

# Executive Summary Report

## Smog Check Statewide December 2019

### 1. TESTING VOLUME

Testing Volume	All Tests	Failed	Percent (%) Failed
Initial Test	755,022	73,828	9.78%
Total	825,735	85,277	10.33%

### 2. CERTIFICATION VOLUME

Certification Volume	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	672,748	89.10%	82,274	10.90%
Total	731,016	88.53%	94,719	11.47%

### 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	354,336	88.95%	44,033	11.05%
Non-STAR Test Only	17,004	91.72%	1,536	8.28%
STAR Test and Repair	190,087	88.66%	24,313	11.34%
Non-STAR Test and Repair	107,154	91.94%	9,388	8.06%
Total	668,581	89.40%	79,270	10.60%

\*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	10,351	10.44%
All Visual	8,390	1.28%	3,633	3.66%
All Functional	47,903	7.30%	11,219	11.31%
OBDII	47,070	7.18%	6,908	6.96%
Overall	53,675	8.18%	20,153	20.32%

### 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	23,614	54,621	19,114	45,098
Non-Directed	190,786	343,748	170,973	309,238
Total	214,400	398,369	190,087	354,336

# Executive Summary Report

## Smog Check Statewide December 2019

### 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	227	56	160	42
Non-Directed	116,315	18,484	106,994	16,962
Total	116,542	18,540	107,154	17,004

### 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	567,285	46,813	8.25%	81,006	16,538	20.40%
Partial	30,845	2,452	7.95%	6,196	1,400	22.60%
Basic	52,762	4,007	7.59%	7,988	1,280	16.00%
Change of Ownership	4,935	403	8.17%	613	142	23.20%
No Program	0	0	0.00%	2	1	50.00%
Unknown	0	0	0.00%	3,390	792	23.40%
Total Program Area	655,827	53,675	8.18%	99,195	20,153	20.30%

### 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	337,243	29,738	8.82%	61,126	12,177	19.90%
STAR Test Only Suspended	958	49	5.11%	90	17	18.90%
Non-STAR Test Only	16,969	1,136	6.69%	1,571	264	16.80%
STAR Test and Repair	185,111	15,419	8.33%	29,289	6,419	21.90%
STAR Test and Repair Suspended	230	12	5.22%	17	6	35.30%
Non-STAR Test and Repair	110,479	6,711	6.07%	6,063	1,000	16.50%
Test and Repair/Dealer	2,494	141	5.65%	12	1	8.33%
Business Fleet	484	9	1.86%	0	0	0.00%
Permanent Fleet Registered	46	0	0.00%	0	0	0.00%
Referee	412	346	84.00%	174	90	51.70%
Government Fleet	1,401	114	8.14%	853	179	21.00%
Total	655,827	53,675	8.18%	99,195	20,153	20.30%

# Executive Summary Report

## Smog Check Statewide December 2019

### 9. NUMBER OF LICENSED STATIONS BY TYPE/PRIVILEGE AND PROGRAM AREA

Station Type	Basic	Change of Ownership	Enhanced	Partial	Total
STAR Test and Repair	110	47	1,890	78	2,125
STAR Test Only	18	1	1,704	34	1,757
STAR Sub-total	128	48	3,594	112	3,882
Non-STAR Test and Repair	499	46	2,185	245	2,975
Non-STAR Test Only	22	8	415	30	475
Non-STAR Sub-total	521	54	2,600	275	3,450
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	298	13	357
Repair Only	2	0	44	1	47
Unknown Type	0	0	15	0	15
Other Station Sub-Total	111	7	434	18	570
<b>Total</b>	<b>760</b>	<b>109</b>	<b>6,628</b>	<b>405</b>	<b>7,902</b>

