



Commonwealth of Massachusetts
Executive Office of Environmental Affairs
Department of Environmental Protection

Attachment B: Detailed 2006 Emissions Test Data

Massachusetts Enhanced Inspection and Maintenance Program

Attachment B: Detailed 2006 Emissions Test Data
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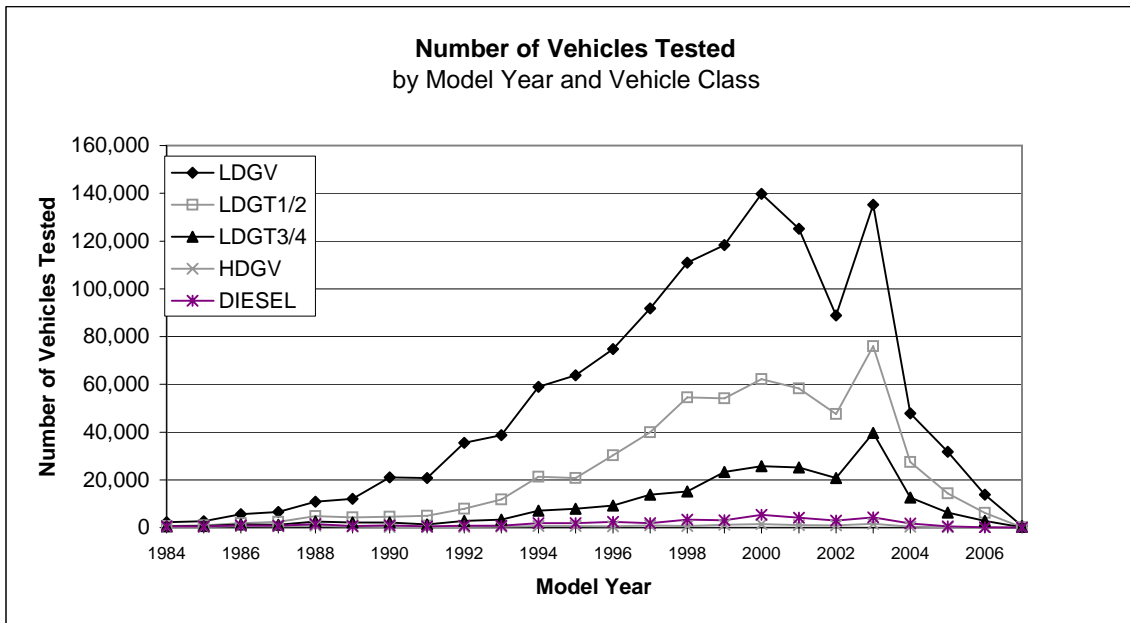
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2006 Massachusetts I&M Program Test Data

51.366 (a)(1) The number of vehicles tested by model year and vehicle type

This is a count of unique VINs receiving an emissions test in 2006

MODEL YEAR	GASOLINE					DIESEL	TOTAL
	LDGV	LDGT1/2	LDGT3/4	HDGV	TOTAL GAS		
1984	2,262	710	568	323	3,863	483	4,346
1985	2,692	917	690	314	4,613	476	5,089
1986	5,562	1,821	1,306	614	9,303	982	10,285
1987	6,518	2,452	1,253	575	10,798	862	11,660
1988	10,881	4,771	2,549	744	18,945	1,476	20,421
1989	12,052	4,281	2,198	463	18,994	731	19,725
1990	21,009	4,571	2,108	317	28,005	964	28,969
1991	20,798	4,957	1,327	173	27,255	512	27,767
1992	35,566	7,867	2,774	285	46,492	831	47,323
1993	38,784	11,768	3,335	340	54,227	795	55,022
1994	58,898	21,307	7,039	616	87,860	1,932	89,792
1995	63,805	20,836	7,966	644	93,251	1,940	95,191
1996	74,808	30,346	9,250	545	114,949	2,421	117,370
1997	91,806	39,891	13,854	954	146,505	1,941	148,446
1998	110,952	54,535	15,204	728	181,419	3,293	184,712
1999	118,305	54,101	23,338	1,150	196,894	3,110	200,004
2000	139,803	62,165	25,779	1,414	229,161	5,354	234,515
2001	125,181	58,301	25,229	1,115	209,826	4,136	213,962
2002	88,872	47,595	20,780	974	158,221	2,953	161,174
2003	135,190	75,913	39,659	1,595	252,357	4,283	256,640
2004	47,820	27,416	12,599	356	88,191	1,805	89,996
2005	31,783	14,332	6,278	171	52,564	508	53,072
2006	13,809	6,105	2,817	58	22,789	170	22,959
2007	610	89	80	1	780	38	818
TOTAL	1,257,766	557,047	227,980	14,469	2,057,262	41,996	2,099,258



LDGV = Non-diesel fueled passenger cars <= 6,000 lbs. GVWR

LDGT1/2 = Non-diesel fueled trucks, motorhomes, and others <= 6,000 lbs. GVWR

LDGT3/4 = Non-diesel fueled trucks, motorhomes, and others > 6,000 and <= 10,000 lbs. GVWR

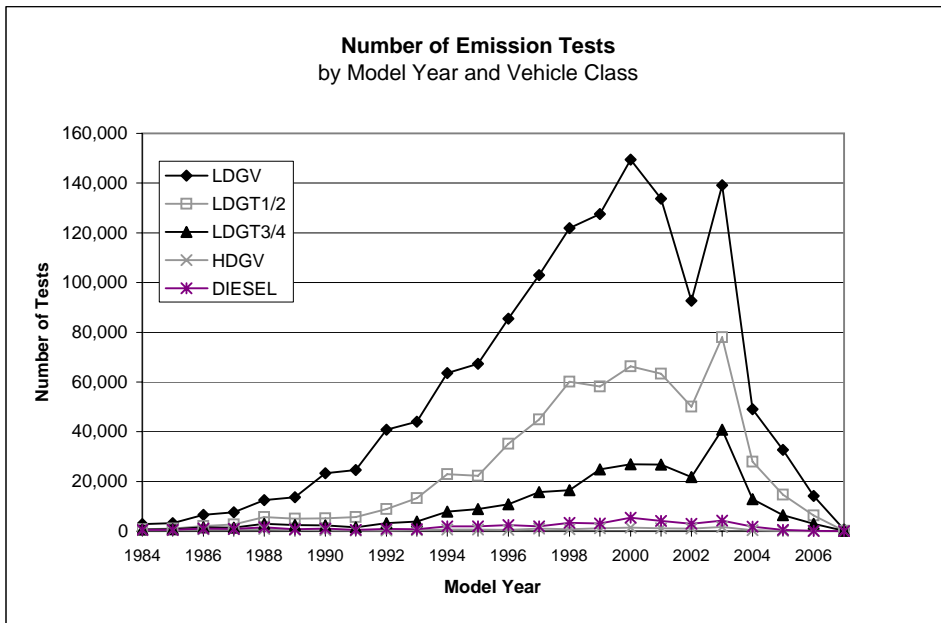
HDGV = Non-diesel fueled vehicles > 10,000 lbs. GVWR

DIESEL= Diesel fueled vehicles >10,000 lbs. GVWR

2006 Massachusetts I&M Program Test Data

51.366 (a)(1) The number of total emissions tests (initial and retest) performed by model year and vehicle type

MODEL YEAR	GASOLINE					DIESEL	TOTAL
	LDGV	LDGT1/2	LDGT3/4	HDGV	TOTAL GAS		
1984	2,794	826	670	392	4,682	498	5,180
1985	3,266	1,071	826	391	5,554	501	6,055
1986	6,612	2,037	1,547	729	10,925	1,012	11,937
1987	7,560	2,681	1,428	730	12,399	892	13,291
1988	12,487	5,638	2,916	916	21,957	1,532	23,489
1989	13,587	5,008	2,510	544	21,649	759	22,408
1990	23,313	5,206	2,380	345	31,244	993	32,237
1991	24,573	5,723	1,526	204	32,026	522	32,548
1992	40,769	8,909	3,225	316	53,219	837	54,056
1993	44,021	13,263	3,813	360	61,457	805	62,262
1994	63,554	22,949	7,821	679	95,003	1,979	96,982
1995	67,361	22,287	8,885	705	99,238	1,963	101,201
1996	85,493	35,125	10,797	579	131,994	2,438	134,432
1997	103,024	44,860	15,694	1,002	164,580	1,956	166,536
1998	121,849	60,086	16,520	745	199,200	3,323	202,523
1999	127,576	58,184	24,799	1,182	211,741	3,121	214,862
2000	149,432	66,283	26,947	1,442	244,104	5,365	249,469
2001	133,739	63,326	26,725	1,130	224,920	4,148	229,068
2002	92,728	50,118	21,744	987	165,577	2,956	168,533
2003	139,093	77,971	40,778	1,619	259,461	4,299	263,760
2004	49,013	27,993	12,909	358	90,273	1,808	92,081
2005	32,634	14,665	6,448	171	53,918	508	54,426
2006	14,120	6,252	2,900	59	23,331	171	23,502
2007	628	90	83	1	802	38	840
TOTAL	1,359,226	600,551	243,891	15,586	2,219,254	42,424	2,261,678



LDGV = Non-diesel fueled passenger cars <= 6,000 lbs. GVWR

LDGT1/2 = Non-diesel fueled trucks, motorhomes, and others <= 6,000 lbs. GVWR

LDGT3/4 = Non-diesel fueled trucks, motorhomes, and others > 6,000 and <= 8,500 lbs. GVWR

HDGV = Non-diesel fueled vehicles > 8,500 lbs. GVWR

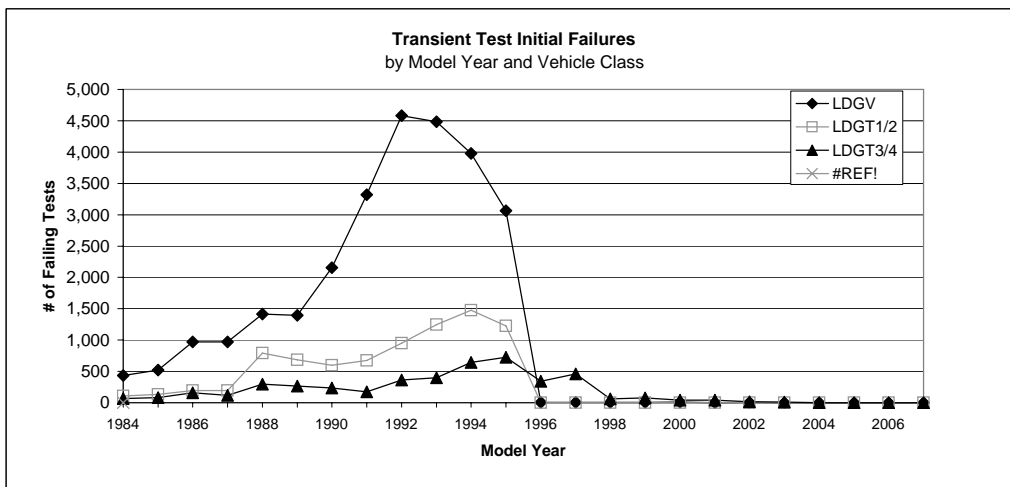
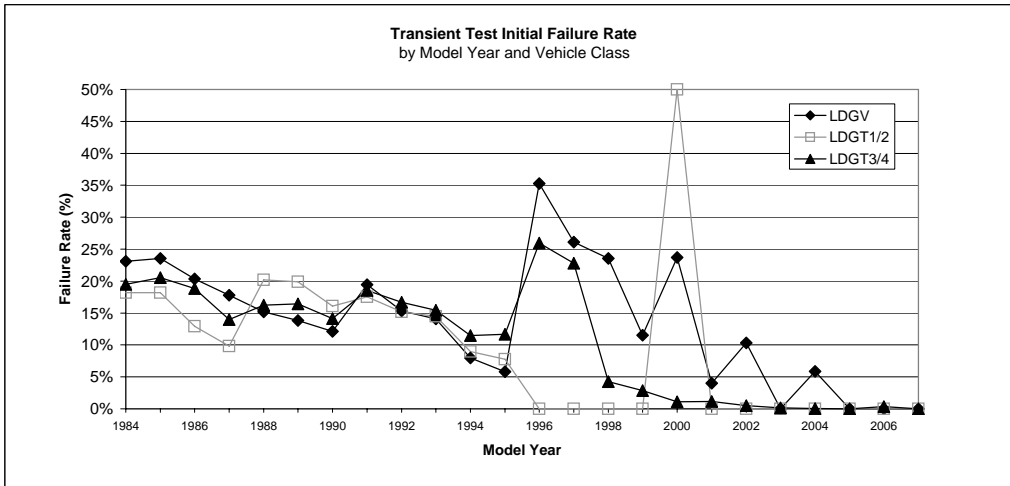
DIESEL= Diesel fueled vehicles >10,000 lbs. GVWR

2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(i) Initial Transient Tests Failing by model year and vehicle type

The transient test is for vehicles model year 1984 through 1995, <=10,000 lbs. GVWR, and capable of two-wheel drive operation. It is also the test used for vehicles model year 1996 and newer between 8,501 lbs. and 10,000 lbs. GVWR and for Kit Cars model years 1996 and newer and under 10,000 lbs. GVWR.

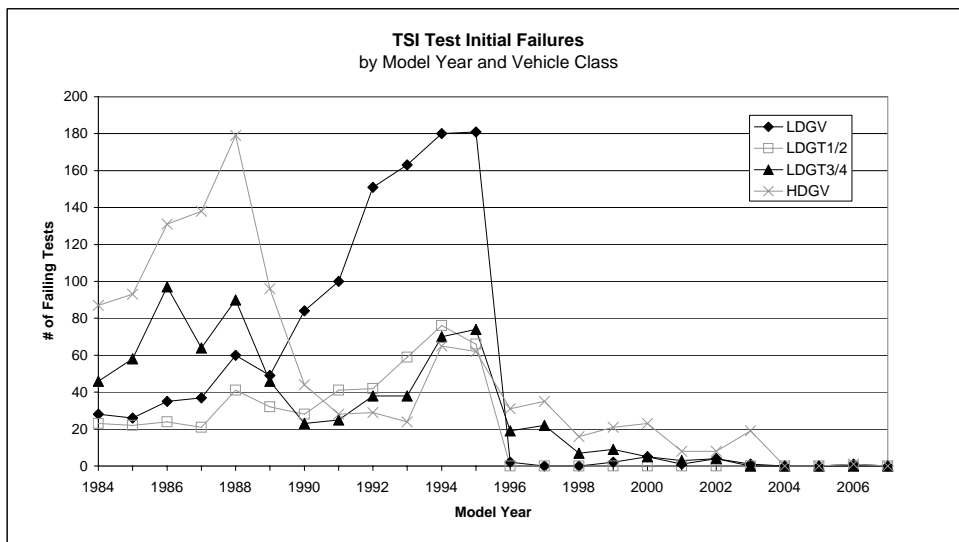
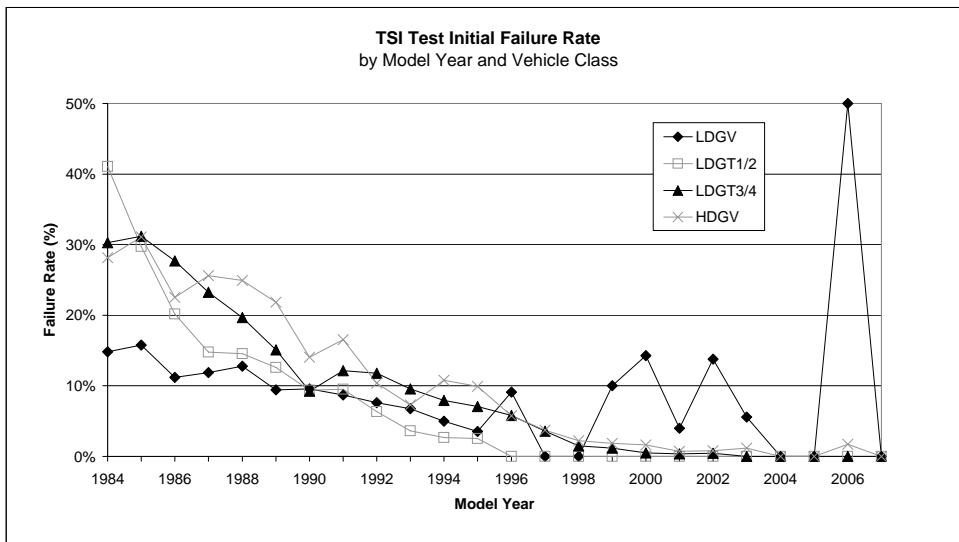
MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			TOTAL		
	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate
1984	432	1,871	23.1%	106	583	18.2%	67	344	19.5%	605	2,798	21.6%
1985	522	2,217	23.5%	133	732	18.2%	84	409	20.5%	739	3,358	22.0%
1986	968	4,755	20.4%	193	1,491	12.9%	158	839	18.8%	1,319	7,085	18.6%
1987	968	5,437	17.8%	195	1,984	9.8%	116	830	14.0%	1,279	8,251	15.5%
1988	1,417	9,330	15.2%	793	3,930	20.2%	296	1,823	16.2%	2,506	15,083	16.6%
1989	1,393	10,061	13.8%	682	3,425	19.9%	267	1,624	16.4%	2,342	15,110	15.5%
1990	2,155	17,806	12.1%	600	3,736	16.1%	233	1,648	14.1%	2,988	23,190	12.9%
1991	3,322	17,079	19.5%	672	3,833	17.5%	176	950	18.5%	4,170	21,862	19.1%
1992	4,580	29,908	15.3%	949	6,242	15.2%	363	2,175	16.7%	5,892	38,325	15.4%
1993	4,486	31,819	14.1%	1,246	8,599	14.5%	396	2,565	15.4%	6,128	42,983	14.3%
1994	3,978	49,880	8.0%	1,474	16,412	9.0%	646	5,629	11.5%	6,098	71,921	8.5%
1995	3,063	52,781	5.8%	1,225	15,778	7.8%	723	6,200	11.7%	5,011	74,759	6.7%
1996	6	17	35.3%	0	1	0.0%	340	1,309	26.0%	346	1,327	26.1%
1997	6	23	26.1%	0	0	0.0%	461	2,021	22.8%	467	2,044	22.8%
1998	4	17	23.5%	0	2	0.0%	61	1,440	4.2%	65	1,459	4.5%
1999	3	26	11.5%	0	1	0.0%	75	2,624	2.9%	78	2,651	2.9%
2000	9	38	23.7%	1	2	50.0%	39	3,588	1.1%	49	3,628	1.4%
2001	1	25	4.0%	0	0	0.0%	42	3,649	1.2%	43	3,674	1.2%
2002	3	29	10.3%	0	0	0.0%	16	3,115	0.5%	19	3,144	0.6%
2003	0	47	0.0%	0	1	0.0%	8	5,715	0.1%	8	5,763	0.1%
2004	1	17	5.9%	0	0	0.0%	1	1,467	0.1%	2	1,484	0.1%
2005	0	21	0.0%	0	0	0.0%	0	594	0.0%	0	615	0.0%
2006	0	20	0.0%	0	0	0.0%	1	283	0.4%	1	303	0.3%
2007	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
TOTAL	27,317	233,224	11.7%	8,269	66,752	12.4%	4,569	50,841	9.0%	40,155	350,817	11.4%



2006 Massachusetts I&M Program Test Data
51.366 (a)(2)(i) Initial TSI Tests Failing by model year and vehicle type

The two-speed idle (TSI) test is for vehicles model years 1984 and newer >10,000 lbs. GVWR and for vehicles <=10,000 lbs. GVWR that could not be tested on the dynamometer (all-wheel drive or non-disengagable 4-wheel drive vehicles) and did not receive an OBDII test.

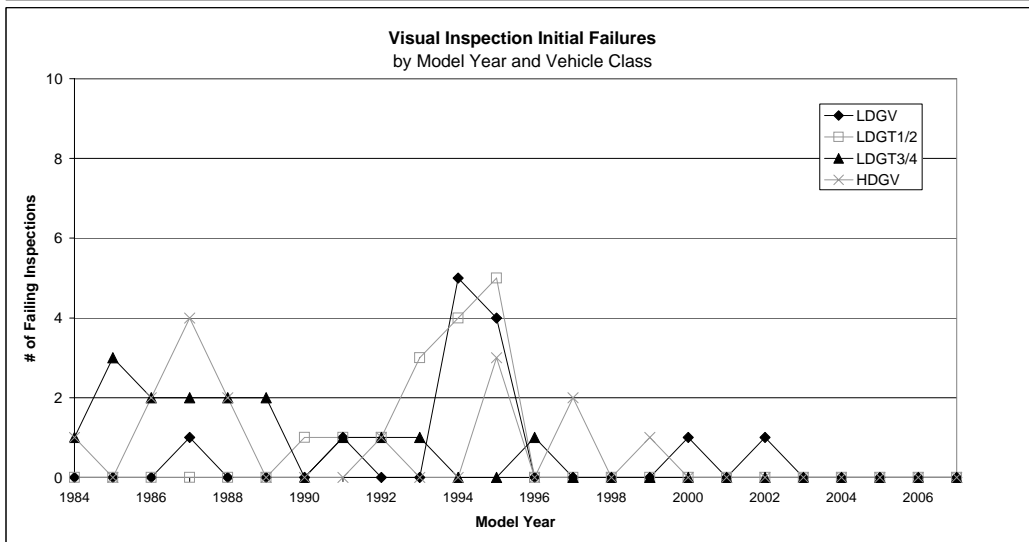
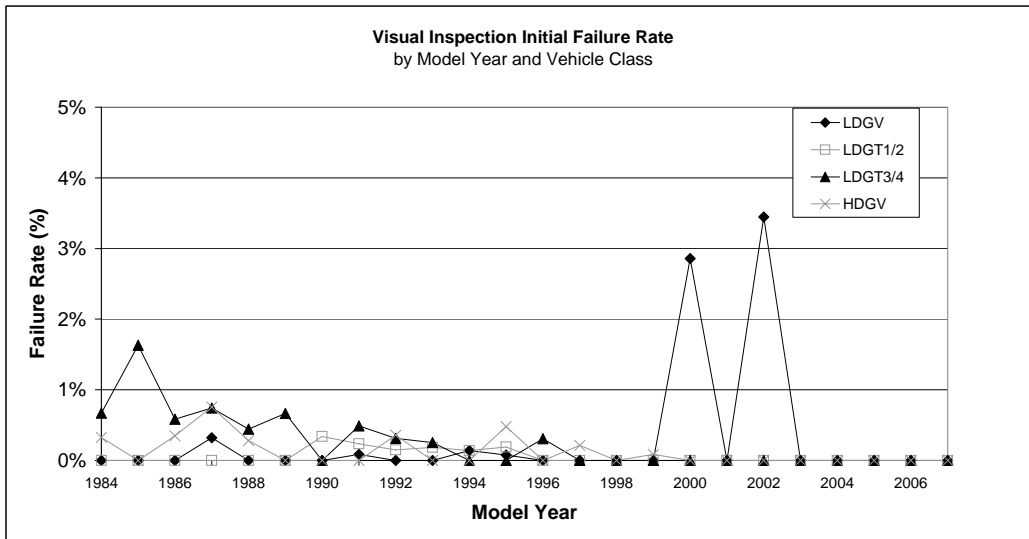
MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate
1984	28	189	14.8%	23	56	41.1%	46	152	30.3%	87	309	28.2%	184	706	26.1%
1985	26	165	15.8%	22	74	29.7%	58	186	31.2%	93	299	31.1%	199	724	27.5%
1986	35	312	11.2%	24	119	20.2%	97	350	27.7%	131	581	22.5%	287	1,362	21.1%
1987	37	311	11.9%	21	142	14.8%	64	275	23.3%	138	539	25.6%	260	1,267	20.5%
1988	60	470	12.8%	41	282	14.5%	90	457	19.7%	179	718	24.9%	370	1,927	19.2%
1989	49	520	9.4%	32	254	12.6%	46	305	15.1%	96	439	21.9%	223	1,518	14.7%
1990	84	879	9.6%	28	298	9.4%	23	249	9.2%	44	313	14.1%	179	1,739	10.3%
1991	100	1,146	8.7%	41	430	9.5%	25	206	12.1%	28	169	16.6%	194	1,951	9.9%
1992	151	1,981	7.6%	42	661	6.4%	38	323	11.8%	29	279	10.4%	260	3,244	8.0%
1993	163	2,412	6.8%	59	1,620	3.6%	38	397	9.6%	24	329	7.3%	284	4,758	6.0%
1994	180	3,610	5.0%	76	2,852	2.7%	70	882	7.9%	65	602	10.8%	391	7,946	4.9%
1995	181	5,089	3.6%	66	2,622	2.5%	74	1,047	7.1%	62	624	9.9%	383	9,382	4.1%
1996	2	22	9.1%	0	1	0.0%	19	328	5.8%	31	537	5.8%	52	888	5.9%
1997	0	19	0.0%	0	0	0.0%	22	614	3.6%	35	942	3.7%	57	1,575	3.6%
1998	0	16	0.0%	0	0	0.0%	7	466	1.5%	16	720	2.2%	23	1,202	1.9%
1999	2	20	10.0%	0	0	0.0%	9	770	1.2%	21	1,140	1.8%	32	1,930	1.7%
2000	5	35	14.3%	0	2	0.0%	5	1,011	0.5%	23	1,403	1.6%	33	2,451	1.3%
2001	1	25	4.0%	0	0	0.0%	3	876	0.3%	8	1,103	0.7%	12	2,004	0.6%
2002	4	29	13.8%	0	1	0.0%	4	887	0.5%	8	968	0.8%	16	1,885	0.8%
2003	1	18	5.6%	0	0	0.0%	0	1,655	0.0%	19	1,594	1.2%	20	3,267	0.6%
2004	0	9	0.0%	0	0	0.0%	0	400	0.0%	0	354	0.0%	0	763	0.0%
2005	0	14	0.0%	0	0	0.0%	0	238	0.0%	0	170	0.0%	0	422	0.0%
2006	1	2	50.0%	0	0	0.0%	0	88	0.0%	1	58	1.7%	2	148	1.4%
2007	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
TOTAL	1,110	17,293	6.4%	475	9,414	5.0%	738	12,162	6.1%	1,138	14,190	8.0%	3,461	53,059	6.5%



