

TECHNICAL ADVISORY COMMITTEE MEETING
January 16, 2025

A meeting of the Technical Advisory Committee (TAC) was held on Thursday, January 16, 2025, at WILMAPCO, 100 Discovery Boulevard, Suite 800, Newark, DE 19713 and via video conference/conference call.

1. CALL TO ORDER: Mr. Cooper Bowers, from Delaware Department of Transportation, and TAC Chair, brought the TAC meeting to order at 10:02 a.m.

2. TAC Members present:

Cooper Bowers, Delaware Department of Transportation
Samantha Bulkilvish, Delaware Office of State Planning
David Dahlstrom, Maryland Department of Planning
Taylor Englert, Department of Natural Resources and Environment
Michael Fortner, City of Newark
William Goldman, Cecil County Division of Planning and Zoning
Dan Janousek, Maryland Department of Transportation
Gwineth Kaminsky Rivera, City of Wilmington Planning
Matthew Rogers, New Castle County Department of Land Use
Catherine Salarano, Maryland Department of the Environment
Steven Weber, City of Wilmington Department of Public Works

TAC Ex-Officio Members present:

Jasmine Champion, U.S. Federal Highway Administration

TAC Members absent:

Delaware Division of Small Business, Development, and Tourism
Delaware River and Bay Authority
Delaware Transit Corporation
Maryland State Highway Administration
Town of Elkton Planning

TAC Ex-Officio Members absent:

Amtrak
Diamond State Port Corporation
U.S. Environmental Protection Agency
U.S. Federal Transit Administration

Guests and Invitees:

Pam Keeney, DNREC, AQS member
Tina Merrill, DNREC, AQS member

Staff:

Dan Blevins, Principal Planner
Heather Dunigan, Principal Planner
Sharen Elcock, Executive Assistant
Elizabeth Espinal, Administrative Assistant
Dave Gula, Principal Planner
Bill Swiatek, Principal Planner

Jake Thompson, Principal Planner
Dawn Voss, Outreach Coordinator
Tigist Zegeye, Executive Director

Minutes prepared by: Elizabeth Espinal.

3. MINUTES

Approval of the December 19, 2024 TAC Meeting Minutes.

ACTION: On motion by Mr. Matthew Rogers and seconded by Mr. Dan Janousek, the December 19, 2024 TAC Minutes are approved.

4. SUBCOMMITTEE UPDATES

None.

5. PUBLIC COMMENT PERIOD

None.

ACTION ITEMS

None.

PRESENTATION/DISCUSSION ITEMS:

6. Transportation Justice Update

Mr. Bill Swiatek provided an update on the Transportation Justice Analysis that WILMAPCO has been developing. He acknowledged the significant effort involved in this project and emphasized that periodic updates would be presented to the TAC as the work progresses.

The analysis aims to meet and exceed Title VI requirements by assessing equity for low-income and racial and ethnic minority populations. Additionally, it includes components related to the Language Assistance Plan, an ADA self-evaluation, and transportation accessibility for mobility-challenged groups. These groups include seniors, individuals with disabilities, residents of households without vehicles, and, for the first time this year, young people. The current update focuses on the mobility-challenged aspect of the analysis.

Mr. Swiatek reviewed survey results from a public opinion survey conducted a few years ago, which explored how transportation access affects different populations. One key finding was that 9% of the general population reported that limited transportation access hindered their ability to reach healthy and affordable grocery stores. However, this figure rose to 35% among individuals in carless households. Among seniors, transportation barriers were like the general population, but for individuals with disabilities, the rate doubled to 17%. A similar trend was observed regarding access to routine medical care, with 20% of individuals in carless households reporting difficulty, compared to the regional average of 9%. Further survey results showed strong regional support (71%) for revitalizing existing communities and downtown areas. However, seniors were slightly less likely to prioritize this issue compared to other groups.

The spatial analysis framework for mobility-challenged groups is like the methodology used for analyzing low-income and racial minority populations. The study categorized the population into seniors (65+), individuals with disabilities, carless households, and youth (ages 5–19). The analysis trimmed out non-residential areas to provide a clearer picture of population concentrations.

