Delaware Bicycle Council
October 6, 2021
Zoom Webinar
Meeting Notes

Members Present
Walt Bryan, Sussex County Representative
Fran Cardaci, At-Large Representative
Tom Hartley, Kent County Representative
Scott Hoffman, At-Large Representative
Michael Krumrine, DNREC Representative
Marty Lessner, Council on Transportation
Jackie McDermott, Office of Highway Safety
Michael Tyler, At-Large Representative
Michael Wagner, Department of Education
James Wilson, New Castle County Representative
Cpl. Tyler Wright, DE State Police Representative

Members Absent
Mack Cochran, Trails & Greenways Council
Shebra Hall, Division of Public Health Representative
Wendy Polasko, DelDOT Representative
Michael Tyler, At-Large Representative

DelDOT Support Staff
John Fiori, Bicycle Coordinator, DelDOT
Christina Thomas, Administrative Assistant, DelDOT

Guests
Chris Assay, Public
Bill Weller, Sussex Cyclists
Justin Strader, Public
Sal Mazzola, Public
Drew Boyce, Century Engineering
Carly Callahan, Public
Karen Zakarian, Public

I. Welcome/Introductions

The meeting was called to order at 5:03 p.m. by Scott Hoffman. The Council meeting was held as a hybrid in which John Fiori took a roll call of Council members present. The quorum was met for the meeting.

Minutes/Agenda Review:
The Council reviewed the meeting minutes from August 4, 2021. John indicated he received an e-mail to address minor grammar mistakes. Scott Hoffman asked for a motion to accept the minutes from August 4, 2021. Walt Bryan made the motion to accept the meeting minutes. Michael Krumrine seconded. All agreed, no one opposed. Motion passed.

II. Public Comment

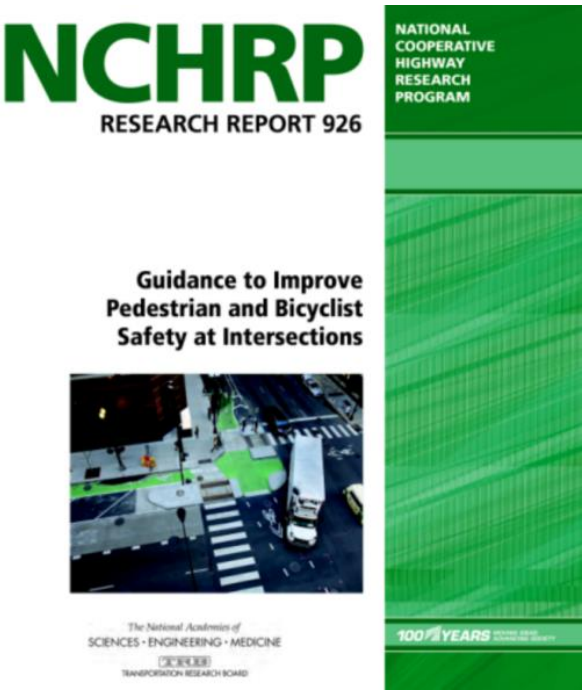
There were no public comments.

III. New Business

2021 Walk Bike Places Conference Presentation:

James Wilson presented the Walk Bike Places Conference he attended virtually in June 2021. It was set up as a hybrid, where you could attend virtually or go to Indianapolis. James chose to attend virtually. James has attended this conference since 2012. The first Walk Bike Places conference goes back to 1980, where this have been going on for 40-years and has learned a lot over the years but was not blown away by this conference. There was one excellent session that saved the whole thing, called Improving Pedestrian Bicycle Safety in Intersections. The intersections are a really challenging problem. Challenging from an engineering point of view but a very important one. It is where most fatal bicycle crashes happen; second after hit from behind. This National Cooperative Highway Researcher Report 962. In the report there is a list of 35 different safety counter measures. The report has a table that provides a quick summary of how the various counter measures effect various kinds of issues that you may have in an intersection; shows how effective they are according to available research; under effectiveness. Does this kind of measure support motor shielding? Does it require an invention to induce motor shielding? Is it about separating the modes or requiring motorists to stop? Talks about the various kinds of crashes that it can address; Motorists failed to yield to the pedestrian, pedestrian failed to yield to the motorists, pedestrian dashed out into the road, bike crossing paths with uncontrolled over movement of motor vehicles, bikes riding through stop signs. By far the most apprehensive guide

to dealing with whatever kinds of issues you are facing in a particular intersection with lots of engineering possibilities. Bill Schultheiss and others were involved prepared this report. Bill works for Tool Design, that is an engineering firm. Bill is mentioned as the greatest specialty's expertise in non-motorized transportation.



