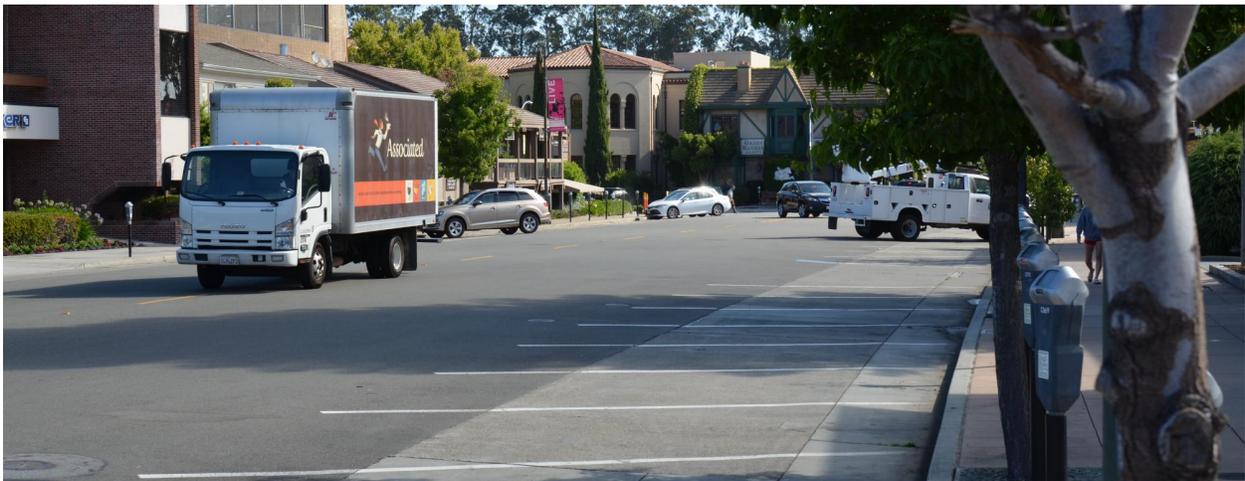


FEASIBILITY STUDY OF CHAPIN AVENUE

CITY OF BURLINGAME

JUNE 2021

WILSEY HAM
CALLANDER ASSOCIATES
TJKM



Background

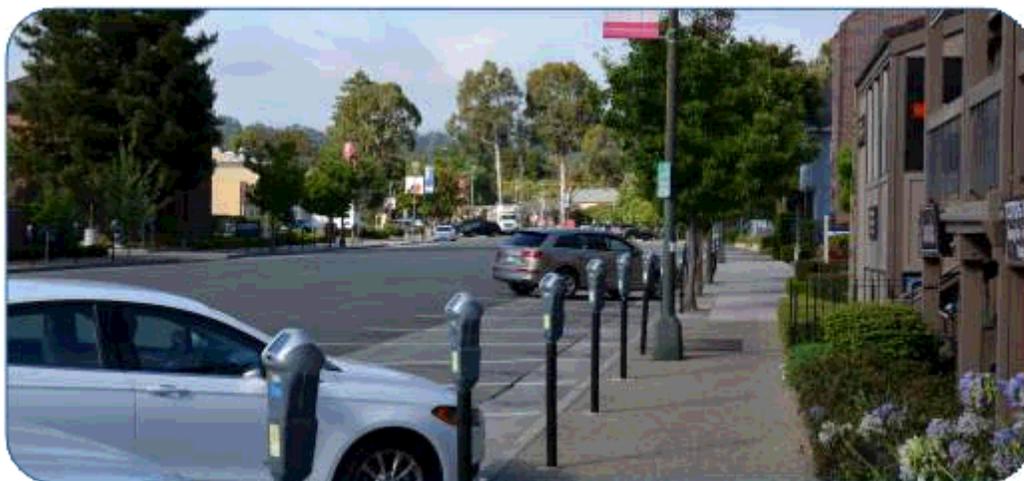
The Feasibility Study of Chapin Avenue Project focuses on streetscape improvement opportunities for Chapin Avenue between El Camino Real and Primrose Road. Chapin Avenue is identified in a number of City and County planning documents including the Burlingame General Plan (2019), the Downtown Specific Plan (2010), the Bicycle Transportation Plan (2004), the Circulation Element (2015), and the San Mateo County Stormwater Resource Plan (2017).

The Burlingame General Plan identifies Chapin Avenue as part of the downtown district, which is planned to undergo concentrated growth in housing and jobs. The General Plan sets out a vision for the making Downtown Burlingame an economically, socially, and culturally vibrant local and regional destination, with a diverse and balanced mix of activities, pedestrian-friendly streets, historic buildings, and inviting gathering spaces.

