

October 25, 2023

Active Transportation Plan

**BPAC Meeting #2: Existing Conditions & Plan
Framework**

Presented by: Tracy McMillan | *NN Engineering*

Samantha Suter | *Metta Urban Design*



**ACTIVE
TRANSPORTATION PLAN**

Agenda:

- Project Update
- Draft Existing Conditions Report
 - Overview
 - Key findings
- Next steps



Project Update

1

Refresh: Project Vision and Principles

Vision Statement:

The City of Mountain View will lead regionally by creating an active transportation system that strengthens the community's access to housing, employment, schools and other destinations.



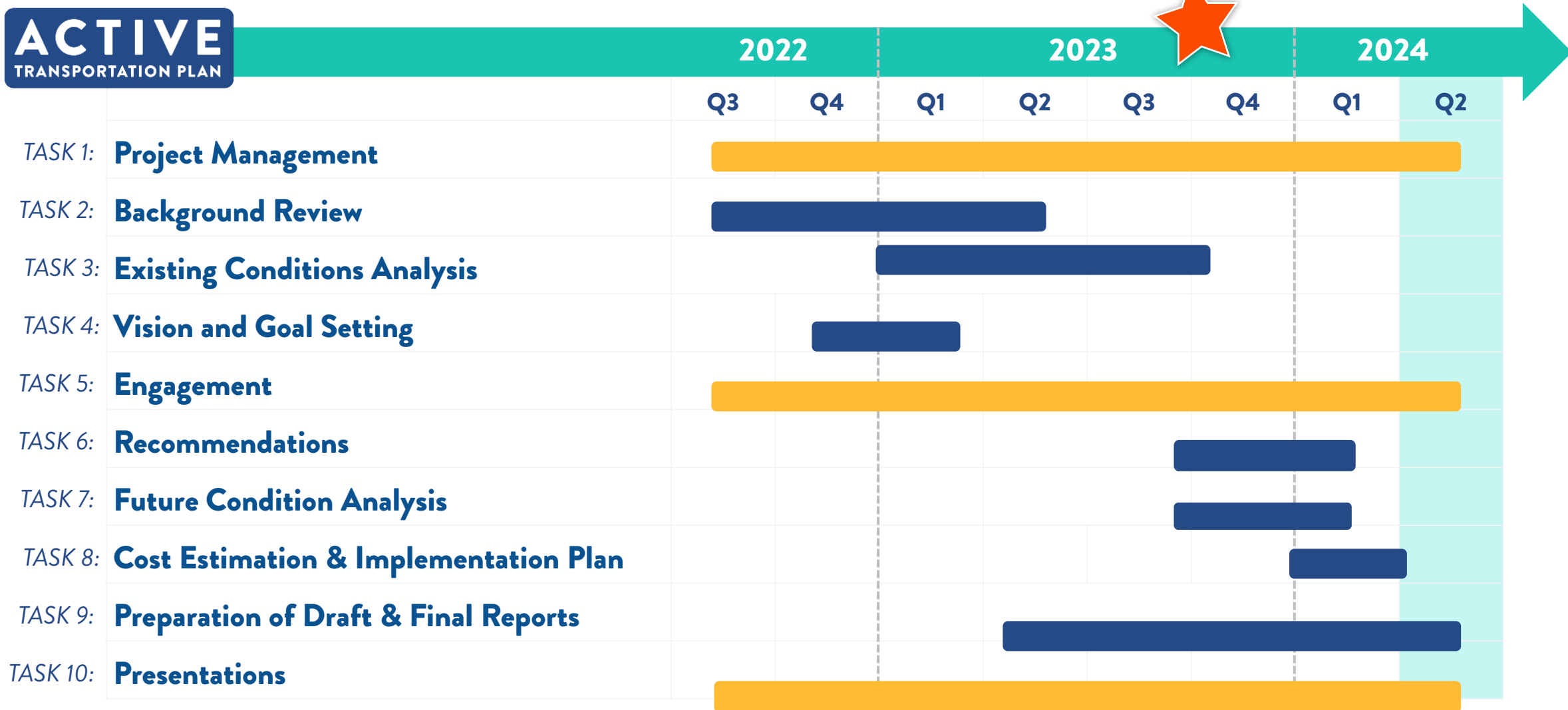
Guiding Principles:

- Mobility & Connectivity
- Safety & Comfort
- Access & Equity
- Sustainability & Biodiversity
- Innovation & Action-Orientation

Schedule Overview

We Are Here

ACTIVE
TRANSPORTATION PLAN



Draft Existing Conditions Report: Overview



2

Existing Conditions and Needs

Draft report is organized around key project principles:

Mobility and Connectivity

- What is the extent of the bicycle and pedestrian networks today?
- Where are there gaps or challenges?

Safety and Comfort

- How and where do the design and conditions of the networks support safe walking, biking, and rolling?
- Where are there safety challenges?

Access and Equity

- How do the networks support mobility need in the community and create access to key destinations and services?

Sustainability and Biodiversity

- How do green streets and street plantings support the needs and goals of the community today?
- How do these elements affect active transportation?

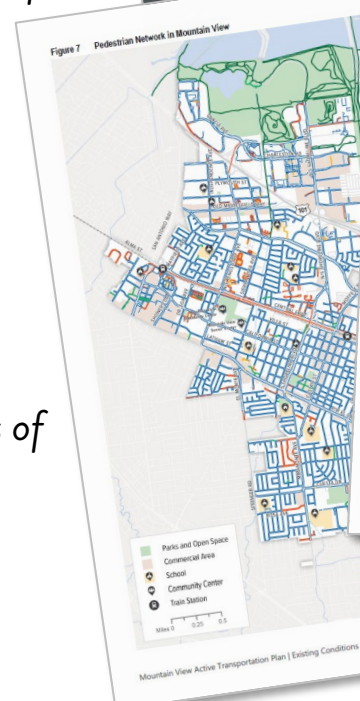
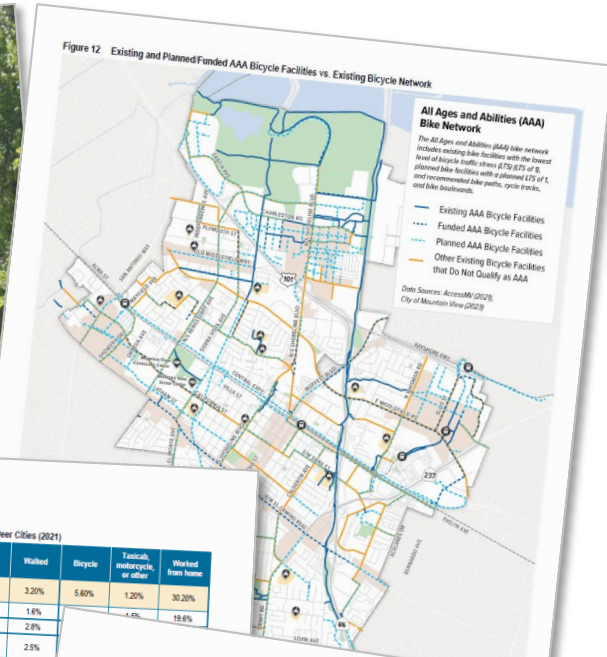
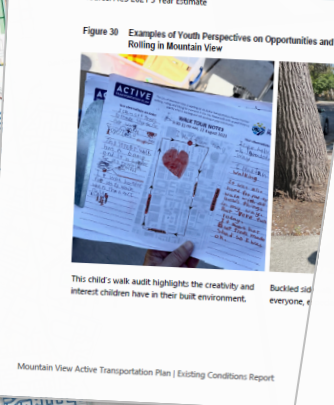


Table 8 Commute Mode Share in Mountain View and Peer Cities (2021)

	Total Workers (Age 16+)	Drove alone	Carpooled	Public transit	Walked	Bicycle	Taxicab, motorcycle, or other	Worked from home
Mountain View	44,414	53.20%	4.50%	2.10%	3.20%	5.60%	1.20%	30.20%
Sunnyvale	87,798	61.6%	9.1%	5.1%	1.6%			
Cupertino	27,965	67.7%	5.8%	1.8%	2.8%			
Santa Clara (City)	69,840	58.2%	5.7%	2.2%	2.5%			
Palo Alto	33,763	46.10%	2.40%	1.80%	6.40%			
San Jose	31,129	51.90%	5.20%	7.10%	3.00%			
Santa Clara County	967,786	59.3%	8.9%	2.1%	2.0%			
California	18,283,118	70.10%	9.60%	4.10%	2.40%			
United States	160,577,736	73.20%	8.60%	4.20%	2.50%			

Source: ACS 2021 5 Year Estimate



Data in many forms, from many sources

Primary data sources:

- ATP Survey (Map-based, 655 responses received)
- Community Bicycle tours (x2)
- Community Walk Tours (x3)
- Community meetings and presentations (CSA, DWC, Cafecito, Seniors, and Teens)
- AskMV feedback
- TAC, BPAC and ATPAC feedback

Secondary data sources:

- City of Mountain View's open data portal
- U.S. Census American Community Survey (ACS) (5 yr. est.)
- Transportation Injury Mapping System (TIMS)
- Santa Clara Valley Transportation Authority (VTA)


Great places for Active Transportation

Okay! Now let's talk about active transportation!

Where do you enjoy traveling by active transportation in Mountain View? These might be your favorite routes for walking or biking, or places you like to reach by walking, biking, or rolling in Mountain View.

- Please mark these on the map by placing pins to indicate specific places, and drawing lines to show routes.
- You can add as many pins or draw as many lines as you wish.
- You can also add a comment with each pin or line to tell us more about why you like to walk or bike on that route or to that place.

Great Place (Point) 

Great Route (Line) 




City of Mountain View

TELL US WHAT YOU THINK ABOUT WALKING AND BIKING IN MOUNTAIN VIEW

Take a 5-minute, fun and interactive mapping survey to inform the City's Active Transportation Plan.

SURVEY LINK:
bit.ly/ATP_MV

ENLACE DE LA ENCUESTA:
bit.ly/ATP_MV

CUÉNTENOS QUÉ PIENSA SOBRE CAMINAR Y ANDAR EN BICICLETA EN MOUNTAIN VIEW

Complete una divertida e interactiva encuesta de 5 minutos sobre el mapeo para proporcionar información al Plan de Transporte Activo de la ciudad.

