

# Executive Summary Report

## SMOG CHECK Statewide

### June 2015

#### 1. Testing Volume

	All Tests	Failed	Percent (%) Failed
Initial Test	991,898	116,526	11.75%
Total	1,119,587	146,118	13.05%

#### 2. Certification Volume

	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	865,487	87.26%	126,411	12.74%
Total	961,841	85.91%	157,746	14.09%

#### 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	423,926	86.52%	66,037	13.48%
Non-STAR Test Only	28,962	90.35%	3,094	9.65%
STAR Test and Repair	250,934	86.94%	37,699	13.06%
Non-STAR Test and Repair	157,296	91.09%	15,385	8.91%
Total	861,118	87.57%	122,215	12.43%

\*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	38,892	15.20%
All Visual	10,285	1.40%	11,143	4.37%
All Functional	52,508	7.13%	32,013	12.50%
OBDII	51,399	6.98%	17,035	6.67%
Overall	59,442	8.07%	57,084	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	52,203	115,594	40,207	89,702
Non-Directed	236,430	374,369	210,727	334,224
Total	288,633	489,963	250,934	423,926

#### 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	442	137	141	61
Non-Directed	172,239	31,919	157,155	28,901
Total	172,681	32,056	157,296	28,962

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

Program Areas	OIS			BAR-97		
	Initial Tests	Failed	Percent (%) Failed	Initial Tests	Failed	Percent (%) Failed
Enhanced	640,989	52,199	8.14%	202,394	47,217	23.30%
Partial	32,704	2,608	7.97%	14,250	3,368	23.60%
Basic	57,065	4,164	7.30%	28,948	4,243	14.70%
Change of Ownership	5,909	471	7.97%	2,212	496	22.40%
No Program	0	0	0.00%	6	2	33.30%
Unknown	0	0	0.00%	7,421	1,758	23.70%
Total Program Area	736,667	59,442	8.07%	255,231	57,084	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	348,041	30,714	8.82%	141,922	33,108	23.30%
STAR Test Only Suspended	0	0	0.00%	0	0	0.00%
Non-STAR Test Only	26,801	1,840	6.87%	5,255	1,044	19.90%
STAR Test and Repair	212,571	17,800	8.37%	76,062	17,889	23.50%
STAR Test and Repair Suspended	0	0	0.00%	0	0	0.00%
Non-STAR Test and Repair	144,318	8,733	6.05%	28,363	4,444	15.70%
Test and Repair/Dealer	3,771	214	5.67%	709	95	13.40%
Business Fleet	6	0	0.00%	0	0	0.00%
Permanent Fleet Registered	0	0	0.00%	0	0	0.00%
Referee	188	87	46.30%	371	188	50.70%
Govt Fleet	971	54	5.56%	2,549	316	12.40%
Total	736,667	59,442	8.07%	255,231	57,084	22.40%

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#### 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	2,157	98	2,255
STAR Regular Test and Repair CAP Basic	153	0	0	0	153
STAR Regular Test and Repair CAP COO	0	67	0	0	67
STAR Test Only	16	1	1,878	26	1,921
Non-STAR Regular Test and Repair	484	38	2,277	234	3,033
Non-STAR Test Only	14	0	417	12	443
Repair Only	3	1	57	0	61
Basic Area Dealer	76	0	0	0	76
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>795</b>	<b>110</b>	<b>7,119</b>	<b>381</b>	<b>8,405</b>

