

Appendix B: PEL Questionnaire

PEL Questionnaire

1. Background:

a. Who is the sponsor of the PEL study? (State DOT, Local Agency, Other):

The Wilmington Area Planning Council (WILMAPCO) will be responsible for administering the study in collaboration with the project management committee, which includes:

- Wilmington Area Planning Council (WILMAPCO)
- Delaware Department of Transportation (DelDOT)
- City of Wilmington
- Delaware Transit Corporation (DTC)

b. What is the name of the PEL study document and other identifying project information (e.g. sub-account or STIP numbers, long-range plan, or transportation improvement program years)?

The name of this PEL study document is The Union Street Reconfiguration and Streetscape Improvement Study. The study was originally programmed in the WILMAPCO FY 2021 Unified Planning Work Program (UPWP) using this name. It was then listed again in the FY 2022 UPWP. There is currently no STIP number associated with this project.

c. Who was included on the study team (Name and title of agency representatives, consultants, etc.)?

The study team included a project management committee and a project advisory committee. The project management committee was responsible for project decision making. The advisory committee were crucial in helping to steering the project and advise throughout the process but were no responsible for decision-making body.

The project management team consisted of the following members:

- Tigist Zegeye – Executive Director, Wilmington Area Planning Council (WILMAPCO)
- Dave Gula – Principal Planner, Wilmington Area Planning Council (WILMAPCO)
- Pamela Steinebach – Planning Director, Delaware Department of Transportation (DelDOT)
- Herb Inden – Planning Director, City of Wilmington
- Gwinneth Kaminsky – Planning, City of Wilmington
- Tom Ogden – Deputy Chief of Staff for Fiscal and Operations Management, City of Wilmington Mayor's Office
- John Rago – Deputy Chief of Staff for Policy and Communications, City of Wilmington Mayor's Office
- Cathy Smith – Planning & Development Manager, Delaware Transit Corporation (DTC)
- Matt Harris – City of Wilmington

The project advisory committee team consisted of the following members:

- Tricia Arndt - Office of State Planning
- Sarah Lester - Westside Grows Together
- Adele Meehan - 7th District Neighborhood Planning Council
- Jackie Castaneda - Westside Grows Together
- Nukun - Bangkok House
- Marina Liapis - 3 Stars
- Christa-Bell - Josiah
- Jack Michael - Jack Michael Hair Salon
- Julie Mundis - Telo Massage
- Robin Robino - Mrs. Robinos
- Andrea Wakefield - Mrs. Robinos
- Tom Ogden - Mayor's Office
- Donna Gooden - Woodlawn Trustees
- Brian Raughley - Dead Presidents

- Richi Ayala/ Luis Palaez - El Toro/ Papa's
- Jo Pressey - Salon Ollae
- Islanda & Maria Finamore - Sheila's Dreams
- John Constantinou - Walter's Steakhouse
- Tony Latina - Corleto Latino Funeral Home
- Jim Ursomarso & Francesco Vattilana - Union Park Auto
- Dino Thompson - Dino's Ice Cream
- Frank Pagliaro - Frank's Wines
- Susan Collins - Little Italy Neighborhood
- Jim Miller - Union Park Gardens
- Tina Votta & Gladys Chamberlain - 2000 Pennsylvania Avenue

The following members were elected officials serving on the project advisory committee

- Sen. Sarah McBride
- Sen. S. Elizabeth Lockman
- Rep. Sherry Dorsey Walker
- Rep. Charles M. "Bud" Freel
- Rep. Gerald Brady
- Rep. John Mitchell
- Bregetta Fields - City Council
- Yolanda McCoy - City Council
- Christofer Johnson - City Council
- Hon. Michael Purzycki – Mayor

The following consultant staff were part of the study team:

- Nancy Bergeron, PE – Project Manager, JMT
- Angie Hernandez, AICP – Deputy Project Manager, JMT
- Cameron Carley – Planner, JMT
- Stacey Chen – Principal, Interface Studio
- Scott Page – Principal, Interface Studio

d. Provide a description of the existing transportation facility within the corridor, including project limits, modes, functional classification, number of lanes, shoulder width, access control and type of surrounding environment (urban vs. rural, residential vs. commercial, etc.)

The Union Street study area corridor extends from Pennsylvania Avenue to the north and Sycamore Street to the south a distance of approximately one mile. Union Street is a one-way southbound urban mixed-use street with 2 twelve-foot travel lanes, a one-way southbound six-foot bicycle lane, and on-street parking lanes on both sides of the street. The on-street parking is a mix of parallel and back-in angle parking along the corridor. Union Street functions as a one-way paired street with Lincoln Street, a northbound one-way street to the east. These streets serve as neighborhood thoroughfares.

It is classified as a principal arterial with an annual average daily traffic (AADT) count of 20,000 and designated as an emergency evacuation route. Union Street has a level 3 bicycle level of traffic stress (LTS 3). According to DeIDOT's LTS system, a classification of LTS 3 is considered tolerable by "enthusiastic and confident bicyclists."

