

# Executive Summary Report

## Smog Check Statewide October 2019

### 1. TESTING VOLUME

Testing Volume	All Tests	Failed	Percent (%) Failed
Initial Test	807,185	82,755	10.25%
Total	889,630	96,415	10.84%

### 2. CERTIFICATION VOLUME

Certification Volume	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	716,287	88.74%	90,898	11.26%
Total	784,218	88.15%	105,412	11.85%

### 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	375,214	88.55%	48,503	11.45%
Non-STAR Test Only	18,483	91.42%	1,734	8.58%
STAR Test and Repair	204,516	88.24%	27,246	11.76%
Non-STAR Test and Repair	113,517	91.69%	10,292	8.31%
Total	711,730	89.02%	87,775	10.98%

\*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	13,160	10.45%
All Visual	9,335	1.37%	4,902	3.89%
All Functional	51,173	7.51%	13,951	11.08%
OBDII	50,087	7.35%	8,443	6.70%
Overall	57,647	8.46%	25,108	19.93%

### 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	28,693	64,338	23,118	52,854
Non-Directed	203,069	359,379	181,398	322,360
Total	231,762	423,717	204,516	375,214

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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	279	55	207	44
Non-Directed	123,530	20,162	113,310	18,439
Total	123,809	20,217	113,517	18,483

### 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	588,676	50,155	8.52%	100,854	20,590	20.40%
Partial	32,017	2,675	8.35%	7,716	1,645	21.30%
Basic	55,011	4,345	7.90%	12,796	1,856	14.50%
Change of Ownership	5,529	472	8.54%	860	196	22.80%
No Program	0	0	0.00%	0	0	0.00%
Unknown	0	0	0.00%	3,726	821	22.00%
Total Program Area	681,233	57,647	8.46%	125,952	25,108	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	348,635	31,699	9.09%	75,082	14,989	20.00%
STAR Test Only Suspended	1,186	110	9.27%	119	23	19.30%
Non-STAR Test Only	18,054	1,250	6.92%	2,163	306	14.10%
STAR Test and Repair	193,924	16,757	8.64%	37,838	8,063	21.30%
STAR Test and Repair Suspended	422	30	7.11%	85	8	9.41%
Non-STAR Test and Repair	114,076	7,117	6.24%	9,733	1,478	15.20%
Test and Repair/Dealer	2,541	156	6.14%	14	1	7.14%
Business Fleet	372	7	1.88%	0	0	0.00%
Permanent Fleet Registered	87	2	2.30%	0	0	0.00%
Referee	521	441	84.60%	182	101	55.50%
Government Fleet	1,415	78	5.51%	736	139	18.90%
Total	681,233	57,647	8.46%	125,952	25,108	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	112	49	1,903	78	2,142
STAR Test Only	18	1	1,725	34	1,778
STAR Sub-total	130	50	3,628	112	3,920
Non-STAR Test and Repair	500	45	2,205	247	2,997
Non-STAR Test Only	23	8	425	27	483
Non-STAR Sub-total	523	53	2,630	274	3,480
Basic Area Dealer	62	0	0	0	62
Business Fleet	0	0	4	0	4
Permanent Fleet Registered	3	2	49	4	58
Referee	5	0	27	0	32
Government Fleet	41	5	298	13	357
Repair Only	2	0	45	1	48
Unknown Type	0	0	6	0	6
Other Station Sub-Total	113	7	429	18	567
<b>Total</b>	<b>766</b>	<b>110</b>	<b>6,687</b>	<b>404</b>	<b>7,967</b>

