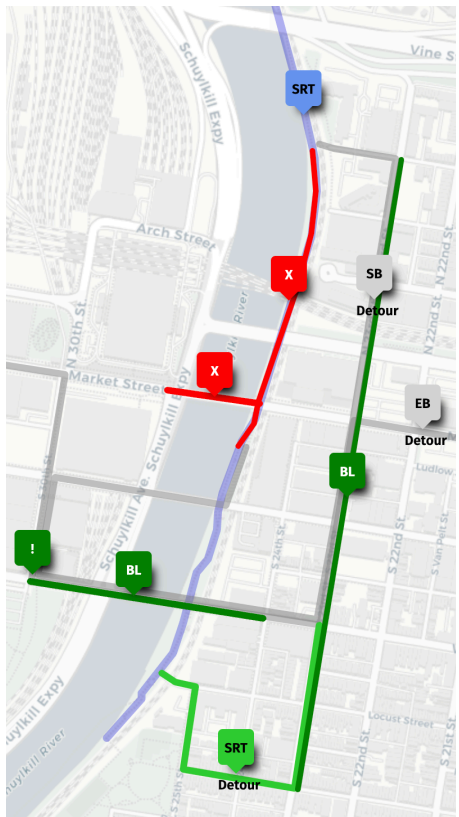
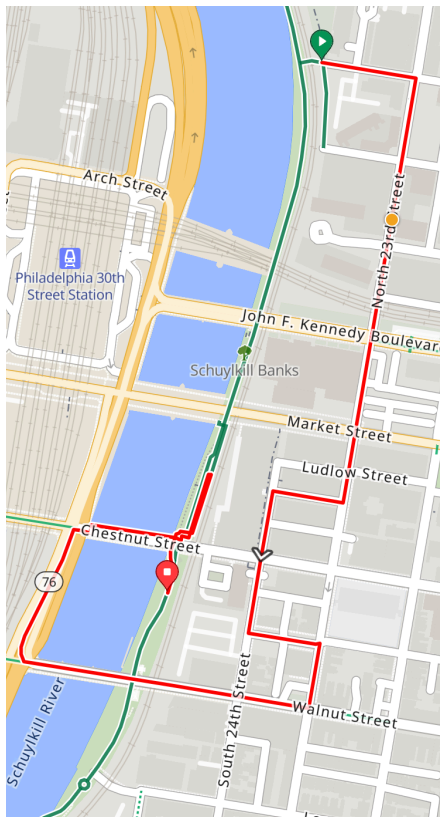
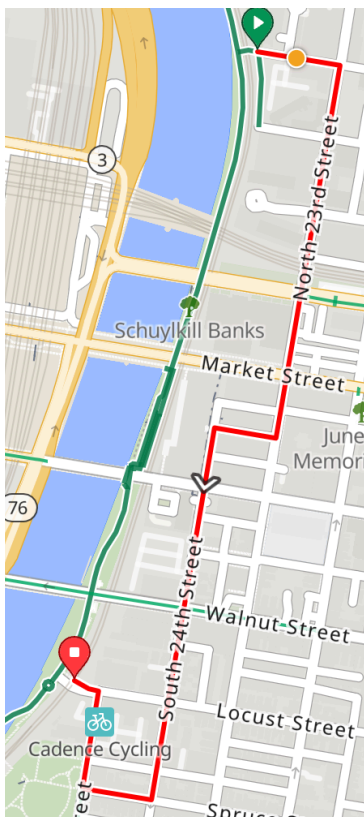
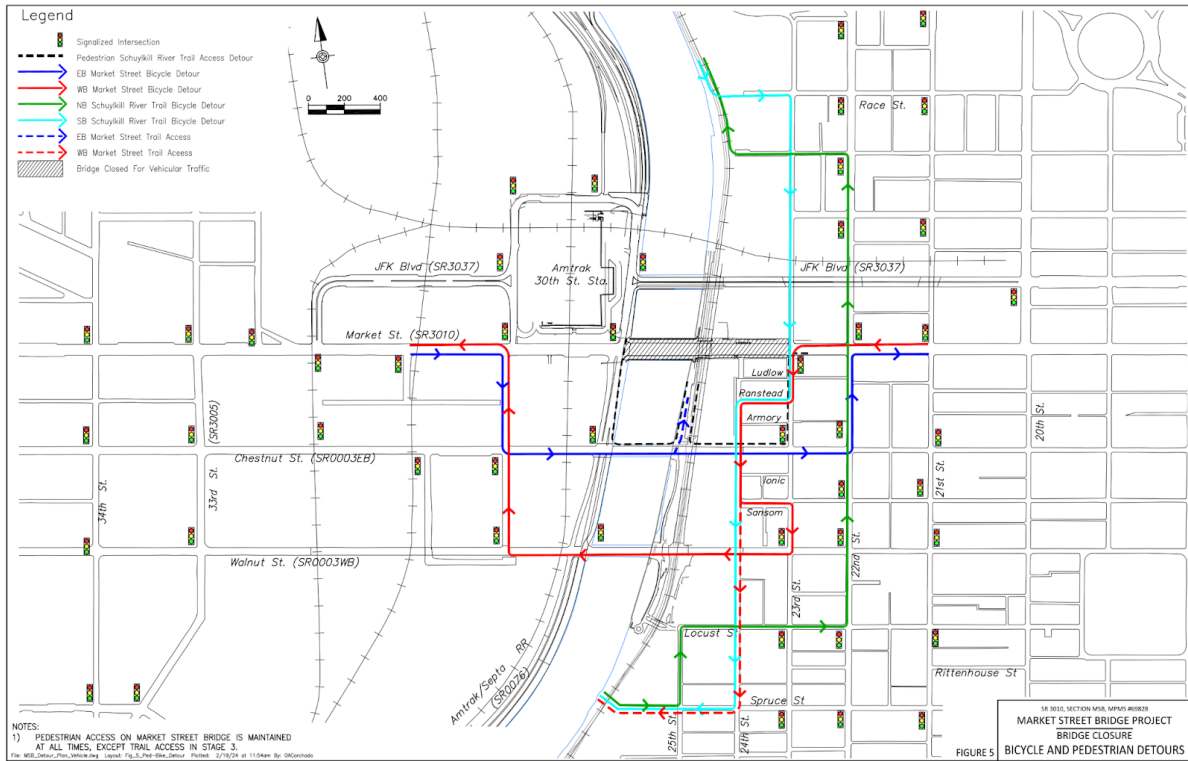


