



DELAWARE VALLEY
REGIONAL PLANNING
COMMISSION

2007

TRANSITIONING *to* TOD



A TRANSIT-ORIENTED DEVELOPMENT PLAN
for SEPTA'S WAWA STATION on the R3 REGIONAL RAIL LINE





DELAWARE VALLEY
REGIONAL PLANNING
COMMISSION

2007

TRANSITIONING *to* TOD



A TRANSIT-ORIENTED DEVELOPMENT PLAN
for SEPTA'S WAWA STATION on the R3 REGIONAL RAIL LINE



Created in 1965, the Delaware Valley Regional Planning Commission (DVRPC) is an interstate, intercounty and intercity agency that provides continuing, comprehensive and coordinated planning to shape a vision for the future growth of the Delaware Valley region. The region includes Bucks, Chester, Delaware, and Montgomery counties, as well as the City of Philadelphia, in Pennsylvania; and Burlington, Camden, Gloucester and Mercer counties in New Jersey. DVRPC provides technical assistance and services; conducts high priority studies that respond to the requests and demands of member state and local governments; fosters cooperation among various constituents to forge a consensus on diverse regional issues; determines and meets the needs of the private sector; and practices public outreach efforts to promote two-way communication and public awareness of regional issues and the Commission.



Our logo is adapted from the official DVRPC seal, and is designed as a stylized image of the Delaware Valley. The outer ring symbolizes the region as a whole, while the diagonal bar signifies the Delaware River. The two adjoining crescents represent the Commonwealth of Pennsylvania and the State of New Jersey.

DVRPC is funded by a variety of funding sources including federal grants from the U.S. Department of Transportation's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), the Pennsylvania and New Jersey departments of transportation, as well as by DVRPC's state and local member governments. The authors, however, are solely responsible for its findings and conclusions, which may not represent the official views or policies of the funding agencies.

DVRPC fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. DVRPC's website may be translated into Spanish, Russian, and Traditional Chinese online by visiting www.dvrpc.org. Publications and other public documents can be made available in alternative languages or formats, if requested. For more information, please call (215) 238-2871.

Table of Contents

Executive Summary	1
Introduction	3
Wawa: <i>Transitioning to TOD</i>	9
Acknowledgements	61
Bibliography	63
<u>Maps</u>	
Map 1: Wawa Existing Uses	12
Map 2: Wawa Rail Infrastructure	15
Map 3: Wawa Land Use (2000)	27
Map 4: Wawa Zoning	33
Map 5: Wawa Environmental Resources	42
<u>Figures</u>	
Figure 1: Build-Out Scenarios and Yield Analyses for the Franklin Mint Site and Adjacent Properties	19
Figure 2: Traffic Counts for Wawa Study Area	45

Executive Summary

The Delaware Valley Regional Planning Commission (DVRPC) has produced several studies and station area plans that support transit-oriented development (TOD) in its nine-county region. By encouraging development around rail and bus facilities, DVRPC hopes to bring new investment to established communities, while also promoting increased transit ridership.

This document includes a TOD plan for the Southeastern Pennsylvania Transportation Authority's (SEPTA) pending reopening of the Wawa rail station in Chester Heights Borough, Delaware County. Prior to 1986, SEPTA's R3 Regional Rail line extended west from Center City Philadelphia to West Chester in Chester County. Today the R3 line ends at Elwyn station in Middletown Township, Delaware County. In the 21 years that have elapsed since SEPTA discontinued rail service beyond Elwyn, western Delaware County has experienced significant population and job growth.

SEPTA currently plans to reinstate R3 Regional Rail service between the Elwyn and Wawa stations by 2011. The Wawa station is located in a growing area that offers excellent opportunities for TOD. Wooded and agricultural lands, the former headquarters of the Franklin Mint, and Wawa Dairy Farms Inc.'s headquarter offices all surround the station site. The return of Regional Rail service, together with Wawa Dairy's continued presence as a major employer in this area, could help stimulate the redevelopment of some of these properties with transit-supportive uses.

This report provides an array of recommendations to help guide future growth and development in the vicinity of the Wawa station site. These recommendations cover areas including, but not limited to, land use, comprehensive planning, zoning, development opportunities, and access management. The framework of this case study is oriented toward an asset-based approach that aims to identify and capitalize on the existing strengths of the surrounding communities, specifically Middletown Township and Chester Heights Borough.

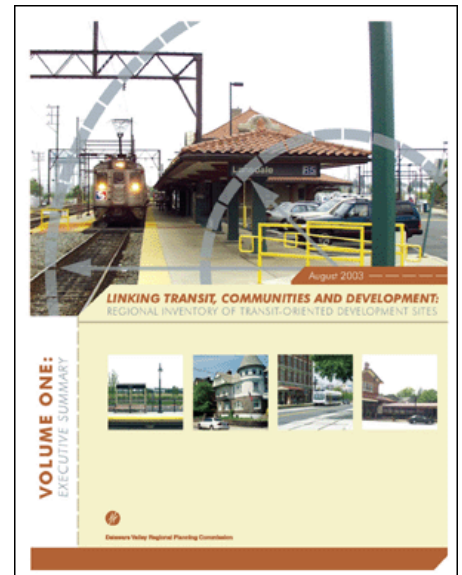
Introduction

DVRPC has been involved in planning for transit-oriented development (TOD) for several years. Past studies have produced station area plans for transit facilities along New Jersey Transit's River Line and the proposed SEPTA/BARTA Schuylkill Valley Metro. This document, *Transitioning to TOD: A Transit-Oriented Development Plan for SEPTA's Wawa Station on the R3 Regional Rail Line*, grew out of the work done on *Linking Transit, Communities and Development: Regional Inventory of Transit-Oriented Development Sites*, published in 2003. The regional inventory determined a priority list of TOD opportunity sites that support the goals and policies of DVRPC's *Destination 2030* long-range plan. Forty-five stations were chosen from a universe of more than 300 in the DVRPC region as those that held the most potential for TOD.

Several stations included in the inventory report were then chosen for more in-depth study, resulting in *Four TOD Plans for Girard, Lansdale, Thorndale, and Woodbury* (2004) and *Developing Around Transit: Transit-Oriented Development Plans for SEPTA Broad Street Line Ellsworth-Federal, SEPTA R5 North Wales, and SEPTA R2 Warminster* (2006). This report carries that work further by offering a case study of the pending reopening of the Wawa station, which, beginning in 2011, will serve as the new western terminus of SEPTA's R3 Regional Rail line.

Included in this document are an array of recommendations intended to guide future growth and development in the vicinity of the Wawa station. These recommendations cover areas including, but not limited to, land use, comprehensive planning, zoning, development opportunities, and access management. The framework of this study is oriented toward an asset-based approach that builds on the existing strengths of the surrounding communities.

For more information about transit-oriented development and its application in greater Philadelphia, visit DVRPC's TOD webpage at www.dvrpc.org/planning/community/tod.htm.



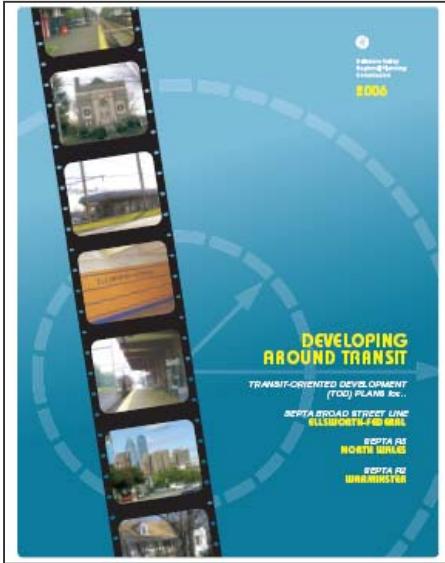
Linking Transit, Communities and Development: Regional Inventory of Transit Oriented Development Sites (2003) identifies opportunities for TOD at 45 stations located throughout DVRPC's nine-county service area.

Transit-Oriented Development (TOD) Principles

Of the more than 300 fixed-rail stations located in the Delaware Valley region, the majority are surrounded by transit-adjacent development (TAD). Transit-adjacent development is development that is physically near transit but fails to fully capitalize on its proximity, both in promoting transit ridership and as an economic and community development tool. Many of the fixed-rail stations in the region also lack pedestrian and bicycle access; lack land uses that complement the station, such as consumer services; and lack building design and orientation that serve the rail user.

Transit-oriented development, by contrast, is intensified development around a transit facility that is compact, mixed-use, and pedestrian-friendly, and which is intended to encourage transit ridership. It is most often moderate to high density, and can be either new construction or redevelopment. Buildings are designed and oriented to facilitate transit usage. While the automobile is accommodated, bicycle and pedestrian access is given equal importance in order to encourage multimodal access. Through redevelopment, it is possible for TADs to become TODs.

In urban settings, TOD may be focused around a few properties or even integrated into the transit station (e.g., The Gallery shopping center in Philadelphia is built over and adjacent to two SEPTA stations: the Market East Regional Rail station and the Market-Frankford Line's 11th Street station). In suburban settings, TOD usually encompasses a broader area, generally focused within a quarter-mile (or up to a half-mile) radius around the transit facility, based on a comfortable pedestrian walking distance. In this case, TOD may be created by the planned interrelationship of different development projects and existing uses. Inappropriate land uses can detract from the TOD and weaken the linkage between the transit facility and the community. Implementing TOD requires a concerted effort by local governments to amend their comprehensive plan and zoning ordinance to add or



Developing Around Transit: Transit-Oriented Development Plans for SEPTA Broad Street Line Ellsworth-Federal, SEPTA R5 North Wales, and SEPTA R2 Warminster (2006) includes in-depth case studies of selected stations from DVRPC's regional inventory report.

refocus on those uses and development patterns that are “transit supportive.”

Transit-Friendly Land Uses

Uses that are transit supportive include those that cater to convenience goods and service needs of residents, employees, and transit station users. This can include food markets, restaurants, beauty salons, dry cleaners, newsstands, bookshops, hardware stores, and other retail uses. Uses that entertain or create activity on the street – or attract day and night activity – are all transit supportive. Movie houses, professional theaters, sidewalk cafes, and other arts venues are all examples of this kind of development.

Uses that are not transit supportive are those that detract from, or interrupt the flow of pedestrian activity along the street. These include, but are not limited to, surface parking lots, gas stations, car washes, large auto repair shops, and drive-through fast food restaurants. Uses that specialize in large bulky items, businesses that require excessive space, or that have few employees per square foot (such as big box retail and warehousing) do not generally attract pedestrians or transit-oriented patrons.

Benefits of TOD

Transportation Benefits

- Increases transit usage by providing higher density housing along the transit or rail line, and by improving the aesthetic environment of the station area.
- Decreases amount of trip-making by allowing for “trip-chaining” (accessing multiple destinations in one trip). Mixing land uses near transit facilities enables local commuters and other residents to access a range of goods and services all in the same trip.
- Reduces auto use and lessens dependence on the automobile.
- Diminishes the need for road widening or large investments in highway repair and building.

Environmental Benefits

- Preserves land resources and diminishes storm water runoff by targeting new development to established communities and encouraging the reuse of existing buildings.
- Minimizes the need for the expansion of sewer systems through the maximization of existing capacity.
- Lessens auto dependence on domestic and imported oil.
- Improves air quality at a regional level by reducing auto usage.

Economic Benefits

- Saves tax dollars by using existing infrastructure more efficiently.
- Raises local tax revenues by promoting infill construction and the redevelopment of parcels along existing transit corridors.
- Increases land and home values.
- Increases disposable household income by reducing automobile dependence and the resulting costs of owning and repairing a car. Thus, by buying “less car,” one can purchase “more house.”

Quality-of-Life Benefits

- Enhances walking and transit options for commuting, errands, and entertainment; can also lead to better health.
- Improves the identity of a corridor or area.
- Enhances community identity and sense of place. Reinforces the role of town centers and helps to create places where people can meet and interact.
- Promotes tourism opportunities.



Completed by DVRPC in 2002, Transit Village Design in Burlington County promoted ridership and community revitalization by encouraging transit-oriented development around the stations served by NJ Transit's River Line.

- Creates continuous activity near the station (as a result of mixed land uses), which provides less opportunity for crime.

TOD in the Delaware Valley

Many municipalities in the Delaware Valley region have completed TOD plans in the last five years, either as an individual study of their specific transit station, or as part of a larger study of an entire transit corridor. These studies are either done in-house, through a consultant, or by a county planning commission, DVRPC, or the transit agency itself.

Since 2002, DVRPC's Transportation and Community Development Initiative (TCDI) has provided funding to communities to undertake TOD studies. This support includes grants to Beverly City, Burlington City, and Riverside Borough in Burlington County; the City of Trenton in Mercer County; Marcus Hook Borough, Yeadon Borough, and Upper Darby Township in Delaware County; Cheltenham Township (for Glenside station), Lower Merion Township (for Ardmore and Bryn Mawr stations), Lansdale Borough, Conshohocken Borough, and North Wales Borough in Montgomery County; and Downingtown Borough in Chester County. TCDI grants have also supported TOD planning initiatives in the Mount Airy neighborhood, and along the Frankford Avenue, West Market Street, and eastern R7 Regional Rail corridors in the City of Philadelphia.

Other communities that are moving forward with TOD plans or projects include Haddonfield and Collingswood boroughs in Camden County; Ewing Township (for West Trenton station), West Windsor Township (for Princeton Junction station) and Hamilton Township in Mercer County; Upper Gwynedd Township and Lansdale Borough (both for Pennbrook station) and Ambler Borough in Montgomery County; and Tredyffrin and Willistown townships (both for Paoli station), and the City of Coatesville in Chester County. Within the City of Philadelphia, TOD planning efforts are underway for the Allegheny West, Girard, and Temple University areas.



Through its Transit Village Initiative, NJ Transit supports revitalization and redevelopment activities around transit facilities.

Marcus Hook Borough, Delaware County



One of the first municipalities in Pennsylvania to receive a TRID grant, Marcus Hook plans to redevelop a large, vacant parcel north of its rail station. The area's current conditions are pictured above. A photo simulation by Kise Straw & Kolodner, below, illustrates how the site could be redeveloped with more transit-friendly uses.



