

Executive Summary Report

Smog Check Statewide May 2020

1. TESTING VOLUME

Testing Volume	All Tests	Failed	Percent (%) Failed
Initial Test	872,654	88,575	10.15%
Total	953,052	100,446	10.54%

2. CERTIFICATION VOLUME

Certification Volume	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	778,300	89.19%	94,354	10.81%
Total	846,036	88.77%	107,016	11.23%

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	417,251	89.04%	51,363	10.96%
Non-STAR Test Only	16,053	90.86%	1,614	9.14%
STAR Test and Repair	232,072	89.02%	28,622	10.98%
Non-STAR Test and Repair	107,318	92.20%	9,074	7.80%
Total	772,694	89.50%	90,673	10.50%

*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	13,017	10.54%
All Visual	8,911	1.19%	3,844	3.11%
All Functional	58,703	7.84%	13,057	10.57%
OBDII	57,868	7.72%	8,103	6.56%
Overall	64,669	8.63%	23,906	19.35%

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	30,615	65,929	24,761	54,682
Non-Directed	230,079	402,685	207,311	362,569
Total	260,694	468,614	232,072	417,251

Executive Summary Report

Smog Check Statewide May 2020

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	243	55	198	43
Non-Directed	116,149	17,612	107,120	16,010
Total	116,392	17,667	107,318	16,053

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	647,221	56,623	8.75%	96,715	19,116	19.80%
Partial	37,304	3,021	8.10%	7,672	1,730	22.50%
Basic	60,056	4,689	7.81%	14,761	2,064	14.00%
Change of Ownership	4,553	336	7.38%	912	245	26.90%
No Program	0	0	0.00%	1	0	0.00%
Unknown	0	0	0.00%	3,459	751	21.70%
Total Program Area	749,134	64,669	8.63%	123,520	23,906	19.40%

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	397,228	36,803	9.26%	71,386	13,561	19.00%
STAR Test Only Suspended	2,497	164	6.57%	193	38	19.70%
Non-STAR Test Only	15,785	1,219	7.72%	1,882	290	15.40%
STAR Test and Repair	222,746	19,310	8.67%	37,948	8,200	21.60%
STAR Test and Repair Suspended	672	65	9.67%	59	13	22.00%
Non-STAR Test and Repair	105,691	6,737	6.37%	10,701	1,517	14.20%
Test and Repair/Dealer	2,287	111	4.85%	18	2	11.10%
Business Fleet	171	11	6.43%	0	0	0.00%
Permanent Fleet Registered	66	1	1.52%	0	0	0.00%
Referee	194	137	70.60%	105	70	66.70%
Government Fleet	1,797	111	6.18%	1,228	215	17.50%
Total	749,134	64,669	8.63%	123,520	23,906	19.40%

Executive Summary Report

Smog Check Statewide May 2020

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

Station Type	Basic	Change of Ownership	Enhanced	Partial	Total
STAR Test and Repair	107	49	1,872	72	2,100
STAR Test Only	15	1	1,709	36	1,761
STAR Sub-total	122	50	3,581	108	3,861
Non-STAR Test and Repair	497	45	2,124	246	2,912
Non-STAR Test Only	26	7	349	31	413
Non-STAR Sub-total	523	52	2,473	277	3,325
Basic Area Dealer	61	0	0	0	61
Business Fleet	0	0	4	0	4
Permanent Fleet Registered	3	2	46	4	55
Referee	5	0	27	0	32
Government Fleet	41	5	301	13	360
Repair Only	2	0	40	1	43
Unknown Type	0	0	21	1	22
Other Station Sub-Total	112	7	439	19	577
Total	757	109	6,493	404	7,763

