

# Executive Summary Report

## SMOG CHECK Statewide

### May 2015

#### 1. Testing Volume

	All Tests	Failed	Percent (%) Failed
Initial Test	963,901	116,730	12.11%
Total	1,085,606	145,332	13.39%

#### 2. Certification Volume

	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	837,615	86.90%	126,286	13.10%
Total	929,077	85.58%	156,529	14.42%

#### 3. Certification Volume by Station Type\*

Station Types	Certificates Issued on Initial Test	Percent (%) Certificates Issued	No Certificates Issued on Initial Test	Percent (%) No Certificates Issued
STAR Test Only	414,686	86.19%	66,450	13.81%
Non-STAR Test Only	26,661	90.40%	2,832	9.60%
STAR Test and Repair	241,100	86.66%	37,121	13.34%
Non-STAR Test and Repair	151,087	90.61%	15,654	9.39%
Total	833,534	87.23%	122,057	12.77%

\*Note: Excludes Basic area dealer, Fleets, and Referee stations

#### 4. Initial Test Failures by Failure Type

	OIS		BAR-97	
	Failed	Percent (%) Failed	Failed	Percent (%) Failed
All Emissions	NA	NA	38,436	15.00%
All Visual	10,663	1.51%	11,710	4.58%
All Functional	52,358	7.39%	32,376	12.70%
OBDII	51,196	7.23%	16,899	6.61%
Overall	59,541	8.41%	57,189	22.40%

#### 5. Initial Tests at All STAR Stations

Vehicles	Test and Repair Station Initial Tests	Test-Only Station Initial Tests	Test and Repair Station Certificates Issued	Test-Only Station Certificates Issued
Directed	52,736	118,348	40,647	91,942
Non-Directed	225,485	362,788	200,453	322,744
Total	278,221	481,136	241,100	414,686

#### 6. Initial Tests at All Non-STAR Stations

Vehicles	Test and Repair Station Initial Tests	Test-Only Station Initial Tests	Test and Repair Station Certificates Issued	Test-Only Station Certificates Issued
Directed	474	119	134	54
Non-Directed	166,267	29,374	150,953	26,607
Total	166,741	29,493	151,087	26,661

#### 7. Initial Test Failures by Program Area

Program Areas	OIS			BAR-97		
	Initial Tests	Failed	Percent (%) Failed	Initial Tests	Failed	Percent (%) Failed
Enhanced	618,689	52,382	8.47%	204,034	47,626	23.30%
Partial	30,693	2,591	8.44%	13,960	3,186	22.80%
Basic	52,779	3,994	7.57%	28,322	4,076	14.40%
Change of Ownership	5,943	574	9.66%	2,219	489	22.00%
No Program	0	0	0.00%	5	3	60.00%
Unknown	0	0	0.00%	7,262	1,812	25.00%
Total Program Area	708,104	59,541	8.41%	255,797	57,189	22.40%

#### 8. Initial Test Failures by Station Type

Station Types	OIS			BAR-97		
	Initial Tests	Failed	Percent (%) Failed	Initial Tests	Failed	Percent (%) Failed
STAR Test Only	336,993	30,703	9.11%	144,143	33,665	23.40%
STAR Test Only Suspended	0	0	0.00%	0	0	0.00%
Non-STAR Test Only	24,414	1,707	6.99%	5,079	907	17.90%
STAR Test and Repair	202,947	17,562	8.65%	75,274	17,739	23.60%
STAR Test and Repair Suspended	0	0	0.00%	0	0	0.00%
Non-STAR Test and Repair	138,985	9,221	6.63%	27,756	4,302	15.50%
Test and Repair/Dealer	3,575	221	6.18%	607	57	9.39%
Business Fleet	3	0	0.00%	1	0	0.00%
Permanent Fleet Registered	0	0	0.00%	1	0	0.00%
Referee	152	69	45.40%	343	181	52.80%
Govt Fleet	1,035	58	5.60%	2,593	338	13.00%
Total	708,104	59,541	8.41%	255,797	57,189	22.40%