Both PATCO and NJ Transit also have studies underway, or completed, that look at TOD opportunities along their transit lines. NJ Transit offers technical assistance to communities through their Transit Friendly Communities Program, while NJ DOT designates Transit Villages. Communities demonstrating a strong commitment to revitalizing the area around their transit station may be recommended for designation as a Transit Village by an interagency task force. The designated Transit Villages in DVRPC's service area include Burlington City, Riverside, and Collingswood, New Jersey. Designation brings prioritized funding and technical assistance from state agencies, as well as eligibility for other grants.

Transit Revitalization Investment Districts (TRID)

Act 238, the Transit Revitalization Investment District (TRID) Act, was enacted by the Commonwealth of Pennsylvania in December 2004 and became effective in February 2005. The Act empowers municipalities and counties to establish "Transit Revitalization Investment Districts," and encourages cooperation with public transit agencies to promote economic development around train stations. Once established, a TRID allows transit agencies to share in the real estate tax revenues generated by new development near a station. The transit agency, in turn, reinvests that revenue in capital projects and/or the maintenance of the TRID area. So far, the Pennsylvania Department of Community and Economic Development has awarded four TRID planning grants to three municipalities in southeastern Pennsylvania: Marcus Hook Borough (SEPTA R2 Marcus Hook station), Bristol Township (SEPTA R7 Croydon station), and the City of Philadelphia (for SEPTA's Temple University Regional Rail station and the 46th Street station on SEPTA's Market-Frankford Line). A TRID study grant from the Pennsylvania Department of Transportation has also been provided to Ambler Borough (SEPTA R5 Ambler station). In addition, DVRPC has awarded a TCDI grant to Lower Merion Township to support TRID planning in the area of the Bryn Mawr station on SEPTA's R5 line.

Wawa: *Transitioning to* TOD

Snapshot

Prior to 1986, SEPTA's R3 Regional Rail line extended west from Center City Philadelphia to West Chester in Chester County. Today the R3 line ends at the Elwyn station in Middletown Township, Delaware County. However, in the 21 years since SEPTA discontinued rail service beyond Elwyn, western Delaware County has experienced significant population and job growth. In the 1990s, SEPTA began studying the feasibility of restoring service to some of the closed stations along the R3 Regional Rail line west of Elwyn, including Wawa.

SEPTA currently plans to reinstate R3 Regional Rail service between the Elwyn and Wawa stations by 2011. The proposed Wawa station would serve as the new terminus of the extended R3 line. The Wawa station site is located in a growing area that offers excellent opportunities for TOD. Wooded and agricultural lands, the former headquarters of the Franklin Mint, and Wawa Dairy Farms Inc.'s corporate campus occupy much of the area that surrounds the station site. The return of Regional Rail service, together with Wawa Dairy's continued presence as a major employer in this area, could help stimulate the redevelopment of some of these properties with transit-supportive uses.

Recently, a private development group unveiled plans to construct a mixed-use town center on the Franklin Mint property, just east of the rail line. The developers assembled a 153-acre site (comprised of the Franklin Mint property and other nearby parcels) and proposed the construction of a mixture of residential, office, and commercial uses, as well as improvements to the area's existing road network. However, as they have not yet filed any formal development applications pertaining to the reuse of the Franklin Mint property, the future of the site remains undetermined at this time. Nevertheless, the design of any new construction at this location will be critical to ensuring the Wawa area becomes a truly walkable and transit-friendly place.



Entrance to a private estate in Middletown Township.



The former headquarters of the Franklin Mint.

Study Area

The study area is comprised of a mile radius surrounding the proposed Wawa SEPTA station site, which is in western Delaware County, Pennsylvania. The station is located approximately 20 miles west of Philadelphia at the intersection of Chester Creek and Baltimore Pike (a section of US 1). Chester Creek follows the route of the rail line between the Glen Riddle and Wawa stations, and also serves as the municipal boundary between Middletown Township and Chester Heights Borough. Baltimore Pike is the only street adjacent to the Wawa station site. Unfortunately, in the vicinity of the proposed station, it lacks both sidewalks and bike lanes.

Previous TOD plans created by DVRPC have generally used a quarter-mile radius to define the study areas surrounding individual transit stations. (Traditional TOD research usually identifies a quarter-mile as the distance an average person is willing to walk to access transit.) Because the proposed Wawa station is surrounded by several large parcels of undeveloped land and is also adjacent to a major redevelopment site (the former Franklin Mint property), an expanded study area was defined in order to more fully encompass the existing land uses and future development opportunities available at this location.



SEPTA's Lenni Technical Training Facility on Lenni Road.

The study area roughly extends from the intersection of Valley and Darlington roads to the north, Pennell Road/PA 452 to the east, Lenni Road to the south, and Valley Brook Road to the west. (See **Map 1: Wawa Existing Uses.**) About half of the study area is located in Middletown Township; the other half in Chester Heights Borough. Very small portions are also located in Aston Township and Thornbury Township. All four municipalities are located in Delaware County. Because the study area includes such tiny sections of Aston and Thornbury townships, the demographic and planning analyses included in this report primarily focus on Middletown Township and Chester Heights Borough.

Benefits of TOD

Several of the advantages that transit-oriented development can afford communities are described in the introduction to this report. These include a wide range of transportation, economic, environmental, and quality-of-life benefits that

result when well-planned, transit-supportive land uses are concentrated around rail and bus stations.

More specifically, TOD increases transit usage and reduces automobile dependence by providing higher density, mixed-use development within walking distance of a station. Diminished auto dependence results in less traffic as local residents and workers are able to walk and ride transit to an increasing number of destinations. New investment in TOD also raises local tax revenues by promoting infill construction and redevelopment along existing transit corridors, some of which are located in established downtown areas. Over time, TOD can help to enhance community identity and sense of place by reinforcing the role of town centers and creating places where people can meet and interact.

A 2006 study by Rutgers University researchers also reveals that the number of children living in high density, multifamily housing near rail stations is about one-third lower than formerly believed. This is important news for cash-strapped school districts that lack the necessary resources to enroll and educate a significant number of additional students. Previously, 100 two-bedroom apartment units in New Jersey were estimated to generate 20 public schoolchildren. In actuality, according to the Rutgers research team, those same apartments only generate about 13 students. Their final report, titled *Who Lives in New Jersey Housing? A Quick Guide to New Jersey Residential Demographic Multipliers*, also found that large, single-family detached homes generate the largest number of school children. Additionally, housing that is affordable to low- and moderate-income families was determined to add fewer school-age children to local attendance rolls than was commonly thought.

Current Transit Service

SEPTA's proposed Wawa station along the planned extension of the R3 Regional Rail line will be built near the intersection of Baltimore Pike and Chester Creek. (The Wawa station closed by SEPTA in 1986 was located in the same area.) SEPTA's plans include laying new track between Elwyn and Wawa, constructing new platforms, installing signals, and creating parking facilities. Rail



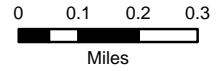
A new single-family home on a large lot in Middletown Township.


Map 1: Existing Uses

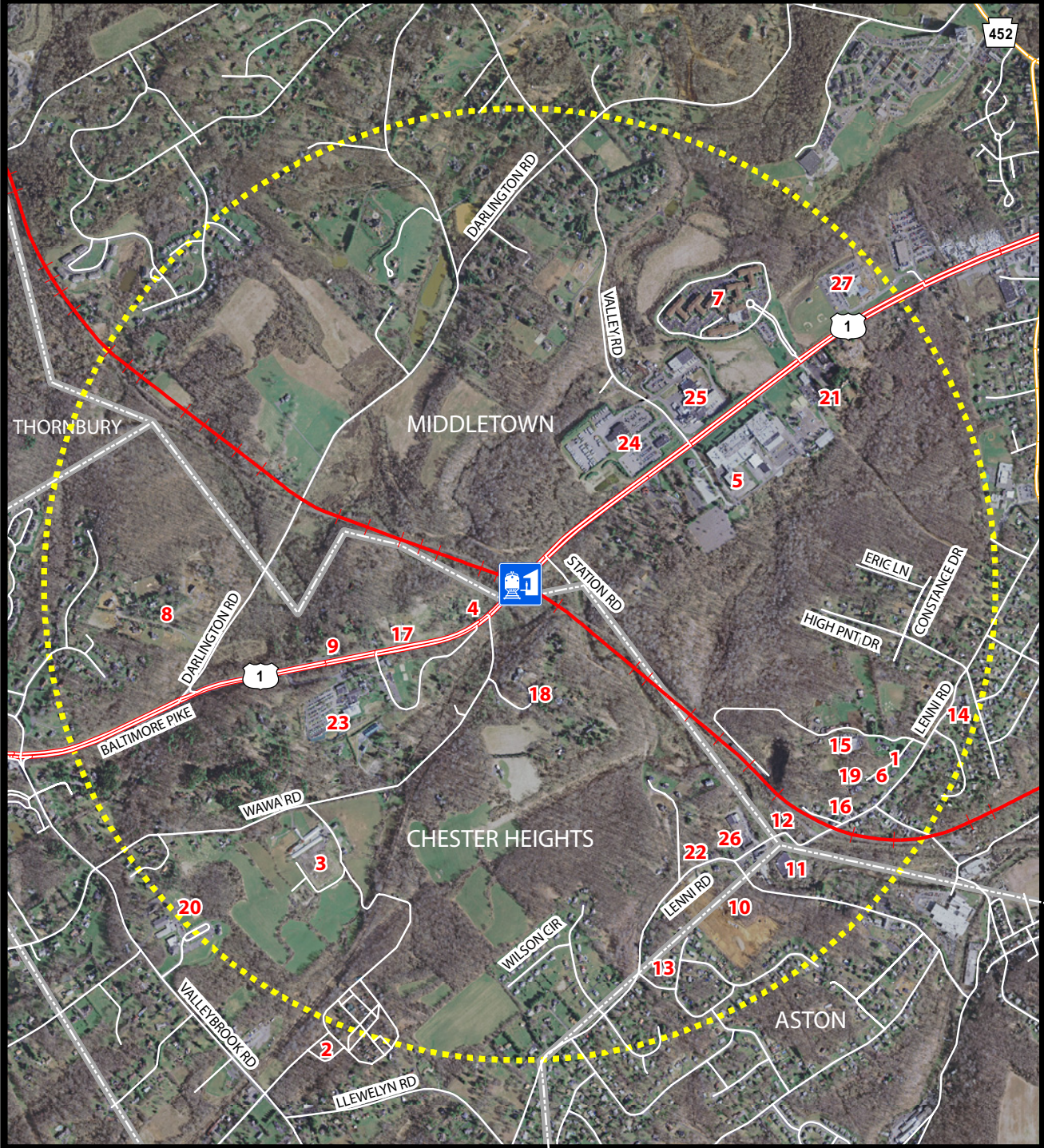
Wawa

Delaware Co., Pennsylvania

Orthophoto Date : 2005



 Delaware Valley
Regional Planning Commission
January 2007



Existing Uses

Wawa



Delaware Valley
Regional Planning Commission
January 2007

Delaware Co., Pennsylvania

1. Barber Shop
2. Chester Heights Camp Meeting
(Listed on the National Register
of Historic Places)
3. Farm
4. Forge Hill
(Listed on the National Register
of Historic Places)
5. Franklin Mint (Former Site)
6. Gift Shop
7. Granite Farms Estates
(Senior Apartments / Assisted Living)
8. Hamanassett Bed & Breakfast
9. Honey Fix It, Inc.
10. Industrial Park
11. Industrial Park
12. Industrial Park
13. Knight Brothers Tree Removal
14. Lenni Heights Fire and Rescue
15. Lenni Products, Inc.
16. Lenni SEPTA Station
(Decommissioned)
17. Locust Hill Professional Center
18. Pathways PA (Social Services)
19. Post Office
20. St. Thomas the Apostle Catholic
Church, School, and Cemetery
21. State Police
22. Stonehaven
(Listed on the National Register
of Historic Places)
23. Wawa Corporate Headquarters
24. Wawa Corporate University
25. Wawa Dairy
26. Westlake Plastics
27. YMCA

service to Wawa is expected to commence in 2011. Elwyn, the current terminus of the R3 line, is located about three miles east of the Wawa station.



Sign marking the location of SEPTA's Lenni Station, which is currently closed to passenger service.

Other rail lines also extend through this area. Between Elwyn and Wawa, on the site of the closed Lenni station, is the switching area for SEPTA's former Chester Creek Branch, which once provided rail service between Lenni and the City of Chester. Inactive since 1972, the Chester Creek Branch is now being converted into a 6.7-mile rails-to-trails path (see pages 41 and 44 for more information). From the Wawa station, the right-of-way for SEPTA's Octoraro Branch extends west to Oxford Borough in Chester County. SEPTA sold the Chester County portion of the Octoraro Branch to a short line rail operator that currently runs freight service between Brandywine Creek and Oxford Borough with connecting access to Wilmington and Coatesville. The Octoraro Branch is inactive in Delaware County. In the future, restoring rail service along the Octoraro Branch as far west as US 202 could provide growing suburbs in western Delaware County with direct transit access to Center City Philadelphia and other points of interest. Another option is to convert the Octoraro Branch into a dedicated bus rapid transit (BRT) route. If future efforts to reuse portions of the Octoraro Branch for transit service are unsuccessful, the potential for trail use should also be considered. (See **Map 2: Wawa Rail Infrastructure.**)

Baltimore Pike is the most significant roadway in the study area and is served by SEPTA bus route 111. From the 69th Street Terminal in Upper Darby, bus route 111 travels to and from the Chadds Ford Business Campus, stopping at the former Franklin Mint site along the way.



The Franklin Mint sign on Baltimore Pike.

Major Pending Development

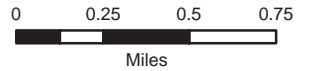
In 2006, a development partnership comprised of Pennrose Properties, Wolfson Verrichia Group, Dewey Companies, and the McKee Group created a concept plan for a new mixed-use town center on a 153-acre site near the future Wawa SEPTA station. The property includes the parcel formerly occupied by the Franklin Mint headquarters and museum.

