

11th Annual New Partners for Smart Growth

Building Safe, Healthy and Livable Communities

**LONG RANGE PLANS FOR
RESILIENT URBAN FORESTS**



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LONG RANGE PLANS

- **Consistent control of the urban forest**
- **Transition of successive urban forest managers**
- **Improved operational policies and procedures**
- **Increase in value**
- **Identification and development of new species**
- **A continual process grades species performance**
- **Evaluating species for use where they work best**
- **Establishes a forest renewal program**

LONG RANGE PLANNING

- **Analyze current condition**
- **Determine remaining useful life span of trees**
- **Engage and educate the public**
- **Develop Guiding Principles**
- **Long term strategy for funding forest renewal**
- **Build in resiliency over decades & generations**

THREATS TO THE URBAN FOREST

- **Root damage**
- **Development**
- **Ignorance & Apathy**
- **Weather**
- **Old age**
- **Insects & Diseases**

THREATS TO THE URBAN FOREST

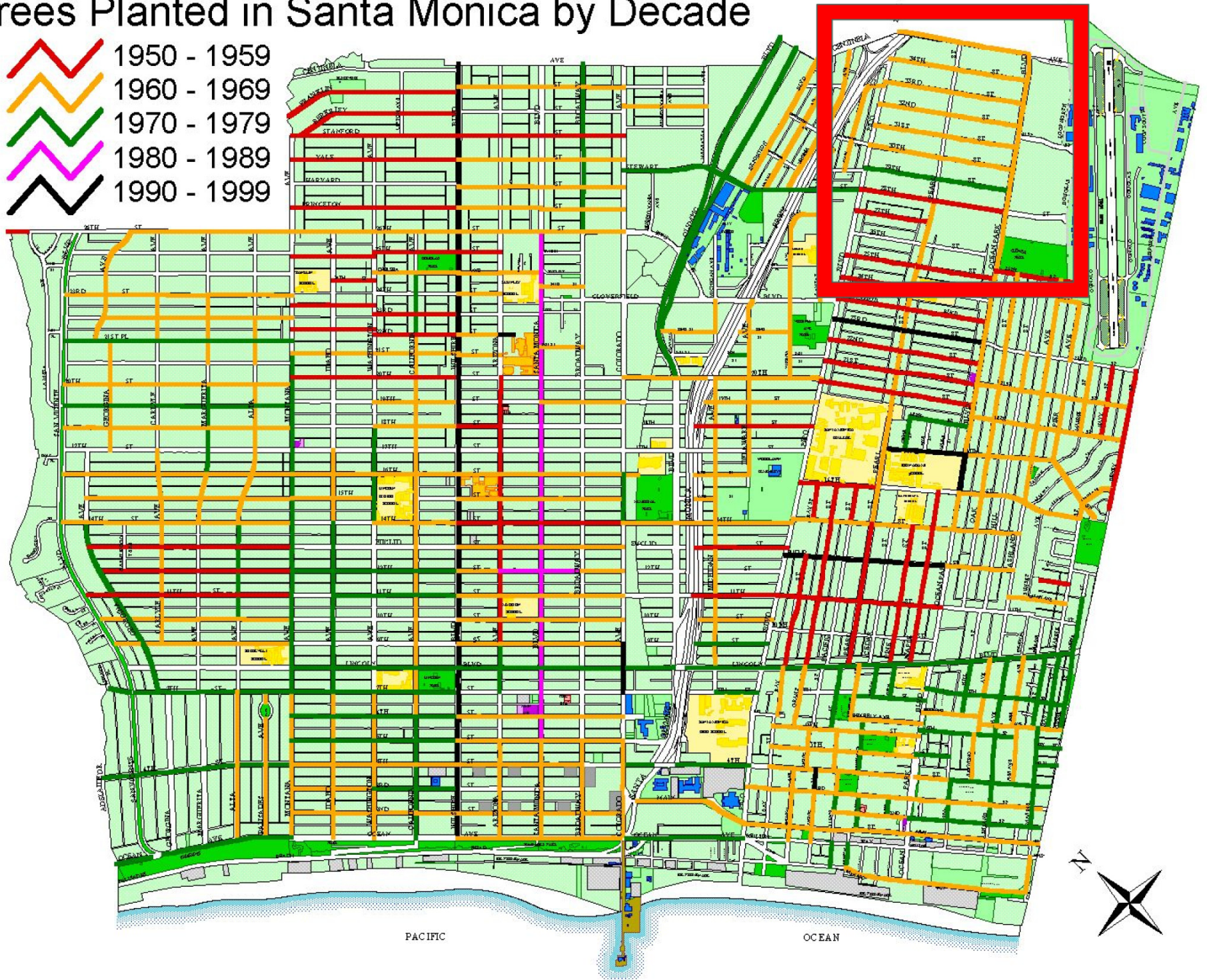
- Root damage: **Improved standard of care**
- Development: **Development Agreements**
- Ignorance & Apathy: **Education**
- Weather: **Preparedness**
- Old age: **Long range planting plans**
- Insects & Diseases: **Species diversity**

