Southbridge Transportation Action Plan Task 1 Report Identify Issues, Opportunities, and Constraints

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Introduction

The Southbridge Transportation Action Plan will update the 2008 Southbridge Circulation Study and extend the 2021 Southbridge Neighborhood Action Plan (SNAP) for the purposes of:

- Exploring the extension of planned road diets on US 13 (Heald Street) and SR 9 (New Castle Avenue) south of Southbridge north into Southbridge. This concept was proposed as a high-level recommendation in the SNAP which has, so far, received positive community support.
- Examining alternatives to slow, reduce, and reroute truck movement through Southbridge, an everyday burden for residents. While the "Garasches Lane Extended" project studied in the Port of Wilmington Truck Access Study may reduce some truck trips in Southbridge's core, a more comprehensive solution or alternatives are needed.
- Improving walking and bicycle connectivity and comfort. This work will carry forth concepts from the SNAP and build off several completed and ongoing projects, such as the Southbridge Wetland Park Trail, the Southbridge Transportation Alternatives Program Streetscape Project, A Street Pathway, etc.
- Enhancing transit access to jobs and healthy, affordable food. Concepts to increase the frequency and connectivity of bus service to key destinations will be uncovered.
- Carrying forth all other mobility-related recommendations in the SNAP, providing an update and refinement of each. These recommendations are mostly housed in the "Improved Mobility" section of the SNAP, while others, such as those related to flooding and climate change, are not.

This report highlights existing demographics, transportation, and land use conditions in the study area, which roughly comprises Census Tract 19.02 in South Wilmington. The Core Study Area, as shown on the following page, focuses on the neighborhood of Southbridge. This report also summarizes plans for future transportation investments in the area. The contents of this report will help inform the recommendations of Southbridge Transportation Action Plan.

When viewing this report digitally, you can zoom in to the maps to see more detail. The maps will also be made available at <u>wilmapco.org/southbridge</u>.



Demographics

According to the 2020 Census, 2113 people live in the study area, 1430 of whom live in the core Southbridge neighborhood. The neighborhood is just 0.15 square miles in size, and the study area as a whole covers 1.1 square miles. The map below shows the population and density of each Census block in the neighborhood.



The study area is majority (66%) non-Hispanic Black, 18% non-Hispanic White, 6% Hispanic or Latino, and 5% non-Hispanic Asian.¹ The median household income is \$43,200, but lower within Southbridge. House prices are three times greater in Christina Landing than in Southbridge.²

The study area was not identified as a tech desert (an area with limited computer or internet access), nor was it identified as an area with limited English proficiency. However, this is likely due to the influence of Christina Landing in the Census tract data used to make that determination. In the SNAP's public involvement process, face-to-face interactions with residents was essential. While all surveys taken during that process were available online, fewer than 1 in 10 were completed online.

For the study area as a whole, 16% of households do not have a computer, 25% of households do not have internet access, and 5% of residents aged 5 or older have limited English proficiency. 11% of residents are aged 65 or older, and 8% have a disability. 25% of households do not have access to a vehicle.

¹ While the Southbridge neighborhood (Core Study Area) is majority Black, recent White middle-class settlement in Christina Landing (Greater Study Area) has significantly skewed demographic and socioeconomic data for Census Tract 19.02. For more information, see this Justice 40 letter: https://www.dropbox.com/s/9a8561f7etv6goi/Justice%2040%20Letter%20-%20SBCA%2C%20SWPN%2C%20SBCDC%20July%202022.pdf?dl=0 and this presentation: https://docs.google.com/presentation/d/1hvHYuMNU8jM1srP1qs3rvbfadj_1k284_08bo6XI22c/edit#slide=id.

² Source: Southbridge Neighborhood Action Plan (SNAP)

Land Use and Zoning

Land Use/Land Cover

The core study area is home to Southbridge, a densely populated neighborhood in the city of Wilmington. This neighborhood contains mixed-use, residential, and commercial land, as well as a few neighborhood parks and institutional buildings. The core neighborhood is surrounded by a mix of industrial and lower density urban development. While 16% of the study area is identified as forest or wetlands, a large portion of that has been developed into the Southbridge Wilmington Wetlands Park.



Zoning

The majority of the core Southbridge neighborhood is zoned single-family residential, but it also contains zoning for apartments and open space. The neighborhood is mostly surrounded by light manufacturing. The western waterfront area is zoned residential/commercial, and the northern waterfront area is zoned for manufacturing. East of I-495 is zoned general industrial.