## Executive Summary Report

### SMOG CHECK Statewide

#### May 2015

#### 9. Number of Licensed Stations by Type/Privilege and Program Area

Station Type	Basic	Change of Ownership	Enhanced	Partial	Total
STAR Regular Test and Repair CAP Enhanced	0	0	2,147	100	2,247
STAR Regular Test and Repair CAP Basic	149	0	0	0	149
STAR Regular Test and Repair CAP COO	0	67	0	0	67
STAR Test Only	15	1	1,886	26	1,928
Non-STAR Regular Test and Repair	492	37	2,270	231	3,030
Non-STAR Test Only	14	0	403	12	429
Repair Only	3	1	61	0	65
Basic Area Dealer	77	0	0	0	77
Business Fleet	0	0	3	0	3
Permanent Fleet Registered	4	0	28	1	33
Referee	6	1	36	0	43
Government Fleet	39	2	265	10	316
Unknown Type	0	0	1	0	1
<b>Total</b>	<b>799</b>	<b>109</b>	<b>7,100</b>	<b>380</b>	<b>8,388</b>

#### 10. Number of Stations Conducting Test by Equipment Type

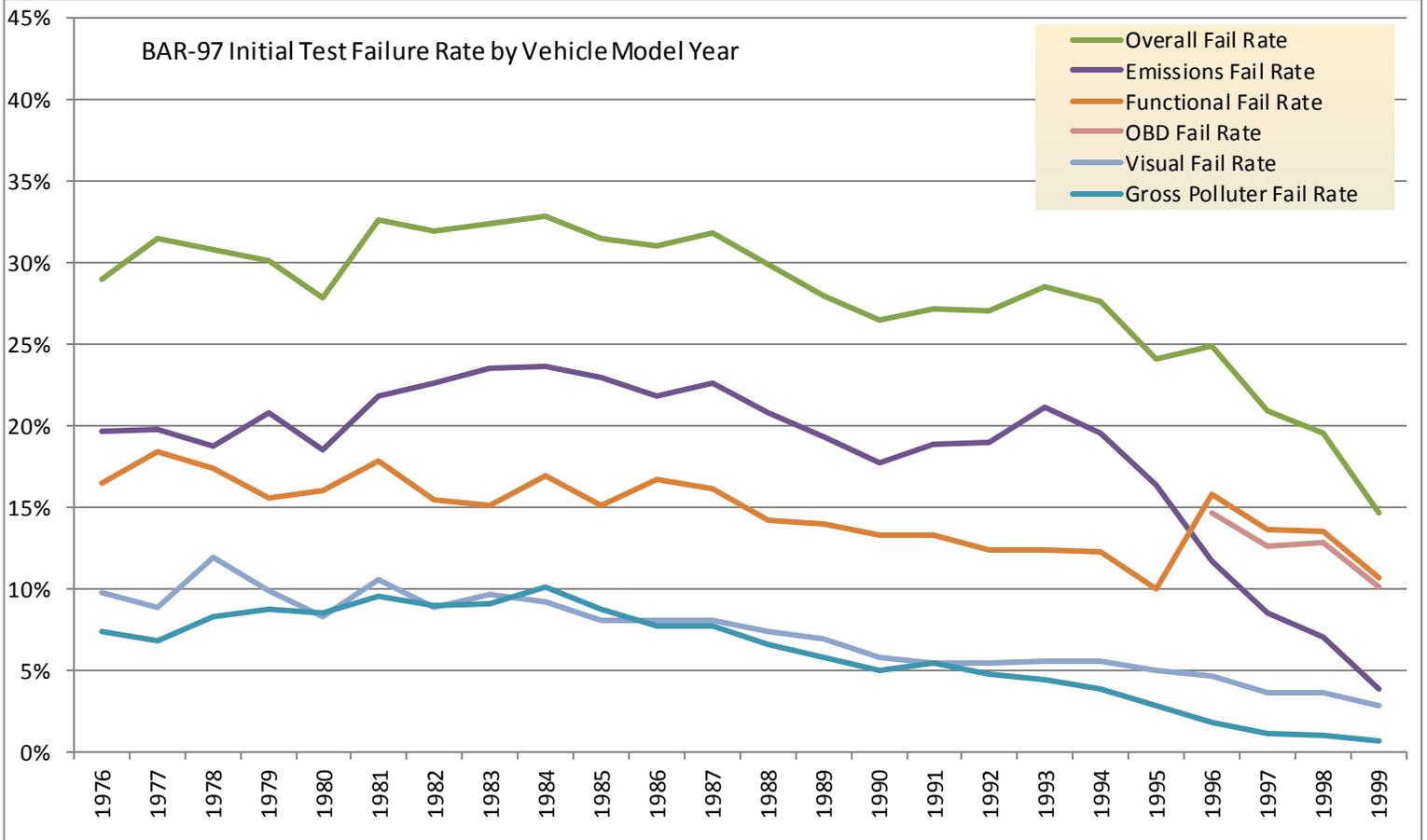
Station Type	Equipment Type		
	BAR-97 Only	OIS Only	BAR-97 & OIS
STAR Regular Test and Repair CAP Enhanced	3	80	2,160
STAR Regular Test and Repair CAP Basic	0	2	91
STAR Regular Test and Repair CAP COO	0	5	78
STAR Test Only	2	16	1,824
Non-STAR Regular Test and Repair	25	1,082	1,340
Non-STAR Test Only	6	39	215
Basic Area Dealer	0	13	61
Business Fleet	1	1	0
Permanent Fleet Registered	1	0	0
Referee	0	0	30
Government Fleet	80	41	28
Unknown Type	0	0	0
<b>Total</b>	<b>118</b>	<b>1,279</b>	<b>5,827</b>