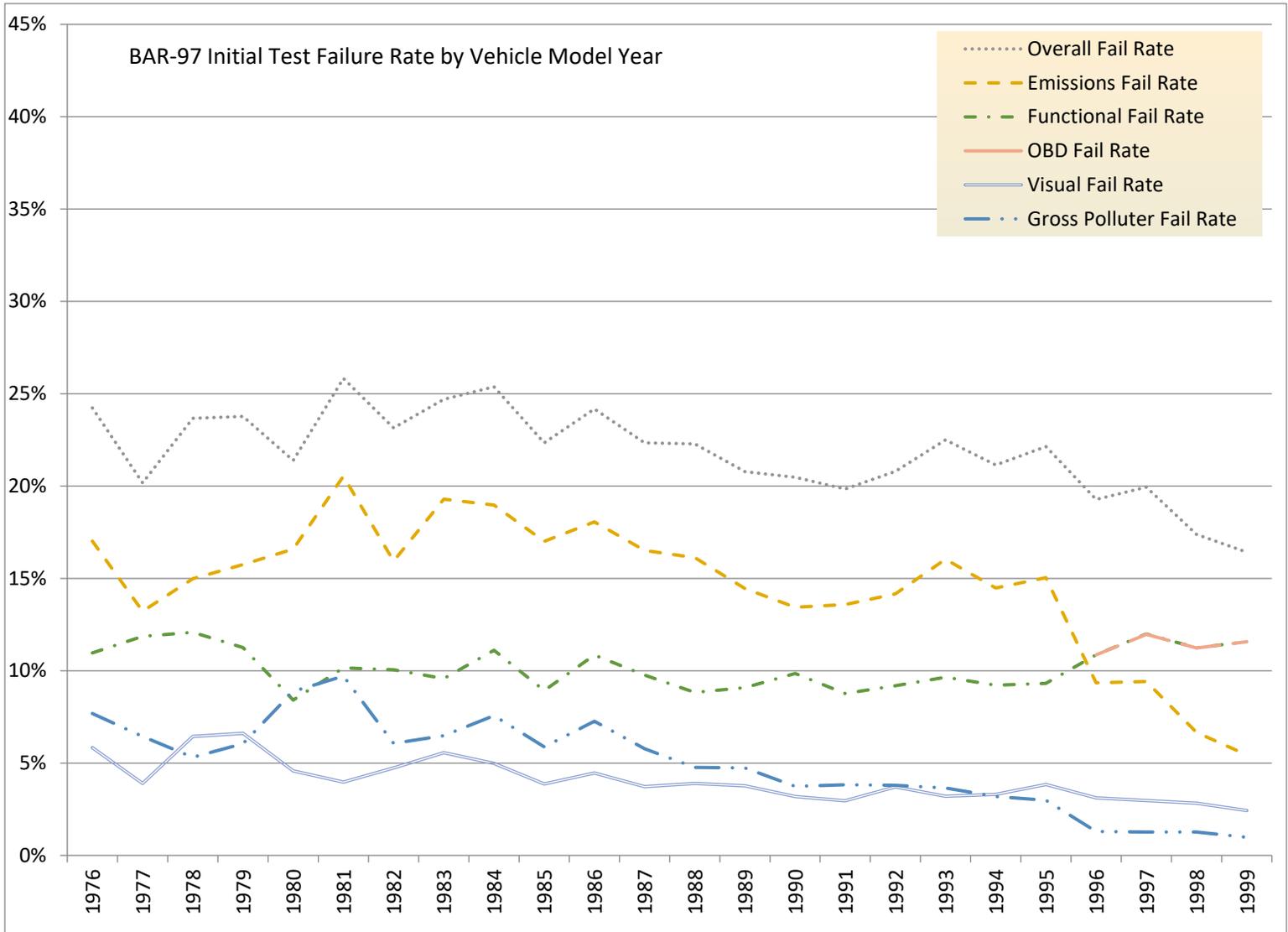
10. NUMBER OF STATIONS CONDUCTING TEST BY EQUIPMENT TYPE

Station Type	BAR-97 Only	OIS Only	BAR-97 & OIS
STAR Test and Repair	1	158	1,852
STAR Test Only	0	72	1,616
<i>STAR Sub-total</i>	1	230	3,468
Non-STAR Test and Repair	1	1,748	411
Non-STAR Test Only	0	106	68
<i>Non-STAR Sub-total</i>	1	1,854	479
Basic Area Dealer	0	49	5
Business Fleet	0	3	0
Permanent Fleet Registered	0	22	0
Referee	0	0	14
Government Fleet	7	135	35
Unknown Type	0	1	19
<i>Other Station Sub-Total</i>	7	210	73
Total	9	2,294	4,020

