



Lawson Middle School Bikeway Feasibility Study

Bicycle Pedestrian Commission



May 17, 2023

Bicycle Pedestrian Commission
Agenda Item #3
05-17-2023










Agenda

- Project Overview
- Study Process & Timeline
- Data Collection & Analysis
- Alternatives
- What we've heard
- Next Steps



Project Overview

- 2016-2017: Citywide School Walk Audit identified need to improve bicycle safety at Lawson
 - Lawson student biking grown from 3% in 2016 to 17% in 2022
 - 2018-2022: Conditions and options explored by City / School / District / PTA / Parents
 - 2022: City contracted with Hexagon to take a fresh look at conditions and options by conducting this feasibility study
- 
- 
- 
- 
- 

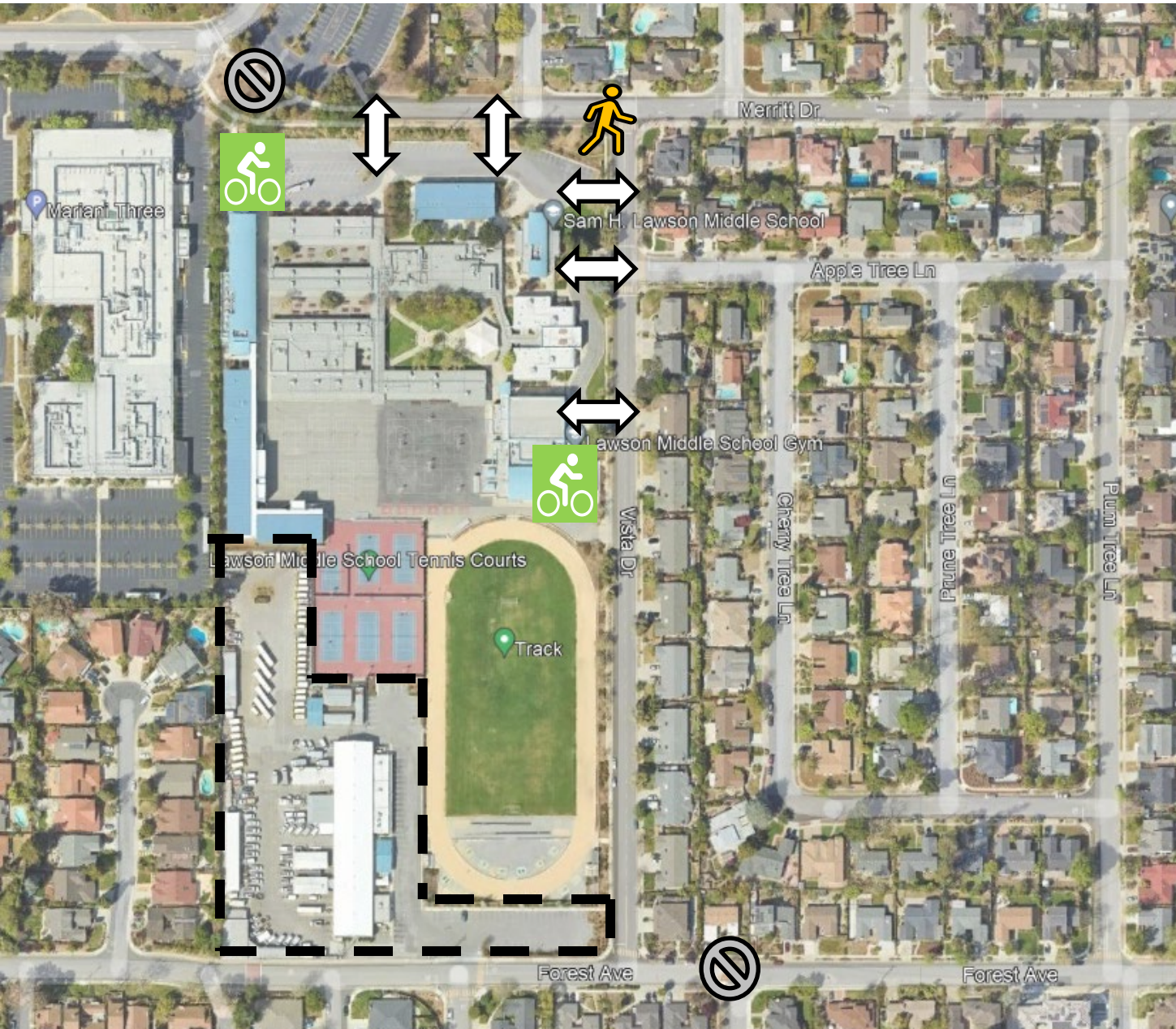
Project Location








 Lawson Middle School



Existing Operations and Context



-  Crossing Guard
-  Bike Cage
-  School Driveways
-  No Vehicle Access
-  CUSD Lot