# Executive Summary Report

## SMOG CHECK Statewide

### May 2015

#### 11. BAR-97 Initial Test Failure Rate by Vehicle Model Year



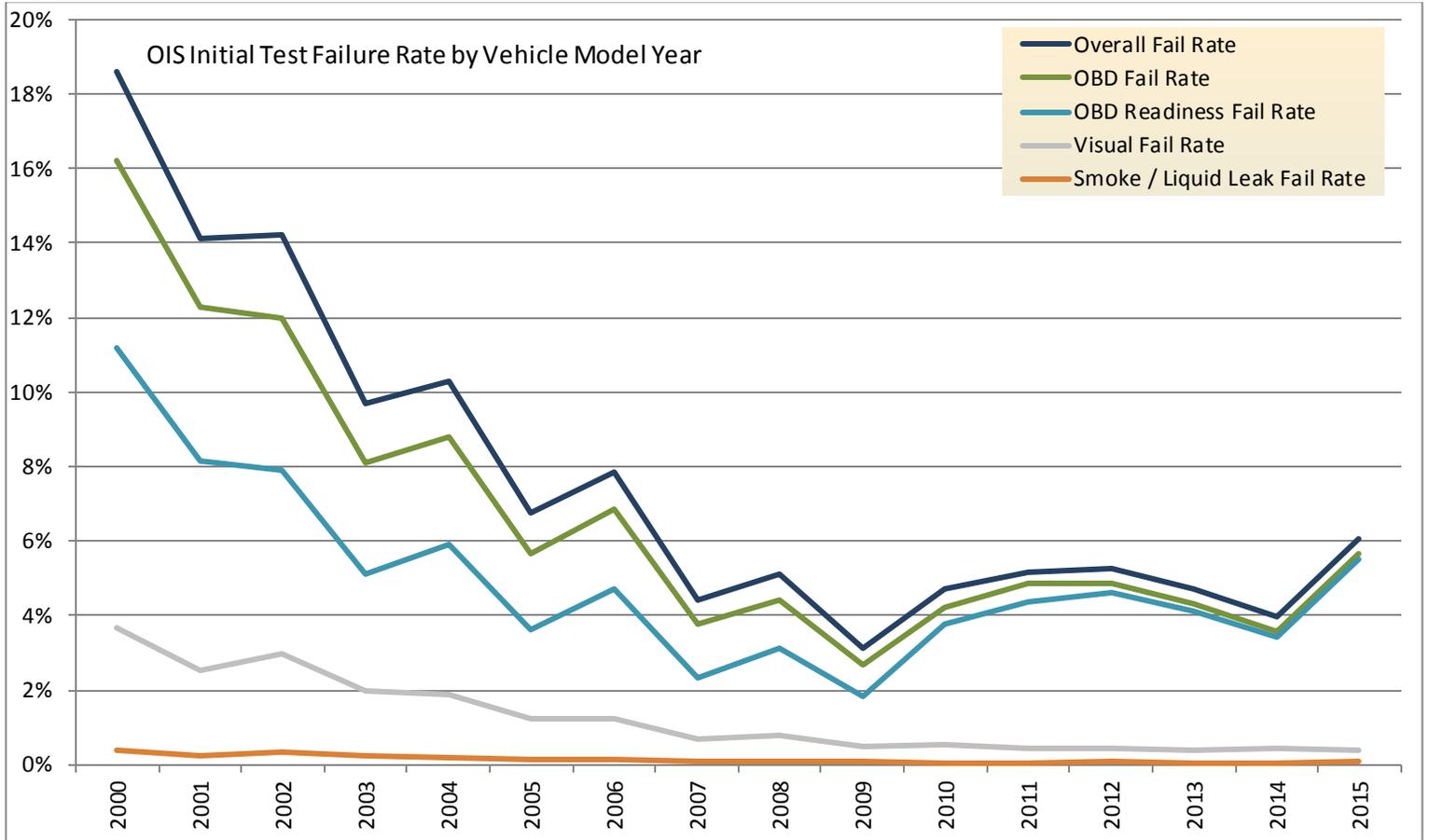
Note: Please see tabular data in Table 17 for BAR-97 tests conducted on other vehicle model years not shown in chart.

# Executive Summary Report

## SMOG CHECK Statewide

### May 2015

#### 12. OIS Initial Test Failure Rate by Vehicle Model Year



Note: Please see tabular data in Table 18 for OIS tests conducted on other vehicle model years not shown in chart.

## Executive Summary Report

### SMOG CHECK Statewide May 2015

#### 13. Referee Activity

	OIS Certificates Issued	BAR-97 Certificates Issued
Certificate of Compliance	193	301
Certificate of Non Compliance	0	0
Parts Cost	29	25
Hardship Extensions	0	0
Exempt Vehicle	4	23
Exempted by Directive	7	14
Parts Exemption	11	5
Unknown Outcome	0	0
Permanently Exempt Vehicle	0	0
