MICHIGAN STREET TREES

An Assessment of Twenty Cities - 1994

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INTRODUCTION

The urban forest is steadily gaining credence as an integral, living component of municipal infrastructure. As with the other components such as sidewalks, roads, and utility fixtures, trees require regularly planned upkeep and replacement to gain the maximum possible benefit from them as a resource. While not everyone will agree on the degree of benefit to be derived from the various attributes, the urban forest is going to persist in its fragmented and adaptive manner, necessitating some level of maintenance. Research and experience over the years have conclusively shown that the aesthetic, ecological, and psychological benefits that result from allowing trees to occupy a niche in the urban infrastructure are worth the monetary expenditure necessary to maintain them as a resource.

This Michigan street tree survey was undertaken as part of a national effort promoted by American Forests and the Michigan State University Forestry Department, and funded by a grant from the Michigan Department of Natural Resources Forestry Division to provide a quick, general assessment of the present state of Michigan's urban forests. This report summarizes the data collected for Michigan and addresses some of the conclusions that can be derived from this information. During 1989, surveys were conducted in 437 cities in other states. The data collected in Michigan in 1994 will be added to that national survey information. A summary of the national data is in Appendix A, and the summary for Michigan is shown in Table 1.

TABLE 1: SUMMARY REPORT FOR MICHIGAN STREET TREE SURVEY - 1994.

Number of Cities in the Sample:	20
Miles of Streets in the Sampled Cities:	6253
Miles of Streets in the Sample:	84.05
This is a Sample Percentage of:	1.34

	NUMBER	PERCENT
TREE SIZE DISTRIBUTION:		
Sapling -- <3 Inches	893	13.75
Small -- 3-12 Inches	2836	43.66
Medium 12-24 Inches	2049	31.55
Large -- >24 Inches	717	11.04
TREE CONDITION DISTRIBUTION:		
Excellent Condition	1070	16.47
Good Condition	2233	34.38
Fair Condition	1847	28.44
Poor Condition	1345	20.71
SAMPLE SUMMARY:		
Total Live Trees in Sample	6495	49.05
Total Dead Trees in Sample	36	0.55
Total Empty Spaces in Sample	6710	50.68
Total Tree Spaces in Sample	13241	100.00
Total Live Trees in Group	483203.27	49.05
Total Dead Trees and Empty	501876.72	50.95
Total Tree Spaces in Group	985079.99	

METHODS

City Selection

The twenty cities sampled were Ann Arbor, Battle Creek, Cedar Springs, Cheboygan, Detroit, East Lansing, Elk Rapids, Grand Rapids, Grosse Pointe Woods, Lincoln Park, Livonia, Manistee, Manistique, Pontiac, Saginaw, Sparta, Southfield, Standish, Warren, and Woodhaven (See Table 2). In keeping with the survey process established by the team for the original project, these cities were randomly selected from nine population categories consisting of 253 Michigan cities having populations greater than 2500 people, as identified by the International City Management Association (ICMA). Of the nine population categories, two are not represented in MI.

Plot Determination

Each city was divided into approximately equivalent sections to match a predetermined number of sample plots. The plots were then randomly located at central street intersections in each section. A sample plot consisted of two quarter mile lengths originating at right angles from the intersection. A total of one mile of street side was thus inventoried for each sample plot. The number of plots was predetermined, according to the American Forests project guidelines, by the city population category; 24 plots for cities 250,000 and over; 10 plots for cities with populations ranging from 25,000 to 249,999; and 5 plots for cities under 25,000. Table 2 shows the number of sample plots for each city along with the reported populations and the population category.

TABLE 2: NUMBER OF PREDETERMINED SAMPLE PLOTS FOR EACH CITY, 1994.

CITY	# SAMPLE PLOTS	CITY POPULATION	POPULATION CATEGORY
Ann Arbor	10	11,0000	3
Battle Creek	10	54,000	5
Cedar Springs	05	2,838	8
Cheboygan	05	5,000	7
Detroit	24	1,200,000	0
East Lansing	10	50,000	4
Elk Rapids	05	1,600	9
Grand Rapids	10	189,126	3
Grosse Pte Woods	05	17,715	6
Lincoln Park	10	42,000	5
Livonia	10	103,000	3
Manistee	05	6,734	7
Manistique	05	3,456	8
Pontiac	10	71,166	4
Saginaw	10	69,512	4
Southfield	10	76,728	4
Sparta	05	3,968	8
Standish	05	1,377	9
Warren	10	161,134	3
Woodhaven	05	13,067	6

The survey sampled 84.05 miles out of 6253 total city street miles in the 20 cities. The sample percentage for Michigan is 1.34% (Table 1), which is close to the 1.22% sample percentage reflected in the national survey (Appendix A). At each sample plot all street trees were identified by species and categorized by diameter and condition classes. Available planting sites were also tallied. A copy of the data collection form is in Appendix B. The information collected was then entered into a computer program for analysis.

RESULTS

Urban Tree Population

The survey results are based on 6495 live trees tallied, 36 dead trees, and 6710 available planting spaces. This information is shown by individual city sampled in Appendix C and cumulatively for Michigan in Table 1. The relatively small number of dead trees (0.5%) suggests that dead tree removal is a task that most communities are able to accomplish. The proportionately large number of empty planting sites (50.95%) indicates that planting is not a prevalent, or perhaps feasible, priority. This is in common with 437 other cities nationwide where 48.59% of available spaces are open. Money is the most probable cause determining priorities. The number of street trees in Michigan is estimated to be 1,674,032 as determined in Table 3.

TABLE 3: NUMBER OF STREET TREES IN MICHIGAN ESTIMATED BY CITY- SIZE- CATEGORY.

CITY POPULATION CATEGORY	1 NUMBER CITIES SAMPLED	2 TOTAL CITIES IN CATEGORY	3 NUMBER OF TREES SURVEYED	4 ESTIMATED TOTAL TREES*	5 AVERAGE OF OWN ESTIMATE*	6 AVERAGE SURVEY ESTIMATE*
1,000,000	1	1	186,200	186,200	250,000 (1)	186,200
100,000 -249,999	4	7	162,990	285,232	40,630 (4)	40,748
50,000 -99,999	5	15	81,156	243,468	13,750 (2)	16,231
25,000 -49,999	1	23	11,472	263,856		11,472
10,000 -24,999	2	45	17,362	390,645	20,000 (1)	8,272
5,000 - 9,999	2	53	6,825	180,862	3,763 (1)	3,412
2,500 - 4,999	3	71	3,526	83,449		1,175
0-2,499	2	42	1,920	40,320		960

ESTIMATED TOTAL IN STATE = 1674,032

* Column 4 = Columns (3/1) x 2
Column 5 = Average calculated from number of trees reported by cities.
( ) = number of cities reporting estimates.
Column 6 = Columns (3/1)

Not surprisingly, Detroit has the highest live tree count at 798 trees tallied in the 24 plots. Of the cities with ten plots, Ann Arbor tops the list with 598 trees tallied. Pontiac reflected the other end of the spectrum with only 177 live trees tallied. Of the cities with five plots Grosse Pointe Woods tops the list with 383 trees tallied with Manistique at 54. With the predetermined number of plots based on human population, the percentage of street miles surveyed varies. For Detroit the sample percentage is 0.43%. For Ann Arbor it is 1.54% and Pontiac is 2.15%. In Grosse Pointe Woods 4.63% of the street miles were sampled and in Manistique the percentage is 8.33%. These variances should be taken into consideration when interpreting the data. The average number of trees tallied per plot is shown in Table 4. As can be seen, this method of comparison shows that on average, Michigan city street miles are only half stocked if the suggested spacing is between 40 and 60 feet depending on species and available space.

TABLE 4: AVERAGE NUMBER OF TREES PER PLOT, TREES PER MILE AND ESTIMATED SPACING, BY NUMBER OF SAMPLE PLOTS PER CITY, 1994.

NUMBER OF SAMPLE PLOTS	TOTAL NUMBER OF TREES COUNTED	AVG NUMBER TREES / PLOT (two-sided)	AVG NUMBER TREES / MILE	ESTIMATED SPACING (FT)
24	798	33.25	66.50	158.80
10	3974	39.74	79.48	132.86
05	1723	38.20	76.40	138.22

Tree Size

Information was tabulated for Michigan as a whole (Table 1), and individually for the municipalities sampled (Table 5). For Michigan in general, the prevalent tree size category represented on streets is the 3"-12" diameter class at 43.66%. For the other size classes, 13.75% are in the <3" sapling class, 31.55% are in the 12"-24" diameter size class, and 11.04% are in the 24"+ class. A natural forest might have 26% in saplings/seedlings, 50% in small, 15% in medium (mature), and 9% in the large size class (Boyce, 1981). The Michigan street tree population, then, consists of about half as many saplings and twice as many medium size as a natural forest, and is similar for both the small pole size and large trees. Table 6 shows the data on a 30-year old natural forest for comparison purposes.

TABLE 5: TREE SIZE DISTRIBUTION SUMMARY BY CITY FOR MICHIGAN.

Code	City Name	Live Tree Total	% Sapling	% Small	% Medium	% Large	Diversity Index
MI001	ANN ARBOR	598	14.21	49.67	30.94	5.18	2.9394
MI002	BATTLE CREEK	251	2.39	18.73	62.15	16.73	2.5006
MI003	CEDAR SPRINGS	184	11.41	28.26	41.85	18.48	2.8689
MI004	CHEBOYGAN	110	27.27	11.82	43.64	17.27	2.1248
MI005	DETROIT	798	5.64	59.90	21.43	13.03	2.5697
MI006	EAST LANSING	378	13.49	37.83	39.68	8.99	2.4507
MI007	ELK RAPIDS	140	19.29	21.43	44.29	15.00	2.6888
MI008	GRAND RAPIDS	421	15.91	40.38	39.19	4.51	2.5754
MI009	Grsse Pte Woods	383	34.46	38.38	16.71	10.44	2.7674
MI010	LINCOLN PARK	478	7.95	60.04	20.29	11.72	1.9942
MI011	LIVONIA	403	10.92	41.19	40.20	7.69	2.5853
MI012	Manistee	215	12.56	20.47	55.81	11.16	2.1286
MI013	MANISTIQUE	54	9.26	16.67	53.70	20.37	1.9099
MI014	PONTIAC	177	20.34	14.69	56.50	8.47	1.8319
MI015	SAGINAW	402	5.22	29.60	49.25	15.92	2.5365
MI016	Sparta	98	7.14	23.47	37.76	31.63	2.2698
MI017	SOUTHFIELD	487	21.56	58.52	13.35	6.57	2.5954
MI018	STANDISH	180	8.89	30.56	46.67	13.89	1.6295
MI019	WARREN	379	10.03	49.34	18.47	22.16	2.0277
MI020	WOODHAVEN	359	25.63	71.87	2.51	0.00	2.6761
	TOTALS	6495	13.75	43.66	31.55	11.04	2.3835

TABLE 6: DISTRIBUTION OF SIZE CLASSES IN 30-YEAR OLD FORESTS [(BOYCE, 1981) FORESTRY HANDBOOK, p.47] AND ON MICHIGAN STREETS, 1994.

SIZE	PERCENT POPULATION	TOTALED BY CITY SAMPLE SIZE CLASSES	APPROXIMATE MICHIGAN STREET TREE SIZE DISTRIBUTION
Seedlings	04%		
Saplings	22%	26%	13.75
Poles (6")	12%		
Poles (8")	16%		
Poles (10")	22%	50%	43.66
Mature	15%	15%	31.55
>24"	09%	09%	11.04
		100%	

The highest percentage of 24" diameter trees were found in Sparta with 31.63%, then Warren with 22.16%. In the medium size category, Battle Creek had the highest percentage with 62.15%, then Pontiac with 56.60%. Woodhaven had the highest percentage of live trees in the small category at 71.87% with Lincoln Park next at 60.04%. In the sapling size category Grosse Pointe Woods ranked highest at 34.46% and Cheboygan next at 27.27%. For Grosse Pointe Woods, the high percentage of trees in the sapling size category, combined with the low number of available planting sites, could result in a trend towards establishing a fully stocked urban forest, diverse in size and therefore preparing for the eventual removal of declining trees. In Cheboygan, where the available planting site percentage is 65.41% compared to Grosse Pointe Woods at 19.71% (Table 8), the high percentage of sapling sized trees reflected concentrated new plantings related to renovation of the downtown area.

Tree Condition

The results of the survey rank the majority of trees (34.38%) in good condition. The smallest percentage (16.47%) are ranked in the excellent condition, 20.71% in poor condition, and 28.44% in fair condition. These results can be seen, by city, in Table 7. The actual field data shows that for the 24"+ diameter class the majority of trees sampled are in the poor condition class. Extrapolation of this data signifies that removals are imminent statewide in a very visible size class, which will result in the majority of remaining trees being in smaller size categories. The visual impact will be significant in the communities with predominately mature urban forests.

As compared to the national condition averages, Michigan has about half as many trees rated as being excellent. It is felt that this rather significant difference may be exaggerated due to subjective interpretations on the part of the various evaluators. Of the different data categories, condition ranking is the one most open to subjective influence because of the many variables considered, and the relative importance assigned to each, when evaluating the health of a tree. Some evidence of this hypothesis can be seen in the Illinois data (Appendix D) where only 1.44% of the surveyed trees were ranked as being in excellent condition, compared to the 32.44% in the national sample (Appendix A).

TABLE 7: TREE CONDITION SUMMARY BY CITY FOR MICHIGAN.

Code	City Name	Live Tree Total	% Excel	% Good	% Fair	% Poor	% Dead
MI001	ANN ARBOR	598	27.59	27.93	25.08	19.40	0.67
MI002	BATTLE CREEK	251	9.96	29.48	37.05	23.51	0.80
MI003	CEDAR SPRINGS	184	26.09	25.00	34.24	14.67	1.09
MI004	CHEBOYGAN	110	5.45	10.91	29.09	54.55	0.00
MI005	DETROIT	798	4.76	30.20	35.34	29.70	0.38
MI006	EAST LANSING	378	9.26	27.25	27.25	36.24	0.00
MI007	ELK RAPIDS	140	17.86	9.29	24.29	48.57	0.00
MI008	GRAND RAPIDS	421	25.42	36.82	21.38	16.39	0.95
MI009	Grsse Pte Woods	383	48.56	30.03	16.19	5.22	0.00
MI010	LINCOLN PARK	478	5.44	43.51	42.89	8.16	1.05
MI011	LIVONIA	403	35.98	41.19	19.35	3.47	0.25
MI012	Manistee	215	6.05	15.81	27.91	50.23	0.93
MI013	MANISTIQUE	54	3.70	9.26	18.52	68.52	7.41
MI014	PONTIAC	177	7.91	36.16	40.11	15.82	0.00
MI015	SAGINAW	402	2.49	25.37	29.35	42.79	1.00
MI016	Sparta	98	14.29	32.65	39.80	13.27	0.00
MI017	SOUTHFIELD	487	18.28	58.52	19.71	3.49	0.62
MI018	STANDISH	180	3.33	11.67	31.67	53.33	0.56
MI019	WARREN	379	10.82	53.30	30.87	5.01	0.26
MI020	WOODHAVEN	359	20.89	52.37	24.23	2.51	0.00
	TOTALS	6495	16.47	34.38	28.44	20.71	0.55

Tree Species

The predominant tree species found on Michigan city streets is the Norway maple at 17.85% followed by silver maple at 16.51% and green ash at 8.89%. Honeylocust species are 7.09% of the urban forest composite. The species diversity code for Michigan is calculated at 3.046 with approximately 91 species having been encountered (Table 8). The national average is close to 3.0. The diversity index was calculated as in the original program. A copy of the formula and brief explanation can be found in Appendix E.

TABLE 8: TREE SPECIES DISTRIBUTION REPORT FOR MICHIGAN.

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
001	fir	0	3	1	0	4	0.07
014	Maple, Hedge	11	1	1	0	13	0.22
016	Maple, Amur	0	25	0	0	25	0.43
017	Maple, Paperback	1	0	0	0	1	0.02
018	Boxelder	0	6	39	9	54	0.93
022	Maple, Japanese	1	0	0	0	1	0.02
028	Maple, Norway	143	544	335	10	1032	17.85
031	Maple,Nor.Columnare	0	9	0	0	9	0.16
032	Crimson King Norway	49	75	6	0	130	2.25
042	Schwedleri Norway	5	25	15	0	45	0.78
058	Maple, Red	90	135	92	15	332	5.74
061		0	1	0	0	1	0.02
070	Maple, Silver	40	156	453	306	955	16.51
076	Maple, Sugar	9	120	248	64	441	7.63
087	Maple, Totarian	0	1	0	0	1	0.02
100	Horsechesnut	2	3	59	7	71	1.23
110	Tree of Heaven	0	2	1	0	3	0.05
125	Birch	0	1	0	0	1	0.02
133	Birch, White	1	4	5	0	10	0.17
135	Birch, Europ. White	1	6	1	0	8	0.14
147	Hornbeam, European	0	4	0	0	4	0.07
158	Hornbeam, American	0	1	0	0	1	0.02
160	Hickories	0	0	10	0	10	0.17
172	Hickory, Shagbark	0	0	2	0	2	0.03
175	Catalpa	1	3	13	20	37	0.64
180	Hackberry	0	0	2	0	2	0.03
186	redbud	1	0	0	0	1	0.02
230	Hawthorn	0	17	1	0	18	0.31
245	Russian Olive	0	12	0	0	12	0.21
270	Ash	0	1	0	0	1	0.02
275	Ash, white	17	81	35	10	143	2.47
292	Ash, Green	115	284	111	4	514	8.89
305	Ginkgo	4	4	0	0	8	0.14
315	honeylocust	42	275	53	6	376	6.50
316	Honeylocust,Thornles	8	13	11	1	33	0.57
323		1	0	0	0	1	0.02
341	Butternut	0	1	0	0	1	0.02
342	Walnut, Black	1	8	21	3	33	0.57
345	Junipers	0	3	0	0	3	0.05
352	Redcedar	0	1	0	0	1	0.02
365	Poplar, Yellow	0	2	3	0	5	0.09
371	sweetgum	10	5	3	0	18	0.31
386	Magnolia, Saucer	0	1	0	0	1	0.02
400	Apple	0	0	4	0	4	0.07
401	Apple, Crab	98	92	2	0	192	3.32
435	Mulberry	1	1	0	0	2	0.03
445	Ironwood	1	1	0	0	2	0.03
450	Spruce	1	0	0	0	1	0.02

TABLE 8: TREE SPECIES DISTRIBUTION REPORT FOR MICHIGAN. (CONTINUED)

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
452	Spruce, Norway	2	5	17	1	25	0.43
454	Spruce, White	5	10	5	0	20	0.35
460	Spruce, Colo. Blue	2	27	16	0	45	0.78
471	Pine, Austrian	5	6	3	1	15	0.26
475	Pine, Norway (Red)	0	1	0	0	1	0.02
477	Pine, White	3	9	6	1	19	0.33
479	Pine, Scotch	1	3	2	0	6	0.10
486	Planetree, London	3	48	54	3	108	1.87
487	Sycamore, American	0	1	6	5	12	0.21
490	Poplar	0	6	4	0	10	0.17
496	Cottonwood, Eastern	0	3	6	8	17	0.29
503	Aspen, Quaking	2	2	0	0	4	0.07
505	Cherry	1	10	1	0	12	0.21
510	Plum, Myrobalan	5	0	0	0	5	0.09
511		0	1	0	0	1	0.02
520	Cherry, Black	0	1	5	1	7	0.12
525	Cherry, Kwanzan	0	20	1	0	21	0.36
529	Plum	6	2	0	0	8	0.14
540	Douglas Fir	3	1	1	0	5	0.09
548	Pear, Bradford	55	135	0	0	190	3.29
550	Oaks	0	1	0	0	1	0.02
552	Oak, White	1	5	15	16	37	0.64
554	Oak, Swampwhite	0	1	0	0	1	0.02
562	Oak, Bur	1	3	0	6	10	0.17
566	Oak, Pin	7	17	5	0	29	0.50
569	Oak, English	3	2	2	0	7	0.12
571	Oak, Red	23	22	19	14	78	1.35
581	Locust, Black	0	12	11	7	30	0.52
585	Willow	0	0	1	3	4	0.07
601		3	16	3	0	22	0.38
611	Ash, European Mtn.	13	12	0	0	25	0.43
631	Cedar, White	2	3	3	1	9	0.16
640	Linden	9	26	3	0	38	0.66
642	Basswood	0	3	21	12	36	0.62
644	Linden, Little leaf	14	90	18	0	122	2.11
665	Elm	4	14	0	3	21	0.36
667	Elm, American	2	12	38	67	119	2.06
676	Elm, Camperdown	0	1	0	0	1	0.02
678	Elm, Chinese	0	1	0	0	1	0.02
680	Elm, Siberian	0	14	46	20	80	1.38
691	Japanese	3	9	0	0	12	0.21
700	Buckthorn	2	3	0	0	5	0.09
807	Redwood, Dawn	0	0	0	1	1	0.02

THE DIVERSITY CODE FOR MI IS: 3.046

Planting Needs

Determination of planting site availability is a subjective decision. To mitigate the subjectivity, the following criteria were used: the presence of at least a three foot tree lawn, practical location regarding utilities, pedestrian access, and vehicular traffic patterns, and the existing adjacent private landscaping. On average, for Michigan, the survey results indicate the percentage of available planting sites to be 50.95% with a calculated fully stocked spacing of 33.5 feet. The percentage of available sites spanned a wide range from Manistique at 85.08% to Grosse Pointe Woods at 19.71%. The majority fell between 40-60%. The planting needs summaries for each city are shown in Table 9.

