

Executive Summary Report

Smog Check Statewide September 2020

1. TESTING VOLUME

Testing Volume	All Tests	Failed	Percent (%) Failed
Initial Test	878,223	88,484	10.08%
Total	962,338	101,456	10.54%

2. CERTIFICATION VOLUME

Certification Volume	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	784,241	89.30%	93,982	10.70%
Total	854,728	88.82%	107,610	11.18%

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	415,815	88.92%	51,793	11.08%
Non-STAR Test Only	18,821	91.85%	1,670	8.15%
STAR Test and Repair	224,195	88.70%	28,570	11.30%
Non-STAR Test and Repair	121,669	92.58%	9,749	7.42%
Total	780,500	89.48%	91,782	10.52%

*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	12,351	10.61%
All Visual	9,642	1.27%	4,023	3.46%
All Functional	58,830	7.72%	12,645	10.86%
OBDII	57,892	7.60%	7,616	6.54%
Overall	65,372	8.58%	23,112	19.86%

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	26,132	58,697	20,882	48,602
Non-Directed	226,633	408,911	203,313	367,213
Total	252,765	467,608	224,195	415,815

Executive Summary Report

Smog Check Statewide September 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	230	49	186	40
Non-Directed	131,188	20,442	121,483	18,781
Total	131,418	20,491	121,669	18,821

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	655,659	57,046	8.70%	89,708	18,271	20.40%
Partial	37,360	3,060	8.19%	7,178	1,685	23.50%
Basic	62,065	4,752	7.66%	14,350	2,009	14.00%
Change of Ownership	6,749	514	7.62%	1,191	291	24.40%
No Program	0	0	0.00%	0	0	0.00%
Unknown	0	0	0.00%	3,963	856	21.60%
Total Program Area	761,833	65,372	8.58%	116,390	23,112	19.90%

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	399,334	37,140	9.30%	68,274	13,246	19.40%
STAR Test Only Suspended	546	51	9.34%	84	15	17.90%
Non-STAR Test Only	18,357	1,262	6.87%	2,134	321	15.00%
STAR Test and Repair	217,712	19,306	8.87%	35,053	7,850	22.40%
STAR Test and Repair Suspended	173	20	11.60%	10	2	20.00%
Non-STAR Test and Repair	121,138	7,151	5.90%	10,280	1,521	14.80%
Test and Repair/Dealer	2,445	131	5.36%	7	0	0.00%
Business Fleet	461	22	4.77%	0	0	0.00%
Permanent Fleet Registered	79	2	2.53%	0	0	0.00%
Referee	351	214	61.00%	160	91	56.90%
Government Fleet	1,237	73	5.90%	388	66	17.00%
Total	761,833	65,372	8.58%	116,390	23,112	19.90%

Executive Summary Report

Smog Check Statewide September 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	106	48	1,881	71	2,106
STAR Test Only	18	2	1,727	34	1,781
STAR Sub-total	124	50	3,608	105	3,887
Non-STAR Test and Repair	483	45	2,047	238	2,813
Non-STAR Test Only	25	5	308	32	370
Non-STAR Sub-total	508	50	2,355	270	3,183
Basic Area Dealer	58	0	0	0	58
Business Fleet	0	0	4	0	4
Permanent Fleet Registered	3	2	48	4	57
Referee	5	0	30	0	35
Government Fleet	41	5	302	13	361
Repair Only	2	0	43	1	46
Unknown Type	0	0	8	0	8
Other Station Sub-Total	109	7	435	18	569
Total	741	107	6,398	393	7,639