2006 Massachusetts I&M Program Test Data
 51.366 (a)(2)(i) Initial Visual Inspection Failing by model year and vehicle type

The Visual Inspection is performed on a vehicle any time there is a Two-Speed Idle (TSI) test. The Visual Inspections checks that critical emission control equipment is present and there are no signs of tampering. The Visual Inspection includes checks for catalyst, PCV valve, EGR system, and air pump or air injection systems.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate
1984	0	189	0.0%	0	53	0.0%	1	149	0.7%	1	308	0.3%	2	699	0.3%
1985	0	162	0.0%	0	73	0.0%	3	184	1.6%	0	295	0.0%	3	714	0.4%
1986	0	311	0.0%	0	117	0.0%	2	343	0.6%	2	577	0.3%	4	1,348	0.3%
1987	1	309	0.3%	0	140	0.0%	2	269	0.7%	4	529	0.8%	7	1,247	0.6%
1988	0	464	0.0%	0	281	0.0%	2	451	0.4%	2	714	0.3%	4	1,910	0.2%
1989	0	515	0.0%	0	252	0.0%	2	301	0.7%	0	435	0.0%	2	1,503	0.1%
1990	0	878	0.0%	1	296	0.3%	0	248	0.0%	0	313	0.0%	1	1,735	0.1%
1991	1	1,142	0.1%	1	428	0.2%	1	205	0.5%	0	168	0.0%	3	1,943	0.2%
1992	0	1,972	0.0%	1	661	0.2%	1	322	0.3%	1	278	0.4%	3	3,233	0.1%
1993	0	2,407	0.0%	3	1,613	0.2%	1	393	0.3%	0	329	0.0%	4	4,742	0.1%
1994	5	3,601	0.1%	4	2,849	0.1%	0	876	0.0%	0	599	0.0%	9	7,925	0.1%
1995	4	5,084	0.1%	5	2,615	0.2%	0	1,038	0.0%	3	622	0.5%	12	9,359	0.1%
1996	0	22	0.0%	0	1	0.0%	1	327	0.3%	0	537	0.0%	1	887	0.1%
1997	0	18	0.0%	0	0	NA	0	613	0.0%	2	941	0.2%	2	1,572	0.1%
1998	0	16	0.0%	0	0	NA	0	466	0.0%	0	720	0.0%	0	1,202	0.0%
1999	0	20	0.0%	0	0	NA	0	770	0.0%	1	1,139	0.1%	1	1,929	0.1%
2000	1	35	2.9%	0	2	0.0%	0	1,011	0.0%	0	1,403	0.0%	1	2,451	0.0%
2001	0	25	0.0%	0	0	NA	0	876	0.0%	0	1,103	0.0%	0	2,004	0.0%
2002	1	29	3.4%	0	1	0.0%	0	887	0.0%	0	968	0.0%	1	1,885	0.1%
2003	0	18	0.0%	0	0	NA	0	1,655	0.0%	0	1,594	0.0%	0	3,267	0.0%
2004	0	9	0.0%	0	0	NA	0	400	0.0%	0	354	0.0%	0	763	0.0%
2005	0	14	0.0%	0	0	NA	0	238	0.0%	0	170	0.0%	0	422	0.0%
2006	0	2	0.0%	0	0	NA	0	88	0.0%	0	58	0.0%	0	148	0.0%
2007	0	0	NA	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
TOTAL	13	17,242	0.1%	15	9,382	0.2%	16	12,110	0.1%	16	14,154	0.1%	60	52,888	0.1%

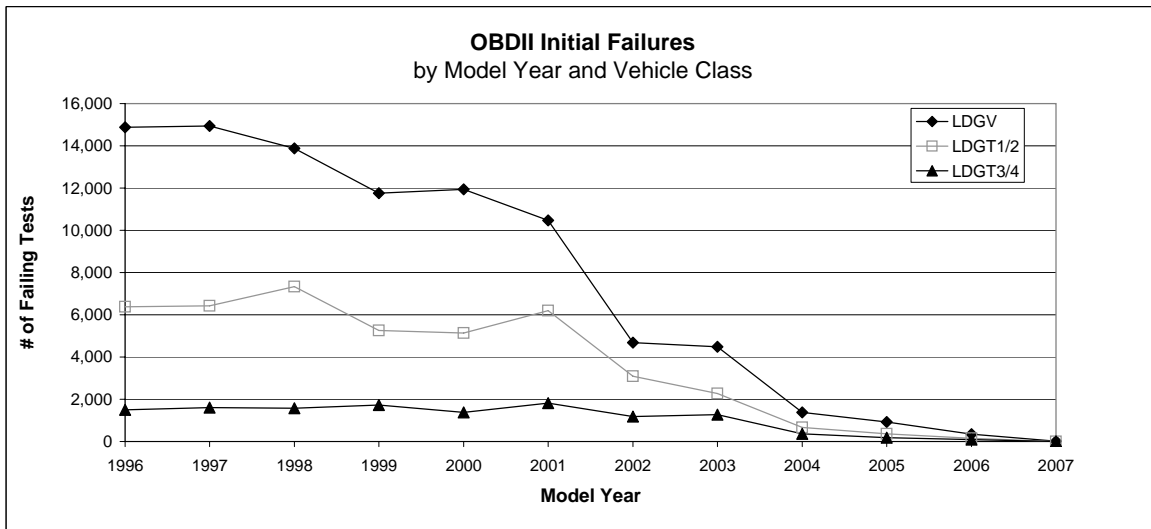
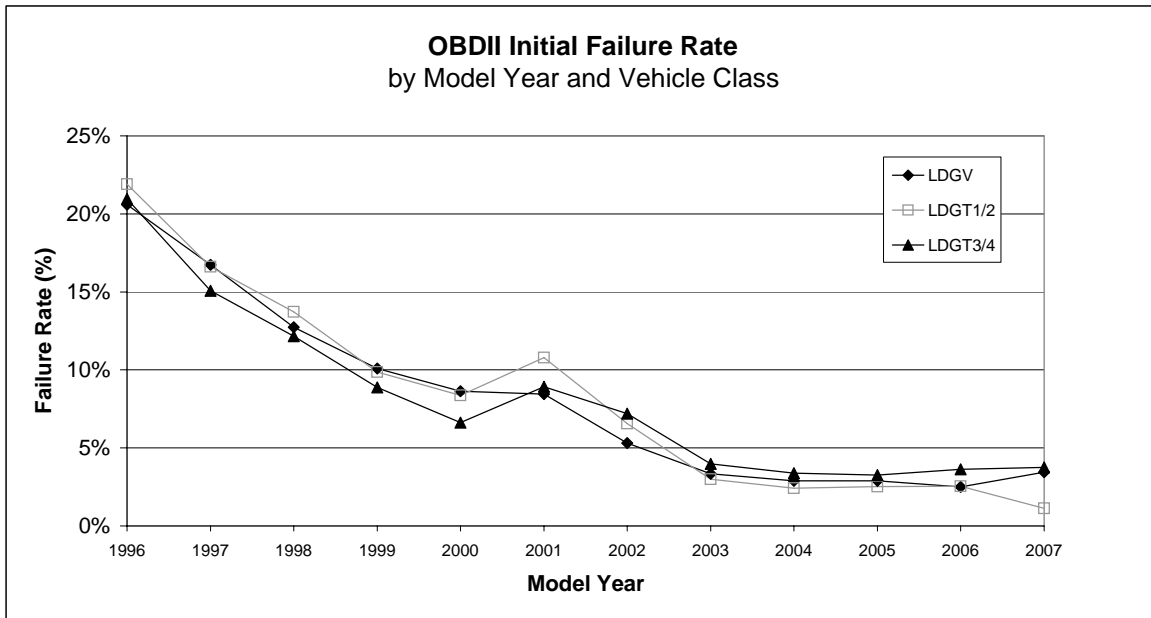


2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(i) Initial OBDII Tests Failing by model year and vehicle type

A vehicle will fail the OBDII test for any of the following reasons: 1) Diagnostic link connector missing, damaged, or obstructed, 2) failure to communicate with the test equipment, 3) MIL commanded on and Diagnostic Trouble Code(s) present, or 4) more than two monitors NOT READY for model years 1996 through 2000 or more than 1 monitor NOT READY for model years 2001 and newer.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate
1996	14,882	72,252	20.6%	6,375	29,102	21.9%	1,496	7,140	21.0%	0	0	NA	22,753	108,494	21.0%
1997	14,939	89,312	16.7%	6,417	38,612	16.6%	1,612	10,699	15.1%	0	0	NA	22,968	138,623	16.6%
1998	13,879	108,954	12.7%	7,335	53,475	13.7%	1,580	12,986	12.2%	0	0	NA	22,794	175,415	13.0%
1999	11,761	116,675	10.1%	5,259	53,291	9.9%	1,730	19,500	8.9%	0	0	NA	18,750	189,466	9.9%
2000	11,940	138,144	8.6%	5,129	61,303	8.4%	1,376	20,790	6.6%	0	1	0.0%	18,445	220,238	8.4%
2001	10,471	123,849	8.5%	6,204	57,520	10.8%	1,811	20,321	8.9%	0	0	NA	18,486	201,690	9.2%
2002	4,678	87,970	5.3%	3,087	47,051	6.6%	1,182	16,409	7.2%	0	0	NA	8,947	151,430	5.9%
2003	4,492	134,764	3.3%	2,270	75,739	3.0%	1,273	32,059	4.0%	0	0	NA	8,035	242,562	3.3%
2004	1,382	47,710	2.9%	665	27,386	2.4%	361	10,699	3.4%	0	0	NA	2,408	85,795	2.8%
2005	918	31,701	2.9%	361	14,325	2.5%	178	5,442	3.3%	0	0	NA	1,457	51,468	2.8%
2006	344	13,785	2.5%	155	6,103	2.5%	89	2,447	3.6%	0	0	NA	588	22,335	2.6%
2007	21	610	3.4%	1	89	1.1%	3	80	3.8%	0	1	0.0%	25	780	3.2%
TOTAL	89,707	965,726	9.3%	43,258	463,996	9.3%	12,691	158,572	8.0%	0	2	0.0%	145,656	1,588,296	9.2%

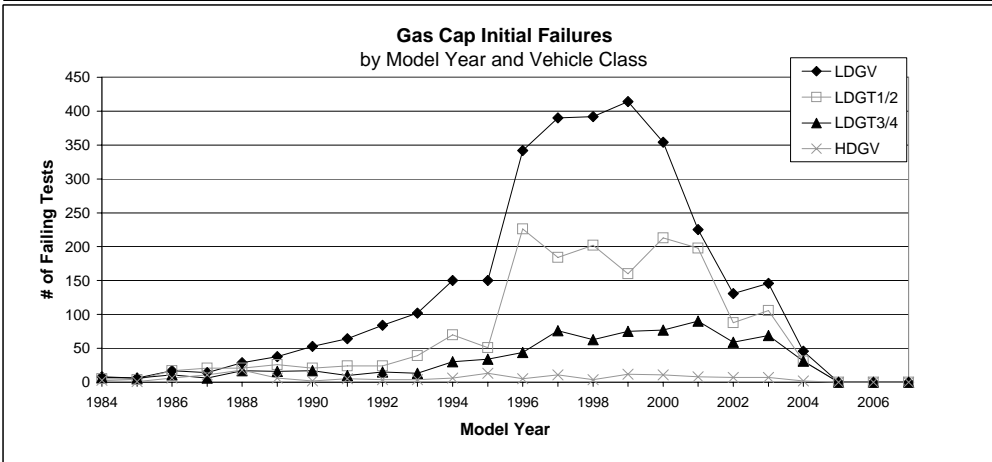
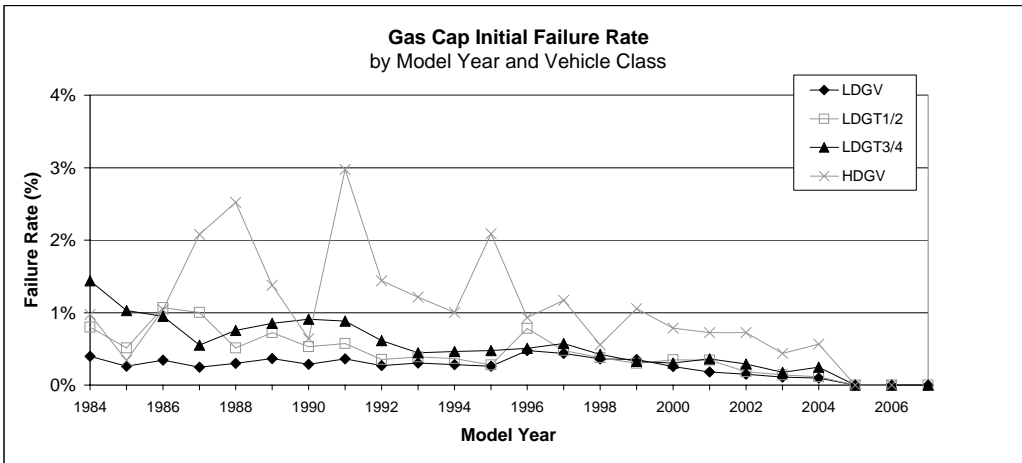


2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(i) Initial Gas Cap Tests Failing by model year and vehicle type

The gas cap functional test is performed on all vehicles receiving an emissions test that have gas caps compatible with one of the 10 gas cap adaptors used in the I&M program. The gas cap fails if it leaks more than 60 cubic centimeters per minute (cc/min) at a pressure of 30 inches of water. The gas cap test is not performed on vehicles after model year 2004 receiving the OBDII test.

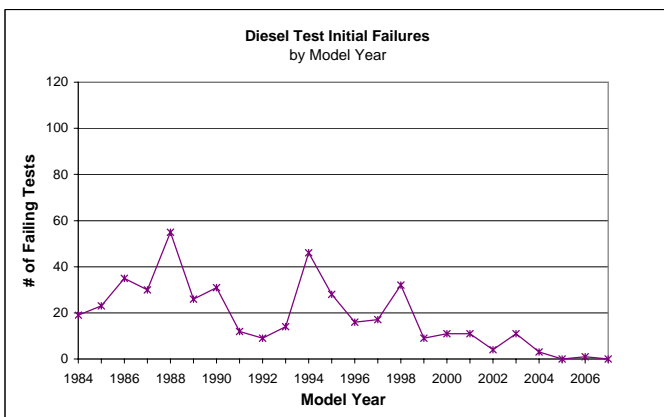
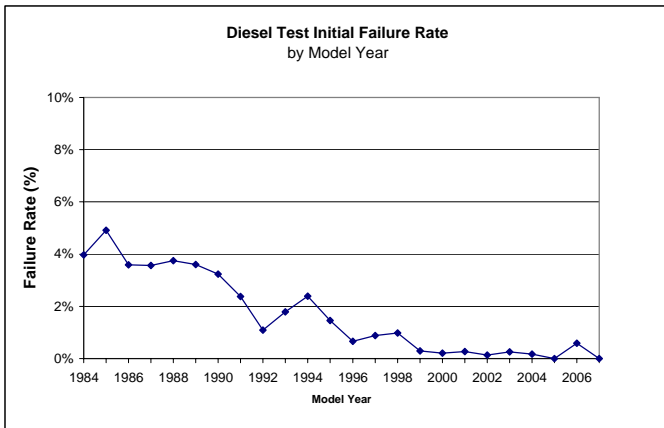
MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate
1984	8	2,003	0.4%	5	627	0.8%	7	486	1.4%	3	308	1.0%	23	3,424	0.7%
1985	6	2,323	0.3%	4	782	0.5%	6	584	1.0%	1	295	0.3%	17	3,984	0.4%
1986	17	4,964	0.3%	17	1,593	1.1%	11	1,158	0.9%	6	577	1.0%	51	8,292	0.6%
1987	14	5,626	0.2%	21	2,098	1.0%	6	1,083	0.6%	11	529	2.1%	52	9,336	0.6%
1988	29	9,623	0.3%	21	4,108	0.5%	17	2,247	0.8%	18	714	2.5%	85	16,692	0.5%
1989	38	10,365	0.4%	26	3,589	0.7%	16	1,880	0.9%	6	435	1.4%	86	16,269	0.5%
1990	53	18,419	0.3%	21	3,964	0.5%	17	1,870	0.9%	2	313	0.6%	93	24,566	0.4%
1991	64	17,735	0.4%	24	4,177	0.6%	10	1,131	0.9%	5	168	3.0%	103	23,211	0.4%
1992	84	31,311	0.3%	24	6,761	0.4%	15	2,442	0.6%	4	278	1.4%	127	40,792	0.3%
1993	102	33,578	0.3%	39	10,006	0.4%	13	2,909	0.4%	4	329	1.2%	158	46,822	0.3%
1994	150	52,973	0.3%	70	19,079	0.4%	30	6,442	0.5%	6	599	1.0%	256	79,093	0.3%
1995	150	57,472	0.3%	51	18,193	0.3%	34	7,144	0.5%	13	622	2.1%	248	83,431	0.3%
1996	342	72,000	0.5%	226	28,952	0.8%	44	8,679	0.5%	5	537	0.9%	617	110,168	0.6%
1997	390	89,100	0.4%	184	38,484	0.5%	76	13,265	0.6%	11	941	1.2%	661	141,790	0.5%
1998	392	108,811	0.4%	202	53,381	0.4%	63	14,867	0.4%	4	720	0.6%	661	177,789	0.4%
1999	414	116,595	0.4%	160	53,229	0.3%	75	22,869	0.3%	12	1,139	1.1%	661	193,832	0.3%
2000	354	138,119	0.3%	213	61,261	0.3%	77	25,376	0.3%	11	1,403	0.8%	655	226,159	0.3%
2001	225	123,830	0.2%	198	57,474	0.3%	90	24,826	0.4%	8	1,103	0.7%	521	207,233	0.3%
2002	131	88,000	0.1%	88	47,032	0.2%	59	20,400	0.3%	7	968	0.7%	285	156,400	0.2%
2003	146	134,818	0.1%	106	75,738	0.1%	69	39,427	0.2%	7	1,594	0.4%	328	251,577	0.1%
2004	46	47,734	0.1%	31	27,386	0.1%	31	12,566	0.2%	2	354	0.6%	110	88,040	0.1%
2005	0	31,736	0.0%	0	14,325	0.0%	0	6,274	0.0%	0	170	0.0%	0	52,505	0.0%
2006	0	13,806	0.0%	0	6,103	0.0%	0	2,818	0.0%	0	58	0.0%	0	22,785	0.0%
2007	0	610	0.0%	0	89	0.0%	0	80	0.0%	0	1	0.0%	0	780	0.0%
TOTAL	3,155	1,211,551	0.3%	1,731	538,441	0.3%	766	220,823	0.3%	146	14,155	1.0%	5,798	1,984,970	0.3%



2006 Massachusetts I&M Program Test Data
51.366 (a)(2)(i) Initial Diesel Tests Failing by Model Year

The SAE J-1667 snap acceleration diesel test is for diesel fueled vehicles with model years >=1984 and >10,000 lbs. GVWR.

MODEL YEAR	TOTAL INITIAL DIESEL		
	Failed	Tested	Fail Rate
1984	19	478	4.0%
1985	23	468	4.9%
1986	35	976	3.6%
1987	30	841	3.6%
1988	55	1,466	3.8%
1989	26	722	3.6%
1990	31	957	3.2%
1991	12	505	2.4%
1992	9	823	1.1%
1993	14	783	1.8%
1994	46	1,921	2.4%
1995	28	1,927	1.5%
1996	16	2,406	0.7%
1997	17	1,924	0.9%
1998	32	3,280	1.0%
1999	9	3,083	0.3%
2000	11	5,337	0.2%
2001	11	4,127	0.3%
2002	4	2,940	0.1%
2003	11	4,275	0.3%
2004	3	1,804	0.2%
2005	0	508	0.0%
2006	1	170	0.6%
2007	0	38	0.0%
TOTAL	443	41,759	1.1%

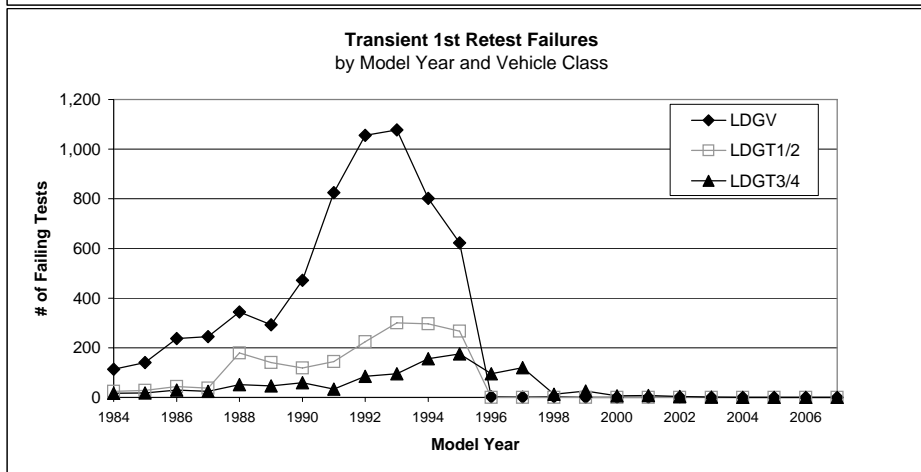
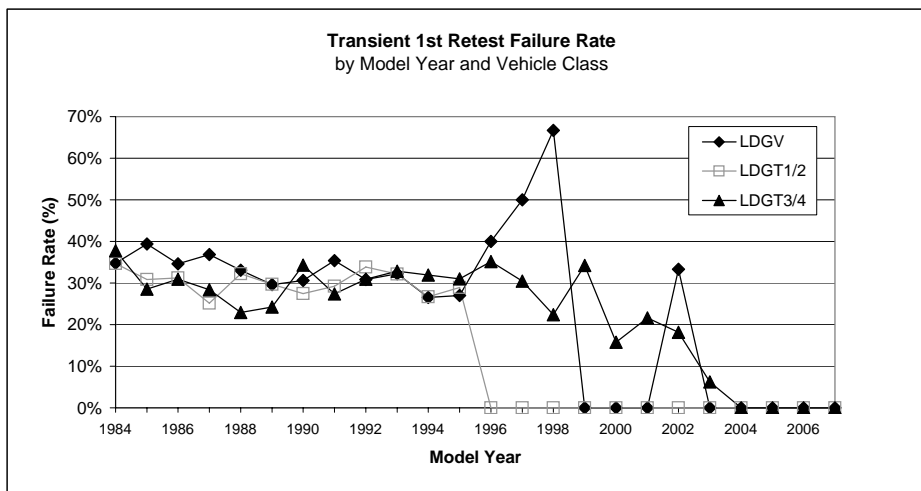


2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(ii) Transient 1st Retests Failing by model year and vehicle type

Any vehicle receiving their second transient test after they failed their first emissions test in 2006 is counted as a 1st transient retest.

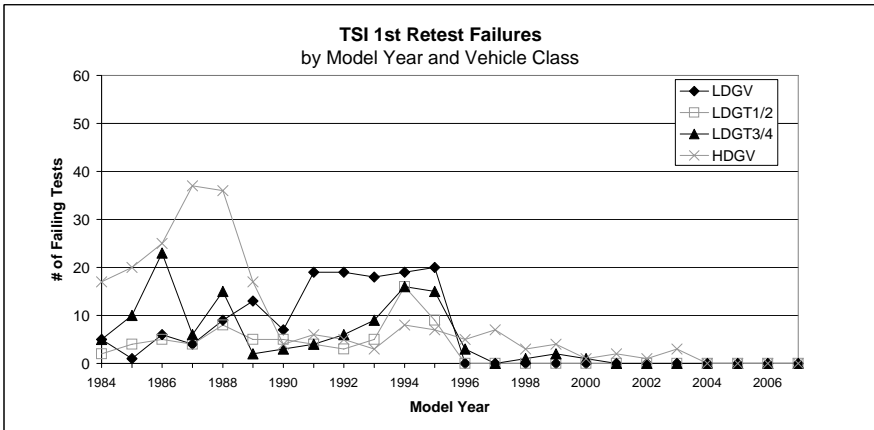
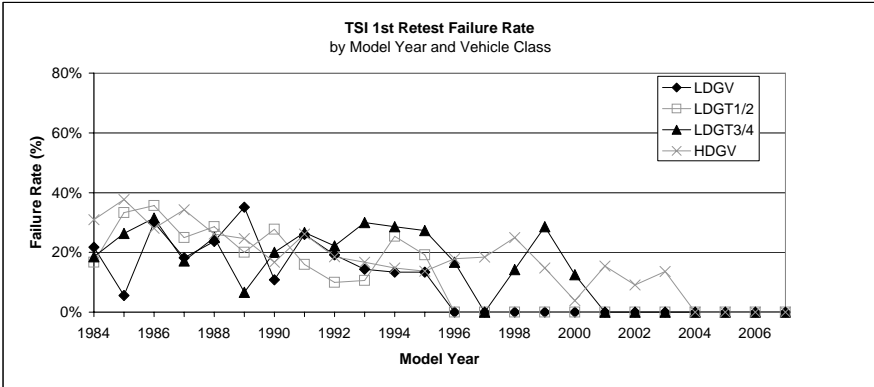
MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			TOTAL		
	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate
1984	113	325	34.8%	25	72	34.7%	17	45	37.8%	155	442	35.1%
1985	141	358	39.4%	29	94	30.9%	18	63	28.6%	188	515	36.5%
1986	237	684	34.6%	44	141	31.2%	30	97	30.9%	311	922	33.7%
1987	245	665	36.8%	38	151	25.2%	25	88	28.4%	308	904	34.1%
1988	344	1,040	33.1%	179	556	32.2%	52	227	22.9%	575	1,823	31.5%
1989	293	990	29.6%	140	472	29.7%	47	194	24.2%	480	1,656	29.0%
1990	472	1,542	30.6%	119	433	27.5%	59	172	34.3%	650	2,147	30.3%
1991	825	2,332	35.4%	144	492	29.3%	34	124	27.4%	1,003	2,948	34.0%
1992	1,055	3,424	30.8%	224	662	33.8%	85	275	30.9%	1,364	4,361	31.3%
1993	1,077	3,344	32.2%	300	933	32.2%	96	292	32.9%	1,473	4,569	32.2%
1994	802	3,018	26.6%	297	1,112	26.7%	156	489	31.9%	1,255	4,619	27.2%
1995	623	2,310	27.0%	267	924	28.9%	175	564	31.0%	1,065	3,798	28.0%
1996	2	5	40.0%	0	0	0.0%	96	273	35.2%	98	278	35.3%
1997	1	2	50.0%	0	0	0.0%	120	394	30.5%	121	396	30.6%
1998	2	3	66.7%	0	0	0.0%	13	58	22.4%	15	61	24.6%
1999	0	0	0.0%	0	0	0.0%	26	76	34.2%	26	76	34.2%
2000	0	1	0.0%	0	1	0.0%	6	38	15.8%	6	40	15.0%
2001	0	1	0.0%	0	0	0.0%	8	37	21.6%	8	38	21.1%
2002	1	3	33.3%	0	0	0.0%	4	22	18.2%	5	25	20.0%
2003	0	0	0.0%	0	0	0.0%	1	16	6.3%	1	16	6.3%
2004	0	1	0.0%	0	0	0.0%	0	3	0.0%	0	4	0.0%
2005	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
2006	0	0	0.0%	0	0	0.0%	0	1	0.0%	0	1	0.0%
2007	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
TOTAL	6,233	20,048	31.1%	1,806	6,043	29.9%	1,068	3,548	30.1%	9,107	29,639	30.7%



2006 Massachusetts I&M Program Test Data
 51.366 (a)(2)(ii) TSI 1st Retests Failing by model year and vehicle type

Any vehicle receiving their second two-speed idle test after they failed their first emissions test in 2006 is counted as a 1st two-speed idle retest.