The public right-of-way along this section of Union Street is approximately 80' wide in total, with approximately 55' of paved surface within the roadway from curb to curb. There are sidewalks along each side of the street varying in width from 3 to 9 feet. Union Street is served by DART Bus Route 6, with bus stops located at Pennsylvania Avenue, 9th Street, 8th Street, 6th Street, 4th Street, 2nd Street, Lancaster Avenue, and Sycamore Street. There is a higher transit ridership focused within the central area of the corridor which correlates to the area comprised of mostly commercial and mixed-use development. The northern area of the corridor has a mixture of residential, mixed use, and regional commercial land uses, whereas residential land uses comprise most of the southern area. More information about the existing conditions of the project area is in **Appendix A: Existing Conditions**.

e. Provide a brief chronology of the planning activities (PEL study) including the year(s) the studies were completed.

West Side Grows Together Neighborhood Revitalization Plan (2012) - Union Street was first identified as in need of updates in the 2012 *West Side Grows Together Neighborhood Revitalization Plan*. That plan led to the *Better Block Demonstration* which was first held in 2014 as a temporary (three-day) installation project that temporarily closed one lane of Union Street, mimicking the proposed two-lane cross-section from the revitalization plan. The Better Block event was held again in 2015 and 2016 with increased focus on the physical appearance of the demonstration by adding more temporary infrastructure and activities, such as games and seating, to the streets for people to interact with.

Union Street Rapid Reconfiguration Project (2017 - 2018) - The demonstration projects led to the DelDOT 2017 *Union Street Rapid Reconfiguration Project*. In 2018, Union Street was converted from a three-lane, one-way principal arterial roadway to a two-lane, one-way street with right-side parallel parking, back-in angled left-side parking, and an adjacent bicycle lane. As part of the reconfigured parking, a total of 6 accessible parking spaces were added, and numerous curb ramps were reconstructed. Additionally, new pavement marking lines, turn arrows, pedestrian crosswalks, and stop lines were installed.

Moving Us Forward: A Plan for Biking in the City of Wilmington (2019) – In 2019, Wilmington’s bike plan called for the installation of bike racks along Union Street, citing the general lack of bicycle parking along the street.

Wilmington 2028: A Comprehensive Plan for Our City and Communities (2020) - In 2020, *Wilmington 2028: A Comprehensive Plan for Our City and Communities* identified Union Street as a main street and a neighborhood corridor. According to the plan, main street corridors are where Wilmington residents shop, dine, and work. These streets are core to the city’s economic well-being and local business community. Wilmington’s main streets balance their role of moving cars with their function as places for neighbors to recreate, socialize, and play. In addition to people driving, main streets must be welcoming for people walking and biking and need to ensure access for buses and delivery vehicles. This plan set the goal of using streets (including Union Street) to enhance the city’s economic vitality, safety, health, and environment.

Union Street Reconfiguration and Streetscape Improvement PEL Study (2021 - 2022) - The Union Street Reconfiguration and Streetscape Improvement PEL Study is concluded in May 2022.

1. Notices about the PEL initiation were sent to agencies in October of 2021.
2. The initial public visioning workshop was held on May 19, 2021.
3. Purpose and Need – A draft purpose and need statement was developed shortly after the completion of the public visioning workshop. This purpose and need statement was reviewed and refined in coordination with DelDOT in August of 2021. It was then endorsed by the project management team at their September 16, 2021 meeting and concurrently endorsed by the advisory committee at the October 13, 2021 meeting. The public had the opportunity to review and provide feedback about the purpose and need statement by commenting directly on the project website, during the public meeting held on October 27, 2021, and providing feedback in the online survey which was active for three weeks following the public workshop. No public comments were provided to substantiate revisions to the purpose and need statement.
4. Measures of Effectiveness – Measures of effectiveness were developed and presented at the 2nd advisory committee meeting that took place on October 13, 2021, and also presented for feedback at the October 27, 2021 public meeting. The measures of effectiveness were refined and finalized based on feedback received from meeting participants at the meeting as well as from the surveys completed by the public following the meeting.
5. A range of unique alternative cross sections were developed for the corridor. Two groups of cross sections were initially created. The first group included options that would not require the curb to be relocated. The second group included alternatives that would require reconstructing the curbs in an alternate location. The first group of alternatives that did not move the curb were presented to members of the project management team at the Wilmington Initiatives meeting on July 21, 2021. These alternatives were screened through the measures of effectiveness and were determined to not meet the purpose and need of the project and were therefore dismissed from further consideration.
6. There were six alternatives, that met the purpose and need, and were carried forward to the advisory committee at the October 13, 2021 meeting for their review and feedback before progressing to public review.
7. A public meeting was held on October 27, 2021 to review and solicit feedback about the draft purpose and need statement, to provide feedback and preferences of the cross-section alternatives and provide feedback on the measures of effectiveness. A recommended preferred alternative was identified upon

the conclusion of the public survey, which ended on November 26, 2021 and agreement by WILMAPCO staff.

