

CARMEL-BY-THE-SEA, CA PLANNING FOR OUR URBAN FOREST

Presented by Davey Resource Group, Inc.
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of Forestry and Fire Protection as part of the California Climate
Investments Program.



THIS PRESENTATION



PLAN
DEVELOPMENT



DISTRIBUTION
OF
TREE CANOPY



COMMUNITY
TREE
RESOURCE



URBAN
FORESTRY
SERVICES



COMMUNITY
VISION



PLAN DEVELOPMENT



THE URBAN FOREST

- Community trees (public trees)
 - Public rights-of-way (street trees)
 - Parks and natural areas
 - Trees at city facilities
- Private trees
 - Residential
 - Commercial
 - Industrial zones



PLAN DEVELOPMENT

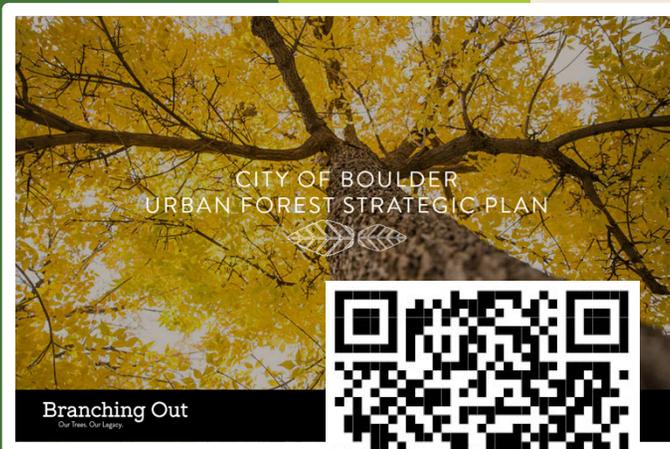
- Kickoff – January 2023
- Community tree resource analysis
- Tree canopy and land cover assessment
- Recommended Species List
- Background review
 - Current policies
 - Operations and funding
- Community and stakeholder engagement
- Urban Forest Management Plan (UFMP)
 - Drafts (2)
 - Final



CARMEL'S MANAGEMENT PLAN

- Illustrate the value and benefit of community trees
- Communicate challenges and opportunities
- Promote shared vision
- Ensure resources are in place to support community goals