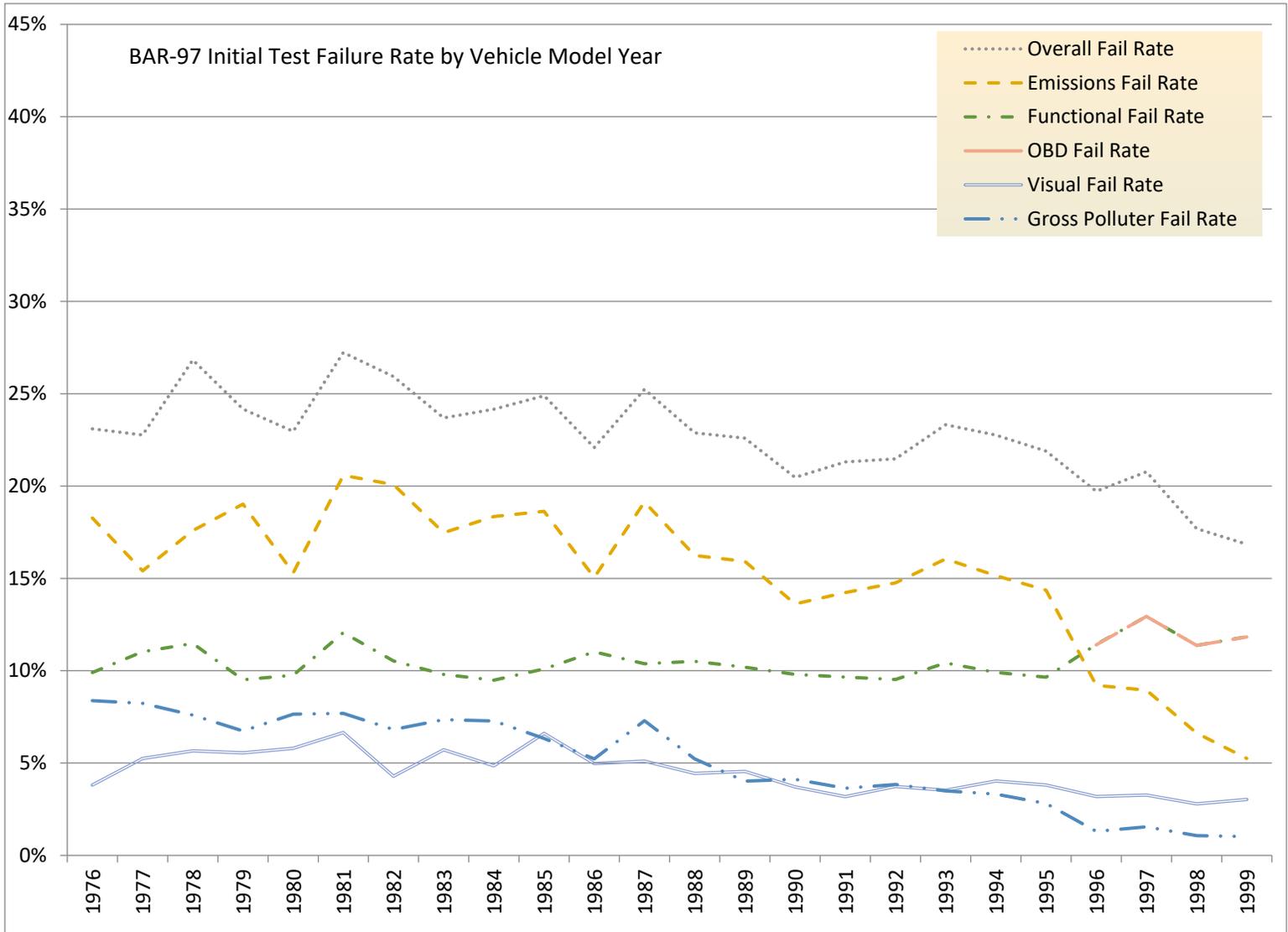
10. NUMBER OF STATIONS CONDUCTING TEST BY EQUIPMENT TYPE

Station Type	BAR-97 Only	OIS Only	BAR-97 & OIS
STAR Test and Repair	2	166	1,856
STAR Test Only	0	75	1,646
<i>STAR Sub-total</i>	2	241	3,502
Non-STAR Test and Repair	0	1,763	407
Non-STAR Test Only	2	104	78
<i>Non-STAR Sub-total</i>	2	1,867	485
Basic Area Dealer	0	49	4
Business Fleet	0	2	0
Permanent Fleet Registered	0	17	0
Referee	0	1	22
Government Fleet	7	144	31
Unknown Type	0	0	6
<i>Other Station Sub-Total</i>	7	213	63
Total	11	2,321	4,050

