

Executive Summary Report

Smog Check Statewide August 2019

1. TESTING VOLUME

Testing Volume	All Tests	Failed	Percent (%) Failed
Initial Test	914,069	92,007	10.07%
Total	1,004,126	106,936	10.65%

2. CERTIFICATION VOLUME

Certification Volume	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	815,761	89.25%	98,308	10.75%
Total	890,195	88.65%	113,931	11.35%

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	427,823	88.97%	53,056	11.03%
Non-STAR Test Only	20,064	90.97%	1,992	9.03%
STAR Test and Repair	234,605	88.91%	29,267	11.09%
Non-STAR Test and Repair	128,064	92.27%	10,729	7.73%
Total	810,556	89.50%	95,044	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	14,713	10.32%
All Visual	10,598	1.37%	5,394	3.78%
All Functional	56,431	7.31%	15,369	10.78%
OBDII	55,417	7.18%	9,364	6.57%
Overall	63,979	8.29%	28,028	19.66%

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	32,700	71,726	26,550	59,030
Non-Directed	231,172	409,153	208,055	368,793
Total	263,872	480,879	234,605	427,823

Executive Summary Report

Smog Check Statewide August 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	294	74	239	61
Non-Directed	138,499	21,982	127,825	20,003
Total	138,793	22,056	128,064	20,064

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	667,441	55,850	8.37%	111,393	22,463	20.20%
Partial	36,042	2,889	8.02%	8,238	1,759	21.40%
Basic	62,034	4,734	7.63%	17,304	2,448	14.10%
Change of Ownership	5,992	506	8.44%	1,338	357	26.70%
No Program	0	0	0.00%	0	0	0.00%
Unknown	0	0	0.00%	4,287	1,001	23.30%
Total Program Area	755,362	61,428	8.13%	144,258	27,720	19.20%

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	398,283	35,387	8.88%	82,596	16,421	19.90%
STAR Test Only Suspended	1,575	113	7.17%	89	21	23.60%
Non-STAR Test Only	19,620	1,431	7.29%	2,436	333	13.70%
STAR Test and Repair	220,082	18,725	8.51%	43,790	9,170	20.90%
STAR Test and Repair Suspended	611	45	7.36%	53	8	15.10%
Non-STAR Test and Repair	126,376	7,647	6.05%	12,417	1,802	14.50%
Test and Repair/Dealer	2,634	134	5.09%	21	3	14.30%
Business Fleet	360	6	1.67%	0	0	0.00%
Permanent Fleet Registered	161	7	4.35%	0	0	0.00%
Referee	476	421	88.40%	156	74	47.40%
Government Fleet	1,331	63	4.73%	1,002	196	19.60%
Total	771,509	63,979	8.29%	142,560	28,028	19.70%

Executive Summary Report

Smog Check Statewide August 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	112	49	1,908	79	2,148
STAR Test Only	17	1	1,717	33	1,768
STAR Sub-total	129	50	3,625	112	3,916
Non-STAR Test and Repair	498	48	2,220	246	3,012
Non-STAR Test Only	21	8	431	29	489
Non-STAR Sub-total	519	56	2,651	275	3,501
Basic Area Dealer	62	0	0	0	62
Business Fleet	0	0	4	0	4
Permanent Fleet Registered	3	2	51	4	60
Referee	5	0	27	0	32
Government Fleet	41	5	298	13	357
Repair Only	2	0	46	1	49
Unknown Type	1	0	21	0	22
Other Station Sub-Total	114	7	447	18	586
Total	762	113	6,723	405	8,003