Historic Properties

Southbridge is home to historic neighborhood institutions, such as Henrietta Johnson Medical Center, the Neighborhood House, and Mt. Joy United Methodist Church. Also, the Harriett Tubman Underground Railroad Byway passes through the study area on Route 9.

Sensitive Natural Network

According to the Conservation Fund, the study area does not contain any sensitive natural areas.

Community and Environmental Features

The Southbridge neighborhood is home to many places of worship and several neighborhood parks. A community center, senior center, medical center, and fire station are all located within a short walk of all homes in the core neighborhood. The Southbridge Wilmington Wetlands Park is located just west of the neighborhood. While there are no full-service supermarkets in the neighborhood, a ShopRite is located about a mile west. The boardwalk in the Southbridge Wilmington Wetlands Park roughly halves the walk to ShopRite.



Transportation Conditions

Nonmotorized Network

The map below shows the locations of sidewalks, marked crosswalks, and trails in the study area. The Southbridge Wilmington Wetlands Park features a boardwalk trail stretching from South Walnut Street to South Church Street, which has been extended north to A Street but is not yet visible on the map. The Jack A. Markell Trail is just outside the study area, across the Christina River. The core Southbridge neighborhood contains mostly complete sidewalks and crosswalks with few gaps. Most of South Market Street has sidewalks, but there are large gaps south of the Christina Crossing shopping center. South Walnut Street mostly lacks sidewalks except along the shopping center. Outside of these residential and commercial areas, the study area mostly lacks sidewalks and crosswalks.



Bicycle Level of Traffic Stress

Bicycle level of traffic stress (bike LTS) is a measure of how stressful roads are for bicycling, based on infrastructure conditions including traffic speeds, traffic volumes, and the number of lanes. In 2019, DeIDOT developed its own bike LTS methodology, giving each road segment in Delaware a bike LTS score ranging from 1 (least stressful) to 4 (most stressful).

The majority of residential streets in Southbridge are low stress and comfortable for most people to bike on. South Heald Street (part of US-13 and State Route 9) is one-way southbound and has two wide lanes and no bike infrastructure, giving it a bike LTS score of 3. New Castle Avenue (Route 9) has mostly the same configuration going northbound and has sections ranging from LTS 2 to 4. These two streets bisect the neighborhood and serve as a barrier to biking, and they may also pose a challenge to people crossing on foot. South Market Street and South Walnut Street are both LTS 4, posing a major barrier to access to the commercial businesses in the area. A Street connects these residential and commercial areas and is considered low stress.



Bus Ridership

Owing to its proximity to downtown Wilmington, the study area is well served by transit, featuring many DART bus routes, and bus stops in the area have moderate to high ridership. The majority of these routes connect to nearby downtown Wilmington and the train station, making nearly the entire DART network as well as SEPTA's Wilmington/Newark line accessible with no more than one transfer. Southbridge residents can take Routes 15 and 51 directly to the City of New Castle and the Christiana Mall, which serves as another transfer hub.



Traffic Volumes

DeIDOT measures traffic volumes on state-owned roads, which in this study area include South Market Street, South Walnut Street, South Heald Street, and New Castle Avenue. Traffic volumes are high on Market and Walnut Streets (part of US-13 Business). Traffic volumes are lower in the core Southbridge neighborhood, though higher traffic volumes were recorded on Heald Street north of its merge with New Castle Avenue. I-495 carried roughly 100,000 average daily vehicles in 2019 through the study area.



Crashes

Between 2019 and 2021, a total of 480 reported vehicle crashes occurred within the study area, including seven crashes that involved a pedestrian, one that involved a bicycle, and three fatalities. One pedestrian fatality occurred on South Walnut Street, and four pedestrian crashes occurred on Heald Street at its merge with New Castle Avenue. 191 crashes occurred within the core Southbridge neighborhood, and 127 occurred in the commercial area bounded by A, Market, and Walnut Streets. 50 crashes occurred on A Street from Market to Walnut Streets (inclusive of intersections). Crashes at intersections ranged from 6 to 35, with 35 crashes (including one fatality) at the intersection of Walnut and A Streets, and another 35 crashes at Market and A Streets.



