REGULAR MEETING AGENDA

Date: 7/13/2022
Time: 7:00 p.m.
Location: Zoom.us/join – ID# 845 2506 8381

NOVEL CORONAVIRUS, COVID-19, EMERGENCY ADVISORY NOTICE
Consistent with Government Code section 54953(e), and in light of the declared state of emergency, and maximize public safety while still maintaining transparency and public access, members of the public can listen to the meeting and participate using the following methods.

- How to participate in the meeting
  - Access the meeting real-time online at: Zoom.us/join – Meeting ID 845 2506 8381
  - Access the meeting real-time via telephone at: (669) 900-6833
    Meeting ID 845 2506 8381
    Press *9 to raise hand to speak

Subject to Change: Given the current public health emergency and the rapidly evolving federal, state, county and local orders, the format of this meeting may be altered or the meeting may be canceled. You may check on the status of the meeting by visiting the City’s website www.menlopark.org. The instructions for logging on to the Zoom webinar and/or the access code is subject to change. If you have difficulty accessing the Zoom webinar, please check the latest online edition of the posted agenda for updated information (menlopark.org/agenda).

Regular Meeting (Zoom.us/join – ID# 845 2506 8381)

A. Call To Order
B. Roll Call
C. Reports and Announcements
   Under “Reports and Announcements,” staff and Commission members may communicate general information of interest regarding matters within the jurisdiction of the Commission. No Commission discussion or action can occur on any of the presented items.
D. Public Comment
   Under “Public Comment,” the public may address the Commission on any subject not listed on the agenda. Each speaker may address the Commission once under public comment for a limit of three minutes. Please clearly state your name and address or political jurisdiction in which you live. The Commission cannot act on items not listed on the agenda and, therefore, the Commission cannot respond to non-agenda issues brought up under public comment other than to provide general information.
E. **Regular Business**

E1. Accept the Complete Streets Commission minutes for June 8, 2022 (Attachment)

E2. Recommend preferred conceptual designs for Middle Avenue to the City Council (Staff Report #22-010-CSC)

E3. Recommend to City Council a new Complete Streets Commission meeting start time

E4. Evaluate commission subcommittees to support City Council priorities

F. **Informational Items**

F1. Update on major project status

G. **Committee/Subcommittee Reports**

G1. Update from Downtown Access and Parking Subcommittee (Altman Behroozi Cole)

G2. Update from Multimodal Metrics Subcommittee (Altman Behroozi)

G3. Update from Safe Routes to School Program Subcommittee (Behroozi Cebrian King)

G4. Update from Transportation Master Plan Implementation Subcommittee (Altman Behroozi Cebrian)

G5. Update from Zero Emission Subcommittee (Jensen)

H. **Adjournment**

At every Regular Meeting of the Commission, in addition to the Public Comment period where the public shall have the right to address the Commission on any matters of public interest not listed on the agenda, members of the public have the right to directly address the Commission on any item listed on the agenda at a time designated by the Chair, either before or during the Commission’s consideration of the item.

At every Special Meeting of the Commission, members of the public have the right to directly address the Commission on any item listed on the agenda at a time designated by the Chair, either before or during consideration of the item.

For appeal hearings, appellant and applicant shall each have 10 minutes for presentations.

If you challenge any of the items listed on this agenda in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the City of Menlo Park at, or prior to, the public hearing.

Any writing that is distributed to a majority of the City Council by any person in connection with an agenda item is a public record (subject to any exemption under the Public Records Act) and is available by request by emailing the city clerk at jaherren@menlopark.org. Persons with disabilities, who require auxiliary aids or services in attending or participating in City Council meetings, may call the City Clerk’s Office at 650-330-6620.

Agendas are posted in accordance with Government Code §54954.2(a) or §54956. Members of the public can view electronic agendas and staff reports by accessing the City website at menlopark.org/agenda and can receive email notification of agenda and staff report postings by subscribing to the “Notify Me” service at menlopark.org/notifyme. Agendas and staff reports may also be obtained by contacting City Clerk at 650-330-6620. (Posted: 7/7/2022)
A. Call To Order

Chair Cole called the meeting to order at 7:02 p.m.

B. Roll Call

Present: Behroozi, Cebrian, Cole, Jensen, King, Kollmann
Absent: Altman
Staff: Acting Planning Manager Kyle Perata, Assistant Public Works Director – Transportation Hugh Louch, Engineering Technician Patrick Palmer, Senior Transportation Engineer Kevin Chen
Others: Hart Howerton Eric Morley and Hart Howerton Eron Ashley

C. Reports and Announcements

Staff Chen reported on City Council actions related to transportation since the May 11, 2022 Commission meeting.

D. Public Comment

- Jean Baronas spoke in support of a new signal at the intersection of Sharon Road and Sharon Park Drive.

E. Regular Business

E1. Accept the Complete Streets Commission minutes for May 11, 2022 (Attachment)

ACTION: Motion and second (Cebrian/ King), to accept the Complete Streets Commission minutes for May 11, 2021, including Commission feedback summary verbiage under item E2. with: 1) “…distance to nearest cross street…” to the first bullet and, 2) “…Blake Street…” to the second bullet, passed 5-0 (Jensen abstaining and Altman absent).

E2. Review and recommendation of General Plan Circulation Element and Zoning Map amendments to modify site access and circulation for the proposed Willow Village master plan project (Staff Report #22-009-CSC)

Staff Perata and the Hart Howerton team representatives Morley and Ashley made presentations (Attachment).