8. The consultant team completed a draft conceptual corridor concept plan showing the recommended alternative, a report documenting the project, and costs estimates and a phasing plan to implement the recommended alternative. The draft conceptual corridor plan, cost estimates, and report will be reviewed by the project management committee, the project advisory committee, and the public before being endorsed by WILMAPCO and the project management committee, which is anticipated in May 2022.

f. Are there recent, current, or near future planning studies or projects in the vicinity? What is the relationship of this project to those studies/projects?

There are no recent, current, or near future planning studies or projects in the vicinity.

2. Methodology used:

a. What was the scope of the PEL study and the reason for completing it?

The scope of the PEL study included:

- Community outreach including community visioning, workshops, and meetings. There was also stakeholder outreach that included coordination with an advisory committee and other project stakeholders.
- Preparation of alternatives based on the identify project needs.
- Comparative analysis of alternatives to determine feasibility, using measures of effectiveness including:
 - creation of greenspace and space for shade trees;
 - public gathering spaces and business frontage spaces within the streetscape;
 - pedestrian accessibility and connectivity;
 - transit delay and improvements for amenity space;
 - space for freight deliveries and short-term drop-offs/pick-ups;
 - level of service;
 - on-street parking capacity; and
 - bicycle level of comfort and connectivity.
- Identification of a recommended preferred alternative.
- Feasibility level conceptual design plan.
- Planning level cost estimates and an implementation plan including infrastructure needs, costs, and phasing to better position the project for future funding.

b. Did you use NEPA-like language? Why or why not?

Yes, NEPA-like language was used to streamline the NEPA process for future transportation projects along Union Street.

c. What were the actual terms used and how did you define them? (Provide examples or list)

- **Purpose and Need Statement** – describes the underlying need to be met and the other factors relevant to the assessment of a range of alternatives.
- **Alternative** – A reasonable range of solutions to address the identified problems and satisfy the stated project purpose and need.
- **Recommended Alternatives** - Based on the alternatives evaluation screening conducted in the PEL study, the recommended alternatives are the alternatives that was identified as a top preferred alternatives based on the public input surveying as well as the top performing alternatives based on the measures of effectiveness ranking system to meet the purpose and need of this project.
- **Environmental Consequences** – Anticipated environmental effects of project alternatives to indicate potential impacts on the natural, social, and cultural resources that could be expected based on the recommended alternative.

d. How do you see these terms being used in NEPA documents?

These terms will be used in NEPA document in a similar fashion to how they were used in the PEL study.

e. What were the key steps and coordination points in the PEL decision-making process? Who were the decision-makers and who else participated in those key steps? For example, for the corridor vision, the decision was made by state DOT and the local agency, with buy-in from FHWA, the USACE, and USFWS and other resource/regulatory agencies.

This planning study has been an open and collaborative process engaging with stakeholder agencies and community members throughout the decision-making process. The project visioning was an interactive process where the community at large, the advisory committee, and the project management committee played a role in developing and formalizing the project vision, the purpose and need statement, the measures of effectiveness, ranking of alternatives, and the recommended alternative.

The study team met with the advisory committee regarding the following topics on:

- April 22, 2021
 - Study overview, scope, schedule, and milestones
 - Current corridor conditions
 - Identified corridor issues and opportunities
 - Public visioning strategy and public outreach plans
- October 13, 2021
 - Public visioning results summary
 - Project purpose and need
 - Measures of effectiveness
 - Preliminary alternatives considered and measures of effectiveness scoring
 - Outreach strategy for October 27, 2021, public workshop.
- February 28, 2022
 - Summary of public input following public workshop #2
 - Typical section and corridor wide concept plan presentation of the recommended alternative

The study team met with the Project Management Committee, during Wilmington Initiatives Meetings, regarding the following topics on:

- July 21, 2021
 - Public visioning results summary
 - Preliminary alternatives considered
 - Draft project purpose and need statement
- September 16, 2021
 - Revised project purpose and need
 - Measures of effectiveness
 - Preliminary recommended alternatives considered and measures of effectiveness scoring
- January 19, 2022
 - Summary of public input following public workshop #2
 - Consensus on the recommended alternative
 - Updated project schedule
 - Potential future funding sources for the project
- February 16, 2022
 - Draft concept plan presentation of the recommended preferred alternative

f. How should the PEL information be presented in NEPA?

The term “recommended alternatives” can be used to refer to the recommendations from the alternatives screening conducted in the PEL study when identifying the Recommended Alternative in the Alternatives chapter of the NEPA document or when referencing PEL Study recommendations for the NEPA documentation of a project phase. The environmental overview can provide the basis for environmental scoping. The other terms in this PEL study will also be used in NEPA documents in the same way as they were used in the PEL study.

3. Agency coordination:

- a. **Provide a synopsis of coordination with Federal, tribal, state and local environmental, regulatory and resource agencies. Describe their level of participation and how you coordinated with them.**

Progress meetings with the project management committee, as summarized in Section 2. D of this PEL Questionnaire, were held ensuring coordination with various state and local agencies. The role of both the project management committee was to provide input on a range of issue analyzed in this PEL study.

