

Executive Summary Report

Smog Check Statewide July 2019

1. TESTING VOLUME

Testing Volume	All Tests	Failed	Percent (%) Failed
Initial Test	899,620	89,148	9.91%
Total	986,488	103,589	10.50%

2. CERTIFICATION VOLUME

Certification Volume	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	804,135	89.39%	95,485	10.61%
Total	875,837	88.78%	110,651	11.22%

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	418,675	89.16%	50,904	10.84%
Non-STAR Test Only	21,581	91.35%	2,044	8.65%
STAR Test and Repair	229,965	88.92%	28,656	11.08%
Non-STAR Test and Repair	128,625	92.54%	10,374	7.46%
Total	798,846	89.67%	91,978	10.33%

*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	14,399	9.98%
All Visual	10,139	1.34%	5,414	3.75%
All Functional	54,228	7.18%	15,153	10.50%
OBDII	53,230	7.05%	9,370	6.50%
Overall	61,428	8.13%	27,720	19.22%

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	32,105	72,590	26,040	60,238
Non-Directed	226,516	396,989	203,925	358,437
Total	258,621	469,579	229,965	418,675

Executive Summary Report

Smog Check Statewide July 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	231	74	192	53
Non-Directed	138,768	23,551	128,433	21,528
Total	138,999	23,625	128,625	21,581

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	652,946	53,736	8.23%	112,018	21,957	19.60%
Partial	35,193	2,678	7.61%	8,576	1,843	21.50%
Basic	61,384	4,530	7.38%	17,861	2,588	14.50%
Change of Ownership	5,839	484	8.29%	1,442	339	23.50%
No Program	0	0	0.00%	2	0	0.00%
Unknown	0	0	0.00%	4,359	993	22.80%
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	385,482	33,709	8.74%	84,097	15,954	19.00%
STAR Test Only Suspended	1,591	132	8.30%	123	37	30.10%
Non-STAR Test Only	21,122	1,547	7.32%	2,503	393	15.70%
STAR Test and Repair	215,225	18,066	8.39%	43,396	9,190	21.20%
STAR Test and Repair Suspended	555	41	7.39%	42	6	14.30%
Non-STAR Test and Repair	126,291	7,330	5.80%	12,708	1,858	14.60%
Test and Repair/Dealer	2,732	155	5.67%	16	1	6.25%
Business Fleet	363	6	1.65%	0	0	0.00%
Permanent Fleet Registered	158	4	2.53%	0	0	0.00%
Referee	439	364	82.90%	159	75	47.20%
Government Fleet	1,404	74	5.27%	1,214	206	17.00%
Total	755,362	61,428	8.13%	144,258	27,720	19.20%

Executive Summary Report

Smog Check Statewide July 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	1,914	79	2,156
STAR Test Only	17	1	1,728	32	1,778
STAR Sub-total	130	51	3,642	111	3,934
Non-STAR Test and Repair	502	46	2,238	245	3,031
Non-STAR Test Only	21	8	439	30	498
Non-STAR Sub-total	523	54	2,677	275	3,529
Basic Area Dealer	63	0	0	0	63
Business Fleet	0	0	4	0	4
Permanent Fleet Registered	3	2	50	3	58
Referee	5	0	27	0	32
Government Fleet	41	5	298	13	357
Repair Only	2	0	46	1	49
Unknown Type	1	0	22	1	24
Other Station Sub-Total	115	7	447	18	587
Total	768	112	6,766	404	8,050