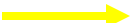


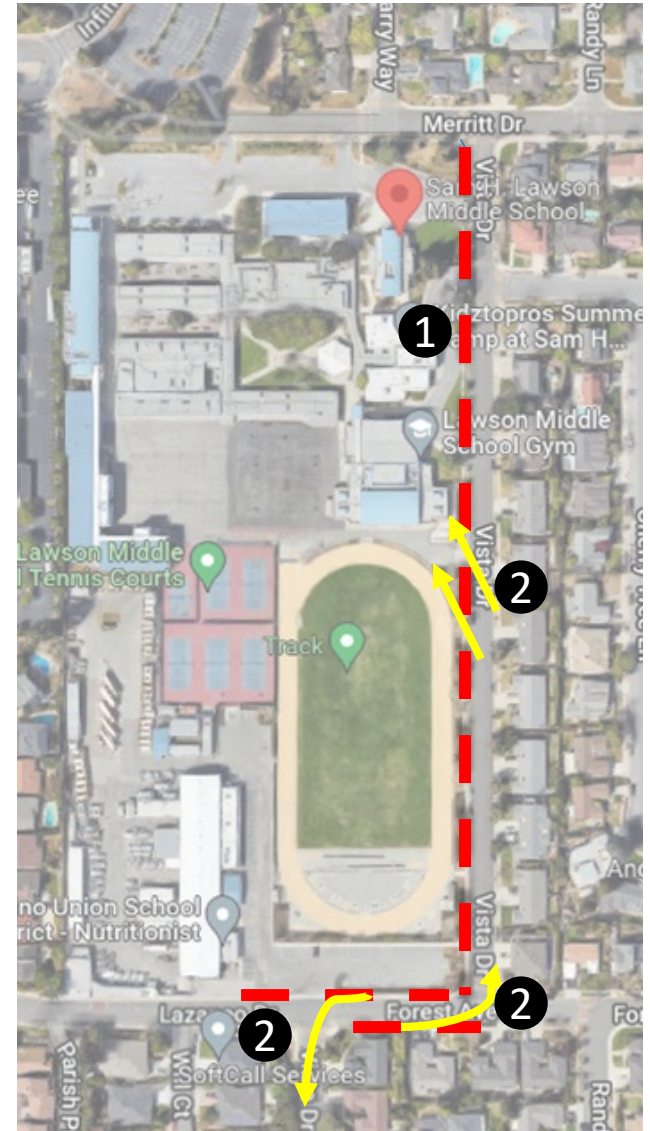
Purpose of this Study

Accommodate the growing number of cyclists
and keep all road users safe
by providing a safe route to access bike cages
on campus, while minimizing impacts to the
neighborhood

Observed Conflict Areas

- 1 Peds and bikes sharing the sidewalk
- 2 Bicycles making wide turns, weaving across vehicles to cross

