

Executive Summary Report

Smog Check Statewide June 2020

1. TESTING VOLUME

Testing Volume	All Tests	Failed	Percent (%) Failed
Initial Test	1,005,175	101,333	10.08%
Total	1,099,584	115,484	10.50%

2. CERTIFICATION VOLUME

Certification Volume	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	898,101	89.35%	107,074	10.65%
Total	977,531	88.90%	122,053	11.10%

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	472,377	89.02%	58,251	10.98%
Non-STAR Test Only	22,288	91.11%	2,176	8.89%
STAR Test and Repair	260,479	88.94%	32,402	11.06%
Non-STAR Test and Repair	136,568	92.69%	10,772	7.31%
Total	891,712	89.59%	103,601	10.41%

*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	14,805	10.58%
All Visual	10,454	1.21%	4,500	3.22%
All Functional	66,797	7.72%	14,886	10.64%
OBDII	65,771	7.60%	9,290	6.64%
Overall	73,804	8.53%	27,529	19.67%

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	33,083	72,232	26,663	59,621
Non-Directed	259,798	458,396	233,816	412,756
Total	292,881	530,628	260,479	472,377

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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	273	62	234	45
Non-Directed	147,067	24,402	136,334	22,243
Total	147,340	24,464	136,568	22,288

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	747,038	64,757	8.67%	109,372	22,167	20.30%
Partial	42,107	3,326	7.90%	8,598	1,918	22.30%
Basic	69,580	5,269	7.57%	16,812	2,353	14.00%
Change of Ownership	6,507	452	6.95%	1,168	261	22.30%
No Program	0	0	0.00%	1	0	0.00%
Unknown	0	0	0.00%	3,992	830	20.80%
Total Program Area	865,232	73,804	8.53%	139,943	27,529	19.70%

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	449,736	41,565	9.24%	80,892	15,676	19.40%
STAR Test Only Suspended	2,048	140	6.84%	198	26	13.10%
Non-STAR Test Only	21,717	1,609	7.41%	2,747	409	14.90%
STAR Test and Repair	250,088	21,824	8.73%	42,793	9,400	22.00%
STAR Test and Repair Suspended	1,159	115	9.92%	91	21	23.10%
Non-STAR Test and Repair	135,320	8,088	5.98%	12,020	1,694	14.10%
Test and Repair/Dealer	2,783	147	5.28%	18	4	22.20%
Business Fleet	415	17	4.10%	0	0	0.00%
Permanent Fleet Registered	72	2	2.78%	0	0	0.00%
Referee	291	205	70.40%	181	123	68.00%
Government Fleet	1,603	92	5.74%	1,003	176	17.50%
Total	865,232	73,804	8.53%	139,943	27,529	19.70%

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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	107	48	1,868	72	2,095
STAR Test Only	14	1	1,700	35	1,750
STAR Sub-total	121	49	3,568	107	3,845
Non-STAR Test and Repair	488	46	2,098	244	2,876
Non-STAR Test Only	28	7	348	31	414
Non-STAR Sub-total	516	53	2,446	275	3,290
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	301	13	360
Repair Only	2	0	42	1	45
Unknown Type	1	0	24	0	25
Other Station Sub-Total	113	7	444	18	582
Total	750	109	6,458	400	7,717