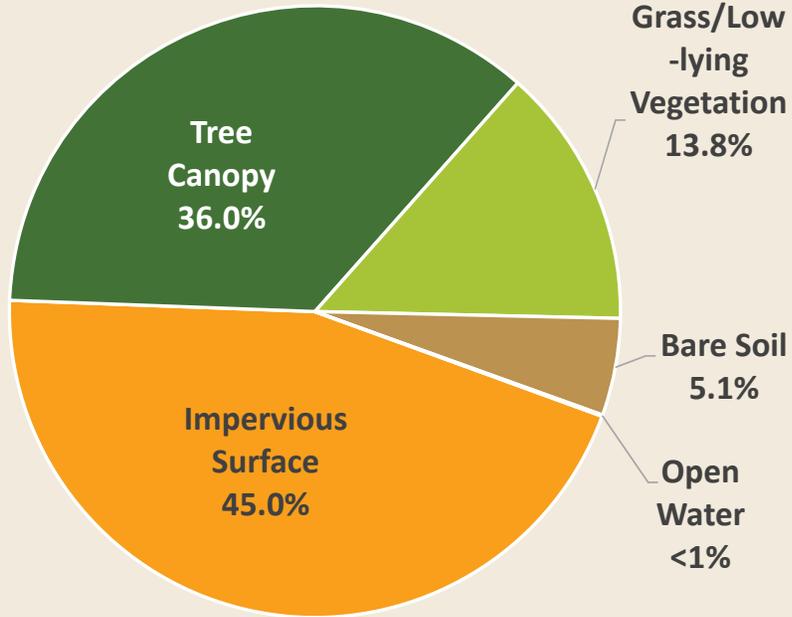
EXAMPLE URBAN FOREST MANAGEMENT PLANS





DISTRIBUTION OF TREE CANOPY

LAND COVER



- 676 total acres
- 243 acres of tree canopy
- 36% tree canopy

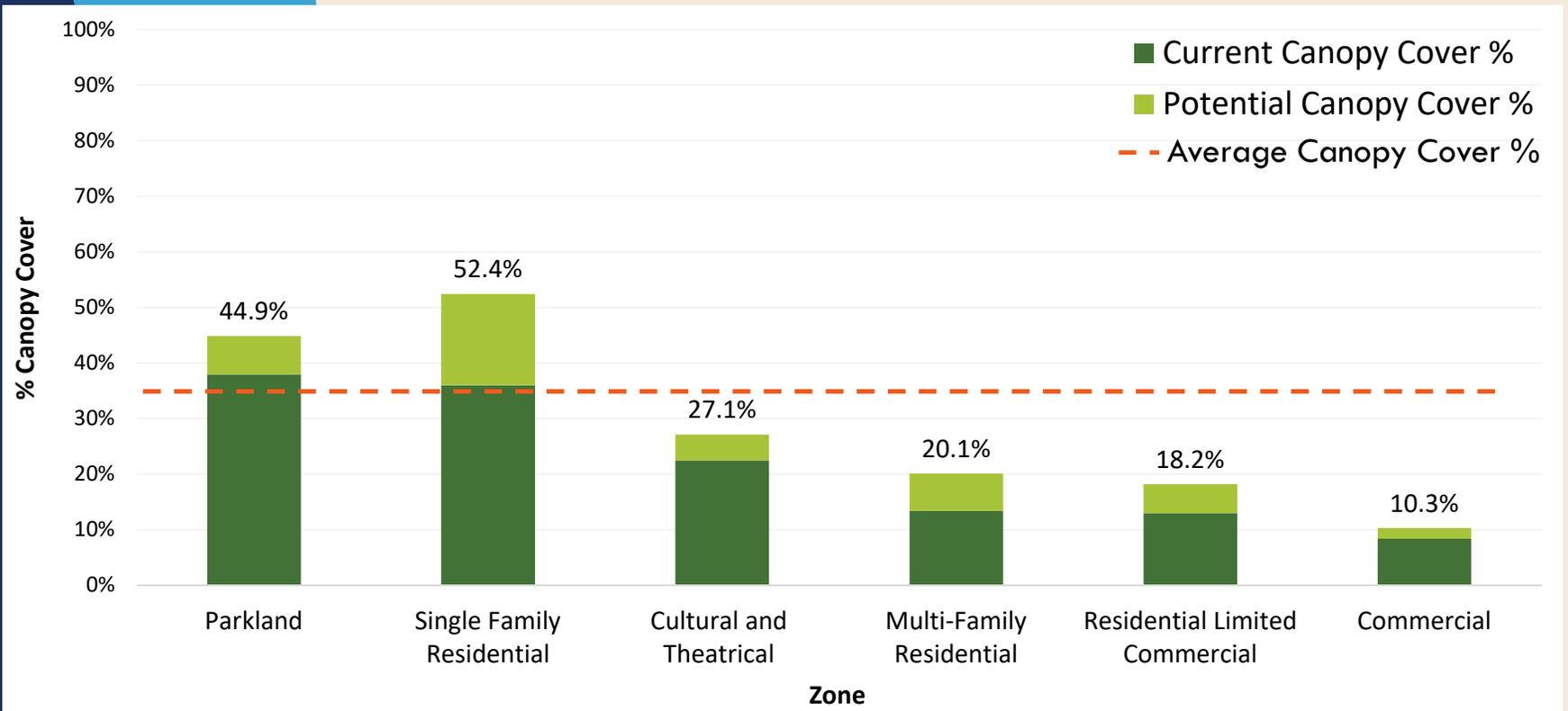


PLANTING POTENTIAL

- 79 acres residential areas
 - 21 acres high or very high priority
 - 3,621 potential planting sites
- 2 acres commercial areas
 - 1 acre high or very high priority
 - 99 potential planting sites
- Prioritization based on stormwater management and canopy continuity

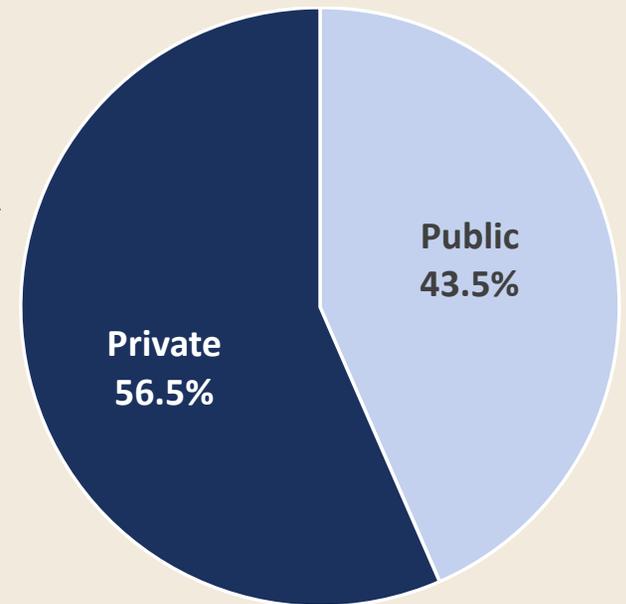


CANOPY BY ZONING



PUBLIC V. PRIVATE CANOPY COVER

- 106 acres on public property
 - 40% tree canopy cover
 - 47% potential canopy cover
- 138 acres on private property
 - 33% tree canopy cover
 - 49% potential canopy cover