Map 2: Rail Infrastructure

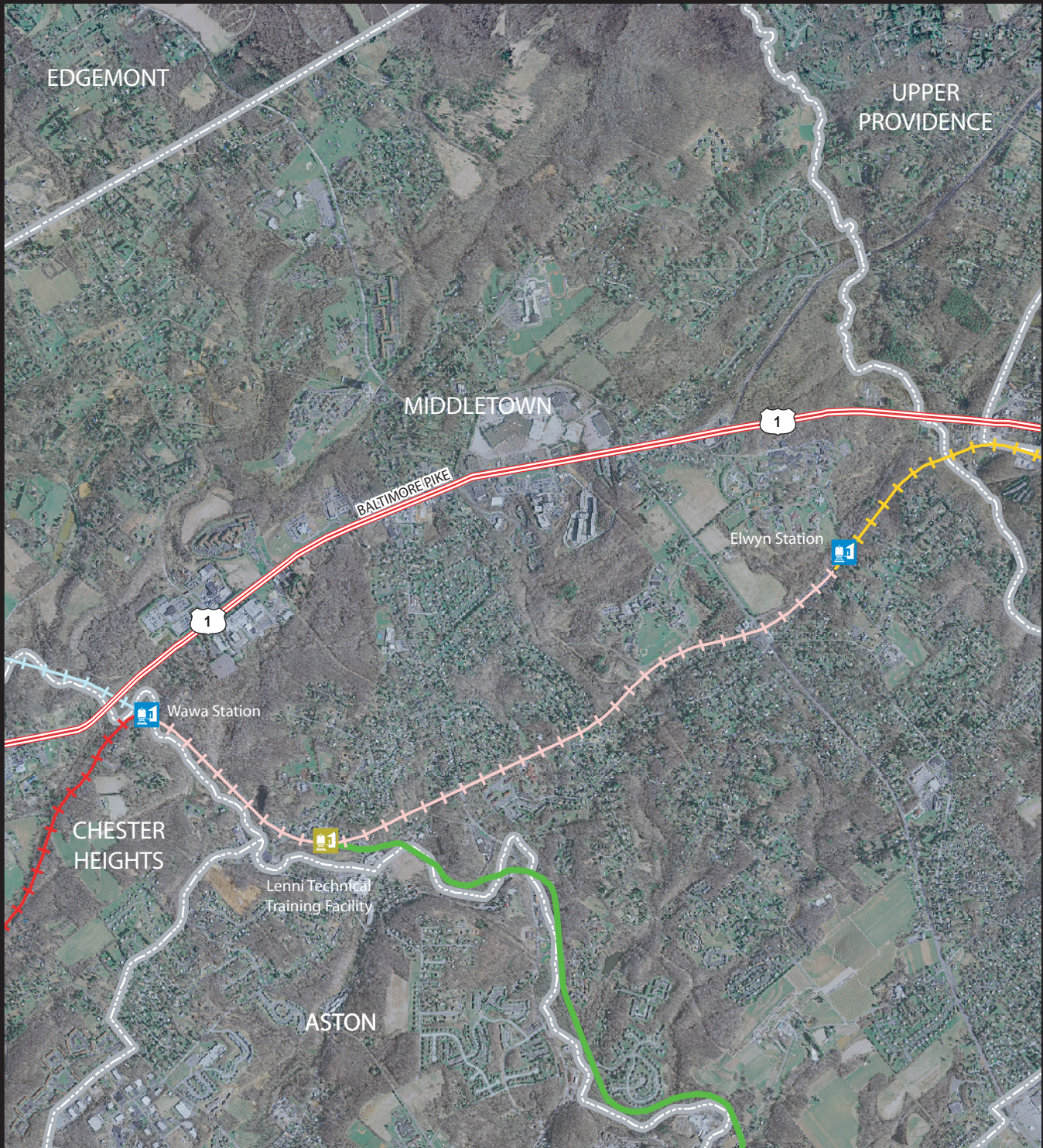
Wawa

Delaware Co., Pennsylvania

Orthophoto Date : 2005



Delaware Valley
Regional Planning Commission
June 2006



Rail Station



Other SEPTA Facility



Municipal Boundary

+++ Octoraro Branch Rail

+++ Planned Extension of SEPTA R3 Rail

+++ West Chester Branch Rail

+++ Existing/Active SEPTA R3 Rail

— Chester Creek Branch Trail (construction)

The developers' initial proposal called for the construction of approximately 1,300 housing units, including both for-sale and rental homes. This equates to a gross density of a little more than eight dwelling units per acre, similar to what is found in Lansdowne Borough, Delaware County. Although denser than what can currently be found in most of Middletown Township and Chester Heights Borough, it is less compact than what is often recommended for TOD. According to the Center for Transit-Oriented Development, a division of Reconnecting America, the appropriate residential density for mixed-use town centers with a comparable level of transit service is about 12 units per acre. (Suburban town centers with more frequent transit headways can sometimes support upwards of 60 units per acre.)

Lofts, double-stacked townhouses, and an active adult community were all among the planned housing types included in the developers' proposal. In some locations on the site, gated communities were planned. Other proposed uses included 1.3 million square feet of retail space, 300 hotel rooms, a multiplex movie theater, and 400,000 square feet of office space. Plans also showed shops lining an internal "Main Street" with both on-street and structured parking. Two stories of apartments were to be constructed atop the street's ground floor retail uses, and additional housing units would mask the planned parking structures.

This initial proposal for the Franklin Mint site bears likeness to many lifestyle mixed-use projects being built across the country. According to the development team, their conceptual plan for the Franklin Mint property could be implemented in phases with build-out occurring over several years. This strategy would help to ensure the site is not oversupplied with residential or commercial uses for which there is little demand. Wolfson Verrichia Group, which planned to oversee the retail portion of the project, was part of the team that built Main Street at Exton. Located in Chester County, Main Street at Exton is a lifestyle retail center similar to what was proposed for the Franklin Mint site, although the project in Exton does not include housing.



Main Street at Exton, a lifestyle retail center developed by Wolfson Verrichia Group in Chester County. Image by AGS Environmental Graphic Design.

The development team also retained the transportation engineering firm McMahon Associates to do traffic

analyses and propose roadway improvements to enhance access to the planned mixed-use project. McMahon's recommendations included widening Baltimore Pike from four lanes to seven lanes, and building a four-lane loop road that would serve the redeveloped Franklin Mint site and SEPTA station, and connect to both Baltimore Pike and PA 452. Additionally, three entrances, or curb cuts, were designed to provide direct access to the town center from Baltimore Pike. McMahon Associates estimated that these prescribed improvements would cost between \$35 and 45 million to complete. Pending the approval of their town center proposal, the development team agreed to absorb most of these costs. Conversely, they noted that any significant scaling back of their original plans would preclude them from underwriting such a large investment in public infrastructure improvements.

The development team's plan for the site also included several acres (exact amount to be determined) of open space, most of it located along Chester Creek and the southern boundary of the Franklin Mint property, where it borders existing municipal parkland. However, because this area encompasses part of the Chester Creek floodplain and also includes some very steep slopes, it holds little value as developable property.

In November 2006, local residents began to become aware of the development team's plans for the Franklin Mint site. In response, local adversaries of the proposed town center launched a website, www.SaveMiddletown.com, to circulate information about the project and galvanize opposition to its construction. In particular, residents of the area just north of the proposed project site worried that the creation of a large-scale, mixed-use development would have significant negative impacts on their neighborhood, which is semi-rural in character. Safety, the construction of high-density buildings, school overcrowding, and a general decline in their quality of life were among their concerns. They also argued that the scale of the planned town center would generate significant new traffic on local streets such as Valley Road and New Darlington Road, which are narrow, residential, and ill-equipped for high volumes of vehicles. Neighbors of the Franklin Mint site also worried that the town center, which would aim to attract several large national retailers, might evolve into a generic regional



A sign protesting the construction of a town center on the Franklin Mint property.

shopping complex with little focus on the unique commercial needs of local residents.

One month later, in December 2006, the Middletown Township Council's Land Planning Committee recommended the council reject the developers' original plans for the Franklin Mint site. (The developers have not yet submitted an official redevelopment proposal to either Middletown Township or the Delaware County Planning Department.) A month later, the council unanimously authorized Thomas Comitta Associates Inc., which completed the township's current comprehensive plan in 2001, to carry out an analysis of the 153-acre area assembled by developers in order to determine what could be constructed on these parcels under existing zoning.

The results of Thomas Comitta Associates' hypothetical build-out analysis were presented to Middletown's Township Council on April 23, 2007. The key assumptions directing the consultants' work were as follows:

- Approximately 116 of the 153 total acres comprise an SU-1 Special Use district, the zoning classification created in the early 1970s to facilitate the construction of the Franklin Mint campus.
- 37 acres are zoned R-1 Residential, which allows for the construction of single-family detached homes on individual lots that are at least one acre in size.



Parking and office facilities on the Franklin Mint site.

Guided by these assumptions and information about the area's topography and environmental constraints, Thomas Comitta Associates determined that the 153-acre site could accommodate 1.5 million square feet of office space and six residential units. As detailed in the following table, this scenario differs markedly from both the existing development on the site and the proposal for a new town center.

Figure 1: Build-Out Scenarios and Yield Analyses for the Franklin Mint Site and Adjacent Properties

	Existing Development	Hypothetical Build-Out Analysis (Comitta)	Town Center Proposal (Developers)
Office	440,524 s.f.	1,500,000 s.f.	400,000 s.f.
Retail	0	0	1,300,000 s.f.
Hotel	0	0	300 rooms
Movie Theater	0	0	75,000 s.f.
Residential	2 units	6 units ¹	1,300 units

Source: Thomas Comitta Associates Inc., 2007.

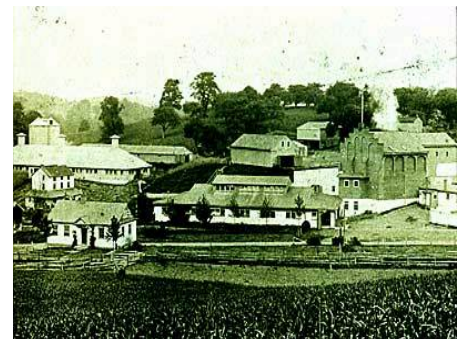
Given the high estimated costs of retrofitting and bringing the existing Franklin Mint buildings up to Class A office space standards, it is likely that most or all of the existing structures on the site will need to be demolished, regardless of which development scenario is ultimately approved by the township. At the time this report was published, the future of the Franklin Mint site remained unknown.

History

The Native American Lenni Lenape tribe named this area “Wawa,” or “wild goose,” in honor of the Canada goose, their favorite game. Chester Creek, which runs through this section of Delaware County, is on the migratory path of the Canada goose.

The first rail line connecting Philadelphia to Wawa was completed in 1857. By 1858, the railroad expanded to West Chester. In 1902, George Wood, a textile merchant from Philadelphia, opened the Wawa Dairy with a prize herd of Guernsey cows. The cows were known for their rich golden milk with high butterfat content. At one time, more than 450 purebred cattle grazed the fields surrounding the Wawa Dairy in Middletown and Aston townships. New regulations in the early 1900s required that milk be produced and handled under sanitary conditions, and “certified milk” became Wawa Dairy’s signature product.

Around this same time, Wawa Dairy also began sending bottled milk by rail to a West Philadelphia “milk depot.”



Wawa Dairy in the early 1900s.
Image by Wawa Dairy Farms Inc.

¹ Environmental constraints negate the possibility of building more than six residential units within the area zoned R-1 Residential.



Wawa Dairy's processing and bottling plant, which was built in 1929 at the intersection of Baltimore Pike and Valley Road.

From there it was delivered to private homes by horse-drawn wagons. Demand continued and, eventually, after World War I, rail delivery to the city was replaced by truck. (Rail was still used to ship milk across the country.) In 1929, Wawa Dairy built a new, state-of-the-art processing and bottling plant for a cost of \$250,000. The facility, which was considered extremely modern for its time, is housed in a charming colonial revival structure that still stands at the intersection of Baltimore Pike and Valley Road. Inside, the building houses a combined certified plant and pasteurized plant.

The Great Depression and World War II caused milk consumption to drop and adjustments had to be made. Wawa Dairy's herd was thinned, and the last 150 cows and remaining farm equipment were eventually sold in 1945. The company then purchased milk from neighboring farms in order to meet its needs. After the war, home delivery was again popular and Wawa purchased other milk companies and expanded its delivery routes. By the 1960s, however, changing lifestyles eroded the home delivery market for milk and Wawa entered into the convenience store business, opening its first in 1964 in nearby Folsom, Pennsylvania.

Twelve years later, in 1976, SEPTA assumed ownership of the West Chester Branch of the railroad from the Penn Central Transportation Company. SEPTA continued to provide rail service between Center City Philadelphia and West Chester for ten years; however, in 1986, service from Elwyn to West Chester was suspended due to deteriorating track conditions and low ridership. As noted elsewhere in this report, Elwyn remains the current, westbound terminus of SEPTA's R3 Regional Rail line.

In the meantime, Wawa Dairy continued to steadily expand its convenience store business. The company now employs a total of 13,000 people and operates 550 convenience stores in Pennsylvania, Delaware, New Jersey, Maryland, and Virginia. In addition, Wawa still manages a large wholesale dairy business that includes more than 900 customer accounts including hotels, restaurants, schools, and hospitals.



Artificial cows on the lawn of Wawa Corporate University pay homage to the site's history as the company's original dairy farm.

Together with the Wawa Dairy property, the former Franklin Mint site occupies much of the land in the eastern half of the study area. In 1970, the Franklin Mint, which specializes in the sale of collectable items such as figurines and commemorative plates, acquired more than 80 acres of land on the south side of Baltimore Pike – directly across the road from the Wawa Dairy. On this site, the Franklin Mint constructed a campus that included offices, manufacturing and shipping facilities, and a museum. The Franklin Mint once employed as many as 1,500 people at its Middletown headquarters; however, in the spring of 2004, the company ceased its operations at the site. Although a portion of the property’s office and industrial space is currently leased by Wawa Dairy and other local employers, much of the former Franklin Mint campus remains unoccupied. (Current capacity constraints on existing sewer infrastructure preclude Wawa Dairy from expanding its own office facilities.)

The area west of the proposed station site, in what is now Chester Heights Borough, was largely a farming community in the 18th and 19th centuries. The arrival of the railroad led to the construction of summer residences on large parcels of land. Today, several of these homes remain, including fieldstone and brick houses dating from the early 1700s. Until 1945, Chester Heights was part of Aston Township, which is located to the southeast of the borough. As the areas annexed into the new municipality of Chester Heights were largely residential in character, the borough lacks an identifiable village center or downtown.