MODEL	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate
1984	5	23	21.7%	2	12	16.7%	5	27	18.5%	17	55	30.9%	29	117	24.8%
1985	1	18	5.6%	4	12	33.3%	10	38	26.3%	20	53	37.7%	35	121	28.9%
1986	6	20	30.0%	5	14	35.7%	23	73	31.5%	25	89	28.1%	59	196	30.1%
1987	4	22	18.2%	4	16	25.0%	6	35	17.1%	37	108	34.3%	51	181	28.2%
1988	9	38	23.7%	8	28	28.6%	15	60	25.0%	36	138	26.1%	68	264	25.8%
1989	13	37	35.1%	5	25	20.0%	2	30	6.7%	17	69	24.6%	37	161	23.0%
1990	7	65	10.8%	5	18	27.8%	3	15	20.0%	4	24	16.7%	19	122	15.6%
1991	19	73	26.0%	4	25	16.0%	4	15	26.7%	6	23	26.1%	33	136	24.3%
1992	19	99	19.2%	3	30	10.0%	6	27	22.2%	5	27	18.5%	33	183	18.0%
1993	18	125	14.4%	5	47	10.6%	9	30	30.0%	3	18	16.7%	35	220	15.9%
1994	19	142	13.4%	16	63	25.4%	16	56	28.6%	8	54	14.8%	59	315	18.7%
1995	20	149	13.4%	9	47	19.1%	15	55	27.3%	7	51	13.7%	51	302	16.9%
1996	0	1	0.0%	0	0	0.0%	3	18	16.7%	5	28	17.9%	8	47	17.0%
1997	0	0	0.0%	0	0	0.0%	0	19	0.0%	7	38	18.4%	7	57	12.3%
1998	0	0	0.0%	0	0	0.0%	1	7	14.3%	3	12	25.0%	4	19	21.1%
1999	0	1	0.0%	0	0	0.0%	2	7	28.6%	4	27	14.8%	6	35	17.1%
2000	0	0	0.0%	0	0	0.0%	1	8	12.5%	1	26	3.8%	2	34	5.9%
2001	0	0	0.0%	0	0	0.0%	0	2	0.0%	2	13	15.4%	2	15	13.3%
2002	0	0	0.0%	0	1	0.0%	0	4	0.0%	1	11	9.1%	1	16	6.3%
2003	0	0	0.0%	0	0	0.0%	0	3	0.0%	3	22	13.6%	3	25	12.0%
2004	0	0	0.0%	0	0	0.0%	0	1	0.0%	0	2	0.0%	0	3	0.0%
2005	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
2006	0	1	0.0%	0	0	0.0%	0	0	0.0%	0	1	0.0%	0	2	0.0%
2007	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
TOTAL	140	814	17.2%	70	338	20.7%	121	530	22.8%	211	889	23.7%	542	2,571	21.1%

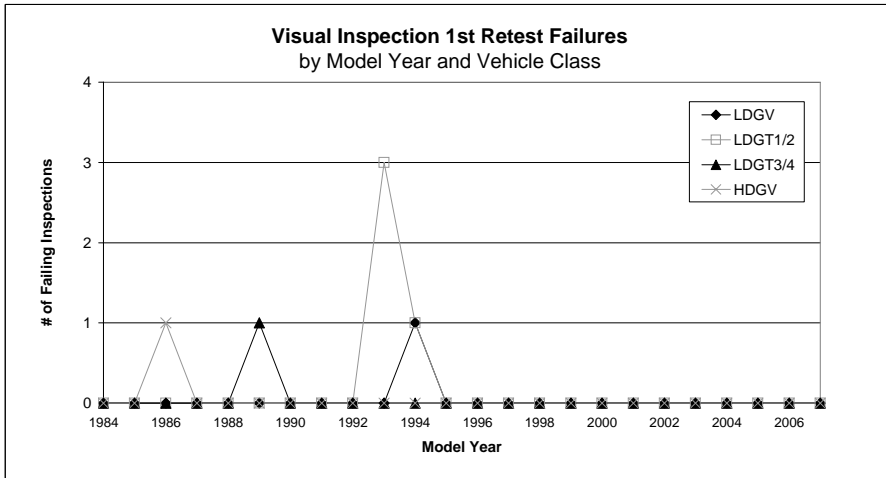
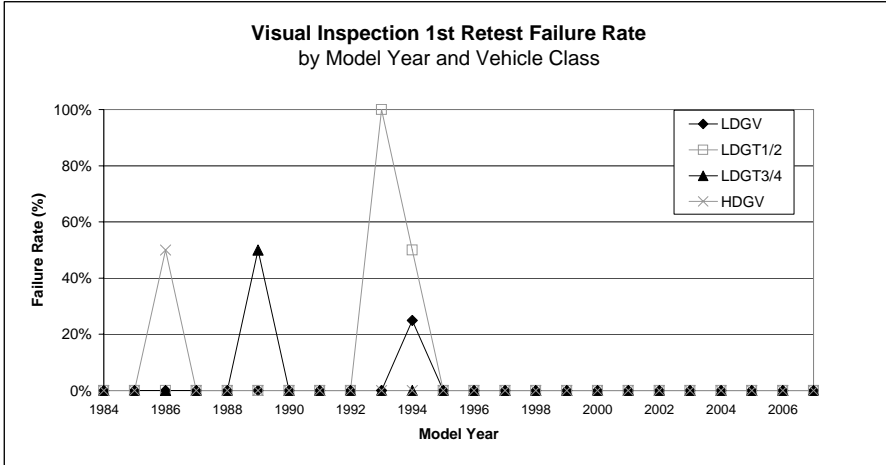


2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(ii) Visual Inspection Retest Failing by model year and vehicle type

Any vehicle receiving their second visual inspection after they failed their first visual inspection in 2006 is counted as a visual inspection retest.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate
1984	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	1	0.0%	0	1	0.0%
1985	0	0	0.0%	0	0	0.0%	0	1	0.0%	0	0	0.0%	0	1	0.0%
1986	0	0	0.0%	0	0	0.0%	0	0	0.0%	1	2	50.0%	1	2	50.0%
1987	0	1	0.0%	0	0	0.0%	0	1	0.0%	0	3	0.0%	0	5	0.0%
1988	0	0	0.0%	0	0	0.0%	0	2	0.0%	0	1	0.0%	0	3	0.0%
1989	0	0	0.0%	0	0	0.0%	1	2	50.0%	0	0	0.0%	1	2	50.0%
1990	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1991	0	1	0.0%	0	0	0.0%	0	1	0.0%	0	0	0.0%	0	2	0.0%
1992	0	0	0.0%	0	0	0.0%	0	1	0.0%	0	1	0.0%	0	2	0.0%
1993	0	0	0.0%	3	3	100.0%	0	1	0.0%	0	0	0.0%	3	4	75.0%
1994	1	4	25.0%	1	2	50.0%	0	0	0.0%	0	0	0.0%	2	6	33.3%
1995	0	4	0.0%	0	0	0.0%	0	0	0.0%	0	2	0.0%	0	6	0.0%
1996	0	0	0.0%	0	0	0.0%	0	1	0.0%	0	0	0.0%	0	1	0.0%
1997	0	0	0.0%	0	0	0.0%	0	1	0.0%	0	0	0.0%	0	1	0.0%
1998	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1999	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	1	0.0%	0	1	0.0%
2000	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
2001	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	1	0.0%	0	1	0.0%
2002	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
2003	0	0	0.0%	0	0	0.0%	0	1	0.0%	0	0	0.0%	0	1	0.0%
2004	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
2005	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
2006	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
2007	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
TOTAL	1	10	10.0%	4	5	80.0%	1	12	8.3%	1	12	8.3%	7	39	17.9%

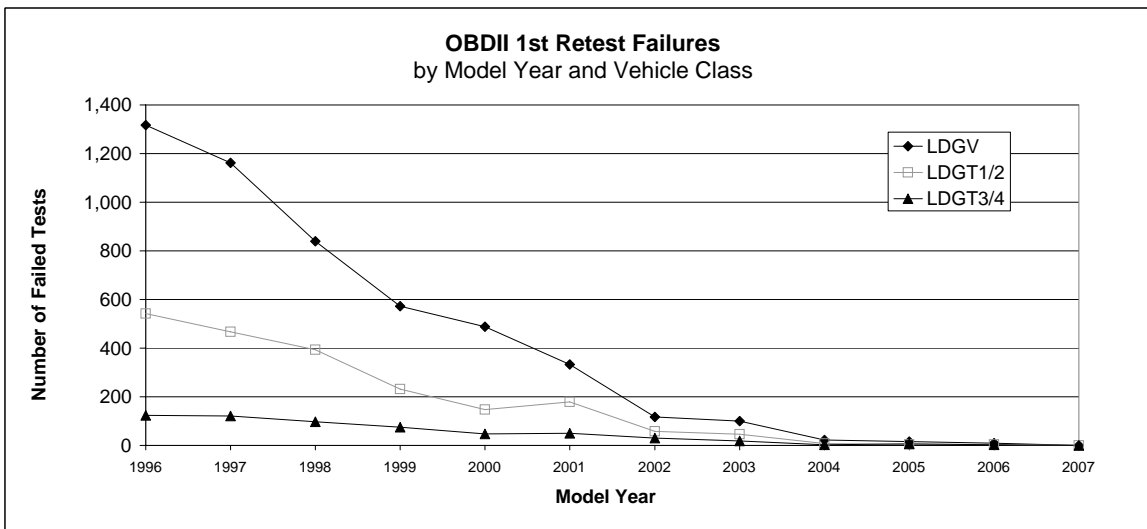
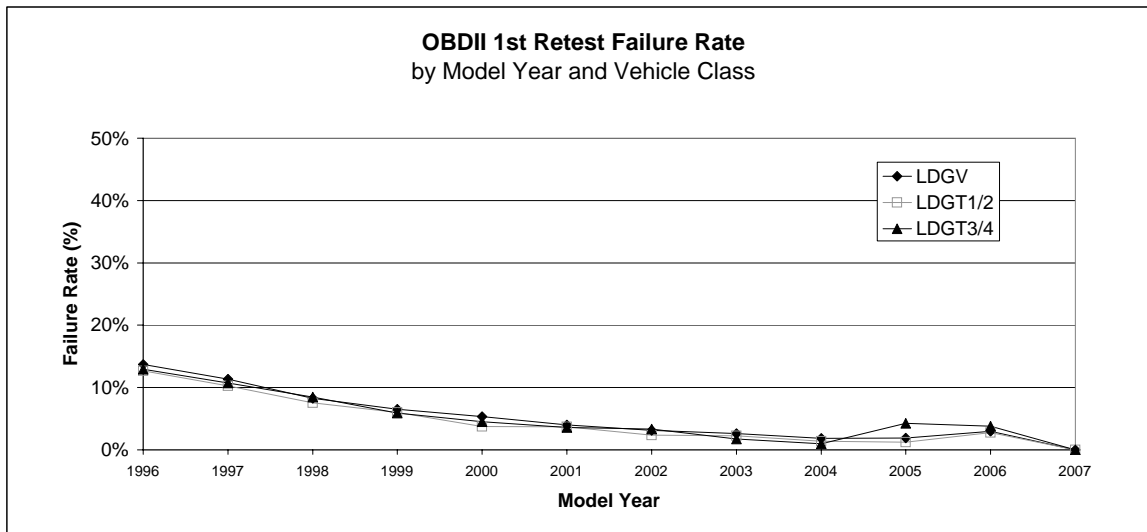


2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(ii) OBDII 1st Retests Failing by model year and vehicle type

Any vehicle receiving an OBDII retest that failed the initial OBDII test in 2006 is counted as a OBDII 1st retest. Vehicles that are "Not Ready" for their retest but would otherwise pass OBD (i.e. MIL commanded off) are rejected from testing and don't count as receiving a retest.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate
1996	1,317	9,596	13.7%	542	4,267	12.7%	124	957	13.0%	0	0	NA	1,983	14,820	13.4%
1997	1,162	10,251	11.3%	467	4,542	10.3%	121	1,127	10.7%	1	1	100.0%	1,751	15,921	11.0%
1998	840	10,140	8.3%	394	5,214	7.6%	97	1,145	8.5%	0	0	NA	1,331	16,499	8.1%
1999	572	8,759	6.5%	232	3,865	6.0%	75	1,273	5.9%	0	0	NA	879	13,897	6.3%
2000	488	9,170	5.3%	148	3,969	3.7%	48	1,068	4.5%	0	0	NA	684	14,207	4.8%
2001	333	8,270	4.0%	179	4,871	3.7%	50	1,393	3.6%	0	1	0.0%	562	14,535	3.9%
2002	117	3,729	3.1%	58	2,451	2.4%	30	904	3.3%	0	0	NA	205	7,084	2.9%
2003	100	3,813	2.6%	46	2,017	2.3%	19	1,088	1.7%	0	0	NA	165	6,918	2.4%
2004	22	1,177	1.9%	8	569	1.4%	3	303	1.0%	0	1	0.0%	33	2,050	1.6%
2005	16	839	1.9%	4	326	1.2%	7	164	4.3%	0	1	0.0%	27	1,330	2.0%
2006	9	300	3.0%	4	144	2.8%	3	79	3.8%	0	0	NA	16	523	3.1%
2007	0	18	0.0%	0	1	0.0%	0	3	0.0%	0	0	NA	0	22	0.0%
TOTAL	4,976	66,062	7.5%	2,082	32,236	6.5%	577	9,504	6.1%	1	4	25.0%	7,636	107,806	7.1%

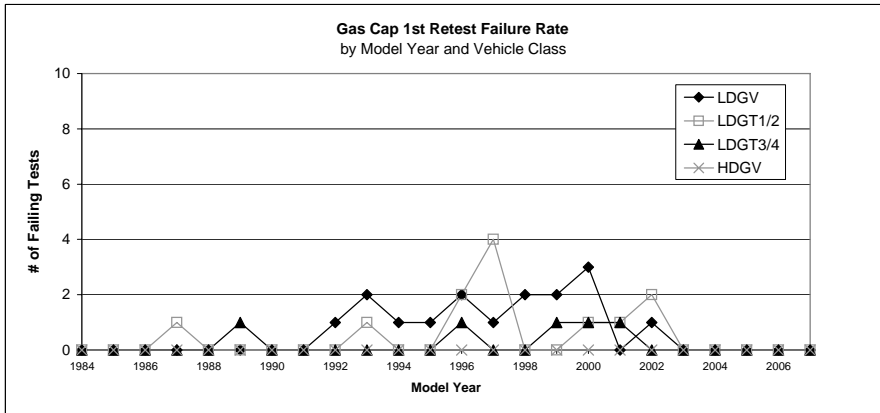
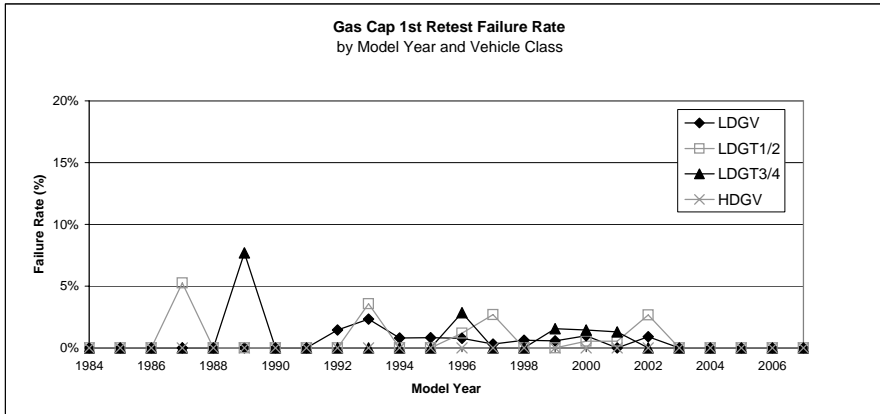


2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(ii) Gas Cap 1st Retests Failing by model year and vehicle type

Any vehicle receiving their gas cap functional test after they failed their first gas cap test in 2006 is counted as a 1st gas cap retest.

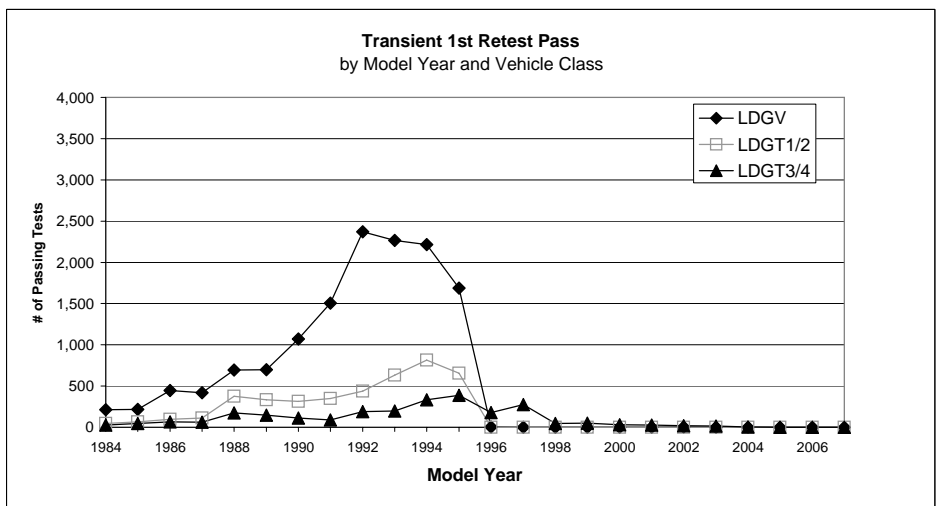
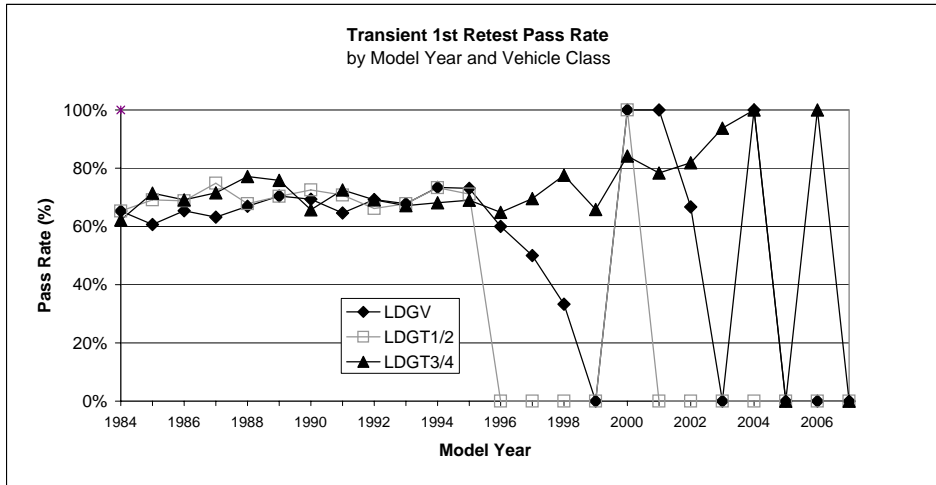
MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate	Failed	Tested	Fail Rate
1984	0	8	0.0%	0	2	0.0%	0	5	0.0%	0	1	0.0%	0	16	0.0%
1985	0	3	0.0%	0	3	0.0%	0	4	0.0%	0	0	NA	0	10	0.0%
1986	0	11	0.0%	0	15	0.0%	0	7	0.0%	0	2	0.0%	0	35	0.0%
1987	0	12	0.0%	1	19	5.3%	0	5	0.0%	0	9	0.0%	1	45	2.2%
1988	0	22	0.0%	0	17	0.0%	0	13	0.0%	0	14	0.0%	0	66	0.0%
1989	0	29	0.0%	0	19	0.0%	1	13	7.7%	0	4	0.0%	1	65	1.5%
1990	0	45	0.0%	0	14	0.0%	0	14	0.0%	0	1	0.0%	0	74	0.0%
1991	0	53	0.0%	0	17	0.0%	0	6	0.0%	0	4	0.0%	0	80	0.0%
1992	1	69	1.4%	0	20	0.0%	0	10	0.0%	0	3	0.0%	1	102	1.0%
1993	2	86	2.3%	1	28	3.6%	0	12	0.0%	0	4	0.0%	3	130	2.3%
1994	1	126	0.8%	0	61	0.0%	0	21	0.0%	0	3	0.0%	1	211	0.5%
1995	1	120	0.8%	0	44	0.0%	0	26	0.0%	0	9	0.0%	1	199	0.5%
1996	2	254	0.8%	2	167	1.2%	1	35	2.9%	0	5	0.0%	5	461	1.1%
1997	1	315	0.3%	4	148	2.7%	0	63	0.0%	0	9	0.0%	5	535	0.9%
1998	2	322	0.6%	0	164	0.0%	0	51	0.0%	0	2	0.0%	2	539	0.4%
1999	2	353	0.6%	0	131	0.0%	1	64	1.6%	0	9	0.0%	3	557	0.5%
2000	3	301	1.0%	1	182	0.5%	1	69	1.4%	0	10	0.0%	5	562	0.9%
2001	0	201	0.0%	1	181	0.6%	1	77	1.3%	0	8	0.0%	2	467	0.4%
2002	1	110	0.9%	2	75	2.7%	0	51	0.0%	0	5	0.0%	3	241	1.2%
2003	0	128	0.0%	0	99	0.0%	0	63	0.0%	0	6	0.0%	0	296	0.0%
2004	0	44	0.0%	0	28	0.0%	0	28	0.0%	0	2	0.0%	0	102	0.0%
2005	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA
2006	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA
2007	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA
TOTAL	16	2,612	0.6%	12	1,434	0.8%	5	637	0.8%	0	110	0.0%	33	4,793	0.7%



2006 Massachusetts I&M Program Test Data
 51.366 (a)(2)(iii) Transient 1st Retests Passing by model year and vehicle type

Any vehicle receiving their second transient test after they failed their first emissions test in 2006 is counted as a 1st transient retest.