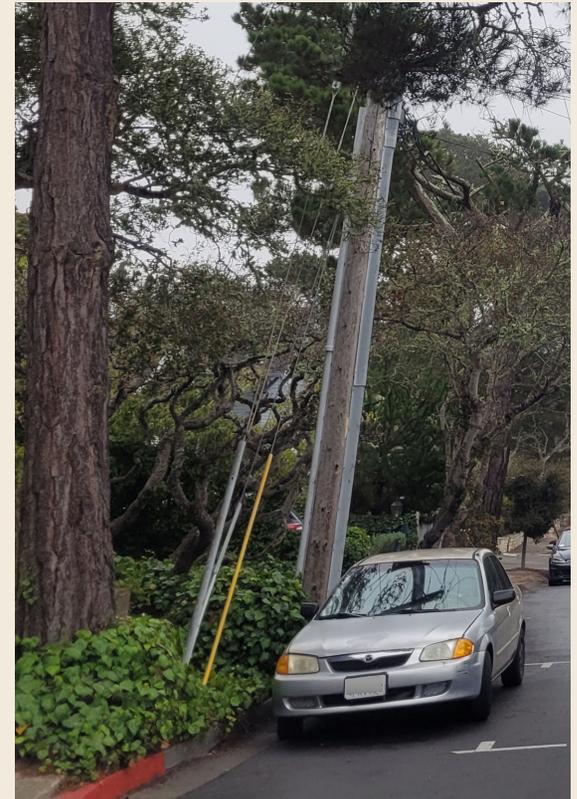
Canopy Distribution



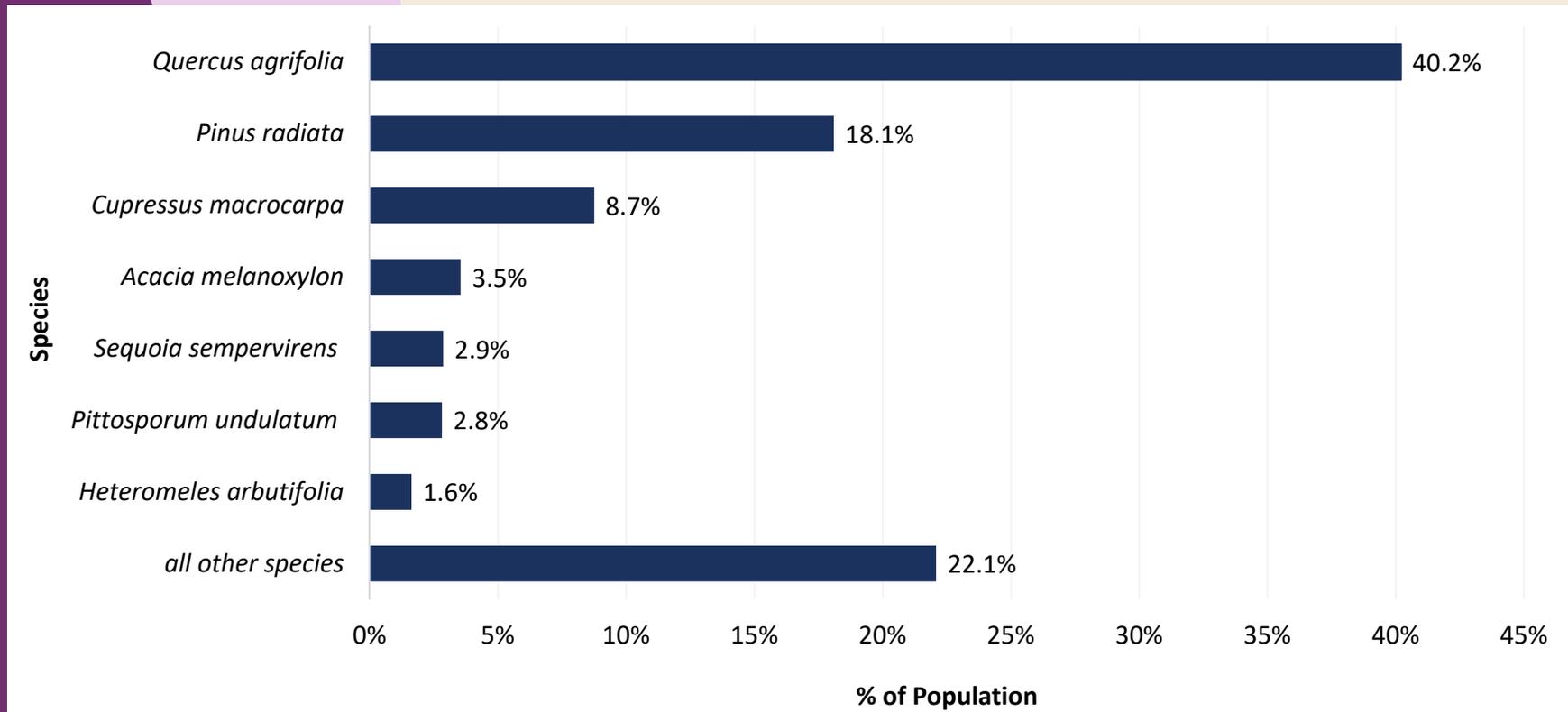
COMMUNITY TREE RESOURCE

COMMUNITY TREE RESOURCE

