

Executive Summary Report

Smog Check Statewide November 2019

1. TESTING VOLUME

Testing Volume	All Tests	Failed	Percent (%) Failed
Initial Test	737,499	73,955	10.03%
Total	809,238	85,670	10.59%

2. CERTIFICATION VOLUME

Certification Volume	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	656,493	89.02%	81,006	10.98%
Total	715,796	88.45%	93,442	11.55%

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	350,209	88.85%	43,958	11.15%
Non-STAR Test Only	15,806	91.49%	1,470	8.51%
STAR Test and Repair	185,934	88.42%	24,356	11.58%
Non-STAR Test and Repair	100,803	91.89%	8,893	8.11%
Total	652,752	89.24%	78,677	10.76%

*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	11,267	10.43%
All Visual	8,405	1.34%	4,081	3.78%
All Functional	46,815	7.44%	11,984	11.09%
OBDII	45,806	7.28%	7,254	6.71%
Overall	52,464	8.33%	21,491	19.89%

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	25,103	57,539	20,385	47,461
Non-Directed	185,187	336,628	165,549	302,748
Total	210,290	394,167	185,934	350,209

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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	225	58	145	55
Non-Directed	109,471	17,218	100,658	15,751
Total	109,696	17,276	100,803	15,806

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	545,595	45,750	8.39%	87,767	17,755	20.20%
Partial	29,169	2,448	8.39%	6,562	1,469	22.40%
Basic	49,946	3,886	7.78%	9,955	1,416	14.20%
Change of Ownership	4,759	380	7.98%	682	153	22.40%
No Program	0	0	0.00%	2	0	0.00%
Unknown	0	0	0.00%	3,062	698	22.80%
Total Program Area	629,469	52,464	8.33%	108,030	21,491	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	328,312	29,202	8.89%	65,855	13,064	19.80%
STAR Test Only Suspended	713	46	6.45%	86	8	9.30%
Non-STAR Test Only	15,598	1,054	6.76%	1,678	260	15.50%
STAR Test and Repair	178,045	15,276	8.58%	32,245	6,872	21.30%
STAR Test and Repair Suspended	519	44	8.48%	36	8	22.20%
Non-STAR Test and Repair	102,229	6,297	6.16%	7,467	1,111	14.90%
Test and Repair/Dealer	2,180	129	5.92%	5	0	0.00%
Business Fleet	348	8	2.30%	0	0	0.00%
Permanent Fleet Registered	88	2	2.27%	0	0	0.00%
Referee	375	334	89.10%	108	65	60.20%
Government Fleet	1,062	72	6.78%	550	103	18.70%
Total	629,469	52,464	8.33%	108,030	21,491	19.90%

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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	110	48	1,884	78	2,120
STAR Test Only	18	1	1,720	33	1,772
STAR Sub-total	128	49	3,604	111	3,892
Non-STAR Test and Repair	495	46	2,213	248	3,002
Non-STAR Test Only	21	8	429	28	486
Non-STAR Sub-total	516	54	2,642	276	3,488
Basic Area Dealer	61	0	0	0	61
Business Fleet	0	0	4	0	4
Permanent Fleet Registered	3	2	46	4	55
Referee	5	0	27	0	32
Government Fleet	41	5	298	13	357
Repair Only	2	0	45	1	48
Unknown Type	1	0	12	0	13
Other Station Sub-Total	113	7	432	18	570
Total	757	110	6,678	405	7,950