Philly Bike Action Response to PennDOT's proposed Market St Bicycle Detour

Last Updated: 03.25.2024



PennDOT [2.21.24](#) plan: [map](#)

PennDOT [04.13.23](#) described by email: [map](#) PBA Proposal with protected bike lanes [map](#)

23rd Street:

Our recommendation is to **install a parking-protected bike lane for the entirety of 23rd St affected by the detour (Race St to Spruce St)** and to **prioritize a direct route south on 23rd St.**

>>> "It is not possible to eliminate a lane on 23rd Street for vehicles without creating significant traffic problems."

- Paul L. Shultes, P.E. | Consultant Project Manager (AECOM), March 15, 2024

This reasoning is concerning. It seems to us that PennDOT and AECOM are choosing to put cyclists at risk to avoid unsubstantiated "traffic problems".

- The traffic volumes on 23rd (4.1k AADT) are much lower than 22nd (6.6k AADT, which currently is operating effectively as a one-lane road with a bike lane due to construction). **There is plenty of capacity to repurpose a traffic lane for bicycles.** [\[DVRPC Traffic Counts\]](#)
- The car detour only uses 23rd between Market and Walnut, so the additional traffic on N 23rd sounds exaggerated. Plus, JFK is available as a secondary detour, to further relieve potential congestion. **PennDOT should consider detouring car traffic onto 21st street** instead of 23rd so that appropriate bike facilities can be prioritized on at least one road.



Feb 14th, looking south on 22nd at Walnut St

- The road diet which added protected bicycle infrastructure on Washington Avenue, a road with much higher ADT than 23rd St, resulted in **“no statistically significant change to the travel time”** (p. 19) according to the city’s full [travel time report](#). On Washington Ave, bicycle traffic increased by as much as 101% after the improvements (p. 29), which contributed to the reduction in automobile traffic. A dedicated bicycle lane on 23rd St would induce a similar modal shift and avoid congestion.
 - Washington Ave has AADT of 15,500 for 4 lanes, or about 7,700 per each 2-lane direction, which is *much* higher than 23rd St. **We now know that a single lane can handle at least 7.7k AADT.**
- Scientific research on multi-modal streets shows that **removing a lane of automobile traffic can reduce congestion**, not increase it, especially if that traffic lane is repurposed for bicycles.
 - The [Federal Highway Administration](#) states that lane reductions from four to three lanes on roads with an ADT of up to 20,000 are feasible, and an ADT of under 10,000 is “a great candidate for road diets in most instances. Capacity will most likely not be affected.” 23rd St’s current two-lane configuration at 4.1k ADT is far below that threshold. Also, the FHWA specifically states that lane reductions can be effective on one-way streets.
 - A study from [Gudz et al.](#) (2016) specifically demonstrates that replacing a lane of automobile traffic with a dedicated bicycle lane induces significant use of the corridor by bicycles without negatively affecting travel times for motorists. Another study from [Nixon et al.](#) (2018) shows that

replacing an automobile lane with a dedicated bicycle lane *reduced* vehicle congestion by up to 23% on the section with the bicycle lanes and up to 6% on side streets.