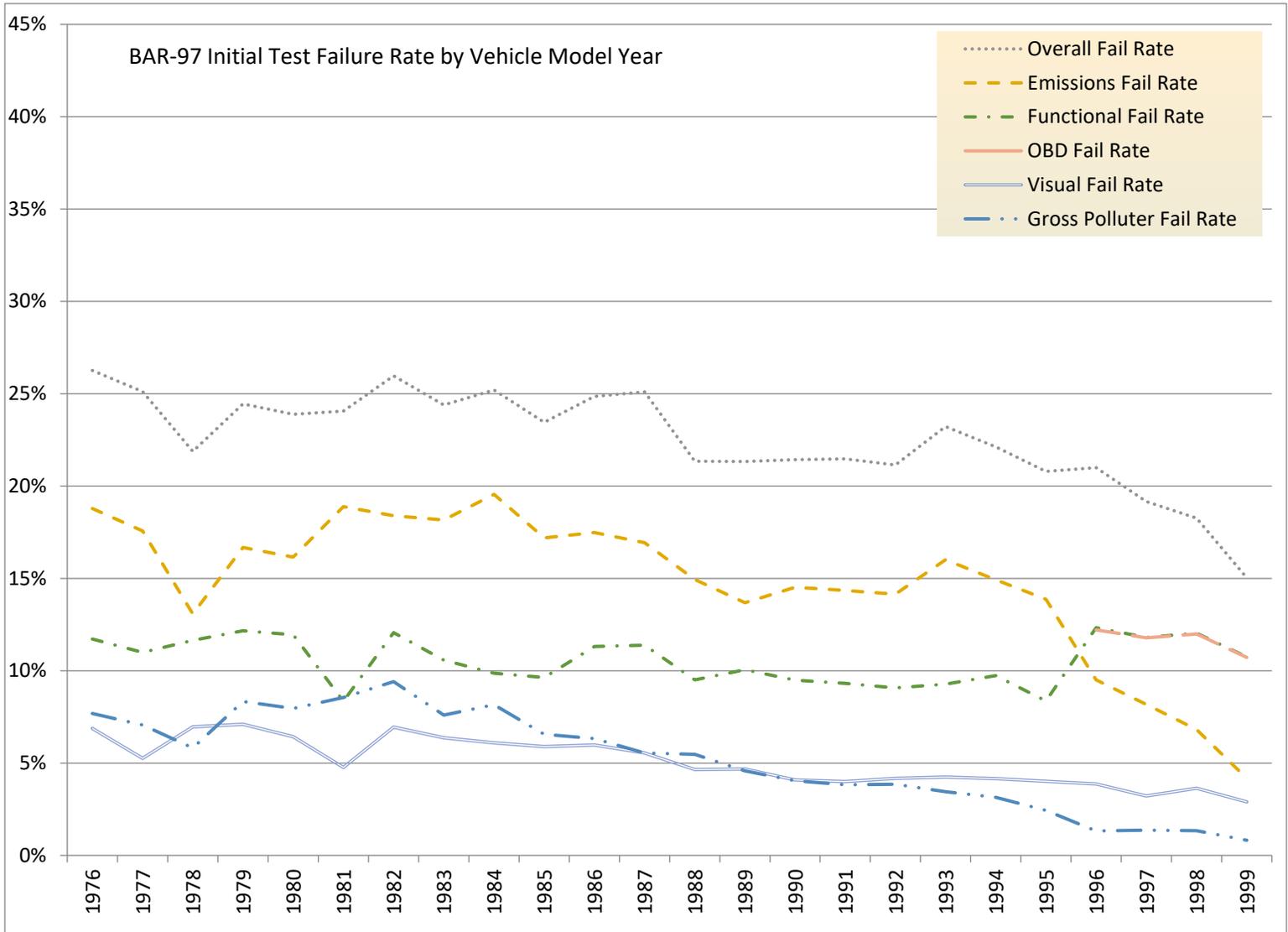
10. NUMBER OF STATIONS CONDUCTING TEST BY EQUIPMENT TYPE

Station Type	BAR-97 Only	OIS Only	BAR-97 & OIS
STAR Test and Repair	0	172	1,919
STAR Test Only	4	49	1,684
<i>STAR Sub-total</i>	4	221	3,603
Non-STAR Test and Repair	3	1,904	445
Non-STAR Test Only	1	135	83
<i>Non-STAR Sub-total</i>	4	2,039	528
Basic Area Dealer	0	55	4
Business Fleet	0	3	0
Permanent Fleet Registered	0	32	0
Referee	0	0	31
Government Fleet	8	137	38
Unknown Type	0	0	23
<i>Other Station Sub-Total</i>	8	227	96
Total	16	2,487	4,227

