

City of Berkeley Hearst Avenue Complete Street

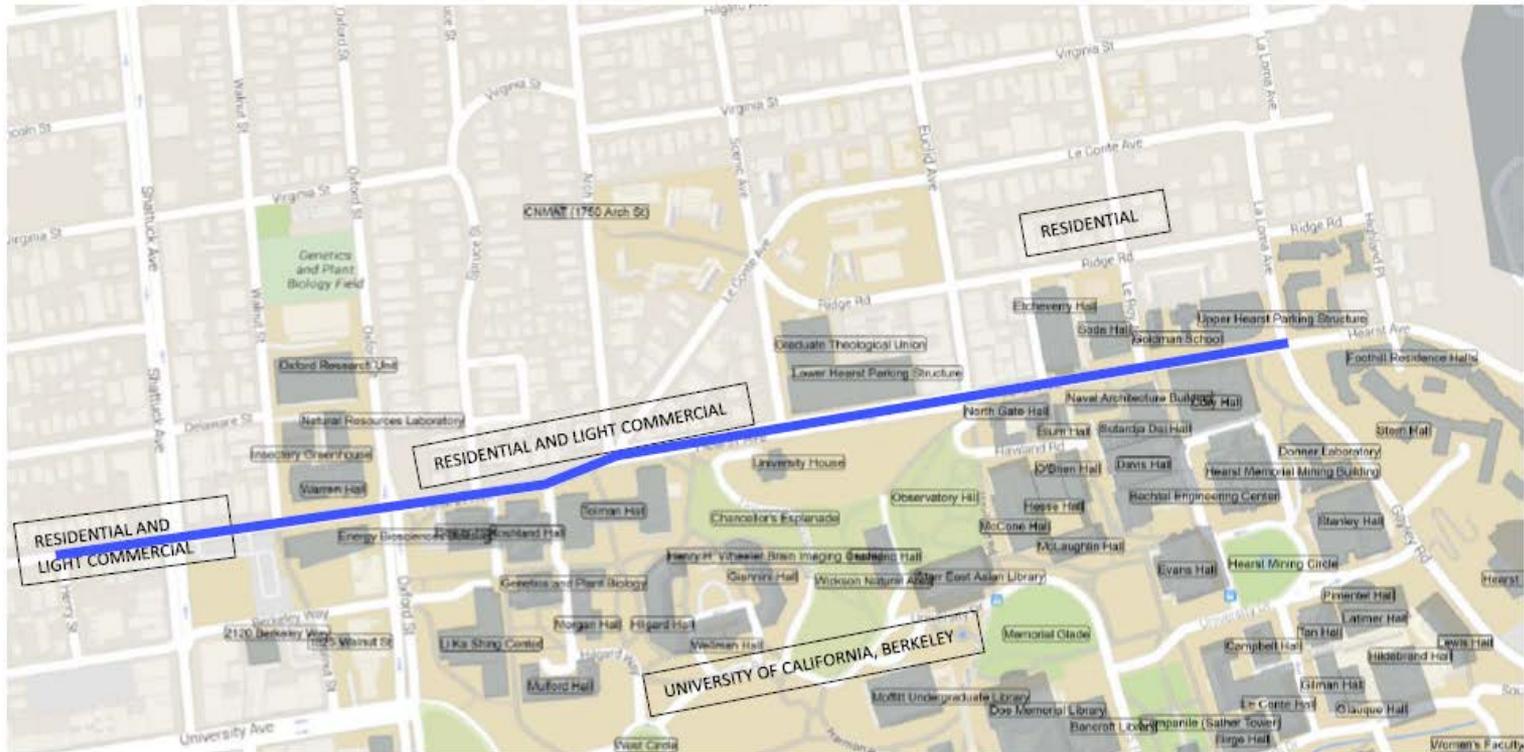
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Project Vicinity



Project Location

Hearst Avenue Complete Streets City of Berkeley



Surrounding land use of the project area is a mixture of University Buildings, single family, multifamily residential, and light commercial.

Project Description

- Safe Access for All Users
 - Improve Bicycle and Pedestrian Access
 - Close an existing 350 foot long sidewalk gap
 - Reduce pedestrian crossing distances
 - Reduce travel lanes to eliminate multiple-threat conditions
 - Create safer facilities for bicyclists including buffered and shared bike lanes
 - Enhance Safe Motorized Vehicle Operations
 - Manage traffic speeds and improve safety with flashing beacons, speed feedback signs, and traffic signalization.
 - Left turn pockets, lane reconfiguration, and pavement repair will support motor vehicle traffic
 - Improve existing transit stop facilities
 - Install bio-retention area to treat/infiltrate storm water

Project Need

- The project embraces the complete street model to encourage bicycle, pedestrian, and transit use in the City of Berkeley by creating safer facilities.
- 2000-2010 SWITRs Collision Data Reports within the project corridor include 1 pedestrian fatality, 15 bicycle-involved collisions (13 injury), and 28 pedestrian-involved collisions (26 injury).

Complete Street Road Diet

- The project will implement a complete street/road diet reducing lanes from 4 to 2 lanes between Shattuck Avenue and Le Conte Avenue with center turn lane pockets and medians.
- The project will add Class II bike lanes between Shattuck Avenue and Le Conte Avenue. A Class II bike lane will continue eastbound from Le Conte Avenue to Euclid Avenue.
- Shared bike lanes (Class III) will be designated to the westbound direction from Le Conte Avenue to La Loma Avenue/Gayley Road and in the eastbound direction between Euclid and La Loma Avenue/Gayley Road.

