

ALBANY CALIFORNIA



CITY OF ALBANY
1000 SAN PABLO AVENUE
ALBANY, CA 94706
www.AlbanyCA.org

14 September 2021

MEMORANDUM

To: Albany City Council Members

From: Vice Mayor Jordan

Re: New street trees paid for with Measure DD revenue

RECOMMENDATIONS

That the Council direct staff to prepare a resolution to 1) remove the charge for new street trees and concrete removal for planting them from the Master Fee Schedule in order to make them free to requestors, 2) provide a watering bag with each new street tree as appropriate to the species, and 3) pay for these with Measure DD revenue.

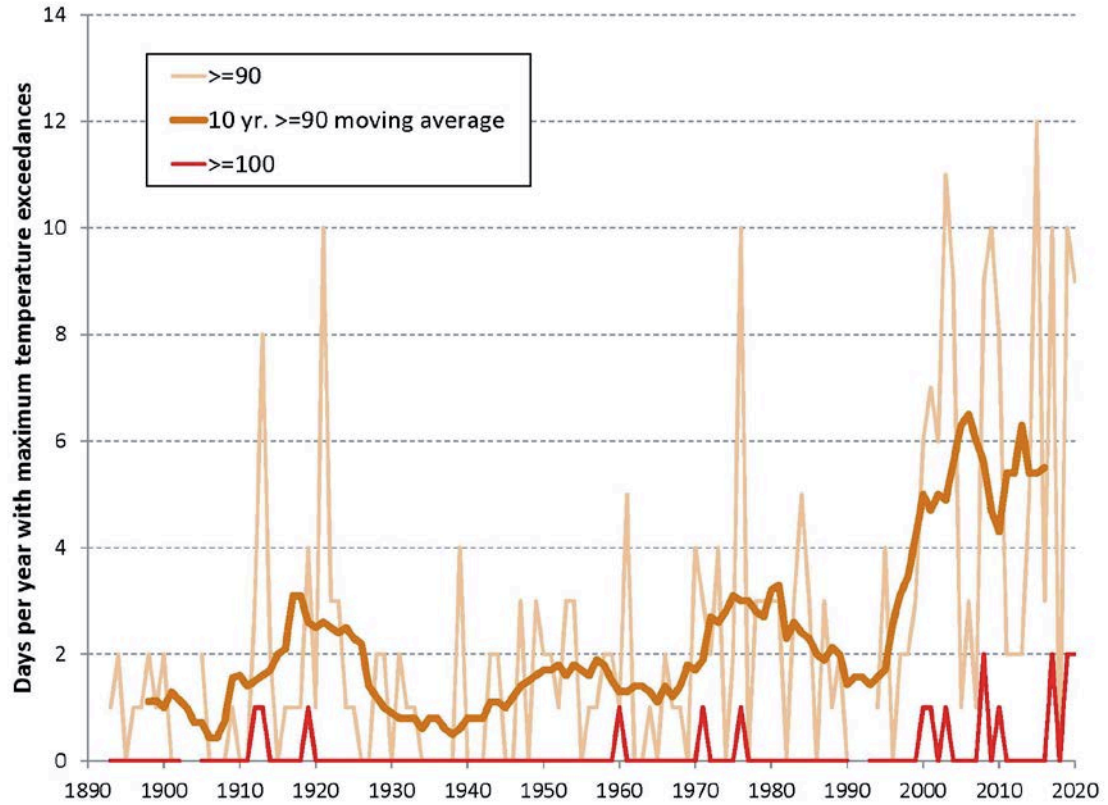
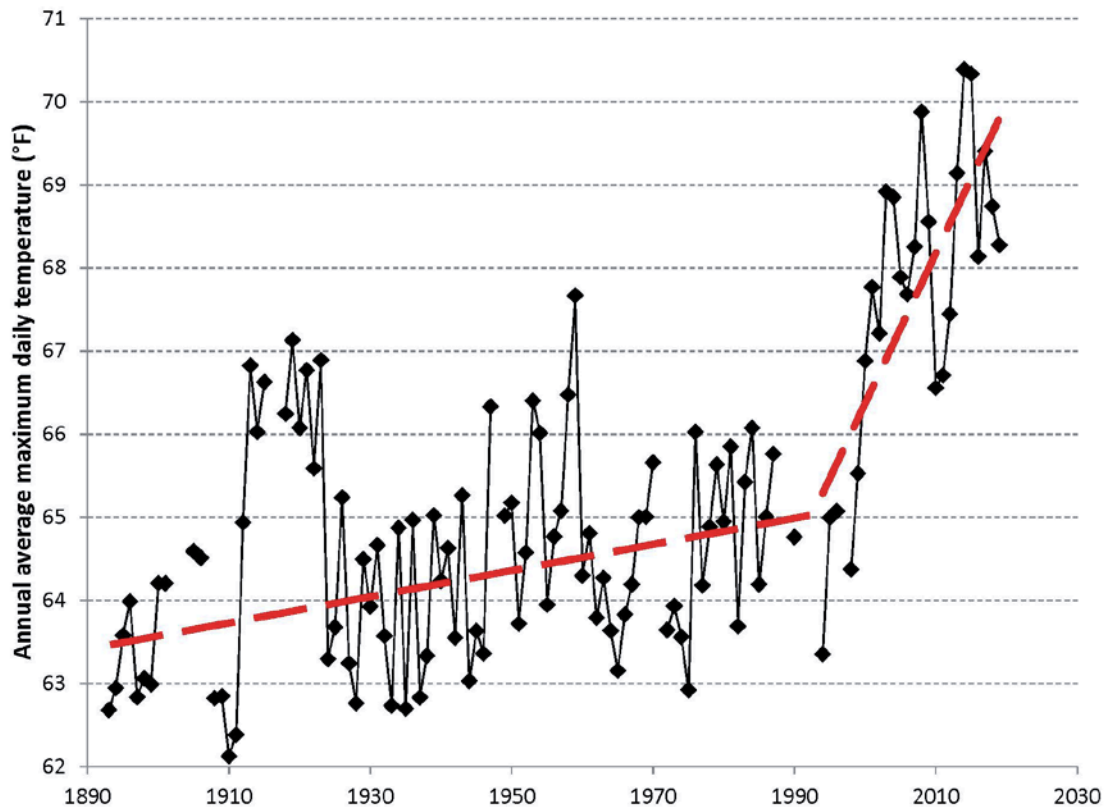
BACKGROUND

