

# Executive Summary Report

## Smog Check Statewide July 2020

### 1. TESTING VOLUME

Testing Volume	All Tests	Failed	Percent (%) Failed
Initial Test	1,000,043	101,397	10.14%
Total	1,095,961	116,085	10.59%

### 2. CERTIFICATION VOLUME

Certification Volume	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	893,102	89.31%	106,941	10.69%
Total	973,557	88.83%	122,404	11.17%

### 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	470,254	88.89%	58,798	11.11%
Non-STAR Test Only	21,935	91.27%	2,099	8.73%
STAR Test and Repair	255,972	88.82%	32,235	11.18%
Non-STAR Test and Repair	138,646	92.71%	10,908	7.29%
Total	886,807	89.50%	104,040	10.50%

\*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	14,617	10.69%
All Visual	10,871	1.26%	4,601	3.37%
All Functional	66,917	7.75%	14,692	10.75%
OBDII	65,892	7.63%	8,956	6.55%
Overall	74,235	8.60%	27,162	19.87%

### 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	31,331	69,326	25,152	57,111
Non-Directed	256,876	459,726	230,820	413,143
Total	288,207	529,052	255,972	470,254

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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	265	67	223	50
Non-Directed	149,289	23,967	138,423	21,885
Total	149,554	24,034	138,646	21,935

### 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	745,292	65,046	8.73%	106,054	21,592	20.40%
Partial	41,500	3,395	8.18%	8,385	1,896	22.60%
Basic	69,240	5,236	7.56%	16,664	2,403	14.40%
Change of Ownership	7,294	558	7.65%	1,290	308	23.90%
No Program	0	0	0.00%	3	2	66.70%
Unknown	0	0	0.00%	4,321	961	22.20%
Total Program Area	863,326	74,235	8.60%	136,717	27,162	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	449,489	42,003	9.34%	79,563	15,568	19.60%
STAR Test Only Suspended	1,941	157	8.09%	225	33	14.70%
Non-STAR Test Only	21,362	1,591	7.45%	2,672	423	15.80%
STAR Test and Repair	247,006	21,741	8.80%	41,201	9,116	22.10%
STAR Test and Repair Suspended	969	76	7.84%	60	11	18.30%
Non-STAR Test and Repair	137,503	8,238	5.99%	12,051	1,752	14.50%
Test and Repair/Dealer	2,818	135	4.79%	18	4	22.20%
Business Fleet	506	29	5.73%	0	0	0.00%
Permanent Fleet Registered	90	5	5.56%	0	0	0.00%
Referee	293	179	61.10%	173	107	61.80%
Government Fleet	1,349	81	6.00%	754	148	19.60%
Total	863,326	74,235	8.60%	136,717	27,162	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	106	49	1,874	72	2,101
STAR Test Only	17	2	1,730	35	1,784
STAR Sub-total	123	51	3,604	107	3,885
Non-STAR Test and Repair	485	46	2,065	241	2,837
Non-STAR Test Only	26	6	313	32	377
Non-STAR Sub-total	511	52	2,378	273	3,214
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	28	0	33
Government Fleet	41	5	301	13	360
Repair Only	2	0	42	1	45
Unknown Type	0	0	12	0	12
Other Station Sub-Total	111	7	433	18	569
Total	745	110	6,415	398	7,668

