

Executive Summary Report

Smog Check Statewide February 2019

1. TESTING VOLUME

Testing Volume	All Tests	Failed	Percent (%) Failed
Initial Test	822,460	84,188	10.24%
Total	902,310	96,624	10.71%

2. CERTIFICATION VOLUME

Certification Volume	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	731,658	88.96%	90,802	11.04%
Total	798,488	88.49%	103,822	11.51%

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	380,897	88.70%	48,547	11.30%
Non-STAR Test Only	18,055	91.85%	1,601	8.15%
STAR Test and Repair	213,213	88.41%	27,955	11.59%
Non-STAR Test and Repair	115,755	92.39%	9,529	7.61%
Total	727,920	89.25%	87,632	10.75%

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

4. INITIAL TEST FAILURES BY FAILURE TYPE

Initial Test Failure	OIS Failed	OIS Percent (%) Failed	BAR-97 Failed	BAR-97 Percent (%) Failed
All Emissions	NA	NA	13,235	10.34%
All Visual	10,117	1.46%	5,327	4.16%
All Functional	50,973	7.34%	14,579	11.39%
OBDII	49,971	7.20%	9,101	7.11%
Overall	58,216	8.38%	25,972	20.29%

5. INITIAL TEST 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	30,522	64,727	24,475	53,019
Non-Directed	210,646	364,717	188,738	327,878
Total	241,168	429,444	213,213	380,897

Executive Summary Report

Smog Check Statewide February 2019

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	212	62	177	48
Non-Directed	125,072	19,594	115,578	18,007
Total	125,284	19,656	115,755	18,055

7. INITIAL TEST FAILURES BY PROGRAM AREA

Program Areas	OIS Initial Tests	OIS Failed	OIS Percent (%) Failed	BAR-97 Initial Tests	BAR-97 Failed	BAR-97 Percent (%) Failed
Enhanced	603,662	50,918	8.43%	101,248	20,942	20.70%
Partial	32,080	2,608	8.13%	7,732	1,765	22.80%
Basic	53,275	4,290	8.05%	14,948	2,223	14.90%
Change of Ownership	5,461	400	7.32%	1,121	256	22.80%
No Program	0	0	0.00%	0	0	0.00%
Unknown	0	0	0.00%	2,933	786	26.80%
Total Program Area	694,478	58,216	8.38%	127,982	25,972	20.30%

8. INITIAL TEST FAILURES BY STATION TYPE

Station Types	OIS Initial Tests	OIS Failed	OIS Percent (%) Failed	BAR-97 Initial Tests	BAR-97 Failed	BAR-97 Percent (%) Failed
STAR Test Only	355,249	32,029	9.02%	74,195	15,098	20.30%
STAR Test Only Suspended	593	39	6.58%	35	9	25.70%
Non-STAR Test Only	17,337	1,178	6.79%	2,319	296	12.80%
STAR Test and Repair	201,009	17,719	8.82%	40,159	8,859	22.10%
STAR Test and Repair Suspended	182	13	7.14%	16	4	25.00%
Non-STAR Test and Repair	114,263	6,759	5.92%	11,021	1,645	14.90%
Test and Repair/Dealer	2,683	146	5.44%	38	3	7.89%
Business Fleet	215	0	0.00%	0	0	0.00%
Permanent Fleet Registered	98	3	3.06%	0	0	0.00%
Referee	283	186	65.70%	133	54	40.60%
Government Fleet	2,566	144	5.61%	66	4	6.06%
Total	694,478	58,216	8.38%	127,982	25,972	20.30%

Executive Summary Report

Smog Check Statewide February 2019

9. NUMBER OF LICENSED STATIONS BY TYPE/PRIVILEGE AND PROGRAM AREA

Station Type	Basic	Change of Ownership	Enhanced	Partial	Total
STAR Test and Repair	121	60	2,062	84	2,327
STAR Test Only	18	0	1,784	32	1,834
STAR Sub-total	139	60	3,846	116	4,161
Non-STAR Test and Repair	509	36	2,179	241	2,965
Non-STAR Test Only	24	8	431	33	496
Non-STAR Sub-total	533	44	2,610	274	3,461
Basic Area Dealer	65	0	0	0	65
Business Fleet	0	0	4	0	4
Permanent Fleet Registered	3	2	51	4	60
Referee	5	0	27	0	32
Government Fleet	41	4	291	13	349
Repair Only	2	0	46	1	49
Unknown Type	0	0	8	0	8
Other Station Sub-Total	116	6	427	18	567
Total	788	110	6,883	408	8,189