-  Bikes observed on sidewalk
-  Path of bike travel on street





Data Collection Findings



- **Vehicles**

- Low volumes (<200 vehs/hr each direction) on adjacent streets




- **Pedestrian**

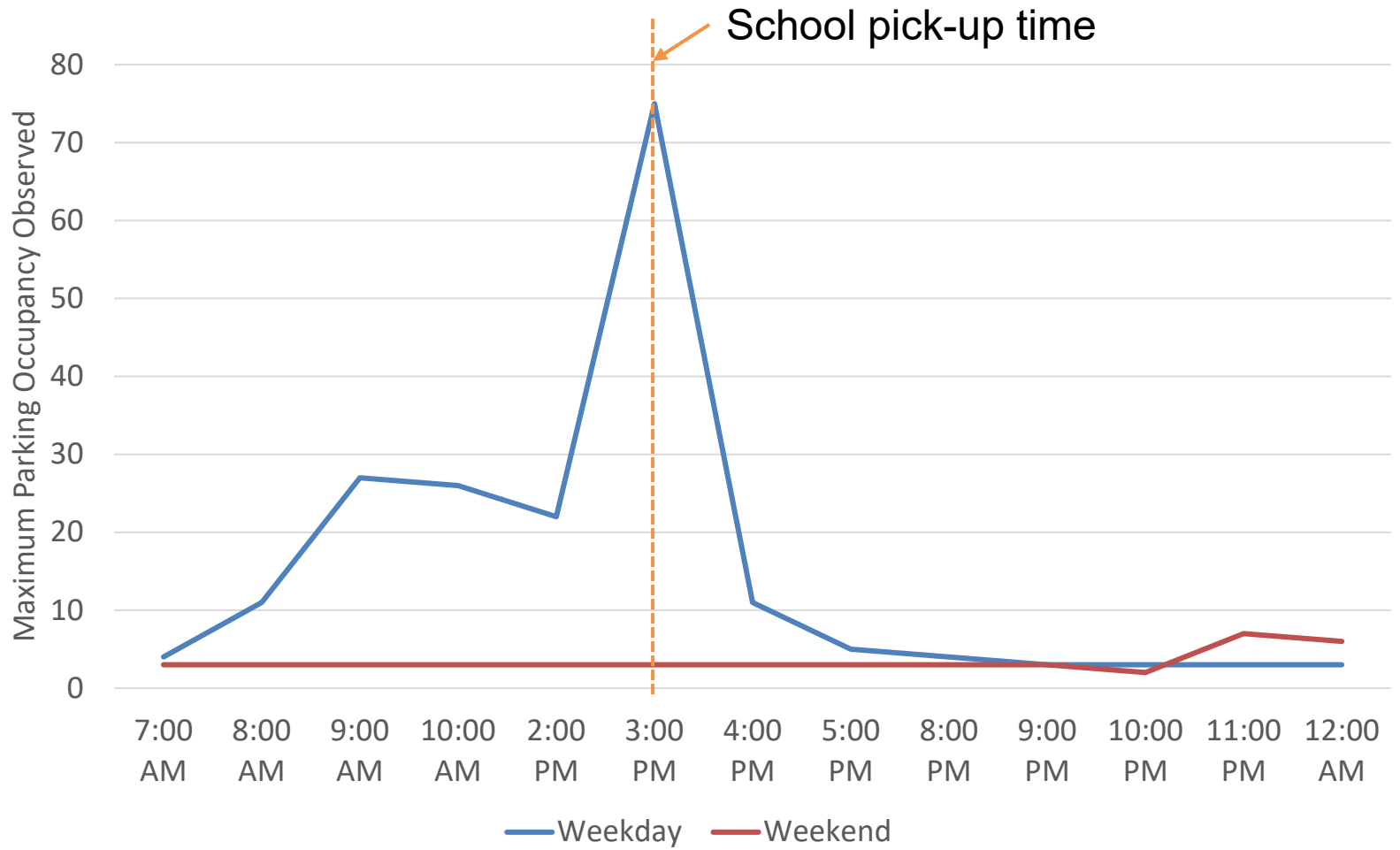
- High ped volumes (>100) south and north of the bike cage



- **Bikes**






- High bike volumes (>30) south of Vista bike cage
 - Low bike volumes (<10) north of Vista bike cage
- 

Time of Day On-Street Parking Analysis- Vista Drive










Vista Dr Parking Counts

- 
- **Hexagon Counts**
 - 20 spaces were observed to be unoccupied in the school parking lot
 - 75 maximum parked cars observed on weekday
 - **Neighbor Counts**
 - On average, 25 – 30 parked cars observed on weekdays and 10 – 15 parked cars observed on weekends
 - Greater than 40 parked cars observed on six weekdays
 - 84 maximum parked cars observed on one weekday at 6 PM
- 
- 
- 
- 



Alternatives Analysis

- 
- 
- 
- 
- 
- The 2 preferred alternatives are based on:
 - Data collection and analysis
 - Community and stakeholder input
 - Options considered but eliminated since they don't adequately address safety concerns:
 - Bike route and sharrows signage and pavement markings
 - No change