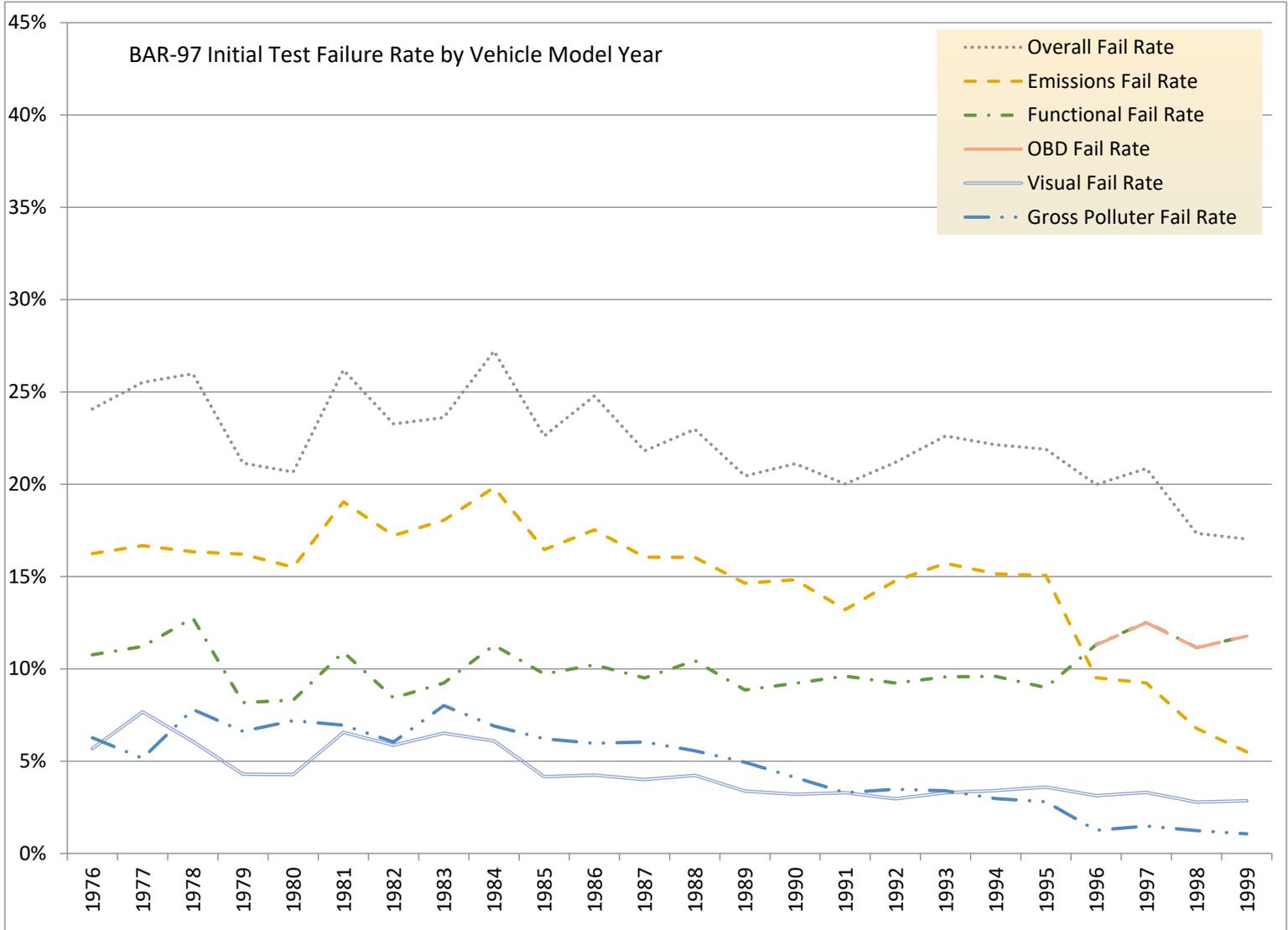
10. NUMBER OF STATIONS CONDUCTING TEST BY EQUIPMENT TYPE

Station Type	BAR-97 Only	OIS Only	BAR-97 & OIS
STAR Test and Repair	1	155	1,862
STAR Test Only	3	76	1,612
<i>STAR Sub-total</i>	4	231	3,474
Non-STAR Test and Repair	0	1,769	412
Non-STAR Test Only	1	113	84
<i>Non-STAR Sub-total</i>	1	1,882	496
Basic Area Dealer	0	49	5
Business Fleet	0	3	0
Permanent Fleet Registered	0	22	0
Referee	0	0	18
Government Fleet	7	135	39
Unknown Type	0	2	20
<i>Other Station Sub-Total</i>	7	211	82
Total	12	2,324	4,052