The Commission discussed and provided the following feedback:
- Re-examine Park Street and Main Street configurations (e.g., 4-lane roadway) for traffic flow efficiency, slower vehicular speed, and safety.
- Re-examine project site access and turning lanes on Willow Road for traffic flow efficiency and...
• Improve crossings on Willow Road to project site for pedestrians and bicyclists.
• Improve bicycle access on the west side of Main Street.
• Reduce vehicular lane widths where feasible (e.g., Main Street).
• Explore additional bicycle facilities where feasible (e.g., Main Street and West Street).
• Explore relinquishment of Willow Road from Caltrans.

**ACTION:** Motion and second (Cebrian/ King), to approve the general plan circulation element and zoning map amendments and to advise staff and applicant to continue to improve on-site circulation to prioritize pedestrian and bicycle safety as discussed, passed 5-1 (Behroozi dissenting and Altman absent).

**E3. Selection of vice chair**

Staff Chen introduced the item.

**ACTION:** Motion and second (Behroozi/ King), to select Jacquie Cebrian as vice chair, passed unanimously.

**E4. Evaluate commission subcommittees to support City Council priorities**

Staff Chen made a presentation (Attachment).

The Commission discussed subcommittees’ roles, responsibilities and possible overlapping duties.

**ACTION:** Motion and second (Cole/ Jensen), to sunset the Climate Action Plan and Multimodal subcommittees, passed 5-0 (Altman absent).

**F. Informational Items**

**F1. Update on major project status**

Staff Chen provided updates on the County’s Ringwood Avenue/ Coleman Avenue transportation study and the Menlo Park Community Campus parking management plan.

**G. Committee/Subcommittee Reports**

**G1. Update from Climate Action Plan Subcommittee**

None.

**G2. Update from Downtown Access and Parking Subcommittee**

None.

**G3. Update from Multimodal Metrics Subcommittee**

None.

**G4. Update from Multimodal Subcommittee**
Complete Streets Commission Regular Meeting Minutes – DRAFT
June 8, 2022
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None.

G5. Update from Safe Routes to School Program Subcommittee
    None.

G6. Update from Transportation Master Plan Implementation Subcommittee
    None.

G7. Update from Zero Emission Subcommittee
    None.

H. Adjournment
    Chair Cole adjourned the meeting at 9:57 p.m.

    Kevin Chen, Senior Transportation Engineer
RECOMMENDED MEETING FORMAT

▪ Meeting agenda:
  – Staff overview and presentation
  – Applicant presentation
  – Public comment
  – Commissioner discussion and recommendation

▪ Recommendation:
  – Recommend approval of applicant’s requested site access and modified site circulation associated with General Plan Circulation Element and Zoning Map Amendments for the proposed project
WILLOW VILLAGE PROJECT LOCATION

Hamilton Ave Parcels

Main project site
MAIN PROJECT SITE CIRCULATION

CURRENT GENERAL PLAN

PROPOSED MASTER PLAN

LEGEND:
- Street Traffic
- Mixed Use Collector
- Mixed Use Arterial
- Mixed Use Collector
- Local Arterial Collector
- Local Arterial
- Multi-use Pathway / Access
- Parking / Spectrum
Potential street classifications within project site:
- Mixed-use collector
- Neighborhood collector
- Main Street
- Local streets

Table 1 of Circulation Element
- Detailed street classifications

Table 1 of staff report
- Provides staff’s preliminary analysis of proposed streets
- Staff continues to evaluate proposed circulation network
  • Ensure pedestrian and bicycle circulation prioritized
COMPLETE STREETS COMMISSION REVIEW

- Review and recommend approval of proposed site access and circulation
  - Comparable circulation to adopted Circulation Element and Zoning Map provided by proposed plan
  - Circulation will continue to be evaluated and refined through project entitlement process
    • Staff evaluating proposed street designs for bicycle and pedestrian circulation
  - Provide any additional recommendations for staff and the applicant to consider when evaluating the proposed site access and circulation
THANK YOU
LEGEND

- Multi-Use Pathway
- Elevated Park Multi-Use Pathway
- Existing Class II Bikeway
- Class IV Bikeway
- Subgrade Class IV Bikeway
- Class III Bikeway
- On-Street Bike Circulation
- Suggested Bike Routes*
- Potential Future Connection
- Furnishing Zone
- Transit Hub

*Information Source:
- Menlo Park Comprehensive Bicycle Development Plan, City of Menlo Park, 2005
- San Mateo Bike Map Southeast Booklet, City/County Association of Governments of San Mateo County

Proposed primary bike route is conceptual and may be subject to change.

Refer to Appendix 4 for parcel-by-parcel details on short and long term bike parking.

BICYCLE PARKING REQUIREMENT PER ZONING

<table>
<thead>
<tr>
<th>Land Use Development</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,600,000 sf</td>
</tr>
<tr>
<td>Office</td>
<td>20% of</td>
</tr>
<tr>
<td></td>
<td>1.0/5,000sf</td>
</tr>
<tr>
<td>Short-Term</td>
<td>133 spaces</td>
</tr>
<tr>
<td>Long-Term</td>
<td>340 spaces</td>
</tr>
</tbody>
</table>

Note: Bicycle parking depicted is illustrative and may be subject to change, but will remain compliant with Parking Requirements per Zoning and CDP Standards.