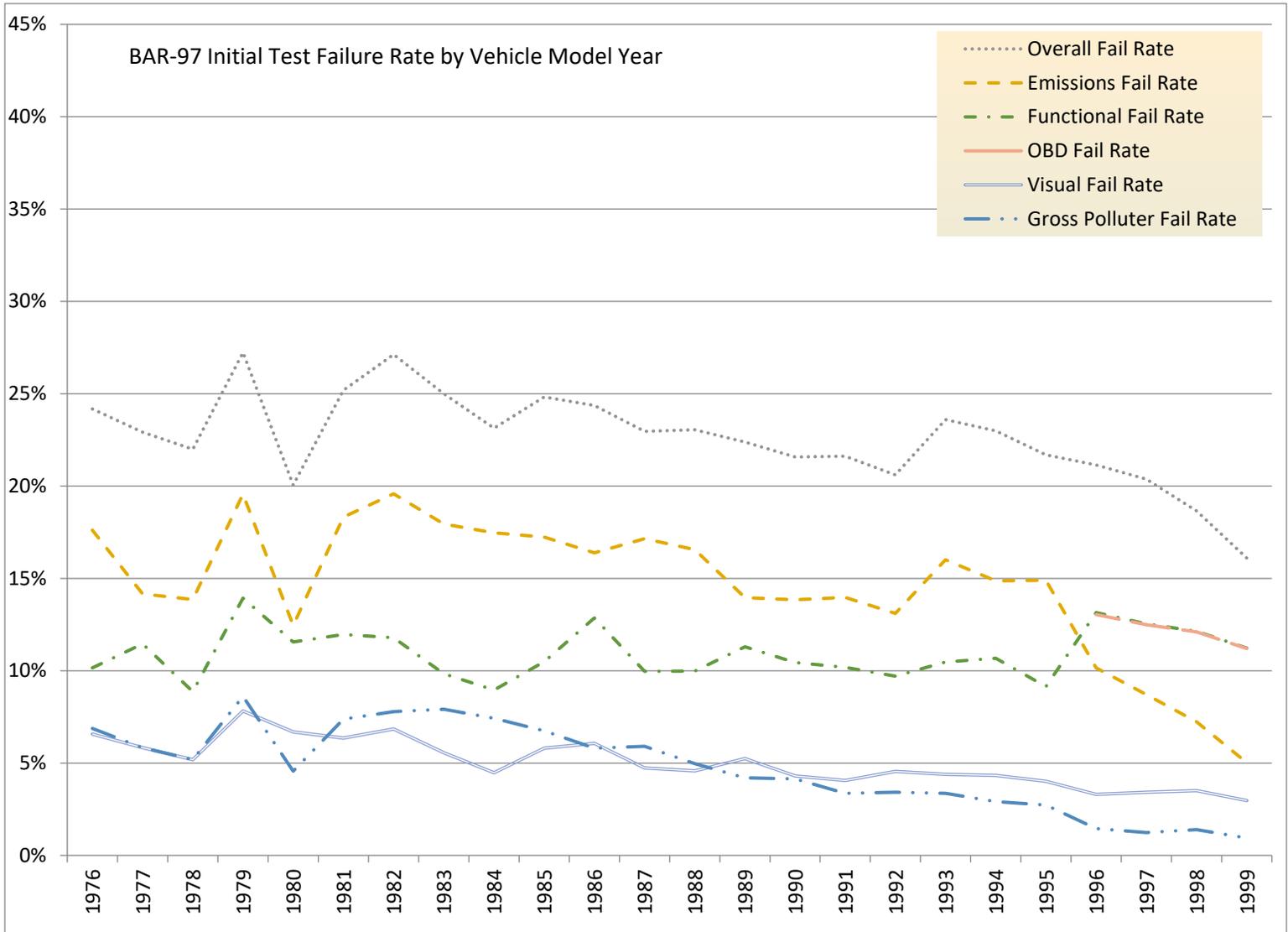
10. NUMBER OF STATIONS CONDUCTING TEST BY EQUIPMENT TYPE

Station Type	BAR-97 Only	OIS Only	BAR-97 & OIS
STAR Test and Repair	0	192	1,856
STAR Test Only	0	54	1,671
<i>STAR Sub-total</i>	0	246	3,527
Non-STAR Test and Repair	0	1,928	360
Non-STAR Test Only	1	120	99
<i>Non-STAR Sub-total</i>	1	2,048	459
Basic Area Dealer	0	54	2
Business Fleet	0	2	0
Permanent Fleet Registered	0	22	0
Referee	0	2	29
Government Fleet	15	135	21
Unknown Type	0	1	11
<i>Other Station Sub-Total</i>	15	216	63
Total	16	2,510	4,049