Executive Summary Report

Smog Check Statewide May 2020

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

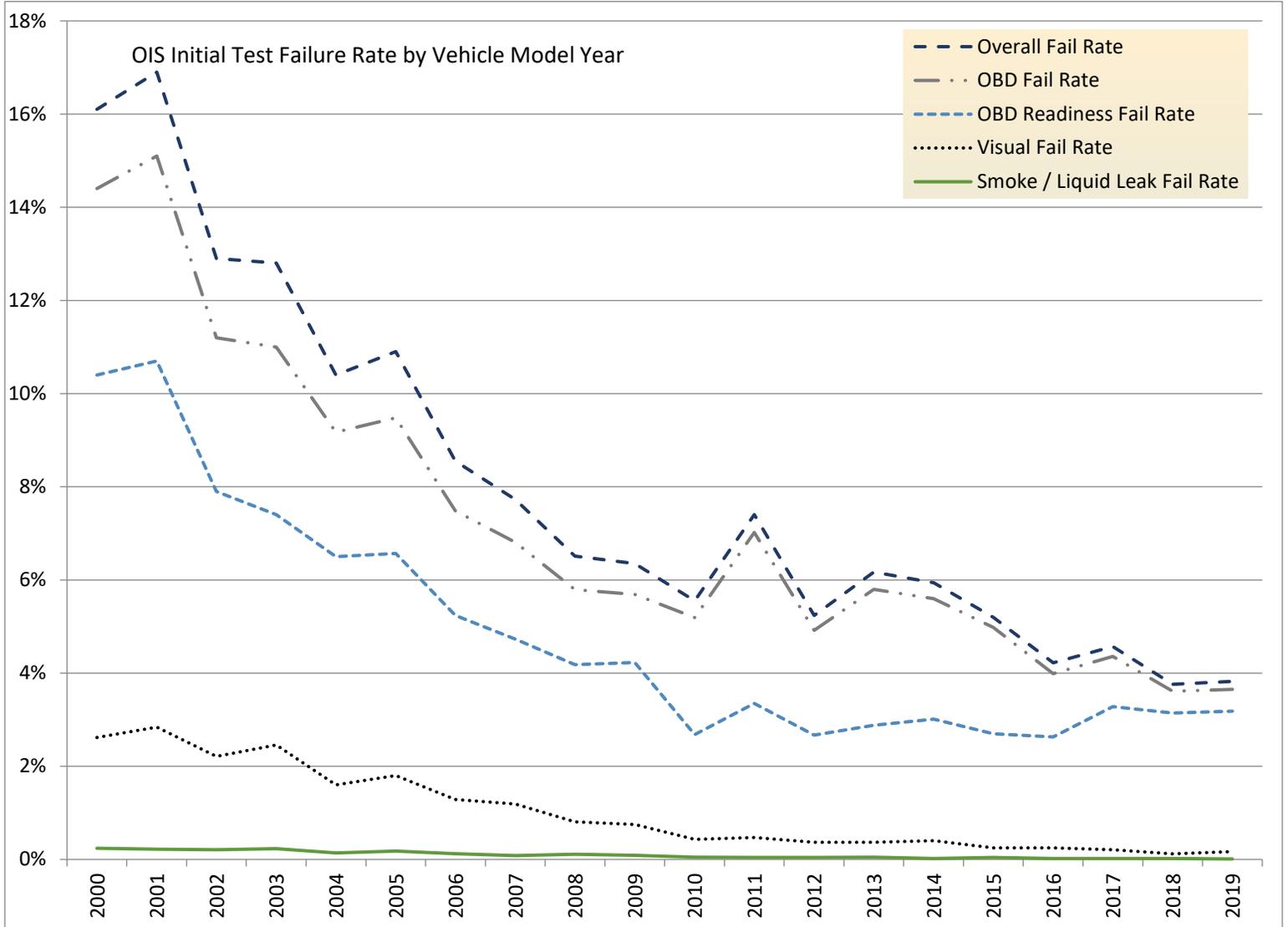


Note: Please see tabular data in Table 18 for BAR-97 tests conducted on other vehicle model years not shown in chart.

Executive Summary Report

Smog Check Statewide May 2020

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 May 2020

13. REFEREE ACTIVITY

Referee Activity	OIS Certificates Issued	BAR-97 Certificates Issued
Certificate of Compliance	134	73
Certificate of Non-Compliance	0	0
Parts Cost	8	3
Hardship Extensions	0	0
Exempt Vehicle	0	6
Exempted by Directive	6	0
Parts Exemption	2	0
Unknown Outcome	0	0
Permanently Exempt Vehicle	0	0
Temporarily Exempt Vehicle	0	0
Total	150	82

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)	2,511
EO and EI (Inspect and Repair)	2,768
Total	5,279

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	38,965	\$56.55	222,510	\$56.09	261,475	\$56.16
STAR Test Only	74,376	\$49.89	396,065	\$48.97	470,441	\$49.11
Non-STAR Test and Repair	10,869	\$53.17	104,863	\$55.10	115,732	\$54.92
Non-STAR Test Only	1,934	\$44.38	15,732	\$42.50	17,666	\$42.71
Test and Repair/Dealer	18	\$66.89	2,287	\$63.01	2,305	\$63.04
Total	126,162	\$52.15	741,457	\$51.88	867,619	\$51.92