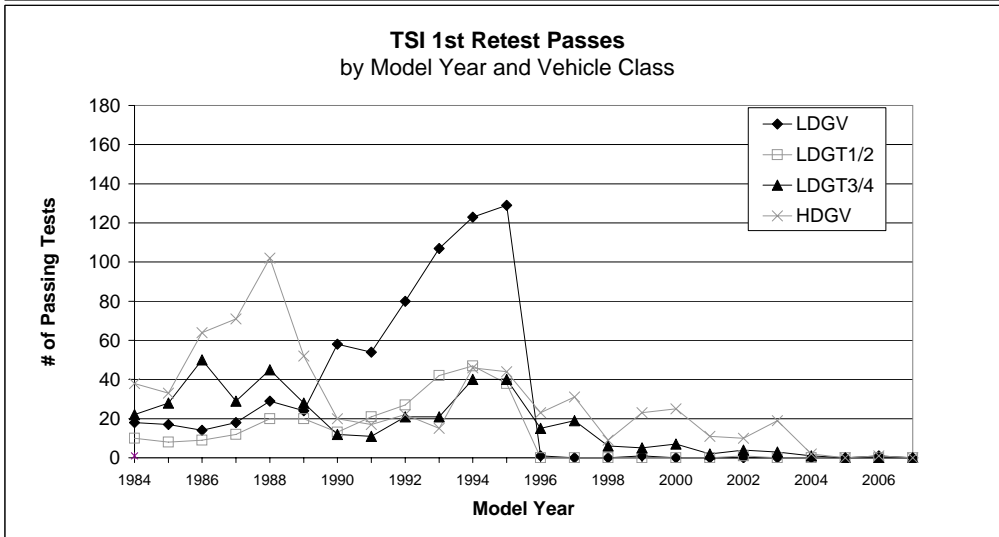
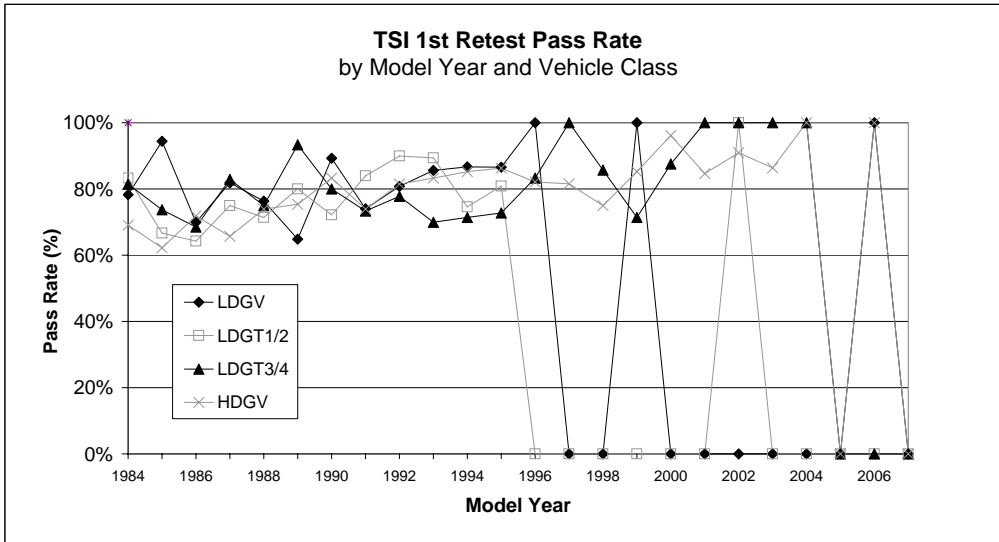
MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			TOTAL		
	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate
1984	212	325	65.2%	47	72	65.3%	28	45	62.2%	287	442	64.9%
1985	217	358	60.6%	65	94	69.1%	45	63	71.4%	327	515	63.5%
1986	447	684	65.4%	97	141	68.8%	67	97	69.1%	611	922	66.3%
1987	420	665	63.2%	113	151	74.8%	63	88	71.6%	596	904	65.9%
1988	696	1,040	66.9%	377	556	67.8%	175	227	77.1%	1,248	1,823	68.5%
1989	697	990	70.4%	332	472	70.3%	147	194	75.8%	1,176	1,656	71.0%
1990	1,070	1,542	69.4%	314	433	72.5%	113	172	65.7%	1,497	2,147	69.7%
1991	1,507	2,332	64.6%	348	492	70.7%	90	124	72.6%	1,945	2,948	66.0%
1992	2,369	3,424	69.2%	438	662	66.2%	190	275	69.1%	2,997	4,361	68.7%
1993	2,267	3,344	67.8%	633	933	67.8%	196	292	67.1%	3,096	4,569	67.8%
1994	2,216	3,018	73.4%	815	1,112	73.3%	333	489	68.1%	3,364	4,619	72.8%
1995	1,687	2,310	73.0%	657	924	71.1%	389	564	69.0%	2,733	3,798	72.0%
1996	3	5	60.0%	0	0	NA	177	273	64.8%	180	278	64.7%
1997	1	2	50.0%	0	0	NA	274	394	69.5%	275	396	69.4%
1998	1	3	33.3%	0	0	NA	45	58	77.6%	46	61	75.4%
1999	0	0	NA	0	0	NA	50	76	65.8%	50	76	65.8%
2000	1	1	100.0%	1	1	100.0%	32	38	84.2%	34	40	85.0%
2001	1	1	100.0%	0	0	NA	29	37	78.4%	30	38	78.9%
2002	2	3	66.7%	0	0	NA	18	22	81.8%	20	25	80.0%
2003	0	0	NA	0	0	NA	15	16	93.8%	15	16	93.8%
2004	1	1	100.0%	0	0	NA	3	3	100.0%	4	4	100.0%
2005	0	0	NA	0	0	NA	0	0	NA	0	0	NA
2006	0	0	NA	0	0	NA	1	1	100.0%	1	1	100.0%
2007	0	0	NA	0	0	NA	0	0	NA	0	0	NA
TOTAL	13,815	20,048	68.9%	4,237	6,043	70.1%	2,480	3,548	69.9%	20,532	29,639	69.3%



2006 Massachusetts I&M Program Test Data
 51.366 (a)(2)(iii) TSI 1st Retests Passing by model year and vehicle type

Any vehicle receiving their second two-speed idle test after they failed their first emissions test in 2006 is counted as a 1st two-speed idle retest.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate
1984	18	23	78.3%	10	12	83.3%	22	27	81.5%	38	55	69.1%	88	117	75.2%
1985	17	18	94.4%	8	12	66.7%	28	38	73.7%	33	53	62.3%	86	121	71.1%
1986	14	20	70.0%	9	14	64.3%	50	73	68.5%	64	89	71.9%	137	196	69.9%
1987	18	22	81.8%	12	16	75.0%	29	35	82.9%	71	108	65.7%	130	181	71.8%
1988	29	38	76.3%	20	28	71.4%	45	60	75.0%	102	138	73.9%	196	264	74.2%
1989	24	37	64.9%	20	25	80.0%	28	30	93.3%	52	69	75.4%	124	161	77.0%
1990	58	65	89.2%	13	18	72.2%	12	15	80.0%	20	24	83.3%	103	122	84.4%
1991	54	73	74.0%	21	25	84.0%	11	15	73.3%	17	23	73.9%	103	136	75.7%
1992	80	99	80.8%	27	30	90.0%	21	27	77.8%	22	27	81.5%	150	183	82.0%
1993	107	125	85.6%	42	47	89.4%	21	30	70.0%	15	18	83.3%	185	220	84.1%
1994	123	142	86.6%	47	63	74.6%	40	56	71.4%	46	54	85.2%	256	315	81.3%
1995	129	149	86.6%	38	47	80.9%	40	55	72.7%	44	51	86.3%	251	302	83.1%
1996	1	1	100.0%	0	0	NA	15	18	83.3%	23	28	82.1%	39	47	83.0%
1997	0	0	NA	0	0	NA	19	19	100.0%	31	38	81.6%	50	57	87.7%
1998	0	0	NA	0	0	NA	6	7	85.7%	9	12	75.0%	15	19	78.9%
1999	1	1	100.0%	0	0	NA	5	7	71.4%	23	27	85.2%	29	35	82.9%
2000	0	0	NA	0	0	NA	7	8	87.5%	25	26	96.2%	32	34	94.1%
2001	0	0	NA	0	0	NA	2	2	100.0%	11	13	84.6%	13	15	86.7%
2002	0	0	NA	1	1	100.0%	4	4	100.0%	10	11	90.9%	15	16	93.8%
2003	0	0	NA	0	0	NA	3	3	100.0%	19	22	86.4%	22	25	88.0%
2004	0	0	NA	0	0	NA	1	1	100.0%	2	2	100.0%	3	3	100.0%
2005	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA
2006	1	1	100.0%	0	0	NA	0	0	NA	1	1	100.0%	2	2	100.0%
2007	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA
TOTAL	674	814	82.8%	268	338	79.3%	409	530	77.2%	678	889	76.3%	2,029	2,571	78.9%

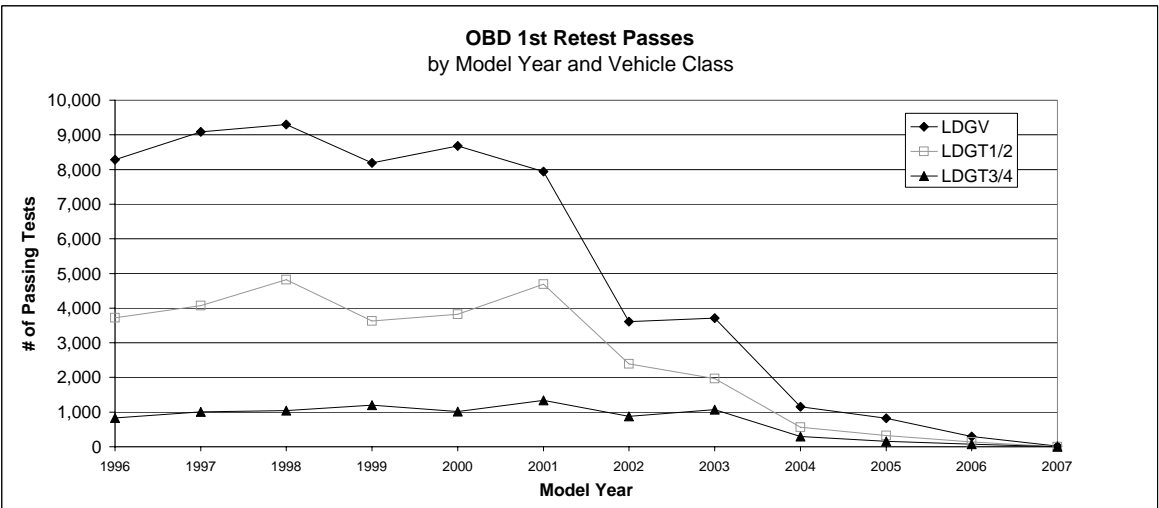
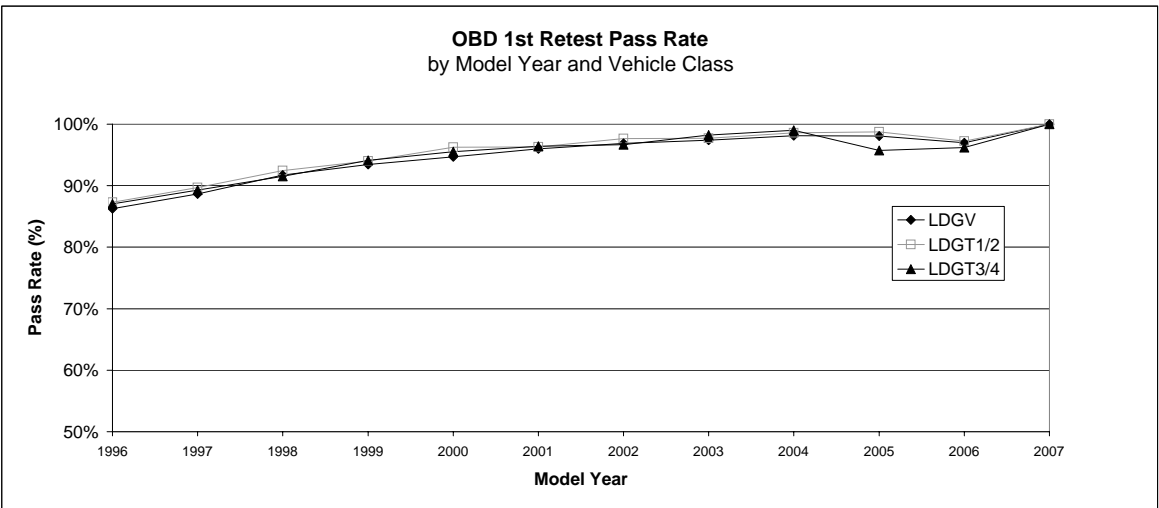


2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(iii) OBD 1st Retests Passing by model year and vehicle type

Any vehicle receiving an OBDII retest that failed the initial OBDII test in 2006 is counted as a OBDII 1st retest.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate
1996	8,279	9,596	86.3%	3,725	4,267	87.3%	833	957	87.0%	0	0	NA	12,837	14,820	86.6%
1997	9,089	10,251	88.7%	4,075	4,542	89.7%	1,006	1,127	89.3%	0	1	0.0%	14,170	15,921	89.0%
1998	9,300	10,140	91.7%	4,820	5,214	92.4%	1,048	1,145	91.5%	0	0	NA	15,168	16,499	91.9%
1999	8,187	8,759	93.5%	3,633	3,865	94.0%	1,198	1,273	94.1%	0	0	NA	13,018	13,897	93.7%
2000	8,682	9,170	94.7%	3,821	3,969	96.3%	1,020	1,068	95.5%	0	0	NA	13,523	14,207	95.2%
2001	7,937	8,270	96.0%	4,692	4,871	96.3%	1,343	1,393	96.4%	1	1	100.0%	13,973	14,535	96.1%
2002	3,612	3,729	96.9%	2,393	2,451	97.6%	874	904	96.7%	0	0	NA	6,879	7,084	97.1%
2003	3,713	3,813	97.4%	1,971	2,017	97.7%	1,069	1,088	98.3%	0	0	NA	6,753	6,918	97.6%
2004	1,155	1,177	98.1%	561	569	98.6%	300	303	99.0%	1	1	100.0%	2,017	2,050	98.4%
2005	823	839	98.1%	322	326	98.8%	157	164	95.7%	1	1	100.0%	1,303	1,330	98.0%
2006	291	300	97.0%	140	144	97.2%	76	79	96.2%	0	0	NA	507	523	96.9%
2007	18	18	100.0%	1	1	100.0%	3	3	100.0%	0	0	NA	22	22	100.0%
TOTAL	61,086	66,062	92.5%	30,154	32,236	93.5%	8,927	9,504	93.9%	3	4	75.0%	100,170	107,806	92.9%

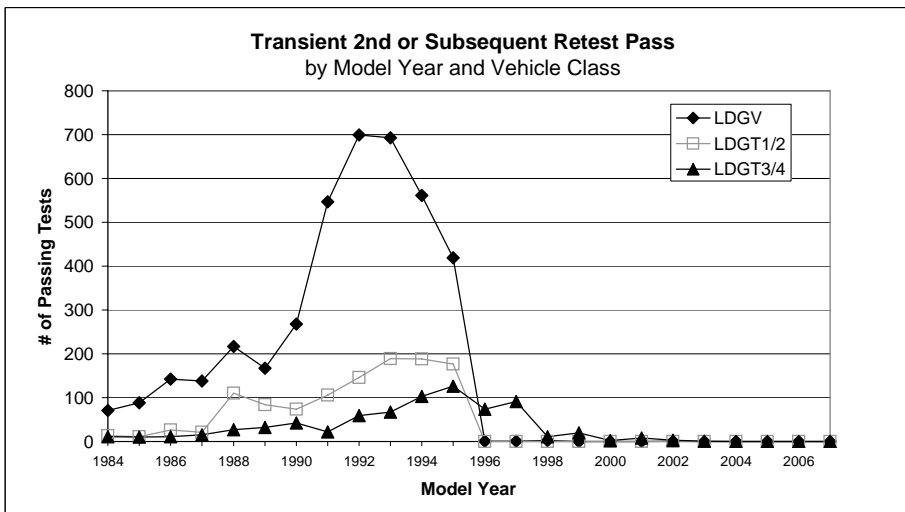
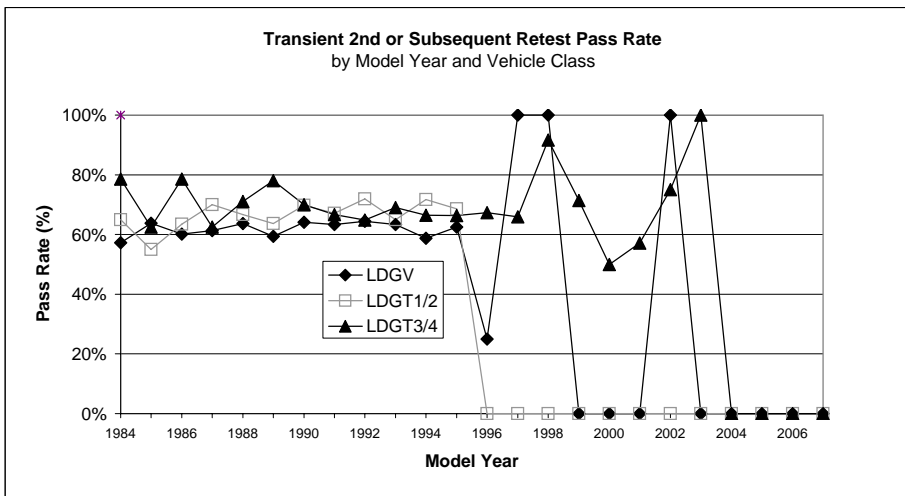


2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(iv) Transient 2nd and Subsequent Retests Passing by model year and vehicle type

Any vehicle receiving a subsequent transient retest after they failed their second emissions test in 2006 is counted as a 2nd and subsequent transient retest.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			TOTAL		
	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate
1984	71	124	57.3%	13	20	65.0%	11	14	78.6%	95	158	60.1%
1985	88	138	63.8%	11	20	55.0%	10	16	62.5%	109	174	62.6%
1986	142	236	60.2%	26	41	63.4%	11	14	78.6%	179	291	61.5%
1987	138	225	61.3%	21	30	70.0%	15	24	62.5%	174	279	62.4%
1988	217	341	63.6%	110	165	66.7%	27	38	71.1%	354	544	65.1%
1989	167	281	59.4%	84	132	63.6%	32	41	78.0%	283	454	62.3%
1990	268	418	64.1%	74	106	69.8%	42	60	70.0%	385	585	65.8%
1991	547	864	63.3%	106	158	67.1%	22	33	66.7%	675	1,055	64.0%
1992	699	1086	64.4%	146	203	71.9%	59	91	64.8%	904	1,380	65.5%
1993	693	1094	63.3%	189	291	64.9%	67	97	69.1%	949	1,482	64.0%
1994	561	955	58.7%	188	262	71.8%	103	155	66.5%	852	1,372	62.1%
1995	419	671	62.4%	177	258	68.6%	126	190	66.3%	722	1,119	64.5%
1996	1	4	25.0%	0	0	NA	74	110	67.3%	75	114	65.8%
1997	1	1	100.0%	0	0	NA	91	138	65.9%	92	139	66.2%
1998	2	2	100.0%	0	0	NA	11	12	91.7%	13	14	92.9%
1999	0	0	NA	0	0	NA	20	28	71.4%	20	28	71.4%
2000	0	0	NA	0	0	NA	2	4	50.0%	2	4	50.0%
2001	0	0	NA	0	0	NA	8	14	57.1%	8	14	57.1%
2002	1	1	100.0%	0	0	NA	3	4	75.0%	4	5	80.0%
2003	0	0	NA	0	0	NA	1	1	100.0%	1	1	100.0%
2004	0	0	NA	0	0	NA	0	0	NA	0	0	NA
2005	0	0	NA	0	0	NA	0	0	NA	0	0	NA
2006	0	0	NA	0	0	NA	0	0	NA	0	0	NA
2007	0	0	NA	0	0	NA	0	0	NA	0	0	NA
TOTAL	4,015	6,441	62.3%	1,145	1,686	67.9%	735	1,084	67.8%	5,896	9,212	64.0%

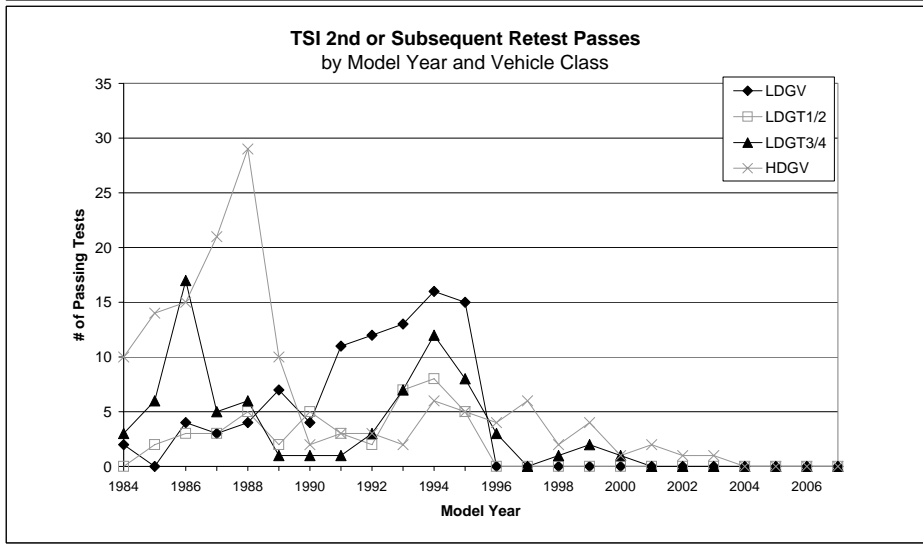
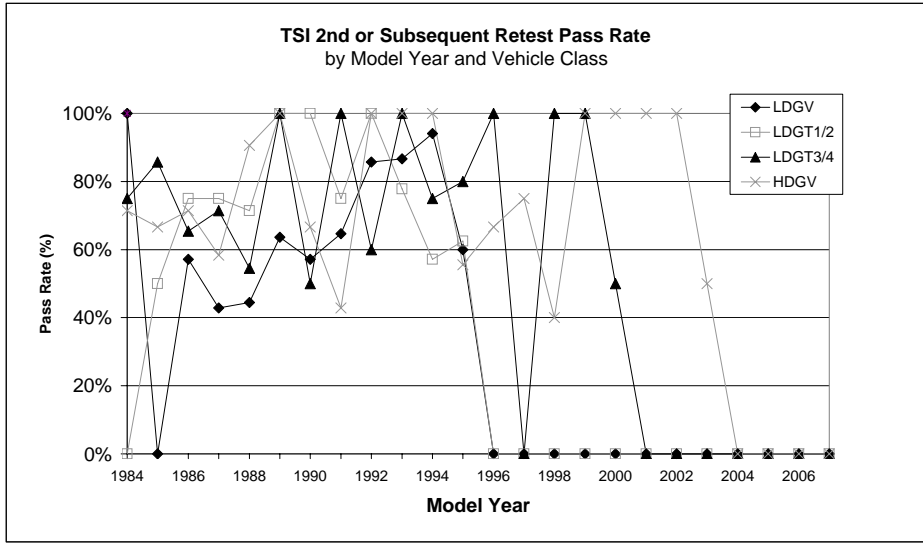


2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(iv) TSI 2nd and Subsequent Retests Passing by model year and vehicle type

Any vehicle receiving a subsequent TSI retest after they failed their second emissions test in 2006 is counted as a 2nd and subsequent TSI retest.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate
1984	2	2	100.0%	0	0	NA	3	4	75.0%	10	14	71.4%	15	20	75.0%
1985	0	0	NA	2	4	50.0%	6	7	85.7%	14	21	66.7%	22	32	68.8%
1986	4	7	57.1%	3	4	75.0%	17	26	65.4%	15	21	71.4%	39	58	67.2%
1987	3	7	42.9%	3	4	75.0%	5	7	71.4%	21	36	58.3%	32	54	59.3%
1988	4	9	44.4%	5	7	71.4%	6	11	54.5%	29	32	90.6%	44	59	74.6%
1989	7	11	63.6%	2	2	100.0%	1	1	100.0%	10	10	100.0%	20	24	83.3%
1990	4	7	57.1%	5	5	100.0%	1	2	50.0%	2	3	66.7%	12	17	70.6%
1991	11	17	64.7%	3	4	75.0%	1	1	100.0%	3	7	42.9%	18	29	62.1%
1992	12	14	85.7%	2	2	100.0%	3	5	60.0%	3	3	100.0%	20	24	83.3%
1993	13	15	86.7%	7	9	77.8%	7	7	100.0%	2	2	100.0%	29	33	87.9%
1994	16	17	94.1%	8	14	57.1%	12	16	75.0%	6	6	100.0%	42	53	79.2%
1995	15	25	60.0%	5	8	62.5%	8	10	80.0%	5	9	55.6%	33	52	63.5%
1996	0	0	NA	0	0	NA	3	3	100.0%	4	6	66.7%	7	9	77.8%
1997	0	0	NA	0	0	NA	0	0	NA	6	8	75.0%	6	8	75.0%
1998	0	0	NA	0	0	NA	1	1	100.0%	2	5	40.0%	3	6	50.0%
1999	0	0	NA	0	0	NA	2	2	100.0%	4	4	100.0%	6	6	100.0%
2000	0	0	NA	0	0	NA	1	2	50.0%	1	1	100.0%	2	3	66.7%
2001	0	0	NA	0	0	NA	0	0	NA	2	2	100.0%	2	2	100.0%
2002	0	0	NA	0	0	NA	0	0	NA	1	1	100.0%	1	1	100.0%
2003	0	0	NA	0	0	NA	0	0	NA	1	2	50.0%	1	2	50.0%
2004	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA
2005	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA
2006	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA
2007	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA
TOTAL	91	131	69.5%	45	63	71.4%	77	105	73.3%	141	193	73.1%	354	492	72.0%

