

# Urban Forest

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Community Coordinator

# CALFIRE GRANTS

- ← 2016/2017 Urban & Community Urban Forestry
  - Inventoried more than 140,000 trees on public right ways
  - Planted additional 300 trees throughout the City of Fresno
- ← 2019/2020 Urban Forest Management Plan
  - RFQ will go out for bid in April, and we expect to award a consultant by summer/early Fall 2021.
  - This plan will utilize citywide inventory data to establish a 40-year Urban Forest Management Plan.
  - The plan will be comprehensive including both recommendations for maintenance and expansion.

# Tool for Measuring Value: Inventory

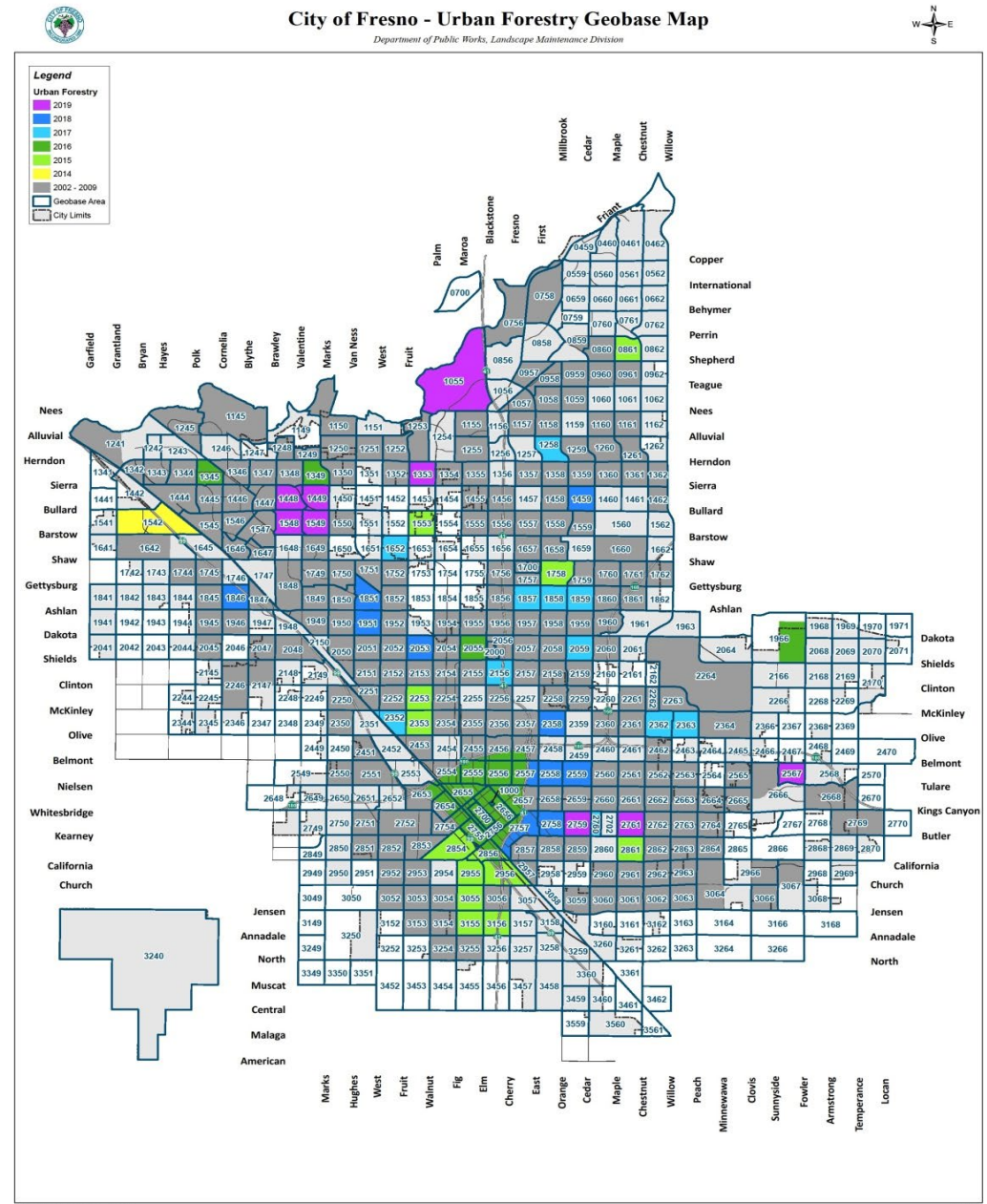
- Inventory allows for fast assessments of value
- Track return on investment over time with budget and value assessment

