

Executive Summary Report

Smog Check Statewide May 2019

1. TESTING VOLUME

Testing Volume	All Tests	Failed	Percent (%) Failed
Initial Test	923,113	92,075	9.97%
Total	1,012,810	106,789	10.54%

2. CERTIFICATION VOLUME

Certification Volume	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	823,926	89.26%	99,187	10.74%
Total	898,144	88.68%	114,666	11.32%

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	425,784	88.99%	52,661	11.01%
Non-STAR Test Only	19,843	91.59%	1,823	8.41%
STAR Test and Repair	236,229	88.81%	29,758	11.19%
Non-STAR Test and Repair	136,671	92.85%	10,526	7.15%
Total	818,527	89.62%	94,768	10.38%

*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	15,358	9.77%
All Visual	10,623	1.39%	5,911	3.76%
All Functional	54,606	7.13%	16,444	10.46%
OBDII	53,603	7.00%	10,069	6.41%
Overall	62,429	8.15%	29,646	18.86%

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	34,289	77,959	27,730	64,908
Non-Directed	231,698	400,486	208,499	360,876
Total	265,987	478,445	236,229	425,784

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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	270	65	220	50
Non-Directed	146,927	21,601	136,451	19,793
Total	147,197	21,666	136,671	19,843

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	661,028	54,557	8.25%	121,958	23,312	19.10%
Partial	36,259	2,743	7.57%	9,539	2,091	21.90%
Basic	62,387	4,675	7.49%	19,413	2,840	14.60%
Change of Ownership	6,281	454	7.23%	1,392	337	24.20%
No Program	0	0	0.00%	2	0	0.00%
Unknown	0	0	0.00%	4,854	1,066	22.00%
Total Program Area	765,955	62,429	8.15%	157,158	29,646	18.90%

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	385,977	34,475	8.93%	92,468	16,997	18.40%
STAR Test Only Suspended	1,588	126	7.93%	162	36	22.20%
Non-STAR Test Only	19,404	1,358	7.00%	2,262	329	14.50%
STAR Test and Repair	219,224	18,458	8.42%	46,763	9,865	21.10%
STAR Test and Repair Suspended	360	27	7.50%	47	7	14.90%
Non-STAR Test and Repair	133,275	7,249	5.44%	13,922	2,072	14.90%
Test and Repair/Dealer	3,068	154	5.02%	17	2	11.80%
Business Fleet	331	3	0.91%	0	0	0.00%
Permanent Fleet Registered	58	2	3.45%	0	0	0.00%
Referee	519	458	88.20%	176	76	43.20%
Government Fleet	2,151	119	5.53%	1,341	262	19.50%
Total	765,955	62,429	8.15%	157,158	29,646	18.90%

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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	50	1,943	81	2,186
STAR Test Only	18	1	1,729	33	1,781
STAR Sub-total	130	51	3,672	114	3,967
Non-STAR Test and Repair	506	46	2,245	241	3,038
Non-STAR Test Only	22	7	456	32	517
Non-STAR Sub-total	528	53	2,701	273	3,555
Basic Area Dealer	64	0	0	0	64
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	48	1	51
Unknown Type	1	0	18	0	19
Other Station Sub-Total	116	6	443	18	583
Total	774	110	6,816	405	8,105