Alternative A

Two-way Mixed-Use Trail To Replace Existing Sidewalk

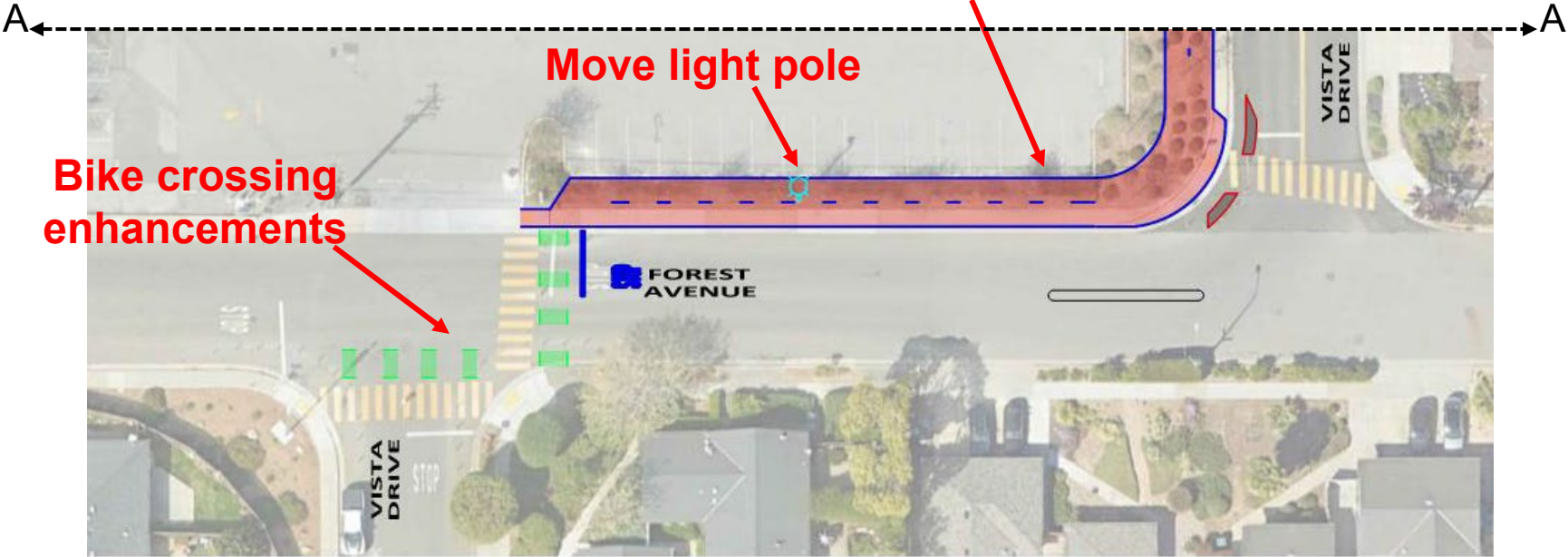
- Design Features
 - 14', two-way, continuous, mixed-use trail
 - Bike crossing enhancements at intersections
 - Wayfinding/Signage



 Bike crossing enhancements

 Two-way Mixed-Use trail

Remove existing sidewalk and landscaping and build 14' multiuse path (10' path + 2' shoulders on each side)