WILLOW VILLAGE
Menlo Park, CA

May 17, 2022
Conditional Development Permit

Conceptual Bicycle Circulation Plan
G4.11
Page E-1.17
LEGEND

- Existing Pedestrian Circulation
- Pedestrian Circulation
- Subgrade Pedestrian Circulation
- Elevated Park Pedestrian Circulation
- Internal Campus Pedestrian Circulation
- Potential Future Connection
- Multi-Use Pathway
- Elevated Park Multi-Use Pathway
- Furnishing Zone
- Elevated Park Access (Publicly Accessible)
- Secure Campus Entry
- Transit Hub

Note:
• Proposed primary pedestrian is conceptual and may be subject to change.
• Refer to Appendix 4 for parcel-by-parcel details on short and long term bike parking.

WILLOW VILLAGE
Menlo Park, CA

Peninsula Innovation Partners
Conditional Development Permit

Conceptual Pedestrian Circulation Plan
May 17, 2022
Page E-1.18
WILLOW VILLAGE
Menlo Park, CA

Illustrative Elevated Park
June 8, 2022

Peninsula Innovation Partners
CONCRETE MULTI-USE PATHWAY (COLOR TBD)
CONCRETE CURB
ASPHALT
FURNISHING ZONE & BENCHES
(SEE TYPICAL DETAIL ON G4.10)

STREET POLE LIGHT, TYP.

RETAINING WALL AND FENCE

PLANTING AREA OR BIOTREATMENT AREAS WITH PLANTING & LOW DECORATIVE RAIL, TYP.

EAST LOOP ROAD

10'-0"
5'-6"
11'-6"
12'
12'
12'
6'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.
Thank You
MISSION STATEMENT

- The Complete Streets Commission shall advise the City Council on realizing the City's adopted goals for Complete Streets, Vision Zero, Climate Action Plan, and provide input on major land use and development projects as it relates to transportation.
1. To advance the goals of the city’s newly adopted Climate Action plan by making alternatives to driving safer and more attractive, namely by:
   - Reviewing the city’s Transportation Master Plan (TMP) and recommending the projects most likely to reduce Vehicle Miles Traveled (VMT)
   - Providing input on major development projects such as the Menlo Park Community Campus, by looking at them through the lens of transportation accessibility, especially bicycle/pedestrian/public transportation accessibility

2. Advise City Council on the implementation of the TMP:
   - Evaluate the current process and procedure of the neighborhood traffic management program (TMP Project #165)
GOALS / PRIORITIES

3. Continue to advocate for and advise the Council on the planning and installation of the Middle Avenue pedestrian and bicycle rail crossing, and safe cycling/pedestrian infrastructure connecting the Burgess complex to the Middle Avenue corridor to Olive Street, and north on Olive Street to Hillview Middle School.

4. Continue to support Council in ongoing initiatives to improve access to Downtown and support downtown businesses.
5. Continue to support the implementation of the Safe Routes to School strategy and advocate for community engagement, program continuity and engineering implementation:
   - Evaluate the current state of the safe routes to school program

6. Continue to support City Council’s role as a stakeholder with regard to regional multimodal and transportation demand management programs projects to increase sustainable transportation for Menlo Park.
SUBCOMMITTEES (MEMBERS)

- Climate Action Plan (none)
- Downtown Access and Parking (Altman/Behroozi/Cole)
- Multimodal Metrics (Altman/Behroozi)
- Multimodal (Cebrian)
- Safe Routes to School Program (Behroozi/Cebrian/King)
- TMP Implementation (Altman/Behroozi/Cebrian)
- Zero Emission (Jensen)
Recommendation
Staff recommends that the Complete Streets Commission recommend preferred design concepts for Middle Avenue to the City Council.

Policy Issues
This project is consistent with the policies and programs stated in the 2016 General Plan Circulation Element (e.g., CIRC-1.7, CIRC-1.8, CIRC-2.7, etc.). These policies seek to maintain a safe, efficient, attractive, user-friendly circulation system that promotes a healthy, safe and active community and quality of life throughout Menlo Park.

This project is a 2021 City Council priority, which continue to be used in 2022.

Implementation of bicycle facilities on Middle Avenue between El Camino Real and University Drive fulfill “Mitigation Measure TRA-2.1” of the Mitigation Monitoring and Reporting Program (MMRP) established in the 500 El Camino Real Project Final Environmental Impact Report (FEIR) approved in 2017.

Background
Middle Avenue is an important part of the transportation network in the City of Menlo Park as it fronts Safeway Plaza, Nealon and Lyle Parks, senior centers, preschool and other community amenities. Children on bicycle use Middle Avenue as a route to Hillview Middle School and Oak Knoll Elementary School while others use it to the bicycle bridge at the south end of San Mateo Drive to reach Stanford University. Middle Avenue is currently a Class III bicycle route for shared use with vehicles. Removal of parking on one or both sides of the street would be required to establish Class II bicycle lanes.

In anticipation of the completion of Middle Plaza at 500 El Camino Real, the City Council had directed staff to study the traffic calming options along Middle Avenue with the following project goals:
- Enhance bicyclist and pedestrian visibility and improve safety of all street 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

On March 3, 2022, City staff held in-person and virtual public meetings to inform residents about the project and gather feedback from the community to shape potential bicycle improvements and traffic calming options. Additional comments on current issues, needs, and priorities for the corridor were captured through
online public surveys on the project website.

On May 11, 2022, City staff presented to the Complete Streets Commission a summary of community feedback received at the public meetings and online surveys. Overall, the majority of the community supported a removal of parking from at least one side of the street and having traffic calming measures to address concerns around safety of pedestrians and bicyclists. A hyperlink to the staff report from that meeting is included as Attachment A.