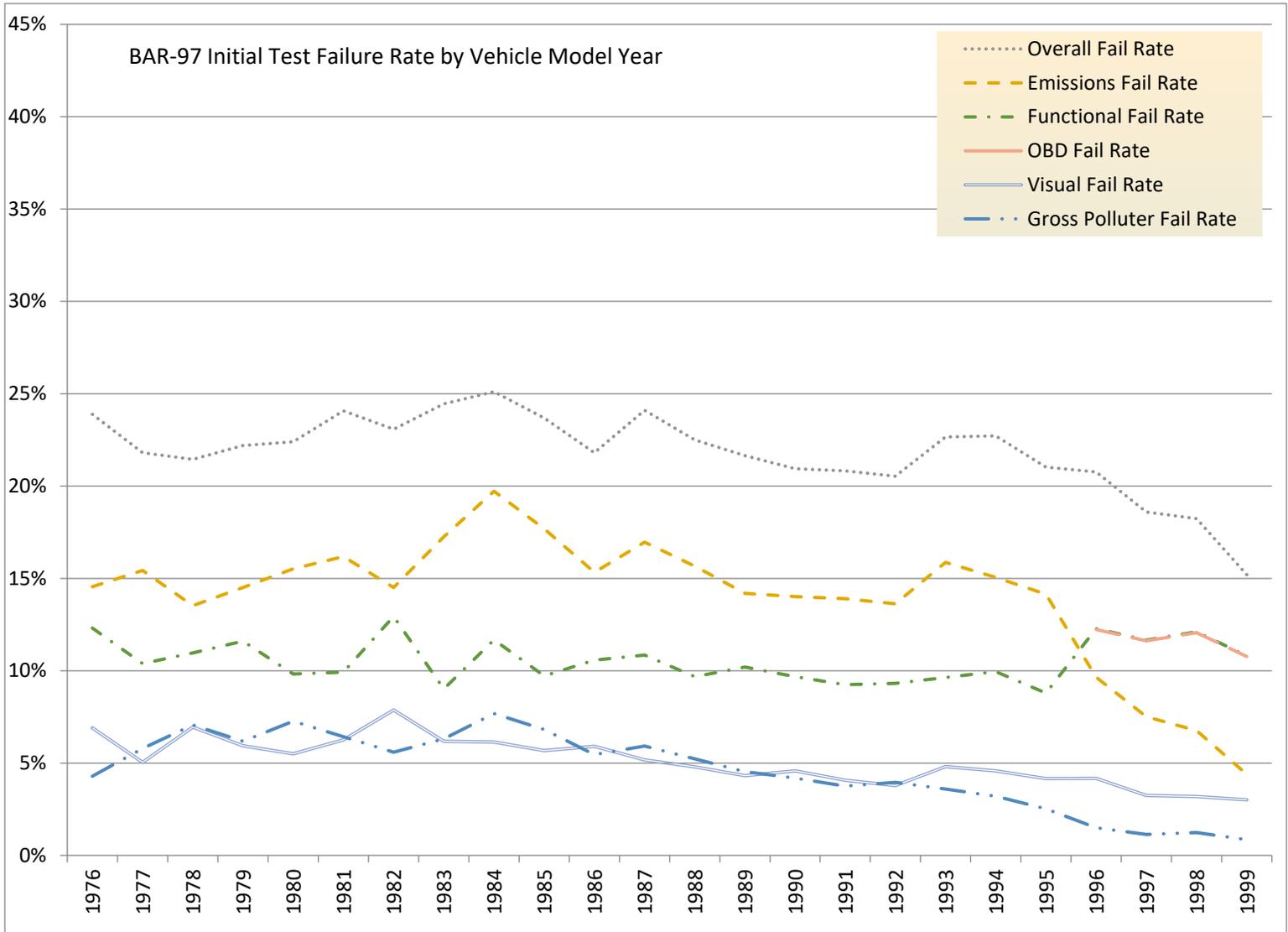
10. NUMBER OF STATIONS CONDUCTING TEST BY EQUIPMENT TYPE

Station Type	BAR-97 Only	OIS Only	BAR-97 & OIS
STAR Test and Repair	0	197	1,924
STAR Test Only	3	74	1,655
<i>STAR Sub-total</i>	3	271	3,579
Non-STAR Test and Repair	2	1,934	443
Non-STAR Test Only	3	146	89
<i>Non-STAR Sub-total</i>	5	2,080	532
Basic Area Dealer	0	56	4
Business Fleet	0	3	0
Permanent Fleet Registered	0	22	0
Referee	0	0	31
Government Fleet	5	146	33
Unknown Type	0	1	16
<i>Other Station Sub-Total</i>	5	228	84
Total	13	2,579	4,195