TABLE 9: STREET TREE PLANTING NEEDS SUMMARY BY CITY FOR MICHIGAN.

Code	City Name	Total Tree Spaces	Live Trees	% Live	Dead and Empty	% Need
MI001	ANN ARBOR	841	598	71.11	243	28.89
MI002	BATTLE CREEK	606	251	41.42	355	58.58
MI003	CEDAR SPRINGS	294	184	62.59	110	37.41
MI004	CHEBOYGAN	318	110	34.59	208	65.41
MI005	DETROIT	1720	798	46.40	922	53.60
MI006	EAST LANSING	729	378	51.85	351	48.15
MI007	ELK RAPIDS	345	140	40.58	205	59.42
MI008	GRAND RAPIDS	625	421	67.36	204	32.64
MI009	Grsse Pte Woods	477	383	80.29	94	19.71
MI010	LINCOLN PARK	1049	478	45.57	571	54.43
MI011	LIVONIA	614	403	65.64	211	34.36
MI012	Manistee	415	215	51.81	200	48.19
MI013	MANISTIQUE	362	54	14.92	308	85.08
MI014	PONTIAC	585	177	30.26	408	69.74
MI015	SAGINAW	835	402	48.14	433	51.86
MI016	Sparta	213	98	46.01	115	53.99
MI017	SOUTHFIELD	1116	487	43.64	629	56.36
MI018	STANDISH	461	180	39.05	281	60.95
MI019	WARREN	1036	379	36.58	657	63.42
MI020	WOODHAVEN	600	359	59.83	241	40.17
	TOTALS	13241	6495	49.05	6746	50.95

Table 10 presents the data on the number of trees planted and removed as reported by those cities having that information available. The average of the two-year data from those cities reporting this information shows a two year trend to plant about as many trees as are removed. When evaluating comparisons between planting and removal rates, equivalent numbers do not always lead to, or result in, a city-wide reforestation process. Casual observation showed concentrated planting efforts in conjunction with construction projects while removals occur throughout a city. The average planting/removal ratio is shown to be 1.1. If the data from Detroit is not included, that ratio is then 1.7. It was of interest to calculate a ratio not including the data from Detroit because of the significant difference in population and covered area between Detroit and the rest of the cities surveyed. There are two city population categories not represented in the Michigan data between Detroit and the next largest city surveyed, Grand Rapids.

TABLE 10: NUMBER OF TREES PLANTED AND REMOVED OVER TWO YR PERIOD: 1992/93.

	1992 SEASON		1993 SEASON		TWO YEAR
MUNICIPALITY	PLANTED	REMOVED	PLANTED	REMOVED	RATIO
Ann Arbor	850	360	900	430	2.22
Battle Creek	50	93	0	102	.26
Cedar Springs	20	5	22	6	3.82
Cheboygan	0	0	8	0	....
Detroit	290	2515	297	1639	.14
East Lansing	125	116	267	35	2.60
Elk Rapids	100	10	60	12	7.27
Grand Rapids	1125	596	1139	616	1.86
Grosse Pte Wds	96	174	176	91	1.03
Lincoln Park	50	150	50	150	.33
Livonia	680	242	540	322	2.16
Manistee	25	30	20	20	.90
Manistique	0	0	0	0	....
Pontiac	135	251	135	238	.55
Saginaw	72	93	101	179	.64
Southfield	325	60	400	45	6.90
Sparta	0	10	0	10	....
Standish	36	4	0	5	4.00
Warren	400	250	500	350	1.50
Woodhaven	150	8	165	6	22.50
TOTALS	**4529**	**4967**	**4780**	**4256**	**1.01***

***Ratio Without Detroit Data = 1.7**

Background Information

Administrators from each city were asked to respond to a short background questionnaire. The information requested included city population, number of street miles, budget dollars spent on tree related work, number of existing street trees, as well as number of trees planted and removed for the 1992 and 1993 seasons. Also included were questions about whether or not the municipality employed an urban forester, if there is a formal tree management plan, if there is a municipal tree ordinance, if there is an Arbor Day celebration, and if it is recognized as a Tree City USA. Table 11 summarizes several of the city background questions. Six of the twenty cities employ an urban forester by title. Seventeen of the twenty have municipal tree ordinances, and seven have formal tree management plans, only one of which did not have the municipal ordinance. Ten of the twenty celebrate Arbor Day and eight of those are recognized as Tree City USA members.

TABLE 11: STATUS OF TREE MANAGEMENT ACCORDING TO FIVE CRITERIA FOR 20 MICHIGAN CITIES, 1994.

MUNICIPALITY	URBAN FORESTER	TREE ORDINANCE	MANAGEMENT PLAN	ARBOR DAY	TREE CITY
Ann Arbor	YES	YES	NO	YES	YES
Battle Creek	NO	YES	NO	NO	NO
Cedar Springs	NO	NO	YES	YES	YES
Cheboygan	NO	YES	NO	NO	NO
Detroit	YES	YES	NO	YES	YES
East Lansing	NO	YES	YES	YES	YES
Elk Rapids	NO	YES	NO	NO	NO
Grand Rapids	YES	YES	NO	YES	YES
Grse Pte Wds	YES	YES	YES	YES	YES
Lincoln Park	NO	YES	NO	NO	NO
Livonia	NO	YES	NO	NO	NO
Manistee	NO	YES	YES	YES	YES
Manistique	NO	NO	NO	NO	NO
Pontiac	NO	YES	NO	YES	NO
Saginaw	NO	YES	YES	YES	PEND
Southfield	YES	YES	NO	YES	YES
Sparta	NO	YES	NO	NO	NO
Standish	NO	NO	NO	NO	NO
Warren	YES	YES	YES	NO	NO
Woodhaven	NO	YES	YES	NO	NO
TOTAL - YES	**6**	**17**	**7**	**10**	**8**

Further investigation is needed in order to correlate actual budget expenditures on tree related activities with the level of interest from the municipal and private sector, and the overall care and planting efforts. Table 12 shows the city budget dollars reported as spent on tree related activities by those communities that had the information available.

TABLE 12: REPORTED BUDGETS FOR ON TREE RELATED ACTIVITIES.

CITY	DOLLARS SPENT PER FISCAL YEAR 1992/93 YEAR	1993/94 YEAR
Ann Arbor	$810,572	$898,000
Battle Creek	54,884	48,561
Cedar Springs	N/A	N/A
Cheboygan	280	300
Detroit	5,000,000	5,000,000
East Lansing	180,000	180,000
Elk Rapids	2,000	2,000
Grand Rapids	708,345	708,345
Grosse Pte Wds	93,100	93,100
Lincoln Park	N/A	10,000
Livonia	385,000	415,000
Manistee	31,242	31,242
Manistique	N/A	N/A
Pontiac	105,000	105,000
Saginaw	714,020	646,407
Southfield	257,148	257,148
Sparta	2,000	2,000
Standish	700	3,244
Warren	200,000	200,000
Woodhaven	60,000	91,000

CONCLUSION

This inventory project presents an opportunity to see how different municipalities interpret and manage their urban forest resource. In the smaller, older communities much of the existing forest is comprised of mature maples planted in the early part of this century. Without an immediate, concentrated planting effort these communities will be faced with the loss of a substantial portion of the current street tree population over the next ten to fifteen years. The larger communities share the same problem, but it is distributed over a larger area, so the impact will be felt most by the affected neighborhoods, rather than city-wide.

With almost half of the live trees (49.15%) ranked in the fair and poor condition class, and with half of the available planting sites empty, a formal tree management and planting plan appears necessary if Michigan is to maintain the continuity of urban forest cover as declining trees are removed. While plantings in conjunction with construction projects add to the overall tree population, they do not address the need for routine replacements of declining or removed trees.

Different combinations of the usual urban forest problems appeared in all communities: restricted planting areas, compacted soils, poor species/site selections, mechanical damage to lower trunk areas from motor vehicles and lawn maintenance equipment, poor branch structure from lack of corrective pruning early on, and disease and insect infestations in the large wounds resulting from removal of limbs on mature trees that should have been addressed when the trees were younger and better able to callus over the wound area.

It is hoped that continued efforts will be made in tracking the condition, stocking, and species diversity of Michigan's urban forests and that the information collected during this project can serve as a benchmark for future comparisons.

While it was not possible to personally contact administrators in all cities, their help and cooperation are much appreciated. Special acknowledgement is due of John Sosnowski, with the Detroit North District Forestry Department, for personally providing transportation for the surveyors and contributing to the evaluation of all twenty-four plots in Detroit.

APPENDIX A

Summary Report for National Street Tree Survey- 1990

APPENDIX A

SUMMARY REPORT FOR NATIONAL SAMPLE

NUMBER OF CITIES IN THE SAMPLE:	437
MILES OF STREETS IN THE SAMPLED CITIES:	142930
MILES OF STREETS IN THE SAMPLE:	1654.25
THIS IS A SAMPLE PERCENTAGE OF:	1.16

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	29854	21.12
SMALL — 3-12 INCHES :	64244	45.46
MEDIUM — 12-24 INCHES :	35712	25.27
LARGE — > 24 INCHES :	11514	8.15

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	44927	31.79
GOOD CONDITION :	56227	39.79
FAIR CONDITION :	28656	20.28
POOR CONDITION :	11514	8.15

SAMPLE SUMMARY:		
TOTAL LIVE TREES IN SAMPLE :	141324	50.86
TOTAL DEAD TREES IN SAMPLE :	1545	1.09
TOTAL EMPTY SPACES IN SAMPLE:	135011	48.59
TOTAL TREE SPACES IN SAMPLE :	277880	100.00
TOTAL LIVE TREES IN GROUP:	12210632.81	50.86
TOTAL DEAD TREES & EMPTY:	11798669.54	49.14
TOTAL TREE SPACES IN GROUP:	24009302.34	

APPENDIX B

Sample Data Collection Form

URBAN FOREST SURVEY DATA SHEET

Intersection Name _____

Plot Number _____

Date Collected ____/____/____ By _____

Municipal Zone

Urban _____

If plot includes more than one municipal zone, indicate length of street in this zone _____

Length of boulevard (if present) _____

Size Class / Condition Class	<3" Ex.	<3" Good	<3" Fair	<3" Poor/Dead	3-12" Ex.	3-12" Good	3-12" Fair	3-12" Poor/Dead	12-24" Ex.	12-24" Good	12-24" Fair	12-24" Poor/Dead	>24" Ex.	>24" Good	>24" Fair	>24" Poor/Dead
Species																
1.																
2.																
3.																
4.																
5.																
6.																
7.																
8.																
9.																
10.																
11. Other																

Potential planting spaces: _____

Average size of planting spaces: _____

APPENDIX B

entered

GK

no response

URBAN FOREST SURVEY DATA SHEET

Intersection Name 102NW / ALPINE NW

Municipal Zone

Plot Number 2

S Urban

Date Collected 6/4/94 By BW / JK

If plot includes more than one municipal zone, indicate length of street in this zone 1/2

Length of boulevard (if present)

Size Class / Condition Class	<3" Ex.	<3" Good	<3" Fair	<3" Poor/Dead	3-12" Ex.	3-12" Good	3-12" Fair	3-12" Poor/Dead	12-24" Ex.	12-24" Good	12-24" Fair	12-24" Poor/Dead	>24" Ex.	>24" Good	>24" Fair	>24" Poor/Dead
Species 1. Sycamore 601					II	IIII	IIII	II		I	I					
2. Hawthorn 305	I															
3. Green ash 292					II	I										
4. Sycamore 070											IIII	III		I	I	I
5. London 486									I	I						
6. Norway 028					II			I			I					
7. Sugar 076												I				
8. Schwedler 042						II	I									
9. Crimson King 032	I					III	I									
10.																
11. Other																

T: 25

Potential planting spaces: IIII IIII IIII IIII IIII

Average size of planting spaces: 10 2 - 10

APPENDIX C

Summary Reports for Individual Michigan Cities

SUMMARY REPORT FOR ANN ARBOR, MI CODE: MI001

02/27/95

MILES OF STREETS IN THE CITY:	325
MILES OF STREETS IN THE SAMPLE:	5.00
THIS IS A SAMPLE PERCENTAGE OF:	1.54

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	85	14.21
SMALL — 3-12 INCHES :	297	49.67
MEDIUM — 12-24 INCHES :	185	30.94
LARGE — > 24 INCHES :	31	5.18

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	165	27.59
GOOD CONDITION :	167	27.93
FAIR CONDITION :	150	25.08
POOR CONDITION :	116	19.40

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	598	71.11
TOTAL DEAD TREES IN SAMPLE :	4	0.67
TOTAL EMPTY SPACES IN SAMPLE:	239	28.42
TOTAL TREE SPACES IN SAMPLE :	841	100.00

TOTAL LIVE TREES IN CITY:	38870.00	71.11
TOTAL DEAD TREES & EMPTY:	15795.00	28.89
TOTAL TREE SPACES IN CITY:	54665.00	

SPECIES DISTRIBUTION REPORT FOR ANN ARBOR, MI CODE: MI001
02/27/95

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
018	Boxelder	0	0	1	2	3	0.50
028	Maple, Norway	12	66	21	0	99	16.56
032	Crimson King Norway	3	0	0	0	3	0.50
042	Schwedleri Norway	3	0	0	0	3	0.50
058	Maple, Red	22	8	2	0	32	5.35
070	Maple, Silver	0	6	42	12	60	10.03
076	Maple, Sugar	1	15	46	6	68	11.37
100	Horsechesnut	0	0	1	0	1	0.17
110	Tree of Heaven	0	1	0	0	1	0.17
160	Hickories	0	0	1	0	1	0.17
172	Hickory, Shagbark	0	0	2	0	2	0.33
245	Russian Olive	0	1	0	0	1	0.17
275	Ash, white	5	15	4	0	24	4.01
292	Ash, Green	7	41	17	0	65	10.87
315	honeylocust	4	34	0	0	38	6.35
342	Walnut, Black	0	1	5	1	7	1.17
401	Apple, Crab	0	20	0	0	20	3.34
450	Spruce	1	0	0	0	1	0.17
452	Spruce, Norway	0	0	4	0	4	0.67
460	Spruce, Colo. Blue	0	3	1	0	4	0.67
471	Pine, Austrian	3	1	2	0	6	1.00
479	Pine, Scotch	0	0	1	0	1	0.17
486	Planetree, London	3	20	6	1	30	5.02
503	Aspen, Quaking	2	0	0	0	2	0.33
505	Cherry	0	0	1	0	1	0.17
525	Cherry, Kwanzan	0	9	0	0	9	1.51
540	Douglas Fir	0	0	1	0	1	0.17
548	Pear, Bradford	6	5	0	0	11	1.84
552	Oak, White	0	0	2	2	4	0.67
554	Oak, Swampwhite	0	1	0	0	1	0.17
569	Oak, English	2	2	0	0	4	0.67
571	Oak, Red	2	5	5	0	12	2.01
601		0	2	1	0	3	0.50
611	Ash, European Mtn.	3	0	0	0	3	0.50
640	Linden	0	9	1	0	10	1.67
642	Basswood	0	0	4	0	4	0.67
644	Linden, Little leaf	3	12	0	0	15	2.51
665	Elm	1	6	0	0	7	1.17
667	Elm, American	1	2	8	7	18	3.01
680	Elm, Siberian	0	3	6	0	9	1.51
691	Japanese	1	9	0	0	10	1.67
700	Buckthorn	0	0	0	0	0	0.00

Intersection Name GREEN/PLYMOUTH
Plot Number MI-001-01
Date Collected 06/11/94 By WILDENTHAL
Potential Planting Spaces 30

Municipal Zone B
Street Length 0.44 Miles
Boulevard Length 0.00 Miles

Intersection Name GREEN/PLYMOUTH
Plot Number MI-001-01
Date Collected 06/11/94 By WILDENTHAL
Potential Planting Spaces 0

Municipal Zone S
Street Length 0.06 Miles
Boulevard Length 0.00 Miles

Intersection Name FAIRMNT/WINDMRE
Plot Number MI-001-02
Date Collected 06/12/94 By WILDENTHAL
Potential Planting Spaces 9

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name LONDNRY/GLENDLC
Plot Number MI-001-03
Date Collected 06/13/94 By WILDENTHAL
Potential Planting Spaces 21

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name PRKWOOD/NORWOOD
Plot Number MI-001-04
Date Collected 06/12/94 By WILDENTHAL
Potential Planting Spaces 17

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name BRDWLK/EISENOWE
Plot Number MI-001-05
Date Collected 06/12/94 By WILDENTHAL
Potential Planting Spaces 35

Municipal Zone B
Street Length 0.50 Miles
Boulevard Length 0.12 Miles

Intersection Name SUNSET/NEWPORT
Plot Number MI-001-06
Date Collected 06/19/94 By WILDENTHAL
Potential Planting Spaces 39

Municipal Zone F
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name S.SEVENTH/LUTZ
Plot Number MI-001-07
Date Collected 06/19/94 By WILDENTHAL
Potential Planting Spaces 14

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name GRNVIEW/SCIOCHU
Plot Number MI-001-08
Date Collected 06/19/94 By WILDENTHAL
Potential Planting Spaces 16