The Downtown Specific Plan guides growth, development, and design standards in Downtown Burlingame. The plan names Chapin Avenue as an opportunity area to improve streetscape and open space with design elements such as seating, consistent street trees, and bulb-outs. The plan suggests that the ample width of the street offers the potential for a center median with parking and/or open space closer to Primrose Road while retaining an open pavement for delivery vehicles closer to El Camino Real.

The General and Downtown Specific Plans also discuss the desire to provide improvements to encourage pedestrian and bicycle access throughout the downtown district. The Bicycle Transportation Plan and Circulation Element identify Chapin Avenue as a designated bike route dating back to the City's 1972 Bikeways map, and the General Plan recommends Chapin Avenue for a Class III bike route with sharrows.

The Downtown district is described as having a "village" character, where development should preserve and enhance the small-town scale with walkable, pedestrian scaled and landscaped streets. The Plan directs the City to prioritize and invest in streetscapes so people want to walk farther because it is safe and aesthetically pleasing.





Project History

Project Kickoff and City Staff Meetings – August 2019
Downtown Business Improvement District Meeting – November 2019
Open House Meeting – November 2019
Chapin Avenue Property Owner & Resident Meeting – December 2019
Narrative Alternative Development – Early 2020
Traffic Safety and Parking Commission Meeting #1 – July 2020
Primary Alternative Development – Late 2020
Public Survey – February 2021
Primary Alternative Completion – March 2021
Traffic Safety and Parking Commission Meeting #2 – May 2021
City Council Meeting – May 2021

Summary of Input from Stakeholders

The Feasibility Study kicked off in August 2019 with a joint meeting between City staff and the consultant team to discuss the goals and direction of the study. The meeting identified outreach and approval strategies, potentially important topics from stakeholders, and what would constitute a successful project.

The Downtown Business Improvement District (DBID) meeting in November 2019 offered the first opportunity to get targeted feedback from stakeholders. The DBID members were supportive of linking Chapin Avenue to Burlingame Avenue in feel and theme, providing a mid-block pedestrian crossing, and adding multi-way stop controls to the Primrose Road intersection. One of their top priorities was to preserve or expand the street's parking.

The Open House Meeting in November 2019 allowed residents and stakeholders to familiarize themselves with the project and express their vision for Chapin Avenue. The goal of this meeting was to provide attendees with an idea of the existing conditions of the street and allow a blank canvas to generate ideas within the areas of Pedestrian Access and Safety, Vehicular Access and Parking, Bicycle Access and Safety, Community Spaces, Green Infrastructure, and Village Character. The feedback included a desire for bulbouts to provide safer pedestrian crossings, adding a mid-block crossing, reducing the street width, introducing an all-way stop at

Primrose Road, providing additional landscaping areas for street trees, community spaces, and green infrastructure, and introducing wayfinding signage. Street parking was a pressing topic of discussion for attendees, but the reviews were mixed. Some commenters desired additional parking to act as overflow for Burlingame Ave, but others prioritized green spaces and beautification over maximizing the parking counts.

The Traffic Safety and Parking Commission (TSPC) Meeting #1 in July 2020 allowed the project team to present the first set of alternative options, which were developed following initial public outreach. The three initial alternatives offered tradeoffs between maximizing parking, landscape areas, community spaces, and varying classifications of bike lanes. In general, the responses from the TSPC focused on the alternatives' lack of separated bike facilities, the need for safer pedestrian crossings at El Camino Real and Primrose Road, and a desire to maximize parking.

Following the TSPC Meeting #1, the project team consolidated the initial options into two distinct alternatives which provided tradeoffs between the two main points of interest from stakeholders: maximizing parking versus green infrastructure, landscaping, and beautification. Following the development of these two primary alternatives, the project team conducted an online survey, which was distributed to residents, business owners, and other stakeholders. The survey walked through the alternatives and gathered feedback on priorities and preferences between the options. The survey received 166 responses from both new and repeat participants. The survey results generally followed a similar trend as comments received at the 2019 open house: respondents overwhelmingly reacted well to the alternative which maximized green infrastructure and landscaping. Additionally, the respondents did not feel the need to prioritize bike infrastructure on Chapin Avenue, citing that a Class III bike route with sharrows was sufficient. The final question on the survey asked stakeholders to choose between the alternatives: The alternative with maximized green spaces received 66% of the votes, the alternative with maximized parking received 23% of the votes, and 11% of respondents signaled that they had no preference. One potential cause for the discrepancy of votes between the alternatives may have been the idea of reverse angle parking, which was shown on the diagrams for Alternative 2. While the survey pointed out that the reverse angle parking was an optional design for both alternatives, its' presence in the Alternative 2 views may have been off-putting to respondents. While most of the survey results cited the desire for the green infrastructure for Alternative 1, the parking orientation may have played a part in the disparity in the survey results.