- b. **What transportation agencies (e.g. for adjacent jurisdictions) did you coordinate with or were involved during the PEL study?**

There were several agency-specific coordination meetings and regular email communications throughout the study with DeIDOT, DTC, and the City of Wilmington to discuss various items including project goals, development of the purpose and need statement, and alternatives considered.

- c. **What steps will need to be taken with each agency during NEPA scoping?**

Future NEPA phases should likely focus on final determination of study area and an advanced transportation analysis, public and agency engagement, and environmental concerns. During NEPA scoping, the coordination that was started during this PEL study should continue with the management committee and advisory group. Agencies should be invited to contribute to any modifications to the final purpose and need statement. This task includes identifying and describing the needs of the individual agencies now and in future scenarios, and how the project can contribute to meeting those needs. Following that, agencies should be invited to participate in contributing to further developing the recommended alternative identified in the PEL study and participate in validating the data analysis regarding transportation and environmental concerns in the area.

Additional coordination with regulatory agencies as the project progresses should also include:

- US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) Database review to obtain an official species list and evaluate potential impacts on resources managed by USFWS.
- An Environmental Review of the project should be requested from Delaware Department of Natural Resources and Environmental Control (DNREC) Species Conservation and Research Program (SCRCP).

4. Public coordination:

- a. **Provide a synopsis of your coordination efforts with the public and stakeholders.**

Three virtual public workshops were held for this project, one on May 13, 2021, another on October 27, 2021, and the final workshop on March 16, 2022.

The visioning workshop on May 13, 2021, focused on:

- Study overview, schedule, and milestones
- Current corridor conditions
- Identified corridor issues and opportunities
- Visioning and group activities/discussions about project goals
- Promoting the online survey and other project activities to increase public engagement

The second public workshop on October 27, 2021, focused on:

- Public visioning results summary
- Draft purpose and need statement
- Draft measures of effectiveness (MOEs)
- Preliminary recommended alternatives considered MOEs scoring
- Project schedule update

The third public workshop on March 16, 2022, focused on:

- Summary of public input following public workshop #2
- Corridor wide concept plan presentation of the recommended alternative
- Planning level cost estimates
- Phasing Plan

- Draft report presentation for review and comment

Postcards and posters were distributed prior to the meetings to residents and business owners in the vicinity. Public engagement advertisements and materials had information in English and Spanish regarding the Zoom links for the meetings, as well as links to online surveys and other online activities for individuals to complete as a form of asynchronous public engagement after the live meetings.

The project website (<http://www.wilmapco.org/unionstreet/>) was created at the start of the project and updated throughout the project duration with project information as the project progressed. The website included presentation materials and announcements about upcoming engagement events and opportunities, ways to sign up for project information, and contact information for the project team. The webpage also housed online engagement activities that were left live for a minimum of two weeks following the public meetings. The public meetings were recorded and displayed on the project website for public viewing after the live meetings.

Spanish translation services were requested for the second public workshop on October 27 as well as the third public workshop on March 16, 2022. Live translation services were provided for Spanish-speaking community members during these meetings.

Additional coordination with project stakeholders on the advisory committee was also conducted as described above in Section 2. E.

5. Purpose and Need for the PEL study:

a. What was the scope of the PEL study and the reason for completing it?

The *Union Street Reconfiguration and Streetscape Improvement PEL Study* was conducted by WILMAPCO in partnership with the City of Wilmington, DeIDOT, and DTC to continue the planning efforts from West Side Grows Together Neighborhood Revitalization Plan, the Union Street Rapid Reconfiguration Project, and the Wilmington 2028 Comprehensive Plan. The PEL study area includes the public right-of-way for Union Street between Pennsylvania Avenue and Sycamore Street in the City of Wilmington.

The scope of this study involved a thorough inventory of existing conditions along the corridor, development of a purpose and need statement, alternatives development and measures of effectiveness, alternatives screening process, selection and refinement of a recommended alternative based on public and stakeholder feedback, conceptual streetscape design plans, high-level concepts for environmental impacts, planning level cost estimates, implementation phasing plan, final report documentation, and stakeholder and public outreach efforts. A key goal of completing this PEL was to provide information that would support the funding of NEPA review, design, and construction.

b. Provide the purpose and need statement, or the corridor vision and transportation goals and objectives to realize that vision.

Purpose: The purpose of the project is to transform Union Street into a Main Street corridor that supports the multimodal mobility and connectivity needs of the local business community and of the residents of the Flats, Little Italy, Union Park Gardens, and surrounding neighborhoods.

Need: Transportation and streetscape improvements are needed along Union Street between Pennsylvania Avenue and Sycamore Street to (a) better function as a Main Street corridor, as a place for residents and neighbors to shop, dine, work, recreate, socialize, and play, while balancing moving cars and (b) improve multimodal mobility and connectivity.

