



VILLAGE OF MAMARONECK

STREET TREE INVENTORY

**Inventory Conducted October 2013
Funded by USDA Forest Service**

Prepared by Hudson Valley Specialized Weekday Arborist Team (SWAT)
SWAT Coordinator, Brenda Cagle



Cornell University
Cooperative Extension



SWAT PROJECT

Small communities

Public trees

iPads

i-Tree software

Trained master gardeners, students, forester



TREE INVENTORY – WHAT/WHY?

Snapshot in time

Quantity, quality of resource

Information for prioritizing

- Safety issues
- Planting needs
- Maintenance

Essential tool for management



SUMMARY

856 Street trees inventoried

207 Planting Sites

267 Maples

646 Good condition (wood and foliage)

16 >75% Deadwood

61 High priority prune

75 Consult recommended

\$4,809,502.42 Replacement value

\$157,838.67 Estimated annual benefits



INVENTORY SAMPLE

Tree Id	St Num	Street	Species	SiteType	Loc Site	Loc No	DBH
1	144	E Boston Post	Northern red oak	Cutout	Side	1	15
2	144	E Boston Post	Cherry	Plant strip >4 ft	Side	2	17
3	180	E Boston Post	Red maple	Cutout	Front	1	4
4	180	E Boston Post	Red maple	Cutout	Front	2	6
5	180	E Boston Post	Red maple	Cutout	Front	3	4
6	514	E Boston Post	Dogwood	Plant strip <4 ft	Front	1	2
7	514	E Boston Post	Dogwood	Plant strip <4 ft	Front	2	2
8	514	E Boston Post	Plant Site No Wires	Lawn	Front	3	-
9	514	E Boston Post	Norway maple	Lawn	Front	4	38
10	514	E Boston Post	Norway maple	Lawn	Front	5	28
11	640	E Boston Post	Ginkgo	Cutout	Front	1	7
12	640	E Boston Post	Ginkgo	Cutout	Front	2	2
13	640	E Boston Post	Ginkgo	Cutout	Front	3	6
14	1100	E Boston Post	Norway maple	Plant strip <4 ft	Front	1	9