Executive Summary Report

Smog Check Statewide May 2020

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 Count ⁴	Average BAR-97 Inspection Cost ⁴	OIS Initial Test Count ⁴	Average OIS Inspection Cost ⁴
STAR Test and Repair	1	\$61.75	8,106	\$60.78	38,962	\$56.55	214,404	\$55.92
STAR Test Only	0	\$0.00	8,240	\$74.10	74,374	\$49.89	387,825	\$48.43
Non-STAR Test and Repair	1	\$1.00	60,635	\$61.34	10,868	\$53.17	44,228	\$46.54
Non-STAR Test Only	0	\$0.00	7,069	\$42.45	1,931	\$44.40	8,663	\$42.55
Test and Repair/Dealer	0	\$0.00	2,108	\$61.99	18	\$66.89	179	\$75.03
Total	2	\$31.38	86,158	\$60.98	126,153	\$52.15	655,299	\$50.68

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	957	\$51	4,771	\$450
	\$101-250	1,096	\$173		
	\$251-500	1,186	\$363		
	\$501-650	468	\$576		
	Over \$650	1,064	\$1,138		
Non-STAR Repairs (Test and Repair)	\$1-100	318	\$50	1,239	\$428
	\$101-250	339	\$171		
	\$251-500	259	\$362		
	\$501-650	86	\$576		
	Over \$650	237	\$1,318		
Repair Only	\$1-100	0	\$0	0	\$0
	\$101-250	0	\$0		
	\$251-500	0	\$0		
	\$501-650	0	\$0		
	Over \$650	0	\$0		
CAP Repairs	\$1-100	0	\$0	111	\$743
	\$101-250	1	\$245		
	\$251-500	25	\$397		
	\$501-650	25	\$583		
	Over \$650	60	\$962		
Total Repairs	\$1-100	1,275	\$51	6,121	\$451
	\$101-250	1,436	\$172		
	\$251-500	1,470	\$364		
	\$501-650	579	\$577		
	Over \$650	1,361	\$1,161		

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 May 2020

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	429	104	24.24%	17.02%	7.69%	10.96%	5.83%	NA
1977	590	119	20.17%	13.22%	6.44%	11.86%	3.90%	NA
1978	621	147	23.67%	14.98%	5.31%	12.08%	6.44%	NA
1979	711	169	23.77%	15.75%	6.05%	11.25%	6.61%	NA
1980	416	89	21.39%	16.59%	8.89%	8.41%	4.57%	NA
1981	453	117	25.83%	20.53%	9.71%	10.15%	3.97%	NA
1982	527	122	23.15%	15.94%	6.07%	10.06%	4.74%	NA
1983	648	160	24.69%	19.29%	6.48%	9.57%	5.56%	NA
1984	1,044	265	25.38%	18.97%	7.57%	11.11%	4.98%	NA
1985	1,446	323	22.34%	17.01%	5.88%	8.92%	3.87%	NA
1986	1,927	466	24.18%	18.06%	7.27%	10.85%	4.46%	NA
1987	2,180	487	22.34%	16.51%	5.78%	9.77%	3.72%	NA
1988	2,536	565	22.28%	16.13%	4.77%	8.83%	3.90%	NA
1989	3,446	716	20.78%	14.45%	4.73%	9.08%	3.77%	NA
1990	4,011	821	20.47%	13.44%	3.74%	9.85%	3.19%	NA
1991	4,697	932	19.84%	13.58%	3.83%	8.77%	2.96%	NA
1992	4,767	991	20.79%	14.16%	3.80%	9.19%	3.71%	NA
1993	5,587	1,257	22.50%	16.04%	3.65%	9.65%	3.20%	NA
1994	7,800	1,649	21.14%	14.47%	3.19%	9.22%	3.31%	NA
1995	8,312	1,840	22.14%	15.04%	2.98%	9.31%	3.84%	NA
1996	11,597	2,235	19.27%	9.34%	1.29%	10.87%	3.12%	10.86%
1997	13,520	2,696	19.94%	9.42%	1.27%	11.99%	2.97%	11.97%
1998	20,652	3,590	17.38%	6.66%	1.26%	11.24%	2.82%	11.23%
1999	21,034	3,454	16.42%	5.44%	0.98%	11.57%	2.43%	11.57%
2000	501	105	20.96%	10.98%	4.59%	13.17%	2.59%	13.17%
2001	282	64	22.70%	9.93%	3.19%	19.86%	2.84%	19.86%
2002	397	71	17.88%	7.81%	4.03%	12.34%	1.51%	12.34%
2003	326	64	19.63%	7.98%	2.76%	16.56%	2.45%	16.56%
2004	509	55	10.81%	3.93%	1.77%	8.64%	0.59%	8.64%
2005	328	60	18.29%	5.79%	2.13%	15.24%	1.52%	15.24%
2006	490	42	8.57%	2.65%	1.22%	7.14%	0.61%	7.14%
2007	256	32	12.50%	3.13%	1.17%	10.94%	1.17%	10.94%
2008	431	28	6.50%	1.86%	0.93%	5.10%	0.00%	5.10%
2009	109	2	14.68%	4.59%	2.75%	3.77%	0.00%	13.76%
2010	107	14	13.08%	1.87%	0.93%	12.15%	0.00%	12.15%
2011	127	16	12.60%	4.72%	2.36%	11.81%	0.00%	11.81%
2012	268	9	3.36%	0.75%	0.00%	3.36%	0.00%	3.36%
2013	42	2	4.76%	0.00%	0.00%	4.76%	0.00%	4.76%
2014	57	9	15.79%	7.02%	7.02%	15.79%	0.00%	15.79%
2015	36	2	5.56%	2.78%	0.00%	5.56%	0.00%	5.56%
2016	35	1	2.86%	0.00%	0.00%	2.86%	0.00%	2.86%
2017	34	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2018	46	2	4.35%	0.00%	0.00%	2.17%	2.17%	2.17%
2019	76	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2020	112	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	0	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Model Years	123,520	23,906	19.35%	10.54%	2.52%	10.57%	3.11%	6.56%

