



I.B.

DEPARTMENT OF PARKS
AND COMMUNITY SERVICES

CITY OF SACRAMENTO
CALIFORNIA

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March 23, 1990

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- DIVISIONS:
- GOLF
 - CROCKER ART MUSEUM
 - HISTORY AND SCIENCE
 - METROPOLITAN ARTS
 - SACRAMENTO ZOO
 - PARKS AND RECREATION
 - NORTH
 - SOUTH
 - CITY-WIDE

Budget and Finance Committee
Transportation and Community Development Committee
Sacramento, California

Honorable Members in Session:

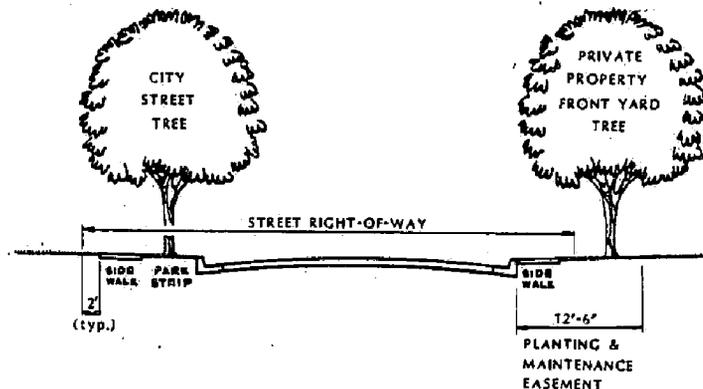
SUBJECT: Street Tree Maintenance

SUMMARY

As requested by the City Council on August 1, 1989, this report provides additional information regarding street tree maintenance in Sacramento. Further, this report recommends that Council: 1) approve funding for the development of a Tree Management Plan, 2) approve an augmentation to the Tree Services budget in order to reduce the backlog of approved tree trimming orders on city street trees, and 3) authorize refocusing current tree trimming resources to the maintenance of "city street trees" until a Tree Management Plan is developed and brought back to Council for approval.

BACKGROUND

The City's Tree Services Section maintains an estimated 150,000 city street trees, park trees and private property front yard trees. Trees in city parks total 35,000. A "city street tree" is defined as a tree planted within a city street easement, park strip or other public property. A "private property front yard tree" is defined as a tree planted on private property within a twelve and one-half foot planting maintenance easement from the curb (see illustration below).



Historically, the City has maintained both city street trees and private property front yard trees. The City Tree Ordinance, Chapter 45, however, states that the Director may, within budgetary limitations, provide such services as tree inspections, trimming, plantings and removals to city street trees and private property front yard trees.

The number and age of all street trees have increased over the past 20 years resulting in inadequate maintenance of both city street trees and private property front yard trees at present funding levels. As discussed in the June 9, 1989 report to the Council (Exhibit A), city maintained trees have increased from 100,000 in 1960 to 150,000 in 1988 while the number of tree trimmers has remained fairly constant (Exhibit A, page 2).

In addition, the City has experienced increasing liability claims relating to street trees over the past six years (Exhibit B). Claims have increased from 14 claims in 1984 to 45 claims in 1988. Claims paid by the City from 1976 through 1988 total \$222,021.

Currently, a backlog of over 1,000 approved tree trimming orders exists dating back to January 1988. Approximately 650 of the 1,000 tree backlog are City street trees, while the remaining 350 are private property front yard trees. The 24-month backlog is unacceptable in terms of providing adequate care for Sacramento's street trees. In addition, there are no resources available to provide necessary trimming of park trees, which currently are trimmed only in emergency situations.

As requested by the City Council at the August 1, 1989 meeting, Tree Services staff has met with interested community groups such as the Sacramento Tree Foundation, the Sacramento Old City Association (SOCA), the Sacramento County Association of Neighborhoods (SCAN) and the Environmental Council of Sacramento (ECOS) regarding the future direction of street tree care.

While all interested groups agree there is a need to improve street tree care, there is no consensus on maintenance levels and funding sources. The groups have agreed that the proposed Tree Management Plan can be used as a vehicle to develop public consensus on street tree care. At a meeting on March 20, 1990 representatives from the Sacramento Tree Foundation, SOCA and SCAN supported the recommendations presented in this report.

Sacramento Tree Management Plan

This report recommends that the City proceed with the development of a Tree Management Plan. The development of a Tree Management Plan for Sacramento was recommended by the Street Tree Task Force in 1987.

The Tree Management Plan will provide a complete inventory of the existing street tree population. The Plan will also recommend planting plans for specific geographic locations, construction guidelines to preserve large trees in the downtown area, and a funding plan to address methods to finance the

proposed level of street tree care. An outline of the proposed Tree Management Plan was developed by the Street Tree Task Force as a guide for its development (Exhibit C).

The Tree Management Plan will be developed by a consultant team including an arborist, a horticulturist, a landscape architect, and an urban planner. It is estimated that the Plan will cost approximately \$150,000 to develop and print and will take approximately 18 months to complete. Funding for the development of the Plan is currently available from an unused portion of the administrative contingency fund of the Landscape and Lighting Assessment District.

In order to oversee the development of the Tree Management Plan by the consultant team, this report recommends that a Technical Advisory Committee be formed to participate in decisions regarding the development and contents of the Plan. Additionally, the TAC would convene public meetings to solicit community input and develop consensus on street tree maintenance policies and funding. Committee members would be nominated by the Director of Parks and Community Services and approved by the City Council. Representation on the Committee would be as follows:

- Local arborist
- Sacramento Tree Foundation
- SMUD
- U.C. Agricultural Extension
- Sacramento County Alliance of Neighborhoods
- Four interested citizens

The four citizen members on the Committee will be selected from different geographic and economic areas of the city recognizing that tree care needs vary by neighborhood. The development of the Tree Management Plan will enable the City to learn the full magnitude of tree care requirements for Sacramento's street trees. The Plan will help determine the best method to maintain and fund the care of Sacramento's street trees. Community meetings will be held during the development of the Tree Management Plan to provide an opportunity for the public to discuss tree maintenance and funding options.

