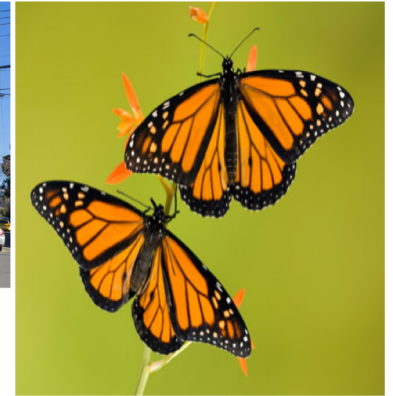


# Traffic Circle Vegetation and Tree Policy Recommendations



**City of Berkeley Traffic Circle Policy Task Force**  
*Presentation to City Council*  
November 12, 2019

# Key Traffic Circle Policy Recommendations

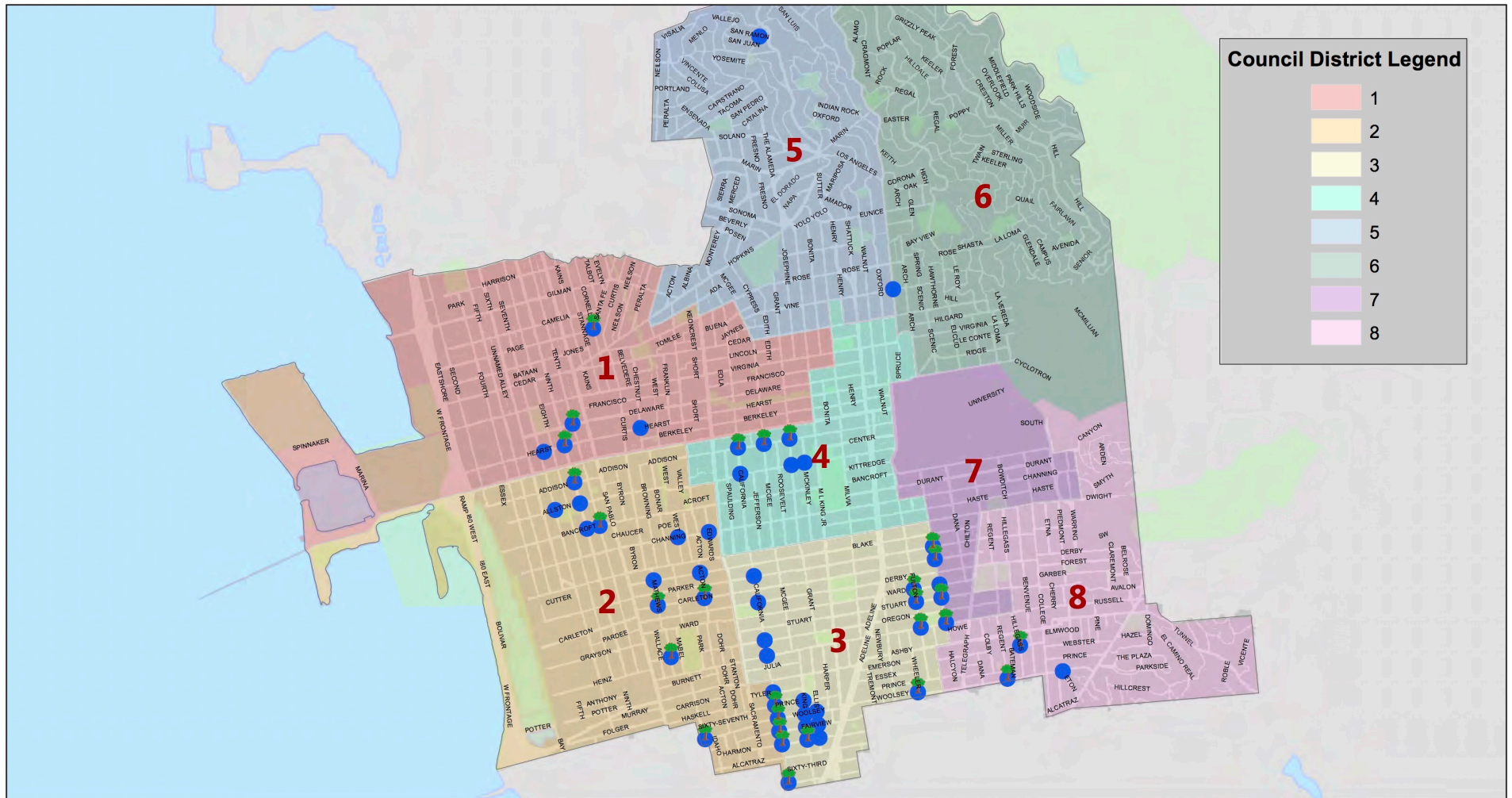
- Preserve all existing trees
- Low vegetation required and new trees allowed
- All vegetation and trees maintained for visibility and safety by community volunteers