Following the presentation, staff were requested to consider design options on the following topics:

- **Bicycle facility and parking**
  - Present two bicycle lane/parking removal options- one with parking removed on one side and one with parking removed on both sides
  - Examine property lot size, driveway capacity, distance to school, and distance to nearest cross street

- **Traffic Calming measures**
  - Explore multiple traffic calming measures at El Camino Real, Blake Street, University Drive, Arbor Road, San Mateo Drive, and Olive Street

- **Others**
  - Conduct a parking demand evaluation at Nealon Park and propose frontage parking configuration alternatives
  - Explore the possibility of eliminating westbound right turn lanes on Middle Avenue at University Drive and Olive Street to improve pedestrian and bicycle safety
  - Evaluate feasibility and explore a temporary trial phase in response to residents request to close Blake Street
  - Evaluate circulation from Safeway and gas station driveways near El Camino Real and Middle Avenue

**Analysis**

Based on the feedback from the CSC and the public, staff developed design options within three areas:

- Bikeway facility design
- Intersection design at major intersections (El Camino Real, University Drive, and Olive Street)
- Traffic calming treatments along the corridor

Because a portion of the corridor (from El Camino Real to University Drive) will be implemented by Stanford University as a part of the Middle Plaza conditions of approval, exhibits for these options generally are split by implementing party (Stanford and the City). For simplicity, the intersection design options are shown as a separate exhibit as these options could be paired with multiple bikeway facility options.

**Bicycle Facility Design**

The CSC directed staff to consider bicycle facilities and removal of parking on one or both sides of Middle Avenue. The CSC also directed staff to consider either removing the parking in front of Nealon Park or converting it to parallel parking. During the public outreach phase of the project, the parking in front of Nealon Park was closed to install sidewalks in front of the park. The temporary closure did not result in parking challenges on either weekday evenings or weekends (Attachment B).

The potential to remove parking in front of Nealon Park creates an opportunity to place a portion of the
proposed bikeway in the space currently used by parking. In exploring this idea, staff identified three alternatives for bicycle lanes along Middle Avenue (Attachment C):

- **Option 1:** Class II bike lanes with a small buffer (approximately 2’ on each side). Parking would be preserved on the south side of Middle Avenue.
- **Option 2:** Class II bike lanes with a larger buffer (approximately 4’ on each side). Parking would be removed from both sides of the street.
- **Option 3:** Class IV separated bikeway on the north side of the street. Parking would be preserved on the south side of Middle Avenue, or a Class II bike lane (without a buffer) could be retained in the eastbound direction instead of the parking. This option was only evaluated for the El Camino Real to University Drive segment.

For all three concepts, a portion of the bicycle facility near Nealon Park could be placed within the space currently used for parking. As a result, some parallel parking would be provided on the street side of the bicycle facility in these locations. Staff has also identified that restriping the parking lot could produce approximately 10 additional parking spaces. All design options would reduce the travel lanes to 10 feet and provide minimum of 5-foot wide bicycle lanes.

The following table summarizes the advantages and disadvantages of each option for consideration:

<table>
<thead>
<tr>
<th>Table 1: Summary of Bicycle Facility Design Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
</tr>
<tr>
<td><strong>Option 1 – remove parking on one side</strong></td>
</tr>
<tr>
<td>• Accommodates bicyclists traveling between neighborhoods, schools, and other common destinations</td>
</tr>
<tr>
<td>• Maintains on-street parking on the south side</td>
</tr>
<tr>
<td>• Retains space for delivery vehicles</td>
</tr>
<tr>
<td><strong>Option 2 – remove parking from both sides</strong></td>
</tr>
<tr>
<td>• Greater distance between vehicles and bicyclists</td>
</tr>
<tr>
<td>• Without parking, risk of “doorin” accidents is eliminated</td>
</tr>
<tr>
<td><strong>Option 3 – separated bikeway – El Camino Real to University Dr.</strong></td>
</tr>
<tr>
<td>• Improves comfort and safety for bicyclists due to separation from traffic and limited conflict points</td>
</tr>
<tr>
<td>• Improves access to and circulation around Nealon Park and community center</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
**Intersection Improvements**

Staff evaluated potential intersection improvements at three locations:

- El Camino Real
- University Drive
- Olive Street

**El Camino Real**

Two issues were evaluated at this intersection – the design of the intersection itself and the potential to update the Safeway and gas station access driveways from Middle Avenue.

Staff were directed to consider a protected intersection at El Camino Real and Middle Avenue. A protected intersection has a distinct path of travel for bicyclists that is separate from the automobile path of travel and is signalized to allow for separated travel movements. Staff has evaluated both a protected intersection, which would likely require removal of one travel lane on each direction of El Camino Real, and an alternate approach of a dedicated intersection, which has some of the features of a protected intersection but does not require bike lanes on all approaches (Attachment D). Staff recommends pursuing a dedicated intersection in the short term, which would have some potential right-of-way impacts, requiring additional design and coordination with Caltrans.

Attachment D also shows existing and proposed vehicle circulation at the Safeway and gas station at the intersection of El Camino Real and Middle Avenue. For the gas station, there are two driveways along El Camino Real and two driveways along Middle Avenue, one of which is technically an access point from Alto Lane. All driveways currently operate without turn restrictions. Staff recommends closing the driveway on Middle Avenue that is closest to the intersection, conditioned on mutual agreement with property owner. Closing this driveway would reduce conflicts between vehicles that access the gas station, vehicles using Middle Avenue and bicyclists while not restricting access for vehicles to the gas station.