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

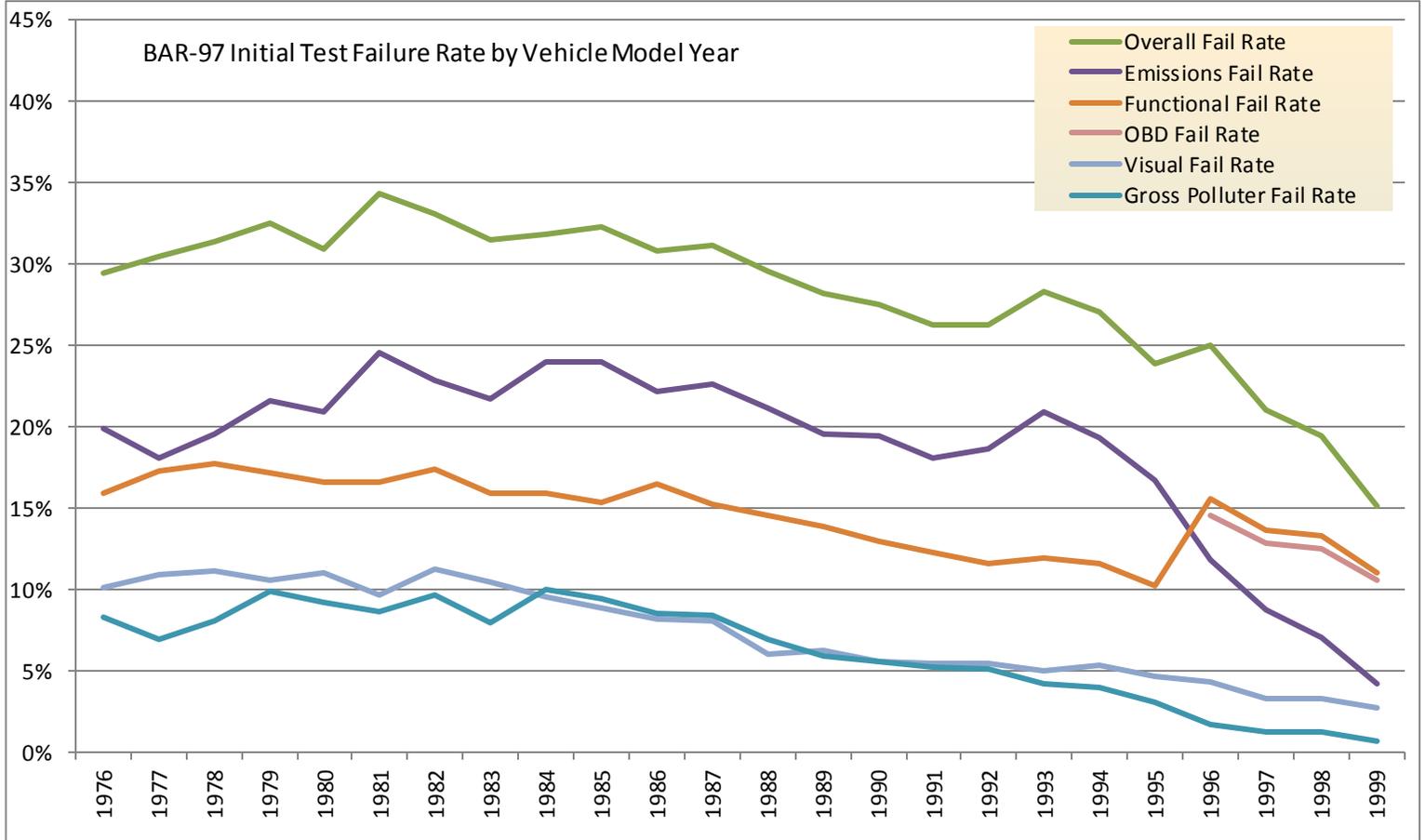
Station Type	Equipment Type		
	BAR-97 Only	OIS Only	BAR-97 & OIS
STAR Regular Test and Repair CAP Enhanced	3	83	2,174
STAR Regular Test and Repair CAP Basic	0	3	92
STAR Regular Test and Repair CAP COO	0	4	63
STAR Test Only	4	14	1,808
Non-STAR Regular Test and Repair	23	1,107	1,332
Non-STAR Test Only	2	45	231
Basic Area Dealer	0	12	60
Business Fleet	0	2	0
Permanent Fleet Registered	0	0	0
Referee	0	0	30
Government Fleet	80	43	38
Unknown Type	0	0	0
<b>Total</b>	<b>112</b>	<b>1,313</b>	<b>5,828</b>