Improved Street Tree Maintenance

At current funding levels, City Tree Services is not providing an acceptable level of street tree care. As stated earlier, the current City tree ordinance allows the Director of the Department of Parks and Community Services to provide tree care within budgetary limitations. Given the current 24 month backlog and increasing liability, this report recommends that Council authorize a refocusing of current resources to the maintenance of City street trees until such time that the Tree Management Plan is completed and brought to City Council for approval. Maintenance efforts would be focused on trees in city street easements, park strips or other city property.

The redirection of tree maintenance service will allow City tree crews to focus all of their resources to the maintenance of city street trees. This will allow improved care to city street trees and will help reduce the City's exposure to claims for property damage and personal injury from tree-related incidents.

The Department will continue to perform necessary safety-related work on 'private property front yard' trees when notice is received that a tree presents a hazard to nearby public property. Tree Services will also continue to provide the following services to private property front yard trees:

- Mistletoe tool loan program
- Neighborhood self-help programs
- Education programs
- Tree planting

Catch-Up Program for Tree Trimming Backlog

This report recommends that the additional funding be provided to reduce the backlog of approved tree trimming orders for city street trees which date back to January 1988. Private property front yard trees which were previously approved for trimming will be not be addressed until a Tree Management Plan is brought back to Council.

Funding for this Catch-Up Program could be provided through the addition of a tree maintenance component to the Landscape and Lighting Assessment District. A five percent adjustment in the annual assessment will provide the necessary funds to remedy the two-year backlog of trimming orders for city street trees. Two funding options are as follows:

1. A \$200,000 augmentation which would increase the annual assessment fee by five percent and significantly reduce the backlog in 12 months; or
2. A \$400,000 augmentation which would increase the annual assessment fee by ten percent and significantly reduce the backlog in approximately 6 months.

This augmentation would be utilized to contract for additional tree trimming. The combination of additional funding for tree trimming and the shifting of existing resources to city street trees will significantly reduce the backlog of orders. Once the backlog is reduced, the funding would then enable Tree Services to keep pace with new tree trimming needs for city street trees as the number of old and maturing trees increases and allow for reduction in the tree trimming cycle which currently is about 20 years. Staff recommends that the City Council approve the \$200,000 augmentation option.

FINANCIAL DATA

Funding for the recommendations is as follows:

Development of the Tree Management Plan

Funds are currently available in an unused portion of administrative contingency portion of the Landscape and Lighting District for FY 1989-90. In FY 1990-91, funds will be available due to first-year administrative costs which will not be necessary in FY 1990-91.

FY 1989-90 - \$ 50,000
FY 1990-91 - \$100,000

Reduction in the tree trimming backlog as follows:

FY 1990-91	<u>Option 1</u>	<u>Option 2</u>
Additional Funding	\$200,000	\$400,000*
Current Annual Assessment (Single family rate)	\$24.13	\$24.13
New Annual Assessment (Single family rate)	\$25.41	\$26.81
Percent Increase	5%	11%
Months to reduce backlog:	12 months	6 months

*An increase of \$400,000 in contracted trimming would require an additional tree trimming supervisor to manage the contracted work. This additional employee, vehicle, and supplies would cost approximately \$50,000 and would be funded from the \$400,000 augmentation.

POLICY CONSIDERATIONS

The refocusing of City resources to concentrate on the maintenance of city street trees rather than private property front yards trees is a shift from current practice. The development of a Tree Management Plan will recommend future maintenance policies and funding levels for tree care in Sacramento.

The Department of Parks and Community Services' Citizens Advisory Committee endorses this policy.

MBE/WBE EFFORTS

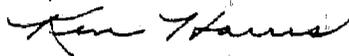
Every effort will be made to meet MBE/WBE goals in the solicitation of tree trimming contractors.

RECOMMENDATION

It is recommended that the Budget and Finance Committee and the Transportation and Community Development Committee approve this report and forward it to the full City Council, and that the City Council, by resolution:

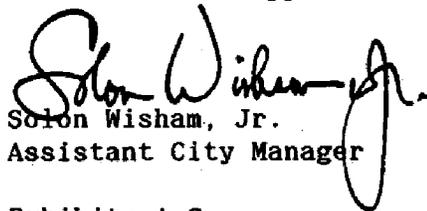
1. Approve the funding for the Tree Management Plan by allocating administrative contingency funds in the Landscape and Lighting Assessment District in the amount of \$50,000 for FY 1989-90 and \$100,000 for FY 1990-91.
2. Direct staff to add a tree maintenance component to the Landscape and Lighting Assessment District in FY 1990-91 to provide \$200,000. This would increase the annual assessment by approximately five percent for all assessed parcels.
3. Amend the FY 1989/90 operating budget by transferring \$50,000 from the Lighting and Landscape Assessment Fund to Parks and Recreation/Citywide Division operating budget.
4. Direct staff to report back with nominations for four citizen members on the Technical Advisory Committee for the Tree Management Plan.
5. Authorize the refocusing of current tree trimming resources to the maintenance of 'City Street Trees' until a Tree Management Plan is approved by Council.