For the access to Safeway plaza, staff recommends considering two changes for any of the new bicycle facilities:

1. Right out only at driveway on Middle Avenue
2. Relocate the driveway further down on Middle Avenue

The first change would require drivers traveling northbound on El Camino Real to exit on southbound El Camino Real and make a U-turn at Middle Avenue. The second change would require additional coordination and reconfiguration of parking spaces at the Safeway plaza, without any change in the amount of parking provided at the plaza. Note that staff do not recommend restricting left turns from eastbound Middle Avenue into Safeway plaza because it would require vehicles access Safeway plaza to make a complex movement to access the shopping center from Middle Avenue.

**University Drive and Olive Street**

Staff explored removing the right turn pockets at University Drive and at Olive Street. The CSC also directed staff to consider a roundabout at University Drive. Because the intersection of Middle Avenue and Olive Street is a three-legged intersection with Middle Court slightly offset from the intersection, a roundabout was not considered at this location.

To evaluate removal of the right turn pockets, staff reviewed available data and analysis on intersection options. The most recent analysis for University Drive comes from the near-term and cumulative (2040) scenarios from the Middle Plaza project EIR (Table 2). According to this analysis, removal of right-turn lane would add approximately 4 vehicles to the left/through lane during the PM peak period in the cumulative
scenario. Based on the intersection LOS presented below and the anticipated added volumes, removal of the right turn pocket at University Drive is not expected to generate significant intersection operational deficiencies.

<table>
<thead>
<tr>
<th>Study Scenarios</th>
<th>Intersection LOS</th>
<th>Approach LOS</th>
<th>WB Middle Avenue</th>
<th>95th percentile queue¹</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Left/through lane</td>
<td>Right turn lane</td>
<td></td>
</tr>
<tr>
<td>Near-term (2021) AM</td>
<td>34 sec/veh LOS D</td>
<td>16 sec/veh LOS C</td>
<td>3 vehicles</td>
<td>1 vehicle</td>
</tr>
<tr>
<td>Near-term (2021) PM</td>
<td>24 sec/veh LOS C</td>
<td>25 sec/veh LOS C</td>
<td>7 vehicles</td>
<td>2 vehicles</td>
</tr>
<tr>
<td>Cumulative (2040) AM</td>
<td>49 sec/veh LOS E</td>
<td>18 sec/veh LOS C</td>
<td>4 vehicles</td>
<td>1 vehicle</td>
</tr>
<tr>
<td>Cumulative (2040) PM</td>
<td>58 sec/veh LOS F</td>
<td>49 sec/veh LOS E</td>
<td>11 vehicles</td>
<td>4 vehicles</td>
</tr>
</tbody>
</table>

Source: 500 ECR Environmental Impact Report, approved in 2017
¹ Assumed 1 vehicle in queue = 25'

Staff have not conducted an intersection analysis at Middle Avenue and Olive Street. However, staff did review pedestrian and vehicle volumes at the two locations (Table 3). Vehicle volumes are approximately half as large at Olive Street, while the number of pedestrian crossings are comparable. As a result, eliminating right-turn lane at Olive Street in favor of bulb outs or other pedestrian improvements is not anticipated to generate significant intersection operation deficiencies.

<table>
<thead>
<tr>
<th>Locations</th>
<th>Day/Time</th>
<th>Average Daily Pedestrian Traffic</th>
<th>Average Daily Vehicle Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle Ave / Olive St</td>
<td>Mon-Sun All Day</td>
<td>205</td>
<td>3,840</td>
</tr>
<tr>
<td></td>
<td>Weekday AM</td>
<td>25</td>
<td>848</td>
</tr>
<tr>
<td></td>
<td>Weekday PM</td>
<td>39</td>
<td>1,538</td>
</tr>
<tr>
<td>Middle Ave / University Dr</td>
<td>Mon-Sun All Day</td>
<td>199</td>
<td>7,020</td>
</tr>
<tr>
<td></td>
<td>Weekday AM</td>
<td>39</td>
<td>1,537</td>
</tr>
<tr>
<td></td>
<td>Weekday PM</td>
<td>61</td>
<td>2,582</td>
</tr>
</tbody>
</table>

Source: Streetlight Data from February-March 2022

Staff also evaluated the potential for a mini-roundabout at the intersection of Middle Avenue and University Drive. A mini-roundabout is a generally a small version of a roundabout, designed primarily for residential streets that do not experience large trucks (i.e., trucks tend to be package delivery vehicles) and thus can have a smaller inner circle, consistent with the design of residential streets.

Using the latest national guidance, staff identified that a mini-roundabout is feasible at this intersection (Attachment E). A mini-roundabout has potential benefits and tradeoffs, including:

- Safety benefits from reduced speeds
- Reduced intersection delay due to all-way yield for vehicles
• Reduced crossing distance for pedestrians due to the use of bulb outs and the elimination of separate turn lanes
• Sharing of the travel path by vehicles and bicycles through the roundabout itself, though ramps can be provided to allow less confident bicyclists to use the sidewalk instead

Staff recommends removal of the right turn lanes and requests direction from the CSC on the potential implementation of a mini-roundabout at Middle Avenue and University Drive.