By the Master Fee Schedule property owners are charged \$218.03 for the City to plant a tree on adjacent city property along a street ("street trees"). If concrete removal is needed to plant the tree, by the Schedule the property owner is charged \$129 minimum and \$8.45 per square foot over 12 square feet. These charges are levied on property owners that voluntarily request the planting of a tree as well as owners the City requires to have a tree planted pursuant to a major remodel.

The closest meteorological station to Albany that has been operating for over a century is located on the UC Berkeley campus. Mean annual daily high temperatures increased 1.5° F from the beginning of the record in the late 1800s to 1990. Since 1990 temperatures have risen by 5° F.¹ On average there were 1.7 days 90° F or over each year on average before 1996 as shown in the first figure. This has more than tripled to 5.3 days on average after 1995 (Attachment 2). The first year with two days 100° F or over was 2008. Three of the last four years have had as many days this hot as shown on the second figure.

High temperatures are a health risk for various segments of the population. This is particularly true in Albany due to the general lack of air conditioning.

¹ <https://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/stations/GHCND:USC00040693/detail>



DISCUSSION

The fourth strategy of the Climate Action and Adaptation Plan (CAAP) is to “accelerate resilience.” One of the purposes of actions under this theme is to “reduce the urban heat island effect.” The first goal and approach of this strategy is to “increase urban tree canopy cover and landscaped area.” Shade and evapotranspiration provided by trees lowers surface temperatures. The second action under this approach is to “explore creative possibilities for increasing green infrastructure in Albany.”

The first CAAP strategy is to “advance active, shared, and electric transportation.” The first goal is to “decrease passenger vehicle miles traveled (VMT) through use of alternative modes.” The first approach is to “encourage active transportation through infrastructure and parking management.” The presence of street trees is correlated with individuals deciding to walk and bicycle for transportation.²

Eliminating the cost to the requestor of planting a street tree is likely to increase the rate of such requests. This in turn will maximize mitigation of high temperatures and the reduction in vehicle miles travelled resulting from the presence of more street trees.

Since the CAAP was adopted, the voters approved Measure DD. The measure states, “the City Council will endeavor to expend at least one-third (1/3) of the additional revenue generated . . . for . . . Action Items in the City’s Climate Action and Adaptation Plan.” As such, these funds can be used by the City to pay for the cost of new street trees as called for by the CAAP.