An attractive older home on Wawa Road in Chester Heights Borough.

Strengths, Weaknesses, Opportunities and Threats

Strengths

- The new Wawa train station will be located within walking distance of Wawa Dairy Farms Inc.’s corporate headquarters and training facilities, which employ hundreds of people.
- The station area is adjacent to Baltimore Pike and served by SEPTA bus route 111.
- Middletown Township’s existing trail network and a planned bicycle and pedestrian path along the

route of the former Chester Creek Branch rail line link several neighborhoods that are proximate to the station.

Weaknesses

- The existing development in the study area is low-density and not particularly transit-friendly.
- Baltimore Pike, the major access road in the station area, is often congested during peak travel hours and is not lined by sidewalks in the vicinity of the proposed station.
- The Franklin Mint property and many of the other parcels near the Wawa station site contain steep slopes and other topographic limitations. This has the potential to drive up construction costs and restrict redevelopment options. In the past, the topography of the area has affected the implementation of proposed infrastructure improvements, including sidewalk extensions and other basic enhancements.



Baltimore Pike in Middletown Township.

Opportunities

- The construction of a new rail station and parking area will increase the number of vehicles and pedestrians that enter the study area on a daily basis and expand the available base of customers to support local retail.
- Large parcels of vacant and underutilized land offer opportunities for new development that is supportive of transit.
- Granite Farms Estates, a residential community for seniors that is located on Baltimore Pike, provides a nearby base of potential customers for both SEPTA Regional Rail service and a new town center.
- The private developers engaged in the conversion of the Franklin Mint site into a mixed-use town center are interested in working with SEPTA to enhance the connectivity between their project and the reopening Wawa rail station.

- The proposed restoration of R3 Regional Rail service and the proposed redevelopment of the Franklin Mint property offer an opportunity to create a new visual identity and character for the area.
- Employees of several nearby companies and institutions, including Wawa Dairy, Riddle Memorial Hospital, Granite Farms Estates, and Penn State’s Delaware County campus may be interested in moving to a walkable, transit-oriented community that is proximate to their respective workplaces.



The return of Regional Rail service to Wawa will create new opportunities for TOD in the surrounding area.

Threats

- The current zoning of the study area does not support the creation of TOD. Middletown Township’s existing Special Use SU-1 district and Chester Heights Borough’s Planned Laboratory Office PLO zone (see Zoning) pose particular challenges to the development of transit-friendly uses.
- The existing land uses and building densities in the study area may be insufficient to sustain significant new development. This might result in a lack of demand.
- Community opposition to the town center project proposed for the Franklin Mint site is already significant. Many area residents are concerned that redeveloping the property will lead to increased traffic congestion, crowded schools, and a diminished quality of life.

Demographics

The study area includes most of census tract 4070, and portions of tracts 4072.01 and 4072.02. Tract 4070 encompasses all of Chester Heights Borough, and tracts 4072.01 (block groups #2 and #3) and 4072.02 (block group #2) include the sections of Middletown Township that are located within one mile of the proposed Wawa SEPTA station. Although much of the population of Chester



Entrance to The Highlands, a residential subdivision in Chester Heights Borough.

Heights Borough lives just outside the one-mile radius from the station site, the following demographic assessment should reasonably reflect the communities and potential ridership that surround the planned station site.

Population and Race

In 2000, the total population of the studied tracts and block groups was 7,435. Of these individuals, 93 percent were white, 4 percent were black, 2 percent identified themselves as Asian, and 1 percent were a combination of two or more races. The study area is less diverse than Delaware County as a whole, where, in 2000, 80 percent of the population was white, 15 percent were black, 3 percent were Asian, and a little more than 1 percent identified themselves as a combination of two or more races. (The remaining residents, about 0.6 percent of the county's total population, recorded their race as "other.")

Between 1990 and 2000, the population of Chester Heights Borough grew from 2,273 to 2,481, an increase of more than 9 percent. During that same time period, Middletown Township's population (includes residents living outside the studied tracts and block groups) rose from 14,130 to 16,064, or about 14 percent. Both municipalities far outpaced the county-wide figures for this same time period. With many of its older townships and boroughs losing residents during the 1990s, Delaware County's overall population remained relatively unchanged between 1990 and 2000. During the course of the decade, the county grew from 547,651 residents to 550,864 – an increase of less than 1 percent.

Housing Characteristics

The studied tracts and block groups contained a total of 2,674 housing units at the time of the 2000 Census. Of these, 96 percent were occupied. This approximately mirrors the occupancy figures for Delaware County, where 95 percent of all housing units were inhabited in 2000.

Of the occupied housing units in the study area in 2000, 76 percent were owner-occupied, and 24 percent were rented. The figures for Delaware County reflected similar trends. According to the U.S. Census, 72 percent of the county's housing stock was owner-occupied in 2000 and 28 percent was rented to tenants.



New home construction has contributed to recent population growth in Middletown Township and Chester Heights Borough.

Median Household Income

In 2000, the median household income in the studied tracts (household income data is not available at the block group level) ranged from \$50,553 in tract 4072.02 (Middletown Township, between Baltimore Pike and Lenni Road) to \$70,236 in tract 4070 (Chester Heights Borough). The median household income for the whole of Delaware County at this time was \$50,092. Chester Heights' high median income may be explained by the fact that most of the borough's housing stock is comprised of single-family homes on lots in excess of one acre in size. Tract 4072.01 in Middletown Township (the area north of Baltimore Pike and south of Orchard Lane) also includes several affluent neighborhoods. However, because the tract encompasses the 360-unit Granite Farms Estates senior community, its median household income in 2000 was calculated at a relatively modest \$58,143. A closer look at the data reveals that 25 percent of the households in tract 4072.01 had an annual income of at least \$100,000 at the time of the 2000 census.



Single-family detached homes comprise most of the housing stock in the study area.

Travel Mode

In the studied tracts and block groups, the vast majority of employed residents utilize automobiles (cars, trucks or vans) as their primary mode of travel to work. At the time of the 2000 Census, 86 percent drove alone to work and 8 percent carpooled. Less than 3 percent took public transportation, about 1 percent walked, and the remainder, a little over 2 percent, worked from home. The average one-way commute time for residents of the study area was just under 27 minutes.

Compared to the population of Delaware County as a whole, the residents of the study area are more likely to travel by automobile on their daily commute to work. This is likely due to the fact that the study area is not currently served by rail transit, whereas much of the rest of Delaware County is. In 2000, 75 percent of the county's residents drove alone to work, 10 percent carpooled, 8 percent utilized public transportation, 4 percent walked, and just under 3 percent worked from home.

Land Use

The area surrounding the decommissioned Wawa train station has great potential for transit-oriented development.



Wawa Dairy Farms' Corporate University on Baltimore Pike in Middletown Township.

As noted elsewhere in this report, the station site is adjacent to a large redevelopment area and also proximate to sizeable tracts of vacant land. With the return of rail service to this section of Delaware County, an opportunity exists to create a new and dynamic community on the underutilized parcels that encircle the reopening station. (See **Map 3: Wawa Land Use** for an overview of the study area. As the map was created using land use information collected in 2000, please note that it does not precisely reflect the conditions in the study area in 2007.)

The Wawa SEPTA station is located near the intersection of Chester Creek and Baltimore Pike. In its proposed capital budget for fiscal year 2008, SEPTA allocated \$51.3 million in funding to support the restoration of rail service between Elwyn and Wawa through fiscal year 2019. This financing will be used to build new track and catenary, install signals and communications technology, and develop a new station building. The new station will be fully compliant with the Americans with Disabilities Act (ADA).

Although not yet final, SEPTA's plans for the Wawa site also call for the construction of about 500 parking spaces. (At the Elwyn station, the current terminus of the R3 Regional Rail line, parking is at a premium. On weekdays, the station's 233 spaces are usually fully occupied.) Because much of the station area is located within the boundaries of the Chester Creek floodplain, the installation of surface parking may not be feasible. Another, more preferable, option is to construct a multilevel parking garage east of the rail line that could be utilized by both SEPTA passengers, and employees and customers of a redeveloped Franklin Mint site.



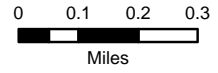
An agricultural property on Wawa Road in Chester Heights Borough.

Beyond the station property, the study area is defined by a large amount of wooded land, as well as some agricultural, residential, and commercial uses. Baltimore Pike roughly bisects the study area, following a northeast-southwest trajectory. East of the station, Wawa Dairy Farms Inc. owns a large amount of land on the north side of Baltimore Pike. Approximately half of this property is undeveloped.

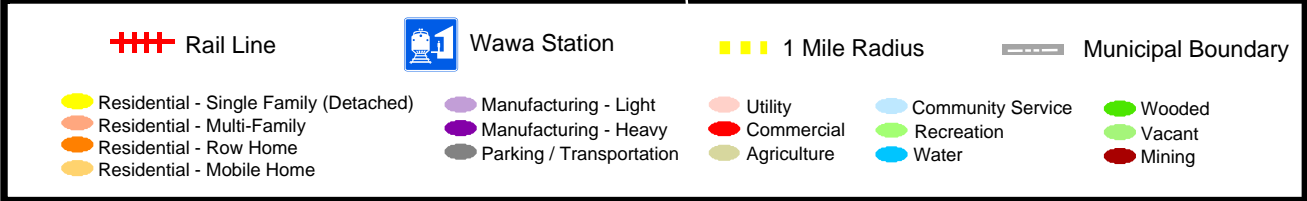
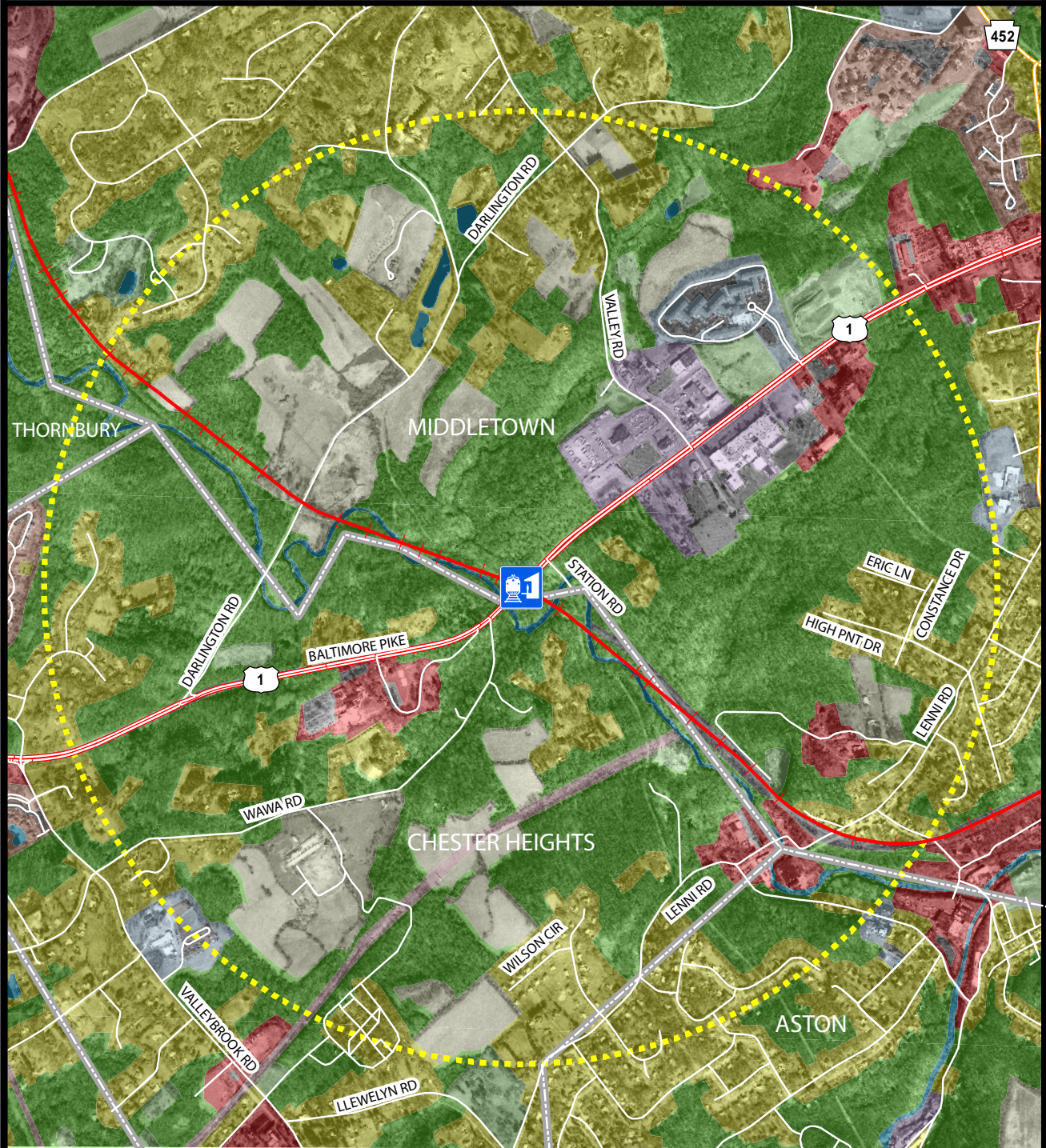
Map 3: Land Use (2000)

Wawa

Orthophoto Date : 2000



Delaware Valley
Regional Planning Commission
January 2007



The other half is occupied by the company's dairy plant and training facilities. Farther east, and also on the north side of Baltimore Pike, is Granite Farms Estates, a 360-unit continuing care community for seniors. North of the Wawa Dairy's property and Granite Farms Estates, the study area is largely defined by protected open space (some of which is owned by the Natural Lands Trust) and single-family residential development on large lots.

Also east of the rail line, on the south side of Baltimore Pike, is the 80-plus acre Franklin Mint site. This parcel is the largest property in the study area that is currently available for redevelopment. (The Franklin Mint site, and several properties surrounding it, comprise the 153-acre tract assembled by Pennrose Properties, Wolfson Verrichia Group, Dewey Companies, and the McKee Group for the proposed construction of a mixed-use town center.) Surface parking lots, low-rise office buildings, and manufacturing facilities are located on the portion of the Franklin Mint property that is adjacent to Baltimore Pike. The remainder of the site is wooded.

