polluting vehicles that were in need of maintenance or were lacking federally-mandated emission control equipment.

Ambient air quality is routinely measured at monitoring stations which are predominantly located in populated areas. To determine compliance, ambient samples are measured then the concentration levels are compared to the NAAQS. States with areas that were out of compliance with the NAAQS could implement an I/M program in order to demonstrate to EPA that they were taking meaningful steps to reduce emissions and return those areas back into a compliance status.

[2] 36 FR 8186 (Apr. 30, 1971).

It soon became apparent to officials in Clark County, and later in Washoe County, that the counties were exceeding the carbon monoxide NAAQS in violation of the CAA. The Commission recognized the need for implementing I/M programs in these counties, and in 1973, the Nevada legislature amended NRS 445 to create the authority for an I/M program.

The I/M program slowly developed during the next 15 years amid public controversy and uncertainty over how to structure the program to achieve the required emission reductions. Amidst the controversy, there was an underlying threat of sanctions that EPA could levy against Nevada for not moving decisively towards implementation of an effective I/M program.[3]

In 1974, the DMV established a pilot testing program in Clark County for vehicles 15 years old or newer. As part of this effort, DMV developed many of the necessary elements of an I/M program, such as licensing procedures for authorized testing stations and inspectors, setting a fee for certificates of compliance, and setting vehicle emission standards (i.e., establishing maximum allowable pollutant concentrations measured at the tailpipe). The pilot testing program was scheduled to begin in July 1975. However, the Nevada legislature postponed implementation of the pilot testing program due to concerns over economic hardships the program would impose on Clark County residents.

In 1977, the Nevada Legislature amended NRS 445 to authorize the adoption of regulations for an I/M program in counties having populations greater than 100,000. The effect of this legislation was to expand the scope of the I/M program to Washoe County.

The CAA amendments of 1977 required states with areas out of compliance (i.e., nonattainment areas) to prepare State Implementation Plans (SIPs) to achieve attainment of the NAAQS. The plans had to include the control measures, and the means and techniques, to reach standard qualifications. In 1978, EPA designated the Las Vegas Valley as a carbon monoxide nonattainment area (43 FR 8962, 9012).[4]

In 1979, the Nevada legislature postponed initiation of the program, until 1981. However, the legislature did provide authority to the Clark County Board of County Commissioners (BCC) to begin the program earlier at its discretion. The BCC exercised this option, and the I/M program began testing vehicles in January 1980. However, public backlash over the program caused the BCC to rescind its decision, and emission testing was halted after five months.

In 1981, the Nevada Legislature again postponed implementation of the I/M program, this time until 1983. By this time, EPA had begun to express its concern over Nevada's inaction in implementing an I/M program. Concern was further heightened due to elevated levels of ozone, sulfur dioxide, and particulate matter pollution measured in both Clark and Washoe counties, as well as the designation of certain areas to nonattainment status.

[3] The CAA sets forth two types of sanctions. Section 179 requires automatic sanctions when (1) EPA finds that a state has failed to submit a required state implementation plan (SIP) or revision, (2) EPA disapproves a required SIP or revision, and (3) EPA finds that a requirement of an approved SIP is not being implemented. Section 110(m) also allows the EPA to apply discretionary sanctions at any time, or any time after, making a finding, disapproval, or determination that some CAA provision has not been met.

[4] The original carbon monoxide NAAQS attainment deadline was 1982.

This raised the very real possibility that the EPA could be compelled to formally reject Nevada's program for controlling emissions. A rejection could have meant the imposition of sanctions authorized under the CAA—namely the withholding of federal highway funding from non-attainment areas.[5] There was also a possibility that EPA could impose a federal I/M program in affected counties.

The possibility of these threats prompted the 1983 Nevada legislature to approve an annual I/M program. In October 1983, the program began operating in both Clark and Washoe counties.

During the next few years the regulations were amended to: strengthen the emission standards, refine the test methods, and to change the applicability of vehicle testing from the originally adopted 15-year sliding scale to a 21-year sliding scale. During these years the program tested over 550,000 vehicles in both Clark and Washoe counties.

In 1985, the Las Vegas area recorded 41 exceedances of the 8-hour carbon monoxide NAAQS.[6] The following year, EPA audited Nevada's I/M program and determined that it was not sufficiently rigorous to generate the required emission reductions. The threat of federal sanctions was once again raised in a 1987 letter sent by EPA to Governor Bryan. In response, the Governor formed a committee tasked with developing a plan to modify the I/M program in order to generate the emission reductions EPA expected.

Following plan development, the Commission adopted appropriate regulations which became effective in January 1988. The revised I/M program included: provisions that required switching to automated computer controlled emission analyzers, revisions to the visual inspection procedure for detecting emission equipment tampering, strengthened inspector training requirements, more stringent emission standards, and a new public information and awareness program.

In 1989, additional program revisions were added to include requirements for: annual testing of 1968 and newer motor vehicles,[7] emissions testing for gasoline fueled heavy-duty vehicles weighing more than 8,500 pounds (based on a separate set of emission standards), and a testing exemption for new vehicles for the first two years.[8]

Nationally, early I/M programs varied widely based upon the tests performed, the design of the testing network, the level of enforcement against motorists and test stations, and overall program

[5] " . . . EPA has formally notified the states of its intent to use [federal sanctions] 855 times since 1990. Actual imposition of sanctions, which cannot occur until 18 months after formal notification, is a relatively rare event, however. The Agency has imposed sanctions 14 times since 1990 . . . ." Congressional Research Service report for Congress, *Highway Fund Sanctions for CAA Violations*, Summary, 97-959 ENR (October 22, 1997). "In each of the 14 cases, the Administrator has imposed the offset sanction. In 2 of the 14 cases, involving small portions of Montana and Missouri, the Administrator has imposed highway fund sanctions in addition to the offset requirement . . . ." Id. at p. CRS-4.
[6] 68 FR 4141, 4142 (January 28, 2003).
[7] NAC 445B.592.
[8] Id.

effectiveness.[9] As a result, the CAA was amended in 1990 to, among other things, formalize the minimum program requirements for mandatory I/M programs. In 1992, EPA published the I/M program requirements rule and formalized the performance standards for the I/M program.[10] The rule was codified in 40 CFR 51.350.[11]

The rule requires the implementation of either basic or enhanced I/M programs in both ozone and carbon monoxide nonattainment areas (depending upon population and nonattainment classification or design value). The applicability of the I/M program to different scenarios is described in 40 CFR 51.350(a)(1) - (9). The following three scenarios have been, or may in the future, be applicable to Clark and Washoe counties:

> For areas outside the ozone transport region, those that are classified as serious or worse ozone nonattainment, or as moderate or serious carbon monoxide nonattainment, with a design value greater than 12.7 ppm, and having a 1980 urbanized area population of 200,000 or more, must implement an enhanced I/M program in the 1990 census-defined urbanized area.[12]
>
> Any area classified, as of November 5, 1992, as marginal ozone nonattainment or moderate carbon monoxide nonattainment with a design value of 12.7 ppm or less shall continue operating I/M programs that were part of an approved SIP as of November 15, 1990, and must update those programs to meet the requirements of the basic I/M program.[13]
>
> Any area classified as moderate ozone nonattainment, must implement a basic I/M program in any 1990 census-defined urbanized area with a population of 200,000 or more.[14]

The Reno area was required to implement the basic I/M program following its designation as a moderate carbon monoxide nonattainment area with a design value less than 12.7 ppm. The Las Vegas area, which was also designated initially as a moderate carbon monoxide nonattainment area, was required to implement the enhanced I/M program because its design value was greater than 12.7 ppm.

In 1995, EPA revised the I/M program to allow for a less stringent enhanced I/M program for areas that could meet reasonable further progress requirements and attainment demonstration requirements.[15] This lower standard, referred to as the low enhanced I/M program, was designed for nonattainment areas that are required to implement enhanced I/M programs but which can obtain adequate emission reductions from other sources to meet emission reduction requirements. The nonattainment area within Clark County met these conditions.

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[9] EPA, Performance Standard Modeling for New and Existing Vehicle Inspection and Maintenance (I/M) Programs Using the MOVES Mobile Source Emissions Model, EPA-420-B-14-006 (Jan. 2014).
[10] 57 FR 52950 (Nov. 5, 1992).
[11] The rule was subsequently amended (see 60 FR 48034, 61 FR 39036, 65 FR 45532).
[12] 40 CFR 51.350(a)(2).
[13] 40 CFR 51.350(a)(3).
[14] 40 CFR 51.350(a)(4).
[15] 60 FR 48029.

Mandatory testing under Clark County's low enhanced I/M program began on March 1, 1996. EPA determined that the low enhanced I/M program provided a 16.8 percent carbon monoxide emission reduction and therefore represented a significant element in the strategy to attain the carbon monoxide NAAQS by the then applicable date of December 31, 2000.[16]

In 2004, the EPA approved the alternate low enhanced vehicle I/M program for the Las Vegas Valley and Boulder City.[17] Since then, EPA has approved updates to the statutory and regulatory elements of the I/M program.[18]

In order to conform with the current federal standards set forth in CAA §182 (a – c), 184(b), 187(a), (b), and in the I/M rule (40 CFR 51, subpart S), and state/local requirements, the Commission adopted several additional I/M program changes. These included: the requirement for testing of diesel-powered vehicles up to 14,000 pounds, the introduction of the on-board diagnostic system II (OBD-II) test procedures to replace tailpipe emissions tests for 1996 and newer vehicles, and clarification over which state agency or regulatory body (DMV or the Commission) had authority to adopt regulations covering different aspects of the I/M program.

2.4 CURRENT DESIGNATION STATUS OF CLARK AND WASHOE COUNTIES

2.4.1 Carbon Monoxide NAAQS Compliance

Federal and state/local efforts to regulate mobile sources have been effective in significantly reducing carbon monoxide emissions both within Nevada, and nationwide. All former carbon monoxide nonattainment areas have been re-designated to attainment status—however, most areas are still subject to maintenance plans.

In 2008, EPA re-designated Reno as an attainment area subject to a carbon monoxide maintenance plan (74 FR 38124). In 2010, EPA re-designated the Las Vegas Valley as an attainment area subject to a carbon monoxide maintenance plan (75 FR 59090). Both maintenance plans are ten-year plans and are federally-enforceable. Both plans also include the I/M programs currently being operated in the respective counties, as control measures.

2.4.2 Ozone NAAQS Compliance

Federal and state/local efforts to regulate mobile sources have also been effective in reducing ozone levels nationwide. Nationally, average ozone levels are down 33 percent since 1980.[19] Ozone levels in both Clark and Washoe counties have also showed a general downward trend for decades. However, unlike the carbon monoxide NAAQS, which has remained unchanged since it was first promulgated in 1971, the ozone NAAQS has been revised downward several times (i.e., made more stringent) to protect public health with an adequate margin of safety.

[16] EPA TSD, *NPRM on the CO SIP Attainment Plan for Las Vegas Valley*, p. 71 (Jan. 2003).
[17] 69 FR 56353.
[18] 73 FR 38127, footnote 3, and 74 FR 3975.
[19] EPA, http://www3.epa.gov/ozonepollution/pdfs/2014decwebinar.pdf (Dec. 2014) (accessed February 4, 2016).

In 2011, EPA re-designated the Las Vegas Valley, as well as adjacent hydrographic areas within Clark County, as attainment areas for the 1997 8-hour ozone standard. The re-designation was subject to an ozone maintenance plan which included the I/M program currently operated within Clark County (76 FR 17343).[20]

As the result of an ozone episode in 1990, EPA designated Washoe County marginal non-attainment for the 1979 1-hour ozone standard. Washoe County remained non-attainment until the 1-hour standard was rescinded in conjunction with the promulgation of the new 8-hour ozone standard in 1997. Washoe County has remained in attainment with the 8-hour ozone standard largely due to an ozone maintenance plan that continues to be implemented and includes the I/M program currently operated within Washoe County (73 FR 3389).

In 2015, EPA revised the ozone NAAQS and promulgated an 8-hour 70 ppb standard.[21] EPA is slated to provide designations in October 2017 based on the most recently available certified design values. Design values are based on the annual fourth-highest daily maximum ozone concentration measured at certified monitoring stations, averaged over a three consecutive-year time period.

For the 2012–2014 time period, the design value for Clark County was 78 ppb, and for Washoe County was 70 ppb. For the 2013–2015 time period, the design value for Clark County was 75 ppb, and for Washoe County was 71 ppb. If EPA designates either county in October 2017, they will likely base the designations on the design values for the 2014–2016 time period.

[20] Note also that in 2015, the 1997 8-hour ozone standard was revoked (80 FR 12264).
[21] 80 FR 65292.

3.0 CURRENT I/M PROGRAMMATIC ELEMENTS

3.1 OVERVIEW

This section discusses the fundamental programmatic elements of the basic I/M program in the urban areas of Washoe County and the low-enhanced I/M program in the urban areas of Clark County. Both programs are implemented by DMV and enforced through a motor vehicle registration denial mechanism. A comparative description of each state's I/M programmatic elements are provided in Appendix B.[22]

3.2 GASOLINE VEHICLES

Gasoline vehicles with model years 1968 through 1995, regardless of weight, and model years that are 1996 or newer with a gross vehicle weight rating (GVWR) of 8,500 pounds or more, are subject to annual two-speed idle testing. These vehicles are tested at idle speed, then with the engine running at approximately 2,500 rpm. Samples of the exhaust emissions are taken from the tailpipe and introduced into an exhaust gas analyzer. Vehicles subject to a two-speed idle test must meet the emission standards for carbon monoxide and hydrocarbons specified in NAC 445B.596.

Gasoline vehicles with model years 1996 and newer with a GVWR less than 8,500 pounds are tested using the information stored on the vehicles OBD-II system. In this test, actual emissions are not analyzed. Instead, an analyzer is connected to the vehicle's certified OBD-II system. A vehicle will pass the inspection if the certified OBD-II system indicates that all emission system monitors exhibit a state of "pass" in a pass/fail test.

Table 3-1 provides an overview of vehicle age profiles in Clark and Washoe counties. The light-duty vehicle populations that are ≤ 1995 are not subject to OBD-II testing.

Table 3-1. Vehicle Age Profiles **

Time Period *	Gasoline Vehicles				Diesel Vehicles			
	Light-Duty < 8.5K		Heavy-Duty > 8.5K		Light-Duty < 8.5K		Heavy-Duty (8.5 - 14K)	
	Clark	Washoe	Clark	Washoe	Clark	Washoe	Clark	Washoe
≤ 1967	0.7%	1.8%	0.3%	0.8%	0.1%	0.1%	0.0%	0.1%
≤ 1990	3.4%	7.8%	5.0%	9.8%	3.5%	4.7%	2.9%	4.5%
≤ 1995	8.0%	15.4%	11.3%	17.4%	5.9%	8.0%	8.2%	9.7%
≤ 2000	21.1%	32.4%	27.0%	34.7%	13.4%	19.5%	25.5%	25.9%
≤ 2005	47.1%	59.5%	59.9%	61.2%	42.3%	59.3%	53.7%	53.7%
≤ 2010	71.8%	79.9%	84.4%	84.0%	66.9%	80.5%	81.9%	78.7%
≤ 2015	99.8%	99.9%	100.0%	99.8%	100.0%	99.9%	99.5%	100.0%

* 2016 model year vehicles were not included.
** Based on 2015 DMV vehicle registration data.

[22] Eastern Research Group, Inc., *IM Program Data, Cost and Design Information*, August, 2013.

3.3 HYBRID VEHICLES

During the 2007 legislative session, the Nevada legislature exempted hybrid vehicles from emissions testing until the model year of the vehicle was 6 years old. Table 3-2 provides population data for both all-electric vehicles and gasoline/electric hybrid vehicles for fiscal year 2015. Since the legislation was passed in 2007, there has been a gradual growth in hybrid vehicle ownership, but not the type of exponential growth anticipated by some.

The rate of ownership appeared to have peaked around 2012-13. The slight downturn is likely linked to the lower cost of gasoline. In total, Table 3-2 shows that there were 1,291 all-electric vehicles, and 26,186 gasoline/electric hybrid vehicles registered in Nevada in FY2015.

Table 3-2. Registered All-Electric and Hybrid Vehicles for FY2015

Model Year	Washoe County		Clark County		Statewide		
	All-Electric	Gasoline-Electric	All-Electric	Gasoline-Electric	All-Electric	Gasoline-Electric	Percentage All-Electric
2015	67	399	307	2,679	374	3,078	12%
2014	42	437	244	2,887	286	3,324	9%
2013	56	541	250	3,348	306	3,889	8%
2012	44	436	108	2,567	152	3,003	5%
2011	12	273	48	1,373	60	1,646	4%
2010	6	409	6	2,033	12	2,442	0%
2009	2	228	2	892	4	1,120	0%
2008	1	486	9	1,708	10	2,194	0%
2007	2	466	4	1,690	6	2,156	0%
2006	2	365	1	961	3	1,326	0%
2005	0	238	19	732	19	970	2%
2004	0	109	0	300	0	409	0%
Totals for all model years *	249	4,528	1,042	21,658	1,291	26,186	

* Fiscal year 2015 data.

** Data provided by the Department of Motor Vehicles based on DMV applications and has been provided for statistical reference.

3.4 DIESEL VEHICLES

Diesel vehicles with a GVWR up to 14,000 pounds are tested using a loaded dynamometer test and must meet the opacity standards set forth in NAC 445B.576. Heavy-duty diesel vehicles with a GVWR over 14,000 pounds are not subject to I/M testing. However, these vehicles must comply with the on-road smoke opacity standards enforced by DMV.[23]

[23] NAC 445B.7665.

3.5 TESTING NETWORK

EPA recognizes two types of I/M program testing networks: centralized and decentralized. One of the fundamental features that distinguish centralized from decentralized networks is that the latter has a far greater number of analyzers, stations, and inspectors available to the public.[24] As a result, decentralized testing networks provide far greater access and convenience to vehicle owners. On the other hand, maintaining a high level of quality assurance and quality control over analyzers and inspectors is more difficult and costly in decentralized programs and EPA therefore provides greater SIP credit for centralized testing networks.

In Nevada, testing is conducted at decentralized testing stations that are owned and operated by private businesses licensed by the State. Separate licenses are issued for testing stations authorized to perform only inspection tests (i.e., 1G stations) or authorized to test, diagnose and repair gasoline-fueled vehicles (i.e., 2G stations). Table 3-3 provides statewide data.

Table 3-3. Vehicle Emissions Testing Stations **

Type of Station	Carson City	Washoe County	Clark County	Statewide
1G	0	37	141	178
2G	2	72 *	171	243 *
Total	2	109	312	421

* Includes 1 diesel-only station
** Excludes government, fleet, and referee testing stations.

Similarly, inspectors are issued separate licenses to perform only inspection tests at 1G stations, or to test, diagnose or repair vehicles at 2G stations. Separate licenses are issued to stations and inspectors for the testing of diesel-powered vehicles with a GVWR up to 14,000 pounds.

Table 3-4. Vehicle Emissions Inspectors **

Type of Station	Carson City	Washoe County	Clark County	Statewide
1G	1	196	531	728
2G	2	140 *	294	436 *
Total	3	336	825	1,164

* Includes 7 diesel vehicle-only inspectors
** Excludes government, fleet, and referee testing stations.

3.6 EXEMPTIONS

There are several vehicle types that have been exempted from I/M program testing requirements directly by statute or indirectly by regulation. Table 3-5 lists and describes the types of vehicles exempted in Nevada.

[24] EPA, I/M Network Type: Effects on Emission Reductions, Cost, and Convenience, EPA-AA-TSS-I/M-89-2 (January 1991).

Table 3-5. Vehicle Types Exempted from I/M Program

Vehicle Type	Source
Motorcycle or moped.	NAC 445B.592
Motor vehicle which is subject to prorated registration pursuant to NRS 706.801 to 706.861, inclusive, and is not based in this State.	NAC 445B.592
New motor vehicle until the third registration of the vehicle.	NAC 445B.592
Motor vehicle permanently converted from gasoline to propane, compressed natural gas (CNG), methane or butane as a fuel.	NAC 445B.592
Motor vehicle with a model year before 1968.	NAC 445B.592
Heavy-duty vehicle which has a manufacturer's gross vehicle weight rating of more than 14,000 lbs and which is powered by a diesel engine.	NAC 445B.592
Trimobile, as defined in NRS 482.129, that meets the definition of a motorcycle set forth in 40 C.F.R. § 86.402-78 or 86.402-98.	NAC 445B.592
Military tactical vehicles	NRS 445B.759, NAC 445B.595
Replica vehicles	NRS 445B.759, NAC 445B.595
Vehicles registered as a Classic Rod, Classic Vehicle or Old Timer and driven no more than 5,000 miles per year.	NRS 445B.760, NAC 445B.574
Hybrid electric vehicles, as defined in 40 C.F.R. § 86.1702-99, until the model year of the vehicle is 6 years old.	NRS 445B.825

* The listed exemptions apply to the designated I/M program areas described below.

3.7 DESIGNATED I/M PROGRAM AREAS

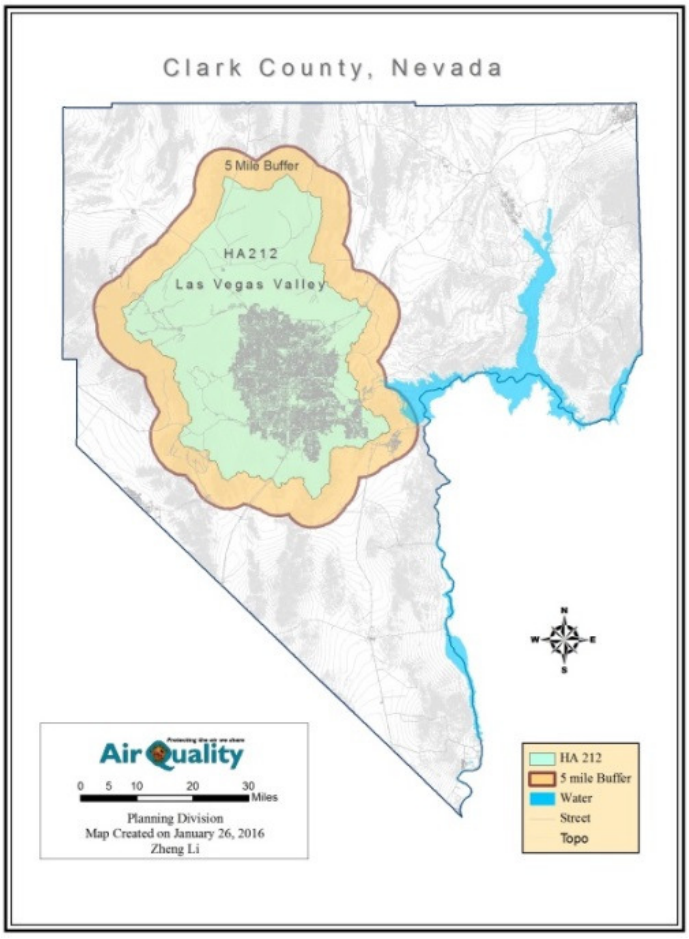
The boundaries of the I/M program testing areas are generally determined by the geographic extent of the airsheds that have violated or are violating the NAAQS. In Nevada, hydrographic areas are used to delineate airsheds.[25]

By statute, it is the Commission's responsibility to designate the areas of a county that should be subject to an I/M program.[26] In making that determination, the Commission must account for the federal requirements in 40 CFR 51.350(b) that require, among other things, that the program nominally cover at least the entire urbanized area. Exclusion of some urban population is allowed as long as an equal number of non-urban residents of the metropolitan statistical area (MSA) containing the subject urbanized area are included to compensate for the exclusion.

For Clark County, the Commission designated the area that includes vehicles based within: (1) Hydrographic Area 212 (i.e., the Las Vegas Valley), (2) the area five miles outside the boundary of Hydrographic Area 212 (i.e., the Las Vegas Valley), and (3) the city limits of Boulder City (see Figure 3-1). Vehicles based at an address located within the community of Goodsprings are excluded.[27]

[25] Nevada Division of Water Resources, http://water.nv.gov/mapping/hydrographic.cfm (accessed Feb. 2, 2016).
[26] NRS 445B.770.1.
[27] NAC 445B.593.

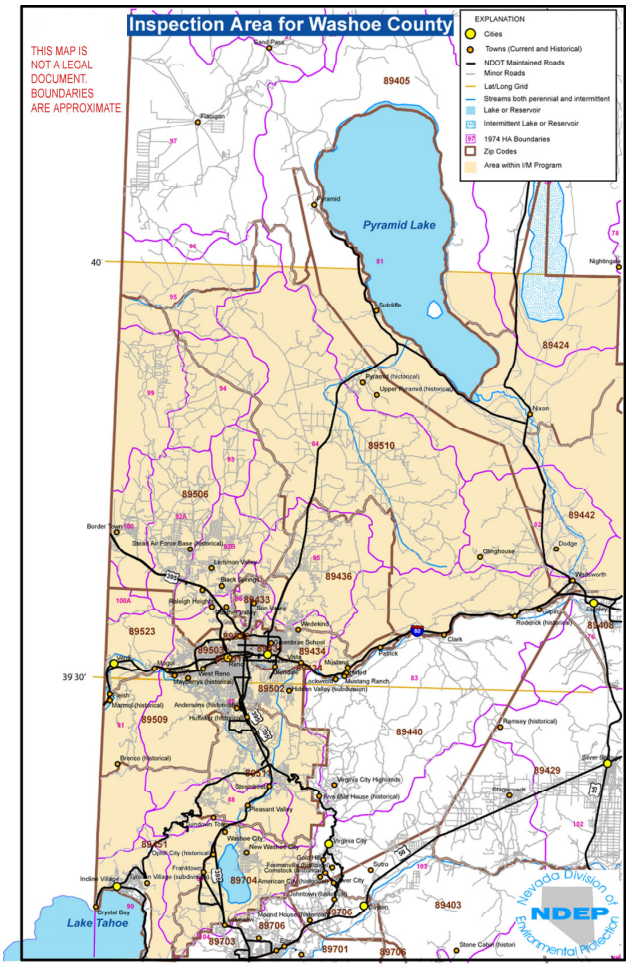
Figure 3-1. Clark County Designated I/M Program Area



For Washoe County, the Commission designated the area that includes vehicles based at an address south of the 40th degree of north latitude (see Figure 3-2). Vehicles registered at an address located within the communities of Crystal Bay, Empire, Incline Village, Nixon, Sutcliffe, or Wadsworth, are excluded.[28]

[28] NAC 445B.594.

Figure 3-2. Washoe County Designated I/M Program Area



3.8 FEES

The fee associated with a vehicle inspection has two components. One is the annual $6 inspection certificate accounted for in the Pollution Control Account.[29] The second is the cost of the inspection itself. For inspecting and testing a motor vehicle, an authorized station may charge a reasonable fee, but not more than the maximum fee prescribed by the DMV.[30] The maximum inspection fee is based on an annual survey of the average hourly shop labor rate charged by authorized stations within the county.[31]

3.9 WAIVERS

Nevada's I/M program provides for waivers from inspection and testing requirements if compliance involves repair and equipment costs that exceed the limits established by the

[29] NRS 445B.767.2.
[30] NAC 445B.598.1.
[31] NAC 445B.599.