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

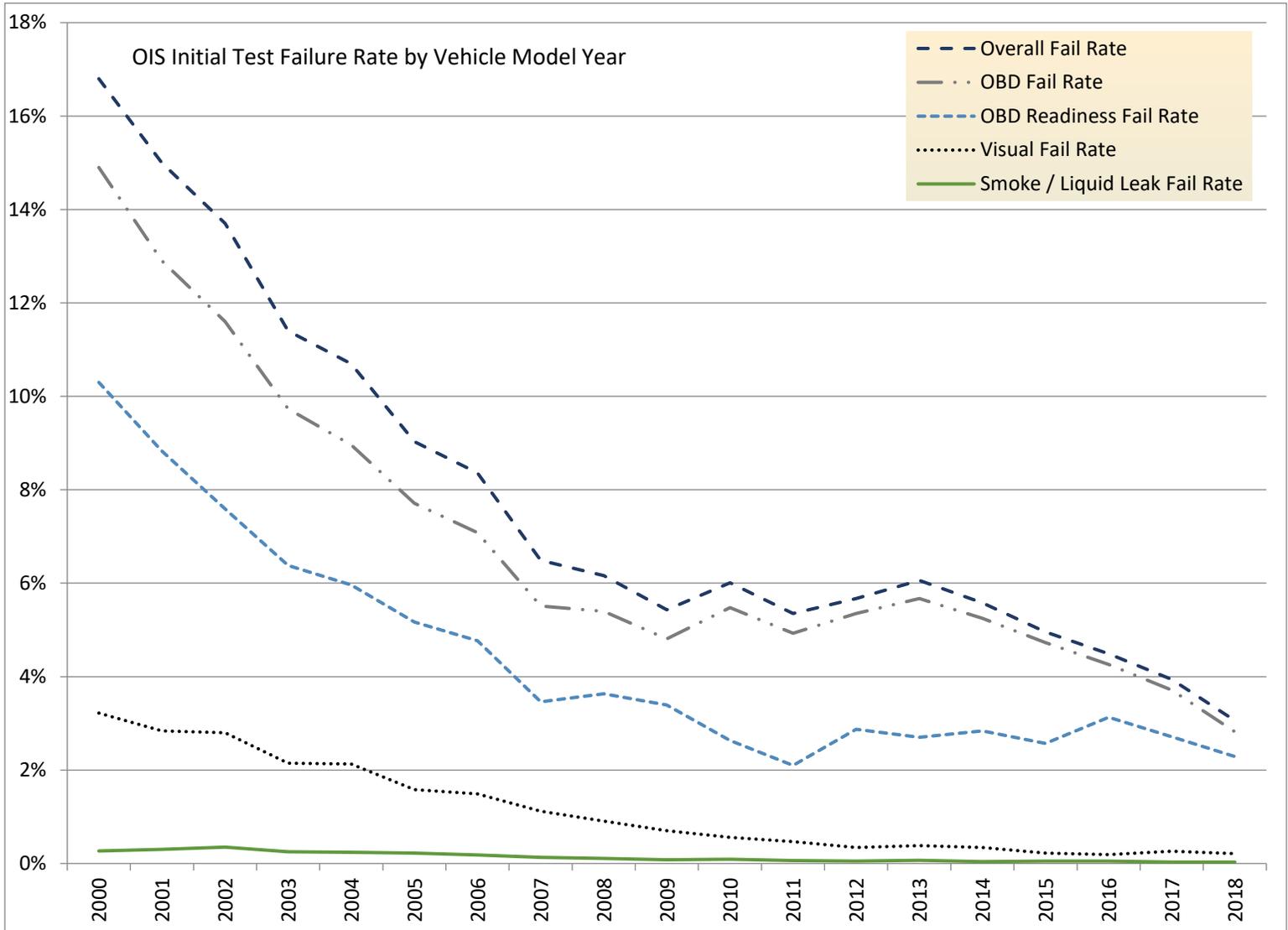


Note: Please see tabular data in Table 18 for BAR-97 tests conducted on other vehicle model years not shown in chart.

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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	162	115
Certificate of Non-Compliance	0	0
Parts Cost	20	3
Hardship Extensions	1	0
Exempt Vehicle	0	7
Exempted by Directive	4	1
Parts Exemption	1	1
Unknown Outcome	0	0
Permanently Exempt Vehicle	0	0
Temporarily Exempt Vehicle	0	0
Total	188	127

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)	2,575
EO and EI (Inspect and Repair)	3,104
Total	5,680