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name BARTON/TRAVER
Plot Number MI-001-09
Date Collected 06/11/94 By WILDENTHAL
Potential Planting Spaces 28

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name PACKARD/STADIUM
Plot Number MI-001-10
Date Collected 06/12/94 By WILDENTHAL
Potential Planting Spaces 30

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

SUMMARY REPORT FOR BATTLE CREEK, MI CODE: MI002

02/27/95

MILES OF STREETS IN THE CITY:	312
MILES OF STREETS IN THE SAMPLE:	5.00
THIS IS A SAMPLE PERCENTAGE OF:	1.60

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	6	2.39
SMALL — 3-12 INCHES :	47	18.73
MEDIUM — 12-24 INCHES :	156	62.15
LARGE — > 24 INCHES :	42	16.73

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	25	9.96
GOOD CONDITION :	74	29.48
FAIR CONDITION :	93	37.05
POOR CONDITION :	59	23.51

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	251	41.42
TOTAL DEAD TREES IN SAMPLE :	2	0.80
TOTAL EMPTY SPACES IN SAMPLE:	353	58.25
TOTAL TREE SPACES IN SAMPLE :	606	100.00

TOTAL LIVE TREES IN CITY:	15662.40	41.42
TOTAL DEAD TREES & EMPTY:	22152.00	58.58
TOTAL TREE SPACES IN CITY:	37814.40	

SPECIES DISTRIBUTION REPORT FOR BATTLE CREEK, MI CODE: MI002
02/27/95

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
028	Maple, Norway	2	13	7	0	22	8.76
032	Crimson King Norway	2	1	0	0	3	1.20
042	Schwedleri Norway	0	2	3	0	5	1.99
058	Maple, Red	1	6	12	0	19	7.57
070	Maple, Silver	1	4	69	16	90	35.86
076	Maple, Sugar	0	1	13	1	15	5.98
160	Hickories	0	0	6	0	6	2.39
175	Catalpa	0	1	3	0	4	1.59
275	Ash, white	0	0	0	2	2	0.80
292	Ash, Green	0	1	0	1	2	0.80
315	honeylocust	0	4	2	0	6	2.39
342	Walnut, Black	0	2	7	0	9	3.59
345	Junipers	0	1	0	0	1	0.40
365	Poplar, Yellow	0	0	1	0	1	0.40
401	Apple, Crab	0	6	0	0	6	2.39
452	Spruce, Norway	0	0	2	0	2	0.80
460	Spruce, Colo. Blue	0	0	4	0	4	1.59
471	Pine, Austrian	0	1	0	0	1	0.40
487	Sycamore, American	0	0	0	2	2	0.80
520	Cherry, Black	0	1	4	0	5	1.99
552	Oak, White	0	0	1	6	7	2.79
571	Oak, Red	0	1	3	9	13	5.18
581	Locust, Black	0	0	7	1	8	3.19
640	Linden	0	2	0	0	2	0.80
667	Elm, American	0	0	1	2	3	1.20
680	Elm, Siberian	0	0	11	2	13	5.18
700	Buckthorn	0	0	0	0	0	0.00

Intersection Name STONEJUG/CARVER
Plot Number MI-002-01
Date Collected 06/18/94 By WILDENTHAL
Potential Planting Spaces 25

Municipal Zone F
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name BECKLEY/EASTGAT
Plot Number MI-002-02
Date Collected 06/18/94 By WILDENTHAL
Potential Planting Spaces 18

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length0.00 Miles

Intersection Name BECKLEY/EASTGAT
Plot Number MI-002-02
Date Collected 06/18/94 By WILDENTHAL
Potential Planting Spaces 26

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length0.00 Miles

Intersection Name STEVENS/STONEJU
Plot Number MI-002-03
Date Collected 06/18/94 By WILDENTHAL
Potential Planting Spaces 14

Municipal Zone F
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name MINGES/LINWOOD
Plot Number MI-002-04
Date Collected 06/18/94 By WILDENTHAL
Potential Planting Spaces 35

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name WHIGHLAND/32ND
Plot Number MI-002-05
Date Collected 06/18/94 By WILDENTHAL
Potential Planting Spaces 44

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.25 Miles

Intersection Name MEACHEM/WINTER
Plot Number MI-002-06
Date Collected 06/18/94 By WILDENTHAL
Potential Planting Spaces 32

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name BRYANT/WOODWARD
Plot Number MI-002-07
Date Collected 06/18/94 By WILDENTHAL
Potential Planting Spaces 38

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name ROSENEATH/HOWLA
Plot Number MI-002-08
Date Collected 06/18/94 By WILDENTHAL
Potential Planting Spaces 48

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name BEDFORD/SHELLEN
Plot Number MI-002-09
Date Collected 06/18/94 By WILDENTHAL
Potential Planting Spaces 36

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name MAIN/MICHIGAN
Plot Number MI-002-10
Date Collected 06/18/94 By WILDENTHAL
Potential Planting Spaces 22

Municipal Zone B
Street Length 0.44 Miles
Boulevard Length 0.00 Miles

Intersection Name MAIN/MICHIGAN
Plot Number MI-002-10
Date Collected 06/18/94 By WILDENTHAL
Potential Planting Spaces 15

Municipal Zone S
Street Length 0.06 Miles
Boulevard Length 0.00 Miles

SUMMARY REPORT FOR CEDAR SPRINGS, MI CODE: MI003

02/27/95

MILES OF STREETS IN THE CITY:	14
MILES OF STREETS IN THE SAMPLE:	2.05
THIS IS A SAMPLE PERCENTAGE OF:	14.64

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	21	11.41
SMALL — 3-12 INCHES :	52	28.26
MEDIUM — 12-24 INCHES :	77	41.85
LARGE — > 24 INCHES :	34	18.48

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	48	26.09
GOOD CONDITION :	46	25.00
FAIR CONDITION :	63	34.24
POOR CONDITION :	27	14.67

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	184	62.59
TOTAL DEAD TREES IN SAMPLE :	2	1.09
TOTAL EMPTY SPACES IN SAMPLE:	108	36.73
TOTAL TREE SPACES IN SAMPLE :	294	100.00

TOTAL LIVE TREES IN CITY:	1256.59	62.59
TOTAL DEAD TREES & EMPTY:	751.22	37.41
TOTAL TREE SPACES IN CITY:	2007.80	

SPECIES DISTRIBUTION REPORT FOR CEDAR SPRINGS, MI CODE: MI003
02/27/95

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
001	fir	0	1	0	0	1	0.54
018	Boxelder	0	3	4	3	10	5.43
028	Maple, Norway	6	5	1	0	12	6.52
032	Crimson King Norway	1	0	0	0	1	0.54
058	Maple, Red	1	4	4	2	11	5.98
061		0	1	0	0	1	0.54
070	Maple, Silver	1	2	7	3	13	7.07
076	Maple, Sugar	0	0	34	18	52	28.26
125	Birch	0	1	0	0	1	0.54
135	Birch, Europ. White	0	1	1	0	2	1.09
160	Hickories	0	0	1	0	1	0.54
175	Catalpa	0	0	0	1	1	0.54
245	Russian Olive	0	3	0	0	3	1.63
275	Ash, white	1	0	0	0	1	0.54
292	Ash, Green	0	1	4	0	5	2.72
305	Ginkgo	0	1	0	0	1	0.54
315	honeylocust	1	4	0	0	5	2.72
341	Butternut	0	1	0	0	1	0.54
342	Walnut, Black	1	0	1	1	3	1.63
365	Poplar, Yellow	0	0	1	0	1	0.54
386	Magnolia, Saucer	0	1	0	0	1	0.54
452	Spruce, Norway	0	3	10	1	14	7.61
454	Spruce, White	3	0	1	0	4	2.17
460	Spruce, Colo. Blue	0	2	2	0	4	2.17
471	Pine, Austrian	2	0	0	0	2	1.09
477	Pine, White	0	1	1	1	3	1.63
490	Poplar	0	6	1	0	7	3.80
496	Cottonwood, Eastern	0	0	1	1	2	1.09
503	Aspen, Quaking	0	1	0	0	1	0.54
529	Plum	0	1	0	0	1	0.54
548	Pear, Bradford	1	0	0	0	1	0.54
552	Oak, White	0	0	0	1	1	0.54
585	Willow	0	0	0	1	1	0.54
631	Cedar, White	1	1	3	1	6	3.26
640	Linden	1	3	0	0	4	2.17
665	Elm	1	3	0	0	4	2.17
667	Elm, American	0	1	0	0	1	0.54
680	Elm, Siberian	0	1	0	0	1	0.54

Intersection Name PINE/FIFTH
Plot Number MI-003-01
Date Collected 04/09/94 By WILDENTHAL
Potential Planting Spaces 2

Municipal Zone B
Street Length 0.06 Miles
Boulevard Length0.00 Miles

Intersection Name PINE/FIFTH
Plot Number MI-003-01
Date Collected 04/09/94 By WILDENTHAL
Potential Planting Spaces 18

Municipal Zone S
Street Length 0.44 Miles
Boulevard Length0.00 Miles

Intersection Name OAK/FIRST
Plot Number MI-003-02
Date Collected 04/09/94 By WILDENTHAL
Potential Planting Spaces 18

Municipal Zone S
Street Length 0.44 Miles
Boulevard Length0.00 Miles

Intersection Name OAK/FIRST
Plot Number MI-003-02
Date Collected 04/09/94 By WILDENTHAL
Potential Planting Spaces 0

Municipal Zone B
Street Length 0.06 Miles
Boulevard Length0.00 Miles

Intersection Name MAIN/BEECH
Plot Number MI-003-03
Date Collected 04/09/94 By WILDENTHAL
Potential Planting Spaces 13

Municipal Zone B
Street Length 0.38 Miles
Boulevard Length0.00 Miles

Intersection Name MAIN/BEECH
Plot Number MI-003-03
Date Collected 04/09/94 By WILDENTHAL
Potential Planting Spaces 10

Municipal Zone S
Street Length 0.12 Miles
Boulevard Length0.00 Miles

Intersection Name ANN/E MUSKEGON
Plot Number MI-003-04
Date Collected 04/09/94 By WILDENTHAL
Potential Planting Spaces 26

Municipal Zone S
Street Length 0.05 Miles
Boulevard Length0.00 Miles

Intersection Name FIFTH/PEAR
Plot Number MI-003-05
Date Collected 04/09/94 By WILDENTHAL
Potential Planting Spaces 21

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

SUMMARY REPORT FOR CHEBOYGAN, MI CODE: MI004

02/27/95 PAGE 1

MILES OF STREETS IN THE CITY:	56
MILES OF STREETS IN THE SAMPLE:	2.50
THIS IS A SAMPLE PERCENTAGE OF:	4.46

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	30	27.27
SMALL — 3-12 INCHES :	13	11.82
MEDIUM — 12-24 INCHES :	48	43.64
LARGE — > 24 INCHES :	19	17.27

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	6	5.45
GOOD CONDITION :	12	10.91
FAIR CONDITION :	32	29.09
POOR CONDITION :	60	54.55

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	110	34.59
TOTAL DEAD TREES IN SAMPLE :	0	0.00
TOTAL EMPTY SPACES IN SAMPLE:	208	65.41
TOTAL TREE SPACES IN SAMPLE :	318	100.00

TOTAL LIVE TREES IN CITY:	2464.00	34.59
TOTAL DEAD TREES & EMPTY:	4659.20	65.41
TOTAL TREE SPACES IN CITY:	7123.20	

SPECIES DISTRIBUTION REPORT FOR CHEBOYGAN, MI CODE: MI004
02/27/95

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
018	Boxelder	0	0	4	0	4	3.64
028	Maple, Norway	8	5	9	2	24	21.82
042	Schwedleri Norway	0	2	2	0	4	3.64
070	Maple, Silver	2	2	4	8	16	14.55
076	Maple, Sugar	0	2	13	7	22	20.00
100	Horsechesnut	0	0	13	1	14	12.73
133	Birch, White	1	0	1	0	2	1.82
292	Ash, Green	2	2	0	0	4	3.64
315	honeylocust	14	0	0	0	14	12.73
401	Apple, Crab	1	0	0	0	1	0.91
581	Locust, Black	0	0	2	0	2	1.82
611	Ash, European Mtn.	2	0	0	0	2	1.82
642	Basswood	0	0	0	1	1	0.91

Intersection Name WESTERN/COURT
Plot Number MI-004-01
Date Collected 07/30/94 By WILDENTHAL
Potential Planting Spaces 54

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name HURON/LOCUST
Plot Number MI-004-02
Date Collected 07/30/94 By WILDENTHAL
Potential Planting Spaces 43

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name SEVENTH/SOUTH C
Plot Number MI-004-03
Date Collected 07/30/94 By WILDENTHAL
Potential Planting Spaces 51

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name MAIN ST/PINE
Plot Number MI-004-04
Date Collected 07/30/94 By WILDENTHAL
Potential Planting Spaces 32

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name MAIN ST/PINE
Plot Number MI-004-04
Date Collected 07/30/94 By WILDENTHAL
Potential Planting Spaces 0

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name CUYLER/LINCOLN
Plot Number MI-004-05
Date Collected 07/30/94 By WILDENTHAL
Potential Planting Spaces 28

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

SUMMARY REPORT FOR DETROIT, MI CODE: MI005

02/27/95

MILES OF STREETS IN THE CITY:	2800
MILES OF STREETS IN THE SAMPLE:	12.00
THIS IS A SAMPLE PERCENTAGE OF:	0.43

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	45	5.64
SMALL — 3-12 INCHES :	478	59.90
MEDIUM — 12-24 INCHES :	171	21.43
LARGE — > 24 INCHES :	104	13.03

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	38	4.76
GOOD CONDITION :	241	30.20
FAIR CONDITION :	282	35.34
POOR CONDITION :	237	29.70

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	798	46.40
TOTAL DEAD TREES IN SAMPLE :	3	0.38
TOTAL EMPTY SPACES IN SAMPLE:	919	53.43
TOTAL TREE SPACES IN SAMPLE :	1720	100.00

TOTAL LIVE TREES IN CITY:	186200.00	46.40
TOTAL DEAD TREES & EMPTY:	215133.33	53.60
TOTAL TREE SPACES IN CITY:	401333.33	

SPECIES DISTRIBUTION REPORT FOR DETROIT, MI CODE: MI005
02/27/95

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
016	Maple, Amur	0	25	0	0	25	3.13
018	Boxelder	0	1	6	0	7	0.88
028	Maple, Norway	4	89	25	1	119	14.91
031	Maple,Nor.Columnare	0	1	0	0	1	0.13
032	Crimson King Norway	0	2	0	0	2	0.25
042	Schwedleri Norway	0	3	2	0	5	0.63
058	Maple, Red	2	9	13	5	29	3.63
070	Maple, Silver	8	19	63	66	156	19.55
076	Maple, Sugar	2	25	2	0	29	3.63
100	Horsechesnut	0	0	6	5	11	1.38
175	Catalpa	0	0	0	4	4	0.50
180	Hackberry	0	0	2	0	2	0.25
245	Russian Olive	0	7	0	0	7	0.88
275	Ash, white	0	5	1	1	7	0.88
292	Ash, Green	15	110	15	0	140	17.54
305	Ginkgo	3	0	0	0	3	0.38
315	honeylocust	4	92	8	0	104	13.03
342	Walnut, Black	0	0	1	0	1	0.13
365	Poplar, Yellow	0	1	0	0	1	0.13
371	sweetgum	1	0	0	0	1	0.13
401	Apple, Crab	0	24	0	0	24	3.01
445	Ironwood	0	1	0	0	1	0.13
471	Pine, Austrian	0	1	0	0	1	0.13
486	Planetree, London	0	14	8	1	23	2.88
487	Sycamore, American	0	0	3	1	4	0.50
490	Poplar	0	0	2	0	2	0.25
496	Cottonwood, Eastern	0	1	0	1	2	0.25
510	Plum, Myrobalan	1	0	0	0	1	0.13
566	Oak, Pin	0	5	0	0	5	0.63
571	Oak, Red	1	5	0	1	7	0.88
581	Locust, Black	0	1	1	0	2	0.25
611	Ash, European Mtn.	0	4	0	0	4	0.50
640	Linden	0	0	1	0	1	0.13
642	Basswood	0	0	1	1	2	0.25
644	Linden, Little leaf	4	32	0	0	36	4.51
665	Elm	0	0	0	3	3	0.38
667	Elm, American	0	1	2	5	8	1.00
680	Elm, Siberian	0	0	9	9	18	2.26

Intersection Name 7MILE/WESTBROOK
Plot Number MI-005-01
Date Collected 07/08/94 By BW,JJK,JS
Potential Planting Spaces 50

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name 7MILE/WESTBROOK
Plot Number MI-005-01
Date Collected 07/08/94 By BW-JJK-JS
Potential Planting Spaces 33

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name SUSSEX/CLARITE
Plot Number MI-005-02
Date Collected 07/08/94 By BW-JJK-JS
Potential Planting Spaces 46

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name FAIRFLD/PICKFRD
Plot Number MI-005-03
Date Collected 07/08/94 By BW-JJK-JS
Potential Planting Spaces 19

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name GODDARD/ROBINWD
Plot Number MI-005-04
Date Collected 07/09/94 By BW-JJK-JS
Potential Planting Spaces 35

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name GREINER/RUNYON
Plot Number MI-005-05
Date Collected 07/09/94 By BW-JJK-JS
Potential Planting Spaces 44

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name SARATOGA/HAYES
Plot Number MI-005-06
Date Collected 07/09/94 By BW-JJK-JS
Potential Planting Spaces 41

Municipal Zone S
Street Length 0.38 Miles
Boulevard Length 0.00 Miles

Intersection Name SARATOGA/HAYES
Plot Number MI-005-06
Date Collected 07/09/94 By BW-JJK-JS
Potential Planting Spaces 11

Municipal Zone B
Street Length 0.12 Miles
Boulevard Length 0.00 Miles

Intersection Name WARREN/KENSNGTN
Plot Number MI-005-07
Date Collected 07/09/94 By BW-JJK-JS
Potential Planting Spaces 19

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name WARREN/KENSNGTN
Plot Number MI-005-07
Date Collected 07/09/94 By BW-JS
Potential Planting Spaces 0

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name MILLER/CARRIE
Plot Number MI-005-08
Date Collected 07/09/94 By BW-JS
Potential Planting Spaces 53

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name RUPERT/SYRACUSE
Plot Number MI-005-09
Date Collected 07/09/94 By BW-JS
Potential Planting Spaces 15

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name PURITAN/LAWTON
Plot Number MI-005-10
Date Collected 07/09/94 By BW-JS
Potential Planting Spaces 17

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name PURITAN/LAWTON
Plot Number MI-005-10
Date Collected 07/09/94 By BW-JS
Potential Planting Spaces 12

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name CHALFORT/ARDMOR
Plot Number MI-005-11
Date Collected 07/09/94 By BW-JS
Potential Planting Spaces 51

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name KEELER/TRINITY
Plot Number MI-005-12
Date Collected 07/08/94 By BW-JJK-JS
Potential Planting Spaces 38

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name CATHEDRL/AUBURN
Plot Number MI-005-13
Date Collected 07/09/94 By BW-JS
Potential Planting Spaces 53

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name WCHICAGO/HUBBEL
Plot Number MI-005-14
Date Collected 07/09/94 By BW-JS
Potential Planting Spaces 56

Municipal Zone S
Street Length 0.44 Miles
Boulevard Length 0.00 Miles

Intersection Name WCHICAGO/HUBBEL
Plot Number MI-005-14
Date Collected 07/09/94 By BW-JS
Potential Planting Spaces 0

