PROBLEM IDENTIFICATION: Bethlehem Pike

Springfield Township, Montgomery County, PA

The intent of this memo is to document the major problems pertaining to traffic conditions that may warrant context sensitive solutions and/or calming measures along Bethlehem Pike in Springfield Township. The problems described here have been identified by local officials and substantiated through site visits and analysis by DVRPC staff.

This information will serve as the basis for DVRPC's Taming Traffic report recommendations. In order to determine the most appropriate improvement strategy, it is important to realistically identify the weaknesses and challenges of the corridor. Please let us know if the identified problems are accurate, and present a reasonable indication of the current transportation-related issues along the corridor. We also ask you to rate the following problems in your perceived order of priority. Thank you for your cooperation.

INTRODUCTION

Location: The study area is a section of Bethlehem Pike, approximately 2.5 miles long, running through Springfield and Whitemarsh Townships, in Montgomery County. The study area extends along Bethlehem Pike from the intersection of Paper Mill Road and Stenton Avenue, north to the intersection of Skippack Pike. The southern end of the study area is adjacent to the City of Philadelphia border. Bethlehem Pike is used as a commuter corridor, and is also critical for local traffic to access shopping and recreation destinations. It intersects with Church Road, Stenton Avenue, Skippack Pike, and Germantown Avenue — all major commuter roadways.

Highway Access: The study area is within close proximity to the Route 309 Expressway, and approximately two miles from the Fort Washington interchange of the Pennsylvania Turnpike.

Transit Access: The study area is served by SEPTA's L Bus that runs from Chestnut Hill to the Motgomeryville Mall. The southern end of the corridor is less than half a mile from the Chestnut Hill East SEPTA regional rail station on the R7 Line.

Roadway: Bethlehem Pike, within the study area, is a state road that varies in width from about 38 to 48 feet. Between the intersection of Paper Mill Road / Stenton Avenue and the Whitemarsh Township border (at the northern end of the Genuardi's shopping center), the roadway is configured as two travel lanes in each direction. From the Whitemarsh border to a point about 200 feet south of Church Road, the roadway has a three-lane configuration, also known as a "road diet," with a center two-way turning lane. The northern end of the study area includes two through lanes for southbound traffic, and one through lane and a left-turn-only lane for northbound traffic.

Neighboring Amenities: The study area is lined with two major strip shopping centers and a number of street-edge businesses and historic structures. It is within close proximity to Fort Washington State Park, a local park with ball fields on Bysher Avenue, and several country clubs. The southern end of the study area is close to Germantown Avenue in Chestnut Hill, a popular shopping avenue. Two private schools sit on the corridor, with several other public and private schools nearby. The study area is also close to Chestnut Hill College and the Morris Arboretum.

History: What is now Springfield Township was a gift from William Penn to his wife, and was first designated on a map in 1681. One of the oldest roadways in Pennsylvania, Bethlehem Pike was originally a Native-American trail. Completed as a modern roadway in 1734, it was traversed by both Colonial and British troops during the Revolutionary War. A number of historic buildings still line the study corridor, including the Black Horse Inn (1744) and the Wheelpump Inn (1725).

Case For Study: Bethlehem Pike within the study area presents the foundation to become a vibrant and prosperous corridor. It already has the types of mixed-use, street-edge, historic buildings and thriving commercial infrastructure that make places like neighboring Chestnut Hill and Ambler attractive to locals and visitors. However, corridor improvements are needed to achieve this potential.

Providing guidance for these improvements was the basis for the *Bethlehem Pike Vision Plan*, completed in 2004 by Kise, Straw and Koladner (consultants) for the Flourtown-Erdenheim Enhancement Association. The Vision Plan proposes a collection of elements -- roadway changes, streetscaping, design guidelines, and development components -- that together would transform the study area into an attractive and distinctive set of walkable town centers.

DVRPC actively assisted Springfield Township in realizing one of the first major elements of the Vision Plan through a Transportation Enhancements (TE) grant to build gateway treatments at Valley Green Road, at the entrance to Cisco Park from Bethlehem Pike, and at Penn Oak and East Mill Road. The Township also obtained a grant and has been working with Michael Baker & Associates and Carter Van Dyke (consultants) to create a Streetscape Master Plan for Bethlehem Pike.

The DVRPC study team recognizes the opportunity to contribute a complementary element to the Streetscape Plan (which does not look at the cartway) through the Taming Traffic study, recommending strategies for altering the roadway to match its emerging new context as a pedestrian-friendly, vibrant commercial corridor. This study may also add value to DVRPC's capital investment in the TE grant project.