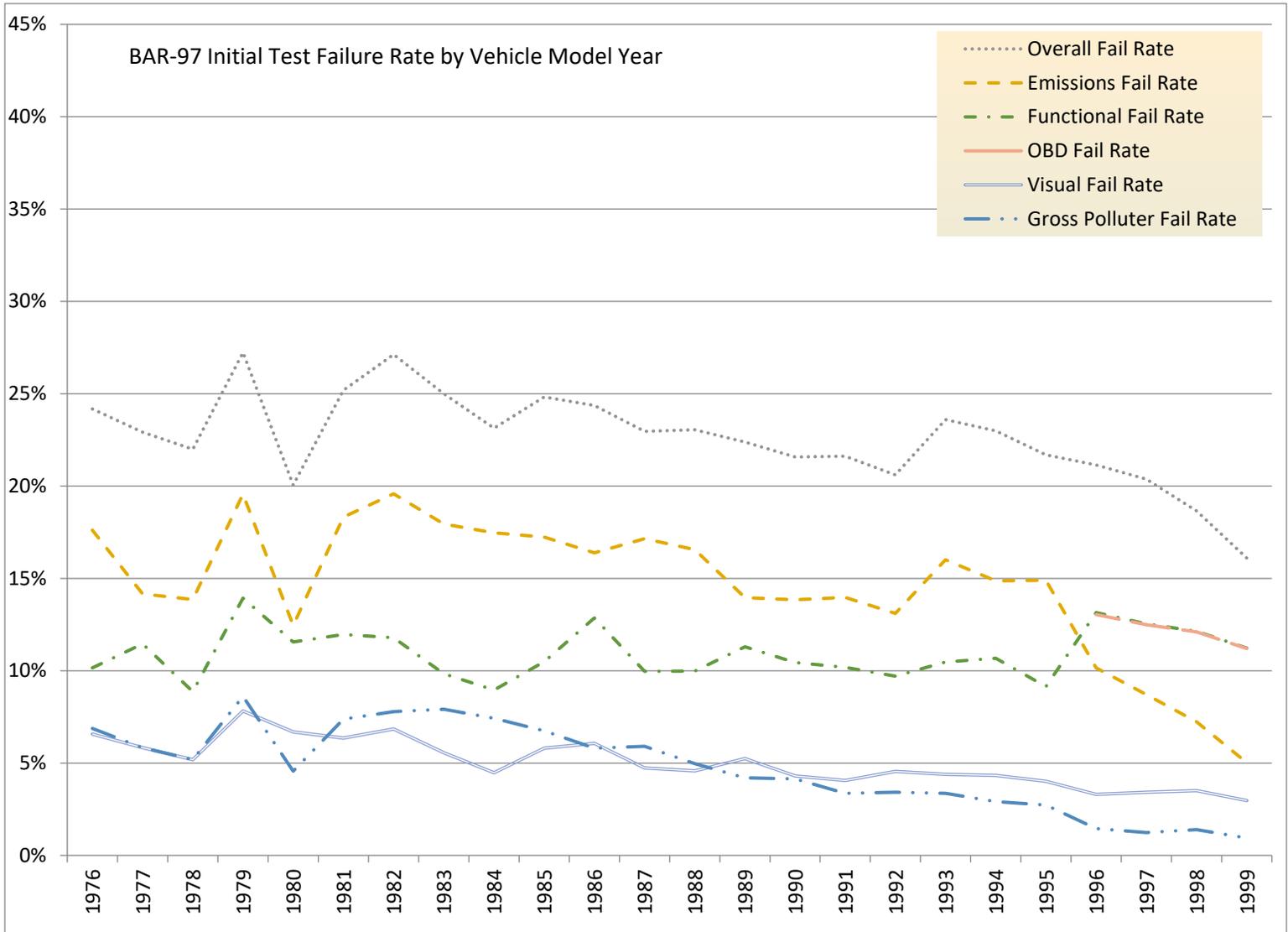
### 10. NUMBER OF STATIONS CONDUCTING TEST BY EQUIPMENT TYPE

Station Type	BAR-97 Only	OIS Only	BAR-97 & OIS
STAR Test and Repair	2	221	1,833
STAR Test Only	1	59	1,654
<i>STAR Sub-total</i>	3	280	3,487
Non-STAR Test and Repair	1	1,943	333
Non-STAR Test Only	1	124	98
<i>Non-STAR Sub-total</i>	2	2,067	431
Basic Area Dealer	0	55	2
Business Fleet	0	2	0
Permanent Fleet Registered	0	18	0
Referee	0	1	30
Government Fleet	7	125	26
Unknown Type	0	1	13
<i>Other Station Sub-Total</i>	7	202	71
<b>Total</b>	<b>12</b>	<b>2,549</b>	<b>3,989</b>