РАССКАЖИТЕ НАМ, ЧТО ДУМАЕТЕ О ПЕРЕДВИЖЕНИИ ПО МАУНТИН-ВЬЮ ПЕШКОМ И НА ВЕЛОСИПЕДЕ

Пройдите наш забавный интерактивный опрос, предполагающий работу с картой — таким образом вы предоставите ценные сведения для работы над Планом Активного передвижения.

告诉我们您对于在 Mountain View 步行和骑自行车的看法

参与一个5分钟的有趣交互式地图调查，为 Mountain View 的主动交通规划提供信息。

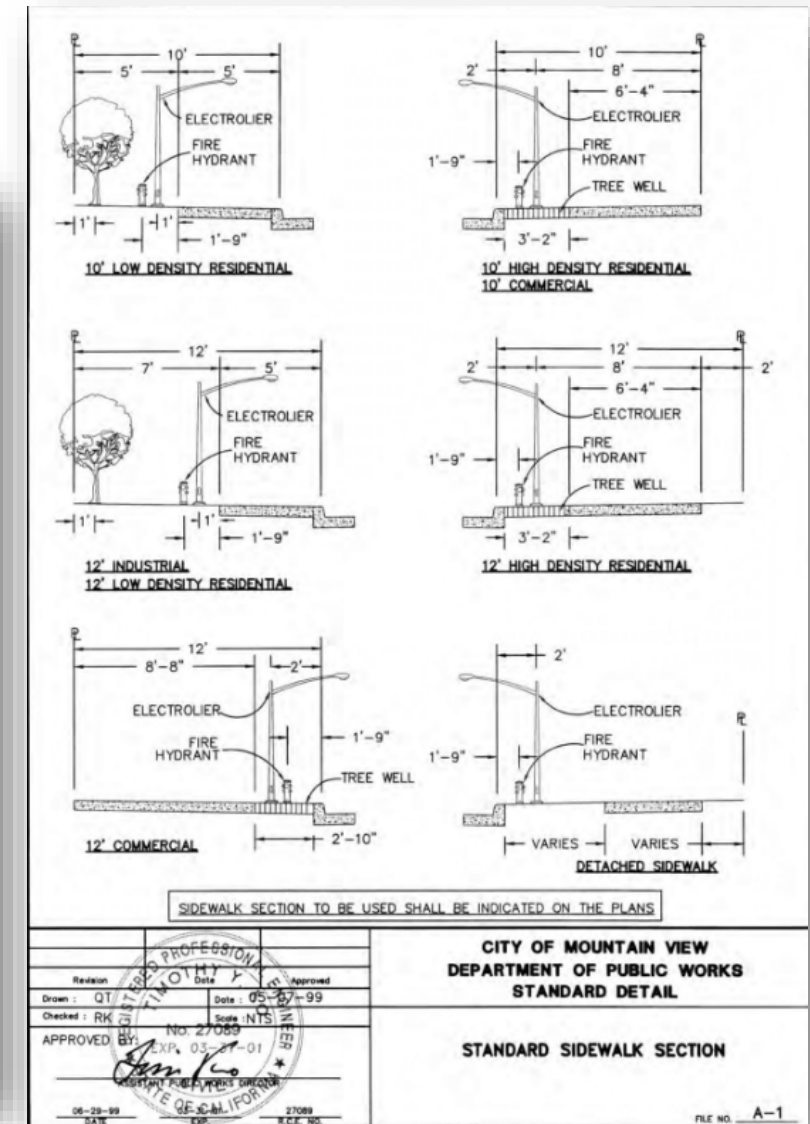
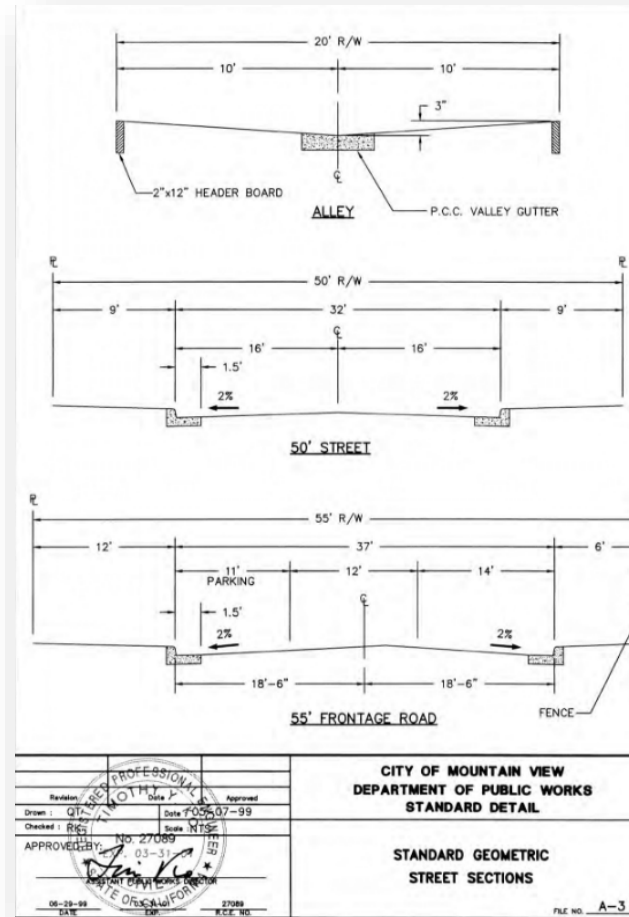
To stay up-to-date with the planning process, please visit:
www.MountainViewATP.com

Para estar al tanto del proceso de planificación, visite:
www.MountainViewATP.com

ACTIVE TRANSPORTATION PLAN

Standard Geometric Sections

- Example: Standard Details (A-1 thru A-9) define street cross sections
- These details effectively design the streets
- Deviations from adopted cross sections are difficult to compel from developers



Code Review

Mountain View has adopted Caltrans standards for curb ramps

Mountain View has adopted Caltrans standards for curb ramps: SDC Chapter 3.5.1 Commercial driveways can be up to 35' wide:

SDC Chapter 3.5.2 Minimum curb return radius is set at 30':

Policy on Unimproved Streets adopted by City Council in 1993

City Code Section 36.22.50, the provision of bike parking is a function of vehicle parking:

City Code Section 36.32.85

In SDC, Chapter 7 - Street Lighting and Chapter 9 and SP&D, Chapter 9 Trees and Chapters 36 and 37 - Street Lighting are also both out of date with current City practice and best practices.

Standard Details A-1 through A-9 define typical street cross sections.

Standard Detail A-8 shows the driveway slope beginning within the width of the sidewalk.

Standard Detail E-11 includes only detection loops in the pavement.

Draft Existing Conditions Report:
Key findings

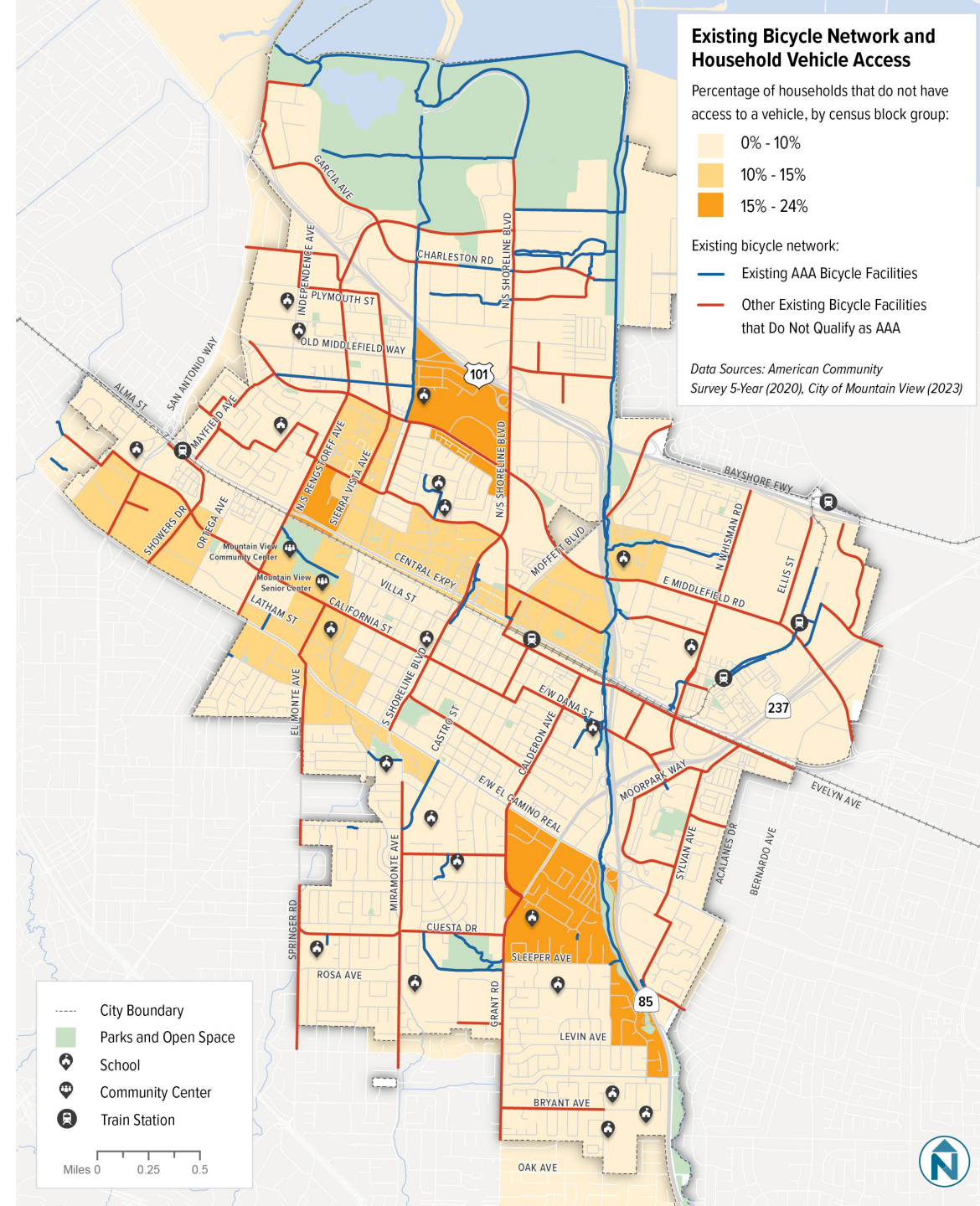
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Demographics and Mode Share