# Task Force Background

- Mayor established February 2019
- 12 Task Force members
- 2 Public Meetings
- 7 Task Force Meetings
- 3 Subcommittees
- Public Works and Transportation staff actively participated

# Traffic Circles in Berkeley

- 62 total circles; 31 with trees



## City of Berkeley Traffic Circles By Council Districts

Map produced by Matt Cottrell & Brian Liang, Public Works Department, Transportation Division

Updated: 08/27/2018

# Purpose of Traffic Calming Circles

- A “circle” is not a “roundabout”
- Calm and slow traffic in neighborhoods
- Reduce speed of travel and collisions
- Trees and vegetation enhance visibility

# Benefits of Traffic Calming Circles

- **Safety** – Make streets safer for bicycles, pedestrians & vehicles
- **Equity** – Urban greening, especially in park-poor neighborhoods
- **Cost** – Organized volunteer programs save the city money
- **Climate** – Trees and vegetation sequester carbon & reduce heat

# Task Force Research

- Reviewed national guidance documents
- Researched City policies and documents
- Interviewed traffic and landscape experts from over 20 cities

# Traffic Calming ePrimer (USDOT FHA 2017)

- “A traffic circle . . . is most effective when it is defined by a raised curb and landscaped to further reduce the open feel of a street. A traffic circle can be landscaped with ground cover, flowers, and street trees.” (US Department of Transportation)



Source: [Traffic Calming ePrimer - Module 3](#) (U.S. Department of Transportation/Federal Highway Administration)

# Urban Street Design Guide (NACTO 2013)

- The National Association of City Transportation Officials states: “Mini roundabouts and neighborhood traffic circles<sup>1</sup> lower speeds at minor intersection crossings...**Shrubs or trees** in the roundabout **further the traffic calming effect** and beautify the street, but need to be **properly maintained** so they do not hinder visibility.”



Source: [Urban Street Design Guide](#) (NACTO 2013)



# Best Practices: San Francisco

- “[T]raffic calming circles **should be landscaped with trees or plantings. Shrubs and grasses should be planted up to 3 feet tall and trees should be appropriately pruned...** In traffic calming circles with a diameter of less than 15 feet, **one tree should be planted in the center.** On a traffic calming circle with a diameter greater than 15 feet, **more than 1 tree** should be planted and should be equally spaced around the circle.”



Sources: [SFBetterStreets](#): A guide to making street improvements in San Francisco (City and County of San Francisco 2015); [SF Green Connections Plan](#) (City and County of San Francisco 201X)

# Best Practices: Palo Alto

- Palo Alto recognizes the value of traffic circles for reducing collisions and **offer[ing] opportunities for added landscaping and tree planting**. They note that the 2012 Transportation Plan “**calls for greater use of traffic circles, particularly along bicycle boulevards.**”

## CITY OF PALO ALTO COMPREHENSIVE PLAN 2030

### TRANSPORTATION

# 3

*VISION: Palo Alto will build and maintain a sustainable network of safe, accessible and efficient transportation and parking solutions for all users and modes, while protecting and enhancing the quality of life in Palo Alto. Programs will include alternative and innovate transportation processes, and the adverse impacts of automobile traffic on the environment in general and residential streets in particular will be reduced. Streets will be safe, attractive and designed to enhance the quality and aesthetics of Palo Alto neighborhoods. Palo Alto recognizes the regional nature of its transportation system, and will be a leader in seeking regional transportation solutions, prioritizing Caltrain service improvements and railroad grade separations.*