Better Function as a Main Street Corridor: The Wilmington 2028 Comprehensive Plan (2019) designated Union Street as a “Main Street corridor”: “Main Street corridors are where Wilmington residents’ shop, dine, and work. These streets are core to the City’s economic well-being and local business community. Wilmington’s main streets balance their role of moving cars with their function as places for neighbors to recreate, socialize, and play. In addition to people driving, main streets must be welcoming for people walking and biking and need to ensure access for buses and delivery vehicles.” Union Street needs to function as a place for residents and neighbors to shop, dine, work, recreate, socialize, and play, while balancing moving cars. There is not adequate public space for people to gather, recreate, socialize, or play. Union Street is not well shaded, creating an uninviting and uncomfortable environment for people in the warmer seasons. Lighting on Union Street is not consistently installed along the corridor or at intersections, which creates an uncomfortable pedestrian environment during nighttime and low-light conditions.

Multimodal Mobility and Connectivity: The existing roadway configuration creates conflicts between different types of users along the corridor. This has resulted in mobility and connectivity challenges that impede people

and goods moving through the corridor, which has impacted residents, business owners, and commuters along Union Street.

Pedestrian: There are multiple ADA accessibility issues along Union Street and at most intersections: 16 out of 20 intersections have some type of accessibility deficiency. ADA compliancy issues along the corridor include non-compliant sidewalks, curb barriers, crosswalks, curb ramps, bus stop pads, pedestrian push buttons, and driveway crossings. Pedestrian improvements should include a continuous pedestrian access route (PAR) along Union Street for the length of the project area, including design elements that reduce pedestrians' exposure to vehicular traffic.

Bicycle: Union Street has a level 3 bicycle level of traffic stress (LTS 3). According to DelDOT's LTS system, an LTS 3 is considered tolerable by "enthusiastic and confident bicyclists." The one-way, southbound, unprotected bike lane on Union Street does not support two-way bicycle travel, and the bicycle lanes on Union Street have substandard transitions to the surrounding bicycle network. The existing bike lane has a high level of exposure to vehicles. There is also no dedicated bicycle parking throughout the corridor, which discourages people from traveling to Union Street by bicycle.

Transit: Union Street is served by DART Bus Route 6, with bus stops located at Pennsylvania Avenue, 9th Street, 8th Street, 6th Street, 4th Street, 2nd Street, Lancaster Avenue, and Sycamore Street. The connectivity between bus stops and the pedestrian network along Union Street have ADA compliancy deficiencies that need to be improved. Two of the eight bus stops have accessibility issues, and many of the bus stops do not have bus shelters or shade, making using transit uncomfortable, particularly during the warmer and wetter months.

Freight: There is insufficient access along Union Street for freight deliveries to commercial properties. Many deliveries occur within the street, blocking traffic flow and crosswalks and creating safety issues within the street. Better curbside management is needed to manage where and when deliveries can occur to avoid conflict with other modes.

Vehicular: The capacity and configuration of the existing on-street parking has been reported as problematic by the community and business owners alike. The existing on-street parking is inconsistently applied along the corridor. There are sections with back-in angle parking and sections with parallel parking. There are also areas of unutilized space between the parking types where the parking transitions from one configuration to another. Short-term parking for drop-offs, pick-ups, and deliveries has also been a problematic recurrence along Union Street, with short-term parking occurring within the travel lanes, obstructing crosswalks, and generally blocking vehicle, bicycle, and pedestrian movements through the corridor. There were 38 recorded crashes along this section of Union Street in 2019. Twenty of the of the 38 crashes either occurred at an intersection or were intersection-related crashes. Eight of the 38 crashes in 2019 resulted in personal injury. Various causes were recorded as the reasons for the crashes, including driver inattention, ignoring traffic signals, failing to yield right-of-way, and following too close. Speeding has also been a problematic recurrence along Union Street, as well as vehicles not yielding to pedestrians crossing Union Street.

c. What steps will need to be taken during the NEPA process to make this a project-level purpose and need statement?

A scoping exercise should be used to determine if this PEL Study purpose and need statement remains valid as a project-level purpose and need statement during any future NEPA phases.

6. Range of alternatives: *Planning teams need to be cautious during the alternative screen process; alternative screening should focus on purpose and need/corridor vision, fatal flaw analysis, and possibly mode selection. This may help minimize problems during discussions with resource agencies. Alternatives that have fatal flaws or do not meet the purpose and need/corridor vision will not be considered reasonable alternatives, even if they reduce impacts to a particular resource. Detail the range of alternatives considered, screening criteria, and screening process, including:*

a. What types of alternatives were looked at? (Provide a one or two sentence summary and reference document.)

The alternatives development and evaluation process consisted of an iterative three-tiered screening process to rank how well the various alternatives met the identified purpose and need of the project. The evaluation process systematically identified the alternatives' ability to meet the project purpose and need and document and document the potential for impacts and benefits among the various alternatives. Please see **Appendix E: Range of Alternatives and Alternatives Screening Process** for more information.

b. How did you select the screening criteria and screening process?

The advisory committee, the project management committee, and the public informed the development of the screening criteria and the screening process. The screening criteria were the direct result of the information gathered during the visioning stage of the project that helped to formulate a project vision, the purpose and need statement, and understand public and stakeholder priorities. The screening criteria and screening process were created to systematically measure how well each alternative met the purpose and need while balancing natural, cultural, and socioeconomic resource impacts. See **Appendix D: Outreach Summary** for the results of the project visioning and public ranking of alternatives.

c. For alternative(s) that were screened out, briefly summarize the reasons for eliminating the alternative(s). (During the initial screenings, this generally will focus on fatal flaws.)

