

Executive Summary Report

Smog Check Statewide June 2019

1. TESTING VOLUME

Testing Volume	All Tests	Failed	Percent (%) Failed
Initial Test	875,133	85,670	9.79%
Total	959,116	99,042	10.33%

2. CERTIFICATION VOLUME

Certification Volume	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	783,409	89.52%	91,724	10.48%
Total	853,307	88.97%	105,809	11.03%

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	412,086	89.29%	49,420	10.71%
Non-STAR Test Only	20,289	91.35%	1,922	8.65%
STAR Test and Repair	223,762	89.11%	27,341	10.89%
Non-STAR Test and Repair	122,894	93.03%	9,206	6.97%
Total	779,031	89.86%	87,889	10.14%

*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	14,431	10.00%
All Visual	9,815	1.34%	5,525	3.83%
All Functional	50,873	6.96%	15,298	10.60%
OBDII	49,933	6.83%	9,157	6.34%
Overall	58,000	7.94%	27,670	19.17%

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	31,801	73,526	25,622	61,061
Non-Directed	219,302	387,980	198,140	351,025
Total	251,103	461,506	223,762	412,086

Executive Summary Report

Smog Check Statewide June 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	253	58	214	45
Non-Directed	131,847	22,153	122,680	20,244
Total	132,100	22,211	122,894	20,289

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	634,666	50,877	8.02%	112,993	22,253	19.70%
Partial	33,668	2,569	7.63%	8,463	1,792	21.20%
Basic	57,064	4,158	7.29%	17,232	2,401	13.90%
Change of Ownership	5,385	396	7.35%	1,284	302	23.50%
No Program	0	0	0.00%	1	0	0.00%
Unknown	0	0	0.00%	4,377	922	21.10%
Total Program Area	730,783	58,000	7.94%	144,350	27,670	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	376,165	32,166	8.55%	85,341	16,117	18.90%
STAR Test Only Suspended	941	60	6.38%	90	15	16.70%
Non-STAR Test Only	19,873	1,431	7.20%	2,338	371	15.90%
STAR Test and Repair	208,410	17,241	8.27%	42,693	9,064	21.20%
STAR Test and Repair Suspended	351	30	8.55%	39	11	28.20%
Non-STAR Test and Repair	119,769	6,470	5.40%	12,331	1,761	14.30%
Test and Repair/Dealer	2,674	128	4.79%	13	3	23.10%
Business Fleet	361	0	0.00%	0	0	0.00%
Permanent Fleet Registered	69	2	2.90%	0	0	0.00%
Referee	444	393	88.50%	152	74	48.70%
Government Fleet	1,726	79	4.58%	1,353	254	18.80%
Total	730,783	58,000	7.94%	144,350	27,670	19.20%

Executive Summary Report

Smog Check Statewide June 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	113	50	1,930	81	2,174
STAR Test Only	18	1	1,718	32	1,769
STAR Sub-total	131	51	3,648	113	3,943
Non-STAR Test and Repair	503	46	2,250	243	3,042
Non-STAR Test Only	22	7	469	31	529
Non-STAR Sub-total	525	53	2,719	274	3,571
Basic Area Dealer	63	0	0	0	63
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	295	13	353
Repair Only	2	0	46	1	49
Unknown Type	0	0	7	0	7
Other Station Sub-Total	114	6	430	18	568
Total	770	110	6,797	405	8,082

