



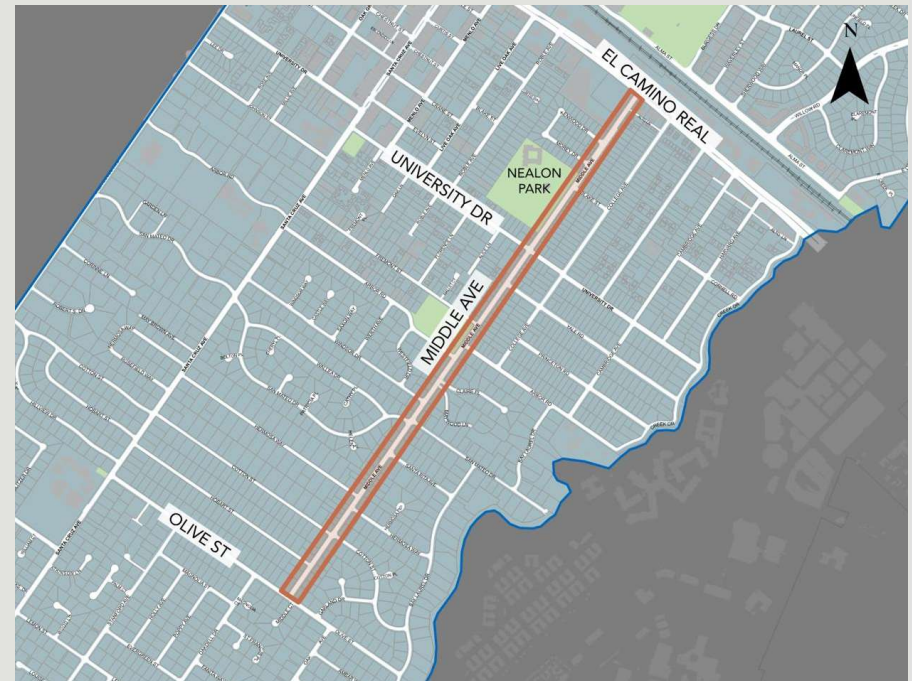
RECOMMENDATIONS ON MIDDLE AVENUE COMPLETE STREETS PROJECT

May 7, 2024



AGENDA

- Project goals
- Background
- Project summary
- Data collection summary
- Recommendations
- Other considerations
- Project schedules





PROJECT GOALS

- Enhance bicyclist and pedestrian visibility and improve safety of all users
- Provide safe and comfortable cycling and pedestrian infrastructure and encourage sustainable mode of transportation
- Increase accessibility of the corridor by supporting improvements related to Middle Plaza and ongoing study of the grade-separated pedestrian and bicycle crossing





BACKGROUND

- March 3, 2022 – Conducted community kick-off meeting
- Oct. 18, 2022 – City Council approved traffic calming measures
- Feb. 14, 2023 – City Council approved the bike lane pilot
- Oct. 2023 – Installed buffer bike lane pilot