Based on the tier one screening, the three alternatives that maintained the existing roadway footprint and curb locations along Union Street did not meet the purpose and need and were dismissed from further consideration. The limiting factors of these alternatives were that they did not provide increased sidewalk space for curbside management, space for frontage areas was not able to be provided in the streetscape for people to gather or shop/dine outdoors in the existing commercial areas, and they did not provide space for street trees along either side of the roadway to better shade the corridor.

For the tier two screening process, the remaining six alternatives were systematically ranked using measures of effectiveness to compare how well the alternatives met the purpose and need of this project. A ranking scale between one – three was used to rank the alternatives against one another for each measure of effectiveness (MOE). A one was the lowest score and three was the highest score awarded per measure of effectiveness. Each MOE score was totaled to get a final alternative “score” on how well the alternative met the purpose and need.

The tier three screening process focused on identifying which of the six scored alternatives were most preferred by the stakeholders and the public. The alternatives were presented to stakeholders and the public with their MOE scores and document the potential for impacts and benefits among the various alternatives. Stakeholders and the public were then asked to either identify the alternative as a preferred or undesirable option. This resulted in a stakeholder/public preference that identified Alternatives A and B as the top two performing alternatives (based on the MOE scoring) as the two most preferred alternatives. Either of these alternatives were determined to appropriately meet the purpose and need. The major differences between these two alternatives were that A would require the relocation of utility poles underground, which would be more costly and a longer project construction period and would place the bike lane along the left side of the roadway. Alternative B would work around the above ground utilities to the greatest extent possible, to avoid additional project costs and shorten construction phasing, and place the bike lane on the right side of the roadway. The main cited reason of why people chose the more costly option to underground utilities was for aesthetic reasons.

More information about the alternatives and their MOE scoring is in **Appendix E: Range of Alternatives and Alternatives Screening Process**

d. Which alternatives should be brought forward into NEPA and why?

It is the recommendation of this PEL Study to progress Alternative A and B forward as the recommended alternatives but to identify Alternative B as the recommended preferred alternative with Alternative A as a potential secondary option if undergrounding utilities is determined to be a critical community priority during any future project development phase.

e. Did the public, stakeholders, and agencies have an opportunity to comment during this process?

The public stakeholders, and agencies provided feedback via virtual meetings, one-on-one interactions with the study team, online through the project webpage, online surveys, comment forms, via email, or over the phone. The following public outreach activities provided the public multiple ways of participating in the study:

- E-Mail, Mailing List, and Contact Database: The study team developed a contact database to include individuals who wanted to stay informed about the study. The database incorporated contact lists collected during the previous studies. The database allowed the study team to communicate directly with the public, including sending notifications of the public open houses.
- Project Web Page: WILMAPCO hosted a dedicated web page on its website to provide updated information about the study, promote engagement, request Spanish interpretation, and to enable ongoing

communication. The web page <http://www.wilmapco.org/unionstreet/> included study information, presentation materials, meeting summaries, and meeting announcements. The web page enabled the public to sign up for the study's mailing list and to submit comments as the study progressed. The webpage also contained contact information for the public to be able to speak directly with the WILMAPCO Outreach Manager and the study team.

- **Public Outreach and Engagement:** WILMAPCO distributed public workshops announcements in print and digital formats. Meeting announcements and information about how to give input into the project were distributed throughout the project corridor to area businesses and residents via a partnership with members of the advisory committee. This information was distributed in both English and Spanish.
- **Social Media Outreach:** WILMAPCO and their planning partners used Facebook and Instagram to communicate announcements about the study and to publicize public meetings and public input opportunities.
- **Points of Contact:** Stakeholders or members of the public were directed to contact Dave Gula, WILMAPCO Project Manager, with comments or questions throughout the duration of the study.

Throughout the study, the stakeholder and public had ongoing, accessible, and distinct opportunities to participate and provide input to inform the study. Over the course of the study, there were approximately 160 members of the public that took part in the surveys or submitted comments that were reviewed and taken into consideration.

Appendix D: Outreach Summary includes a summary of the comments submitted by members of the public during this study.

In addition to the ongoing public engagement, both the advisory committee and the project management committee were asked for feedback as the project progressed and specifically asked to review and comment on the project's purpose and need, the alternatives screening process and rankings, and the recommended alternative.

f. Were there unresolved issues with the public, stakeholders, and/or agencies?

There were no unresolved issues with the public, stakeholders, and/or agencies regarding this study.

7. Planning assumptions and analytical methods:

a. What is the forecast year used in the PEL study?

This study did not include travel forecasting, this study only included existing traffic volume data based on 2019 AADT estimates.

b. What method was used for forecasting traffic volumes?

As previously stated, this study did not include travel forecasting.

c. Are the planning assumptions and the corridor vision/purpose and need statement consistent with each other and with the long-range transportation plan? Are the assumptions still valid?