Temporarily Exempt Vehicle	0	0
<b>Total</b>	<b>244</b>	<b>368</b>

#### 14. Active Technicians

License Type	Technician Count
EA (Test and Repair Enhanced)	2
EB (Test and Repair Basic)	1
EI (Repair Only)	1
EO (Test Only)	2,179
EO (Test and Repair)	5,917
<b>Total</b>	<b>8,100</b>

#### 15. Inspection Costs by Station and Test Type

Station Type	BAR-97 Initial Test Count	Average BAR-97 Inspection Cost	OIS Initial Test Count	Average OIS Inspection Cost	Total Initial Test Count	Overall Average Inspection Cost
STAR Test and Repair	18,457	\$47.71	200,720	\$46.60	219,177	\$46.70
STAR Test Only	34,934	\$47.36	331,589	\$48.88	366,523	\$48.73
Non-STAR Test and Repair	6,858	\$44.51	136,263	\$52.19	143,121	\$51.83
Non-STAR Test Only	1,194	\$38.69	23,594	\$47.00	24,788	\$46.60
Test and Repair/Dealer	127	\$52.18	3,450	\$56.29	3,577	\$56.14
<b>Total</b>	<b>61,570</b>	<b>\$46.99</b>	<b>695,616</b>	<b>\$48.84</b>	<b>757,186</b>	<b>\$48.69</b>