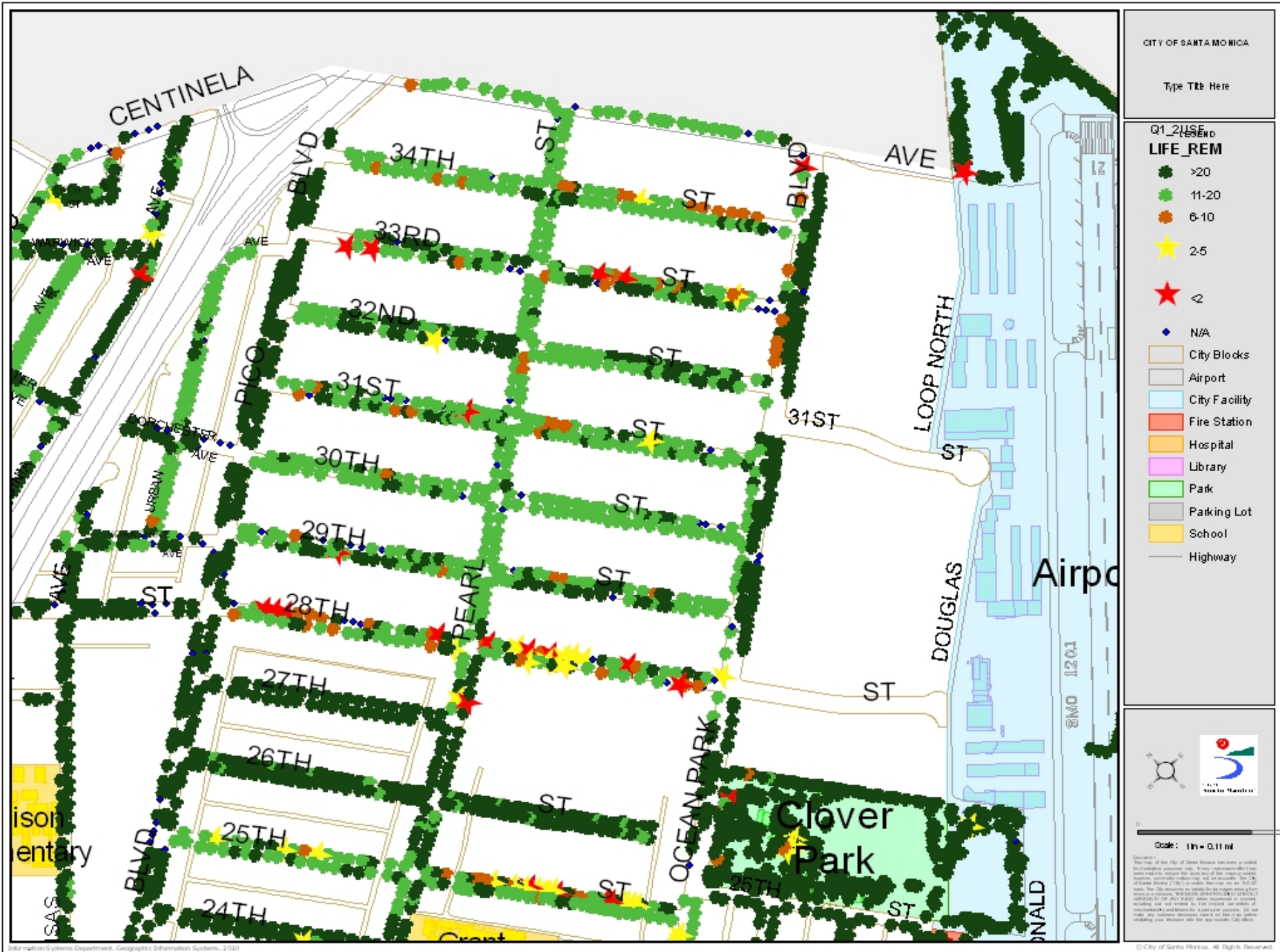
SANTA MONICA'S URBAN FOREST

- **33,800 publicly owned trees**
- **40% of the City's trees are over 50 years**
- **15% of the forest under 10 years**
- **Top 15 species = 49% of the forest**
- **Top environmental performers at risk**

Trees Planted in Santa Monica by Decade

- 1950 - 1959
- 1960 - 1969
- 1970 - 1979
- 1980 - 1989
- 1990 - 1999

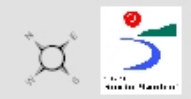




LEGEND

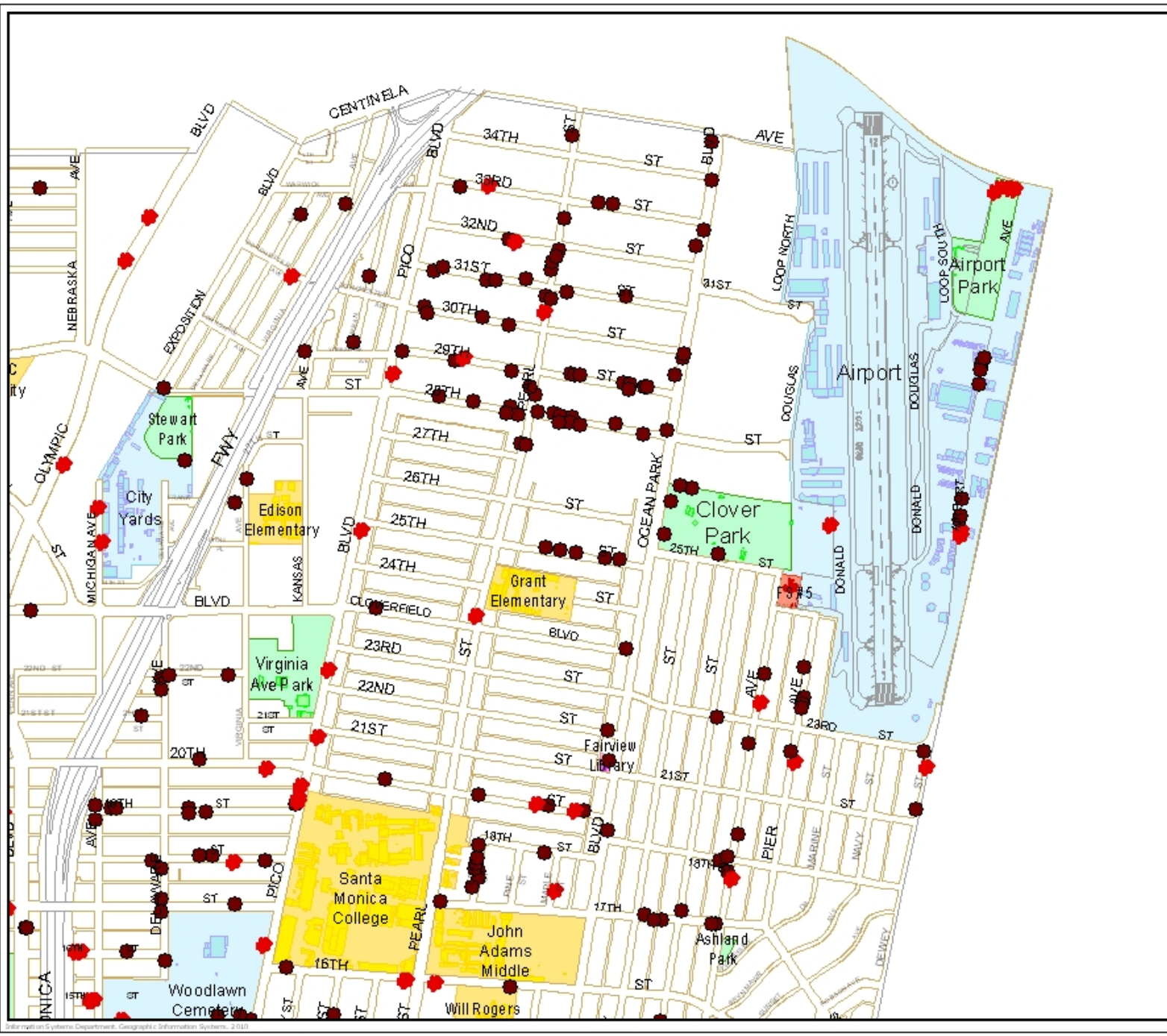
O1_2USF
REM_PRIOR

- Immediate
- Routine
- City Blocks
- Airport
- City Facility
- Fire Station
- Hospital
- Library
- Park
- Parking Lot
- School
- Highway