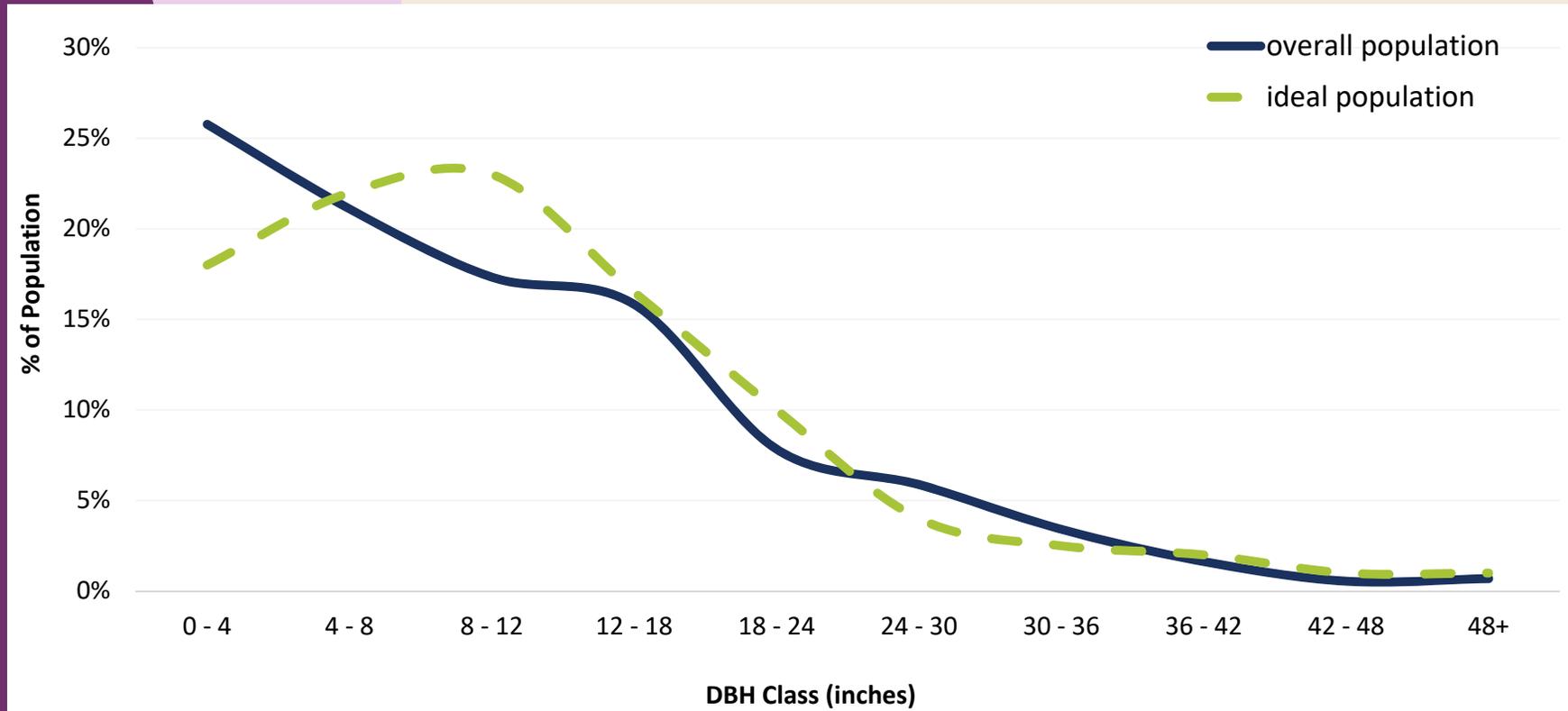
- 9,875 trees
- 1,118 potential planting sites
- 4,412 tons of carbon stored
- \$25.2 million to replace