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 May 2020

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	1	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1997	6	1	16.70%	16.70%	0.00%	16.70%	0.00%	0.00%
1998	233	45	19.30%	18.00%	3.00%	16.70%	8.15%	1.29%
1999	829	135	16.30%	14.70%	2.65%	14.20%	9.65%	0.48%
2000	39,047	6,299	16.10%	14.70%	2.62%	14.40%	10.40%	0.24%
2001	29,585	5,002	16.90%	15.30%	2.84%	15.10%	10.70%	0.22%
2002	50,858	6,541	12.90%	11.40%	2.21%	11.20%	7.90%	0.21%
2003	35,334	4,507	12.80%	11.20%	2.46%	11.00%	7.40%	0.23%
2004	67,589	7,033	10.40%	9.31%	1.60%	9.17%	6.50%	0.14%
2005	42,199	4,583	10.90%	9.65%	1.80%	9.48%	6.57%	0.18%
2006	75,024	6,418	8.55%	7.60%	1.29%	7.48%	5.24%	0.12%
2007	45,630	3,525	7.73%	6.89%	1.19%	6.81%	4.73%	0.08%
2008	65,329	4,252	6.51%	5.89%	0.81%	5.79%	4.18%	0.11%
2009	22,363	1,421	6.35%	5.78%	0.75%	5.69%	4.23%	0.09%
2010	62,003	3,440	5.55%	5.23%	0.43%	5.19%	2.68%	0.05%
2011	24,661	1,824	7.40%	7.05%	0.47%	7.02%	3.35%	0.04%
2012	103,031	5,398	5.24%	4.96%	0.37%	4.92%	2.67%	0.04%
2013	12,325	761	6.17%	5.85%	0.37%	5.80%	2.88%	0.05%
2014	13,395	796	5.94%	5.62%	0.40%	5.60%	3.01%	0.02%
2015	14,200	739	5.20%	5.01%	0.25%	4.98%	2.70%	0.04%
2016	17,176	725	4.22%	4.01%	0.25%	3.99%	2.63%	0.02%
2017	11,541	528	4.57%	4.38%	0.21%	4.36%	3.28%	0.02%
2018	8,174	307	3.76%	3.63%	0.12%	3.61%	3.14%	0.02%
2019	7,038	269	3.82%	3.67%	0.17%	3.65%	3.18%	0.01%
2020	1,549	116	7.49%	7.49%	0.00%	7.42%	6.52%	0.06%
2021	13	3	23.10%	23.10%	0.00%	23.10%	15.40%	0.00%
Other	1	1	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%

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 May 2020

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).