Yes. The corridor vision and purpose and need statement are consistent with each other and the City of Wilmington Comprehensive Plan, the City of Wilmington Bike Plan, and the Delaware Long Range Transportation Plan.

d. What were the future year policy and/or data assumptions used in the transportation planning process related to land use, economic development, transportation costs, and network expansion?

Future uses, policies, and assumptions were based on City of Wilmington Comprehensive Plan for land use and economic development.

8. Environmental resources (wetlands, cultural, etc.) reviewed. For each resource or group of resources reviewed, provide the following:

a. In the PEL study, at what level of detail was the resource reviewed and what was the method of review?

Each resource, identified in **Table 1: Resources Reviewed in PEL Study** below, was reviewed at a planning-level screening using available online information and GIS mapping. It is important to note that this planning-level screening does not examine the full range of environmental and social issues, which will be addressed during NEPA review.

Information was compiled and mapped using readily available data from Delaware FirstMap using GIS visualization. The GIS data was reviewed at multiple scales to see where each resource was present either in the study area or adjacent to it. The resources for which there was no publicly available GIS data were reviewed using agency-specific map viewers (such as the EPA’s tool for viewing brownfields).

b. Is this resource present in the area and what is the existing environmental condition for this resource?

Table 1: Resources Reviewed in PEL Study summarizes the resources that were reviewed as part of this PEL study. As illustrated in the table the only resource anticipated to have potential impacts is hazardous materials.

Table 1: Resources Reviewed in PEL Study	
Hazardous Materials	<p>Affected Environment: According to DNREC NavMap, there is one solid and/or hazardous waste site located at the intersection of Union Street and 9th Street. There are also nine underground storage tanks, seven of them are identified as leaky underground storage tanks on adjacent properties abutting Unions Street within the project study area.</p> <p>Next Steps/Mitigation Strategies: Contamination from hazardous materials is most likely to be encountered during ground-disturbing activities in areas near properties with potential or recognized environmental conditions (hazardous materials). During the design process, the information concerning these properties can be used to identify avoidance options, if possible, and to assist with the development of materials management and worker health and safety plans. An asbestos-containing materials survey is required for all structures to be demolished as part of this project and must be completed as part of the CDPHE demolition permit. Additionally, a lead- based paint survey and regulated materials clearance survey are recommended for all structures to be demolished as part of this project.</p>
Water Resources	There are no surface water resources within or adjacent to the project area, per Delaware FirstMap data.
Climate Vulnerability	No portion of the project is located in an area inundated by sea level rise from 1 to 7 feet, per Delaware FirstMap data.
Floodplains	Located in an area of minimal flood hazard and not located within 100-year or 500-year floodplain, per FEMA.
Wetlands	According to Delaware FirstMap data, there are no wetlands within or adjacent to the project area.
Forests	According to Delaware FirstMap data, there are no NCC forests within or adjacent to the project area.
Brownfields	According to EPA’s Cleanups In My Community Map, there are no brownfield sites within or adjacent to the project area.
Historic Resources	According to Delaware FirstMap data, there are no historic resources (places or districts) within or adjacent to the project area.
Properties Acquired for Right-of-Way and Displacements	The project is located within the existing right of way and no displacement will be necessary.
Archeological Sites	According to Delaware’s Cultural and Historical Resources Information System (CHRIS), there are no archeological sites within or adjacent to the project area.
Population Demographics	<p>The census blocks surrounding the Union Street study likely include Environmental Justice populations. Just over 50% of the population are people of color, 19% live under the poverty line, 10% have not completed high school, and 12% do not have access to a personal vehicle. Most residents speak English well (95%), but of those who do not, almost all of them speak Spanish as a first language (91%).</p> <p>General Population, Economics, and Housing Data These data were pulled from the 2020 census and 2019 American Community Survey (ACS) 5-year estimates for census tracts 12, 13, 14, 23, 24, and 25. The data include values and ranges of values for information such as the median age, median household income, number of persons per household, occupation of housing units, and percentage of population born outside of the United States:</p>

	<ul style="list-style-type: none"> • The median age ranges from 31.6 years old in Census Tract 12 to 50.5 years old in Census Tract 13 (S0101). • The median household income ranges from \$31,892 in Census Tract 23 to \$106,701 in Census Tract 13 (S1901). • The average household size ranges from 2.11 in Census Tract 13 to 2.50 in Census Tract 25 (S1101). • 89.2% of households are occupied (H1). • 6.1% of the population was born outside of the United States (B05002). <p>Environmental Justice (EJ) Community Status These data were pulled mainly from the 2019 American Community Survey (ACS) 5-year estimates for census tracts 12, 13, 14, 23, 24, and 25 and include information such as the percentage of the population who are people of color, below poverty level, limited English-speaking, or who have less than a high school education:</p> <ul style="list-style-type: none"> • 50.8% of the population is a person of color (P2). • 18.8% of the population is below poverty level (S1701). • 2.1% of households are limited English-speaking households (S1602). • 9.5% of population 25 years and over with less than a high school education (S1501). <p>Limited English Proficiency (LEP) These data were pulled from the 2019 American Community Survey (ACS) 5-year estimates, Table S1601, for census tracts 12, 13, 14, 23, 24, and 25. These data indicate that 4.7% of adults have limited English proficiency (LEP), that is, who speak English less than “very well.” Of those adults with LEP, 91.3% speak Spanish and 8.7% speak other languages.</p> <p>Personal Vehicle Access These data were pulled from the 2019 American Community Survey (ACS) 5-year estimates, Table S2504, for census tracts 12, 13, 14, 23, 24, and 25. These data indicate that 11.9% of households have no access to a personal vehicle.</p>
Community Centers	<p>Schools - There are no schools located along Union Street in the project area.</p> <p>Places of Worship - There are two places of worship directly along this stretch of Union Street: the Neighborhood Church, which meets at Union and Howland, and Epiphany Church Wilmington, which meets at Union and 3rd.</p>