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



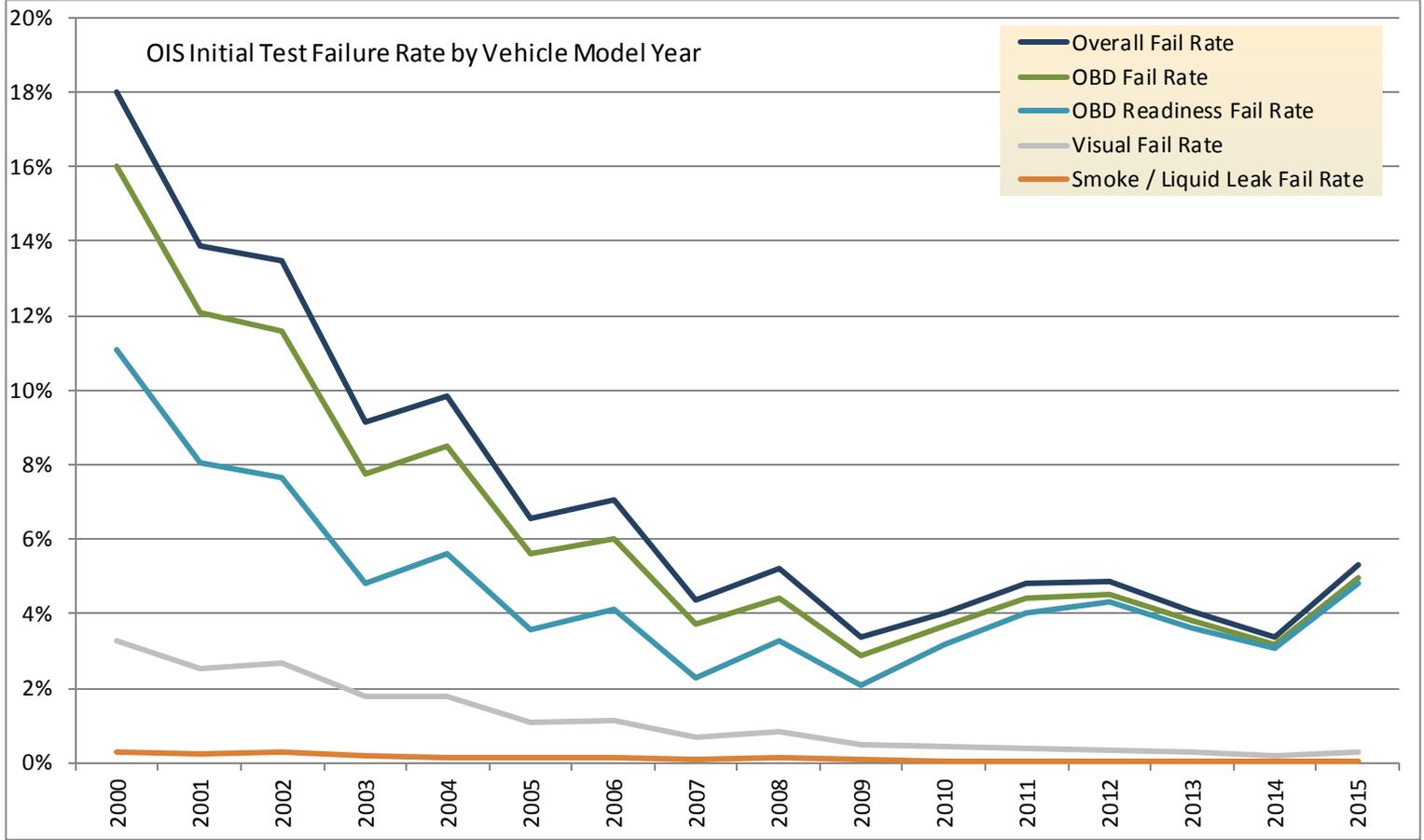
Note: Please see tabular data in Table 17 for BAR-97 tests conducted on other vehicle model years not shown in chart.

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#### 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.