Botanical	Common	Total	Pct.	Estimated Value
Liquidambar styraciflua	AMERICAN SWEETGUM	3,385	10.22%	\$14,879,380.00
Lagerstroemia indica	CRAPE MYRTLE	2,102	6.35%	\$2,247,450.00
Ulmus parvifolia	CHINESE ELM	1,958	5.91%	\$11,009,490.00
Fraxinus velutina 'Modesto'	MODESTO ASH	1,587	4.79%	\$3,799,740.00
Cupaniopsis anacardioides	CARROTWOOD	1,583	4.78%	\$5,511,420.00
Pistacia chinensis	CHINESE PISTACHE	1,319	3.98%	\$2,322,280.00
Pinus canariensis	CANARY ISLAND PINE	1,264	3.82%	\$13,057,940.00
Fraxinus velutina	ARIZONA ASH	1,206	3.64%	\$6,003,390.00
Grevillea robusta	SILK OAK	1,154	3.48%	\$8,540,090.00
Schinus molle	CALIFORNIA PEPPER	1,048	3.16%	\$7,212,380.00
Other	OTHER	16,520	49.87%	\$69,641,080.00
<b>Total Trees</b>		<b>33,126</b>	<b>100%</b>	<b>\$144,224,640.00</b>

## GOAL: Trim Cycle 7 year

Geo Base Grid = 1/2 Mile  
City of Fresno operates on resident-based  
needs through FresGO/311