# Best Practices: Seattle, WA

*“The City of Seattle has been installing traffic circles since the early 1970s. We have installed trees in most of those traffic circles. **We do not have any constraints as to size for removing trees.** We do limb up the trees when they get larger to allow for fire trucks or other large vehicles to maneuver under them.”*

**-Transportation Planner**

*Seattle Department of Transportation*

- 1,200+ circles
- Add 5 each year
- Most have a tree
- **No maximum trunk diameter**



# Seattle Circles



Sent by Seattle DOT as example of a circle

# Seattle Circles



# Seattle Circles



# Seattle Circles



Google

Image capture: Jul 2018 © 2019 Google United States Terms

# Best Practices: Portland, OR

*“Trees...are required to be a minimum diameter... Approved trees larger in diameter than the minimum are permitted, and **I am not aware of any specific limit on the ultimate size of trees.**”*

*- Traffic Engineer, PE, Portland Bureau Transportation*

- **Safety** - “Trees placed in Traffic Circles **break uninterrupted views of long straight street sections** and help to **focus driver attention on their local surroundings.**”
- **Signage** – “Usually have STOP control on one of the intersection streets.”
- Required **minimum** trunk size and **no maximum diameter**





# Portland



# Portland



# Portland



# Portland



# Best Practices: Summary of City Policies

	City	Circle Trees?	Notes
1.	Arlington, VA	✓	Desired max speed at entry is 15 mph.
2.	Boulder, CO	✓	15 mph posted in circle.
3.	Austin, TX	✓	Focus on native vegetation & trees.
4.	Columbus, OH	✓	Half of recommended plantings are trees.
5.	Missoula, MT	✓	Robust Adopt-a-Circle program.
6.	Pasadena, CA	✓	No YIELD control. STOPS at each corner.
7.	Portland, OR	✓	New trees must meet <i>minimum</i> trunk size.
8.	San Francisco, CA	✓	Multiple trees allowed.
9.	Seattle, WA	✓	1,200+ circles, most with trees
10.	Tucson, AZ	✓	200+ circles. Neighbors decide STOP or YIELD.
11.	Vancouver, Canada	✓	Robust “Green Streets” program.

# Berkeley Context

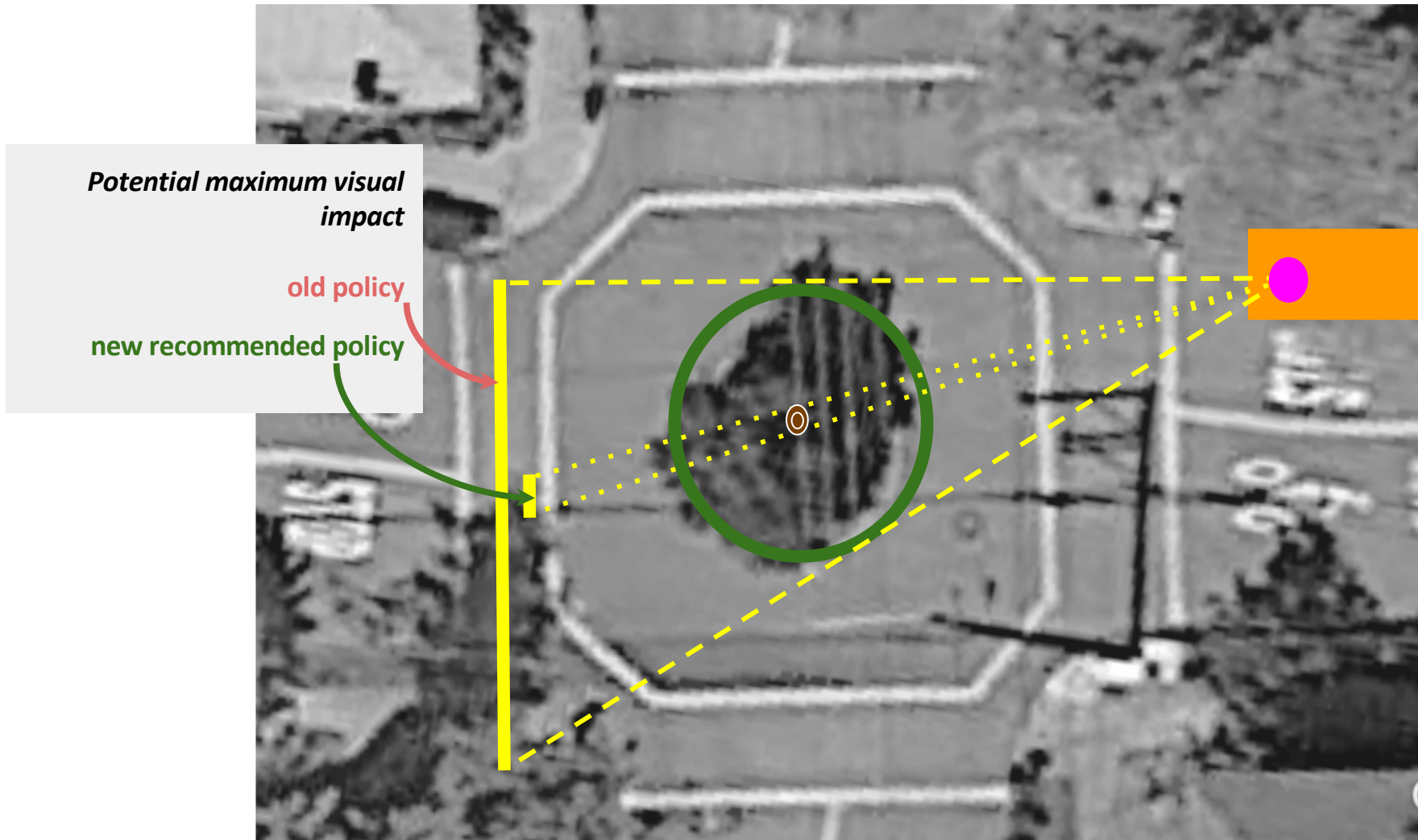
## LeConte Neighborhood Association Newsletter March 2000