Executive Summary Report

Smog Check Statewide July 2019

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

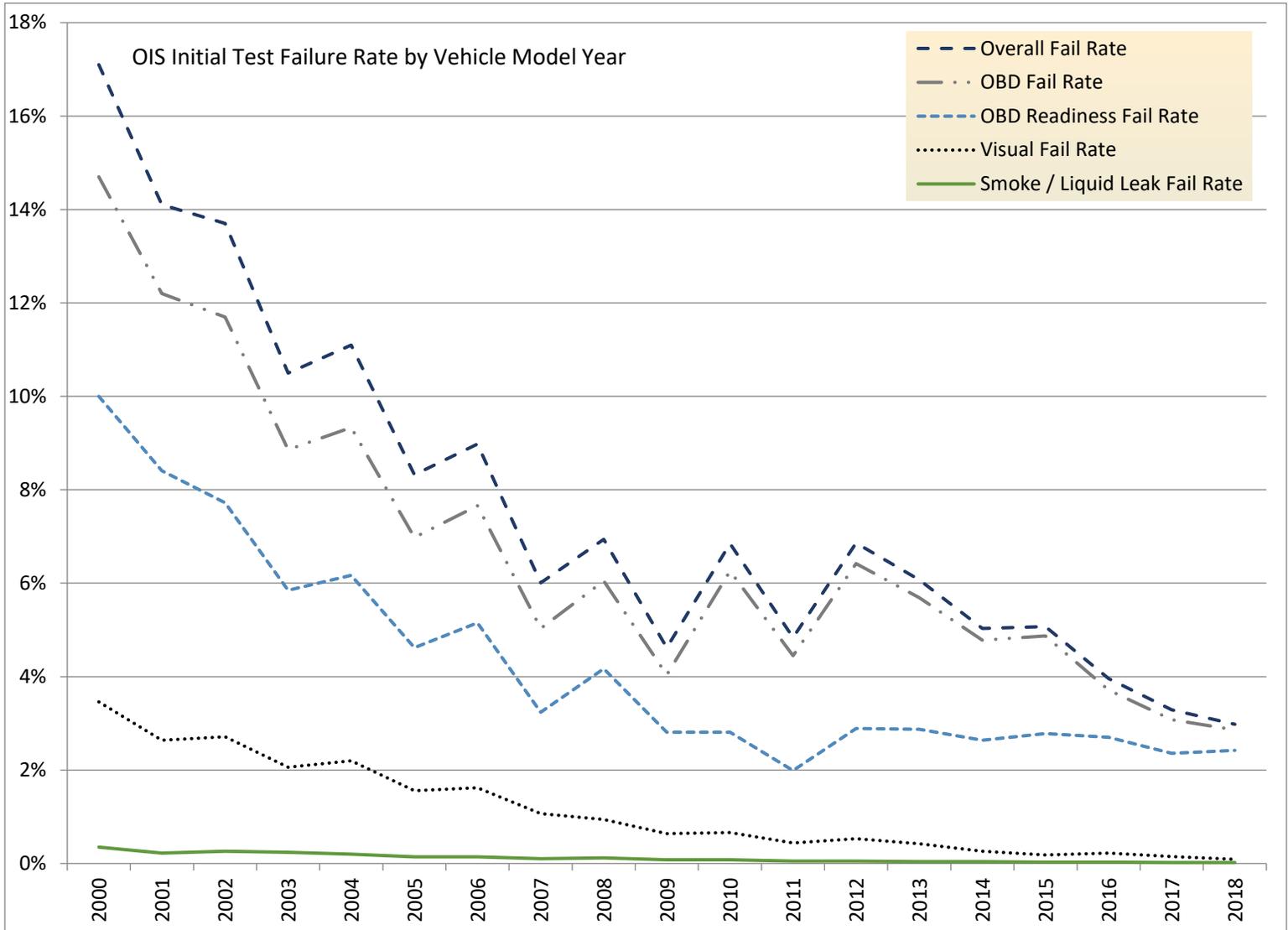


Note: Please see tabular data in Table 18 for BAR-97 tests conducted on other vehicle model years not shown in chart.

Executive Summary Report

Smog Check Statewide July 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 July 2019

13. REFEREE ACTIVITY

Referee Activity	OIS Certificates Issued	BAR-97 Certificates Issued
Certificate of Compliance	263	178
Certificate of Non-Compliance	0	0
Parts Cost	39	8
Hardship Extensions	0	0
Exempt Vehicle	2	16
Exempted by Directive	10	0
Parts Exemption	2	0
Unknown Outcome	0	0
Permanently Exempt Vehicle	0	0
Temporarily Exempt Vehicle	0	0
Total	316	202

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)	2,645
EO and EI (Inspect and Repair)	3,222
Total	5,867