Findings indicated that concentrations of seniors appear south of the C&D Canal and northwest of Wilmington. Households with at least one disabled member were mapped at the block level to provide a more precise assessment of need. The distribution of carless households was more pronounced in Wilmington but also extended along major corridors outside the city. Youth populations were also analyzed for their transportation needs as emerging users of the system.

The spatial analysis informs project prioritization, ensuring that transportation projects in mobility-challenged neighborhoods receive additional consideration. Areas with moderate or significant concentrations of these populations are identified, allowing for a targeted approach to improving transportation equity.

Mr. Swiatek further explained that a separate component of the analysis focuses on language assistance for individuals with limited English proficiency (LEP). The study uses census data to identify populations that self-report speaking English "less than very well." Additionally, it incorporates a proxy measure for low literacy (individuals with less than a ninth-grade education) and assesses digital access limitations based on previous research on technology deserts.

The study is required to comply with the Safe Harbor Provision, ensuring reasonable interpretation, translation, and outreach for LEP communities. While no single language group exceeds the 5% regional threshold, Spanish and Chinese-speaking populations surpass the 1,000-person threshold, necessitating additional language services.

The geographic distribution of LEP populations shows concentrations of Spanish-speaking individuals in central northern New Castle County, Middletown, and Rising Sun. Chinese-speaking clusters appear in suburban areas around Newark. Additional clusters of Haitian Creole and Arabic speakers have been identified near Newark and Wilmington. For literacy and digital access, the study maps populations with low educational attainment and households without computer or internet access. While digital access has generally improved, some pockets with limited technology remain.

Mr. Swiatek emphasized that to ensure equitable communication, WILMAPCO is implementing a tiered outreach plan:

- **Tier 1 (Most Support):** Proactive outreach for Spanish-speaking LEP populations, low literacy groups, and digitally limited communities. This includes translated materials, partnerships with local institutions, and in-person language assistance.
- **Tier 2 (Moderate Support):** Targeted outreach for Chinese-speaking LEP populations.
- **Tier 3 (Responsive Support):** Translation and assistance provided upon request for other language groups.

Studies conducted in low-literacy or limited-digital areas must incorporate visual and oral communication methods, rather than relying solely on written materials. Similarly, outreach in technology-limited communities should supplement digital engagement with low-tech alternatives.

Mr. Swiatek concluded the presentation with next steps highlighting a complete connectivity analysis and integrating the findings into future updates. The CADSR at the University of Delaware is conducting a connectivity analysis to evaluate household access to key destinations across the region. Equity-focused assessments under Title VI and EJ are also in progress. The final report is expected to be endorsed by the Council in September 2025. Mr. Swiatek invited any interested individuals to join the working group and encouraged them to express their interest.

7. Rocky Run Feasibility Study

Mr. Dave Gula provided an overview of the feasibility study, rail planning, and hydraulic analysis associated with the project. Additionally, he referenced a case study of a similar project and outlined the next steps, including a scheduled public workshop and further technical evaluations.

Mr. Gula acknowledged that an Advisory Committee has been established for the project, comprising experts specializing in hydraulic studies. The consulting team is collaborating with organizations such as the Brandywine Conservancy and the University of Delaware Water Research Center to navigate the complexities of the study. Recently, Brendan Diner joined the team to offer insights from a Denver-based perspective.

Mr. Gula reviewed the project's origins, noting that the recommendation for an underpass emerged from the Concord Pike Master Plan. This recommendation was endorsed by the ongoing Concord Pike Monitoring Committee, which secured funding through the UPWP. The primary focus of the study is to assess the hydraulic and flooding implications of potential modifications, particularly concerning an existing culvert with three cells. One proposal under consideration involves closing one of these cells to water flow for pedestrian and bicycle use. The team has examined relevant guidelines from the AASHTO regarding culvert dimensions. The existing culvert cells are approximately seven feet high and eight feet wide, whereas AASHTO recommends a 10-foot by 10-foot clearance. Additional research has included Maryland's bicycle impact guidelines, which advocate greater height and width in underpasses exceeding 60 feet in length. Given that Delaware has limited tunnels, state agencies remain involved in the review process.

The hydrology study identified Rocky Run as a tributary of Brandywine Creek, originating in Jester Park. The stream is primarily fed by stormwater and groundwater runoff, with some sections consisting of concrete channels rather than natural streambeds. Rocky Run flows beneath Concord Pike before converging with Hurricane Run and eventually joining Brandywine Creek. The study area encompasses a 546-acre watershed.