PROJECT SUMMARY - BUFFER BIKE LANE PILOT



- Olive St. to El Camino Real



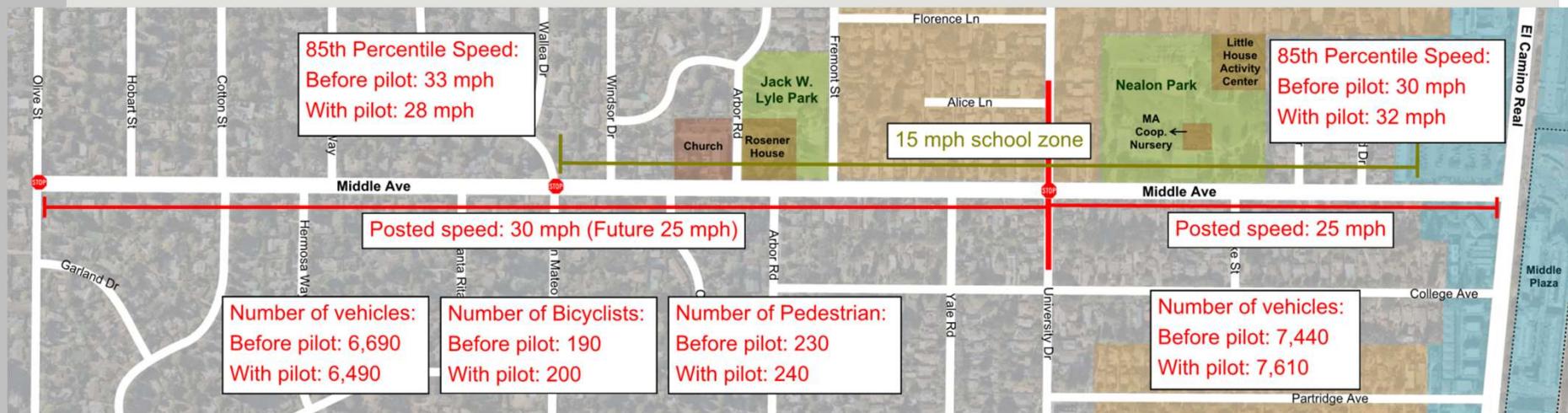


PROJECT SUMMARY – TRAFFIC CALMING MEASURES





DATA COLLECTION SUMMARY – VOLUMES AND SPEEDS



Before pilot data collection: February to April 2023
 With pilot data: March 2024



DATA COLLECTION SUMMARY - COLLISIONS



Before pilot (Oct. 2020 - Sept. 2023)



After pilot (Oct. 2023 - current)



- No. of collisions w/ other vehicles
- No. of collisions w/ Ped/Bike
- R-2 or R-3 Apartment District
- SP-ECR D Downtown Specific Plan

All collisions had no or minor injuries. All pedestrian/bicyclist collisions had minor injuries.



DATA COLLECTION SUMMARY - PARKING OCCUPANCY



#% Maximum percent parking occupancy over several observed dates/times

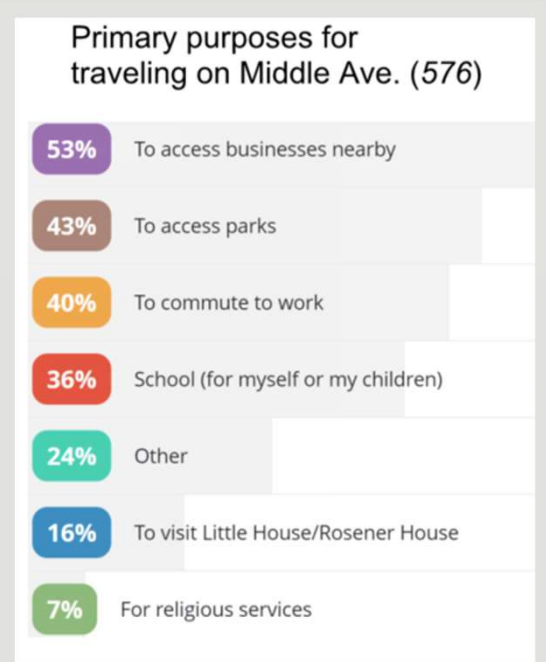
Data collection period: March/April 2024



DATA COLLECTION SUMMARY - PUBLIC SURVEY



- Drivers: Nearly 90% indicated no change to their driving patterns.
- Parking experience: 29% had no trouble finding parking, 38% had trouble finding parking, and 33% had not tried to park on Middle Avenue.
- Bikers: 60% felt safer, 26% felt no change, and 14% felt less safe
- Pedestrians: 36% felt safer, 50% felt no change, and 14% felt less safe





RECOMMENDATIONS – OLIVE ST. TO UNIVERSITY DR.