Respectfully submitted,



KEN HARRIS, Manager
Parks and Recreation City Wide

Recommendation Approved:



Solon Wisham, Jr.
Assistant City Manager

Approved:



ROBERT P. THOMAS, Director
Parks and Community Services

Exhibits A-C

April 3, 1990
All Districts

RPT:ja

Contact Person: Martin Fitch, Superintendent, Tree Services, 449-5304

jrueel.doc

RESOLUTION NO.

ADOPTED BY THE SACRAMENTO CITY COUNCIL

ON DATE OF _____

RESOLUTION APPROVING FUNDING FOR A TREE MANAGEMENT PLAN,
AMENDING THE FY 1989-90 CITY BUDGET AND DIRECTING STAFF TO
NOMINATE CITIZEN MEMBERS FOR TREE MANAGEMENT
PLAN TECHNICAL ADVISORY COMMITTEE AND TO INCORPORATE
STREET TREE MAINTENANCE IN THE 1990-91 LANDSCAPE AND LIGHTING
DISTRICT ASSESSMENT

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF SACRAMENTO:

1. Approves the funding for the Tree Management Plan by allocating administrative contingency funds in the Landscape and Lighting Assessment District in the amount of \$50,000 for FY 1989-90.
2. Direct staff to add a component to the Landscape and Lighting Assessment District in FY 1990-91 to provide \$200,000 for tree maintenance. This would increase the annual assessment by approximately five percent for all assessed parcels.
3. Amends the FY 1989-90 operating budget by transferring \$50,000 from the Lighting and Landscape Assessment Fund to Parks and Recreation/Citywide Division operating budget as follows:

281-XXX-XXXX-XXXX	[\$50,000]
101-450-4590-4258	\$50,000
4. Directs staff to report back with nominations for four citizen members on the Technical Advisory Committee for the Tree Management Plan.
5. Authorizes the refocusing of current tree trimming resources to the maintenance of 'City Street Trees' until a Tree Management Plan is approved by Council.

MAYOR

ATTEST:

CITY CLERK

FOR CITY CLERK USE ONLY

RESOLUTION NO.: _____

DATE ADOPTED: _____

DEPARTMENT OF PARKS
AND COMMUNITY SERVICES

ROBERT P THOMAS
DIRECTOR

G ERLING LINGGI
ASSISTANT DIRECTOR

WALTER S UEDA
DEPUTY DIRECTOR

Budget and Finance Committee/
Transportation and Community Development Committee
Sacramento, California

CITY OF SACRAMENTO
CALIFORNIA

June 9, 1989

1251 I STREET
SUITE 400
SACRAMENTO, CA
95814-2977

916-449-5200

DIVISIONS:
CROCKER ART MUSEUM
GOLF
METROPOLITAN ARTS
MUSEUM AND HISTORY
PARKS
RECREATION
ZOO

Honorable Members in Session:

Subject: Street Tree Maintenance/Ordinance Revision

Summary:

This report details the status of the City's street tree trimming operation. Additionally, this report recommends that the City's street tree ordinance be amended reflecting title changes, and clarifying definitions of street tree, City street tree and maintenance responsibilities. The intent is to match the existing City tree care resources with City tree care responsibility and to provide enhanced tree care public education efforts.

Background Information:

The City of Sacramento is renowned for its progressive street tree operation. Sacramento has been honored with the Tree City USA award for the eleven consecutive years since the award's inception. The magnificent trees themselves provide the greatest testimony to the value of the City's ongoing tree care efforts.

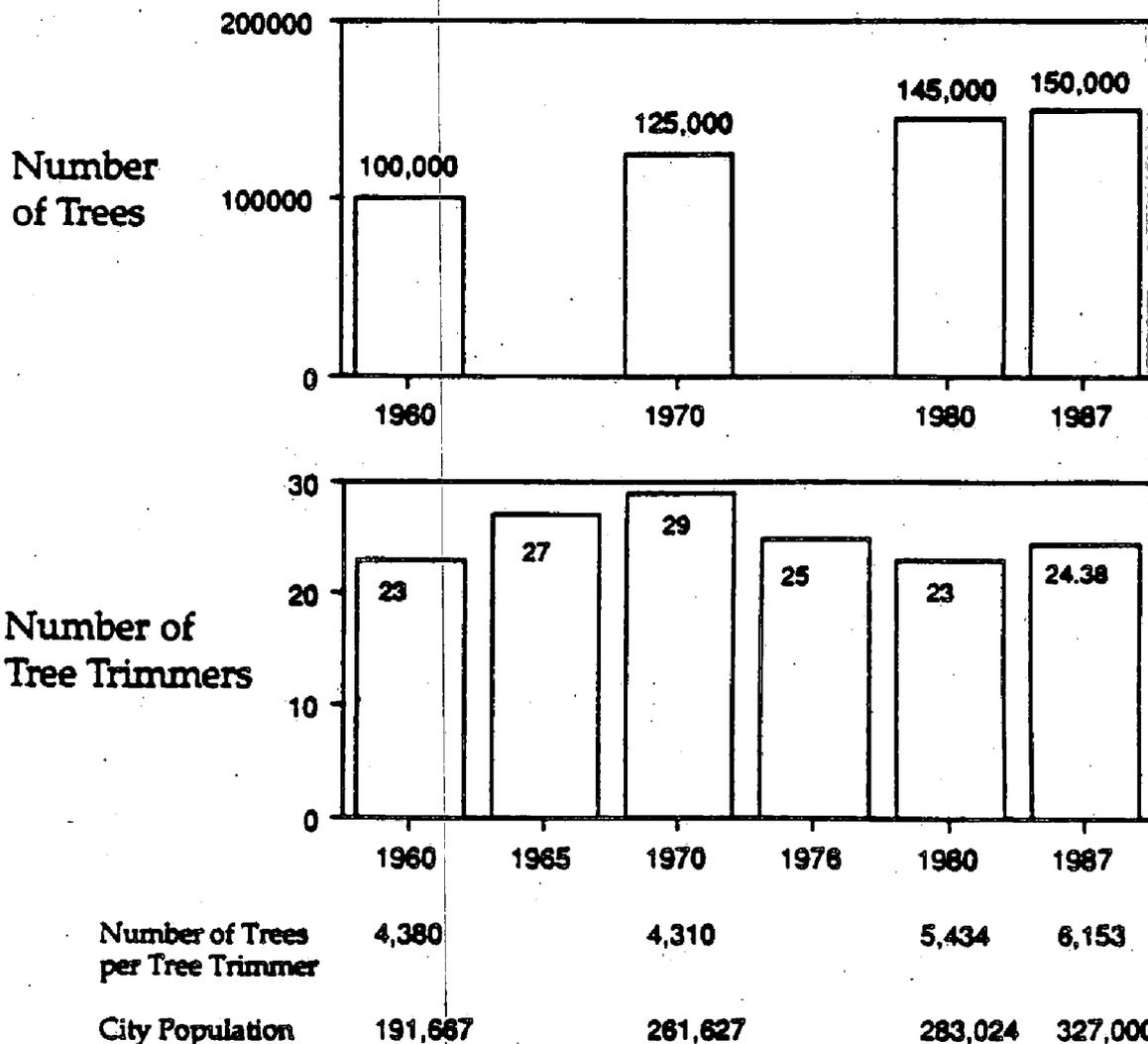
Sacramento's population of City maintained trees increased from an estimated 100,000 trees in 1960 to an estimated 150,000 trees in 1988. While the City is not legally responsible for maintenance of private street trees, we have been providing that maintenance where possible within budgetary limitations. The City of Sacramento is currently responsible for maintenance of all street trees within budgetary limitations as provided by the Director. Exhibit A of this report provides a comprehensive history and detailed analysis of the conditions, service levels and maintenance needs of trees and compares Sacramento's existing maintenance levels with other cities nationally.