# Executive Summary Report

## Smog Check Statewide December 2019

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

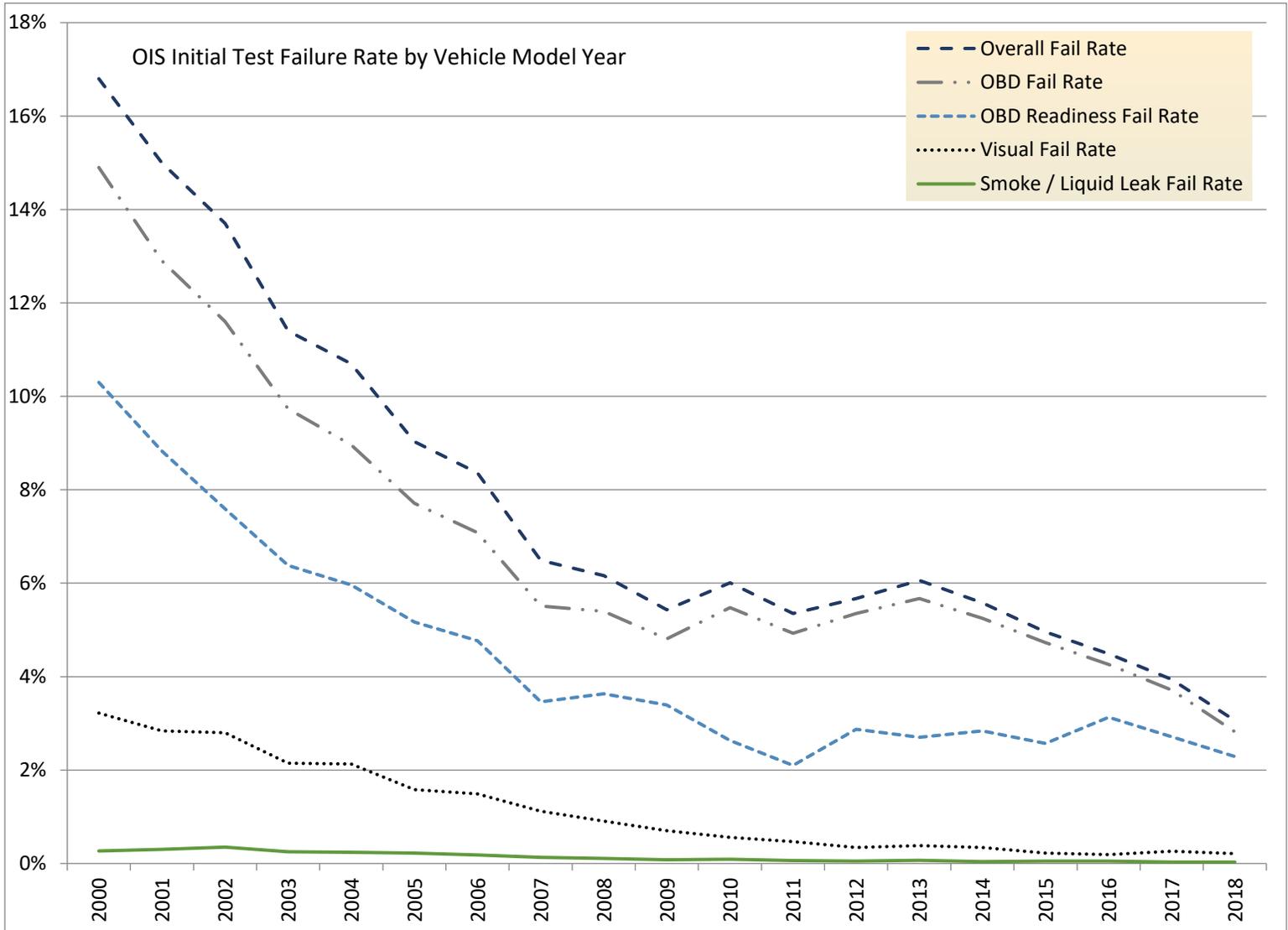


Note: Please see tabular data in Table 18 for BAR-97 tests conducted on other vehicle model years not shown in chart.

# Executive Summary Report

## Smog Check Statewide December 2019

### 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.

# Executive Summary Report

## Smog Check Statewide December 2019

### 13. REFEREE ACTIVITY

Referee Activity	OIS Certificates Issued	BAR-97 Certificates Issued
Certificate of Compliance	241	137
Certificate of Non-Compliance	0	0
Parts Cost	37	10
Hardship Extensions	0	0
Exempt Vehicle	0	22
Exempted by Directive	9	0
Parts Exemption	1	2
Unknown Outcome	0	0
Permanently Exempt Vehicle	0	0
Temporarily Exempt Vehicle	0	0
Total	288	171

