BSN AGENDA: 10/16/06
ITEM: c

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: BUILDING STRONG NEIGHBORHOODS

FROM: James R. Helmer

SUBJECT: **STATUS OF THE SAN JOSE URBAN FOREST**

DATE: October 4, 2006

Approved Date

RECOMMENDATION

Accept this report on the status of the City of San Jose's urban forest.

BACKGROUND

The purpose of this memorandum is to provide information on the urban forest to the Building Strong Neighborhoods Committee for their discussion of Street Tree Maintenance and New Tree Planting.

Trees of the urban forest contribute many benefits to the environment of the City. They provide cooling shade from summer heat which counteracts heat build up in urban areas due to paving covering major portions of the urban landscape. They also provide great beauty to the City and enhance property values in residential neighborhoods. They also help to reduce global warming by removing carbon dioxide from the atmosphere.

San José has been designated a Tree City USA by the National Arbor Day Foundation for the last 24 years, reflecting a commitment to develop and support a substantial urban forest. San José is estimated to have the second largest city street tree population in the state of California, surpassed only by Los Angeles. The number of private and public trees in the City is estimated to number over 1 million trees. Private trees are under the jurisdiction of the Planning, Building and Code Enforcement Department (PCBE), and the Department of Transportation (DOT) oversees street trees and trees in landscaped public right of ways.

DOT performs an annual sample survey to estimate the number of street trees in the urban forest, and the current estimate is 306,000. A complete inventory of street trees has not been performed due to resource limitations and previous staffing reductions in the Arborist's Office. The City has approximately 60,000 missing street trees.

ANALYSIS

The main factors that impact the overall health of the urban forest are the number of trees and the tree pruning cycle. These elements form the basis of the key performance measure for street tree maintenance, specifically the percentage of the existing street trees and the percentage of the street trees that are structurally trimmed on a regular basis. The percentage of existing street trees is the ratio of the estimated number of street trees and the number of trees there should be based on City ordinance mandating each residential property have at least one street tree except for corner lots that are required to have three street trees. (Site safety considerations may preclude the planting of any trees, so the estimate is adjusted to account for this.) The percentage of street trees that are structurally trimmed on a regular basis is the ratio of the actual number of trees trimmed each year and one/fifth of all estimated street trees because all trees should optimally be trimmed on a 5 year cycle.

The percentage of the urban forest in optimal condition based on the improved survey methodology has declined from 50%, in 2004-2005, to 47% in 2005-2006, and is projected to decline to 43% in 2006-2007 due primarily to the declining number of trees structurally pruned.

Tree Trimming

The U.S. Forest Service Center for Urban Forest Research concludes that effective trimming is one of the best methods of preserving the urban forest, and optimally should be performed on a 5 year cycle. Trimming at this interval helps the tree properly develop a strong structure, while cutting away problem branches while they are still small. This reduces the number of large cuts made on mature trees that often contribute to decay in the trunk, thereby reducing catastrophic tree failures.

Many of San Jose's neighboring cities including Cupertino, Santa Clara, Campbell, Milpitas, Sunnyvale, and Fremont prune their street trees on a regular basis. The San Jose Municipal Code designates that responsibility to the property owners, requiring them to maintain the trees in a "non-dangerous" condition. However, the Arborist's Office only issued 901 pruning permits in 2005-2006, which is less than 0.3% of the total street tree population. Nonetheless, this effort by the public saved approximately $54,000 in expenditures that might otherwise have been incurred by the City. To structurally prune our current inventory of Street Trees on the optimal 5 year cycle would cost approximately $6.1 million annually.

In the past, the City has supplemented the property owners' pruning activities with occasional neighborhood street tree pruning on a 10-15 year cycle. However, the last several years of budget shortfalls have led to the elimination of the contractual structural pruning program by the City. It is this reduction in the street tree pruning that is primarily causing the decline of the urban forest condition.

The only remaining structural pruning is performed by the DOT Tree Crews. However, the Tree Crews spend most of their time responding to emergencies and complaints, and very little time on preventative maintenance trimming. They responded to 1,860 tree emergencies in 2003-

2004, 1,940 in 2004-2005, and 2,000 in 2005-2006. This fiscal year the number is increasing and will probably continue to do so in the future as our urban forest matures and condition declines. Most tree emergencies are a result of infrequent or improper trimming which results in broken limbs or fallen trees. The City's crew also removes dead street trees that may pose a public safety concern, and the current backlog of dead trees due to staffing and budget reductions is approximately 150. The department anticipates investing approximately $60,000 in one-time funding toward tree trimming this year. One-time funding to address the backlog of infrastructure maintenance was approved this fiscal year, but it is currently on hold pending resolution of Utility Tax uncertainties.

Tree Planting

The number of street trees is gradually increasing through a combination of efforts by the City, Our City Forest, and the public. San José has supported Our City Forest (OCF) for over a decade. The City currently provides OCF with an annual operating grant of approximately $146,000 annually for which they are required to plant a minimum of 300 trees. OCF uses these funds to establish and maintain its operations while it solicits additional contributions from the private sector and tree planting grants from State and Federal sources. They use these other grant funds to plant on average about 2,000 trees per year in San José and provide training on how to plant and care for young trees. Early care helps trees develop a strong initial structure to support them to maturity and reduce future tree emergencies.

Approximately half of the trees OCF plants are street trees, and the rest are planted at schools, parks, and other public sites. DOT's Arborist Office issued 334 planting permits last fiscal year and 1032 remove and replace permits. Many people obtain their trees from OCF so their planting figures may include some of the City's permitted trees. The City also occasionally provides additional one-time grants to OCF just for planting street trees. This year DOT hopes to grant them an additional $40,000 from the infrastructure maintenance backlog funding to allow OCF to leverage other grant funds to plant approximately 600 additional trees.

The Arborist Office provides many services to residents in support of new tree planting and protecting existing trees, and responds to approximately 2,000 service requests per year. They address questions from residents regarding their trees, and designating desirable tree species and approving locations for new trees. The office also oversees contractual tree work, evaluates existing trees to see if they qualify for a replacement permit, and conducts protest hearings on disputed tree removals.

In an effort to combat Illegal Tree Removals and better understand the needs and concerns of the public related to public and private tree removals, DOT and PBCE, in cooperation with Councilmember Yeager, held a community meeting in May 2006. As a result, Council approved a staff recommendation to increase the fines associated with illegal tree removals, and the Call Center was designated as the contract point for concerns about illegal tree removals. The Arborist Office and Code Enforcement have focused on responding to reports of illegally removed trees and the issuing of citations to help discourage the decline of the urban forest.

CONCLUSION

Street trees provide great benefit towards making San José a desirable urban environment, and the urban forest is a wonderful asset and legacy that we should proudly pass on to future generations. However, the City's funding to increase the number of trees or maintain the existing street trees has never been sufficient, and has declined with the previous years' budget reductions. The City has limited ability to actively contribute to a healthy urban forest and be proactive about overseeing the care of the street trees. Without increased support for maintenance of the urban forest, the condition of our street trees will continue to decline and the tree emergencies and failures will increase, decreasing the size of our urban forest. The public appears to appreciate the urban forest and the value of street trees but is not significantly increasing the number of trees or providing adequate trimming to maintain street trees in a healthy condition. Our City Forest's efforts to increase the number of trees and ensure they are properly maintained are commendable, but the task is significant.

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