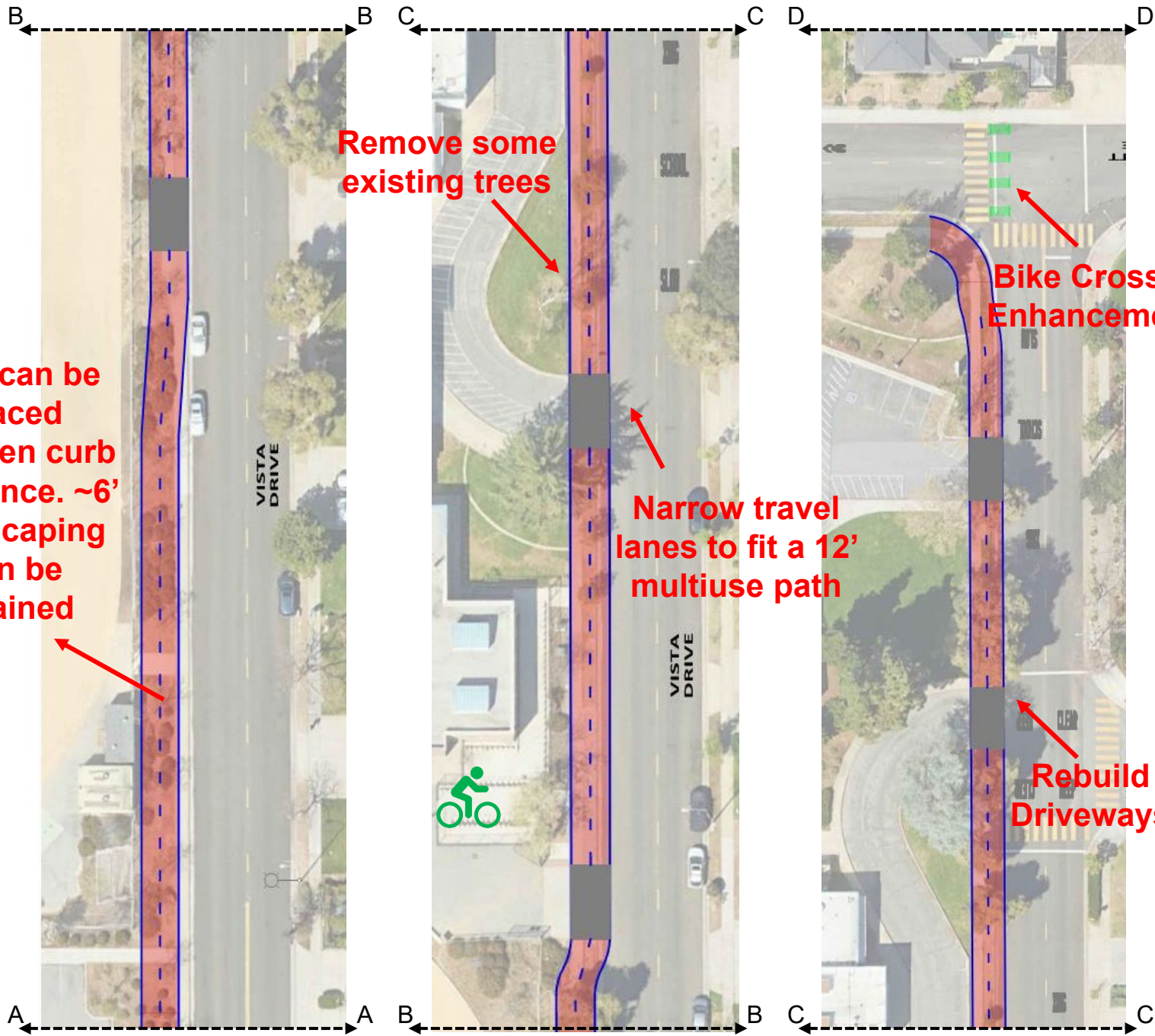
Trail can be placed between curb and fence. ~6' landscaping can be retained

Remove some existing trees

Narrow travel lanes to fit a 12' multiuse path

Bike Crossing Enhancements

Rebuild Driveways



Alternative A

Two-way Mixed-Use Trail To Replace Existing Sidewalk

- **Pros**
 - Get bikes off Vista Dr. and Forest Ave eliminating bike/veh conflicts
 - Wide multi-use trail accommodates bikes and peds
 - Retain parking



Alternative A

Two-way Mixed-Use Trail To Replace Existing Sidewalk

- **Cons**
 - High Cost (approx. \$1.5M)
 - Remove and replant 19 small trees and 9 mature trees
 - Relocate utilities (incl. parking lot light)
 - Rebuild driveways
 - Move curb to narrow lanes



Alternative B

On-street Two-Way Class IV Bike Facility

- Design Features
 - 8' + 3' buffer, two-way, Class IV bike facility
 - Bike crossing enhancements at intersections
 - Wayfinding/Signage