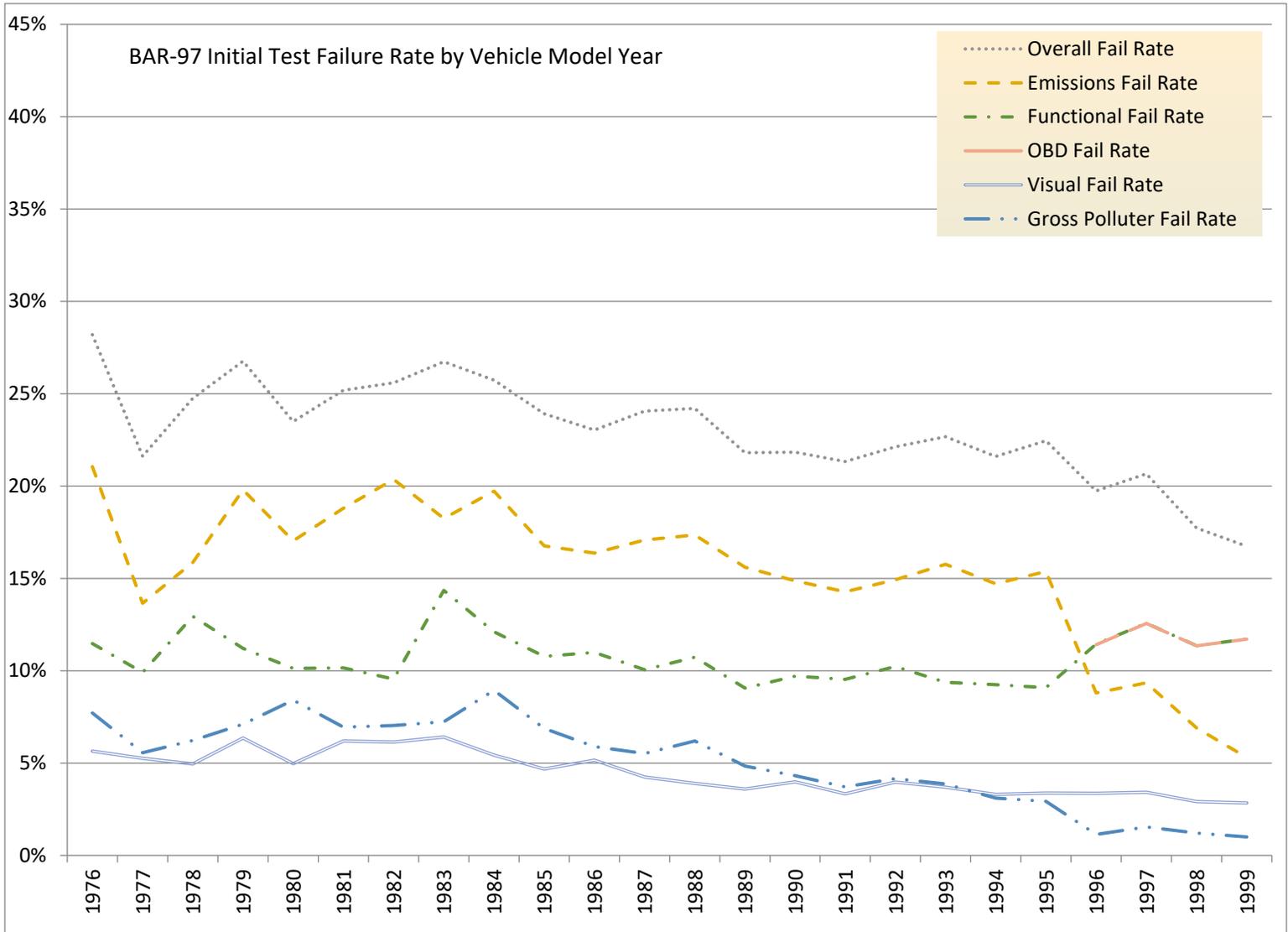
### 10. NUMBER OF STATIONS CONDUCTING TEST BY EQUIPMENT TYPE

Station Type	BAR-97 Only	OIS Only	BAR-97 & OIS
STAR Test and Repair	2	164	1,862
STAR Test Only	5	69	1,648
<i>STAR Sub-total</i>	7	233	3,510
Non-STAR Test and Repair	0	1,779	411
Non-STAR Test Only	2	108	64
<i>Non-STAR Sub-total</i>	2	1,887	475
Basic Area Dealer	0	50	5
Business Fleet	0	2	0
Permanent Fleet Registered	0	20	0
Referee	0	1	18
Government Fleet	9	136	36
Unknown Type	0	2	8
<i>Other Station Sub-Total</i>	9	211	67
Total	18	2,331	4,052