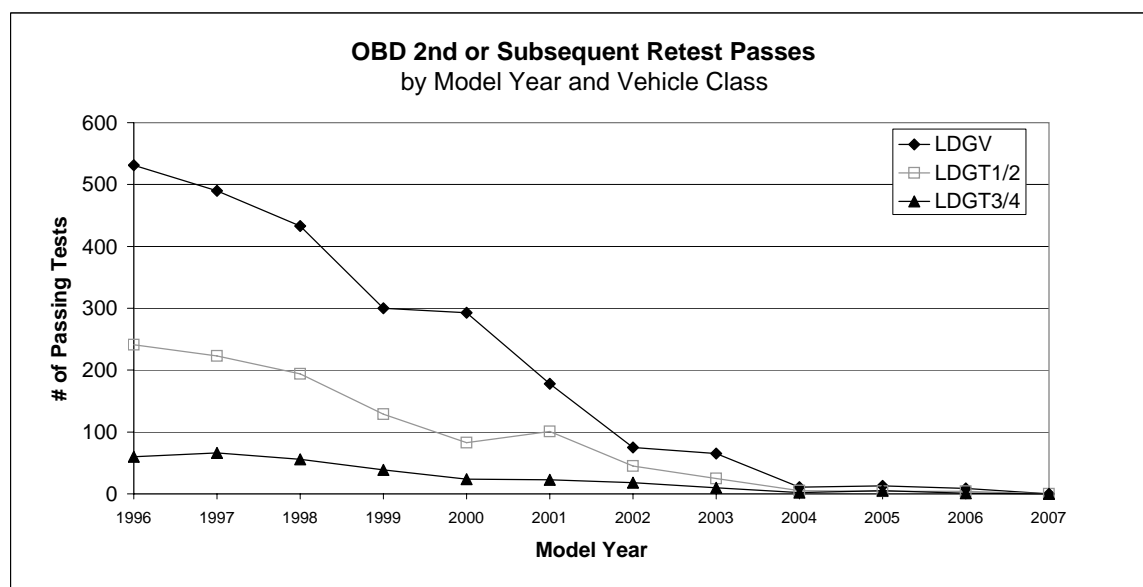
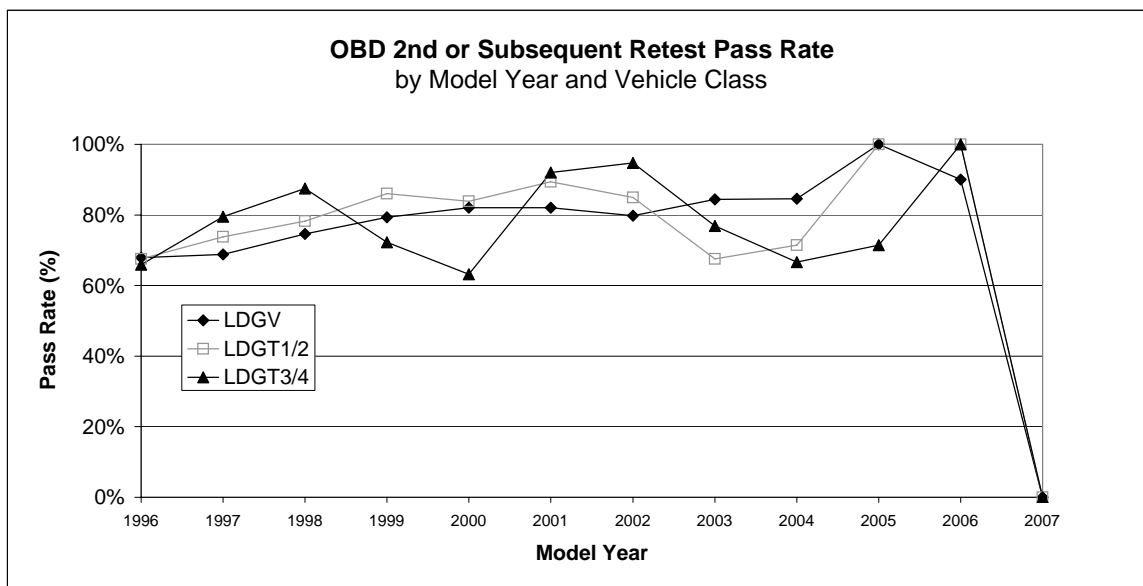


2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(iv) OBDII 2nd and Subsequent Retests Passing by model year and vehicle type

Any vehicle receiving a subsequent OBDII retest after they failed their second or later OBDII test in 2006 is counted as a 2nd and subsequent OBDII retest. Vehicles that are "Not Ready" for their retest but would otherwise pass OBD (i.e. MIL commanded off) are rejected from testing and don't count as receiving a retest.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate	Passed	Tested	Pass Rate
1996	531	782	67.9%	241	357	67.5%	60	91	65.9%	0	0	NA	832	1,230	67.6%
1997	490	712	68.8%	223	302	73.8%	66	83	79.5%	1	1	100.0%	780	1,098	71.0%
1998	433	580	74.7%	194	248	78.2%	56	64	87.5%	0	0	NA	683	892	76.6%
1999	300	378	79.4%	129	150	86.0%	39	54	72.2%	1	1	100.0%	469	583	80.4%
2000	293	357	82.1%	83	99	83.8%	24	38	63.2%	0	0	NA	400	494	81.0%
2001	178	217	82.0%	101	113	89.4%	23	25	92.0%	0	0	NA	302	355	85.1%
2002	75	94	79.8%	45	53	84.9%	18	19	94.7%	0	0	NA	138	166	83.1%
2003	65	77	84.4%	25	37	67.6%	10	13	76.9%	0	0	NA	100	127	78.7%
2004	11	13	84.6%	5	7	71.4%	2	3	66.7%	0	0	NA	18	23	78.3%
2005	13	13	100.0%	4	4	100.0%	5	7	71.4%	0	0	NA	22	24	91.7%
2006	9	10	90.0%	4	4	100.0%	1	1	100.0%	0	0	NA	14	15	93.3%
2007	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA
TOTAL	2,398	3,233	74.2%	1,054	1,374	76.7%	304	398	76.4%	2	2	100.0%	3,758	5,007	75.1%

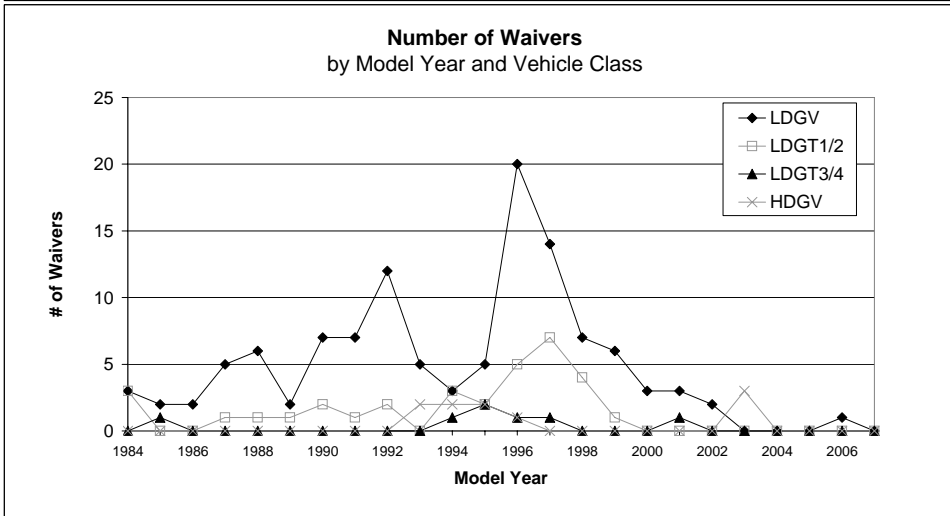
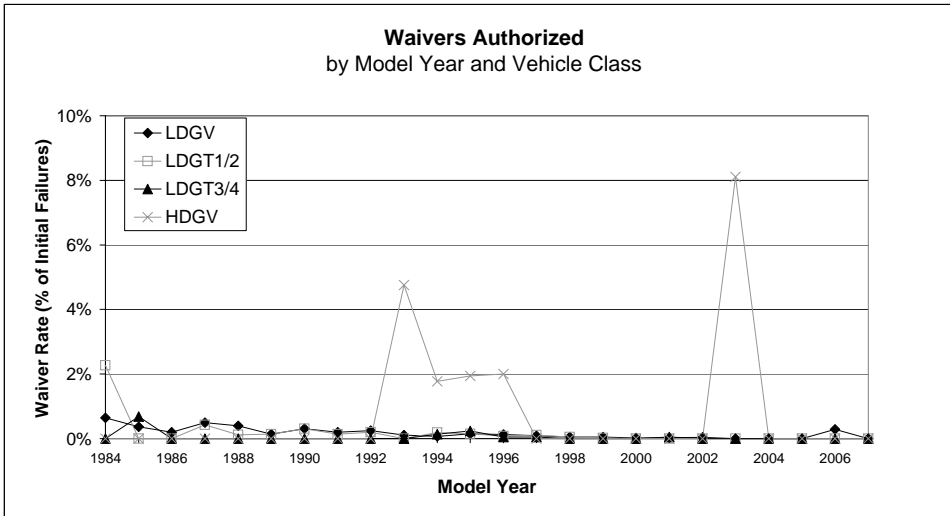


2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(v) Initial Failing Emissions Tests Receiving a Waiver by model year and vehicle type

Motorists can receive an emissions waiver for their vehicle if they cannot pass an emissions retest following repairs. To be eligible for a waiver, a motorist must spend a minimum of \$200 to \$400 (depending on vehicle age) on emission related repairs at a registered repair shop, the emissions-control system must be intact with no evidence of tampering, there must be some improvement to the vehicle's emissions, and emission levels must be less than three times the standard for all pollutants tested, as applicable. If the vehicle failed an OBDII test, then the vehicle must NOT have any misfire or catalyst related DTCs present and must be READY for testing in order to qualify for a waiver. The waiver is valid until the vehicle is due for its next emissions test. The waiver rate is calculated as a percentage of unique vehicles that failed their initial emissions test in 2006.

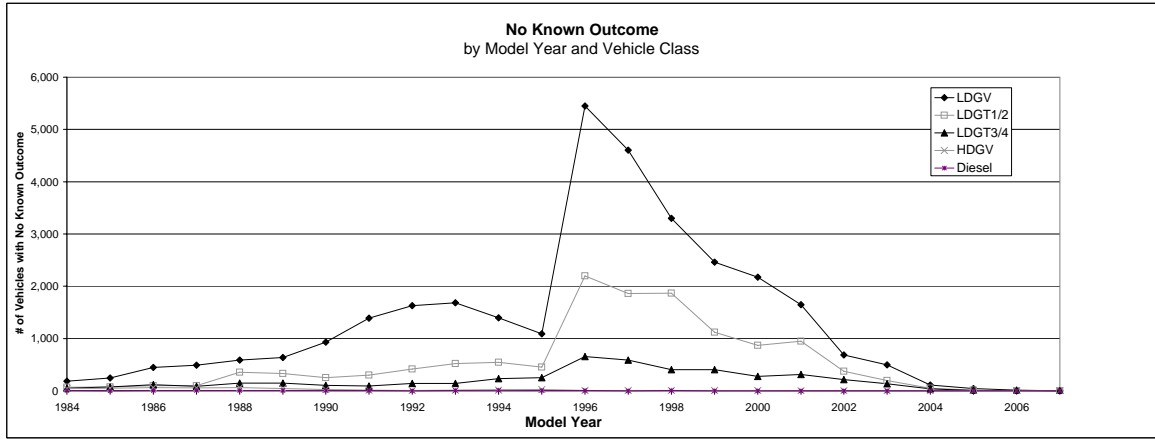
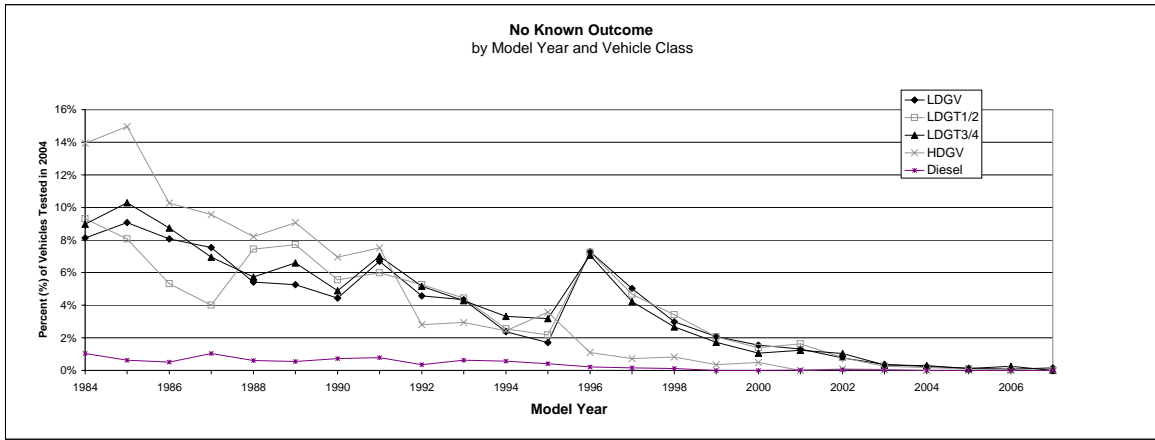
MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Waiver Granted	Initial Failed	Waiver Rate	Waiver Granted	Initial Failed	Waiver Rate	Waiver Granted	Initial Failed	Waiver Rate	Waiver Granted	Initial Failed	Waiver Rate	Waiver Granted	Initial Failed	Waiver Rate
1984	3	465	0.65%	3	132	2.27%	0	117	0.00%	0	109	0.00%	6	823	0.7%
1985	2	552	0.36%	0	158	0.00%	1	147	0.68%	0	116	0.00%	3	973	0.3%
1986	2	1016	0.20%	0	232	0.00%	0	265	0.00%	0	172	0.00%	2	1,685	0.1%
1987	5	1016	0.49%	1	236	0.42%	0	187	0.00%	0	178	0.00%	6	1,617	0.4%
1988	6	1502	0.40%	1	851	0.12%	0	399	0.00%	0	244	0.00%	7	2,996	0.2%
1989	2	1472	0.14%	1	734	0.14%	0	331	0.00%	0	124	0.00%	3	2,661	0.1%
1990	7	2282	0.31%	2	643	0.31%	0	270	0.00%	0	77	0.00%	9	3,272	0.3%
1991	7	3471	0.20%	1	733	0.14%	0	208	0.00%	0	45	0.00%	8	4,457	0.2%
1992	12	4798	0.25%	2	1011	0.20%	0	414	0.00%	0	42	0.00%	14	6,265	0.2%
1993	5	4737	0.11%	0	1342	0.00%	0	445	0.00%	2	42	4.76%	7	6,566	0.1%
1994	3	4293	0.07%	3	1621	0.19%	1	743	0.13%	2	113	1.77%	9	6,770	0.1%
1995	5	3384	0.15%	2	1343	0.15%	2	827	0.24%	2	103	1.94%	11	5,657	0.2%
1996	20	15084	0.13%	5	6490	0.08%	1	1887	0.05%	1	50	2.00%	27	23,511	0.1%
1997	14	15180	0.09%	7	6540	0.11%	1	2152	0.05%	0	62	0.00%	22	23,934	0.1%
1998	7	14122	0.05%	4	7471	0.05%	0	1697	0.00%	0	49	0.00%	11	23,339	0.0%
1999	6	12054	0.05%	1	5383	0.02%	0	1877	0.00%	0	43	0.00%	7	19,357	0.0%
2000	3	12193	0.02%	0	5285	0.00%	0	1485	0.00%	0	44	0.00%	3	19,007	0.0%
2001	3	10639	0.03%	0	6333	0.00%	1	1910	0.05%	0	26	0.00%	4	18,908	0.0%
2002	2	4790	0.04%	0	3145	0.00%	0	1247	0.00%	0	19	0.00%	2	9,201	0.0%
2003	0	4611	0.00%	0	2361	0.00%	0	1341	0.00%	3	37	8.11%	3	8,350	0.0%
2004	0	1425	0.00%	0	691	0.00%	0	389	0.00%	0	5	0.00%	0	2,510	0.0%
2005	0	918	0.00%	0	361	0.00%	0	178	0.00%	0	0	NA	0	1,457	0.0%
2006	1	345	0.29%	0	155	0.00%	0	90	0.00%	0	2	0.00%	1	592	0.2%
2007	0	21	0.00%	0	1	0.00%	0	3	0.00%	0	0	NA	0	25	0.0%
TOTAL	115	120,370	0.10%	33	53,252	0.06%	7	18,609	0.04%	10	1,702	0.59%	165	193,933	0.09%



2006 Massachusetts I&M Program Test Data
 51.366 (a)(2)(vi) Vehicles with no known final outcome (regardless of reason)

Vehicles with no known outcome are vehicles that failed the emissions test and show no record of passing the retest. The following methodology was used for this analysis: Track the vehicles VINs through its emission test sequence and if the sequence was not completed (i.e. there was not a passing result for the emissions test through 3/31/07), then the vehicle was counted as having no known outcome. Vehicles were not checked against the registration database, so some of these may have their registrations expired, were junked, or sold out of state.

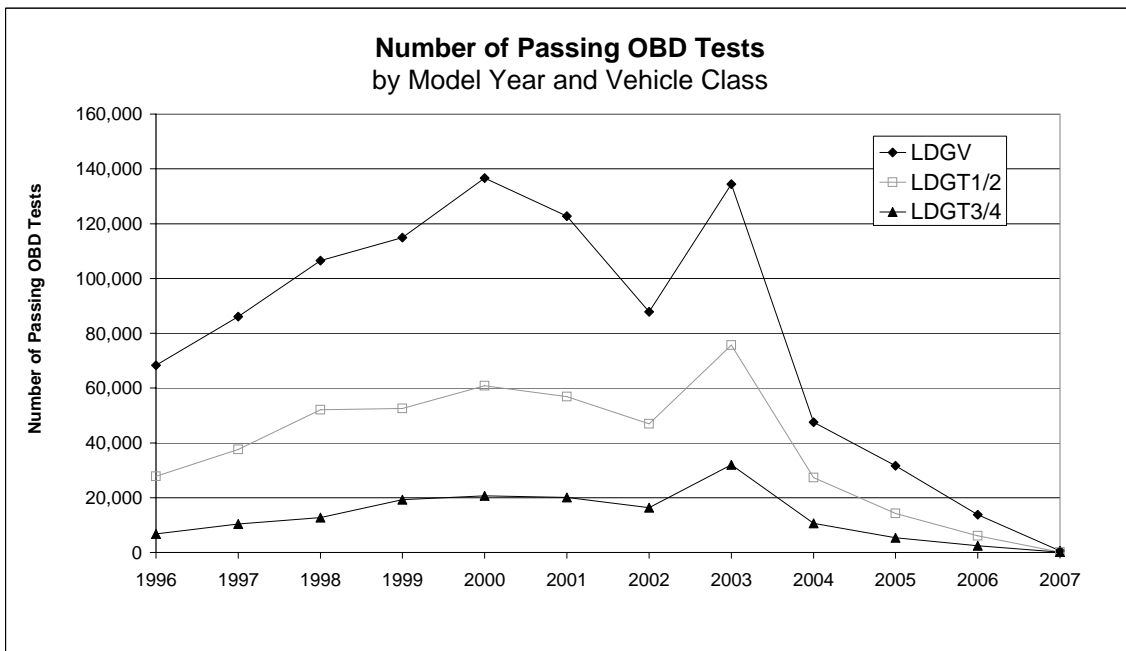
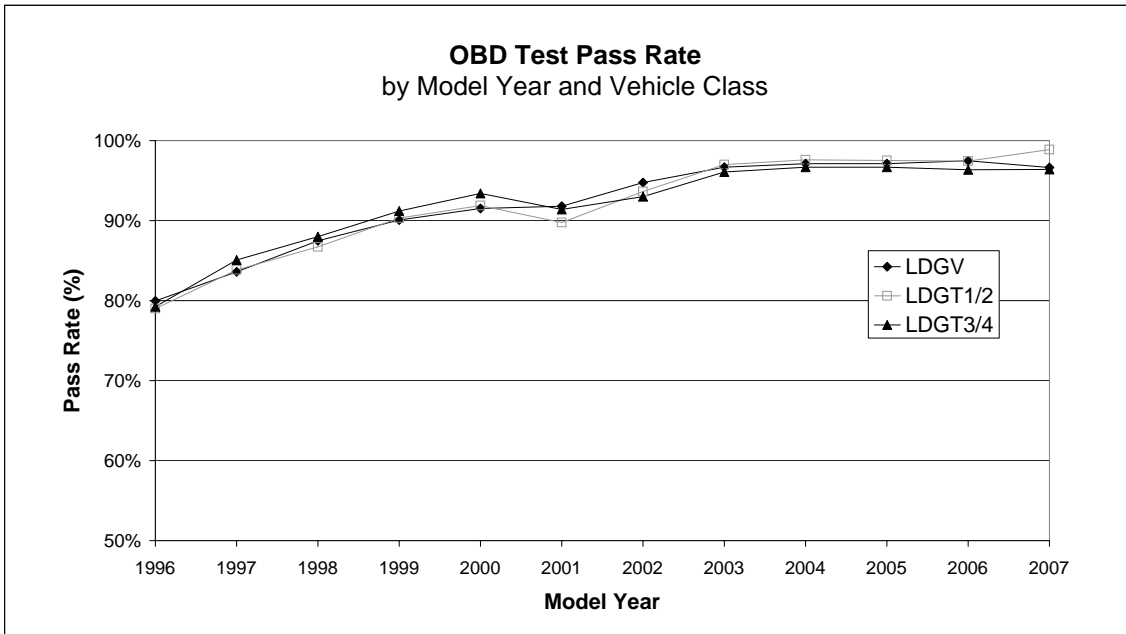
MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			All Gas Vehicles			All Diesel Vehicles			TOTAL		
	No Known Outcome	Vehicles Tested	Rate of Occurrence	No Known Outcome	Vehicles Tested	Rate of Occurrence	No Known Outcome	Vehicles Tested	Rate of Occurrence	No Known Outcome	Vehicles Tested	Rate of Occurrence	No Known Outcome	Vehicles Tested	Rate of Occurrence	No Known Outcome	Vehicles Tested	Rate of Occurrence	No Known Outcome	Vehicles Tested	Rate of Occurrence
1984	184	2,262	8.1%	66	710	9.3%	51	568	9.0%	45	323	13.9%	436	3,863	9.0%	5	483	1.0%	351	3,863	9.1%
1985	244	2,692	9.1%	74	917	8.1%	71	690	10.3%	47	314	15.0%	436	4,613	9.5%	3	476	0.6%	439	4,613	9.5%
1986	449	5,562	8.1%	97	1,821	5.3%	114	1,306	8.7%	63	614	10.3%	723	9,303	7.8%	5	982	0.5%	728	9,303	7.8%
1987	492	6,518	7.5%	98	2,452	4.0%	87	1,253	6.9%	55	575	9.6%	732	10,798	6.8%	9	862	1.0%	741	10,798	6.9%
1988	589	10,881	5.4%	355	4,771	7.4%	146	2,549	5.7%	61	744	8.2%	1,151	18,945	6.1%	9	1,476	0.6%	1,160	18,945	6.1%
1989	634	12,052	5.3%	330	4,281	7.7%	145	2,198	6.6%	42	463	9.1%	1,151	18,994	6.1%	4	731	0.5%	1,155	18,994	6.1%
1990	931	21,009	4.4%	254	4,571	5.6%	103	2,108	4.9%	22	317	6.9%	1,310	28,005	4.7%	7	984	0.7%	1,317	28,005	4.7%
1991	1,391	20,798	6.7%	297	4,967	6.0%	93	1,327	7.0%	13	173	7.5%	1,794	27,255	6.6%	4	512	0.8%	1,798	27,255	6.6%
1992	1,628	35,566	4.6%	414	7,867	5.3%	143	2,774	5.2%	8	285	2.8%	2,193	46,492	4.7%	3	831	0.4%	2,196	46,492	4.7%
1993	1,684	38,784	4.3%	523	11,768	4.4%	143	3,335	4.3%	10	340	2.9%	2,360	54,227	4.4%	5	785	0.6%	2,365	54,227	4.4%
1994	1,396	58,898	2.4%	545	21,307	2.6%	234	7,039	3.3%	15	616	2.4%	2,190	87,860	2.5%	11	1,932	0.6%	2,201	87,860	2.5%
1995	1,090	63,805	1.7%	456	20,836	2.2%	253	7,966	3.2%	23	644	3.6%	1,822	93,251	2.0%	8	1,940	0.4%	1,830	93,251	2.0%
1996	5,449	74,808	7.3%	2,196	30,346	7.2%	653	9,250	7.1%	6	545	1.1%	8,304	114,949	7.2%	5	2,421	0.2%	8,309	114,949	7.2%
1997	4,607	91,806	5.0%	1,864	39,891	4.7%	586	13,854	4.2%	7	954	0.7%	7,064	146,505	4.8%	3	1,941	0.2%	7,067	146,505	4.8%
1998	3,301	110,952	3.0%	1,868	54,535	3.4%	407	15,204	2.7%	6	728	0.8%	5,582	181,419	3.1%	4	3,293	0.1%	5,586	181,419	3.1%
1999	2,460	118,305	2.1%	1,120	54,101	2.1%	402	23,338	1.7%	4	1,150	0.3%	3,986	196,894	2.0%	0	3,110	0.0%	3,986	196,894	2.0%
2000	2,175	139,803	1.6%	868	62,165	1.4%	274	25,779	1.1%	7	1,414	0.5%	3,324	229,161	1.5%	0	5,354	0.0%	3,324	229,161	1.5%
2001	1,649	125,181	1.3%	947	58,301	1.6%	312	25,229	1.2%	0	1,115	0.0%	2,908	209,826	1.4%	1	4,136	0.0%	2,909	209,826	1.4%
2002	686	88,872	0.8%	376	47,595	0.8%	215	20,780	1.0%	1	974	0.1%	1,278	158,221	0.8%	1	2,953	0.0%	1,279	158,221	0.8%
2003	498	135,190	0.4%	195	75,913	0.3%	134	39,659	0.3%	1	1,595	0.1%	828	252,357	0.3%	1	4,293	0.0%	829	252,357	0.3%
2004	110	47,820	0.2%	47	27,416	0.2%	37	12,599	0.3%	0	356	0.0%	194	88,191	0.2%	0	1,805	0.0%	194	88,191	0.2%
2005	44	31,783	0.1%	15	14,332	0.1%	8	6,278	0.1%	0	171	0.0%	67	52,564	0.1%	0	508	0.0%	67	52,564	0.1%
2006	11	13,809	0.1%	2	6,105	0.0%	7	2,817	0.2%	0	58	0.0%	20	22,789	0.1%	0	170	0.0%	20	22,789	0.1%
2007	1	610	0.2%	0	89	0.0%	0	80	0.0%	0	1	0.0%	1	780	0.1%	0	38	0.0%	1	780	0.1%
TOTAL	31,703	1,257,766	2.5%	13,007	557,047	2.3%	4,618	227,980	2.0%	436	14,469	3.0%	49,764	2,057,262	2.4%	88	41,996	0.2%	49,852	2,057,262	2.4%



