



BPAC Design Subcommittee Meeting

September 28, 2022 9:50 am to 10:50 am

Online Zoom Meeting

Meeting Notes:

- **[Bike Friendly Resurfacing](#) Presentation by Sarah Moran, DVRPC**
 - **Goals:** To identify road segments for bike-friendly improvement to be implemented as part of regularly scheduled maintenance projects. To meet the needs and wants of the community.
 - This is done by simply using paint and signs to make bike-friendly improvements.
 - 10-30 road segments each year due to be repaved.
 - **PennDOT Connects Process**

Main Question: Is the facility a candidate for bike-friendly resurfacing within the existing cartway width?

 - Step 1: Initial Priority Screening - Is this segment a priority for bike-friendly improvements? (yes/no)
 - If the counties, the Bike Coalition of Greater Philadelphia or DVRPC say yes, we move on to Step 2.
 - Step 2: Initial Feasibility Screening - Is it possible to fit a safe facility in the cartway? (yes/no)
 - DVRPC planners/designers review the road segments closely using aerial imagery, google street view, traffic counts, speed limits, truck volumes, and more to see what should be recommended.
 - Step 3: Engineering Feasibility Screening - Does PennDOT agree that something is feasible? (yes/no)
 - PennDOT planners/designers review the road segments closely using aerial imagery, google street view, traffic counts, speed limits, truck volumes, and more to see what should be recommended.
 - Step 4: Municipal Outreach: Does the municipality agree to maintain pavement markings between resurfacing? (yes/no)
 - The municipality is required to maintain the road. Some have the capacity and some don't, they don't have the money or staff etc.
 - Cannot tell municipality the cost of maintenance. It varies with the cost of materials and frequency of maintenance.
 - There are outreach tools to help municipalities, such as a template request letter to send to PennDOT for support (which is agreed upon by PennDOT's legal team).
 - [Bike-Friendly Resurfacing Program: Municipal FAQs](#)



- Step 5: Design Striping Plan and Implementation (PennDOT)
 - Even if the municipality is not interested, there have been instances when the shoulder is striped for bicyclists. Usually this is at the request of the county.
- **Alternative Pipelines**

There are cases where good projects are identified but it requires more than just repaving, or an alternative route is better, etc.

 - Now that we've identified this project, is it worth pursuing in other ways?
 - Meet with Project Implementation (PI) to discuss:
 - Well-formed project ideas?
 - Applicable funding opportunities?
 - Connect potential project sponsors with PI to develop funding applications OR provide technical assistance through DVRPC's Unified Planning Work Program (UPWP) to further develop project ideas.
- **Segment Tracking Database**
 - Successes: Since 2018, about 25 miles of on-road facilities were added in suburban counties. There is a full list here: <https://www.dvrpc.org/transportation/bicycle/bikefriendlyresurfacing>
- **Comments**
 - Signs are added along with repaving.
 - Another project: Collecting before and after count data that will hopefully be shared in the future for the suburban program and the Philadelphia program.
 - Where there are heavy-duty bus lanes, people are concerned about conflicts between buses and bicyclists. A multipurpose connector can be a solution. This should be considered.
- **Bike Friendly Resurfacing in Philadelphia Presentation by Thom Stead, DVRPC**
 - This program takes some of the most complicated roadways and tries to improve them.
 - For projects in the City of Philadelphia, DVRPC and OTIS use capacity analysis to assess how PennDOT roads can be redesigned to accommodate new facilities that improve safety for biking and walking.
 - PennDOT releases a 5-year list of roadways due to be repaved.
 - DVRPC and OTIS identify roads that could either accommodate new bicycle facilities or need to have existing facilities modified to improve safety. Priority is given to roads on the High Injury Crash Network (locations where high numbers of crashes are happening) where bike improvements can be installed.
 - DVRPC takes turning movement counts and does observation along the corridor during peak hours to determine existing conditions.
 - DVRPC and OTIS develop conceptual design iterations in Synchro to understand and mitigate potential traffic issues associated with designs.
 - PennDOT must sign off on the designs because they are PennDOT roadways.



- DVRPC develops a findings memo to share with PennDOT.
- PennDOT determines whether the analysis is acceptable or needs modifications.
- OTIS does outreach to local leaders and community.
- If approved, PennDOT and the City of Philadelphia install the project.
- Example: Chestnut Street, West Philadelphia
 - Synchro
 - Synchro uses a map of the street grid that includes data for traffic volumes, travel lanes, traffic signal plans, pedestrian crossings, bike facilities, and bus stops.
 - Uses microsimulation and equations from the Highway Capacity Manual to calculate delay, queueing, and Level of Service.
 - We created an existing and proposed scenario to compare how proposed changes will impact traffic.
 - With a design PennDOT approved, the City of Philadelphia did robust community outreach. The community was supportive of a separated bike lane.
- **BFR in New Jersey**
 - Key Differences in New Jersey
 - Road ownership: A shift from looking at the state level to the county level in New Jersey
 - Paving schedule/process: Every county does something a little different.
 - Municipal involvement/maintenance requirements
 - Design funding: Who pays?
 - There are high hopes that something will soon be started. It will have to be a creative effort.
- **Mercer County, NJ Implementing Bike Facilities within the Paving Program** by Matt Lawson
 - Repaving is done in-house.
 - There is a database of road segments for Mercer County: <https://www.mercercounty.org/departments/planning/2019-bicycle-master-plan>
 - Loosely follow NJDOT Complete Street Design guidelines to redesign road segments.
 - Working on addressing the “low hanging fruit”.
 - When a roadway segment comes up into the paving program (a year or two is given for advance notice), designs are created to give to NJDOT.
 - Ewingville Road Example
 - A buffered bike lane on both sides.
 - Parking on one side.
 - This is only done when the road has the capacity without disrupting traffic. Parking is a big matter but, in this case, taking away parking is easy.
 - GIS is used to create the designs and note specifications.
 - Hoping to make a tracking database, too.



- The “low hanging fruit” is almost gone. Now looking at integrating bike facility improvements into the capital program.
- There is also a very supportive public and advocate network that helps overcome challenges with the community. Parking matters are another challenge to overcome.
- **Comments**
 - Mercer County uses NJDOT’s guidelines liberally i.e., buffer of bike lane is not 2’ but is a standard of 2 6” stipes and 6” between them.
 - The other low hanging fruit seems to be adding delineators. What’s the county’s current thinking on that? Delineators are a constant conversation about maintenance costs. There are limitations on what can be done. One action that might be applied is to stripe an edge line no matter what to clearly delineate where motor vehicles should be driven and what space belongs to bicyclists.
 - County policy is 11’ lanes (a proven safety countermeasure from FHWA).
- **Updates from Members**
 - NJ Transit
 - Next week there is a meeting with Metuchen, Middlesex County, and consultants to discuss the link between the Middlesex Greenway to downtown and the train station.
 - Hope to have more to discuss on bike station work next time.
 - Cassidy Boulan
 - Working on Trenton bike lanes.
 - Trenton has, as of a couple weeks ago, published [Green and Complete Streets guidance](#).