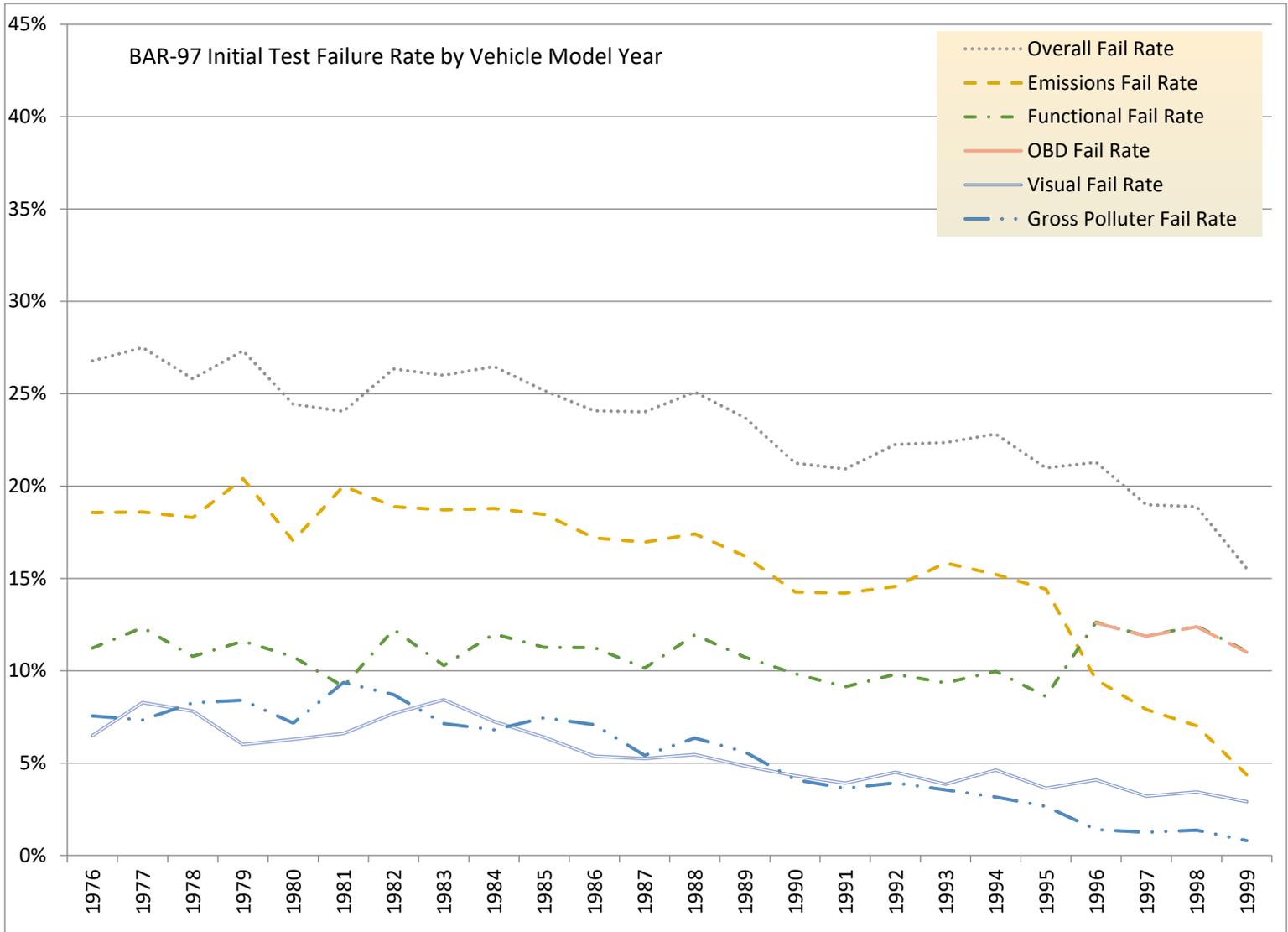
10. NUMBER OF STATIONS CONDUCTING TEST BY EQUIPMENT TYPE

Station Type	BAR-97 Only	OIS Only	BAR-97 & OIS
STAR Test and Repair	1	161	1,917
STAR Test Only	6	49	1,669
<i>STAR Sub-total</i>	7	210	3,586
Non-STAR Test and Repair	2	1,899	436
Non-STAR Test Only	0	140	86
<i>Non-STAR Sub-total</i>	2	2,039	522
Basic Area Dealer	0	54	5
Business Fleet	0	3	0
Permanent Fleet Registered	0	28	0
Referee	0	0	31
Government Fleet	9	148	33
Unknown Type	0	1	23
<i>Other Station Sub-Total</i>	9	234	92
Total	18	2,483	4,200