### **Dawn Redwoods in Traffic Circles**

The Parks Department has planted large specimens of *Metasequoia glyptostroboides* in the new roundabouts on Ellsworth Street at Stuart and at Parker Streets. These deciduous "Redwoods" have an interesting history as they were only discovered growing in China in the early 1940s. Because of their fine textured colorful leaves and rough bark they became very popular and were planted all around the world. Several large 50-year-old trees can now

# Task Force Policy Recommendations

- Policy founded on safety and visual sightlines
- Low vegetation and horizontal sightline clearance



# Task Force Policy Recommendations

## **Vegetation**

- 2.5ft maximum height above traffic circle curb
- No prescribed plant list – performance-based criteria

## **Trees**

- Keep existing and new ones allowed with City Forester approval
- Trees limbed up to 7' within circle
- If trunk >20 inches City implements traffic calming measures

## **Regular Maintenance**

- Volunteers continue to maintain via Adopt-a-Spot
- City maintains orphaned circles

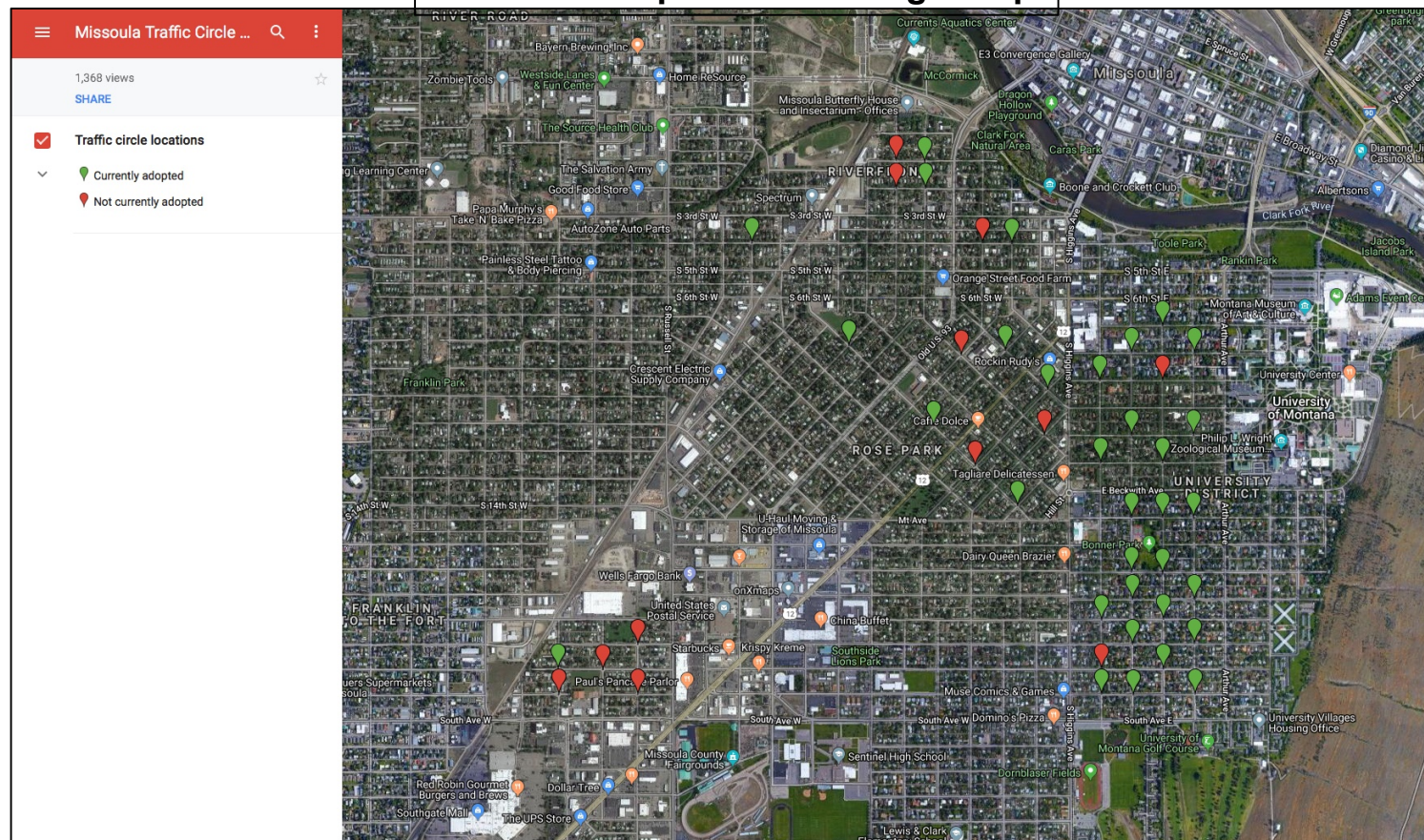


# Task Force Program Recommendations

## Community Common Space Stewardship Program

- Modeled after Oakland's successful "Adopt a Spot"
- Formalize partnership between City and community volunteers
- Traffic Circles are one component of coordinated program
- Saves the City substantial maintenance costs