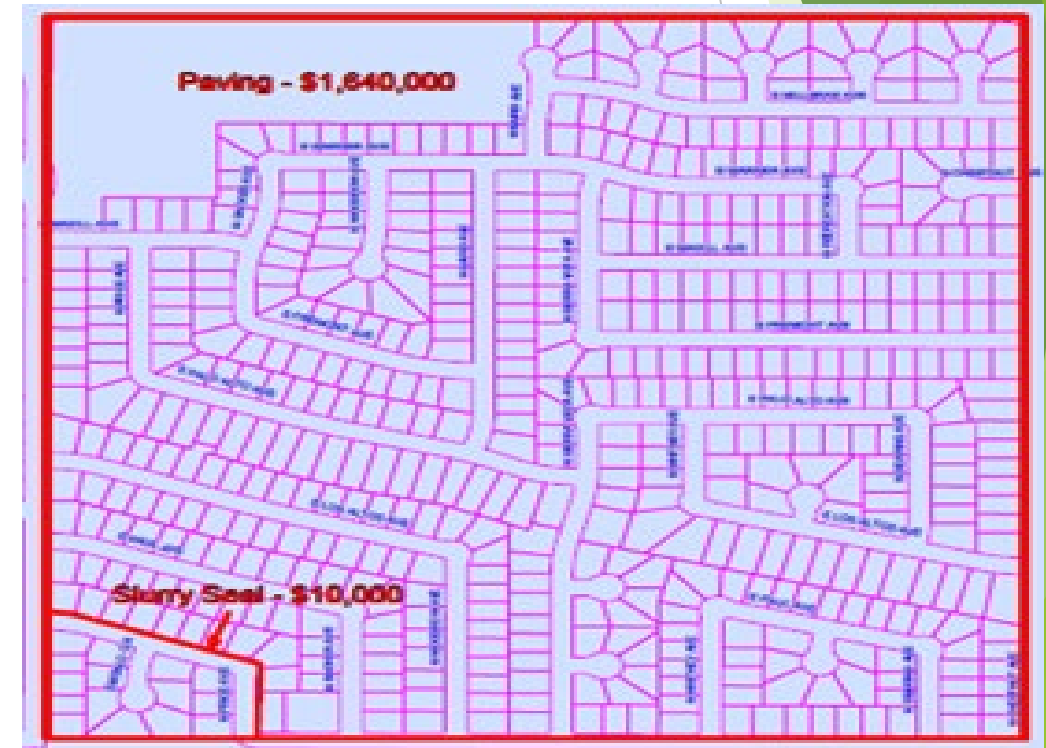
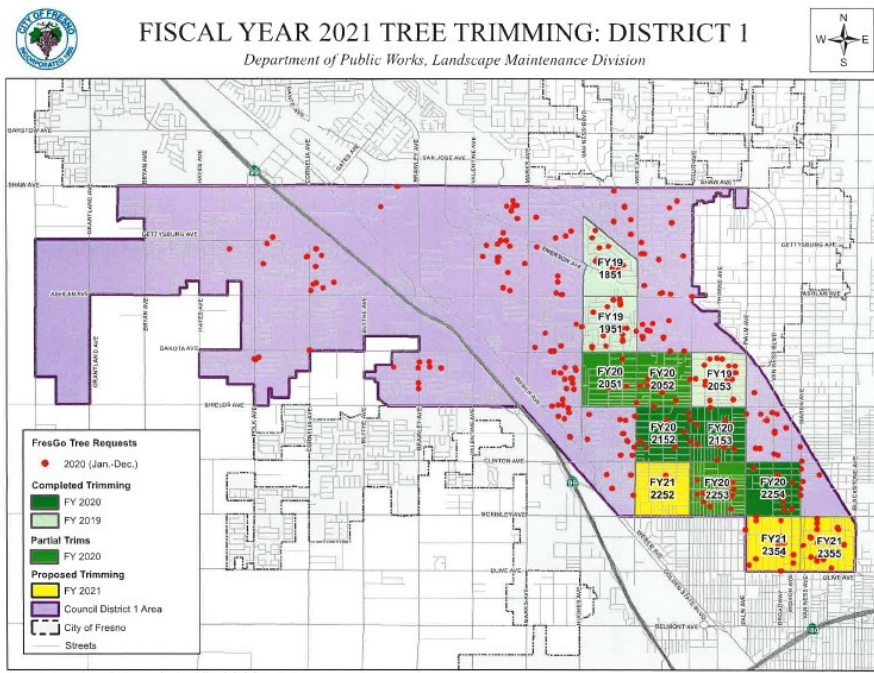
- Purple = 2019
- Blue = 2018
- Aqua = 2017
- Green = 2016
- Neon = 2015
- Yellow = 2014
- Gray = 2002 to 2009
- White = Never