Sacramento's street tree resource is estimated to have a value in excess of \$300 million (based on the Valuation of Landscape Trees, Shrubs and Other Plants

published by the International Society of Arboriculture). Such a valuable resource deserves adequate care. Trees, just like historic buildings or antique cars, require ongoing maintenance or they deteriorate.

Sacramento currently employs 24.38 FTE (full time equivalent) tree trimmers. Employment peaked in 1971-72 with 30 tree trimmers. With current staff levels, the trimming rotation for a tree is over 20 years. This rotation is inadequate and results in a crisis management approach to tree care. Sacramento schedules tree work based on individual citizen requests rather than on a planned and timely rotation. Deadwood, damaged trees, and low limbs, are inspected when a citizen complains. Work is only scheduled where there is an emergency need. This situation is not without consequences. Citizen requests for legitimate tree trimming needs are waiting as much as eighteen months until crews are available. As of January, 1989, the scheduled work file contained 940 requests dating back to June 1987.

Sacramento Tree Population Compared to Number of Tree Trimmers



In order to reduce the turn around time for tree trimming and reduce the citizen request backlog this report recommends clarifying that the maintenance responsibility for private street trees rests on the private property owner. This would be accomplished with revision of the City Code Chapter 45, relating to trees. Exhibit B of this report provides the existing ordinance with the recommended changes noted. City crews would then supply routine maintenance only for City street trees. City street trees are those planted on the actual street easement or other public property. The City is presently maintaining all sidewalks with a similar policy. Sidewalks are inspected and bids to complete any necessary work are solicited by the City and the work is paid for by the property owners.

This proposal provides for continuation of services to City street trees and would increase frequency of service. Private street trees would no longer be provided with the following services: insect control, trimming, tree removal, or emergency response unless the public right of way is impacted. Private street trees are those trees planted on private property in the front yard within 12 1/2 feet of the back of the curb. Services which would continue for private street trees would include, emergency response where the public right of way is impacted, inspection to evaluate tree maintenance needs, tree planting, mistletoe tool loan program, neighborhood self-help program, and continued efforts to educate the public about proper tree care.

The new emphasis for City tree care on city street trees would be accompanied with renewed efforts to complete a street tree management plan, increase the City tree care education program, and promote tree planting.

City Tree Services will proceed with the development of a comprehensive tree management plan. This plan will follow the Street Tree Master Plan Outline guidelines provided by the 1987 Street Tree Task Force and endorsed by Sacramento Tree Foundation. (See Exhibit C) Work on the Tree Management Plan will continue through allocation of labor and materials from the 1989-90 Tree Services operating budget totalling approximately \$25,000 per year for the next three years.

Enhanced education efforts will include the development of an educational presentation geared to various age groups with emphasis on elementary school children. Tree Services will also develop a general information handout that will be made available to the public through all tree services staff and Community Centers. This program will be developed under the direction of the City Arborist. Staffing for the increased education program will be provided by the reallocation of (.46) FTE Tree Trimmer Trainees presently assigned to the six month a year mistletoe tool loan program and 1.08 FTE Tree Maintenance Worker I(s) presently assigned to watering trees and pest control. These positions would have a change in responsibilities under the new ordinance and would be combined into one career position Tree Maintenance Worker II or other appropriate title. The primary responsibility for this new position would be to assist the City Arborist in presenting the programs to elementary schools and other audiences throughout the year. The program would be available to all City of Sacramento schools and interested community groups. This employee would also continue the on-going operation of the popular mistletoe tool loan program.

Tree Services will also accentuate its efforts to encourage tree planting. Tree planting will be an integral part of the education program and the City Tree Services will continue its active participation in the local "Trees for Tomorrow" campaign to plant one million trees by the year 2,000. Tree Services will also continue to work with Sacramento Tree Foundation in its planting projects, and to carry out the City's existing tree planting program. The City program provides one street tree for every 40 feet of street frontage where space permits in the City of Sacramento.