South and west of the station site, the study area has a more rural character. Older, single-family homes and a few agricultural properties occupy large lots along Wawa Road. Pathways PA, a housing and social service facility for women and children that are victims of abuse, is also located in this area. To the southeast, near the edge of the study area, parkland managed by Middletown Township surrounds neighborhoods of single-family homes that date from the mid-twentieth century.



Stonehaven, near the intersection of Lenni and New roads, is listed on the National Register of Historic Places.

The decommissioned Lenni SEPTA station is also southeast of the Wawa station, near the intersection of Chester Creek and Lenni Road. Several industrial properties are also located in this area. East of the Lenni station, a post office and a couple of small businesses (barber shop, gift store) line the north side of Lenni Road. Historic resources include Stonehaven, a Georgian style mansion near the intersection of Lenni and New roads. Constructed in 1799, Stonehaven is listed on the National Register of Historic Places.

Much of the area west of the Wawa station lies within the municipal boundaries of Chester Heights Borough. The

corporate headquarters of Wawa Dairy Farms Inc. is situated on a large tract of land on the south side of Baltimore Pike. On the north side, Forge Hill, the former home of coach maker Joseph Thacher, occupies a parcel on the banks of Chester Creek. The structure dates from 1798 and is listed on the National Register of Historic Places.

Northwest of the station, Darlington Road is lined by several older estates and agricultural properties. At the western edge of the study area, single-family homes dating from around the 1980s are located on large lots along Bonnie Lane and Highland Drive. Near the southwestern edge of the study area, the Chester Heights Camp Meeting Historic District occupies a 30-acre site to the east of Valleybrook Road. The district includes 101 “contributing” historic buildings that are situated in a manner that is representative of nineteenth century Methodist camp meeting facilities. Of the structures included in the district, the earliest date from 1872.

Several major employers are also located just outside the study area. These include the Granite Run Mall, Riddle Memorial Hospital, and Penn State’s Delaware County campus.

Planning Environment

The long range and comprehensive plans for the Delaware Valley region, Delaware County, and Middletown Township all support the implementation of smart growth and traditional neighborhood development patterns in the communities that surround the Wawa station site.

Destination 2030, DVRPC’s long-range plan for the region, identifies both Middletown Township and Chester Heights Borough as “growing suburbs.” Communities that fall under this classification are experiencing, or forecast to experience, significant new population, job, and retail growth. These places often serve as major centers of employment and commerce, and have the potential to evolve into relatively self-contained areas. However, given their rapid pace of growth, these communities also face significant challenges, including traffic congestion, sprawling development patterns, high infrastructure and construction demands, diminishing open space resources, and a lack of local identity.



The corporate headquarters of Wawa Dairy Farms Inc.



Middletown Township’s Administration Building. Image by Middletown Township.

Destination 2030 also identifies Middletown Township as a “Regional Growth Center.” These locations are either existing or emerging hubs that are expected to have increasing concentrations of people, jobs, and services. They have land available for new development, existing or planned sewage capacity, and are supported by current county and municipal planning policies that favor continued growth and expansion.

The Delaware County Planning Department is in the process of updating its comprehensive plan. However, preliminary drafts of the document include policies that support the restoration of Regional Rail service to Wawa and the implementation of TOD throughout the county.

Comprehensive Plan

Middletown Township

Thomas Comitta Associates Inc. of West Chester, Pennsylvania, completed the most recent version of Middletown Township’s comprehensive plan. Adopted in 2001, *Middletown 2020: A Smart Growth Initiative*, outlines strategies to promote sustainable development, grow the economic base, improve traffic flow and safety, and enhance the sense of community in the township. Among the specific recommendations included in the plan are the following:



Municipally-owned open space on Darlington Road in Middletown Township.

- Encourage mixed-use development along the Baltimore Pike corridor. Such development should include commercial, residential, institutional and light industrial uses.
- Develop a town center and create more public places. This includes gathering spaces, landmarks, and other areas that give character and identity to the community.
- Reduce auto dependence and encourage pedestrian travel by promoting the construction of through-streets (as opposed to cul-de-sacs); expanding the township’s network of trails, pathways, and sidewalks; and approving mixed-use developments.
- Develop a Transferable Development Rights (TDR) program to direct growth and concentrate

higher density uses in specific locations. More specifically, *Middletown 2020* proposes transferring the development rights from proposed recreation, conservation, and low- to medium-density residential areas to sites along Baltimore Pike, PA 352, and in the southern portion of the township that are particularly well-suited for compact forms of housing.

Middletown 2020 also supports the restoration of SEPTA R3 Regional Rail service to the Wawa station, and advocates reopening the nearby Glen Riddle and Lenni stations, which are located between Wawa and Elwyn. Additionally, the document recommends locating a new town center or “Main Street” near Middletown’s administrative offices on Pennell Road. However, the Franklin Mint property, which is adjacent to the Wawa station site and currently targeted for redevelopment, was not available for purchase or reuse when Thomas Comitta Associates completed the plan in 2001.

The township’s growing need for more compact residential development is also recognized in *Middletown 2020*. As its population continues to increase, Middletown’s supply of developable land diminishes. In order to provide residents with sufficient housing options, while also preserving natural resources, *Middletown 2020* advocates infill development strategies and the creation of a denser and more varied mix of housing types. (In 2001, Middletown provided an average of just 1.4 dwelling units per residential acre.)

Additionally, the plan outlines a few suggested amendments to the township’s zoning ordinance. These proposed changes support the implementation of the land use and development recommendations previously summarized. Suggested adjustments to the township’s zoning ordinance that appear in *Middletown 2020* include:

- Permitting traditional neighborhood development that features village-scale amenities;
- Assigning different and unique development options to specific portions of the township and amending the zoning map to reflect these changes;



A private estate in northern Middletown Township.



An attractive older home on Darlington Road.

- Allowing a town center that is compatible with surrounding land uses;
- Advocating compact development as a means of accommodating future growth and protecting environmental resources; and
- Supporting the creation of a diversified land use pattern that allows industrial, commercial, residential, and agricultural uses.

Chester Heights Borough

The comprehensive plan for Chester Heights Borough has not been updated since 1965.

Zoning

The Wawa station site is located on the municipal boundary that separates Middletown Township and Chester Heights Borough. Much of the land that is most suitable for future, transit-oriented development is located in Middletown Township and currently zoned as an SU-1 Special Use district. (See **Map 4: Wawa Zoning**.) Because the SU-1 designation only allows for low-density, nonresidential development, an amendment to the existing ordinance must be drafted and approved before new, transit-supportive uses are constructed near the station.

The portion of the study area that lies within the boundaries of Middletown Township is zoned as follows:

- | | |
|------|---|
| SU-1 | Special Use district. Permitted uses include scientific research laboratories, light manufacturing, dairies, and office buildings. The minimum tract size for permitted principal uses is 10 acres; individual lots within a tract must cover a minimum of four acres. Impervious surfaces and paving materials may not cover more than 50 percent of any lot, and buildings may not cover more than 20 percent. Structures may not exceed 40 feet in height. |
|------|---|



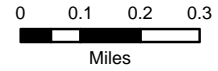
Wawa Dairy Farms' dairy plant on Baltimore Pike is located within an SU-1 Special Use zoning district in Middletown Township.

Map 4: Zoning

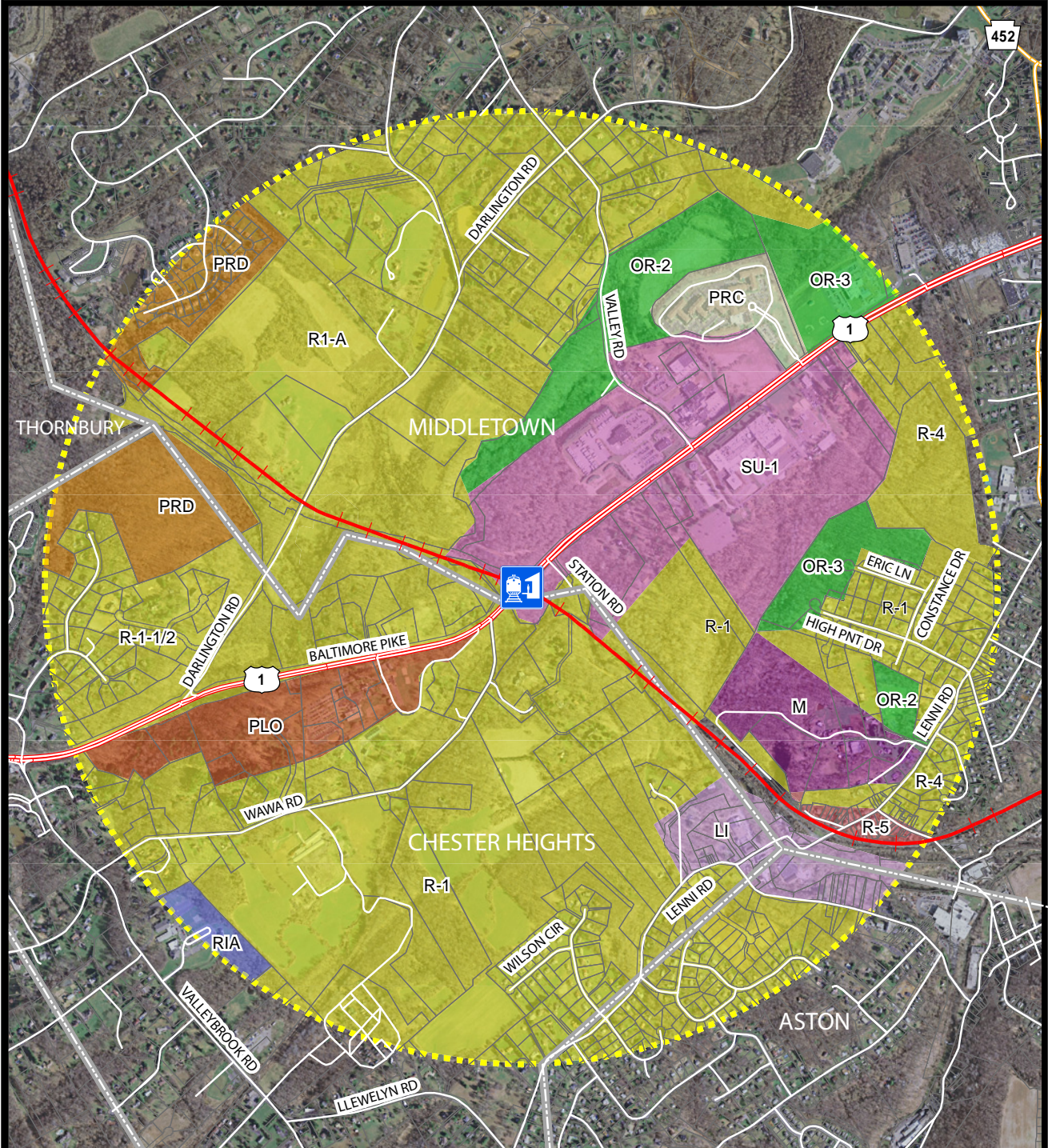
Wawa

Delaware Co., Pennsylvania

Orthophoto Date : 2005



Delaware Valley
Regional Planning Commission
January 2007



- | | | | |
|--------------------------|--------------------------------|------------------------------|-----------------------------------|
| Rail Line | Wawa Station | 1 Mile Radius | Municipal Boundary |
| R-1-5: Residential | RIA: Residence, Church, School | OR 1-3: Outdoor Recreation | PRC: Planned Retirement Community |
| PRD: Planned Residential | LI: Light Industrial | M: Manufacturing, Industrial | |
| PLO: Planned Office/Lab | SU: Special Use | | |



A single-family home located in an R-1 Residence zoning district in Middletown Township.

- R-1 Residence district. Permitted uses include single-family detached residential units, municipal uses, agricultural uses, natural and conservation areas, and open spaces for recreational purposes. The minimum lot size is one acre for each principal building on an individual property. Structures may not exceed 35 feet in height and impervious surfaces may not cover more than 40 percent of an individual lot. Buildings may not cover more than 20 percent.
- R-1A Residence district. In general, areas zoned R-1A have the same permitted uses and development regulations as R-1 districts. One notable difference between the two zoning classifications is that R-1A districts allow cemeteries, while areas zoned R-1 do not.
- R-4 Residence district. Allows single-family detached and semi-detached dwellings, as well as parks and other open spaces. The minimum lot size for detached and semi-detached dwellings with on-lot sewage disposal and water systems is one acre. Impervious surface coverage on such lots is limited to 40 percent and building coverage may not top 20 percent. The minimum lot size for detached and semi-detached dwellings with on-lot water supplies that use public sewer service is one-half acre. Impervious surface coverage on such lots may not exceed 45 percent and total building coverage may not surpass 20 percent. The minimum lot size for detached and semi-detached dwelling units using public sewer and water service is one-quarter acre. (With this regulation, R-4 allows the highest level of residential density currently permitted in the study area.) The maximum impervious surface coverage on such lots is 50 percent with a maximum building coverage of 25 percent.

Buildings may not go above 35 feet in height.

OR-1 Outdoor Recreation district. Permits passive recreational uses such as parks, nature study areas, and trails. Agricultural uses and conservation uses such as woodlands, lakes, ponds, and streams are also allowed. The minimum required tract area within OR-1 districts is 10 acres and no building may exceed 35 feet in height.

OR-2 Outdoor Recreation district. Permits the same uses as OR-1 districts and also allows active recreational uses, such as ball fields, swimming pools, tennis courts, and golf facilities. The minimum tract size within OR-2 districts is one acre for all uses except golf courses. No building may exceed 35 feet in height.

OR-3 Outdoor and Indoor Recreation district. Allows the same uses as OR-2 districts and also permits uses commonly associated with community centers (childcare facilities, gymnasiums, conference rooms, etc.), and rehabilitation and wellness facilities (physical therapy, sports medicine, health education, etc.) The minimum tract size within OR-3 districts is four acres and no building may exceed 35 feet in height.

PRC Planned Retirement Community district. Subject to the approval of the Middletown Township Council, planned retirement communities including multiunit residential buildings for senior citizens may be constructed in PRC districts. Other permitted uses include single-family detached homes, agricultural uses, and nature preserves and conservation areas.

PRD Planned Residential Development district. Permitted uses include single-family attached and detached dwellings, and



Wooded land near the Wawa station site.