# Tree Trim vs Repaving

Tree trimming of a GeoBase (1/2 mile) ranges from \$20,000 to \$80,000

Repaving a 1/2-mile square neighborhood \$1.6 million



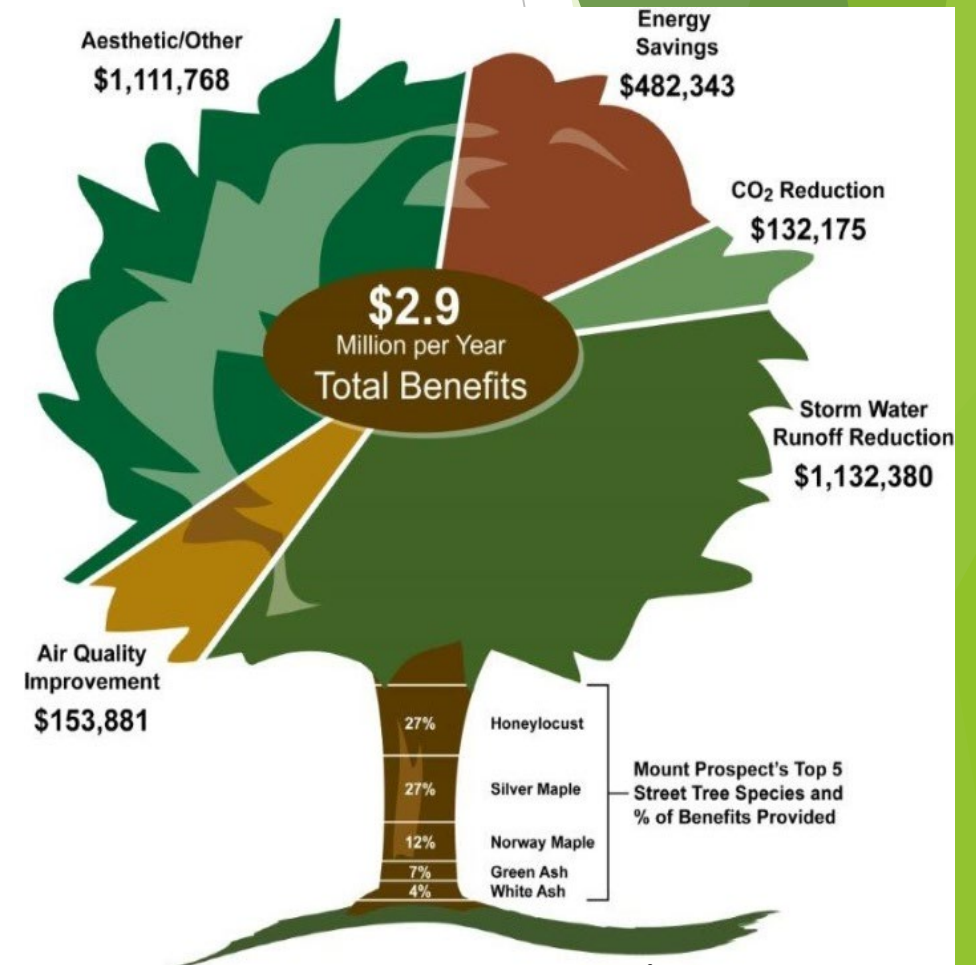
# Pruning Methods

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Structural pruning	a type of tree pruning for young trees that establishes a strong structure and develops subordinate branches, helps to alleviate future failures.
Crown cleaning	the selective removal of dead, diseased, dying, detached, and broken branches. No live foliage is to be pruned during crown cleaning; preferred type for mature trees.
Crown thinning	the selective removal of small live branches to reduce crown density. No more than 25% of live foliage should be removed in a growing season.
Crown raising	the selective removal of branches in order to provide vertical clearance for pedestrians and vehicular.
Crown restoration	the selective removal of branches, watersprouts and stubs from trees that have been topped.
Crown reduction	the selective removal of branches and stems to decrease the height and/or spread of a tree.
Utility pruning	the selective removal of branches and stems to reduce growth away from utility lines.

# Return on Your Investment

- Growing asset
- Increase in value when properly maintained
- Meets city goals
  - Climate Action Plans
    - GHG & ecosystem goals
  - General Plan Goals
    - Conservation and Environmental Justice Elements
  - Canopy Cover Goals



*Mount Prospect, IL UFMP Diagram*

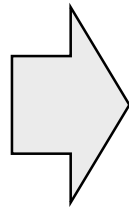
# Trees Pay Us Back!

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100 Trees Over 40 Years...

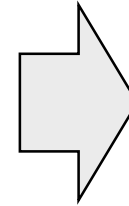
**Costs = \$101,000**

Planting – Pruning,  
Removal/Disposal, Pest and  
Disease, Irrigation - Clean up,  
Sidewalk Repair, & Legal -  
Admin