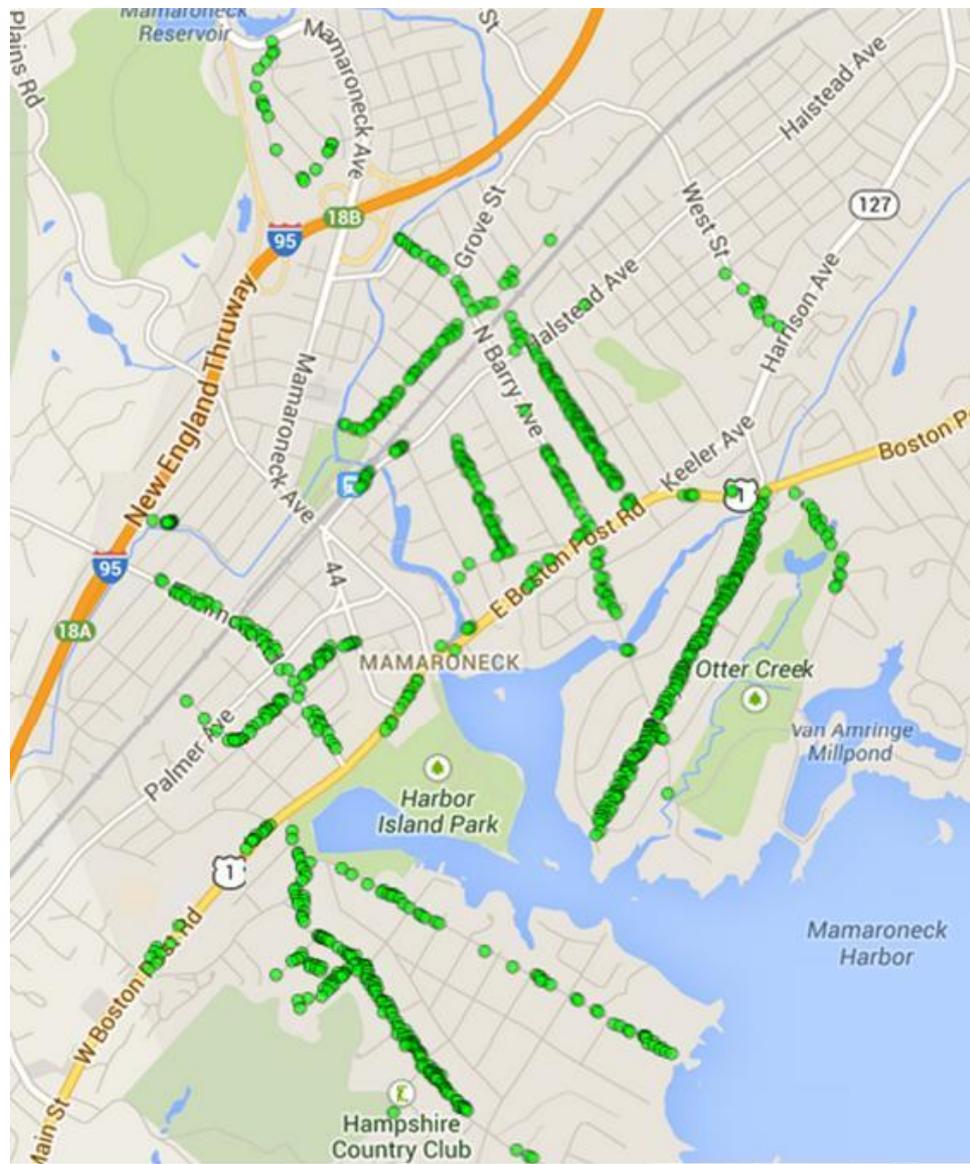


INVENTORY SAMPLE

MtncRec	Con sult	Sw Damg	Wires Present	Cond Wood	Cond Lvs	% Dead wood	GPS_Lat	GPS_Lon
Routine prune	No	None	No	Good	Good	<10	40.94900	-73.73200
Routine prune	No	None	No	Fair	Good	<10	40.94910	-73.73249
Train (small tree)	No	None	Yes	Good	Good	<10	40.94963	-73.73154
Train (small tree)	No	None	Yes	Good	Good	<10	40.94966	-73.73142
Train (small tree)	No	None	Yes	Good	Good	<10	40.94971	-73.73134
Train (small tree)	No	None	Yes	Good	Fair	<10	40.95134	-73.72888
Train (small tree)	No	None	Yes	Good	Good	<10	40.95148	-73.72873
-	-	-	-	-	-	-	40.95162	-73.72849
Routine prune	Yes	None	Yes	Good	Good	<10	40.95170	-73.72828
Routine prune	No	None	Yes	Good	Good	<10	40.95175	-73.72822
Routine prune	No	None	Yes	Good	Good	<10	40.95244	-73.72712
Train (small tree)	No	None	No	Good	Good	<10	40.95249	-73.72702
Routine prune	Yes	None	Yes	Good	Good	<10	40.95255	-73.72683
Routine prune	No	None	Yes	Good	Good	<10	40.95379	-73.72106