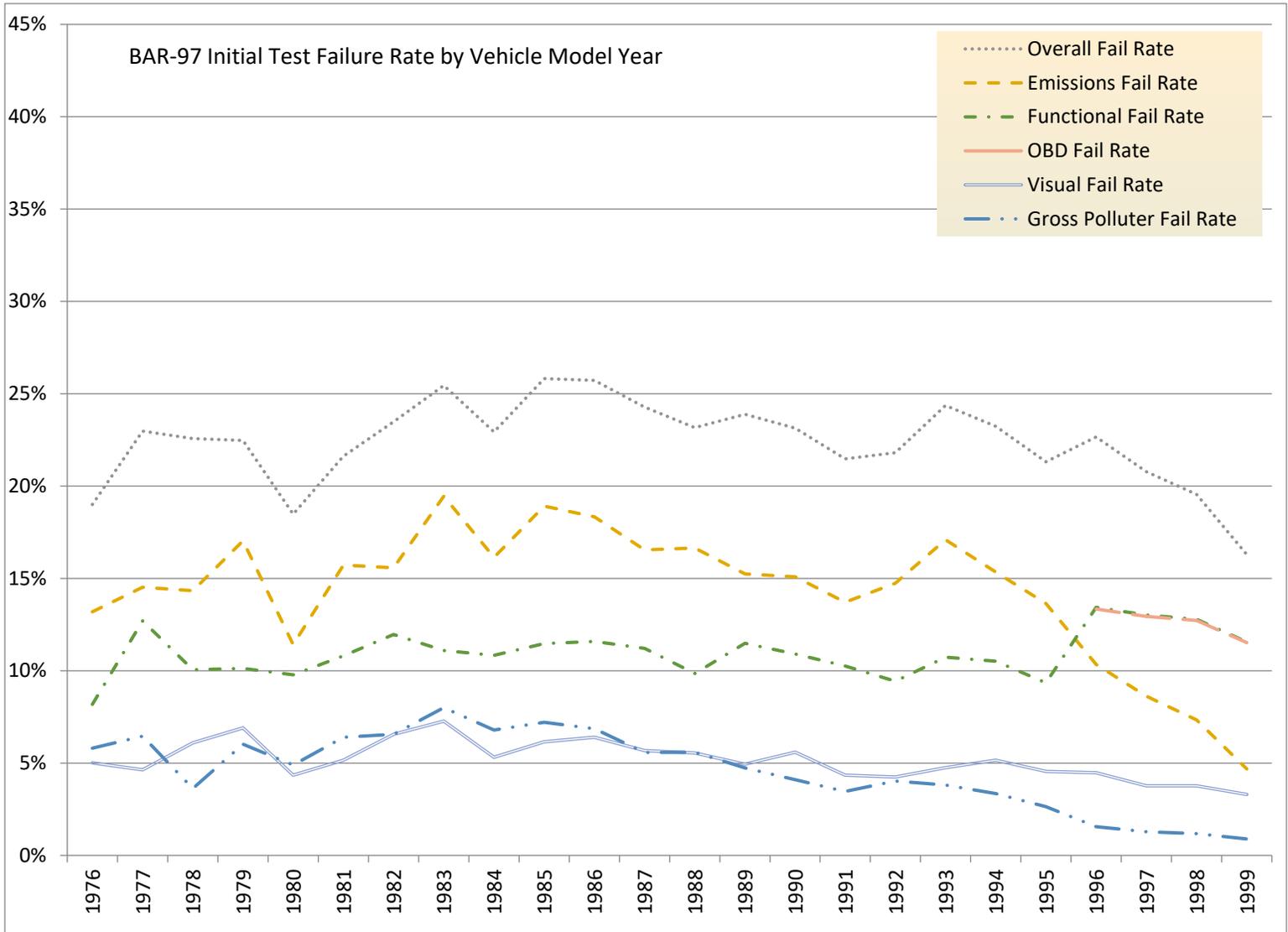
10. NUMBER OF STATIONS CONDUCTING TEST BY EQUIPMENT TYPE

Station Type	BAR-97 Only	OIS Only	BAR-97 & OIS
STAR Test and Repair	0	346	1,890
STAR Test Only	2	165	1,592
<i>STAR Sub-total</i>	2	511	3,482
Non-STAR Test and Repair	1	1,848	429
Non-STAR Test Only	2	133	83
<i>Non-STAR Sub-total</i>	3	1,981	512
Basic Area Dealer	0	56	6
Business Fleet	0	2	0
Permanent Fleet Registered	0	21	0
Referee	0	1	30
Government Fleet	2	147	10
Unknown Type	0	1	4
<i>Other Station Sub-Total</i>	2	228	50
Total	7	2,720	4,044

