

APPENDIX A STATEWIDE SUMMARIES

2308	Total # of Boilers	PAYBACK						
		<1 Year	1-5 Years	6-10 years	11-15 years	16-20 years	Less than 20 years	Greater than 20 years
		0%	0%	0%	1%	2%	3%	93%
TOTALS		0	18	251	821	1218	2308	63206
ALCONA	91	0	0	0	0	0	0	91
ALGER	169	0	0	0	1	4	5	164
ALLEGAN	567	0	0	8	6	22	36	531
ALPENA	418	0	0	0	1	5	6	412
ANTRIM	198	0	0	1	2	2	5	193
ARENAC	147	0	0	0	2	2	4	143
BARAGA	147	0	0	0	0	4	4	143
BARRY	243	0	0	0	2	9	11	232
BAY	735	0	0	1	13	14	28	707
BENZIE	199	0	0	0	0	3	3	196
BERRIEN	959	0	2	4	18	25	49	910
BRANCH	274	0	0	0	4	4	8	266
CALHOUN	958	0	0	8	20	20	48	910
CASS	193	0	0	0	2	1	3	190
CHARLEVOIX	416	0	0	0	0	0	0	416
CHEBOYGAN	302	0	0	0	0	4	4	298
CHIPPEWA	418	0	0	1	3	7	11	407
CLARE	252	0	0	0	0	4	4	248
CLINTON	358	0	1	3	0	3	7	351
CRAWFORD	209	0	0	2	2	5	9	200
DELTA	551	0	0	0	0	4	4	547
DICKINSON	393	0	0	1	2	0	3	390
EATON	706	0	0	5	3	16	24	682
EMMET	597	0	0	2	6	3	11	586
GENESSEE	2785	0	0	13	34	60	107	2678
GLADWIN	156	0	0	0	0	4	4	152
GOGEBIC	395	0	0	0	1	0	1	394
GRAND TRAVERSE	916	0	0	1	8	10	19	897
GRATIOT	369	0	0	2	3	12	17	352
HILLSDALE	364	0	0	0	1	4	5	359
HOUGHTON	580	0	0	0	1	7	8	572
HURON	384	0	0	2	2	5	9	375
INGHAM	2416	0	0	5	36	44	85	2331
IONIA	381	0	0	2	6	8	16	365
IOSCO	304	0	0	1	2	2	5	299
IRON	220	0	0	0	0	2	2	218
ISABELLA	444	0	0	5	2	2	9	435
JACKSON	1044	0	1	2	13	27	43	1001
KALAMAZOO	1821	0	1	8	35	26	70	1751
KALKASKA	105	0	0	0	1	1	2	103
KENT	5259	0	0	22	74	97	193	5066
KEWEENAW	41	0	0	0	0	0	0	41
LAKE	67	0	0	1	0	0	1	66
LAPEER	428	0	0	0	2	4	6	422
LEELANAU	152	0	0	0	2	2	4	148
LENAWEE	872	0	0	0	16	13	29	843
LIVINGSTON	540	0	0	2	4	15	21	519
LUCE	77	0	0	1	1	2	4	73
MACKINAC	161	0	0	4	7	2	13	148
MACOMB	3659	0	1	7	36	79	123	3536
MANISTEE	313	0	0	0	3	3	6	307
MARQUETTE	1031	0	0	3	4	8	15	1016
MASON	319	0	0	1	3	2	6	313
MECOSTA	238	0	0	2	3	3	8	230
MENOMINEE	253	0	0	0	2	0	2	251
MIDLAND	653	0	0	4	8	18	30	623
MISSAUKEE	104	0	0	0	4	0	4	100
MONROE	739	0	0	6	19	26	51	688
MONTCALM	440	0	0	0	4	13	17	423
MONTMORENCY	153	0	0	0	0	1	1	152
MUSKEGON	1222	0	3	5	32	26	66	1156
NEWAYGO	306	0	0	3	3	0	6	300
OAKLAND	8200	0	1	18	99	155	273	7927
OCEANA	161	0	0	1	9	3	13	148
OGEMAW	198	0	0	1	1	0	2	196
ONTONAGON	140	0	0	0	1	0	1	139
OSCEOLA	184	0	0	0	3	5	8	176