#### 16. Inspection Costs by Station and Equipment Type

Station Type	BAR-97 Equipment Only		OIS Equipment Only		Both Equipment (BAR-97 + OIS)			
	BAR-97 Initial Test Count	Average BAR-97 Inspection Cost	OIS Initial Test Count	Average OIS Inspection Cost	BAR-97 Initial Test Count	Average BAR-97 Inspection Cost	OIS Initial Test Count	Average OIS Inspection Cost
STAR Test and Repair	7	\$33.07	2,744	\$52.39	18,450	\$47.72	197,976	\$46.52
STAR Test Only	43	\$44.88	1,310	\$31.60	34,891	\$47.36	330,279	\$48.95
Non-STAR Test and Repair	33	\$58.70	46,500	\$63.60	6,825	\$44.45	89,763	\$46.29
Non-STAR Test Only	35	\$36.98	2,029	\$43.23	1,159	\$38.74	21,565	\$47.36
Test and Repair/Dealer	0	\$0.00	369	\$62.09	127	\$52.18	3,081	\$55.59
<b>Total</b>	<b>118</b>	<b>\$45.70</b>	<b>52,952</b>	<b>\$61.43</b>	<b>61,452</b>	<b>\$46.99</b>	<b>642,664</b>	<b>\$47.81</b>

## Executive Summary Report

### SMOG CHECK Statewide May 2015

#### 17. Tabular Data for BAR-97 Initial Tests by Vehicle Model Year

Model Year	Initial Tests	Failed Overall	Percent (%) Failed Overall	Percent (%) Failed Emissions	Percent (%) Failed Gross Polluters	Percent (%) Failed Functional	Percent (%) Failed Visual	Percent (%) Failed OBDII
1976	709	205	28.91%	19.61%	7.33%	16.50%	9.73%	NA
1977	924	291	31.49%	19.70%	6.82%	18.40%	8.87%	NA
1978	1,056	325	30.78%	18.75%	8.24%	17.42%	11.93%	NA
1979	1,099	331	30.12%	20.75%	8.74%	15.56%	9.83%	NA
1980	637	177	27.79%	18.52%	8.48%	16.01%	8.32%	NA
1981	758	247	32.59%	21.77%	9.50%	17.81%	10.55%	NA
1982	813	259	31.86%	22.63%	8.98%	15.38%	8.86%	NA
1983	1,147	371	32.35%	23.54%	9.07%	15.08%	9.59%	NA
1984	2,033	668	32.86%	23.66%	10.08%	16.92%	9.15%	NA
1985	2,735	860	31.44%	22.96%	8.78%	15.14%	8.01%	NA
1986	3,435	1,064	30.98%	21.75%	7.74%	16.71%	8.06%	NA
1987	4,020	1,278	31.79%	22.64%	7.69%	16.12%	8.06%	NA
1988	4,902	1,462	29.82%	20.83%	6.55%	14.22%	7.43%	NA
1989	6,577	1,838	27.95%	19.31%	5.78%	13.91%	6.92%	NA
1990	8,193	2,165	26.42%	17.71%	5.04%	13.28%	5.80%	NA
1991	10,066	2,728	27.10%	18.90%	5.45%	13.29%	5.46%	NA
1992	10,730	2,898	27.01%	18.91%	4.72%	12.39%	5.41%	NA
1993	12,988	3,708	28.55%	21.12%	4.47%	12.35%	5.61%	NA
1994	15,840	4,371	27.59%	19.49%	3.89%	12.29%	5.59%	NA
1995	23,409	5,624	24.02%	16.40%	2.84%	9.98%	5.00%	NA
1996	19,061	4,745	24.89%	11.67%	1.83%	15.79%	4.61%	14.66%
1997	34,406	7,178	20.86%	8.56%	1.17%	13.59%	3.61%	12.65%
1998	31,961	6,244	19.54%	7.07%	1.06%	13.54%	3.59%	12.79%
1999	52,894	7,731	14.62%	3.91%	0.69%	10.65%	2.78%	10.13%
2000	600	101	16.83%	6.50%	2.50%	12.17%	2.17%	11.83%
2001	676	79	11.69%	5.03%	1.18%	9.17%	1.33%	8.88%
2002	380	46	12.11%	5.26%	2.11%	10.79%	1.58%	10.53%
2003	717	55	7.67%	3.35%	0.56%	6.28%	1.39%	6.14%
2004	418	22	5.26%	2.87%	0.24%	3.35%	0.72%	3.35%
2005	652	34	5.21%	2.91%	0.31%	3.53%	0.61%	3.37%
2006	422	27	6.40%	1.66%	0.24%	4.98%	0.71%	4.74%
2007	599	26	4.34%	1.84%	0.50%	3.17%	0.50%	3.01%
2008	368	10	2.72%	1.63%	0.00%	2.45%	0.54%	2.45%
2009	202	5	2.48%	1.98%	0.99%	0.99%	0.00%	0.99%
2010	34	2	5.88%	2.94%	2.94%	2.94%	0.00%	2.94%
2011	51	0	0.00%	3.92%	0.00%	0.00%	0.00%	0.00%
2012	43	3	6.98%	9.30%	0.00%	4.65%	2.33%	4.65%
2013	36	4	11.11%	8.33%	0.00%	5.56%	2.78%	5.56%
2014	80	1	1.25%	0.00%	0.00%	1.25%	0.00%	1.25%
2015	121	6	4.96%	3.31%	0.00%	1.65%	3.31%	1.65%
2016	5	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Model Years	255,797	57,189	22.36%	12.23%	2.80%	12.66%	4.58%	6.61%