Opening Year (2016) LOS Analysis

All intersections along Hearst Avenue will remain within the City's threshold for traffic delay, level of service (LOS) "D". In some cases, the average delay reduces due to changes in signal control (i.e., Hearst Avenue at Oxford Street and Le Roy Avenue). Other intersections are projected to operate with slightly more delay, but primarily due to the addition of pedestrian-only crossing phases (i.e., Hearst Avenue at Arch Street / Le Conte and Euclid Avenue).

Current ADT 10,400, 4% (416) Trucks

#	Intersection	Control	Existing AM Peak Hour		Existing PM Peak Hour		Existing + Project AM Peak Hour		Existing + Project PM Peak Hour	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Hearst Ave. / Shattuck Ave.	Signal	13.7	B	18.3	B	15.9	B	19.7	B
2	Hearst Ave. / Walnut St.	1-Stop	9.7	A	12.8	B	11.0	B	18.6	C
3	Hearst Ave. / Oxford St ¹ .	Signal	25.2	C	28.8	C	19.2	B	20.2	C
4	Hearst Ave. / Spruce St.	1-Stop	10.7	B	26.9	D	10.7	B	27.1	D
5	Hearst Ave. / Arch St. / Le Conte Ave. ²	Signal	13.9	B	14.8	B	13.5	B	19.7	B
6	Hearst Ave. / Euclid Ave. ³	Signal	15.1	B	19.2	B	19.6	B	22.9	C
7	Hearst Ave. / Le Roy Ave.	1-Stop (New Signal)	17.9	C	13.6	B	8.1	A	11.6	A
8	Hearst Ave. / La Loma Ave. / Gayley Rd.	Signal	9.6	A	15.4	B	9.7	A	19.0	B
9	Virginia St. / Shattuck Ave.	2-Stop	39.9	E	80.3	F	39.9	E	80.3	F
10	Virginia St. / Oxford St.	2-Stop	39.7	E	36.0	E	40.7	E	39.1	E
11	Virginia St. / Spruce St.	4-Stop	7.8	A	7.8	A	7.9	A	8.1	A
12	Virginia St. / Arch St.	4-Stop	7.5	A	7.5	A	7.5	A	7.6	A
13	Virginia St. / Scenic Ave.	4-Stop	7.7	A	7.6	A	7.8	A	7.8	A
14	Cedar St. / Spruce St.	4-Stop	13.5	B	13.0	B	13.6	B	13.2	B

Traffic Shifting to Other Streets

Excerpt from Parisi Transportation Consulting, February 2015, “Traffic Assessment of Hearst Avenue Complete Street Project”

- At Virginia Street / Shattuck Avenue, the east and westbound stop-controlled movements are projected to remain the same with the project (LOS “E/F” (a.m. / p.m.)). The project impact falls within the City’s threshold for significance.
- The project-related traffic at Virginia Street / Oxford Street are projected to increase average traffic delay by approximately one second during the a.m. peak hour and by approximately three seconds in the p.m. peak hour. The project impact falls within the City’s threshold for significance.
- Virginia Street’s intersections with Spruce Street, Arch Street, and Scenic Avenue are projected to remain at LOS “A”. Cedar Street at Spruce Street is projected to remain at LOS “B”.
- **Based on the findings summarized above, the project would not trigger additional mitigation. The results of the 2015 traffic study indicate that the project accomplishes its goal of improving the conditions for bicyclists, pedestrians, and public transit riders, without significantly affecting motor vehicle traffic flow.**

Future Traffic

Future Traffic Volumes are not anticipated to increase significantly. As stated in the “Northeast Quadrant Science and Safety Projects EIR” from 2001, for future 2020 traffic:

“For the 2020 analysis, the traffic volumes from the City of Berkeley General Plan Update EIR were reviewed to determine if a growth rate could be applied to estimate the traffic volumes reflecting the cumulative baseline year 2020 conditions for the NEQSS Projects. This review indicated no clear trend for a particular rate of increase, making the application of a single growth rate inappropriate in developing the future cumulative baseline traffic volumes.”

Future Bike Usage

After the project is completed, The City of Berkeley anticipates a significant increase in bicycle users and a slight decrease for average daily vehicle trips within the project corridor. This expectation is based on two recent studies that discuss the impact of protected bike lanes:

1. National Institute for Transportation and Communities, “Lessons from the Green Lanes: Evaluating Protected Bike Lanes in the U.S.” June 2014
“A bicyclist intercept survey (n= 1,111; or 33% of those invited to participate) focused more on people’s experiences riding in the protected lanes. A measured increase was observed in ridership on all facilities after the installation of the protected cycling facilities, ranging from +21% to +171%. Survey data indicates that 10% of current riders switched from other modes, and 24% shifted from other bicycle routes. Over a quarter of riders indicated they are riding more in general because of the protected bike lanes.”
2. FHWA, “Separated Bikeway Design Guide”, May 2015
“Separated bike lanes have great potential to fill needs in creating low-stress bicycle networks (generally separated from heavy vehicular traffic or sharing the road with motorists only on very low-volume residential streets).
... To encourage cycling as a transportation option for short to moderate length trips, many municipalities are focusing on creating a connected bicycle network that "Interested, but Concerned" riders will confidently use.”

Not a Project of Air Quality Concern

- Project will promote bicycling with new Class II Bicycle lanes
- Project will enhance Transit usage with new facilities
- The project does not include intersections that are or will be at LOS D, E, or F with a significant number of diesel vehicles. There is no significant change in LOS for the proposed project and will remain within the City's threshold for traffic delay.
- The project has no direct impact on traffic volumes or truck traffic
- **The project meets the Clean Air Act requirements and 40 CFR 93.116 without any explicit hot-spot analysis. The project will not create a new or worsen an existing PM_{2.5} violation.**