SPECIES DIVERSITY



AGE DISTRIBUTION



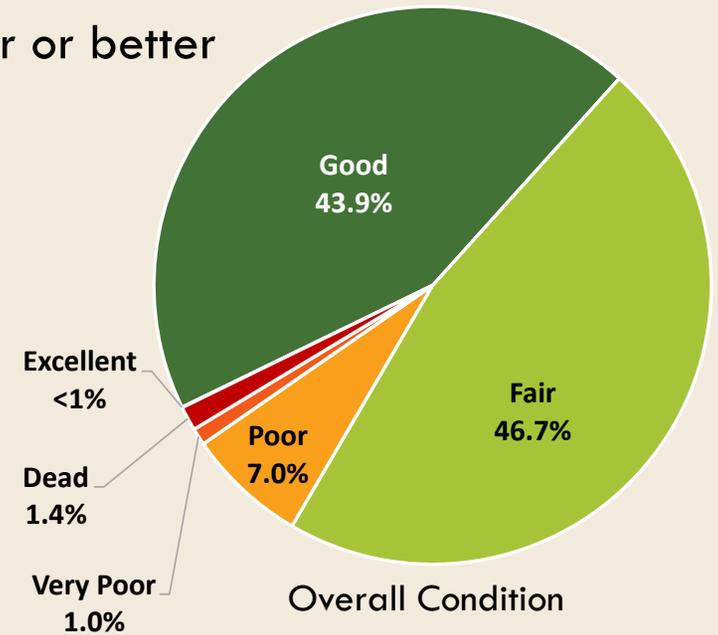
ANNUAL BENEFITS FROM COMMUNITY TREES

- 582,667 gallons of stormwater runoff avoided
- 3 tons of air pollutants removed
 - \$22,420 savings from fewer adverse health incidents
- 115 tons of carbon directly sequestered



TREE CONDITION

- Trees <8" DBH – 94% in fair or better
- Trees 9 to 12" DBH – 87% in fair or better
- Trees >24" – 88% in fair or better
 - 12% in poor or worse

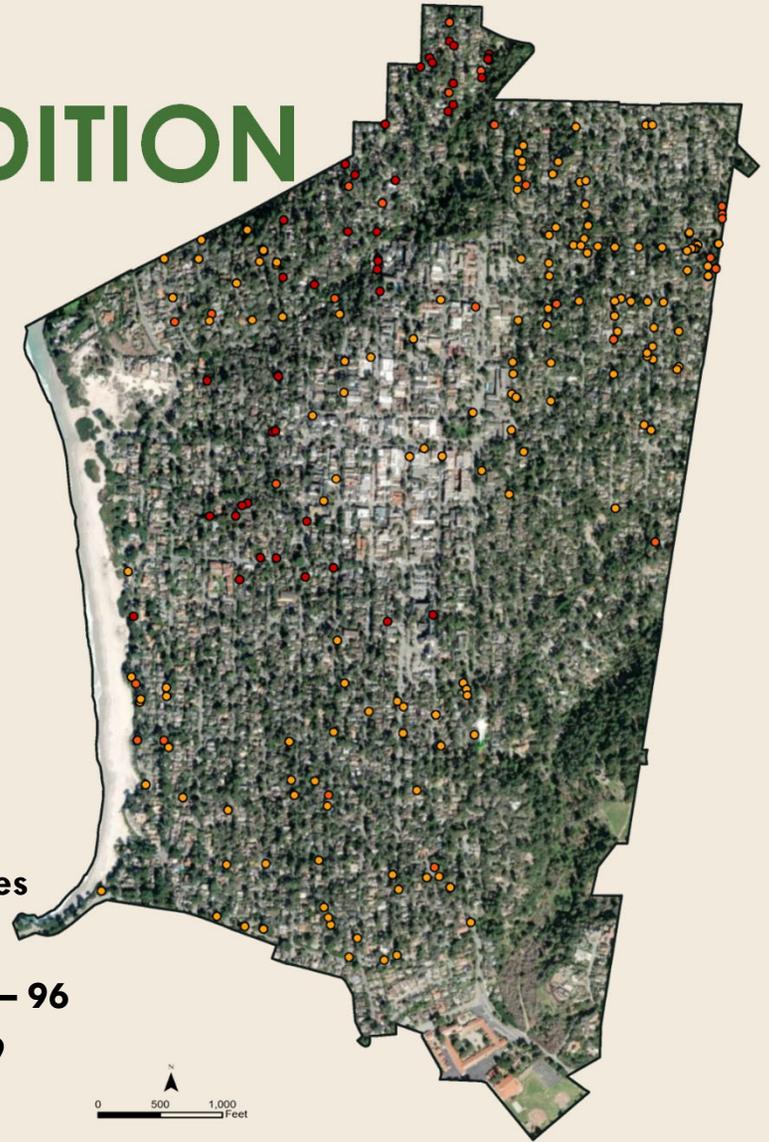


TREE CONDITION

- 10% of trees in poor or worse condition
 - 687 Poor
 - 96 Very Poor
 - 139 Dead

Trees >19 inches

- Poor – 687
- Very Poor – 96
- Dead – 139

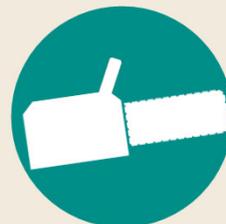




URBAN FORESTRY SERVICES

URBAN FORESTRY OPERATIONS

- Annual Services
 - ~300 trees pruned
 - ~150 trees removed
 - ~80 trees planted
 - Inspections for pests & pathogens