The team employed regression equations from the United States Geological Survey (USGS) to estimate peak and low flow magnitudes, accounting for factors such as drainage area, basin slope, and soil permeability. The study also incorporated annual exceedance probability calculations to determine the likelihood of specific discharge levels occurring. Confidence intervals were applied to accommodate potential variability in flow projections.

Survey data and LiDAR technology were utilized to generate cross-sectional models of the streambed. While LiDAR provided broad coverage, survey points were deemed more accurate for assessing water surface elevations. The hydraulic analysis adhered to guidelines from the DelDOT, which mandates a 50-year storm event as the design frequency for principal arterial roads such as US 202. The analysis also considered the 100-year storm event to ensure compliance with hurricane evacuation route requirements. In both scenarios, a minimum one-

foot freeboard to the vertical clearance between the water surface and the road must be maintained.

Current hydraulic modeling indicates that the existing three-cell culvert configuration accommodates water flow without overtopping Concord Pike, even during extreme storm events. However, if one cell were repurposed for pedestrian and bicycle use, the water surface elevation would rise significantly. The 50-year storm event would cause water to overtop the remaining two cells, while the 100-year event would result in further elevation increases, albeit without overtopping the roadway. The potential upstream impact of these changes is under further evaluation:

- A preliminary analysis of alternative solutions includes:
- Modifying the existing culvert to incorporate a pedestrian and bicycle pathway.
- Constructing a pedestrian bridge over US 202.
- Implementing an at-grade crossing.
- Developing a new tunnel.

Each option will be assessed based on feasibility, safety, cost, and environmental impact. Comparative case studies, such as the Razorback Greenway in Fayetteville, Arkansas, provide valuable insights. In that project, an existing culvert was repurposed for pedestrian use, incorporating drainage improvements and signage warning users of potential flooding during storm events.

The project team is organizing a public workshop on February 10th at the Talleyville Fire Company to present preliminary findings and gather community feedback. A final workshop will likely be scheduled in conjunction with the Concord Pike Monitoring Committee's annual meeting. The Advisory Committee will reconvene on March 11th to review public input and further refine the study's recommendations.

Ongoing considerations include the feasibility of lowering the culvert floor to increase vertical clearance and the potential for upstream excavation to mitigate flooding. The project remains in the preliminary analysis phase, with further technical assessments required before determining the most viable solution.

Mr. David Dahlstrom commended Mr. Gula on a great overview of the study and thanked him for the updated information.

8. Claymont Area Master Plan

Ms. Heather Dunigan provided an update on the Claymont Area Master Plan, noting that the process is nearing completion with a draft report now available for initial review by the planning partners. Initially, the plan was expected to be presented for adoption this month or next; however, additional outreach efforts are being incorporated based on community feedback from the most recent workshop.

The study area includes an update to the Hometown Overlay Zone, originally established by the county, and extends from Downtown Avenue to the I-495 interchange along the Pike corridor, reaching Governor Printz Boulevard and I-95. The study, initiated as a Unified Planning Work Program (UPWP) request from New Castle County, followed a comprehensive process of public outreach, analysis, and best practice integration. This process included an assessment of existing conditions, future needs, performance measures, and planning strategies.

Public engagement has been a cornerstone of the study, consisting of a visioning workshop, roundtable discussions on community concerns, and a series of refined recommendations developed in collaboration with an advisory committee. This committee comprises civic groups, local businesses, elected officials, and community institutions such as the local community center, library, and schools. The planning team includes WILMAPCO, New Castle County, DelDOT, the Delaware Transit Corporation, and the Claymont Renaissance Development Corporation.

Ms. Dunigan elaborated that across all planning scenarios, the study sought to address community priorities. Key concerns included access to community-serving businesses, housing affordability, and the availability of parks and open spaces. Proposed strategies include:

- Encouraging mixed-use development, particularly on underutilized parcels.
- Enhancing pedestrian-friendly streetscapes.
- Identifying opportunities for better use of existing open spaces.
- Implementing affordability programs to support diverse housing options.

