Recommendation
Staff recommends the City Council take the following actions, relating to the Belle Haven neighborhood traffic management plan:
- Amend the plan to replace mid-block bulbouts on Chilco Street, between Hamilton Avenue and Ivy Drive, with speed feedback signs
- Provide direction to staff on potential neighborhood turn restrictions to further reduce cut-through traffic

Policy Issues
The development of the Plan and its implementation fulfill “Mitigation Measure TRA-3.1” of the mitigation monitoring and reporting program (MMRP) established in the Facebook campus expansion project final environmental impact report (FEIR) approved in 2016. As it is a requirement of the MMRP, this effort is not identified in the 2019 City Council work plan; it is considered part of staff’s baseline work.

Background
On April 16, the City Council approved the plan and an initial implementation process for each measure, adopted Resolution No. 6492 to remove on-street parking for bulbouts, and amended the typical implementation process to expedite installation. A link to the April 16 staff report is provided as Attachment A. Additionally, the City Council asked for additional community outreach for the on-street parking removal needed to accommodate some of the improvements, and to return with a more detailed implementation program schedule that adopts a phased approach to minimize overall impact to the neighborhood and expedite installation. An update on each of these items is provided below.

As stated in previous staff reports, while the City has jurisdiction over a majority of public roadways within the neighborhood, some recommendations will require coordination and/or approval from other agencies. These agencies and corresponding locations include:
- San Francisco Public Utilities Commission (SFPUC.) Jurisdiction over Ivy Drive and approval authority for the implementation of crosswalks, edge line stripe, speed feedback signs, gateway treatments, intersection bulbouts, and raised intersection recommendations on Ivy Drive.
- Caltrans. Jurisdiction over Willow Road and approval authority for the implementation of the limited right turn restriction and left turn signal arrow on Newbridge Street at Willow Road.
- Menlo Park Fire Protection District. Interest to ensure adequate roadway width and turning radii for the implementation of intersection and mid-block bulbout extensions.
Analysis

After the approval of the plan, staff engaged the consultant to prepare a scope amendment since the approved plan contains more proposed traffic calming measures and community outreach efforts than anticipated in the original scope. Staff has also continued to make progress on the following activities, in parallel:

• Coordination with outside agencies (Menlo Park Fire Protection District, SFPUC and Caltrans)
• Plan implementation progress, next steps and schedule
• Other requested improvements and next steps

Coordination with outside agencies

**Menlo Park Fire Protection District (MPFPD)**

On May 31, the project team and the Fire District field-simulated turning movements, using MPFPD’s largest fire engine and traffic cones placed in the roadway to mimic a bulbout, to evaluate potential impact of installing bulbouts at key intersections. Initial findings are informing the design and placement of bulbouts to ensure fire truck turns are possible at all locations. As an existing condition, most narrow residential streets require that fire trucks enter the opposing lane to make a turn at an intersection. The information gathered will ensure that the presence of a bulbout will not exacerbate this condition during a fire truck turn maneuver. During the presentation at the August 20 City Council meeting, staff will share video of the existing truck turns taken during the field meeting, which further illustrates this condition. The benefits of bulbouts include lowering vehicular turning speed and shortening pedestrian crossing distances.

**SFPUC and Caltrans**

Recognizing the expected lengthy review and approval processes by SFPUC and Caltrans, staff requested the consultant to commence 30 percent conceptual designs for proposed measures located within each agency’s right of way. The improvements under SFPUC and Caltrans jurisdictions include all measures on Ivy Drive and signal improvements on Newbridge Street at Willow Road, respectively.

Plan implementation progress, next steps and schedule

On April 27, staff attended the Belle Haven spring fair to gather additional neighborhood feedback on the plan. Before the event, a sample bulbout was installed at the northeast corner of Chilco Street and Ivy Drive as a demonstration using paint and flexible bollards, as shown in Attachment B. This location did not require additional parking removal. Community members that attended the fair generally expressed appreciation for the plan and the additional outreach, and desire to see more measures be implemented at the fastest possible timeline.

With Chilco Street being a primary cut-through route, staff conducted direct outreach to residents on Chilco Street between Hamilton Avenue and Ivy Drive, the Belle Haven School and Ravenswood School District, for the removal of on-street parking spaces to install the proposed mid-block bulbouts. A letter with conceptual alternatives was mailed to residents and property owners on this block in early May. Through the community feedback received, residents expressed a desire to keep all existing parking spaces and requested speed feedback signs be installed instead of mid-block bulbouts. Staff is requesting the City Council approve the change from bulbouts to a speed feedback sign in the approved plan, as shown in Attachment C.