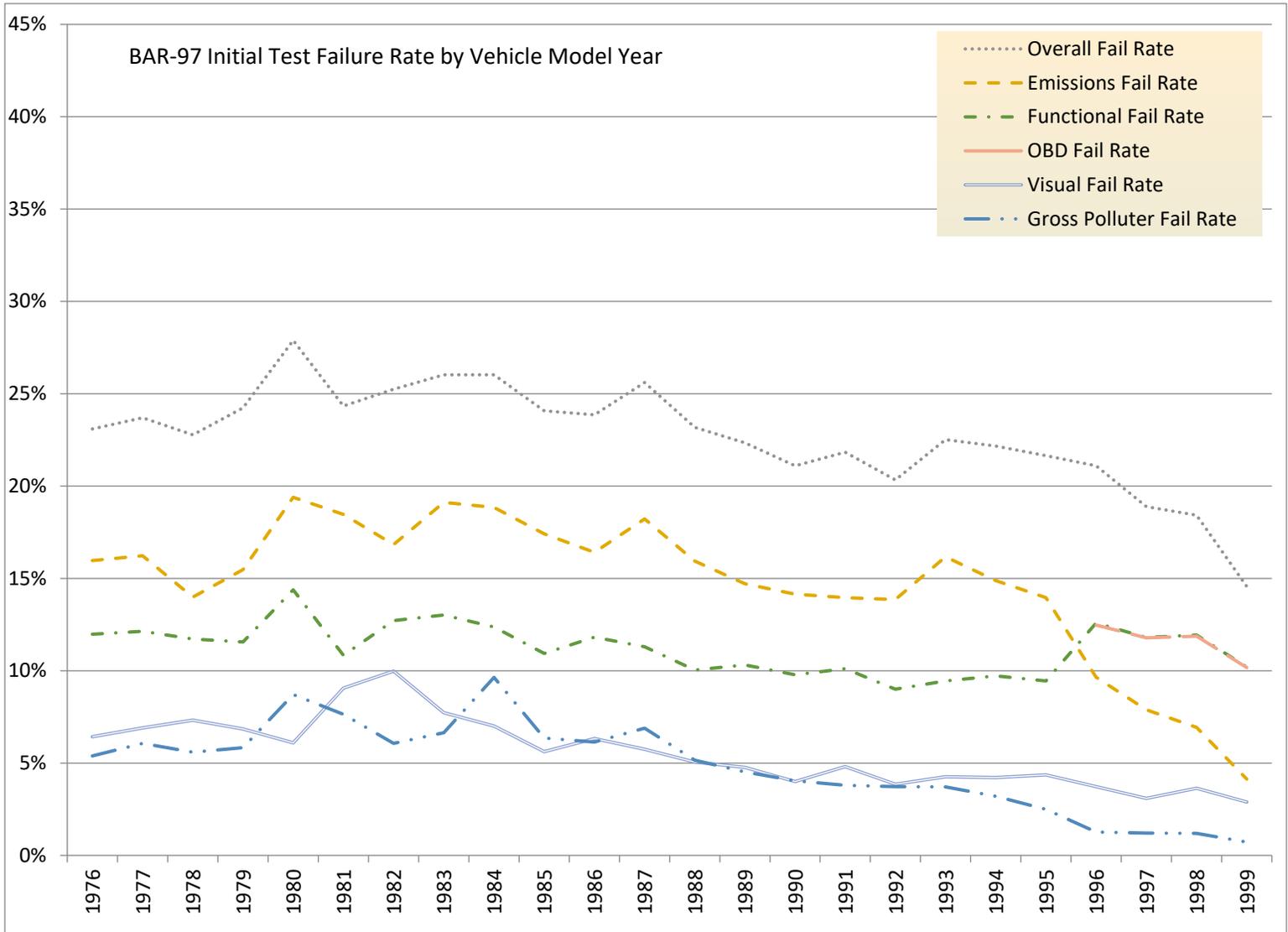
10. NUMBER OF STATIONS CONDUCTING TEST BY EQUIPMENT TYPE

Station Type	BAR-97 Only	OIS Only	BAR-97 & OIS
STAR Test and Repair	1	187	1,923
STAR Test Only	4	65	1,659
<i>STAR Sub-total</i>	5	252	3,582
Non-STAR Test and Repair	1	1,928	440
Non-STAR Test Only	1	148	96
<i>Non-STAR Sub-total</i>	2	2,076	536
Basic Area Dealer	0	56	4
Business Fleet	0	3	0
Permanent Fleet Registered	0	20	0
Referee	0	1	30
Government Fleet	7	139	35
Unknown Type	0	0	5
<i>Other Station Sub-Total</i>	7	219	74
Total	14	2,547	4,192