Executive Summary Report

Smog Check Statewide February 2019

11. BAR-97 INITIAL TEST FAILURE RATE BY VEHICLE MODEL YEAR

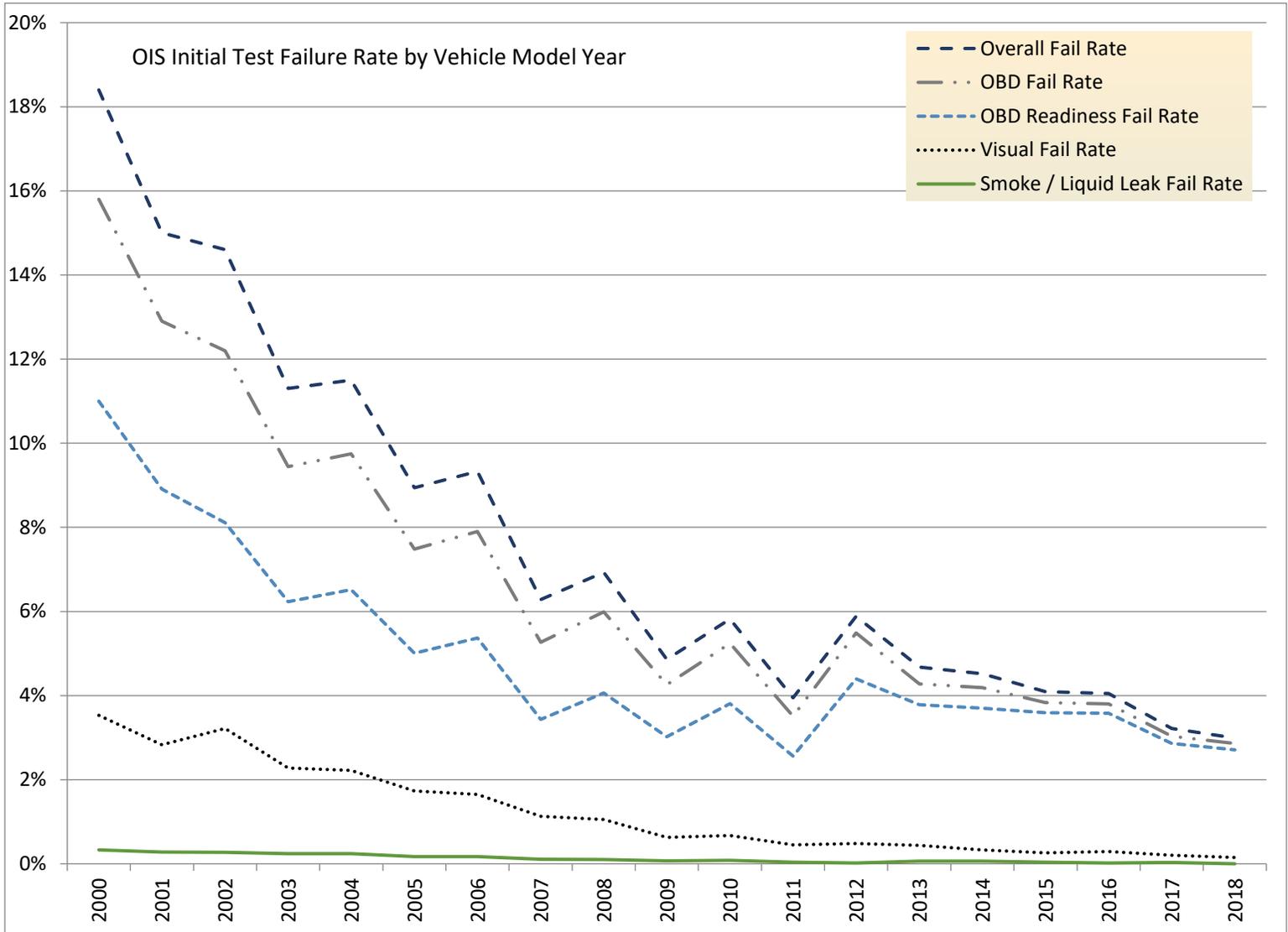


Note: Please see tabular data in Table 18 for BAR-97 tests conducted on other vehicle model years not shown in chart.