Sacramento will retain its strong image as a Tree City USA award recipient. The per capita expenditure on trees will remain unchanged. If this report is approved, the per tree expenditure will increase enabling the City to provide a quality service on City street trees it continues to maintain. Additionally, the City's liability will be diminished by reducing the number of city maintained street trees and by increasing service on those it is responsible to maintain.

Surrounding local communities are adopting similar approaches to tree care. The recently adopted West Sacramento and Folsom Tree Ordinances assign tree maintenance responsibility to the private property owner. These cities do not assume any tree care maintenance responsibilities.

The Sacramento Tree Foundation, Environmental Council of Sacramento, and Sacramento Old City Association have reviewed this report. The Environmental Council deferred to the Tree Foundation as the organization with greatest expertise and membership affiliated with both organizations. The Tree Foundation Technical Advisory Committee sent a motion to the Foundation's Executive Board which supported additional tree crews as first priority with the understanding that a shift of service from street trees to city street trees would be recommended if funding for additional crews could not be found. The Tree Foundation Executive Board passed a motion which supports increased funding for tree maintenance and supports both the management plan and education components of this proposal. Sacramento Old City Association has recommended that the City fund an additional five tree trimming crews without any further qualification. The cost for five additional crews is approximately \$1.2 million annually. All the above groups support increased funding as the solution to maintenance needs; however, they will not oppose the proposed ordinance change. This report was reviewed by the Parks and Recreation Citizen's Advisory Committee at its May 25, 1989 meeting.

FINANCIAL DATA

Increased responsibility to provide more education and develop the tree management plan creates a need for assistance to the arborist. Current limited term employees (1.54 FTE) will be reallocated to a 1.00 employee career FTE with no net change in cost and no additional funds required.

There are no other costs anticipated as a result of the ordinance change.

POLICY CONSIDERATIONS

Policy considerations include revision of the City's Street Tree Ordinance to clarify that responsibility for tree maintenance on private property rests on the property owner. Other policy changes are the renewed emphasis on tree education, tree planting, and development of the street tree management plan.

MBE/WBE EFFORTS

No impact.

RECOMMENDATION

It is recommended that the Budget and Finance Committee and the Transportation and Community Development Committee approve this report and forward it to the full City Council and that the City Council, by resolution:

1. Enact the proposed ordinance amending Chapter 45 of the City Code pertaining to trees.
2. Approve the concept of reallocation of 1.54 Limited Term FTE to one career FTE Tree Maintenance Worker II or other appropriate title to develop and present tree education programs, targeting all age groups, concentrating on elementary school children and community groups. These adjustments will be in the proposed 1989-90 operating budget.

Respectfully Submitted,

for - *B. Euling Swigg*
Robert P. Thomas, Director
Parks and Community Services

Recommendation Approved:

Solon Wisham, Jr.
Assistant City Manager

June 20, 1989
All Districts

Attachments: Exhibits A-D

Contact Person to
Answer Questions:

MARTIN FITCH, PARKS SUPERINTENDENT
TREE SERVICES
449-5304

SACRAMENTO'S TREE RESOURCE

Urban trees are described in American Forests, May/June 1987 as most vigorous from the time their trunk reaches 5-inches in diameter until thirty years of age (Moll, 1987). By this standard the majority of Sacramento's trees are relatively old and, therefore, require increased maintenance.

Sacramento's present tree inventory includes approximately 18,000 elm, 20,000 ash and 20,000 plane trees. These trees represent the majority of older trees in the City, and they account for a proportionately greater share of the maintenance needs. Sacramento has a reputation among professional arborists for having more larger trees than other cities. The elm trees generally range in age from 50 to 110 years. Maintenance needs include annual treatments to control elm leaf beetle, deadwooding, low-limbing, and removal of dead or structurally defective trees. The ash trees range in age from 20 to 50 years. Ash trees require maintenance for many conditions including mistletoe, ash plant bug, ash borer and anthracnose leaf blight, surface roots, major limbs splitting, and dead trees. The plane trees are 50 to 80 years in age. Maintenance needs for plane trees include treatment for scale insects, anthracnose leaf blight, powdery mildew, deadwood, and low limbs.

Tree Services currently spends approximately 65% of its resource on City street trees and 35% on private street trees. There are no counts as to the actual number of City street trees versus street trees. A rough estimate would be 75,000 City street trees and 75,000 street trees. The greater expenditure for City street trees reflects the greater age and size of the City street trees as compared to street trees.

Public liability presents an additional concern. Proper tree maintenance is essential to reduce the potential for property or personal injury which can result from neglected or postponed street tree maintenance (Moll, 1987). This proposed ordinance change will reduce the city's liability exposure with reference to trees, but rather clarifies the division of responsibility. It reduces the City expense which currently arises from our maintaining trees which are not City responsibility and from our expending fewer than all available resources on City street trees.

In response to both the liability question and public demand for improved tree management within current budgets, City Tree Services has developed two tree evaluation forms. These forms assist in providing a uniform evaluation system and increase credibility in removing and replacing the City's declining older trees. The form, "Guide for Evaluating Tree Condition", evaluates tree condition on a point system using the following factors: trunk and limb structure, crown development, insect or disease infestation, tree vigor, and neighborhood impact. The "Nuisance Tree Evaluation" assists City Tree Services, property owners, and neighbors in evaluating nuisance trees for possible solutions (Bramble, 1987). The forms have been well received by the community, and are a step in the right direction. However, Sacramento is still reactive in its approach to tree maintenance. A proactive management plan and tree service operation is needed. Tree maintenance with City crews now consists primarily of the following services:

Exhibit A (Continued)

- 1) Elm leaf beetle control.
- 2) Aphid and other honeydew producing insect control.
- 3) Trimming for low limbs, building clearance, street light clearance, and traffic control clearance.
- 4) Dead and diseased tree removal.
- 5) Emergency response for limbs or trees down, split, or broken and hanging.
- 6) New tree planting.
- 7) Inspection to evaluate tree maintenance needs.
- 8) Mistletoe tool loan program.
- 9) Neighborhood self-help program, i.e. city supervised tree work paid for by the property owner.

