

Executive Summary Report

Smog Check Statewide August 2020

1. TESTING VOLUME

Testing Volume	All Tests	Failed	Percent (%) Failed
Initial Test	891,307	89,994	10.10%
Total	976,837	103,376	10.58%

2. CERTIFICATION VOLUME

Certification Volume	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	796,367	89.35%	94,940	10.65%
Total	867,797	88.84%	109,040	11.16%

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	426,604	88.89%	53,295	11.11%
Non-STAR Test Only	18,077	91.48%	1,684	8.52%
STAR Test and Repair	227,426	88.90%	28,396	11.10%
Non-STAR Test and Repair	120,695	92.72%	9,480	7.28%
Total	792,802	89.52%	92,855	10.48%

*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	12,795	10.58%
All Visual	9,626	1.25%	4,074	3.37%
All Functional	59,506	7.72%	13,079	10.81%
OBDII	58,588	7.61%	8,079	6.68%
Overall	66,041	8.57%	23,953	19.80%

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	27,190	62,279	21,888	51,433
Non-Directed	228,632	417,620	205,538	375,171
Total	255,822	479,899	227,426	426,604

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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	214	52	172	41
Non-Directed	129,961	19,709	120,523	18,036
Total	130,175	19,761	120,695	18,077

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	666,217	57,918	8.69%	94,421	19,066	20.20%
Partial	36,698	2,952	8.04%	7,149	1,656	23.20%
Basic	60,974	4,679	7.67%	14,347	2,098	14.60%
Change of Ownership	6,471	492	7.60%	1,212	312	25.70%
No Program	0	0	0.00%	3	1	33.30%
Unknown	0	0	0.00%	3,815	820	21.50%
Total Program Area	770,360	66,041	8.57%	120,947	23,953	19.80%

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	408,277	38,200	9.36%	71,622	13,890	19.40%
STAR Test Only Suspended	454	26	5.73%	65	2	3.08%
Non-STAR Test Only	17,552	1,271	7.24%	2,209	340	15.40%
STAR Test and Repair	219,585	18,993	8.65%	36,237	7,960	22.00%
STAR Test and Repair Suspended	333	22	6.61%	13	2	15.40%
Non-STAR Test and Repair	120,011	7,117	5.93%	10,164	1,523	15.00%
Test and Repair/Dealer	2,388	128	5.36%	13	5	38.50%
Business Fleet	334	26	7.78%	0	0	0.00%
Permanent Fleet Registered	71	1	1.41%	0	0	0.00%
Referee	269	185	68.80%	171	127	74.30%
Government Fleet	1,086	72	6.63%	453	104	23.00%
Total	770,360	66,041	8.57%	120,947	23,953	19.80%

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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	105	49	1,886	71	2,111
STAR Test Only	18	2	1,740	34	1,794
STAR Sub-total	123	51	3,626	105	3,905
Non-STAR Test and Repair	486	44	2,045	239	2,814
Non-STAR Test Only	25	6	291	32	354
Non-STAR Sub-total	511	50	2,336	271	3,168
Basic Area Dealer	59	0	0	0	59
Business Fleet	0	0	4	0	4
Permanent Fleet Registered	3	2	48	4	57
Referee	5	0	30	0	35
Government Fleet	41	5	301	13	360
Repair Only	2	0	43	1	46
Unknown Type	0	0	8	0	8
Other Station Sub-Total	110	7	434	18	569
Total	744	108	6,396	394	7,642