**Traffic Calming Measures**

In addition to bicycle lanes and major intersection treatments, staff explored various traffic calming measures to address concerns raised about vehicle speeds and volumes, pedestrian and bike safety, and accessibility. Attachment F summarizes advantages, disadvantages, and expected cost for each individual traffic calming measures considered by the project. Based on the effectiveness of these measures, Staff selected potential locations (Attachment C) for traffic calming measures with a goal of providing predictable speeds and safer crossing opportunities at key locations (Table 4).

<table>
<thead>
<tr>
<th>Locations</th>
<th>Issues/Challenges</th>
<th>Potential Traffic Calming Measures</th>
</tr>
</thead>
</table>
| Blake Street   | Located across from Nealon Park, high volume of pedestrians and bicyclists crossing street at Blake Street | • Raised crosswalk  
                |                                                                                 | • Flashing beacons*                                                    |
| Arbor Road     | Located across from Lyle Park, church, and preschool                            | • Raised crosswalk  
                |                                                                                 | • Flashing beacons                                                    |
| San Mateo Drive| Road alignment not feasible for traffic circle                                   | • All-way stop signs  
                |                                                                                 | • Left-turn bike pocket  
                |                                                                                 | • Bulb-out/Curb extension on Middle                                      |
| Olive Street   | T-intersection not feasible for traffic circle                                   | • Bulb-out/Curb extension on Middle                                      |

* A rectangular rapid flashing beacon (RRFB) is being installed at this location as part of the Nealon Park sidewalk project

In addition to these specific locations, staff recommends that speed feedback signs be installed in at least 4 locations (two eastbound and two westbound) and that speed tables be installed at up to two additional locations on Middle Avenue. Consistent with feedback from Menlo Fire on other traffic calming projects, staff is recommending the use of raised crosswalks and speed tables (essentially a larger speed hump) instead of speed humps.

The CSC also requested staff to consider adding a continuous sidewalk on the south side of the corridor where it is not currently available. Sidewalk provides many benefits including safety, mobility, and healthier communities. Adding a sidewalk could take place within the City’s right-of-way without moving the existing curb line, but does require adjustments to the street drainage system and utilities, as well as residential driveways, plantings and irrigation, and other changes. Based on the cost estimate from a recent sidewalk installation project, staff estimates that filling sidewalk gaps from Olive Street to University Drive would cost approximately $4 million.

**Blake Street Closure**

The CSC directed staff to evaluate the request by residents of Blake Street to close the street to through traffic. Blake Street is approximately 30 feet wide one-block long two-lane Local Access road located directly across from Nealon Park. Residents along Blake Street raised concerns of excessive cut-through
traffic into a short neighborhood street with high pedestrian traffic that uses the street due to a lack of sidewalks traveling between the broader Allied Arts neighborhood and Nealon Park and Downtown.

Staff identified potential alternatives for a trial phase of street closure with the goal of eliminating cut-through traffic, reducing volume and speed on the street, and improving pedestrian and bike safety. The alternative includes two options:

- Option 1: Local traffic accessible to/from both ends
- Option 2: Local traffic accessible to/from one end

Both options may provide dedicated space for pedestrian and bicyclists in lieu of on-street parking and access will be limited through use of signs and bollards which could easily be removed by emergency vehicles.

**Next Steps**

Based on CSC feedback on the preferred bikeway facility, intersection design options, and traffic calming options, staff will present final recommendations to the City Council for approval. If approved by the City Council, staff will proceed with final design of improvements for Middle Avenue.

**Impact on City Resources**

Resources expended for project evaluation and improvement design are considered part of the City’s baseline operations. Design and construction for improvements along Middle Avenue between El Camino Real and University Drive would be funded by Stanford. Improvements along Middle Avenue between University Drive and Olive Street would require additional funding.

**Environmental Review**

The Middle Avenue complete streets project is categorically exempt under the California Environmental Quality Act Article 19, § 15301 Existing Facilities - Class I since it involves minor construction on a public street. No additional vehicle miles traveled or roadway capacity will be added as a result of implementation of future bicycle lanes and traffic calming measures.

**Public Notice**

Public notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting. Additional public outreach was achieved by sharing meeting information on the project website and sending email blasts to the project interest list.

**Attachments**

A. Hyperlink – Staff report dated May 11, 2022
B. Additional studies for bicycle facility design
C. Conceptual Bicycle Facility Design Plan
D. El Camino Real Intersection
E. University Drive Intersection
F. Traffic Calming Measures: Advantages and Disadvantages
Additional studies for bicycle facility design

Nealon Park Parking Utilization Study

Parking occupancy data was collected during the weekdays and weekend while the frontage parking at Nealon Park was closed for construction of a separate pedestrian improvement project. Despite of having little league games on Thursday evening and Saturday, no more than 80 percent of the parking spaces in the rear lot were utilized. The counts include handful of vehicles parked at unmarked spaces as well as the vehicles presumably parked by non-park users.