Scale: 1in = 0.2 mi

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TOP 15 SPECIES



TOP 15 SPECIES KEY

- Washingtonia robusta*
MEXICAN FAN PALM
- Ficus microcarpa*
INDIAN LAUREL FIG
- Magnolia grandiflora*
SOUTHERN MAGNOLIA
- Phoenix canariensis*
CANARY ISLAND DATE PALM
- Podocarpus macrophyllus*
YEW PINE
- Cinnamomum camphora*
CAMPHOR TREE
- Pinus canariensis*
CANARY ISLAND PINE
- Jacaranda mimosifolia*
JACARANDA
- Cupaniopsis anacardioides*
CARROTWOOD
- Liquidambar styraciflua*
AMERICAN SWEETGUM
- Cedrus deodara*
DEODAR CEDAR
- Metrosideros excelsior*
NEW ZEALAND CHRISTMASTREE
- Callistemon citrinus*
LEMON BOTTLEBRUSH
- Melaleuca quinquenervia*
CAJEPUT TREE
- Azorectus gracilar*
FERN PINE

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25 TOP SPECIES IN SOUTHERN CALIFORNIA LOMPOC – SAN DIEGO*

1. Crape Myrtle
2. Mexican Fan Palm
3. Liquidambar
4. Canary Island Pine
5. Magnolia
6. London Plane
7. Queen Palm
8. Carrotwood
9. Jacaranda
10. Chinese Elm
11. Tristania
12. Camphor
13. Sycamore
14. California Pepper
15. Holly Oak
16. Live Oak
17. Ficus
18. Brazilian Pepper
19. Bradford Pear
20. Aleppo Pine
21. Red Iron Bark
22. Eucalyptus spp.
23. Evergreen Pear
24. Lemon Scented Gum
25. Red Gum

•*Data courtesy of West Coast Arborists*

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•Data courtesy of West Coast Arborists

BUILDING RESILIENCY

- **Council appointed Urban Forest Task Force**
- **Regular meetings over two years**
- **Engaged the public**
- **Analyzed current status**
- **Developed Guiding Principles**
- **Forest renewal program developed**

KEYS TO A RESILIENT FOREST

➤ Development of Guiding Principles



KEYS TO A RESILIENT FOREST

- Development of the Guiding Principles
 - 1. The urban forest & its environment**

KEYS TO A RESILIENT FOREST

- Development of the Guiding Principles
 - 1. The urban forest & its environment**
 - 2. Understanding the urban forest**

KEYS TO A RESILIENT FOREST

➤ Development of the Guiding Principles

- 1. The urban forest & its environment**
- 2. Understanding the urban forest**
- 3. Economics of the urban forest**

KEYS TO A RESILIENT FOREST

- Development of the Guiding Principles
 1. **The urban forest & its environment**
 2. **Understanding the urban forest**
 3. **Economics of the urban forest**
 4. **Collaborating on urban forest management**

KEYS TO A RESILIENT FOREST

➤ Development of the Guiding Principles


- 1. The urban forest & its environment**
- 2. Understanding the urban forest**
- 3. Economics of the urban forest**
- 4. Collaborating on urban forest management**
- 5. Stewardship of the urban forest**

KEYS TO A RESILIENT FOREST

- Development of the Guiding Principles
 1. **The urban forest & its environment**
 2. **Understanding the urban forest**
 3. **Economics of the urban forest**
 4. **Collaborating on urban forest management**
 5. **Stewardship of the urban forest**
 6. **Enhancing the urban forest**

URBAN FOREST TASK FORCE

➤ Community outreach & workshops




City of Santa Monica

SAVE THE DATE

Help design the future of Santa Monica's Urban Forest.

Come to the Urban Forest Community Workshop.

WHEN: Sunday, June 6th, 2010; 1:00 pm - 3:00 pm
WHERE: Main Library, 601 Santa Monica Blvd., Santa Monica




URBAN FOREST QUESTIONNAIRE

What is your favorite street tree?
What do you like or dislike about the trees on your block?
Is there a street in Santa Monica that you enjoy traveling on because of the street trees?
If yes, what street and why?

Public Landscape Division
2000 Ocean Park Blvd.
Santa Monica, CA 90405

place stamp here



ISSUES AFFECTING THE FOREST

- **Dependence on too few species**
- **Age or disease susceptibility**
- **Lack of unity in plantings**
- **Streets under planted – too many vacancies**
- **Unbalanced canopy coverage**
- **Restricted grow spaces**
- **No specific plan for undeveloped areas**

CITY TREES ARE BEING PROPOSED FOR YOUR STREET NOW

Sometimes trees, including familiar and iconic species, need to be replaced due to disease, age or other damage.

The replacement species for the **street trees adjacent to your home** is being proposed now.

Please let us know what you think.

HOW YOU CAN COMMENT ON THE TREE SPECIES FOR YOUR STREET:

1: Find out what is proposed for your street.

- Look up your street segment on the 'Draft Designated Street Trees List' available online at

www.santamonicatrees.com

- If a new species is being proposed, follow the link for your street segment to see what the proposed new trees will look like

If you do not have internet access...