APPENDIX A STATEWIDE SUMMARIES

2308	Total # of Boilers	PAYBACK						
		<1 Year	1-5 Years	6-10 years	11-15 years	16-20 years	Less than 20 years	Greater than 20 years
OSCODA	77	0	0	0	0	0	0	77
OTSEGO	318	0	0	1	0	2	3	315
OTTAWA	1831	0	2	20	36	23	81	1750
PRESQUE ISLE	180	0	0	0	0	3	3	177
ROSCOMMON	183	0	0	0	0	0	0	183
SAGINAW	1540	0	0	12	19	47	78	1462
SANILAC	378	0	1	0	1	4	6	372
SCHOOLCRAFT	130	0	0	0	0	1	1	129
SHIAWASSEE	359	0	0	0	4	3	7	352
ST. CLAIR	1005	0	1	9	19	18	47	958
ST. JOSEPH	366	0	0	5	12	2	19	347
TUSCOLA	405	0	1	3	0	6	10	395
VAN BUREN	418	0	1	5	11	12	29	389
WASHTENAW	2854	0	0	6	35	67	108	2746
WAYNE	7005	0	2	32	109	173	316	6689
WEXFORD	371	0	0	0	3	5	8	363
TOTALS	65514	0	18	251	821	1218	2308	63206

APPENDIX A STATEWIDE SUMMARIES

2308	Total # of Boilers	WOOD			
		Existing Wood Boiler Capacity	Approximate Existing Wood Use	Wood Boiler Capacity of projects w/ paybacks of <20 yrs	Potential Wood Use
		btus	tons per year	btus	tons per year
TOTALS		2,504,118,520	1,222,788	11,847,206,604	2,882,820
ALCONA	91	213,035,000	129,304	-	-
ALGER	169	51,255,740	12,472	5,748,667	1,399
ALLEGAN	567	33,534,000	8,160	369,146,000	89,826
ALPENA	418	3,000,000	730	22,576,000	5,493
ANTRIM	198	6,368,600	-	-	-
ARENAC	147	-	-	2,448,667	596
BARAGA	147	298,000	73	3,316,000	807
BARRY	243	800	0	36,963,667	8,994
BAY	735	1,400,000	341	582,212,000	141,672
BENZIE	199	4,504,000	1,096	8,581,667	2,088
BERRIEN	959	-	-	260,894,000	63,484
BRANCH	274	-	-	35,377,667	8,609
CALHOUN	958	-	-	314,445,200	76,515
CASS	193	20,718,393	5,041	20,180,000	4,910
CHARLEVOIX	416	404,000	98	-	-
CHEBOYGAN	302	2,977,000	724	13,755,333	3,347
CHIPPEWA	418	1,530,000	372	48,070,000	11,697
CLARE	252	-	-	256,869	63
CLINTON	358	-	-	63,972,000	15,567
CRAWFORD	209	381,396,000	213,256	103,978,000	25,301
DELTA	551	11,047,000	2,688	3,516,000	856
DICKINSON	393	50,624,000	12,319	19,454,167	4,734
EATON	706	14,125,000	3,437	114,542,400	27,872
EMMET	597	17,475,000	4,252	26,942,333	6,556
GENESSEE	2785	330,000,000	200,750	631,873,602	153,756
GLADWIN	156	14,000,000	3,407	6,118,333	1,489
GOGEBIC	395	580,000	141	125,000	30
GRAND TRAVERSE	916	355,000	86	91,209,333	22,194
GRATIOT	369	-	-	39,572,667	9,629
HILLSDALE	364	-	-	17,101,000	4,161
HOUGHTON	580	27,891,000	6,787	6,866,333	1,671
HURON	384	-	-	41,371,867	10,067
INGHAM	2416	13,574,000	3,303	287,366,315	69,926
IONIA	381	19,434,000	4,729	132,999,800	32,363
IOSCO	304	-	-	5,677,833	1,382
IRON	220	11,272,000	2,743	131,167	32
ISABELLA	444	50,000,000	12,167	100,745,333	24,515
JACKSON	1044	-	-	183,083,333	44,550
KALAMAZOO	1821	2,000	0	415,251,353	101,044
KALKASKA	105	-	-	222,667	54
KENT	5259	500,000	122	1,064,426,293	259,010
KEWEENAW	41	-	-	-	-
LAKE	67	-	-	2,066,667	503
LAPEER	428	-	-	20,711,333	5,040
LEELANAU	152	-	-	2,548,667	620
LENAWEE	872	1,300,900	317	179,993,000	43,798
LIVINGSTON	540	1,440,653	351	72,804,333	17,716
LUCE	77	135,000	33	16,097,000	3,917
MACKINAC	161	-	-	6,931,301	1,687
MACOMB	3659	-	-	585,999,698	142,593
MANISTEE	313	180,000	44	78,736,267	19,159
MARQUETTE	1031	94,622,000	23,025	47,825,667	11,638
MASON	319	4,725,000	1,150	27,939,000	6,798
MECOSTA	238	-	-	68,035,667	16,555
MENOMINEE	253	54,189,000	13,186	3,067,000	746
MIDLAND	653	-	-	155,154,581	37,754
MISSAUKEE	104	212,625,000	129,205	27,724,000	6,746
MONROE	739	500,000	122	259,049,867	63,035
MONTCALM	440	5,250,000	1,278	43,798,833	10,658
MONTMORENCY	153	300,000,000	182,500	2,790,000	679
MUSKEGON	1222	-	-	266,200,700	64,776
NEWAYGO	306	300,000	73	80,800,000	19,661
OAKLAND	8200	-	170	903,968,400	219,966
OCEANA	161	-	-	106,577,333	25,934
OGEMAW	198	-	-	2,419,667	589
ONTONAGON	140	3,650,000	888	8,370,000	2,037
OSCEOLA	184	206,352,500	50,212	56,837,818	13,831