Executive Summary Report

Smog Check Statewide September 2020

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

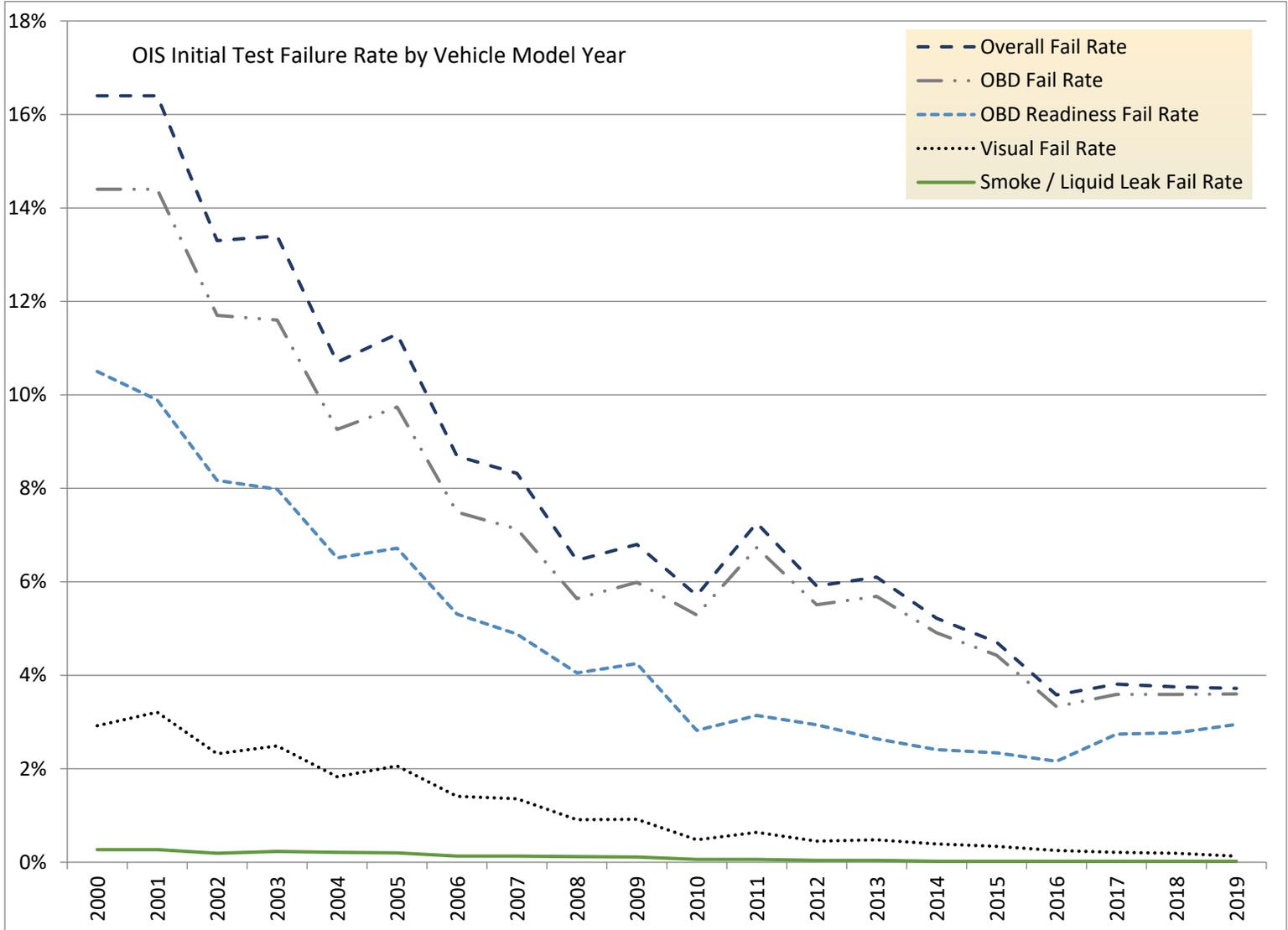


Note: Please see tabular data in Table 18 for BAR-97 tests conducted on other vehicle model years not shown in chart.

Executive Summary Report

Smog Check Statewide September 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 September 2020

13. REFEREE ACTIVITY

Referee Activity	OIS Certificates Issued	BAR-97 Certificates Issued
Certificate of Compliance	257	155
Certificate of Non-Compliance	0	0
Parts Cost	29	3
Hardship Extensions	0	0
Exempt Vehicle	1	23
Exempted by Directive	5	1
Parts Exemption	6	0
Unknown Outcome	0	0
Permanently Exempt Vehicle	0	0
Temporarily Exempt Vehicle	0	0
Total	298	182

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)	2,580
EO and EI (Inspect and Repair)	2,766
Total	5,346