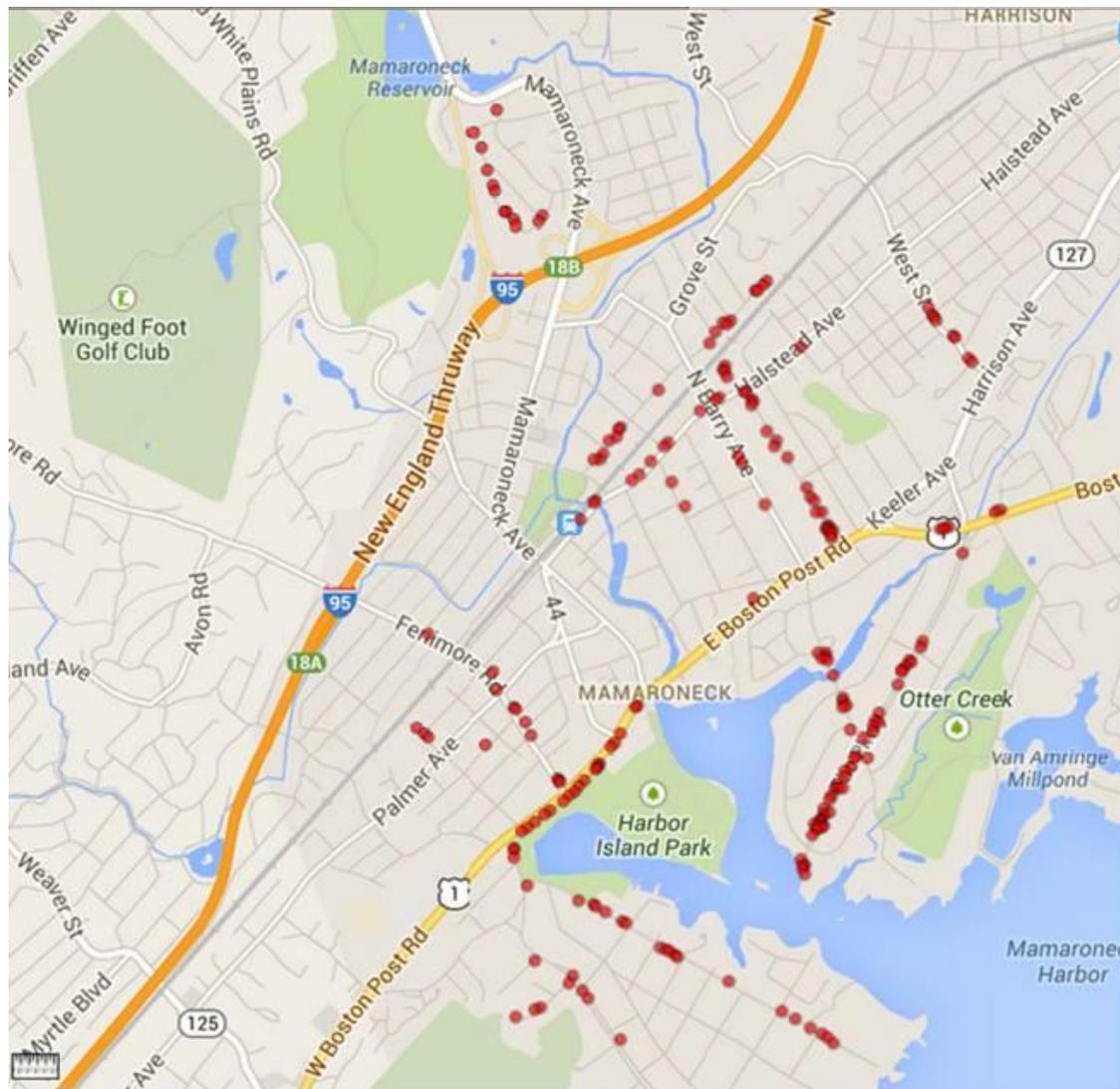


TREE SITES





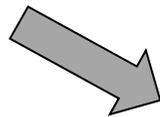
PLANTING SITES





STOCKING LEVEL

Street Trees Planted	856
Total Number of Sites	1063
Stocking Level (856/1063)	81%



NATIONAL AVERAGE IS 60%



SPECIES TOP 10

SPECIES	COUNT	%
Norway maple	119	14%
Callery pear	75	9%
Red maple	60	7%
Littleleaf linden	50	6%
Maple	47	5%
Honeylocust	36	4%
London planetree	30	4%
Pin oak	29	3%
Plum	28	3%
Dogwood	27	3%