COMMUNITY VISION

BREAKOUT SESSION

1. Guidelines
2. Workbooks
3. Discussion (~15 minutes/topic)
4. Reporting

#1 CANOPY GOALS

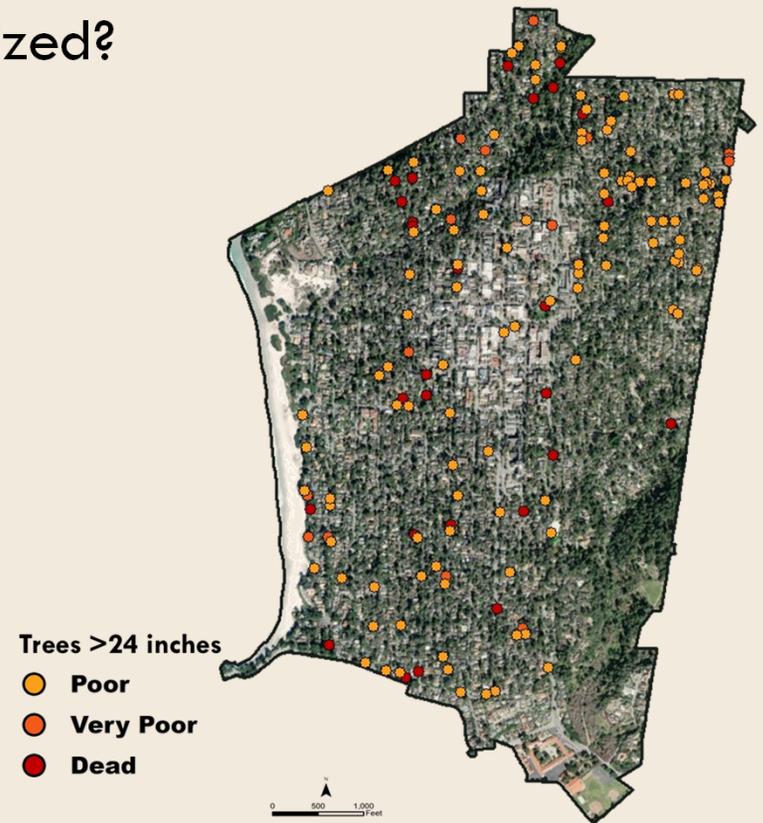
Should canopy cover be maintained, increased, or reduced? What should the canopy goal be?

- Overall
- Commercial areas
- Residential areas
- Parks/open space

Current tree canopy cover = 36%

#2 GEOGRAPHIC PRIORITY

As community trees are removed, where should replanting be prioritized?



#3 SPECIES CHARACTERISTICS

1. What tree characteristics are most important (e.g., shade, fruit, color, etc.)?
2. What species or types of trees should be added to or excluded from the Recommended Species List?
 - Why?



GROUP REPORTING & DISCUSSION

#1 Canopy Goals

#2 Geographic Priority

#3 Species Characteristics

THANK YOU

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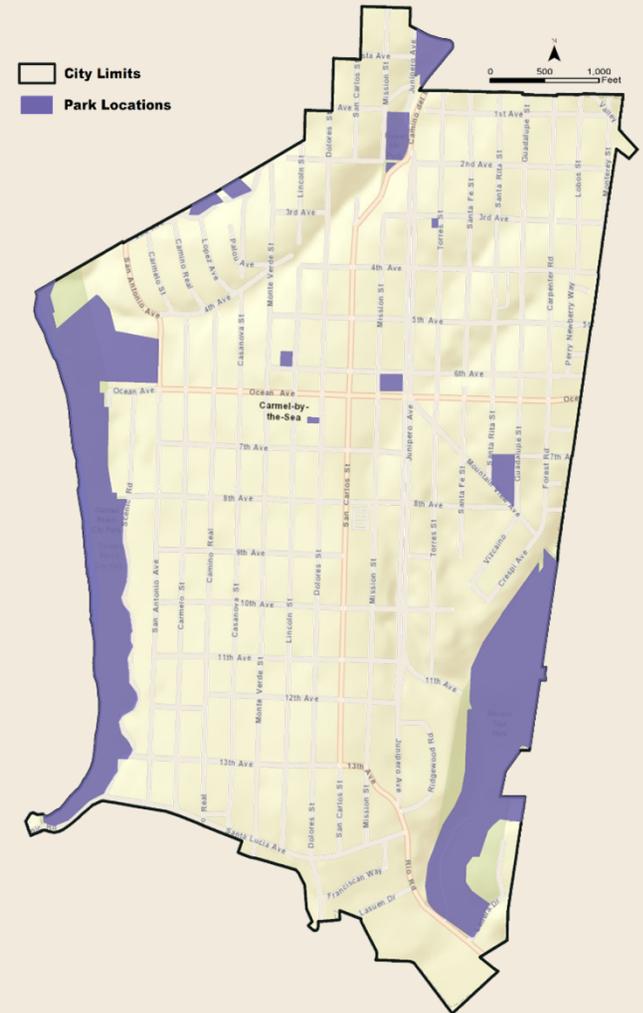
allison.steere@davey.com

TAKE THE SURVEY!