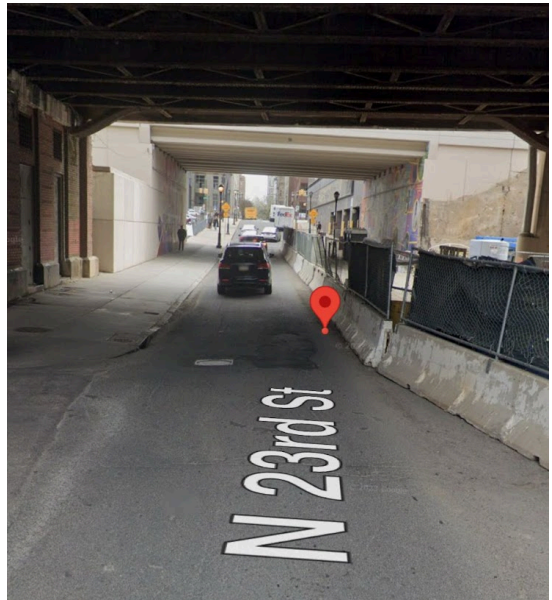
- **We have historical evidence that one lane of traffic on N 23rd St is workable.**

- Market St and 23rd was reduced to a single lane by construction for years
- Today, 23rd St under JFK is reduced to a single lane by construction. The construction under JFK is currently using the right-of-way to park a dumpster - this space could be reclaimed to accommodate a bike lane or, a left-side bike lane could detour onto the sidewalk under the bridge for the duration of the detour.



- Currently, PennDOT is providing no safety accommodations for the majority of blocks on 23rd St, which is not commensurate with the level of safety road users coming off the SRT will be expecting

- PennDOT's suggestion of two one-block long bike lanes on S 23rd St zig-zagging onto 24th is an **inefficient and unrealistic** solution because it involves additional turns which create unnecessary points of conflict. It would be much safer to continue a bike lane from Market to Walnut without detouring onto Ranstead or 24th.



- If temporarily removing parking on S 23rd St is on the table and two-lanes of motor traffic is allegedly needed, PennDOT should remove parking in order to create two lanes of traffic during the detour (in addition to the bike lane). After the project completes, parking can be reinstated as protection for the new bike lane.

- 23rd St is a direct route cyclists will naturally take and would fill an obvious gap in Philly's overall high-quality bike network by more equitably connecting neighborhoods in southwest Philadelphia (Grays Ferry via 23rd St). **PennDOT should work with the City to capitalize on this opportunity** to pilot a new bike lane after this summer's repaving.

Schuylkill River Trail (SRT) detours:

Our recommendation is to **officially extend the SRT Detour to Spruce St**, which would allow cyclists to rejoin the trail at the Locust St rail crossing.

- Instructing trail users to take a circuitous and more dangerous route over Walnut Street Bridge is irresponsible.
 - The route is so inefficient it turns what would be a 0.5 miles into 1.2, more than double.
 - Additionally, the elevation gain on the bridge and ramp is not comparable to the route being detoured, which will make it untenable for some users.
- PennDOT needs to take safety seriously even for a three month winter detour.
 - Winter of 2023, 40,000 bikes used SRT in this area. 23rd had 282 daily cyclists in Dec 2020. We can expect total cyclists for this 3 month period will be around 65,000. [\[DVRPC Bike Counts\]](#)
- PennDOT should work with CSX to prevent trains from stopping in front of the gates.

Walnut Street:

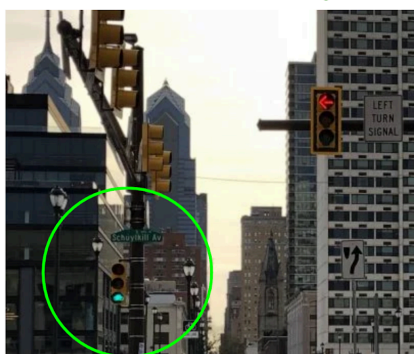
We are excited to hear that re-stripping the bike lane and installing a bike signal are planned for the bridge ahead of the detour. However, due to the high-speed nature of the road, the **bike lane needs to be protected by jersey barriers** during the detour.

- According to [City data](#), Walnut St is in the top 10 corridors for speed related crashes. Since parking protection is not being install until the conclusion of the detour, it's **imperative that concrete jersey barriers are installed immediately** to protect the bike lane from high-speed traffic, similar to Columbus Ave and Spring Garden St:



- We recommend **the bike signal be installed at a lower position than the one currently on Market St**. Bike signals directly next to the car turn signal cause confusion for drivers.

GOOD: Chestnut St Bike LOW Signal



BAD: Market St Bike HIGH Signal