- Almost half of residents identify as white alone
- Household vehicle access varies by geography
- Drive-alone travel is dominant
- Rates of walking and biking are high compared with most peer cities and the state/national averages

Race and Ethnicity	% of Residents
White alone	48.4%
Asian alone	33.3%
Black or African American alone	2.4%
Native American, Native Alaskan alone	0.4%
Native Hawaiian, Pacific Islander alone	0.0%
Some other race alone	5.8%
Two or more races	9.6%
Hispanic or Latino Population	% of Residents
Not Hispanic or Latino	82.0%
Hispanic or Latino:	18.0%

Source: 5-Year Estimates, American Community Survey (2017-2021)



Commute Mode Share in Mountain View vs. Peer Cities

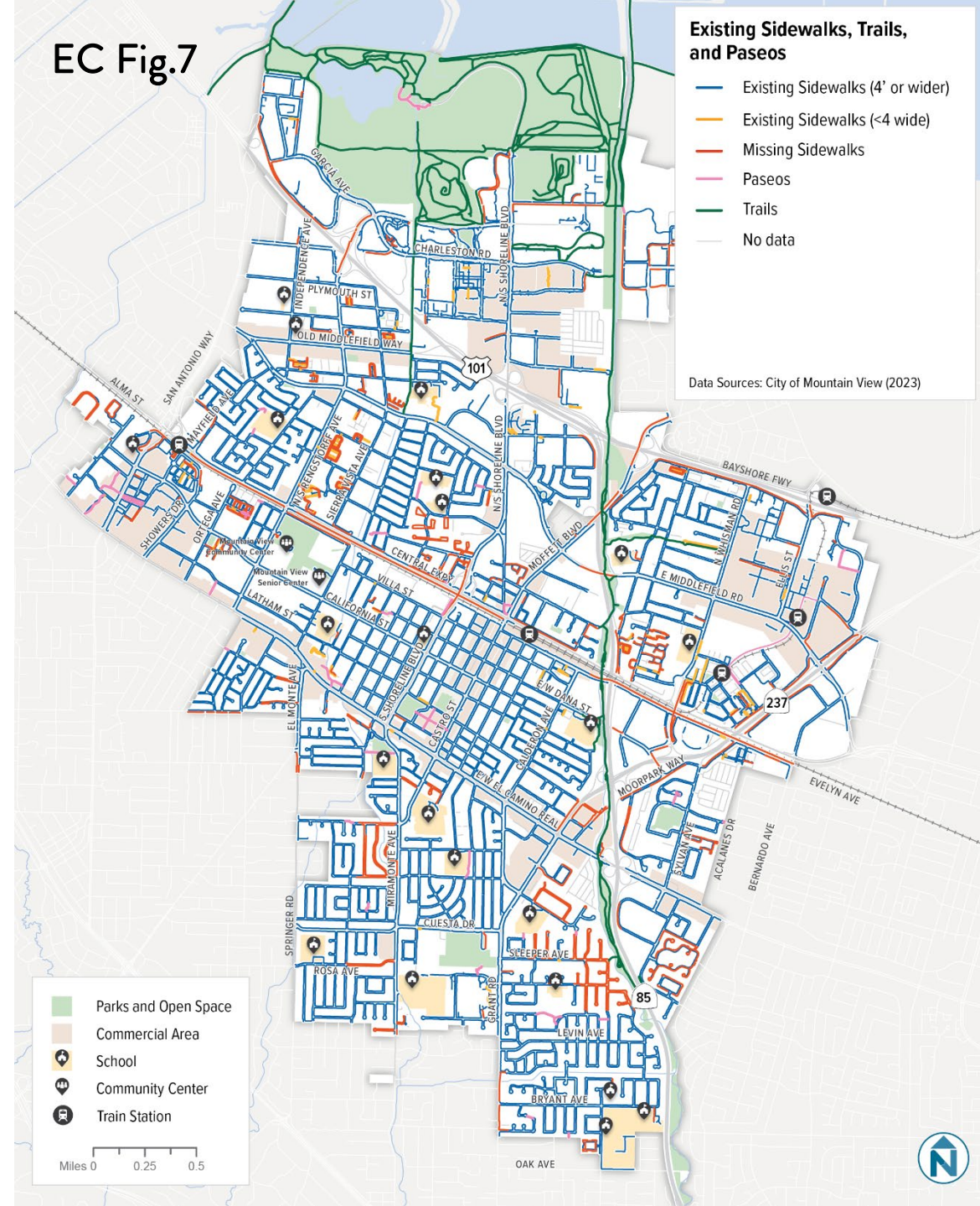
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Sunnyvale	87,798	61.6%	9.1%	5.1%	1.6%	1.6%	1.5%	19.6%
Cupertino	27,965	67.7%	5.8%	1.8%	2.8%	0.5%	1.4%	20.0%
Santa Clara (City)	69,840	58.2%	5.7%	2.2%	2.5%	0.9%	2.3%	28.3%
Palo Alto	33,763	46.1%	2.4%	1.6%	6.4%	9.2%	1.7%	32.6%
Davis	31,129	51.9%	5.2%	7.1%	3.0%	13.8%	1.0%	17.9%
Santa Clara County	967,786	59.3%	8.9%	2.1%	2.0%	1.5%	1.5%	24.8%
California	18,283,118	70.1%	9.6%	4.1%	2.4%	0.8%	1.6%	11.4%
United States	160,577,736	73.2%	8.6%	4.2%	2.5%	0.5%	1.4%	9.7%

Source: 5-Year Estimates, American Community Survey (2017-2021)

Pedestrian Network

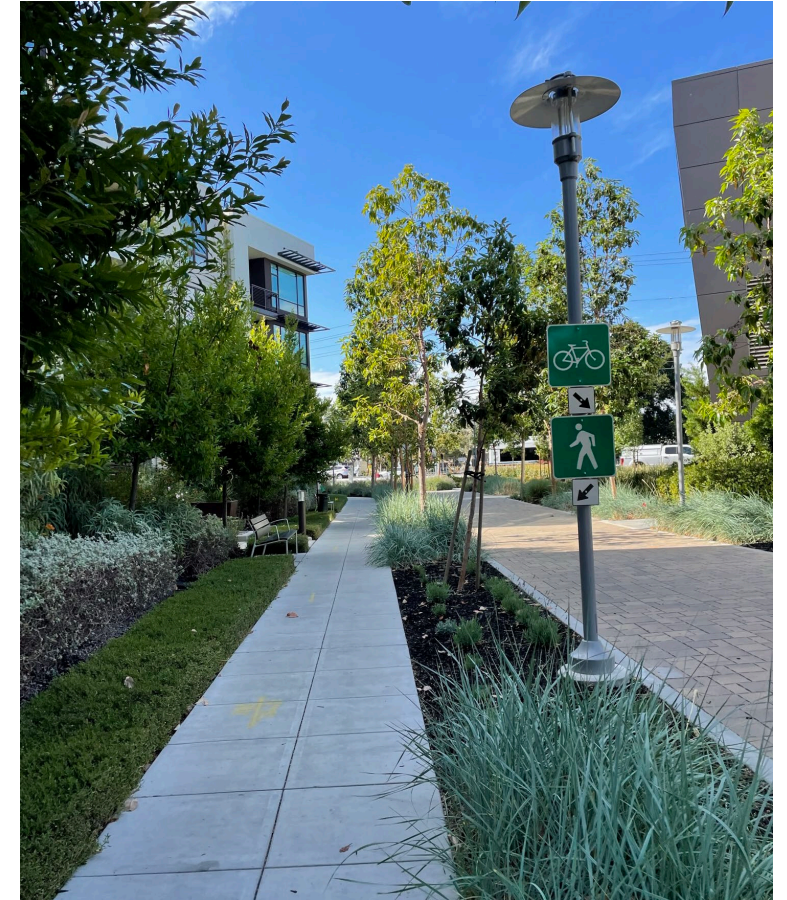
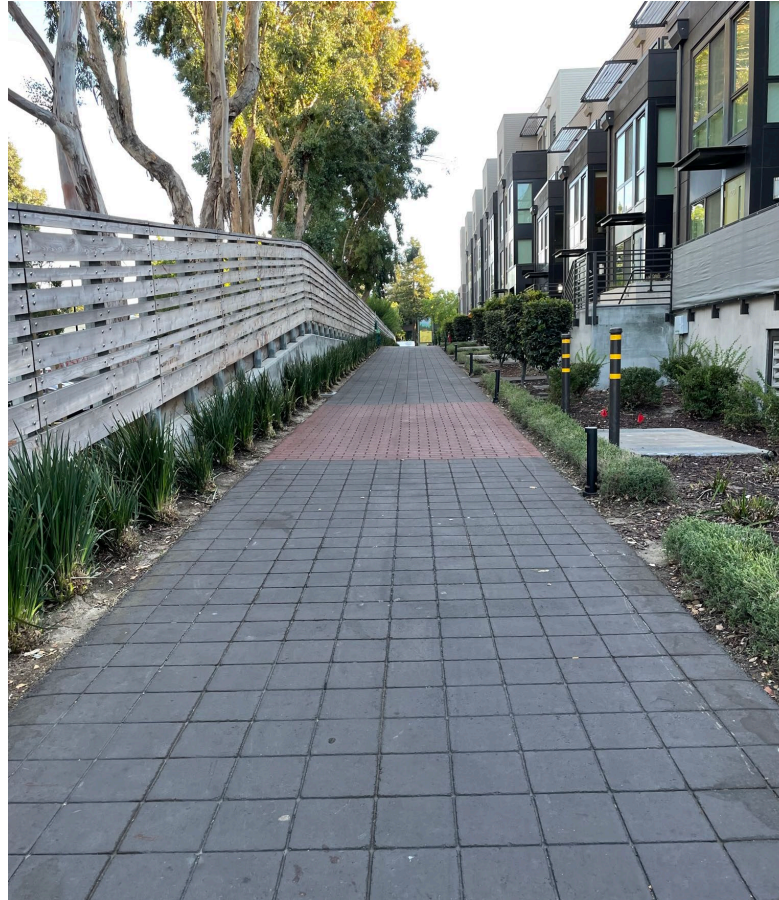
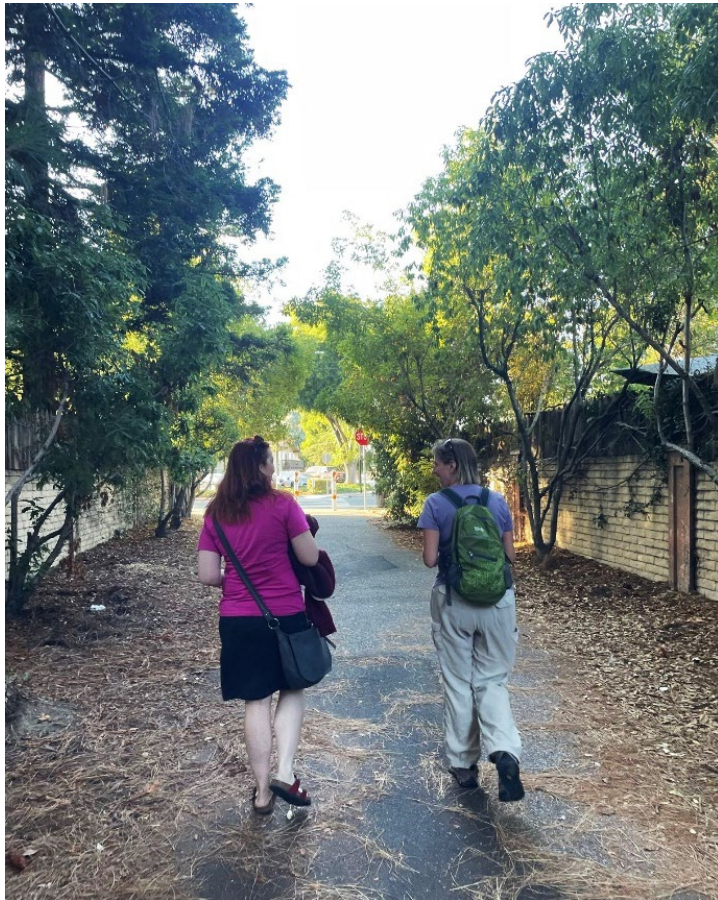
- Sidewalk coverage in Mountain View ~96%, but some gaps remain
- Survey respondents and walk tour participants highlighted challenges related to sidewalk gaps, especially where they limit connections to schools, parks, and trails
- Sidewalk obstructions and accessibility issues exist throughout the network, making some pedestrian pathways less safe and/or accessible