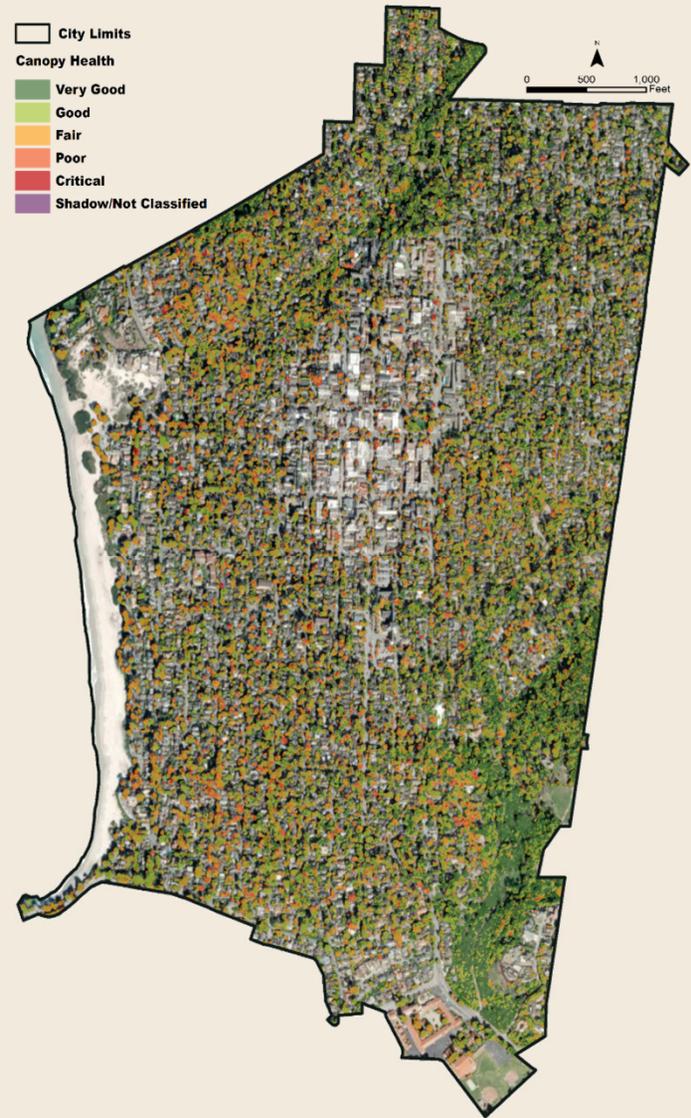
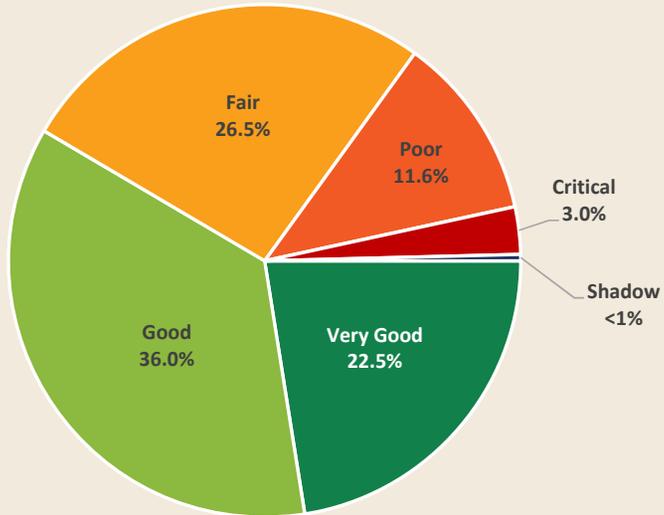
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CANOPY BY PARKS