Commission. Test waivers may be granted to vehicle owners who have had vehicle repair work performed at authorized stations after an initial inspection test failure, but still fail a subsequent inspection test. However, a waiver cannot be granted for an emission failure caused by the tampering of emission control devices, visible smoke, or blow-by.[32]

Minimum waiver limits are set forth by federal regulation based on whether an area operates a basic or enhanced I/M program.[33] The regulations allow for the adjustment of the minimum expenditure in enhanced I/M program areas based on the Consumer Price Index (CPI).[34] The Nevada legislature directed the Commission to establish waiver limits in a manner that avoids unnecessary financial hardship to vehicle owners.[35] However, the minimum expenditure limits have not been adjusted since 1998.

In Clark County, waivers require receipts in the amount of $450 from an authorized station licensed to perform emission related repairs (i.e., designated 2G stations). The receipts must show that the $450 was spent on parts other than a catalytic converter, fuel inlet restrictor or air injection system. The receipts can also include the costs of labor, other than emission testing, if the repairs evidenced by the receipt were directly related to the deficiency in emissions. Self-repair is not authorized.[36]

In Washoe County, waivers require receipts in the amount of $200 from designated 2G stations. The receipts must show that the $200 was spent on parts other than a catalytic converter, fuel inlet restrictor or air injection system. The receipts can also include the costs of labor, other than emission testing, if the repairs evidenced by the receipt were directly related to the deficiency in emissions.[37]

In Washoe County, waivers can also be issued for vehicles repaired by the owner. A self-repair waiver requires receipts or other evidence that at least $200 has been spent on parts other than a catalytic converter, fuel inlet restrictor or air injection system. However, the parts must have been purchased within 14 calendar days after the initial emissions test, and the receipts cannot include the costs of labor.[38]

Both Clark and Washoe counties require that the person applying for the emissions waiver have the following items, (1) the first failed emission test before repairs were performed on the vehicle, (2) receipts for parts and labor repairs dated after the first failed test, and (3) the second failed emission test after repairs were performed. In addition, the vehicle must be present for inspection to verify that repairs were performed.[39]

[32] NAC 445B.590.
[33] 40 CFR 51.360(6), and 51.360(7).
[34] 40 CFR 51.360(7).
[35] NRS 445B.825.3.
[36] NAC 445B.590.2(b).
[37] NAC 445B.590.2(a).
[38] Id.
[39] Nevada DMV, http://www.dmvnv.com/emission.htm (accessed February 2, 2016).

4.0 INSPECTION AND RE-INSPECTION RESULTS

4.1 OVERVIEW

The DMV tracks all emission testing that occurs in Clark and Washoe counties.[40] A tabulated form of that data is provided annually to the EPA. In that report, the DMV includes the following information: (i) model year of the vehicles, (ii) total number of initial inspections, (iii) total number of vehicles that passed and failed the initial inspection, (iv) failure rate for initial inspections, (v) total number of re-inspections, (vi) total number of vehicles that passed and failed the re-inspection, and the (vii) failure rate for re-inspections.

This information is collected for both light-duty and heavy-duty gasoline vehicles. In Nevada, light-duty gasoline vehicles are classified as those with a GVWR of 8,500 pounds or less.[41] Heavy-duty gasoline vehicles are those with a GVWR of 8,501 pounds or more.

4.2 CLARK COUNTY INSPECTION AND RE-INSPECTION RESULTS

During calendar year 2015, there were a total of 1,064,593 light-duty gasoline vehicles inspected, and 27,369 heavy-duty gasoline vehicles inspected within the Clark County designated I/M program area. Light-duty vehicles constituted 97.5 percent of the gasoline vehicle population in Clark County, and heavy-duty vehicles represented the remaining 2.5 percent.

The following tables provide the inspection and re-inspection results for light-duty and heavy – duty gasoline vehicles in Clark County.

[40] There are also a few authorized emissions testing stations located in Carson City (see Table 3-3).

[41] EPA similarly classifies vehicles with a GVWR of 8,500 pounds or less as light-duty vehicles. However, EPA's heavy-duty vehicle classification is more nuanced (EPA, Emission Standards Reference Guide, Vehicle Weight Classifications https://www3.epa.gov/otaq/standards/weights.htm (accessed March 10, 2016)).

Table 4-1. CY2015 Clark County Light-Duty Gasoline Vehicle Inspection and Re-Inspection Results

Year	Total Initial Inspection	Passing Initial Inspection	Failed Initial Inspection	% Failed Initial Inspection	Total Re-Inspection	Passing Initial Re-Inspection	Failed Initial Re-Inspection	% Failed Initial Re-Inspection
1968	125	78	47	37.60%	36	25	11	30.56%
1969	183	131	52	28.42%	35	29	6	17.14%
1970	139	90	49	35.25%	30	23	7	23.33%
1971	141	86	55	39.01%	44	31	13	29.55%
1972	182	131	51	28.02%	36	22	14	38.89%
1973	137	101	36	26.28%	22	17	5	22.73%
1974	152	102	50	32.89%	32	24	8	25.00%
1975	107	77	30	28.04%	24	19	5	20.83%
1976	197	133	64	32.49%	49	35	14	28.57%
1977	265	190	75	28.30%	59	38	21	35.59%
1978	311	231	80	25.72%	64	42	22	34.38%
1979	332	239	93	28.01%	73	53	20	27.40%
1980	203	146	57	28.08%	39	28	11	28.21%
1981	204	153	51	25.00%	41	27	14	34.15%
1982	225	165	60	26.67%	45	33	12	26.67%
1983	264	208	56	21.21%	37	25	12	32.43%
1984	535	443	92	17.20%	67	52	15	22.39%
1985	773	613	160	20.70%	114	85	29	25.44%
1986	1227	1005	222	18.09%	165	112	53	32.12%
1987	1488	1182	306	20.56%	224	153	71	31.70%
1988	2124	1796	328	15.44%	240	156	84	35.00%
1989	3029	2588	441	14.56%	339	248	91	26.84%
1990	4336	3779	557	12.85%	434	306	128	29.49%
1991	5732	5067	665	11.60%	503	348	155	30.82%
1992	6593	5829	764	11.59%	582	404	178	30.58%
1993	8565	7672	893	10.43%	715	500	215	30.07%
1994	12234	11109	1125	9.20%	892	618	274	30.72%
1995	16183	14862	1321	8.16%	1030	708	322	31.26%
1996	16729	15464	1265	7.56%	918	755	163	17.76%
1997	23127	21428	1699	7.35%	1236	1062	174	14.08%
1998	27155	25327	1828	6.73%	1335	1144	191	14.31%
1999	33906	31737	2169	6.40%	1567	1348	219	13.98%
2000	42545	39881	2664	6.26%	1949	1698	251	12.88%
2001	43978	41187	2791	6.35%	1881	1604	277	14.73%
2002	52477	49580	2897	5.52%	1987	1729	258	12.98%
2003	59777	57013	2764	4.62%	1953	1736	217	11.11%
2004	66804	64374	2430	3.64%	1745	1555	190	10.89%
2005	74645	72117	2528	3.39%	1833	1654	179	9.77%
2006	76580	74364	2216	2.89%	1602	1436	166	10.36%
2007	76787	75042	1745	2.27%	1292	1176	116	8.98%
2008	67135	66006	1129	1.68%	857	774	83	9.68%
2009	41617	41129	488	1.17%	373	341	32	8.58%
2010	51443	51058	385	0.75%	291	272	19	6.53%
2011	54795	54484	311	0.57%	228	223	5	2.19%
2012	70254	69915	339	0.48%	258	246	12	4.65%
2013	85398	85070	328	0.38%	245	237	8	3.27%
2014	29008	28942	66	0.23%	43	40	3	6.98%
2015	4404	4401	3	0.07%	1	1	0	0.00%
2016	43	43	0	0.00%	0	0	0	0.00%
Totals:	1,064,593	1,026,768	37,825	3.55%	27,565	23,192	4,373	15.86%

* This information has been obtained and provided by the Department of Motor Vehicles, 2015 EPA Report.

Table 4-2. CY2015 Clark County Heavy-Duty Gasoline Vehicle Inspection and Re-Inspection Results

Year	Total Initial Inspection	Passing Initial Inspection	Failed Initial Inspection	% Failed Initial Inspection	Total Re-Inspection	Passing Initial Re-Inspection	Failed Initial Re-Inspection	% Failed Initial Re-Inspection
1968	0	0	0	0.00%	0	0	0	0.00%
1969	3	1	2	66.67%	2	2	0	0.00%
1970	2	2	0	0.00%	0	0	0	0.00%
1971	1	1	0	0.00%	2	1	1	50.00%
1972	5	4	1	20.00%	0	0	0	0.00%
1973	12	11	1	8.33%	1	1	0	0.00%
1974	9	8	1	11.11%	0	0	0	0.00%
1975	8	5	3	37.50%	2	1	1	50.00%
1976	16	10	6	37.50%	6	5	1	16.67%
1977	26	18	8	30.77%	9	6	3	33.33%
1978	35	23	12	34.29%	12	9	3	25.00%
1979	42	30	12	28.57%	9	8	1	11.11%
1980	21	15	6	28.57%	5	4	1	20.00%
1981	28	18	10	35.71%	8	7	1	12.50%
1982	28	20	8	28.57%	6	5	1	16.67%
1983	54	46	8	14.81%	8	6	2	25.00%
1984	80	62	18	22.50%	14	11	3	21.43%
1985	70	55	15	21.43%	14	10	4	28.57%
1986	73	58	15	20.55%	13	9	4	30.77%
1987	91	76	15	16.48%	12	9	3	25.00%
1988	169	146	23	13.61%	17	13	4	23.53%
1989	244	213	31	12.70%	33	26	7	21.21%
1990	233	210	23	9.87%	19	17	2	10.53%
1991	236	226	10	4.24%	9	6	3	33.33%
1992	267	255	12	4.49%	10	7	3	30.00%
1993	363	340	23	6.34%	20	17	3	15.00%
1994	537	509	28	5.21%	20	14	6	30.00%
1995	705	680	25	3.55%	26	24	2	7.69%
1996	726	695	31	4.27%	30	26	4	13.33%
1997	926	884	42	4.54%	33	28	5	15.15%
1998	738	705	33	4.47%	30	25	5	16.67%
1999	1372	1340	32	2.33%	31	26	5	16.13%
2000	1560	1538	22	1.41%	17	16	1	5.88%
2001	1659	1633	26	1.57%	26	22	4	15.38%
2002	1429	1410	19	1.33%	20	18	2	10.00%
2003	2056	2034	22	1.07%	18	17	1	5.56%
2004	2098	2086	12	0.57%	18	18	0	0.00%
2005	1962	1949	13	0.66%	11	10	1	9.09%
2006	2067	2058	9	0.44%	7	7	0	0.00%
2007	1613	1608	5	0.31%	4	4	0	0.00%
2008	1239	1234	5	0.40%	3	3	0	0.00%
2009	479	476	3	0.63%	3	3	0	0.00%
2010	569	569	0	0.00%	0	0	0	0.00%
2011	882	880	2	0.23%	3	3	0	0.00%
2012	1156	1155	1	0.09%	1	1	0	0.00%
2013	1028	1028	0	0.00%	0	0	0	0.00%
2014	388	388	0	0.00%	0	0	0	0.00%
2015	64	64	0	0.00%	0	0	0	0.00%
2016	0	0	0	0.00%	0	0	0	0.00%
Totals:	27,369	26,776	593	2.17%	532	445	87	16.35%

* This information has been obtained and provided by the Department of Motor Vehicles, 2015 EPA Report.

4.3 WASHOE COUNTY INSPECTION AND RE-INSPECTION RESULTS

During calendar year 2015, there were a total of 268,867 light-duty gasoline vehicles inspected, and 13,971 heavy-duty gasoline vehicles inspected within the Washoe County designated I/M program area. Light-duty vehicles constituted 95.1 percent of the gasoline vehicle population in Washoe County, and heavy-duty vehicles represented the remaining 4.9 percent.

The following tables provide the inspection and re-inspection results for light-duty and heavy – duty gasoline vehicles in Washoe County.

Table 4-3. CY2015 Washoe County Light-Duty Gasoline Vehicle Inspection and Re-Inspection Results

Year	Total Initial Inspection	Passing Initial Inspection	Failed Initial Inspection	% Failed Initial Inspection	Total Re-Inspection	Passing Initial Re-Inspection	Failed Initial Re-Inspection	% Failed Initial Re-Inspection
1968	118	87	31	26.27%	25	17	8	32.00%
1969	131	99	32	24.43%	23	18	5	21.74%
1970	126	85	41	32.54%	31	24	7	22.58%
1971	113	80	33	29.20%	21	16	5	23.81%
1972	160	115	45	28.13%	36	30	6	16.67%
1973	150	108	42	28.00%	31	27	4	12.90%
1974	123	90	33	26.83%	24	19	5	20.83%
1975	85	56	29	34.12%	21	13	8	38.10%
1976	147	107	40	27.21%	22	16	6	27.27%
1977	205	147	58	28.29%	42	30	12	28.57%
1978	218	152	66	30.28%	53	44	9	16.98%
1979	225	164	61	27.11%	43	33	10	23.26%
1980	133	110	23	17.29%	16	13	3	18.75%
1981	134	104	30	22.39%	23	15	8	34.78%
1982	148	110	38	25.68%	25	19	6	24.00%
1983	177	139	38	21.47%	26	22	4	15.38%
1984	364	284	80	21.98%	52	34	18	34.62%
1985	500	396	104	20.80%	72	48	24	33.33%
1986	800	666	134	16.75%	85	67	18	21.18%
1987	996	820	176	17.67%	115	82	33	28.70%
1988	1313	1120	193	14.70%	134	94	40	29.85%
1989	1889	1649	240	12.71%	172	123	49	28.49%
1990	2174	1941	233	10.72%	165	117	48	29.09%
1991	2700	2421	279	10.33%	194	142	52	26.80%
1992	2984	2726	258	8.65%	198	145	53	26.77%
1993	3764	3445	319	8.48%	234	163	71	30.34%
1994	4933	4573	360	7.30%	249	185	64	25.70%
1995	5972	5570	402	6.73%	272	188	84	30.88%
1996	5687	5315	372	6.54%	268	227	41	15.30%
1997	7804	7319	485	6.21%	319	276	43	13.48%
1998	8910	8401	509	5.71%	329	301	28	8.51%
1999	10737	10215	522	4.86%	345	310	35	10.14%
2000	12228	11616	612	5.00%	422	389	33	7.82%
2001	13178	12501	677	5.14%	433	387	46	10.62%
2002	14548	13909	639	4.39%	424	387	37	8.73%
2003	15149	14615	534	3.52%	361	336	25	6.93%
2004	16295	15828	467	2.87%	326	304	22	6.75%
2005	17406	16960	446	2.56%	318	284	34	10.69%
2006	16933	16554	379	2.24%	263	251	12	4.56%
2007	16076	15815	261	1.62%	183	174	9	4.92%
2008	13809	13664	145	1.05%	103	98	5	4.85%
2009	8145	8084	61	0.75%	49	48	1	2.04%
2010	10335	10275	60	0.58%	45	44	1	2.22%
2011	11289	11238	51	0.45%	39	39	0	0.00%
2012	13935	13889	46	0.33%	36	35	1	2.78%
2013	16389	16348	41	0.25%	31	30	1	3.23%
2014	7636	7619	17	0.22%	12	12	0	0.00%
2015	1582	1582	0	0.00%	0	0	0	0.00%
2016	14	14	0	0.00%	0	0	0	0.00%
Totals:	268,867	259,125	9742	3.62%	6,710	5,676	1,034	15.41%

* This information has been obtained and provided by the Department of Motor Vehicles, 2015 EPA Report.

Table 4-4. CY2015 Washoe County Heavy-Duty Gasoline Vehicle Inspection and Re-Inspection Results

Year	Total Initial Inspection	Passing Initial Inspection	Failed Initial Inspection	% Failed Initial Inspection	Total Re-Inspection	Passing Initial Re-Inspection	Failed Initial Re-Inspection	% Failed Initial Re-Inspection
1968	2	2	0	0.00%	0	0	0	0.00%
1969	6	6	0	0.00%	0	0	0	0.00%
1970	5	5	0	0.00%	0	0	0	0.00%
1971	6	6	0	0.00%	0	0	0	0.00%
1972	13	8	5	38.46%	2	2	0	0.00%
1973	21	15	6	28.57%	6	6	0	0.00%
1974	14	11	3	21.43%	0	0	0	0.00%
1975	17	14	3	17.65%	4	3	1	25.00%
1976	36	29	7	19.44%	4	4	0	0.00%
1977	59	46	13	22.03%	9	5	4	44.44%
1978	79	70	9	11.39%	4	3	1	25.00%
1979	71	52	19	26.76%	10	6	4	40.00%
1980	36	25	11	30.56%	9	7	2	22.22%
1981	39	35	4	10.26%	2	2	0	0.00%
1982	41	32	9	21.95%	8	6	2	25.00%
1983	59	49	10	16.95%	5	4	1	20.00%
1984	72	61	11	15.28%	12	10	2	16.67%
1985	109	93	16	14.68%	13	11	2	15.38%
1986	120	97	23	19.17%	21	19	2	9.52%
1987	140	125	15	10.71%	10	8	2	20.00%
1988	197	178	19	9.64%	13	10	3	23.08%
1989	313	287	26	8.31%	18	14	4	22.22%
1990	312	292	20	6.41%	19	17	2	10.53%
1991	243	232	11	4.53%	7	6	1	14.29%
1992	283	272	11	3.89%	9	8	1	11.11%
1993	269	256	13	4.83%	8	6	2	25.00%
1994	376	365	11	2.93%	8	8	0	0.00%
1995	509	495	14	2.75%	8	8	0	0.00%
1996	485	472	13	2.68%	14	12	2	14.29%
1997	557	551	6	1.08%	5	5	0	0.00%
1998	513	508	5	0.97%	3	3	0	0.00%
1999	795	777	18	2.26%	11	10	1	9.09%
2000	797	790	7	0.88%	8	8	0	0.00%
2001	888	877	11	1.24%	5	5	0	0.00%
2002	712	706	6	0.84%	5	5	0	0.00%
2003	879	876	3	0.34%	5	5	0	0.00%
2004	744	744	0	0.00%	2	2	0	0.00%
2005	719	715	4	0.56%	2	2	0	0.00%
2006	802	795	7	0.87%	7	6	1	14.29%
2007	521	519	2	0.38%	2	2	0	0.00%
2008	409	407	2	0.49%	3	3	0	0.00%
2009	183	183	0	0.00%	0	0	0	0.00%
2010	202	202	0	0.00%	1	1	0	0.00%
2011	266	266	0	0.00%	0	0	0	0.00%
2012	405	405	0	0.00%	0	0	0	0.00%
2013	409	408	1	0.24%	1	1	0	0.00%
2014	183	183	0	0.00%	0	0	0	0.00%
2015	55	54	1	1.82%	1	1	0	0.00%
2016	0	0	0	0.00%	0	0	0	0.00%
Totals:	13,971	13,596	375	2.68%	284	244	40	14.08%

* This information has been obtained and provided by the Department of Motor Vehicles, 2015 EPA Report.

4.4 ANALYSIS OF INSPECTION AND RE-INSPECTION RESULTS

The percentage of vehicles failing the initial inspection is markedly low for newer vehicles. Light-duty and heavy-duty gasoline vehicles typically have failure rates below 1 percent until about the sixth year of service life. This reflects the stricter manufacturing standards new vehicles are being built to and the resulting improvements in reliability that new vehicles exhibit. Auto manufacturers are also subject to stricter federal emission component warranty requirements instituted in recent years, which play a role in keeping newer vehicles in compliance with emission standards for a longer period after they enter service.

Older vehicles, however, fail the initial inspection at rates that increase proportionally with age. Many of these vehicles also fail the subsequent re-inspection. These older vehicles failing inspections are a particular concern given that they were subject to much less stringent federal emission standards based on when they were manufactured. Though their numbers are limited, older vehicles that are out of compliance with I/M program emission standards are believed responsible for pollutant emissions that are not insignificant.

5.0 EMISSIONS REDUCTIONS FROM MOTOR VEHICLES

5.1 OVERVIEW

Congress developed a two-pronged approach towards reducing emissions from the mobile source sector. The first prong involves setting standards to control vehicle tailpipe and evaporative emissions (on a per mile basis) and fuel composition (i.e., the sulfur content). The second prong involves a government-mandated inspection and maintenance of vehicles (i.e., the I/M program).

5.2 EMISSIONS REDUCTIONS FROM VEHICLE STANDARDS AND FUEL COMPOSITION

In 1965, Congress passed the Motor Vehicle Air Pollution Control Act. The legislation established the first federal vehicle emissions standards, beginning with 1968 model year vehicles. This threshold year was adopted by EPA as a baseline for the applicability of I/M programs. In Nevada, it remains the baseline year for I/M program applicability.

In 1970, Congress substantially amended the CAA and authorized for the first time the development of federal and state regulations to limit emissions from mobile sources.[42] When Congress amended the CAA in 1977, it set forth phased implementation of more stringent vehicle emissions standards.

The CAA was substantially amended again in 1990, and included even more stringent emissions standards for both motor vehicles and fuels. Table 5-1 provides an overview of the increasingly more stringent NO_x emissions standards for motor vehicles.[43]

Table 5-1. Changes in NO_x Emissions Standards for Motor Vehicles

Category	1975	1979	1988	1994 (Tier 1)	1999	2004-09 (Tier 2)
NO_x Standard for Cars (gpm)*	3.1	2.3	1.2	0.6	0.5	0.07
NO_x Standard for Larger SUVs, Vans, and Heavier Trucks (gpm)*			1.7	1.53		0.20 (2004 - 2007) 0.07 (2008 - 2009)

*gpm = grams per mile.

Section 202(g) of the 1990 Amendments to the CAA established a set of Tier 1 engine standards for controlling emissions from light-duty vehicles beginning with model year 1994 vehicles. Standards were set for hydrocarbon, carbon monoxide, and nitrogen oxide (NO_x) pollutants. Section 202(i) of the CAA directed EPA to issue a Tier 2 report assessing the air quality need,

[42] EPA, *The History of Reducing Tailpipe Emissions,* EPA420-F-99-017 (May 1999).
[43] *Id*.

cost effectiveness, and feasibility of more stringent emissions standards beginning with model year 2004 vehicles. EPA determined that vehicle emissions represented up to 30 percent of smog-forming emissions nationwide. EPA determined that larger vehicles like SUVs did not meet the same emissions standards but polluted 3 to 5 times as much and constituted 50 percent of the vehicles sold. EPA concluded that the technology was available to tighten the standards and that incorporating that technology would be cost-effective.

In 2000, EPA issued the Tier 2 rule.[44] The rule required automobile manufacturers to phase in a single set of exhaust emissions standards for all passenger cars, light-duty trucks, and larger passenger vehicles. The rule also required the oil refining industry to reduce the sulfur content in gasoline so that by 2007 the content would average 30 ppm.

In 2014, EPA issued the Tier 3 rule.[45] The rule established even more stringent vehicle emissions standards and reductions to the sulfur content of gasoline. Beginning in 2017, the rule will reduce exhaust and evaporative emissions by addressing the vehicle and fuel as a system.[46] The rule also includes new requirements for both light and heavy-duty vehicles. The exhaust standards include different phase-in schedules that vary based on vehicle class. The gasoline fuel standard will reduce the sulfur content from the current 30 ppm average down to a 10 ppm average and will enable catalytic converters to operate more efficiently.

EPA anticipates that by 2030 (i.e., when Tier 3 vehicles will make up the majority of the fleet and vehicle miles traveled), the vehicle emissions standards combined with reductions of gasoline sulfur content, will result in NO_x and volatile organic compound (VOC) vehicle emissions reduction of about 21 percent, and carbon monoxide emissions reductions of about 24 percent.[47]

5.3 EMISSIONS REDUCTIONS FROM I/M PROGRAM

I/M programs are federally-enforceable programs that are required to be implemented by states in areas that fail to maintain the NAAQS. I/M programs were first mandated for areas with long term air quality problems beginning with the 1977 CAA amendments.

By the mid 1970's, most new cars were equipped with catalytic converters that could reduce carbon monoxide emissions upwards of 80 percent. In the early 1980's, automakers introduced even more sophisticated catalytic converters, as well as on-board computers and oxygen sensors to help optimize the efficiency of the catalytic converter. By the early 1990's passenger cars were capable of emitting 90 percent less carbon monoxide over their lifetimes than their uncontrolled counterparts in the 1960s.[48]

[44] 65 FR 6698 (Feb. 10, 2000).
[45] 79 FR 23414 (April 28, 2014).
[46] *Id.* at 23417.
[47] *Id.*
[48] EPA, *Automobiles and Carbon Monoxide*, EPA 400-F-92-005 (January 1993).

In 1992, EPA published the I/M program rule.[49] The rule requires I/M programs in both ozone and carbon monoxide nonattainment areas, depending upon population and nonattainment classification or design value. In 1996, EPA established the minimum requirements for inspecting vehicles equipped with OBD-II systems.[50]

Mandatory testing under Clark County's low enhanced I/M program began on March 1, 1996. EPA determined that the low enhanced I/M program provided a 16.8 percent carbon monoxide emission reduction and therefore represented a significant element in the strategy to attain the carbon monoxide NAAQS.[51] Comparatively, EPA determined the basic I/M program operated in Washoe County demonstrated a carbon monoxide reduction of 9.5 percent (73 FR 1181).

I/M programs help improve air quality by identifying high-emitting vehicles in need of repair. The vehicles are identified through visual inspection, emissions testing, or the downloading of fault codes from a vehicle's on-board computer. Repairing the vehicle, or obtaining a waiver in lieu of repair, is a prerequisite to vehicle registration. The I/M program contributions for reducing harmful emissions that have been estimated for 2018 in Clark and Washoe Counties are provided in Table 5-2.[52] The percent reductions represent the portion of overall emission reductions provided by the I/M program.

Table 5-2. I/M Program Contribution to Mobile Source Emission Reductions

County	VOC	NOx	CO	VOC	NOx	CO
	(tons/day)			(percent reduction)		
Clark	2.6	2.8	49.4	12.3%	7.8%	18.9%
Washoe	0.8	0.8	12.4	15.7%	6.0%	17.6%

Modeling of emission reductions was performed only for light-duty gasoline vehicles, which in 2015 represented approximately 89.9% and 87.0% of all registered vehicles (excluding motorcycles) in Clark and Washoe counties, respectively.

[49] 57 FR 52950 (Nov. 5, 1992).
[50] 61 FR 40940 (August 6, 1996).
[51] EPA TSD, *NPRM on the CO SIP Attainment Plan for Las Vegas Valley*, p. 71 (Jan. 2003).
[52] Estimated emissions were developed by Clark County using the EPA-approved MOVES modeling software.