EC Fig.7



Pedestrian Network

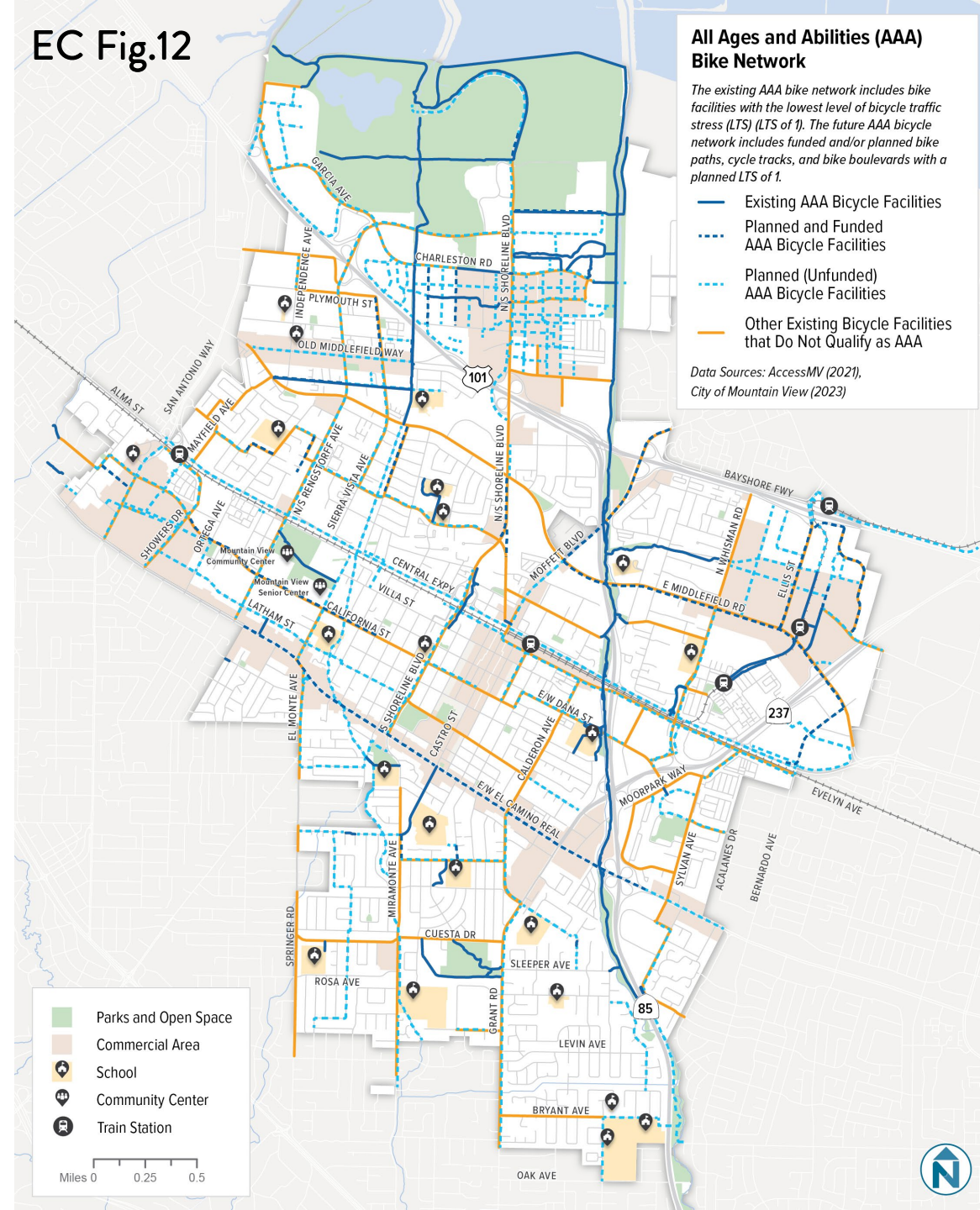
- Survey respondents and walk tour participants highlighted the paseos and trails as key elements of the pedestrian network



Bicycle Network

- Existing and planned/funded All Ages and Abilities (AAA) network is robust in some areas (i.e. North Bayshore) but limited in others (neighborhoods south of El Camino)
- Today, there is no major AAA east-west bicycle route (El Camino Real project will help address this gap)
- Many existing facilities do not meet the City's threshold for the AAA network, which limits connectivity for some riders

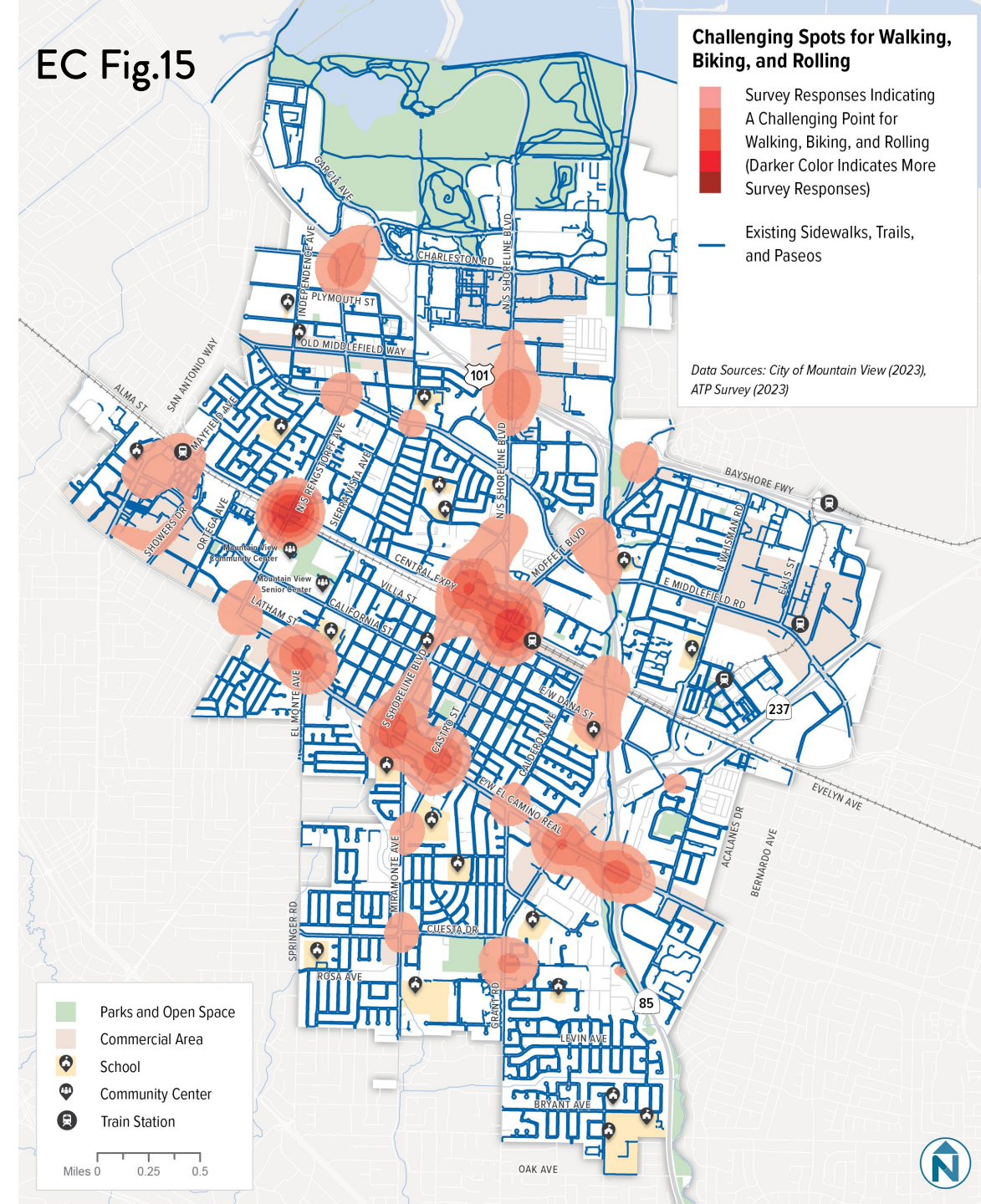
EC Fig.12



Challenging Locations

Rank	Challenging Spot
1	Rengstorff Avenue & Central Expressway (and by extension: Rengstorff Avenue & Leland Avenue/Crisanto Avenue)
2	Castro Street/Moffett Boulevard & Central Expressway (and by extension: Castro Street & Evelyn Avenue)
3	El Camino Real & Castro Street
4	Central Expressway & Shoreline Boulevard
5	Grant Road & El Camino Real
6	Miramonte Avenue/Shoreline Boulevard & El Camino Real
7	SR-85 & El Camino Real
8	SR-101 & Shoreline Boulevard
9	SR-85 & Central Expressway
10	El Camino Real & Escuela Avenue