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#### 13. Referee Activity

	OIS Certificates Issued	BAR-97 Certificates Issued
Certificate of Compliance	264	331
Certificate of Non Compliance	0	0
Parts Cost	37	21
Hardship Extensions	0	0
Exempt Vehicle	1	20
Exempted by Directive	4	30
Parts Exemption	12	6
Unknown Outcome	0	0
Permanently Exempt Vehicle	0	0
Temporarily Exempt Vehicle	0	0
<b>Total</b>	<b>318</b>	<b>408</b>

#### 14. Active Technicians

License Type	Technician Count
EA (Test and Repair Enhanced)	3
EB (Test and Repair Basic)	1
EI (Repair Only)	1
EO (Test Only)	2,236
EO (Test and Repair)	5,838
<b>Total</b>	<b>8,079</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	75,487	\$47.91	211,049	\$46.66	286,536	\$46.99
STAR Test Only	140,324	\$47.54	345,129	\$48.76	485,453	\$48.41
Non-STAR Test and Repair	28,089	\$44.60	142,089	\$51.85	170,178	\$50.66
Non-STAR Test Only	5,071	\$41.56	26,282	\$47.74	31,353	\$46.74
Test and Repair/Dealer	703	\$50.81	3,651	\$56.73	4,354	\$55.78
<b>Total</b>	<b>249,674</b>	<b>\$47.21</b>	<b>728,200</b>	<b>\$48.76</b>	<b>977,874</b>	<b>\$48.36</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	5	\$56.67	3,409	\$54.24	75,482	\$47.91	207,640	\$46.53
STAR Test Only	152	\$50.12	1,527	\$31.22	140,172	\$47.54	343,602	\$48.84
Non-STAR Test and Repair	108	\$57.68	48,677	\$62.89	27,981	\$44.55	93,412	\$46.10
Non-STAR Test Only	34	\$41.73	2,181	\$45.74	5,037	\$41.56	24,101	\$47.93
Test and Repair/Dealer	0	\$0.00	401	\$64.80	703	\$50.81	3,250	\$55.74
<b>Total</b>	<b>299</b>	<b>\$52.00</b>	<b>56,195</b>	<b>\$60.85</b>	<b>249,375</b>	<b>\$47.20</b>	<b>672,005</b>	<b>\$47.75</b>

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#### 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	736	216	29.35%	19.84%	8.29%	15.90%	10.05%	NA
1977	935	284	30.37%	18.07%	6.95%	17.22%	10.91%	NA
1978	1,042	326	31.29%	19.48%	8.06%	17.66%	11.13%	NA
1979	1,055	343	32.51%	21.52%	9.86%	17.16%	10.52%	NA
1980	652	201	30.83%	20.86%	9.20%	16.56%	11.04%	NA
1981	755	259	34.30%	24.50%	8.61%	16.56%	9.67%	NA
1982	806	266	33.00%	22.83%	9.68%	17.37%	11.29%	NA
1983	1,096	345	31.48%	21.72%	7.94%	15.88%	10.40%	NA
1984	1,844	586	31.78%	23.92%	9.98%	15.94%	9.54%	NA
1985	2,594	836	32.23%	23.90%	9.44%	15.27%	8.87%	NA
1986	3,583	1,104	30.81%	22.16%	8.54%	16.41%	8.18%	NA
1987	4,039	1,258	31.15%	22.56%	8.42%	15.18%	8.00%	NA
1988	4,928	1,457	29.57%	21.08%	6.96%	14.49%	5.99%	NA
1989	6,756	1,905	28.20%	19.49%	5.91%	13.88%	6.23%	NA
1990	8,495	2,336	27.50%	19.46%	5.54%	12.96%	5.60%	NA
1991	9,722	2,544	26.17%	18.10%	5.19%	12.31%	5.43%	NA
1992	10,450	2,745	26.27%	18.56%	5.09%	11.63%	5.46%	NA
1993	13,094	3,698	28.24%	20.89%	4.19%	11.95%	5.03%	NA
1994	15,662	4,229	27.00%	19.34%	3.93%	11.57%	5.34%	NA
1995	23,407	5,593	23.89%	16.63%	3.03%	10.16%	4.63%	NA
1996	19,352	4,832	24.97%	11.77%	1.70%	15.56%	4.34%	14.54%
1997	34,553	7,258	21.01%	8.73%	1.29%	13.65%	3.27%	12.81%
1998	31,873	6,180	19.39%	6.99%	1.19%	13.26%	3.33%	12.52%
1999	52,236	7,884	15.09%	4.21%	0.72%	11.05%	2.71%	10.58%
2000	631	109	17.27%	6.66%	2.69%	13.79%	1.27%	13.79%
2001	648	78	12.04%	3.09%	1.08%	9.88%	1.23%	9.26%
2002	333	34	10.21%	6.31%	2.40%	7.51%	1.20%	7.51%
2003	738	45	6.10%	2.71%	1.08%	3.12%	0.81%	2.98%
2004	453	37	8.17%	1.99%	0.22%	6.40%	1.99%	6.40%
2005	671	26	3.87%	2.09%	0.45%	2.53%	0.45%	2.53%
2006	462	21	4.55%	3.90%	0.65%	2.60%	1.08%	2.16%
2007	600	18	3.00%	1.50%	0.17%	2.00%	0.33%	2.00%
2008	331	6	1.81%	1.21%	0.00%	1.21%	0.30%	1.21%
2009	254	19	7.48%	2.36%	1.18%	4.33%	0.79%	4.33%
2010	40	1	2.50%	5.00%	0.00%	2.50%	0.00%	2.50%
2011	43	0	0.00%	2.33%	0.00%	0.00%	0.00%	0.00%
2012	33	0	0.00%	3.03%	0.00%	0.00%	0.00%	0.00%
2013	54	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2014	57	1	1.75%	1.75%	0.00%	0.00%	0.00%	0.00%
2015	152	4	2.63%	1.97%	0.00%	0.66%	1.97%	0.66%
2016	66	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Model Years	255,231	57,084	22.37%	12.35%	2.89%	12.54%	4.37%	6.67%