Note: Vehicle model years 2000 and newer were tested on the BAR-97 because they may not be compatible with the OIS test (for example, a non-OBD-II certified vehicle).

See Table 19 for Smog Check requirements.

## Executive Summary Report

### SMOG CHECK Statewide May 2015

#### 18. Tabular Data for OIS Initial Tests by Vehicle Model Year

Model Year	Initial Tests	Failed Overall	Percent (%) Failed Overall	Percent (%) Failed Functional	Percent (%) Failed Visual	Percent (%) Failed OBDII	Percent (%) Failed OBDII Readiness	Percent (%) Failed Smoke and/or Liquid Leak
1985	1	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1987	1	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1994	2	1	50.00%	50.00%	0.00%	50.00%	50.00%	0.00%
1996	42	5	11.90%	11.90%	2.38%	11.90%	9.52%	0.00%
1997	110	16	14.50%	10.90%	3.64%	10.90%	4.55%	0.00%
1998	333	42	12.60%	11.10%	1.80%	11.10%	8.41%	0.00%
1999	1,200	208	17.30%	16.10%	2.17%	15.70%	10.90%	0.42%
2000	40,678	7,550	18.60%	16.60%	3.65%	16.20%	11.20%	0.36%
2001	77,022	10,849	14.10%	12.60%	2.51%	12.30%	8.16%	0.25%
2002	42,138	5,986	14.20%	12.30%	2.97%	12.00%	7.88%	0.32%
2003	90,600	8,790	9.70%	8.34%	1.97%	8.12%	5.10%	0.22%
2004	41,795	4,294	10.30%	8.99%	1.86%	8.80%	5.91%	0.19%
2005	108,654	7,328	6.74%	5.82%	1.24%	5.66%	3.61%	0.16%
2006	40,292	3,165	7.86%	7.00%	1.21%	6.86%	4.70%	0.14%
2007	111,469	4,911	4.41%	3.86%	0.70%	3.78%	2.32%	0.07%
2008	27,371	1,404	5.13%	4.53%	0.76%	4.44%	3.12%	0.09%
2009	66,745	2,082	3.12%	2.71%	0.48%	2.65%	1.85%	0.07%
2010	11,770	553	4.70%	4.24%	0.54%	4.20%	3.76%	0.04%
2011	14,599	756	5.18%	4.87%	0.41%	4.84%	4.38%	0.03%
2012	10,268	539	5.25%	4.93%	0.41%	4.86%	4.60%	0.07%
2013	11,632	548	4.71%	4.39%	0.37%	4.33%	4.11%	0.06%
2014	8,414	335	3.98%	3.59%	0.43%	3.55%	3.43%	0.04%
2015	2,957	179	6.05%	5.72%	0.37%	5.65%	5.51%	0.07%
2016	11	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Model Years	708,104	59,541	8.41%	7.39%	1.51%	7.23%	4.86%	0.16%