The map below shows the number of crashes that occurred at each intersection in the core Southbridge neighborhood (for each intersection with more than two crashes). 29 crashes, including four pedestrian crashes, occurred on Heald Street at its merge with New Castle Avenue. 10 crashes occurred at New Castle Avenue and A Street, and 8 crashes occurred at Heald and D Streets. 6 crashes occurred at each of the following intersections: Heald Street at A, B, and C Streets and New Castle Avenue at B, C, and Pearl Streets. 1 crash fatality occurred in the neighborhood, at Buttonwood and B Streets.



Planned Transportation

Route 9 Road Diet

The Route 9 Corridor Master Plan, endorsed in May 2017, proposed a road diet along Route 9 north to Terminal Avenue. The Southbridge Neighborhood Action Plan proposed extending this road diet into Southbridge. The project is funded in DeIDOT's Capital Budget and labeled to extend to A Street in Southbridge. The Southbridge Transportation Action Plan will study the feasibility of extending this road diet into Southbridge and develop a preferred concept plan, including locallypreferred cross sections.

In Southbridge, the road diet will eliminate one travel lane, widen sidewalks, add street trees and green space, and narrow crossings by adding curb extensions. This road diet will improve safety for people walking and biking and reduce the risk of crashes. It may also reduce through-traffic in Southbridge.

This project is listed in the 2050 Regional Transportation Plan as a medium-term, fiscally-constrained project, with a planned service year of 2030. It is partially funded in the FY2023-2026 Transportation Improvement Program (TIP).



Existing





Proposed

Existing and proposed cross-sections for New Castle Avenue through Southbridge (Source: Southbridge Neighborhood Action Plan)

Southbridge Wilmington Wetlands Park

The Southbridge Wilmington Wetlands Park has been developed in the wetlands in South Wilmington, between the core Southbridge neighborhood and the Christina Crossing shopping center. This project was funded by a \$2.9 million federal grant, and construction began in June 2019. The primary purpose of the park is to reduce flooding in Southbridge. The park also features a boardwalk trail that stretches across the park from South Walnut Street to South Church Street, providing a low-stress, car-free connection between the residential and commercial areas. Construction of the park has been completed, and it is set to be officially opened to the public in September 2022.



Renderings of the Southbridge Wilmington Wetlands Park and its boardwalk (Source: City of Wilmington)

Shared Use Path Connections to Wetlands Park

DeIDOT has developed a concept plan for additional shared use path(s) that would extend south from the Wetlands Park boardwalk, shown on the previous page. As shown on the map below, alternative path connections are being considered to South Walnut Street, Garasches Lane, and the Chase Field House. These paths would provide a connection between the Wetlands Park boardwalk and the existing shared use path on the Christina River Bridge. The design is yet to be finalized, and construction is anticipated to begin in 2024.



Heald Street Bridge Replacement and Road Diet

Bridge 1-684 (US-13, South Heald Street over the Norfolk Southern Railroad) underwent inspection in early 2016. The study was completed in May 2017, recommending full replacement of the bridge. A preliminary design was completed in April 2021, which includes full-depth pavement reconstruction from Garasches Lane to the southern bridge abutment as well as replacement of the existing bridge structure. This project includes a proposed road diet for Heald Street, which will eliminate one travel lane in each direction. A two-way center left-turn lane would be included on surface sections, but not on the bridge. Additional public meetings are planned for fall 2022 and spring 2023, and construction is expected to begin in 2024. Construction is expected to last a full year, with traffic detours along South Market Street, South Walnut Street, and New Castle Avenue.





Garasches Lane Reconfiguration

WILMAPCO's <u>Port Circulation Study</u> (May 2022) recommends a reconfiguration of Garasches Lane to facilitate truck access to the Port of Wilmington, among other potential alternatives. This reconfiguration would combine Garasches Lane with the existing off-ramp from southbound US-13 (South Heald Street), creating a direct connection from Garasches Lane to New Castle Avenue. This would be built as part of the Heald Street bridge replacement project, shown on the previous page.



"Connecting Route 9" Areas of Persistent Poverty Grant

DTC has recently been awarded an \$810,000 grant from the Federal Transit Administration under the Areas of Persistent Poverty Program. Under the project title "Connecting Route 9 Corridor Communities", this grant funding will be utilized for public outreach and technical analysis, including evaluating fixed-route bus improvements, microtransit initiatives, and enhanced connections to transit within Southbridge and other neighborhoods, as well as Complete Streets strategies for multimodal corridor improvements to augment the recommended transit enhancements. This analysis will cover the three-mile stretch of Route 9 from Southbridge to I-295.