- Permanent buffered bike lanes - no parking zone on both sides



- Arbor Rd. reached ≥ 95 percent parking occupancy on Sundays
- Maximum parking occupancy on other cross streets (i.e., Westfield Drive, Fremont Street and Windsor Drive): ≤ 50 percent



RECOMMENDATIONS - UNIVERSITY DR. TO ECR

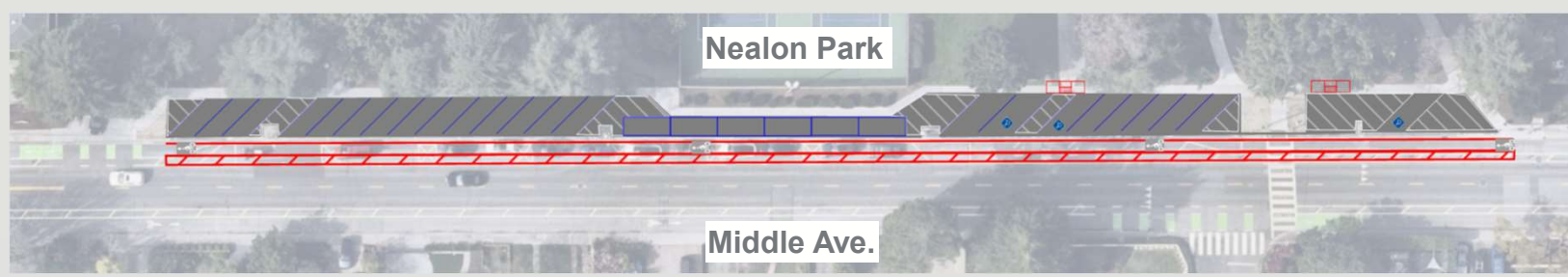


- Pilot Nealon Park frontage: back-in angle parking, shift buffered bike lanes (fall 2024)
- Permanent buffered bike lanes - no parking zone on both sides





RECOMMENDATIONS - UNIVERSITY DR. TO ECR



- Alleviate Nealon Park parking lot and frontage parking demand (i.e., occupancy reached ≥ 95 percent)
- Improve children loading/unloading conditions for park users and nursery families
- Improve sight visibilities

Nealon Park frontage parking inventory		
Parking configuration	Total regular spaces	Total accessible spaces
Perpendicular parking (Pre-pilot)	46	3
Parallel parking (current configuration)	14	3
Back-in angle parking (proposed configuration)	26	3



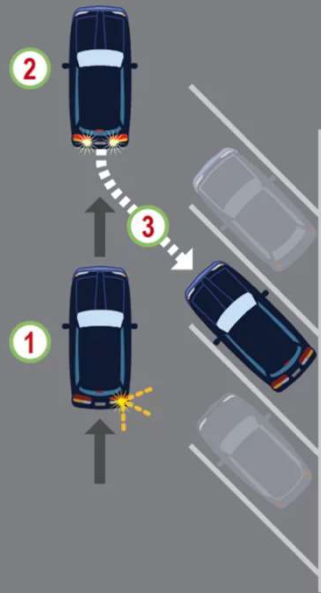
RECOMMENDATIONS – BACK IN ANGLE PARKING



How does it work?

Just like parallel parking:

1. Signal a right turn to warn other drivers.
2. Pull past the parking spot and stop.
3. Reverse into the parking spot.



Stanford Ave.








OTHER CONSIDERATIONS - NEALON PARK PARKING LOT



Existing: 26 diagonal spaces
Proposed: 37 perpendicular spaces

Legends:

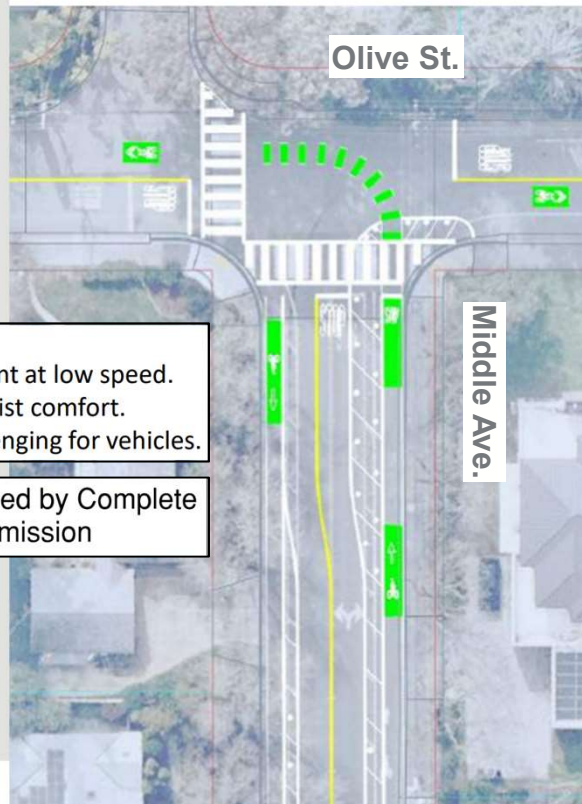
-  Existing asphalt path
-  Existing concrete path
-  Proposed parking layout / path





OTHER CONSIDERATIONS - AT OLIVE ST.