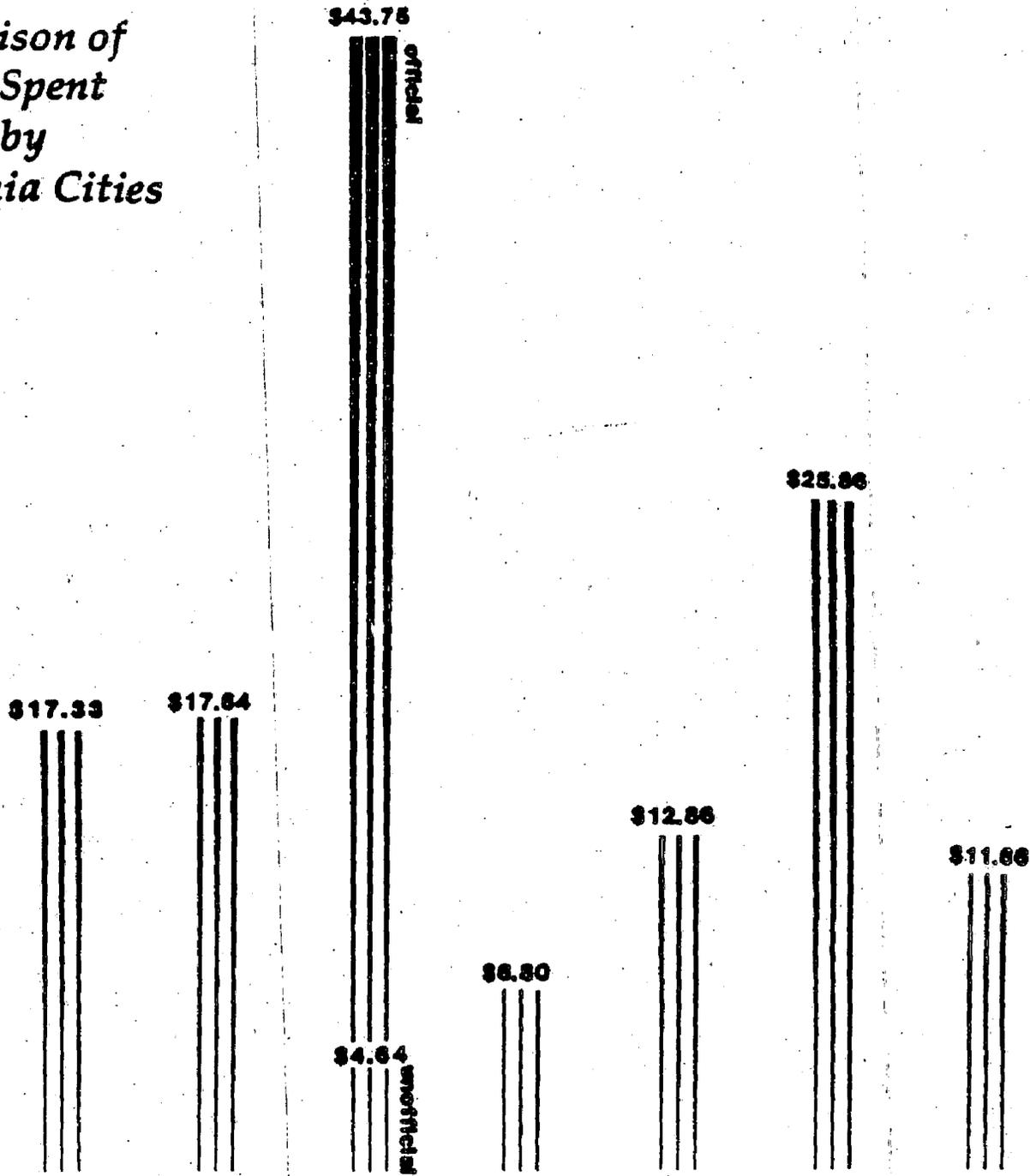
SACRAMENTO TREE CARE COMPARED TO OTHER MUNICIPALITIES

Sacramento's tree maintenance expenditures are falling behind when compared to other tree conscious cities throughout the nation. Sacramento spends \$17.33 per tree per year compared to \$17.64 in Modesto, \$25.00 in Seattle, \$23.00 in Milwaukee, and \$18.00 in Minneapolis. Comparison between Sacramento's tree maintenance program and those of Modesto, Seattle, Minneapolis, and Milwaukee indicates that the responsibilities are essentially the same: maintenance of street trees in front of each property. Seattle is the exception, maintaining trees only on public property. A comparison with a random sample of similar sized California Cities shows Sacramento's tree expenditure to be about average. It should be noted that the majority of California cities have no tree program at all. Approximately 150 of California's 450 cities have tree programs. However, most of California's larger cities do have established formal tree care programs.

Tree care professionals recommend urban tree trimming on a minimum five to six year rotation for each tree. This rotation is achieved in the cities of Milwaukee, Seattle, Minneapolis, and Modesto (Skiera, Clark, Devoto, Gilstrap, 1987). Sacramento's 20 year plus tree trimming rotation capability is four times longer than the recommended professional standard.