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.

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#### 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
0	1	1	100.00%	100.00%	0.00%	100.00%	100.00%	0.00%
1985	1	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1990	1	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1991	2	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1993	1	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1995	2	1	50.00%	50.00%	0.00%	50.00%	50.00%	0.00%
1996	94	11	11.70%	11.70%	0.00%	9.57%	4.26%	2.13%
1997	180	14	7.78%	5.56%	2.22%	5.56%	3.89%	0.00%
1998	401	51	12.70%	11.00%	3.74%	10.20%	5.24%	0.75%
1999	1,304	212	16.30%	15.20%	1.61%	14.60%	10.60%	0.61%
2000	42,122	7,575	18.00%	16.30%	3.29%	16.00%	11.10%	0.28%
2001	77,706	10,782	13.90%	12.30%	2.51%	12.10%	8.03%	0.25%
2002	43,381	5,861	13.50%	11.90%	2.68%	11.60%	7.64%	0.29%
2003	92,818	8,504	9.16%	7.92%	1.80%	7.75%	4.83%	0.17%
2004	43,063	4,244	9.86%	8.64%	1.77%	8.48%	5.61%	0.16%
2005	116,914	7,676	6.57%	5.76%	1.10%	5.61%	3.56%	0.14%
2006	41,986	2,955	7.04%	6.19%	1.15%	6.02%	4.10%	0.16%
2007	113,584	4,936	4.35%	3.79%	0.68%	3.71%	2.30%	0.08%
2008	27,792	1,443	5.19%	4.55%	0.83%	4.44%	3.25%	0.12%
2009	72,135	2,432	3.37%	2.96%	0.47%	2.88%	2.06%	0.07%
2010	12,396	499	4.03%	3.69%	0.43%	3.65%	3.19%	0.03%
2011	15,132	727	4.80%	4.47%	0.40%	4.42%	4.04%	0.05%
2012	10,623	516	4.86%	4.57%	0.35%	4.52%	4.30%	0.05%
2013	12,626	514	4.07%	3.85%	0.26%	3.82%	3.60%	0.03%
2014	8,662	290	3.35%	3.21%	0.17%	3.19%	3.08%	0.02%
2015	3,691	196	5.31%	5.01%	0.30%	4.96%	4.82%	0.05%
2016	49	2	4.08%	4.08%	0.00%	4.08%	4.08%	0.00%
All Model Years	736,667	59,442	8.07%	7.13%	1.40%	6.98%	4.69%	0.15%

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.

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### 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).