Municipal Zone B
Street Length 0.06 Miles
Boulevard Length 0.00 Miles

Intersection Name JOY/MCQUADE
Plot Number MI-005-15
Date Collected 07/09/94 By BW/JS
Potential Planting Spaces 0

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name JOY/MCQUADE
Plot Number MI-005-15
Date Collected 07/09/94 By BW/JS
Potential Planting Spaces 30

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name HARPER/BRUSH
Plot Number MI-005-16
Date Collected 07/09/94 By BW/JC
Potential Planting Spaces 0

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name HARPER/BRUSH
Plot Number MI-005-16
Date Collected 07/09/94 By BW-JS
Potential Planting Spaces 22

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name SYLVSTR/SEMINOL
Plot Number MI-005-17
Date Collected 07/09/94 By BW-JS
Potential Planting Spaces 29

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name KERCHEVAL/DICKE
Plot Number MI-005-18
Date Collected 07/09/94 By BW-JS
Potential Planting Spaces 4

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name KERCHEVAL/DICKE
Plot Number MI-005-18
Date Collected 07/09/94 By BW-JS
Potential Planting Spaces 22

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name BENSON/MCDOUGAL
Plot Number MI-005-19
Date Collected 07/08/94 By BW-JJK-JS
Potential Planting Spaces 22

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name SPRUCE/TRUMBULL
Plot Number MI-005-20
Date Collected 07/08/94 By BW-JJK-JS
Potential Planting Spaces 47

Municipal Zone S
Street Length 0.44 Miles
Boulevard Length 0.00 Miles

Intersection Name SPRUCE/TRUMBULL
Plot Number MI-005-20
Date Collected 07/08/94 By BW-JJK-JS
Potential Planting Spaces 5

Municipal Zone B
Street Length 0.06 Miles
Boulevard Length 0.00 Miles

Intersection Name JACKSON/31ST
Plot Number MI-005-21
Date Collected 07/08/94 By BW-JJK-JS
Potential Planting Spaces 56

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name WHITLOCK/WARWIC
Plot Number MI-005-22
Date Collected 07/09/94 By BW-JS
Potential Planting Spaces 23

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name FRANCIS/ANNABEL
Plot Number MI-005-23
Date Collected 07/08/94 By BW-JJK-JS
Potential Planting Spaces 20

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name LEXINGTON/GREEN
Plot Number MI-005-24
Date Collected 07/08/94 By BW-JJK-JS
Potential Planting Spaces 46

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

SUMMARY REPORT FOR EAST LANSING, MI CODE: MI006

02/27/95

MILES OF STREETS IN THE CITY:	88
MILES OF STREETS IN THE SAMPLE:	5.00
THIS IS A SAMPLE PERCENTAGE OF:	5.68

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	51	13.49
SMALL — 3-12 INCHES :	143	37.83
MEDIUM — 12-24 INCHES :	150	39.68
LARGE — > 24 INCHES :	34	8.99

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	35	9.26
GOOD CONDITION :	103	27.25
FAIR CONDITION :	103	27.25
POOR CONDITION :	137	36.24

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	378	51.85
TOTAL DEAD TREES IN SAMPLE :	0	0.00
TOTAL EMPTY SPACES IN SAMPLE:	351	48.15
TOTAL TREE SPACES IN SAMPLE :	729	100.00

TOTAL LIVE TREES IN CITY:	6652.80	51.85
TOTAL DEAD TREES & EMPTY:	6177.60	48.15
TOTAL TREE SPACES IN CITY:	12830.40	

SPECIES DISTRIBUTION REPORT FOR EAST LANSING, MI CODE: MI006
02/27/95

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
018	Boxelder	0	0	1	0	1	0.26
028	Maple, Norway	24	42	49	2	117	30.95
031	Maple,Nor.Columnare	0	1	0	0	1	0.26
032	Crimson King Norway	3	3	1	0	7	1.85
042	Schwedleri Norway	0	4	2	0	6	1.59
058	Maple, Red	8	14	2	0	24	6.35
070	Maple, Silver	0	3	32	14	49	12.96
076	Maple, Sugar	0	14	16	1	31	8.20
135	Birch, Europ. White	0	1	0	0	1	0.26
147	Hornbeam, European	0	4	0	0	4	1.06
175	Catalpa	0	1	0	0	1	0.26
230	Hawthorn	0	11	0	0	11	2.91
275	Ash, white	2	0	0	0	2	0.53
292	Ash, Green	2	1	2	0	5	1.32
315	honeylocust	2	22	5	0	29	7.67
401	Apple, Crab	3	1	0	0	4	1.06
454	Spruce, White	0	1	0	0	1	0.26
486	Planetree, London	0	5	1	0	6	1.59
505	Cherry	1	0	0	0	1	0.26
520	Cherry, Black	0	0	0	1	1	0.26
529	Plum	0	1	0	0	1	0.26
540	Douglas Fir	1	0	0	0	1	0.26
548	Pear, Bradford	3	5	0	0	8	2.12
550	Oaks	0	1	0	0	1	0.26
552	Oak, White	0	2	4	0	6	1.59
569	Oak, English	1	0	0	0	1	0.26
571	Oak, Red	0	1	3	1	5	1.32
611	Ash, European Mtn.	1	0	0	0	1	0.26
644	Linden, Little leaf	0	5	14	0	19	5.03
667	Elm, American	0	0	18	15	33	8.73

Intersection Name HARRISON/TROWBR
Plot Number MI-006-01
Date Collected 09/11/94 By WILDENTHAL
Potential Planting Spaces 52

Municipal Zone B
Street Length 0.50 Miles
Boulevard Length0.50 Miles

Intersection Name GLENHVN/WOODNGH
Plot Number MI-006-02
Date Collected 09/11/94 By WILDENTHAL
Potential Planting Spaces 4

Municipal Zone F
Street Length 0.20 Miles
Boulevard Length0.00 Miles

Intersection Name GLENHVN/WOODNGH
Plot Number MI-006-02
Date Collected 09/11/94 By WILDENTHAL
Potential Planting Spaces 27

Municipal Zone S
Street Length 0.30 Miles
Boulevard Length0.00 Miles

Intersection Name WILDWOOD/ROSEWO
Plot Number MI-006-03
Date Collected 09/11/94 By WILDENTHAL
Potential Planting Spaces 20

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name HARRISON/MICHIG
Plot Number MI-006-04
Date Collected 09/11/94 By WILDENTHAL
Potential Planting Spaces 4

Municipal Zone S
Street Length 0.38 Miles
Boulevard Length0.25 Miles

Intersection Name HARRISON/MICHIG
Plot Number MI-006-04
Date Collected 09/11/94 By WILDENTHAL
Potential Planting Spaces 1

Municipal Zone B
Street Length 0.12 Miles
Boulevard Length0.00 Miles

Intersection Name HIPOST/WDLDPASS
Plot Number MI-006-05
Date Collected 09/11/94 By WILDENTHAL
Potential Planting Spaces 52

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name BURCHAM/GROVE
Plot Number MI-006-06
Date Collected 09/10/94 By WILDENTHAL
Potential Planting Spaces 32

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name WAYLAND/MELROSE
Plot Number MI-006-07
Date Collected 09/10/94 By WILDENTHAL
Potential Planting Spaces 41

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name GUNSON/BEECH
Plot Number MI-006-08
Date Collected 09/10/94 By WILDENTHAL
Potential Planting Spaces 28

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name COOLIDGE/FARWOO
Plot Number MI-006-09
Date Collected 09/10/94 By WILDENTHAL
Potential Planting Spaces 36

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name DENNISON/WALBRG
Plot Number MI-006-10
Date Collected 09/10/94 By WILDENTHAL
Potential Planting Spaces 54

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

SUMMARY REPORT FOR ELK RAPIDS, MI CODE: MI007

02/27/95

MILES OF STREETS IN THE CITY:	18
MILES OF STREETS IN THE SAMPLE:	2.50
THIS IS A SAMPLE PERCENTAGE OF:	13.89

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	27	19.29
SMALL — 3-12 INCHES :	30	21.43
MEDIUM — 12-24 INCHES :	62	44.29
LARGE — > 24 INCHES :	21	15.00

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	25	17.86
GOOD CONDITION :	13	9.29
FAIR CONDITION :	34	24.29
POOR CONDITION :	68	48.57

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	140	40.58
TOTAL DEAD TREES IN SAMPLE :	0	0.00
TOTAL EMPTY SPACES IN SAMPLE:	205	59.42
TOTAL TREE SPACES IN SAMPLE :	345	100.00

TOTAL LIVE TREES IN CITY:	1008.00	40.58
TOTAL DEAD TREES & EMPTY:	1476.00	59.42
TOTAL TREE SPACES IN CITY:	2484.00	

SPECIES DISTRIBUTION REPORT FOR ELK RAPIDS, MI CODE: MI007
02/27/95

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
014	Maple, Hedge	7	1	1	0	9	6.43
018	Boxelder	0	0	2	1	3	2.14
028	Maple, Norway	3	5	7	1	16	11.43
032	Crimson King Norway	5	4	0	0	9	6.43
042	Schwedleri Norway	0	2	0	0	2	1.43
058	Maple, Red	0	0	16	0	16	11.43
070	Maple, Silver	1	2	2	1	6	4.29
076	Maple, Sugar	1	5	18	11	35	25.00
133	Birch, White	0	0	2	0	2	1.43
175	Catalpa	1	0	1	1	3	2.14
292	Ash, Green	0	0	2	0	2	1.43
315	honeylocust	0	1	0	0	1	0.71
342	Walnut, Black	0	4	2	0	6	4.29
401	Apple, Crab	1	0	0	0	1	0.71
435	Mulberry	1	0	0	0	1	0.71
452	Spruce, Norway	0	0	1	0	1	0.71
454	Spruce, White	1	0	0	0	1	0.71
460	Spruce, Colo. Blue	1	0	0	0	1	0.71
477	Pine, White	2	0	4	0	6	4.29
496	Cottonwood, Eastern	0	1	1	0	2	1.43
540	Douglas Fir	0	1	0	0	1	0.71
548	Pear, Bradford	1	2	0	0	3	2.14
566	Oak, Pin	1	0	0	0	1	0.71
571	Oak, Red	0	0	1	0	1	0.71
581	Locust, Black	0	0	1	6	7	5.00
611	Ash, European Mtn.	0	1	0	0	1	0.71
640	Linden	1	1	0	0	2	1.43
680	Elm, Siberian	0	0	1	0	1	0.71

PLOTS SAMPLED IN ELK RAPIDS, MI CODE: MI007
Run Date: 02/27/95

Intersection Name First/Cedar
Plot Number MI-007-01
Date Collected 07/16/94 By Wildenthal
Potential Planting Spaces 32

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name US31/Ottowa
Plot Number MI-007-02
Date Collected 07/16/94 By Wildenthal
Potential Planting Spaces 29

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name Ash/River
Plot Number MI-007-03
Date Collected 07/16/94 By Wildenthal
Potential Planting Spaces 28

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name Rivershore/Ames
Plot Number MI-007-04
Date Collected 07/16/94 By Wildenthal
Potential Planting Spaces 48

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name Park/Third
Plot Number MI-007-05
Date Collected 07/16/94 By Wildenthal
Potential Planting Spaces 68

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

SUMMARY REPORT FOR GRAND RAPIDS, MI CODE: MI008

02/27/95

MILES OF STREETS IN THE CITY:	600
MILES OF STREETS IN THE SAMPLE:	5.00
THIS IS A SAMPLE PERCENTAGE OF:	0.83

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	67	15.91
SMALL — 3-12 INCHES :	170	40.38
MEDIUM — 12-24 INCHES :	165	39.19
LARGE — > 24 INCHES :	19	4.51

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	107	25.42
GOOD CONDITION :	155	36.82
FAIR CONDITION :	90	21.38
POOR CONDITION :	69	16.39

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	421	67.36
TOTAL DEAD TREES IN SAMPLE :	4	0.95
TOTAL EMPTY SPACES IN SAMPLE:	200	32.00
TOTAL TREE SPACES IN SAMPLE :	625	100.00

TOTAL LIVE TREES IN CITY:	50520.00	67.36
TOTAL DEAD TREES & EMPTY:	24480.00	32.64
TOTAL TREE SPACES IN CITY:	75000.00	

SPECIES DISTRIBUTION REPORT FOR GRAND RAPIDS, MI CODE: MI008
02/27/95 PAGE 2

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
001	fir	0	0	1	0	1	0.24
014	Maple, Hedge	4	0	0	0	4	0.95
018	Boxelder	0	0	1	0	1	0.24
028	Maple, Norway	23	46	31	0	100	23.75
032	Crimson King Norway	7	14	2	0	23	5.46
042	Schwedleri Norway	0	6	2	0	8	1.90
058	Maple, Red	3	4	3	0	10	2.38
070	Maple, Silver	2	1	28	12	43	10.21
076	Maple, Sugar	1	15	20	1	37	8.79
100	Horsechesnut	0	0	2	0	2	0.48
160	Hickories	0	0	2	0	2	0.48
175	Catalpa	0	0	3	0	3	0.71
275	Ash, white	0	1	2	0	3	0.71
292	Ash, Green	23	24	18	0	65	15.44
305	Ginkgo	1	0	0	0	1	0.24
315	honeylocust	0	26	8	0	34	8.08
365	Poplar, Yellow	0	0	1	0	1	0.24
371	sweetgum	0	0	1	0	1	0.24
401	Apple, Crab	0	2	0	0	2	0.48
445	Ironwood	1	0	0	0	1	0.24
452	Spruce, Norway	0	1	0	0	1	0.24
460	Spruce, Colo. Blue	0	3	6	0	9	2.14
486	Planetree, London	0	0	28	1	29	6.89
496	Cottonwood, Eastern	0	1	1	0	2	0.48
505	Cherry	0	1	0	0	1	0.24
520	Cherry, Black	0	0	1	0	1	0.24
552	Oak, White	1	2	1	0	4	0.95
562	Oak, Bur	0	0	0	2	2	0.48
571	Oak, Red	0	2	1	1	4	0.95
581	Locust, Black	0	6	0	0	6	1.43
601		0	12	2	0	14	3.33
642	Basswood	0	0	0	1	1	0.24
644	Linden, Little leaf	0	1	0	0	1	0.24
667	Elm, American	1	2	0	1	4	0.95

Intersection Name 7TH/FAIRFIELD
Plot Number MI-008-01
Date Collected 06/04/94 By BW-JJK
Potential Planting Spaces 16

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name 10THNW/ALPINENW
Plot Number MI-008-02
Date Collected 06/04/94 By BW-JJK
Potential Planting Spaces 25

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name 3MI/PLAINFIELD
Plot Number MI-008-03
Date Collected 06/04/94 By BW/JJK
Potential Planting Spaces 22

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name CURTIS/UNION AV
Plot Number MI-008-04
Date Collected 06/04/94 By BW-JJK
Potential Planting Spaces 27

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name MARYLAND/OAKIND
Plot Number MI-008-05
Date Collected 06/04/94 By BW-JJK
Potential Planting Spaces 21

Municipal Zone B
Street Length 0.38 Miles
Boulevard Length0.00 Miles

Intersection Name MARYLAND/OAKIND
Plot Number MI-008-05
Date Collected 06/04/94 By BW-JJK
Potential Planting Spaces 11

Municipal Zone S
Street Length 0.12 Miles
Boulevard Length0.00 Miles

Intersection Name LEXNGTON/WATSON
Plot Number MI-008-06
Date Collected 06/04/94 By BW-JJK
Potential Planting Spaces 15

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name MADISON/FRANKLN
Plot Number MI-008-07
Date Collected 06/04/94 By BW-JJK
Potential Planting Spaces 21

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name EASTERN/OTTILLA
Plot Number MI-008-08
Date Collected 06/04/94 By BW-JJK
Potential Planting Spaces 24

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name BRETTON/OKEMOS
Plot Number MI-008-09
Date Collected 06/04/94 By BW-JJK
Potential Planting Spaces 15

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name KALAMAZOO/36TH
Plot Number MI-008-10
Date Collected 06/04/94 By BW-JJK
Potential Planting Spaces 3

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

SUMMARY REPORT FOR Grsse Pte Woods, MI CODE: MI009

02/27/95 PAGE 1

MILES OF STREETS IN THE CITY:	54
MILES OF STREETS IN THE SAMPLE:	2.50
THIS IS A SAMPLE PERCENTAGE OF:	4.63

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	132	34.46
SMALL — 3-12 INCHES :	147	38.38
MEDIUM — 12-24 INCHES :	64	16.71
LARGE — > 24 INCHES :	40	10.44

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	186	48.56
GOOD CONDITION :	115	30.03
FAIR CONDITION :	62	16.19
POOR CONDITION :	20	5.22

SAMPLE SUMMARY:		
TOTAL LIVE TREES IN SAMPLE :	383	80.29
TOTAL DEAD TREES IN SAMPLE :	0	0.00
TOTAL EMPTY SPACES IN SAMPLE:	94	19.71
TOTAL TREE SPACES IN SAMPLE :	477	100.00
TOTAL LIVE TREES IN CITY:	8272.80	80.29
TOTAL DEAD TREES & EMPTY:	2030.40	19.71
TOTAL TREE SPACES IN CITY:	10303.20	

SPECIES DISTRIBUTION REPORT FOR Grsse Pte Woods, MI CODE: MI009
02/27/95 PAGE 2

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
028	Maple, Norway	12	55	11	0	78	20.37
058	Maple, Red	5	21	9	0	35	9.14
070	Maple, Silver	0	6	14	10	30	7.83
076	Maple, Sugar	0	8	0	0	8	2.09
100	Horsechesnut	1	2	0	0	3	0.78
158	Hornbeam, American	0	1	0	0	1	0.26
175	Catalpa	0	0	1	9	10	2.61
230	Hawthorn	0	1	1	0	2	0.52
275	Ash, white	7	3	1	1	12	3.13
292	Ash, Green	5	8	9	0	22	5.74
315	honeylocust	3	17	3	0	23	6.01
323		1	0	0	0	1	0.26
371	sweetgum	9	1	0	0	10	2.61
401	Apple, Crab	59	2	0	0	61	15.93
460	Spruce, Colo. Blue	1	0	0	0	1	0.26
477	Pine, White	0	1	0	0	1	0.26
486	Planetree, London	0	1	3	0	4	1.04
505	Cherry	0	1	0	0	1	0.26
510	Plum, Myrobalan	3	0	0	0	3	0.78
525	Cherry, Kwanzan	0	1	0	0	1	0.26
529	Plum	6	0	0	0	6	1.57
548	Pear, Bradford	3	4	0	0	7	1.83
552	Oak, White	0	0	1	0	1	0.26
566	Oak, Pin	0	0	1	0	1	0.26
569	Oak, English	0	0	2	0	2	0.52
571	Oak, Red	6	2	2	1	11	2.87
601		2	0	0	0	2	0.52
611	Ash, European Mtn.	0	2	0	0	2	0.52
640	Linden	0	9	0	0	9	2.35
644	Linden, Little leaf	5	0	0	0	5	1.31
665	Elm	2	0	0	0	2	0.52
667	Elm, American	0	0	3	18	21	5.48
676	Elm, Camperdown	0	1	0	0	1	0.26
680	Elm, Siberian	0	0	3	1	4	1.04
691	Japanese	2	0	0	0	2	0.52

