

Executive Summary Report

Smog Check Statewide January 2020

1. TESTING VOLUME

Testing Volume	All Tests	Failed	Percent (%) Failed
Initial Test	919,192	90,863	9.89%
Total	1,004,117	104,565	10.41%

2. CERTIFICATION VOLUME

Certification Volume	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	821,418	89.36%	97,774	10.64%
Total	891,894	88.82%	112,223	11.18%

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	430,818	89.07%	52,882	10.93%
Non-STAR Test Only	19,720	90.99%	1,952	9.01%
STAR Test and Repair	235,088	89.32%	28,112	10.68%
Non-STAR Test and Repair	130,052	92.65%	10,315	7.35%
Total	815,678	89.74%	93,261	10.26%

*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	12,624	10.82%
All Visual	10,484	1.31%	4,473	3.83%
All Functional	59,548	7.42%	13,323	11.41%
OBDII	58,552	7.30%	7,963	6.82%
Overall	66,812	8.33%	24,051	20.61%

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	29,014	64,477	23,480	52,935
Non-Directed	234,186	419,223	211,608	377,883
Total	263,200	483,700	235,088	430,818

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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	274	70	202	59
Non-Directed	140,093	21,602	129,850	19,661
Total	140,367	21,672	130,052	19,720

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	694,932	58,204	8.38%	97,022	20,058	20.70%
Partial	37,767	3,123	8.27%	7,511	1,661	22.10%
Basic	63,928	4,992	7.81%	7,881	1,308	16.60%
Change of Ownership	5,850	493	8.43%	589	162	27.50%
No Program	0	0	0.00%	1	0	0.00%
Unknown	0	0	0.00%	3,711	862	23.20%
Total Program Area	802,477	66,812	8.33%	116,715	24,051	20.60%

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	411,331	36,983	8.99%	72,369	14,576	20.10%
STAR Test Only Suspended	1,602	102	6.37%	119	13	10.90%
Non-STAR Test Only	19,891	1,493	7.51%	1,781	311	17.50%
STAR Test and Repair	228,022	19,242	8.44%	35,178	7,754	22.00%
STAR Test and Repair Suspended	802	70	8.73%	37	11	29.70%
Non-STAR Test and Repair	134,567	8,175	6.08%	5,800	1,029	17.70%
Test and Repair/Dealer	2,905	152	5.23%	2	0	0.00%
Business Fleet	506	18	3.56%	0	0	0.00%
Permanent Fleet Registered	37	1	2.70%	0	0	0.00%
Referee	539	459	85.20%	167	98	58.70%
Government Fleet	2,275	117	5.14%	1,262	259	20.50%
Total	802,477	66,812	8.33%	116,715	24,051	20.60%

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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	1,878	76	2,109
STAR Test Only	18	1	1,731	33	1,783
STAR Sub-total	125	49	3,609	109	3,892
Non-STAR Test and Repair	500	46	2,187	246	2,979
Non-STAR Test Only	23	8	372	31	434
Non-STAR Sub-total	523	54	2,559	277	3,413
Basic Area Dealer	60	0	0	0	60
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	299	13	358
Repair Only	2	0	43	1	46
Unknown Type	0	0	16	2	18
Other Station Sub-Total	111	7	435	20	573
Total	759	110	6,603	406	7,878