Staff also observed parking demand along Middle Avenue near the park as well as along Kenwood Drive, Morey Drive, and Blake Street during event hours but found only small number of vehicles parked.
Table 1: Parking Counts at Nealon Park - Weekdays

<table>
<thead>
<tr>
<th></th>
<th>Wednesday, 5/18/22</th>
<th>Thursday, 5/19/22</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1pm</td>
<td>2pm</td>
</tr>
<tr>
<td>Handicapped</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupied</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Non-Handicapped</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupied</td>
<td>72</td>
<td>58</td>
</tr>
<tr>
<td>Unmarked Spaces</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupied</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupied</td>
<td>86</td>
<td>65</td>
</tr>
<tr>
<td>Vacant</td>
<td>39</td>
<td>52</td>
</tr>
<tr>
<td>On-street: Middle</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>On-street: Blake</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>On-street: Morey</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

![Wednesday Occupied and Vacant Graph](image1)

![Thursday Occupied and Vacant Graph](image2)
Table 2: Parking Counts at Nealon Park - Weekend

<table>
<thead>
<tr>
<th></th>
<th>Saturday, 5/20/22</th>
<th></th>
<th>Sunday 5/21/22</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10am</td>
<td>12pm</td>
<td>2pm</td>
<td>10am</td>
</tr>
<tr>
<td>Handicapped</td>
<td>Occupied</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Non-Handicapped</td>
<td>Occupied</td>
<td>89</td>
<td>65</td>
<td>78</td>
</tr>
<tr>
<td>Unmarked Spaces</td>
<td>Occupied</td>
<td>6</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>Occupied</td>
<td>96</td>
<td>76</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Vacant</td>
<td>25</td>
<td>50</td>
<td>37</td>
</tr>
<tr>
<td>On-street: Middle</td>
<td></td>
<td>5</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>On-street: Blake</td>
<td></td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>On-street: Morey</td>
<td></td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

![Bar charts for Saturday and Sunday showing occupied and vacant parking spaces.](image)
Driveway and Garage Parking Capacity

Staff performed field visits to examine lot sizes and driveway vehicle capacity to evaluate the impact of parking removal. As shown in Table 3, single family homes (SFH) on Middle Avenue either have one- or two-car garage/carport with driveway space to fit at least 2 additional cars. The properties on the south side have greater driveway capacity than the properties on the north side.

Additionally, there are more single family homes on the south side of Middle Avenue between San Mateo Drive and El Camino Real and several multi-unit housing and community oriented land uses, including a church and a preschool, on the north side between San Mateo Drive and University Drive.

### Table 3: Driveway and Garage Capacity

<table>
<thead>
<tr>
<th>Segment</th>
<th>Number of SFH</th>
<th>Average SFH Garage Size</th>
<th>Average SFH Driveway Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olive Street – San Mateo Drive</td>
<td>North 21</td>
<td>1.6</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>South 17</td>
<td>1.9</td>
<td>2.9</td>
</tr>
<tr>
<td>San Mateo Drive – University Drive²</td>
<td>North 9</td>
<td>1.8</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>South 22</td>
<td>1.7</td>
<td>2.9</td>
</tr>
<tr>
<td>University Drive – El Camino Real</td>
<td>North 5</td>
<td>1.0</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>South 26</td>
<td>1.4</td>
<td>2.9</td>
</tr>
</tbody>
</table>

¹ Not including multi-unit housing (i.e. duplex, fourplex, condominiums, etc.)
² Church, preschool, community center, and 10 additional parcels with multi-unit housing are located on the north side of the segment between San Mateo Drive and El Camino Real

Cross Street

Table 4 below shows number of cross streets within each segment. Alto Lane and Maywood Lane were excluded from the counts since street parking on these streets is not available for public. El Camino Real to University Drive would be most impacted by a removal of parking on both sides of the street since there are fewer number of cross streets to find on-street parking. Additionally, a potential closure of Blake Street would limit street parking in this segment.

### Table 4: Cross Streets

<table>
<thead>
<tr>
<th>Segment</th>
<th>Number of Cross Streets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olive Street – San Mateo Drive¹</td>
<td>North 4</td>
</tr>
<tr>
<td></td>
<td>South 4</td>
</tr>
<tr>
<td>San Mateo Drive – University Drive²</td>
<td>North 4</td>
</tr>
<tr>
<td></td>
<td>South 4</td>
</tr>
<tr>
<td>University Drive – El Camino Real³</td>
<td>North 3</td>
</tr>
<tr>
<td></td>
<td>South 2</td>
</tr>
</tbody>
</table>

¹ cross street includes Olive Street, excludes San Mateo Drive
² cross street includes San Mateo Drive, excludes University Drive
³ cross street includes University Drive. Parking is not allowed on El Camino Real
Distance to School

With Menlo Park’s continuous support for bicycle network and Safe Routes to Schools program, there has been increasing number of students biking on neighborhood streets where they live and go to school. Table 4 summarizes distance from major intersections along Middle Avenue to the nearby schools.

Investing in bicycle lanes with separation from moving or parked vehicles can offer a safe and comfortable space for children to bike and encourage bicycling for other trips. While establishing bicycle safety routes only during school hours may be feasible where parking and bicycle lanes revert based on time-of-day, it would be ineffective if cars are parked outside of designated parking hours and block the bicyclists.

<table>
<thead>
<tr>
<th>Locations</th>
<th>Hillview Middle School</th>
<th>Oak Knoll Elementary School</th>
<th>New Beginning Preschool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olive Street</td>
<td>2,200 ft (0.4 mi)</td>
<td>3,000 ft (0.6 mi)</td>
<td>2,500 ft (0.5 mi)</td>
</tr>
<tr>
<td>San Mateo Drive</td>
<td>4,200 ft (0.8 mi)</td>
<td>5,000 ft (1.0 mi)</td>
<td>600 ft (0.1 mi)</td>
</tr>
<tr>
<td>University Drive</td>
<td>6,200 ft (1.2 mi)</td>
<td>7,000 ft (1.4 mi)</td>
<td>1,500 ft (0.3 mi)</td>
</tr>
<tr>
<td>El Camino Real</td>
<td>7,900 ft (1.5 mi)</td>
<td>8,700 ft (1.7 mi)</td>
<td>3,200 ft (0.6 mi)</td>
</tr>
</tbody>
</table>
El Camino Real - University Drive