Note: Some model year 1999 and older vehicles required a Referee inspection, were tested at Beta stations, or were 1998/1999 model year diesels.

See Table 19 for Smog Check requirements.

# Executive Summary Report

SMOG CHECK Statewide  
May 2015

## 19. Smog Check Requirements by Vehicle Type

SMOG CHECK REQUIREMENTS BY VEHICLE TYPE						
Fuel Type	Model-Year	GVWR <sup>1</sup>	OBD II Equipped?	Smog Check Required		
				None	OIS Test	BAR-97 Test
All <sup>2</sup> (except Diesel)	Four model-years and newer <sup>3</sup>	All	All	X		
	Fifth and sixth model-years <sup>4</sup>	All	All	X		
	1975 and earlier	All	All	X		
Gasoline & Flex Fuel (Methanol or Ethanol)	1976-1999	All	All			X
	2000 and newer	14,000 and less	Yes <sup>5</sup>		X	
		Over 14,000	All	No		
Hybrid	2000 and newer	14,000 and less	All		X	
Dedicated Propane and Natural Gas (CNG, LNG, or LPG)	1976-1999	14,000 and less	All			X
		Over 14,000	All	X		
	2000 and newer	14,000 and less	Yes		X	
		Over 14,000	All	No		
Diesel	1976-1997	All	All	X		
	1998 and newer	14,000 and less	All		X	
		Over 14,000	All	X <sup>6</sup>		
Full Electric Powered	All	All	All	X		
Motorcycle	All	All	All	X		
Other Vehicles: Two Cylinder Engine, Two-stroke Engine, Off-highway Registered	All	All	All	X		

<sup>1</sup> Gross vehicle weight rating

<sup>2</sup> Includes gasoline, flex fuel, hybrid, dedicated propane, and natural gas vehicles. A Smog Check is required for all out-of-state 1976 model-year and newer vehicles registering in California for the first time and other initial registration events determined by the Department of Motor Vehicles.

<sup>3</sup> Vehicles four model-years and newer are not subject to biennial (every other year) or change-of-ownership Smog Checks. Add four to the model-year of a vehicle to determine the first year a vehicle will be subject to a change-of-ownership Smog Check. For example, a 2010 model-year vehicle will be first subject a change-of-ownership Smog Check in 2014 (2010+4=2014).

<sup>4</sup> Fifth and sixth model-year vehicles are not subject to biennial Smog Checks. However, a change-of-ownership Smog Check is required. Add six to the model-year of a vehicle to determine the first year a vehicle will be subject to a biennial Smog Check. For example, a 2010 model-year vehicle will be first subject to a biennial Smog Check in 2016 (2010+6=2016).

<sup>5</sup> In the future, BAR may identify some vehicles that have GVWR of 14,000 and less or that have problematic OBDII systems that may require the BAR-97 test.

<sup>6</sup> Fleet vehicles are subject to the ARB Periodic Smoke Inspection Program (PSIP).