6.0 COMPARISON OF NEVADA'S NAAQS COMPLIANCE AND I/M PROGRAM ELEMENTS WITH OTHER STATES

6.1 OVERVIEW

Thirty one states and the District of Columbia have some form of I/M program. States have adopted a variety of different programmatic elements for areas of varied air quality conditions. In evaluating the reasonableness of Nevada's I/M program, the subcommittee compared other state programs that operated under similar air quality conditions. Recognizing that the VOC and NO_x pollutants are both precursors of ozone, special attention was paid to the carbon monoxide and ozone NAAQS compliance status since it is on that basis that EPA determined whether an area required an I/M program.

Comparisons were also made for the different programmatic elements of other state programs, especially: the oldest model year vehicles may be eligible for exemption, testing frequency, and new vehicle exemptions.

6.2 CARBON MONOXIDE NAAQS COMPLIANCE

As described in the background section of this report, implementation of Nevada's I/M program was no easy feat. It took many years, even decades, before government officials and the general public recognized that the program benefits outweighed its burdens.

In the latter part of the 20th century, mobile source carbon monoxide emissions were a national problem. Yet with the prudent federal regulation of vehicle emission and fuel standards, and with state and local efforts to implement I/M programs, carbon monoxide pollution levels have shown statistically impressive reductions over time. Table 6-1 shows both the national and regional trends over the past few decades.

Table 6-1. Carbon Monoxide Trends [53]

Area	Years	Average Carbon Monoxide Emissions Decrease	No. of Monitoring Sites	States in Area
National	1980 - 2014	85%	74	All States
National	1990 - 2014	77%	120	All States
National	2000 - 2014	60%	188	All States
West	2000 - 2014	57%	56	California, Nevada
Southwest	2000 - 2014	24%	24	Arizona, Utah, Colorado, New Mexico
Northwest	2000 - 2014	56%	3	Washington, Oregon, Idaho

In 2011, EPA issued a decision to retain the current NAAQS for carbon monoxide. EPA concluded that the current NAAQS (which was established in 1971) still provided the required level of public health protection, including protection for people with heart disease, who are

[53] EPA, National Trends in CO Levels, http://www3.epa.gov/airtrends/carbon.html (accessed Feb. 5, 2016).

especially susceptible to health problems associated with exposures to carbon monoxide in ambient air.

Currently, there aren't any areas in the country designated nonattainment for the carbon monoxide NAAQS. The last area was re-designated five years ago, in 2010. That area happened to be the Las Vegas Valley.[54] Since the attainment status for the carbon monoxide NAAQS is the same for all states, that compliance status was not included in tables comparing air quality status.

The CAA requires a state requesting re-designation to also submit a ten-year maintenance plan—that is made federally-enforceable when approved by EPA. The purpose of the plan is to ensure that an area will continue to meet the NAAQS. All areas having operational I/M programs located in the western states identified in Table 6-2 have carbon monoxide maintenance plans. The Washoe and Clark counties maintenance plans were approved by EPA in 2008 and 2010, respectively.[55]

6.3 OZONE NAAQS COMPLIANCE

The decades-long effort to reduce carbon monoxide pollution nationwide, through the mobile sector, was largely successful. Today the benefits associated with retaining the I/M program have largely shifted towards ozone emissions reduction efforts.

Table 6-2 shows the ozone compliance status based on 2012 – 2014 design values, for western state areas with I/M programs.[56] Though the 2015 ozone NAAQS designations will not be made until October 2017, at the earliest, the design values for the 2012 – 2014 time period are provided as indicators of the state of current ozone compliance.

[54] 75 FR 59090 (Sep. 27, 2010).

[55] In 2008, EPA re-designated Reno as an attainment area subject to a carbon monoxide maintenance plan (74 FR 38124 (July 3, 2008)). In 2010, EPA re-designated the Las Vegas Valley as an attainment area subject to a carbon monoxide maintenance plan (75 FR 59090 (Sep. 27, 2010)).

[56] Western states, as defined by the U.S. Census Bureau, include Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. U.S. Census Bureau, Census Regions and Divisions of the United States, http://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf (accessed March 23, 2016).

Table 6-2. I/M Program Characteristics of Western States and Ozone Compliance Status

Western States	2008 ozone NAAQS: Nonattainment Area Classifications	2015 ozone NAAQS: Counties with 2012 – 2014 Design Values > 70 ppb [57]	Oldest Model Year Vehicle Tested	New Vehicle Exemption (years)	Annual Testing	Biennial Testing	Annual and Biennial Testing
Arizona[58]	Marginal	Maricopa (80 ppb), Pinal (73 ppb)	1967	4			√ [59]
California[60]	Moderate to Extreme	Calaveras (71 ppb), Butte (75 ppb), Imperial (80 ppb), Los Angeles (97 ppb), Orange (74 ppb), Riverside (99 ppb), San Bernardino (102 ppb), Mariposa (78 ppb), Nevada (78 ppb), El Dorado (84 ppb), Placer (81 ppb), Sacramento (85 ppb), Solano (80 ppb), Sutter (74 ppb), San Diego (79 ppb), Alameda (72 ppb), Kern (91 ppb), Fresno (95 ppb), Kings (91 ppb), Madera (84 ppb), Merced (81 ppb), San Joaquin (79 ppb), Stanislaus (84 ppb), Tulare (91 ppb), San Luis Obispo (75 ppb), Tehama (75 ppb), Ventura (79 ppb)	1976	6		√	
Colorado[61]	Marginal	Adams (73 ppb), Arapahoe (71 ppb), Boulder (75 ppb), Douglas (81 ppb), Jefferson (82 ppb), Larimer (78 ppb), Weld (74 ppb)	All ages tested	7			√ [62]
Idaho			1981	4		√	
Nevada		Clark (78 ppb)	1968	2	√		
New Mexico			1981	4		√	
Oregon			1975	5		√	
Utah		Salt Lake (75 ppb), Utah (74 ppb), Weber (73 ppb)	1968	2		√	√ [63]
Washington			1990	7		√	

[57] EPA is slated to provide designations in October 2017. The designations will likely be based on the 2014- 2016 design values. The 2012 – 2014 design values are provided to show which areas are trending higher.
[58] Nonattainment area: Phoenix-Mesa.
[59] Arizona has annual testing for 1967 - 1980, and biennial testing for 1981 an newer model year vehicles.
[60] There are 16 non-tribal nonattainment areas statewide in California.
[61] Nonattainment area: Denver-Boulder-Greeley-Ft. Collins-Loveland.
[62] Colorado has annual testing for 1967 - 1981, and biennial testing for 1982 an newer model year vehicles.
[63] Utah has biennial testing for first six years of new vehicle for all counties except Cache County which has a biennial program. Also, the oldest model year vehicle tested in Cache County is 1969.

6.4 OLDEST MODEL YEAR VEHICLES SUBJECT TO TESTING

The model year of the oldest vehicle tested varies considerably among the states with I/M programs. Some states exempt older vehicles on an annual rolling basis (e.g., Massachusetts). Other states only require a gas cap or visual inspection for older vehicles, as opposed to actual emissions testing for model year vehicles older than 1996 (i.e., the year in which vehicles must undergo OBD II testing).

Colorado is the only state that does not provide an exemption year for older vehicles. However, as is the case with most states, Colorado does provide exemptions for collector vehicles (see section of report discussing special license plate vehicles). Colorado also permits owners of model year vehicles that are 1967 and older to pay sharply reduced repair costs in order to qualify for a waiver of testing requirements.[64]

When only western states with I/M programs are considered (see Table 6-3), the average age of the oldest vehicle exempted is 1975.[65] The older exemption thresholds for western states, as compared nation-wide, reflect the relative dry conditions in western states (see Appendix C). In general, vehicles tend to last longer in drier environments because they are not exposed to the more humid conditions that cause rusting or in climates where road salt is used to prevent icy conditions.

Table 6-3 shows the distribution of older vehicle exemption dates in all states with I/M programs. A separate column identifies the Ozone Transport Region (OTR) states. The CAA sets out specific requirements for these northeast states. States in the OTR region are required to incorporate a certain level of control measures for the pollutants that form ozone—even if they meet the ozone standards. One of these controls is an I/M program, and all OTR states currently operate I/M programs.[66]

[64] The cost of a testing waiver for gasoline vehicles with model years 1968 and later is $715, while the cost for model years 1967 and older is $75. The result is a quasi-exemption for a comparatively nominal cost.
[65] For purposes of estimating the average age, it is assumed that the quasi-exemption date for older vehicles in Colorado is 1968.
[66] EPA, SIP Requirements List, http://www3.epa.gov/airquality/urbanair/sipstatus/nonattainment_req.html (Accessed Feb. 5, 2016).

Table 6-3. Oldest Model Year Vehicles Tested by State (for CY2016)

Oldest Model Year Vehicle Tested	Nevada and Surrounding States	Other Western States	Ozone Transport Region States	Remaining States
No oldest age specified		Colorado		
1960			New Jersey, Vermont*	
1961				
1962				
1963				
1964				
1965				
1966				
1967	Arizona			
1968	Nevada, Utah		Delaware, District of Columbia	
1969				
1970				
1971				
1972				
1973			Maine*	
1974				
1975	Oregon		Pennsylvania*	Tennessee
1976	California			Indiana
1977			Maryland	
1978				
1979				
1980				Louisiana*
1981	Idaho	New Mexico		
1982				
1983				
1984				
1985				
1986				
1987				
1988				
1989				
1990		Washington	New Hampshire*, Rhode Island	
1991			Connecticut, Virginia	Georgia, Ohio
1992			New York	
1993				Texas
1994				
1995				
1996				Illinois, Missouri, North Carolina, Wisconsin
1997				
1998				
1999				
2000				
2001			Massachusetts**	

* The states of Louisiana, Maine, New Hampshire, Pennsylvania, and Vermont only require a gas cap or visual test for model year vehicles older than 1996.

** In Massachusetts, model year vehicles 15 years and older are exempt.

Older vehicles emit significantly more emissions on a per-mile basis than newer vehicles. Old vehicles not only fail emissions tests at a much higher rate than newer vehicles (see Tables 4-1 – 4-4), but they fail those tests while being subject to far less stringent emissions standards. From an air quality perspective, there is a compelling argument to keep the exemption threshold for older model year vehicles at 1968 for an arid western state where vehicle lives are longer.

Some states are even willing to provide monetary incentives to owners of older vehicles in order to scrap their vehicles (e.g., California's VAVR program).[67] The purpose is to reduce mobile source emissions by accelerating the turnover of the existing fleet vehicles with newer and cleaner vehicles. Nevada does not currently operate a vehicle retirement program.

6.5 TESTING FREQUENCY

Among the western states, Nevada stands alone as the only state with an I/M program that requires annual testing exclusively (see Table 6-2). Nationwide, almost two-thirds of the states operating I/M programs, have either biennial testing (17 states) or a combination of annual and biennial testing (3 states). The remaining states operate annual programs.

Table 6-4 compares the areas in the western states that most closely resemble the air quality conditions of Clark and Washoe counties. Among these areas, the most common testing frequency was a combination of annual and biennial testing. When considering the selection of a uniform testing standard for both Clark and Washoe counties, a combination of annual and biennial testing would be the norm among western states.

Table 6-4. Comparison of Testing Frequency in those Western States that have Similar Air Quality Conditions to Clark and Washoe Counties

Counties with Air Quality Conditions Similar to Clark County	Counties with Air Quality Conditions Similar to Washoe County	Federally Approved 1971 Carbon Monoxide NAAQS Maintenance Plan	2008 Ozone NAAQS Status	2015 Ozone NAAQS: 2012 – 2014 Design Value [68]	Testing Frequency
Weber, Utah		yes	Attainment	73 ppb	Annual & Biennial
Utah, Utah		yes	Attainment	74 ppb	Annual & Biennial
Salt Lake, Utah		yes	Attainment	75 ppb	Annual & Biennial
Pima, Arizona		yes	Attainment	71 ppb	Annual & Biennial
	Davis, Utah	yes	Attainment	< 71 ppb	Annual & Biennial
	Cache, Utah	yes	Attainment	< 71 ppb	Biennial
	Ada, Idaho	yes	Attainment	< 71 ppb	Biennial
	Canyon, Idaho	yes	Attainment	< 71 ppb	Biennial

[67] California's program is called the Voluntary Accelerated Vehicle Retirement (VAVR) program and is operated at both the state and local level. At the State level, as much as $1,000 is provided for qualifying vehicles ($1,500 for low-income owners).

[68] EPA is slated to provide designations in October 2017. The designations will likely be based on the 2014- 2016 design values. The 2012 – 2014 design values are provided to show which areas are trending higher.

When considering the biennial portion of a combined annual/biennial testing program, two options were evaluated. The first option was biennial testing for the first eight years of a vehicle's life, and then annual testing thereafter. The second option was biennial testing for 2004 and newer model year vehicles, and annual testing for older model year vehicles.

The rationale for considering biennial exemptions for the first eight years of a vehicle's life is that residents of area with I/M programs that meet federal guidelines are eligible for warranty protection for specified major emission control components (SMECCs) for the first 8 years or 80,000 miles (whichever occurs first).[69] According to federal law, SMECCs that fail because of a defect in materials or workmanship, must be repaired or replaced by the vehicle manufacturer free of charge as long as the vehicle has not exceeded the warranty time or mileage limitations.[70]

Three SMECCs are covered: (i) catalytic converters, (ii) electronic emissions control unit or computer (ECU), and (iii) on-board emissions diagnostic device or computer (OBD).[71]

The catalytic converter aids in the conversion of carbon monoxide, hydrocarbons, and NO_x to less harmful substances such as carbon dioxide, water vapor, nitrogen, and oxygen. The ECU monitors certain powertrain functions and controls various operating parameters to help a vehicle run efficiently. The ignition, transmission function, air injection, exhaust gas circulation, engine operating temperature, and fuel system parameters are some of the systems monitored and controlled by the ECU. Finally, the OBD system monitors the operation of the ECU and alerts the driver with a dashboard light when a malfunction occurs.[72]

The rationale for considering biennial exemptions for 2004 and newer model year vehicles is that the 2004 model year vehicle was the first model year for which federally-mandated Tier 2 standards were applicable. The Tier 2 vehicle standards represented a significant emissions reduction as compared to the Tier 1 standards which were first applicable for 1994 model year vehicles (see Table 5-1).

Decreasing the frequency of vehicle testing will result in an emissions increase, and the emissions increases associated with the two testing options described above, are provided in Tables 7-2 and 7-3.

6.6 NEW VEHICLE EXEMPTION

The age at which new vehicles are initially subject to testing nation-wide, varies from 0 to 7 years (see Table 6-5). Most new vehicle manufacturers provide warranty coverage for at least three years. The argument has been made that a new vehicle exemption should therefore last at least this amount of time since most vehicle owners will take their vehicles to get repaired on their own volition when a check-engine light comes on during the warranty period.

[69] The average annual vehicle-miles driven by vehicle owners in the U.S. is 13,476 miles. U.S. Federal Highway Administration https://www.fhwa.dot.gov/ohim/onh00/bar8.htm (accessed March 23, 2016).
[70] EPA, Emissions Warranties for 1995 and Newer Light-duty Cars and Trucks under 8,500 Pounds Gross Vehicle Weight Rating (GVWR), EPA-420-F-15-035 (October 2015).
[71] Id.
[72] Id.

Table 6-5. New Vehicle Exemptions in States with I/M Programs

New Vehicle Exemption (years)	Nevada and Surrounding States	Other Western States	Ozone Transport Region States	Remaining States
0			Maine, New Hampshire, Vermont	
1			Massachusetts, Pennsylvania	Tennessee
2	Nevada, Utah*		Maryland, New York, Rhode Island, Virginia	Louisiana, Missouri, Texas
3				North Carolina
4	Arizona, Idaho*	New Mexico	Connecticut, District of Columbia,	Georgia, Illinois, Indiana, Ohio, Wisconsin
5	Oregon			
6	California	Washington	Delaware, New Jersey	
7		Colorado		

*In Idaho and Utah, the new vehicle exemptions vary by county.

The average new vehicle exemption period for all of the states participating in the I/M program is approximately 3.1 years. However, this includes the OTR states which are subject to more stringent control measures under the CAA. When the OTR states are excluded, the national average new vehicle exemption period is 3.7 years. The average new vehicle exemption period for all of the western states listed in Table 6-5, is approximately 4.4 years. For those western states with I/M programs in areas that have air quality conditions similar to Clark and Washoe counties (see Table 6-6), the average new vehicle exemption period is approximately 3.3 years.

Table 6-6. Comparison of New Vehicle Exemptions in those Western States that have Similar Air Quality Conditions to Clark and Washoe Counties

Counties with Air Quality Conditions Similar to Clark County	Counties with Air Quality Conditions Similar to Washoe County	Federally Approved 1971 Carbon Monoxide NAAQS Maintenance Plan	2008 Ozone NAAQS Status	2015 Ozone NAAQS: 2012 – 2014 Design Value [73]	New Vehicle Exemption (years)
Weber, Utah		yes	Attainment	73 ppb	2
Utah, Utah		yes	Attainment	74 ppb	2
Salt Lake, Utah		yes	Attainment	75 ppb	2
Pima, Arizona		yes	Attainment	71 ppb	4
	Davis, Utah	yes	Attainment	< 71 ppb	2
	Cache, Utah	yes	Attainment	< 71 ppb	6
	Ada, Idaho	yes	Attainment	< 71 ppb	4
	Canyon, Idaho	yes	Attainment	< 71 ppb	4

[73] EPA is slated to provide designations in October 2017. The designations will likely be based on the 2014- 2016 design values. The 2012 – 2014 design values are provided to show which areas are trending higher.

The initial failure rates for gasoline and diesel powered vehicles tested in Clark and Washoe counties during CY2015 provided in Tables 4-1, 4-2, 4-3, and 4-4 shows a strong correlation between inspection failure rates and the age of the vehicle being inspected. The data also shows that for the first six years, the inspection failure rate is nominal (less than 1 percent).

When evaluating new vehicle exemption periods, the I/M Subcommittee took into consideration the relative stringency of retaining the 1968 model year for exempting older vehicles. The I/M Subcommittee chose to evaluate the impact of changing the new vehicle exemption period from two years to four years based on the exemption periods adopted in western states, and from two years to six years based on the nominal failure rates through the first six years of vehicle ownership in both Clark and Washoe counties.

7.0 RECOMMENDED CHANGES TO THE TESTING PROGRAM

7.1 OVERVIEW

The I/M Committee recommends changing the new vehicle exemption period from two years to four years, and changing the vehicle testing frequency for year's five through eight of a vehicle's life from annual testing to biennial testing. Table 7-1 shows the I/M program testing schedule as it currently exists as compared to the I/M Committee's recommendation if they were both applied to a new model year 2016 vehicle with original ownership. The I/M Committee also provides in Appendix D other recommended programmatic changes that already fall within the authority of the regulatory bodies established in the current I/M program's enabling statutes. The I/M Committee recognizes that a sufficient amount of time will be needed to implement any potential changes to the I/M program.

Table 7-1. Existing I/M Program Testing Schedule Compared to Recommended Schedule Applied to New 2016 Model Year Vehicle with Original Ownership.

Vehicle Age	Year	Existing Schedule	Recommended Schedule
1	2016	N	N
2	2017	N	N
3	2018	Y	N
4	2019	Y	N
5	2020	Y	Y
6	2021	Y	N
7	2022	Y	Y
8	2023	Y	N
9	2024	Y	Y
10	2025	Y	Y

Note: 'Y' means that testing is required while 'N' means that testing is not required

7.2 MODELING RESULTS

Several different scenarios were considered by the subcommittee in proposing an updated, modernized inspection and maintenance program for Nevada. In its consideration, the subcommittee gave special emphasis to assessing the viability of the concepts brought forward during past Nevada legislative sessions—especially changes to the two I/M program elements that had received the most attention: test frequency and model year applicability.

In considering test frequency and model year applicability, the subcommittee focused on four permutations of new vehicle exemptions and vehicle testing frequencies with the oldest model year vehicle tested kept at 1968 for all permutations (see Section 6.4 for the I/M Committee's justification). These four permutations would more closely align Nevada's I/M program with those of other western states that operate I/M programs in areas that closely resemble the air quality conditions of Clark and Washoe counties. Those scenarios were then simulated using an EPA-approved computer model to estimate the effect on mobile source emissions within the urban areas of Clark and Washoe counties.

Computer models are used for planning purposes to estimate the cumulative emissions produced by all motor vehicles in a particular area for a given time period. EPA requires air quality planning agencies to use the Motor Vehicle Emission Simulator (MOVES) model, which was developed by EPA to guide agency decisions in air quality planning matters involving mobile sources. The MOVES model is sophisticated enough to estimate the change in emissions that would result from modifications to I/M program testing frequency and model year applicability.

The estimated emissions resulting from each modeled scenario were compared to the emissions associated with the current I/M program. Tables 7-2 and 7-3 show the estimated emissions increases associated with each modeled scenario for Clark and Washoe counties.[74] The second scenario, which would change the new vehicle exemption period from two years to four years and change the vehicle testing frequency for year's five through eight of a vehicle's life from annual testing to biennial testing, provided the lowest emissions increases (less than 1 percent for all pollutants).

Table 7-2. Estimated Emissions Associated with Different I/M Program Testing Schedules in Clark County

Scenario	New Vehicle Exemption	Testing Frequency	Oldest Model Year Vehicle Tested	Vehicle Emissions (tons/day)			Percent Increase in Emissions		
				VOC	NOx	CO	VOC	NOx	CO
Current	2 years	Annual	1968	20.957	35.543	261.195			
1	4 years	Biennial for 2004 and newer model years, and Annual for older	1968	21.166	35.711	264.884	1.0%	0.5%	1.4%
2	4 years	Biennial up to 8th year of vehicle life, then Annual thereafter	1968	21.049	35.644	263.655	0.4%	0.3%	0.9%
3	6 years	Biennial for 2004 and newer model years, and Annual for older	1968	21.257	35.838	268.089	1.4%	0.8%	2.6%
4	6 years	Biennial up to 8th year of vehicle life, then Annual thereafter	1968	21.139	35.771	266.860	0.9%	0.6%	2.2%
No I/M Program:				23.532	38.303	310.545	12.3%	7.8%	18.9%

Modeling time period: July 2018
Modeling was performed only for light-duty gasoline vehicles, which in 2015 represented approximately 89.9% of all registered vehicles (excluding motorcycles) in Clark County

[74] Note that the emissions provided are based on modeling runs performed for the month of July, 2018.

Table 7-3. Estimated Emissions Associated with Different I/M Program Testing Schedules in Washoe County

Scenario	New Vehicle Exemption	Testing Frequency	Oldest Model Year Vehicle Tested	Vehicle Emissions (tons/day)			Percent Increase in Emissions		
				VOC	NOx	CO	VOC	NOx	CO
Current	2 years	Annual	1968	5.359	13.370	70.729			
1	4 years	Biennial for 2004 and newer model years, and Annual for older	1968	5.393	13.414	71.472	0.6%	0.3%	1.1%
2	4 years	Biennial up to 8th year of vehicle life, then Annual thereafter	1968	5.376	13.399	71.281	0.3%	0.2%	0.8%
3	6 years	Biennial for 2004 and newer model years, and Annual for older	1968	5.414	13.450	72.162	1.0%	0.6%	2.0%
4	6 years	Biennial up to 8th year of vehicle life, then Annual thereafter	1968	5.397	13.435	71.972	0.7%	0.5%	1.8%
No I/M Program:				6.201	14.178	83.150	15.7%	6.0%	17.6%

Modeling time period: July 2018
Modeling was performed only for light-duty gasoline vehicles, which in 2015 represented approximately 87.0% of all registered vehicles (excluding motorcycles) in Washoe County

To put into context the emissions increases associated with the second scenario, Table 7-4 provides the emissions inventories for highway vehicles and total emissions in Clark and Washoe counties. Using EPA's most recent available national emissions inventory data, the VOC emissions increases associated with the second scenario would represent approximately 0.2 percent, and 0.1 percent of the entire VOC emissions inventory in Clark and Washoe counties, respectively.[75] For the NOx emissions increases the percentages would be approximately 0.07 and 0.07, respectively. For the carbon monoxide emissions increases the percentages would be approximately 0.30 and 0.22, respectively.

[75] EPA, 2011 National Emissions Inventory (NEI) (accessed March 30, 2016).

Table 7-4. Comparison of Second Scenario and Overall County Emissions

Source	County	VOC (tons/year)	NOx (tons/year)	CO (tons/year)
Emissions Increase if Recommended Changes Adopted *	Clark	33.6	36.9	897.9
	Washoe	6.2	10.6	201.5
2011 EPA estimate of Light-Duty Gasoline Vehicle Emissions *	Clark	10,776.8	17,317.9	124,704.0
	Washoe	3,804.1	5,651.9	41,083.3
2011 EPA estimate of Total On-Road Mobile Emissions **	Clark	11,998.0	28,965.5	131,978.2
	Washoe	4,185.2	9,422.9	43,621.0
2011 EPA estimate of Total County Emissions ***	Clark	184,010.6	51,716.1	297,863.3
	Washoe	60,243.4	14,448.1	91,958.2

EPA data from EPA 2011 National Emissions Inventory (NEI)
* Light-duty gasoline vehicles represent almost 90% of all registered vehicles (excluding motorcycles)
** Emissions from all highway vehicles
*** Includes biogenic emissions

7.3 AIR QUALITY IMPACTS IF RECOMMENDED CHANGES TO I/M PROGRAM'S TESTING SCHEDULE WERE ADOPTED

From an air quality perspective, the arguments made in the subsequent subsections support the contention that the recommend change to Nevada's I/M program testing schedule is a justifiable update that will not by itself result in violations of ambient air quality standards. The I/M Committee believes that any resulting increase in emissions of NAAQS pollutants is not appreciable and will be offset by local emission reductions and federal air quality control measures anticipated to further reduce mobile source emissions in Clark and Washoe counties in the coming years.

7.3.1 Nominal Emissions Increase Offset by Local Emission Reductions

Air quality planners in Nevada would be required to demonstrate to EPA that any emission increase resulting from a recommended change in the I/M program would be offset by emission reductions from another federal, state, or local emission reduction effort. One example of a local emission reduction that could significantly offset the nominal emissions increases associated with the I/M Committee recommendations, are the emission reductions related to the shutdown of the Reid Gardner electric generating facility (Reid Gardner). Reid Gardner is located in an area that was formerly designated as a Clark County ozone nonattainment area for the 1997 ozone NAAQS. During the 2013 legislative session, the legislators passed Senate Bill 123 (SB 123) requiring the incremental shutdown of the boiler units at Reid Gardner. Three of the four boilers have already been shut down. NRS 704.7316.2(a) requires the shutdown of the remaining Reid Gardner boiler (unit 4) by the end of 2017.

The offset of emissions associated with the shutdown would be based on the facility's actual emissions. In 2014, unit 4 operated a total of 5,210 hours while emitting 15 tons of VOC emissions, 936 tons of NOx emissions, and 19,920 tons of carbon monoxide. Table 7-5 compares these emission reductions with the emission increases associated with the I/M Committee's recommendation.