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	32,116	\$54.86	174,285	\$49.83	206,401	\$50.62
STAR Test Only	65,615	\$50.06	326,522	\$51.49	392,137	\$51.25
Non-STAR Test and Repair	7,462	\$53.86	97,739	\$55.97	105,201	\$55.82
Non-STAR Test Only	1,663	\$45.12	14,952	\$43.12	16,615	\$43.32
Test and Repair/Dealer	5	\$70.59	2,078	\$64.87	2,083	\$64.89
Total	106,861	\$51.69	615,576	\$51.57	722,437	\$51.59

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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	9,210	\$64.12	32,116	\$54.86	165,075	\$49.04
STAR Test Only	0	\$0.00	6,019	\$40.84	65,615	\$50.06	320,503	\$51.69
Non-STAR Test and Repair	0	\$0.00	67,040	\$60.53	7,462	\$53.86	30,699	\$46.02
Non-STAR Test Only	25	\$50.00	7,120	\$42.79	1,638	\$45.05	7,832	\$43.42
Test and Repair/Dealer	0	\$0.00	2,014	\$64.18	5	\$70.59	64	\$86.77
Total	25	\$50.00	91,403	\$58.29	106,836	\$51.69	524,173	\$50.40

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	940	\$48	4,069	\$415
	\$101-250	975	\$172		
	\$251-500	1,006	\$363		
	\$501-650	366	\$575		
	Over \$650	782	\$1,151		
Non-STAR Repairs (Test and Repair)	\$1-100	288	\$50	1,101	\$450
	\$101-250	287	\$167		
	\$251-500	259	\$356		
	\$501-650	67	\$570		
	Over \$650	200	\$1,512		
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	140	\$741
	\$101-250	3	\$196		
	\$251-500	32	\$396		
	\$501-650	29	\$571		
	Over \$650	76	\$972		
Total Repairs	\$1-100	1,228	\$48	5,310	\$431
	\$101-250	1,265	\$171		
	\$251-500	1,297	\$362		
	\$501-650	462	\$574		
	Over \$650	1,058	\$1,207		

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	335	81	24.18%	17.61%	6.87%	10.15%	6.57%	NA
1977	445	102	22.92%	14.16%	5.84%	11.46%	5.84%	NA
1978	541	119	22.00%	13.86%	5.18%	8.87%	5.18%	NA
1979	639	174	27.23%	19.56%	8.61%	13.93%	7.82%	NA
1980	329	66	20.06%	12.46%	4.56%	11.55%	6.69%	NA
1981	393	99	25.19%	18.32%	7.38%	11.96%	6.36%	NA
1982	424	115	27.12%	19.58%	7.78%	11.79%	6.84%	NA
1983	468	117	25.00%	17.95%	7.91%	9.83%	5.56%	NA
1984	916	212	23.14%	17.47%	7.42%	8.95%	4.48%	NA
1985	1,172	291	24.83%	17.24%	6.74%	10.49%	5.80%	NA
1986	1,617	394	24.37%	16.39%	5.81%	12.86%	6.06%	NA
1987	1,947	447	22.96%	17.15%	5.91%	9.96%	4.73%	NA
1988	2,035	469	23.05%	16.56%	4.96%	9.98%	4.57%	NA
1989	3,073	688	22.39%	13.96%	4.20%	11.29%	5.24%	NA
1990	3,258	703	21.58%	13.84%	4.14%	10.44%	4.30%	NA
1991	4,015	868	21.62%	13.97%	3.36%	10.19%	4.06%	NA
1992	3,718	766	20.60%	13.10%	3.42%	9.71%	4.55%	NA
1993	5,059	1,194	23.60%	16.01%	3.36%	10.48%	4.39%	NA
1994	6,442	1,481	22.99%	14.86%	2.92%	10.68%	4.33%	NA
1995	8,931	1,937	21.69%	14.89%	2.73%	9.15%	4.01%	NA
1996	7,608	1,608	21.14%	10.16%	1.45%	13.14%	3.30%	13.04%
1997	13,916	2,835	20.37%	8.71%	1.23%	12.54%	3.42%	12.49%
1998	14,782	2,758	18.66%	7.23%	1.39%	12.13%	3.50%	12.10%
1999	22,335	3,596	16.10%	5.02%	0.94%	11.22%	2.97%	11.20%
2000	315	63	20.00%	11.75%	5.71%	10.48%	2.54%	10.48%
2001	295	58	19.66%	6.44%	3.05%	14.58%	4.07%	14.58%
2002	268	35	13.06%	7.46%	2.61%	8.21%	2.61%	8.21%
2003	343	56	16.33%	6.41%	3.21%	11.66%	2.62%	11.66%
2004	269	26	9.67%	2.97%	0.37%	7.43%	1.12%	7.43%
2005	338	29	8.58%	3.85%	0.59%	5.03%	1.48%	4.44%
2006	299	35	11.71%	4.35%	1.67%	7.02%	1.67%	7.02%
2007	305	33	10.82%	7.87%	2.30%	4.92%	0.98%	4.92%
2008	197	12	6.09%	2.54%	1.02%	4.57%	1.52%	4.57%
2009	119	2	9.24%	3.36%	3.36%	3.77%	0.84%	5.04%
2010	41	2	4.88%	0.00%	0.00%	2.44%	2.44%	2.44%
2011	259	4	1.54%	0.39%	0.00%	1.16%	0.39%	1.16%
2012	153	1	0.65%	0.00%	0.00%	0.65%	0.00%	0.65%
2013	55	1	1.82%	0.00%	0.00%	1.82%	1.82%	1.82%
2014	56	2	3.57%	0.00%	0.00%	3.57%	0.00%	3.57%
2015	52	1	1.92%	1.92%	0.00%	0.00%	1.92%	0.00%
2016	21	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2017	43	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2018	44	0	0.00%	2.27%	0.00%	0.00%	0.00%	0.00%
2019	100	2	2.00%	0.00%	0.00%	1.00%	1.00%	1.00%
2020	59	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	1	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Model Years	108,030	21,491	19.89%	10.43%	2.40%	11.09%	3.78%	6.71%