 Bike crossing enhancements

 Class IV Bike Facility



8' two-way class IV bike path with 3' buffer and vertical separation



Bike crossing enhancements

Remove parking on one-side

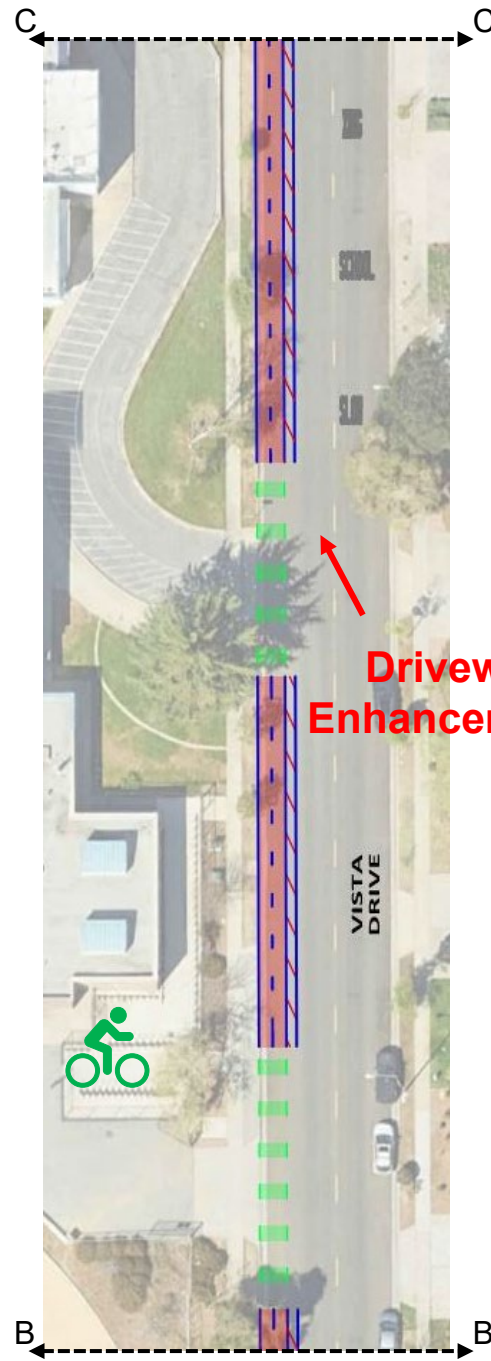




Remove parking on one side



Driveway Enhancements



Bike Crossing Enhancements



Alternative B

On-street Two-Way Class IV Bike Facility

- **Pros**
 - Low cost (approx. \$115K)
 - Eliminates bike/veh and bike/ped conflicts
 - Does not require removal of trees/relocating utilities



 Bike crossing enhancements

 Class IV Bike Facility

Alternative B

On-street Two-Way Class IV Bike Facility

- **Cons**
 - Removal of Parking
 - West side of Vista Dr:
Approx 51 spaces
 - North side of Forest Ave:
Approx 8 spaces



 Bike crossing enhancements

 Class IV Bike Facility

Alternatives Recap

Alt A: Two-way Mixed-Use Trail To Replace Existing Sidewalk

Alt B: On-street Two-Way Class IV Bike Facility

Characteristics	Alt A	Alt B
Addresses bike/ped/veh conflicts	Yes	Yes
Relocate utilities	Yes	None
Remove trees (small and mature)	28	None
Remove on-street parking spaces	None	59
Cost to implement	~\$1.5M	~\$0.12M



Community Outreach

- Conducted 3 community meetings
 - Approximately 30 attendees at each meeting including Lawson students, parents, and neighbors
 - Interactive polling
 - Survey
- Conducted a meeting with CUSD and School Staff
 - Generally supportive of the study's direction and the alternatives.

What we've heard

- Lawson neighbors generally prefer the two-way mixed-use trail to replace existing sidewalk (Alternative A)
- Lawson school parents and students generally prefer the on-street two-way class IV bike facility (Alternative B)