Table 7-5. Comparing Reid Gardner Emission Reductions with Emission Increases Resulting from Adoption of I/M Committee Recommendations

Rule	VOC (tpy)	NOx (tpy)	CO (tpy)
2014 Actual Emissions from unit 4 of Reid Gardner facility	15	936	19,920
Annual emissions increase in Clark County if I/M Committee recommendations are accepted by legislators	34	37	898

tpy = tons per year.

Based on the 2014 emissions data, the expected emission reductions from the closure of Reid Gardner exceed the emission increases associated with the NOx and carbon monoxide pollutants, although the VOC emissions would not be entirely offset.

Clark and Washoe counties are also expecting emission reductions by participating in the EPA Ozone Advance Program which is a collaborative effort between EPA, states, and local governments to encourage expeditious emission reductions through voluntary programs. The Ozone Advance Program was designed to help attainment areas reduce emissions of ozone precursors such as VOC and NOx in order to continue to meet the NAAQS. The program provides a menu of voluntary control measures that have been proven to reduce emissions and allows for flexibility to choose the options most appropriate for individual communities. Clark County was accepted into the Ozone Advance Program in 2013 while Washoe County recently applied to and was accepted in February 2016.

7.3.2 Nominal Emissions Increase Offset by Federal Emission Reductions

EPA has estimated that any area designated nonattainment of the 2015 70 ppb ozone NAAQS in Nevada will attain the standard by 2025.[76] EPA has projected the 2025 design value in Clark County will be 69 ppb, and in Washoe County will be 59 ppb by 2025.[77] The modeled projections rely in large part upon the emission reductions associated with the many federal rules promulgated by EPA over the past decades.

Table 7-6 provides a list of the rules cited in the regulatory impact analysis produced for the 2015 ozone NAAQS rule.[78] The expected emissions reductions of ozone precursors from these listed regulations could also be used to demonstrate that the recommended change in the I/M program would not adversely impact air quality in Clark and Washoe counties.

[76] EPA, 2015 Ozone Standards https://ozoneairqualitystandards.epa.gov/OAR_OAQPS/OzoneSliderApp/index.html# (accessed March 24, 2016).
[77] EPA, Counties Projected to Violate the 2015 Primary Ground-Level Ozone Standard http://www3.epa.gov/ozonepollution/pdfs/20151001datatable2025.pdf (accessed Feb. 9, 2016).
[78] EPA, Regulatory Impact Analysis of the Final Revisions to the National Ambient Air Quality Standards for Ground-Level Ozone, EPA-452/R-15-007, pp. 1-7, 1-8 (Sep. 2015).

Table 7-6. Federal EPA Rules Reducing Ozone Precursor Emissions

Rule	Cite
Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units (litigated)	80 FR 64661 (Oct. 23, 2015)
Tier 3 Motor Vehicle Emission and Fuel Standards	79 FR 23414 (Apr. 28, 2014)
2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards	77 FR 62623 (Oct. 15, 2012)
Cross State Air Pollution Rule (CSAPR)	76 FR 48208 (Aug. 8, 2011)
Mercury and Air Toxics Standards (litigated)	77 FR 9304 (Feb. 16, 2012)
Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles	76 FR 57106 (Sep. 15, 2011)
C3 Oceangoing Vessels	75 FR 22895 (Apr. 30, 2010)
Reciprocating Internal Combustion Engines (RICE) NESHAPs (litigated)	71 FR 39153 (July 11, 2006)
Regulation of Fuels and Fuel Additives: Modifications to Renewable Fuel Standard Program (RFS2)	75 FR 14670 (Mar. 26, 2010)
Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule for Model-Year 2012-2016 [79]	75 FR 25323 (May 7, 2010)
Hospital/Medical/Infectious Waste Incinerators: New Source Performance Standards and Emission Guidelines: Final Rule Amendments	78 FR 25323 (May 13, 2013)
Emissions Standards for Locomotives and Marine Compression-Ignition Engines	73 FR 37096 (June 30, 2008)
Control of Emissions for Nonroad Spark Ignition Engines and Equipment	72 FR 28098 (May 18, 2007)
Regional Haze Regulations and Guidelines for Best Available Retrofit Technology Determinations	77 FR 33642 (June 7, 2012)
NOx Emission Standard for New Commercial Aircraft Engines	77 FR 36342 (June 18, 2012)

7.3.3 Comparison with other State I/M Programs

A comparison with other state I/M programs suggests that the recommended changes would fit well within the norm of other western state I/M program areas with similar air quality conditions. Currently Nevada is the only western state that operates an I/M program with annual only testing (see Table 6-2). If the recommended changes to the I/M program testing schedule was adopted, Nevada would join Arizona, Utah, and Colorado as states that changed their I/M programs from annual testing to annual/biennial hybrid programs. All the other western states currently operate biennial I/M programs.

The average new vehicle exemption period for all western states is approximately 4.4 years (see Table 6-5). By extending the new vehicle exemption period from two years to four years, Nevada's I/M program would approximate the average exemption period across the west. In addition, more than 99.5 percent of vehicles in Clark County, and 99.6 percent of vehicles in Washoe County currently pass initial inspections during their fourth year of operation (see Tables 4-1, and 4-3).

[79] Note that there was a subsequent rule issued addressing model year 2017 and later vehicles: *2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards* (77 FR 62624 (Oct. 15, 2012)).

Although the I//M Committee believes that local emission reductions, federally mandated emission reductions, and a comparison with other state I/M programs supports the recommended changes, there are always uncertainties about future air quality conditions. The uncertainty stems from factors such as: a dependence on the accuracy of data used to model future air quality conditions; the accuracy of the model itself; the potential impact of ongoing litigation of major rules promulgated by the EPA; and the types of policies that might be adopted by a future administration.

In 2015, EPA issued a more stringent ozone NAAQS—ratcheting the standard down from 75 ppb to 70 ppb. Although the 2012 – 2014 design values were included in this report for comparison purposes, EPA's final designations for the 2015 NAAQS will likely be based on 2014 – 2016 design values (or even later ones if court litigation interrupts the CAA designation schedule as it did for the 1997 and 2008 ozone NAAQS). In other words, it is difficult to predict what the compliance status will be for Clark and Washoe counties and what role the I/M program will play in reducing ozone precursor emissions if required for compliance demonstrations.

Despite the uncertainty, ozone levels nation-wide continue to exhibit a general downward trend. It is the opinion of the I/M Committee that the nominal increase in emissions associated with the recommendations will not prevent Clark and Washoe counties from achieving compliance with the NAAQS.

7.4 COSTS OF I/M PROGRAM

The I/M Subcommittee considered two costs incurred by the motoring public – costs based on the average labor rate charged by vehicle inspection stations, and the costs associated with the vehicle inspection certificate fee. Combined, these are the costs of the I/M program as an emissions control measure.

The costs associated with the current I/M program (Table 7-7) are based upon the average labor rate charged by vehicle inspection stations during FY2015 for a light-duty gasoline vehicle plus the current cost of the inspection certificate fee. The average labor rate charged by a station is the average costs paid by the motoring public to 1G and 2G stations in both Clark and Washoe counties. Appendix E provides tabulated FY2015 test information for all four of the modeled scenarios in Clark and Washoe counties. In FY2015 there were 1,210,134 light-duty gasoline inspections in Clark County with an average labor rate of $13.01 and there were 303,494 light-duty gasoline inspections in Washoe County with an average labor rate of $16.63 per test.[80] The vehicle inspection certificate fee is $6.00 per vehicle test, statewide.

[80] The emissions testing industry generally only considers initial inspections when calculating average labor rates. This is in part because the emissions testing industry charges for re-inspections at a different rate than they charge for initial inspections. When looking solely at initial inspections, for FY2015, there were 1,167,481 light-duty gasoline inspections in Clark County with an average labor rate of $13.96 and there were 293,222 light-duty gasoline inspections in Washoe County with an average labor rate of $17.32 per test. There were 52,925 light-duty gasoline-powered vehicle re-inspections in FY2015 and they accounted for 3.5 percent of the overall light-duty gasoline-powered inspections in the state.

Under the proposed second modeling scenario, fewer vehicle inspections will occur annually and the program will be less expensive for the motoring public. Currently, those administrative costs are paid for with the $6.00 inspection certificate fee. However, the administrative costs for implementing the program do not change with fewer tests. In order to maintain revenue neutrality with fewer tests, the inspection certificate fee will have to change in order to pay for the implementation of the program. This is discussed further in Section 8 of the report.

When applying the I/M Committee's recommended I/M program testing schedule to FY2015, there would be approximately 278,958 fewer light-duty gasoline vehicle inspections in Clark County, and 55,917 fewer light-duty gasoline vehicle inspections in Washoe County. If the average labor rates in FY2015 remained the same and the vehicle inspection certificate fee remained fixed at $6.00, the total annual cost to the motoring public under the recommended I/M program testing schedule would be approximately $5.3 million less in Clark County and $1.3 million less in Washoe County.

The total costs under the current and recommended I/M program testing schedules are provided in Table 7-7. When considering only the costs of an emissions inspection, the I/M Committee's recommendation results in a less expensive program for the motoring public.

Table 7-7. Total Annual I/M Program Cost (FY2015)

I/M Program Testing Schedule	County	Cost
Current*	Clark	$ 23,010,021
	Washoe	$ 6,867,666
Recommended*	Clark	$ 17,705,790
	Washoe	$ 5,602,339

*Includes current $6.00 certification fee

8.0 FISCAL IMPACT

8.1 OVERVIEW

The recommended changes to the I/M program testing frequency would result in fewer emissions inspections in any given year. If the changes to amend the program recommended in Section 7 were adopted by the Legislature and fees remained the same, there would be reduced revenue for the state government agencies that share responsibility for the I/M program, the local air quality agencies, as well as the emissions testing industry. In order to maintain revenue neutrality with fewer tests, the I/M Committee recommends increasing the inspection certificate fee from $6.00 to $7.75 to offset the expected revenue shortfall to the Pollution Control Account.

The Nevada Emission Testers Council independently commissioned and submitted a fiscal impact of the proposed changes to the emissions testing industry. That analysis and a summary of the I/M Committee's assessment of the testing industry's report has been included in Appendix F.

8.2 GOVERNMENT REVENUE IMPACT

NRS 445B.830 requires that an annual fee of $6.00 be paid to DMV for each inspection form issued to a state-authorized emissions inspection station. These funds are collected in the Pollution Control Account and distributed to state and local air agencies pursuant to NRS 445B.830(2 through 6). Each quarter, the DMV disperses to Clark and Washoe counties an amount in the Pollution Control Account equal to one-sixth ($1.00) of the amount received for each form issued in that county. The dedicated monies distributed to the counties are principally used to pay employee wages, salaries and benefits to conduct activities necessary to monitor and regulate sources of air pollution.

After deduction of the amounts distributed pursuant to NRS 445B.830 (2) and (4), funds in excess of $1,000,000 remaining in the Pollution Control Account at the end of the fiscal year are distributed to local agencies for programs related to the improvement of air quality in nonattainment or maintenance areas for a pollutant for which air quality criteria have been issued (NRS 445B.830 (6)).

By statute, local air pollution control agencies that receive revenue generated by the I/M program (i.e., Clark County DAQ and Washoe County AQMD), are required to submit annual reports on the use of that money to the Director of the Legislative Counsel Bureau (NRS 445B.830.5). The revenue is utilized for various air quality improvement programs, to include public outreach, complaint response, small business assistance, permitting, and planning activities. If the Legislature adopts the I/M Committee's recommended program test schedule, there will be 22.78 percent fewer inspections in Clark County and 17.91 percent fewer inspections in Washoe County (based on FY2015 program data). For FY2015, this amounts to 347,950 fewer inspections statewide. The I/M Committee estimates nearly $1.75 million less revenue will be collected annually in the Pollution Control Account using FY2015 as a baseline. Table 8-1 shows the estimated losses to the Pollution Control Account as well as the losses to Clark and Washoe counties if there is no change to the vehicle inspection fee. This lost revenue would

have a substantial and lasting impact on the programs necessary to monitor and regulate sources of air pollution in Nevada.

Table 8-1. Annual Revenue Shortfall to Pollution Control Account if I/M Committee's Recommendations Adopted without Changing Vehicle Inspection Fee *

Account/Fund	Revenue Shortfall
Pollution Control Account	($1,739,750)
Dedicated Fund – Clark County	($288,297)
Dedicated Fund – Washoe County	($59,653)
Excess Reserve Fund – Clark County **	($786,074)
Excess Reserve Fund – Washoe County **	($208,956)

* Based on FY2015 vehicle data (see Appendix E, Scenario 2)
** Based on FY2015 Clark/Washoe distributions using a vehicle inspection ratio of 79.9%/20.1%

8.3 SUGGESTED CHANGES TO THE FEES TO BE PAID TO THE POLLUTION CONTROL ACCOUNT AND OPTIONS FOR AN ALTERNATE GOVERNMENT FUNDING MECHANISM

In areas of the State where the I/M program applies, NRS 445B.830 authorizes fees to be paid to the DMV and accounted for in the Pollution Control Account. Emission testing stations purchase forms certifying emission control compliance at $6 each from the DMV and pass those costs on to the motor vehicle owner with the issuance of the certificate following a successful emissions test.

The I/M Committee recommends that any I/M program changes should be instituted in a revenue neutral manner with respect to the Pollution Control Account. This is done in order to preserve program functionality and integrity, and to continue to fund other vital clean air programs.

To accomplish this, the I/M Committee recommends raising the certificate fee by an amount equal to the expected revenue shortfall. As shown in Table 8-2, the Pollution Control Account received more than $9.5 million from the $6.00 inspection certificate fee in FY 2015. The I/M Committee recommends increasing the inspection certificate fee to $7.75. It should be noted, the inspection certificate fee has not been increased since 2003.

Table 8-2. Revenue Neutrality Based on Adjusted Inspection Certificate Fee

Account/Fund	Revenue Based on Current I/M Program Exemptions and $6.00 Certificate Fee	Revenue Based on Recommended I/M Program Exemptions and $7.75 Certificate Fee
Total Revenue for FY2015	$9,590,802	$9,691,507
Excess Reserve Fund – Clark County	$786,074	$794,328
Excess Reserve Fund – Washoe County	$208,956	$211,150

* Based on FY2015 vehicle data and Table 8-1 Excess Reserve fund estimates.

This increase would ensure not only that affected state and local agencies would maintain current funding levels from the Pollution Control Account, it would also offset upfront costs expected by DMV for computer programming and other tasks necessary to update the emissions testing system with the recommended changes.

Another approach to funding the implementation of the I/M program and the state and local air pollution control agencies is to assess motorists an annual air pollution abatement fee in place of the current emission test certificate fee. An abatement fee could be assessed to motor vehicles registered in counties covered by the I/M program and paid at the time of registration and annual re-registration.

California uses just such a mechanism to fund their state and local air pollution control agencies. California's annual smog abatement fee is $20. Owners of vehicles six or less years old pay an annual smog abatement fee for the first six registration years instead of being required to obtain biennial smog certification.

Sections 44060(d)(1), and 44011(a)(4)(A) of the California Health and Safety Code provide the following regulatory language to support California's smog abatement program for exempt vehicles:

> Motor vehicles exempted under paragraph (4) of subdivision (a) of Section 44011 shall be subject to an annual smog abatement fee of twelve dollars ($12). The department may also, by regulation, subject motor vehicles that are exempted under paragraph (5) of subdivision (a) of Section 44011 to the twelve dollar ($12) annual smog abatement fee. Payment of the annual smog abatement fee shall be made to the Department of Motor Vehicles at the time of registration of the motor vehicle.
>
> Except as provided in subparagraph (B), all motor vehicles four or less model-years old. (B) Beginning January 1, 2005, all motor vehicles six or less model-years old, unless the state board finds that providing an exception for these vehicles will prohibit the state from meeting the requirements of Section 176(c) of the federal Clean Air Act (42 U.S.C. Sec. 7401 et seq.) or the state's commitments with respect to the state implementation plan required by the federal Clean Air Act.

The I/M Committee suggests that an annual air pollution abatement fee could be instituted for the purposes of ensuring a steady annual revenue stream that would not fluctuate due to the uncertainties associated with switching to a partial biennial testing system.

9.0 RECOMMENDED SPECIAL LICENSE PLATE PROGRAM CHANGES

9.1 OVERVIEW

This section provides an overview and analysis of the legislative history of the "Classic Vehicle" program (Appendix G) and its current status with respect to emissions testing. It further provides recommendations to address the loophole that allows owners of motor vehicles that would not normally be considered classic vehicles, but nevertheless meet the statutory requirements necessary to obtain special license plates, (Classic Vehicles, Classic Rods, or Old Timer) to obtain these plates in order to be exempt from emission testing requirements normally applied to 1968 and newer vehicles.

9.2 CLASSIC AND OLD TIMER VEHICLES

NAC 445B.592 exempts model year vehicles that are 1968 or older from emissions testing requirements. Nevada's selection of 1968 as the threshold year for vehicle inspections was based on the requirements set forth by the EPA in 40 CFR 51.351(a), (g). EPA's selection of 1968 as the threshold year was based on congressional passage of the Motor Vehicle Air Pollution Control Act of 1965 which amended the CAA and established the first federal vehicle emissions standards beginning with 1968 model year vehicles.

A majority of the states with I/M programs have justified upward revisions of the 1968 threshold model year (see Table 6-3). One of the common justifications for such revisions is that on a per-capita basis, most states have far few older vehicles in regular operation, and that because of their low numbers the emissions impact is minimal. However, Nevada is the driest state in the United States (see Appendix C), and vehicles here do not rust as quickly as they do in other states. As a result, older vehicles tend to remain in operation longer and the 1968 exemption threshold in Nevada has remained unchanged.

There are, however, three categories of older vehicles, having model years of 1968 or newer, that can also be exempted from emissions testing:

i. *Old Timer* vehicles, which are any motor vehicles manufactured more than 40 years before the date of application for registration (NRS 482.381).

ii. *Classic rods*, which are any passenger cars or light commercial vehicles with a manufacturer's rated carrying capacity of 1 ton or less that were manufactured at least 20 years before the application for registration (NRS 482.3814).

iii. *Classic vehicles*, which are any passenger cars or light commercial vehicles with a manufacturer's rated carrying capacity of 1 ton or less that were manufactured at least 25 years before the application for registration and contain only "original parts which were used to manufacture the vehicle or replacement parts that duplicate those original parts (NRS 482.3816)."

These categories of vehicles are often collectively referred to as "classic vehicles." To avoid the ambiguity created by the collective use of the term and its statutory definition, this report refers to all three categories as either "Classic and Old Timer" or "special license plate" vehicles.

9.3 AIR QUALITY IMPACT

Older vehicles emit significantly more emissions on a per-mile basis than newer vehicles.[81] Not only do old vehicles fail emissions tests at a much higher rate than newer vehicles, but they fail those tests while being subject to far less stringent emissions standards. Compared with a 2015 model year vehicle, emissions from a 1990 model year vehicle (i.e., a vehicle that is 25 years older, and therefore potentially classifiable as a "classic vehicle"), are on average 9.1 and 18.3 times higher for the primary ozone precursor pollutants, VOC and NO_x, respectively.[82] Table 9-1 summarizes the pre-1995 changes in carbon monoxide and VOC emissions standards for light-duty gasoline-powered vehicles.[83]

Table 9-1. Nevada Maximum Carbon Dioxide and Hydrocarbon Emission Limits for Light-Duty and Heavy-Duty Gasoline Vehicles in Nevada

Light-Duty Gasoline Vehicles			Heavy-Duty Gasoline Vehicles		
Model Year	**CO%**	**HC (ppm)**	**Model Year**	**CO%**	**HC (ppm)**
1968 - 1969	4.0	800	1968 - 1969	7.0	1400
1970 - 1974	3.5	700	1970 - 1978	6.0	1400
1975 - 1978	2.5	500	1979	5.0	1000
1979 - 1980	2.0	500	1980	4.0	1000
1981 - 1995	1.2	220	1981 and newer	3.5	1000

This data was obtained from NAC 445B.596, which is based on the emission thresholds set forth in units of grams per mile in 40 CFR 51.351.

Table 9-2 lists the light-duty and heavy-duty gasoline vehicle failure rates for initial emissions inspection at authorized stations in Clark and Washoe counties.[84] The data shows that the initial failure rates for light-duty gasoline vehicles are approximately 47 times higher for 1970 model year vehicles then they are for 2010 model year vehicles in Clark County, and 56 times higher in Washoe County. The disparity is even greater for heavy-duty gasoline vehicles in both Clark and Washoe counties.

[81] Nevada Department of Motor Vehicles, *2015 Activity Report: Motor Vehicle Inspection and Maintenance Program* (annual EPA Report) (see Tables 4-1, 4-2, 4-3, and 4-4).
[82] Argonne National Laboratory, *Updated Emission Factors of Air Pollutants from Vehicle Operations in GREET Using MOVES*, Table A2: Lifetime mileage-weighted average air pollutant emission factors (g/mile) for gasoline passenger cars for model years 1990-2020 (Sep. 2013).
[83] Hydrocarbon (HC) emissions are a large subset of VOC emissions.
[84] DMV, 2014 Nevada Clean Air Report, Motor Vehicle Inspection and Maintenance Program (CY2014).

Table 9-2. Model Year Vehicle Emissions Testing Failure Rates

Model Year	Clark County		Washoe County	
	Light-Duty	Heavy-Duty	Light-Duty	Heavy-Duty
1970	35.25%	*	32.54%	*
1980	28.08%	28.57%	17.29%	30.56%
1990	12.85%	9.87%	10.72%	6.41%
2000	6.26%	1.41%	5.00%	0.88%
2010	0.75%	0.00%	0.58%	0.00%

* Statistically insufficient number of vehicles tested

9.4 RESTORED VEHICLES

During the 1997 legislative session, the Nevada legislature introduced the concept of a "restored" vehicle into the statutes. Concurrently, the legislators directed the State Environmental Commission (Commission) to provide a definition of "restored" vehicle.[85]

The Commission did not provide any specific requirements for the actual restoration of a vehicle, e.g., such as the current requirement for a "classic vehicle" to contain "*...only the original parts which were used to manufacture the vehicle or replacement parts that duplicate those original parts.*"[86] Instead, the Commission determined that a vehicle could be certified as a "restored" vehicle, and thereby be exempt from emissions testing requirements, if the following four conditions were met:[87]

> The vehicle:
> i. had a classic vehicle, classic rod, street rod, or Old Timer special license plate,
> ii. did not emit smoke,
> iii. passed an emissions test, and
> iv. had not been driven more than 2,500 miles since the immediately preceding annual registration.

To comply with these requirements, a vehicle must first have passed an emission inspection at an authorized station.[88] Then an application for a "restored vehicle" was to be completed by the owner and submitted to DMV's Vehicle Licensing Division. Afterwards, a second inspection for emission compliance was performed at DMV's *Emission Control Test Lab*. If the vehicle passed both inspections, the vehicle could be certified as a "restored" vehicle.[89] Thereafter, the owner

[85] NRS 445B.760.1 (1997).
[86] NRS 482.3816.l(c) (1995).
[87] NAC 445B.6125 (1998).
[88] DMV, *Clean Air* 2010 Activity Report, p. 8 http://www.dmvnv.com/pdfforms/ec2010activity.pdf (accessed Nov. 3, 2015).
[89] Id.

was required to provide the DMV a signed affidavit form, on an annual basis, certifying that the vehicle was not driven more than 2,500 miles since the previous registration cycle.

During the 2011 legislative session, the concept of a "restored" vehicle and its substantive regulatory provisions were vacated. Although the requirement for a vehicle not to emit smoke was no longer necessary due to the provisions of NAC 445B.576.1, the requirement to pass emissions tests went away.[90] The requirement for a vehicle not to be driven more than 2,500 miles during the preceding year was replaced with a 5,000 mile limit. The procedural requirement to obtain a special license plate remained unchanged.

In comparison to the more narrowly defined and detailed exemption requirements for special license plated vehicles in surrounding states, what remained in Nevada was an older vehicle exemption program with far less constraint.

9.5 THE LOOPHOLE

The 1997 legislative session created a program that would allow an owner of a "restored" vehicle to exempt their vehicle from emissions testing requirements. As the bill worked its way through committees, NDEP expressed concerns about creating an emissions exemption program that might produce a loophole for old, unmaintained vehicles utilized for general transportation, that were also gross emitters of smog.[91]

Though that concern may have been overstated during the time that the "restored" vehicle program was in effect, subsequent changes made during the 2011 legislative session seemed to have generated just such a loophole. In that year, AB2 was passed that allowed vehicles that would otherwise be subject to the I/M program, but had obtained special license plates, to avoid the requirement that an initial emissions test be passed.

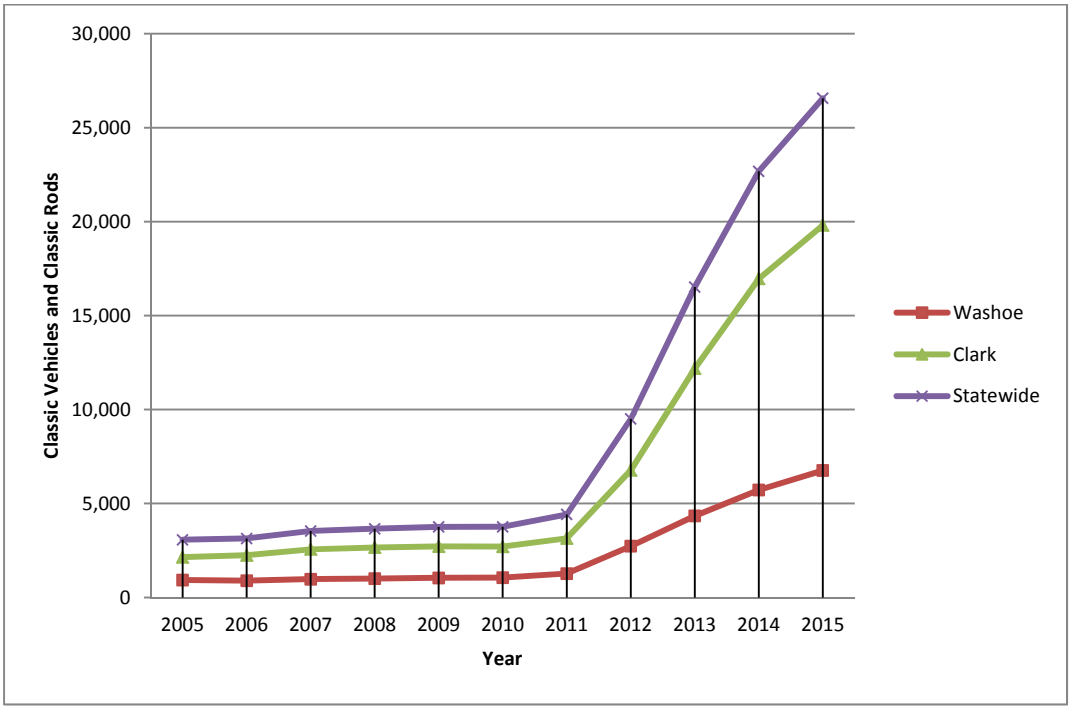
In 2015, the number of "classic vehicles" and "classic rods" issued special license plates in Clark County was 19,805 vehicles, and in Washoe County was 6,758 vehicles. Different states have their own nomenclature for older vehicles. Some states identify them as classic, others as collectible, collector, vintage, etc. In Arizona, the number of collectible vehicles estimated in the Phoenix Metropolitan Area was 3,800 in 2006.[92]

When taking into account population data for those years, the number of classic vehicles and classic rods in Clark County was 9.5 times greater on a per capita basis than the Phoenix Metropolitan Area. In Washoe County it is about 16.1 times greater on a per capita basis. Figure 9-1 shows the growth of the "classic vehicle" and "classic rod" inventories during the past decade. Note the significant growth that occurred as a result of the legislative changes made

[90] The NRS 4840.415.2 requirement for "[t]he engine and power mechanism of every motor vehicle [to be] equipped and adjusted so as to prevent the escape of excessive fumes or smoke" predates the provisions of NAC 445B.6125 (i.e., the regulation that defined a "restored vehicle").
[91] Minutes of the Assembly Committee on Transportation, Sixty-ninth Session http://www.leg.state.nv.us/Session/69th1 997/97minutes/AM/TR/am7-02TR.htm, p.5 (July 2, 1997).
[92] 71 FR 78115, 78118 {December 28, 2006).