Requestors of street trees are responsible for watering them through dry seasons until they are established. This typically takes two to several years. It is possible a lower proportion of street trees planted as a result of the recommended policy thrive due to lack of care. Items that are free tend to elicit less care than items that have a cost.

The potential increase in lack of care can likely be partially mitigated by provided a watering bag free with each tree if determined appropriate for the species by the Urban Forester. Watering bags allow rapid delivery of water to the tree location, saving the requestor time, while releasing the water to the tree slowly. This improves rooting and growth.

² Schneider, R. J. (2013). Theory of routine mode choice decisions: An operational framework to increase sustainable transportation. *Transport Policy*, 25: 128-137.
<https://doi.org/10.1016/j.tranpol.2012.10.007>

SUSTAINABILITY CONSIDERATIONS

As detailed, if the recommended policy increases the rate of street tree planting, this will reduce temperatures compared to what would otherwise occur and increase the share of trips completed by walking and biking.

Besides supporting health, reducing temperatures by accelerating tree coverage would reduce the rate of air conditioning installation and utilization of existing air conditions. The first reduces capital costs for those households that are able to afford to install air conditioning at all. Both reduce demand for electricity, which needs to be conserved to meet other demands, such as for air conditioning in hotter locations of the State and for electric vehicle charging.

SOCIAL EQUITY AND INCLUSIVITY CONSIDERATIONS

Street tree coverage appears to correlate with household income. For instance, Stannage Avenue north of Solano has half as many trees per length of street as San Carlos Avenue. They have the same width landscape area between the sidewalk and curb. This segment of Stannage Avenue resides in a census tract with estimated 2019 income of \$97,000 per household while San Carlos Avenue is in a census tract with estimated 2019 income of \$139,000 per household.³ The trees along San Carlos Avenue are also of larger size on average, providing greater mitigation of high temperatures.

This disparity in tree coverage puts less economically advantaged areas in the City at greater health risk. Providing street trees to requestors for free may close this gap partially as the current cost appears to be a substantially larger percentage of disposable income for households in the census tract containing the segment of Stannage Avenue than San Carlos Avenue.

CITY COUNCIL STRATEGIC PLAN INITIATIVES

The proposed adaptation advances Goal 1, Objective 1, which is to “advance climate action and adaptation.” It specifically has a nexus with Item 4 of this Goal, which is to “develop an Urban Forest Master Plan.” Based on past experience of the time to completion of strategic plan items, leaving the proposed action to after development of the Plan would potentially put it off for years. Due to the changed and changing climate in Albany, this wait risks more damage in terms of human health than benefit in terms of a more perfect approach to urban forestry.

The proposed adaptation advances Goal 1, Objective 3, which is to “promote active transportation and safety.” It specifically has a nexus with Item 2 of this Goal, which is to “update the Active Transportation Plan and reporting of related portions of the City’s Capital Improvement Program.” This reiterates CAAP Action 1.1.1, which is to “develop a new Active Transportation Plan.” This item states, “The plan should emphasize . . . green infrastructure,” among other items. The proposed action not only plans more green infrastructure, if successful it takes the next step of creating more green infrastructure.

³ <https://datausa.io/profile/geo/albany-ca>

FINANCIAL CONSIDERATIONS

The ballot question for Measure DD projected it would raise \$675,000 of new revenue. Revenue from Measure DD is general. The Council is not required to spend any of it in any specific manner. The voters have recommended spending a third of it on climate action and adaptation. This was one of the two aspects of the measure most featured by the campaign (Attachments 1 and 2). If the Council chooses to honor this recommendation, \$225,000 per year of the projected revenue would be spent on climate action and adaptation.

At a cost of approximately \$300 per tree (concrete removal is not needed for every new tree), if the proposed action more than doubled the recent average rate of 40 to 45 new street trees requested per year to 100 trees per year the charge against Measure DD revenues would be \$30,000 per year. This is about 13% of one third of the projected revenue from the measure. If the cost is substantially more or there is a need to direct the revenue elsewhere, the Council can restore the charges to the Master Fee Schedule.

If the Council chooses not to honor the voters' recommendation to spend a third of the new revenue on climate change and adaptation, this breach of faith with the voters would likely reduce the probability they will pass future measures bolstering the general fund.

Attachment:

1. Argument for Measure DD
2. First mailer of the Measure DD campaign