### 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)	2,751
EO and EI (Inspect and Repair)	3,012
Total	5,763

### 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	29,215	\$55.27	183,933	\$49.28	213,148	\$50.10
STAR Test Only	60,933	\$50.57	335,343	\$50.44	396,276	\$50.46
Non-STAR Test and Repair	6,056	\$55.36	109,105	\$57.63	115,161	\$57.51
Non-STAR Test Only	1,569	\$43.11	16,899	\$45.23	18,468	\$45.05
Test and Repair/Dealer	12	\$77.74	2,494	\$62.77	2,506	\$62.85
Total	97,785	\$52.15	647,774	\$51.23	745,559	\$51.36

# Executive Summary Report

## Smog Check Statewide December 2019

### 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	0	\$0.00	11,080	\$47.81	29,215	\$55.27	172,853	\$49.37
STAR Test Only	2	\$60.00	6,235	\$44.88	60,931	\$50.57	329,108	\$50.55
Non-STAR Test and Repair	1	\$79.95	78,647	\$61.25	6,055	\$55.36	30,458	\$48.28
Non-STAR Test Only	6	\$41.75	8,227	\$42.72	1,563	\$43.11	8,672	\$47.62
Test and Repair/Dealer	0	\$0.00	2,419	\$61.91	12	\$77.74	75	\$90.73
Total	9	\$50.05	106,608	\$57.48	97,776	\$52.15	541,166	\$50.00

<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	987	\$50	3,884	\$421
	\$101-250	864	\$171		
	\$251-500	967	\$364		
	\$501-650	336	\$575		
	Over \$650	730	\$1,221		
Non-STAR Repairs (Test and Repair)	\$1-100	277	\$51	1,129	\$427
	\$101-250	313	\$168		
	\$251-500	257	\$361		
	\$501-650	86	\$569		
	Over \$650	196	\$1,398		
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	141	\$750
	\$101-250	1	\$250		
	\$251-500	30	\$382		
	\$501-650	26	\$580		
	Over \$650	84	\$940		
Total Repairs	\$1-100	1,264	\$50	5,154	\$431
	\$101-250	1,178	\$171		
	\$251-500	1,254	\$364		
	\$501-650	448	\$574		
	Over \$650	1,010	\$1,232		

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.

# Executive Summary Report

## Smog Check Statewide December 2019

### 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	304	74	24.34%	15.79%	5.92%	10.86%	5.59%	NA
1977	424	104	24.53%	16.04%	5.66%	12.26%	7.08%	NA
1978	486	108	22.22%	14.61%	5.35%	10.49%	5.56%	NA
1979	541	135	24.95%	16.64%	7.76%	10.54%	6.28%	NA
1980	351	92	26.21%	17.66%	7.98%	12.82%	5.98%	NA
1981	322	80	24.84%	17.70%	6.52%	10.87%	5.28%	NA
1982	405	92	22.72%	15.80%	3.46%	9.63%	6.91%	NA
1983	398	98	24.62%	17.34%	6.53%	11.81%	4.52%	NA
1984	817	214	26.19%	18.24%	6.61%	11.38%	5.39%	NA
1985	981	236	24.06%	18.35%	6.42%	8.36%	4.38%	NA
1986	1,456	362	24.86%	17.03%	5.43%	11.61%	5.70%	NA
1987	1,825	454	24.88%	17.26%	5.92%	10.79%	5.32%	NA
1988	1,963	446	22.72%	15.59%	4.89%	10.29%	4.28%	NA
1989	2,740	625	22.81%	14.78%	4.34%	10.95%	3.91%	NA
1990	3,115	691	22.18%	14.64%	3.72%	10.05%	3.98%	NA
1991	3,896	854	21.92%	14.53%	3.80%	9.98%	3.70%	NA
1992	3,649	809	22.17%	14.69%	3.81%	9.84%	3.92%	NA
1993	4,531	1,093	24.12%	16.60%	3.69%	10.37%	3.86%	NA
1994	5,670	1,325	23.37%	14.97%	3.33%	10.92%	4.18%	NA
1995	7,921	1,726	21.79%	14.08%	2.78%	9.39%	4.12%	NA
1996	7,582	1,613	21.27%	9.18%	1.08%	13.08%	3.69%	13.02%
1997	12,083	2,634	21.80%	9.23%	1.55%	13.52%	3.83%	13.51%
1998	14,259	2,637	18.49%	7.22%	1.49%	12.05%	3.10%	12.03%
1999	20,274	3,351	16.53%	4.82%	0.98%	11.73%	3.01%	11.70%
2000	306	58	18.95%	11.44%	4.58%	10.78%	1.63%	10.78%
2001	235	34	14.47%	5.11%	2.55%	11.06%	1.70%	11.06%
2002	224	34	15.18%	5.80%	2.23%	11.61%	1.34%	11.61%
2003	252	28	11.11%	3.97%	0.79%	8.33%	1.19%	7.94%
2004	241	24	9.96%	2.90%	1.24%	7.47%	1.66%	7.47%
2005	269	34	12.64%	7.06%	2.60%	6.69%	2.60%	6.69%
2006	333	26	7.81%	2.70%	1.20%	4.80%	1.20%	4.80%
2007	277	24	8.66%	3.61%	1.08%	5.42%	0.00%	5.42%
2008	209	15	7.18%	0.96%	0.48%	5.74%	1.44%	5.74%
2009	106	2	6.60%	1.89%	1.89%	3.77%	1.89%	3.77%
2010	54	1	1.85%	1.85%	0.00%	1.85%	0.00%	1.85%
2011	149	1	0.67%	0.67%	0.00%	0.67%	0.00%	0.67%
2012	123	2	1.63%	1.63%	0.81%	0.81%	0.00%	0.81%
2013	47	1	2.13%	0.00%	0.00%	2.13%	2.13%	2.13%
2014	44	5	11.36%	0.00%	0.00%	9.09%	2.27%	9.09%
2015	36	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2016	30	3	10.00%	3.33%	0.00%	6.67%	0.00%	6.67%
2017	44	1	2.27%	0.00%	0.00%	2.27%	2.27%	2.27%
2018	49	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2019	138	1	0.72%	0.72%	0.72%	0.00%	0.00%	0.00%
2020	34	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	2	1	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%
All Model Years	99,195	20,153	20.32%	10.44%	2.44%	11.31%	3.66%	6.96%