Executive Summary Report

Smog Check Statewide August 2019

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

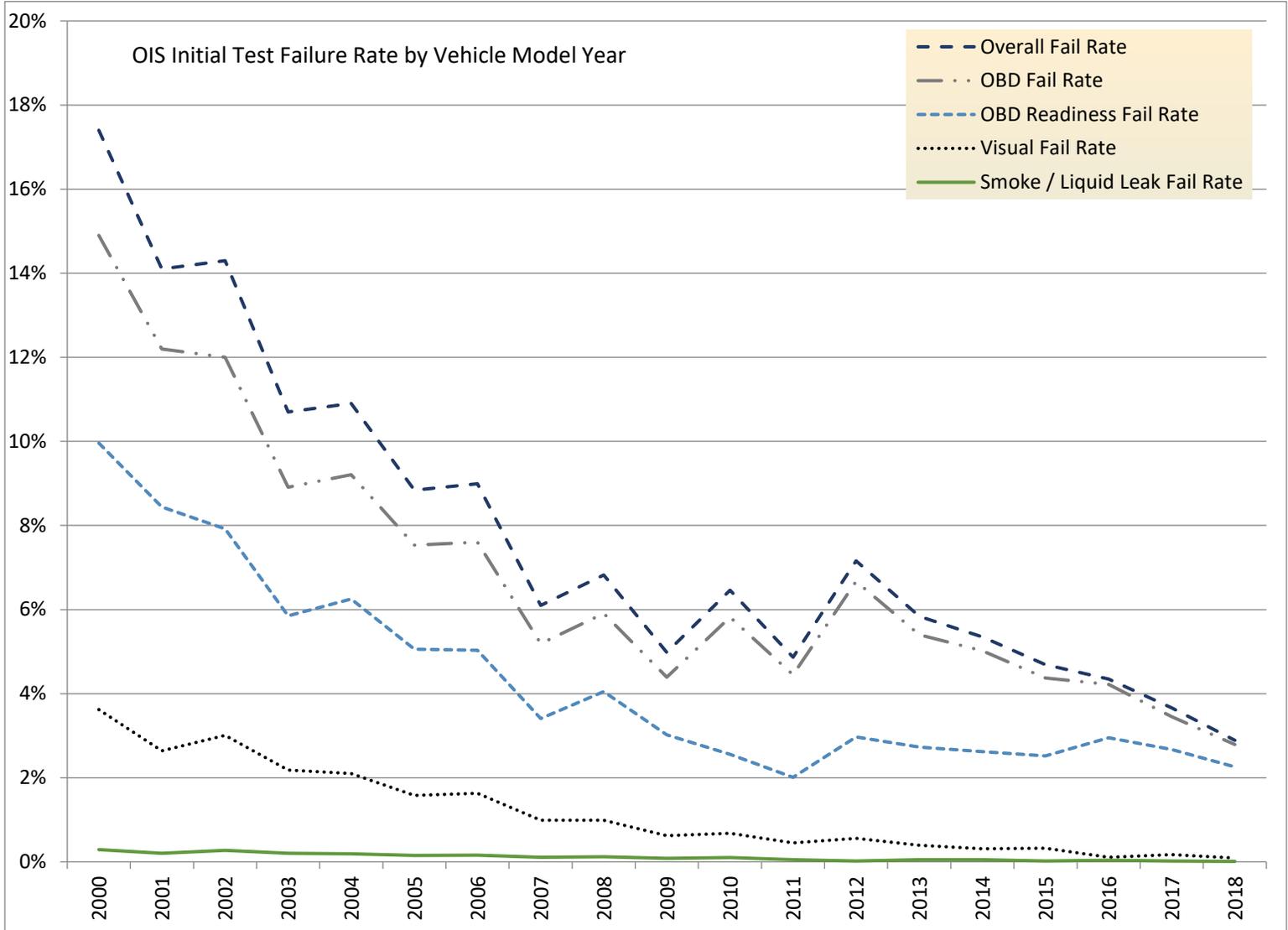


Note: Please see tabular data in Table 18 for BAR-97 tests conducted on other vehicle model years not shown in chart.

Executive Summary Report

Smog Check Statewide August 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 August 2019

13. REFEREE ACTIVITY

Referee Activity	OIS Certificates Issued	BAR-97 Certificates Issued
Certificate of Compliance	253	152
Certificate of Non-Compliance	0	0
Parts Cost	38	11
Hardship Extensions	0	0
Exempt Vehicle	1	27
Exempted by Directive	5	1
Parts Exemption	0	0
Unknown Outcome	0	0
Permanently Exempt Vehicle	0	0
Temporarily Exempt Vehicle	0	0
Total	297	191

14. ACTIVE TECHNICIANS

License Type	Technician Count
EA (Inspect and Repair Enhanced)	0
EB (Inspect and Repair Basic)	0
EI (Repair Only)	1
EO (Inspect Only)	2,649
EO and EI (Inspect and Repair)	3,206
Total	5,856