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

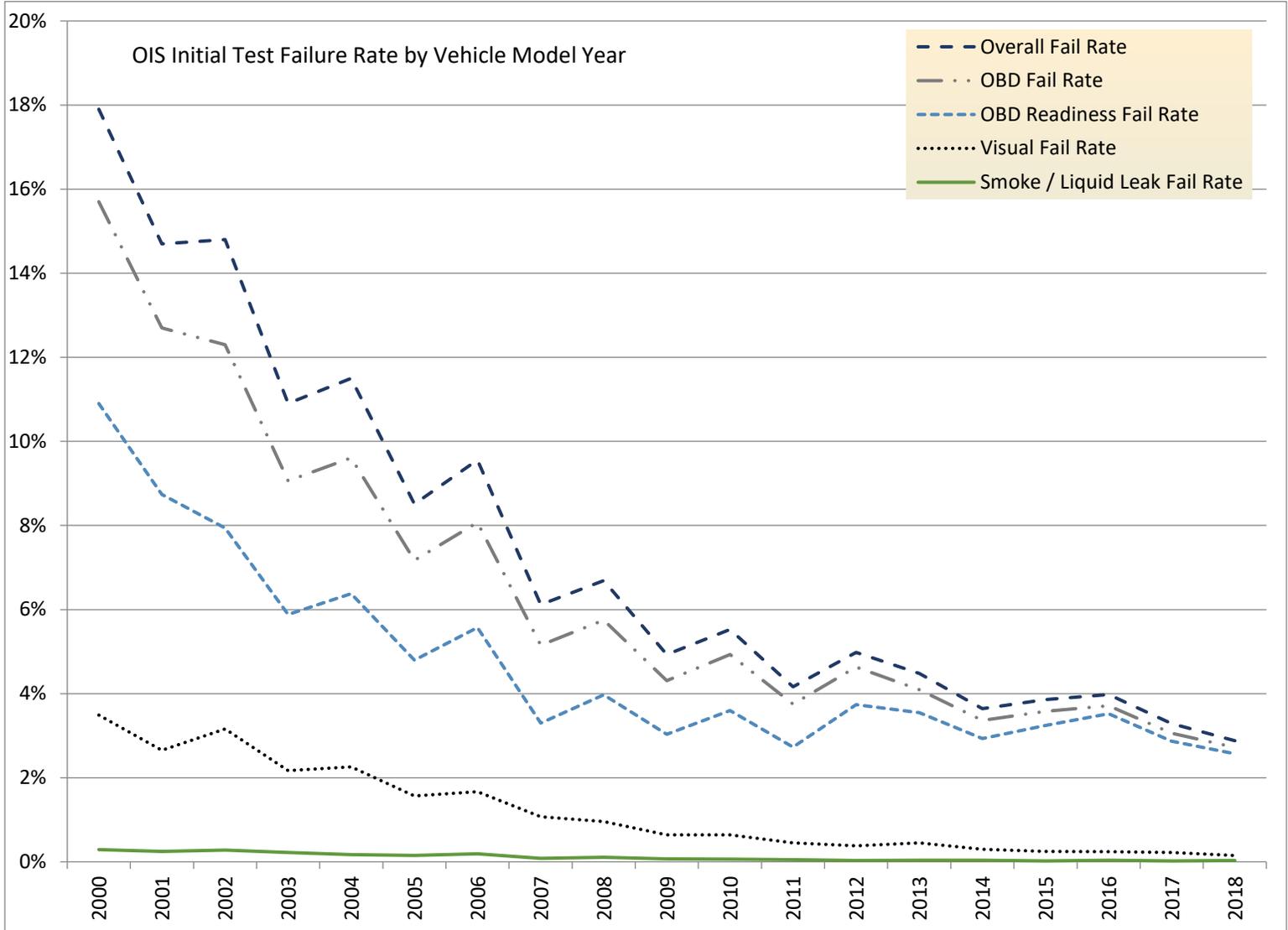


Note: Please see tabular data in Table 18 for BAR-97 tests conducted on other vehicle model years not shown in chart.

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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.

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13. REFEREE ACTIVITY

Referee Activity	OIS Certificates Issued	BAR-97 Certificates Issued
Certificate of Compliance	221	190
Certificate of Non-Compliance	0	0
Parts Cost	32	14
Hardship Extensions	0	0
Exempt Vehicle	0	19
Exempted by Directive	4	0
Parts Exemption	49	1
Unknown Outcome	0	0
Permanently Exempt Vehicle	0	0
Temporarily Exempt Vehicle	0	0
Total	306	224

14. ACTIVE TECHNICIANS

License Type	Technician Count
EA (Inspect and Repair Enhanced)	0
EB (Inspect and Repair Basic)	0
EI (Repair Only)	2
EO (Inspect Only)	2,616
EO and EI (Inspect and Repair)	3,230
Total	5,848