- Call 310-458-8974 to request a hardcopy
- View a hardcopy at any Santa Monica Public Library

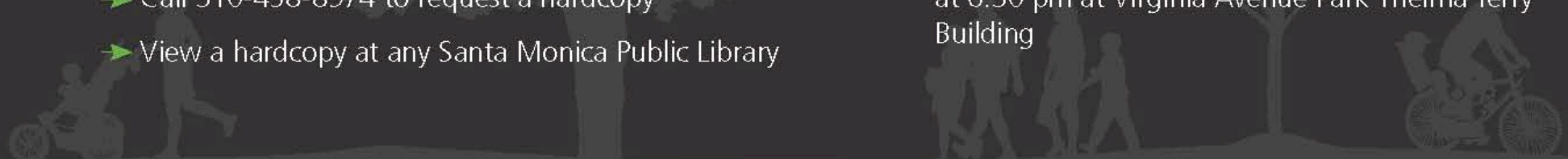
2: Tell us what you think by September 14.

- Email comments to **trees@smgov.net**.

- Mail comments to:

Public Landscape Division
Attn: Urban Forest Master Plan Task Force
2600 Ocean Park Blvd
Santa Monica, CA 90405

- Attend Urban Forest Master Plan Task Force meetings on **September 7** or **September 14** at 6:30 pm at Virginia Avenue Park Thelma Terry Building



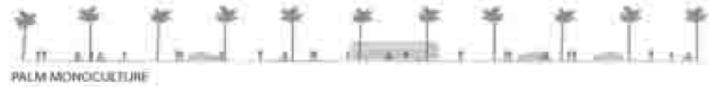
Community Workshops



Table Discussion Groups



POSSIBLE PLANT PROFILES



PALM MONOCULTURE



PALM MONOCULTURE



DECIDUOUS MONOCULTURE (SUMMER)



DECIDUOUS MONOCULTURE (WINTER)



BROAD-LEAFED EVERGREEN MONOCULTURE



ALTERNATING DECIDUOUS & PALM (SUMMER)



ALTERNATING DECIDUOUS & PALM (WINTER)



ALTERNATING PALM & BROAD-LEAFED EVERGREEN



ALTERNATING PALM & COASTAL EVERGREEN



ALTERNATING DECIDUOUS & COASTAL EVERGREEN (SUMMER)



ALTERNATING DECIDUOUS & COASTAL EVERGREEN (WINTER)

YOUR COMMENT

POSSIBLE PLANT PROFILES



PATTERN OF PALM & COASTAL EVERGREEN SPECIES



PATTERN OF BROAD-LEAFED EVERGREEN & DECIDUOUS SPECIES (SUMMER)



PATTERN OF BROAD-LEAFED EVERGREEN & DECIDUOUS SPECIES (WINTER)



PATTERN OF BROAD-LEAFED EVERGREEN & SMALL DECIDUOUS SPECIES



SMALL DECIDUOUS MONOCULTURE SPECIES



ALTERNATING PATTERN OF BROAD-LEAFED EVERGREEN & DECIDUOUS SPECIES WITH SIMILAR FORMS



PATTERN OF BROAD-LEAFED EVERGREEN & DECIDUOUS SPECIES



ALTERNATING BROAD-LEAFED EVERGREEN & EVERGREEN SPECIES



ALTERNATING COMBINATION OF EVERGREEN SPECIES



ALTERNATING EVERGREEN SPECIES



ALTERNATING PALM SPECIES

YOUR COMMENTS

THE PEOPLES CHOICE

1. **Broadleaved Evergreen Monoculture**
2. **Broadleaved Evergreen & Deciduous**
3. **Narrow leaved Evergreen & Deciduous**
4. **Deciduous Monoculture**
5. **Combination of narrow leaved Evergreen Species**
6. **Broadleaved Evergreen & Deciduous with Similar Form**
7. **Broadleaved Evergreen & narrow leaved Evergreen**
8. **Combination of multiple evergreen Species**
9. **Palm Monoculture (compact spacing)**
10. **Palm & Deciduous**