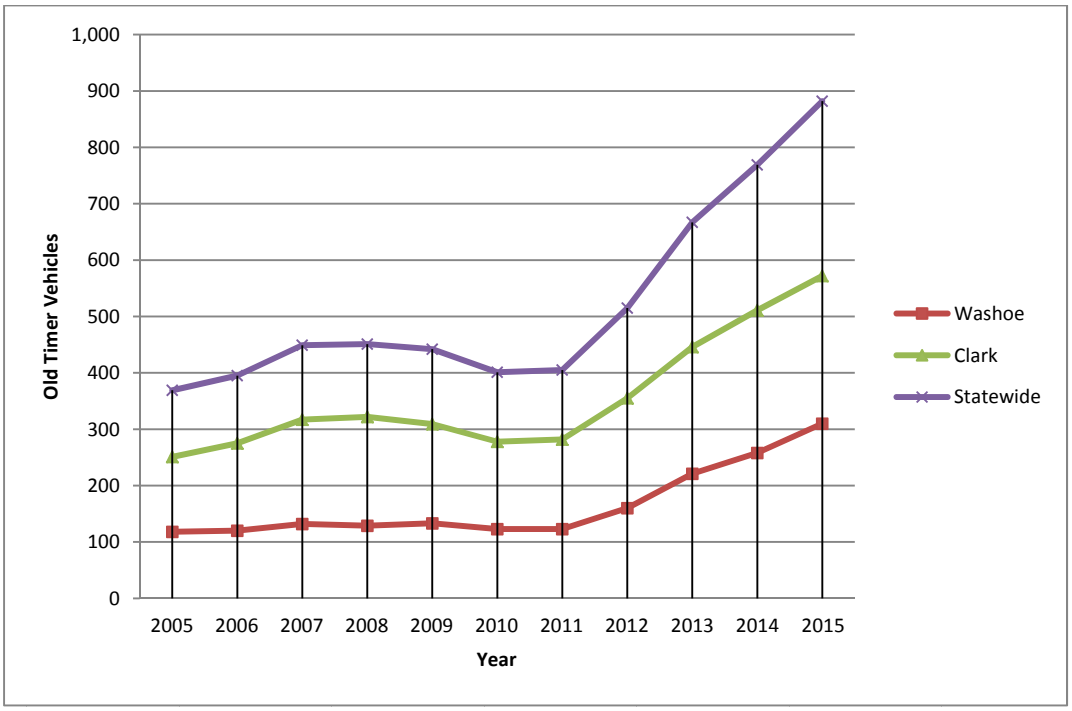
during the 2011 legislative session. To a lesser extent, old timer vehicles also experienced a similar growth pattern (see Figure 9-2).

Figure 9-1. Classic Vehicle and Classic Rod Population Growth



* The 2005 statistical data contains registration beginning with February 7, 2005.

Figure 9-2. Old Timer Vehicle Population Growth



On several occasions, both the print and televised media have reported on vehicles driving around town with classic license plates that appear to be classic in name only (Figure 9-3). Nevada air quality regulators and the I/M Committee recognized this development and have tracked the increasing numbers of special license plate vehicles since 2011. The I/M Committee has concerns that, left alone, the loophole would likely continue to generate controversy and result in an ever-increasing number of older vehicles with special license plates that were obtained for the express purpose of evading emissions testing.

Figure 9-3. Example of Classic Vehicle in Name Only

9.6 RECOMMENDATIONS

The I/M Committee developed the following three recommendations, any of which if implemented individually or in combination, could substantially reduce or eliminate the existing loophole.

9.6.1 Recommendation 1: Provide the general definition for classic rods, classic vehicles, and Old Timer vehicles that is utilized by the western states surrounding Nevada

Since the 1970's, owners of classic and Old Timer vehicles have been exempted from certain vehicle fee requirements. From 1973 to 1991, owners of "Old Timer" vehicles could be exempted from regular registration and license plate fees so long as: [93]

> ". . . any such vehicle shall not be used for general transportation, but could be used for club activities, exhibitions, tours, parades or similar activities."

During the 2007 legislative session, a type of vehicle characterized as a "replica vehicle" was introduced. Replica vehicles were exempted from emissions testing requirements.[94] However, there were several constraints placed on the registration of replica vehicles. DMV could not issue certificates of registration for more than 100 replica vehicles each year.[95] Replica vehicles also had to be: [96]

> " . . . maintained solely for occasional transportation, including exhibitions, club activities, parades, tours or other similar uses . . . [and] not used for daily transportation."

Both the rescinded "Old Timer" and the "replica vehicle" definitions are the type of qualifying definitions that are commonly found in state statutes in order to differentiate the types of older vehicles that would merit emissions inspection exemption status. For example, the five states surrounding Nevada have incorporated the following into their statutes or administrative codes:

> In Oregon, vehicles are exempt from the requirement to be equipped with a pollution control system if the vehicles are "...maintained as collectors' items and used for exhibitions, parades, club activities and similar uses but not used primarily for the transportation of persons or property."[97]
>
> In Idaho, "[a]ny motor vehicle or motorcycle which qualifies as an 'Idaho Classic' shall be used for exhibits, parades, tours, club activities, and such occasional use as is necessary for operation and maintenance of the vehicle. The

[93] NRS 482.381 (1973).
[94] NAC 445B.592.
[95] NRS 482.224.
[96] NRS 445B.759.2(b)(3), (4).
[97] Oregon Revised Statute 815.300(6).

vehicle cannot be used for business or commercial purposes or as customary and usual transportation."[98]

In Utah, a vintage or custom vehicle is primarily a collector's item that is used for participation in club activities, exhibitions, tours, parades, occasional transportation, and other similar uses."[99]

In Arizona, a collectible vehicle must be maintained primarily for use in car club activities, exhibitions, parades, or other functions of public interest or for a private collection and used only infrequently for other purposes."[100]

In California, a collector motor vehicle is used primarily in shows, parades, charitable functions, and historical exhibitions for display, maintenance, and preservation, and is not used primarily for transportation."[101]

All of these five statutes, as well as Nevada's original 1973 definition of an "Old Timer" vehicle, and Nevada's current definition of a "replica vehicle" have two common elements. The first is that the use of a classic or collector vehicle must primarily be for activities associated with that type of ownership, e.g., in club activities, exhibitions, parades, and similar activities. The second element limits the use of classic or collector vehicles for general transportation.

9.6.2 Recommendation 2: Require owners of classic vehicles and classic rods to have their odometer readings annually certified at I/M inspection stations prior to obtaining special license plate renewal sticker

Industry had indicated that this certification could be accomplished at a nominal cost. The maximum fee could be controlled by a regulation similar to NAC 445B.599.2 which allows DMV to set the maximum fee for an emissions inspection. The fee calculation takes into account the average hourly shop labor rate for the current year and the amount of time spent by the testing station providing the certification.

9.6.3 Recommendation 3: Bring back the requirement that owners applying for classic vehicle or classic rod special license plates first pass an emissions test at the DMV prior to issuance

As was discussed previously, during the 1997 legislative session the legislators introduced for the first time statutory language that would exempt classic vehicles, classic rods, street rods, and Old Timer vehicles from emissions testing if they met certain requirements. Among the requirements, NAC 445B.6125.3 required that the vehicle:[102]

[98] Idaho Statute, Title 49, Chapter 4, 49-406A.
[99] Utah Codes 41-21-1 (3)(b) and 41-6a-1507.
[100] Arizona Revised Statute 49-542.Z.
[101] California Vehicle Code § 259.
[102] NRS 445B.760.1(c).

> "[h]as an engine that complies with the standards for emissions set forth in NAC 445B.596 for the model year of the motor vehicle as determined by a two-speed emissions test conducted by the Department pursuant to NRS 445B.798 or conducted at an authorized station or authorized inspection station."

The requirement that owners applying for classic vehicle or classic rod special license plates first pass an emissions test prior to issuance remained in effect until the 2011 legislative session when the regulation was eliminated. After its removal, the number of vehicles issued special license plates began to significantly increase.

Since vehicles fall into the Classic and Old Timer categories based on a rolling year, currently model year 1996, OBD II equipped vehicles are now eligible for the Classic Rod emissions exemption. If vehicles are required to be tested to qualify for the emissions exemption, any proposal of change should include reference to the testing standards of an OBD II emissions test, and light duty diesel opacity test. The proposed change should be similar to:

> "[h]as an engine that complies with the standards for emissions set forth in NAC 445B.596 for the model year of the motor vehicle as determined by a two-speed emissions test*, NAC 445B.5815 for the model year of the light duty motor vehicle as determined by a certified on-board diagnostics system inspection, or NAC 445B.589 for the model year, and opacity standard of the motor vehicle* conducted by the Department pursuant to NRS 445B.798."

9.7 OTHER OPTIONS

In addition to the recommendations, the following four options are offered for consideration.

9.7.1 Option 1: Require owners of vehicles with special license plates to obtain classic vehicle insurance

Classic automobile insurance is on the average less expensive than traditional car insurance. The logic for such pricing assumes that the owner of a classic or collectible vehicle takes extra care to protect their property and generally does not use the vehicle for general transportation. In fact, the text of many state statutory requirements concerning classic or collectible vehicles, have as their origin, the insurance company requirements for obtaining classic automobile insurance.

Just as states and local agencies have an interest in assuring the general public that owners of classic or collectible vehicles receiving exemptions from fees and/or emissions testing requirements are actually owners of legitimate classic or collectible vehicles, insurance companies have a fiduciary interest in assuring that the owners of vehicles acquiring classic vehicle insurance actually own a classic or collectible vehicle.

In the State of Arizona, owners of classic or collectible vehicles are required to obtain classic automobile insurance and own another vehicle for personal use. The latter requirement is typically a prerequisite for obtaining classic automobile insurance since lack of such ownership

suggests that the classic vehicle is being used frequently for general transportation. These provisions are enshrined in ARS §49-542.Z.3, which states:

> "[t]he vehicle must have a collectible vehicle or classic automobile insurance coverage that restricts the collectible vehicle mileage or use, or both, and requires the owner to have another vehicle for personal use."

The enforcement mechanism for such legislation can take several forms. The State of Arizona passed legislation providing an indirect form of enforcement through insurance company notifications:

> "If an insurer notifies the department of transportation of the cancellation or nonrenewal of collectible vehicle or classic automobile insurance coverage for a collectible vehicle, the department of transportation shall cancel the registration of the vehicle and the vehicle's exemption from emissions testing pursuant to this section unless evidence of coverage is presented to the department of transportation within sixty days."[103]

In order to implement the requirement of Classic Vehicle Insurance, there would be an estimated fiscal impact of $85,100 to the Highway Fund (based on a mandate of implementation and if contract programming is required) in relation to the programming necessary for such a requirement. This includes the creation of the necessary programming that would allow for this requirement to be implemented. The total number of estimated programming hours is 851 at $100.00 an hour. This estimate was provided by DMV and is subject to change based upon implementation requirements.

As an alternative, regulations could require owners of vehicles with special license plates to sign annual affidavits stating that they possess classic automobile insurance. This is an approach that DMV currently uses when it requires to certify that their vehicles have not been driven more than 5,000 miles since the preceding annual registration.

9.7.2 Option 2: Change the affidavit verbiage on the annual odometer certification forms to emphasize the penalty for perjury

DMV form EC-18, which has as its caption, Odometer Certification for Emission Exemption, requires an owner of a classic vehicle, classic rod, or Old Timer vehicle to document the odometer reading of the vehicle under penalty of perjury. The form is required when the owner applies for an exemption from emissions testing when making either an initial application for registration or renewal of registration. The specific warning language found on the form is as follows:

> "I certify under penalty of perjury, this vehicle has not been driven more than 5,000 miles since the previous registration cycle and the odometer has remained operable as required by NRS 484D.315."

[103] ARS 49-452.Y.

In order to emphasize the seriousness of the affidavit, the warning could additionally include the actual penalty for perjury. As an example, the warning language could add the following changes:

> "I certify under penalty of perjury, this vehicle has not been driven more than 5,000 miles since the previous registration cycle and the odometer has remained operable as required by NRS 484D.315. Perjury is a category D felony, and is punishable by an imprisonment in the state prison for a minimum term of not less than 1 year and a maximum term of not more than 4 years. In addition to any other penalty, the court may impose a fine of not more than $5,000, unless a greater fine is authorized or required by statute."

9.7.3 Option 3: Require random audits of odometer readings, and publish the findings of the audits and any penalties on DMV's website

Auditing the odometer readings of classic vehicles and classic rods, and then publishing the findings on DMV's website, would alert the motoring public to the seriousness of government efforts to enforce the special license plate program. Publicizing the audit findings and penalties could deter those vehicle owners using their vehicles for general transportation from seeking to acquire special license plates for the primary purpose of avoiding emissions testing. The cost of implementing such a program has not yet been estimated.

9.7.4 Option 4: Create a "classic" special license plate hotline similar to the smoking vehicle hotline

The purpose of a "classic" vehicle special license plate hotline would be to identify vehicles that do not seem to fit the profile of a "classic" vehicle. Owners of identified vehicles would be sent information describing the requirements of the program and a description of the penalty for a violation of program requirements. Some examples of vehicles that could be reported include those that exceed the statutory carrying capacity limits of one ton or less. If some form of the recommended general definition were adopted, then vehicles used for general transportation could also be reported.

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APPENDIX A: PROPOSED REVISIONS TO THE VEHICLE TESTING PROGRAM BY THE NEVADA EMISSION TESTERS COUNCIL AND THE DMV RESPONSE

A-1 OVERVIEW

At the November 17, 2015 meeting of the I/M subcommittee, representatives from the emissions testing industry presented various program revisions to the subcommittee. Lou Gardella, with Jiffy Smog and the Nevada Emission Testers Council, provided in writing a list of changes to the subcommittee and these are included in Section A-2. The DMV replied to those suggestions separately and that has been included in Section A-3. Also included in Section A-3 are suggestions provided by Peter Kreuger of the Nevada Emission Testers Council at the November 17 meeting and the DMV's subsequent response.

A-2 SUGGESTED I/M PROGRAM REVISIONS PROVIDED BY THE NEVADA EMISSION TESTERS COUNCIL

Jiffy Smog, updates to current emission testing program 11-17-15

1. Delete NAC 445b.599, NRS 445.210, 770, 785, 830. Which would change the smog check test price from current State mandated maximum to free a market system.
    a. Clark County's proposed changes would reduce number of tests by up to 64%. Any change in volume of tests must be reflected in the test price. This is basic economics 101. Nevada must still maintain a viable number of test stations to service the public in a convenient manner.
    b. Currently, only repair stations (about 30% of stations) have a say in the test price. That leaves the majority of test stations with no say whatsoever in the test price.
    c. Competition sets pricing at the lowest possible price for the consumer.
2. A new DMV online VID status page and blog.
    a. The status page and blog would be monitored by someone who has the ability to fix VID problems 7 days a week during business hours.
    b. This would give real time updates for all.
    c. Stations could post VID and renewal problems and DMV could post replies.
    d. Saves DMV and stations time, phone calls and conflicting information.
3. Inspector licensing from current "per station" to all NV stations.
    a. An inspector license should be the same as a CDL driver's license allowing them to work at any emission station in Nevada.
    b. This would eliminate problems as many of our emission stations have multiple locations.
    c. This would save time and effort by the DMV, inspectors and stations. DMV has the ability to "turn off" an inspector at any time.
4. Inspector locks out from currently having to go to the DMV to over the phone reset.
    a. If an inspector inputs their code incorrectly 3 times, they are locked out and must go to the DMV to reset their code. This occurs often with a caps lock on.
    b. If they know their code, they should be able to reset it with a call to the DMV.
    c. This would save the DMV, inspector, and stations time eliminating unnecessary trips to the DMV.
    d. Or this could be fixed simply by making the codes not case sensitive.
5. Mandate any VID update is done only at night and is tested "real world" beforehand.
    a. The reason for this the past history.
6. Re-establish offline testing of up to 30 tests.
    a. The reason for this is the past history.
7. Re-establish auto VIR ordering when count goes below 25 as it used to be.
    a. This would end constant monitoring that is required now.
8. Enforce all stations that are licensed to do renewals must take all forms of payment (cash, check & credit card). This is not being done now and consumers are upset.
9. Allow renewal documents to be submitted electronically to the DMV.
    a. This would provide instant availability to the DMV in both Carson City and Las Vegas and less paperwork.
10. Establish an annual meeting between industry and the DMV to discuss problems both parties see and possible solutions.

A-3 DMV RESPONSE TO PROPOSED REVISIONS

1. The Industry has expressed concern regarding the price cap that they are allowed to charge for Emission Testing. This cap is currently mandated by NRS and NAC. The Industry is requesting the deletion of NAC 445B.599, NRS 445.210, NRS 445.770, NRS 445.785, NRS 445.830, thus changing the smog check test price from current State mandated maximums to a free market system.

    a. The Department of Motor Vehicles has reviewed the Industries request for the deletion of NAC 445B.599, NRS 445.210, NRS 445.770, NRS 445.785, NRS 445.830. Though the Department understands the Industries desire to charge emission testing fees at their own discretion, the Department believes that the participation of all 2 G Stations in the completion and submission of the survey that is used to determine the cost of the emission testing fees would allow for the Industry to obtain an average fee. That is why the surveys are sent to the Industry. However, in order for this system to work correctly, the Industry must do their part. The Department will not proceed with supporting the deletion of the above referenced NAC and NRS's.

2. The Industry has requested that a new DMV online VID status page and blog be supplied.

    a. The Department of Motor Vehicles has considered the request for a status page to be placed on the VID. The Department will not proceed with implementing a status page in the VID. The use of a status page for notification to the Industry when the VID is down would fail as the status page would be located on the VID and when the VID is down, nothing can be sent or received through the VID.
    b. The Department currently lists all Planned Outages, Appointments, and Error Messages on the Home page of the Department Website, located at www.dmvnv.com. Additionally, everyone in the Industry receives this information electronically through a notification in the VID.
    c. The Department currently lists all Public Hearings and Workshops and meetings for the Advisory Committee on Control of Emissions from Motor Vehicles on the Public Meetings, Board and Committees page of the Department Website. Additionally, both the Industry and Private individuals that have chosen to receive theses notifications have requested to be placed on an email notification list. The Department uses this list to send these notifications to those participants.
    d. The Department sends notifications electronically in the VID regarding any changes that are going to be implemented that will affect how anyone in the Industry is able to conduct business.
    e. The Departments Emission Control Labs is available for any questions that the Industry has during state business days and hours.
    f. The Departments Help Desk is available for any questions that the Industry has during weekend days and hours.

3. The Industry would like to be required to only have 1 inspector license for each inspector, regardless of their location.

a. The Department of Motor Vehicles has reviewed the Industries request to be required to obtain one license for each inspector without being required to obtain additional authorization to operate in multiple locations. The Department will not proceed with supporting this request as this requirement is in place for security measures.
b. If this requirement were to be removed, an inspector that was dismissed from their position could then operate at a new facility without being required to update their status for all facilities, allowing them to operate at a facility, perhaps without authorization from the management or owners.

4. The Industry would like to have the system updated to authorize that they can contact the help desk via telephone and have their credentials reset after three failed attempts to log in to the system.

a. The Department of Motor Vehicles has reviewed the Industries request regarding being able to contact the help desk rather than go into a station after three failed log in attempts. The Department will not proceed with supporting this request as it is in place for security purposes.
b. This requirement assists in preventing an inspector to access and utilize another inspector's authority.
c. The proposed resolution of changing the system to not require case sensitive credentials is currently implemented.

5. The Industry would like to have mandated that VID updates be completed at night and tested before being placed in production.

a. The Department of Motor Vehicles has reviewed the Industries request regarding mandating that VID updates be completed at night and tested before being placed into production. Though the Department has had multiple issues this year with VID, all updates are completed at night and tested prior to being placed in Production.
b. The Department will not be proceeding with any changes to this process as the requests made by the Industry are currently being implemented.

6. The Industry would like to re-establish the ability to complete up to 30 tests while offline.

a. The Department of Motor Vehicles has reviewed the industries request to be able to complete up to 30 tests while offline. This ability was removed as there was and is no way to accurately track testing and testing results while offline.
b. The Department will not proceed with the support of this action as the Department is required to track all tests and test results.

c. Hypothetically, if a test were to be completed offline, there would be no way to determine and assign the next valid VIR. Additionally, the system would not be able to determine a test result.

7. The Industry would like to re-establish automatic VIR ordering when the count of available VIR's goes below 25.

   a. The Department of Motor Vehicles has reviewed the industries request to re-establish automatic VIR ordering when the count of available VIR's goes below 25. The Department will not proceed with the re-establishment of automatic ordering of VIR's; The Industry is currently able to order and purchase 10 books at a time. The Industry can purchase another set of 10 books consecutive to the first set of 10 books, so long as the first transaction was completed and paid.
   b. If the system is in failover mode, the Industry can order 6 books consecutively.

8. The Industry would like to have the acceptance of all forms of payment be enforced for all stations that are licensed to complete renewals, stating that it is the law.

   a. The Department of Motor Vehicles has reviewed the Industries request to have the acceptance of all forms of payment be enforced for all stations that are licensed to complete renewals. The Department will not proceed with enforcing that all Stations that are licensed to complete renewals must accept all forms of payment as it is not a requirement of NAC 482.760 or NRS 482.281 nor is it a requirement of the Memorandum of Understanding.

9. The Industry would like to be granted authority to submit registration renewal documents electronically to the Department of Motor Vehicles.

   a. The Department of Motor Vehicles is currently reviewing the Industries request to grant authority to submit registration renewal documents electronically to the Department. As this ability would affect other Divisions, this decision has to be made by the Department as a whole. Once a decision is made, the Department will give an update regarding this matter.

10. The Industry has requested that an annual meeting be created between the Industry and the Department to discuss problems both parties see and possible solutions.

    a. The Department of Motor Vehicles has reviewed the Industries request to hold an Annual Meeting. The Department is not going to proceed with holding an annual meeting as the Department currently participates in Public Meetings, Boards, and Committees all of which are open to the Industry and the General Public.

Peter Kreuger, with the Nevada Emission Testers Council, stated many things could be accomplished with the input of the industry. He suggested that small changes/work be allowed to be done by the industry; examples: printer changes and filter changes.

DMV Response:

The Industry has requested to gain access inside the cabinets of the Machines.

a. The Department of Motor Vehicles has reviewed the Industries request to gain access inside the cabinets. Though the Department understands the Industries desire to obtain such access, the Department, as previously stated, will not allow the Industry this access.
b. In order to obtain this access inside the cabinets, one must have administrative privileges to the computer allowing them to make modifications. The allowance of these privileges would cause the Department lack of ability to determine if tests were being completed and processed appropriately. Additionally, it would disallow the Department to verify testing.
c. The Department is currently receiving two different forms of identification to verify the same vehicle. If the Department gives the Industry access, the Department cannot determine if the information is accurate. In turn, this doesn't allow the Department to guarantee compliance with federal regulations, specifically the Federal Air Quality Standards.