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

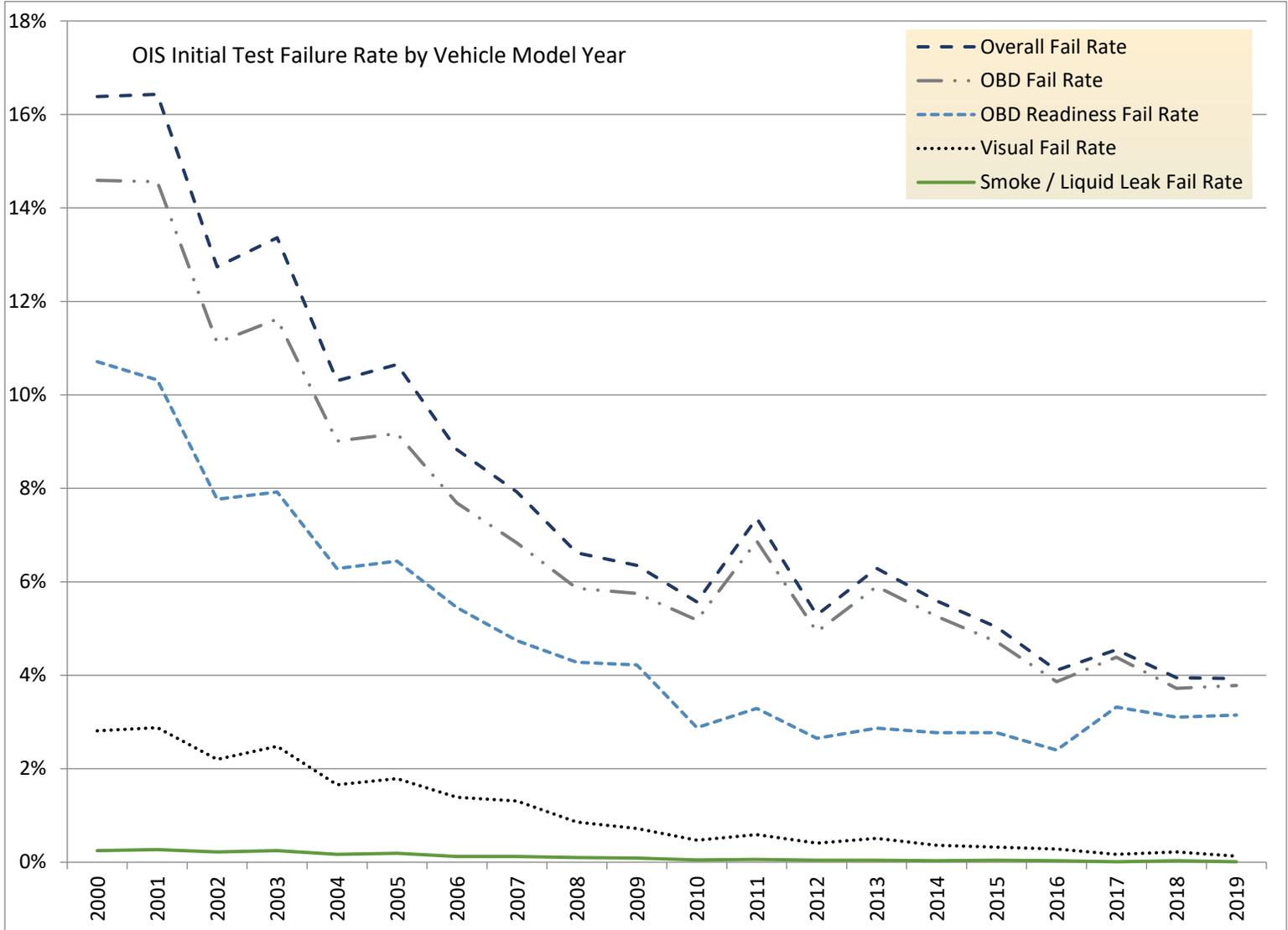


Note: Please see tabular data in Table 18 for BAR-97 tests conducted on other vehicle model years not shown in chart.

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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	227	127
Certificate of Non-Compliance	0	0
Parts Cost	20	3
Hardship Extensions	0	0
Exempt Vehicle	0	8
Exempted by Directive	2	0
Parts Exemption	2	2
Unknown Outcome	0	0
Permanently Exempt Vehicle	0	0
Temporarily Exempt Vehicle	0	0
Total	251	140

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)	2,559
EO and EI (Inspect and Repair)	2,808
Total	5,367

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	42,720	\$56.61	249,627	\$54.35	292,347	\$54.68
STAR Test Only	80,570	\$50.74	448,789	\$49.79	529,359	\$49.93
Non-STAR Test and Repair	12,016	\$54.19	134,900	\$56.35	146,916	\$56.17
Non-STAR Test Only	2,716	\$44.24	21,661	\$43.05	24,377	\$43.18
Test and Repair/Dealer	18	\$65.17	2,783	\$64.58	2,801	\$64.59
Total	138,040	\$52.73	857,760	\$52.03	995,800	\$52.12