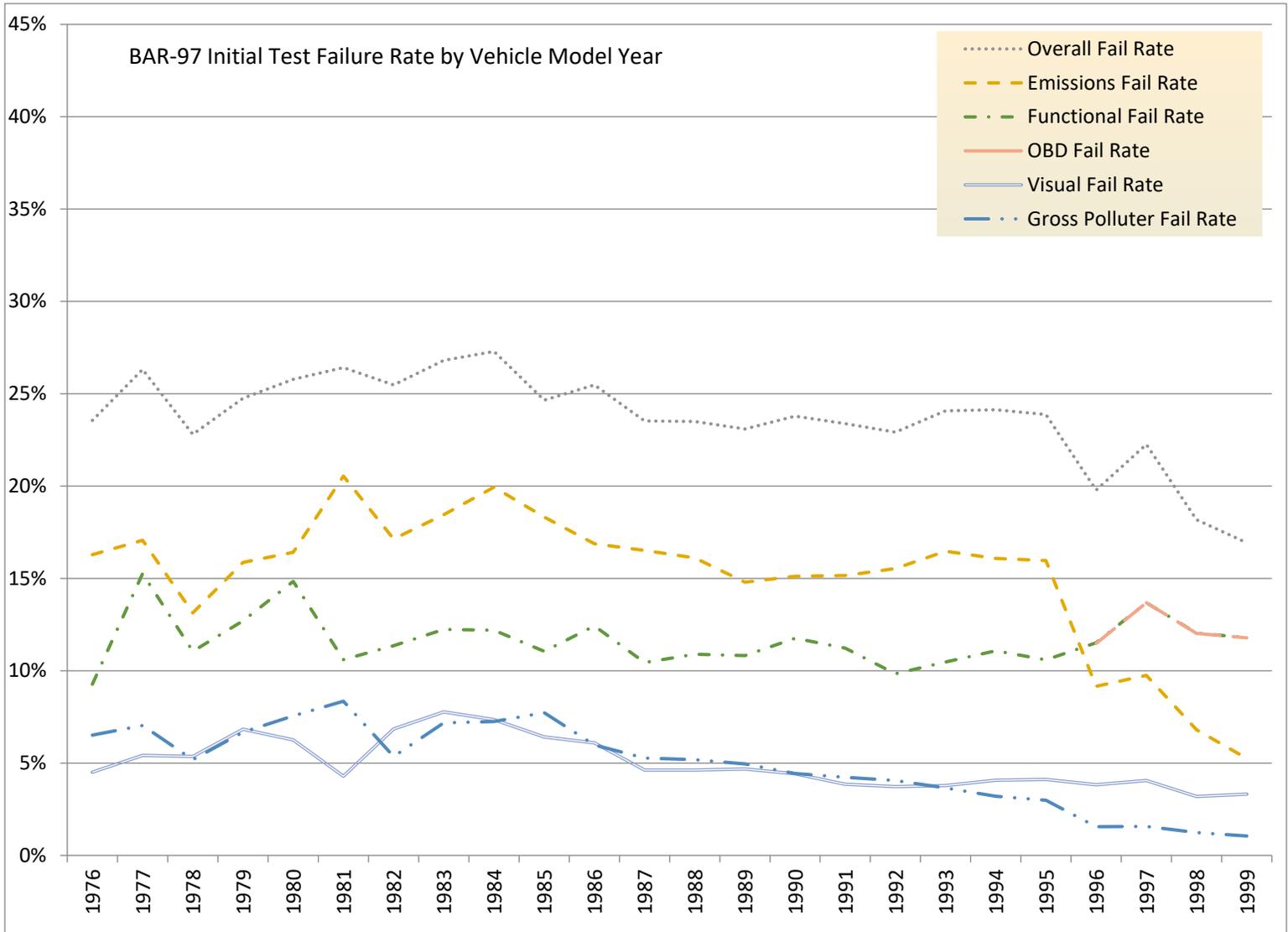
10. NUMBER OF STATIONS CONDUCTING TEST BY EQUIPMENT TYPE

Station Type	BAR 97 Only	OIS Only	BAR 97 & OIS
STAR Test and Repair	0	235	1,813
STAR Test Only	0	57	1,679
<i>STAR Sub-total</i>	0	292	3,492
Non-STAR Test and Repair	1	2,007	271
Non-STAR Test Only	0	135	62
<i>Non-STAR Sub-total</i>	1	2,142	333
Basic Area Dealer	0	55	1
Business Fleet	0	2	0
Permanent Fleet Registered	0	13	0
Referee	0	0	31
Government Fleet	6	140	35
Unknown Type	0	0	18
<i>Other Station Sub-Total</i>	6	210	85
Total	7	2,644	3,910