Executive Summary Report

Smog Check Statewide June 2019

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

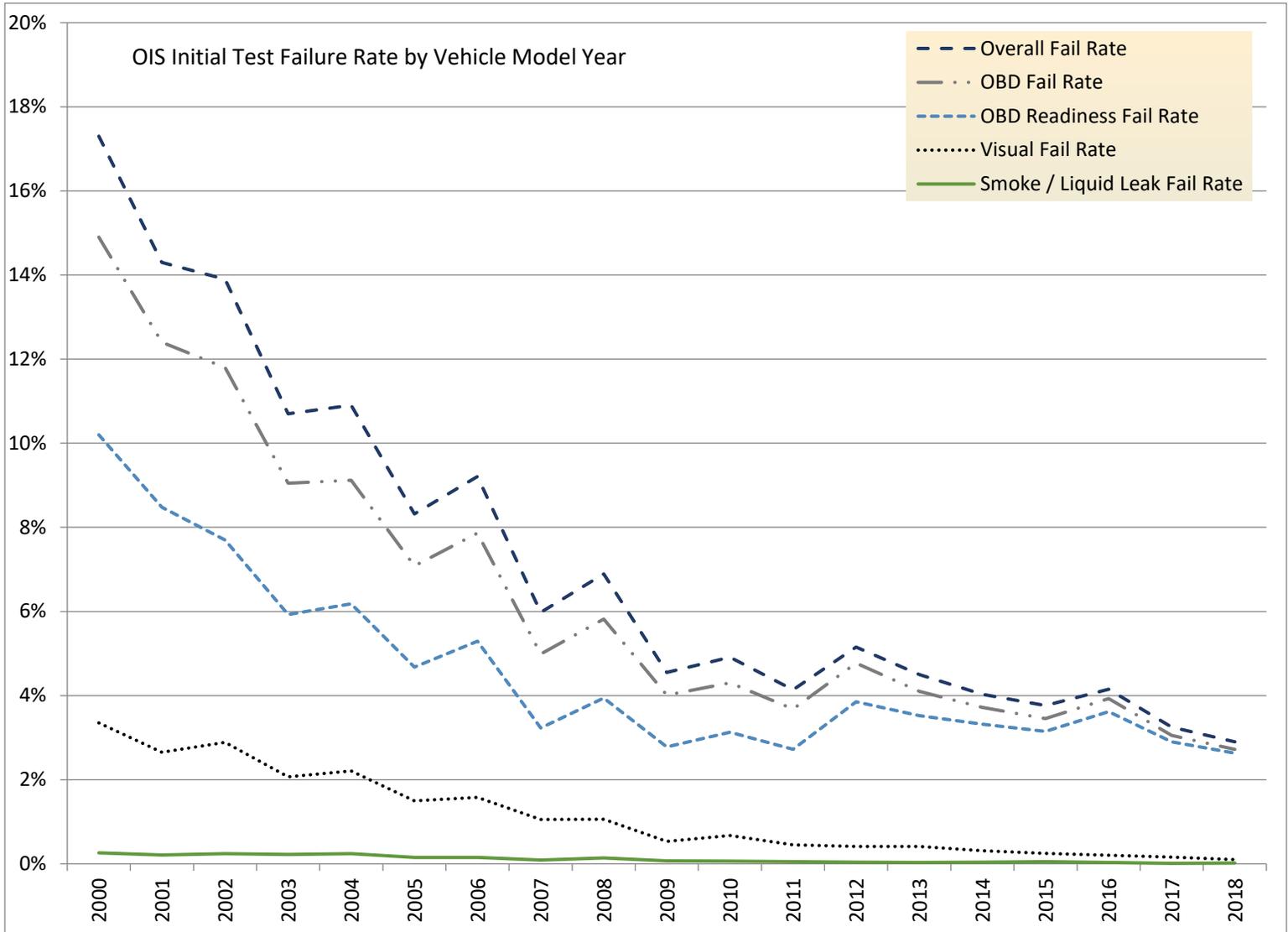


Note: Please see tabular data in Table 18 for BAR-97 tests conducted on other vehicle model years not shown in chart.

Executive Summary Report

Smog Check Statewide June 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 June 2019

13. REFEREE ACTIVITY

Referee Activity	OIS Certificates Issued	BAR-97 Certificates Issued
Certificate of Compliance	237	172
Certificate of Non-Compliance	0	0
Parts Cost	36	7
Hardship Extensions	0	0
Exempt Vehicle	0	22
Exempted by Directive	3	2
Parts Exemption	6	0
Unknown Outcome	0	0
Permanently Exempt Vehicle	0	0
Temporarily Exempt Vehicle	0	0
Total	282	203

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)	2,615
EO and EI (Inspect and Repair)	3,186
Total	5,802