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	35,063	\$57.19	217,024	\$49.64	252,087	\$50.69
STAR Test Only	67,969	\$50.70	397,762	\$48.81	465,731	\$49.09
Non-STAR Test and Repair	10,247	\$55.78	120,463	\$59.10	130,710	\$58.84
Non-STAR Test Only	2,132	\$43.29	18,222	\$46.29	20,354	\$45.98
Test and Repair/Dealer	7	\$71.28	2,405	\$63.85	2,412	\$63.87
Total	115,418	\$52.99	755,876	\$50.68	871,294	\$50.98

Executive Summary Report

Smog Check Statewide September 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	2	\$80.38	8,403	\$51.82	35,061	\$57.19	208,621	\$49.55
STAR Test Only	0	\$0.00	7,882	\$47.54	67,969	\$50.70	389,880	\$48.84
Non-STAR Test and Repair	0	\$0.00	76,218	\$64.81	10,247	\$55.78	44,245	\$49.27
Non-STAR Test Only	77	\$41.86	7,158	\$43.06	2,055	\$43.34	11,064	\$48.39
Test and Repair/Dealer	0	\$0.00	2,264	\$63.53	7	\$71.28	141	\$68.87
Total	79	\$42.83	101,925	\$60.85	115,339	\$53.00	653,951	\$49.09

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	921	\$51	4,399	\$476
	\$101-250	987	\$172		
	\$251-500	1,059	\$368		
	\$501-650	408	\$578		
	Over \$650	1,024	\$1,222		
Non-STAR Repairs (Test and Repair)	\$1-100	262	\$50	1,120	\$486
	\$101-250	299	\$169		
	\$251-500	234	\$360		
	\$501-650	84	\$576		
	Over \$650	241	\$1,445		
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	125	\$845
	\$101-250	4	\$208		
	\$251-500	24	\$376		
	\$501-650	25	\$588		
	Over \$650	72	\$1,126		
Total Repairs	\$1-100	1,183	\$50	5,644	\$486
	\$101-250	1,290	\$172		
	\$251-500	1,317	\$366		
	\$501-650	517	\$578		
	Over \$650	1,337	\$1,257		

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 September 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	394	91	23.10%	18.27%	8.38%	9.90%	3.81%	NA
1977	571	130	22.77%	15.41%	8.23%	11.03%	5.25%	NA
1978	671	180	26.83%	17.59%	7.60%	11.48%	5.66%	NA
1979	757	183	24.17%	19.02%	6.74%	9.51%	5.55%	NA
1980	379	87	22.96%	15.30%	7.65%	9.76%	5.80%	NA
1981	481	131	27.23%	20.58%	7.69%	12.06%	6.65%	NA
1982	513	133	25.93%	20.08%	6.82%	10.53%	4.29%	NA
1983	612	145	23.69%	17.48%	7.35%	9.80%	5.72%	NA
1984	948	229	24.16%	18.35%	7.28%	9.49%	4.85%	NA
1985	1,406	350	24.89%	18.63%	6.33%	10.10%	6.61%	NA
1986	1,933	427	22.09%	15.05%	5.23%	11.02%	4.97%	NA
1987	2,100	530	25.24%	19.14%	7.29%	10.38%	5.10%	NA
1988	2,408	551	22.88%	16.24%	5.23%	10.51%	4.44%	NA
1989	3,404	769	22.59%	15.92%	4.02%	10.19%	4.55%	NA
1990	3,664	750	20.47%	13.62%	4.12%	9.80%	3.71%	NA
1991	4,534	966	21.31%	14.23%	3.64%	9.66%	3.18%	NA
1992	4,397	944	21.47%	14.76%	3.84%	9.53%	3.73%	NA
1993	5,327	1,242	23.32%	16.05%	3.49%	10.42%	3.53%	NA
1994	7,347	1,672	22.76%	15.15%	3.32%	9.91%	4.03%	NA
1995	8,317	1,821	21.89%	14.36%	2.81%	9.65%	3.81%	NA
1996	10,180	2,007	19.72%	9.21%	1.30%	11.42%	3.19%	11.40%
1997	12,462	2,588	20.77%	8.95%	1.55%	12.94%	3.27%	12.94%
1998	19,650	3,477	17.69%	6.62%	1.07%	11.37%	2.79%	11.37%
1999	19,035	3,207	16.85%	5.25%	1.02%	11.84%	3.03%	11.83%
2000	464	84	18.10%	10.34%	4.09%	9.91%	3.66%	9.91%
2001	286	49	17.13%	4.55%	1.05%	14.34%	2.80%	14.34%
2002	406	69	17.00%	5.42%	1.97%	11.82%	3.45%	11.82%
2003	341	54	15.84%	4.11%	1.17%	12.61%	2.93%	12.61%
2004	461	45	9.76%	3.69%	0.87%	6.94%	2.17%	6.94%
2005	310	47	15.16%	6.13%	3.23%	11.61%	1.61%	11.61%
2006	438	34	7.76%	2.74%	1.14%	5.48%	2.05%	5.48%
2007	274	39	14.23%	7.30%	1.46%	8.03%	2.55%	8.03%
2008	348	24	6.90%	3.16%	1.44%	4.60%	0.00%	4.60%
2009	63	2	14.29%	0.00%	0.00%	3.77%	0.00%	14.29%
2010	100	13	13.00%	4.00%	2.00%	12.00%	0.00%	12.00%
2011	127	11	8.66%	2.36%	1.57%	7.87%	0.00%	7.87%
2012	334	12	3.59%	1.20%	0.60%	2.69%	0.00%	2.69%
2013	49	2	4.08%	0.00%	0.00%	4.08%	0.00%	4.08%
2014	67	2	2.99%	0.00%	0.00%	2.99%	0.00%	2.99%
2015	74	2	2.70%	1.35%	1.35%	1.35%	1.35%	1.35%
2016	77	2	2.60%	1.30%	0.00%	1.30%	0.00%	1.30%
2017	57	1	1.75%	0.00%	0.00%	1.75%	0.00%	1.75%
2018	55	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2019	105	1	0.95%	0.00%	0.00%	0.95%	0.00%	0.95%
2020	462	2	0.43%	0.43%	0.43%	0.22%	0.00%	0.22%
Other	2	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Model Years	116,390	23,112	19.86%	10.61%	2.54%	10.86%	3.46%	6.54%