1st Choice – Broad leaved Evergreen Monoculture



2nd Choice – Broad leaved Evergreen & Deciduous

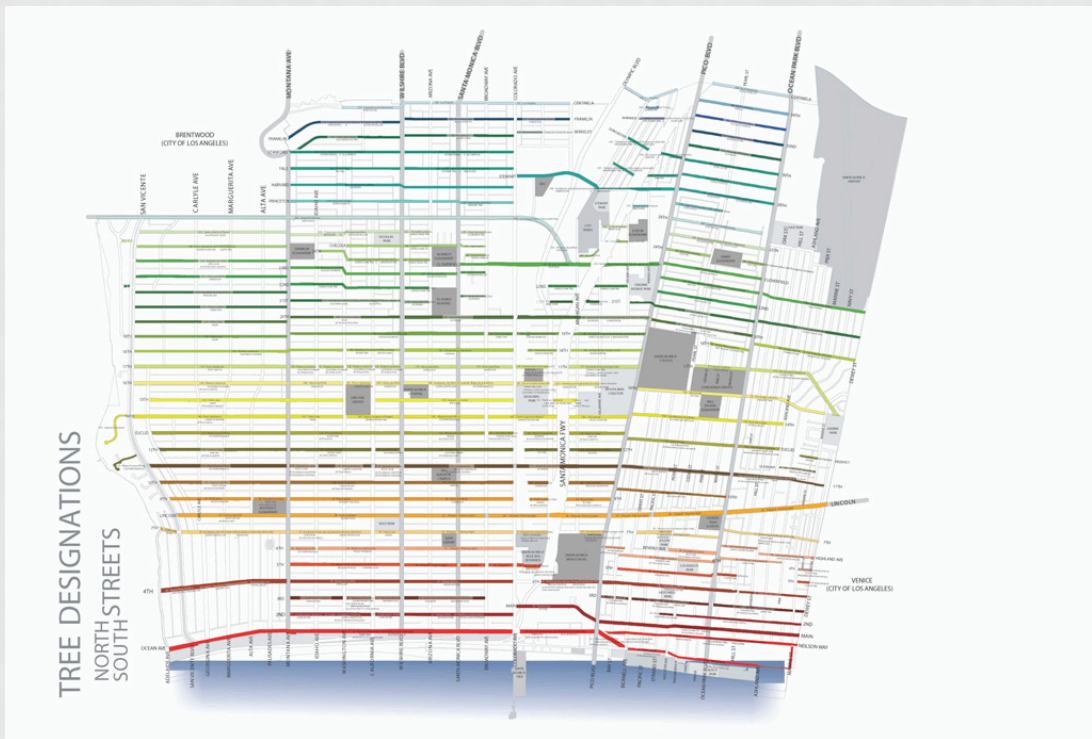


3rd Choice – Narrow leaved Evergreen & Deciduous



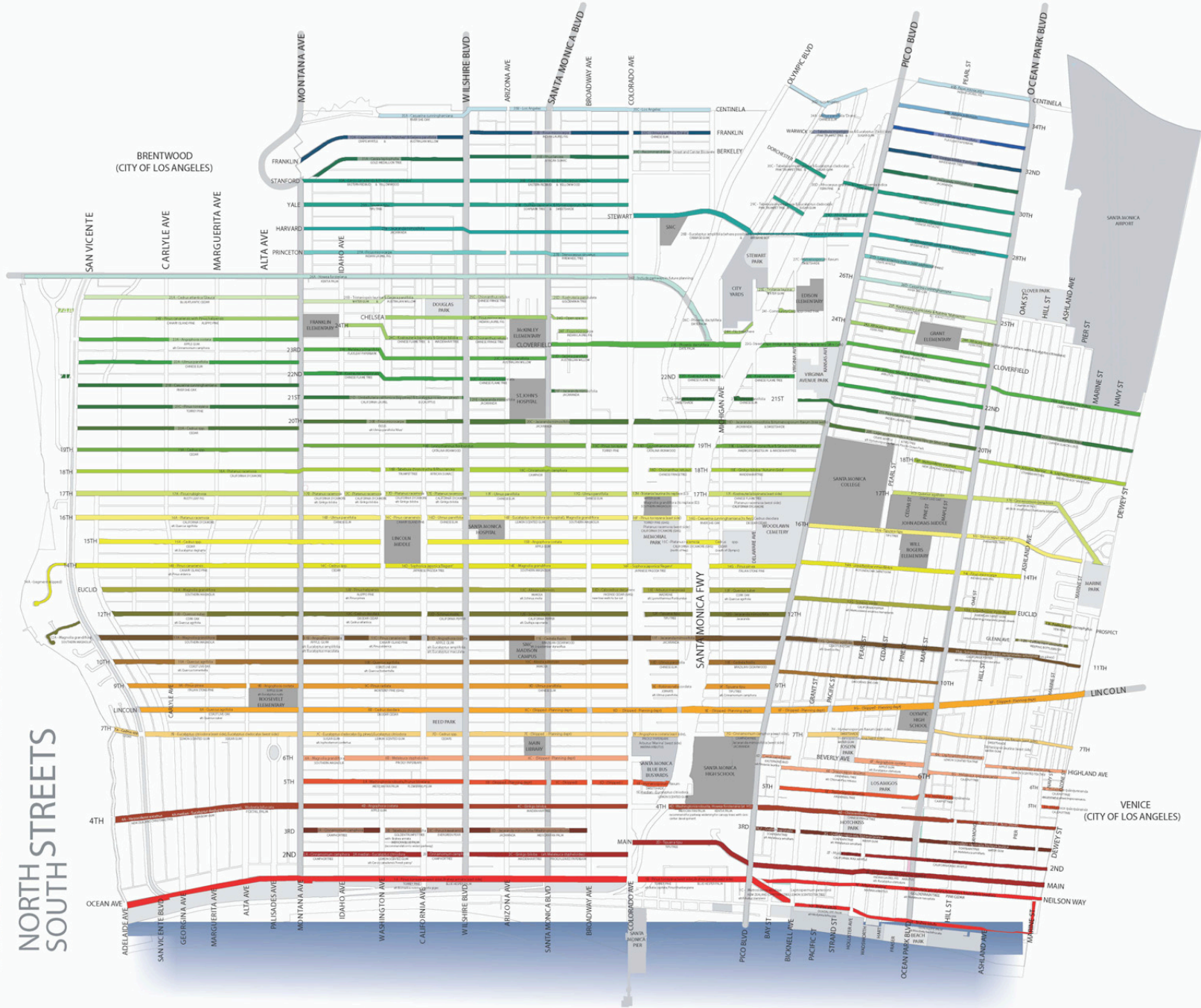
DESIGNING THE FUTURE FOREST

- Define street segments
- Refine street tree designations



TREE DESIGNATIONS

NORTH STREETS SOUTH STREETS



TREE DESIGNATIONS

EAST WEST STREETS



ANALYZING SITE CONDITIONS