Granite Farms Estates, a continuing care community for seniors on Baltimore Pike in Middletown Township.

common open space for recreation and conservation purposes. No building may exceed 35 feet in height and the gross building density may not exceed that of any underlying zoning district. At least 50 percent of any tract within a PRD district must be devoted to common open space. At least 40 percent of the residential units constructed in a PRD district must be single-family detached. A minimum of 10 percent must be single-family attached.

M Manufacturing and Industrial district. Permits a wide range of scientific research facilities, office uses, industrial properties, and government buildings. The minimum lot area for each principal permitted building is two acres. The maximum impervious surface area is 60 percent of the total lot area; the maximum allowable building coverage is 4 percent. No building may exceed 55 feet in height.

The section of the study area that lies within the municipal boundaries of Chester Heights Borough is zoned as follows:



Housing in an R-1-1/2 Residence zoning district in Chester Heights Borough.

R-1-1/2 Residence district. Permits single-family detached dwellings, agricultural uses, woodlands, game preserves, and other conservation uses. The minimum lot size in this zoning district is 1.5 acres, and no more than 25 percent of any lot may be occupied by buildings. Primary buildings may not exceed three stories or 35 feet in height; and accessory structures, with the exception of agricultural buildings, may not exceed 20 feet.

R-1 Residence district. Allows the same uses as R-1-1/2 districts. The minimum lot size in areas zoned R-1 is one acre. No more than 25 percent of any lot may be occupied by buildings, and primary buildings may not surpass three stories or 35 feet in height.

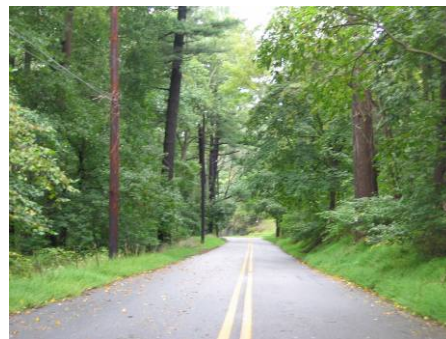
Accessory structures, with the exception of agricultural buildings, may not exceed 20 feet.

R-1-A Residence district. Permits the same uses as R-1-1/2 districts and applies the same area and height regulations as R-1 districts. In addition, religious uses such as churches and church-related schools and cemeteries may be located in R-1-A zones.

PLO Planned Laboratory - Office district. Designed to accommodate selected modern laboratory and office uses. Scientific and laboratory research, testing or experimental laboratories, and similar facilities for research or product development are permitted within PLO zoning districts. Commercial production or storage of any commodity or substance is prohibited unless it is necessary for scientific research. The minimum required lot size is five acres and no building may exceed three stories or 35 feet in height.

PRD Planned Residential Development district. Consists of a contiguous area of at least 50 acres. Permitted uses include single-family detached, semidetached, and attached residential dwellings, as well as garden apartments. Recreational, commercial and institutional uses that are designed and intended to primarily serve the residents of the PRD district may also be allowed. The maximum allowable average gross residential density is four units per acre; and no more than 10 percent of the dwellings constructed within a PRD district may be single-family detached. At least 70 percent of the total area of a PRD must be dedicated open space, and no building may exceed 35 feet in height.

LI Limited Industrial district. Permits attractive, non-nuisance industrial



Wawa Road, a residential street in Chester Heights Borough with semi-rural character.



A private home at the end of a cul-de-sac in Chester Heights Borough.

development that is compatible with the character of the borough. Such uses may include offices, industrial research laboratories, and certain types of manufacturing. The minimum lot size is four acres and no more than 25 percent of the total area of any lot may be occupied by buildings. Where an LI district abuts a residential or apartment district, a buffer strip of 100 feet must be provided and maintained. Buildings may not exceed 35 feet in height.

The zoning ordinances for both Middletown Township and Chester Heights Borough place restrictions on development within the Chester Creek Flood Plain Conservation District. No buildings may be constructed within the floodplain; however, some accessory/conditional uses may be permitted so long as they remain outside the floodway. As long as there is no construction in the floodway or increase in the height of the floodway, no permits are required. Otherwise a permit from the Pennsylvania Department of Environmental Protection is needed.

Special Studies

SEPTA's *Elwyn to Wawa Service Restoration Feasibility Study* was completed in June 2000. The purpose of the report was to evaluate the conceptual designs and recommendations included in previous SEPTA studies (*Planning Analysis for the Proposed Elwyn to Wawa Rail Restoration Project*, completed in 1991, and *Elwyn-Wawa Service Restoration Project Report*, completed in 1992), and to prepare ridership estimates for the proposed restoration of passenger service from Elwyn to Wawa. Ridership estimates for a further extension of service to West Chester and Painter's Crossroads (the intersection of Baltimore Pike and Route 202) were also calculated.

The report also contains information on a range of other topics, including the demographics of the study area, needed capital improvements, environmental conditions, short- and long-term project costs, supportive services, and project feasibility and implementation.



Elwyn station, the current westbound terminus of SEPTA's R3 Regional Rail Line. Image by Vollmer Associates.

Access

Regional Rail Level of Service and Ridership

SEPTA estimates the new Wawa station will attract around 500 commuters per day, or 1,000 daily trips. Of those 500 riders, about a third will be people that are currently driving to Elwyn, the present terminus of the R3 Regional Rail Line, to catch the train. The rest will be new transit customers. Elwyn is presently served by a total of 50 trains on weekdays (25 inbound, 25 outbound), and 34 on weekend days (17 inbound, 17 outbound).

Bus Lines

SEPTA bus route 111, which serves US 1 in the study area, operates from approximately 5:30 a.m. until 12:00 a.m., Monday through Saturday (service is not provided on Sundays). During peak travel hours on weekdays, bus route 111 stops at the Franklin Mint site at 30 minute intervals. Midday service is limited to one bus every two or three hours, although other stops along the same route maintain 15 to 30 minute headways throughout the day. Route 111 buses do not stop at the Franklin Mint on weekends; however, on Saturdays, the route does continue to serve the Granite Run Mall, Penn State's Delaware County campus, and other nearby attractions on an hourly basis.

Automobile Circulation and Highway Access

SEPTA's 1992 *Elwyn-Wawa Service Restoration Project Report* proposed the construction of a signalized jug-handle intersection that would provide southbound traffic on Baltimore Pike with direct access to Station Road. (Station Road is the narrow access road that connects the Wawa station with Baltimore Pike.) However, by the time SEPTA released *Elwyn to Wawa Service Feasibility Study* in 2000, analyses of the area's topography had concluded that a jug-handle intersection was not feasible. Thus, the 2000 report offered an alternative vision for a signalized intersection at Baltimore Pike and Station Road. This proposal included the construction of a left-turn lane for southbound traffic on Baltimore Pike and the installation of a right-turn deceleration lane for northbound traffic.

The recently introduced conceptual plan for a mixed-use town center on the former Franklin Mint site also includes



Walnut Hill Boulevard in Chester Heights Borough.

proposed roadway improvements. Pending the necessary approvals, these enhancements would be financed by the development team of Pennrose Properties, Wolfson Verrichia Group, Dewey Companies, and the McKee Group, which owns 153-acres west of the Wawa station site and also proposed the construction of the town center on the former Franklin Mint property. The suggested improvements include widening Baltimore Pike from four to seven lanes in the vicinity of the Franklin Mint property, and constructing a new access road that would begin at a new intersection on Baltimore Pike, between the Wawa station site and the current entrance to the Franklin Mint. The road would extend south through the Franklin Mint property before turning east to parallel Baltimore Pike and eventually connect with PA 452.

According to McMahon Associates, the traffic engineers retained by the development team, these roadway enhancements would reduce existing automobile congestion and also mitigate any additional traffic created by the proposed town center. This program of access improvements could cost between \$35 and 45 million to implement. If plans for a new, large-scale, mixed-use development move forward on the Franklin Mint site, McMahon's recommendations will merit further analysis.

Parking

According to SEPTA's *Elwyn to Wawa Service Restoration Feasibility Study* (2000), the reopened Wawa station will provide 385 parking spaces for rail passengers; however, recent statements by SEPTA personnel suggest that number may be increased to 500. Additional parking may also be available on the nearby headquarters site of Wawa Dairy Farms Inc., which has a significant number of underutilized spaces in its employee and visitor lots. Wawa Dairy also has an oversupply of parking facilities for trucks and service vehicles.

The presence of Chester Creek's floodplain limits the amount of land available for parking near the Wawa station site. Although more costly to construct than surface lots, structured parking facilities, such as garages, can accommodate a larger number of vehicles with a smaller floor plate. To help offset the cost of building a garage, SEPTA should consider partnering with the owners of the



A surface parking lot on the Franklin Mint property.

Franklin Mint site to develop shared parking facilities. Depending on the form and type of development that is ultimately built on the Franklin Mint property, it may be that its visitors and customers will generate high demand for parking on evenings and weekends; whereas Regional Rail commuters will require a large number of parking spaces on weekdays.

Sidewalks, Trails, Bike Lanes

Middletown Township has an ambitious open space preservation program that it first initiated in 1986 and called *Project 300* after the township's tercentennial observance that same year. It is one of the largest municipally owned open space systems in the region. (See **Map 5: Wawa Environmental Resources.**)

Middletown's holdings include 157 acres of the former Linvill Family property on the north side of West Knowlton Road (southeast of study area) and 170 acres from the Jesse and Martha Darlington Estate along both sides of Darlington Road adjacent to the Chester Creek (within the study area). Since 1981, the township has also owned the former Indian Orchard Girl Scout Camp. Over time, Middletown created hiking and horseback riding trails on the former Girl Scout property that also extend through privately held open space along the Rocky Run stream. The township intends to expand its trail network along the Ridley and Chester creeks, and connect these new paths with other significant open space. The planned Chester Creek path is a rails-to-trails project that follows a 6.7-mile stretch of SEPTA's former Chester Creek Branch rail line. The first phase of the path, a three-mile section that extends from Lenni Road to Chester Creek Road, is expected to open in 2009.

Three popular, completed trails are located in the TOD study area: the Darlington, Cornucopia, and Rocky Run trails. The Darlington, located off Darlington Road on township-owned open space, is a 2.75-mile trail that follows the Chester Creek, then an old railroad right-of-way, before meandering through the site of the former Darlington family dairy. The trail winds through woods, meadows, and farmland, and offers beautiful vistas of the surrounding landscape. The Cornucopia, which may be reached via the Darlington Trail, Stephen Drive, or Richard



Lenni Park in Middletown Township.



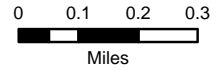
Rocky Run trailhead on Valley Road in Middletown Township.

**Map 5:
Environmental
Resources**

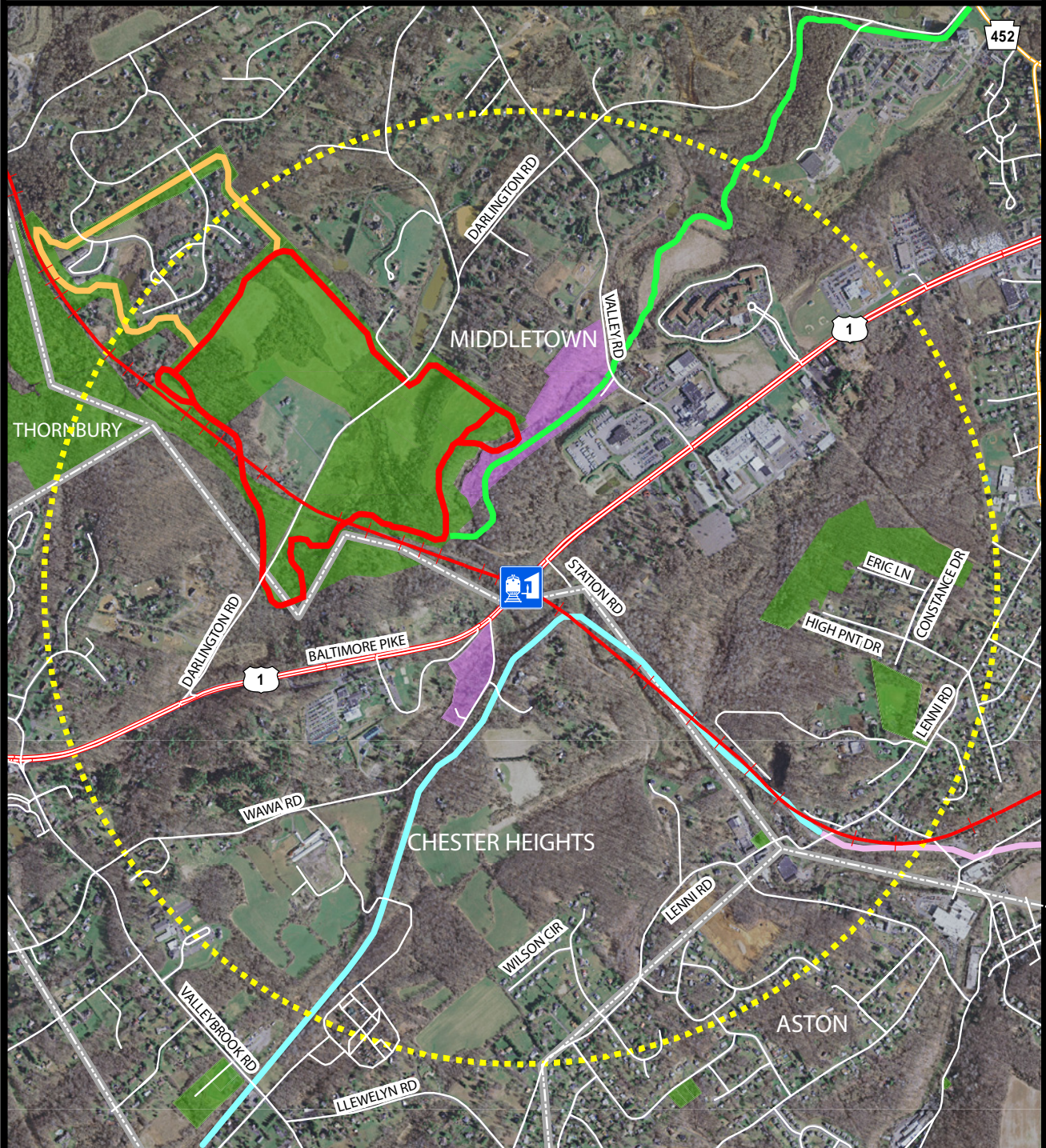
Wawa

Delaware Co., Pennsylvania

Orthophoto Date : 2005



Delaware Valley
Regional Planning Commission
January 2007



Rail Line	Wawa Station	1 Mile Radius	Municipal Boundary
2004 Protected Lands		Trails	
Open Space / Municipal	Octororo (proposed)	Cornucopia	Darlington
Land Trust / Private Protected	Chester Creek (construction)	Rocky Run	

Lane, is a 1.25-mile trail that also extends through a portion of the Darlington family diary and offers views of the old homestead and Chester Creek. Rocky Run, which may be reached near the Valley Road bridge over the Rocky Run stream, is a 2.5-mile trail along property that is largely owned by the Natural Lands Trust. The path parallels the Rocky Run stream and crosses old-growth hardwoods, open meadows, and portions of the Tyler Arboretum trail network, which then connects to the Ridley Creek State Park trail system.