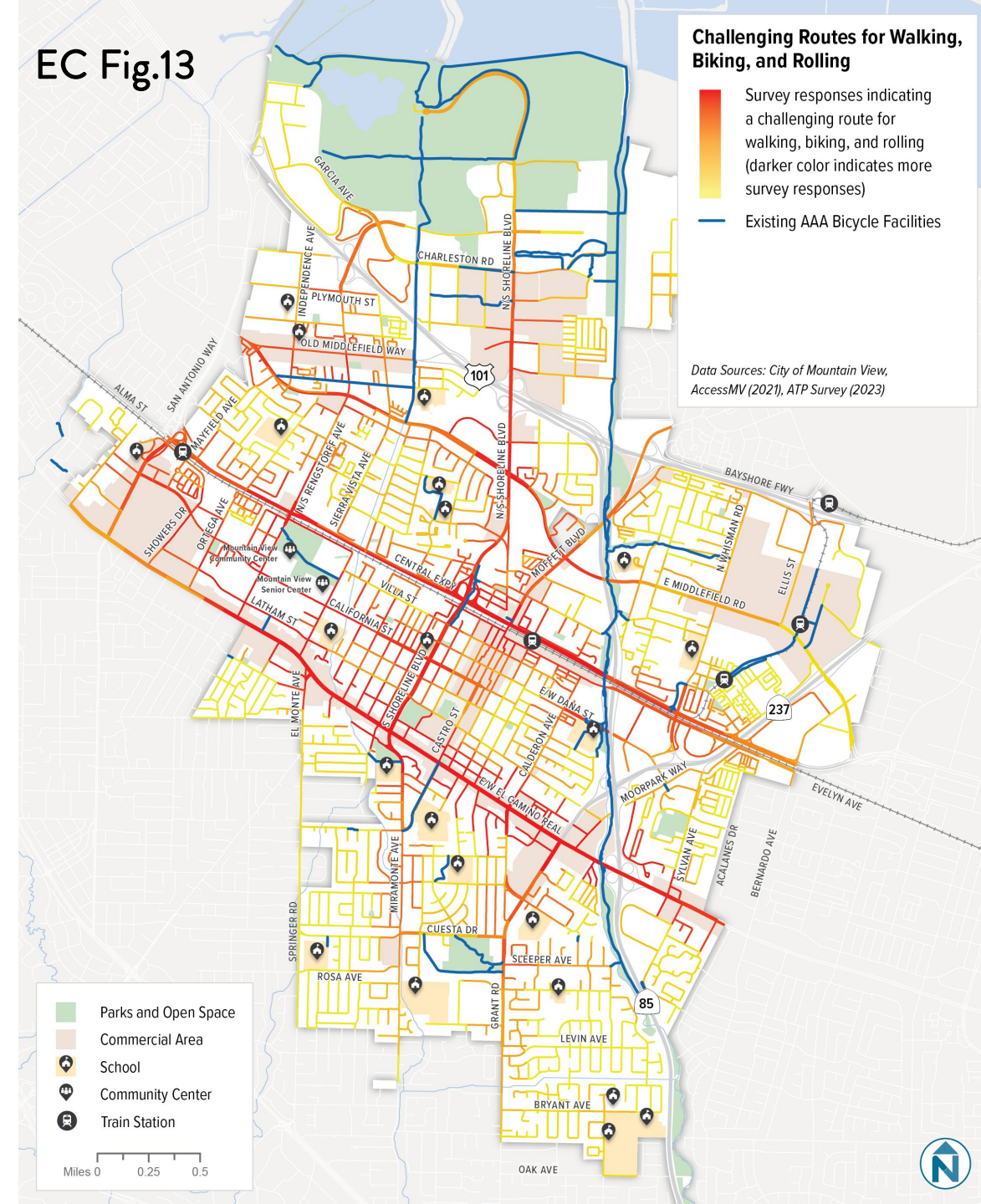
EC Fig.15



Challenging Routes

Rank	Challenging Route
1	El Camino Real (between Dale Avenue and Rengstorff Avenue/Ortega Avenue)
2	Shoreline Boulevard (between Sonia Way and Wright Avenue)
3	Central Expressway (between Thompson Avenue and SR-85)
4	Grant Road (between Bentley Square and SR-85)
5	Rengstorff Avenue (between El Camino Real and Montecito Avenue)
6	Latham Street (between Ortega Avenue and Leksich Avenue)
8	Escuela Avenue (between El Camino Real and Villa Street)
9	California Street (between Chiquita Avenue and Ortega Avenue)
10	Leland Avenue/Crisanto Avenue (between College Avenue and Escuela Avenue)

