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MUNICIPAL FORESTRY ANNUAL EXPENDITURES SURVEY

The following information is needed to model annual costs and benefits. If appropriate and feasible, please break out information for street and park trees. Provide data for a single year and note places where the values you have provided deviate from a typical year.

1) GENERAL

Name of organization or dept.: _____

Your name: _____

Title: _____

Address: _____

Phone number: _____ fax: _____ e-mail: _____

Year for which these data are reported: _____

Number of employees in your program (FTE): _____

Your tree program's annual budget for planting, care, and management: _____

Your city's total municipal budget: _____

City population: _____

City land area (sq miles): _____

Total linear miles of street in your city: _____

Total acres of managed park land: _____

Average street width: _____

Average sidewalk width: _____

Average width of planting strip between street and sidewalk: _____

2) YOUR TREES

Please answer the following question about the trees resource you manage for the year you have specified.

	<u>Street Trees</u>	<u>Park Trees (Managed)</u>
Total number of trees	_____	_____

3) PLANTING

Total annual expenditure for planting \$ _____ Total number of trees planted _____

Percentage planted in new sites _____% Percentage replacement trees _____%

Please fill in the table below with the appropriate information for each location:

	STREET		PARK	
% of trees planted by type and size:	%	Typical size	%	Typical size
Container		(gal)		(gal)
Bareroot or seedling				
Shade tree		(dia. in.)		(dia.in.)
Conifer		(ht. in ft.)		(ht. in ft.)

	STREET	PARK
Costs (\$/tree for typical sizes):		
Tree and Planting		
Initial staking/mulching		
Establishment-related watering (first 5 yrs)		
Root barriers:		
Average cost per barrier		
% of planted trees with barriers		
Early mortality rate:		
Total % loss expected over the first 5 yrs after planting		

Age-independent mortality rate: If 100 trees survive the first five years after planting, how many are likely to be alive in 35 years?

Street Trees Park Trees (Managed)

What is the typical life span of a typical species in each location (years):

Street Trees Park Trees

4) PRUNING

Total annual expenditure for pruning \$ _____

Total number of trees pruned:

Small Medium Large

Estimate average per tree costs for each type of pruning:

PRUNE TYPE	STREET (\$ per tree)	PARK (\$ per tree)
Training (new trees w/ clippers or saw)		
Standard Prune: Small (e.g., <20-ft tall, from ground w/pole pruner)		
Med (e.g. 20-40-ft tall, limited climbing)		
Large (e.g., >40-ft tall, full climb or lift)		

Indicate how frequently (i.e. 6-yr cycle, once every third year for 6 years) trimming operations are typically performed:

	STREET	PARK
Training (new trees w/ clippers)		
Standard Prune: Small (e.g., <20-ft tall, from ground w/pole pruner)		
Med (e.g. 20-40-ft tall, limited climbing)		
Large (e.g., >40-ft tall, full climb or lift)		

5) TREE AND STUMP REMOVAL

Total annual expenditure for removals \$ _____

Total number of trees removed _____ (list number by size class if available)

Estimate average cost of removing a tree **less than 3" dbh** on a per tree basis:

Street Trees Park Trees

\$ _____ \$ _____

Estimate average cost for removing a tree **greater than 3" dbh** on a per diameter inch basis (or by DBH)

class if price is not consistent relative to tree size):

Street Trees Park Trees
 \$_____ per inch \$_____ per inch

Estimate average cost for stump removal and backfilling per diameter inch:

Street Trees Park Trees
 \$_____ per inch \$_____ per inch

What percentage of tree removals also involve stump removal? _____%

What percentage of removed trees are replaced? _____ %

List the percentage of total replacement trees by size:

Bareroot _____ %

B&B _____ in. cal. _____ %

B&B _____ in. cal. _____ %

5 gal _____ %

15 gal _____ %

Other _____ %

6) SALVAGE AND DISPOSAL

Total annual expenditure or income for salvage and disposal \$_____ (use info calculated in the table below if necessary).