IDENTIFIED PROBLEMS

1. Excessive vehicle speeds northbound due to steep grade between Stenton Avenue and Gordon Lane.

The high-volume intersection of Stenton Avenue, Paper Mill Road, and Bethlehem Pike is located at the southern end of the study corridor. Vehicles proceeding north along the corridor encounter a steep grade, and at the northern end of the incline, a sharp curve. As identified by the steering committee, a significant number of drivers increase their speed on the grade, maneuver the curve at dangerous speeds, and accelerate again when the roadway geometry opens up into a straightaway. Moreover, this portion of the corridor is lined with street-edge businesses and residential streets, where high-speed traffic is inappropriate and presents safety concerns.

The straightaway past the curve at Gordon Lane (northbound) results in drivers accelerating just as they are entering a traditional business district where high speeds are inappropriate.
(Photo: DVRPC)

2. Potentially dangerous conditions created by Bethlehem Pike's inconsistent parking scheme

At several points along the corridor Bethlehem Pike is lined with traditional, street-edge businesses, some of which are served by on-street parking. Because a designated parking lane does not exist along Bethlehem Pike, this on-street parking is permitted in the travel lanes in certain sections of the corridor and during certain times of day (not during AM and PM peak periods). This presents a potentially hazardous situation as motorists traveling through the corridor encounter parked cars in the travel lane, and are forced to stop suddenly and merge into the adjacent free-flowing travel lane. One location of particular note is the section of Bethlehem Pike near Montgomery Avenue. There is a significant volume of southbound left-turning traffic at this location. However, vehicles are permitted to park in the right-hand travel lane. The combination of parked vehicles in the right lane and turning vehicles in the left lane creates a situation where traffic stacks in both lanes and seriously limits the capacity of Bethlehem Pike.

The need for on-street parking and the lack of dedicated parking lanes results in this unusual allowance of on-street parking in an active travel lane — a potentially dangerous condition.
(Photo: DVRPC)

3. Retail hub in the vicinity of Bysher Avenue experiences high volume of traffic and pedestrians, and has a demonstrated crash history.

The steering committee and the study team have observed dangerous conditions for both motorists and pedestrians at the intersection of Bysher Avenue. This offset intersection has several elements that create potential conflicts with through traffic, turning vehicles, and/or pedestrians. The main issue centers around the access point for the Starbucks, located directly between the two legs of the offset intersection. This uncontrolled access point adds to an already confusing situation with through traffic moving at different signal phases, and compromised site distance for turning traffic. Opposing left turns obscure visibility of through traffic, making left turns potentially dangerous.

The offset intersection coupled with the Starbucks access point creates a confusing intersection with poor sight lines, and a demonstrated crash history.
(Photo: DVRPC)

4. Town center area lacks a distinctive sense of place.

Between Bysher Avenue and Mill Road, the study corridor contains a significant density of businesses, including many street-edge businesses, with their frontage along Bethlehem Pike. This section also contains several key historic structures. This development pattern creates a foundation for a town-center, main-street type character. However, this business corridor lacks complementary components that accent that character and convey to drivers that the area they are passing through is a special environment, requiring caution and slower speeds. In other communities throughout the region, this "sense of place" has been shown to be important for calming traffic, attracting shoppers, and providing a safe and friendly environment for pedestrians.

A segment of the study area has historic buildings, a critical mass of businesses, and good walkability, but lacks the sense of place that makes other town centers easily identifiable.
(Photo: DVRPC)

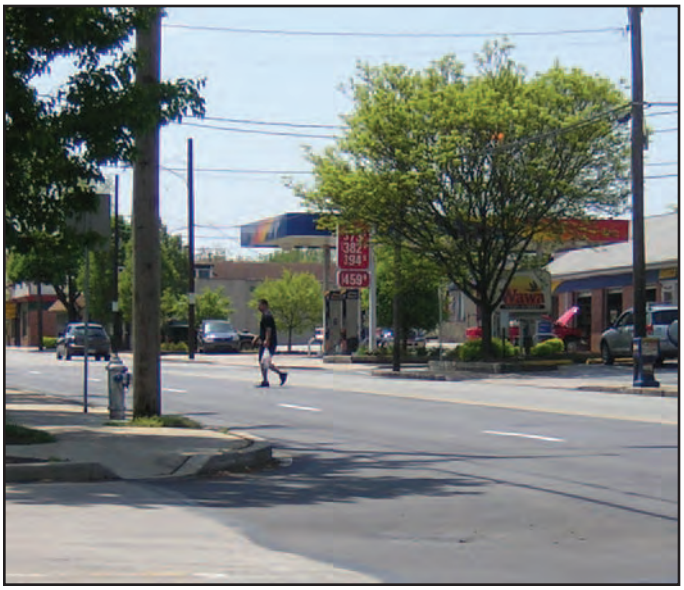
5. Conflicts with turning and through traffic at major destinations.