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	4	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1997	7	2	28.60%	14.30%	0.00%	14.30%	14.30%	0.00%
1998	209	38	18.20%	16.30%	3.83%	14.80%	4.78%	1.44%
1999	721	107	14.80%	13.50%	2.77%	12.60%	8.74%	0.83%
2000	25,917	4,373	16.90%	15.20%	3.29%	14.90%	10.40%	0.28%
2001	39,032	5,879	15.10%	13.30%	2.84%	13.00%	8.87%	0.31%
2002	32,110	4,405	13.70%	12.00%	2.76%	11.70%	7.62%	0.35%
2003	49,407	5,628	11.40%	10.00%	2.15%	9.75%	6.40%	0.25%
2004	38,094	4,058	10.70%	9.18%	2.12%	8.93%	5.94%	0.25%
2005	58,035	5,257	9.06%	7.96%	1.59%	7.74%	5.18%	0.22%
2006	44,326	3,684	8.31%	7.22%	1.48%	7.04%	4.72%	0.18%
2007	66,376	4,313	6.50%	5.64%	1.12%	5.51%	3.47%	0.13%
2008	37,317	2,294	6.15%	5.50%	0.91%	5.39%	3.63%	0.11%
2009	36,278	1,974	5.44%	4.90%	0.71%	4.81%	3.38%	0.09%
2010	27,174	1,626	5.98%	5.55%	0.56%	5.46%	2.63%	0.10%
2011	57,645	3,073	5.33%	4.98%	0.46%	4.92%	2.09%	0.06%
2012	25,621	1,439	5.62%	5.35%	0.34%	5.30%	2.84%	0.05%
2013	14,597	883	6.05%	5.73%	0.38%	5.67%	2.70%	0.07%
2014	14,461	806	5.57%	5.29%	0.35%	5.26%	2.83%	0.03%
2015	16,990	849	5.00%	4.81%	0.21%	4.77%	2.57%	0.05%
2016	15,622	704	4.51%	4.33%	0.19%	4.28%	3.14%	0.04%
2017	11,571	458	3.96%	3.75%	0.26%	3.72%	2.73%	0.03%
2018	10,866	335	3.08%	2.88%	0.21%	2.85%	2.31%	0.03%
2019	6,604	244	3.69%	3.57%	0.12%	3.53%	3.09%	0.05%
2020	478	30	6.28%	5.65%	0.42%	5.65%	4.81%	0.00%
Other	7	5	71.40%	57.10%	28.60%	57.10%	28.60%	0.00%
All Model Years	629,469	52,464	8.33%	7.44%	1.34%	7.28%	4.65%	0.16%

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).