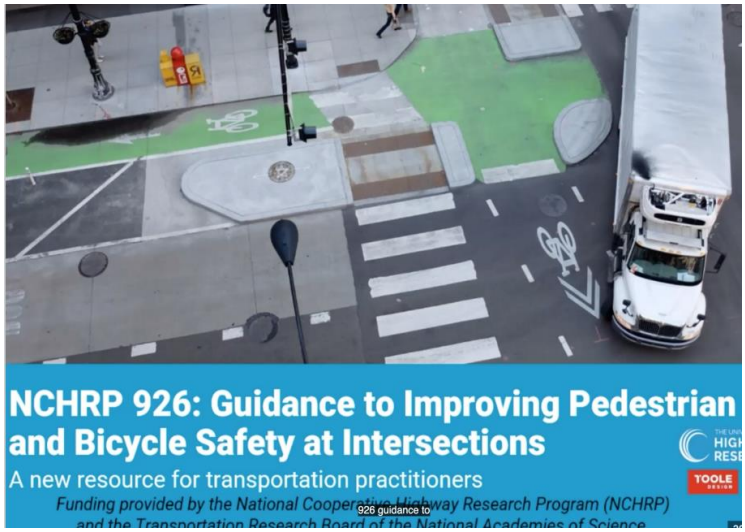


Table 25. Countermeasure Summary Matrix

Countermeasure	Effectiveness			Public Process	Motorist Traveling Straight							Motorist Turning			
	Tier 1: Supports Motorist Yielding	Tier 2: Requires Intervention to Induce Motorist Yielding	Tier 3: Separates Modes or Requires Motorists to Stop	1 to 5 Scale: 1 = No Public Process and 5 = Extensive Public Process	Motorist Failed to Yield to Pedestrian	Pedestrian Failed to Yield	Pedestrian Dash	Bike Crossing Paths With Uncontrolled Motorist	Bike Rides Through/Out—STOP sign	Motorist Drives Out into Bike—Stop Controlled	Bike Rides Through/Out—Signalized Intersection	Motorist left Turning into Pedestrian Parallel Path	Motorist Right Turning into Pedestrian Parallel Path	Motorist Right Turning into Bike—Same Direction	Motorist Left Turning into Bike—Opposite Direction
Active warning beacons	M	M	L	1	●	●	●	●	●			●	●	●	●
Advance stop/yield lines	H	M	L	1	●	●	●	●	●						
All-walk phase	M	H	H	3	●	●	●					●	●		
Bicycle lane extension through intersections	M	L	L	1				●		●				●	●
Bicycle signals	M	M	H	1							●			●	●
Bike boxes	M	M	M	1										●	
Continuous raised medians	H	H	H	4	●	●	●	●	●		●	●			●
Hardened centerlines	H	H	H	1								●			●
Crossing barriers	L	M	H	5	●	●	●	●							
Crossing islands	H	H	H	3	●	●	●	●	●		●	●			●
Curb extensions	M	M	M	1	●	●	●	●	●	●	●	●	●	●	●

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Curb radius reduction	M	M	M	1									●	●	
Gateway treatments (R1-6 signs)	H	M	L	1	●	●	●	●							
Grade-separated crossings	L	M	H	5	●	●	●	●	●	●	●	●	●	●	●
High-visibility crosswalk markings	H	H	H	1	●	●	●	●	●	●		●	●	●	●
In-street pedestrian crossing signs	H	M	L	1	●	●	●	●	●						
Leading bicycle interval	H	H	H	1								●	●	●	●
Leading pedestrian interval	H	H	H	1								●	●	●	●
Lighting	H	H	H	4	●	●	●	●	●	●	●	●	●	●	●
Mini-traffic circles	M	M	M	4	●	●	●	●	●	●	●	●	●	●	●
Mixing zone treatments	M	L	L	3										●	
No turn on red signs	H	H	H	1									●	●	
Parking restrictions at crossing locations/ daylighting	H	H	H	2	●	●	●	●	●	●	●	●	●	●	●
Passive bicycle signal detection	H	H	H	1							●				
Pedestrian countdown signals	H	H	H	1		●	●					●	●		