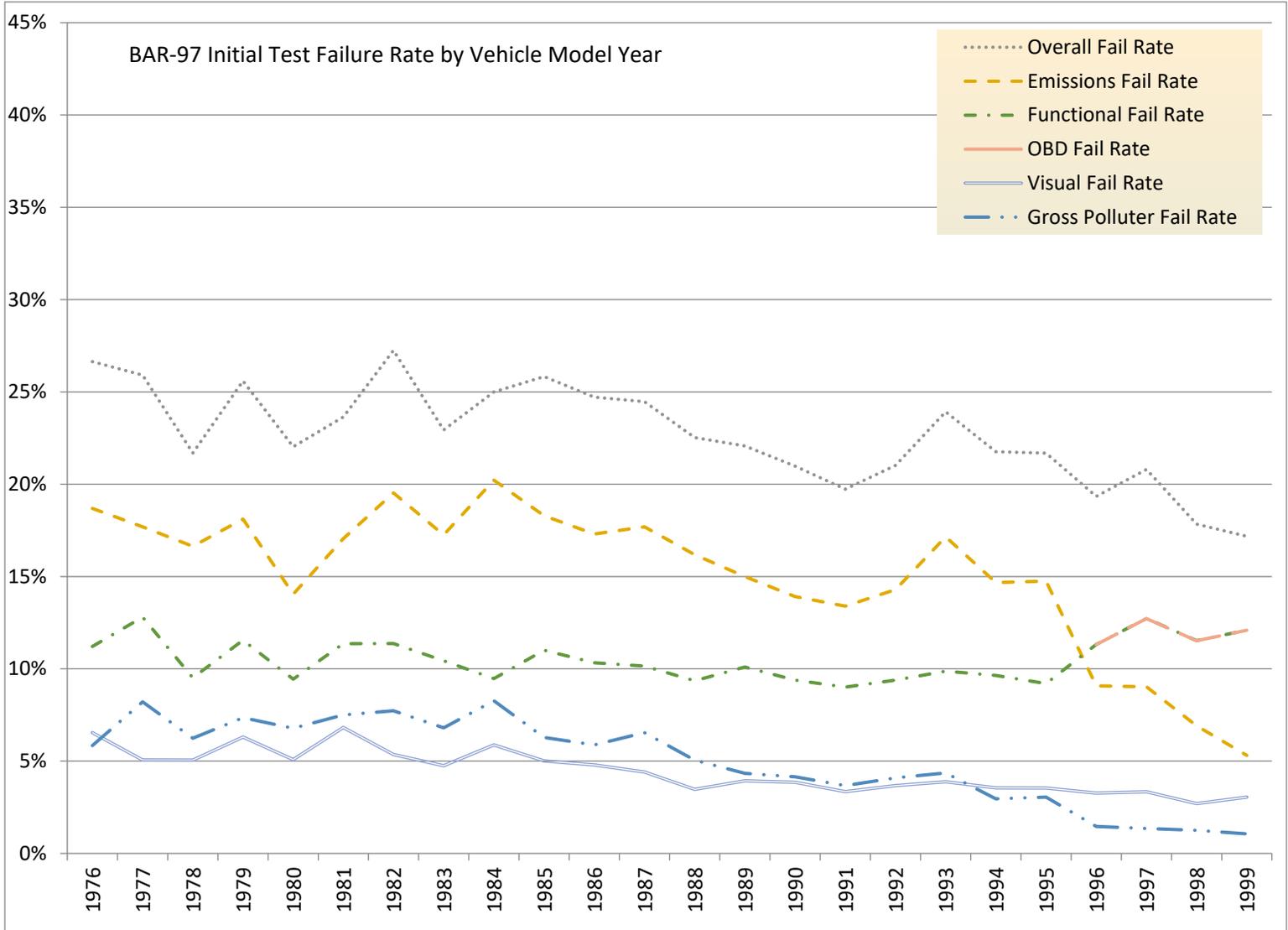
10. NUMBER OF STATIONS CONDUCTING TEST BY EQUIPMENT TYPE

Station Type	BAR-97 Only	OIS Only	BAR-97 & OIS
STAR Test and Repair	0	164	1,869
STAR Test Only	3	69	1,654
<i>STAR Sub-total</i>	3	233	3,523
Non-STAR Test and Repair	0	1,766	399
Non-STAR Test Only	2	99	69
<i>Non-STAR Sub-total</i>	2	1,865	468
Basic Area Dealer	0	51	3
Business Fleet	0	3	0
Permanent Fleet Registered	0	14	0
Referee	0	4	18
Government Fleet	8	132	33
Unknown Type	0	2	5
<i>Other Station Sub-Total</i>	8	206	59
Total	13	2,304	4,050