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

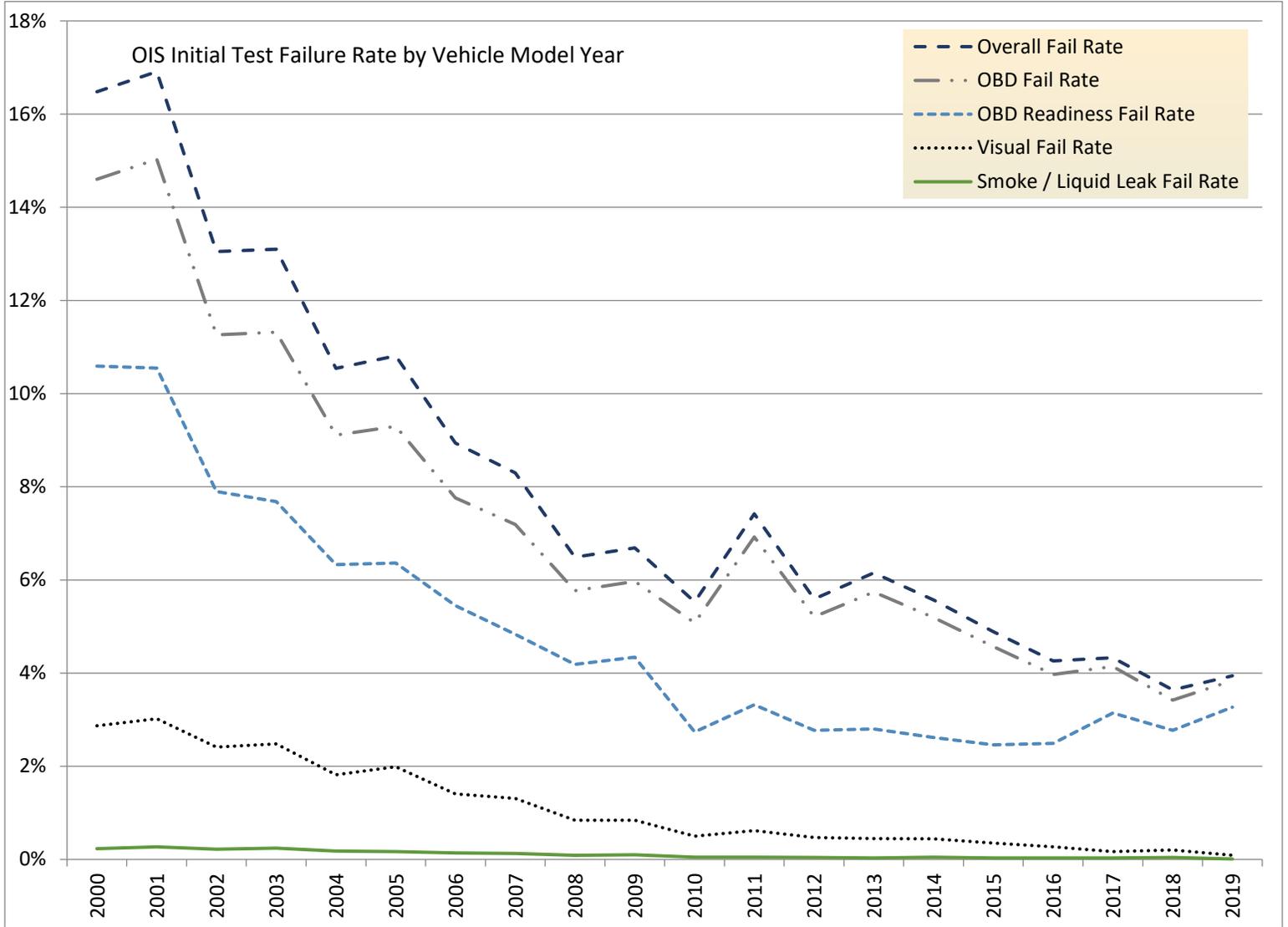


Note: Please see tabular data in Table 18 for BAR-97 tests conducted on other vehicle model years not shown in chart.

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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	278	163
Certificate of Non-Compliance	0	0
Parts Cost	26	4
Hardship Extensions	0	0
Exempt Vehicle	0	8
Exempted by Directive	4	0
Parts Exemption	2	0
Unknown Outcome	0	0
Permanently Exempt Vehicle	0	0
Temporarily Exempt Vehicle	0	0
Total	310	175

### 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)	2,582
EO and EI (Inspect and Repair)	2,796
Total	5,378

### 15. INSPECTION COSTS BY STATION AND TEST TYPE<sup>1</sup>

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	41,052	\$57.08	246,205	\$49.73	287,257	\$50.78
STAR Test Only	79,332	\$50.70	448,608	\$49.09	527,940	\$49.33
Non-STAR Test and Repair	12,040	\$53.87	137,019	\$57.00	149,059	\$56.74
Non-STAR Test Only	2,667	\$43.53	21,346	\$55.62	24,013	\$54.28
Test and Repair/Dealer	18	\$69.00	2,785	\$63.75	2,803	\$63.79
Total	135,109	\$52.78	855,963	\$50.75	991,072	\$51.03

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### 16. INSPECTION COSTS BY STATION AND EQUIPMENT TYPE<sup>1</sup>

Station Type	BAR-97 Initial Test Count <sup>2</sup>	Average BAR-97 Inspection Cost <sup>2</sup>	OIS Initial Test Count <sup>3</sup>	Average OIS Inspection Cost <sup>3</sup>	BAR-97 Inspection Count <sup>4</sup>	Average BAR-97 Inspection Cost <sup>4</sup>	OIS Initial Test Count <sup>4</sup>	Average OIS Inspection Cost <sup>4</sup>
STAR Test and Repair	29	\$49.08	8,901	\$53.51	41,023	\$57.09	237,304	\$49.58
STAR Test Only	658	\$55.50	9,807	\$45.31	78,674	\$50.66	438,801	\$49.17
Non-STAR Test and Repair	0	\$0.00	87,260	\$62.97	12,040	\$53.87	49,759	\$46.52
Non-STAR Test Only	110	\$41.72	8,042	\$44.53	2,557	\$43.61	13,304	\$62.33
Test and Repair/Dealer	0	\$0.00	2,562	\$63.22	18	\$69.00	223	\$69.82
Total	797	\$53.36	116,572	\$59.50	134,312	\$52.78	739,391	\$49.37

<sup>1</sup>Note: 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.