OPTION 1 - CLASS II BIKE LANES W/PARKING

OPTION 2 - CLASS II BUFFERED BIKE LANES, NO PARKING

OPTION 3 - CLASS IV SEPARATED BIKE LANES W/PARKING
University Drive - San Maxeo Drive

Option 1: Class 1 Bike Lanes w/ Parking

Option 2: Class 2 Buffered Bike Lanes, No Parking
San Mateo Drive - Olive Street

OPTION 1: CLASS I BIKE LANES W/ PARKING

OPTION 2: CLASS II BUFFERED BIKE LANES, NO PARKING
Standard Intersection Treatment

Notes:
- Improves crossing while there are no bicycle lanes on El Camino Real
- Design would need to consider bus, truck, and large vehicle turning movements at intersection
- Gas station access may limit design options
- Recommend that no right turn on red from Middle Avenue - consider right turn overlap with Northbound left turn

Dedicated Intersection

Illustrative Only

Notes:
- Signal poles may need to be relocated
- Control cabinet & other utilities relocation
- Gas Station Driveway Access
- Right of way may be required
- Path to future undercrossing
- Hetch-Hetchy shallow water main edge of pavement and curb.
Notes:

- Likely requires removal of one travel lane on El Camino Real to align bike lanes and allow for corner curves and protected queuing areas.
- Middle Plaza entry has no bicycle lanes on the entry driveway.
- Middle Plaza corners need to be modified to accommodate queuing area, any reconstruction would be above the Hetch-Hetchy shallow water main.
- Design would need to consider bus, truck, and large vehicle turning movements at intersection.
- Gas station access to Middle Avenue would need to be addressed due to proximity to corner and queuing areas.
- Recommend no right turn on red from Middle Avenue.
Existing Conditions

Mini-Roundabout

Notes:
• Assumes that bicyclists share the lane with vehicles in the roundabout
• Slip ramps could be provided at all corners to allow less confident bicyclists to use the sidewalks to navigate the roundabout
• Design would need to consider bus and truck movements
# Traffic Calming Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Pros</th>
<th>Cons</th>
<th>Location</th>
<th>Typical Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flashing beacons (RRFB)</strong></td>
<td>• Higher vehicle yield rate to pedestrians</td>
<td>• No secondary traffic calming effect</td>
<td>x</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>• No impact to emergency vehicles</td>
<td>• Higher construction cost</td>
<td>x</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Speed tables or speed humps</strong></td>
<td>• Reduces speed</td>
<td>• May increase noise</td>
<td>x</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>• Speed tables are preferred by Menlo Fire</td>
<td>• Driver discomfort if immediate adjacent to driveways</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Raised crosswalks</strong></td>
<td>• Improve safety for both vehicles and pedestrians</td>
<td>• Potential impact to drainage</td>
<td>x</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>• Effective in reducing speeds, though not to the extent of speed bumps</td>
<td>• Impact to emergency vehicle</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Speed feedback signs</strong></td>
<td>• Visually remind drivers of speed and alerts violators without affecting normal traffic</td>
<td>• Effectiveness may be reduced over time as regular drivers become desensitized</td>
<td>x</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Some drivers may ignore knowing that the signs do not include automated enforcement</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bulb-out/ Curb extension/ Corner Radius Reduction</strong></td>
<td>• Reduces speeds of turning vehicles</td>
<td>• Makes right-turns more difficult for large vehicles</td>
<td>x</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>• Shortens pedestrian crossing distance</td>
<td>• May result in loss of street parking</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Prevents street parking near intersection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>All-way stop signs</strong></td>
<td>• Requires vehicles to stop</td>
<td>• Effectiveness may be reduced if drivers do not stop</td>
<td>x</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>• Prioritizes pedestrian crossings</td>
<td>• Not effective in situations with limited cross-traffic or pedestrian and bicycle volumes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Roundabout</strong></td>
<td>• Reduce number of conflicts between transportation modes</td>
<td>• May require more intersection space to implement</td>
<td>x</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>• Better traffic flow</td>
<td>• Relatively new feature for Menlo Park</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Left-turn bike pocket</strong></td>
<td>• Provides dedicated space for turning bicyclists</td>
<td>• Relatively new feature for Menlo Park</td>
<td>x</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Turn restrictions</strong></td>
<td><strong>Reduction of specific turning movements</strong> especially where volume control is desired</td>
<td><strong>Reduces</strong> travel speeds</td>
<td><strong>May divert traffic problem onto another street or intersection</strong></td>
<td><strong>May increase trip lengths for some drivers or limit access for local homeowners/businesses</strong></td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-------------------------</td>
<td>----------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Reduce Travel Lane Width</strong></td>
<td><strong>Allows inclusion of other facilities, such as bicycle lanes and medians</strong></td>
<td><strong>Reduces travel speeds</strong></td>
<td><strong>May not be appropriate for higher volume streets with significant numbers of large vehicles</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Traffic Enforcement</strong></td>
<td><strong>Produces immediate results and can be effective where streets experience excessive speeding or stop sign violations</strong></td>
<td><strong>Can be deployed on short notice and during specific hours when problem occurs</strong></td>
<td><strong>Takes considerable staff time and there are limited resources</strong></td>
<td><strong>Effectiveness typically does not last beyond enforcement period</strong></td>
</tr>
</tbody>
</table>