Community Meeting Poll Results

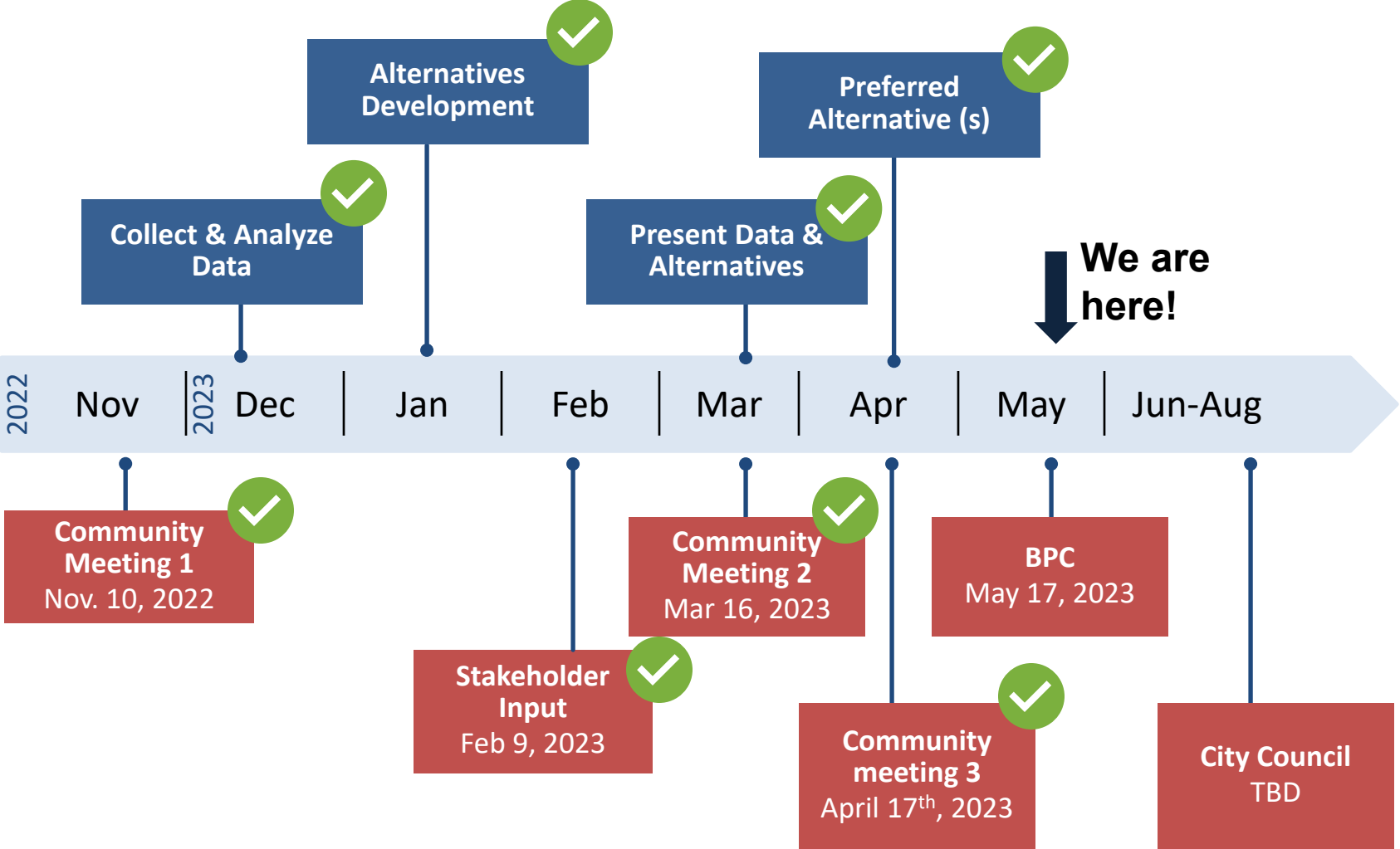
Poll Questions	Alt A	Alt B
Preferred Alternative	37%	63%
Oppose Alternative	52%	34%

Online Survey Results

- 30 survey responses

Poll Questions	Alt A	Alt B
Preferred Alternative	7%	87%
Oppose Alternative	80%	7%