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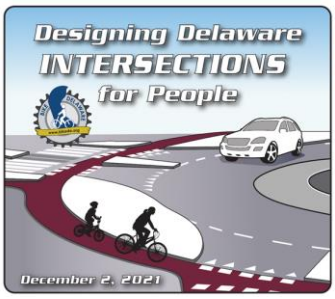
Pedestrian hybrid beacon	M	H	H	1	●	●	●	●	●						
Protected intersections	H	H	H	3							●	●	●	●	●
Protected phases	M	H	H	4								●	●	●	●
Raised crossings	M	H	H	3	●	●	●	●	●	●	●	●	●	●	●
Rectangular rapid flash beacon	H	M	L	1	●	●	●	●							
Road diet/rechannelization	H	H	H	5	●	●	●	●	●	●	●	●	●	●	●
Roundabout	H	H	H	5	●	●	●	●	●	●	●	●	●	●	●
Signal timing	H	H	H	3	●	●	●	●			●	●	●	●	●
Traffic signals	M	M	M	3	●	●	●	●			●	●	●	●	●
Two-stage bicycle turn queue boxes	M	M	M	1										●	

Designing Delaware Intersections People Conference 2:



James Wilson presented that Designing Delaware Intersections for People 2. Some members on the Council attended this online conference last year in November. More positive feedback was received on this event than any other event ever done. Anyone in Delaware was invited to nominate any intersection anywhere in the state that they thought needed help or was not working right from the point of view of people walking and cycling. Assembled that list of nominated intersections and we shared it with a group of engineering experts from the country and internationally. The group chose one intersection from the list of nominated sections and made a session for their design ideas for that specific intersection. Some of the presenters got hired as sub-contractors to work here in Delaware. A couple of weeks ago there was a public workshop that WILMAPCO held on the City of New Castle Transportation Plan, where this was the first time the public got to see those presenters' ideas. Due to the feedback and the lasting impact from last year's conference, we wanted to do it again. The Designing Delaware Intersections for People 2 will be on December 2, 2021 but registration is not open yet but will probably be next week. What is open is the nominated intersection, where it is strongly encourage Council members and anyone sign in if you can think of an intersection in your community that is not awesome or is unsafe or people walking and cycling. Please consider taking your nomination and share it with the impressive group of engineers.

What Smartphone Data Can Tell Us About Bicycle Travel in Delaware:
Camille Mapua of Bike Delaware was to conduct the presentation but due to technical difficulties she could not log on the webinar. James Wilson said he would try his best to do the presentation prepared by Camille. The overview of the presentation was unlike people driving around where we have an enormous amount of information on Vehicles Miles Traveled (VMT). DelDOT has strong information from year to year, in which VMT has gone up in the 50-years. They know how much driving is done at any given road and street. On the DelDOT website there is a lot of information such as trail counters that give information. Beyond that how much do we know about how much bicycling is going on in Delaware and where it is happening? We now have more information about people moving around on bicycles in Delaware, not just the recreation cyclists. Like anyone who has a smart phone and has the location feature on the smart phone enabled, all those smart phones are constantly pinging cellphone towers on the location of them. There is this company called Streamlight Data that can take all those pings and extracts out the bicycle movements. They can determine which pings are coming from a bicycle, not a car, where it gives us this data set about bicycle travel that we have never had before. There are other data sources, but they have not been telling us about bicycle data. For any given area it has been kind of

normalized by the number of people giving you the kind of a mode share. Delaware has a couple of high areas of cycling in Wilmington and Newark. The Dover area is getting a large amount of biking as well as eastern Sussex County. During the census, they conduct the American Community Survey where they ask people how they travel to and from work. We have seen some census American survey numbers that have suggested that Newark has a 5% population for using bicycles to and from work as main way of transportation. However, the smartphone location data seems to be telling us a very different story; suggesting there is a lot more cycling than what the census numbers had. Going forward we can ask a lot of questions about bicycle travel, such as was there more or less biking in Delaware in 2020 than 2019? Trying to figure out whether most cycling in Delaware is recreational or transportation cycling. Lewes and Wilmington had big jumps in bicycling from 2019 to 2020 while overall Sussex County seems like the biggest 2019 to 2020 increase. Newark, Wilmington, Dover, and Lewes are seeing the most bicycling in Delaware. In looking at individual cities, smartphone location data is taken and connected it to demographic data in the various districts where we have the number of people cycling. We can also ask the question on vehicle movement as well. Where in Delaware are there a lot of vehicle trips that are short because that would tend to point out an area that are good candidates for bicycle infrastructure. You have an area where 90% of trips are less than 3-miles but people are driving in their cars. Those are trips that you could do easily on their bikes. This would also offer a way to analyze projects that should ping for the innovation grants.