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

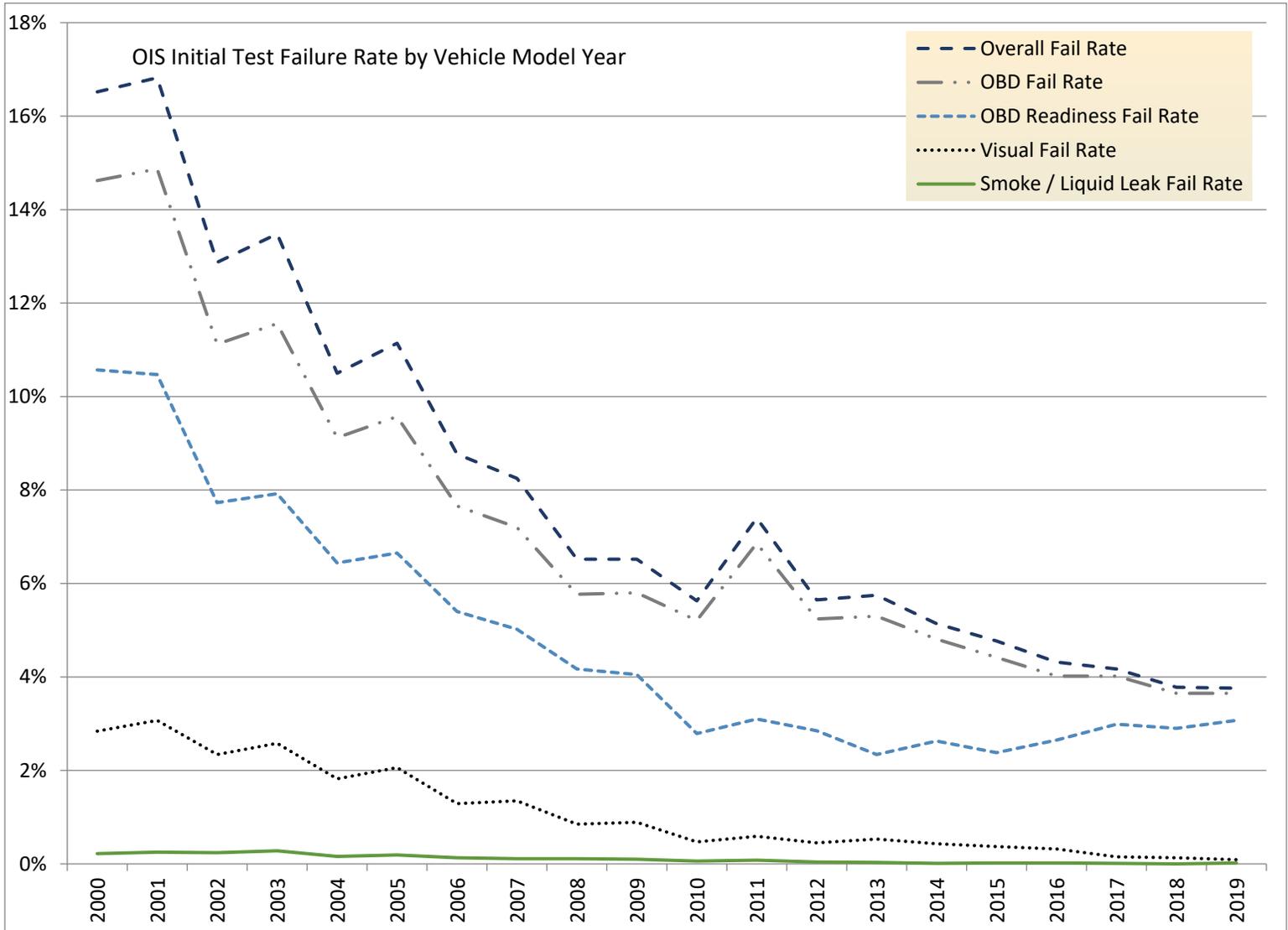


Note: Please see tabular data in Table 18 for BAR-97 tests conducted on other vehicle model years not shown in chart.

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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	190	124
Certificate of Non-Compliance	0	0
Parts Cost	20	4
Hardship Extensions	0	0
Exempt Vehicle	0	7
Exempted by Directive	7	0
Parts Exemption	2	0
Unknown Outcome	0	0
Permanently Exempt Vehicle	0	0
Temporarily Exempt Vehicle	0	0
Total	219	135

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)	2,625
EO and EI (Inspect and Repair)	2,780
Total	5,405

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	37,750	\$57.16	218,900	\$53.75	256,650	\$54.25
STAR Test Only	74,515	\$50.32	407,844	\$49.43	482,359	\$49.57
Non-STAR Test and Repair	10,569	\$55.75	119,284	\$61.03	129,853	\$60.60
Non-STAR Test Only	2,308	\$43.90	17,414	\$46.88	19,722	\$46.53
Test and Repair/Dealer	13	\$64.22	2,365	\$65.40	2,378	\$65.40
Total	125,155	\$52.72	765,807	\$52.46	890,962	\$52.50