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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 Count ⁴	Average BAR-97 Inspection Cost ⁴	OIS Initial Test Count ⁴	Average OIS Inspection Cost ⁴
STAR Test and Repair	2	\$56.75	8,770	\$51.42	42,718	\$56.61	240,857	\$54.45
STAR Test Only	283	\$41.94	9,495	\$45.02	80,287	\$50.77	439,294	\$49.89
Non-STAR Test and Repair	0	\$0.00	83,833	\$61.99	12,016	\$54.19	51,067	\$47.09
Non-STAR Test Only	108	\$41.75	8,233	\$44.40	2,608	\$44.34	13,428	\$42.22
Test and Repair/Dealer	0	\$0.00	2,545	\$63.52	18	\$65.17	238	\$75.96
Total	393	\$41.96	112,876	\$58.49	137,647	\$52.76	744,884	\$51.05

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	1,093	\$51	5,253	\$462
	\$101-250	1,208	\$171		
	\$251-500	1,251	\$369		
	\$501-650	464	\$576		
	Over \$650	1,237	\$1,160		
Non-STAR Repairs (Test and Repair)	\$1-100	270	\$53	1,204	\$435
	\$101-250	355	\$171		
	\$251-500	274	\$369		
	\$501-650	98	\$573		
	Over \$650	207	\$1,408		
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	89	\$820
	\$101-250	2	\$231		
	\$251-500	12	\$366		
	\$501-650	16	\$587		
	Over \$650	59	\$996		
Total Repairs	\$1-100	1,363	\$51	6,546	\$462
	\$101-250	1,565	\$171		
	\$251-500	1,537	\$369		
	\$501-650	578	\$575		
	Over \$650	1,503	\$1,188		

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	511	123	24.07%	16.24%	6.26%	10.76%	5.68%	NA
1977	678	173	25.52%	16.67%	5.16%	11.21%	7.67%	NA
1978	808	210	25.99%	16.34%	7.80%	12.75%	6.06%	NA
1979	771	163	21.14%	16.21%	6.61%	8.17%	4.28%	NA
1980	445	92	20.67%	15.51%	7.19%	8.31%	4.27%	NA
1981	504	132	26.19%	19.05%	6.94%	10.91%	6.55%	NA
1982	546	127	23.26%	17.22%	6.04%	8.42%	5.86%	NA
1983	737	174	23.61%	18.05%	8.01%	9.23%	6.51%	NA
1984	1,231	335	27.21%	19.82%	6.90%	11.29%	6.09%	NA
1985	1,707	386	22.61%	16.46%	6.21%	9.72%	4.16%	NA
1986	2,146	532	24.79%	17.52%	5.96%	10.21%	4.24%	NA
1987	2,449	534	21.80%	16.05%	6.04%	9.51%	4.00%	NA
1988	2,768	636	22.98%	16.04%	5.56%	10.44%	4.23%	NA
1989	3,703	757	20.44%	14.64%	4.94%	8.86%	3.38%	NA
1990	4,685	989	21.11%	14.83%	4.12%	9.22%	3.20%	NA
1991	5,262	1,053	20.01%	13.21%	3.29%	9.60%	3.29%	NA
1992	5,344	1,132	21.18%	14.76%	3.48%	9.23%	2.96%	NA
1993	6,254	1,414	22.61%	15.72%	3.39%	9.56%	3.29%	NA
1994	8,832	1,955	22.14%	15.14%	2.97%	9.59%	3.40%	NA
1995	9,302	2,036	21.89%	15.06%	2.80%	8.98%	3.60%	NA
1996	13,126	2,624	19.99%	9.52%	1.25%	11.31%	3.13%	11.29%
1997	15,073	3,142	20.85%	9.23%	1.48%	12.53%	3.30%	12.50%
1998	23,311	4,043	17.34%	6.77%	1.23%	11.15%	2.78%	11.14%
1999	24,069	4,098	17.03%	5.50%	1.06%	11.77%	2.85%	11.77%
2000	554	104	18.77%	8.12%	3.79%	12.64%	1.62%	12.64%
2001	333	68	20.42%	9.01%	3.00%	13.51%	2.40%	13.51%
2002	483	80	16.56%	6.83%	3.11%	12.01%	1.66%	12.01%
2003	438	67	15.30%	5.94%	1.60%	11.64%	2.28%	11.64%
2004	657	70	10.65%	3.20%	1.07%	8.83%	1.07%	8.83%
2005	396	60	15.15%	4.80%	1.26%	11.87%	1.01%	11.87%
2006	627	53	8.45%	3.35%	0.64%	6.06%	0.64%	6.06%
2007	328	55	16.77%	5.79%	1.52%	11.89%	0.91%	11.89%
2008	442	46	10.41%	3.39%	0.90%	6.79%	0.90%	6.79%
2009	96	2	17.71%	2.08%	1.04%	3.77%	1.04%	15.63%
2010	137	17	12.41%	0.73%	0.00%	12.41%	0.00%	12.41%
2011	120	7	5.83%	0.00%	0.00%	5.83%	0.00%	5.83%
2012	306	14	4.58%	0.98%	0.65%	3.27%	0.65%	3.27%
2013	49	3	6.12%	0.00%	0.00%	6.12%	0.00%	6.12%
2014	62	4	6.45%	1.61%	0.00%	4.84%	0.00%	4.84%
2015	61	2	3.28%	0.00%	0.00%	1.64%	1.64%	1.64%
2016	71	1	1.41%	0.00%	0.00%	0.00%	1.41%	0.00%
2017	61	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2018	89	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2019	144	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2020	226	1	0.44%	0.00%	0.00%	0.44%	0.00%	0.44%
Other	1	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Model Years	139,943	27,529	19.67%	10.58%	2.46%	10.64%	3.22%	6.64%