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	43,364	\$54.68	214,783	\$51.65	258,147	\$52.16
STAR Test Only	83,639	\$49.84	383,662	\$51.38	467,301	\$51.11
Non-STAR Test and Repair	12,688	\$53.90	125,530	\$55.63	138,218	\$55.47
Non-STAR Test Only	2,490	\$44.54	21,045	\$47.18	23,535	\$46.90
Test and Repair/Dealer	16	\$69.66	2,732	\$62.86	2,748	\$62.89
Total	142,197	\$51.59	747,752	\$52.10	889,949	\$52.02

Executive Summary Report

Smog Check Statewide July 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	7,870	\$45.01	43,364	\$54.68	206,913	\$51.90
STAR Test Only	672	\$41.43	6,933	\$38.25	82,967	\$49.91	376,729	\$51.63
Non-STAR Test and Repair	3	\$40.00	78,604	\$61.49	12,685	\$53.91	46,926	\$45.80
Non-STAR Test Only	17	\$46.70	7,866	\$42.23	2,473	\$44.52	13,179	\$50.13
Test and Repair/Dealer	0	\$0.00	2,576	\$62.41	16	\$69.66	156	\$70.24
Total	692	\$41.55	103,849	\$57.25	141,505	\$51.64	643,903	\$51.26

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	1,315	\$47	5,146	\$404
	\$101-250	1,200	\$172		
	\$251-500	1,245	\$365		
	\$501-650	430	\$575		
	Over \$650	956	\$1,162		
Non-STAR Repairs (Test and Repair)	\$1-100	365	\$47	1,306	\$414
	\$101-250	352	\$172		
	\$251-500	281	\$361		
	\$501-650	86	\$564		
	Over \$650	222	\$1,410		
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	168	\$747
	\$101-250	6	\$230		
	\$251-500	50	\$389		
	\$501-650	34	\$575		
	Over \$650	78	\$1,090		
Total Repairs	\$1-100	1,680	\$47	6,620	\$415
	\$101-250	1,558	\$172		
	\$251-500	1,576	\$365		
	\$501-650	550	\$573		
	Over \$650	1,256	\$1,202		

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 July 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	495	130	26.26%	18.79%	7.68%	11.72%	6.87%	NA
1977	609	153	25.12%	17.57%	7.06%	11.00%	5.25%	NA
1978	704	154	21.88%	13.07%	5.82%	11.65%	6.96%	NA
1979	732	179	24.45%	16.67%	8.33%	12.16%	7.10%	NA
1980	452	108	23.89%	16.15%	7.96%	11.95%	6.42%	NA
1981	503	121	24.06%	18.89%	8.55%	8.35%	4.77%	NA
1982	489	127	25.97%	18.40%	9.41%	12.07%	6.95%	NA
1983	738	180	24.39%	18.16%	7.59%	10.57%	6.37%	NA
1984	1,115	281	25.20%	19.55%	8.16%	9.87%	6.10%	NA
1985	1,680	394	23.45%	17.20%	6.55%	9.64%	5.89%	NA
1986	2,024	503	24.85%	17.49%	6.32%	11.31%	5.98%	NA
1987	2,363	593	25.10%	16.93%	5.54%	11.38%	5.54%	NA
1988	2,905	620	21.34%	14.94%	5.47%	9.50%	4.65%	NA
1989	4,014	856	21.33%	13.68%	4.58%	10.06%	4.68%	NA
1990	4,456	955	21.43%	14.52%	4.04%	9.49%	4.08%	NA
1991	5,373	1,154	21.48%	14.35%	3.83%	9.31%	4.00%	NA
1992	5,349	1,131	21.14%	14.15%	3.85%	9.07%	4.17%	NA
1993	6,529	1,516	23.22%	16.01%	3.45%	9.27%	4.24%	NA
1994	7,938	1,757	22.13%	14.92%	3.14%	9.73%	4.16%	NA
1995	11,709	2,436	20.80%	13.87%	2.43%	8.37%	4.01%	NA
1996	10,346	2,172	20.99%	9.51%	1.32%	12.33%	3.87%	12.21%
1997	19,112	3,662	19.16%	8.18%	1.36%	11.81%	3.21%	11.78%
1998	19,265	3,520	18.27%	6.81%	1.34%	12.03%	3.63%	11.99%
1999	30,928	4,647	15.03%	4.17%	0.82%	10.75%	2.90%	10.72%
2000	444	70	15.77%	8.11%	4.73%	9.68%	2.48%	9.68%
2001	368	64	17.39%	8.97%	3.53%	12.23%	1.63%	11.96%
2002	301	34	11.30%	4.65%	2.33%	7.97%	1.99%	7.64%
2003	453	52	11.48%	5.08%	1.77%	7.73%	1.55%	7.73%
2004	363	37	10.19%	4.41%	1.65%	5.51%	2.48%	5.23%
2005	471	34	7.22%	3.82%	1.27%	4.67%	1.27%	4.67%
2006	334	16	4.79%	2.10%	1.20%	2.99%	0.00%	2.99%
2007	401	20	4.99%	2.99%	1.00%	3.49%	0.75%	3.49%
2008	250	12	4.80%	2.00%	0.80%	2.40%	1.20%	2.40%
2009	119	2	5.04%	1.68%	1.68%	3.77%	0.84%	3.36%
2010	63	5	7.94%	1.59%	1.59%	6.35%	0.00%	6.35%
2011	225	5	2.22%	0.44%	0.44%	0.89%	0.89%	0.89%
2012	58	2	3.45%	0.00%	0.00%	3.45%	0.00%	3.45%
2013	53	3	5.66%	0.00%	0.00%	0.00%	5.66%	0.00%
2014	53	5	9.43%	3.77%	0.00%	3.77%	5.66%	3.77%
2015	58	1	1.72%	0.00%	0.00%	0.00%	1.72%	0.00%
2016	40	3	7.50%	0.00%	0.00%	0.00%	7.50%	0.00%
2017	57	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2018	66	1	1.52%	0.00%	0.00%	0.00%	1.52%	0.00%
2019	210	1	0.48%	0.00%	0.00%	0.00%	0.48%	0.00%
2020	43	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Model Years	144,258	27,720	19.22%	9.98%	2.43%	10.50%	3.75%	6.50%