APPENDIX A STATEWIDE SUMMARIES

2308	Total # of Boilers	WOOD			
		Existing Wood Boiler Capacity	Approximate Existing Wood Use	Wood Boiler Capacity of projects w/ paybacks of <20 yrs	Potential Wood Use
OSCODA	77	2,950,000	718	-	-
OTSEGO	318	-	-	28,923,667	7,038
OTTAWA	1831	10,300,000	2,506	536,910,667	130,648
PRESQUE ISLE	180	-	-	7,000,000	1,703
ROSCOMMON	183	1,000,000	243	-	-
SAGINAW	1540	-	-	480,025,587	116,806
SANILAC	378	-	-	34,580,333	8,415
SCHOOLCRAFT	130	10,310,000	2,509	36,667	9
SHIAWASSEE	359	-	-	29,427,667	7,161
ST. CLAIR	1005	-	-	286,751,627	69,776
ST. JOSEPH	366	22,500	5	160,995,667	39,176
TUSCOLA	405	12,960,000	3,154	70,325,360	17,113
VAN BUREN	418	4,234	1	113,652,133	27,655
WASHTENAW	2854	-	-	501,941,118	122,139
WAYNE	7005	-	-	1,467,118,724	356,999
WEXFORD	371	300,001,200	182,500	22,551,723	5,488
TOTALS	65514	2,504,118,520	1,222,788	11,847,206,604	2,882,820