Comparison of Dollars Spent per Tree by California Cities 1986-87

DOLLARS SPENT PER TREE

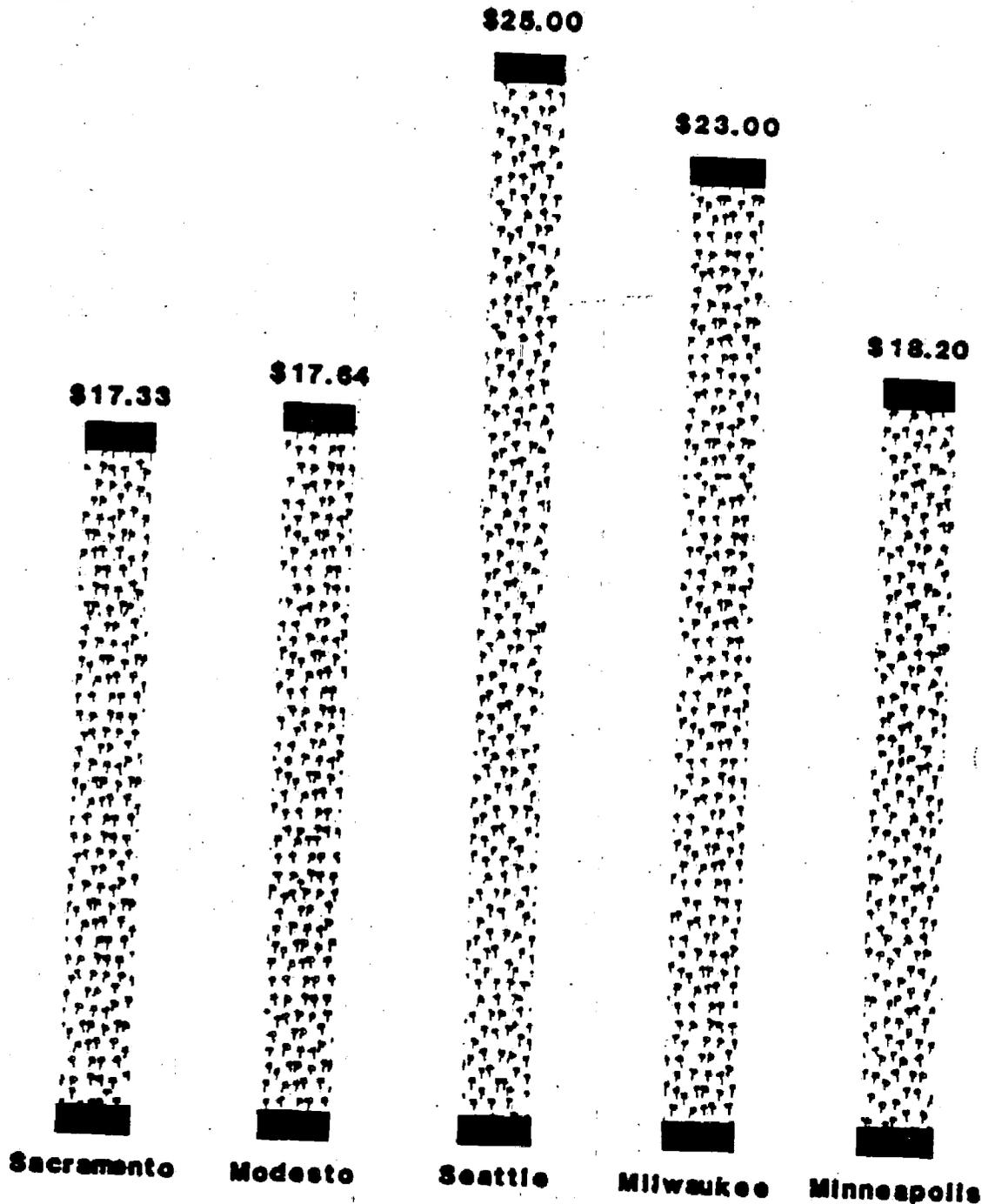


	Sacramento	Modesto	Oakland	San Jose	Stockton	Anaheim	Fresno
# of Trees	150,000	85,000	40,000*	250,000	70,000	58,000	120,000
# of Trimmers	24.38	14	26	13	14	26	21
Budget in millions	\$2.6	\$1.5	\$1.75	\$1.7	\$2.9	\$1.5	\$1.4
Population	327,000	132,500	360,000	740,000	180,000	254,000	300,000
Program Head	Fitch	Gilstrap	Newman	Beaudoin	Feldkamp	Crump	m

*Oakland has 40,000 official trees and 275,000-400,000 unofficial trees.
 Note: Of California's approximately 450 cities only 150 have formal city tree care programs.

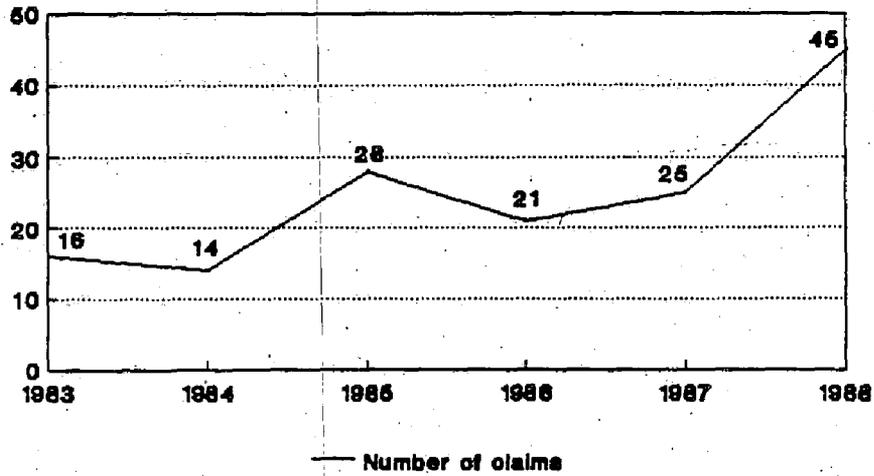
*National Comparison
of Dollars spent per
Tree during 1986-87*