Once the public survey was complete, the project team attended the Traffic Safety and Parking Commission Meeting #2 in May 2021 to present the two alternatives to the commission. The TSPC cited the need for parking infrastructure in the downtown as well as increased bicycle and pedestrian safety. The commission passed a motion to support the alternative which maximized parking and included the desire to provide an all-way stop at Primrose Road.

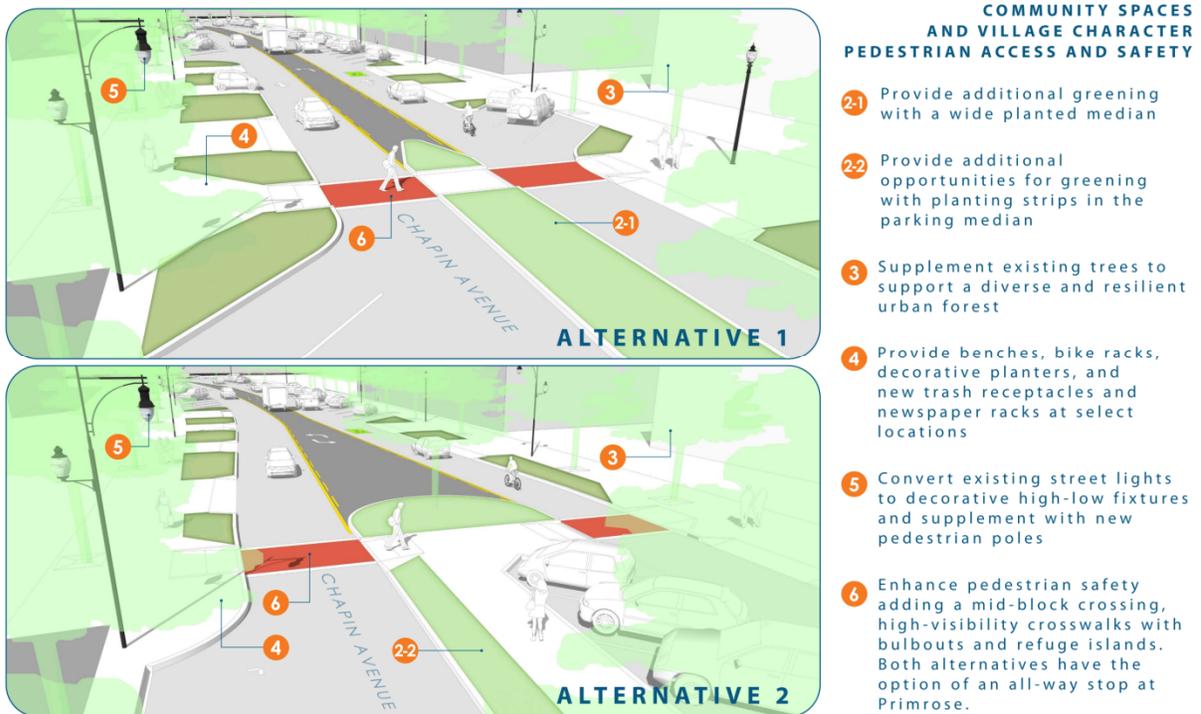
The City Council Meeting in May 2021 was the final aspect of outreach and stakeholder feedback. The project team presented the two alternatives and previous stakeholder feedback to City Council and the meeting's attendees. City Council supported the alternative which maximized green infrastructure and landscaping along the street, citing the desire for more beautification in the downtown district as well as various projects downtown which will help alleviate the need to maximize parking on Chapin.

Alternative Features and Comparisons

As discussed in the Summary of Input from Stakeholders, the two overarching topics of discussion during the feasibility study have been the tradeoffs between parking counts and green infrastructure or landscaping. While the two alternatives provide many similarities in layout, the differences generally lie in the balance of parking and landscaping.

Both alternatives address many of the priorities that were discussed throughout the outreach process:

- Narrowed drive lanes for traffic calming
- Turn lane/truck loading near El Camino Real
- Bulbouts at pedestrian crosswalks to minimize the distance to cross the street
- A mid-block crosswalk
- Class III bike lanes with sharrow
- Bioretention areas for stormwater treatment
- Street trees for beautification
- Improved lighting for pedestrian and bicycle safety



The differences between the two alternatives present themselves closer to the Primrose Road intersection. Both alternatives provide a median island in the roadway, but with differing uses.