APPENDIX B: A COMPARATIVE DESCRIPTION OF EACH STATE'S I/M PROGRAMMATIC ELEMENTS

I/M Jurisdiction Report (2015 I/M Solutions Conference)																
State	Program Area	Attainment Status			Network Type	State Fee	Contractor Fee	Inspector Fee	Other Fee	# Stations	Age 1st test	Renewal Frequency				Exemptions
		O3	CO	PM								Biennial	Annual	Oldest tested	Waiver Range	
AZ	Phoenix	8-hr nonattainment not classified	Maint	non-serious	Centralized	$6.50	$13.20			15	4	1981 +	Pre-1981	1967	$200 - 450	Collectible w/collectible insurance
AZ	Tucson		Maint		Centralized	$12.25				15	4	1981 +	Pre-1981	1967	$450	Collectible w/collectible insurance
CA	Statewide	Attainment to Extreme Non	Attainment	Attainment to Extreme Non	De-centralized	$8.25	$1.08	$48.00		7300	7	All		1976	$650	1975 +, CNG/LPG/LNG
CO	Denver, Boulder, No Front Range	Nonattainment			Hybrid	$0.25	$24.75		Gas: $15 (pre-1982) LDD/HDD: $45 - 120	18	7 - not 8 as reported	1982 +	Pre-1981	any age	$75 - 715	Collector vehicles (25 yrs), Street Rods, Farm Plated Vehicles
CT	Statewide	Marginal Non	Maint	Maint	De-centralized	$2.06	$5.44	$12.50	New: 1 x $40; Renewal & New Regs: $10 Federal CAA fee	219	4	all		1991	$868	Farm vehicles, GVW 10,001 and greater
DE	Statewide	8-hr mod nonattainment			Centralized	Funding from CMAQ and DE Clean Air Fund from traffic violations				4	6	all		1968	$75 - 810	
DC	District-wide	Marginal Non	Maint	Maint	Centralized	$35.00				1	4	all		1968	$848	Taxis tested every 6 mo, commercial - annually
GA	Metro Atlanta (13 Counties)	Nonattainment			De-centralized	$3.38	$1.59	$20.03		900	4		all	1991	$868	Senior Citizen: less than 5,000, 10 yr or older, 65 yrs old. Antique Vehicles 25 + yrs
ID	Ada (Boise)	Maint	Maint	Maint	De-centralized	$3.50		$16.50		45	4	all		1981	$300	Motor-homes; GVW < 1,500 lbs

I/M Jurisdiction Report (2015 I/M Solutions Conference)															
State	Program Area	Attainment Status			Network Type	State Fee	Contractor Fee	Inspector Fee	Other Fee	# Stations	Age 1st test	Renewal Frequency				Exemptions
		O3	CO	PM								Biennial	Annual	Oldest tested	Waiver Range	
ID	Canyon Co				De-centralized	$3.42		$7.58		24	6	all		1981	$200	Pre-1981, Classics as def 49-406A, motor-homes, farm vehicles, GVW < 1,500 lbs
IL	Chicago & East St. Louis	1-hr Maint & 8-hr marginal nonattain			Hybrid		$6.95		Funding from Il Motor Fuel Tax, state pays $6.95/test to Mgt Contractor	55	4	All		1996	$450	Pre-1996, farm vehicles, ceremonial vehicles owned by non-profits, street rods
IN	Lake & Porter Counties	Maint		Nonattainment	Centralized		$23.83		No cost to motorists, state pays $23.83 from General Fund	7	4	All		1976	$450	
LA	Baton Rouge	1-hr marginal nonattain			De-centralized	$2.00		$8.00	Combined safety $10 and emission test fee $8 for $18 total	185	2		All	1980 (visual and cap test for 1980 - 1995)		Pre-1980 exempt
ME	Statewide				De-centralized	$2.50		$16.00	$12.50 Safety Inspection & Visual inspect of catalytic converter. $18.50 for 1996 + for OBD & safety	700			All	1973 (cap test for 1973 to 1986; visual for 1987 to 1995)	NO	Farm & Fish trucks (2 or 3 axle
MD	DC, Baltimore, Hagerstown & Philadelphia MSA's				Centralized	$7.00	$7.00		$15 late fee every 28 days. $5 from test fees supports program	18	2	All		1977	$450	1976 or older, seniors over 70 or disabled, each driving <5,000

I/M Jurisdiction Report (2015 I/M Solutions Conference)																
State	Program Area	Attainment Status			Network Type	State Fee	Contractor Fee	Inspector Fee	Other Fee	# Stations	Age 1st test	Renewal Frequency				Exemptions
		O3	CO	PM								Biennial	Annual	Oldest tested	Waiver Range	
MA	Statewide	Dukes Co - 8-hr marginal nonattain			De-centralized	$9.60	$1.90	$23.50		1600	1		All	2000 (15 yrs and older exempt) or 1984 for diesels	$670 - 870	15 yrs or older exempt. All safety test annually
MO	St Louis	8-hr moderate nonattain		Nonattainment	De-centralized	$2.50	$3.45	$18.05	$12 safety inspection	874	2	All		1996 (1997 for diesels)	$200 - 450	1995 older LDGV & LDGT; 1996 older LDDV & LDDT >8500 lbs. 2 yr old <40,000 mi; every 2 yr after <12,000 mi/yr
NV	Clark, Washoe	8-hr maint	Maint	CC - PM10 maint; WA - PM10 Serious Nonattain	De-centralized	$6.00		$36.50	CC: HDG $40.50 WA: LD & HD Gas $42	454	2		All	1968	CC $450, WC $200 self or shop	1967 older, classic/rod/old timer <5,000 mi/yr
NH	Statewide	Marginal to Serious nonattain	Maint		De-centralized	$3.25	$3.81	$42.94	Fee unregulated range $20 to $50	1926	0		All	1995 (1990 to 1995 get visual insp)	NO, one time 1-yr extension	<1,000 mi exempt from OBDII. 20+ yrs exempt from visual tampering
NJ	Statewide	Severe Nonattainment	Attainment	Nonattainment	Hybrid			$20.29	Centralized tests $14 registration; Decentralized market ave $70	1126	6	All		1960		Pre-1960, Historic/Classic, farm
NM	Albuquerque		Maint		De-centralized	$4.50		$15.50	Fee market ave $20	146	4	All		1981	$300	Dedicated Electric Vehicles
NY	Statewide	NYMA - nonattainment (Ozone Transport Region)			De-centralized	$6.00		$21.00	Downstate: $27 emission+ $10 safety; Upstate: $11 emission + $10 safety	10000	2		All	1991 (25 yrs and older exempt)	$450	Low Enhanced (NYVIP2) 25 yr +; OBDII - 2 yrs, electric, historic & farm

I/M Jurisdiction Report (2015 I/M Solutions Conference)															
State	Program Area	Attainment Status			Network Type	State Fee	Contractor Fee	Inspector Fee	Other Fee	# Stations	Age 1st test	Renewal Frequency				Exemptions
		O3	CO	PM								Biennial	Annual	Oldest tested	Waiver Range	
NC	48 Counties				De-centralized	$6.25		$23.75	Total emissions $30, inspect fee market ave $23.75	4500	3		All	1996	$200	HD gas >8,500, vehicles +35 yrs
OH	Cleveland, Akron	8-hr nonattainment		Nonattainment	De-centralized				No fee, funding by State General Fund	76	4	All		1991 (25 yrs and older exempt)	$300	Alt Fuel (propane, butane, alcohol or nat gas), 25 + yrs, historical & collector
Ontario	Southern Ontario				De-centralized	$5.50		$24.50	Market cap $30 + 3.90 tax, HD $100 + tax + $15 state fee	2100	7	mixed		1988	$450	LDV 1987 and older, historic, kit & farm
OR	Portland, Medford	Maint	Maint		Centralized	$21.00			$21 cert Portland; $10 cert Medford	7	5	All		1975		Electric & nat gas
PA	25 counties				De-centralized	$1.47		$38.53	Market cap $20 - $40	8000	1		All	1975 (Cap visual)	$150	<5,000 mi/yr, GVWR > 9,000 lbs, street rods, antiques, collectibles
RI	Statewide	Unclassifiable, Attainment			De-centralized	$33.25	$2.75	$19.00		293	2	All		1990	$700	Vehicles < 2 yrs with < 24,000 mi
TN	Nashville, Middle TN	8-hr nonattainment		Nonattainment	Centralized	$2.80		$6.20		16	1		All	1975	$75 - $650	Antique, Low/Med speed vehicles, tactical military
TX	Austin, Dallas, El Paso, Houston	Marginal to Moderate nonattainment							DFW & HGB 1995 older $24.50, 1996 newer $18.50, plus $7 safety	4800	2		All	1991 (25 years and older exempt)	$100 - $600	< 5,000 mi/yr, 24 yrs +, extension for public assistance qualified

I/M Jurisdiction Report (2015 I/M Solutions Conference)																
State	Program Area	Attainment Status			Network Type	State Fee	Contractor Fee	Inspector Fee	Other Fee	# Stations	Age 1st test	Renewal Frequency				Exemptions
		O3	CO	PM								Biennial	Annual	Oldest tested	Waiver Range	
UT	Cache County			Nonattinment	Decentratlized	$3.00		$15.00	Cap: $15 OBD, $20 TSI	46	7	All		1969		Farm trucks, replica vehicles, street/custom vehicles for occasional use not daily transportation
UT	Davis County	Maint	Maint	Nonattainment	Decentratlized	$3.00			Open market no cap	137	2	< 6 yr	6 yr +	1968	$250 - $450	
UT	Salt Lake City	Maint		Nonattainment	Decentratlized	$3.00		$29.00	Market no cap ave $29.50	433	2	< 6 yr	6 yr +	1968	$250 - $1500	pre-1968
UT	Utah County				Decentratlized	$2 air pollution fee + $3.25 cert fee	$1.35	$21.40	Market ave $26	210	3	< 6 yr	6 yr +	1968	$250 - 450	pre-1968, farm vehicles, kit cars, vintage > 30 yrs
UT	Weber County		Maint	Nonattainment	Decentratlized	$1 APC fee		$30.00		112	2	< 6 yr	6 yr +	1968		pre-1968
VT	Statewide				Decentratlized				Market ave $25 - $40	1600			All	1960 (visual 1960-1995)		
VA	No VA, DC Non-Attainment Area	Nonattainment			Decentratlized	$2.00		$28.00	Cap $28	530	2	All		1991	$780 req'd Cert Emissions Repair Facility	antique, Fire/Rescue, alt fuel
WA	Seattle, Tacoma, Spokane, Vancouver				Hybrid	$3.00		$12.00	Funded by state general fund	53	7	All		1990	$150	Alternate fuel
WI	Milwaukee	8-hr marginal nonattainment		Maint	Decentratlized	$5.00			State Transportation Fund & Petro Clean up	200	4	All		1996	$855	pre-1996, farm trucks

APPENDIX C: HISTORICAL DRY WEATHER CONDITIONS IN WESTERN STATES

30-Year Average of Precipitation-Evaporation (PE) Values from Thornthwaite's PE Index[104]

State	PE Value
Alabama	115.6
Alaska	113.5
Arizona	25.1
Arkansas	107.0
California	52.9
Colorado	42.6
Connecticut	146.0
Delaware	117.0
Florida	104.4
Georgia	103.1
Hawaii	57.9
Idaho	50.6
Illinois	99.2
Indiana	106.6
Iowa	92.1
Kansas	63.7
Kentucky	112.3
Louisiana	112.1
Maine	161.3
Maryland	114.1
Massachusetts	119.7
Michigan	103.6
Minnesota	95.2
Mississippi	113.5
Missouri	98.3
Montana	46.7
Nebraska	59.8
Nevada	16.8
New Hampshire	165.0
New Jersey	123.7
New Mexico	30.0
New York	130.4
North Carolina	110.1
North Dakota	61.1
Ohio	103.9
Oklahoma	71.3
Oregon	98.8
Pennsylvania	125.2
Rhode Island	132.0
South Carolina	106.0
South Dakota	57.9
Tennessee	120.3
Texas	51.5
Utah	29.6
Vermont	147.7
Virginia	105.4
Washington	127.9
West Virginia	118.0
Wisconsin	102.8
Wyoming	47.6
Dist. Columbia	105.4

[104] Data provided by EPA in developing EPA's AERR nonpoint residential construction estimates spreadsheet, "2014_residential_construction_2311010000_emissionsv2.0.xlxs." http://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-information (accessed January 25, 2016).

APPENDIX D: OTHER RECOMMENDED PROGRAM CHANGES

D-1 OVERVIEW

In addition to the recommended programmatic new vehicle and testing frequency exemptions and special license plate program changes, the I/M Committee additionally recommends consideration of several future modernizations to the I/M program. These include an expansion of the voluntary program of electronic monitoring of emissions information to private-party individuals; modernizing the emissions testing process by utilizing remote sensor testing as an alternative to the inspection component of the I/M program; and modernizing the emissions testing requirements for diesel and heavy-duty gasoline vehicles. These changes fall within authorities provided in the current I/M program enabling statutes and may be implemented through regulation.

D-2 CONTINUOUS MONITORING FOR PRIVATE PARTY INDIVIDUALS

Pursuant to NRS 445B.767 and NAC 445B.602, the owner or lessee of a fleet of three or more vehicles, located in a county whose population is 100,000 or more, is eligible to participate in a voluntary program of electronic monitoring of emission information. The voluntary program involves installation of electronic devices that continuously monitor vehicle emission levels. If the owner or lessee of a fleet which participates in the voluntary program conforms to the program's regulatory requirements, the owner's vehicle fleet is not subject to annual emissions testing requirements.

Expanding the voluntary program to allow private-party individual participation would be a modernization that could benefit not only owners of non-fleet vehicles but also the ambient air quality of the communities where the vehicles are driven. By utilizing continuous monitoring, DMV would be able to monitor a participating vehicle's emission information and notify an owner when a vehicle's emission system is non-compliant almost immediately. As a result, excess emissions can be mitigated by timely repairs.

In contrast, it is not uncommon for vehicle owners to rely solely upon annual emissions testing results before repairing a vehicle's emissions problem. Since emissions testing is only required once a year, this type of reliance can result in considerably more emissions when the time lapse between the onset of the problem and the subsequent repair is significant.

DMV is in the process of completing the necessary programming and guidelines required for the department to begin implementing the voluntary program of continuous electronic monitoring of emission information. Upon implementation, the Department will be able to receive data generated by installed devices for the purposes of continuous monitoring.

Currently, fleet vehicles are specified as the only vehicles that may participate in this program. However, in order to modernize this program further, the regulations could be updated to allow for private-party individuals to participate in continuous monitoring as well. There would be no fiscal impact to the department to implement continuous monitoring for private-party individuals as the department is currently creating the programing for this process in a manner that would

allow for both fleet and private-party participation. Additionally, this would be a self-funded monitoring program.[105]

D-3 REMOTE SENSOR TESTING AS AN ALTERNATIVE TO THE INSPECTION COMPONENT OF THE I/M PROGRAM

Remote Sensor (RS) testing is a modernized way of testing vehicles emissions that could be an alternative for the motoring public instead of taking their vehicles to a licensed emissions testing station. RS testing allows an owner of a vehicle to obtain a passing emissions test while simply driving from one destination to another. RS testing could be an efficient, accurate, and effective means of modernizing the inspection component of the I/M programs currently operated in Clark and Washoe counties.

D-3.1 Program Operation

RS testing uses laser technology to test the emissions emitted from a vehicle. The testing process involves measurement of a vehicle's emission levels as the vehicle passes by a RS testing device. Concurrently a digital image of the vehicle's license plate number is captured by the device. This information is then electronically submitted to DMV in a statistical report format.

An RS testing program could take several different forms. As an example, a vehicle may have to be observed twice by a RS testing device during the course of a registration year. If on both occasions the vehicle registers passing emissions levels, the vendor would notify DMV that the vehicle's emissions have met regulatory standards. Funding could take the form of a participating vehicle owner paying the vendor the cost of the emissions certificate.

If a registered owner elects to take advantage of the RS testing program, the vendor would first notify DMV. The department could then assign a Vehicle Inspection Report (VIR) number to the vehicle owner's emissions certificate. The owner would then receive a notice on their registration renewal stating that they are not required to obtain an emissions certificate from a licensed emissions station since their vehicle has met the emissions standards for that registration year.

D-3.2 Projected Participation and Funding

There are approximately 1.2 million vehicles currently required to obtain an emissions certificate from an authorized emissions station in Clark and Washoe counties prior to being able to complete the registration process.[106] DMV currently conducts an annual RS testing study that lasts for six days, capturing 0.05 percent of the vehicles located in Clark County.

Based on the data obtained from the fiscal year 2015 study, a total of 20,071 valid vehicle readings were captured. Of that total, 18,418 readings (91.8 percent) were conducted on vehicles actually registered within Clark County. Within the subset of Clark County registered vehicles,

[105] The fiscal impact was provided by DMV
[106] This information was obtained from the 2015 initial testing report generated by the DMV database.

the emission levels of 17,785 vehicles fell within the regulatory emission standards resulting in an overall passing rate of 96.56 percent.

Currently owners of vehicles registered at an address located within designated I/M program areas must annually test their vehicles at licensed emissions testing stations. Based on the above data, it is projected that if RS testing were implemented there would be approximately 683,488 Clark County vehicles captured annually. Since RS testing of vehicles would be required twice a year, this would potentially increase the number of passing vehicles to 341,744. Table D-1 provides the projected RS testing participation.

Table D-1. Remote Sensor Testing Results

	Total Valid Readings	Total Participant Tests	Total Participant Passed	Percentage Participants Passed
FY2015 *	20,071	18,418	17,785	96.56%
2016 Projection **	777,764	705,900	683,488	96.83%

* Statistics provided by DMV are based on the data obtained from the 0.05% sampling RS testing study conducted annually by DMV within Clark County. This data has been provided for statistical reference.
** Projection based on averages obtained by using a compilation of data from one week of the 0.05% study.

Implementation of an RS testing program by the vendor would be self-funded. DMV's emissions control program would monitor, evaluate, and analyze all information and data obtained from RS testing. DMV would maintain communications with other agencies and include the testing results in the Annual EPA Report. DMV would require approximately six hundred hours of programming. Based on a mandate of implementation and if contract programming is required, there would be an estimated cost totaling $60,000 (600 hours x $100 per hour). The programming costs have been provided by the DMV as an estimate and are subject to change based on the implementation necessities and requirements.

D-4 MODERNIZING EMISSIONS TESTING REQUIREMENTS FOR DIESEL AND HEAVY-DUTY GASOLINE VEHICLES

As automotive technology continues to evolve, and is incorporated in the production of higher performance vehicles that are more fuel efficient and cleaner burning, the emission testing standards should also evolve to assure the vehicles continue to operate within their EPA certified exhaust emission limits. As described in Table D-2, some of Nevada's I/M program regulations pertaining to vehicle emission testing standards have not kept up with the technological advances made in the automotive industry.

Table D-2. Vehicle Emissions Testing Failure Rates

Vehicle Type	Emissions Testing Standards Last Changed	OBD-II Testing
New light-duty (includes passenger cars) and heavy-duty diesel vehicles with a GVWR of 14,000 pounds or less	48 years ago	no
New heavy-duty gasoline vehicles with a GVWR of 8,501 pounds or more	35 years ago	no
New heavy-duty diesel vehicles with a GVWR of 14,001 pounds or more	25 years ago	no
New light-duty gasoline vehicles with a GVWR of 8,500 pounds or less	20 years ago	yes

D-4.1 New Diesel Vehicles with a GVWR of 14,000 Pounds or Less

Currently, a new diesel vehicle, with a GVWR of 14,000 pounds or less, is held to the same annual tailpipe emissions testing requirements and emissions standards as a vehicle that was manufactured 48 years ago. If the diesel emission testing requirements in Nevada had kept up with ongoing changes in automotive technology, the annual tailpipe emission test would be updated to an OBD-II testing format, and the emissions standards would be similar to the current testing standard required for 1996 and newer model year light-duty gasoline vehicles.

Of the 23 I/M programs areas testing light-duty diesel vehicles nation-wide, a total of 15 (i.e., 65 percent) require OBD-II testing for diesel powered vehicles with a GVWR of 8,500 pounds or less (see Table D-4). If similar testing standards were adopted in Nevada, there could be as many as 70,608 vehicles affected in Clark and Washoe counties (see Table D-3). The total number of vehicles would continue to grow as new diesel vehicles are purchased in these counties.

Table D-3. Population of Registered Heavy-Duty Gasoline and Diesel Vehicles in Clark and Washoe Counties (CY2014)

Registered Vehicles		Clark County	Washoe County
Heavy-Duty Gasoline	≥ 2007 model year with GVWR of 8,501 - 14,000 pounds	4,664	1,598
	≥ 2013 model year with GVWR ≥ 14,001 pounds	545	136
Light-Duty Diesel	≥ 1997 model year with GVWR ≤ 8,500 pounds	16,540	8,827
Heavy-Duty Diesel	≥ 2007 model year with GVWR of 8,501 - 14,000 pounds	31,968	13,273
Diesel with GVWR > 14,000 pounds	All diesel vehicles with a GVWR ≥ 14,001 pounds	13,047	4,911
	≥ 2007 model year vehicles with GVWR ≥ 14,001 pounds	11,541	4,096
Total number of OBD-II equipped heavy-duty gasoline vehicles that are two-speed idle tested		6,943	
Total number of OBD-II equipped light-duty and heavy-duty diesel vehicles (i.e., 8,501 – 14,000 pounds) that are two-speed idle tested		70,608	

Data provided by the DMV is based on the data obtained from the DMV Application. This data has been provided for statistical reference.

D-4.2 New Diesel Vehicles with a GVWR of 14,001 Pounds or More

Currently, a new heavy-duty diesel powered vehicle with a GVWR of 14,001 pounds or more, is held to the same exhaust emission standards as a vehicle that was manufactured 25 years ago. If testing standards were revised for these diesel vehicles, a specific number of affected vehicles would be difficult to estimate because the vehicles subjected to testing are both in-state and interstate. However, as a rough approximation, there are about 18,000 heavy-duty diesel vehicles in Clark and Washoe counties that could be impacted by changes to Nevada's emissions testing standards (see Table D-3).

D-4.3 New Heavy-Duty Gasoline Vehicles with a GVWR of 8,501 Pounds or More

Currently, a new heavy-duty gasoline vehicle with a GVWR of 8,501 pounds or more is held to the same exhaust emission standards as a vehicle that was manufactured 35 years ago. They are tested annually by means of the two-speed idle test. However, of the 27 I/M programs areas testing heavy-duty gasoline vehicles nation-wide, 18 (i.e., 67 percent) require OBD-II testing (see Table D-4). If Nevada were to change the current testing standards to OBD-II testing, approximately 7,000 vehicles in Nevada would be affected (see Table D-3).

D-4.4 Logistics and Funding

Diesel emissions inspections are conducted using an opacity meter and dynamometer. Heavy-duty gasoline emissions inspections are conducted using two-speed idle tests. If emissions testing standards were upgraded to an OBD-II testing standard, it would require a vendor to supply new emission test analyzers, or to upgrade existing tests analyzers that are owned or purchased by the emission test stations. Software changes within the DMV's Vehicle Information Database (VID) would also be required.

Implementation of OBD-II testing for heavy-duty gasoline vehicles and light-duty diesel vehicles would require approximately eight hundred hours of programming. Based on a mandate of implementation and if contract programming is required, there would be an estimated cost totaling $80,000 (800 hours x $100 per hour). The programming costs have been provided by DMV as an estimate and are subject to change based on the implementation necessities and requirements.

Table D-4. National Heavy-Duty Gasoline Vehicle and Diesel Vehicle Testing [107]

State	Area	Heavy-Duty Gasoline			Light-Duty Diesel			Heavy-Duty Diesel		
		Test	OBD-II	GVWR (lbs)	Test	OBD-II	GVWR (lbs)	Test	OBD-II	GVWR (lbs)
AZ	Phoenix				X		< 8,501	X		> 0
AZ	Tucson	X		> 8,500	X		> 0	X		> 0
CA		X	X	> 0	X	X	< 8,501	X	X	> 8,500
CO		X		< 14,001	X		< 8,501	X		> 8,500
CT		X		< 10,001	X	X	< 8,501	X		> 8,500
DE					X	X	< 8,501			
DC		X	X	< 10,001						
GA										
ID	Ada	X	X	< 10,001	X		< 8,501	X		< 10,000
ID	Canyon	X	X	< 14,001				X	X	< 14,000
IL		X	X	< 14,001						
IN		X	X	< 9,001						
LA		X	X	< 10,001						
ME		X	X	?	X		>0	X		?
MD		X	X	< 14,001						
MA		X	X	< 14,001	X	X	< 8,501	X		< 14,001
MO					X	X	< 8,501			
NV		X		> 8,500	X		< 14,001	X		> 14,000
NH					X	X	< 8,501			
NJ		X	X	> 8,500	X	X	< 8,501	X	?	?
NM		X	X	< 10,000	X	X	< 8,501	X	X	< 10,001
NY					X	X	< 8,501	X		< 14,001
NC										
OH		X	X	< 10,001	X	X	< 8,501	X	X	< 10,001
OR					X	X	< 8,501			
PA		X		< 9,901						
RI					X		< 8,501			
TN		X	X	< 10,501	X		< 10,501	X	X	< 10,501
TX		X	X	< 10,001						
UT	Cache	X	X	< 14,000				X	X	< 14,001
UT	Davis				X	X	< 8,501	X	X	< 10,001
UT	Salt Lake				X	X	< 8,501	X		< 14,001
UT	Utah	X	X	< 14,000						
UT	Weber	X	X	< 14,000						
VT		X		> 8,500	X	X	< 8,501	X		> 8,500
VA		X		< 10,001	X	X	< 8,501			
WA		X		< 14,001				X		> 14,001
WI		X	X	< 14,001				X	X	< 14,001
Totals:		27	18		23	15		21	8	

* There are a total of 38 I/M programs among the 32 States including the District of Columbia.
** Data provided by the DMV is based on the data obtained from the DMV Application. This data has been provided for statistical reference.

[107] Information obtained from 2015 I/M Solutions Jurisdictional Report.