The study also examined long-term redevelopment opportunities for older apartment complexes and proposed modernizing guidelines from the 2004 Hometown Overlay Plan. Updates include allowing two- to three-story buildings at certain nodes along the Pike and up to four stories at key gateway locations.

Community feedback highlighted concerns related to speeding, unsafe driving behaviors, and pedestrian safety, particularly at crossings. Specific issues included misuse of the center turn lane for passing and parking. Performance measures for transportation improvements focused on:

- Reducing fatal and serious injury crashes.
- Enhancing pedestrian comfort by minimizing crossing distances.
- Improving bicycle accessibility and transit amenities.
- Maintaining acceptable vehicle level-of-service while ensuring speed compliance.

Ms. Dunigan presented the three proposed transportation scenarios:

1. **Optimizing Existing Infrastructure** – Maintaining the current number of lanes but improving functionality and safety.
2. **Extending the Road Diet** – Converting four-lane sections to a three-lane configuration (one lane in each direction with a center turn lane), based on traffic analysis indicating feasibility without excessive congestion.
3. **Introducing a Roundabout** – Implementing a roundabout at a key intersection to enhance traffic flow, act as a gateway feature, and improve access to local destinations.

Public reaction to the scenarios varied. Attendees at the in-person workshop favored the roundabout option, citing its potential for traffic calming and improved pedestrian safety. However, support from online survey respondents was mixed.

Overall, the study found that the roundabout scenario performed best across key performance measures.

The Claymont Area Master Plan will undergo further community engagement before final adoption. The planning team will refine recommendations based on continued input, with a focus on balancing transportation safety, land use improvements, and community needs.

Ms. Heather Dunigan noted that while the plan is meeting or exceeding the standard Level of Service D for traffic flow, additional public outreach is being planned to address misinformation and concerns that have emerged. In November, a news article misrepresented the level of community support for proposed transportation improvements, particularly the roundabout and road diet options. The article suggested a strong consensus in favor of these changes, whereas community feedback has been more divided. These topics are inherently polarizing, and the misinformation generated on social media following the article has led to significant confusion and resistance. Many online comments reflected misunderstandings about the plan.

On January 9th, WILMAPCO met with representatives from the fire department, local businesses, and school districts to address their concerns. The group submitted a list of questions in advance, which included:

- The functionality and safety of roundabouts.
- The difference between roundabouts and traditional traffic circles.
- The validity of WILMAPCO's recommendations, given that its staff does not reside in Claymont.
- The impact of these changes on emergency vehicles, event traffic at the Waterfall Banquet & Conference Center, and funeral home operations.
- The effectiveness of road diets in improving traffic flow and safety.

In response, WILMAPCO provided data-driven insights, noting that studies have demonstrated safety and operational benefits of road diets. A before-and-after analysis of a previous road diet implementation showed a 13% reduction in crashes over three years, with only two pedestrian-related incidents occurring at transition areas rather than within the modified roadway itself. Additionally, while speeding remains a challenge, overall compliance has improved. Concerns about traffic diversion were unfounded, as traffic volumes actually increased following the road diet.

During the January 9th meeting, some community members called for a complete removal of the road diet, a proposal that WILMAPCO clarified is not under consideration due to its demonstrated benefits.

Ms. Dunigan shared several misconceptions about roundabouts and road diets that have surfaced in public discussions, of which WILMAPCO provided clarification on several key points:

- **Road Diets Do Not Increase Congestion:** A four-lane road often functions similarly to a two-lane road, as vehicles unpredictably stop in the left lane to make turns. Studies indicate that road diets typically reduce through-traffic crashes by 19% to 47%.
- **Roundabouts Are Not the Same as Traffic Circles:** Unlike large traffic circles, roundabouts are smaller, require drivers to yield upon entry, and facilitate smoother traffic flow. Navigating a roundabout is as straightforward as making a right turn at a yield sign.
- **Roundabouts Improve Traffic Flow:** National traffic data indicates that truck drivers, on average, stop at five traffic signals and spend 10% of their time waiting at signals. Properly placed roundabouts reduce overall travel delay.
- **Roundabouts Accommodate Emergency Vehicles:** While large farm equipment can struggle with roundabouts, this is not a concern for the Claymont area. The roundabouts proposed in this plan can be designed to accommodate fire engines and other large vehicles.