Missoula Adopt-a-Circle Google Map



# Task Force Policy Aligns with COB Policies & Goals

## Plans

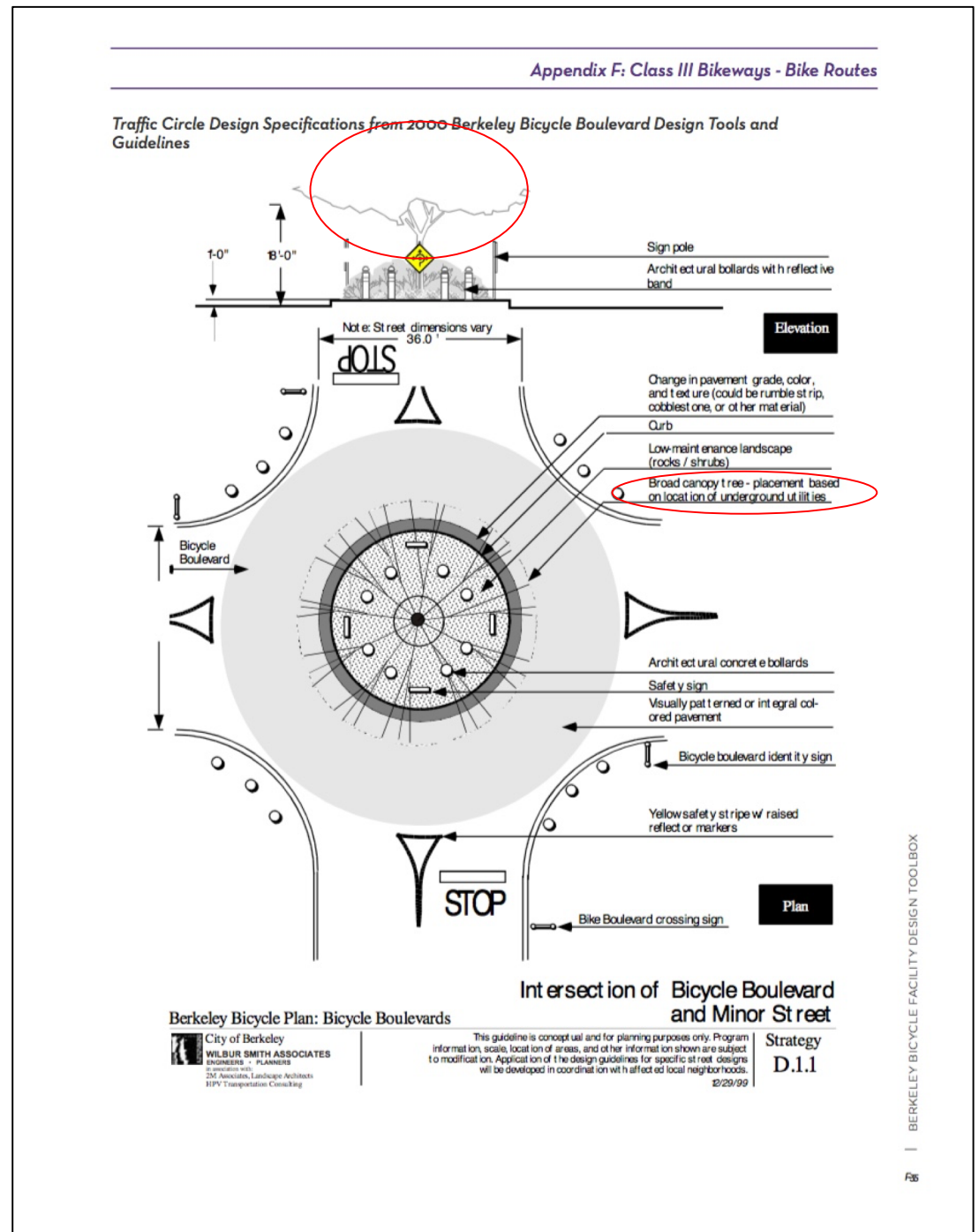
- **General Plan** – *“Encourage use of landscaped traffic circles to calm traffic in residential areas.”*
- **Bicycle Plan** – 42 new traffic circles
- **Pedestrian Master Plan**
- **Climate Action Plan** – carbon capture, urban heat island cooling
- **Vision Zero**