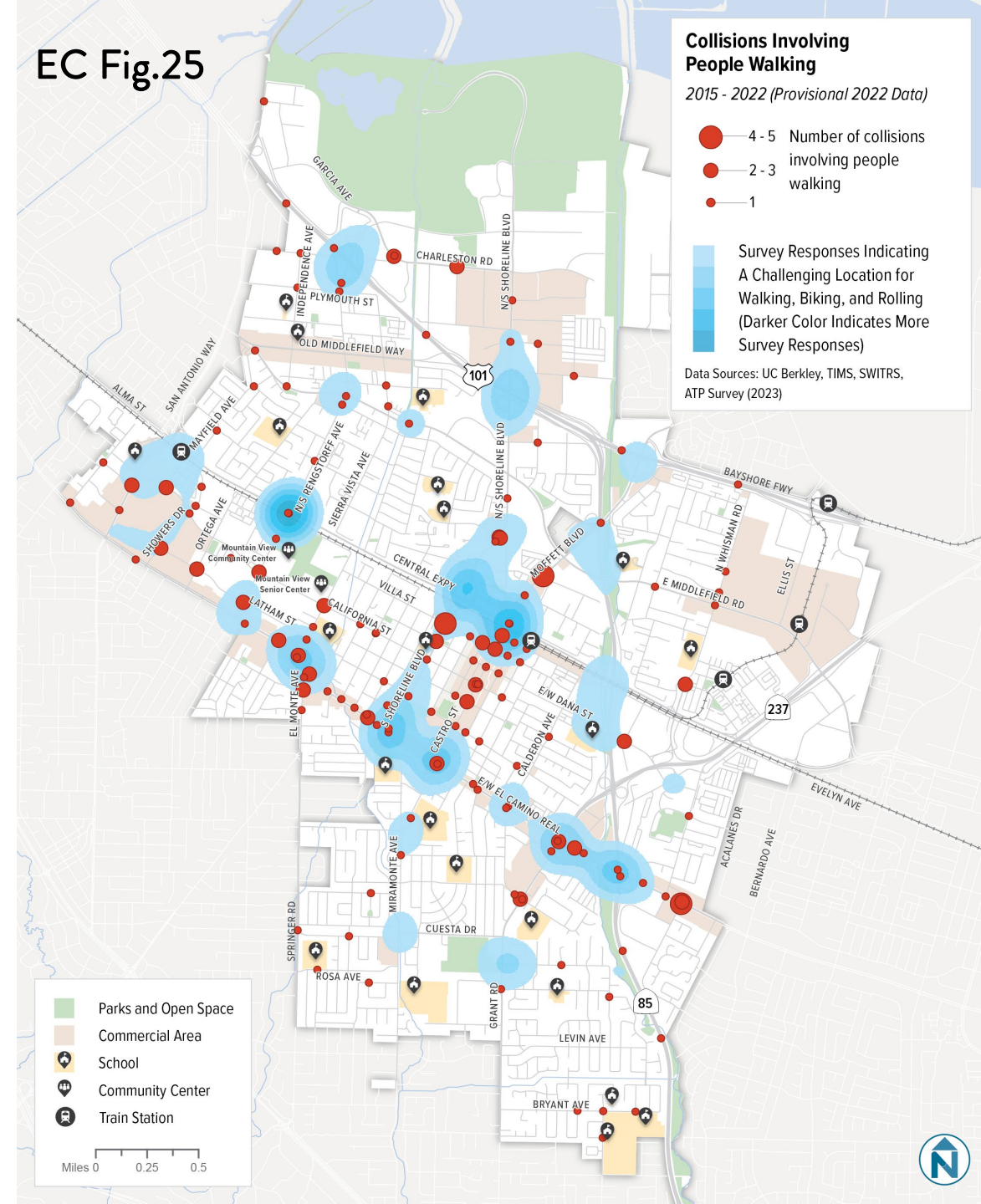
EC Fig.13



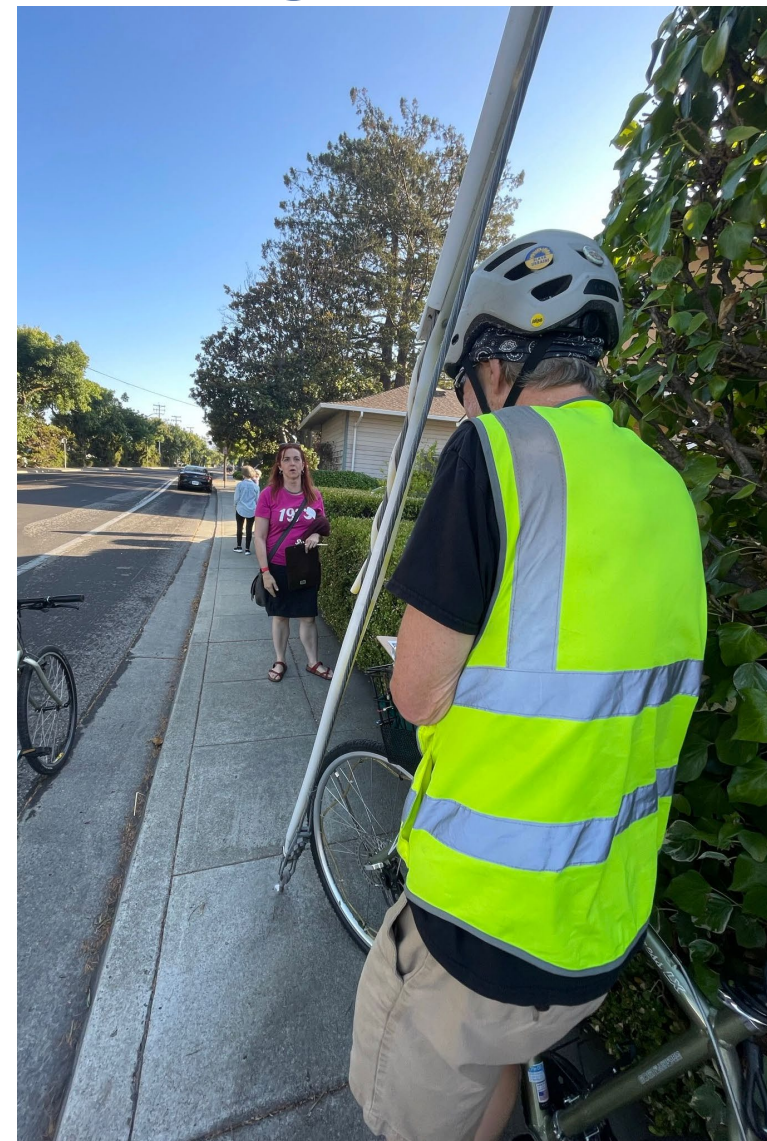
Collisions

- From 2015 to 2022, there were 564 reported collisions involving people walking and biking:
 - 11 resulted in fatalities
 - 52 resulted in severe injuries
- Many collisions concentrated on arterials with higher vehicle speeds, more vehicle lanes, and higher traffic volume.
- 73% of fatal and severe injury collisions occur on 20% of total street network
- Data on map does not reflect unreported collisions or near misses
- Survey respondents and walk/bike tour participants highlighted challenging/unsafe areas

EC Fig.25

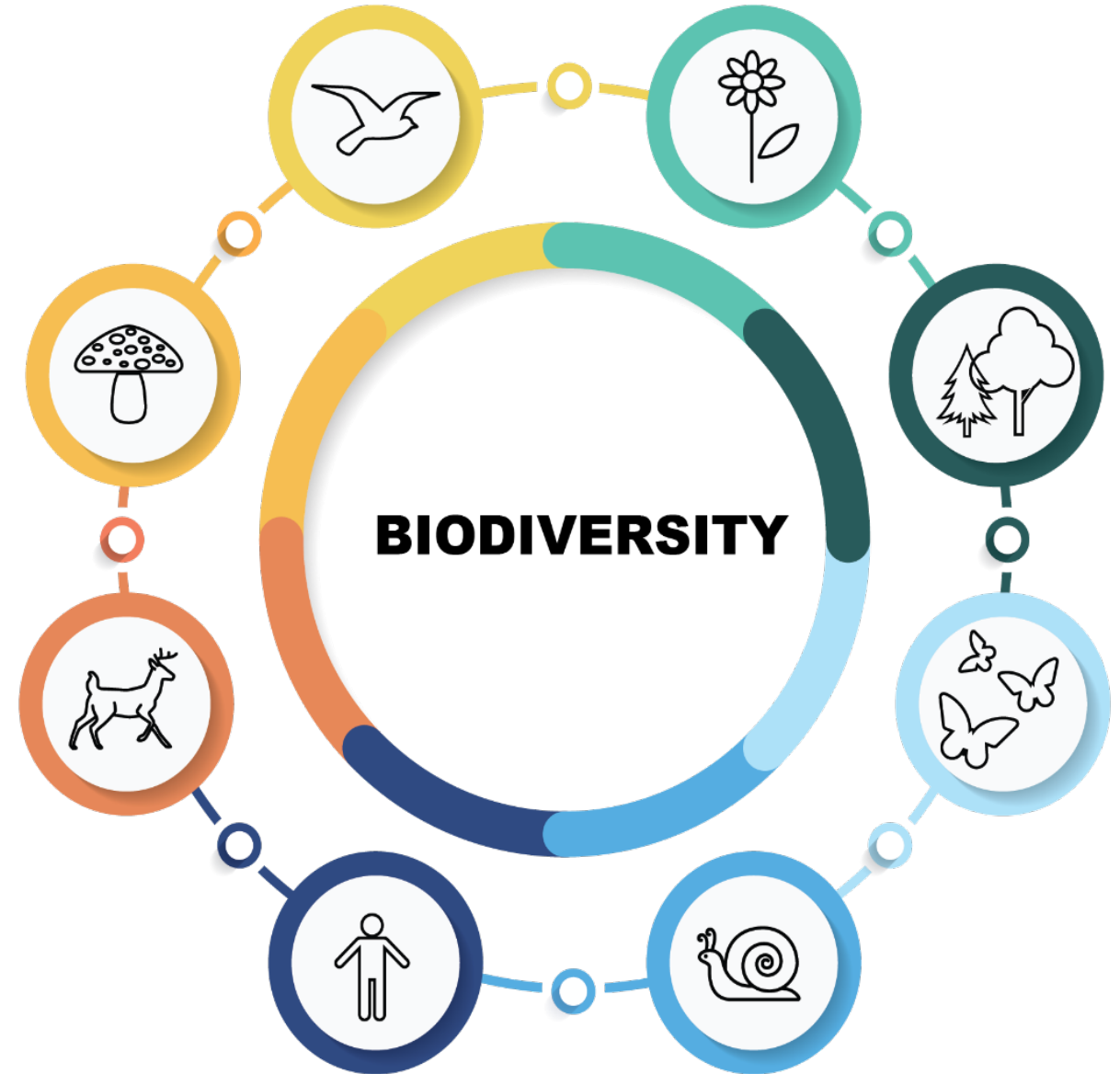


Network Conditions, Crossings, and Urban Design Factors



Biodiversity

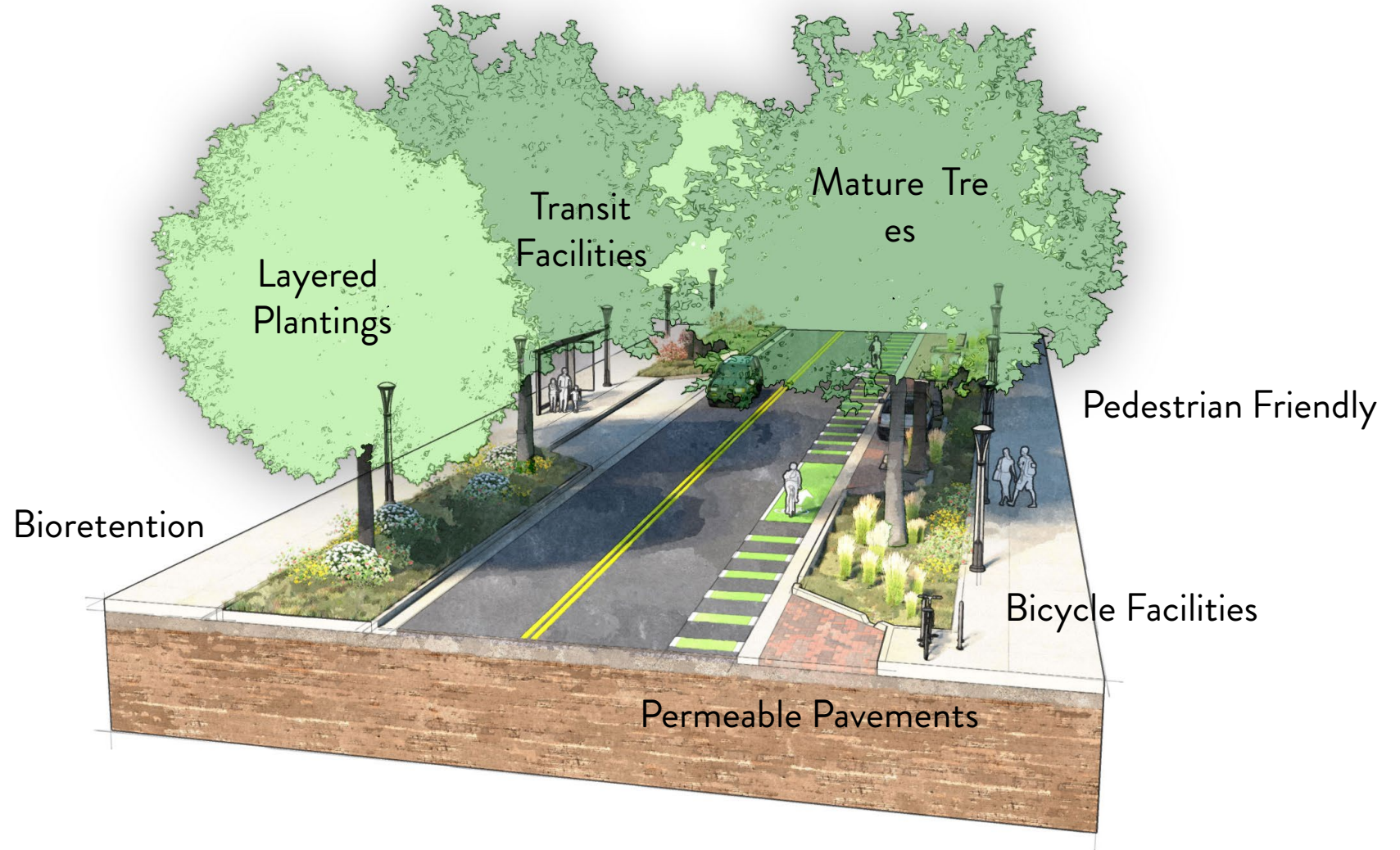
- **Biodiversity** refers to the variety of living organisms on Earth. The Bay Area is a global biodiversity hotspot.
- A **loss in biodiversity** is associated with development and fragmentation of natural areas and it can have catastrophic consequences.
- In 2021, Mountain View City Council established a goal to “**protect and enhance local ecosystems and biodiversity through rewilding and other measures**” as part of their Sustainability & Climate Resiliency strategic priority.