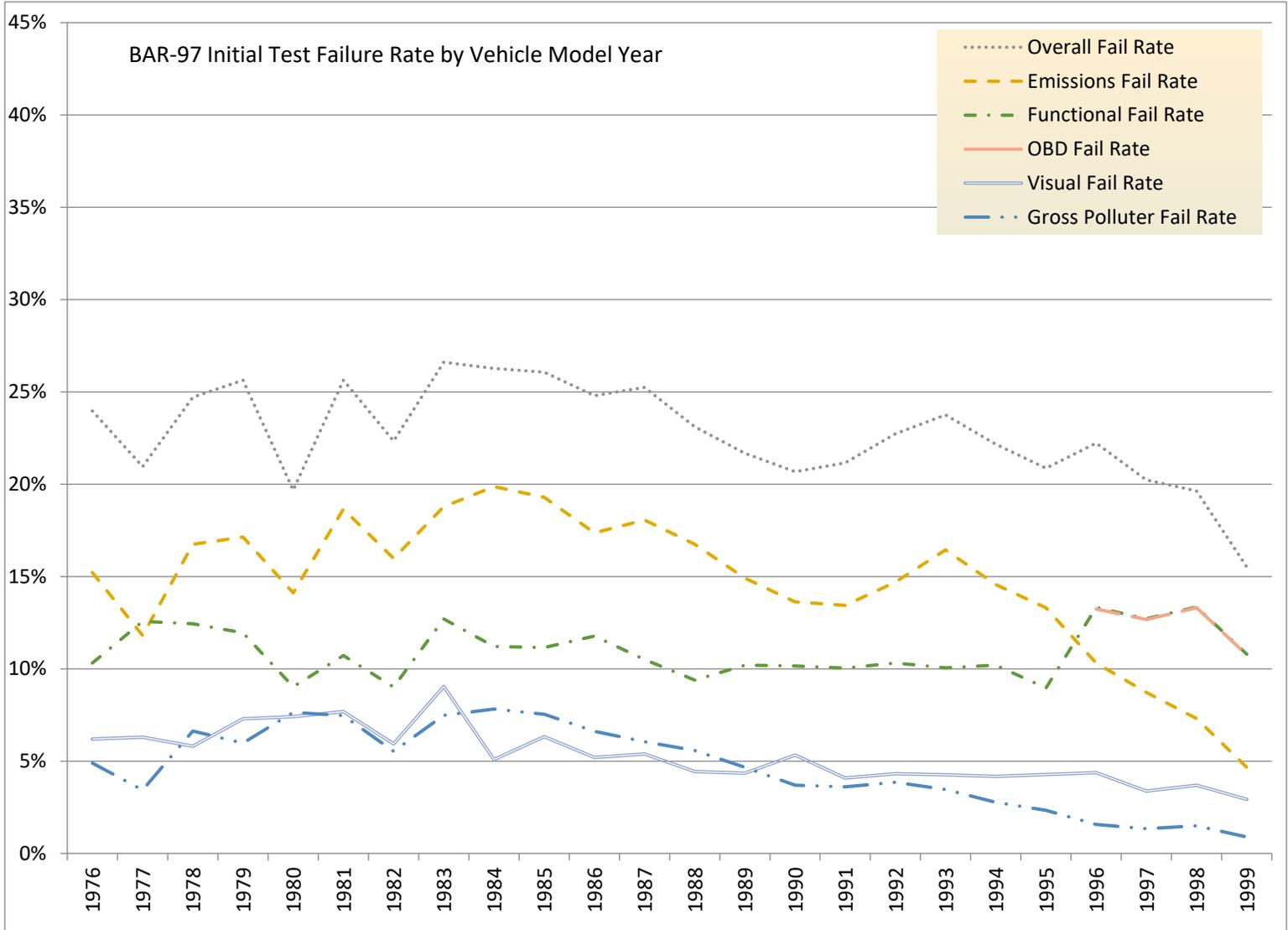
### 10. NUMBER OF STATIONS CONDUCTING TEST BY EQUIPMENT TYPE

Station Type	BAR-97 Only	OIS Only	BAR-97 & OIS
STAR Test and Repair	3	179	1,890
STAR Test Only	1	52	1,681
<i>STAR Sub-total</i>	4	231	3,571
Non-STAR Test and Repair	1	1,906	405
Non-STAR Test Only	1	128	88
<i>Non-STAR Sub-total</i>	2	2,034	493
Basic Area Dealer	0	54	3
Business Fleet	0	3	0
Permanent Fleet Registered	0	18	0
Referee	0	1	30
Government Fleet	8	136	33
Unknown Type	0	2	5
<i>Other Station Sub-Total</i>	8	214	71
<b>Total</b>	<b>14</b>	<b>2,479</b>	<b>4,135</b>