- Size of growspace in relation to street





ANALYZING SITE CONDITIONS

➤ Size of canopy in relation to street

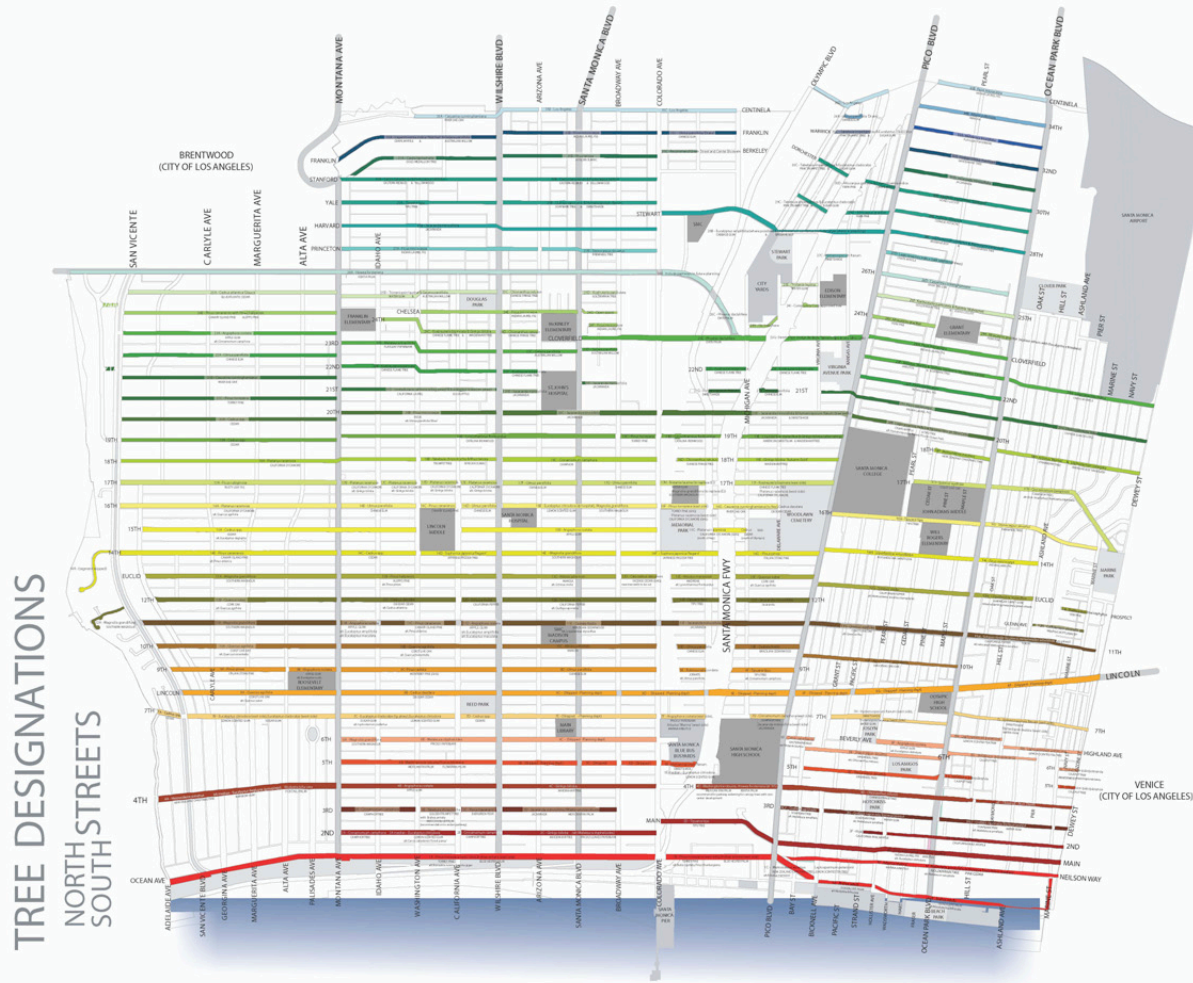


ANALYZING SITE CONDITIONS

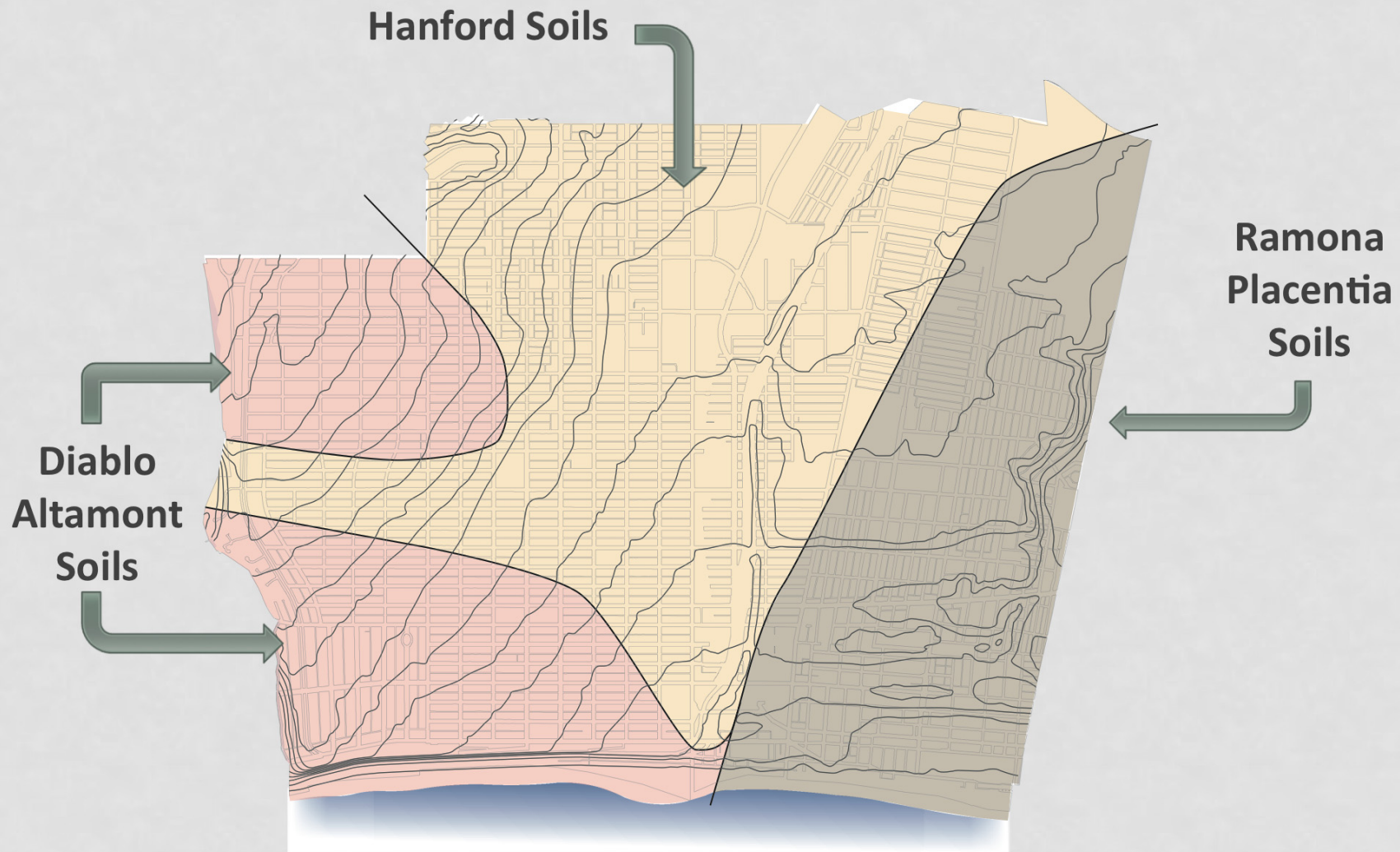
➤ Adjacent buildings & structures



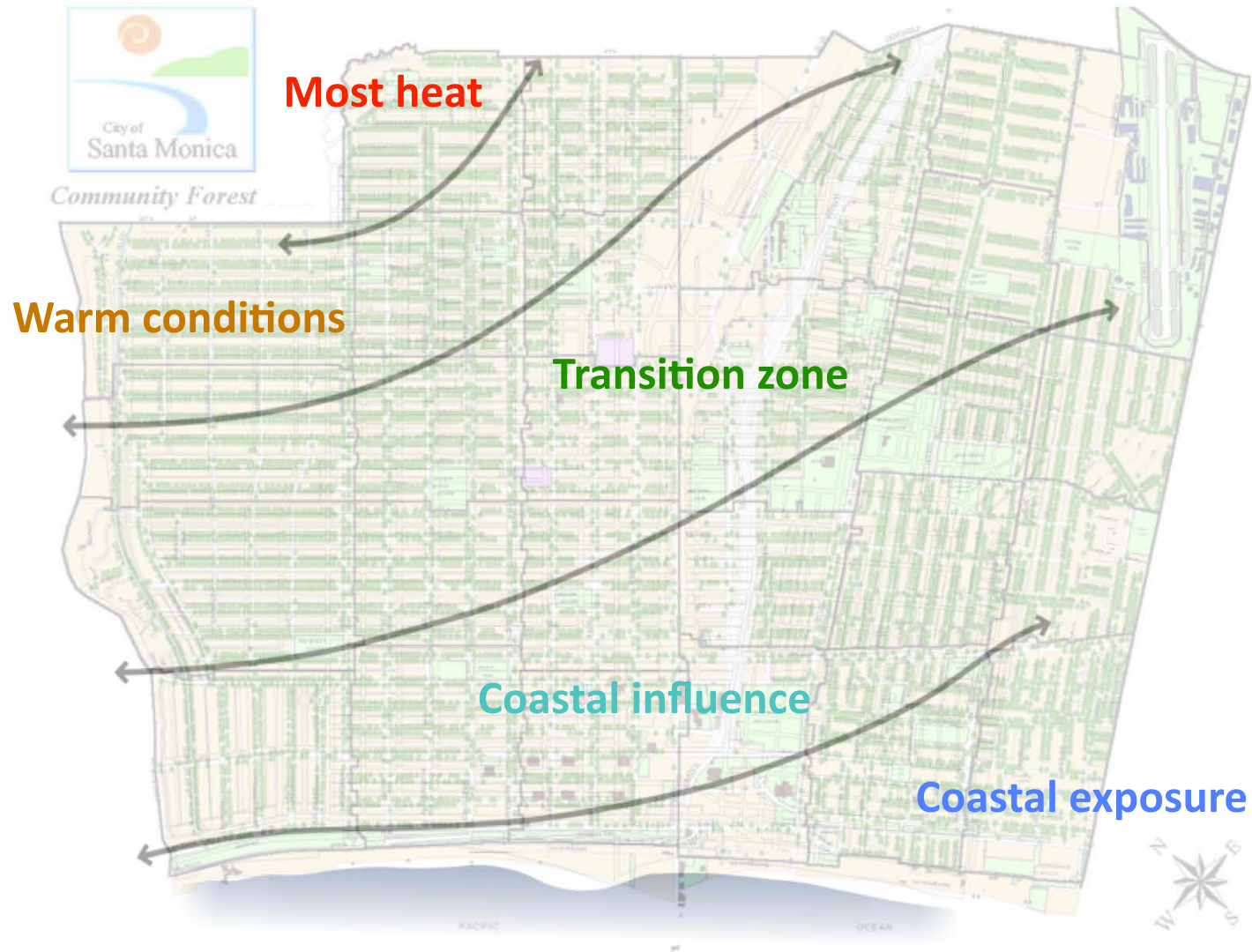
ANALYZING SITE CONDITIONS



ANALYZING SOIL CONDITIONS



CLIMATE IMPACT



ANALYZING SITE CONDITIONS

- **Type of traffic; heavy vehicles, pedestrians**



