



SUPPLEMENTAL AGENDA MATERIAL for Supplemental Packet 2

Meeting Date: February 28, 2022

Item Number: 14

Item Description: Referral: Creation of an Intersection Daylighting Policy

Submitted by: Councilmember Robinson (Author), Councilmember Humbert (Co-Sponsor), Councilmember Hahn (Co-Sponsor), Councilmember Harrison (Co-Sponsor)

RECOMMENDATION

Refer to the City Manager to develop a comprehensive intersection daylighting policy and make recommendations about the implementation of a citywide intersection daylighting program.

Staff should consider criteria for identifying priority areas for daylighting such as high-injury streets, streets and intersections with especially high pedestrian traffic, commercial districts, and streets near schools and colleges. Staff should seek input and feedback on the development of such a policy and program from the Transportation & Infrastructure Commission, and other relevant commissions.

BACKGROUND

Pedestrian safety is a priority of the City of Berkeley. The City of Berkeley adopted its Pedestrian Plan in 2020, highlighting community member feedback where many residents identified “unsafe or uncomfortable crossing conditions” across the city.¹ According to the Pedestrian Plan, of the 1,071 total collisions involving pedestrians in Berkeley between 2008 and 2017, 10 were fatal (1 percent) and 79 led to a severe

¹ *Pedestrian Plan*. (2021, January 26). City of Berkeley. Page ES-4

injury (7 percent).² Additionally, the City of Berkeley has approved the Vision Zero Action Plan, which aims for zero traffic fatalities and severe injuries. Berkeley's Vision Zero Annual Report (2020-2021) prioritizes "quick-builds," where easy solutions such as painting or posting signs can help increase safety.³ This work is guided by the belief and conviction that every collision is preventable; through effective street redesign, we can avoid any more unnecessary fatalities and injuries.

Despite our wealth of forward-thinking planning documents, the physical infrastructure in Berkeley has not kept up with our ambition. We have a long way to go before our streets are truly safe and before we have achieved the goal of eliminating traffic injuries and deaths in Berkeley. There are a variety of barriers to this work, namely costs and staff capacity. Thus, strategies and projects that maximize pedestrian safety impact with minimum infrastructure or staffing costs are ideal for near-term focus.

Intersection daylighting is an effective—yet cheap and straightforward—way to improve pedestrian safety. Daylighting operates primarily by preventing drivers from parking in the spaces directly before an intersection, thus increasing visibility and improving sight-lines for drivers, helping drivers and pedestrians make eye contact.

According to the National Association of City Transportation Officials (NACTO), 20-25 feet of curb space leading up to an intersection should be daylighted to maximize safety. This diagram from NACTO shows how the implementation of daylighting increases visibility of the entire crosswalk for drivers approaching the intersection. For pedestrians, daylighting means that they don't have to venture into the intersection and peek around parked cars to see if they have a clear path to cross—which is especially dangerous for people using wheelchairs. For drivers, this means they can see pedestrians before they arrive at the crosswalk and have more time to slow down.⁴



² *Pedestrian Plan*. Page ES-6 <https://berkeleyca.gov/your-government/our-work/adopted-plans/pedestrian-plan-2020>

³ *Vision Zero Action Plan*. (2019, March 10). City of Berkeley. <https://berkeleyca.gov/your-government/our-work/adopted-plans/vision-zero-action-plan>

⁴ NACTO

Sight lines before and after daylighting (Source: NACTO)

Similar Examples Implemented by Other Jurisdictions

Hoboken, New Jersey became a Vision Zero city and has since implemented safer pedestrian facilities across the city. As of June 2022, Hoboken, New Jersey hasn't had a traffic death in four years. According to Ryan Sharp, Hoboken's Director of Transportation and Parking, daylighting is one of the most impactful tools that Hoboken has used to make its streets less deadly.⁵ Interestingly enough, New Jersey law already prohibits any driver from parking within 25 feet of a crosswalk. Hoboken's progress has in part been due to their enthusiasm in actually enforcing the state rule.



Daylighted intersections in Hoboken, NJ

At each daylighted intersection, a parking space is removed in place of hatched paint markings and/or delineators (flexible posts). In certain cases, Hoboken implements hardscape improvements like curb extensions to further improve its daylight intersections, especially on major corridors. But usually, paint is sufficient to daylight an intersection. This makes daylighting perhaps the most cost-effective pedestrian safety facility we have at our disposal. The 2020 Berkeley Pedestrian Plan estimates the cost per intersection approach of adding red curb paint at \$500, or \$2,000 per intersection.⁶ Adding hatched paint markings and/or delineators may cost more but, without hardscape changes, costs should remain low.

San Francisco has also implemented a comprehensive daylighting plan, defining daylighting as a minimum of 10 feet of red curb before an intersection. In accordance with its Vision Zero plan, San Francisco has committed to daylighting all the streets in the High Injury Network (13% of streets that account for 75% of severe and fatal

⁵ Robbins, C. (2022, June 17). *Hoboken Hasn't Had a Traffic Death in 4 Years. What's Right?* Curbed. <https://www.curbed.com/2022/06/hoboken-traffic-deaths-none-vision-zero-streets.html>

⁶ Pedestrian Plan. (2021, January 26). City of Berkeley. Page 64 <https://berkeleyca.gov/your-government/our-work/adopted-plans/pedestrian-plan-2020>

crashes). As a result, they saw 14% fewer collisions and 50% of pedestrians reported feeling safer.⁷

The importance of daylighting as a traffic safety measure has also resulted in statewide attention—and may soon result in statewide action. On February 2, 2023, California State Assemblymember Alex Lee introduced AB 413, legislation that would prohibit parking within 20 feet of crosswalks throughout the state.⁸ By passing its own daylighting policy, Berkeley can become a leader on this important issue and, if necessary, staff can work to adapt to any potential state policy changes.