Intersection Name Goethe/Hawthorn
Plot Number MI-009-01
Date Collected 04/23/94 By Wildenthal
Potential Planting Spaces 26

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name Wedgewd/Roslyn
Plot Number MI-009-02
Date Collected 04/23/94 By Wildenthal
Potential Planting Spaces 29

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name Sunningdale/Fai
Plot Number MI-009-03
Date Collected 04/23/94 By Wildenthal
Potential Planting Spaces 13

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.11 Miles

Intersection Name Morningside/Fai
Plot Number MI-009-04
Date Collected 04/23/94 By Wildenthal
Potential Planting Spaces 21

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.25 Miles

Intersection Name Mack/Manchester
Plot Number MI-009-05
Date Collected 04/23/94 By Wildenthal
Potential Planting Spaces 4

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length 0.25 Miles

Intersection Name Mack/Manchester
Plot Number MI-009-05
Date Collected 04/23/94 By Wildenthal
Potential Planting Spaces 1

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

SUMMARY REPORT FOR LINCOLN PARK, MI CODE: MI010

02/27/95

MILES OF STREETS IN THE CITY:	120
MILES OF STREETS IN THE SAMPLE:	5.00
THIS IS A SAMPLE PERCENTAGE OF:	4.17

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	38	7.95
SMALL — 3-12 INCHES :	287	60.04
MEDIUM — 12-24 INCHES :	97	20.29
LARGE — > 24 INCHES :	56	11.72

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	26	5.44
GOOD CONDITION :	208	43.51
FAIR CONDITION :	205	42.89
POOR CONDITION :	39	8.16

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	478	45.57
TOTAL DEAD TREES IN SAMPLE :	5	1.05
TOTAL EMPTY SPACES IN SAMPLE:	566	53.96
TOTAL TREE SPACES IN SAMPLE :	1049	100.00

TOTAL LIVE TREES IN CITY:	11472.00	45.57
TOTAL DEAD TREES & EMPTY:	13704.00	54.43
TOTAL TREE SPACES IN CITY:	25176.00	

SPECIES DISTRIBUTION REPORT FOR LINCOLN PARK, MI CODE: MI010
02/27/95

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
002	Fir, balsam	0	1	0	0	1	0.21
010	Maples	0	1	0	0	1	0.21
018	Boxelder	0	3	0	1	4	0.84
028	Maple, Norway	5	135	3	2	145	30.33
031	Maple,Nor.Columnare	0	2	0	0	2	0.42
032	Crimson King Norway	2	18	1	0	21	4.39
058	Maple, Red	2	8	0	0	10	2.09
070	Maple, Silver	9	64	65	38	176	36.82
076	Maple, Sugar	0	2	1	0	3	0.63
100	Horsechesnut	0	2	0	0	2	0.42
133	Birch, White	0	4	0	0	4	0.84
175	Catalpa	0	0	2	0	2	0.42
186	redbud	2	1	0	0	3	0.63
275	Ash, white	0	1	0	0	1	0.21
292	Ash, Green	3	8	9	1	21	4.39
315	honeylocust	5	22	6	0	33	6.90
371	sweetgum	1	2	0	0	3	0.63
401	Apple, Crab	2	3	1	0	6	1.26
435	Mulberry	0	1	1	1	3	0.63
486	Planetree, London	1	0	0	0	1	0.21
487	Sycamore, American	0	4	3	4	11	2.30
496	Cottonwood, Eastern	1	0	2	0	3	0.63
529	Plum	0	1	0	0	1	0.21
548	Pear, Bradford	2	0	0	0	2	0.42
571	Oak, Red	2	1	0	0	3	0.63
581	Locust, Black	0	1	0	0	1	0.21
611	Ash, European Mtn.	0	1	0	0	1	0.21
642	Basswood	0	0	0	2	2	0.42
644	Linden, Little leaf	1	0	0	0	1	0.21
667	Elm, American	0	0	0	1	1	0.21
680	Elm, Siberian	0	1	3	6	10	2.09

Intersection Name PORTER/COLLEGE
Plot Number MI-010-01
Date Collected 07/29/94 By RICK CLOSE
Potential Planting Spaces 41

Municipal Zone U
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name WARWICK/LAFAYET
Plot Number MI-010-02
Date Collected 07/29/94 By RICK CLOSE
Potential Planting Spaces 58

Municipal Zone U
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name FERRIS/CICOTTE
Plot Number MI-010-03
Date Collected 07/29/94 By RICK CLOSE
Potential Planting Spaces 40

Municipal Zone U
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name SOUTHFIELD/WASH
Plot Number MI-010-04
Date Collected 07/29/94 By RICK CLOSE
Potential Planting Spaces 15

Municipal Zone U
Street Length 0.25 Miles
Boulevard Length0.00 Miles

Intersection Name SOUTHFIELD/WASH
Plot Number MI-010-04
Date Collected 07/29/94 By RICK CLOSE
Potential Planting Spaces 41

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length0.00 Miles

Intersection Name DIX/CLEVELAND
Plot Number MI-010-05
Date Collected 07/29/94 By RICK CLOSE
Potential Planting Spaces 40

Municipal Zone U
Street Length 0.25 Miles
Boulevard Length0.00 Miles

Intersection Name DIX/CLEVELAND
Plot Number MI-010-05
Date Collected 07/29/94 By RICK CLOSE
Potential Planting Spaces 42

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length0.00 Miles

Intersection Name PROGRESS/LAFAYE
Plot Number MI-010-06
Date Collected 07/29/94 By RICK CLOSE
Potential Planting Spaces 60

Municipal Zone U
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name MYRON/HOWARD
Plot Number MI-010-07
Date Collected 07/29/94 By RICK CLOSE
Potential Planting Spaces 49

Municipal Zone U
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name FORD/ABBOTT
Plot Number MI-010-08
Date Collected 07/29/94 By RICK CLOSE
Potential Planting Spaces 38

Municipal Zone U
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name FORT ST/LEBLANC
Plot Number MI-010-09
Date Collected 07/29/94 By RICK CLOSE
Potential Planting Spaces 35

Municipal Zone U
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name FORT ST/LEBLANC
Plot Number MI-010-09
Date Collected 07/29/94 By RICK CLOSE
Potential Planting Spaces 27

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length 0.12 Miles

Intersection Name ELECTRIC/PAGEL
Plot Number MI-010-10
Date Collected 07/29/94 By RICK CLOSE
Potential Planting Spaces 80

Municipal Zone U
Street Length 0.50 Miles
Boulevard Length 0.12 Miles

SUMMARY REPORT FOR LIVONIA, MI CODE: MI011

02/27/95

MILES OF STREETS IN THE CITY:	420
MILES OF STREETS IN THE SAMPLE:	5.00
THIS IS A SAMPLE PERCENTAGE OF:	1.19

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	44	10.92
SMALL — 3-12 INCHES :	166	41.19
MEDIUM — 12-24 INCHES :	162	40.20
LARGE — > 24 INCHES :	31	7.69

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	145	35.98
GOOD CONDITION :	166	41.19
FAIR CONDITION :	78	19.35
POOR CONDITION :	14	3.47

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	403	65.64
TOTAL DEAD TREES IN SAMPLE :	1	0.25
TOTAL EMPTY SPACES IN SAMPLE:	210	34.20
TOTAL TREE SPACES IN SAMPLE :	614	100.00

TOTAL LIVE TREES IN CITY:	33852.00	65.64
TOTAL DEAD TREES & EMPTY:	17724.00	34.36
TOTAL TREE SPACES IN CITY:	51576.00	

SPECIES DISTRIBUTION REPORT FOR LIVONIA, MI CODE: MI011
02/27/95

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
001	fir	0	2	0	0	2	0.50
017	Maple, Paperback	1	0	0	0	1	0.25
018	Boxelder	0	0	1	0	1	0.25
022	Maple, Japanese	1	0	0	0	1	0.25
028	Maple, Norway	6	53	64	0	123	30.52
032	Crimson King Norway	14	19	0	0	33	8.19
042	Schwedleri Norway	0	1	3	0	4	0.99
058	Maple, Red	10	24	3	0	37	9.18
070	Maple, Silver	2	6	23	10	41	10.17
076	Maple, Sugar	0	4	19	4	27	6.70
230	Hawthorn	0	3	0	0	3	0.74
275	Ash, white	2	7	16	4	29	7.20
292	Ash, Green	1	1	1	0	3	0.74
315	honeylocust	0	1	0	0	1	0.25
316	Honeylocust,Thornles	2	10	11	1	24	5.96
342	Walnut, Black	0	1	0	0	1	0.25
345	Junipers	0	2	0	0	2	0.50
371	sweetgum	0	1	0	0	1	0.25
400	Apple	0	0	1	0	1	0.25
401	Apple, Crab	1	3	0	0	4	0.99
452	Spruce, Norway	0	1	0	0	1	0.25
460	Spruce, Colo. Blue	0	6	2	0	8	1.99
471	Pine, Austrian	0	1	0	1	2	0.50
477	Pine, White	0	4	0	0	4	0.99
479	Pine, Scotch	1	1	1	0	3	0.74
486	Planetree, London	0	7	7	0	14	3.47
487	Sycamore, American	0	0	0	2	2	0.50
496	Cottonwood, Eastern	0	0	0	2	2	0.50
562	Oak, Bur	0	1	0	2	3	0.74
566	Oak, Pin	0	0	4	0	4	0.99
571	Oak, Red	0	0	1	1	2	0.50
611	Ash, European Mtn.	1	0	0	0	1	0.25
640	Linden	0	2	1	0	3	0.74
642	Basswood	0	3	3	0	6	1.49
644	Linden, Little leaf	0	1	0	0	1	0.25
667	Elm, American	0	0	0	2	2	0.50
680	Elm, Siberian	0	1	1	2	4	0.99
700	Buckthorn	2	0	0	0	2	0.50

Intersection Name WAYNE/W.CHICAGO
Plot Number MI-011-01
Date Collected 05/28/94 By WILDENTHAL
Potential Planting Spaces 45

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name HUBBARD/ORNGLWN
Plot Number MI-011-02
Date Collected 05/28/94 By WILDENTHAL
Potential Planting Spaces 27

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name MDLBELT/HATHAWA
Plot Number MI-011-03
Date Collected 05/28/94 By WILDENTHAL
Potential Planting Spaces 33

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name LYNDON/GARDEN
Plot Number MI-011-04
Date Collected 05/28/94 By WILDENTHAL
Potential Planting Spaces 10

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name PURITAN/HENRYRU
Plot Number MI-011-05
Date Collected 05/28/94 By WILDENTHAL
Potential Planting Spaces 16

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name BRENTWD/PICKFRD
Plot Number MI-011-06
Date Collected 05/28/94 By WILDENTHAL
Potential Planting Spaces 21

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name MERRIMAN/7MILE
Plot Number MI-011-07
Date Collected 05/28/94 By WILDENTHAL
Potential Planting Spaces 31

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name WAYNE/CURTIS
Plot Number MI-011-08
Date Collected 05/28/94 By WILDENTHAL
Potential Planting Spaces 0

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name LEVAN/SUNNYDALE
Plot Number MI-011-09
Date Collected 05/28/94 By WILDENTHAL
Potential Planting Spaces 17

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.12 Miles

Intersection Name RAMBLWOOD/PERTH
Plot Number MI-011-10
Date Collected 05/28/94 By WILDENTHAL
Potential Planting Spaces 10

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

SUMMARY REPORT FOR Manistee, MI CODE: MI012

02/27/95

MILES OF STREETS IN THE CITY:	49
MILES OF STREETS IN THE SAMPLE:	2.50
THIS IS A SAMPLE PERCENTAGE OF:	5.10

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	27	12.56
SMALL — 3-12 INCHES :	44	20.47
MEDIUM — 12-24 INCHES :	120	55.81
LARGE — > 24 INCHES :	24	11.16

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	13	6.05
GOOD CONDITION :	34	15.81
FAIR CONDITION :	60	27.91
POOR CONDITION :	108	50.23

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	215	51.81
TOTAL DEAD TREES IN SAMPLE :	2	0.93
TOTAL EMPTY SPACES IN SAMPLE:	198	47.71
TOTAL TREE SPACES IN SAMPLE :	415	100.00

TOTAL LIVE TREES IN CITY:	4214.00	51.81
TOTAL DEAD TREES & EMPTY:	3920.00	48.19
TOTAL TREE SPACES IN CITY:	8134.00	

SPECIES DISTRIBUTION REPORT FOR Manistee, MI CODE: MI012
02/27/95

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
018	Boxelder	0	0	1	0	1	0.47
028	Maple, Norway	5	16	42	3	66	30.70
032	Crimson King Norway	2	0	0	0	2	0.93
058	Maple, Red	5	14	14	1	34	15.81
070	Maple, Silver	0	4	11	9	24	11.16
076	Maple, Sugar	2	3	21	2	28	13.02
100	Horsechesnut	0	0	9	0	9	4.19
133	Birch, White	0	2	2	0	4	1.86
175	Catalpa	0	0	3	0	3	1.40
292	Ash, Green	0	2	1	0	3	1.40
316	Honeylocust,Thornles	6	3	0	0	9	4.19
401	Apple, Crab	6	0	0	0	6	2.79
490	Poplar	0	0	1	0	1	0.47
640	Linden	1	0	0	0	1	0.47
642	Basswood	0	0	13	8	21	9.77
680	Elm, Siberian	0	0	2	1	3	1.40

PLOTS SAMPLED IN Manistee, MI CODE: MI012
Run Date: 02/27/95

Intersection Name River/Cypress
Plot Number MI-012-01
Date Collected 07/17/94 By Wildenthal
Potential Planting Spaces 35

Municipal Zone B
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name Ninth/Ramsdell
Plot Number MI-012-02
Date Collected 07/17/94 By Wildenthal
Potential Planting Spaces 67

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name Maple/Fifth
Plot Number MI-012-03
Date Collected 07/17/94 By Wildenthal
Potential Planting Spaces 29

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name Eighth/Tamarack
Plot Number MI-012-04
Date Collected 07/17/94 By Wildenthal
Potential Planting Spaces 50

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name Ford/Fourth Ave
Plot Number MI-012-05
Date Collected 07/17/94 By Wildenthal
Potential Planting Spaces 17

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

SUMMARY REPORT FOR MANISTIQUE, MI CODE: MI013

02/27/95

MILES OF STREETS IN THE CITY:	30
MILES OF STREETS IN THE SAMPLE:	2.50
THIS IS A SAMPLE PERCENTAGE OF:	8.33

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	5	9.26
SMALL — 3-12 INCHES :	9	16.67
MEDIUM — 12-24 INCHES :	29	53.70
LARGE — > 24 INCHES :	11	20.37

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	2	3.70
GOOD CONDITION :	5	9.26
FAIR CONDITION :	10	18.52
POOR CONDITION :	37	68.52

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	54	14.92
TOTAL DEAD TREES IN SAMPLE :	4	7.41
TOTAL EMPTY SPACES IN SAMPLE:	304	83.98
TOTAL TREE SPACES IN SAMPLE :	362	100.00

TOTAL LIVE TREES IN CITY:	648.00	14.92
TOTAL DEAD TREES & EMPTY:	3696.00	85.08
TOTAL TREE SPACES IN CITY:	4344.00	

SPECIES DISTRIBUTION REPORT FOR MANISTIQUE, MI CODE: MI013
02/27/95

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
018	Boxelder	0	0	0	1	1	1.85
028	Maple, Norway	2	2	0	3	7	12.96
032	Crimson King Norway	1	0	0	0	1	1.85
058	Maple, Red	0	0	6	2	8	14.81
070	Maple, Silver	0	2	8	5	15	27.78
076	Maple, Sugar	0	2	11	0	13	24.07
100	Horsechesnut	1	0	0	0	1	1.85
133	Birch, White	0	0	1	0	1	1.85
292	Ash, Green	0	2	3	0	5	9.26
400	Apple	0	1	0	0	1	1.85
503	Aspen, Quaking	1	0	0	0	1	1.85

Intersection Name STEUBEN/GARDEN
Plot Number MI-013-01
Date Collected 07/31/94 By WILDENTHAL
Potential Planting Spaces 58

Municipal Zone U
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name LAKE/MAIN
Plot Number MI-013-02
Date Collected 07/31/94 By WILDENTHAL
Potential Planting Spaces 28

Municipal Zone U
Street Length 0.12 Miles
Boulevard Length0.00 Miles

Intersection Name LAKE/MAIN
Plot Number MI-013-02
Date Collected 07/31/94 By WILDENTHAL
Potential Planting Spaces 16

Municipal Zone B
Street Length 0.38 Miles
Boulevard Length0.00 Miles

Intersection Name ELM/CEDAR
Plot Number MI-013-03
Date Collected 07/31/94 By WILDENTHAL
Potential Planting Spaces 70

Municipal Zone U
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name BEAR/HOUGHTON
Plot Number MI-013-04
Date Collected 07/31/94 By WILDENTHAL
Potential Planting Spaces 84

Municipal Zone U
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name FOURTH/ELM
Plot Number MI-013-05
Date Collected 07/31/94 By WILDENTHAL
Potential Planting Spaces 48

Municipal Zone U
Street Length 0.50 Miles
Boulevard Length0.00 Miles

SUMMARY REPORT FOR PONTIAC, MI CODE: MI014

02/27/95

MILES OF STREETS IN THE CITY:	233
MILES OF STREETS IN THE SAMPLE:	5.00
THIS IS A SAMPLE PERCENTAGE OF:	2.15

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	36	20.34
SMALL — 3-12 INCHES :	26	14.69
MEDIUM — 12-24 INCHES :	100	56.50
LARGE — > 24 INCHES :	15	8.47

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	14	7.91
GOOD CONDITION :	64	36.16
FAIR CONDITION :	71	40.11
POOR CONDITION :	28	15.82

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	177	30.26
TOTAL DEAD TREES IN SAMPLE :	0	0.00
TOTAL EMPTY SPACES IN SAMPLE:	408	69.74
TOTAL TREE SPACES IN SAMPLE :	585	100.00

TOTAL LIVE TREES IN CITY:	8248.20	30.26
TOTAL DEAD TREES & EMPTY:	19012.80	69.74
TOTAL TREE SPACES IN CITY:	27261.00	

SPECIES DISTRIBUTION REPORT FOR PONTIAC, MI CODE: MI014

02/27/95

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
028	Maple, Norway	4	18	32	1	55	31.07
032	Crimson King Norway	0	3	0	0	3	1.69
058	Maple, Red	0	0	8	0	8	4.52
070	Maple, Silver	2	0	27	12	41	23.16
076	Maple, Sugar	0	0	7	0	7	3.95
100	Horsechesnut	0	0	1	0	1	0.56
292	Ash, Green	23	4	14	0	41	23.16
315	honeylocust	1	0	1	0	2	1.13
371	sweetgum	0	1	2	0	3	1.69
552	Oak, White	0	0	6	2	8	4.52
571	Oak, Red	0	0	2	0	2	1.13
640	Linden	6	0	0	0	6	3.39

Intersection Name STANLEY/WALTON
Plot Number MI-014-01
Date Collected 07/02/94 By WILDENTHAL
Potential Planting Spaces 8

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length0.00 Miles

Intersection Name STANLEY/WALTON
Plot Number MI-014-01
Date Collected 07/02/94 By WILDENTHAL
Potential Planting Spaces 0

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length0.00 Miles

Intersection Name STIRLING/NTHFLD
Plot Number MI-014-02
Date Collected 07/02/94 By WILDENTHAL
Potential Planting Spaces 55