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

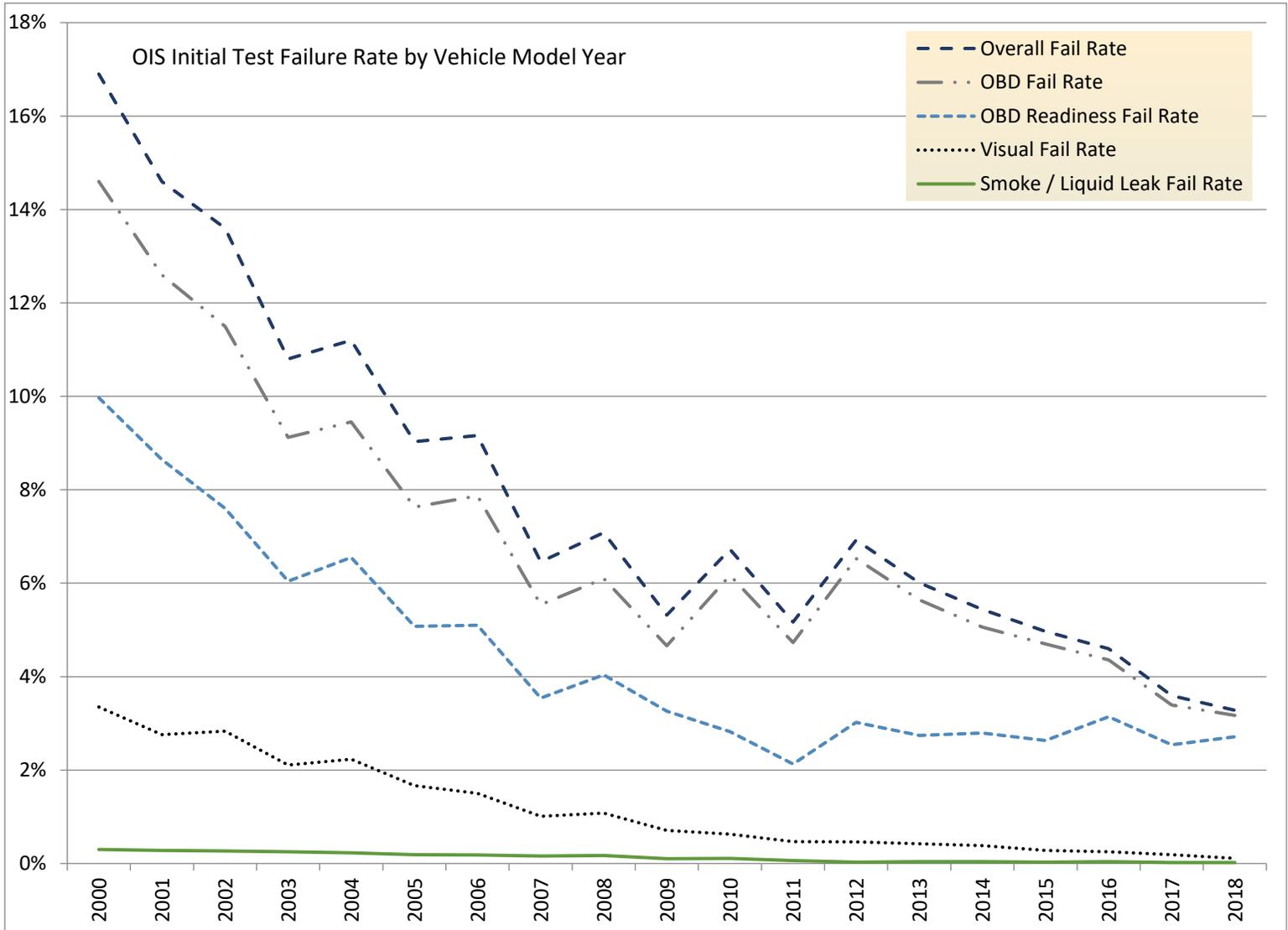


Note: Please see tabular data in Table 18 for BAR-97 tests conducted on other vehicle model years not shown in chart.

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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	288	182
Certificate of Non-Compliance	0	0
Parts Cost	23	7
Hardship Extensions	0	0
Exempt Vehicle	0	16
Exempted by Directive	8	0
Parts Exemption	6	1
Unknown Outcome	0	0
Permanently Exempt Vehicle	0	0
Temporarily Exempt Vehicle	0	0
<b>Total</b>	<b>325</b>	<b>206</b>

### 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)	2,601
EO and EI (Inspect and Repair)	3,189
<b>Total</b>	<b>5,791</b>