Street Network

There are relatively few streets in the study area and Baltimore Pike, Lenni Road, and Darlington Road are the only ones that cross the rail line. Much of the land that surrounds the station is heavily wooded, and large-lot facilities, such as the Franklin Mint site and Wawa Dairy's headquarters, occupy a significant portion of the remaining property. Baltimore Pike is the most significant road that serves this section of Delaware County. Station Road connects the Wawa station site to Baltimore Pike.

Roadways

Baltimore Pike, a major arterial in this portion of Delaware County, extends northeast-southwest across the study area. The site of the reopening Wawa station is located immediately south of Baltimore Pike on the banks of Chester Creek. On a daily basis, approximately 30,000 cars travel the stretch of Baltimore Pike that passes the Wawa station site. Two lanes run in each direction and traffic speeds often exceed the posted limit of 45 miles per hour. During peak commuting hours, however, it is not uncommon for Baltimore Pike to become congested with automobiles. In addition, the section of Baltimore Pike that extends through the study area follows a somewhat winding path. The landscape in this area is largely defined by rolling hills that limit visibility and necessitate curves in the roadway that can be dangerous if driven at high speeds. There are no sidewalks along this section of Baltimore Pike.

In 2000, DVRPC released a report titled *Pennsylvania Congestion Management System: US 1 / Baltimore Pike*. The study area for this report spanned the US 1 / Baltimore Pike corridor from the municipal boundary between



Signage for commercial properties on Baltimore Pike in Chester Heights Borough.

Chester Heights Borough and Middletown Township to the Philadelphia city line. The width of the study area extended from approximately one mile north of US 1 to approximately one mile south of Baltimore Pike. (West of PA 352, Baltimore Pike and US 1 become one roadway.) DVRPC identified the intersection of Baltimore Pike and PA 452, in Middletown Township, as one of the worst performing intersections in this study area. In the report, DVRPC recommended widening Baltimore Pike from four to six lanes between PA 352 and PA 452. The creation of additional left-turn lanes was also suggested. These recommendations have not yet been implemented.



A private residence on Darlington Road in Middletown Township.

Beyond Baltimore Pike, the study area is served by very few roads. Wawa and Darlington roads, which are located west of the station, are narrow in size and lined with single-family homes on large lots and a few agricultural properties. East of the station, the street network in the study area is primarily limited to access roads for the Wawa, Franklin Mint, and Granite Run Estates properties. Valley Road, which intersects with Baltimore Pike opposite the Franklin Mint site and extends north and west through the study area, provides the area with some linkage to neighborhoods in the northern part of Middletown Township.

The development team that hopes to revitalize the Franklin Mint property has proposed the creation of a new loop road that would mitigate new congestion along Baltimore Pike by channeling vehicles onto an alternate route through their 153-acre site. The road would begin at a new intersection on Baltimore Pike, between the Wawa station site and the current entrance to the Franklin Mint. From there the road would extend south along the western edge of the Franklin Mint property and then turn east to parallel Baltimore Pike. At its eastern end, the loop road would connect with PA 452 and Baltimore Pike.

Traffic Volumes

DVRPC counts traffic on major roadways throughout the nine-county region. Annual Average Daily Traffic (AADT) represents an estimate of all traffic counted for a 24-hour period at the location indicated. The year and segments of the roadway counted may differ.



This bridge across Valley Road in Middletown Township links Wawa Dairy Farms' Corporate University and dairy plant.

Figure 2: Traffic Counts for Wawa Study Area

Chester Heights Borough

Road Name	From	To	Date	Direction	AADT
Baltimore Pike/ U.S. 1	Darlington Road	Wawa Road	2004	Both	29,386
Baltimore Pike/ U.S. 1	Valleybrook Road	Darlington Road	2003	Both	31,131
Baltimore Pike/ U.S. 1	Valleybrook Road	Darlington Road	2000	Both	27,814
Baltimore Pike/ U.S. 1	Darlington Road	Wawa Road	1998	Both	26,296

Source: DVRPC, 2007.

Middletown Township

Road Name	From	To	Date	Direction	AADT
Baltimore Pike/ U.S. 1	Valley Road	Granite Farms Estates Drive	2004	Both	29,746
Baltimore Pike/ U.S. 1	Valley Road	Granite Farms Estates Drive	2001	Both	29,690
Baltimore Pike/ U.S. 1	Franklin Mint Road	Granite Farms Estates Drive	1998	Both	28,368

Source: DVRPC, 2007.

Pending Transit Agency or DOT Improvements

Projects included in DVRPC's Transportation Improvement Program for fiscal year 2007 include:

- *US 1 / Baltimore Pike at PA 352 / Middletown Road (MPMS# 15251)*. This project provides funding for preliminary engineering work related to the reconstruction of the cloverleaf interchange located at the intersection of US 1 and PA 352 in Middletown Township. The cloverleaf, which was originally built in 1939, is located about two miles east of the Wawa station site. Between fiscal years 2007 and 2008, a total of \$3 million will be allocated to support the reconstruction effort.
- *US 1 / Baltimore Pike Bridge over Chester Creek (MPMS# 15367)*. At the intersection of US 1 and

Chester Creek, near the border of Middletown Township and Chester Heights Borough, the existing bridge across the creek is slated for replacement. A total of \$2 million has been allocated to support this effort between fiscal years 2007 and 2008. This road segment is proposed for inclusion in the Delaware County Bicycle Plan.



The Chester Creek rail trail will extend from the Lenni Rail crossing to Chester Creek Road.

- *Chester Creek Bicycle / Pedestrian Trail (MPMS# 47986)*. In fiscal year 2007, \$200,000 will be allocated to support the engineering of a multipurpose commuting and recreation trail on the out-of-service Chester Creek Branch rail line. The first phase of the trail will extend from Lenni Road to Chester Creek Road. Like the Baltimore Pike bridge project described above, this trail is proposed for inclusion in the Delaware County Bicycle Plan.
- *Elwyn to Wawa Rail Improvements (MPMS# 60636)*. This project will provide for the restoration of rail service between the existing Elwyn station at the terminus of the R3 Regional Rail line and the former Wawa station. Service restoration will require new track, catenary, signals, communications and structures between Elwyn and Wawa, and the construction of a new station and parking facility at the Wawa site. This effort will receive a total of \$31 million in funding between fiscal years 2008 and 2010. (Total project costs through fiscal year 2019 are estimated at \$51.3 million.)

Development Opportunity Areas

As noted elsewhere in this report, the Franklin Mint site offers the most significant opportunity for TOD in the study area. Adjacent to both the Wawa station site and Baltimore Pike, the property will soon be easily accessible by both public transportation and private automobile. Should the development team comprised of Pennrose Properties, Wolfson Verrichia Group, Dewey Companies, and the McKee Group continue to move forward with its vision to transform this site into a new, mixed-use lifestyle retail center and residential community, this section of Delaware County will likely become a regional destination for shopping and entertainment.

Opposite Baltimore Pike from the Wawa station site, Wawa Dairy Farms Inc. also owns several acres of undeveloped land. If not needed by Wawa for a future expansion of its corporate campus, this property is large enough to accommodate a wide range of uses. Much of the remaining undeveloped land in the study area is protected open space. This includes property owned by Middletown Township and the Natural Lands Trust.

No Superfund sites or other significant contaminated properties are located in or near the study area.

Market Potential

Over the next 25 years, Chester Heights Borough is expected to experience more significant population growth than Middletown Township. Using 2000 census data, DVRPC projected Middletown Township's 2005 population at 16,070. If current trends persist, that figure is expected to grow to 17,930 by 2030, for a net gain of 1,860 or 11.5 percent. Of course, if a new town center that includes hundreds of housing units is built on the Franklin Mint site within the next few years, it would stand to reason that the net population gain would exceed 1,860 persons. DVRPC projected Chester Heights Borough's 2005 population at 2,680, and forecast it to grow to 4,290 by 2030. This translates to a net gain of 1,610 people or an increase of 60 percent.

Employment in Chester Heights is also expected to grow at a faster rate than Middletown's. DVRPC projected Middletown Township's 2005 employment at 11,541 jobs and estimates it will grow to 12,909 jobs by 2030, for a net gain of 1,368 or 12 percent. Chester Heights Borough's 2005 employment is 1,628 jobs, and forecast to grow to 2,429 jobs by 2030. This will produce a net gain of 801 jobs or 49 percent.

In terms of the number of building permits issued between 2000 and 2005, Middletown Township granted a total of 164 permits for single-family homes, and 20 permits for developments with two or more units. During that same time period, Chester Heights Borough provided a total of 20 permits for single-family homes and none for multifamily units.



Single-family home construction in Chester Heights Borough (top) and Middletown Township (bottom) continues to bring new residents to the area.

Recommendations

Market/Land Uses:

1. **Redevelop the Franklin Mint property and other, adjacent sites as a mixed-use, transit-oriented area** that includes commercial space, community facilities, and residential units. The design of this new development should be pedestrian scale and include a town center that offers a sense of place and community identity.

In contrast, maintaining the site's current zoning and replacing its existing buildings with 1.5 million square feet of office space will effectively eliminate any possibility of creating a dynamic, transit-oriented place near the Wawa train station. The office space scenario will also fail to provide the developers with the future income streams necessary to offset the costs of building a new loop road or investing in other significant infrastructure improvements. As a result, the traffic congestion along Baltimore Pike and PA 452 will continue to worsen as the area's residential population and workforce continue to grow. With fewer federal funds now available to finance new highway construction and road improvements, any significant enhancements in this area will likely require a significant contribution from a private entity, namely a developer.

The Franklin Mint site provides Middletown Township with a unique opportunity to create an attractive, walkable, mixed-use environment that is proximate to rail and bus service and linked to privately funded roadway improvements. This model of development that encompasses economic growth, community place-making, and environmental sustainability has the potential to enhance the fiscal, social, and physical health of both the township and its residents.

As part of the redevelopment of the Franklin Mint site, **construct a mix of housing types that will appeal to a wide range of households.** This includes, but should not be limited to, single-family



Haddonfield Borough, New Jersey, is an example of a community with a vibrant, mixed-use town center that is pedestrian-friendly and proximate to transit.

detached dwellings, townhouses, and multifamily residential units in mixed-use buildings. Multiple housing types should also be constructed within the individual neighborhoods or villages created as part of this redevelopment effort. Rather than building residential communities that are defined by a particular housing type or price point, the new town center should espouse an integrated site plan. The construction of affordable housing should also be encouraged. Developing such a broad range of dwelling types will help to diversify Middletown's existing housing stock, which is largely comprised of single-family detached homes, and expand the choices available to both new and long-time residents. The inclusion of student housing for Penn State's Delaware County campus should be considered as well.

2. **Locate community facilities in the new mixed-use development** in order to create a multipurpose, resident-oriented downtown. Such uses could include a post office, library, police station, childcare facility, or community center.
3. **Phase the construction of the new town center over several years.** Build uses near the rail station first, including any shared parking facilities. Add additional development as the demand for housing and commercial space in the area increases.



Wooded land near the Wawa station site.