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.

# Executive Summary Report

## Smog Check Statewide December 2019

### 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	6	2	33.30%	33.30%	0.00%	33.30%	0.00%	0.00%
1997	5	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1998	231	33	14.30%	12.10%	3.46%	10.80%	5.63%	1.30%
1999	780	113	14.50%	13.10%	1.79%	12.80%	8.33%	0.26%
2000	27,467	4,422	16.10%	14.40%	3.04%	14.20%	10.00%	0.25%
2001	33,920	5,238	15.40%	13.80%	2.69%	13.60%	9.24%	0.20%
2002	35,193	4,488	12.80%	11.20%	2.56%	10.90%	7.17%	0.25%
2003	43,052	5,288	12.30%	10.70%	2.39%	10.50%	6.82%	0.23%
2004	43,851	4,458	10.20%	8.80%	1.97%	8.58%	5.78%	0.23%
2005	51,825	5,038	9.72%	8.51%	1.68%	8.33%	5.63%	0.18%
2006	51,944	4,173	8.03%	6.99%	1.40%	6.84%	4.56%	0.15%
2007	58,075	4,181	7.20%	6.27%	1.26%	6.15%	3.85%	0.12%
2008	45,160	2,712	6.01%	5.32%	0.87%	5.20%	3.53%	0.11%
2009	30,525	1,805	5.91%	5.29%	0.80%	5.22%	3.64%	0.08%
2010	35,899	1,770	4.93%	4.56%	0.48%	4.50%	2.20%	0.06%
2011	49,489	2,842	5.74%	5.40%	0.47%	5.35%	2.29%	0.05%
2012	45,226	2,126	4.70%	4.40%	0.36%	4.37%	2.44%	0.02%
2013	14,601	952	6.52%	6.10%	0.58%	6.06%	2.99%	0.03%
2014	14,592	787	5.39%	5.12%	0.36%	5.10%	2.69%	0.02%
2015	16,904	871	5.15%	4.88%	0.30%	4.86%	2.71%	0.02%
2016	25,587	1,197	4.68%	4.51%	0.21%	4.48%	3.28%	0.03%
2017	12,433	466	3.75%	3.57%	0.19%	3.52%	2.67%	0.05%
2018	10,466	347	3.32%	3.20%	0.12%	3.17%	2.65%	0.03%
2019	7,886	313	3.97%	3.82%	0.15%	3.77%	3.26%	0.05%
2020	699	45	6.44%	6.29%	0.14%	6.29%	5.87%	0.00%
Other	11	8	72.70%	36.40%	27.30%	36.40%	9.09%	0.00%
All Model Years	655,827	53,675	8.18%	7.30%	1.28%	7.18%	4.61%	0.13%

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.

# Executive Summary Report

## Smog Check Statewide December 2019

### 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).