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name CAMBRIGE/LAUREL
Plot Number MI-014-03
Date Collected 07/02/94 By WILDENTHAL
Potential Planting Spaces 20

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length0.00 Miles

Intersection Name CAMBRIGE/LAUREL
Plot Number MI-014-03
Date Collected 07/02/94 By WILDENTHAL
Potential Planting Spaces 33

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length0.00 Miles

Intersection Name UNIVERSITY/BAY
Plot Number MI-014-04
Date Collected 07/02/94 By WILDENTHAL
Potential Planting Spaces 64

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name CHMBRLAIN/PERRY
Plot Number MI-014-05
Date Collected 07/02/94 By WILDENTHAL
Potential Planting Spaces 8

Municipal Zone S
Street Length 0.44 Miles
Boulevard Length0.00 Miles

Intersection Name CHMBRLAIN/PERRY
Plot Number MI-014-05
Date Collected 07/02/94 By WILDENTHAL
Potential Planting Spaces 0

Municipal Zone B
Street Length 0.06 Miles
Boulevard Length0.00 Miles

Intersection Name MICHIGN/EASTWAY
Plot Number MI-014-06
Date Collected 07/02/94 By WILDENTHAL
Potential Planting Spaces 48

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name MEADOW/SOUTH BV
Plot Number MI-014-07
Date Collected 07/02/94 By WILDENTHAL
Potential Planting Spaces 15

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name MEADOW/SOUTH BV
Plot Number MI-014-07
Date Collected 07/02/94 By WILDENTHAL
Potential Planting Spaces 21

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name FRNKLN/SOUTH BV
Plot Number MI-014-08
Date Collected 07/02/94 By WILDENTHAL
Potential Planting Spaces 30

Municipal Zone S
Street Length 0.38 Miles
Boulevard Length 0.06 Miles

Intersection Name FRNKLN/SOUTH BV
Plot Number MI-014-08
Date Collected 07/02/94 By WILDENTHAL
Potential Planting Spaces 33

Municipal Zone B
Street Length 0.12 Miles
Boulevard Length 0.00 Miles

Intersection Name DWIGHT/HURON
Plot Number MI-014-09
Date Collected 07/02/94 By WILDENTHAL
Potential Planting Spaces 8

Municipal Zone B
Street Length 0.06 Miles
Boulevard Length 0.00 Miles

Intersection Name DWIGHT/HURON
Plot Number MI-014-09
Date Collected 07/02/94 By WILDENTHAL
Potential Planting Spaces 20

Municipal Zone S
Street Length 0.44 Miles
Boulevard Length 0.00 Miles

Intersection Name KINNEY/BLAINE
Plot Number MI-014-10
Date Collected 07/02/95 By WILDENTHAL
Potential Planting Spaces 45

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

SUMMARY REPORT FOR SAGINAW, MI CODE: MI015

02/27/95

MILES OF STREETS IN THE CITY:	302
MILES OF STREETS IN THE SAMPLE:	5.00
THIS IS A SAMPLE PERCENTAGE OF:	1.66

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	21	5.22
SMALL — 3-12 INCHES :	119	29.60
MEDIUM — 12-24 INCHES :	198	49.25
LARGE — > 24 INCHES :	64	15.92

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	10	2.49
GOOD CONDITION :	102	25.37
FAIR CONDITION :	118	29.35
POOR CONDITION :	172	42.79

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	402	48.14
TOTAL DEAD TREES IN SAMPLE :	4	1.00
TOTAL EMPTY SPACES IN SAMPLE:	429	51.38
TOTAL TREE SPACES IN SAMPLE :	835	100.00

TOTAL LIVE TREES IN CITY:	24280.80	48.14
TOTAL DEAD TREES & EMPTY:	26153.20	51.86
TOTAL TREE SPACES IN CITY:	50434.00	

SPECIES DISTRIBUTION REPORT FOR SAGINAW, MI CODE: MI015
02/27/95

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
018	Boxelder	0	1	18	1	20	4.98
028	Maple, Norway	3	25	25	0	53	13.18
031	Maple,Nor.Columnare	0	7	0	0	7	1.74
032	Crimson King Norway	1	10	3	0	14	3.48
042	Schwedleri Norway	0	3	0	0	3	0.75
058	Maple, Red	0	4	6	4	14	3.48
070	Maple, Silver	2	7	62	39	110	27.36
076	Maple, Sugar	0	12	13	1	26	6.47
100	Horsechesnut	1	1	27	1	30	7.46
110	Tree of Heaven	0	1	0	0	1	0.25
133	Birch, White	0	1	0	0	1	0.25
135	Birch, Europ. White	1	4	0	0	5	1.24
175	Catalpa	0	0	2	4	6	1.49
275	Ash, white	0	1	6	2	9	2.24
292	Ash, Green	1	9	7	0	17	4.23
315	honeylocust	6	24	11	0	41	10.20
342	Walnut, Black	0	0	5	0	5	1.24
401	Apple, Crab	3	0	0	0	3	0.75
496	Cottonwood, Eastern	0	0	0	1	1	0.25
525	Cherry, Kwanzan	0	8	0	0	8	1.99
540	Douglas Fir	2	0	0	0	2	0.50
562	Oak, Bur	0	0	0	1	1	0.25
611	Ash, European Mtn.	1	1	0	0	2	0.50
667	Elm, American	0	0	4	7	11	2.74
680	Elm, Siberian	0	0	9	3	12	2.99

PLOTS SAMPLED IN SAGINAW, MI
Run Date: 02/27/95

CODE: MI015

Intersection Name McEWAN/STATE
Plot Number MI-015-01
Date Collected 07/23/94 By WILDENTHAL
Potential Planting Spaces 56

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name JACKSON/OAKLEY
Plot Number MI-015-02
Date Collected 07/23/94 By WILDENTHAL
Potential Planting Spaces 34

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name LARCH/DIVISION
Plot Number MI-015-03
Date Collected 07/23/94 By WILDENTHAL
Potential Planting Spaces 47

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name DURAND/UNION
Plot Number MI-015-04
Date Collected 07/23/94 By WILDENTHAL
Potential Planting Spaces 33

Municipal Zone S
Street Length 0.44 Miles
Boulevard Length0.00 Miles

Intersection Name DURAND/UNION
Plot Number MI-015-04
Date Collected 07/23/94 By WILDENTHAL
Potential Planting Spaces 11

Municipal Zone B
Street Length 0.06 Miles
Boulevard Length0.00 Miles

Intersection Name PARK/JANES
Plot Number MI-015-05
Date Collected 07/23/94 By WILDENTHAL
Potential Planting Spaces 16

Municipal Zone B
Street Length 0.38 Miles
Boulevard Length0.00 Miles

Intersection Name PARK/JANES
Plot Number MI-015-05
Date Collected 07/23/94 By WILDENTHAL
Potential Planting Spaces 6

Municipal Zone S
Street Length 0.12 Miles
Boulevard Length0.00 Miles

Intersection Name MAPLE/MICHIGAN
Plot Number MI-015-06
Date Collected 07/23/94 By WILDENTHAL
Potential Planting Spaces 25

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name WASHNGTN/NIMMON
Plot Number MI-015-07
Date Collected 07/23/94 By WILDENTHAL
Potential Planting Spaces 39

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name OAKWOOD/HESS
Plot Number MI-015-08
Date Collected 07/23/94 By WILDENTHAL
Potential Planting Spaces 29

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name OAKWOOD/HESS
Plot Number MI-015-08
Date Collected 07/23/94 By WILDENTHAL
Potential Planting Spaces 32

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name REMINGTON/EMILY
Plot Number MI-015-09
Date Collected 07/23/94 By WILDENTHAL
Potential Planting Spaces 54

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name EIGHTH/NORMAN
Plot Number MI-015-10
Date Collected 07/23/94 By WILDENTHAL
Potential Planting Spaces 47

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

SUMMARY REPORT FOR Sparta, MI CODE: MI016

02/27/95

MILES OF STREETS IN THE CITY:	30
MILES OF STREETS IN THE SAMPLE:	2.50
THIS IS A SAMPLE PERCENTAGE OF:	8.33

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	7	7.14
SMALL — 3-12 INCHES :	23	23.47
MEDIUM — 12-24 INCHES :	37	37.76
LARGE — > 24 INCHES :	31	31.63

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	14	14.29
GOOD CONDITION :	32	32.65
FAIR CONDITION :	39	39.80
POOR CONDITION :	13	13.27

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	98	46.01
TOTAL DEAD TREES IN SAMPLE :	0	0.00
TOTAL EMPTY SPACES IN SAMPLE:	115	53.99
TOTAL TREE SPACES IN SAMPLE :	213	100.00

TOTAL LIVE TREES IN CITY:	1176.00	46.01
TOTAL DEAD TREES & EMPTY:	1380.00	53.99
TOTAL TREE SPACES IN CITY:	2556.00	

SPECIES DISTRIBUTION REPORT FOR Sparta, MI CODE: MI016
02/27/95

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
028	Maple, Norway	2	2	0	0	4	4.08
032	Crimson King Norway	2	1	0	0	3	3.06
042	Schwedleri Norway	0	0	1	0	1	1.02
058	Maple, Red	0	1	0	3	4	4.08
070	Maple, Silver	0	1	7	11	19	19.39
076	Maple, Sugar	1	1	23	12	37	37.76
270	Ash	0	1	0	0	1	1.02
275	Ash, white	0	1	0	0	1	1.02
292	Ash, Green	1	1	0	0	2	2.04
352	Redcedar	0	1	0	0	1	1.02
401	Apple, Crab	0	3	0	0	3	3.06
460	Spruce, Colo. Blue	0	1	0	0	1	1.02
477	Pine, White	0	1	0	0	1	1.02
496	Cottonwood, Eastern	0	0	1	0	1	1.02
503	Aspen, Quaking	0	1	0	0	1	1.02
552	Oak, White	0	0	0	1	1	1.02
562	Oak, Bur	1	2	0	1	4	4.08
571	Oak, Red	0	0	1	0	1	1.02
581	Locust, Black	0	1	0	0	1	1.02
631	Cedar, White	0	2	0	0	2	2.04
642	Basswood	0	0	0	1	1	1.02
667	Elm, American	0	0	1	2	3	3.06
680	Elm, Siberian	0	2	3	0	5	5.10

PLOTS SAMPLED IN Sparta, MI CODE: MI016
Run Date: 02/27/95

Intersection Name Stebbins/Grove
Plot Number MI-016-01
Date Collected 05/14/94 By Wildenthal
Potential Planting Spaces 35

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name Union/Alma
Plot Number MI-016-02
Date Collected 05/14/94 By Wildenthal
Potential Planting Spaces 13

Municipal Zone S
Street Length 0.38 Miles
Boulevard Length 0.00 Miles

Intersection Name Union/Alma
Plot Number MI-016-02
Date Collected 05/14/94 By Wildenthal
Potential Planting Spaces 1

Municipal Zone B
Street Length 0.12 Miles
Boulevard Length 0.00 Miles

Intersection Name S.State/South
Plot Number MI-016-03
Date Collected 05/14/94 By Wildenthal
Potential Planting Spaces 20

Municipal Zone S
Street Length 0.38 Miles
Boulevard Length 0.00 Miles

Intersection Name S.State/South
Plot Number MI-016-03
Date Collected 05/14/94 By Wildenthal
Potential Planting Spaces 9

Municipal Zone B
Street Length 0.12 Miles
Boulevard Length 0.00 Miles

Intersection Name Anderson/Nelson
Plot Number MI-016-04
Date Collected 05/14/94 By Wildenthal
Potential Planting Spaces 17

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name Maple/E.Gardner
Plot Number MI-016-05
Date Collected 05/14/94 By Wildenthal
Potential Planting Spaces 20

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

SUMMARY REPORT FOR SOUTHFIELD, MI CODE: MI017

02/27/95 PAGE 1

MILES OF STREETS IN THE CITY:	262
MILES OF STREETS IN THE SAMPLE:	5.00
THIS IS A SAMPLE PERCENTAGE OF:	1.91

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	105	21.56
SMALL — 3-12 INCHES :	285	58.52
MEDIUM — 12-24 INCHES :	65	13.35
LARGE — > 24 INCHES :	32	6.57

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	89	18.28
GOOD CONDITION :	285	58.52
FAIR CONDITION :	96	19.71
POOR CONDITION :	17	3.49

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	487	43.64
TOTAL DEAD TREES IN SAMPLE :	3	0.62
TOTAL EMPTY SPACES IN SAMPLE:	626	56.09
TOTAL TREE SPACES IN SAMPLE :	1116	100.00

TOTAL LIVE TREES IN CITY:	25518.80	43.64
TOTAL DEAD TREES & EMPTY:	32959.60	56.36
TOTAL TREE SPACES IN CITY:	58478.40	

SPECIES DISTRIBUTION REPORT FOR SOUTHFIELD, MI CODE: MI017
02/27/95

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
018	Boxelder	0	0	0	1	1	0.21
028	Maple, Norway	17	29	4	0	50	10.27
032	Crimson King Norway	2	3	0	0	5	1.03
058	Maple, Red	7	8	0	0	15	3.08
070	Maple, Silver	12	37	17	11	77	15.81
076	Maple, Sugar	1	9	0	0	10	2.05
087	Maple, Totarian	0	1	0	0	1	0.21
186	redbud	1	0	0	0	1	0.21
245	Russian Olive	0	1	0	0	1	0.21
275	Ash, white	0	4	1	0	5	1.03
292	Ash, Green	25	27	17	3	72	14.78
315	honeylocust	5	14	9	0	28	5.75
342	Walnut, Black	0	0	0	1	1	0.21
371	sweetgum	0	1	0	0	1	0.21
400	Apple	0	0	3	0	3	0.62
401	Apple, Crab	7	2	0	0	9	1.85
435	Mulberry	0	1	0	0	1	0.21
452	Spruce, Norway	2	0	0	0	2	0.41
454	Spruce, White	0	7	4	0	11	2.26
460	Spruce, Colo. Blue	0	9	1	0	10	2.05
471	Pine, Austrian	0	0	1	0	1	0.21
477	Pine, White	1	2	1	0	4	0.82
486	Planetree, London	0	0	1	0	1	0.21
487	Sycamore, American	0	0	1	0	1	0.21
496	Cottonwood, Eastern	0	0	2	3	5	1.03
511		0	1	0	0	1	0.21
525	Cherry, Kwanzan	0	2	1	0	3	0.62
548	Pear, Bradford	17	95	0	0	112	23.00
552	Oak, White	0	1	0	3	4	0.82
571	Oak, Red	8	2	0	0	10	2.05
585	Willow	0	0	1	2	3	0.62
611	Ash, European Mtn.	0	1	0	0	1	0.21
644	Linden, Little leaf	0	20	0	0	20	4.11
667	Elm, American	0	0	0	6	6	1.23
680	Elm, Siberian	0	5	1	1	7	1.44
700	Buckthorn	0	3	0	0	3	0.62
807	Redwood, Dawn	0	0	0	1	1	0.21

Intersection Name STHFIELD/ADRIAN
Plot Number MI-017-01
Date Collected 07/16/94 By R. CLOSE
Potential Planting Spaces 34

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length0.00 Miles

Intersection Name STHFIELD/ADRIAN
Plot Number MI-017-01
Date Collected 07/16/94 By R. CLOSE
Potential Planting Spaces 25

Municipal Zone B
Street Length 0.13 Miles
Boulevard Length0.00 Miles

Intersection Name STHFIELD/ADRIAN
Plot Number MI-017-01
Date Collected 07/16/94 By R. CLOSE
Potential Planting Spaces 20

Municipal Zone U
Street Length 0.12 Miles
Boulevard Length0.00 Miles

Intersection Name LXNGTN/SANQUENT
Plot Number MI-017-02
Date Collected 07/16/94 By R. CLOSE
Potential Planting Spaces 79

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name HICKRYLF/ROCKCK
Plot Number MI-017-03
Date Collected 07/16/94 By R. CLOSE
Potential Planting Spaces 29

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name TWYKNGHM/LAHSER
Plot Number MI-017-04
Date Collected 07/16/94 By R. CLOSE
Potential Planting Spaces 38

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name CIVICCTR/1STCTR
Plot Number MI-017-05
Date Collected 07/16/94 By R. CLOSE
Potential Planting Spaces 0

Municipal Zone S
Street Length 0.13 Miles
Boulevard Length0.13 Miles

Intersection Name CIVICCTR/1STCTR
Plot Number MI-017-05
Date Collected 07/16/94 By R. CLOSE
Potential Planting Spaces 0

Municipal Zone U
Street Length 0.25 Miles
Boulevard Length0.25 Miles

Intersection Name CIVICCTR/1STCTR
Plot Number MI-017-05
Date Collected 07/16/94 By R. CLOSE
Potential Planting Spaces 44

Municipal Zone B
Street Length 0.12 Miles
Boulevard Length 0.12 Miles

Intersection Name LK.RAVINE/WREXF
Plot Number MI-017-06
Date Collected 07/16/94 By R. CLOSE
Potential Planting Spaces 72

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name NINE MILE/BERG
Plot Number MI-017-07
Date Collected 07/17/94 By R. CLOSE
Potential Planting Spaces 53

Municipal Zone S
Street Length 0.44 Miles
Boulevard Length 0.00 Miles

Intersection Name NINE MILE/BERG
Plot Number MI-017-07
Date Collected 07/17/94 By R. CLOSE
Potential Planting Spaces 7

Municipal Zone B
Street Length 0.06 Miles
Boulevard Length 0.00 Miles

Intersection Name GRNVIEW/GRNWALD
Plot Number MI-017-08
Date Collected 07/17/94 By R. CLOSE
Potential Planting Spaces 52

Municipal Zone F
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name FRNKLIN/MUERLAN
Plot Number MI-017-09
Date Collected 07/17/94 By R. CLOSE
Potential Planting Spaces 31

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name FRNKLIN/MUERLAN
Plot Number MI-017-09
Date Collected 07/17/94 By R. CLOSE
Potential Planting Spaces 23

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name 12 MILE/DUFFY
Plot Number MI-017-10
Date Collected 07/17/94 By R. CLOSE
Potential Planting Spaces 56

Municipal Zone B
Street Length 0.20 Miles
Boulevard Length 0.00 Miles

Intersection Name 12 MILE/DUFFY
Plot Number MI-017-10
Date Collected 07/17/94 By R. CLOSE
Potential Planting Spaces 63

Municipal Zone U
Street Length 0.30 Miles
Boulevard Length 0.00 Miles

SUMMARY REPORT FOR STANDISH, MI CODE: MI018

02/27/95 PAGE 1

MILES OF STREETS IN THE CITY:	12
MILES OF STREETS IN THE SAMPLE:	2.50
THIS IS A SAMPLE PERCENTAGE OF:	20.83

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	16	8.89
SMALL — 3-12 INCHES :	55	30.56
MEDIUM — 12-24 INCHES :	84	46.67
LARGE — > 24 INCHES :	25	13.89

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	6	3.33
GOOD CONDITION :	21	11.67
FAIR CONDITION :	57	31.67
POOR CONDITION :	96	53.33

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	180	39.05
TOTAL DEAD TREES IN SAMPLE :	1	0.56
TOTAL EMPTY SPACES IN SAMPLE:	280	60.74
TOTAL TREE SPACES IN SAMPLE :	461	100.00