2006 Massachusetts I&M Program Test Data
51.366 (a)(2)(xi) Passing OBDII Tests by model year and vehicle type

All passing OBDII tests, regardless of Test sequence. The pass rate is calculated as a percentage of all OBDII tests performed. Note: tests include retests for vehicles whose test sequence began prior to 2006 and are not accounted for in the other OBD test data analyses.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Pass	Tested	Pass Rate	Pass	Tested	Pass Rate	Pass	Tested	Pass Rate	Pass	Tested	Pass Rate	Pass	Tested	Pass Rate
1996	68,286	85,408	80.0%	27,738	35,115	79.0%	6,802	8,582	79.3%	0	0	NA	102,826	129,105	79.6%
1997	86,049	102,953	83.6%	37,597	44,853	83.8%	10,441	12,274	85.1%	0	1	0.0%	134,087	160,081	83.8%
1998	106,554	121,804	87.5%	52,096	60,071	86.7%	12,717	14,454	88.0%	0	1	0.0%	171,367	196,330	87.3%
1999	114,872	127,522	90.1%	52,546	58,181	90.3%	19,306	21,173	91.2%	0	0	NA	186,724	206,876	90.3%
2000	136,656	149,350	91.5%	60,901	66,274	91.9%	20,680	22,142	93.4%	2	3	66.7%	218,239	237,769	91.8%
2001	122,706	133,683	91.8%	56,835	63,326	89.7%	20,107	22,002	91.4%	1	1	100.0%	199,649	219,012	91.2%
2002	87,791	92,659	94.7%	46,922	50,113	93.6%	16,364	17,596	93.0%	0	0	NA	151,077	160,368	94.2%
2003	134,409	139,028	96.7%	75,637	77,970	97.0%	31,964	33,262	96.1%	0	0	NA	242,010	250,260	96.7%
2004	47,577	48,985	97.1%	27,317	27,993	97.6%	10,665	11,030	96.7%	1	1	100.0%	85,560	88,009	97.2%
2005	31,665	32,599	97.1%	14,299	14,664	97.5%	5,428	5,615	96.7%	1	1	100.0%	51,393	52,879	97.2%
2006	13,742	14,097	97.5%	6,093	6,252	97.5%	2,435	2,527	96.4%	0	0	NA	22,270	22,876	97.4%
2007	607	628	96.7%	89	90	98.9%	80	83	96.4%	1	1	100.0%	777	802	96.9%
TOTAL	950,914	1,048,716	90.7%	458,070	504,902	90.7%	156,989	170,740	91.9%	6	9	66.7%	1,565,979	1,724,367	90.8%

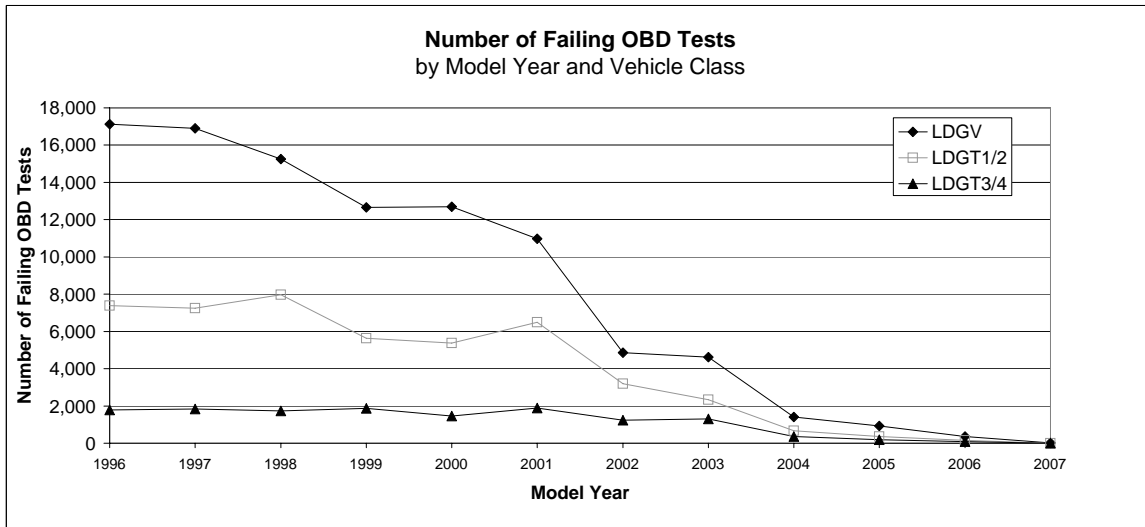
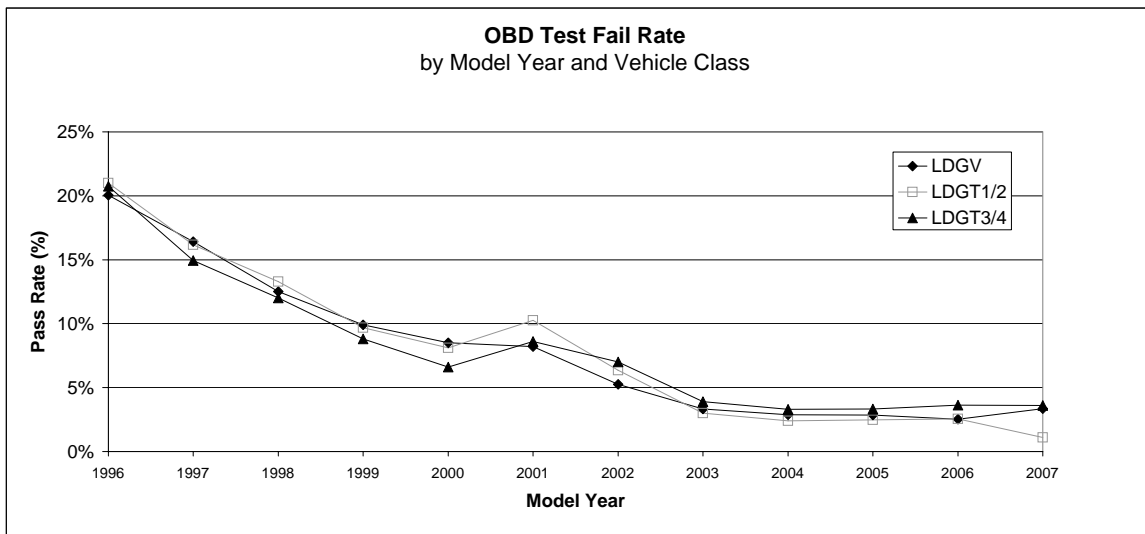


2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(xii) Failing OBDII Tests by model year and vehicle type

All failing OBDII tests, regardless of Test sequence. The fail rate is calculated as a percentage of all OBDII tests performed. Note: tests include retests for vehicles whose test sequence began prior to 2006 and are not accounted for in the other OBD test data analyses.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Fail	Tested	Fail Rate	Fail	Tested	Fail Rate	Fail	Tested	Fail Rate	Fail	Tested	Fail Rate	Fail	Tested	Fail Rate
1996	17,122	85,408	20.0%	7,377	35,115	21.0%	1,780	8,582	20.7%	0	0	NA	26,279	129,105	20.4%
1997	16,904	102,953	16.4%	7,256	44,853	16.2%	1,833	12,274	14.9%	1	1	100.0%	25,994	160,081	16.2%
1998	15,250	121,804	12.5%	7,975	60,071	13.3%	1,737	14,454	12.0%	1	1	100.0%	24,963	196,330	12.7%
1999	12,650	127,522	9.9%	5,635	58,181	9.7%	1,867	21,173	8.8%	0	0	NA	20,152	206,876	9.7%
2000	12,694	149,350	8.5%	5,373	66,274	8.1%	1,462	22,142	6.6%	1	3	33.3%	19,530	237,769	8.2%
2001	10,977	133,683	8.2%	6,491	63,326	10.3%	1,895	22,002	8.6%	0	1	0.0%	19,363	219,012	8.8%
2002	4,868	92,659	5.3%	3,191	50,113	6.4%	1,232	17,596	7.0%	0	0	NA	9,291	160,368	5.8%
2003	4,619	139,028	3.3%	2,333	77,970	3.0%	1,298	33,262	3.9%	0	0	NA	8,250	250,260	3.3%
2004	1,408	48,985	2.9%	676	27,993	2.4%	365	11,030	3.3%	0	1	0.0%	2,449	88,009	2.8%
2005	934	32,599	2.9%	365	14,664	2.5%	187	5,615	3.3%	0	1	0.0%	1,486	52,879	2.8%
2006	355	14,097	2.5%	159	6,252	2.5%	92	2,527	3.6%	0	0	NA	606	22,876	2.6%
2007	21	628	3.3%	1	90	1.1%	3	83	3.6%	0	1	0.0%	25	802	3.1%
TOTAL	97,802	1,048,716	9.3%	46,832	504,902	9.3%	13,751	170,740	8.1%	3	9	33.3%	158,388	1,724,367	9.2%

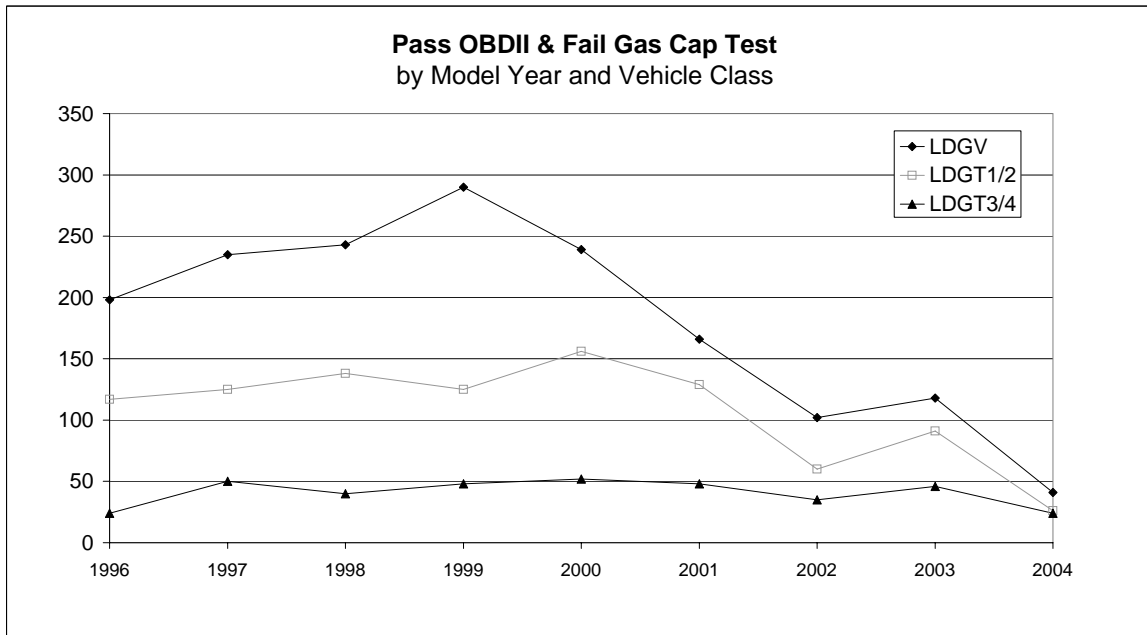
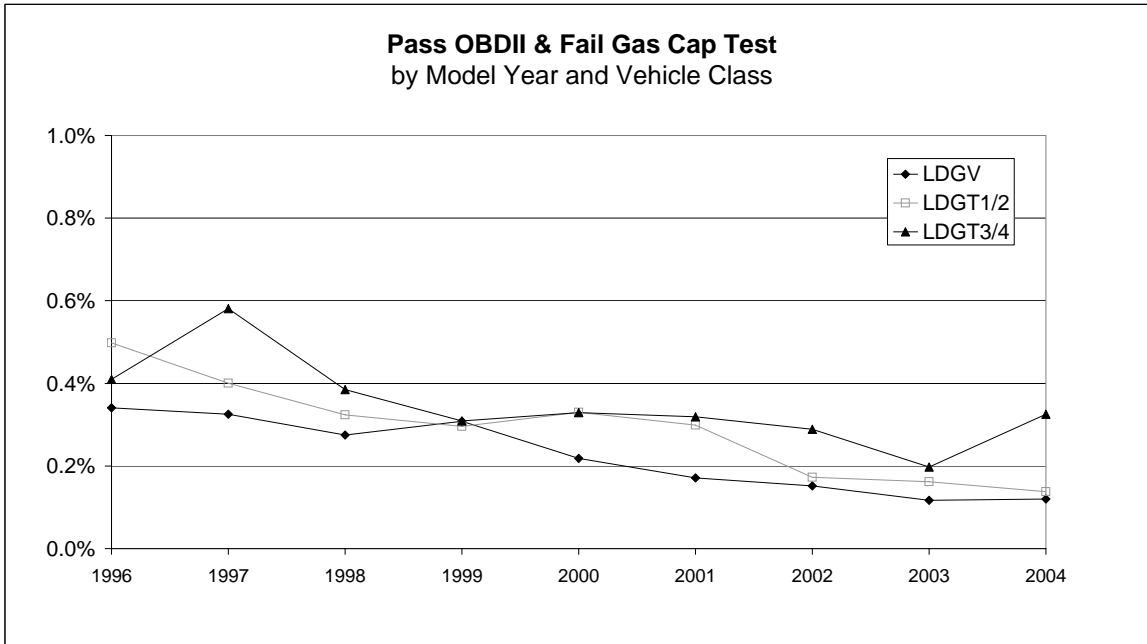


2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(xv) Passing OBDII and Failing Gas Cap Tests by model year and vehicle type

All tests where the vehicle passed the OBDII test and failed the Gas Cap (GC) test. The last year for gas cap testing is model year 2004. The rate of occurrence is calculated as a percentage of all passing OBDII tests that also received a gas cap test.

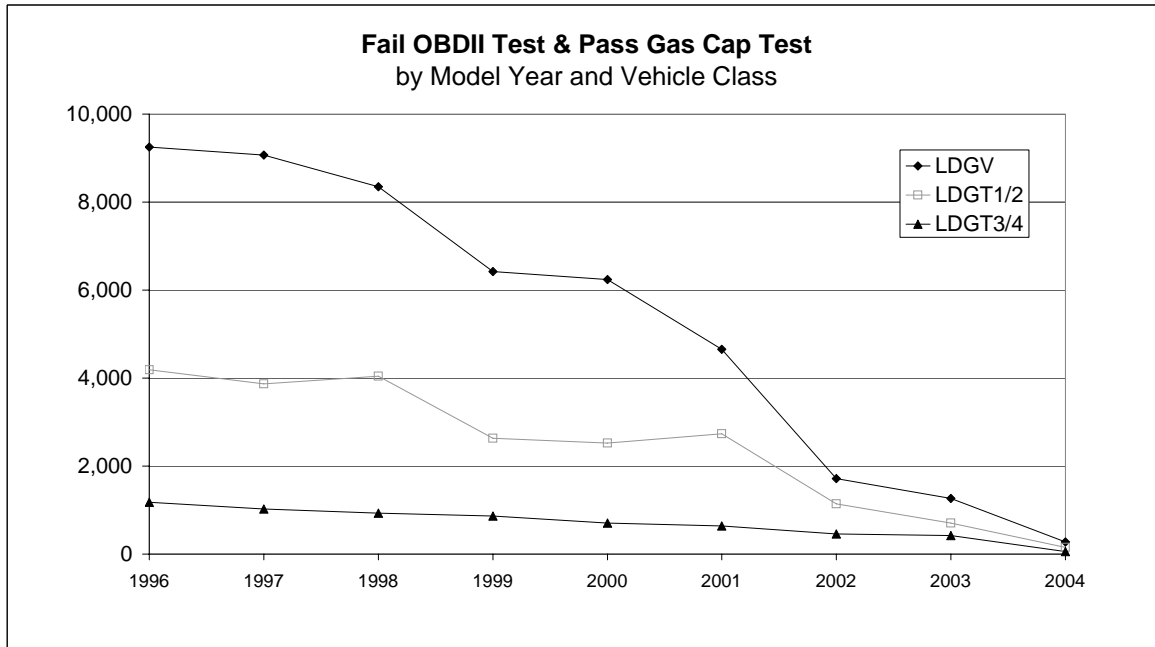
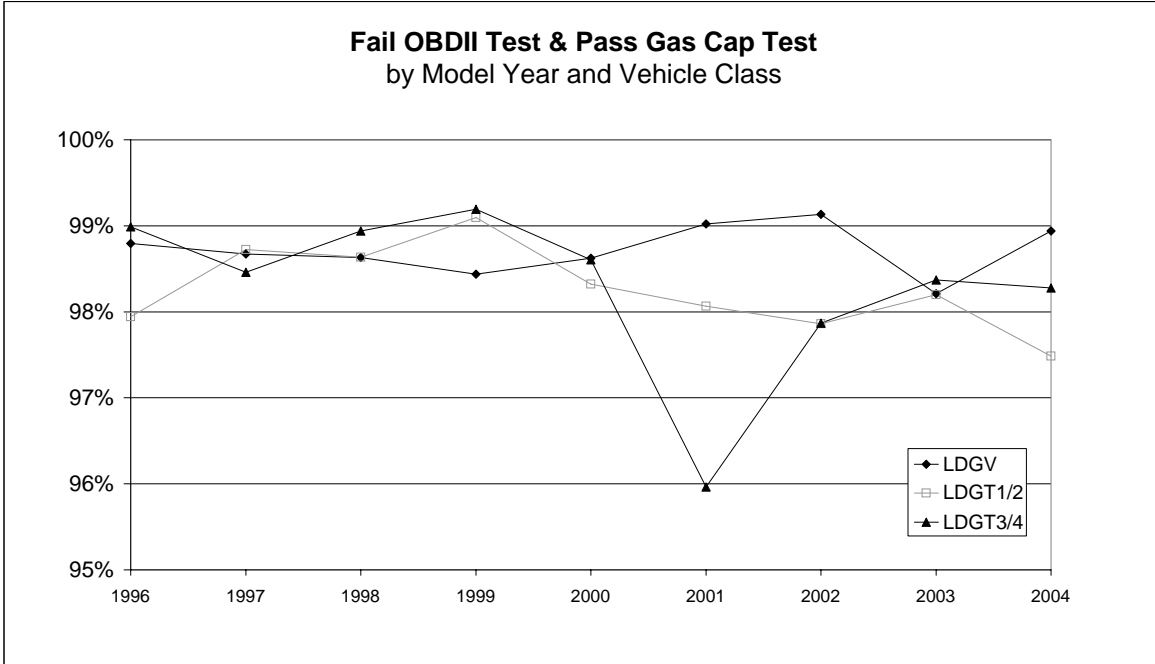
MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Pass OBD & Fail GC	Total OBD Pass with GC test	Rate of Occurrence	Pass OBD & Fail GC	Total OBD Pass with GC test	Rate of Occurrence	Pass OBD & Fail GC	Total OBD Pass with GC test	Rate of Occurrence	Pass OBD & Fail GC	Total OBD Pass with GC test	Rate of Occurrence	Pass OBD & Fail GC	Total OBD Pass with GC test	Rate of Occurrence
1996	198	58,142	0.3%	117	23,497	0.5%	24	5,853	0.4%	0	0	NA	339	87,492	0.4%
1997	235	72,295	0.3%	125	31,192	0.4%	50	8,606	0.6%	0	0	NA	410	112,093	0.4%
1998	243	88,444	0.3%	138	42,640	0.3%	40	10,384	0.4%	0	0	NA	421	141,468	0.3%
1999	290	94,103	0.3%	125	42,266	0.3%	48	15,527	0.3%	0	0	NA	463	151,896	0.3%
2000	239	109,379	0.2%	156	47,228	0.3%	52	15,785	0.3%	0	2	0.0%	447	172,394	0.3%
2001	166	96,896	0.2%	129	43,109	0.3%	48	15,047	0.3%	0	1	0.0%	343	155,053	0.2%
2002	102	67,067	0.2%	60	34,740	0.2%	35	12,128	0.3%	0	0	NA	197	113,935	0.2%
2003	118	100,986	0.1%	91	56,283	0.2%	46	23,298	0.2%	0	0	NA	255	180,567	0.1%
2004	41	34,160	0.1%	26	18,875	0.1%	24	7,372	0.3%	0	1	0.0%	91	60,408	0.2%
TOTAL	1,632	721,472	0.2%	967	339,830	0.3%	367	114,000	0.3%	0	4	0.0%	2,966	1,175,306	0.25%



2006 Massachusetts I&M Program Test Data
51.366 (a)(2)(xvi) Failing OBDII and Passing Gas Cap Test by model year and vehicle type

All tests where the vehicle failed the OBDII Pass/Fail test and passed the Gas Cap (GC) test. The last year for gas cap testing is model year 2004. The rate of occurrence is calculated as a percentage of all failing OBDII tests that also received a gas cap test.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Fail OBD & Pass GC	Total OBD Fail with GC test	Rate of Occurrence	Fail OBD & Pass GC	Total OBD Fail with GC test	Rate of Occurrence	Fail OBD & Pass GC	Total OBD Fail with GC test	Rate of Occurrence	Fail OBD & Pass GC	Total OBD Fail with GC test	Rate of Occurrence	Fail OBD & Pass GC	Total OBD Fail with GC test	Rate of Occurrence
1996	9,252	9,365	98.8%	4,190	4,278	97.9%	1,175	1,187	99.0%	0	0	NA	14,617	14,830	98.6%
1997	9,070	9,192	98.7%	3,868	3,918	98.7%	1,022	1,038	98.5%	1	1	100.0%	13,961	14,149	98.7%
1998	8,352	8,468	98.6%	4,041	4,097	98.6%	933	943	98.9%	0	0	NA	13,326	13,508	98.7%
1999	6,419	6,521	98.4%	2,633	2,657	99.1%	862	869	99.2%	0	0	NA	9,914	10,047	98.7%
2000	6,237	6,324	98.6%	2,522	2,565	98.3%	706	716	98.6%	1	1	100.0%	9,466	9,606	98.5%
2001	4,656	4,702	99.0%	2,735	2,789	98.1%	642	669	96.0%	0	0	NA	8,033	8,160	98.4%
2002	1,715	1,730	99.1%	1,143	1,168	97.9%	459	469	97.9%	0	0	NA	3,317	3,367	98.5%
2003	1,262	1,285	98.2%	709	722	98.2%	423	430	98.4%	0	0	NA	2,394	2,437	98.2%
2004	280	283	98.9%	155	159	97.5%	57	58	98.3%	0	0	NA	492	500	98.4%
TOTAL	47,243	47,870	98.7%	21,996	22,353	98.4%	6,279	6,379	98.4%	2	2	100.0%	75,520	76,604	98.6%

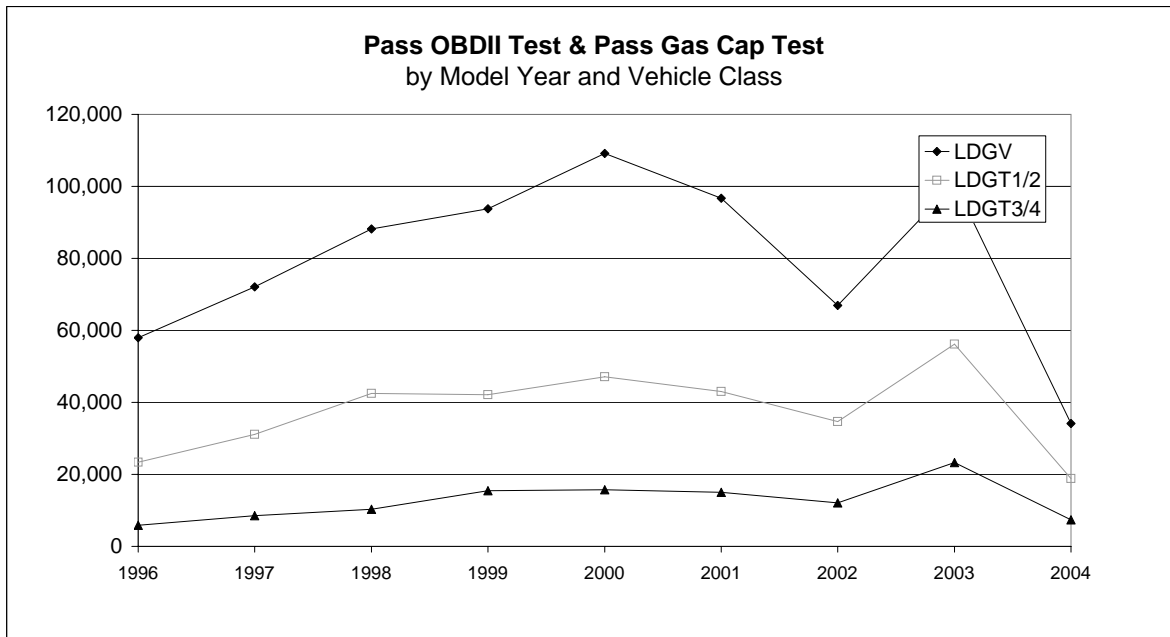
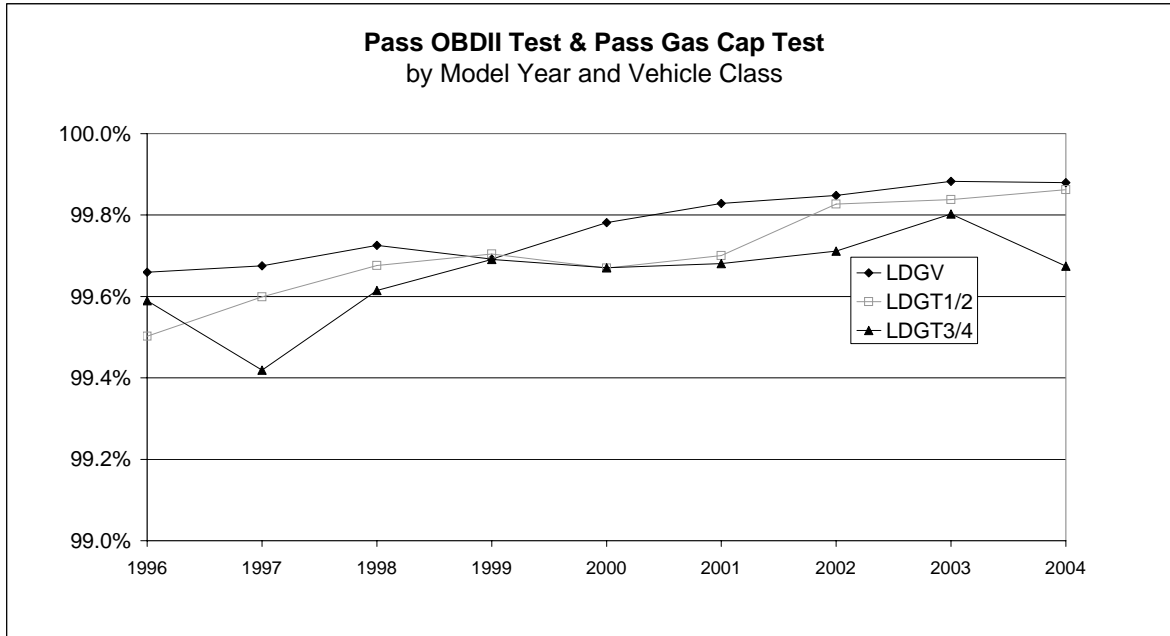