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

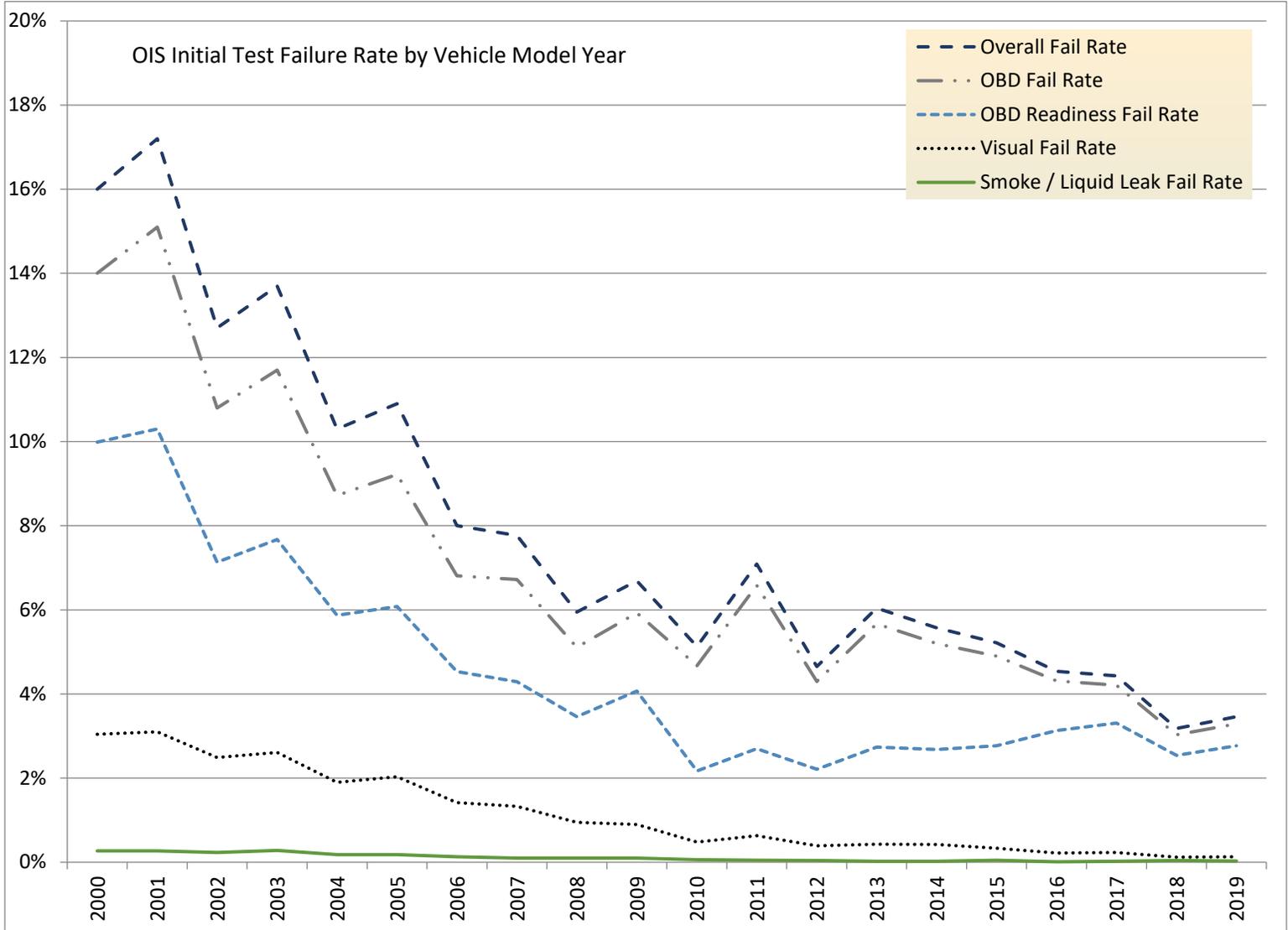


Note: Please see tabular data in Table 18 for BAR-97 tests conducted on other vehicle model years not shown in chart.

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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	249	150
Certificate of Non-Compliance	0	0
Parts Cost	30	7
Hardship Extensions	0	0
Exempt Vehicle	1	15
Exempted by Directive	8	0
Parts Exemption	2	1
Unknown Outcome	0	0
Permanently Exempt Vehicle	0	0
Temporarily Exempt Vehicle	0	0
Total	290	173

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)	2,761
EO and EI (Inspect and Repair)	2,929
Total	5,690

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	35,138	\$55.59	227,251	\$49.05	262,389	\$49.93
STAR Test Only	72,126	\$50.49	409,843	\$50.53	481,969	\$50.53
Non-STAR Test and Repair	5,791	\$57.04	134,085	\$59.29	139,876	\$59.20
Non-STAR Test Only	1,757	\$43.88	19,783	\$43.17	21,540	\$43.23
Test and Repair/Dealer	2	\$70.75	2,905	\$65.29	2,907	\$65.30
Total	114,814	\$52.28	793,867	\$51.46	908,681	\$51.56