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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	0	\$0.00	7,821	\$50.27	37,748	\$57.16	211,079	\$53.88
STAR Test Only	217	\$55.67	8,010	\$48.37	74,298	\$50.30	399,834	\$49.46
Non-STAR Test and Repair	0	\$0.00	75,179	\$64.08	10,569	\$55.75	44,105	\$55.83
Non-STAR Test Only	21	\$40.44	7,247	\$44.19	2,286	\$43.92	10,167	\$48.80
Test and Repair/Dealer	0	\$0.00	2,240	\$65.20	13	\$64.22	125	\$69.06
Total	238	\$54.32	100,497	\$60.34	124,914	\$52.72	665,310	\$51.27

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	960	\$50	4,603	\$477
	\$101-250	1,011	\$172		
	\$251-500	1,105	\$364		
	\$501-650	421	\$576		
	Over \$650	1,106	\$1,199		
Non-STAR Repairs (Test and Repair)	\$1-100	313	\$52	1,161	\$412
	\$101-250	291	\$168		
	\$251-500	274	\$365		
	\$501-650	77	\$566		
	Over \$650	206	\$1,310		
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	109	\$818
	\$101-250	0	\$0		
	\$251-500	22	\$411		
	\$501-650	24	\$580		
	Over \$650	63	\$1,050		
Total Repairs	\$1-100	1,273	\$51	5,873	\$470
	\$101-250	1,302	\$171		
	\$251-500	1,401	\$365		
	\$501-650	522	\$575		
	Over \$650	1,375	\$1,209		

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	428	114	26.64%	18.69%	5.84%	11.21%	6.54%	NA
1977	633	164	25.91%	17.69%	8.21%	12.80%	5.06%	NA
1978	673	146	21.69%	16.64%	6.24%	9.51%	5.05%	NA
1979	762	195	25.59%	18.11%	7.35%	11.55%	6.30%	NA
1980	413	91	22.03%	14.04%	6.78%	9.44%	5.08%	NA
1981	440	104	23.64%	17.05%	7.50%	11.36%	6.82%	NA
1982	466	127	27.25%	19.53%	7.73%	11.37%	5.36%	NA
1983	632	145	22.94%	17.25%	6.80%	10.44%	4.75%	NA
1984	1,088	272	25.00%	20.22%	8.27%	9.47%	5.88%	NA
1985	1,498	387	25.83%	18.29%	6.28%	11.01%	5.01%	NA
1986	2,023	500	24.72%	17.30%	5.88%	10.33%	4.79%	NA
1987	2,109	516	24.47%	17.69%	6.54%	10.15%	4.41%	NA
1988	2,534	571	22.53%	16.18%	5.05%	9.35%	3.47%	NA
1989	3,434	758	22.07%	15.00%	4.34%	10.10%	3.93%	NA
1990	3,875	813	20.98%	13.91%	4.15%	9.39%	3.85%	NA
1991	4,572	902	19.73%	13.39%	3.67%	9.01%	3.35%	NA
1992	4,471	940	21.02%	14.29%	4.09%	9.39%	3.67%	NA
1993	5,388	1,289	23.92%	17.15%	4.36%	9.87%	3.88%	NA
1994	7,628	1,660	21.76%	14.67%	2.96%	9.64%	3.55%	NA
1995	8,359	1,812	21.68%	14.75%	3.05%	9.20%	3.54%	NA
1996	10,666	2,063	19.34%	9.08%	1.46%	11.32%	3.27%	11.31%
1997	12,920	2,688	20.80%	9.03%	1.35%	12.73%	3.34%	12.72%
1998	20,608	3,677	17.84%	6.91%	1.25%	11.53%	2.70%	11.52%
1999	20,265	3,482	17.18%	5.31%	1.06%	12.09%	3.05%	12.09%
2000	442	76	17.19%	7.69%	2.71%	10.63%	4.07%	10.63%
2001	306	63	20.59%	6.21%	2.29%	17.65%	2.61%	17.65%
2002	395	71	17.97%	6.84%	3.04%	11.90%	3.29%	11.90%
2003	340	58	17.06%	5.59%	1.76%	12.06%	2.35%	12.06%
2004	433	54	12.47%	3.00%	1.62%	9.70%	1.85%	9.70%
2005	310	48	15.48%	5.81%	0.97%	12.58%	1.29%	12.58%
2006	542	56	10.33%	3.69%	0.55%	6.83%	1.11%	6.83%
2007	303	35	11.55%	2.64%	0.66%	9.24%	1.98%	9.24%
2008	363	17	4.68%	1.38%	0.55%	3.31%	0.28%	3.31%
2009	91	2	9.89%	2.20%	1.10%	3.77%	1.10%	9.89%
2010	107	9	8.41%	1.87%	0.93%	8.41%	2.80%	8.41%
2011	172	7	4.07%	1.74%	1.16%	3.49%	1.16%	3.49%
2012	361	21	5.82%	1.66%	1.11%	5.82%	0.00%	5.82%
2013	49	4	8.16%	0.00%	0.00%	8.16%	0.00%	8.16%
2014	76	3	3.95%	1.32%	0.00%	3.95%	0.00%	3.95%
2015	62	2	3.23%	0.00%	0.00%	3.23%	0.00%	3.23%
2016	64	1	1.56%	0.00%	0.00%	1.56%	0.00%	1.56%
2017	53	1	1.89%	0.00%	0.00%	1.89%	0.00%	1.89%
2018	47	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2019	98	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2020	448	2	0.45%	0.00%	0.00%	0.45%	0.00%	0.45%
Other	0	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Model Years	120,947	23,953	19.80%	10.58%	2.58%	10.81%	3.37%	6.68%