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	8	2	25.00%	25.00%	0.00%	25.00%	12.50%	0.00%
1998	239	24	10.04%	9.62%	0.84%	8.79%	5.02%	0.84%
1999	962	129	13.41%	12.58%	1.46%	12.37%	8.32%	0.21%
2000	42,899	7,027	16.38%	14.84%	2.81%	14.59%	10.71%	0.25%
2001	32,771	5,383	16.43%	14.82%	2.88%	14.56%	10.32%	0.27%
2002	57,062	7,267	12.74%	11.35%	2.20%	11.12%	7.77%	0.22%
2003	39,884	5,327	13.36%	11.87%	2.48%	11.62%	7.92%	0.25%
2004	72,963	7,515	10.30%	9.18%	1.66%	9.01%	6.28%	0.17%
2005	48,723	5,191	10.65%	9.35%	1.79%	9.17%	6.44%	0.19%
2006	82,459	7,285	8.83%	7.81%	1.39%	7.69%	5.45%	0.12%
2007	51,336	4,064	7.92%	6.95%	1.31%	6.83%	4.74%	0.12%
2008	73,287	4,849	6.62%	5.95%	0.86%	5.86%	4.28%	0.10%
2009	26,820	1,702	6.35%	5.84%	0.72%	5.75%	4.22%	0.09%
2010	72,143	4,017	5.57%	5.23%	0.47%	5.18%	2.88%	0.05%
2011	29,117	2,144	7.36%	6.93%	0.59%	6.87%	3.29%	0.06%
2012	111,700	5,906	5.29%	4.97%	0.41%	4.93%	2.65%	0.04%
2013	17,186	1,081	6.29%	5.94%	0.51%	5.90%	2.87%	0.04%
2014	18,071	1,011	5.59%	5.30%	0.36%	5.26%	2.77%	0.03%
2015	19,573	985	5.03%	4.75%	0.32%	4.72%	2.77%	0.04%
2016	23,175	953	4.11%	3.89%	0.28%	3.86%	2.40%	0.03%
2017	16,620	756	4.55%	4.39%	0.17%	4.39%	3.32%	0.01%
2018	11,757	464	3.95%	3.74%	0.22%	3.72%	3.10%	0.03%
2019	13,572	534	3.93%	3.79%	0.13%	3.78%	3.15%	0.01%
2020	2,881	179	6.21%	6.11%	0.10%	6.11%	5.66%	0.00%
2021	18	8	44.44%	44.44%	0.00%	44.44%	5.56%	0.00%
Other	4	1	25.00%	25.00%	0.00%	25.00%	25.00%	0.00%
All Model Years	865,232	73,804	8.53%	7.72%	1.21%	7.60%	5.10%	0.12%

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).