

Memorandum: 2-Way Cycle Track Proposal for Patrick Avenue

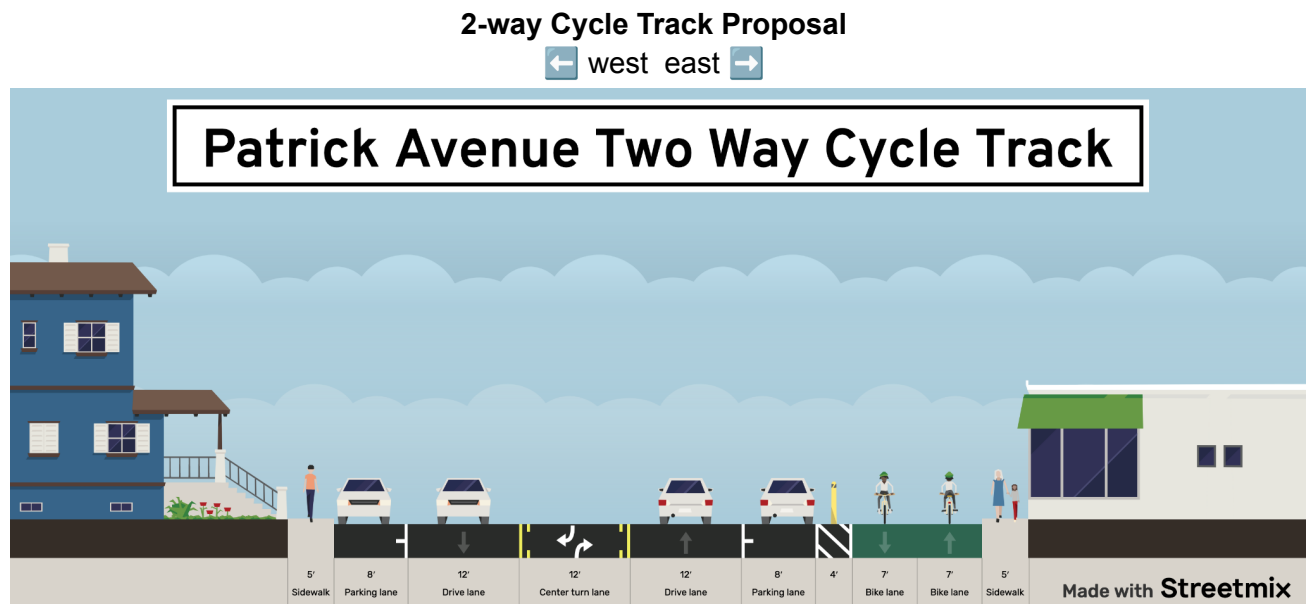
Date: September 7, 2021

To: Hayward Public Works

Fr: Bike East Bay

Background

At its July 28, 2021 meeting, the Hayward City Council Infrastructure Committee directed Public Works Department to analyze and consider a 2-way cycle track bikeway design for Patrick Avenue. This came in response to Bike East Bay's request to Council and staff, as we believe a 2-way cycle track best meets the safety and access goals of the project while addressing community concerns about floating parking. This Memorandum lays out technical details for our proposal for a 2-way cycle track on Patrick Avenue, and provides some examples of 2-way cycle tracks on the ground and under development in the East Bay.



As shown here in sectional view of the 2-way cycle track proposal, the bikeway is on the east side of Patrick Avenue and is buffered from on-street parking, which is retained on the east side, and maintains a travel lane in each direction with center turn lane. Super important is that on-street parking is also retained and repositioned to the curb on the west side of the street, as it was prior to the project. With west side on-street parking back to the curb, 90% of the residential parking in front of homes fronting Patrick Avenue is curbside, eliminating a main point of contention residents have with parking away from the curb--floating parking in front of their house. Another point of contention with the current design is sight lines for drivers pulling out of driveways. As staff have acknowledged, sight line issues are addressed with removal of an additional parking spot adjacent driveways, as is common practice with parking-protected bike lanes. Staff have already removed some on-street parking near driveways and can remove more where needed.

Intersections

Patrick Avenue and Tennyson

Safety is far improved at this intersection with this 2-way cycle track design over all other designs under consideration, including the upgraded protected bike lanes approved, funded, but not yet installed. The reason for this is the bikeway with this design is completely removed from the double right turns from Patrick Avenue onto Tennyson heading toward 880. The bikeway is also removed from the doh or left turning traffic from Tennyson Road onto Patrick. This is a huge improvement. All other designs require people bicycling to position themselves way out in the street between the double right turn lanes and the left turning traffic—that is unreasonably dangerous and only the most brave people will attempt that.

Patrick Avenue and Reiger

This intersection had fewer than 50 left turning cars SB off of Patrick Avenue on to Reiger and thus should function safely with no crossing improvements.¹ However, for added safety, we propose rubber bumps be installed parallel to the bikeway crossing, between the bikeway and traffic on Patrick Avenue. This will help slow left and right turning traffic across the bikeway.

Patrick Avenue and Roosevelt

This intersection is a 4-way stop with low traffic volumes, and accordingly should function safely with a green bike crossing and additional signage.

Patrick Avenue and Gomer Street

This intersection is a 4-way stop with low traffic volumes, and accordingly should function safely with a green bike crossing and additional signage.

Patrick Avenue and Westwood (and St Bede)

We propose closing left turning traffic at St. Bede Lane, limiting vehicle movements to right in, right out. At Westwood, add a 4-stop sign.