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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	15,761	\$46.74	35,138	\$55.59	211,490	\$49.22
STAR Test Only	0	\$0.00	7,890	\$44.14	72,126	\$50.49	401,953	\$50.66
Non-STAR Test and Repair	1	\$60.00	104,743	\$61.18	5,790	\$57.04	29,342	\$52.57
Non-STAR Test Only	0	\$0.00	9,605	\$41.41	1,757	\$43.88	10,178	\$44.83
Test and Repair/Dealer	0	\$0.00	2,890	\$65.29	2	\$70.75	15	\$65.75
Total	1	\$60.00	140,889	\$57.34	114,813	\$52.28	652,978	\$50.19

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	1,120	\$52	4,678	\$418
	\$101-250	1,066	\$172		
	\$251-500	1,182	\$362		
	\$501-650	416	\$573		
	Over \$650	894	\$1,170		
Non-STAR Repairs (Test and Repair)	\$1-100	353	\$52	1,414	\$444
	\$101-250	360	\$169		
	\$251-500	333	\$354		
	\$501-650	102	\$577		
	Over \$650	266	\$1,396		
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	125	\$721
	\$101-250	3	\$209		
	\$251-500	23	\$406		
	\$501-650	36	\$591		
	Over \$650	63	\$934		
Total Repairs	\$1-100	1,473	\$52	6,217	\$430
	\$101-250	1,429	\$171		
	\$251-500	1,538	\$361		
	\$501-650	554	\$575		
	Over \$650	1,223	\$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	399	94	23.56%	16.29%	6.52%	9.27%	4.51%	NA
1977	498	131	26.31%	17.07%	7.03%	15.26%	5.42%	NA
1978	579	132	22.80%	13.13%	5.18%	11.05%	5.35%	NA
1979	630	156	24.76%	15.87%	6.67%	12.70%	6.83%	NA
1980	384	99	25.78%	16.41%	7.55%	14.84%	6.25%	NA
1981	443	117	26.41%	20.54%	8.35%	10.61%	4.29%	NA
1982	467	119	25.48%	17.13%	5.35%	11.35%	6.85%	NA
1983	515	138	26.80%	18.45%	7.18%	12.23%	7.77%	NA
1984	993	271	27.29%	19.94%	7.25%	12.19%	7.35%	NA
1985	1,294	319	24.65%	18.32%	7.73%	11.05%	6.41%	NA
1986	1,707	435	25.48%	16.87%	5.98%	12.42%	6.09%	NA
1987	2,011	473	23.52%	16.51%	5.27%	10.44%	4.62%	NA
1988	2,315	544	23.50%	16.11%	5.18%	10.89%	4.62%	NA
1989	3,170	732	23.09%	14.79%	4.95%	10.82%	4.67%	NA
1990	3,700	880	23.78%	15.11%	4.43%	11.76%	4.41%	NA
1991	4,230	989	23.38%	15.15%	4.23%	11.23%	3.85%	NA
1992	4,481	1,027	22.92%	15.53%	4.06%	9.84%	3.73%	NA
1993	5,446	1,311	24.07%	16.47%	3.65%	10.48%	3.78%	NA
1994	7,004	1,690	24.13%	16.08%	3.20%	11.08%	4.07%	NA
1995	8,421	2,010	23.87%	15.96%	2.99%	10.59%	4.12%	NA
1996	10,167	2,011	19.78%	9.16%	1.55%	11.52%	3.82%	11.48%
1997	13,199	2,937	22.25%	9.75%	1.57%	13.68%	4.06%	13.68%
1998	19,291	3,508	18.18%	6.80%	1.24%	12.04%	3.19%	12.02%
1999	21,477	3,637	16.93%	5.25%	1.05%	11.79%	3.32%	11.78%
2000	341	49	14.37%	7.62%	4.40%	6.74%	2.35%	6.74%
2001	262	32	12.21%	6.87%	1.91%	7.25%	1.91%	6.87%
2002	329	36	10.94%	6.69%	2.13%	6.08%	1.52%	6.08%
2003	279	30	10.75%	3.58%	1.43%	7.17%	1.43%	7.17%
2004	364	24	6.59%	1.92%	0.27%	3.57%	1.10%	3.57%
2005	291	23	7.90%	5.50%	2.41%	3.44%	1.03%	3.44%
2006	451	27	5.99%	3.99%	1.55%	1.77%	1.77%	1.77%
2007	295	20	6.78%	4.75%	1.36%	2.03%	0.68%	2.03%
2008	307	18	5.86%	3.91%	1.30%	2.28%	0.65%	2.28%
2009	70	2	7.14%	4.29%	4.29%	3.77%	0.00%	2.86%
2010	80	6	7.50%	1.25%	0.00%	5.00%	2.50%	5.00%
2011	129	2	1.55%	0.00%	0.00%	0.78%	0.78%	0.78%
2012	262	5	1.91%	0.76%	0.00%	0.76%	0.38%	0.76%
2013	47	3	6.38%	0.00%	0.00%	4.26%	2.13%	4.26%
2014	54	3	5.56%	1.85%	0.00%	3.70%	1.85%	3.70%
2015	40	2	5.00%	2.50%	0.00%	2.50%	0.00%	2.50%
2016	39	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2017	38	1	2.63%	0.00%	0.00%	0.00%	2.63%	0.00%
2018	64	1	1.56%	0.00%	0.00%	1.56%	0.00%	1.56%
2019	117	1	0.85%	0.00%	0.00%	0.85%	0.00%	0.85%
2020	32	2	6.25%	0.00%	0.00%	3.13%	3.13%	3.13%
Other	3	1	33.33%	33.33%	0.00%	0.00%	0.00%	0.00%
All Model Years	116,715	24,051	20.61%	10.82%	2.58%	11.41%	3.83%	6.82%