CURRENT SITUATION AND ITS EFFECTS

The 2020 Berkeley Pedestrian Plan recommends red curbs at intersections to improve sightlines.⁹ However, daylighted intersections are rare in the city and are most often found where new complete streets projects have included them. In other words, while the Pedestrian Plan recommends it as a treatment to improve safety at intersections, there is not currently a systematic effort to daylight intersections broadly across the city. This maintains the status quo of dangerous intersection crossings.

This item suggests that staff develop an Intersection Daylighting Policy, so that consistent standards for sightlines and red curb and hatched paint buffers can be applied to intersections across the city. Additionally, this item suggests that staff develop a program to daylight intersections across the city, independent from ongoing complete streets and repaving projects. With simple materials such as paint and bollards, the city ought to be able to have a positive effect on a significant quantity of intersections quickly and affordably.

The majority of pedestrian collisions in Berkeley occur at intersections. The intersections in Berkeley with the highest number of collisions were generally located around downtown, south of the UC Berkeley campus, and along major arterials, such as Ashby Avenue, San Pablo Avenue, Shattuck Avenue, and University Avenue. The Pedestrian Plan also identified four key intersections with the highest pedestrian volumes. Each of these intersections is located in Berkeley's downtown core: Kala Bagai Way at Addison Street, Shattuck Avenue at Addison Street, Shattuck Avenue at Center Street and Shattuck Avenue at Allston Way.¹⁰

⁷ Anzilotti, E. (2021, November 4). *Daylighting* [Text]. SFMTA; San Francisco Municipal Transportation Agency. <https://www.sfmta.com/getting-around/walk/daylighting>

⁸ "AB 413." n.d. California Legislative Information. Accessed February 3, 2023.

https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=202320240AB413.

⁹ <https://berkeleyca.gov/sites/default/files/2022-01/2020-Pedestrian-Plan.pdf> (page 34)

¹⁰ Pedestrian Plan. (2021, January 26). City of Berkeley. <https://berkeleyca.gov/your-government/our-work/adopted-plans/pedestrian-plan-2020>

Staff Considerations

Modeling policy on Hoboken’s successful citywide daylighting efforts, staff should create a program that standardizes daylighting as a best practice across the city and directs resources to daylighting. Staff may consider prioritizing intersections on High-Injury Streets as identified in the city’s 2019 Vision Zero Action Plan,¹¹ in addition to streets and intersections with especially high pedestrian traffic, those on commercial corridors, or those near schools and colleges.



Map of high-injury streets and areas near schools in Berkeley (for visualization only; not a proposal)¹²

Due to the low fiscal cost and high safety return of daylighting, this program should function differently from complete streets construction. Complete streets projects are often implemented only once a street is repaved, but this would needlessly delay daylighting—a facility that can be as simple to implement as red curb paint.

While red curb paint is technically a sufficient regulatory signal to drivers that parking is not permitted, staff may explore other more visible designs, including hatched markings and delineators like those used at intersections in Hoboken. Hoboken’s daylighted intersections consist of hatched markings and/or delineators that prevent drivers from parking in former corner parking spaces.

¹¹ <https://berkeleyca.gov/sites/default/files/2022-02/Berkeley-Vision-Zero-Action-Plan.pdf>

¹² Map created by Sam Greenberg. Data sources: MTC, City of Berkeley, *City of Berkeley Vision Zero Action Plan* (2019), California Department of Education, OpenStreetMap

In addition to these “quick build” measures citywide, staff should continue to ~~prioritize~~ include "quick build" daylighting and hardscape curb extension facilities in complete streets projects to maximize visibility and improve pedestrian safety. Wherever implemented, ~~While most intersections in the city could benefit from just paint and delineators, hardscape improvements should be implemented at intersections on streets that are already being reconstructed.~~ red curb paint and plastic delineators are intended to be a short-term “quick build” treatment and, given available resources and staff time, should ideally in the future be replaced with permanent hardscape improvements such as curb extensions.

FINANCIAL IMPLICATIONS

In metered areas, the city receives revenue from parking meters and residential parking permits (RPPs). Removing parking spaces for daylighting may reduce parking meter revenue and RPP participation.

Staff should also consider if there are regional funding opportunities that could support a city daylighting program, such as One Bay Area Grants (OBAG) administered by the Metropolitan Transportation Commission, in addition to the Highway Safety Improvement Program (HSIP) administered by Caltrans, Alameda County Measure B/BB funds, and Alameda County Measure F funds.

Staff should consider what level of funding would be necessary to deliver a successful and effective daylighting program. This item does not refer funding to the budget process at this time, as this project is unlikely to be able to be initiated during the next fiscal year due to staffing constraints.

CONTACT PERSON

Councilmember Rigel Robinson, (510) 981-7170
Sam Greenberg, Legislative Assistant