2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(xvii) Passing OBDII and Passing Gas Cap Tests by model year and vehicle type

All tests where the vehicle passed the OBDII test and passed the Gas Cap (GC) test. The last model year for gas cap testing is 2004. The rate of occurrence is calculated as a percentage of all passing OBDII tests that also received a gas cap test.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Pass OBD & Pass GC	Total OBD Pass with GC test	Rate of Occurrence	Pass OBD & Pass GC	Total OBD Pass with GC test	Rate of Occurrence	Pass OBD & Pass GC	Total OBD Pass with GC test	Rate of Occurrence	Pass OBD & Pass GC	Total OBD Pass with GC test	Rate of Occurrence	Pass OBD & Pass GC	Total OBD Pass with GC test	Rate of Occurrence
1996	57,944	58,142	99.7%	23,380	23,497	99.5%	5,829	5,853	99.6%	0	0	NA	87,153	87,492	99.6%
1997	72,060	72,295	99.7%	31,067	31,192	99.6%	8,556	8,606	99.4%	0	0	NA	111,683	112,093	99.6%
1998	88,201	88,444	99.7%	42,502	42,640	99.7%	10,344	10,384	99.6%	0	0	NA	141,047	141,468	99.7%
1999	93,813	94,103	99.7%	42,141	42,266	99.7%	15,479	15,527	99.7%	0	0	NA	151,433	151,896	99.7%
2000	109,140	109,379	99.8%	47,072	47,228	99.7%	15,733	15,785	99.7%	2	2	100.0%	171,947	172,394	99.7%
2001	96,730	96,896	99.8%	42,980	43,109	99.7%	14,999	15,047	99.7%	1	1	100.0%	154,710	155,053	99.8%
2002	66,965	67,067	99.8%	34,680	34,740	99.8%	12,093	12,128	99.7%	0	0	NA	113,738	113,935	99.8%
2003	100,868	100,986	99.9%	56,192	56,283	99.8%	23,252	23,298	99.8%	0	0	NA	180,312	180,567	99.9%
2004	34,119	34,160	99.9%	18,849	18,875	99.9%	7,348	7,372	99.7%	1	1	100.0%	60,317	60,408	99.8%
TOTAL	719,840	721,472	99.8%	338,863	339,830	99.7%	113,633	114,000	99.7%	4	4	100.0%	1,172,340	1,175,306	99.7%

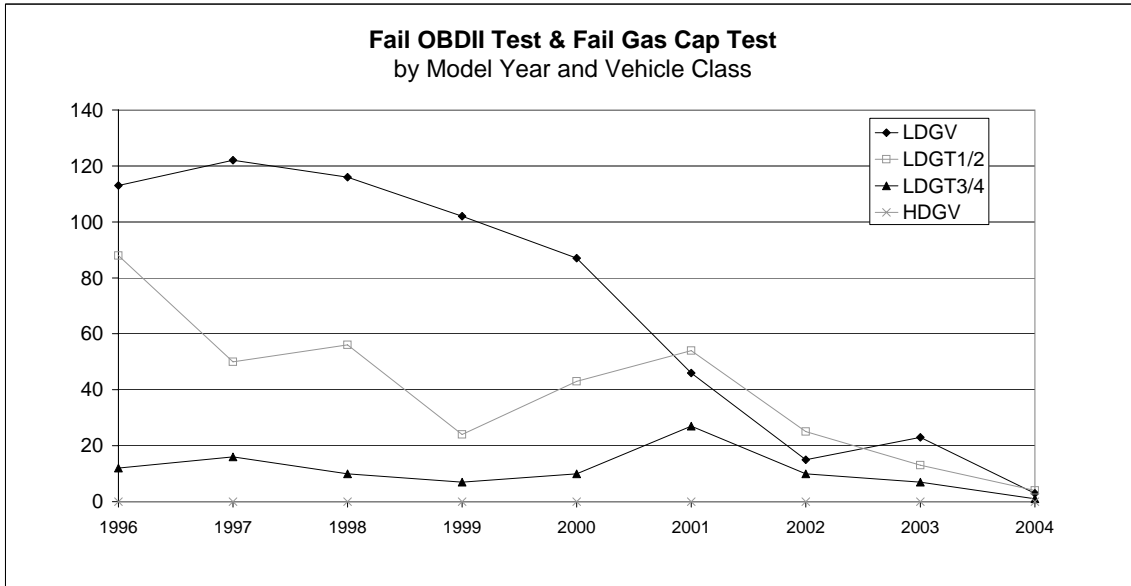
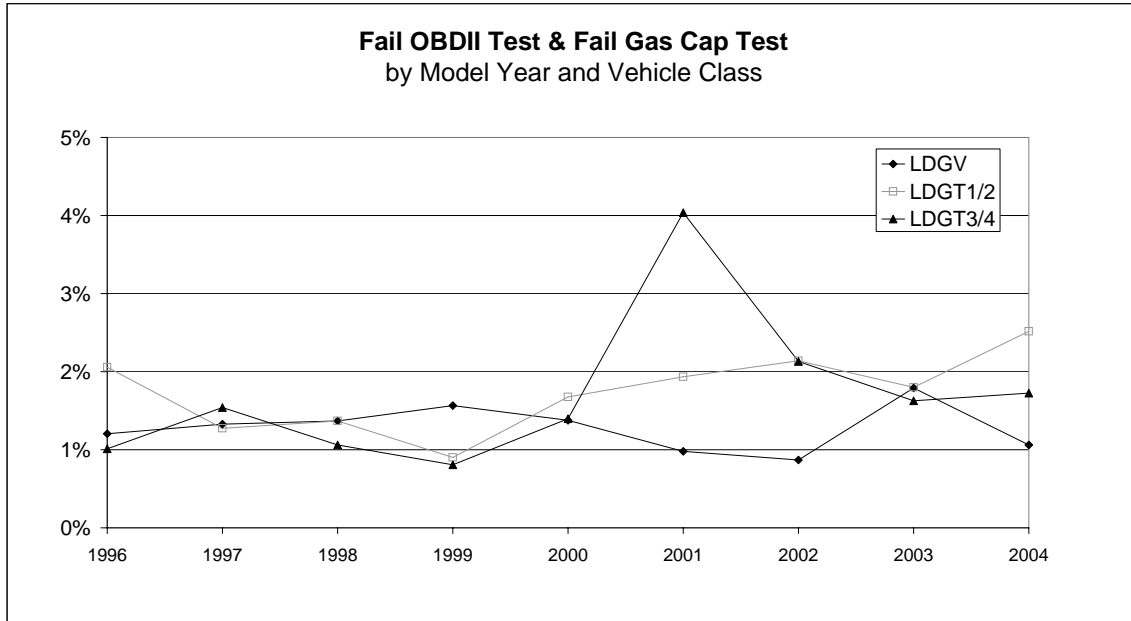


2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(viii) Failing OBDII and Failing Gas Cap Test by model year and vehicle type

All tests where the vehicle failed the OBDII test and failed the Gas Cap (GC) test. The last model year for gas cap testing is 2004. The rate of occurrence is calculated as a percentage of all failing OBDII tests that also received a gas cap test.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Fail OBD & Fail GC	Total OBD Fail with GC test	Rate of Occurrence	Fail OBD & Fail GC	Total OBD Fail with GC test	Rate of Occurrence	Fail OBD & Fail GC	Total OBD Fail with GC test	Rate of Occurrence	Fail OBD & Fail GC	Total OBD Fail with GC test	Rate of Occurrence	Fail OBD & Fail GC	Total OBD Fail with GC test	Rate of Occurrence
1996	113	9,365	1.2%	88	4,278	2.1%	12	1,187	1.0%	0	0	NA	213	14,830	1.4%
1997	122	9,192	1.3%	50	3,918	1.3%	16	1,038	1.5%	0	1	0.0%	188	14,149	1.3%
1998	116	8,468	1.4%	56	4,097	1.4%	10	943	1.1%	0	0	NA	182	13,508	1.3%
1999	102	6,521	1.6%	24	2,657	0.9%	7	869	0.8%	0	0	NA	133	10,047	1.3%
2000	87	6,324	1.4%	43	2,565	1.7%	10	716	1.4%	0	1	0.0%	140	9,606	1.5%
2001	46	4,702	1.0%	54	2,789	1.9%	27	669	4.0%	0	0	NA	127	8,160	1.6%
2002	15	1,730	0.9%	25	1,168	2.1%	10	469	2.1%	0	0	NA	50	3,367	1.5%
2003	23	1,285	1.8%	13	722	1.8%	7	430	1.6%	0	0	NA	43	2,437	1.8%
2004	3	283	1.1%	4	159	2.5%	1	58	1.7%	0	0	NA	8	500	1.6%
TOTAL	627	47,870	1.3%	357	22,353	1.6%	100	6,379	1.6%	0	2	0.0%	1,084	76,604	1.4%

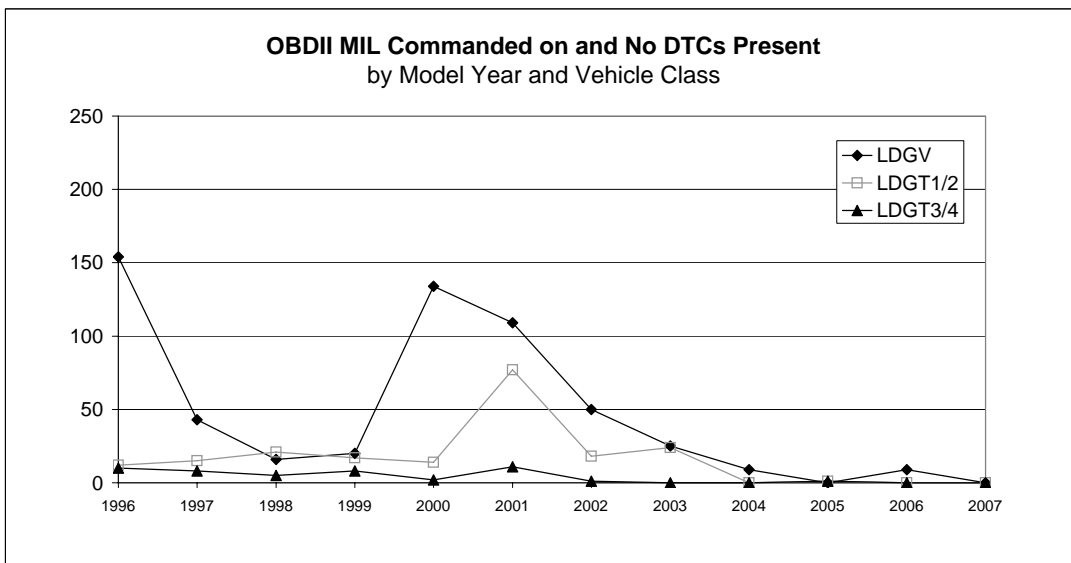
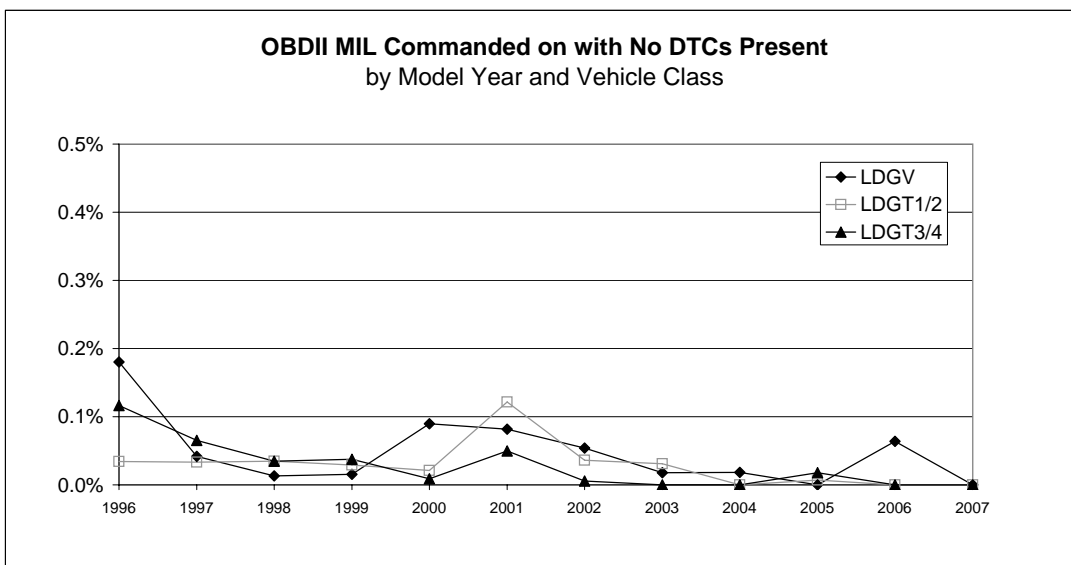


2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(xix) OBDII tests where the MIL is commanded on and no codes (DTCs) are stored by model year and vehicle type

All OBDII tests where the OBDII MIL was commanded on and no diagnostic trouble codes (DTCs) were present. The rate of occurrence is calculated as a percentage of total OBD Tests performed. Vehicles with damaged, missing, or obstructed DLCs and vehicles that could not communicate with the test equipment were included in the OBD test totals but did not have any MIL or DTC data to report. For this reason, the MIL/DTC combinations in (2)(xix) through (2)(xxii) do not add up to the total OBD tested.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	MIL on w/ no DTCs	Total OBD Tested	Rate of Occurrence	MIL on w/ no DTCs	Total OBD Tested	Rate of Occurrence	MIL on w/ no DTCs	Total OBD Tested	Rate of Occurrence	MIL on w/ no DTCs	Total OBD Tested	Rate of Occurrence	MIL on w/ no DTCs	Total OBD Tested	Rate of Occurrence
1996	154	85,408	0.18%	12	35,115	0.03%	10	8,582	0.12%	0	0	NA	176	129,105	0.1%
1997	43	102,953	0.04%	15	44,853	0.03%	8	12,274	0.07%	0	1	0.00%	66	160,081	0.0%
1998	16	121,804	0.01%	21	60,071	0.03%	5	14,454	0.03%	0	1	0.00%	42	196,330	0.0%
1999	20	127,522	0.02%	17	58,181	0.03%	8	21,173	0.04%	0	0	NA	45	206,876	0.0%
2000	134	149,350	0.09%	14	66,274	0.02%	2	22,142	0.01%	0	3	0.00%	150	237,769	0.1%
2001	109	133,683	0.08%	77	63,326	0.12%	11	22,002	0.05%	0	1	0.00%	197	219,012	0.1%
2002	50	92,659	0.05%	18	50,113	0.04%	1	17,596	0.01%	0	0	NA	69	160,368	0.0%
2003	25	139,028	0.02%	24	77,970	0.03%	0	33,262	0.00%	0	0	NA	49	250,260	0.0%
2004	9	48,985	0.02%	0	27,993	0.00%	0	11,030	0.00%	0	1	0.00%	9	88,009	0.0%
2005	0	32,599	0.00%	1	14,664	0.01%	1	5,615	0.02%	0	1	0.00%	2	52,879	0.0%
2006	9	14,097	0.06%	0	6,252	0.00%	0	2,527	0.00%	0	0	NA	9	22,876	0.0%
2007	0	628	0.00%	0	90	0.00%	0	83	0.00%	0	1	0.00%	0	802	0.0%
TOTAL	569	1,048,716	0.05%	199	504,902	0.04%	46	170,740	0.03%	0	9	0.00%	814	1,724,367	0.0%



2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(xx) OBDII tests where the MIL is NOT commanded on but codes (DTCs) are stored by model year and vehicle type

All tests where the OBDII MIL was not commanded on and there were diagnostic trouble codes (DTCs) present. The workstation software had been modified to ignore pending DTCs if the MIL is not commanded on. The rate of occurrence is calculated as a percentage of total OBDII tests performed. MassDEP believes these are pending codes that are being recorded. The presence of DTCs without the MIL commanded on will not cause the vehicle to fail the OBDII test.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	DTCs present w/ MIL off	Total OBD Tested	Rate of Occurrence	DTCs present w/ MIL off	Total OBD Tested	Rate of Occurrence	DTCs present w/ MIL off	Total OBD Tested	Rate of Occurrence	DTCs present w/ MIL off	Total OBD Tested	Rate of Occurrence	DTCs present w/ MIL off	Total OBD Tested	Rate of Occurrence
1996	0	85,408	0.00%	1	35,115	0.00%	0	8,582	0.00%	0	0	NA	1	129,105	0.00%
1997	1	102,953	0.00%	0	44,853	0.00%	0	12,274	0.00%	0	1	0.00%	1	160,081	0.00%
1998	0	121,804	0.00%	0	60,071	0.00%	1	14,454	0.01%	0	1	0.00%	1	196,330	0.00%
1999	1	127,522	0.00%	0	58,181	0.00%	0	21,173	0.00%	0	0	NA	1	206,876	0.00%
2000	0	149,350	0.00%	0	66,274	0.00%	0	22,142	0.00%	0	3	0.00%	0	237,769	0.00%
2001	0	133,683	0.00%	0	63,326	0.00%	0	22,002	0.00%	0	1	0.00%	0	219,012	0.00%
2002	0	92,659	0.00%	0	50,113	0.00%	0	17,596	0.00%	0	0	NA	0	160,368	0.00%
2003	0	139,028	0.00%	0	77,970	0.00%	0	33,262	0.00%	0	0	NA	0	250,260	0.00%
2004	0	48,985	0.00%	0	27,993	0.00%	0	11,030	0.00%	0	1	0.00%	0	88,009	0.00%
2005	0	32,599	0.00%	0	14,664	0.00%	0	5,615	0.00%	0	1	0.00%	0	52,879	0.00%
2006	0	14,097	0.00%	0	6,252	0.00%	0	2,527	0.00%	0	0	NA	0	22,876	0.00%
2007	0	628	0.00%	0	90	0.00%	0	83	0.00%	0	1	0.00%	0	802	0.00%
TOTAL	2	1,048,716	0.00%	1	504,902	0.00%	1	170,740	0.00%	0	9	0.00%	4	1,724,367	0.00%

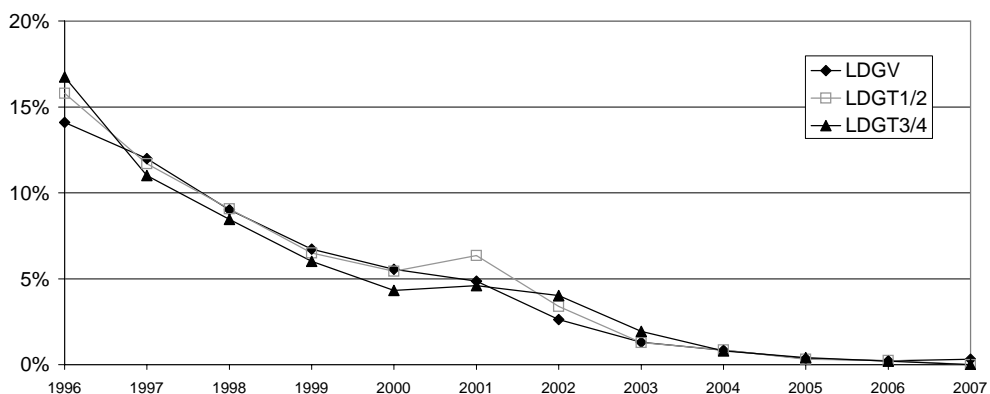
2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(xxi) OBDII tests where the MIL is commanded and codes (DTCs) are stored by model year and vehicle type.

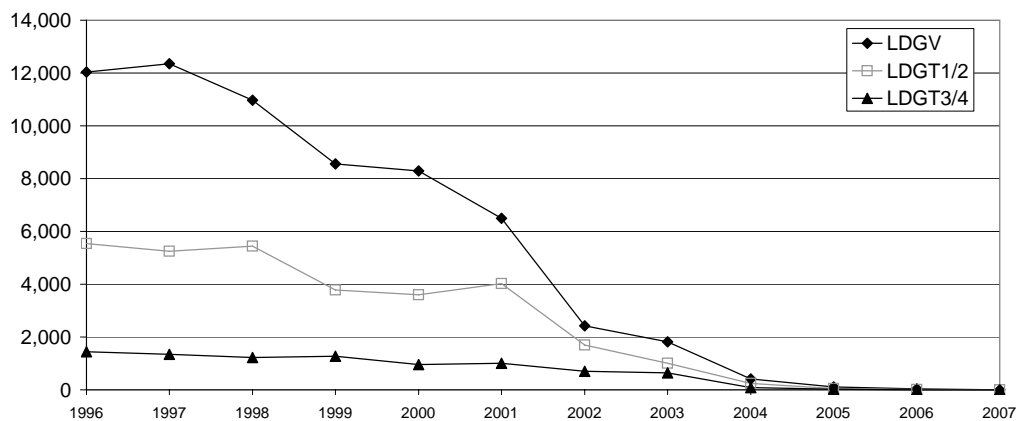
All OBDII tests where the MIL was commanded on and there were diagnostic trouble codes (DTCs) present. The rate of occurrence is calculated as a percentage of total OBDII tests performed.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	MIL on w/ DTCs	Total OBD Tested	Rate of Occurrence	MIL on w/ DTCs	Total OBD Tested	Rate of Occurrence	MIL on w/ DTCs	Total OBD Tested	Rate of Occurrence	MIL on w/ DTCs	Total OBD Tested	Rate of Occurrence	MIL on w/ DTCs	Total OBD Tested	Rate of Occurrence
1996	12,040	85,408	14.1%	5,542	35,115	15.8%	1,437	8,582	16.7%	0	0	NA	19,019	129,105	14.7%
1997	12,350	102,953	12.0%	5,249	44,853	11.7%	1,351	12,274	11.0%	0	1	0.0%	18,950	160,081	11.8%
1998	10,971	121,804	9.0%	5,445	60,071	9.1%	1,221	14,454	8.4%	0	1	0.0%	17,637	196,330	9.0%
1999	8,561	127,522	6.7%	3,780	58,181	6.5%	1,273	21,173	6.0%	0	0	NA	13,614	206,876	6.6%
2000	8,290	149,350	5.6%	3,603	66,274	5.4%	956	22,142	4.3%	0	3	0.0%	12,849	237,769	5.4%
2001	6,491	133,683	4.9%	4,026	63,326	6.4%	1,012	22,002	4.6%	0	1	0.0%	11,529	219,012	5.3%
2002	2,425	92,659	2.6%	1,702	50,113	3.4%	709	17,596	4.0%	0	0	NA	4,836	160,368	3.0%
2003	1,820	139,028	1.3%	1,004	77,970	1.3%	643	33,262	1.9%	0	0	NA	3,467	250,260	1.4%
2004	411	48,985	0.8%	242	27,993	0.9%	89	11,030	0.8%	1	1	100.0%	743	88,009	0.8%
2005	114	32,599	0.3%	47	14,664	0.3%	23	5,615	0.4%	0	1	0.0%	184	52,879	0.3%
2006	31	14,097	0.2%	15	6,252	0.2%	5	2,527	0.2%	0	0	NA	51	22,876	0.2%
2007	2	628	0.3%	0	90	0.0%	0	83	0.0%	0	1	0.0%	2	802	0.2%
TOTAL	63,506	1,048,716	6.1%	30,855	504,902	6.1%	8,719	170,740	5.1%	1	9	11.1%	102,881	1,724,367	6.0%