TOTAL LIVE TREES IN CITY:	864.00	39.05
TOTAL DEAD TREES & EMPTY:	1348.80	60.95
TOTAL TREE SPACES IN CITY:	2212.80	

SPECIES DISTRIBUTION REPORT FOR STANDISH, MI CODE: MI018
02/27/95

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
018	Boxelder	0	0	3	0	3	1.67
028	Maple, Norway	6	37	34	1	78	43.33
042	Schwedleri Norway	0	3	1	0	4	2.22
058	Maple, Red	1	2	2	1	6	3.33
070	Maple, Silver	2	5	30	17	54	30.00
076	Maple, Sugar	0	1	2	0	3	1.67
133	Birch, White	0	2	0	0	2	1.11
275	Ash, white	1	0	0	0	1	0.56
292	Ash, Green	6	0	9	3	18	10.00
315	honeylocust	0	1	0	0	1	0.56
340	Walnut	0	1	2	0	3	1.67
496	Cottonwood, Eastern	0	0	0	3	3	1.67
644	Linden, Little leaf	0	3	0	0	3	1.67
667	Elm, American	0	0	1	0	1	0.56

Intersection Name M-61/AUPACK DR. Municipal Zone B
Plot Number MI-018-01 Street Length 0.44 Miles
Date Collected 07/24/94 By WILDENTHAL Boulevard Length 0.00 Miles
Potential Planting Spaces 73

Intersection Name M-61/AUPACK DR. Municipal Zone U
Plot Number MI-018-01 Street Length 0.06 Miles
Date Collected 07/24/94 By WILDENTHAL Boulevard Length 0.00 Miles
Potential Planting Spaces 11

Intersection Name FRONT/WASHINGTO Municipal Zone U
Plot Number MI-018-02 Street Length 0.44 Miles
Date Collected 07/24/94 By WILDENTHAL Boulevard Length 0.00 Miles
Potential Planting Spaces 28

Intersection Name FRONT/WASHINGTO Municipal Zone B
Plot Number MI-018-02 Street Length 0.06 Miles
Date Collected 07/24/94 By WILDENTHAL Boulevard Length 0.00 Miles
Potential Planting Spaces 15

Intersection Name M-61/CASS Municipal Zone U
Plot Number MI-018-03 Street Length 0.50 Miles
Date Collected 07/24/94 By WILDENTHAL Boulevard Length 0.00 Miles
Potential Planting Spaces 36

Intersection Name CHERRY/LAPEER Municipal Zone U
Plot Number MI-018-04 Street Length 0.50 Miles
Date Collected 07/24/94 By WILDENTHAL Boulevard Length 0.00 Miles
Potential Planting Spaces 75

Intersection Name NORTH/GROVE Municipal Zone U
Plot Number MI-018-05 Street Length 0.25 Miles
Date Collected 07/24/94 By WILDENTHAL Boulevard Length 0.00 Miles
Potential Planting Spaces 28

Intersection Name NORTH/GROVE Municipal Zone B
Plot Number MI-018-05 Street Length 0.25 Miles
Date Collected 07/24/94 By WILDENTHAL Boulevard Length 0.00 Miles
Potential Planting Spaces 14

SUMMARY REPORT FOR WARREN, MI CODE: MI019

02/27/95

MILES OF STREETS IN THE CITY:	465
MILES OF STREETS IN THE SAMPLE:	5.00
THIS IS A SAMPLE PERCENTAGE OF:	1.08

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	38	10.03
SMALL — 3-12 INCHES :	187	49.34
MEDIUM — 12-24 INCHES :	70	18.47
LARGE — > 24 INCHES :	84	22.16

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	41	10.82
GOOD CONDITION :	202	53.30
FAIR CONDITION :	117	30.87
POOR CONDITION :	19	5.01

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	379	36.58
TOTAL DEAD TREES IN SAMPLE :	1	0.26
TOTAL EMPTY SPACES IN SAMPLE:	656	63.32
TOTAL TREE SPACES IN SAMPLE :	1036	100.00

TOTAL LIVE TREES IN CITY:	35247.00	36.58
TOTAL DEAD TREES & EMPTY:	61101.00	63.42
TOTAL TREE SPACES IN CITY:	96348.00	

SPECIES DISTRIBUTION REPORT FOR WARREN, MI CODE: MI019
02/27/95

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
018	Boxelder	0	1	0	1	2	0.53
028	Maple, Norway	6	60	7	0	73	19.26
032	Crimson King Norway	0	9	0	0	9	2.37
042	Schwedleri Norway	2	2	0	0	4	1.06
058	Maple, Red	3	3	0	0	6	1.58
070	Maple, Silver	5	30	41	72	148	39.05
076	Maple, Sugar	0	6	3	0	9	2.37
110	Tree of Heaven	0	0	1	0	1	0.26
133	Birch, White	0	1	0	0	1	0.26
175	Catalpa	0	1	0	1	2	0.53
275	Ash, white	0	0	2	0	2	0.53
292	Ash, Green	1	4	2	0	7	1.85
315	honeylocust	2	25	6	6	39	10.29
401	Apple, Crab	15	28	2	0	45	11.87
454	Spruce, White	1	2	0	0	3	0.79
460	Spruce, Colo. Blue	0	3	0	0	3	0.79
475	Pine, Norway (Red)	0	1	0	0	1	0.26
487	Sycamore, American	0	1	2	0	3	0.79
505	Cherry	0	1	0	0	1	0.26
552	Oak, White	0	0	0	1	1	0.26
611	Ash, European Mtn.	1	3	0	0	4	1.06
631	Cedar, White	1	0	0	0	1	0.26
644	Linden, Little leaf	1	5	4	0	10	2.64
667	Elm, American	0	0	0	2	2	0.53
680	Elm, Siberian	0	1	0	1	2	0.53

Intersection Name WALKER/MARTIN
Plot Number MI-019-01
Date Collected 07/22/94 By RICK CLOSE
Potential Planting Spaces 67

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name BUCHANAN/BLAIR
Plot Number MI-019-02
Date Collected 07/22/94 By RICK CLOSE
Potential Planting Spaces 45

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name LORRAINE/OLIVE
Plot Number MI-019-03
Date Collected 07/22/94 By RICK CLOSE
Potential Planting Spaces 68

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.12 Miles

Intersection Name 13MI/SCHOENHERR
Plot Number MI-019-04
Date Collected 07/22/94 By RICK CLOSE
Potential Planting Spaces 67

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length0.00 Miles

Intersection Name 13MI/SCHOENHERR
Plot Number MI-019-04
Date Collected 07/22/94 By RICK CLOSE
Potential Planting Spaces 57

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length0.00 Miles

Intersection Name 12MI/PALOMINO
Plot Number MI-019-05
Date Collected 07/22/94 By RICK CLOSE
Potential Planting Spaces 46

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length0.00 Miles

Intersection Name 12MI/PALOMINO
Plot Number MI-019-05
Date Collected 07/22/94 By RICK CLOSE
Potential Planting Spaces 41

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length0.00 Miles

Intersection Name DOVER/CHAMPAIGN
Plot Number MI-019-06
Date Collected 07/22/94 By RICK CLOSE
Potential Planting Spaces 34

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length0.00 Miles

Intersection Name KNOX/BLACKETT
Plot Number MI-019-07
Date Collected 07/22/94 By RICK CLOSE
Potential Planting Spaces 77

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name FORD/AUTOMOBILE
Plot Number MI-019-08
Date Collected 07/22/94 By RICK CLOSE
Potential Planting Spaces 66

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name RYAN/JARVIS
Plot Number MI-019-09
Date Collected 07/22/94 By RICK CLOSE
Potential Planting Spaces 30

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name RYAN/JARVIS
Plot Number MI-019-09
Date Collected 07/22/94 By RICK CLOSE
Potential Planting Spaces 6

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name ORR/CUNNINGHAM
Plot Number MI-019-10
Date Collected 07/22/94 By RICK CLOSE
Potential Planting Spaces 52

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

SUMMARY REPORT FOR WOODHAVEN, MI CODE: MI020

02/27/95

MILES OF STREETS IN THE CITY:	63
MILES OF STREETS IN THE SAMPLE:	2.50
THIS IS A SAMPLE PERCENTAGE OF:	3.97

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING — < 3 INCHES :	92	25.63
SMALL — 3-12 INCHES :	258	71.87
MEDIUM — 12-24 INCHES :	9	2.51
LARGE — > 24 INCHES :	0	0.00

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	75	20.89
GOOD CONDITION :	188	52.37
FAIR CONDITION :	87	24.23
POOR CONDITION :	9	2.51

SAMPLE SUMMARY:

TOTAL LIVE TREES IN SAMPLE :	359	59.83
TOTAL DEAD TREES IN SAMPLE :	0	0.00
TOTAL EMPTY SPACES IN SAMPLE:	241	40.17
TOTAL TREE SPACES IN SAMPLE :	600	100.00

TOTAL LIVE TREES IN CITY:	9046.80	59.83
TOTAL DEAD TREES & EMPTY:	6073.20	40.17
TOTAL TREE SPACES IN CITY:	15120.00	

SPECIES DISTRIBUTION REPORT FOR WOODHAVEN, MI CODE: MI020
02/27/95

CODE	SPECIES	SAPLING	SMALL	MEDIUM	LARGE	TOTAL	PERCENT
028	Maple, Norway	6	15	0	0	21	5.85
032	Crimson King Norway	7	6	0	0	13	3.62
058	Maple, Red	23	15	0	0	38	10.58
070	Maple, Silver	2	26	4	0	32	8.91
230	Hawthorn	0	2	0	0	2	0.56
275	Ash, white	0	44	2	0	46	12.81
292	Ash, Green	9	48	2	0	59	16.43
305	Ginkgo	0	3	0	0	3	0.84
315	honeylocust	0	11	0	0	11	3.06
365	Poplar, Yellow	0	1	0	0	1	0.28
371	sweetgum	0	1	0	0	1	0.28
401	Apple, Crab	2	1	0	0	3	0.84
471	Pine, Austrian	0	2	0	0	2	0.56
479	Pine, Scotch	0	2	0	0	2	0.56
486	Planetree, London	0	1	0	0	1	0.28
505	Cherry	0	7	0	0	7	1.95
510	Plum, Myrobalan	1	0	0	0	1	0.28
548	Pear, Bradford	24	24	0	0	48	13.37
566	Oak, Pin	6	12	0	0	18	5.01
571	Oak, Red	6	4	0	0	10	2.79
581	Locust, Black	0	4	0	0	4	1.11
601		1	2	0	0	3	0.84
611	Ash, European Mtn.	4	0	0	0	4	1.11
644	Linden, Little leaf	1	14	0	0	15	4.18
665	Elm	0	5	0	0	5	1.39
667	Elm, American	0	6	1	0	7	1.95
678	Elm, Chinese	0	1	0	0	1	0.28
680	Elm, Siberian	0	1	0	0	1	0.28

Intersection Name GUDITH/WEST
Plot Number MI-020-01
Date Collected 07/16/94 By RICK CLOSE
Potential Planting Spaces 27

Municipal Zone B
Street Length 0.12 Miles
Boulevard Length 0.00 Miles

Intersection Name GUDITH/WEST
Plot Number MI-020-01
Date Collected 07/16/94 By RICK CLOSE
Potential Planting Spaces 35

Municipal Zone S
Street Length 0.38 Miles
Boulevard Length 0.00 Miles

Intersection Name HALL/BIRCH
Plot Number MI-020-02
Date Collected 07/16/94 By RICK CLOSE
Potential Planting Spaces 17

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name VANHRN/CAMBRIDG
Plot Number MI-020-03
Date Collected 07/16/94 By RICK CLOSE
Potential Planting Spaces 41

Municipal Zone S
Street Length 0.38 Miles
Boulevard Length 0.00 Miles

Intersection Name VANHRN/CAMBRIDG
Plot Number MI-020-03
Date Collected 07/16/94 By RICK CLOSE
Potential Planting Spaces 32

Municipal Zone B
Street Length 0.12 Miles
Boulevard Length 0.00 Miles

Intersection Name WLLWCOVE/BLAKLY
Plot Number MI-020-04
Date Collected 07/16/94 By RICK CLOSE
Potential Planting Spaces 0

Municipal Zone S
Street Length 0.50 Miles
Boulevard Length 0.00 Miles

Intersection Name ALLEN/TRUWOOD
Plot Number MI-020-05
Date Collected 07/16/94 By RICK CLOSE
Potential Planting Spaces 19

Municipal Zone S
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

Intersection Name ALLEN/TRUWOOD
Plot Number MI-020-05
Date Collected 07/16/94 By RICK CLOSE
Potential Planting Spaces 70

Municipal Zone B
Street Length 0.25 Miles
Boulevard Length 0.00 Miles

APPENDIX D

s Size/Condition Summary Reports

Abies sp
0

<24 IN.	>24 IN.
1	0
25.00	0.00

ON	FAIR	POOR
	2	1
	50.00	25.00

Abies balsamea
0

<24 IN.	>24 IN.
0	0
0.00	0.00

ON	FAIR	POOR
	1	0
	100.00	0.00

Acer spp.
0

<24 IN.	>24 IN.
0	0
0.00	0.00

ON	FAIR	POOR
	0	0
	0.00	0.00

Acer campestre
0

<24 IN.	>24 IN.
1	0
7.69	0.00

ON	FAIR	POOR
	1	3
	7.69	23.08

TREECODE 016 Maple, Amur Acer ginnula
TOTAL LIVE TREES IN SAMPLES 25 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	25	0	0
PERCENT	0.00	100.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
		CONDITION		
NUMBER	1	18	5	1
PERCENT	4.00	72.00	20.00	4.00

TREECODE 017 Maple, Paperback Acer griseum
TOTAL LIVE TREES IN SAMPLES 1 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	1	0	0	0
PERCENT	100.00	0.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
		CONDITION		
NUMBER	1	0	0	0
PERCENT	100.00	0.00	0.00	0.00

TREECODE 018 Boxelder Acer negundo
TOTAL LIVE TREES IN SAMPLES 62 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	9	42	11
PERCENT	0.00	14.52	67.74	17.74

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
		CONDITION		
NUMBER	1	6	20	35
PERCENT	1.61	9.68	32.26	56.45

TREECODE 022 Maple, Japanese Acer palmatum
TOTAL LIVE TREES IN SAMPLES 1 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	1	0	0	0
PERCENT	100.00	0.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
		CONDITION		
NUMBER	1	0	0	0
PERCENT	100.00	0.00	0.00	0.00

TREECODE 028 Maple, Norway Acer platanoides
TOTAL LIVE TREES IN SAMPLES 1262 TOTAL DEAD 11

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	156	718	372	16
PERCENT	12.36	56.89	29.48	1.27

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	196	424	372	270
PERCENT	15.53	33.60	29.48	21.39

TREECODE 031 Maple,Nor.Columnare Acer platanoides
TOTAL LIVE TREES IN SAMPLES 11 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	11	0	0
PERCENT	0.00	100.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	8	3	0
PERCENT	0.00	72.73	27.27	0.00

TREECODE 032 Crimson King Norway Acer platanoides
TOTAL LIVE TREES IN SAMPLES 152 TOTAL DEAD 2

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	52	93	7	0
PERCENT	34.21	61.18	4.61	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	67	60	19	6
PERCENT	44.08	39.47	12.50	3.95

TREECODE 042 Schwedleri Norway Acer platanoides
TOTAL LIVE TREES IN SAMPLES 49 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	5	28	16	0
PERCENT	10.20	57.14	32.65	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	6	13	16	14
PERCENT	12.24	26.53	32.65	28.57

TREECODE 056 Maple, Red Acer rubrum
TOTAL LIVE TREES IN SAMPLES 356 TOTAL DEAD 2

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	93	145	100	18
PERCENT	26.12	40.73	28.09	5.06

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	71	99	81	105
PERCENT	19.94	27.81	22.75	29.49

TREECODE 061
TOTAL LIVE TREES IN SAMPLES 1 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	1	0	0
PERCENT	0.00	100.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	1	0	0	0
PERCENT	100.00	0.00	0.00	0.00

TREECODE 070 Maple, Silver Acer saccharinum
TOTAL LIVE TREES IN SAMPLES 1200 TOTAL DEAD 4

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	51	227	556	366
PERCENT	4.25	18.92	46.33	30.50

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	63	381	424	332
PERCENT	5.25	31.75	35.33	27.67

TREECODE 076 Maple, Sugar Acer saccharum
TOTAL LIVE TREES IN SAMPLES 460 TOTAL DEAD 7

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	9	125	262	64
PERCENT	1.96	27.17	56.96	13.91

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	58	119	119	164
PERCENT	12.61	25.87	25.87	35.65

TREECODE 087 Maple, Totarian Acer tartaricum
TOTAL LIVE TREES IN SAMPLES 1 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	1	0	0
PERCENT	0.00	100.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	1	0	0	0
PERCENT	100.00	0.00	0.00	0.00

TREECODE 100 Horsechesnut Aesculus spp.
TOTAL LIVE TREES IN SAMPLES 74 TOTAL DEAD 2

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	3	5	59	7
PERCENT	4.05	6.76	79.73	9.46

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	2	16	23	33
PERCENT	2.70	21.62	31.08	44.59

TREECODE 110 Tree of Heaven Ailanthus Altissima
TOTAL LIVE TREES IN SAMPLES 3 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	2	1	0
PERCENT	0.00	66.67	33.33	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	2	1	0
PERCENT	0.00	66.67	33.33	0.00

TREECODE 125 Birch Betula spp.
TOTAL LIVE TREES IN SAMPLES 1 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	1	0	0
PERCENT	0.00	100.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	0	1	0
PERCENT	0.00	0.00	100.00	0.00

3 Birch, White Betula papyrifera
EES IN SAMPLES 17 TOTAL DEAD 0

<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
1	10	6	0
5.88	58.82	35.29	0.00

EXCELLENT	GOOD	FAIR	POOR
CONDITION			
1	5	7	4
5.88	29.41	41.18	23.53

5 Birch, Europ. White Betula pendula
EES IN SAMPLES 8 TOTAL DEAD 0

<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
1	6	1	0
12.50	75.00	12.50	0.00

EXCELLENT	GOOD	FAIR	POOR
CONDITION			
2	1	3	2
25.00	12.50	37.50	25.00

7 Hornbeam, European Carpinus betulus
EES IN SAMPLES 4 TOTAL DEAD 0

<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
0	4	0	0
0.00	100.00	0.00	0.00

EXCELLENT	GOOD	FAIR	POOR
CONDITION			
0	2	0	2
0.00	50.00	0.00	50.00

58 Hornbeam, American Carpinus carolinia
EES IN SAMPLES 1 TOTAL DEAD 0

<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
0	1	0	0
0.00	100.00	0.00	0.00

EXCELLENT	GOOD	FAIR	POOR
CONDITION			
0	0	0	1
0.00	0.00	0.00	100.00

PP
24 IN.
0
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ata
24 IN.
0
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POOR
0
0.00

P
4 IN.
0
1.28
POOR
20
51.28

P
4 IN.
0
3.00
POOR
1
50.00

TREECODE 186 redbud Cercis canadensis
TOTAL LIVE TREES IN SAMPLES 4 TOTAL DEAD 1

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	3	1	0	0
PERCENT	75.00	25.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	3	0	0	1
PERCENT	75.00	0.00	0.00	25.00

TREECODE 230 Hawthorn Crataegus spp.
TOTAL LIVE TREES IN SAMPLES 18 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	17	1	0
PERCENT	0.00	94.44	5.56	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	10	6	2
PERCENT	0.00	55.56	33.33	11.11