Species
5%-10%

Genus
<20%

Genus
Maple 31%



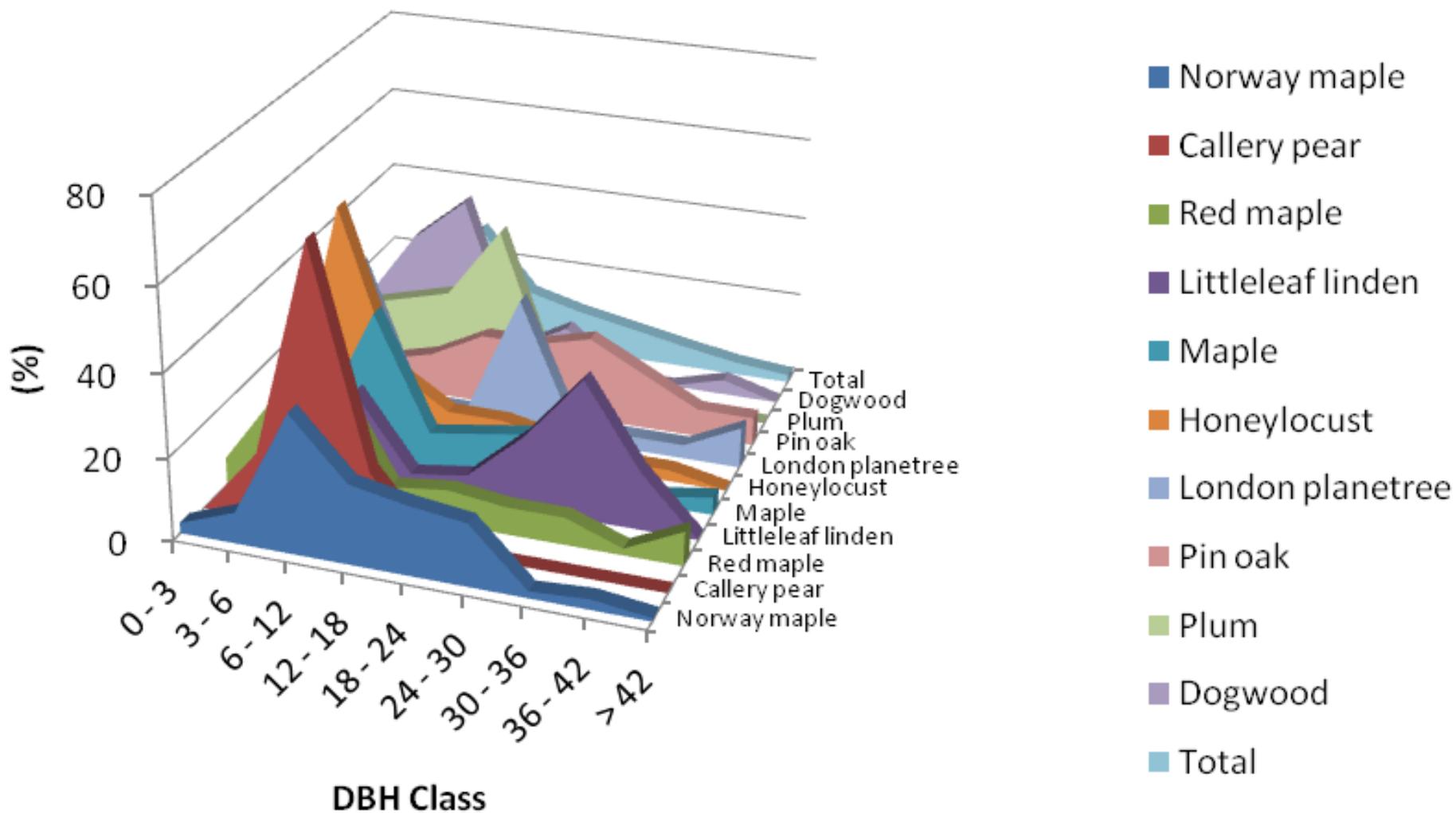
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A SWAT TEAM