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	46,745	\$54.86	218,677	\$48.26	265,422	\$49.42
STAR Test Only	92,181	\$49.55	385,824	\$49.47	478,005	\$49.48
Non-STAR Test and Repair	13,920	\$53.24	132,623	\$54.56	146,543	\$54.44
Non-STAR Test Only	2,233	\$44.21	19,305	\$47.12	21,538	\$46.82
Test and Repair/Dealer	17	\$64.00	3,068	\$62.58	3,085	\$62.58
Total	155,096	\$51.41	759,497	\$50.00	914,593	\$50.24

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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	9,531	\$45.00	46,745	\$54.86	209,146	\$48.41
STAR Test Only	1,579	\$38.33	10,214	\$38.77	90,602	\$49.75	375,610	\$49.76
Non-STAR Test and Repair	2	\$84.38	86,464	\$59.73	13,918	\$53.24	46,159	\$44.88
Non-STAR Test Only	8	\$20.91	8,998	\$41.68	2,225	\$44.29	10,307	\$51.88
Test and Repair/Dealer	0	\$0.00	2,900	\$62.40	17	\$64.00	168	\$65.64
Total	1,589	\$38.30	118,107	\$55.42	153,507	\$51.54	641,390	\$49.01

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	1,402	\$47	5,364	\$399
	\$101-250	1,211	\$172		
	\$251-500	1,318	\$362		
	\$501-650	450	\$572		
	Over \$650	983	\$1,154		
Non-STAR Repairs (Test and Repair)	\$1-100	427	\$50	1,493	\$399
	\$101-250	377	\$171		
	\$251-500	354	\$362		
	\$501-650	94	\$570		
	Over \$650	241	\$1,363		
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	213	\$652
	\$101-250	6	\$205		
	\$251-500	58	\$382		
	\$501-650	58	\$581		
	Over \$650	91	\$900		
Total Repairs	\$1-100	1,829	\$47	7,070	\$407
	\$101-250	1,594	\$172		
	\$251-500	1,730	\$363		
	\$501-650	602	\$572		
	Over \$650	1,315	\$1,175		

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.

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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	536	128	23.88%	14.55%	4.29%	12.31%	6.90%	NA
1977	674	147	21.81%	15.43%	5.79%	10.39%	5.04%	NA
1978	821	176	21.44%	13.52%	7.06%	10.96%	6.94%	NA
1979	793	176	22.19%	14.50%	6.18%	11.60%	5.93%	NA
1980	509	114	22.40%	15.52%	7.27%	9.82%	5.50%	NA
1981	544	131	24.08%	16.18%	6.43%	9.93%	6.25%	NA
1982	572	132	23.08%	14.51%	5.59%	12.94%	7.87%	NA
1983	777	190	24.45%	17.25%	6.31%	9.01%	6.18%	NA
1984	1,354	340	25.11%	19.72%	7.68%	11.67%	6.13%	NA
1985	1,832	434	23.69%	17.69%	6.82%	9.72%	5.68%	NA
1986	2,251	491	21.81%	15.33%	5.46%	10.57%	5.91%	NA
1987	2,535	611	24.10%	16.96%	5.92%	10.85%	5.17%	NA
1988	3,027	681	22.50%	15.66%	5.22%	9.68%	4.79%	NA
1989	4,060	879	21.65%	14.19%	4.53%	10.20%	4.31%	NA
1990	4,895	1,025	20.94%	14.01%	4.19%	9.68%	4.58%	NA
1991	5,726	1,192	20.82%	13.90%	3.75%	9.24%	4.07%	NA
1992	5,827	1,196	20.53%	13.63%	3.96%	9.32%	3.78%	NA
1993	6,958	1,577	22.66%	15.87%	3.59%	9.64%	4.80%	NA
1994	8,751	1,987	22.71%	15.05%	3.20%	9.95%	4.58%	NA
1995	12,809	2,692	21.02%	14.15%	2.53%	8.79%	4.15%	NA
1996	10,948	2,273	20.76%	9.65%	1.50%	12.28%	4.17%	12.23%
1997	20,748	3,858	18.59%	7.51%	1.13%	11.66%	3.25%	11.62%
1998	20,334	3,706	18.23%	6.76%	1.24%	12.11%	3.19%	12.06%
1999	33,957	5,162	15.20%	4.39%	0.85%	10.81%	3.01%	10.77%
2000	588	79	13.44%	6.97%	3.40%	7.99%	1.36%	7.65%
2001	568	53	9.33%	2.82%	1.41%	7.39%	2.29%	7.39%
2002	457	35	7.66%	3.94%	0.88%	5.47%	1.53%	5.47%
2003	640	44	6.88%	3.28%	1.56%	3.91%	1.09%	3.91%
2004	487	28	5.75%	3.08%	1.23%	4.11%	0.41%	4.11%
2005	618	29	4.69%	2.43%	0.81%	1.78%	1.29%	1.78%
2006	485	21	4.33%	2.47%	0.62%	2.06%	0.82%	2.06%
2007	472	18	3.81%	2.12%	0.64%	1.91%	0.00%	1.91%
2008	335	11	3.28%	1.19%	0.30%	1.49%	0.90%	1.49%
2009	188	2	2.66%	1.60%	0.53%	3.77%	0.53%	1.06%
2010	115	6	5.22%	2.61%	0.87%	5.22%	0.00%	5.22%
2011	264	4	1.52%	0.38%	0.38%	0.76%	0.38%	0.76%
2012	64	2	3.13%	0.00%	0.00%	3.13%	0.00%	3.13%
2013	106	3	2.83%	0.00%	0.00%	1.89%	0.94%	1.89%
2014	64	4	6.25%	0.00%	0.00%	3.13%	4.69%	3.13%
2015	64	1	1.56%	0.00%	0.00%	0.00%	1.56%	0.00%
2016	61	3	4.92%	1.64%	0.00%	1.64%	3.28%	1.64%
2017	67	1	1.49%	0.00%	0.00%	0.00%	1.49%	0.00%
2018	122	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2019	141	1	0.71%	0.71%	0.00%	0.00%	0.71%	0.00%
2020	14	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Model Years	157,158	29,646	18.86%	9.77%	2.34%	10.46%	3.76%	6.41%