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	1	50.00%	50.00%	0.00%	50.00%	50.00%	0.00%
1997	10	2	20.00%	20.00%	0.00%	20.00%	10.00%	0.00%
1998	194	25	12.89%	12.89%	1.55%	11.86%	4.64%	1.03%
1999	787	89	11.31%	9.53%	2.54%	8.64%	5.59%	0.89%
2000	37,724	6,231	16.52%	14.85%	2.84%	14.62%	10.57%	0.22%
2001	28,904	4,862	16.82%	15.12%	3.07%	14.87%	10.47%	0.25%
2002	50,036	6,441	12.87%	11.36%	2.34%	11.12%	7.73%	0.24%
2003	36,373	4,903	13.48%	11.84%	2.58%	11.56%	7.92%	0.28%
2004	63,753	6,696	10.50%	9.27%	1.82%	9.12%	6.44%	0.16%
2005	39,951	4,452	11.14%	9.76%	2.06%	9.57%	6.65%	0.19%
2006	72,417	6,352	8.77%	7.79%	1.29%	7.66%	5.40%	0.13%
2007	43,493	3,586	8.25%	7.31%	1.35%	7.20%	5.02%	0.11%
2008	66,475	4,331	6.52%	5.88%	0.85%	5.77%	4.17%	0.11%
2009	25,759	1,679	6.52%	5.90%	0.89%	5.80%	4.05%	0.10%
2010	63,269	3,565	5.63%	5.27%	0.47%	5.21%	2.79%	0.06%
2011	25,646	1,899	7.40%	6.94%	0.59%	6.86%	3.10%	0.08%
2012	94,856	5,355	5.65%	5.28%	0.45%	5.24%	2.85%	0.04%
2013	16,764	964	5.75%	5.33%	0.53%	5.30%	2.34%	0.03%
2014	17,076	878	5.14%	4.82%	0.43%	4.81%	2.63%	0.01%
2015	18,813	898	4.77%	4.44%	0.37%	4.42%	2.38%	0.02%
2016	21,358	923	4.32%	4.04%	0.32%	4.02%	2.65%	0.02%
2017	15,682	654	4.17%	4.03%	0.15%	4.02%	2.99%	0.01%
2018	11,779	445	3.78%	3.65%	0.13%	3.65%	2.90%	0.00%
2019	14,903	561	3.76%	3.67%	0.09%	3.65%	3.07%	0.02%
2020	4,283	241	5.63%	5.42%	0.21%	5.42%	4.93%	0.00%
2021	46	4	8.70%	8.70%	0.00%	8.70%	6.52%	0.00%
Other	7	4	57.14%	14.29%	0.00%	14.29%	14.29%	0.00%
All Model Years	770,360	66,041	8.57%	7.72%	1.25%	7.61%	5.07%	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).