APPENDIX A STATEWIDE SUMMARIES

2308	Total # of Boilers	BTU						
		<750,000	750,001-2,500,000	2,500,001-5,000,000	5,000,001-15,000,000	15,000,001-25,000,000	>25,000,001	N/A
		59%	23%	5%	3%	0%	1%	10%
TOTALS		38348	14977	2998	2158	301	386	6362
ALCONA	91	78	24	0	1	0	1	3
ALGER	169	123	24	7	1	1	1	12
ALLEGAN	567	300	126	37	35	2	11	56
ALPENA	418	312	55	13	8	1	5	24
ANTRIM	198	141	35	14	5	0	0	3
ARENAC	147	88	31	19	0	0	0	9
BARAGA	147	102	23	6	1	0	0	15
BARRY	243	141	47	9	16	1	0	29
BAY	735	436	192	41	20	2	13	31
BENZIE	199	162	20	2	6	0	0	9
BERRIEN	959	486	177	38	45	6	7	200
BRANCH	274	145	52	4	5	3	1	64
CALHOUN	958	516	176	36	54	11	9	156
CASS	193	110	25	5	4	1	2	46
CHARLEVOIX	416	330	62	10	4	0	0	10
CHEBOYGAN	302	213	61	10	6	0	0	12
CHIPPEWA	418	312	69	6	13	0	2	16
CLARE	252	197	38	8	0	0	0	9
CLINTON	358	214	69	31	11	0	4	29
CRAWFORD	209	162	25	3	6	0	5	8
DELTA	551	401	75	20	2	0	0	53
DICKINSON	393	291	56	9	6	1	2	28
EATON	706	456	142	31	25	1	4	47
EMMET	597	441	118	18	9	2	0	9
GENESSEE	2785	1588	555	149	127	17	22	327
GLADWIN	156	126	23	0	5	0	0	2
GOGEBIC	395	258	40	7	3	0	0	87
GRAND TRAVERSE	916	637	188	34	21	5	2	29
GRATIOT	369	221	106	20	13	2	0	7
HILLSDALE	364	246	58	10	7	0	0	43
HOUGHTON	580	444	70	13	9	0	0	44
HURON	384	269	64	8	5	2	2	34
INGHAM	2416	1382	612	87	76	12	8	239
IONIA	381	219	110	13	11	5	3	20
IOSCO	304	216	61	11	1	0	0	15
IRON	220	150	30	5	3	0	0	32
ISABELLA	444	304	105	8	3	0	7	17
JACKSON	1044	524	243	42	39	6	17	173
KALAMAZOO	1821	974	318	76	53	15	11	374
KALKASKA	105	80	20	4	0	0	0	1
KENT	5259	3200	1279	179	189	33	30	349
KEWEENAW	41	39	1	0	0	0	0	1
LAKE	67	55	11	0	1	0	0	0
LAPEER	428	278	94	12	14	2	0	28
LEELANAU	152	125	14	7	6	0	0	0
LENAWEE	872	547	194	40	22	5	2	62
LIVINGSTON	540	296	124	31	28	1	2	58
LUCE	77	63	4	4	1	0	1	4
MACKINAC	161	119	29	6	2	0	0	5
MACOMB	3659	1782	971	210	145	10	9	532
MANISTEE	313	238	52	10	2	0	3	8
MARQUETTE	1031	686	156	31	15	4	4	135
MASON	319	242	43	10	5	0	1	18
MECOSTA	238	147	60	7	11	3	2	8
MENOMINEE	253	159	46	6	10	0	0	32
MIDLAND	653	389	122	40	32	4	5	61
MISSAUKEE	104	77	15	3	0	4	1	4
MONROE	739	413	175	32	50	3	8	58
MONTCALM	440	278	100	28	14	1	0	19
MONTMORENCY	153	124	12	4	1	0	1	11
MUSKEGON	1222	654	339	63	56	10	9	91
NEWAYGO	306	205	64	13	1	1	3	19
OAKLAND	8200	4267	2297	503	233	25	24	851
OCEANA	161	109	28	3	8	3	2	8
OGEMAW	198	157	22	5	6	0	0	8
ONTONAGON	140	99	12	4	1	0	1	23
OSCEOLA	184	132	30	6	8	0	3	5