<sup>2</sup>BAR-97 Equipment Only

<sup>3</sup>OIS Equipment Only

<sup>4</sup>Both 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	1,104	\$50	5,078	\$480
	\$101-250	1,079	\$172		
	\$251-500	1,170	\$368		
	\$501-650	459	\$578		
	Over \$650	1,266	\$1,183		
Non-STAR Repairs (Test and Repair)	\$1-100	320	\$52	1,234	\$446
	\$101-250	324	\$175		
	\$251-500	256	\$366		
	\$501-650	99	\$563		
	Over \$650	235	\$1,395		
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	2	\$67	163	\$717
	\$101-250	3	\$233		
	\$251-500	56	\$401		
	\$501-650	32	\$584		
	Over \$650	70	\$1,070		
Total Repairs	\$1-100	1,426	\$51	6,475	\$479
	\$101-250	1,406	\$173		
	\$251-500	1,482	\$369		
	\$501-650	590	\$576		
	Over \$650	1,571	\$1,210		

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	532	150	28.20%	21.05%	7.71%	11.47%	5.64%	NA
1977	666	144	21.62%	13.66%	5.56%	9.91%	5.26%	NA
1978	788	195	24.75%	15.86%	6.22%	12.94%	4.95%	NA
1979	803	215	26.77%	19.80%	7.10%	11.21%	6.35%	NA
1980	464	109	23.49%	17.03%	8.41%	10.13%	4.96%	NA
1981	532	134	25.19%	18.80%	6.95%	10.15%	6.20%	NA
1982	555	142	25.59%	20.36%	7.03%	9.55%	6.13%	NA
1983	718	192	26.74%	18.25%	7.24%	14.35%	6.41%	NA
1984	1,197	308	25.73%	19.72%	8.94%	12.11%	5.43%	NA
1985	1,689	404	23.92%	16.76%	6.87%	10.78%	4.68%	NA
1986	2,175	501	23.03%	16.37%	5.89%	10.99%	5.15%	NA
1987	2,377	572	24.06%	17.08%	5.51%	10.05%	4.25%	NA
1988	2,825	684	24.21%	17.35%	6.19%	10.73%	3.89%	NA
1989	3,808	830	21.80%	15.60%	4.83%	9.06%	3.60%	NA
1990	4,492	981	21.84%	14.87%	4.32%	9.71%	3.98%	NA
1991	5,227	1,115	21.33%	14.27%	3.71%	9.53%	3.33%	NA
1992	5,110	1,131	22.13%	14.93%	4.15%	10.23%	3.97%	NA
1993	6,377	1,446	22.68%	15.76%	3.87%	9.38%	3.70%	NA
1994	8,608	1,860	21.61%	14.71%	3.10%	9.25%	3.30%	NA
1995	9,345	2,099	22.46%	15.37%	2.93%	9.09%	3.38%	NA
1996	12,507	2,469	19.74%	8.80%	1.14%	11.44%	3.36%	11.41%
1997	14,574	3,013	20.67%	9.34%	1.54%	12.57%	3.42%	12.56%
1998	22,861	4,053	17.73%	6.91%	1.21%	11.35%	2.92%	11.35%
1999	22,939	3,840	16.74%	5.30%	1.00%	11.72%	2.84%	11.71%
2000	546	102	18.68%	8.79%	4.03%	11.36%	3.30%	11.36%
2001	318	56	17.61%	5.97%	1.89%	14.47%	1.89%	14.47%
2002	417	49	11.75%	3.12%	0.72%	9.35%	1.92%	9.35%
2003	433	76	17.55%	7.62%	3.23%	12.47%	2.08%	12.47%
2004	568	60	10.56%	4.93%	1.58%	6.69%	1.23%	6.69%
2005	370	50	13.51%	4.59%	1.35%	10.00%	1.62%	10.00%
2006	587	52	8.86%	2.56%	0.85%	6.64%	1.36%	6.64%
2007	334	39	11.68%	3.59%	1.20%	8.08%	1.80%	8.08%
2008	433	26	6.00%	1.62%	0.69%	4.16%	0.46%	4.16%
2009	93	2	9.68%	1.08%	0.00%	3.77%	1.08%	8.60%
2010	116	10	8.62%	0.86%	0.00%	8.62%	0.86%	8.62%
2011	136	6	4.41%	0.74%	0.74%	3.68%	0.00%	3.68%
2012	357	22	6.16%	0.28%	0.28%	6.16%	0.00%	6.16%
2013	64	4	6.25%	3.13%	1.56%	4.69%	1.56%	4.69%
2014	68	6	8.82%	0.00%	0.00%	7.35%	1.47%	7.35%
2015	59	2	3.39%	1.69%	0.00%	3.39%	0.00%	3.39%
2016	65	2	3.08%	0.00%	0.00%	3.08%	0.00%	3.08%
2017	69	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2018	75	1	1.33%	0.00%	0.00%	0.00%	1.33%	0.00%
2019	126	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2020	311	1	0.32%	0.32%	0.32%	0.00%	0.00%	0.00%
Other	3	2	66.67%	66.67%	0.00%	0.00%	33.33%	0.00%
All Model Years	136,717	27,162	19.87%	10.69%	2.58%	10.75%	3.37%	6.55%