Currently, the consultant is utilizing the base maps and knowledge learned from the May 31 field meeting with the Fire District to complete design of the trial intersection bulbouts. Initial findings have resulted in the determination that 38 (out of 50 previously identified) bulbouts are feasible and would not impact or exacerbate emergency response maneuvers (Attachment D.)
As previously stated, each intersection bulbout would require the removal of one to two on-street parking spaces directly adjacent to the intersection. Normally, postcards would be mailed to residents or stakeholders within a 500-foot radius of each bulbout. However, given the spacing and overlapping areas of influence of the 38 bulbouts, postcards (in English and Spanish) were instead mailed out to all addresses in the Belle Haven neighborhood in late July in advance of the August 20 City Council meeting. As of August 7 (before the publication of this report,) no additional feedback has been received regarding the revised plan and parking removal. Additionally, staff will conduct another round of community outreach on parking removal via letter mailers to residents immediately adjacent to ensure community members are informed before trial installation.

Since commencing the plan design phase, the consultant has prepared all necessary base maps for the trial design of all measures in the City right of way and 30 percent conceptual design of SFPUC and Caltrans measures. Staff’s current focus is to implement measures within the City jurisdiction at the earliest possible time. Table 1 summarizes the proposed implementation plan and expected trial device installation schedule for improvements on each corridor.

<table>
<thead>
<tr>
<th>Location</th>
<th>Jurisdiction</th>
<th>Measures</th>
<th>Trial device installation schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chilco Street</td>
<td>City</td>
<td>Signing and striping(^1)</td>
<td>October - December 2019</td>
</tr>
<tr>
<td>Newbridge Street</td>
<td>City</td>
<td>Striping and bulbouts</td>
<td>October - December 2019</td>
</tr>
<tr>
<td>Terminal Avenue</td>
<td>City</td>
<td>Striping and bulbouts</td>
<td>October - December 2019</td>
</tr>
<tr>
<td>Chilco Street/Hamilton Avenue/Newbridge Street</td>
<td>City</td>
<td>Gateway treatments</td>
<td>October - December 2019</td>
</tr>
<tr>
<td>Hamilton Avenue</td>
<td>City</td>
<td>Speed hump</td>
<td>October - December 2019</td>
</tr>
<tr>
<td>Ivy Drive</td>
<td>SFPUC</td>
<td>All</td>
<td>Dependent on review by outside agencies, expected 12 months (fall 2020)</td>
</tr>
<tr>
<td>Willow Road/Newbridge Street</td>
<td>Caltrans</td>
<td>All</td>
<td>Dependent on review by outside agencies, expected 12 months (fall 2020)</td>
</tr>
</tbody>
</table>

\(^1\) Speed feedback sign requires additional design and would be installed as a secondary phase if amended plan is approved by the City Council

Following implementation of the trial devices in the City’s jurisdiction, a six-month trial evaluation period would begin. Concurrently, staff would continue to work toward implementation of improvements in the SFPUC and Caltrans jurisdiction. The trial evaluation schedule is summarized in Table 2.
Table 2: Trial evaluation and permanent device schedule

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install trial devices</td>
<td>October - December 2019</td>
</tr>
<tr>
<td>Six-month trial period</td>
<td>January - June 2020</td>
</tr>
<tr>
<td>Post-trial data collection</td>
<td>June 2020</td>
</tr>
<tr>
<td>Analysis and outreach</td>
<td>June - September 2020</td>
</tr>
<tr>
<td>Permanent device design</td>
<td>Late 2020</td>
</tr>
<tr>
<td>Permanent device installation</td>
<td>Mid-2021</td>
</tr>
</tbody>
</table>

Updates on other approved improvements

Staff is additionally continuing to make progress on the installation of improvements identified in the approved plan in the Beechwood School/Onetta Harris Community Center (OHCC) parking lot (Attachment E) and at Ringwood Avenue/Van Buren Road (raised crosswalk.) Improvements at the Beechwood School/OHCC parking lot are planned for installation this fall, in coordination with the new concrete sidewalk along the existing Beechwood School fence line. Construction of the new sidewalk is a requirement of the Menlo Gateway development project on Independence and Constitution Drives and is anticipated to be completed by end of August.

Provide direction on additional Belle Haven neighborhood modifications

Following the City Council’s adoption of the plan, staff has continued to receive requests for other neighborhood modifications that are not included in the plan (Attachment F.) These requests include additional peak period turning restrictions to reduce and discourage cut-through traffic and modifications to improve traffic flow and safety at the Willow Road/Newbridge Street intersection.

Staff has reviewed the turn restriction request and recommends installation of turn restrictions at the following locations:
- Chilco Street/Constitution Drive
- Chilco Street/Terminal Avenue or Hamilton Avenue/Almanor Avenue
- Hamilton Avenue/Sevier Avenue
- Hamilton Avenue/Madera Avenue
- Hamilton Avenue/Carlton Avenue or Newbridge Street/Carlton Avenue

Staff is seeking City Council direction to install these additional turn restrictions, using a similar process as employed in the Willows neighborhood during construction of the Willow Road/U.S. 101 interchange in late 2017. If City Council directs the installation of the additional turn restrictions, staff would place temporary signs on barricades to install the restrictions as soon as possible (expected within two weeks following approval) and would continue to monitor community feedback following implementation. The success of these signs would then be evaluated as part of the evaluation of the traffic management plan (anticipated approximately 6-months following trial device installation, in mid-2020) before determining whether they should be permanently installed.