Green Streets

Mountain View's Green Streets are streets that support biodiversity, incorporate sustainable stormwater strategies, and prioritize biking, walking and rolling for people of all ages and abilities.

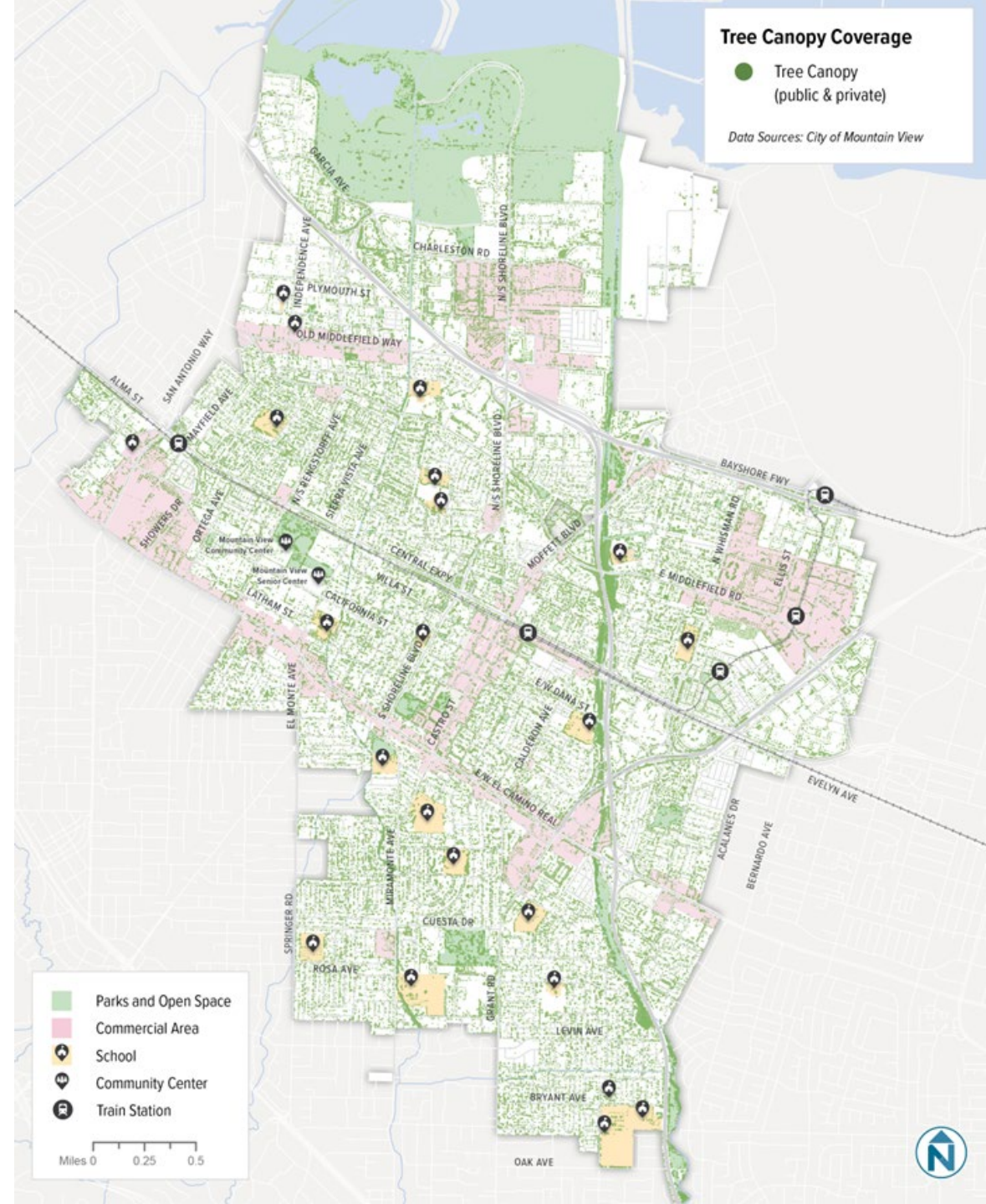
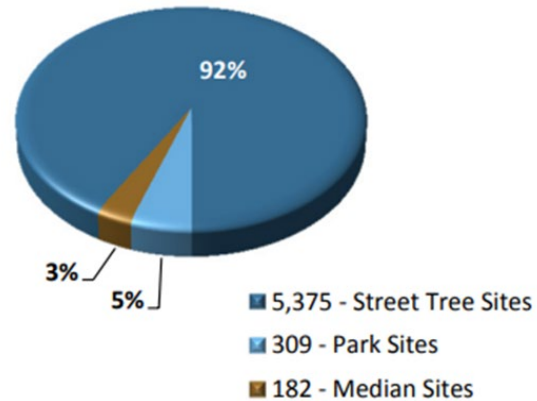
Active Transportation
+
Biodiversity
+
Green Infrastructure



Tree Canopy Coverage

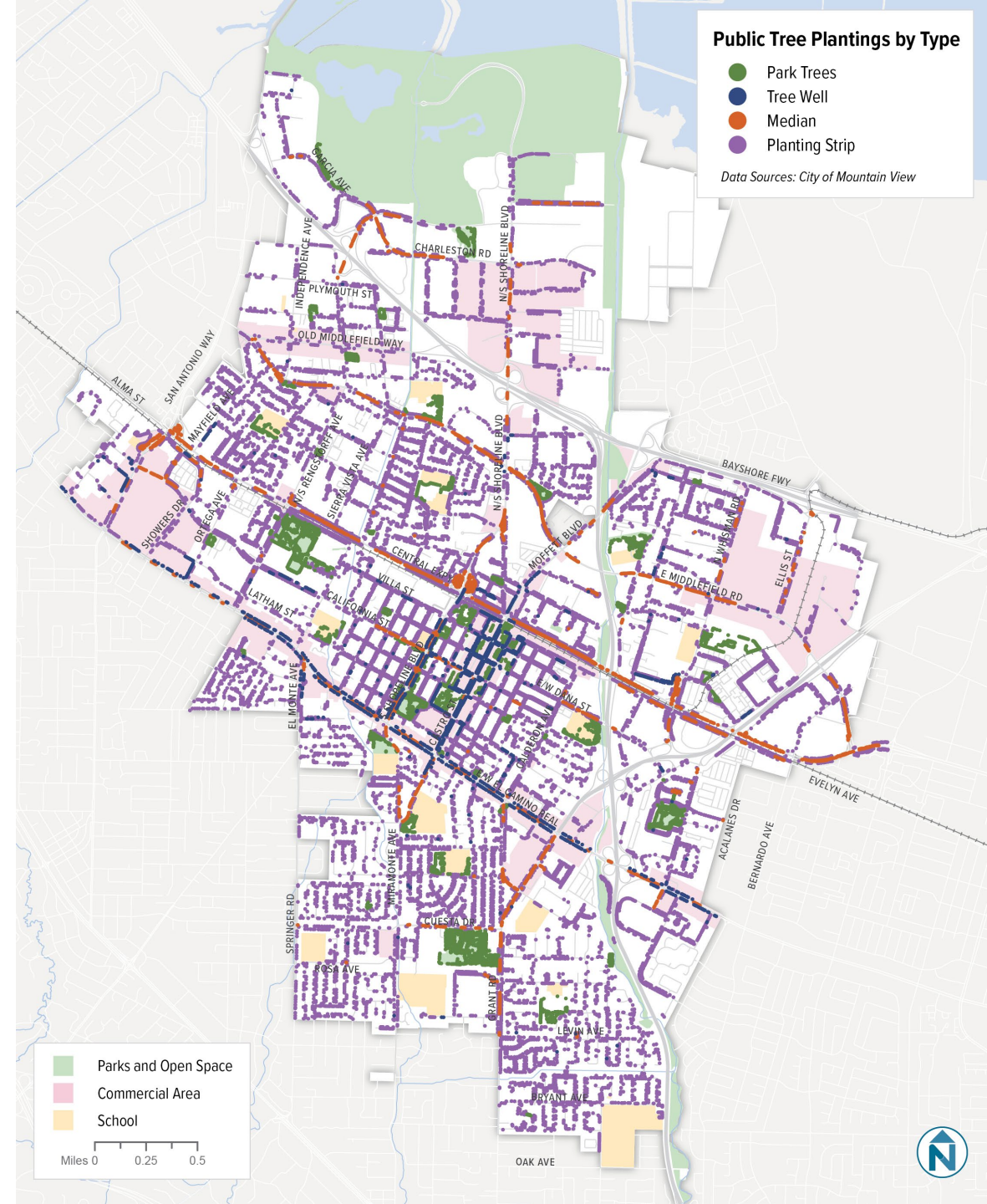
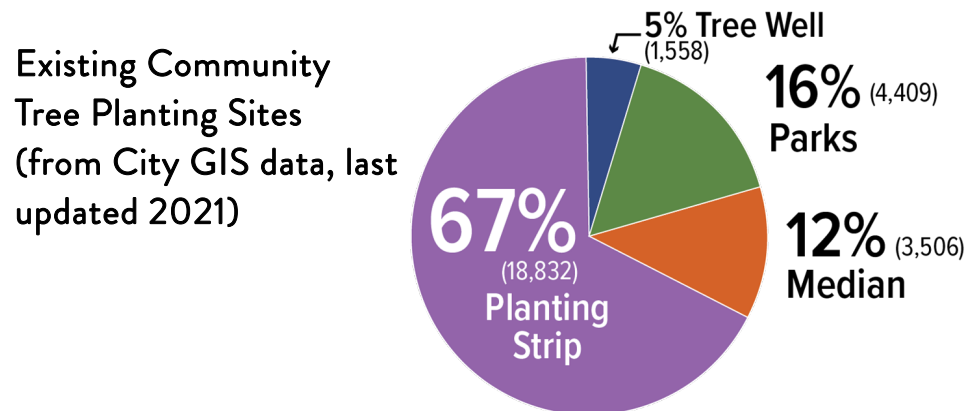
- Mountain View's tree canopy includes **trees on private and public property.**
- Mountain View's 2015 Community Tree Master Plan (CTMP) established a goal to **increase tree canopy coverage by 5%** -- from 17.7% to 22.7%, the equivalent of **11,000 trees.**
- Mountain View has over **28,000 public trees** (based on 2021 City Tree Data), which is about **25% of the overall tree canopy** (according to the *Tree Technical Manual, 2022*).
- 92% of vacant street planting sites for public trees are along streets**, representing the biggest opportunity for the City to add trees within public property (according to the 2015 CTMP).