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.

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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	14	4	28.60%	21.40%	7.14%	14.30%	0.00%	7.14%
1998	250	43	17.20%	13.60%	5.60%	12.00%	6.40%	1.60%
1999	907	132	14.60%	12.80%	2.65%	11.90%	8.27%	0.88%
2000	30,532	5,473	17.90%	16.00%	3.49%	15.70%	10.90%	0.29%
2001	51,972	7,648	14.70%	13.00%	2.65%	12.70%	8.74%	0.25%
2002	35,244	5,203	14.80%	12.50%	3.16%	12.30%	7.94%	0.28%
2003	66,756	7,245	10.90%	9.28%	2.17%	9.06%	5.88%	0.22%
2004	42,835	4,908	11.50%	9.79%	2.26%	9.61%	6.38%	0.17%
2005	83,224	7,081	8.51%	7.32%	1.57%	7.17%	4.80%	0.15%
2006	44,678	4,273	9.56%	8.25%	1.67%	8.07%	5.57%	0.19%
2007	89,959	5,504	6.12%	5.23%	1.07%	5.15%	3.30%	0.08%
2008	39,938	2,670	6.69%	5.86%	0.96%	5.75%	3.97%	0.11%
2009	55,775	2,750	4.93%	4.38%	0.64%	4.31%	3.03%	0.07%
2010	26,428	1,461	5.53%	4.99%	0.64%	4.93%	3.60%	0.06%
2011	75,705	3,151	4.16%	3.79%	0.45%	3.75%	2.73%	0.05%
2012	16,453	820	4.98%	4.66%	0.38%	4.63%	3.74%	0.03%
2013	18,471	827	4.48%	4.14%	0.45%	4.09%	3.55%	0.04%
2014	17,121	624	3.64%	3.39%	0.30%	3.36%	2.93%	0.04%
2015	25,258	974	3.86%	3.60%	0.25%	3.58%	3.24%	0.02%
2016	16,295	648	3.98%	3.74%	0.24%	3.71%	3.52%	0.04%
2017	12,870	423	3.29%	3.08%	0.22%	3.06%	2.87%	0.02%
2018	11,650	336	2.88%	2.76%	0.15%	2.72%	2.57%	0.03%
2019	3,592	220	6.12%	6.07%	0.03%	6.07%	6.01%	0.00%
2020	14	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	12	11	91.70%	41.70%	41.70%	41.70%	16.70%	0.00%
All Model Years	765,955	62,429	8.15%	7.13%	1.39%	7.00%	4.86%	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.

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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).