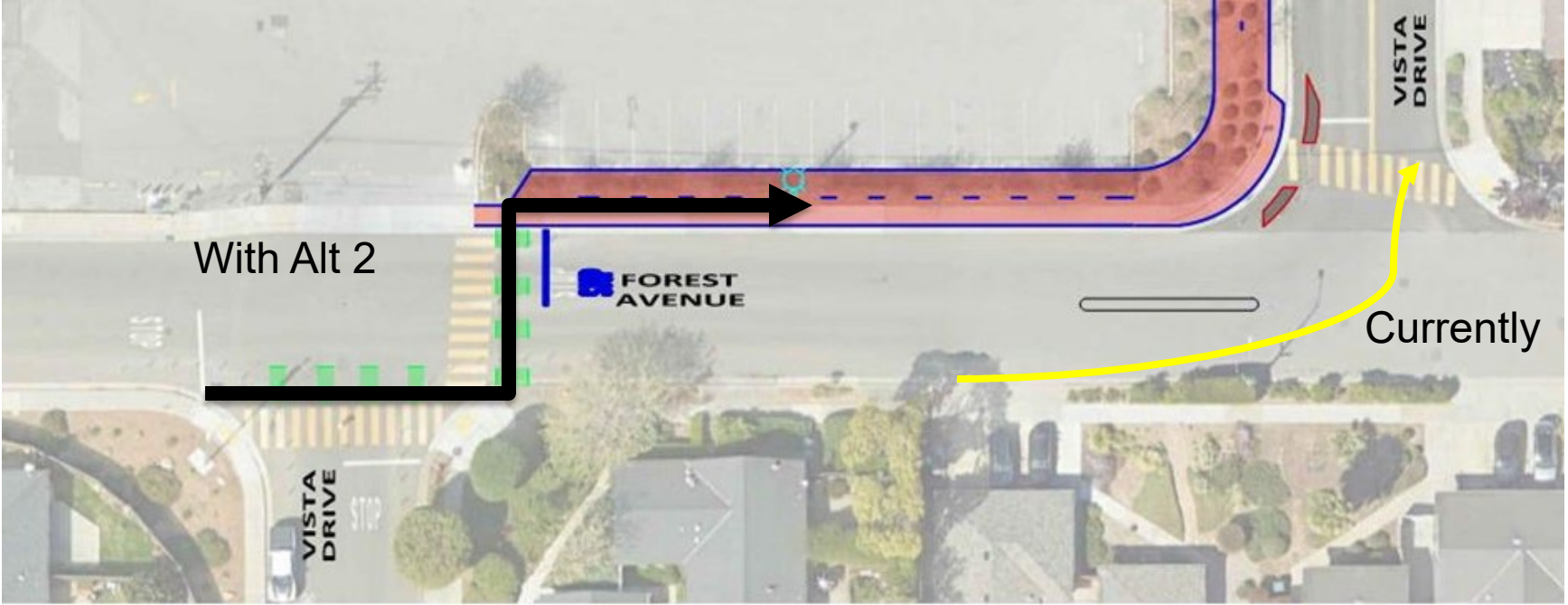
Study Process/Timeline





Staff Recommendation

Bicycle Pedestrian Commission recommend a preferred alternative for further development by staff and Council consideration



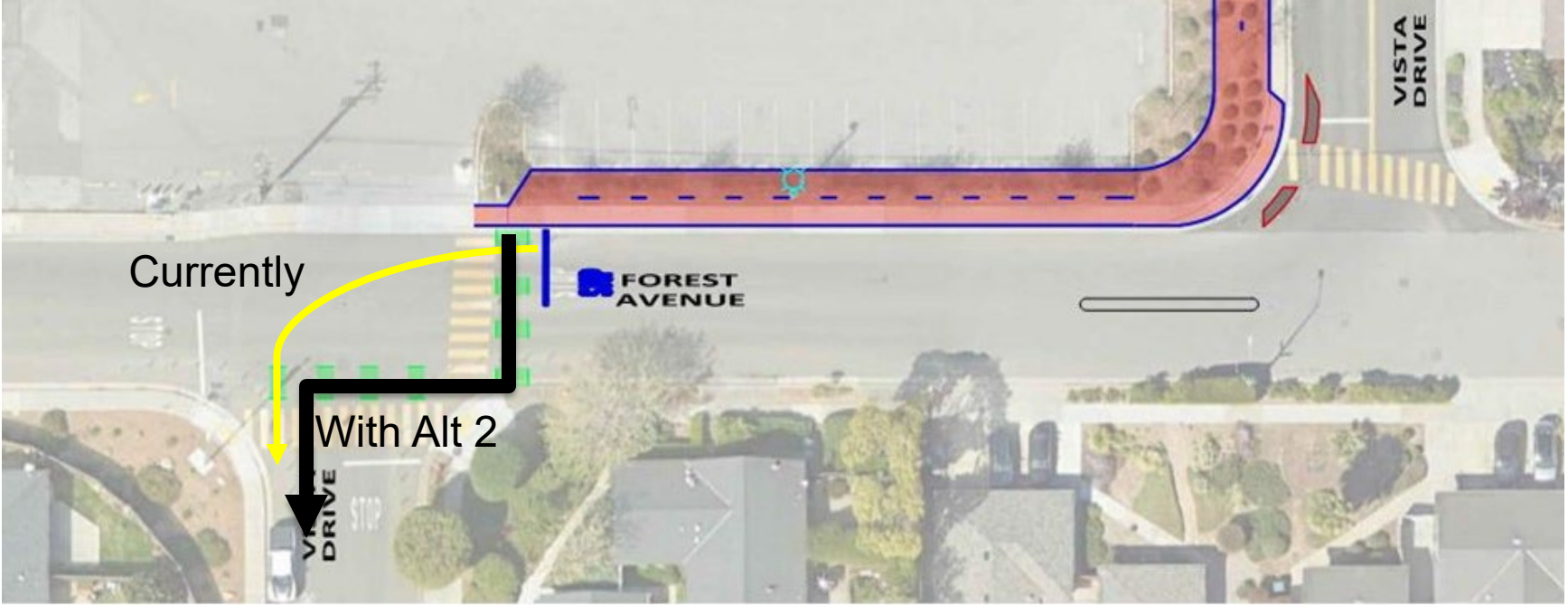
With Alt 2

FOREST AVENUE

Currently

VISTA DRIVE

VISTA DRIVE



Two-way bikeway



Redwood Middle School, Palo Alto

Bicycle Pedestrian Commission
Agenda Item #3
May 17, 2023



Multiuse path



Cupertino High School, Cupertino