Executive Summary Report

Smog Check Statewide February 2019

12. OIS INITIAL TEST FAILURE RATE BY VEHICLE MODEL YEAR



Note: Please see tabular data in Table 19 for OIS tests conducted on other vehicle model years not shown in chart.

Executive Summary Report

Smog Check Statewide February 2019

13. REFEREE ACTIVITY

Referee Activity	OIS Certificates Issued	BAR-97 Certificates Issued
Certificate of Compliance	206	150
Certificate of Non-Compliance	0	0
Parts Cost	44	13
Hardship Extensions	0	0
Exempt Vehicle	0	20
Exempted by Directive	1	3
Parts Exemption	4	0
Unknown Outcome	0	0
Permanently Exempt Vehicle	0	0
Temporarily Exempt Vehicle	0	0
Total	255	186

14. ACTIVE TECHNICIANS

License Type	Technician Count
EA (Inspect and Repair Enhanced)	0
EB (Inspect and Repair Basic)	0
EI (Repair Only)	0
EO (Inspect Only)	2,495
EO and EI (Inspect and Repair)	3,169
Total	5,664

15. INSPECTION COSTS BY STATION AND TEST TYPE¹

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	42,277	\$54.44	200,088	\$48.95	242,365	\$49.91
STAR Test Only	77,684	\$48.91	354,372	\$49.26	432,056	\$49.20
Non-STAR Test and Repair	11,622	\$50.96	112,523	\$54.37	124,145	\$54.05
Non-STAR Test Only	2,437	\$40.74	17,077	\$50.71	19,514	\$49.46
Test and Repair/Dealer	39	\$55.12	2,617	\$60.92	2,656	\$60.84
Total	134,059	\$50.68	686,677	\$50.09	820,736	\$50.19

Executive Summary Report

Smog Check Statewide February 2019

16. INSPECTION COSTS BY STATION AND EQUIPMENT TYPE¹

Station Type	BAR-97 Initial Test Count ²	Average BAR-97 Inspection Cost ²	OIS Initial Test Count ³	Average OIS Inspection Cost ³	BAR-97 Inspection Cost ⁴	Average BAR-97 Inspection Cost ⁴	OIS Initial Test Count ⁴	Average OIS Inspection Cost ⁴
STAR Test and Repair	0	\$0.00	14,032	\$45.20	42,274	\$54.44	186,056	\$49.24
STAR Test Only	751	\$39.26	21,261	\$41.37	76,933	\$49.00	333,111	\$49.76
Non-STAR Test and Repair	0	\$0.00	71,996	\$59.97	11,621	\$50.96	40,527	\$44.43
Non-STAR Test Only	21	\$36.20	7,995	\$40.43	2,416	\$40.78	9,082	\$59.76
Test and Repair/Dealer	0	\$0.00	2,394	\$61.00	39	\$55.12	223	\$60.12
Total	772	\$39.17	117,678	\$53.54	133,283	\$50.75	568,999	\$49.37

¹Note: Smog Check Inspectors are asked to enter their inspection costs once per month. These costs may or may not include any discounts and may not reflect the actual inspection cost. Additionally, inspection costs entries in excess of \$99 cannot be entered into the BAR-97 software.

²BAR-97 Equipment Only

³OIS Equipment Only

⁴Both Equipment (BAR-97 and OIS)

17. REPAIR COSTS

Repair Station Type	All Cost Ranges	Vehicles Repaired	Average Cost	(All Cost Ranges) Vehicles Repaired	(All Cost Ranges) Average Cost
STAR Repairs (Test and Repair, Non-CAP)	\$1-100	985	\$49	3,928	\$411
	\$101-250	935	\$172		
	\$251-500	936	\$361		
	\$501-650	323	\$571		
	Over \$650	749	\$1,179		
Non-STAR Repairs (Test and Repair)	\$1-100	414	\$47	1,495	\$394
	\$101-250	378	\$167		
	\$251-500	370	\$365		
	\$501-650	103	\$568		
	Over \$650	230	\$1,360		
Repair Only	\$1-100	7	\$57	30	\$645
	\$101-250	3	\$187		
	\$251-500	3	\$305		
	\$501-650	0	\$0		
	Over \$650	2	\$1,483		
CAP Repairs	\$1-100	0	\$0	177	\$738
	\$101-250	1	\$222		
	\$251-500	44	\$396		
	\$501-650	44	\$599		
	Over \$650	88	\$985		
Total Repairs	\$1-100	1,406	\$49	5,615	\$417
	\$101-250	1,317	\$171		
	\$251-500	1,353	\$363		
	\$501-650	470	\$573		
	Over \$650	1,069	\$1,203		