Alternative 1 provides a landscaped median island centered on the street with trees and landscaping, while Alternative 2 provides additional parking in the center of the roadway with pedestrian access.



**GREEN INFRASTRUCTURE
COMMUNITY SPACES
AND VILLAGE CHARACTER**

- 1 Treat stormwater using bioretention planters in sidewalk bulbouts
- 2-1 Provide additional greening with a wide planted median
- 2-2 Provide additional opportunities for greening with planting strips in the parking median
- 3 Supplement existing trees to support a diverse and resilient urban forest
- 4 Provide benches, bike racks, decorative planters, and new trash receptacles and newspaper racks at select locations

Table 1 highlights the tradeoffs between the alternatives:

	Parking Count	Tree Count	Bioretention Area (sf)	Landscape Area (sf)
Existing Conditions	101	26	0	0
Alternative 1	78	52	3560	3764
Alternative 2	89	55	2929	2610

In addition to the two options discussed throughout the project, stakeholders frequently requested an all-way stop controlled intersection at Primrose Road and Chapin Avenue. The project team’s traffic consultant, TJKM, performed an analysis of the existing traffic data provided by the City. They found that while traffic data did not warrant an all-way stop, the conversion would reduce the conflicts between vehicles and pedestrians/bicycles and could encourage more bicycle and pedestrian trips within the area. They therefore recommended that the intersection be converted to an all-way stop.

Recommended Alternative and Implementation Strategy

After the conclusion of the outreach phase of the project, the project team and City Staff recommend that the Chapin Avenue project move forward with Alternative 1. Alternative 1 was the overwhelming choice between the public survey responses and the City Council, citing the appeal for the added landscaping and green infrastructure opportunities. Additionally, the City has ongoing projects which aim to address the existing parking needs that some residents,

business owners, and TSPC members mentioned during the feedback phase of the project. The project team also recommends further study and analysis for implementation of the all-way stop at the Primrose Road intersection.

Following the feasibility study's completion, the project's implementation strategy includes opportunities for the City to acquire funding for the project. City staff and the project team have discussed options for federal and local stormwater grants to aid the City in funding the project's design and construction phases. An engineer's estimate has been developed for the chosen alternative to aid the City in understanding the scale of the project. The estimate provides a conservative approach to the quantity and cost assumptions in an effort to provide an upper limit for the City. The estimate provides for a complete demolition and reconstruction of the entire street block, whereas the project team believes that significant cost savings could come from utilizing as much of the existing hardscapes and materials as possible. The engineer's estimate (provided at the end of this document) values the estimated construction costs of the project at \$3,590,000 after a 30% contingency was added to account for the early stage of the project.

Once the City has secured funding for Chapin Avenue, the chosen alternative can be further developed with the project design team. These designs will include landscaping, lighting, grading, stormwater management, signage and striping among other things. In an effort to adhere to the wishes of the feasibility study's stakeholders, the designs should follow a common theme to match the downtown district and Chapin Avenue's connection to Burlingame Avenue. After the design phase of the project, the City's selected contractor will construct the approved designs and implement the community's chosen alternative.



City of Burlingame

**Feasibility Study of Chapin Avenue
Alternative 1**

Proj. No. 140-098
Prepared By: JKP
Date: 04/06/21

Cost Estimate

Item No.	Sec No.	Description	Quantity	Units	Unit Cost	Cost
1		Mobilization (10%)	1	LS	\$250,579	\$250,579
2		Erosion Control	1	LS	\$10,000	\$10,000
3		Traffic Control	1	LS	\$10,000	\$10,000
Alternative 1 Improvements						
4		Remove Existing Asphalt Pavement	69,331	SF	\$10	\$693,310
5		Remove Existing Sidewalk	25,968	SF	\$10	\$259,680
6		Remove Existing Landscaping	1,097	SF	\$5	\$5,485
7		Install Pavement	54,412	SF	\$5	\$272,060
8		Install Curb and Gutter	2,070	LF	\$100	\$206,985
9		Install Median Island Curb	786	LF	\$100	\$78,600
10		Install Sidewalk	26,082	SF	\$25	\$652,050
11		Install Curb Ramp	6	EA	\$7,000	\$42,000
12		Install Driveway	1360	SF	\$30	\$40,800
13		Install Bioretention Area	3,563	SF	\$5	\$17,815
14		Install Tree and Tree Grate	52	EA	\$3,500	\$182,000
15		Install Landscape	1	LS	\$15,000	\$15,000
16		Install Striping	1	LS	\$20,000	\$20,000
Subtotal						\$2,485,785
Construction Cost						\$2,505,785
Cost incl. Mobilization and Design & Administration						\$2,756,364
30% Contingency						\$826,909
Total						\$3,583,300