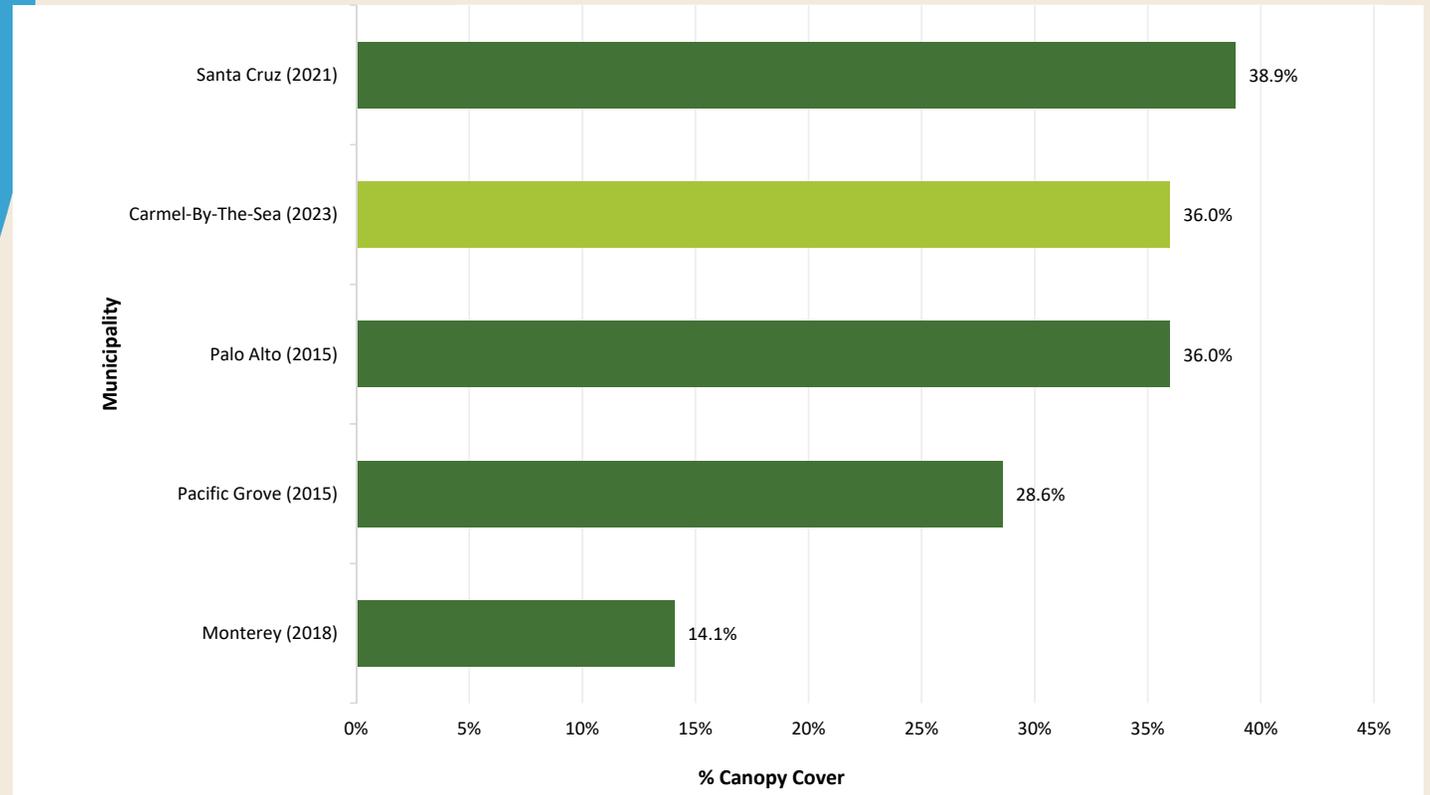
Parks	Acres	Canopy Acres	Canopy %	Impervious Acres	Grass/Low-lying Vegetation Acres	Bare Soil Acres	Open Water Acres	Potential Canopy %
Carmel Beach	39.63	2.75	6.95	0.59	7.10	28.70	0.48	17.95
Mission Trail Park	34.38	23.83	69.31	0.93	6.96	2.67	0.00	69.46
Forest Hill Park	3.90	2.55	65.28	0.36	0.76	0.23	0.00	72.30
PacRep at the Forest Theater	1.57	0.63	40.40	0.67	0.23	0.04	0.00	56.84
Open Space	1.12	0.80	71.09	0.04	0.28	0.00	0.00	96.21
Devendorf Park	0.63	0.34	52.92	0.04	0.26	0.00	0.00	53.00
First Murphy Park First Murphy House	0.28	0.11	39.14	0.11	0.06	0.00	0.00	61.31
Picadilly Park	0.10	0.06	65.81	0.02	0.01	0.00	0.00	74.55
Open Space	0.08	0.02	29.09	0.03	0.02	0.00	0.00	59.70
Total	81.68	31.09	38.06%	2.80	15.68	31.63	0.48	44.57%



CANOPY HEALTH



NEIGHBORING COMMUNITY COMPARISON



ANNUAL CANOPY BENEFITS

- 18,029 lb. of air pollutants removed, valued at \$48,285
- 4 million gallons in avoided stormwater runoff, valued at \$31,228
- 423 tons of CO₂ sequestered from the atmosphere, valued at \$72,205