APPENDIX A STATEWIDE SUMMARIES

2308	Total # of Boilers	BTU						
		<750,000	750,001-2,500,000	2,500,001-5,000,000	5,000,001-15,000,000	15,000,001-25,000,000	>25,000,001	N/A
OSCODA	77	52	18	2	0	0	0	5
OTSEGO	318	244	62	3	0	0	1	8
OTTAWA	1831	1048	464	75	53	17	23	151
PRESQUE ISLE	180	147	16	4	4	0	0	9
ROSCOMMON	183	130	44	2	2	0	0	5
SAGINAW	1540	810	426	106	65	10	17	106
SANILAC	378	282	61	5	6	0	3	21
SCHOOLCRAFT	130	92	20	4	3	0	0	11
SHIAWASSEE	359	210	88	18	13	1	0	29
ST. CLAIR	1005	592	243	47	33	4	12	74
ST. JOSEPH	366	182	55	13	11	6	5	94
TUSCOLA	405	291	67	15	7	0	5	20
VAN BUREN	418	229	68	14	22	0	4	81
WASHTENAW	2854	1567	662	114	104	17	12	378
WAYNE	7005	3496	2014	448	304	40	53	650
WEXFORD	371	301	50	7	11	1	1	0
TOTALS	65514	38348	14977	2998	2158	301	386	6362

APPENDIX A STATEWIDE SUMMARIES

2308	Total # of Boilers	FUEL						
		GAS	PROPANE	OIL	ELECTRIC	COAL	OTHER	WOOD
		(Natural Gas)						
TOTALS		96%	0%	1%	2%	0%	0%	0%
		62800	24	882	1192	246	108	272
ALCONA	91	84	0	4	0	0	0	3
ALGER	169	144	0	10	5	1	0	9
ALLEGAN	567	531	0	16	13	1	3	3
ALPENA	418	395	0	13	1	2	6	1
ANTRIM	198	187	0	8	0	0	0	3
ARENAC	147	138	0	5	4	0	0	0
BARAGA	147	132	0	9	3	1	0	2
BARRY	243	223	0	9	2	1	0	8
BAY	735	713	0	7	10	4	0	1
BENZIE	199	194	0	3	0	1	0	1
BERRIEN	959	909	2	27	11	7	3	0
BRANCH	274	249	0	6	6	5	0	8
CALHOUN	958	910	1	12	20	11	1	3
CASS	193	183	0	3	0	0	0	7
CHARLEVOIX	416	397	0	13	3	0	0	3
CHEBOYGAN	302	288	0	5	2	2	1	4
CHIPPEWA	418	373	0	35	6	0	2	2
CLARE	252	245	0	3	4	0	0	0
CLINTON	358	341	0	11	4	0	0	2
CRAWFORD	209	198	0	3	2	0	0	6
DELTA	551	508	0	22	8	5	0	8
DICKINSON	393	371	0	12	3	0	1	6
EATON	706	677	1	4	17	1	0	6
EMMET	597	575	0	11	7	0	0	4
GENESSEE	2785	2714	0	10	51	8	0	2
GLADWIN	156	150	2	0	2	0	0	2
GOGEBIC	395	355	0	25	8	1	0	6
GRAND TRAVERSE	916	888	0	12	10	3	1	2
GRATIOT	369	358	0	3	8	0	0	0
HILLSDALE	364	348	1	8	2	3	0	2
HOUGHTON	580	538	0	22	12	0	0	8
HURON	384	365	0	8	4	4	0	3
INGHAM	2416	2261	1	13	78	30	3	30
IONIA	381	365	0	6	1	4	0	5
IOSCO	304	289	0	6	9	0	0	0
IRON	220	205	0	6	5	0	0	4
ISABELLA	444	437	0	0	4	2	0	1
JACKSON	1044	1001	0	5	19	0	17	2
KALAMAZOO	1821	1762	1	23	24	8	0	3
KALKASKA	105	102	0	0	3	0	0	0
KENT	5259	5171	0	24	50	8	4	2
KEWEENAW	41	23	0	18	0	0	0	0
LAKE	67	63	0	4	0	0	0	0
LAPEER	428	415	1	3	5	3	0	1
LEELANAU	152	139	0	11	2	0	0	0
LENAWEE	872	840	1	8	11	5	0	7
LIVINGSTON	540	513	0	8	10	2	0	7
LUCE	77	64	0	7	5	0	0	1
MACKINAC	161	141	0	7	13	0	0	0
MACOMB	3659	3523	0	28	105	3	0	0
MANISTEE	313	294	0	13	1	3	0	2
MARQUETTE	1031	954	0	43	18	9	0	7
MASON	319	307	0	3	4	1	0	4
MECOSTA	238	235	0	1	0	1	0	1
MENOMINEE	253	228	0	9	4	2	0	10
MIDLAND	653	611	0	7	12	0	22	1
MISSAUKEE	104	99	0	3	0	0	0	2
MONROE	739	678	0	23	22	14	1	1
MONTCALM	440	421	1	7	4	2	0	5
MONTMORENCY	153	151	0	1	0	0	0	1
MUSKEGON	1222	1178	0	9	25	6	4	0
NEWAYGO	306	285	0	13	5	0	0	3
OAKLAND	8200	7955	4	27	201	8	3	2
OCEANA	161	151	0	9	1	0	0	0
OGEMAW	198	189	0	5	4	0	0	0
ONTONAGON	140	116	0	17	2	1	0	4
OSCEOLA	184	173	0	4	4	1	1	1