DOLLARS SPENT PER TREE



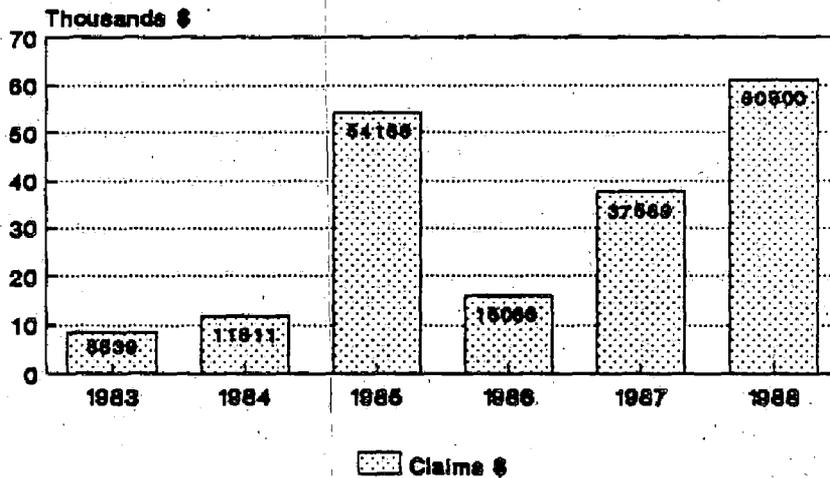
	Sacramento	Modesto	Seattle	Milwaukee	Minneapolis
# of Trees	150,000	85,000	22,000	324,000	300,000
# of Trimmers	24.38	14	16	88	75
Budget in Millions	\$2.6	\$1.5	\$.55	\$8.5	\$5.5

City Tree Liability Number of claims



149 claims over
six year period

City Tree Liability Paid Claims



\$189,174 paid claims
over six year period

**GUIDELINES FOR SACRAMENTO'S
TREE MANAGEMENT PLAN**

INTRODUCTION (City & Consultant)

- A. History of Plan
- B. Background of City Tree Care
- C. Street Tree Task Force

I. Existing Trees (City)

- A. Growing Conditions
 - 1. Geography
 - a. Soils
 - 2. Climate
- B. Tree History
- C. Existing Tree Cover
 - 1. Tree Inventory
 - 2. Present Condition of Trees

II. Design Criteria/Treescape Plan (Consultant)

- A. Species Selection
 - 1. Uniform Species (per block)
 - 2. Mixed Species (Blocks with existing trees)
 - 3. Species Size Considerations
 - a. Building Setbacks
 - b. Depth of Soil
 - c. Size of Planting Area
 - d. Utilities-Underground and Overhead
 - e. Visual Obstructions
 - f. Solar Access
 - 4. Policy and Species Recommendations
 - a. Major Street
 - 1. Arterials
 - 2. Collectors
 - 3. Central Business District
 - b. Residential Streets
 - 1. Homeowner choice within the planting easement
 - c. Medians
 - d. Sound walls
 - 5. Useful Life
 - a. Rotational Reforestation
 - b. Even-Aged Stands
- B. Guidelines for New Development
 - 1. Preserving Existing Trees
 - 2. Providing Adequate Space for New Trees
 - 3. Parking Lot Shade

- C. Guidelines for Street Improvements - Sidewalks, Curbs, Gutters, and the Street.
 - 1. Preserving Existing Trees
 - a. Sidewalk Configuration
 - 2. Providing Adequate Space for New Trees
 - a. Sidewalk Configuration
 - b. Clustering Trees

III. Planting (City)

- A. Planting Specifications
 - 1. Size and Depth of Hole
 - a. Penetrating Hardpan
 - 2. Backfill Material
 - 3. Fertilizer
 - 4. Staking
 - 5. Water Basins
 - a. Grates (Consultant)
 - 6. Containers (Consultant)
 - 7. Root Barriers (Consultant)
- B. City Nursery

IV. Maintenance (City)

- A. Young Tree Care
 - 1. Watering
 - 2. Pruning
 - 3. Fertilizing
 - 4. Tree Well and Street Median Weed Control
 - 5. Tree Staking Policy
- B. Mature Tree Care
 - 1. Pruning
 - a. Thinning
 - b. Crown Reduction
 - 2. Removing
 - a. Tree Evaluations
 - b. Public Review
 - c. Stump Removal
 - d. Private Trees
 - 3. Solar Access
- C. Pest Control
 - 1. Spraying
 - 2. Injecting
 - 3. Integrated Pest Management
 - 4. Tree Well Weeds
- D. Safety
- E. Emergency Operations
- F. Utility Easements

V. Financing

- A. Budget for Proposed Tree Care Plan
- B. Financing Options

VI. Community Involvement and Education (City)

- A. Public Education and Participation
 - 1. Mistletoe Tool Loan Plan
 - 2. Gifts to Share Program
 - 3. Neighborhood Self-Help Program
 - a. Providing Information and Assistance to Neighborhoods
 - 4. Neighborhood Tree Specialist Program
 - a. Disseminating Information About Street Trees
 - b. Organizing Neighborhood Groups

VII. New Programs (Consultant)

- A. Public Street Tree Surcharge
- B. Other Programs