IV. Old Business

Cycling Innovation Grant Update:
Fran Cardaci reported that the grant working group visited all three of the sites that Newark submitted and application. Based on the site visit, Newark will submit a revised application for only the Chrysler Avenue project. The grant working group also visited Millville and Bethany Beach. Next will be a WebEx meeting with Milton and an in-site meeting with Elsmere. John is working on establishing meeting times with Georgetown and Lewes. John sent an email to Lewes.

Safety Initiatives:
Scott Hoffman discussed with trying to come up with ideas on things the Council can do that may help encourage new programs, new policies having to do something on safety. James Wilson, Michael Wagner, and Scott Hoffman had a discussion offline after the last meeting concerning education. Michael had an idea in terms of maybe doing thing different at the meeting with a more active engagement instead of just the talk and listen type activity in our normal meetings. Michael Wagner noticed the Council does a lot of listening, where the Council did some active things for a while and now do a lot of listening to reports and making comments. The idea is for a couple of members to come up with a proposal and what we could do. This would be discussed at the next Council meeting, where at the Council will be divided into two groups and have breakout sessions and each group will take the idea and develop the idea and present to the Council as a whole. Scott Hoffman indicated that Zoom has the ability for breakout rooms and John Fiori will investigate having that done for the next meeting. Walt Bryan stated that Pete Booker is the executive of the Delaware Safety Council and he talked to him and asked him if something about bicycle safety could be included in the Delaware safety programs that the safety council offers to citizens where Peter said yes. Scott stated that we as a council would start with the idea on what the content is,

and we break into these groups. The groups come up with modification to it and land a plan. Plan on having this on the agenda next time. Will need to get at least one proposal to talk about.

Bicycle Route 1 Update:
Scott Hoffman stated that Chris Assay has done the most work on thing but still need to find people to help with the New Castle County map. Scott indicated he has busy and has not been able to lead that effort. Scott will talk to Chris to maybe can join forces to get that moving along. Anticipating more progress, it is just a matter of getting everyone together to be able to go through the exercises that we have done for Kent and Sussex Counties.

Priority Bikeway Projects Update:
John Fiori indicated that there was only one update, which was the additional of the School Lane Trails project. The project consists installing a shared-use path along the northeast and northwest sides of the Penn Farm, where it is anticipated to start the design process in November 2021, but the project schedule has not been determined at this time. John indicated that the project received an innovation grant award in 2017 and will be moving forward with design.

Prior to adjourning the meeting Scott Hoffman mentioned that for the December Council meeting some of the agenda topics will be awarding the cycling innovation grant, breakout session for the Bicycle Safety Initiatives and bicycle project updates. Also, some Council member terms have expired and will need to determine if those members want to be re-appointed or resign from the Council. John Fiori stated that those members will be contacted by the Governor's Office. Scott asked does the Council participate in filling any vacancies. John responded that those who are interested in being on the Delaware Bicycle Council, they would need to go to the Governors website and fill out an application. John said he will send the Council the website in case anyone knows someone who might want to possibly be on the Delaware Bicycle Council. John Fiori also mentioned that other agenda items will be the approving the FY22 Budget, discuss the FY23 Budget proposal/priorities and nominations will be accepted for Chair and Vice-Chair with voting occurring at the February 2022 Council meeting.

Scott Hoffman entertained a motion to adjourn. Tom Hartley made the motion to adjourn the meeting. Walt Bryan seconded the motion at 6:35 p.m. All agreed, no one opposed. Motion passed.

Next meeting: Wednesday December 1, 2021 from 5:00 p.m. to 7:00 p.m. to be a Zoom webinar unless otherwise determined to be in-person.