APPENDIX A STATEWIDE SUMMARIES

2308	Total # of Boilers	FUEL						
		GAS (Natural Gas)	PROPANE	OIL	ELECTRIC	COAL	OTHER	WOOD
OSCODA	77	74	0	0	1	0	0	2
OTSEGO	318	308	0	7	3	0	0	0
OTTAWA	1831	1781	0	22	15	8	0	5
PRESQUE ISLE	180	177	0	3	0	0	0	0
ROSCOMMON	183	169	0	12	0	1	0	1
SAGINAW	1540	1467	3	19	38	10	0	3
SANILAC	378	363	0	5	7	2	0	1
SCHOOLCRAFT	130	118	0	5	2	2	0	3
SHIAWASSEE	359	349	0	5	3	1	0	1
ST. CLAIR	1005	946	0	12	32	15	0	0
ST. JOSEPH	366	338	0	9	5	2	0	12
TUSCOLA	405	388	2	6	5	1	10	3
VAN BUREN	418	375	2	15	15	0	9	2
WASHTENAW	2854	2791	1	11	41	6	0	4
WAYNE	7005	6790	0	40	140	19	16	0
WEXFORD	371	346	0	1	6	5	0	13
TOTALS	65514	62800	24	882	1192	246	108	272

APPENDIX A STATEWIDE SUMMARIES

2308	Total # of Boilers	AGE					
		2000-present	1980-1999	1960-1979	1945-1959	older than 1945	N/A
		22%	53%	22%	3%	1%	0%
TOTALS		14207	34460	14577	1806	458	6
ALCONA	91	18	55	17	1	0	0
ALGER	169	29	108	27	5	0	0
ALLEGAN	567	144	291	121	9	2	0
ALPENA	418	89	228	90	8	3	0
ANTRIM	198	33	133	28	2	2	0
ARENAC	147	56	75	14	2	0	0
BARAGA	147	18	98	25	5	1	0
BARRY	243	58	129	40	9	6	1
BAY	735	131	385	177	33	9	0
BENZIE	199	40	133	24	1	1	0
BERRIEN	959	159	485	259	51	5	0
BRANCH	274	52	131	64	15	12	0
CALHOUN	958	219	515	184	33	7	0
CASS	193	29	107	49	2	6	0
CHARLEVOIX	416	88	241	79	7	1	0
CHEBOYGAN	302	44	181	74	2	1	0
CHIPPEWA	418	103	241	64	10	0	0
CLARE	252	62	147	43	0	0	0
CLINTON	358	85	190	65	14	4	0
CRAWFORD	209	43	142	22	2	0	0
DELTA	551	103	333	99	11	5	0
DICKINSON	393	86	232	68	6	1	0
EATON	706	210	347	134	10	5	0
EMMET	597	147	334	101	10	5	0
GENESSEE	2785	671	1406	610	88	10	0
GLADWIN	156	30	96	29	1	0	0
GOGEBIC	395	69	237	70	15	4	0
GRAND TRAVERSE	916	248	483	161	18	6	0
GRATIOT	369	78	185	92	13	1	0
HILLSDALE	364	57	258	40	4	5	0
HOUGHTON	580	98	375	94	10	3	0