### 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	37,591	\$55.36	193,250	\$49.97	230,841	\$50.84
STAR Test Only	74,737	\$50.00	347,803	\$50.72	422,540	\$50.60
Non-STAR Test and Repair	9,613	\$53.67	113,298	\$56.84	122,911	\$56.59
Non-STAR Test Only	2,153	\$44.23	17,774	\$43.80	19,927	\$43.84
Test and Repair/Dealer	14	\$70.78	2,491	\$63.88	2,505	\$63.91
<b>Total</b>	<b>124,108</b>	<b>\$51.81</b>	<b>674,616</b>	<b>\$51.40</b>	<b>798,724</b>	<b>\$51.46</b>

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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 Cost <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	17	\$71.01	9,287	\$47.66	37,574	\$55.35	183,963	\$50.08
STAR Test Only	1	\$65.00	6,197	\$40.31	74,736	\$50.00	341,606	\$50.91
Non-STAR Test and Repair	1	\$51.75	74,708	\$61.92	9,612	\$53.67	38,590	\$47.01
Non-STAR Test Only	2	\$51.75	7,238	\$44.21	2,151	\$44.22	10,536	\$43.51
Test and Repair/Dealer	0	\$0.00	2,374	\$63.31	14	\$70.78	117	\$75.36
Total	21	\$67.97	99,804	\$58.00	124,087	\$51.80	574,812	\$50.25

<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	1,130	\$48	4,857	\$436
	\$101-250	1,089	\$174		
	\$251-500	1,186	\$362		
	\$501-650	417	\$572		
	Over \$650	1,035	\$1,165		
Non-STAR Repairs (Test and Repair)	\$1-100	395	\$52	1,411	\$379
	\$101-250	392	\$172		
	\$251-500	301	\$368		
	\$501-650	114	\$573		
	Over \$650	209	\$1,294		
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	256	\$730
	\$101-250	9	\$219		
	\$251-500	61	\$386		
	\$501-650	62	\$577		
	Over \$650	124	\$1,013		
Total Repairs	\$1-100	1,525	\$49	6,524	\$435
	\$101-250	1,490	\$174		
	\$251-500	1,548	\$364		
	\$501-650	593	\$573		
	Over \$650	1,368	\$1,171		

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	388	93	23.97%	15.21%	4.90%	10.31%	6.19%	NA
1977	525	110	20.95%	11.81%	3.43%	12.57%	6.29%	NA
1978	603	149	24.71%	16.75%	6.63%	12.44%	5.80%	NA
1979	753	193	25.63%	17.13%	5.98%	11.95%	7.30%	NA
1980	432	85	19.68%	14.12%	7.64%	9.03%	7.41%	NA
1981	429	110	25.64%	18.65%	7.46%	10.72%	7.69%	NA
1982	488	109	22.34%	15.98%	5.53%	9.02%	5.94%	NA
1983	575	153	26.61%	18.78%	7.48%	12.70%	9.04%	NA
1984	1,062	279	26.27%	19.87%	7.82%	11.21%	5.08%	NA
1985	1,327	346	26.07%	19.29%	7.54%	11.15%	6.33%	NA
1986	1,980	491	24.80%	17.37%	6.62%	11.77%	5.20%	NA
1987	2,115	534	25.25%	18.06%	6.05%	10.50%	5.39%	NA
1988	2,459	568	23.10%	16.75%	5.57%	9.39%	4.43%	NA
1989	3,609	782	21.67%	14.91%	4.66%	10.20%	4.35%	NA
1990	3,661	757	20.68%	13.63%	3.69%	10.16%	5.33%	NA
1991	5,020	1,062	21.16%	13.43%	3.61%	10.04%	4.08%	NA
1992	4,374	994	22.73%	14.70%	3.86%	10.31%	4.32%	NA
1993	6,076	1,443	23.75%	16.44%	3.46%	10.06%	4.26%	NA
1994	7,393	1,638	22.16%	14.57%	2.77%	10.20%	4.17%	NA
1995	11,056	2,307	20.87%	13.30%	2.34%	8.96%	4.27%	NA
1996	8,668	1,927	22.23%	10.31%	1.57%	13.32%	4.37%	13.24%
1997	16,544	3,347	20.23%	8.73%	1.34%	12.71%	3.37%	12.67%
1998	16,360	3,212	19.63%	7.31%	1.49%	13.35%	3.69%	13.31%
1999	25,856	4,012	15.52%	4.66%	0.89%	10.79%	2.93%	10.75%
2000	378	70	18.52%	10.58%	5.29%	8.73%	1.85%	8.73%
2001	356	53	14.89%	7.58%	1.40%	8.71%	2.81%	8.71%
2002	292	39	13.36%	7.88%	3.08%	9.25%	2.05%	9.25%
2003	429	56	13.05%	7.93%	3.26%	6.76%	2.10%	6.76%
2004	309	29	9.39%	5.50%	1.62%	7.12%	0.65%	7.12%
2005	433	52	12.01%	8.55%	3.23%	6.93%	2.31%	6.93%
2006	322	35	10.87%	4.66%	2.80%	7.45%	1.24%	7.45%
2007	350	21	6.00%	3.14%	0.29%	3.71%	1.14%	3.71%
2008	220	15	6.82%	4.09%	1.82%	3.18%	0.00%	3.18%
2009	132	2	4.55%	3.03%	0.76%	3.77%	0.00%	2.27%
2010	81	7	8.64%	0.00%	0.00%	7.41%	2.47%	7.41%
2011	234	9	3.85%	3.42%	0.85%	3.85%	0.43%	3.85%
2012	68	4	5.88%	4.41%	1.47%	4.41%	2.94%	4.41%
2013	36	4	11.11%	5.56%	5.56%	5.56%	5.56%	5.56%
2014	51	1	1.96%	0.00%	0.00%	1.96%	0.00%	1.96%
2015	70	1	1.43%	0.00%	0.00%	0.00%	1.43%	0.00%
2016	47	2	4.26%	6.38%	2.13%	4.26%	0.00%	4.26%
2017	65	1	1.54%	1.54%	0.00%	0.00%	1.54%	0.00%
2018	52	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2019	188	2	1.06%	0.53%	0.00%	0.53%	0.53%	0.53%
2020	86	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Model Years	125,952	25,108	19.93%	10.45%	2.45%	11.08%	3.89%	6.70%