OBDII MIL Commanded on with DTCs Present
by Model Year and Vehicle Class



OBDII MIL Commanded on with DTCs Present
by Model Year and Vehicle Class

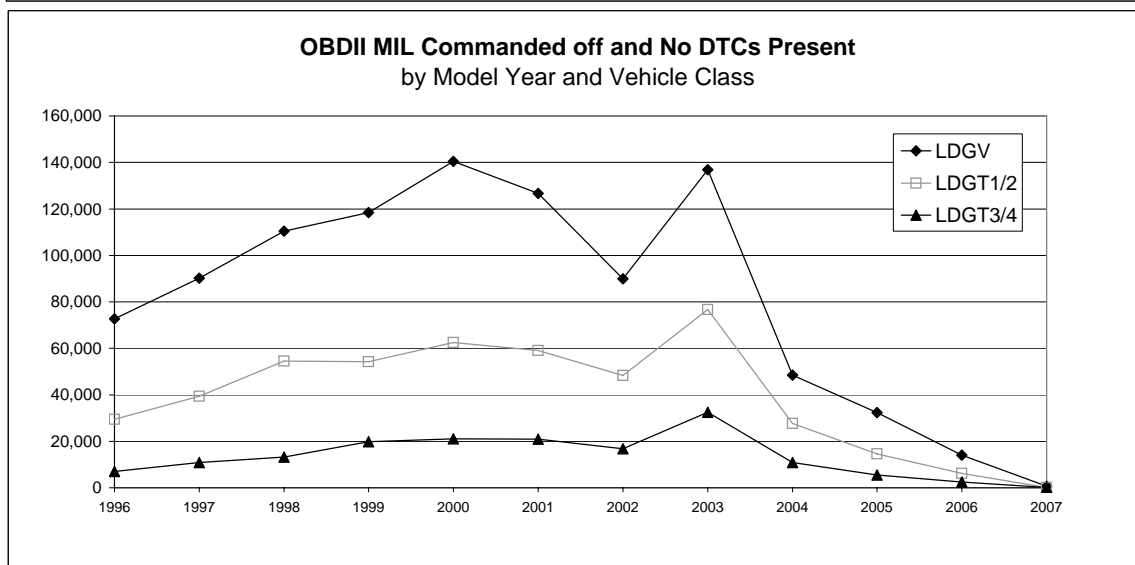
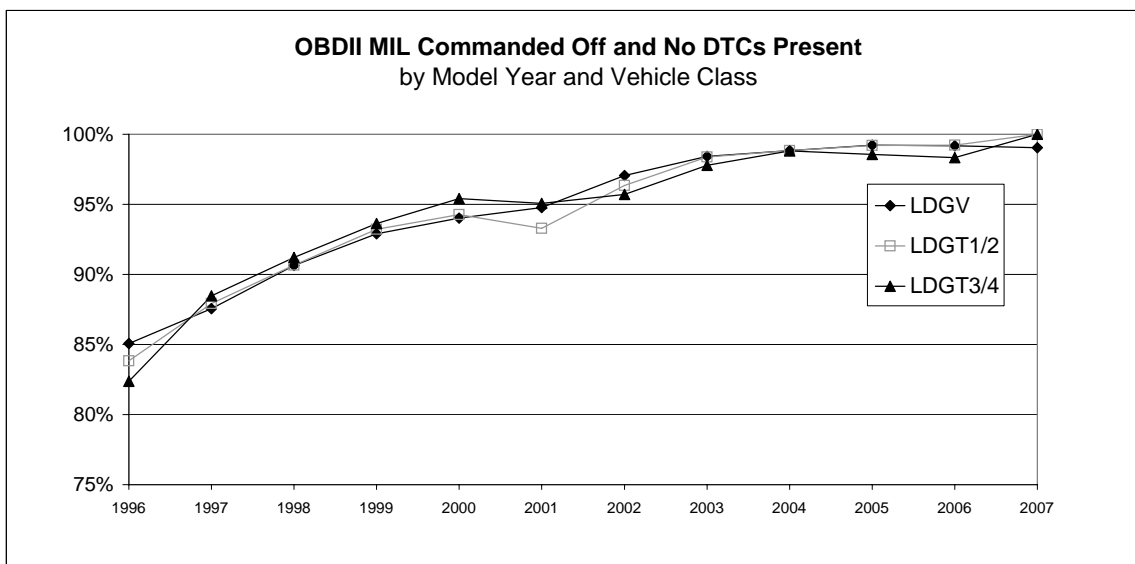


2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(xxii) OBDII tests where the MIL is not commanded on and no codes (DTCs) are stored by model year and vehicle type

All OBDII tests where the MIL was NOT commanded on and there were no diagnostic trouble codes (DTCs) present. The rate of occurrence is calculated as a percentage of total OBDII tests performed.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	MIL off & no DTCs	Total OBD Tested	Rate of Occurrence	MIL off & no DTCs	Total OBD Tested	Rate of Occurrence	MIL off & no DTCs	Total OBD Tested	Rate of Occurrence	MIL off & no DTCs	Total OBD Tested	Rate of Occurrence	MIL off & no DTCs	Total OBD Tested	Rate of Occurrence
1996	72,653	85,408	85.1%	29,436	35,115	83.8%	7,070	8,582	82.4%	0	0	NA	109,159	129,105	84.6%
1997	90,151	102,953	87.6%	39,438	44,853	87.9%	10,860	12,274	88.5%	0	1	0.0%	140,449	160,081	87.7%
1998	110,397	121,804	90.6%	54,464	60,071	90.7%	13,183	14,454	91.2%	0	1	0.0%	178,044	196,330	90.7%
1999	118,468	127,522	92.9%	54,238	58,181	93.2%	19,822	21,173	93.6%	0	0	NA	192,528	206,876	93.1%
2000	140,400	149,350	94.0%	62,483	66,274	94.3%	21,126	22,142	95.4%	2	3	66.7%	224,011	237,769	94.2%
2001	126,704	133,683	94.8%	59,072	63,326	93.3%	20,917	22,002	95.1%	1	1	100.0%	206,694	219,012	94.4%
2002	89,935	92,659	97.1%	48,282	50,113	96.3%	16,839	17,596	95.7%	0	0	NA	155,056	160,368	96.7%
2003	136,830	139,028	98.4%	76,714	77,870	98.4%	32,529	33,262	97.8%	0	0	NA	246,073	250,260	98.3%
2004	48,413	48,985	98.8%	27,669	27,993	98.8%	10,900	11,030	98.8%	1	1	100.0%	86,983	88,009	98.8%
2005	32,349	32,599	99.2%	14,548	14,664	99.2%	5,534	5,615	98.6%	1	1	100.0%	52,432	52,879	99.2%
2006	13,982	14,097	99.2%	6,203	6,252	99.2%	2,485	2,527	98.3%	0	0	NA	22,670	22,876	99.1%
2007	622	628	99.0%	90	90	100.0%	83	83	100.0%	1	1	100.0%	796	802	99.3%
TOTAL	980,904	1,048,716	93.5%	472,637	504,902	93.6%	161,348	170,740	94.5%	6	9	66.7%	1,614,895	1,724,367	93.7%

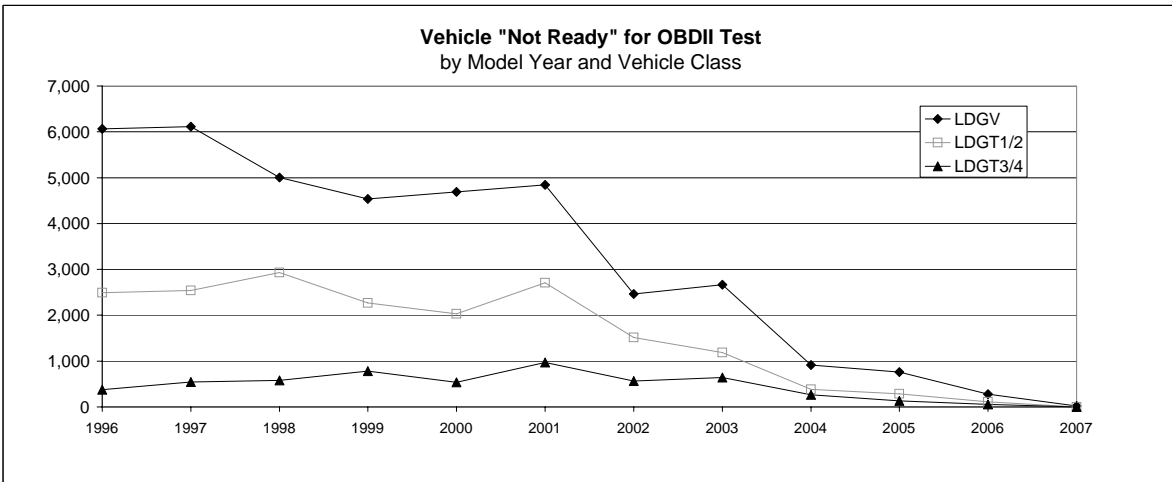
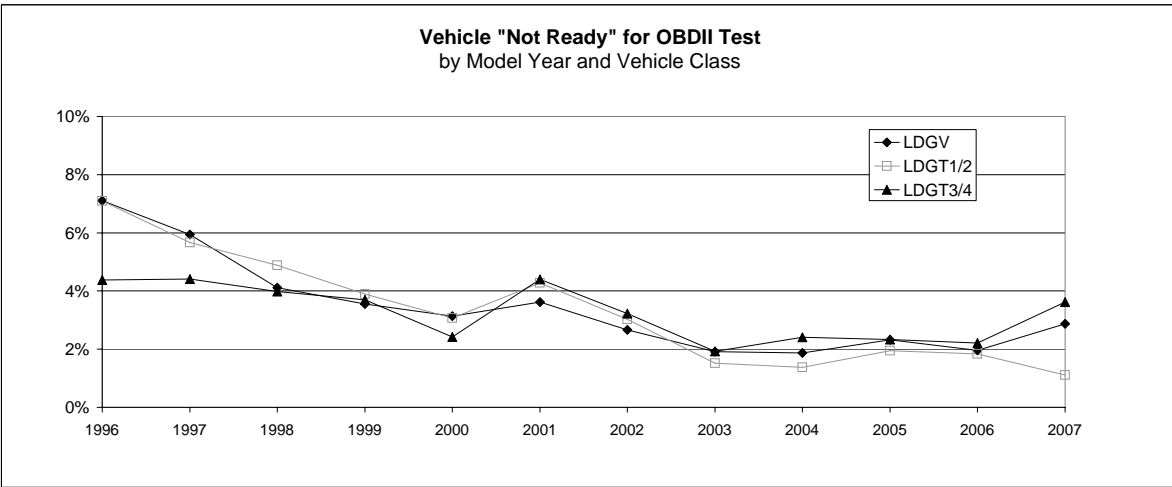


2006 Massachusetts I&M Program Test Data

51.366 (a)(2)(xxiii) Readiness status indicates that the evaluation is not complete for any module supported by on-board diagnostic systems

For OBDII testing, vehicles are considered "Not Ready" when 2 or more supported monitors are "Not Ready" for vehicles model years 2000 and older. Vehicles model years 2001 and newer are considered "Not Ready" when 1 or more supported monitors are "Not Ready". The rate of occurrence is calculated as a percentage of total OBDII tests performed.

MODEL YEAR	LDGV			LDGT1/2			LDGT3/4			HDGV			TOTAL		
	Vehicles Not Ready	Total OBD Tested	Rate of Occurrence	Vehicles Not Ready	Total OBD Tested	Rate of Occurrence	Vehicles Not Ready	Total OBD Tested	Rate of Occurrence	Vehicles Not Ready	Total OBD Tested	Rate of Occurrence	Vehicles Not Ready	Total OBD Tested	Rate of Occurrence
1996	6,067	85,408	7.1%	2,491	35,115	7.1%	376	8,582	4.4%	0	0	NA	8,934	129,105	6.9%
1997	6,117	102,953	5.9%	2,542	44,853	5.7%	542	12,274	4.4%	0	1	0.0%	9,201	160,081	5.7%
1998	5,006	121,804	4.1%	2,931	60,071	4.9%	576	14,454	4.0%	0	1	0.0%	8,513	196,330	4.3%
1999	4,538	127,522	3.6%	2,268	58,181	3.9%	782	21,173	3.7%	0	0	NA	7,588	206,876	3.7%
2000	4,689	149,350	3.1%	2,032	66,274	3.1%	535	22,142	2.4%	1	3	33.3%	7,257	237,769	3.1%
2001	4,843	133,683	3.6%	2,709	63,326	4.3%	968	22,002	4.4%	0	1	0.0%	8,520	219,012	3.9%
2002	2,465	92,659	2.7%	1,516	50,113	3.0%	568	17,596	3.2%	0	0	NA	4,549	160,368	2.8%
2003	2,665	139,028	1.9%	1,185	77,970	1.5%	640	33,262	1.9%	0	0	NA	4,490	250,260	1.8%
2004	914	48,985	1.9%	386	27,993	1.4%	266	11,030	2.4%	0	1	0.0%	1,566	88,009	1.8%
2005	758	32,599	2.3%	285	14,664	1.9%	131	5,615	2.3%	0	1	0.0%	1,174	52,879	2.2%
2006	276	14,097	2.0%	115	6,252	1.8%	56	2,527	2.2%	0	0	NA	447	22,876	2.0%
2007	15	628	2.9%	1	90	1.1%	3	83	3.6%	0	1	0.0%	22	802	2.7%
TOTAL	38,356	1,048,716	3.7%	18,461	504,902	3.7%	5,443	170,740	3.2%	1	9	11.1%	62,261	1,724,367	3.6%



2006 Massachusetts I&M Program Test Data

51.366 (5) Average change in Transient Test Emissions after repairs by model year and vehicle type

Average change in emissions due to repair was determined using the following method: calculate the average emissions for vehicles that failed the initial transient test, calculate the average emissions for initially failing vehicles that passed the transient test, and calculate the percent difference between the two averages. The overall averages by vehicle class and model year were determined by taking the sum of the weighted averages [(Avg emissions) * (# of vehicles tested)] for each model year or vehicle class and dividing by the total number of vehicles tested for the model year or vehicle class. For post-repair tests, the vehicles and their emissions that were considered were the group of vehicles that received an initial retest after a previous transient failure.

AVG. HYDROCARBONS (g/ml)

MODEL YEAR	LDGV					LDG1/2					LDG3/4					OVERALL				
	Pre-Repair # of vehicles	Pre-Repair avg. emissions	Post-repair # of vehicles	Post-Repair avg. emissions	% change in emissions	Pre-Repair # of vehicles	Pre-Repair avg. emissions	Post-repair # of vehicles	Post-Repair avg. emissions	% change in emissions	Pre-Repair # of vehicles	Pre-Repair avg. emissions	Post-repair # of vehicles	Post-Repair avg. emissions	% change in emissions	Pre-Repair # of vehicles	Pre-Repair avg. emissions	Post-repair # of vehicles	Post-Repair avg. emissions	% change in emissions
1984	432	2.02	283	0.63	-68.6%	106	5.12	60	1.17	-77.1%	67	7.11	39	1.15	-83.9%	605	3.13	382	0.77	-75.3%
1985	522	2.52	305	0.66	-73.8%	133	5.62	76	1.22	-78.2%	84	4.78	55	1.26	-73.7%	739	3.34	436	0.83	-75.0%
1986	968	2.14	589	0.57	-73.3%	193	4.61	123	1.09	-76.4%	158	4.68	78	1.28	-72.6%	1,319	2.81	790	0.72	-74.3%
1987	968	2.18	558	0.60	-72.6%	195	4.60	134	1.02	-77.9%	116	5.20	78	1.14	-78.0%	1,279	2.82	770	0.73	-74.3%
1988	1,417	1.97	913	0.57	-71.1%	793	2.77	487	0.85	-69.2%	296	3.54	202	1.06	-70.1%	2,506	2.41	1,602	0.72	-70.2%
1989	1,393	2.00	864	0.53	-73.3%	682	2.83	416	0.95	-66.5%	267	3.67	179	1.22	-68.5%	2,342	2.46	1,459	0.74	-70.0%
1990	2,155	1.71	1,338	0.48	-72.0%	600	2.54	388	0.85	-68.6%	233	4.13	155	1.08	-73.9%	2,988	2.07	1,881	0.61	-70.7%
1991	3,322	1.40	2,054	0.39	-72.2%	672	2.29	454	0.65	-71.6%	176	3.59	112	1.01	-71.9%	4,170	1.64	2,620	0.46	-71.8%
1992	4,580	1.37	3,068	0.35	-74.4%	949	1.93	584	0.57	-70.7%	363	2.98	249	0.92	-69.3%	5,892	1.56	3,901	0.42	-73.1%
1993	4,486	1.38	2,960	0.36	-74.0%	1,246	1.94	822	0.55	-71.6%	396	2.64	263	0.89	-66.4%	6,128	1.57	4,045	0.43	-72.6%
1994	3,978	1.35	2,777	0.36	-73.5%	1,474	2.26	1,003	0.54	-76.0%	646	2.46	436	0.75	-69.4%	6,098	1.69	4,216	0.44	-73.8%
1995	3,063	1.45	2,106	0.36	-75.4%	1,225	1.80	834	0.47	-73.7%	723	2.36	515	0.70	-70.1%	5,011	1.67	3,455	0.44	-73.8%
1996	6	0.70	4	0.24	-65.9%	0	0.00	0	0.00	NA	340	1.50	251	0.56	-62.8%	346	1.49	255	0.55	-62.8%
1997	6	1.99	2	0.33	-83.4%	0	0.00	0	0.00	NA	461	1.27	365	0.44	-65.0%	467	1.28	367	0.44	-65.3%
1998	4	2.48	3	0.09	-96.5%	0	0.00	0	0.00	NA	61	1.55	56	0.32	-79.3%	65	1.61	59	0.31	-80.8%
1999	3	4.79	0	0.00	-100.0%	0	0.00	0	0.00	NA	75	1.42	70	0.27	-81.0%	78	1.55	70	0.27	-82.6%
2000	9	5.67	1	0.46	-91.9%	1	1.18	1	0.31	-73.7%	39	2.41	34	0.32	-86.8%	49	2.98	36	0.32	-89.2%
2001	1	0.41	1	0.16	-61.0%	0	0.00	0	0.00	NA	42	1.54	37	0.31	-79.9%	43	1.52	38	0.31	-79.8%
2002	3	0.26	3	0.24	-8.9%	0	0.00	0	0.00	NA	16	3.41	21	0.16	-95.3%	19	2.91	24	0.17	-94.2%
2003	0	0.00	0	0.00	NA	0	0.00	0	0.00	NA	8	2.64	16	0.07	-97.3%	8	2.64	16	0.07	-97.3%
2004	1	0.19	1	0.00	-100.0%	0	0.00	0	0.00	NA	1	0.97	3	0.01	-99.0%	2	0.58	4	0.01	-98.7%
2005	0	0.00	0	0.00	NA	0	0.00	0	0.00	NA	0	0.00	0	0.00	NA	0	NA	0	0.00	0.0%
2006	0	0.00	0	0.00	NA	0	0.00	0	0.00	NA	1	0.14	1	0.04	-71.4%	1	0.14	1	0.04	-71.4%
2007	0	0.00	0	0.00	NA	0	0.00	0	0.00	NA	0	0.00	0	0.00	NA	0	NA	0	0.00	0.0%
Overall	27,317	1.56	17,830	0.41	-73.6%	8,269	2.43	5,382	0.67	-72.5%	4,569	2.81	3,215	0.79	-72.0%	40,155	1.88	26,427	0.51	-72.9%

AVG. CARBON MONOXIDE (g/ml)

MODEL YEAR	LDGV					LDG1/2					LDG3/4					OVERALL				
	Pre-Repair # of vehicles	Pre-Repair avg. emissions	Post-repair # of vehicles	Post-Repair avg. emissions	% change in emissions	Pre-Repair # of vehicles	Pre-Repair avg. emissions	Post-repair # of vehicles	Post-Repair avg. emissions	% change in emissions	Pre-Repair # of vehicles	Pre-Repair avg. emissions	Post-repair # of vehicles	Post-Repair avg. emissions	% change in emissions	Pre-Repair # of vehicles	Pre-Repair avg. emissions	Post-repair # of vehicles	Post-Repair avg. emissions	% change in emissions
1984	432	36.16	283	7.24	-80.0%	106	75.22	60	21.18	-71.8%	67	62.52	39	17.78	-71.6%	605	45.92	382	10.51	-77.1%
1985	522	35.20	305	6.81	-80.6%	133	71.08	76	21.93	-69.1%	84	68.17	55	22.37	-67.2%	739	45.40	436	11.41	-74.9%
1986	968	36.37	589	5.48	-84.9%	193	52.39	123	16.03	-69.4%	158	56.88	78	17.50	-69.2%	1,319	41.17	790	8.31	-79.8%
1987	968	34.51	558	5.80	-83.2%	195	60.70	134	14.10	-76.8%	116	52.93	78	14.37	-72.9%	1,279	40.18	770	8.11	-79.8%
1988	1,417	28.60	913	5.27	-81.6%	793	31.56	487	10.62	-66.4%	296	38.17	202	10.36	-72.9%	2,506	30.67	1,602	7.54	-75.4%
1989	1,393	33.15	864	4.83	-85.4%	682	39.13	416	12.44	-68.2%	267	37.88	179	12.57	-66.8%	2,342	35.43	1,459	7.95	-77.6%
1990	2,155	29.86	1,338	4.71	-84.2%	600	33.62	388	11.19	-66.7%	233	51.30	155	11.65	-77.3%	2,988	32.29	1,881	6.62	-79.5%
1991	3,322	21.88	2,054	3.81	-82.6%	672	36.05	454	7.39	-79.5%	176	51.95	112	11.43	-78.0%	4,170	25.44	2,620	4.76	-81.3%
1992	4,580	25.48	3,068	3.58	-85.9%	949	29.23	584	6.41	-78.1%	363	39.93	249	9.57	-76.0%	5,892	26.97	3,901	4.39	-83.7%
1993	4,486	20.62	2,960	3.76	-81.8%	1,246	25.77	822	6.25	-75.7%	396	35.31	263	9.67	-72.6%	6,128	22.61	4,045	4.65	-79.4%
1994	3,978	21.07	2,777	3.72	-82.3%	1,474	26.08	1,003	6.21	-76.2%	646	32.00	436	8.74	-72.7%	6,098	23.44	4,216	4.83	-79.4%
1995	3,063	22.38	2,106	3.69	-83.5%	1,225	23.27	834	5.67	-75.6%	723	27.21	515	6.94	-67.1%	5,011	23.29	3,455	4.95	-78.7%
1996	6	11.86	4	2.34	-80.3%	0	0.00	0	0.00	NA	340	38.41	251	10.62	-72.3%	346	37.94	255	10.49	-72.4%
1997	6	12.83	2	4.31	-66.5%	0	0.00	0	0.00	NA	461	27.85	365	10.18	-63.5%	467	27.66	367	10.14	-63.3%
1998	4	26.50	3	1.27	-95.2%	0	0.00	0	0.00	NA	61	16.68	56	4.82	-71.1%	65	17.28	59	4.64	-73.2%
1999	3	12.26	0	0.00	-100.0%	0	0.00	0	0.00	NA	75	16.15	70	3.77	-76.6%	78	16.00	70	3.77	-76.4%
2000	9	12.75	1	5.19	-59.3%	1	19.88	1	2.70	-86.2%	39	16.50	34	2.56	-84.5%	49	15.88	36	2.63	-83.4%
2001	1	7.86	1	4.41	-43.9%	0	0.00	0	0.00	NA	42	13.03	37	3.68	-71.8%	43	12.91	38	3.69	-71.4%
2002	3	4.84	3	5.58	15.4%	0	0.00	0	0.00	NA	16	12.55	21	1.37	-89.0%	19	11.33	24	1.90	-83.2%
2003	0	0.00	0	0.00	NA	0	0.00	0	0.00	NA	8	18.42	16	1.07	-94.2%	8	18.42	16	1.07	-94.2%
2004	1	31.10	1	0.00	-100.0%	0	0.00	0	0.00	NA	1	8.68	3	0.00	-100.0%	2	19.89	4	0.00	-100.0%
2005	0	0.00	0	0.00	NA	0	0.00	0	0.00	NA	0	0.00	0	0.00	NA	0	NA	0	0.00	0.0%
2006	0	0.00	0	0.00	NA	0	0.00	0	0.00	NA	1	0.00	1	0.00	NA	1	0.00	1	0.00	NA
2007	0	0.00	0	0.00	NA	0	0.00	0	0.00	NA	0	0.00	0	0.00	NA	0	NA	0	0.00	0.0%
Overall	27,317	25.20	17,830	4.15	-83.5%	8,269	31.72	5,382	8.30	-73.8%	4,569	36.34	3,215	10.07	-72.3%	40,155	27.81	26,427	5.72	-79.4%

AVG. OXIDES OF NITROGEN (g/ml)

MODEL YEAR	LDGV					LDG1/2					LDG3/4					OVERALL				
	Pre-Repair # of vehicles	Pre-Repair avg. emissions	Post-repair # of vehicles	Post-Repair avg. emissions	% change in emissions	Pre-Repair # of vehicles	Pre-Repair avg. emissions	Post-repair # of vehicles	Post-Repair avg. emissions	% change in emissions	Pre-Repair # of vehicles	Pre-Repair avg. emissions	Post-repair # of vehicles	Post-Repair avg. emissions	% change in emissions	Pre-Repair # of vehicles	Pre-Repair avg. emissions	Post-repair # of vehicles	Post-Repair avg. emissions	% change in emissions
1984	432	3.05	283	1.34	-56.0%	106	3.43	60	2.54	-26.1%	67	4.74	39	2.59	-45.4%	605	3.30	382	1.66	-49.8%
1985	522	3.04	305	1.40	-54.0%	133	3.64	76	2.43	-33.2%	84	4.07	55	2.40	-41.1%	739	3.26	436	1.70	-47.8%
1986	968	3.16	589	1.32	-58.3%	193	4.29	123	2.38	-44.7%	158	5.16	78	2.81	-45.6%	1,319	3.56	790	1.63	-54.3%
1987	968	3.16	558	1.30	-59.0%	195	3.89	134	1.95	-49.8%	116	4.75	78	2.78	-41.4%	1,279	3.42	770	1.56	-54.3%
1988	1,417	3.21	913	1.38	-57.0%	793	4.27	487	1.61	-62.3%	296	5.16	202	2.02	-60.8%	2,506	3.78	1,602	1.53	-59.5%
1989	1,393	3.20	864	1.30	-59.3%	682	4.18	416	1.64	-60.8%	267	4.90	179	2.42	-50.6%	2,342	3.68	1,459	1.54	-58.3%
1990	2,155	3.32	1,338	1.29	-61.0%	600	4.09	388	1.59	-61.2%	233	4.71	155	2.18	-53.8%	2,988	3.58	1,881	1.43	-60.1%
1991	3,322	2.94	2,054	1.13	-61.5%	672	3.58	454	1.34	-62.6%	176	4.64	112	2.26	-51.3%	4,170	3.11	2,620	1.21	-61.0%
1992	4,580	2.75	3,068	1.13	-58.9%	949</														