Percent of removed wood taken to a landfill: _____ %

Landfill dumping fee (\$/ton): _____

Percent of removed wood salvaged: _____ %

Indicate below percent of salvaged wood, its market destination, and cost comparisons. Market destination refers to who purchases or is given salvaged wood. To compare costs, consider costs of salvage (e.g., processing, storage, distribution costs) vs. savings from avoided costs (dumping fees) and income from purchased mulch, wood products, or firewood sold:

USES OF SALVAGED WOOD	PERCENT SALVAGED	MARKET DESTINATION	COSTS EXCEED SAVINGS (\$/ton)	BREAK EVEN	SAVINGS EXCEED COSTS (\$/ton)
Mulch					
Compost					
Firewood					
Wood products					
Other					

7) IRRIGATION

Total annual expenditure for irrigation \$_____

Total number of trees irrigated _____

If trees are regularly irrigated, indicate in the table below what type of irrigation is used and

approximately how many gallons are applied per week during summer to a small tree (<25-ft tall). If a water truck is used, please provide annual costs per tree irrigated, including labor and equipment:

Type of Irrigation	Street	Park
Hose or other (gal/tree/week)		
Drip (gal/tree/week)		
Bubbler (gal/tree/week)		
Water truck (gal/tree/week): (\$/tree for labor/equip):		
Height (ft) or age of tree if/when irrigation is terminated		

Trees are irrigated from (give dates) _____ through _____

Water used for irrigation costs approximately \$ _____ per _____ (gal or cf)

8) PEST & DISEASE CONTROL

Total annual expenditure for IPM \$_____

Total number of trees inspected/treated _____

If pest and disease control is a regular annual expenditure, please list how much is spent annually for materials and labor for each treatment used.

Treatment applied	Number of trees treated		Total cost per year	
	Street	Park	Street	Park
1)				
2)				
3)				
4)				

9) INFRASTRUCTURE REPAIR DUE TO TREE ROOT GROWTH

The following questions require information about average annual infrastructure repair expenditures. Please record costs that are attributable to tree root growth. If data are not available you may need to estimate this cost as a percentage of total repair costs, based on personal observation. In this case, please show the percentages that you have assumed:

- | | <u>Street</u> | <u>Park</u> |
|---|---------------|-------------|
| 1) Average annual sidewalk repair cost due to trees, or total annual expenditure and percentage thought to be tree-related. | \$ _____ | \$ _____ |
| 2) Average annual mitigation costs related to tree root damage (root pruning, grinding, tapering, etc.) | \$ _____ | \$ _____ |
| 3) Average annual curb & gutter repair cost or total annual expenditure and percentage thought to be tree-related. | \$ _____ | \$ _____ |

4) Average annual sewer line repair costs \$_____ \$_____

5) Average annual water line repair costs \$_____ \$_____

6) Other infrastructure repair costs \$_____ \$_____

Total annual expenditure for infrastructure repair and mitigation due to tree root growth \$_____

10) LITTER AND STORM CLEAN-UP DUE TO DEBRIS FROM PUBLIC TREES

Annual costs for street clean-up due to debris from public trees \$_____

Typical annual costs for storm clean-up due to debris from public trees \$_____

Costs for other clean-up due to public trees \$_____

Total annual expenditure for litter and storm clean-up due to public tree debris \$_____

(Provide a typical amount, not based on unusual storm year.)

11) LITIGATION/LIABILITY

Expenditures associated with tree-related settlements, awards, reimbursement for damages, and legal fees. This information will be kept strictly confidential.

Annual payments Street Park
\$_____ \$_____

Estimated costs of legal fees \$_____ \$_____

Income from compensation or mitigation fees \$_____ \$_____

Total annual expenditure for payments and legal staff time associated with tree-related claims, \$_____ or total amount and percentage thought to be tree-related. You may include income to the program from compensatory or mitigation payments.

12) INSPECTION/ANSWER SERVICE REQUESTS

If tree inspection, answering service requests or other non-administrative activities, not covered in the preceding question, are regular program costs, please provide average annual costs for each activity:

Activity	Street	Park
1)	\$	\$
2)	\$	\$
3)	\$	\$

Total annual expenditure for inspection/answer service requests \$_____

13) ADMINISTRATION

Total annual expenditure for administration \$_____ (See info required below to derive this figure)

List average annual expenditures for program administration including supervision, training, ordinance enforcement, attending meetings, office supplies, equipment, other program expenses, as well as salaries of supervisory/administrative and clerical personnel. This category should cover overhead costs that were not incorporated into previous cost estimates.

Annual administrative costs: Street Park
 \$ _____ \$ _____

List types of costs included here: _____

14) OTHER EXPENDITURES

Total annual expenditure for other costs \$ _____

List and describe other expenditures:

Street
\$ _____ List/Describe: _____

Park
\$ _____ List/Describe: _____

15) ANNUAL FUEL CONSUMED

Please list the total gallons per year of fuel consumed by vehicles, saws, chippers, and other equipment—by fuel type—due to tree-related activities. This is for calculating CO₂ emissions associated with tree care activities. Gasoline _____ gals Diesel _____ gals

Comments: _____

THANK YOU for participating in this survey. Your input is greatly appreciated.

Please e-mail, fax, or mail to:

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