HURON	384	88	221	61	12	2	0
INGHAM	2416	483	1090	689	100	54	0
IONIA	381	110	215	39	10	6	1
IOSCO	304	69	163	65	7	0	0
IRON	220	38	138	39	4	1	0
ISABELLA	444	127	251	55	6	5	0
JACKSON	1044	220	513	253	47	11	0
KALAMAZOO	1821	395	867	472	80	7	0
KALKASKA	105	11	67	25	2	0	0
KENT	5259	1192	2975	968	103	21	0
KEWEENAW	41	8	28	5	0	0	0
LAKE	67	12	46	7	2	0	0
LAPEER	428	83	252	85	5	3	0
LEELANAU	152	49	84	19	0	0	0
LENAWEE	872	117	581	147	11	16	0
LIVINGSTON	540	130	312	80	9	9	0
LUCE	77	26	28	22	1	0	0
MACKINAC	161	38	101	19	3	0	0
MACOMB	3659	803	1742	993	114	6	1
MANISTEE	313	78	189	37	6	3	0
MARQUETTE	1031	227	555	228	20	1	0
MASON	319	64	180	65	5	5	0
MECOSTA	238	58	116	57	5	2	0
MENOMINEE	253	42	143	54	9	5	0
MIDLAND	653	128	361	142	21	1	0
MISSAUKEE	104	21	59	20	4	0	0
MONROE	739	160	394	157	18	10	0
MONTCALM	440	113	260	51	10	6	0
MONTMORENCY	153	26	119	7	1	0	0
MUSKEGON	1222	271	556	317	65	13	0
NEWAYGO	306	55	188	53	6	4	0
OAKLAND	8200	1805	4186	1979	200	29	1
OCEANA	161	34	94	30	3	0	0
OGEMAW	198	60	108	29	1	0	0
ONTONAGON	140	17	82	34	6	1	0
OSCEOLA	184	43	104	33	3	1	0

APPENDIX A STATEWIDE SUMMARIES

2308	Total # of Boilers	AGE					
		2000- present	1980- 1999	1960- 1979	1945- 1959	older than 1945	N/A
OSCODA	77	11	61	4	0	1	0
OTSEGO	318	78	194	45	1	0	0
OTTAWA	1831	462	1040	270	49	10	0
PRESQUE ISLE	180	29	115	30	5	1	0
ROSCOMMON	183	49	99	33	2	0	0
SAGINAW	1540	357	744	380	47	12	0
SANILAC	378	94	230	47	3	4	0
SCHOOLCRAFT	130	32	58	34	5	1	0
SHIAWASSEE	359	76	197	74	11	1	0
ST. CLAIR	1005	212	533	212	36	12	0
ST. JOSEPH	366	78	183	75	19	11	0
TUSCOLA	405	95	210	87	9	4	0
VAN BUREN	418	104	172	125	14	3	0
WASHTENAW	2854	675	1334	761	60	24	0
WAYNE	7005	1274	3414	2037	246	32	2
WEXFORD	371	83	207	63	3	15	0
TOTALS	65514	14207	34460	14577	1806	458	6