Note: Non-CAP repair costs are based solely on Smog Check Inspector entries. The majority of non-CAP repairs are not entered into the repair database and therefore not included in this summary.

Executive Summary Report

Smog Check Statewide February 2019

18. 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	379	72	19.00%	13.19%	5.80%	8.18%	5.01%	NA
1977	496	114	22.98%	14.52%	6.45%	12.70%	4.64%	NA
1978	607	137	22.57%	14.33%	3.62%	10.05%	6.10%	NA
1979	681	153	22.47%	17.03%	6.02%	10.13%	6.90%	NA
1980	368	68	18.48%	11.41%	4.89%	9.78%	4.35%	NA
1981	407	88	21.62%	15.72%	6.39%	10.81%	5.16%	NA
1982	443	104	23.48%	15.58%	6.55%	11.96%	6.55%	NA
1983	550	140	25.45%	19.45%	8.00%	11.09%	7.27%	NA
1984	1,016	233	22.93%	16.14%	6.79%	10.83%	5.31%	NA
1985	1,317	340	25.82%	18.91%	7.21%	11.47%	6.15%	NA
1986	1,734	446	25.72%	18.34%	6.86%	11.59%	6.40%	NA
1987	1,989	483	24.28%	16.54%	5.58%	11.21%	5.68%	NA
1988	2,344	543	23.17%	16.64%	5.59%	9.85%	5.55%	NA
1989	3,258	778	23.88%	15.25%	4.73%	11.48%	4.94%	NA
1990	3,971	919	23.14%	15.08%	4.10%	10.90%	5.59%	NA
1991	4,420	949	21.47%	13.71%	3.46%	10.25%	4.34%	NA
1992	4,590	1,001	21.81%	14.73%	4.03%	9.43%	4.25%	NA
1993	5,510	1,342	24.36%	17.10%	3.81%	10.74%	4.75%	NA
1994	7,674	1,783	23.23%	15.35%	3.34%	10.52%	5.16%	NA
1995	10,778	2,298	21.32%	13.64%	2.64%	9.35%	4.54%	NA
1996	9,621	2,180	22.66%	10.35%	1.56%	13.43%	4.48%	13.34%
1997	17,207	3,575	20.78%	8.62%	1.28%	13.02%	3.77%	12.94%
1998	17,495	3,421	19.55%	7.33%	1.18%	12.79%	3.77%	12.72%
1999	27,757	4,523	16.29%	4.68%	0.89%	11.56%	3.30%	11.52%
2000	362	61	16.85%	9.12%	5.52%	9.67%	3.04%	9.67%
2001	309	35	11.33%	6.15%	2.27%	7.44%	2.27%	7.44%
2002	232	25	10.78%	6.90%	3.88%	8.19%	1.29%	8.19%
2003	345	34	9.86%	4.93%	1.74%	6.96%	0.87%	6.96%
2004	267	18	6.74%	3.00%	1.50%	5.24%	0.37%	5.24%
2005	361	34	9.42%	4.99%	1.66%	4.43%	0.83%	4.16%
2006	302	28	9.27%	4.30%	1.99%	4.97%	1.32%	4.97%
2007	299	20	6.69%	2.68%	1.34%	4.35%	0.00%	4.35%
2008	181	14	7.73%	5.52%	3.87%	1.66%	1.66%	1.66%
2009	103	2	4.85%	3.88%	0.97%	3.77%	0.00%	0.97%
2010	45	1	2.22%	2.22%	2.22%	2.22%	0.00%	2.22%
2011	127	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2012	61	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2013	53	3	5.66%	1.89%	0.00%	3.77%	0.00%	3.77%
2014	44	1	2.27%	0.00%	0.00%	2.27%	0.00%	2.27%
2015	34	1	2.94%	2.94%	0.00%	0.00%	0.00%	0.00%
2016	29	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2017	51	1	1.96%	0.00%	0.00%	1.96%	0.00%	1.96%
2018	68	1	1.47%	1.47%	0.00%	0.00%	1.47%	0.00%
2019	93	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2020	4	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Model Years	127,982	25,972	20.29%	10.34%	2.39%	11.39%	4.16%	7.11%

Note: Some model year 1975 and older vehicles required a Referee inspection (for example, engine changes). 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 20 for Smog Check requirements.