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 July 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	3	1	33.30%	33.30%	0.00%	33.30%	33.30%	0.00%
1997	14	2	14.30%	7.14%	0.00%	7.14%	7.14%	0.00%
1998	250	40	16.00%	13.20%	4.80%	12.80%	4.80%	0.40%
1999	837	103	12.30%	10.60%	2.03%	10.50%	6.93%	0.12%
2000	29,539	5,040	17.10%	15.00%	3.46%	14.70%	10.00%	0.35%
2001	49,690	7,010	14.10%	12.50%	2.64%	12.20%	8.41%	0.22%
2002	35,385	4,849	13.70%	12.00%	2.71%	11.70%	7.72%	0.26%
2003	65,721	6,895	10.50%	9.10%	2.06%	8.86%	5.85%	0.24%
2004	40,902	4,532	11.10%	9.53%	2.20%	9.33%	6.17%	0.20%
2005	86,275	7,178	8.32%	7.12%	1.56%	6.98%	4.62%	0.14%
2006	44,893	4,031	8.98%	7.79%	1.62%	7.66%	5.15%	0.14%
2007	88,750	5,330	6.01%	5.13%	1.07%	5.03%	3.24%	0.10%
2008	35,959	2,496	6.94%	6.17%	0.94%	6.05%	4.17%	0.12%
2009	60,975	2,815	4.62%	4.11%	0.64%	4.04%	2.81%	0.08%
2010	26,200	1,794	6.85%	6.35%	0.66%	6.26%	2.81%	0.08%
2011	73,835	3,576	4.84%	4.50%	0.44%	4.45%	1.99%	0.05%
2012	15,476	1,062	6.86%	6.47%	0.53%	6.42%	2.89%	0.05%
2013	18,310	1,112	6.07%	5.73%	0.42%	5.69%	2.87%	0.04%
2014	16,721	841	5.03%	4.81%	0.26%	4.78%	2.64%	0.04%
2015	23,020	1,166	5.07%	4.90%	0.18%	4.87%	2.78%	0.03%
2016	15,058	597	3.96%	3.74%	0.22%	3.71%	2.70%	0.03%
2017	12,290	404	3.29%	3.11%	0.15%	3.08%	2.36%	0.02%
2018	10,950	326	2.98%	2.88%	0.09%	2.86%	2.42%	0.02%
2019	4,240	217	5.12%	4.95%	0.09%	4.95%	4.27%	0.00%
2020	56	1	1.79%	1.79%	0.00%	1.79%	1.79%	0.00%
Other	13	10	76.90%	38.50%	38.50%	38.50%	15.40%	0.00%
All Model Years	755,362	61,428	8.13%	7.18%	1.34%	7.05%	4.51%	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 July 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).