RELATIVE AGE DISTRIBUTION TOP 10



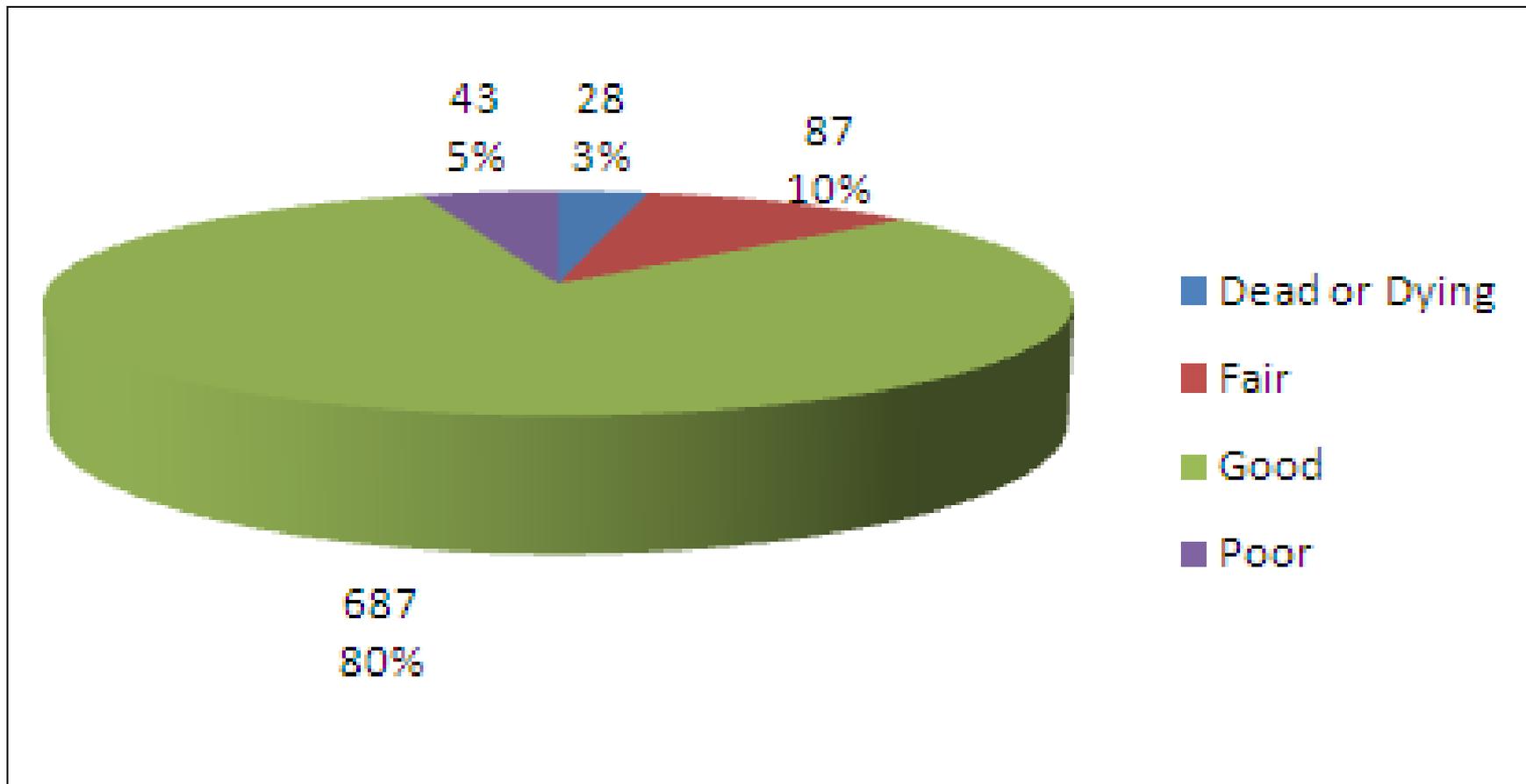


IMPORTANCE VALUES

Species	# Trees	% Total Trees	Leaf Area (ft ²)	% Total Leaf Area	Canopy Cover (ft ²)	% Total Canopy Cover	Importance Value
Norway maple	119	13.90	262,185.65	13.93	106,119.11	16.19	14.67
Callery pear	75	8.76	91,207.88	4.85	36,195.67	5.52	6.38
Red maple	60	7.01	161,789.61	8.59	48,053.12	7.33	7.65
Littleleaf linden	50	5.84	118,628.99	6.30	47,250.89	7.21	6.45
Maple	47	5.49	121,769.30	6.47	43,711.54	6.67	6.21
Honeylocust	36	4.21	78,888.26	4.19	29,583.46	4.51	4.30
London planetree	30	3.50	112,132.44	5.96	36,725.70	5.60	5.02
Pin oak	29	3.39	157,944.99	8.39	54,760.19	8.36	6.71
Plum	28	3.27	17,227.84	0.92	9,140.65	1.39	1.86
Dogwood	27	3.15	13,853.08	0.74	7,557.80	1.15	1.68