- Roundabouts Enhance Safety: Traditional intersections have more potential conflict points than roundabouts. Crashes that occur at roundabouts are generally at lower speeds, making them significantly less severe.
- Emergency Responders Support Roundabouts: A national survey of first responders in communities with roundabouts found that most experienced reduced congestion, less delay, and improved safety.

To ensure transparency and address lingering concerns, WILMAPCO is planning a fourth public workshop in late winter or early spring of 2025. The final plan is expected to be presented for adoption in the spring.

Ms. Dunigan emphasized that this marks the beginning of the process rather than the final decision. Any transportation recommendations included in the plan must still undergo the project prioritization process, which involves additional public outreach and analysis. Furthermore, DeIDOT will conduct its own review before any implementation occurs.

Mr. Dan Janousek from MDOT discussed traffic volume on a road, noting it was relatively low at 10,000-18,000 vehicles per day and suggesting a road diet as a feasible option. Drawing from his experience on Hilton Head Island, he highlighted the effectiveness of roundabouts, particularly the Sea Pines Circle, which efficiently handles over 30,000 vehicles daily in peak season. He also observed a suburban corridor near a Dunkin' Donuts as a potential redevelopment site and questioned its zoning regulations.

Ms. Dunigan explained that the area falls under a "Hometown Overlay," allowing local control over land use in unincorporated areas, with a community-based committee guiding development toward walkability.

Mr. Janousek further noted the incorporation of landscaping and drew parallels to his past planning work in Gaithersburg, Maryland, where similar road layouts persist. He acknowledged that state-county collaboration takes time and mentioned local concerns in southern Sussex County about the implementation of traffic circles.

Mr. Cooper Bowers expressed appreciation for the discussion, mentioning his attendance at a recent meeting where community members voiced concerns. He found the variety of viewpoints interesting and acknowledged that while some concerns were valid, misconceptions about traffic circles and roundabouts persisted. Ms. Dunigan added that a broader distrust of data and government-provided information presents a significant challenge for planners and policymakers. Mr. Bowers agreed, noting a general skepticism toward expertise and expert opinions, which makes it difficult to communicate the real-world safety benefits of roundabouts and similar infrastructure improvements.

INFORMATION ITEMS

9. Staff Report

Ms. Heather Dunigan reported the following updates:

- On January 7th, the Technical Committee for the Rocky Run Underpass Feasibility Study met to review the initial site and hydrological analyses.
- On January 9th, the Council met and amended the FY 2025-2028 TIP to include funds for the Cecil County Mid-County Transit Hub project. Staff also participated in a research forum on sea level rise and flooding.

- On January 9th, a meeting was held with Claymont business leaders and the fire department to discuss transportation recommendations.
- On January 15th, the online survey for the Kirkwood Highway Corridor Master Plan will close.
- On January 16th, the Route 9 Master Plan's Monitoring Committee will meet
- On January 24th, Staff will participate in the NCHRP 08-171 Phase II Focus Group on Institutionalizing the Safe System Approach in Transportation Planning and Programming.
- On January 27th, the Air Quality Partnership of Delaware will meet.
- On January 27th, the East Elkton Plan's Monitoring Committee will meet.
- The Diamond State Line project team has submitted the draft Study Scope, Schedule, and Budget (SSB) for the Initiation and Scope Study of Passenger Rail Service to Lower Delaware and Eastern Maryland. The final SSB is due in late January 2025.
- On February 3rd, the Ardens Transportation Plan's Monitoring Committee will meet.
- On February 6th, the final Advisory Committee meeting for the Kirkwood Highway Corridor Master Plan is scheduled.
- On February 10th, a public workshop for the Rocky Run Underpass Feasibility Study will be held from 4:30–6:30 p.m. at the Talleyville Fire Company.
- On February 24th, a workshop for the Kirkwood Highway Corridor Master Plan will be held.
- On March 3rd, the first public workshop for the Augustine Cut-Off Reconfiguration Study will take place at Salesianum School.
- Staff continue to coordinate with DVRPC on a Regional Comprehensive Climate Action Plan for the Philadelphia MSA.

OTHER BUSINESS:

ADJOURNMENT:

ACTION: Meeting adjourned at 11:13 a.m.

Attachments (0)