Modifications at Willow Road/Newbridge Street to improve traffic flow and safety, with a focus on the eastbound direction of Newbridge Street (for residents leaving the Belle Haven neighborhood) during the morning peak period are currently under consideration by staff. Improvements at this location will require
additional community outreach and City resources. Staff anticipates returning to the City Council with a scope of work and summary of expected resource needs as a future project. It is expected that this project could further delay other projects in the capital improvement program, including the intersection of Middlefield Road/Ringwood Avenue-Ravenswood Avenue signal modification and pedestrian crossing enhancements on El Camino Real at Ravenswood, Roble and Encinal avenues.

**Next steps**

In summary, staff recommends that City Council amend the Belle Haven traffic-calming plan to replace bulbouts on Chilco Street with speed feedback signs; and provide direction on additional neighborhood peak period turn restrictions at:
- Chilco Street/Constitution Drive,
- Chilco Street/Terminal Avenue or Hamilton Avenue/Almanor Avenue,
- Hamilton Avenue/Sevier Avenue,
- Hamilton Avenue/Madera Avenue, Hamilton Avenue/Carlton Avenue or Newbridge Street/Carlton Avenue

**Impact on City Resources**

As a required condition of approval for a development project, staff time on the Belle Haven traffic calming study, development, and implementation of the plan is considered part of the baseline City service levels. The trial and permanent implementation costs of measures in the final plan would be funded by Facebook (Hibiscus Properties, LLC) based on the 2017 neighborhood cut-through traffic survey that identified Chilco Street, Ivy Drive and Newbridge Street to be the main cut-through routes.

**Environmental Review**

The recommendation is categorically exempt under Class 1 (existing conditions) and Class 4 (minor modifications) of the current State of California Environmental Quality Act Guidelines.

**Public Notice**

Public notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting. Additionally, postcards were delivered to the neighborhood before this meeting. Parking removal outreach to immediately impacted residents for the proposed mid-block bulbouts was conducted in May. The outreach included residents and school facilities located on Chilco Street between Hamilton Avenue and Ivy Drive. Another round of outreach on parking removal for intersection bulbouts to residents immediately adjacent to the intersections will be conducted before trial installation.

**Attachments**

B. Photo of sample bulbout at Chilco Street/Ivy Drive
C. Revised Belle Haven neighborhood traffic calming plan
D. Implementation plan
E. Beechwood School/OHCC parking lot improvements
F. Additional neighborhood modification suggestions
Sample trial bulbout at Chilco Street and Ivy Drive, Menlo Park
Recommended Plan amendment area (replace four mid-block bulbouts with two speed feedback signs)
Bulbout: not feasible
not desirable at this time

Design Criteria: Maintain a 26' curb-to-curb width at intersections, except Ivy Drive, which will have 16' curb-to-curb one-way streets

Trial Bulbout Count:
Total = 50
Not feasible/desirable = 12     To be installed = 38

Right-of-Way Approval Authority

- SFPUC ROW
- Caltrans ROW
- City ROW

Legend:
1. Updated School Signage
2. Marked Crosswalk
3. Yellow Centerline
4. Sharrow
5. Edge Line Stripe
6. Speed Hump
7. Raised Crosswalk
8. Speed Feedback Sign
9. Blank Out Sign*
10. New Sidewalk
11. Bulbout**
12. Left Turn Arrow
13. Raised Intersection
14. Gateway Treatment

*No right turn blank out sign will activate concurrent with Northbound left turn
**Will require removal of localized on-street parking spaces (~ 2-4 spaces per location)
Trim landscaping for sight visibility.

Legends:
- Rubber speed bumps + end caps (see next page for photos)
- Ex. curb ramp
- Sidewalk
- Pavement arrows
- Stripe crosswalk
- New sign on new post
- New sign on existing post

ATTACHMENT E

Beechwood School / Onetta Harris Community Center Parking Lot Improvements

relocate existing ADA related sign from to

25 ft

PARK HOURS
SUNRISE TO 9PM
BY COMMITTEE TRAINING

DO NOT ENTER
sample rubber speed bump

Length: 72 inches
48 inches

Weight: 50 lbs

Height: 2.25 inches

Width: 12 inches

sample end cap

Length: Adds 9 inches to the length of the speed bump

Width: 12 inches
Proposed Additional Belle Haven Neighborhood
Traffic Calming Measures

ATTACHMENT F

Existing Traffic Control
- Speed Hump
- Median
- Traffic Signal
- Traffic Circle
- Turning Restriction
- One-Way Road
- No Thru Traffic Sign

0 350 700 Feet

Proposed Traffic Control
- No Left Turn (3:30pm-7pm Mon-Fri)
- No Right Turn (3:30pm-7pm Mon-Fri)

Proposed Traffic Evaluation
- School Drop Off/Pick Up Evaluation
- Traffic Flow and Safety Evaluation