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	7	2	28.57%	14.29%	14.29%	14.29%	14.29%	0.00%
1997	8	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1998	221	27	12.22%	11.31%	1.36%	9.95%	4.07%	1.36%
1999	881	101	11.46%	10.10%	2.16%	9.76%	6.92%	0.34%
2000	42,001	6,923	16.48%	14.83%	2.87%	14.60%	10.59%	0.23%
2001	32,107	5,428	16.91%	15.30%	3.02%	15.03%	10.55%	0.27%
2002	56,401	7,358	13.05%	11.48%	2.41%	11.26%	7.90%	0.22%
2003	40,201	5,265	13.10%	11.56%	2.48%	11.32%	7.68%	0.24%
2004	72,352	7,623	10.54%	9.29%	1.82%	9.11%	6.33%	0.18%
2005	47,954	5,186	10.81%	9.47%	1.99%	9.30%	6.36%	0.17%
2006	80,551	7,198	8.94%	7.90%	1.41%	7.76%	5.45%	0.14%
2007	49,090	4,074	8.30%	7.32%	1.31%	7.19%	4.83%	0.13%
2008	72,884	4,731	6.49%	5.86%	0.84%	5.77%	4.19%	0.09%
2009	28,221	1,889	6.69%	6.07%	0.84%	5.97%	4.34%	0.10%
2010	71,937	3,976	5.53%	5.13%	0.50%	5.08%	2.74%	0.05%
2011	29,230	2,168	7.42%	6.98%	0.62%	6.92%	3.32%	0.05%
2012	106,083	5,930	5.59%	5.25%	0.47%	5.21%	2.77%	0.04%
2013	18,096	1,113	6.15%	5.77%	0.45%	5.74%	2.80%	0.03%
2014	19,108	1,064	5.57%	5.23%	0.44%	5.19%	2.62%	0.05%
2015	20,350	995	4.89%	4.59%	0.35%	4.57%	2.46%	0.03%
2016	24,397	1,040	4.26%	4.00%	0.27%	3.97%	2.49%	0.03%
2017	19,529	845	4.33%	4.17%	0.17%	4.14%	3.14%	0.03%
2018	12,971	472	3.64%	3.45%	0.20%	3.42%	2.77%	0.04%
2019	14,903	587	3.94%	3.85%	0.09%	3.84%	3.27%	0.01%
2020	3,814	233	6.11%	6.08%	0.08%	6.06%	5.24%	0.03%
2021	19	3	15.79%	15.79%	0.00%	15.79%	5.26%	0.00%
Other	10	4	40.00%	30.00%	20.00%	30.00%	10.00%	0.00%
All Model Years	863,326	74,235	8.60%	7.75%	1.26%	7.63%	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 <sup>1</sup>	OBD II Equipped?	Smog Check Required None	Smog Check Required OIS Test	Smog Check Required BAR-97 Test
All <sup>2</sup> (except Diesel)	Four Model-years and newer <sup>3</sup>	All	All	x		
	Fifth and sixth model-years <sup>4</sup>	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 <sup>5</sup>		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 <sup>6</sup>	
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		

<sup>1</sup> Gross vehicle weight rating

<sup>2</sup> 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.

<sup>3</sup> 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).

<sup>4</sup> 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).

<sup>5</sup> 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.

<sup>6</sup> Fleet vehicles are subject to the ARB Periodic Smoke Inspection Program (PSIP).