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	43,717	\$54.65	219,415	\$50.03	263,132	\$50.80
STAR Test Only	81,943	\$49.94	396,345	\$49.67	478,288	\$49.72
Non-STAR Test and Repair	12,357	\$54.10	125,288	\$56.30	137,645	\$56.11
Non-STAR Test Only	2,420	\$44.95	19,498	\$44.11	21,918	\$44.20
Test and Repair/Dealer	21	\$66.48	2,595	\$61.15	2,616	\$61.19
Total	140,458	\$51.69	763,141	\$50.76	903,599	\$50.90

Executive Summary Report

Smog Check Statewide August 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	19	\$65.00	7,360	\$51.17	43,698	\$54.64	212,055	\$49.99
STAR Test Only	289	\$43.10	5,748	\$40.48	81,654	\$49.97	390,597	\$49.80
Non-STAR Test and Repair	5	\$51.80	78,197	\$61.45	12,352	\$54.10	47,091	\$47.76
Non-STAR Test Only	0	\$0.00	8,256	\$42.61	2,420	\$44.95	11,242	\$45.22
Test and Repair/Dealer	0	\$0.00	2,393	\$60.56	21	\$66.48	202	\$68.09
Total	313	\$44.56	101,954	\$57.98	140,145	\$51.71	661,187	\$49.65

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	1,333	\$47	5,334	\$419
	\$101-250	1,212	\$172		
	\$251-500	1,276	\$366		
	\$501-650	482	\$572		
	Over \$650	1,031	\$1,185		
Non-STAR Repairs (Test and Repair)	\$1-100	378	\$48	1,414	\$403
	\$101-250	397	\$167		
	\$251-500	307	\$356		
	\$501-650	102	\$580		
	Over \$650	230	\$1,378		
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	1	\$45	165	\$677
	\$101-250	6	\$220		
	\$251-500	42	\$407		
	\$501-650	42	\$582		
	Over \$650	74	\$929		
Total Repairs	\$1-100	1,712	\$47	6,913	\$422
	\$101-250	1,615	\$171		
	\$251-500	1,625	\$365		
	\$501-650	626	\$574		
	Over \$650	1,335	\$1,204		

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 August 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	463	124	26.78%	18.57%	7.56%	11.23%	6.48%	NA
1977	640	176	27.50%	18.59%	7.34%	12.34%	8.28%	NA
1978	678	175	25.81%	18.29%	8.26%	10.77%	7.82%	NA
1979	750	205	27.33%	20.40%	8.40%	11.60%	6.00%	NA
1980	446	109	24.44%	17.04%	7.17%	10.76%	6.28%	NA
1981	470	113	24.04%	20.00%	9.36%	9.15%	6.60%	NA
1982	482	127	26.35%	18.88%	8.71%	12.24%	7.68%	NA
1983	700	182	26.00%	18.71%	7.14%	10.29%	8.43%	NA
1984	1,118	296	26.48%	18.78%	6.80%	11.99%	7.25%	NA
1985	1,517	382	25.18%	18.46%	7.45%	11.27%	6.39%	NA
1986	2,106	507	24.07%	17.19%	7.08%	11.25%	5.37%	NA
1987	2,327	559	24.02%	16.97%	5.41%	10.14%	5.24%	NA
1988	2,878	722	25.09%	17.41%	6.36%	11.95%	5.46%	NA
1989	3,949	936	23.70%	16.21%	5.60%	10.74%	4.84%	NA
1990	4,468	949	21.24%	14.26%	4.10%	9.83%	4.32%	NA
1991	5,366	1,123	20.93%	14.20%	3.63%	9.13%	3.91%	NA
1992	5,119	1,139	22.25%	14.57%	3.93%	9.81%	4.51%	NA
1993	6,930	1,549	22.35%	15.83%	3.55%	9.35%	3.85%	NA
1994	7,836	1,788	22.82%	15.21%	3.16%	9.97%	4.62%	NA
1995	12,213	2,562	20.98%	14.42%	2.65%	8.61%	3.64%	NA
1996	10,295	2,192	21.29%	9.52%	1.40%	12.63%	4.08%	12.59%
1997	18,654	3,543	18.99%	7.90%	1.25%	11.88%	3.20%	11.87%
1998	18,860	3,560	18.88%	7.02%	1.36%	12.43%	3.44%	12.38%
1999	29,948	4,650	15.53%	4.36%	0.80%	11.05%	2.91%	11.00%
2000	384	79	20.57%	12.50%	4.69%	11.20%	2.08%	11.20%
2001	354	49	13.84%	7.06%	3.11%	9.60%	0.56%	9.60%
2002	300	39	13.00%	5.00%	1.33%	8.67%	3.67%	8.67%
2003	481	54	11.23%	4.99%	2.08%	7.07%	2.70%	6.86%
2004	337	25	7.42%	2.67%	0.89%	5.34%	1.19%	5.34%
2005	407	22	5.41%	1.72%	0.49%	4.18%	0.49%	4.18%
2006	306	30	9.80%	4.90%	1.63%	6.86%	0.65%	6.86%
2007	348	19	5.46%	2.30%	0.57%	3.74%	1.15%	3.74%
2008	222	14	6.31%	3.60%	1.80%	1.80%	1.35%	1.80%
2009	145	2	7.59%	5.52%	2.07%	3.77%	0.00%	3.45%
2010	54	5	9.26%	1.85%	0.00%	7.41%	0.00%	7.41%
2011	268	6	2.24%	0.75%	0.37%	1.87%	0.75%	1.49%
2012	50	1	2.00%	0.00%	0.00%	2.00%	0.00%	2.00%
2013	68	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2014	62	1	1.61%	0.00%	0.00%	1.61%	0.00%	1.61%
2015	75	3	4.00%	0.00%	0.00%	0.00%	4.00%	0.00%
2016	39	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2017	49	1	2.04%	2.04%	0.00%	0.00%	0.00%	0.00%
2018	121	1	0.83%	0.00%	0.00%	0.83%	0.00%	0.83%
2019	211	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2020	63	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	3	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Model Years	142,560	28,028	19.66%	10.32%	2.50%	10.78%	3.78%	6.57%