Vacant Planting Sites, from CTMP



Street Trees Planting Sites

- Street tree planting represents a significant opportunity for the City to increase its canopy cover and its proportion of local, native species, and to create streets that support active transportation modes.
- Urban conditions present challenges for trees, so choosing the right tree for the right street is essential to long term health of the urban forest and the active transportation network.



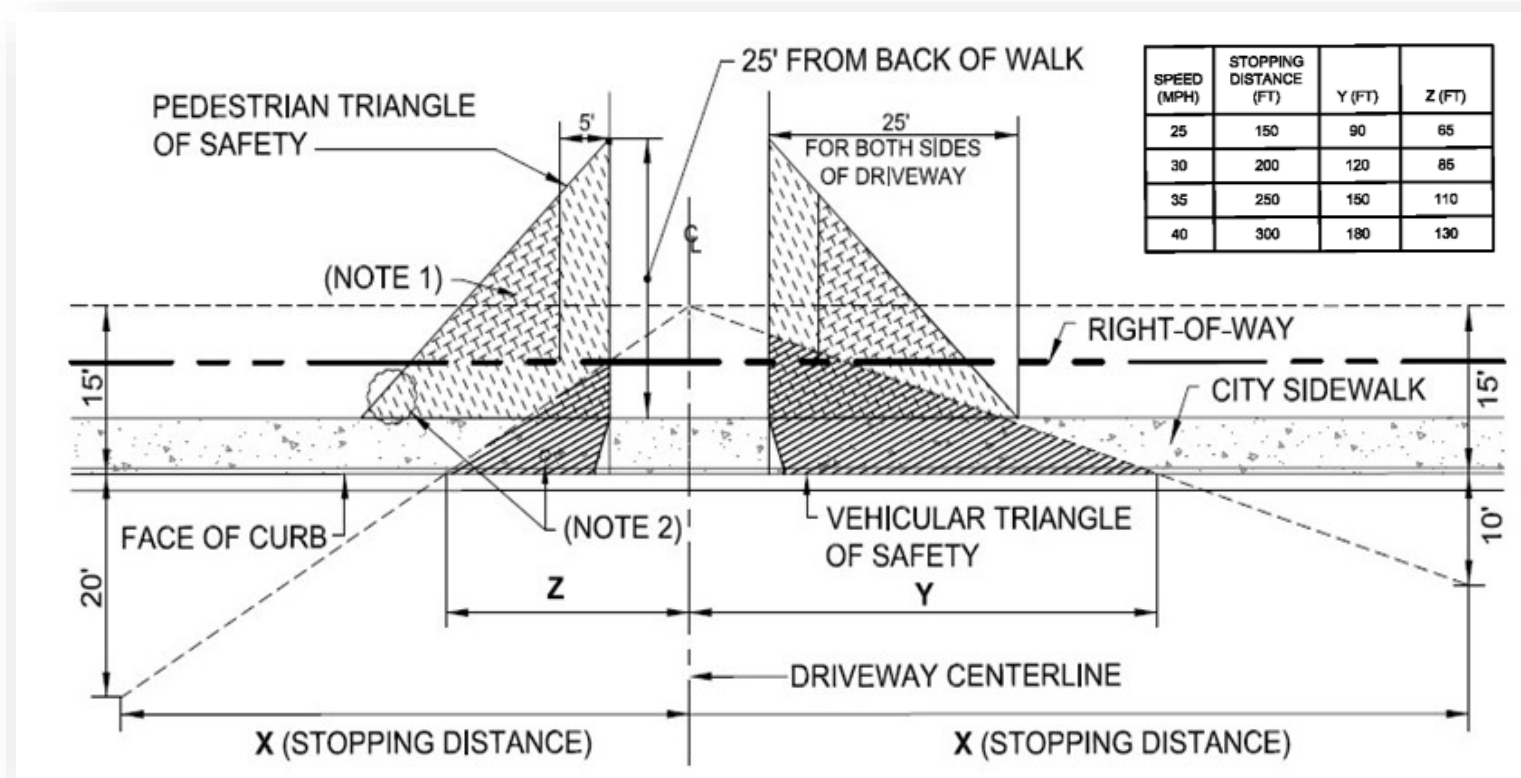
Unique Challenges to Green Streets & Urban Canopy

Standard Detail A-22 (2019)

- Referred to as “triangles of safety” for pedestrians and vehicles
- Only applies to redevelopment

Literature reviews of pedestrian safety and collision reports of Mountain View show:

- Site triangles are unusually large
- Provide little impact on overall crash data and pedestrian safety
- Could result in the removal of existing trees and prevent new ones from being planted



Existing Conditions and Needs

Mobility and Connectivity

- What is the extent of the bicycle and pedestrian networks today?
- Where are there gaps or challenges?

Safety and Comfort

- How and where do the design and conditions of the networks support safe walking, biking, and rolling?
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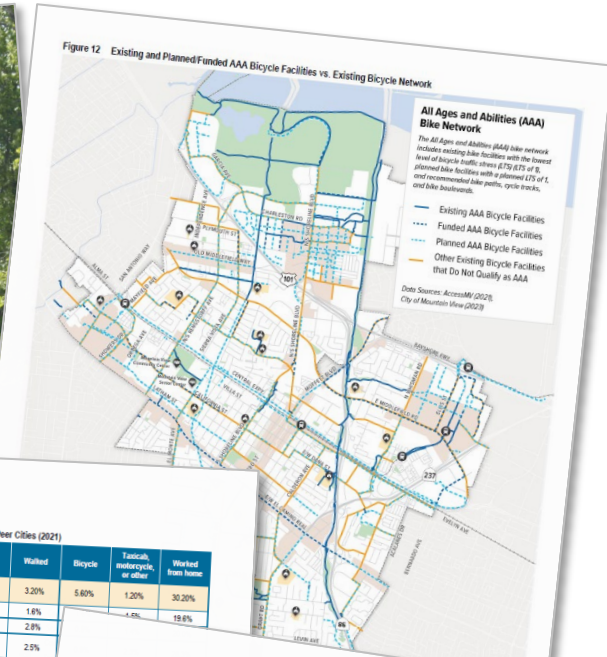
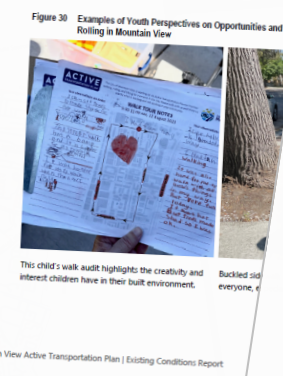
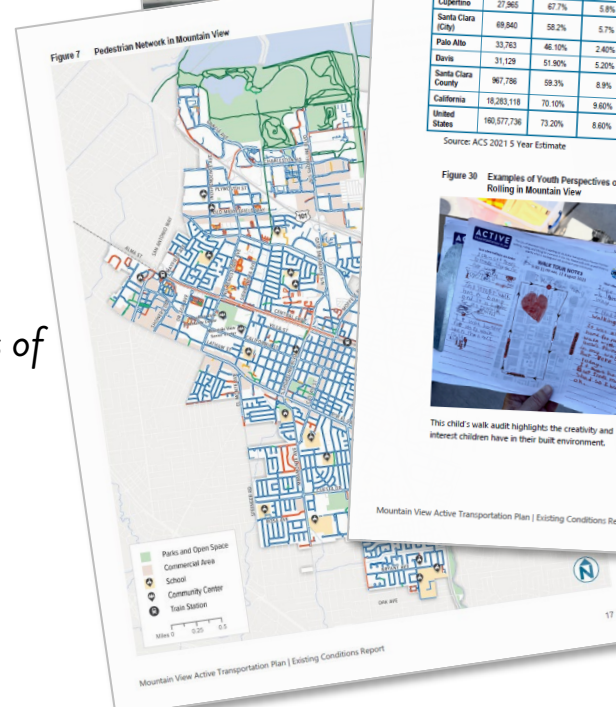


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Source: ACS 2021 5 Year Estimate



4. Protected Intersections and Bikeways (Class IV)

The space between the bike lane and the motor vehicle travel lane, also called the protective buffer, presents opportunities for green street elements, including trees, vegetation, and bioswales. Protected intersections provide space for low-lying green treatments at the corner island.

Challenges: Protective buffer areas require available roadway space and may increase costs for plant maintenance. Other challenges include plant encroachment upon the bike lane, including tree branches. Low-lying plants should be used in protected intersection corner islands to maintain visibility.

Opportunities: Opportunities include expanding green street treatments to reduce vehicle speeds, infuse vibrancy, contribute to climate and tree canopy goals, and create separation between the bikeway and motor vehicles, thereby increasing comfort and safety for cyclists of all ages and abilities.

Top Left: Charleston Avenue, Top Right: Shoreline Boulevard at Charleston Avenue, Bottom: Charleston Avenue

Looking Ahead: Next Steps

3

What are the next steps?

– Phase 3:

- Scenario Plans (March 2024)
- Draft Report (**June 2024**)



Thank You

Tracy McMillan | *NN Engineering*

Samantha Suter | *Metta Urban Design*

Committee Comment Period

RECOMMENDATION

Review and provide feedback on the Active Transportation Plan existing conditions report.