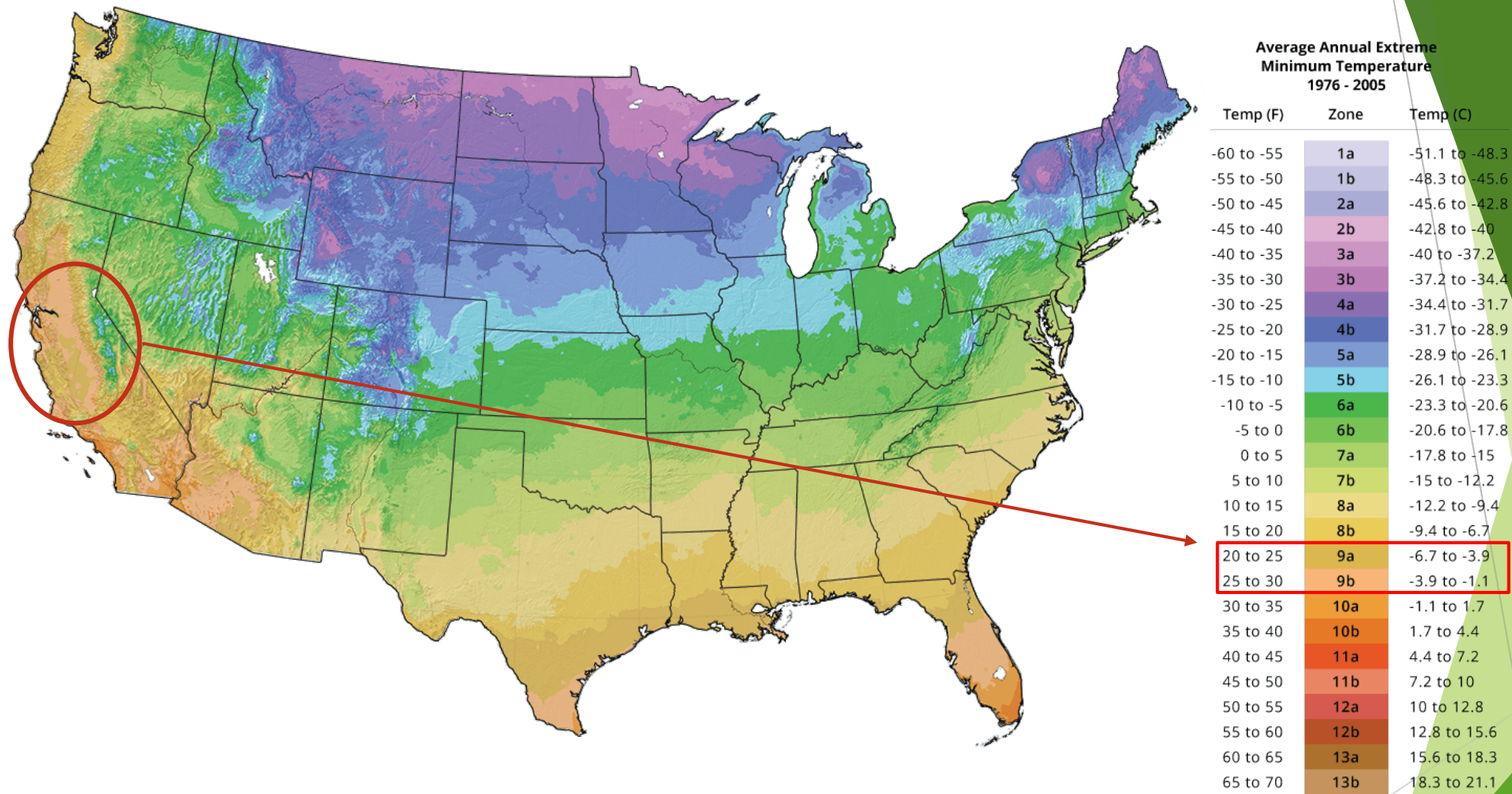


**Benefits = \$261,000**

Energy, Air Quality,  
Stormwater  
Mitigation, Public  
Health, & Real Estate



**Pay Off:  
\$160,000**



# USDA Plant Hardiness Zone

# Best trees for Fresno, CA

Fresno is located within USDA ZONE 9. The best type of trees are drought-tolerant for HOT summers, non-invasive, and could survive freezing winters:



**30 HARD FREEZE WARNING**

**SAN JOAQUIN VALLEY**  
IN EFFECT: EARLY THURSDAY MORNING  
THROUGH LATE FRIDAY MORNING

**TEMPERATURES**  
LOWS IN THE LOW TO MIDDLE 20S

**IMPACTS**  
BELOW FREEZING TEMPS MAY DAMAGE / Klabc 30  
CROPS & OTHER SENSITIVE VEGETATION

41°

The graphic features a dark blue background with white and yellow text. On the right side, there is a vertical thermometer with a red liquid column and a small red square at the bottom. The thermometer is surrounded by white frost or snow. The Klabc 30 logo is visible in the bottom right corner.