Executive Summary Report

Smog Check Statewide February 2019

19. 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
1996	4	1	25.00%	0.00%	25.00%	0.00%	0.00%	0.00%
1997	5	3	60.00%	20.00%	20.00%	20.00%	20.00%	0.00%
1998	182	43	23.60%	22.00%	3.85%	20.30%	9.34%	1.65%
1999	664	85	12.80%	10.80%	2.86%	10.70%	7.68%	0.15%
2000	29,005	5,338	18.40%	16.10%	3.53%	15.80%	11.00%	0.33%
2001	46,651	6,977	15.00%	13.20%	2.83%	12.90%	8.91%	0.28%
2002	34,664	5,049	14.60%	12.40%	3.22%	12.20%	8.11%	0.27%
2003	59,345	6,693	11.30%	9.68%	2.28%	9.44%	6.23%	0.24%
2004	40,797	4,691	11.50%	9.98%	2.22%	9.75%	6.52%	0.24%
2005	69,919	6,253	8.94%	7.65%	1.73%	7.48%	5.01%	0.17%
2006	44,668	4,168	9.33%	8.07%	1.65%	7.90%	5.37%	0.17%
2007	76,971	4,837	6.28%	5.39%	1.13%	5.27%	3.43%	0.11%
2008	40,405	2,801	6.93%	6.09%	1.05%	5.99%	4.06%	0.10%
2009	46,226	2,246	4.86%	4.33%	0.63%	4.26%	3.02%	0.07%
2010	26,082	1,517	5.82%	5.32%	0.67%	5.24%	3.81%	0.08%
2011	72,130	2,846	3.95%	3.56%	0.45%	3.51%	2.56%	0.04%
2012	16,928	995	5.88%	5.51%	0.48%	5.49%	4.40%	0.02%
2013	15,751	737	4.68%	4.34%	0.44%	4.28%	3.78%	0.06%
2014	14,990	678	4.52%	4.25%	0.33%	4.19%	3.70%	0.06%
2015	24,734	1,012	4.09%	3.88%	0.26%	3.83%	3.59%	0.04%
2016	12,748	516	4.05%	3.82%	0.29%	3.80%	3.58%	0.02%
2017	11,493	370	3.22%	3.06%	0.20%	3.03%	2.86%	0.03%
2018	8,628	258	2.99%	2.86%	0.15%	2.86%	2.71%	0.00%
2019	1,486	101	6.80%	6.80%	0.00%	6.80%	6.80%	0.00%
Other	2	1	50.00%	0.00%	50.00%	0.00%	0.00%	0.00%
All Model Years	694,478	58,216	8.38%	7.34%	1.46%	7.20%	5.02%	0.14%

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 20 for Smog Check Requirements.

Executive Summary Report

Smog Check Statewide February 2019

20. SMOG CHECK REQUIREMENTS BY VEHICLE TYPE

Fuel Type	Model-Year	GVWR ¹	OBD II Equipped?	Smog Check Required None	Smog Check Required OIS Test	Smog Check Required BAR-97 Test
All ² (except Diesel)	Four Model-years and newer ³	All	All	x		
	Fifth and sixth model-years ⁴	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 ⁵		x	
		No				x
		Over 14,000	All			x
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	
		No				x
			Over 14,000	All	x	
Diesel	1976-1997	All	All	x		
	1998 and newer	14,000 and less	All		x	
		Over 14,000	All		x ⁶	
Full Electric Powered	All	All	All			
Motorcycle	All	All	All			
Other Vehicles: Two Cylinder Engine, Two-stroke Engine, Off-highway Registered	All	All	All	x		

¹ Gross vehicle weight rating

² 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.

³ 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 in 2014 (2010+4=2014).

⁴ 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).

⁵ In the future, BAR may identify some vehicles that have GVWR of 14,000 and less or that have problematic OBD II systems that may require the BAR-97 test.

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