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 August 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	5	2	40.00%	0.00%	20.00%	0.00%	0.00%	0.00%
1997	9	2	22.20%	22.20%	0.00%	22.20%	22.20%	0.00%
1998	219	31	14.20%	12.30%	5.02%	11.40%	4.57%	0.91%
1999	862	144	16.70%	15.40%	1.86%	14.50%	9.51%	0.93%
2000	30,786	5,348	17.40%	15.20%	3.62%	14.90%	9.96%	0.29%
2001	51,822	7,291	14.10%	12.40%	2.64%	12.20%	8.44%	0.20%
2002	36,365	5,192	14.30%	12.30%	3.01%	12.00%	7.92%	0.27%
2003	70,782	7,539	10.70%	9.12%	2.18%	8.91%	5.85%	0.20%
2004	42,467	4,609	10.90%	9.40%	2.10%	9.21%	6.25%	0.19%
2005	80,939	7,156	8.84%	7.68%	1.58%	7.53%	5.06%	0.15%
2006	46,527	4,185	8.99%	7.76%	1.63%	7.60%	5.03%	0.16%
2007	90,861	5,540	6.10%	5.30%	0.99%	5.19%	3.41%	0.11%
2008	37,261	2,543	6.82%	6.03%	0.99%	5.91%	4.05%	0.12%
2009	61,187	3,045	4.98%	4.48%	0.62%	4.39%	3.02%	0.08%
2010	26,692	1,725	6.46%	5.92%	0.68%	5.82%	2.56%	0.10%
2011	75,655	3,685	4.87%	4.50%	0.45%	4.45%	2.01%	0.05%
2012	16,017	1,147	7.16%	6.70%	0.56%	6.67%	2.97%	0.02%
2013	18,770	1,096	5.84%	5.46%	0.39%	5.40%	2.73%	0.05%
2014	17,070	913	5.35%	5.07%	0.31%	5.02%	2.62%	0.05%
2015	23,235	1,089	4.69%	4.39%	0.32%	4.37%	2.52%	0.02%
2016	15,225	663	4.35%	4.26%	0.11%	4.22%	2.95%	0.04%
2017	12,602	461	3.66%	3.48%	0.17%	3.45%	2.67%	0.02%
2018	11,117	321	2.89%	2.80%	0.09%	2.79%	2.26%	0.01%
2019	4,857	231	4.76%	4.59%	0.12%	4.57%	3.99%	0.02%
2020	164	12	7.32%	7.32%	0.00%	7.32%	6.10%	0.00%
Other	13	9	69.20%	23.10%	15.40%	23.10%	15.40%	0.00%
All Model Years	771,509	63,979	8.29%	7.31%	1.37%	7.18%	4.61%	0.13%

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 August 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).