## Small Trees

- Crape Myrtle (*Lagerstroemia*)
- Japanese Blueberry (*Elaeocarpus decipiens*)
- Bay Trees (*Laurus nobilis*)



## Medium Trees

- Chinese Pistache (*Pistacia chinensis*)
- Japanese Pagoda Tree (*Sophora japonica* 'Regent')
- Goldenrain (*Koelreuteria paniculate*)

# Large Trees

- Live Oak, Valley Oak, Red Oak (Quercus)
- Sycamore (Platanus X acerifolia sp.) (golden allergy balls)
- Prospector Elm (Ulmus wilsoniana 'Prospector')



# Irrigation - Double Loop Drip System



Drip irrigation is highly effective at supplying one to four gallons of water per hour directly to the soil. The advantage of drip irrigation over sprinklers is that there is **little water loss** due to evaporation or runoff. It's particularly good for mulched areas because it can directly soak the soil without washing away the mulch.

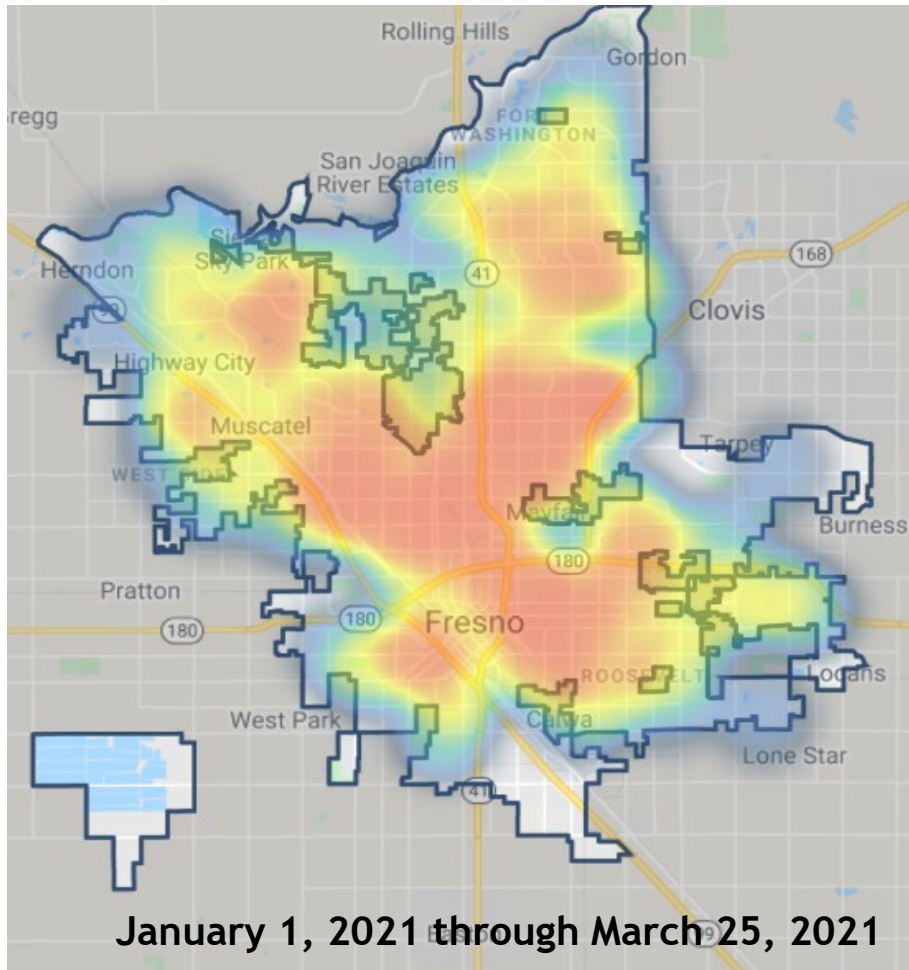
- ▶ FresGO is a City of Fresno mobile app that allows residents to submit service requests within City limits
  - ▶ Over 30,000 residents have downloaded this app and thousands more have called 3-1-1 to report a service request.
    - ▶ Service Request Examples: Graffiti, Parking, Water, Pothole, etc
    - ▶ Street Trees is a very popular service request that has received over 18,000 + service requests
      - ▶ The service request allows the resident to report trees if:
        - ▶ Tree interfering, a limb fell, request arborist, tree/shrub obstructing views, tree permit, etc.