At several points along the corridor, such as the aforementioned Starbucks at Bysher Avenue, there are conflicts between turning and through traffic, resulting in potentially dangerous and difficult driving and pedestrian conditions. Another significant location exhibiting this issue is the corridor section between Mill Road and Weiss Avenue, where there are driveways for the Wawa, Halligan's Pub, and the Acme shopping center. Because these access points are all in close proximity, but are staggered on both sides of the roadway, there is a significant amount of turning traffic from several directions, conflicting with both northbound and southbound through traffic.

The collection of several, staggered access points by the Acme shopping center creates conflicts between turning and through traffic. (Photo: DVRPC)

6. Shortage of safe and highly visible pedestrian crossings, especially in the vicinity of heavily used bus stops.

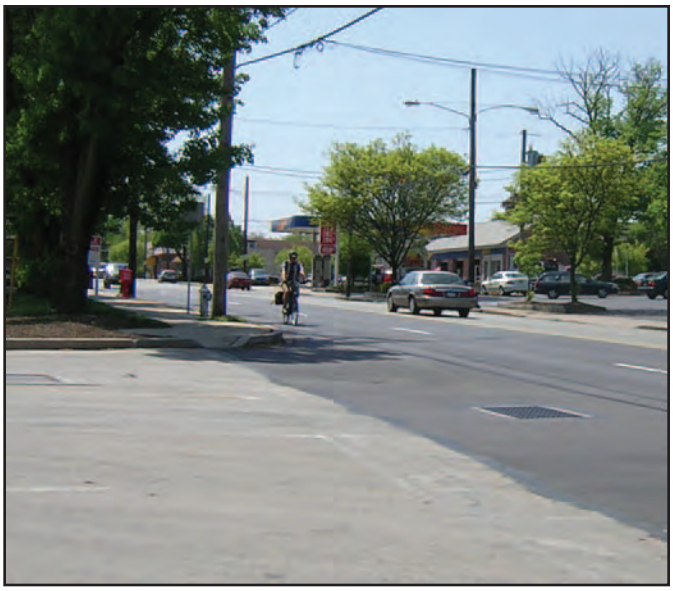
There are numerous marked crosswalks along the corridor. However, with the exception of the continental-style crosswalks at the Haws Lane intersection, the pedestrian crossings do not have high-visibility treatments. In addition, there are no mid-block crossing points along the corridor, despite the fact that a significant number of pedestrians have been observed crossing Bethlehem Pike to access the SEPTA bus stop across from the Wawa. Throughout the corridor there are other points with high pedestrian activity that lack visible crosswalks, such as the southern entrance to the Genuardi's shopping center, by the Dunkin' Donuts. The danger associated with lacking pedestrian crossing amenities not only decreases pedestrian safety, but also creates a perceived danger among potential pedestrians that may keep them from choosing to walk as a mode of travel along Bethlehem Pike.



Significant pedestrian activity exists in the area by the Wawa and Acme shopping center, yet no crosswalks are provided for safe pedestrian crossings.
(Photo: DVRPC)

7. Corridor lacks adequate bicycle amenities.

As per PennDOT's regulations, bicycles are permitted in the travel lanes of Bethlehem Pike. However, this facility is not very bicycle friendly. Furthermore, the Montgomery County trail system is currently being expanded and will include a trail head, and possibly a trail connection, at Bethlehem Pike, just north of Mill Road. Due to the densely developed residential communities surrounding the corridor, and the forthcoming bicycle traffic due to the trails, it is increasingly important to plan for multi-modal roadway usage, and for this facility to accommodate bicyclists.



The corridor lacks sufficient bicycle amenities, such as “share the road” signs, bike lanes, and storage racks.
(Photo: DVRPC)

8. Lack of accommodations and safety considerations for transit users / minimal presence of transit amenities along the corridor.

The corridor is served by SEPTA's Route L bus. However, most SEPTA stops along the corridor lack basic amenities for transit riders, such as shelters and benches. Some stops are poorly marked and others lack sidewalks or any kind of safe area at which riders can wait. Transit and multi-modal planning are important for supporting the users of alternative modes of travel, and also for calming the behavior of motorists. Drivers tend to proceed more slowly when they share the roadway with other modes of travel, including cyclists, pedestrians, and transit users.

Some areas of the corridor, like this segment just south of Church Road, contain transit stops, but no shelters or safe places to wait. At some points, like the area shown, there are no sidewalks leading to the stops (bus stops are circled in yellow).
(Photo: DVRPC)