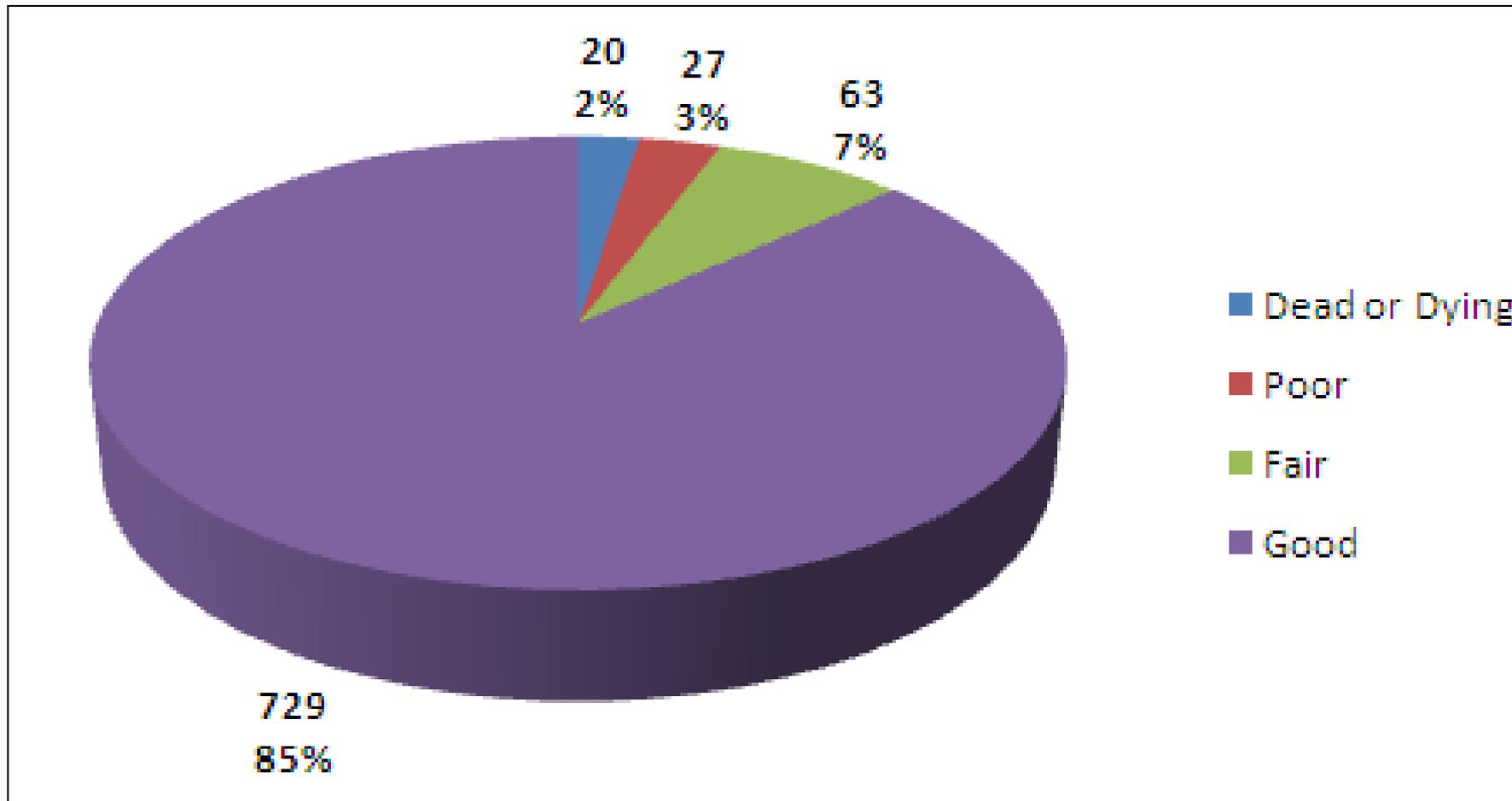


WOOD CONDITION



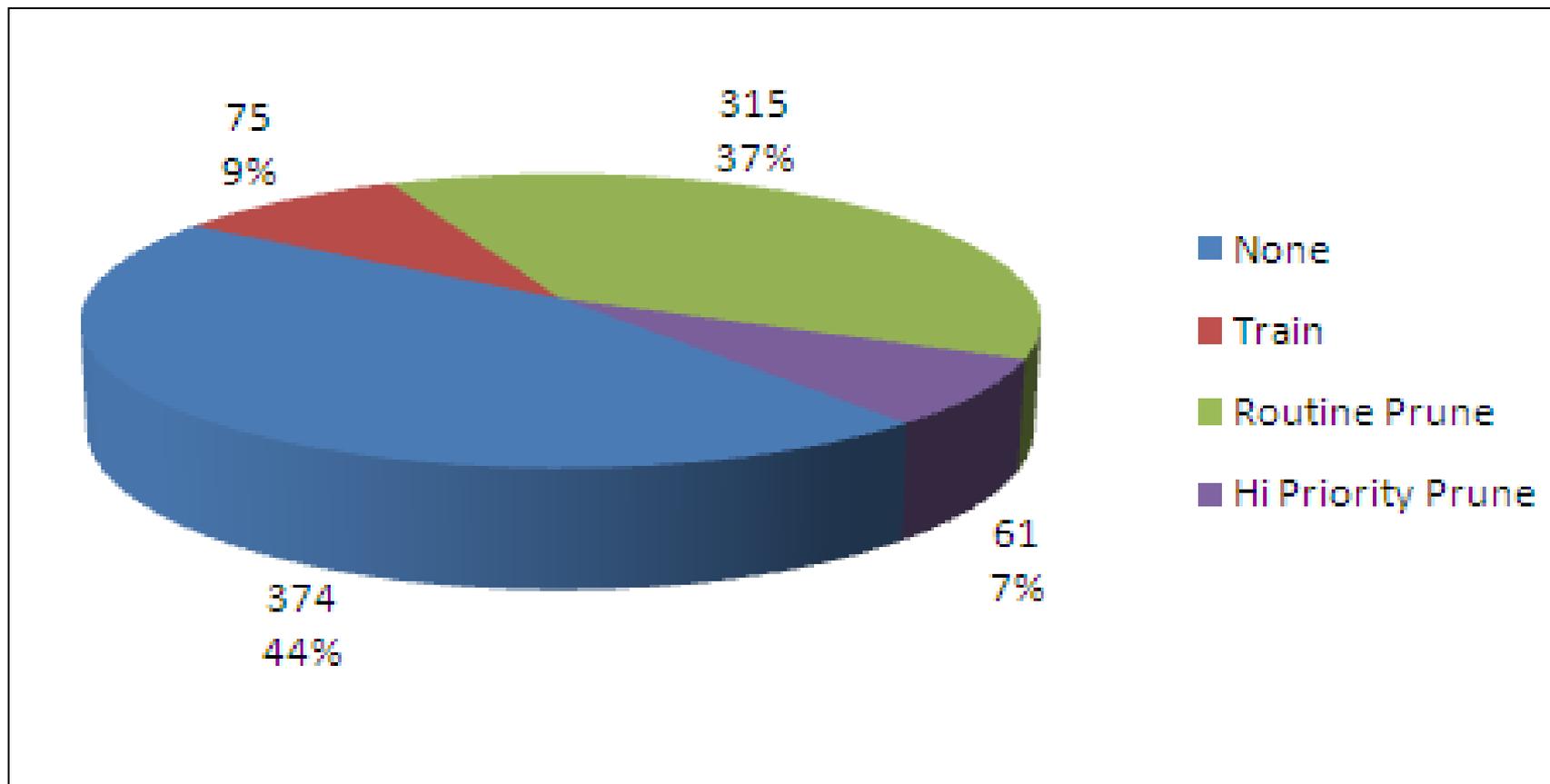


FOLIAGE CONDITION





MAINTENANCE





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HIGH PRIORITY PRUNE





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ROUTINE PRUNE





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TRAIN





CONSULT EXAMPLES

75 Consults





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CONSULT EXAMPLES





ASH TREES

24 Ash trees

8 dead or poor wood
6 dead foliage

7 high priority prune

6 >75% deadwood

10 consult



ANNUAL BENEFITS

Energy	\$41,041
CO ₂	\$1,049
Air Quality	\$7,403
Stormwater	\$10,006
Aesthetic/Other	\$98,340
TOTAL	\$157,839



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FORESTRY MANAGEMENT PLAN

PLANTING

Stocking
goal

Planting
specs

Species
diversity

MAINTENANCE

Prioritize

- Consult
- Remove
- High Priority
prune

Citizen
pruners

OUTREACH

Community

School

Officials

INVENTORY MAINTENANCE

Record
changes

Re-
inventory
20%
annually



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RIGHT TREE, RIGHT PLACE?





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33 YEARS

A Tree Board or Department

A Tree Care Ordinance

**A Community Forestry Program With an
Annual Budget of at Least \$2 Per Capita**

Arbor Day Observance and Proclamation





**DEC Urban & Community
Forestry Grants Program**

**No match for
management plans!**

50/50 Tree Planting

50/50 Tree Maintenance





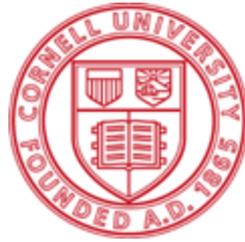
FINAL THOUGHTS.....

Suburbia is where the developer bulldozes out the trees,
then names the streets after them.

~Bill Vaughan

Trees are the only part of infrastructure that actually
appreciates in value while the rest depreciates.

~ Pepper Provenzano



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Questions?

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