c. What are the issues that need to be considered during NEPA, including potential resource impacts and potential mitigation requirements (if known)?

If changes are made to the project or study areas during future NEPA phases, a reassessment of climate vulnerability should be undertaken. Updated socio-economic data should also be collected and local communities engaged in future NEPA phases. With more detailed planning, potential impacts will be evaluated to identify whether the future project has the potential to cause adverse effects to these populations and households.

Issues related to stormwater management are likely to shape the design of alternatives during future NEPA phases. Depending on the sensitivity of the water resources, minimizing adverse effects could require stormwater treatment measures beyond the raingarden proposed as part of the recommended alternative in this PEL study. Detention and treatment of stormwater runoff will be addressed in more detail during future NEPA phases.

A modification to study area limits in future NEPA phases may require a reassessment of whether chronic environmental deficiencies are present.

d. How will the planning data provided need to be supplemented during NEPA?

The resource planning-level screening for this study was conducted by performing a desktop survey (no field confirmation), referencing available agency electronic files, and utilizing existing GIS base mapping data. Therefore, most of the resources will require additional assessment that will require a field verification of the existing conditions within the corridor as well as further agency coordination. Also, depending on the timeframe of

any future NEPA process, some resources could require additional assessment due to new regulations, additional federally listed endangered/threatened species, etc. The concept plans for the preferred recommended alternative developed as part of the Union Street Reconfiguration and Streetscape Improvement PEL Study should be used as the starting point to advance this project into detailed design engineering.

9. List environmental resources you are aware of that were not reviewed in the PEL study and why. Indicate whether or not they will need to be reviewed in NEPA and explain why.

The following resources were not evaluated as part of this PEL Study as they were not included as part of the consultant scope of work:

- Air quality
- Water quality
- Noise
- Soils and geology
- Wildlife/Threatened and Endangered Species

Additional environmental analysis for these above-mentioned resources should be included as part of future NEPA analysis and documentation.

10. Were cumulative impacts considered in the PEL study? If yes, provide the information or reference where the analysis can be found.

No cumulative impacts were considered in this PEL study.

11. Describe any mitigation strategies discussed at the planning level that should be analyzed during NEPA.

Please refer to **Table 1: Resources Reviewed in PEL Study** above.

12. What needs to be done during NEPA to make information from the PEL study available to the agencies and the public? Are there PEL study products which can be used or provided to agencies or the public during the NEPA scoping process?

The final study report including this questionnaire will be available on the WILMAPCO project website for public viewing the conclusion of this study. The final report will be shared with all the agencies that participated in the project management committee upon conclusion of the study. The final report and supporting study documentation, which will be included as appendices to the report, can be used during the future NEPA scoping process.

13. Are there any other issues a future project team should be aware of?

Examples: Controversy, utility problems, access or ROW issues, encroachments into ROW, problematic landowners and/or groups, contact information for stakeholders, special or unique resources in the area, etc.

- **Utilities** – The existing overhead utilities along the project corridor should be further investigated to explore opportunities to underground utilities during future design development phase. As part of this utility investigation, research should be completed to understand the existing utility capacity along the corridor, particularly to ensure that the corridor is able to support any future electric vehicle charging infrastructure needs, particularly in the residential areas of the project where residents depend on on-street parking.
- **Access Management** – The existing commercial driveways along the corridor should be further examined for access consolidation and width reduction to decrease the number and widths of driveways along Union Street. Consolidating and reducing the widths of driveways will decrease pedestrian exposure to turning vehicles along the corridor as well as better organize turning vehicle movements at driveways. Any access modifications proposed in the recommended alternative proposed in this PEL study should be thoroughly vetted during future design development phase and discussed with affected property owners.

- **Stormwater Management** – The stormwater capacity and treatment system along the project corridor should be further investigated to explore opportunities to reduce nuisance flooding and improve stormwater runoff treatment during future design development phase.
- **Stakeholder Coordination** – The project management committee and advisory committee should continue in their respective roles to help guide future design development phases and ensure that the stakeholders and community members continue to guide and inform this project. The contact information for members of the project management committee and advisory committee will be available to the future project development team via a request to WILMAPCO.
- **Public Involvement** – Additional public involvement will be required as the project progresses in future design development phases.