APPENDIX E: FISCAL YEAR TEST INFORMATION FOR THE FOUR MODELED PROGRAM TEST SCHEDULES

Scenario 1 – New vehicle exemption extended to four years, biennial testing for 2004 and newer model years, and annual testing for 1968 to 2003 model year vehicles.								
Total number of inspections completed in FY2015 by Model Year	**Gasoline**				**Diesel**			
	Light-Duty < 8.5K		**Heavy-Duty (8.5-14K)**		**Light-Duty < 8.5K**		**Heavy-Duty (8.5-14K)**	
Model Year	**Clark**	**Washoe**	**Clark**	**Washoe**	**Clark**	**Washoe**	**Clark**	**Washoe**
2015	844	388	12	8	12	16	2	14
2014	13,314	5,168	169	111	107	92	26	62
2013	**67,776**	**14,258**	**706**	**286**	**757**	**262**	**204**	**150**
2012	**79,060**	**15,386**	**1,204**	**433**	**1,180**	**392**	**683**	**399**
2011	60,611	12,633	939	265	894	330	479	239
2010	**56,236**	**11,062**	**619**	**208**	**569**	**196**	**208**	**117**
2009	46,400	8,954	536	189	487	170	255	119
2008	**75,886**	**15,211**	**1,344**	**458**	**973**	**388**	**892**	**447**
2007	87,776	17,719	1,714	557	1,119	461	804	393
2006	**89,162**	**18,966**	**2,206**	**860**	**1,990**	**952**	**1,303**	**528**
2005	88,254	19,770	2,084	756	1,480	948	950	459
2004	**79,646**	**18,704**	**2,252**	**798**	**1,224**	**910**	**909**	**438**
Total number of inspections completed in FY2015 for all required Model Years	1,210,134	303,494	29,286	14,946	14,328	8,661	11,561	6,057
Total number of inspections lost under this scenario	447,766	93,587	8,331	3,043	6,693	3,100	4,199	2,079
Percentage exempted	37.00%	30.84%	28.45%	20.36%	46.71%	35.79%	36.32%	34.32%
Total Clark County additional vehicles exempted:								**36.91%**
Total Washoe County additional vehicles exempted:								**30.56%**

Scenario 2 - New vehicle exemption extended to four years, biennial testing up to the eighth year of vehicle life, and annual testing from the ninth year of vehicle life and older.								
Total number of inspections completed in FY2015 by Model Year	**Gasoline**				**Diesel**			
	Light-Duty < 8.5K		**Heavy-Duty (8.5-14K)**		**Light-Duty < 8.5K**		**Heavy-Duty (8.5-14K)**	
Model Year	**Clark**	**Washoe**	**Clark**	**Washoe**	**Clark**	**Washoe**	**Clark**	**Washoe**
2015	844	388	12	8	12	16	2	14
2014	13,314	5,168	169	111	107	92	26	62
2013	**67,776**	**14,258**	**706**	**286**	**757**	**262**	**204**	**150**
2012	**79,060**	**15,386**	**1,204**	**433**	**1,180**	**392**	**683**	**399**
2011	60,611	12,633	939	265	894	330	479	239
2010	**56,236**	**11,062**	**619**	**208**	**569**	**196**	**208**	**117**
2009	46,400	8,954	536	189	487	170	255	119
2008	**75,886**	**15,211**	**1,344**	**458**	**973**	**388**	**892**	**447**
2007	87,776	17,719	1,714	557	1,119	461	804	393
2006	89,162	18,966	2,206	860	1,990	952	1,303	528
2005	88,254	19,770	2,084	756	1,480	948	950	459
2004	79,646	18,704	2,252	798	1,224	910	909	438
Total number of inspections completed in FY2015 for all required Model Years	1,210,134	303,494	29,286	14,946	14,328	8,661	11,561	6,057
Total number of inspections lost under this scenario	278,958	55,917	3,873	1,385	3,479	1,238	1,987	1,113
Percentage exempted	23.05%	18.42%	13.22%	9.27%	24.28%	14.29%	17.19%	18.38%
							Total Clark County additional vehicles exempted:	**22.78%**
							Total Washoe County additional vehicles exempted:	**17.91%**

Scenario 3 - New vehicle exemption extended to six years, biennial testing for 2004 and newer model years, and annual testing for 1968 to 2003 model year vehicles.								
Total number of inspections completed in FY2015 by Model Year	**Gasoline**				**Diesel**			
	Light-Duty < 8.5K		**Heavy-Duty (8.5-14K)**		**Light-Duty < 8.5K**		**Heavy-Duty (8.5-14K)**	
Model Year	**Clark**	**Washoe**	**Clark**	**Washoe**	**Clark**	**Washoe**	**Clark**	**Washoe**
2015	844	388	12	8	12	16	2	14
2014	13,314	5,168	169	111	107	92	26	62
2013	**67,776**	**14,258**	**706**	**286**	**757**	**262**	**204**	**150**
2012	**79,060**	**15,386**	**1,204**	**433**	**1,180**	**392**	**683**	**399**
2011	**60,611**	**12,633**	**939**	**265**	**894**	**330**	**479**	**239**
2010	**56,236**	**11,062**	**619**	**208**	**569**	**196**	**208**	**117**
2009	46,400	8,954	536	189	487	170	255	119
2008	**75,886**	**15,211**	**1,344**	**458**	**973**	**388**	**892**	**447**
2007	87,776	17,719	1,714	557	1,119	461	804	393
2006	**89,162**	**18,966**	**2,206**	**860**	**1,990**	**952**	**1,303**	**528**
2005	88,254	19,770	2,084	756	1,480	948	950	459
2004	**79,646**	**18,704**	**2,252**	**798**	**1,224**	**910**	**909**	**438**
Total number of inspections completed in FY2015 for all required Model Years	1,210,134	303,494	29,286	14,946	14,328	8,661	11,561	6,057
Total number of inspections lost under this scenario	508,377	106,220	9,270	3,308	7,587	3,430	4,678	2,318
Percentage exempted	42.01%	35.00%	31.65%	22.13%	52.95%	39.60%	40.46%	38.27%
							Total Clark County additional vehicles exempted:	**41.88%**
							Total Washoe County additional vehicles exempted:	**34.60%**

Scenario 4 - New vehicle exemption extended to six years, biennial testing up to the eighth year of vehicle life, and annual testing from the ninth year of vehicle life and older.								
Total number of inspections completed in FY2015 by Model Year	**Gasoline**				**Diesel**			
	Light-Duty < 8.5K		**Heavy-Duty (8.5-14K)**		**Light-Duty < 8.5K**		**Heavy-Duty (8.5-14K)**	
Model Year	**Clark**	**Washoe**	**Clark**	**Washoe**	**Clark**	**Washoe**	**Clark**	**Washoe**
2015	844	388	12	8	12	16	2	14
2014	13,314	5,168	169	111	107	92	26	62
2013	**67,776**	**14,258**	**706**	**286**	**757**	**262**	**204**	**150**
2012	**79,060**	**15,386**	**1,204**	**433**	**1,180**	**392**	**683**	**399**
2011	**60,611**	**12,633**	**939**	**265**	**894**	**330**	**479**	**239**
2010	**56,236**	**11,062**	**619**	**208**	**569**	**196**	**208**	**117**
2009	46,400	8,954	536	189	487	170	255	119
2008	**75,886**	**15,211**	**1,344**	**458**	**973**	**388**	**892**	**447**
2007	87,776	17,719	1,714	557	1,119	461	804	393
2006	89,162	18,966	2,206	860	1,990	952	1,303	528
2005	88,254	19,770	2,084	756	1,480	948	950	459
2004	79,646	18,704	2,252	798	1,224	910	909	438
Total number of inspections completed in FY2015 for all required Model Years	1,210,134	303,494	29,286	14,946	14,328	8,661	11,561	6,057
Total number of inspections lost under this scenario	339,569	68,550	4,812	1,650	4,373	1,568	2,466	1,352
Percentage exempted	28.06%	22.59%	16.43%	11.04%	30.52%	18.10%	21.33%	22.32%
							Total Clark County additional vehicles exempted:	**27.76%**
							Total Washoe County additional vehicles exempted:	**21.95%**

APPENDIX F: NEVADA EMISSION TESTERS COUNCIL FISCAL ANALYSIS OF PROPOSED CHANGES AND I/M COMMITTEE ASSESSMENT

F-1 OVERVIEW

On March 18, 2016, Peter Kreuger, on behalf of the Nevada Emission Testers Council, submitted to the I/M Subcommittee a report prepared by the Bosma Group which detailed the fiscal impacts of the proposed changes to the emissions testing industry. The report has been included here in its entirety as Section F-2. Section F-3 contains the I/M Committee assessment of the Bosma report.

F-2 FISCAL ANALYSIS OF PROPOSED CHANGES PROVIDED BY THE NEVADA EMISSION TESTERS COUNCIL

BOSMA GROUP
BUSINESS TAX ACCOUNTING

March 17, 2016

Mr. Peter Krueger, Executive Director
Nevada Emission Testers Council
401 Ryland Street, Suite 105
Reno, NV 89502

Dear Peter:

Thank you for engaging Bosma Group to review and analyze the business and economic impact of the Advisory Sub-Committee on the control of Emissions proposed Scenario 2. This proposal would change the current annual testing of all light duty gasoline and diesel vehicles from after the second model year to after the fourth model year. After the fourth model year, the proposal would require testing every other year for years five through eight. If enacted the proposal would cause an approximate 22.39% reduction in emission tests in Clark and Washoe Counties, combined. Our analysis is as follows:

The proposed Scenario 2 (Fig. 4), currently before the Advisory Sub-Committee on the Control of Emissions from Motor Vehicles (AB146), risks a total cost to The State of Nevada, and concerned citizens, of **$25,155,944**. The recurring costs, which omit Initial Unemployment Benefit Expense, is **$21,122,830**.

- Recurring economic cost of lost wages
- Initial unemployment benefit expenses
- Recurring loss of productivity
- Recurring cost of delayed economic activity
- Recurring lost emission test fees
- Recurring additional emissions cost

These losses, their magnitude, measurement, and rationale, will be explained as presented. This sum draws upon the fragility of the Emissions Testing-Only Industry, comprised mostly of small businesses, which will suffer an aggregate 29.45% Business Cessation Rate[1]. That figure is aggregated across all businesses, not just new entities, and is highly material to the analysis. Furthermore, the industry average of 2015 discretionary owner earnings (D.O.E.) was just **14.77%**[2] in 2015, down from 15.10% in 2012, and 15.70% in 2010. When competing against other businesses (2-G locations) which rely on emissions testing as an add-on, the slim and decreasing margins of the 1-G emissions-only testing location (as compared with the compound 9.5% rate of return of The S&P 500[3] from 1928-2014) would not survive a 22.39% state-wide averaged decrease in demand. As Nevada has a price cap on emissions tests, the increase in prices required to keep the business model feasible would reasonably put businesses reliant on serving the emissions testing needs of Nevadans at a high risk of business cessation. Any price hike in response to the proposed change would do further damage to the value proposition of these best cost providers, and the volume upon which they rely.

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[1] BizMiner: Industry Market Research on NAICS:811198.04[Emissions Testing] covering 2012-2015(q2). *Released: 12/2015.*
[2] BizMiner: Industry Financial Report on NAICS:811198.04[Emissions Testing] covering 2010-2015(q2). *Released: 12/2015.*
[3] MarketWatch: Understanding performance: The S&P 500 Index *2/18/2015.*

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As a result, and with further economic consideration, the stand-alone emissions testing business model would face systemic and unavoidable rationale to doubt continuation as a going concern.

Potential wage loss and employment loss resulting from the above is estimated to be **$15,923,190.** This figure is based upon the reasonable loss of 267[4] jobs, the economic impact this causes year over year, and the initial outlay for unemployment benefits. The calculation used an economic multiplier of 1.24 multiplied by the state-wide average industry pay of $35,913, both figures are readily available through The Governor's Office of Economic Development[5]. The aggregated cost of unemployment benefit is $2,226 per month[6], and the average duration of unemployment, nationally, is roughly 6.7 months[7]. The average base pay of an Emission Control Technician, $43,257, is calculated with a loss of three jobs to account for the decreased need for technicians.

Recurring Economic Cost of Lost Wages: 267 * $35,913 * 1.24 = **$11,890,076**

Initial Technician Unemployment Benefit Expense: 267 * $2,226 * 6.7 = **$3,982,091**

Initial NV Control Tech Unemployment Benefit Expense: 3 * $2,538 * 6.7 = **$51,023**

Lost productivity was calculated using the lost wages method. Absent the 1-G option, 42%[8] of 1,198,478[9] Nevadans required to obtain emissions testing would instead go to the 2-G locations which require an estimated 1.5 additional hours (ignoring increased congestion from fewer locations for added conservatism). Presuming that 377,521 (or 75%) of the 503,361 impacted Nevadans, are in the work-force, and take time away from work at the average state wage (of $16.10), the productivity loss is significant without taking the time to apply any multiplier.

Recurring Lost Productivity: 377,521 * $16.10 = **$6,078,088**

The projected loss from delayed economic activity is based on 2,205 retests which would not have happened in the proposed scenario (compare Fig. 4 and Fig. 5) multiplied by average cost of $123[10] for an emissions repair.

Recurring Cost of Delayed Economic Activity: 2,205 * $123 = **$271,215**

The estimated lost emission test fee is based on $6 per test and 345,745 fewer initial tests (Fig. 4). The lost tax revenue is based on average small business tax payments to state agencies and the 178 at-risk 1-G Stations (Fig.3).

Recurring Lost Emission Test Fees: $6 * 345,745 = **$2,074,470**

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[4] At an average of 1.5 employees per 1-G location per The Nevada Emission Testers Council. *Confirmed via phone on 3/15/2016.*

[5] NAICS Code 811198 modeled within Nevada. *Confirmed via phone on 3/14/2016.*

[6] TANF, SNAP, and Medicaid average costs of $131, $119, and $420, are the average costs per claimant, respectively, per Fiscal Services - The Nevada Welfare Department. Unemployment weekly benefits for private sector technicians of $360, and $433 for NV Control Technicians per The Department of Employment's Research and Analysis Division. *Confirmed via phone on 3/14/2016.*

[7] Federal Reserve Bank of St. Louis: https://research.stlouisfed.org/fred2/series/LNU03008275. *3/15/2016.*

[8] The ratio of 1-G to total testing stations, excluding the diesel-only location (Fig. 1).

[9] 1,544,223 tests in 2015, minus 345,745 tests not required under the concerned scenario (Fig. 4).

[10] http://ageconsearch.umn.edu/bitstream/10915/1/dp990023.pdf. *3/15/2016.*

The economic cost of increased emissions is based on the report found on Figure 6, and the costs of 2392 per ton of VOC, 10293 per ton for NOx, and 205 per ton of CO[11].

Recurring Additional Emissions Cost: ($2,392 * 39.8) + ($10,293 * 47.4) + ($205 * 1,099.4) = **$808,981**

The Bosma Group, P.C. is pleased to present this estimated fiscal impact and analysis resulting from proposed changes to emissions testing requirements in Washoe and Clark Counties. In looking at the impact, the vast majority of figures are publically available, readily confirmable, or a combination of the two. Where assumptions, estimates, or averages were used, including those obtained from offices of The State of Nevada, this is disclaimed. The above analysis does not include the loss of tax revenue from business closure, nor ancillary impacts of unemployment, including increased benefit costs for childcare, increased benefit costs relating to mental health, nor the impact to low wage earners. The latter concerns impact to the most vulnerable Nevadans, those most reliant upon the convenience afforded by stand-alone 1-G testing locations, having the least flexibility.

The findings in this report are based on data that you provided, and certain assumptions. We did not independently verify this data or attest to the sufficiency of the assumptions. The findings could materially change if either the data or assumptions change.

Very truly yours,

BOSMA GROUP, P.C.

Michael D. Bosma, CPA
Managing Shareholder

MDB/act

[11] Transportation Cost and Benefit Analysis II – Air Pollution Costs http://www.vtpi.org/tca/tca0510.pdf. *3/15/2016.*

Appendix:

Figure 1: Total 2015 Emission Inspectors (Private Sector Employees)

2015 Emission Inspectors				
Inspector Type	**Carson City**	**Washoe County**	**Clark County**	**Statewide**
1-G Inspectors	1	196	531	728
2-G Inspectors	2	133	294	429
Diesel Only Inspectors	0	7	0	7
Total	**3**	**336**	**825**	**1164**

* Data provided by the Department of Motor Vehicles is based on the data obtained from the DMV Application. This data is constantly changing due to changes in business license activity and has been provided for statistical reference.

Source: Washoe County Health District, Air Quality Management Division

Figure 2: State Employees in Emission Program

DMV Services Manager (1)
Management Analyst (1)
Program Officers (2)
Environmental Scientist (1)
Supervising Emission Control Officers (2)
Administrative Assistants (2)
Emission Control Technicians (17)
Compliance Enforcement Investigators (10)
Supervisory Compliance Enforcement Investigators (1)
IT Professionals (2)

Source: Washoe County Health District, Air Quality Management Division

Figure 3: 2015 Emission Stations

2015 Emission Stations				
	Carson City	Washoe County	Clark County	Statewide
1-G Stations	0	37	141	178
2-G Stations	2	71	171	244
Diesel Only Stations	0	1	0	1
Total	**2**	**109**	**312**	**423**

* Data provided by the Department of Motor Vehicles is based on the data obtained from the DMV Application. This data is constantly changing due to changes in business license activity and has been provided for statistical reference.

Source: Washoe County Health District, Air Quality Management Division

Figure 4: Proposed Scenario 2

Scenario 2 - This data was obtained for Fiscal Year 2015, from a DMV Application Report and provided by the Department of Motor Vehicles.

Number of Tests completed for both Gasoline and Diesel Powered Vehicles in Fiscal Year 2015. Carson City statistics are based on an accumulation of inspections completed for vehicles that are based in Washoe County while having a zip code that is shared with Carson City.

Initial Inspections completed in Fiscal Year 2015 by Model Year	Gasoline				Diesel			
	Light-Duty < 8.5K		Heavy-Duty (8.5 - 14K)		Light-Duty < 8.5K		Heavy-Duty (8.5 - 14K)	
Model Year	Clark	Washoe	Clark	Washoe	Clark	Washoe	Clark	Washoe
2015	844	388	12	8	12	16	2	14
2014	13,304	5,166	169	111	107	92	26	62
2013	**67,603**	**14,229**	**705**	**286**	**757**	**262**	**204**	**150**
2012	**78,774**	**15,346**	**1,202**	**433**	**1,179**	**392**	**681**	**398**
2011	60,340	12,595	938	264	893	329	476	239
2010	**55,895**	**10,996**	**618**	**208**	**564**	**196**	**206**	**117**
2009	45,937	8,892	534	189	484	170	254	119
2008	**74,787**	**15,089**	**1,337**	**457**	**964**	**386**	**879**	**445**
2007	85,971	17,485	1,709	555	1,109	460	794	386
2006	86,820	18,605	2,192	854	1,965	949	1,278	524
2005	85,568	19,342	2,076	754	1,474	943	943	455
2004	76,980	18,215	2,237	796	1,205	901	897	434
Total Number of Tests lost by the negation of the above highlighted areas	277,059	55,660	3,862	1,384	3,464	1,236	1,970	1,110
Total number of initial inspections completed in Fiscal Year 2015 for all required Model Years	1,167,481	293,222	28,661	14,568	14,210	8,619	11,444	6,018
Percentage:	23.73%	18.98%	13.47%	9.50%	24.38%	14.34%	17.21%	18.44%

* Projections based on Fiscal Year 2015 Data		
	Total Clark County additional vehicles exempted:	**23.44%**
	Total Washoe County additional vehicles exempted:	**18.42%**

Figure 5: Scenario two, including 2,205 fewer retests in Scenario 2

Scenario 2 - The Department of Motor Vehicles will not be using this data for the purpose of a fiscal impact as it includes the total number of initial inspections, re-inspections, and subsequent inspections. These numbers are for statistical reference of Fiscal Year 2015 only.

Number of Tests completed for both Gasoline and Diesel Powered Vehicles in Fiscal Year 2015. Carson City statistics are based on an accumulation of inspections completed for vehicles that are based in Washoe County while having a zip code that is shared with Carson City.

Total Number of Inspections completed in Fiscal Year 2015 by Model Year	Gasoline				Diesel			
	Light-Duty < 8.5K		Heavy-Duty (8.5 - 14K)		Light-Duty < 8.5K		Heavy-Duty (8.5 - 14K)	
Model Year	Clark	Washoe	Clark	Washoe	Clark	Washoe	Clark	Washoe
2015	844	388	12	8	12	16	2	14
2014	13,314	5,168	169	111	107	92	26	62
2013	**67,776**	**14,258**	**706**	**286**	**757**	**262**	**204**	**150**
2012	**79,060**	**15,386**	**1,204**	**433**	**1,180**	**392**	**683**	**399**
2011	60,611	12,633	939	265	894	330	479	239
2010	**56,236**	**11,062**	**619**	**208**	**569**	**196**	**208**	**117**
2009	46,400	8,954	536	189	487	170	255	119
2008	**75,886**	**15,211**	**1,344**	**458**	**973**	**388**	**892**	**447**
2007	87,776	17,719	1,714	557	1,119	461		

Figure 6: MOVES2014 modeling runs for I/M Subcommittee (July, 2018)

MOVES2014 modeling runs for I/M Subcommittee (July, 2018)					VOC	NOx	CO	VOC	NOx	CO
	Scenario	New Vehicle Exemption	Testing Frequency	Oldest Vehicle Tested	(tons/day)			(% increase)		
Clark County	Baseline	2 years	Annual	1968	20.957	35.543	261.195			
	1	4 years	Biennial for 2004 and newer model years, and Annual for older	1968	21.166	35.711	264.884	1.0%	0.5%	1.4%
	2	4 years	Biennial up to 8th year of vehicle life, then Annual thereafter	1968	21.049	35.644	263.655	0.4%	0.3%	0.9%
	3	6 years	Biennial for 2004 and newer model years, and Annual for older	1968	21.257	35.838	268.089	1.4%	0.8%	2.6%
	4	6 years	Biennial up to 8th year of vehicle life, then Annual thereafter	1968	21.139	35.771	266.860	0.9%	0.6%	2.2%
	No I/M Program				23.532	38.303	310.545	12.3%	7.8%	18.9%
Washoe County	Baseline	2 years	Annual	1968	5.359	13.370	70.729			
	1	4 years	Biennial for 2004 and newer model years, and Annual for older	1968	5.393	13.414	71.472	0.6%	0.3%	1.1%
	2	4 years	Biennial up to 8th year of vehicle life, then Annual thereafter	1968	5.376	13.399	71.281	0.3%	0.2%	0.8%
	3	6 years	Biennial for 2004 and newer model years, and Annual for older	1968	5.414	13.450	72.162	1.0%	0.6%	2.0%
	4	6 years	Biennial up to 8th year of vehicle life, then Annual thereafter	1968	5.397	13.435	71.972	0.7%	0.5%	1.8%
	No I/M Program				6.201	14.178	83.150	15.7%	6.0%	17.6%

F-3 I/M COMMITTEE ASSESSMENT OF THE BOSMA REPORT

Representatives of the emissions testing industry attended the meetings held by the I/M Subcommittee, were given the opportunity to provide input to both the Subcommittee and the full I/M Committee, and provided an analysis of the expected impact of recommended program changes. The Nevada Emission Testers Council submitted a review and analysis of the business and economic impacts that would result from the programmatic changes proposed in Scenario 2. The Bosma Group report in Section F-2 presented not just the direct impacts to the emission testing industry, but also factored in the economic multiplier effects to the broader economy of the State. The report's projected impacts that would result from implementing Scenario 2 can be summarized as:

- A total cost to the State of $25,155,944; these costs includes lost wages, initial unemployment benefit expenses, costs of lost productivity and delayed economic activity, lost tax revenue and emission test certificate fees, and the costs to society of increased emissions;

- The stand-alone emission test stations (1G stations) suffer from low earnings and cannot rely on other revenue sources such as parts and repair sales; the business model for stand-alone stations would be threatened;

- Due to the fragility of the testing industry, an expected 29.45 percent business cessation rate would occur, disproportionately affecting the 1G stations;

- With fewer 1G stations to select from, Nevada motor vehicle owners would likely have to drive to 2G locations, incurring additional wait times and lost productivity.

The I/M Committee is sensitive to the economic impacts to the emission testing industry that may result from proposed changes in testing frequency. In a decentralized testing program such as Nevada's a viable and competitive private testing industry is vital for keeping testing fees reasonable for motor vehicle owners. A healthy emissions testing industry also provides motorists with numerous and convenient testing locations, as well as short wait times.

The estimated 22 percent reduction in annual tests performed will undoubtedly have some negative impact on the emissions testing industry. However, the Bosma report may be overstating the effects of a programmatic change in several respects:

- The maximum labor rates charged by testing stations to perform an inspection are annually set by the DMV. The maximum labor rates are based on an annual survey of 2G and diesel station labor rates. Table F-1 shows the maximum allowable labor rate that could have been charged by a station in 2015. However, the average labor rate charged to perform an inspection is well below the maximum (less than half for CY2015), providing some margin for the testing stations to increase their rates to make up for expected revenue losses. Table F-2 shows the average labor rates for 1G and 2G stations in Clark and Washoe counties performing an initial inspection of a light-duty gasoline-

powered vehicle. As surveyed labor rates increase, the DMV correspondingly increases the cap;

- The emissions testing industry, particularly 1G stations, have shown the ability to respond to changing market conditions. Both the number of tests performed and the number of licensed emission testing stations have increased by roughly 1 to 1.5 percent per year over the last 12 years. Some contraction in the number of these stations will likely occur, however, a complete collapse of the 1G station segment of the industry is doubtful. The testing industry will adjust to the number of tests the market requires, though this period of adjustment may be painful for the industry to bear initially; and

- The expected societal costs of emission increases are not likely to be incurred. As stated in Section 7 of the main report, the I/M Committee expects that increases in emissions resulting from implementation of Scenario 2 would be less than 1 percent (see Tables 7-2 and 7-3) and would be offset by expected reductions in emissions due to other local efforts and federal emission reduction programs that will be instituted in the next several years.

Table F-1. DMV Maximum Allowable Labor Rates for CY2015

Vehicle Type	Clark County	Washoe County
Light Duty – Gasoline	$36.50	$36.00
Heavy Duty – Gasoline	$34.50	$36.00
Diesel	$39.50	$34.00

Due to the 22 percent reduction in annual tests that is expected to have some impact on emissions testing industry revenue, it may be appropriate to make some adjustment in the DMV capped rate to compensate for expected losses. The I/M Committee recommends consideration of an increase to the maximum labor rate in order to offset expected industry revenue shortfalls. This increase would be on par with the expected percent reduction of annual tests, but would still retain DMV's authority to set maximum labor rates intended to protect motor vehicle owners from being charged excessive testing fees.[108] Table F-2 shows the expected industry loss based on average labor rates charged for initial vehicle inspections by the industry should there be no changes to labor rates. The expected industry loss associated with initial inspections of light-duty gasoline powered vehicles should the I/M Committee's recommendation be implemented with no change to the average labor rate totals more than $4.8 million. The emissions testing industry did not provide a similarly conceived total for the I/M Committee to compare against.

[108] As a point of comparison, in Clark County the maximum labor rate for light-duty gasoline vehicles for 2015 was $36.50. With the addition of the $6.00 certificate fee, the maximum test fee is $42.50, though many test stations provide discounts that result in total testing fees of around $20. If the certificate fee were increased to $7.75 as proposed, and the labor rate increased by 20 percent, motorists could expect light-duty gasoline vehicle emission tests to range in cost from about $24 to a maximum of $52 in Clark County (Washoe County would be slightly less).

Table F-2. Expected Industry Loss Based on Average Initial Inspection Labor Rate Charged by Stations in FY2015 *

Vehicle Model Year	Clark County		Washoe County	
	Station Type		Station Type	
	1G	2G	1G	2G
2015	98	746	112	276
2014	3,357	9,947	1,636	3,530
2013	38,121	29,482	7,145	7,084
2012	46,616	32,158	8,731	6,615
2011	37,587	22,753	7,346	5,249
2010	36,298	19,597	6,673	4,323
2009	30,078	15,859	5,444	3,448
2008	49,968	24,819	9,349	5,740
2007	58,171	27,800	10,772	6,713
2006	59,585	27,235	11,561	7,044
2005	59,165	26,403	11,722	7,620
2004	53,811	23,169	11,097	7,118
Total number of initial inspections completed in FY2015 for all required Model Years	776,008	391,473	166,393	126,829
Total number of inspections not conducted under recommended Scenario 2	171,003	106,056	31,898	23,762
Average Labor Rate Charged by stations in FY2015	$14.05	$13.78	$17.82	$16.67
Industry Loss based on Average Labor Rate charged in FY2015	$2,402,592.15	$1,461,451.68	$568,422.36	$396,112.54

* This table only considers losses associated with initial inspections conducted on light-duty gasoline powered vehicles. Average labor rates will vary by county and vehicle type.

APPENDIX G: LEGISLATIVE AND REGULATORY HISTORY OF SPECIAL LICENSE PLATE EXEMPTIONS

G-1 OVERVIEW

The following is a review of the legislative history of statutes and regulations associated with ownership of specialty license plates. The focus of the review is on Classic (includes both Classic Vehicles and Classic Rods) and Old Timer vehicles as they are currently the only ones subject to exemption from emissions testing. Historical changes associated with NRS 445B.760 are also included since this statute currently triggers exemptions for Classic and Old Timer vehicles.

Text of a statute or a regulation that is expressed in italicized blue font indicates that the text was added during the legislative session (e.g., *added text*). Text of a statute or a regulation that is expressed in bracketed red font, with a strikethrough line across the middle, indicates that the text was deleted during the legislative session (e.g., [~~deleted text~~]).

G-2 1973 LEGISLATIVE SESSION

The first significant Clean Air Act (Act) legislation was passed by Congress in 1970. That same year, EPA was established. EPA obtained authority to regulate motor vehicle pollution by enforcing the emissions standards set forth in the Act.

G-2.1 Creation of NRS 445.620 (precedes NRS 445B.760)

During the 1973 legislative session, the Nevada legislature passed legislation enacting NRS 445.620, which provided authority within the state to carry out federal regulatory mandates. The following year, the Department of Motor Vehicles implemented a pilot emissions inspection program within Clark County.[109]

> **NRS 445.620**
> *1. The state environmental commission may by regulation prescribe standards for exhaust emissions, fuel evaporative emissions and visible smoke emissions from mobile internal combustion engines on the ground or in the air, including but not limited to aircraft, motor vehicles, snowmobiles and railroad locomotives.*
> *2. Such regulations shall be uniform throughout the state.*

G-2.2 Creation of NRS 482.381 (Old Timer vehicle)

During the same 1973 legislative session, state legislators enacted NRS 482.381. This statute permitted owners of certain vehicles manufactured more than 40 years ago to acquire special license plates. Owners that acquired these plates for this class of vehicle (an *Old Timer* vehicle) paid a lower license plate fee than the regular plate fee.