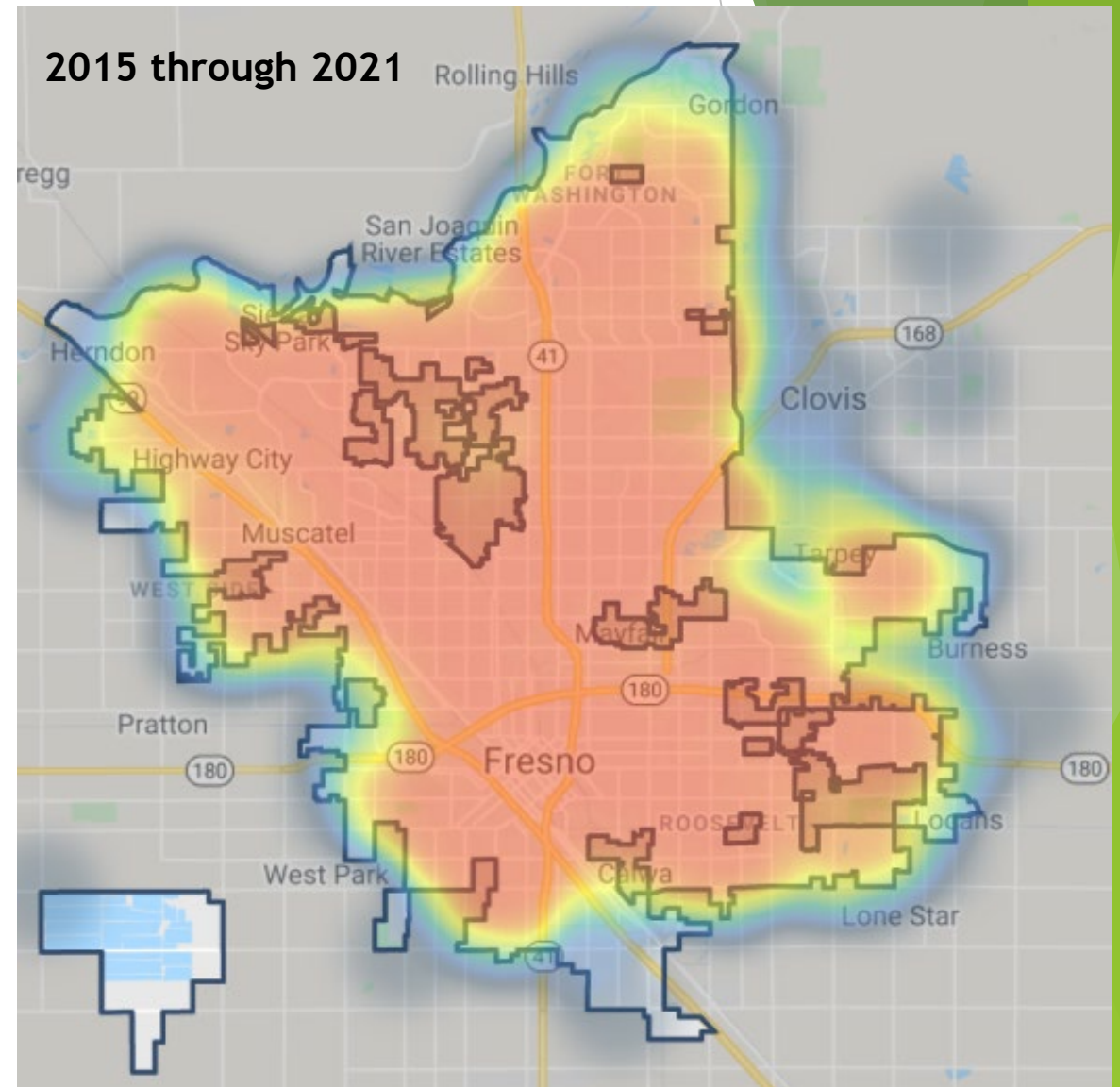
See. Snap. Send. Take control of your neighborhood.

# FresGO/311 - Tree Service Requests

So far in 2021, we have received more than 378 tree service requests.



Heat map indicating where the 18,000+ Tree Service Requests have been submitted throughout the City of Fresno.



# Thank You!

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