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	5	1	20.00%	20.00%	0.00%	20.00%	0.00%	0.00%
1997	10	3	30.00%	20.00%	10.00%	20.00%	0.00%	0.00%
1998	256	39	15.20%	12.50%	3.52%	11.70%	5.86%	0.78%
1999	915	128	14.00%	13.20%	2.08%	12.50%	8.85%	0.77%
2000	37,499	6,007	16.00%	14.30%	3.04%	14.00%	9.99%	0.27%
2001	32,760	5,628	17.20%	15.40%	3.10%	15.10%	10.30%	0.27%
2002	48,598	6,167	12.70%	11.00%	2.49%	10.80%	7.13%	0.23%
2003	40,358	5,510	13.70%	12.00%	2.61%	11.70%	7.67%	0.28%
2004	62,754	6,452	10.30%	8.90%	1.90%	8.72%	5.87%	0.18%
2005	47,308	5,150	10.90%	9.41%	2.03%	9.22%	6.08%	0.18%
2006	76,908	6,149	8.00%	6.94%	1.42%	6.81%	4.53%	0.13%
2007	52,743	4,098	7.77%	6.82%	1.33%	6.72%	4.29%	0.10%
2008	68,137	4,052	5.95%	5.22%	0.95%	5.11%	3.46%	0.10%
2009	26,472	1,771	6.69%	6.04%	0.90%	5.93%	4.07%	0.10%
2010	57,634	2,957	5.13%	4.73%	0.48%	4.67%	2.17%	0.06%
2011	37,016	2,626	7.09%	6.63%	0.63%	6.58%	2.70%	0.05%
2012	88,236	4,099	4.65%	4.34%	0.39%	4.30%	2.21%	0.04%
2013	17,275	1,043	6.04%	5.69%	0.43%	5.67%	2.74%	0.02%
2014	17,148	955	5.57%	5.22%	0.42%	5.20%	2.68%	0.02%
2015	18,962	990	5.22%	4.95%	0.33%	4.90%	2.77%	0.05%
2016	32,724	1,486	4.54%	4.33%	0.22%	4.31%	3.13%	0.01%
2017	15,338	680	4.43%	4.22%	0.23%	4.21%	3.31%	0.02%
2018	12,151	387	3.18%	3.07%	0.12%	3.03%	2.54%	0.04%
2019	10,095	349	3.46%	3.32%	0.13%	3.29%	2.77%	0.03%
2020	1,167	80	6.86%	6.68%	0.26%	6.68%	6.43%	0.00%
Other	8	5	62.50%	12.50%	37.50%	12.50%	0.00%	0.00%
All Model Years	802,477	66,812	8.33%	7.42%	1.31%	7.30%	4.66%	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).