Option A: Protected Intersection

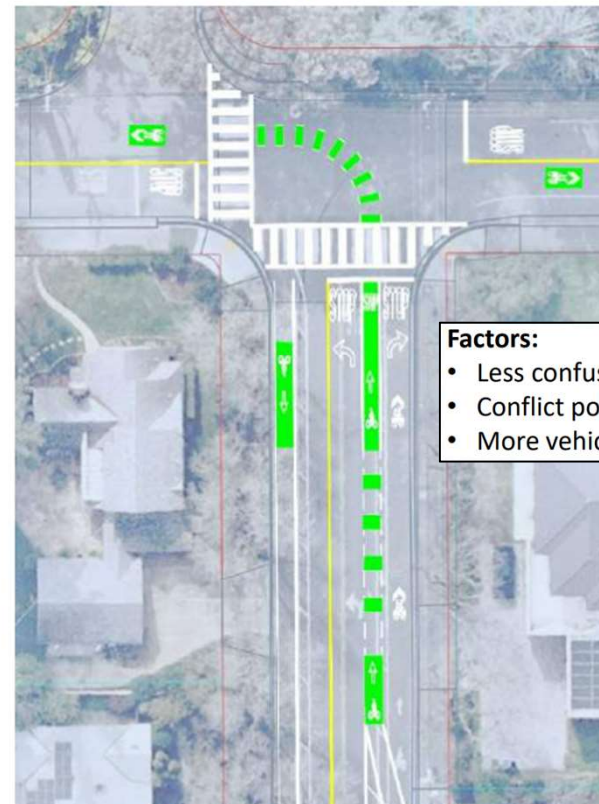


Factors:

- Conflict point at low speed.
- More bicyclist comfort.
- More challenging for vehicles.

Recommended by Complete Streets Commission

Option B: Bend Out + Right Turn Pocket

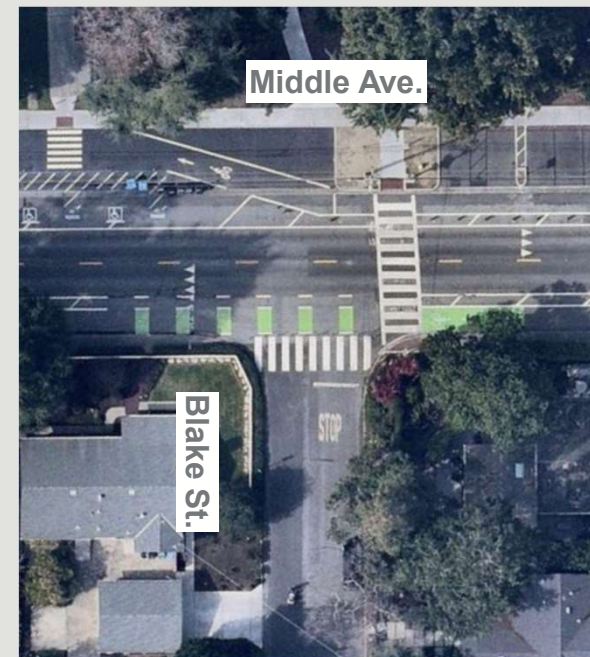


Factors:

- Less confusion at stop sign.
- Conflict point at higher speed.
- More vehicle capacity.



OTHER CONSIDERATIONS - CROSSING SAFETY / CIRCULATION



- Continue to monitor



PROJECT SCHEDULES

- May 7: City Council actions

Trial (e.g., Nealon Park parking lot / frontage parking)

- Design: summer 2024
- Construction: fall/winter 2024

Permanent (e.g., buffer bike lanes, traffic calming, resurfacing)

- Design: fall/winter 2024
- Construction: summer 2025



THANK YOU