SPECIES SELECTION

- **Avoid using trees in the Top 15**
- **Retain beneficial species**
- **Seek opportunities for new species**
- **Select species that adapt to local conditions**
- **Create nursery availability**

CHANGING SITE CONDITIONS

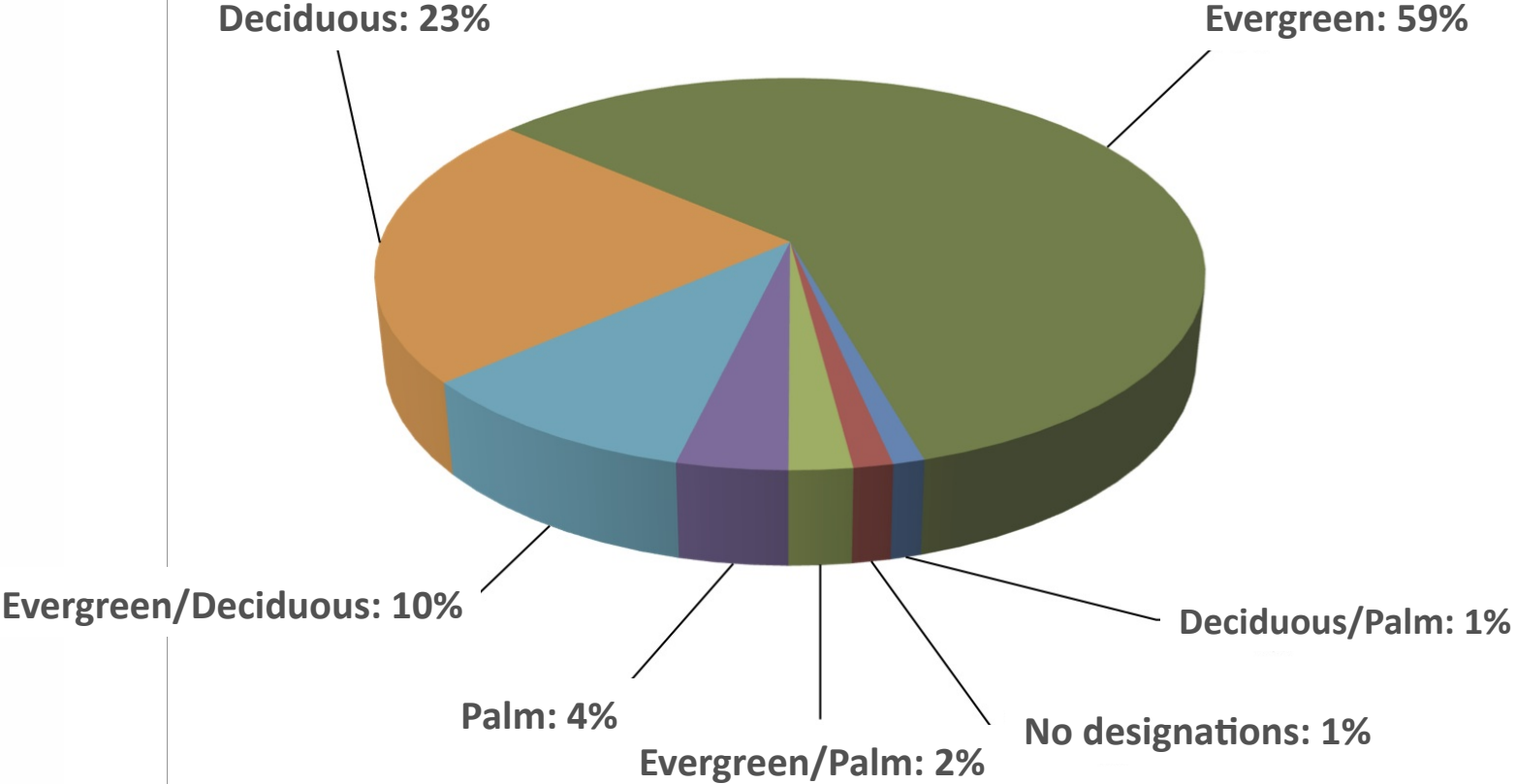
- **Expand tiny parkways**
- **Plant trees behind monolithic curbs**
- **Create green streets**
- **Tree well cut outs**
- **Collaborating on Public Works improvement projects**