TREECODE 245 Russian Olive Elaeagnus augustifolia
TOTAL LIVE TREES IN SAMPLES 12 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	12	0	0
PERCENT	0.00	100.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	2	8	1	1
PERCENT	16.67	66.67	8.33	8.33

TREECODE 270 Ash Fraxinus spp
TOTAL LIVE TREES IN SAMPLES 1 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	1	0	0
PERCENT	0.00	100.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	0	1	0
PERCENT	0.00	0.00	100.00	0.00

TREECODE 275 Ash, white Fraxinus americana
TOTAL LIVE TREES IN SAMPLES 145 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	18	82	35	10
PERCENT	12.41	56.55	24.14	6.90

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	37	79	17	12
PERCENT	25.52	54.48	11.72	8.28

TREECODE 292 Ash, Green Fraxinus pennsylvanica
TOTAL LIVE TREES IN SAMPLES 558 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	124	294	132	8
PERCENT	22.22	52.69	23.66	1.43

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	115	200	157	86
PERCENT	20.61	35.84	28.14	15.41

TREECODE 305 Ginkgo Ginkgo biloba
TOTAL LIVE TREES IN SAMPLES 8 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	4	4	0	0
PERCENT	50.00	50.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	5	2	1	0
PERCENT	62.50	25.00	12.50	0.00

TREECODE 315 honeylocust Gleditsia triacanthos
TOTAL LIVE TREES IN SAMPLES 410 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	47	298	59	6
PERCENT	11.46	72.68	14.39	1.46

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	45	190	127	48
PERCENT	10.98	46.34	30.98	11.71

TREECODE 316 Honeylocust.Thornles Gleditsia tricanthos/iner
TOTAL LIVE TREES IN SAMPLES 33 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	8	13	11	1
PERCENT	24.24	39.39	33.33	3.03

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	3	15	11	4
PERCENT	9.09	45.45	33.33	12.12

TREECODE 323
TOTAL LIVE TREES IN SAMPLES 1 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	1	0	0	0
PERCENT	100.00	0.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	0	1	0
PERCENT	0.00	0.00	100.00	0.00

TREECODE 340 Walnut Juglans spp
TOTAL LIVE TREES IN SAMPLES 3 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	1	2	0
PERCENT	0.00	33.33	66.67	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	1	2	0
PERCENT	0.00	33.33	66.67	0.00

TREECODE 341 Butternut Juglans cinera
TOTAL LIVE TREES IN SAMPLES 1 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	1	0	0
PERCENT	0.00	100.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	1	0	0
PERCENT	0.00	100.00	0.00	0.00

TREECODE 342 Walnut, Black Juglans nigra
TOTAL LIVE TREES IN SAMPLES 33 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	1	8	21	3
PERCENT	3.03	24.24	63.64	9.09

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	4	14	9	6
PERCENT	12.12	42.42	27.27	18.18

TREECODE 345 Junipers Juniperus spp.
TOTAL LIVE TREES IN SAMPLES 3 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	3	0	0
PERCENT	0.00	100.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	0	3	0
PERCENT	0.00	0.00	100.00	0.00

TREECODE 352 Redcedar Juniperus virginniana
TOTAL LIVE TREES IN SAMPLES 1 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	1	0	0
PERCENT	0.00	100.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	0	1	0
PERCENT	0.00	0.00	100.00	0.00

TREECODE 365 Poplar, Yellow Liriodendron tulipfera
TOTAL LIVE TREES IN SAMPLES 5 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	2	3	0
PERCENT	0.00	40.00	60.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	2	1	2	0
PERCENT	40.00	20.00	40.00	0.00

TREECODE 371 sweetgum Liquidambar styraciflua
TOTAL LIVE TREES IN SAMPLES 21 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	11	7	3	0
PERCENT	52.38	33.33	14.29	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	10	4	5	2
PERCENT	47.62	19.05	23.81	9.52

TREECODE 386 Magnolia, Saucer Magnolia soulangiana
TOTAL LIVE TREES IN SAMPLES 1 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	1	0	0
PERCENT	0.00	100.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	1	0	0
PERCENT	0.00	100.00	0.00	0.00

TREECODE 400 Apple Malus spp.
TOTAL LIVE TREES IN SAMPLES 5 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	1	4	0
PERCENT	0.00	20.00	80.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	2	2	1
PERCENT	0.00	40.00	40.00	20.00

TREECODE 401 Apple, Crab Malus crab spp.
TOTAL LIVE TREES IN SAMPLES 198 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	100	95	3	0
PERCENT	50.51	47.98	1.52	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	88	64	35	11
PERCENT	44.44	32.32	17.68	5.56

TREECODE 435 Mulberry Morus spp
TOTAL LIVE TREES IN SAMPLES 5 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	1	2	1	1
PERCENT	20.00	40.00	20.00	20.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	2	3	0
PERCENT	0.00	40.00	60.00	0.00

TREECODE 445 Ironwood Ostrya virginiana
TOTAL LIVE TREES IN SAMPLES 2 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	1	1	0	0
PERCENT	50.00	50.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	2	0	0
PERCENT	0.00	100.00	0.00	0.00

TREECODE 450 Spruce Picea Spp
TOTAL LIVE TREES IN SAMPLES 1 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	1	0	0	0
PERCENT	100.00	0.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	1	0	0
PERCENT	0.00	100.00	0.00	0.00

TREECODE 452 Spruce, Norway Picea abies
TOTAL LIVE TREES IN SAMPLES 25 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	2	5	17	1
PERCENT	8.00	20.00	68.00	4.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	4	8	10	3
PERCENT	16.00	32.00	40.00	12.00

TREECODE 454 Spruce, White Picea glauca
TOTAL LIVE TREES IN SAMPLES 20 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	5	10	5	0
PERCENT	25.00	50.00	25.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	15	3	2	0
PERCENT	75.00	15.00	10.00	0.00

TREECODE 460 Spruce, Colo. Blue Picea pungens
TOTAL LIVE TREES IN SAMPLES 45 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	2	27	16	0
PERCENT	4.44	60.00	35.56	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	15	15	13	2
PERCENT	33.33	33.33	28.89	4.44

TREECODE 471 Pine, Austrian Pinus nigra
TOTAL LIVE TREES IN SAMPLES 15 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	5	6	3	1
PERCENT	33.33	40.00	20.00	6.67

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	4	4	5	2
PERCENT	26.67	26.67	33.33	13.33

TREECODE 475 Pine, Norway (Red) Pinus resinosa
TOTAL LIVE TREES IN SAMPLES 1 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	1	0	0
PERCENT	0.00	100.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	1	0	0	0
PERCENT	100.00	0.00	0.00	0.00

TREECODE 477 Pine, White Pinus strobus
TOTAL LIVE TREES IN SAMPLES 19 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	3	9	6	1
PERCENT	15.79	47.37	31.58	5.26

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	9	4	4	2
PERCENT	47.37	21.05	21.05	10.53

TREECODE 479 Pine, Scotch Pinus sylvestris
TOTAL LIVE TREES IN SAMPLES 6 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	1	3	2	0
PERCENT	16.67	50.00	33.33	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	2	0	3	1
PERCENT	33.33	0.00	50.00	16.67

TREECODE 486 Planetree, London Platanus acerifolia
TOTAL LIVE TREES IN SAMPLES 109 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	4	48	54	3
PERCENT	3.67	44.04	49.54	2.75

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	27	56	22	4
PERCENT	24.77	51.38	20.18	3.67

TREECODE 487 Sycamore, American Platanus occidentalis
TOTAL LIVE TREES IN SAMPLES 23 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	5	9	9
PERCENT	0.00	21.74	39.13	39.13

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	6	13	4
PERCENT	0.00	26.09	56.52	17.39

TREECODE 490 Poplar Populus spp
TOTAL LIVE TREES IN SAMPLES 10 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	6	4	0
PERCENT	0.00	60.00	40.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	9	0	1	0
PERCENT	90.00	0.00	10.00	0.00

TREECODE 496 Cottonwood, Eastern Populus deltoides
TOTAL LIVE TREES IN SAMPLES 23 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	1	3	8	11
PERCENT	4.35	13.04	34.78	47.83

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	3	8	8	4
PERCENT	13.04	34.78	34.78	17.39

TREECODE 503 Aspen, Quaking Populus tremuloides
TOTAL LIVE TREES IN SAMPLES 5 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	3	2	0	0
PERCENT	60.00	40.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	1	1	2	1
PERCENT	20.00	20.00	40.00	20.00

TREECODE 505 Cherry Prunus spp
TOTAL LIVE TREES IN SAMPLES 12 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	1	10	1	0
PERCENT	8.33	83.33	8.33	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	2	3	5	2
PERCENT	16.67	25.00	41.67	16.67

TREECODE 510 Plum, Myrobalan Prunus cerasifera
TOTAL LIVE TREES IN SAMPLES 5 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	5	0	0	0
PERCENT	100.00	0.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	4	0	1	0
PERCENT	80.00	0.00	20.00	0.00

TREECODE 511
TOTAL LIVE TREES IN SAMPLES 1 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	1	0	0
PERCENT	0.00	100.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	0	1	0
PERCENT	0.00	0.00	100.00	0.00

TREECODE 520 Cherry, Black Prunus serotina
TOTAL LIVE TREES IN SAMPLES 7 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	1	5	1
PERCENT	0.00	14.29	71.43	14.29

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	1	3	2	1
PERCENT	14.29	42.86	28.57	14.29

TREECODE 525 Cherry, Kwanzan Prunus serrulata'Kwanz
TOTAL LIVE TREES IN SAMPLES 21 TOTAL DEAD 2

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	20	1	0
PERCENT	0.00	95.24	4.76	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	3	9	9
PERCENT	0.00	14.29	42.86	42.86

TREECODE 529 Plum Prunus domestica
TOTAL LIVE TREES IN SAMPLES 9 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	6	3	0	0
PERCENT	66.67	33.33	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	6	1	1	1
PERCENT	66.67	11.11	11.11	11.11

TREECODE 540 Douglas Fir Pseudotsuga menziesii
TOTAL LIVE TREES IN SAMPLES 5 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	3	1	1	0
PERCENT	60.00	20.00	20.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	1	1	3	0
PERCENT	20.00	20.00	60.00	0.00

TREECODE 548 Pear, Bradford Pyrus calle.'Bradford
TOTAL LIVE TREES IN SAMPLES 192 TOTAL DEAD 1

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	57	135	0	0
PERCENT	29.69	70.31	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	51	113	25	3
PERCENT	26.56	58.85	13.02	1.56

TREECODE 550 Oaks Quercus spp
TOTAL LIVE TREES IN SAMPLES 1 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	1	0	0
PERCENT	0.00	100.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	1	0	0
PERCENT	0.00	100.00	0.00	0.00

TREECODE 552 Oak, White Quercus alba
TOTAL LIVE TREES IN SAMPLES 37 TOTAL DEAD 1

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	1	5	15	16
PERCENT	2.70	13.51	40.54	43.24

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	5	11	8	13
PERCENT	13.51	29.73	21.62	35.14

TREECODE 554 Oak, Swampwhite Quercus bicolor
TOTAL LIVE TREES IN SAMPLES 1 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	1	0	0
PERCENT	0.00	100.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	1	0	0	0
PERCENT	100.00	0.00	0.00	0.00

TREECODE 562 Oak, Bur Quercus macrocarpa
TOTAL LIVE TREES IN SAMPLES 10 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	1	3	0	6
PERCENT	10.00	30.00	0.00	60.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	2	4	4	0
PERCENT	20.00	40.00	40.00	0.00

TREECODE 566 Oak, Pin Quercus palustris
TOTAL LIVE TREES IN SAMPLES 29 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	7	17	5	0
PERCENT	24.14	58.62	17.24	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	11	9	6	3
PERCENT	37.93	31.03	20.69	10.34

TREECODE 569 Oak, English Quercus robur
TOTAL LIVE TREES IN SAMPLES 7 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	3	2	2	0
PERCENT	42.86	28.57	28.57	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
		CONDITION		
NUMBER	4	3	0	0
PERCENT	57.14	42.86	0.00	0.00

TREECODE 571 Oak, Red Quercus rubra
TOTAL LIVE TREES IN SAMPLES 81 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	25	23	19	14
PERCENT	30.86	28.40	23.46	17.28

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
		CONDITION		
NUMBER	22	27	20	12
PERCENT	27.16	33.33	24.69	14.81

TREECODE 581 Locust, Black Robinia pseudo-occacia
TOTAL LIVE TREES IN SAMPLES 31 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	13	11	7
PERCENT	0.00	41.94	35.48	22.58

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
		CONDITION		
NUMBER	0	8	18	5
PERCENT	0.00	25.81	58.06	16.13

TREECODE 585 Willow Salix spp.
TOTAL LIVE TREES IN SAMPLES 4 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	0	1	3
PERCENT	0.00	0.00	25.00	75.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
		CONDITION		
NUMBER	0	1	3	0
PERCENT	0.00	25.00	75.00	0.00

TREECODE 601
TOTAL LIVE TREES IN SAMPLES 22 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	3	16	3	0
PERCENT	13.64	72.73	13.64	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	6	8	5	3
PERCENT	27.27	36.36	22.73	13.64

TREECODE 611 Ash, European Mtn. Sorbus aucuparia
TOTAL LIVE TREES IN SAMPLES 26 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	13	13	0	0
PERCENT	50.00	50.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	4	10	5	7
PERCENT	15.38	38.46	19.23	26.92

TREECODE 631 Cedar, White Thuja occidentalis
TOTAL LIVE TREES IN SAMPLES 9 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	2	3	3	1
PERCENT	22.22	33.33	33.33	11.11

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	1	8	0	0
PERCENT	11.11	88.89	0.00	0.00

TREECODE 640 Linden Tilia spp.
TOTAL LIVE TREES IN SAMPLES 38 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	9	26	3	0
PERCENT	23.68	68.42	7.89	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	19	9	8	2
PERCENT	50.00	23.68	21.05	5.26

TREECODE 642 Basswood Tilia americana
TOTAL LIVE TREES IN SAMPLES 38 TOTAL DEAD 1

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	3	21	14
PERCENT	0.00	7.89	55.26	36.84

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	7	16	15
PERCENT	0.00	18.42	42.11	39.47

TREECODE 644 Linden, Little leaf Tilia cordata
TOTAL LIVE TREES IN SAMPLES 126 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	15	93	18	0
PERCENT	11.90	73.81	14.29	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	33	57	32	4
PERCENT	26.19	45.24	25.40	3.17

TREECODE 665 Elm Ulmus spp
TOTAL LIVE TREES IN SAMPLES 21 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	4	14	0	3
PERCENT	19.05	66.67	0.00	14.29

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	1	11	4	5
PERCENT	4.76	52.38	19.05	23.81

TREECODE 667 Elm, American Ulmus americana
TOTAL LIVE TREES IN SAMPLES 121 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	2	12	39	68
PERCENT	1.65	9.92	32.23	56.20

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	5	41	45	30
PERCENT	4.13	33.88	37.19	24.79

TREECODE 676 Elm, Camperdown Ulmus glabra
TOTAL LIVE TREES IN SAMPLES 1 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	1	0	0
PERCENT	0.00	100.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	0	1	0
PERCENT	0.00	0.00	100.00	0.00

TREECODE 678 Elm, Chinese Ulmus parvifolia
TOTAL LIVE TREES IN SAMPLES 1 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	1	0	0
PERCENT	0.00	100.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	1	0	0	0
PERCENT	100.00	0.00	0.00	0.00

TREECODE 680 Elm, Siberian Ulmus pumila
TOTAL LIVE TREES IN SAMPLES 90 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	15	49	26
PERCENT	0.00	16.67	54.44	28.89

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	0	16	37	37
PERCENT	0.00	17.78	41.11	41.11

TREECODE 691 Japanese Zelkova serrata
TOTAL LIVE TREES IN SAMPLES 12 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	3	9	0	0
PERCENT	25.00	75.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	1	3	6	2
PERCENT	8.33	25.00	50.00	16.67

TREECODE 700 Buckthorn Rhamnus spp
TOTAL LIVE TREES IN SAMPLES 5 TOTAL DEAD 2

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	2	3	0	0
PERCENT	40.00	60.00	0.00	0.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	2	3	0	0
PERCENT	40.00	60.00	0.00	0.00

TREECODE 807 Redwood, Dawn Metasequoia glyptestroboide
TOTAL LIVE TREES IN SAMPLES 1 TOTAL DEAD 0

SIZE	<3 IN.	3-12 IN.	12-24 IN.	>24 IN.
NUMBER	0	0	0	1
PERCENT	0.00	0.00	0.00	100.00

SIZE GROUP	EXCELLENT	GOOD	FAIR	POOR
	CONDITION			
NUMBER	1	0	0	0
PERCENT	100.00	0.00	0.00	0.00

APPENDIX E

Summary Report for Illinois Street Tree Survey

APPENDIX E

SUMMARY REPORT FOR ILLINOIS

NUMBER OF CITIES IN THE SAMPLE:	21
MILES OF STREETS IN THE SAMPLED CITIES:	6576
MILES OF STREETS IN THE SAMPLE:	87.50
THIS IS A SAMPLE PERCENTAGE OF:	1.33

TREE SIZE DISTRIBUTION:	NUMBER	PERCENT
SAPLING -- < 3 INCHES :	878	10.69
SMALL -- 3-12 INCHES :	2758	33.56
MEDIUM -- 12-24 INCHES :	3612	43.96
LARGE -- > 24 INCHES :	969	11.79

TREE CONDITION DISTRIBUTION:	NUMBER	PERCENT
EXCELLENT CONDITION :	118	1.44
GOOD CONDITION :	2717	33.07
FAIR CONDITION :	3754	45.69
POOR CONDITION :	1628	19.81

SAMPLE SUMMARY:		
TOTAL LIVE TREES IN SAMPLE :	8217	87.28
TOTAL DEAD TREES IN SAMPLE :	87	1.06
TOTAL EMPTY SPACES IN SAMPLE:	1110	11.79
TOTAL TREE SPACES IN SAMPLE :	9414	100.00
TOTAL LIVE TREES IN GROUP:	617542.77	87.28
TOTAL DEAD TREES & EMPTY:	89959.68	12.72
TOTAL TREE SPACES IN GROUP:	707502.45	

APPENDIX F

Diversity Index Formula and Description

(As reported in the National Street Tree Survey)

APPENDIX F

Diversity Index

The Shannon-Wiener diversity index was taken from the work of McPherson and Rowntree (1986), adapted from Krebs(1984). It is calculated as follows:

P_i = (Live trees of One Species/Total live trees in City)

Diversity Index (sH) = Sum for all Species of $(-1*P_i*Log(P_i))$

In the state summaries, the diversity index contained in the "Street Tree Size Summary" table is shown as the average of the sampled cities. The "diversity code" contained in the "Species Distribution Report" is calculated in the same manner as the city indices were calculated, with the total live trees in the state used in calculating P_i.

Since the number of cities sampled was not always a representative sample of the cities within a given state, both state indices should be used with some caution.

McPherson, E.G. and R.A. Rowntree. 1986. Ecological measures of structure and change for street £treepopulations. Procedings of Third National Urban Forestry Conference, Orlando, Florida. Washington, DC: American Forestry Association. pp. 65-77.

Krebs, C.S. 1984. Ecology: The Experimental Analysis of Distribution and Abundance (Third Edition). New York: Harper & Row