APPENDIX A STATEWIDE SUMMARIES

2308	Total # of Boilers	BOILER USE					
		Hot Water Heat	Hot Water Supply	Steam Heating	Power	Process Steam	N/A
		68%	16%	7%	6%	2%	1%
TOTALS		44481	10212	4606	3771	1511	933
ALCONA	91	87	3	0	1	0	0
ALGER	169	119	25	13	8	4	0
ALLEGAN	567	389	72	34	47	24	1
ALPENA	418	334	34	29	14	7	0
ANTRIM	198	0	0	0	0	0	198
ARENAC	147	112	26	1	1	7	0
BARAGA	147	118	13	6	9	1	0
BARRY	243	143	48	21	10	14	7
BAY	735	470	77	122	50	16	0
BENZIE	199	168	17	5	8	0	1
BERRIEN	959	609	118	131	52	39	10
BRANCH	274	168	41	25	20	8	12
CALHOUN	958	554	168	137	52	29	18
CASS	193	120	27	27	6	8	5
CHARLEVOIX	416	365	26	10	8	6	1
CHEBOYGAN	302	251	35	3	7	5	1
CHIPPEWA	418	311	32	51	19	5	0
CLARE	252	207	36	2	4	3	0
CLINTON	358	263	54	21	12	6	2
CRAWFORD	209	169	24	5	10	1	0
DELTA	551	457	32	28	22	9	3
DICKINSON	393	314	34	17	16	12	0
EATON	706	451	173	37	32	10	3
EMMET	597	496	49	23	20	8	1
GENESSEE	2785	1988	375	234	137	50	1
GLADWIN	156	134	10	6	3	2	1
GOGEBIC	395	300	24	53	13	5	0
GRAND TRAVERSE	916	661	148	50	43	11	3
GRATIOT	369	263	49	29	15	13	0
HILLSDALE	364	266	41	33	16	3	5
HOUGHTON	580	426	20	103	18	12	1
HURON	384	296	32	28	20	4	4
INGHAM	2416	1626	335	221	156	32	46
IONIA	381	254	58	39	18	7	5
IOSCO	304	261	23	6	7	7	0
IRON	220	166	16	26	7	5	0
ISABELLA	444	311	105	6	14	6	2
JACKSON	1044	641	156	150	76	19	2
KALAMAZOO	1821	1263	226	178	93	57	4
KALKASKA	105	85	12	5	1	2	0
KENT	5259	3784	710	397	243	119	6
KEWEENAW	41	37	1	3	0	0	0
LAKE	67	50	12	1	3	1	0
LAPEER	428	290	74	28	27	6	3
LEELANAU	152	112	23	13	2	2	0
LENAWEE	872	628	111	55	51	16	11
LIVINGSTON	540	358	100	23	42	11	6
LUCE	77	56	2	10	5	4	0
MACKINAC	161	142	7	6	6	0	0
MACOMB	3659	2351	741	153	310	103	1
MANISTEE	313	240	35	18	15	5	0
MARQUETTE	1031	771	77	105	52	26	0
MASON	319	240	39	18	16	4	2
MECOSTA	238	189	18	12	11	6	2
MENOMINEE	253	172	17	36	19	7	2
MIDLAND	653	427	90	44	74	18	0
MISSAUKEE	104	91	5	1	6	1	0
MONROE	739	457	128	93	46	8	7
MONTCALM	440	322	57	26	17	11	7
MONTMORENCY	153	143	5	1	4	0	0
MUSKEGON	1222	766	203	134	86	32	1
NEWAYGO	306	245	35	4	10	9	3
OAKLAND	8200	5068	1874	0	533	234	491
OCEANA	161	116	21	5	15	4	0
OGEMAW	198	154	25	10	7	2	0
ONTONAGON	140	108	8	11	11	1	1
OSCEOLA	184	136	25	12	10	0	1

APPENDIX A STATEWIDE SUMMARIES

2308	Total # of Boilers	BOILER USE					
		Hot Water Heat	Hot Water Supply	Steam Heating	Power	Process Steam	N/A
OSCODA	77	65	6	2	1	3	0
OTSEGO	318	256	39	9	6	8	0
OTTAWA	1831	1356	248	88	105	32	2
PRESQUE ISLE	180	150	10	15	3	2	0
ROSCOMMON	183	155	19	3	2	3	1
SAGINAW	1540	971	247	186	85	45	6
SANILAC	378	302	48	6	18	3	1
SCHOOLCRAFT	130	97	9	13	8	3	0
SHIAWASSEE	359	269	37	28	16	7	2
ST. CLAIR	1005	681	156	85	70	12	1
ST. JOSEPH	366	245	44	24	33	8	12
TUSCOLA	405	309	48	25	20	2	1
VAN BUREN	418	258	58	50	34	16	2
WASHTENAW	2854	1809	540	297	143	62	3
WAYNE	7005	4219	1426	627	516	213	4
WEXFORD	371	270	40	14	25	5	17
TOTALS	65514	44481	10212	4606	3771	1511	933