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	2	40.00%	40.00%	0.00%	40.00%	0.00%	0.00%
1997	14	7	50.00%	42.90%	7.14%	42.90%	28.60%	0.00%
1998	206	45	21.80%	17.50%	4.37%	17.50%	8.25%	0.00%
1999	713	102	14.30%	12.50%	2.66%	11.10%	6.59%	1.40%
2000	26,785	4,522	16.90%	14.90%	3.35%	14.60%	9.97%	0.30%
2001	47,607	6,944	14.60%	12.90%	2.76%	12.60%	8.65%	0.28%
2002	33,379	4,549	13.60%	11.80%	2.83%	11.50%	7.60%	0.27%
2003	59,226	6,414	10.80%	9.37%	2.11%	9.12%	6.04%	0.25%
2004	37,188	4,181	11.20%	9.68%	2.23%	9.45%	6.55%	0.23%
2005	66,675	6,021	9.03%	7.82%	1.67%	7.63%	5.08%	0.19%
2006	42,588	3,899	9.16%	8.05%	1.50%	7.87%	5.10%	0.18%
2007	79,605	5,140	6.46%	5.70%	1.01%	5.54%	3.54%	0.16%
2008	34,388	2,436	7.08%	6.27%	1.08%	6.10%	4.04%	0.17%
2009	45,186	2,403	5.32%	4.76%	0.71%	4.66%	3.26%	0.10%
2010	23,827	1,601	6.72%	6.28%	0.63%	6.17%	2.82%	0.11%
2011	68,016	3,518	5.17%	4.79%	0.47%	4.73%	2.13%	0.06%
2012	15,583	1,079	6.92%	6.56%	0.46%	6.53%	3.02%	0.03%
2013	17,032	1,024	6.01%	5.68%	0.42%	5.64%	2.74%	0.04%
2014	16,696	908	5.44%	5.10%	0.38%	5.06%	2.79%	0.04%
2015	19,984	993	4.97%	4.73%	0.28%	4.70%	2.63%	0.03%
2016	14,464	665	4.60%	4.40%	0.25%	4.36%	3.14%	0.04%
2017	12,936	464	3.59%	3.41%	0.19%	3.39%	2.54%	0.02%
2018	12,312	404	3.28%	3.19%	0.11%	3.17%	2.71%	0.02%
2019	6,400	294	4.59%	4.44%	0.16%	4.42%	3.86%	0.02%
2020	406	25	6.16%	6.16%	0.00%	6.16%	5.67%	0.00%
Other	12	7	58.30%	33.30%	8.33%	33.30%	16.70%	0.00%
All Model Years	681,233	57,647	8.46%	7.51%	1.37%	7.35%	4.71%	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 <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).