Patrick Avenue and Schafer Road

This is a signalized intersection and should function fine as left turning movements are below the 50 left turns/hour threshold for 2-way bikeways.

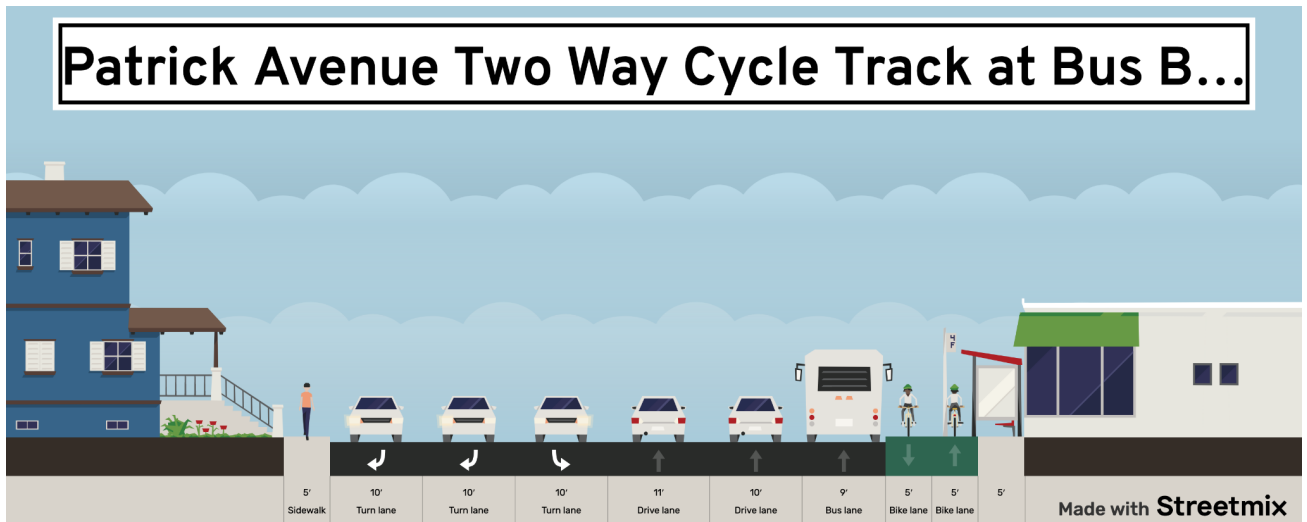
Patrick Avenue and intersections north

While not part of this project, the intersections to the north of Schafer Road all similarly have low volumes of left turning traffic. Huntwood intersection is signalized.

¹ <https://www.mass.gov/doc/chapter-6-signals/download>, Chapter 6, Exhibit 6A, page 107

Bus Stops

At Tennyson, the stop includes a raised bus bulb that also functions as a raised bikeway when buses are not present. There is sufficient room at this intersection to keep all the turn lanes currently and an area for the bus to stop at the bus bulb. Here is a sectional view:



The raised bus bulb would be provided by Zicla, a manufacturer of hard rubber raised bus islands, of which several are installed in cities in California, including in Oakland. When a bus stops at the bus bulb, bike traffic on the cycle track has to stop and yield to transit riders getting on and off the bus. AC Transit line 56 operates here with low frequencies and low ridership. Thus, there should not be a conflict issue. We have discussed this design with AC Transit. Alternatively, the bus stop here can be combined with the bus stop at Roosevelt, functioning similarly.

2-Way Cycle Track Examples in East Bay

- **Richmond: Marina Way South**
A 2-way cycle track is planned from Ohio Street to Wright Avenue in South Richmond. Phase 1 from Ohio to Cutting is currently under construction. At unsignalized intersections, traffic on Marina Way South has the right of way and turning traffic both rights and lefts from Marina Way South to side streets has to yield to 2-way bike traffic in the cycle track;
- **Richmond: Cutting Blvd**
A 2-way cycle track is starting construction soon on Cutting Blvd from Gerrard Street to Harbor Way South. At unsignalized intersections, traffic on Cutting Blvd has the right of way and turning traffic both rights and lefts from Cutting Blvd to side streets has to yield to 2-way bike traffic in the cycle track;
- **Richmond: Canal Blvd**
One of the first 2-way cycle tracks built in the East Bay, extends along Canal Blvd two miles from Cutting Blvd to Red Oak Victory Ship. At unsignalized intersections, traffic on Canal Blvd has the right of way and turning traffic both rights and lefts from Canal Blvd to side streets has to yield to 2-way bike traffic in the cycle track;

- Alameda: Clement Avenue
A 2-way cycle track exists now along two segments of Clement Avenue, one north between Sakas Street and Entrance Road, and another to the south between Willow Street and Minturn Street.
- Berkeley: Gilman Avenue
Construction has started on a new bike-ped bridge over I-80 at Gilman Street in Berkeley, and a new 2-way cycle track from the east side frontage road to 4th Street. At 2nd Street, right and left turning traffic from Gilman Street crosses the cycle track.
- Berkeley: Bancroft Way
A 2-way cycle track was completed in 2017 on Bancroft Way from Fulton Street to Dana Street. This 2-way cycle track will under design to continue east to Piedmont Avenue.
- Emeryville: 40th Street
Emeryville was recently awarded design money for a 2-way cycle track on 40th Street, extending from Adeline Street west to the Bay Bridge pathway from IKEA.