SPECIAL PROJECTS

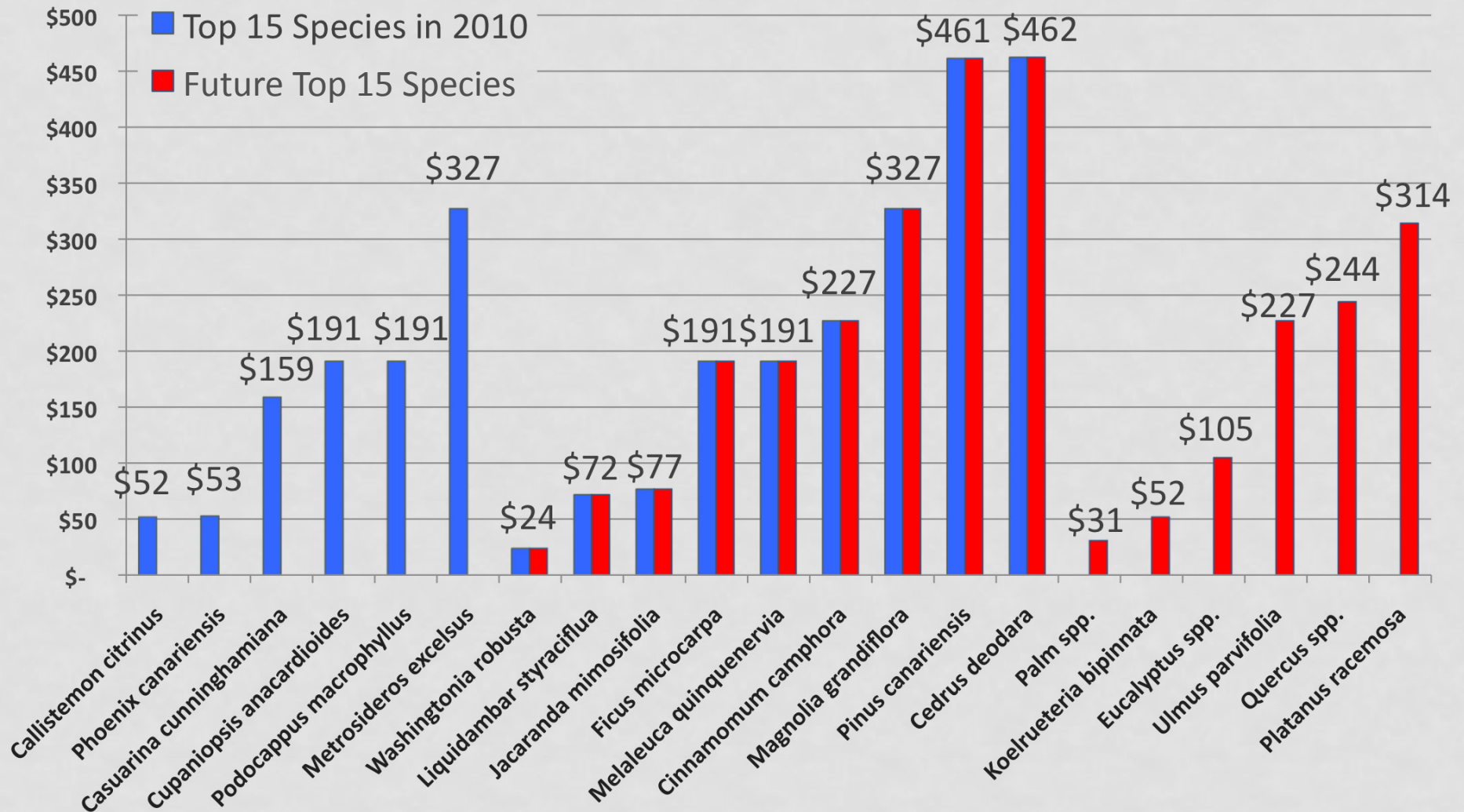
- **Grants**
- **Significant groves, stands or Allées**
- **Council directed public improvement projects**
 - **EXPO Lite Rail**
 - **Development Agreements**
 - **Freeway forest**
 - **The “*City as an Arboretum*” concept**

THE COMMUNITY'S FUTURE FOREST

Street tree designations by type



THE COMMUNITY'S FUTURE FOREST



KEYS TO A RESILIENT FOREST

- **Long Range Master Plan**
- **Dedicated funding**
- **Proactive forest renewal program**
- **Greater species diversity**
- **Natural ability to thrive in local climate**

KEYS TO A RESILIENT FOREST

- **Share the vision through Guiding Principles**
- **Think beyond your experience**
- **Plan beyond your tenure**
- **Educated public, decision makers & staff**
- **Integrate the forest into the infrastructure**
 - **Mandate proper urban forest management policies**
 - **Assign responsibility**



FINAL MESSAGE

As the current inhabitants of urban forests, we have a responsibility to care for our trees so the next generation will inherit healthy urban forests.