## Goals

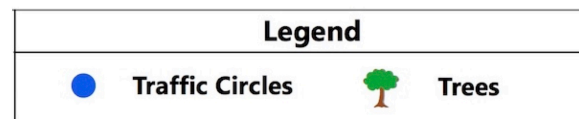
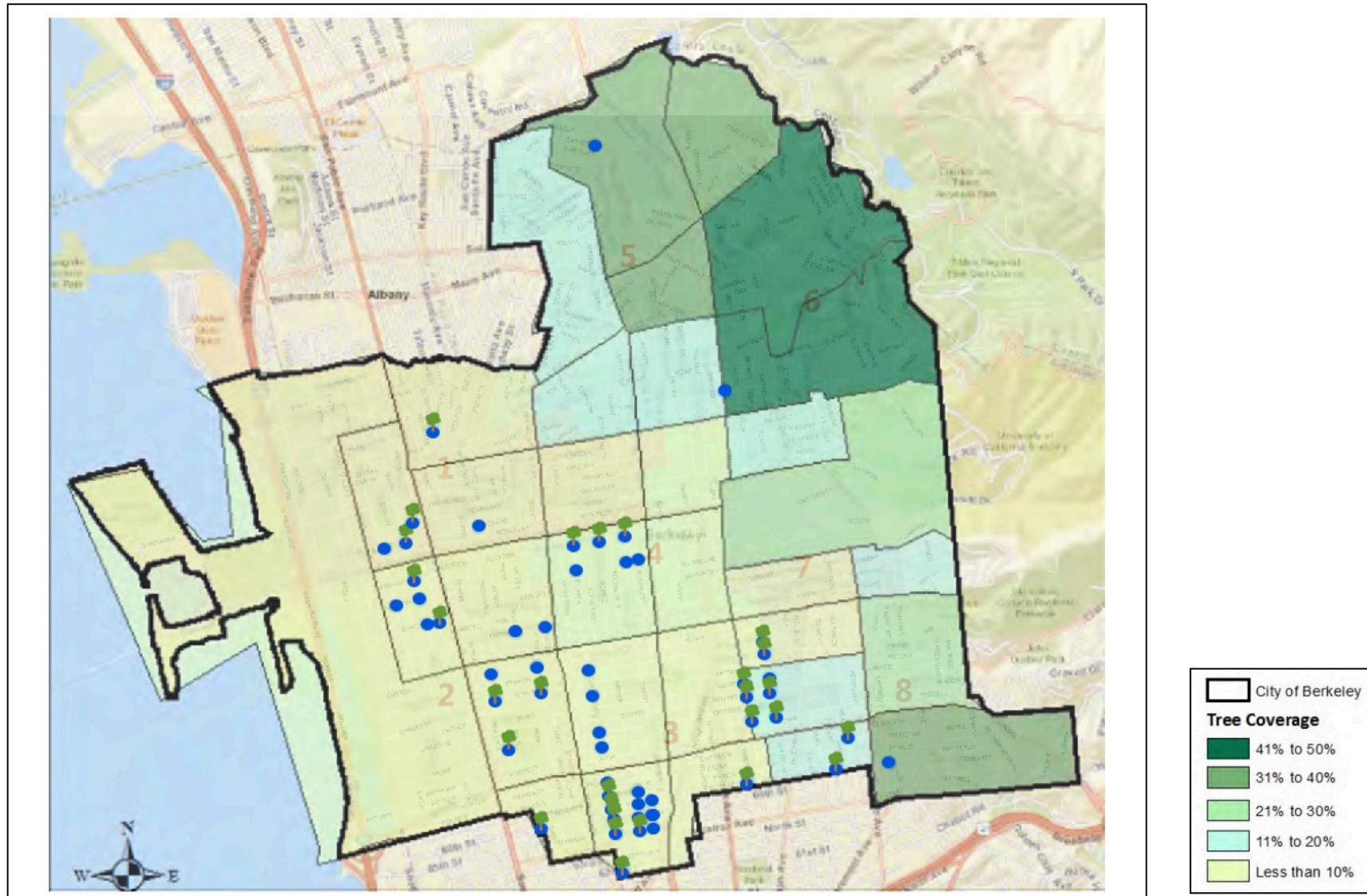
- **Environmental Sustainability** - biodiversity, stormwater capture
- **Social Equity** – green space and trees in underserved neighborhoods
- **Civic Pride** – Community building and resilience

# Berkeley Precedent for Trees – Bicycle Plan

- Appendix F
- Tree in Design Specification
- “Broad canopy tree”



# Social Equity / Environmental Justice



# City Technical Memo vs Task Force Policy

	<b>Staff Recommendation</b>	<b>Task Force Recommendation</b>
Existing Trees	No position taken	Keep trees
New Trees	No new trees in circles	Allowed
Mid-block bulbouts	Only avenue for new trees	"Both/And"
Vegetation height	24 inches	30 inches
Mature tree limb clearance	7 feet	7 feet
Duration of Policy	---	Revisit every 5 years
Volunteer program	Not defined	Robust Adopt-a-Spot

# Policy Recommendation Next Steps

- Update 2012 “Traffic Circle-Planting Policy” to reflect Task Force recommendations
- Develop plan to update all traffic circles with standard safety signage and markings
- Communicate new Policy to community volunteers
- City and Task Force host a community traffic circle work day
- City budgets for and implements “Adopt a Spot” program