The legislators specifically intended that the statute not apply to vehicles used for general transportation. If the vehicles were used for general transportation, the owner was required to pay the regular license plate fees. The types of transportation that were permissible for *Old Timer*

[109] John Foody (NDEP), *History of I/M Program*, p. 1.

vehicles included transportation for " . . . *club activities, exhibitions, tours, parades or similar activities*."[110]

At the time this legislation was passed, no exemption from emissions testing was provided to owners of vehicles with special license plates.

> **NRS 482.381**
> *1. The department may issue special license plates and registration certificates to residents of Nevada for any motor vehicle which is a model manufactured more than 40 years prior to the date of application for registration under this section. Except as provided in subsection 4, any such vehicle shall not be used for general transportation, but may be used for club activities, exhibitions, tours, parades or similar activities.*
> *2. In lieu of the annual registration and fees required by this chapter, and of the privilege tax imposed by chapter 371 of NRS, the owner of a vehicle described in subsection 1 may submit an affidavit to the department indicating that the vehicle will only be used for the permitted purposes enumerated in subsection 1 and that the vehicle has been inspected and found safe to be operated on the highways of this state, and pay a $12.50 fee.*
> *3. If the owner complies with the requirements of subsection 2, the department may issue the owner license plates and a registration certificate which will expire when the owner sells or dismantles the vehicle.*
> *4. If the owner elects to use the vehicle as general transportation, he shall pay the regular license plate fees as prescribed by law.*
> *5. License plates issued pursuant to this section shall bear the inscription "Old Timer" and the plates shall be numbered consecutively.*
> *6. The Nevada Old Timer Club members shall bear the cost of the dies for the implementation of this section.*

G-3 1979 LEGISLATIVE SESSION

During the 1979 legislative session, the Committee on *Transportation* sponsored Assembly Bill 679 (AB 679). The bill introduced legislation focused on emissions testing for trimobile vehicles.

G-3.1 Revision of NRS 445.620 (extraneous)

The act amended NRS 445.620 as follows:

> **NRS 445.620**
> 1. The state environmental commission may by regulation prescribe standards for exhaust emissions, fuel evaporative emissions and visible smoke emissions from mobile internal combustion engines on the ground or in the air, including but not limited to aircraft, motor vehicles, snowmobiles and railroad locomotives.
> 2. *Standards for exhaust emissions which apply to a trimobile must be based on standards which were in effect in the year in which the engine of the trimobile was built.*
> *3.* Such regulations [~~shall~~] *must* be uniform throughout the state.

[110] NRS 482.381.1 (ver. 1973).

G-4 1985 LEGISLATIVE SESSION

During the 1985 legislative session, the Committee on *Natural Resources, Agriculture and Mining* sponsored AB 61. The resulting statute provided DMV approval authority for emissions standards prior to adoption.

G-4.1 Revision of NRS 445.620 (extraneous)

The act amended NRS 445.620 as follows:

> **NRS 445.620**
> 1. The state environmental commission may by regulation prescribe standards for exhaust emissions, fuel evaporative emissions and visible **[**~~smoke~~**]** emissions *of smoke* from mobile internal combustion engines on the ground or in the air, including but not limited to aircraft, motor vehicles, snowmobiles and railroad locomotives.
> 2. Standards for exhaust emissions which apply to a trimobile must be based on standards which were in effect in the year in which the engine of the trimobile was built.
> 3. **[**~~Such regulations must be uniform throughout the state.~~**]** *Any such standards which pertain to motor vehicles must be approved by the department of motor vehicles before they are adopted by the commission.*

G-5 1989 LEGISLATIVE SESSION

During the 1989 legislative session, legislators passed AB 468. The resulting statute authorized an owner of a *street rod* vehicle (i.e., a vehicle manufactured not later than 1948) or a *classic rod* vehicle (i.e., a vehicle manufactured at least 20 years ago, but not prior to 1948) to acquire special license plates.

Unlike the transportation restrictions imposed on *Old Timer* vehicles, which limited vehicle usage to " . . . *club activities, exhibitions, tours, parades or similar activities*," no transportation restrictions were placed on *street rod* or *classic rod* vehicles. [111]

G-5.1 Creation of NRS 482.3812 and .3814 (street rod and classic rod vehicles)

At the time this legislation was passed, an emissions testing exemption was not provided to owners of vehicles with special license plates. The statute reads as follows:

> **NRS 482.3812**
> *1. The department may issue special license plates and registration certificates to residents of Nevada for any passenger car or light commercial vehicle:*
> *(a) Having a manufacturer's rated carrying capacity of 1 ton or less; and*
> *(b) Manufactured not later than 1948.*
> *2. License plates issued pursuant to this section must be inscribed with the words STREET ROD and three or four consecutive numbers.*
> *3. If during a registration year, the holder of special plates issued pursuant to this section disposes of the vehicle to which the plates are affixed, he shall retain the plates and:*
> *(a) Affix them to another vehicle which meets the requirements of this section and report the change to the department in accordance with the procedure set forth for other transfers; or*
> *(b) Within 30 days after removing the plates from the vehicle, return them to the department.*

[111] NRS 482.381.1 (ver. 1973).

4. The fee for the special license plates is $25, in addition to all other applicable registration and license fees and motor vehicle privilege taxes. If the special plates are lost, stolen or mutilated, the owner of the vehicle may secure a set of replacement license plates from the department for a fee of $2.

NRS 482.3814

1. The department may issue special license plates and registration certificates to residents of Nevada for any passenger car or light commercial vehicle:

(a) Having a manufacturer's rated carrying capacity of 1 ton or less; and

(b) Manufactured not earlier than 1949, but at least 20 years before the application is submitted to the department.

2. License plates issued pursuant to this section must be inscribed with the words CLASSIC ROD and three or four consecutive numbers.

3. If during a registration year, the holder of special plates issued pursuant to this section disposes of the vehicle to which the plates are affixed, he shall retain the plates and:

(a) Affix them to another vehicle which meets the requirements of this section and report the change to the department in accordance with the procedure set forth for other transfers; or

(b) Within 30 days after removing the plates from the vehicle, return them to the department.

4. The fee for the special license plates is $25, in addition to all other applicable registration and license fees and motor vehicle privilege taxes. If the special plates are lost, stolen or mutilated, the owner of the vehicle may secure a set of replacement license plates from the department for a fee of $2.

G-6 1991 LEGISLATIVE SESSION

During the 1991 legislative session, the Committee on Transportation sponsored AB 557. The act removed the transportation restrictions imposed on *Old Timer* vehicles, i.e., those that limited vehicle usage to ". . . *club activities, exhibitions, tours, parades or similar activities*."[112] As a result, *Old Timer*, *street rod*, and *classic rod* vehicles were allowed to be used for general transportation.

G-6.1 Revision of NRS 482.381 (Old Timer vehicle)

At the time this legislation was passed, an emissions testing exemption was not provided to owners of vehicles with special license plates. The statute reads as follows:

NRS 482.381

1. The department may issue special license plates and registration certificates to residents of Nevada for any motor vehicle which is a model manufactured more than 40 years [~~prior to~~] *before* the date of application for registration [~~under~~] *pursuant to* this section. [~~Except as provided in subsection 4, any such vehicle shall not be used for general transportation, but may be used for club activities, exhibitions, tours, parades or similar activities.~~

~~2. In lieu of the annual registration and fees required by this chapter, and of the privilege tax imposed by chapter 371 of NRS, the owner of a vehicle described in subsection 1 may submit an affidavit to the department indicating that the vehicle will only be used for the permitted purposes enumerated in subsection 1 and that the vehicle has been inspected and found safe to be operated on the highways of this state, and pay a $12.50 fee.~~

~~3. If the owner complies with the requirements of subsection 2, the department may issue the owner license plates and a registration certificate which will expire when the owner sells or dismantles the vehicle.~~

~~4. If the owner elects to use the vehicle as general transportation, he shall pay the regular license plate fees as prescribed by law.~~

[112] NRS 482.381.1 (ver. 1973).

~~5.~~] *2.* License plates issued pursuant to this section [~~shall~~] *must* bear the inscription "Old Timer" and the plates [~~shall~~] *must* be numbered consecutively.

[~~6.~~] *3.* The Nevada Old Timer Club members shall bear the cost of the dies for [~~the implementation~~] *carrying out the provisions* of this section.

4. The department shall charge and collect the following fees for the issuance of these license plates, which fees are in addition to all other license fees and motor vehicle taxes:

(a) For the first issuance..... $15

(b) For a renewal sticker..... 5

G-7 1995 LEGISLATIVE SESSION

During the 1995 legislative session, AB 289 authorized issuance of special license plates to a "*classic vehicle*." Unlike a *classic rod* vehicle that could achieve qualifying status based solely on the age of the vehicle, a *classic vehicle* was additionally required to have only " . . . *original parts which were used to manufacture the vehicle or replacement parts that duplicate those original parts*." [113]

G-7.1 Creation of NRS 482.3816 (classic vehicle)

At the time this legislation was passed, an emissions testing exemption was not provided to owners of vehicles with special license plates. The statute reads as follows:

NRS 482.3816

1. The department may issue special license plates and registration certificates to residents of Nevada for any passenger car or light commercial vehicle:

(a) Having a manufacturer's rated carrying capacity of 1 ton or less;

(b) Manufactured at least 25 years before the application is submitted to the department; and

(c) Containing only the original parts which were used to manufacture the vehicle or replacement parts that duplicate those original parts.

2. License plates issued pursuant to this section must be inscribed with the words CLASSIC VEHICLE and three or four consecutive numbers.

3. If during a registration year, the holder of special plates issued pursuant to this section disposes of the vehicle to which the plates are affixed, he shall retain the plates and:

(a) Affix them to another vehicle which meets the requirements of this section and report the change to the department in accordance with the procedure set forth for other transfers; or

(b) Within 30 days after removing the plates from the vehicle, return them to the department.

4. The fee for the special license plates is $35, in addition to all other applicable registration and license fees and motor vehicle privilege taxes. The fee for an annual renewal sticker is $10.

G-8 1997 LEGISLATIVE SESSION

During the 1997 legislative session, the legislators passed Senate Bill 430 (SB 430). The subject matter of the bill had both a procedural and substantive component. Procedurally, the bill transferred the text of NRS 445.620 to NRS 445B.760, and then deleted NRS 445.620. Substantively, the bill introduced, for the first time, statutory language that would exempt certain types of vehicles from emissions testing.

[113] NRS 482.3816.1.

To be exempt, the bill required that a vehicle meet the definition of a "restored" vehicle, as defined by regulation.[114]

SB 430 was debated within the *Assembly Committee on Transportation* prior to its passage.[115] During a committee meeting, one senator asserted that restored vehicles " . . . *would not be required to meet smog requirements because they were typically in mint condition with rebuilt engines*."[116] When the Chairwoman inquired as to how someone would know whether the vehicle was clean-running, the response was that the provisions to meet emission standards were in the statutes.[117]

The Chairwoman also indicated that it was very important to the committee that there not be a loophole in the law to allow owners of smoking vehicles or vehicles not in good condition to purchase a license plate without emissions testing.[118]

Interestingly, the only vehicles specifically referenced were " . . . *classic rods, street rods, and old timers*."[119] By one estimate, the total number of affected vehicles was estimated to be " . . . *about 700 cars*."[120] In another estimate, the approximate inventory of *classic rod*, *street rod*, and *Old Timer* vehicles were: [121]

Classic Rods:	57
Street Rods:	22
Old Timers:	446
Total:	525

One of the senators from the *Senate Transportation Committee* who presented the bill noted that the *Old Timer* vehicles were already exempt and that he felt that the total number of vehicles exempted by the bill was 79 vehicles statewide (i.e., 57 *classic rod* vehicles and 22 *street rod* vehicles).[122] He also noted that the Senate Transportation Committee had a commitment from the Washoe and Clark County air quality agencies that if the bill was codified to only include those cars that had the special license plates for "*show cars*," they would support the bill.[123]

NDEP testified about its concern that the bill needed much tighter controls on what vehicles could be exempted from emission control requirements.[124] NDEP indicated that it would not be concerned about collector cars, but that it was concerned with the way the bill was written and the definition of classic car qualifications that would create a large loophole for old,

[114] NRS 445B.760.1(c).
[115] Minutes of the Assembly Committee on Transportation, Sixty-ninth Session http://www.leg.state.nv.us/Session/69th1997/97minutes/AM/TR/am7-02TR.htm (July 2, 1997).
[116] *Id*. at p.2.
[117] *Id*. at p.3.
[118] Minutes of the Assembly Committee on Transportation, Sixty-ninth Session http://www.leg.state.nv.us/Session/76th2011/Minutes/Assembly/TRN/Final/308.pdf, p.4 (July 3, 1997).
[119] Minutes of the Assembly Committee on Transportation, Sixty-ninth Session http://www.leg.state.nv.us/Session/69th1997/97minutes/AM/TR/am7-02TR.htm, p.2 (July 2, 1997).
[120] *Id*. at p.5.
[121] *Id*. at p.3.
[122] *Id*. at p.6.
[123] *Id*.
[124] *Id*. at p.5.

unmaintained cars that were gross emitters of smog.[125] NDEP indicated that it wanted to avoid a situation where any vehicle 20 years old or older could obtain an exemption from emissions testing.[126]

G-8.1 Creation of NRS 445B.760 (restored vehicles)

The final form of the statute arising from SB 430 reads as follows:

> **NRS 445B.760**
>
> 1. The state environmental commission may by regulation prescribe standards for exhaust emissions, fuel evaporative emissions and visible emissions of smoke from mobile internal combustion engines on the ground or in the air, including, but not limited to, aircraft, motor vehicles, snowmobiles and railroad locomotives. *The regulations must:*
>
> *(a) Provide for the exemption from such standards of restored vehicles for which special license plates have been issued pursuant to NRS 482.381, 482.3812, 482.3814 or 482.3816.*
>
> *(b) Establish criteria for the condition and functioning of a restored vehicle to qualify for the exemption, and provide that the evaluation of the condition and functioning of such a vehicle may be conducted at an authorized inspection station or authorized station as defined in NRS 445B.710 and 445B.720, respectively.*
>
> *(c) Define "restored vehicle" for the purposes of the regulations.*
>
> 2. Standards for exhaust emissions which apply to a trimobile must be based on standards which were in effect in the year in which the engine of the trimobile was built.
>
> 3. Any such standards which pertain to motor vehicles must be approved by the department of motor vehicles and public safety before they are adopted by the commission.

G-8.2 Creation of NAC 445B.6115 and .6125 (restored vehicle definition)

NAC 445B.592 includes a list of motor vehicles that have been exempted from emissions testing requirements.[127] The statutory mandate for exempting and defining restored vehicles, pursuant to NRS 445.760.1(a) and 445.760.1(c), were adopted in separate regulations. The provisions for exemption were incorporated into NAC 445B.6115, and "restored vehicles" were defined in NAC 445B.6125.[128]

> ***NAC 445B.6115***
>
> *The provisions of NAC 445B.575 to 445B.601, inclusive, do not apply to a motor vehicle that is certified as a restored vehicle by the Department pursuant to NAC 445B.6125.*

> ***NAC 445B.6125***
>
> *The Department may certify a motor vehicle as a restored vehicle if the motor vehicle:*
>
> *1. Is licensed pursuant to NRS 482.381, 482.3812, 482.3814 or 482.3816;*
>
> *2. Does not emit smoke;*
>
> *3. Has an engine that complies with the standards for emissions set forth in NAC 445B.596 for the model year of the motor vehicle as determined by a two-speed emissions test conducted by the Department pursuant to NRS 445B.798 or conducted at an authorized station or authorized inspection station; and*

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[125] *Id.*

[126] Minutes of the Assembly Committee on Transportation, Sixty-ninth Session http://www.leg.state.nv.us/Session/76th2011/Minutes/Assembly/TRN/Final/308.pdf, p.4 (July 3, 1997).

[127] Some of the vehicles exempted under NRS 445B.592 include: (i) Motorcycles or mopeds, (ii) New vehicles until the third registration, and (iii) Vehicles with model years prior to 1968.

[128] LCB File No. R205-97 (March 5, 1998).

4. Has been certified upon each annual registration required pursuant to NRS 482.205 to have been driven not more than 2,500 miles since the immediately preceding annual registration, if any.

G-9 2001 LEGISLATIVE SESSION

During the 2001 legislative session, the Department of Motor Vehicles and Public Safety was reorganized into two separate departments. SB 481 made the appropriate changes to statutory references.

G-9.1 Revision of NRS 445B.760 (extraneous)

The act amended NRS 445B.760 as follows:

NRS 445B.760

1. The state environmental commission may by regulation prescribe standards for exhaust emissions, fuel evaporative emissions and visible emissions of smoke from mobile internal combustion engines on the ground or in the air, including, but not limited to, aircraft, motor vehicles, snowmobiles and railroad locomotives. The regulations must:

(a) Provide for the exemption from such standards of restored vehicles for which special license plates have been issued pursuant to NRS 482.381, 482.3812, 482.3814 or 482.3816.

(b) Establish criteria for the condition and functioning of a restored vehicle to qualify for the exemption, and provide that the evaluation of the condition and functioning of such a vehicle may be conducted at an authorized inspection station or authorized station as defined in NRS 445B.710 and 445B.720, respectively.

(c) Define "restored vehicle" for the purposes of the regulations.

2. Standards for exhaust emissions which apply to a trimobile must be based on standards which were in effect in the year in which the engine of the trimobile was built.

3. Any such standards which pertain to motor vehicles must be approved by the department of motor vehicles [~~and public safety~~] before they are adopted by the commission.

G-10 2009 LEGISLATIVE SESSION

During the 2009 legislative session, AB 414 exempted trimobiles from emissions standards if they met the federal definition of a motorcycle. The bill also required both trimobiles that do not meet the federal definition of a motorcycle and reconstructed vehicles to meet the emissions standards that were in effect the year in which the engine of the trimobile or reconstructed vehicle was built.

G-10.1 Revision of NRS 445B.760 (extraneous)

The act amended NRS 445B.760 as follows:

NRS 445B.760

1. The [~~State Environmental~~] Commission may by regulation prescribe standards for exhaust emissions, fuel evaporative emissions and visible emissions of smoke from mobile internal combustion engines on the ground or in the air, including, but not limited to, aircraft, motor vehicles, snowmobiles and railroad locomotives. The regulations must:

(a) Provide for the exemption from such standards of restored vehicles for which special license plates have been issued pursuant to NRS 482.381, 482.3812, 482.3814 or 482.3816.

(b) Establish criteria for the condition and functioning of a restored vehicle to qualify for the exemption, and provide that the evaluation of the condition and functioning of such a vehicle may

be conducted at an authorized inspection station or authorized station as defined in NRS 445B.710 and 445B.720, respectively.

(c) Define "restored vehicle" for the purposes of the regulations.

2. [~~Standards~~] *Except as otherwise provided in subsection 3, standards* for exhaust emissions which apply to a [~~trimobile~~]*:*

(a) Reconstructed vehicle, as defined in NRS 482.100; and

(b) Trimobile, as defined in NRS 482.129, must be based on standards which were in effect in the year in which the engine of the [~~trimobile~~] *vehicle* was built.

3. *A trimobile that meets the definition of a motorcycle in 40 C.F.R. § 86.402-78 or 86.402-98, as applicable, is not subject to emissions standards under this chapter.*

4. Any such standards which pertain to motor vehicles must be approved by the Department of Motor Vehicles before they are adopted by the Commission.

G-11 2011 LEGISLATIVE SESSION

During the 2011 legislative session, the legislators passed AB 2. The bill provided for the exemption of older vehicles that had been issued special license plates from emissions testing requirements if the owner certified that the vehicle had not been driven more than 5,000 miles during the previous year.

G-11.1 Revision of NRS 445B.760 (elimination of restored vehicles)

The stated intent for increasing the amount of allowable annual miles was to " . . . accommodate restored vehicle owners who travel to car shows in other states several times a year."[129] The act amended NRS 445B.760, and this revision remains in place today:

NRS 445B.760

1. The Commission may by regulation prescribe standards for exhaust emissions, fuel evaporative emissions and visible emissions of smoke from mobile internal combustion engines on the ground or in the air, including, but not limited to, aircraft, motor vehicles, snowmobiles and railroad locomotives. The regulations must [~~:~~

~~(a) Provide~~] *provide* for the exemption from such standards of [~~restored vehicles~~] *a vehicle* for which special license plates have been issued pursuant to NRS 482.381, 482.3812, 482.3814 or 482.3816 [~~.~~

~~(b) Establish criteria for the condition and functioning of a restored vehicle to qualify for the exemption, and provide that the evaluation of the condition and functioning of such a vehicle may be conducted at an authorized inspection station or authorized station as defined in NRS 445B.710 and 445B.720, respectively.~~

~~(c) Define "restored vehicle" for the purposes of the regulations.~~] *if the owner of such a vehicle certifies to the Department of Motor Vehicles, on a form provided by the Department of Motor Vehicles, that the vehicle was not driven more than 5,000 miles during the immediately preceding year.*

2. Except as otherwise provided in subsection 3, standards for exhaust emissions which apply to a:

(a) Reconstructed vehicle, as defined in NRS 482.100; and

(b) Trimobile, as defined in NRS 482.129, must be based on standards which were in effect in the year in which the engine of the vehicle was built.

3. A trimobile that meets the definition of a motorcycle in 40 C.F.R. § 86.402-78 or 86.402-98, as applicable, is not subject to emissions standards under this chapter.

4. Any such standards which pertain to motor vehicles must be approved by the Department of Motor Vehicles before they are adopted by the Commission.

[129] Assembly Committee on Transportation, *Proposed Amendment* (February 24, 2011).

G-11.2 Creation of NRS 482.2655 (90 day wait period after failed emissions test)

The intent of this statute was to deter owners of old vehicles that failed their emissions inspection tests from acquiring a special license plate for exemption purposes rather than attempting to fix their vehicles and re-test.[130] The statute reads as follows:

> **NRS 482.2655**
> *1. If, with respect to a motor vehicle that is required to comply with the provisions of NRS 445B.700 to 445B.815, inclusive, and the regulations adopted pursuant thereto, an authorized inspection station or authorized station tests the emissions from the motor vehicle and the motor vehicle fails the emissions test, the Department shall not issue a special license plate for that vehicle pursuant to NRS 482.381, 482.3812, 482.3814 or 482.3816 for a period of 90 days after the motor vehicle fails the emissions test.*
> *2. As used in this section:*
> *(a) "Authorized inspection station" has the meaning ascribed to it in NRS 445B.710.*
> *(b) "Authorized station" has the meaning ascribed to it in NRS 445B.720.*
> *(c) "Fails the emissions test" means that a motor vehicle does not comply with the applicable provisions of NRS 445B.700 to 445B.815, inclusive, and the regulations adopted pursuant thereto.*

G-11.3 Revisions to NAC 445B.6115 and .6125 (eliminating restored vehicles)

Following the 2011 legislative session, the State Environmental Commission changed the basis of vehicle exemption (NAC 445B.6115) from that which fit the definition of "restored vehicle" to a vehicle which only had to have special license plates and not be driven more than 5,000 miles during the preceding year.[131] Then, in NAC 445B.6125 the State Environmental Commission removed the definition of a "restored vehicle," and in doing so, removed three long-standing conditions for a vehicle exemption, i.e., that the vehicle (i) not emit smoke, (ii) be able to pass an emissions test, and (iii) not be driven more than 2,500 miles during the preceding year.[132]

> **NAC 445B.6115 Exemption of vehicle from certain provisions.** (NRS 445B.210, 445B.760, 445B.770, 445B.825) The provisions of NAC 445B.575 to 445B.601, inclusive, do not apply to a motor vehicle that is certified as a [~~restored~~] vehicle *for which special license plates have been issued* by the Department pursuant to NAC 445B.6125.
>
> **NAC 445B.6125 Certification of vehicle for exemption.** (NRS 445B.210, 445B.760, 445B.770, 445B.825) The Department may certify a motor vehicle [~~as a restored vehicle~~] if the motor vehicle:
> 1. Is licensed pursuant to NRS 482.381, 482.3812, 482.3814 or 482.3816;
> [~~2. Does not emit smoke;~~
> ~~3. Has an engine that complies with the standards for emissions set forth in NAC 445B.596 for the model year of the motor vehicle, as determined by a two speed emissions test conducted by the Department pursuant to NRS 445B.798 or conducted at an authorized station or authorized inspection station; and~~

[130] Senate Committee on Transportation, *Minutes*, p. 12 (April 28, 2011).
[131] LCB File No. R039-11 (October 26, 2011).
[132] Both NAC 445B.6115 and NAC 445B.6125 were first adopted in 1997.

~~4.~~] *2.* Has been certified upon each annual registration required pursuant to NRS 482.205 to have been driven not more than [~~2,500~~] *5,000* miles since the immediately preceding annual registration, if any.

G-12 2015 LEGISLATIVE SESSION

Two bills related to vehicle exemptions were considered during the 2015 legislative session. The first bill, AB 326, would have placed a moratorium on the issuance of special license plates to owners of 1996 and newer model years. However, Governor Sandoval vetoed the bill, and provided the following rational:

> "Assembly Bill 326 revises requirements for the issuance of special license plates inscribed with the words "Old Timer," "Street Rod," "Classic Rod," or "Classic Vehicle," and further prohibits the issuance of those same plates from July 1, 2015, until July 1, 2017.
>
> Although this bill has merit in that it attempts to curb the abuse of these special plates by individuals purely seeking to avoid emissions testing fees, issuing a two-year moratorium on these plates unnecessarily penalizes true Nevada car enthusiasts who might seek one of these plates for proper reasons. This heavy-handed approach is opposed by the Specialty Equipment Market Association, known for its annual trade show in Las Vegas, as well as Hot August Nights, whose members and affiliates would be unfairly punished by this measure.
>
> Assembly Bill 146, passed by the Nevada Legislature this Session and signed into law on June 8, 2015, allows for the State Environmental Commission to review alleged abuses of these special license plates, study and make recommendations regarding Nevada's emissions testing program. This approach is appropriate and commensurate with the problem at hand; the approach of Assembly Bill 326 is not. Therefore, I veto this bill and return it without my signature or approval."

The second bill considered during the 2015 legislative session was AB 146, which was referenced in the Governor's veto message. AB 146 went through several revisions. The initial version of the bill would have created a biennial testing program and extended new vehicle exemptions from two to four years. The bill was then amended to eliminate emissions testing for only model year 1995 and older vehicles—thereby creating an emissions testing program for only vehicles equipped with OBD II technology. In its final version, the bill removed all proposed changes, and stated the following:

> "The Advisory Committee on the Control of Emissions from Motor Vehicles shall conduct a study concerning the inspection and testing of motor vehicles and systems for the control of emissions from motor vehicles in this State.
>
> On or before June 30, 2016, the Committee shall submit a report of the results of the study conducted pursuant to subsection 1 and a proposal for an updated and modernized plan for such inspection and testing to the Director of the Legislative Counsel Bureau for transmittal to the Chairs of the Senate and Assembly Standing Committees on Transportation.
>
> As used in this section, "Advisory Committee on the Control of Emissions from Motor Vehicles" means the advisory committee described in subsection 7 of NRS 445B.830."