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	42,631	\$55.00	207,553	\$48.50	250,184	\$49.61
STAR Test Only	84,944	\$49.51	374,796	\$48.77	459,740	\$48.91
Non-STAR Test and Repair	12,092	\$53.82	117,678	\$54.19	129,770	\$54.15
Non-STAR Test Only	2,272	\$44.01	19,778	\$46.95	22,050	\$46.65
Test and Repair/Dealer	13	\$68.07	2,674	\$62.05	2,687	\$62.08
Total	141,952	\$51.44	722,479	\$49.58	864,431	\$49.88

Executive Summary Report

Smog Check Statewide June 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	1	\$71.70	7,987	\$43.63	42,630	\$55.00	199,566	\$48.70
STAR Test Only	1,649	\$32.58	8,057	\$41.06	83,295	\$49.85	366,739	\$48.94
Non-STAR Test and Repair	2	\$99.00	74,626	\$59.58	12,090	\$53.82	43,052	\$44.83
Non-STAR Test Only	1	\$50.00	8,100	\$40.92	2,271	\$44.00	11,678	\$51.13
Test and Repair/Dealer	0	\$0.00	2,496	\$61.59	13	\$68.07	178	\$68.44
Total	1,653	\$32.70	101,266	\$55.41	140,299	\$51.66	621,213	\$48.63

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	1,280	\$49	4,900	\$416
	\$101-250	1,093	\$170		
	\$251-500	1,186	\$363		
	\$501-650	406	\$573		
	Over \$650	935	\$1,207		
Non-STAR Repairs (Test and Repair)	\$1-100	331	\$49	1,252	\$420
	\$101-250	326	\$174		
	\$251-500	288	\$356		
	\$501-650	92	\$571		
	Over \$650	215	\$1,388		
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	176	\$723
	\$101-250	7	\$221		
	\$251-500	40	\$402		
	\$501-650	46	\$576		
	Over \$650	83	\$1,001		
Total Repairs	\$1-100	1,611	\$49	6,328	\$426
	\$101-250	1,426	\$171		
	\$251-500	1,514	\$363		
	\$501-650	544	\$573		
	Over \$650	1,233	\$1,224		

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 June 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	576	133	23.09%	15.97%	5.38%	11.98%	6.42%	NA
1977	709	168	23.70%	16.22%	6.06%	12.13%	6.91%	NA
1978	751	171	22.77%	13.98%	5.59%	11.72%	7.32%	NA
1979	788	191	24.24%	15.48%	5.84%	11.55%	6.85%	NA
1980	459	128	27.89%	19.39%	8.71%	14.38%	6.10%	NA
1981	563	137	24.33%	18.47%	7.64%	10.83%	9.06%	NA
1982	511	129	25.24%	16.83%	6.07%	12.72%	9.98%	NA
1983	738	192	26.02%	19.11%	6.64%	13.01%	7.72%	NA
1984	1,141	297	26.03%	18.84%	9.64%	12.36%	7.01%	NA
1985	1,620	390	24.07%	17.41%	6.36%	10.93%	5.62%	NA
1986	2,200	525	23.86%	16.41%	6.14%	11.82%	6.32%	NA
1987	2,453	628	25.60%	18.22%	6.89%	11.29%	5.75%	NA
1988	2,869	665	23.18%	15.93%	5.16%	10.04%	5.05%	NA
1989	3,827	855	22.34%	14.71%	4.52%	10.32%	4.76%	NA
1990	4,580	966	21.09%	14.15%	4.04%	9.78%	4.00%	NA
1991	5,230	1,142	21.84%	13.96%	3.79%	10.11%	4.80%	NA
1992	5,489	1,116	20.33%	13.86%	3.73%	9.00%	3.86%	NA
1993	6,549	1,474	22.51%	16.17%	3.71%	9.45%	4.26%	NA
1994	7,820	1,734	22.17%	14.88%	3.20%	9.72%	4.22%	NA
1995	11,601	2,511	21.64%	13.95%	2.49%	9.44%	4.36%	NA
1996	10,182	2,148	21.10%	9.65%	1.27%	12.58%	3.72%	12.47%
1997	19,115	3,608	18.88%	7.88%	1.21%	11.80%	3.08%	11.78%
1998	18,799	3,462	18.42%	6.93%	1.19%	11.93%	3.63%	11.87%
1999	31,276	4,554	14.56%	4.13%	0.72%	10.20%	2.89%	10.17%
2000	426	65	15.26%	7.98%	3.52%	9.15%	0.47%	9.15%
2001	386	55	14.25%	6.99%	2.33%	9.33%	2.07%	9.33%
2002	323	34	10.53%	4.95%	0.93%	5.88%	2.48%	5.88%
2003	475	40	8.42%	5.47%	1.89%	5.47%	1.26%	5.47%
2004	409	30	7.33%	4.16%	1.47%	5.13%	2.44%	5.13%
2005	477	37	7.76%	3.35%	1.05%	5.45%	0.21%	5.45%
2006	367	21	5.72%	3.81%	1.36%	4.09%	0.82%	4.09%
2007	424	26	6.13%	4.48%	2.36%	3.77%	0.94%	3.77%
2008	204	13	6.37%	1.96%	0.98%	3.92%	0.49%	3.92%
2009	103	2	5.83%	3.88%	1.94%	3.77%	0.00%	2.91%
2010	80	4	5.00%	3.75%	2.50%	3.75%	0.00%	3.75%
2011	215	3	1.40%	0.00%	0.00%	1.40%	0.47%	1.40%
2012	53	3	5.66%	3.77%	3.77%	5.66%	1.89%	5.66%
2013	53	3	5.66%	1.89%	0.00%	5.66%	0.00%	5.66%
2014	61	1	1.64%	1.64%	0.00%	0.00%	0.00%	0.00%
2015	63	0	0.00%	1.59%	0.00%	0.00%	0.00%	0.00%
2016	53	3	5.66%	1.89%	0.00%	3.77%	3.77%	3.77%
2017	59	1	1.69%	0.00%	0.00%	0.00%	1.69%	0.00%
2018	91	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2019	140	1	0.71%	0.71%	0.00%	0.00%	0.71%	0.00%
2020	38	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	4	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Model Years	144,350	27,670	19.17%	10.00%	2.36%	10.60%	3.83%	6.34%