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 September 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	5	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1998	198	24	12.10%	11.10%	2.53%	10.60%	5.05%	0.51%
1999	732	89	12.20%	10.80%	2.19%	10.50%	7.65%	0.27%
2000	36,989	6,057	16.40%	14.70%	2.92%	14.40%	10.50%	0.27%
2001	28,429	4,670	16.40%	14.60%	3.21%	14.40%	9.89%	0.27%
2002	48,581	6,465	13.30%	11.80%	2.32%	11.70%	8.17%	0.19%
2003	35,848	4,805	13.40%	11.80%	2.49%	11.60%	7.98%	0.23%
2004	63,666	6,787	10.70%	9.47%	1.83%	9.26%	6.51%	0.21%
2005	38,047	4,290	11.30%	9.94%	2.06%	9.74%	6.72%	0.20%
2006	72,756	6,323	8.69%	7.63%	1.41%	7.49%	5.31%	0.13%
2007	42,596	3,545	8.32%	7.25%	1.36%	7.13%	4.88%	0.13%
2008	66,511	4,294	6.46%	5.75%	0.91%	5.64%	4.05%	0.12%
2009	24,266	1,650	6.80%	6.10%	0.92%	5.99%	4.25%	0.11%
2010	60,326	3,444	5.71%	5.35%	0.48%	5.29%	2.82%	0.06%
2011	25,628	1,861	7.26%	6.79%	0.64%	6.73%	3.14%	0.06%
2012	92,385	5,462	5.91%	5.56%	0.45%	5.51%	2.94%	0.04%
2013	17,345	1,058	6.10%	5.73%	0.48%	5.69%	2.64%	0.04%
2014	18,235	952	5.22%	4.93%	0.39%	4.91%	2.41%	0.02%
2015	19,968	941	4.71%	4.44%	0.34%	4.43%	2.34%	0.02%
2016	22,236	796	3.58%	3.35%	0.25%	3.33%	2.16%	0.02%
2017	15,964	608	3.81%	3.61%	0.21%	3.59%	2.74%	0.02%
2018	12,735	477	3.75%	3.60%	0.19%	3.59%	2.77%	0.02%
2019	13,072	486	3.72%	3.62%	0.13%	3.60%	2.95%	0.02%
2020	5,190	273	5.26%	5.13%	0.19%	5.11%	4.47%	0.02%
2021	119	13	10.90%	10.90%	0.00%	10.90%	7.56%	0.00%
Other	5	2	40.00%	20.00%	0.00%	20.00%	20.00%	0.00%
All Model Years	761,833	65,372	8.58%	7.72%	1.27%	7.60%	5.05%	0.12%

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 September 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).