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 June 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	2	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1997	4	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1998	185	36	19.50%	16.20%	5.41%	15.10%	8.11%	1.08%
1999	915	126	13.80%	12.30%	2.62%	11.80%	6.99%	0.55%
2000	29,105	5,033	17.30%	15.20%	3.35%	14.90%	10.20%	0.26%
2001	49,038	7,017	14.30%	12.60%	2.65%	12.40%	8.48%	0.21%
2002	33,890	4,702	13.90%	12.10%	2.89%	11.80%	7.70%	0.24%
2003	64,034	6,847	10.70%	9.28%	2.07%	9.05%	5.93%	0.22%
2004	39,786	4,341	10.90%	9.36%	2.21%	9.12%	6.18%	0.24%
2005	83,722	6,967	8.32%	7.22%	1.50%	7.08%	4.68%	0.15%
2006	42,587	3,924	9.21%	8.00%	1.58%	7.86%	5.29%	0.15%
2007	86,262	5,160	5.98%	5.08%	1.05%	4.99%	3.23%	0.09%
2008	36,505	2,517	6.89%	5.96%	1.06%	5.82%	3.94%	0.14%
2009	57,419	2,612	4.55%	4.08%	0.53%	4.01%	2.78%	0.07%
2010	25,553	1,254	4.91%	4.36%	0.67%	4.30%	3.13%	0.06%
2011	71,981	2,982	4.14%	3.73%	0.45%	3.68%	2.72%	0.05%
2012	14,890	767	5.15%	4.81%	0.41%	4.77%	3.85%	0.04%
2013	17,150	771	4.50%	4.14%	0.41%	4.10%	3.52%	0.03%
2014	15,864	640	4.03%	3.76%	0.31%	3.72%	3.32%	0.04%
2015	22,654	851	3.76%	3.50%	0.25%	3.45%	3.15%	0.05%
2016	14,220	590	4.15%	3.96%	0.20%	3.93%	3.62%	0.03%
2017	11,515	374	3.25%	3.06%	0.16%	3.05%	2.90%	0.01%
2018	10,143	294	2.90%	2.74%	0.10%	2.72%	2.63%	0.02%
2019	3,323	185	5.57%	5.48%	0.06%	5.39%	5.24%	0.09%
2020	24	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	12	10	83.30%	50.00%	41.70%	50.00%	25.00%	0.00%
All Model Years	730,783	58,000	7.94%	6.96%	1.34%	6.83%	4.73%	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 June 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).