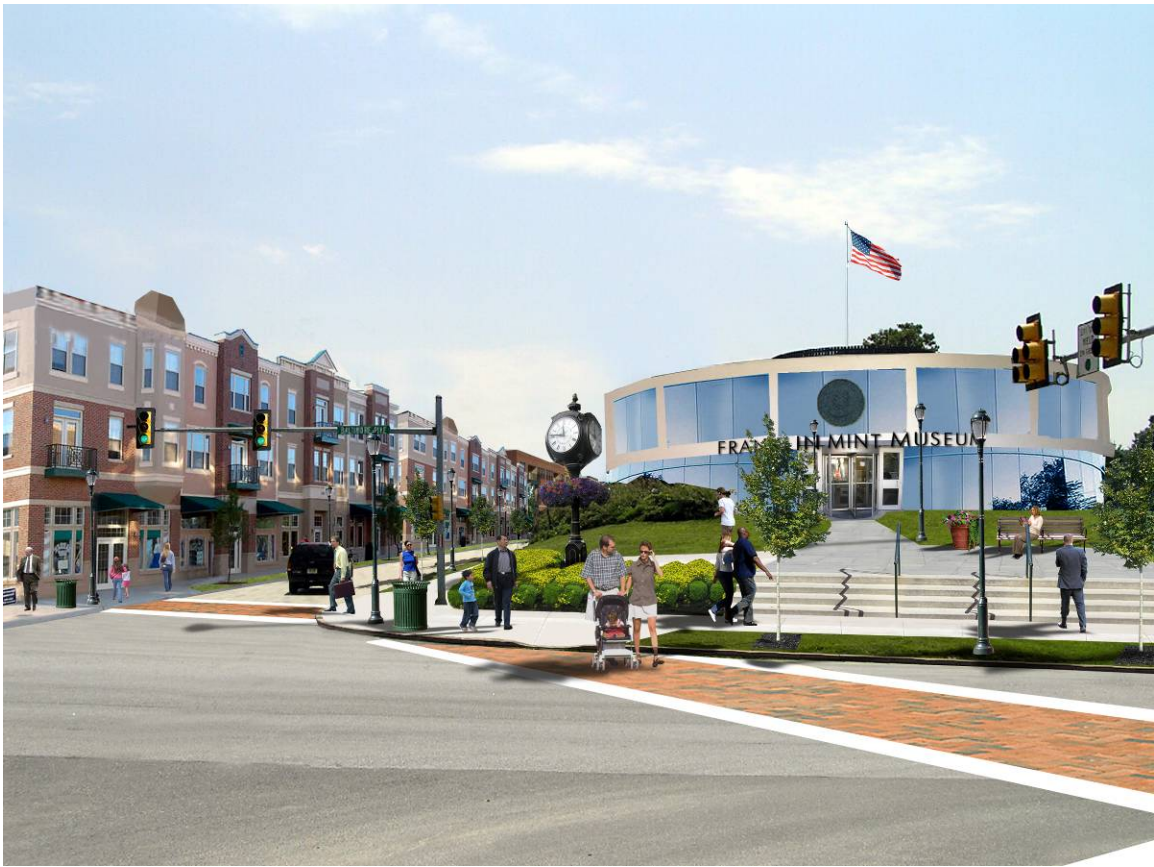
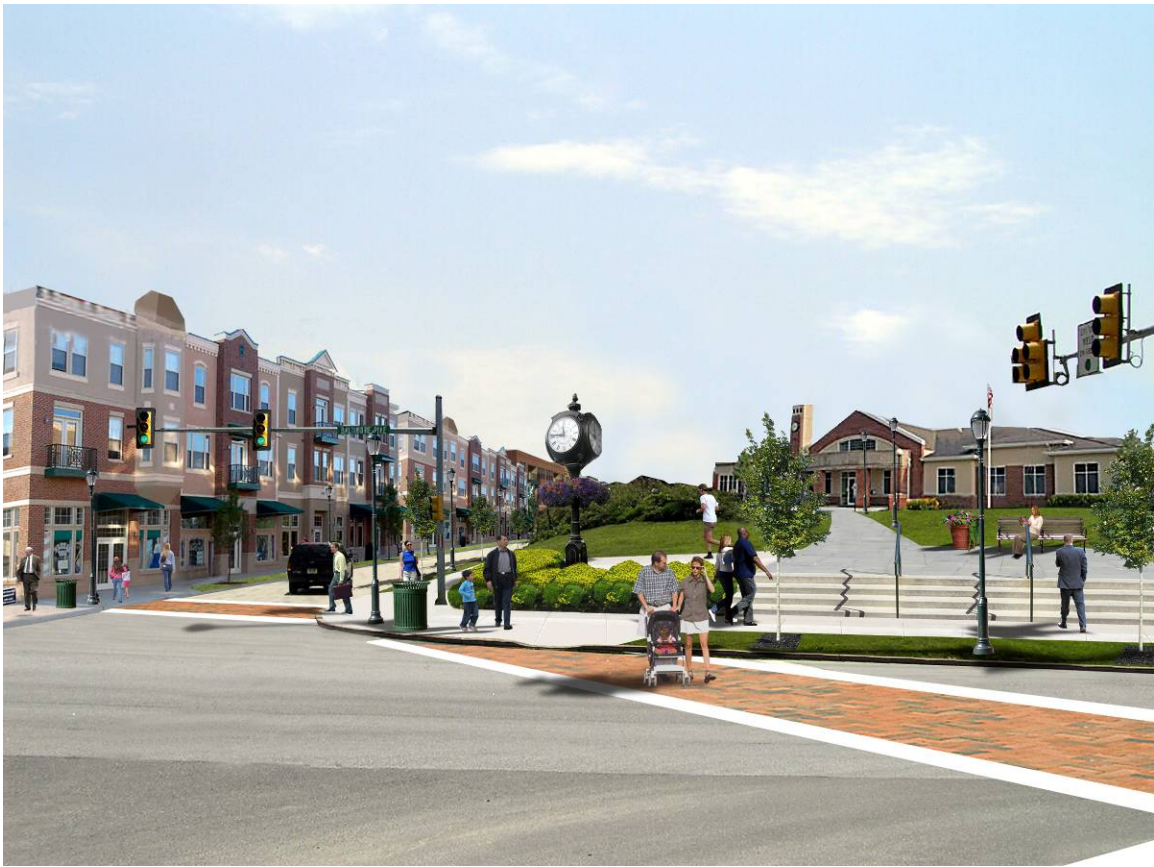
Access:

1. **Encourage cooperation between SEPTA and the redevelopers of the Franklin Mint property** in order to ensure their respective building initiatives near the Wawa station site are well-integrated and contribute to the creation of a walkable, attractive, and transit-friendly place.
2. **Connect the new station to the redeveloped Franklin Mint site.** Sidewalks and paths should be installed to link the station to the new residential

The image below depicts the existing conditions at the main entrance to the Franklin Mint site, which is located at the intersection of Baltimore Pike and Valley Road. The round building on the right formerly housed the Franklin Mint Museum.

On the opposite page, the two photo simulations illustrate how this area could be redeveloped as a walkable, mixed-use, transit-friendly place. In the first photo simulation, the Franklin Mint Museum is replaced with a new structure. The bottom image shows what the site might look like with a rehabilitated and preserved museum building. The photo simulations were created by DVRPC.







Some mechanism should be installed to allow pedestrians easy passage between the Wawa station site and the Franklin Mint property. These two areas are currently separated by a steep slope.
Image of the Niagara Falls Incline Railway from www.funiculars.net.

and retail properties. Such pedestrian facilities should be attractively landscaped and well-maintained. The walk between the station and the new town center *should not* require pedestrians to traverse large parking lots. Attention should also be paid to the steep slope that separates the rail line and Wawa station site from the Franklin Mint property. As this area is rebuilt, pedestrian infrastructure enhancements could include the installation of a covered escalator, moving walkway (“people mover”), or some other mechanism for transporting people between these two levels of the development.

3. **Build the proposed four-lane loop road through the Franklin Mint site** in order to redirect any new traffic generated by redevelopment or the Wawa train station away from Baltimore Pike. The loop road should extend as far east as PA 452. Approving the construction of a new town center on the former Franklin Mint site would give the developers access to projected future income streams that would be sufficient to offset the \$35 to 45 million cost of constructing the loop road and widening Baltimore Pike in the vicinity of their property. Thus, **Middletown Township should mandate that the construction of such a loop road be included in the final redevelopment plans for the Franklin Mint site, and financed by whichever developer is ultimately permitted to build on the property.** Privatizing the construction and ownership of this road will speed the development process and remove the financial burden from public funding sources, namely PennDOT. However, as noted above and elsewhere in this document, a developer’s capacity to finance such a large infrastructure improvement will ultimately be linked to their ability to construct a large, mixed-use, and relatively dense project on the Franklin Mint site.
4. Once the proposed loop road through the Franklin Mint property is completed, **adjust the route of SEPTA bus 111 to serve the new town center and Wawa train station.**

5. **Require the creation of connected street networks on development sites near the station.** In addition to the loop road, all other new streets should provide through-access to vehicles, bicyclists, and pedestrians. The construction of dead-end streets and cul-de-sacs should be minimized.



Connected streets, not cul-de-sacs (pictured above), should be constructed on the Franklin Mint site in order to provide through-access to vehicles, pedestrians, and bicyclists.

6. **Increase the capacity and efficiency of the intersection of Baltimore Pike and PA 452.** Currently, this intersection is one of the most congested in Delaware County. Although the restoration of rail service to the Wawa station and the construction of a loop road through the former Franklin Mint site will help alleviate some of the automobile congestion in this area, additional improvements will still be needed to facilitate the efficient movement of vehicular traffic over the long term. Delaware County supports the construction of a grade-separated interchange. At the very least, further study of this area is needed in order to determine the best way to relieve congestion at this intersection.

7. **Create entrances to the station area that provide safe and attractive access ways for drivers, cyclists, and pedestrians.** In addition to a paved road that connects the Wawa station to Baltimore Pike, SEPTA passengers should also be able to walk to transit via Middletown Township’s extensive trail network.



In the vicinity of the Wawa station site, Baltimore Pike lacks the necessary infrastructure to safely accommodate pedestrians and bicyclists, such as adequate sidewalks, crosswalks, and bike lanes.

8. **Install sidewalks and bike lanes, and enhance pedestrian crossings along Baltimore Pike.** Currently, this section of the corridor is nearly devoid of pedestrian infrastructure. As the redevelopment of Wawa station and the Franklin Mint site gets underway, bicycle and pedestrian access to this area will need to be improved. The new loop road that may be built through the Franklin Mint site should also accommodate multiple modes of transportation.

9. **Extend the Chester Creek Branch rail trail from Lenni Road to the Wawa train station.** Although four lanes of track connect the Wawa station site to



Heritage Rail Trail parallels an active rail line in York County. Image by the Pennsylvania Department of Conservation and Natural Resources.

the Lenni SEPTA station on Lenni Road (closed to passenger service), only two are needed for the planned extension of the R3 Regional Rail line. The remaining lanes could be converted into a bicycle/pedestrian path. A chain-link fence could be erected to separate the path from the active rail lines. Lengthening the Chester Creek Branch rail trail would enhance bicycle and pedestrian access to the new train station and connect local residents to a broader network of recreation areas.

10. **Launch a jitney service that links the new Wawa SEPTA station to any commercial and residential uses developed on the Franklin Mint site.** If convenient and well-managed, jitneys would help reduce the number of vehicle trips made within the area. The provision of jitney service to Wawa Dairy's facilities, Riddle Memorial Hospital, Granite Farms Estates, and other residential and employment centers should also be considered.
11. **Construct a multilevel parking garage west of the rail line that may be utilized by SEPTA passengers, and by visitors and employees of any new retail and office facilities** built on the Franklin Mint site. During the week, a certain number of spaces within the garage could be reserved for rail commuters. On evenings and weekends, those parking spots could be opened up and made available to customers of any new commercial development that may be constructed on the Franklin Mint site.
12. **Preserve the right-of-way and switching area for the Octoraro Branch, the decommissioned rail line that extends from Wawa to US 202 and beyond.** In the future, restored rail service along the Octoraro Line could provide growing suburbs in western Delaware County with direct transit access to Center City Philadelphia and other points of interest across the region. The Octoraro Line could also be converted into a right-of-way for a bus rapid transit (BRT) route.



A remnant of the Octoraro Rail Line near US 202 in Delaware County.

Regulatory:

1. **Create new TOD zoning overlays or form-based codes** to encourage the development of well-designed, transit-supportive uses on underutilized parcels near the proposed Wawa station site. This applies to parcels in both Middletown Township and Chester Heights Borough, including, but not limited to, the former Franklin Mint property. The piecemeal approach of zoning-by-variance is not preferred due to the complexity and scale of the available development sites in the study area. Overlays and form-based codes, by comparison, generally provide more comprehensive guidelines for defining and preserving the character of a place over the long term. The existing zoning in the study area is not very supportive of TOD.
2. **Chester Heights Borough should draft and adopt a new comprehensive plan** to guide its future growth and development. The plan should include a TOD element that outlines specific land use goals for the area surrounding the Wawa station site.
3. Middletown Township and Chester Heights Borough should **apply for a Transit Revitalization Investment District (TRID) planning grant** from the Pennsylvania Department of Community and Economic Development to reinforce TOD planning and implementation activities.
4. **The proposed loop road** that would parallel Baltimore Pike and provide an alternate route connecting PA 452, the Franklin Mint site, and the new Wawa SEPTA station **should be added to Middletown Township's official map.**



Baltimore Pike at Valley Road.

Physical:

1. **Improve the streetscape along Baltimore Pike.** Install trees, grass, and/or other plantings to create a buffer between pedestrians and automobile traffic. In the vicinity of the Wawa station and Franklin Mint sites, construct a landscaped median between the northbound and southbound lanes in order to slow traffic and create a sense of place.



The Franklin Mint Museum building, now vacant.

2. **Incorporate green building technologies into any planned reuse of the Franklin Mint site.** Green roofs, permeable paving surfaces, water-efficient plumbing, and solar panels are just a few of the myriad products that could help offset the negative environmental impacts of redeveloping this property. The U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system is the nationally accepted method for assessing the design, construction, and operation of high performance green buildings. LEED criteria focus on five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.
3. **Incorporate the Franklin Mint sign and/or a portion of the Franklin Mint Museum building into the design of the new town center.** Preserving and displaying these artifacts from the site's past will help to maintain its identity as a unique and noteworthy place.
4. As the Franklin Mint property is redeveloped, **concentrate higher density uses and structures near the train station and in a central commercial area. Scale back density as distance from these areas increases.** Consider placing townhomes and other, less intense residential forms along the southern edge of the development, where the Franklin Mint property borders existing parkland. This will help preserve the character of the environmental resources located in this section of Middletown Township.
5. **Locate a mix of retail uses near the station and in the town center.** Providing a variety of retail types will help meet the needs of the local residential population and workforce. Entrances to both small and large shops should be at street level and easily accessible to pedestrians. Big-box retail is not generally considered to be transit- or pedestrian-friendly (see page 58, "Prohibited Uses"); however, if designed well and scaled appropriately it may be possible to accommodate this form of development

within a transit-oriented place. Architectural details, building to the street wall, reduced floor plates, and the construction of multilevel stores can all help integrate big-box retailers into walkable, mixed-use communities.

6. **Increase the amount of open space included in the final redevelopment plan for the Franklin Mint site.** Although the original proposal for the property included a significant amount of open space, much of it encompassed steep and wet areas that are difficult to utilize in any way. These undevelopable places certainly merit protection and conservation; however, a revitalized Franklin Mint site should also include parks and other green areas that are more suitable for passive and active forms of recreation. These spaces should connect to Middletown Township's existing network of parks and trails, and be available for use by all local residents, including those living outside the boundaries of the redevelopment area.



Protected open space in Middletown Township.

Programmatic:

1. **Establish a community organization or special services district** to serve the businesses and residents of the redeveloped Franklin Mint site. The responsibilities of such an entity might include organizing festivals, farmers markets, outdoor concerts, and other public events that would help create a sense of place in the new community.
2. **Develop an image or brand for the area that celebrates its unique heritage.** Possible themes could reference the influence of the dairy and Americana/collectables industries (Wawa Dairy Farms and the Franklin Mint) on the history and growth of this section of Delaware County.
3. **Middletown Township should conduct a formal public involvement process in order to effectively engage local residents in the redesign and redevelopment of the Franklin Mint site.** Charrettes and other interactive planning techniques often generate new and realistic ideas while also creating a more cooperative local atmosphere.



The dairy industry has played an important role in the history of this section of Delaware County. Image by Wawa Dairy Farms Inc.

Prohibited Uses:

1. **Avoid locating auto-oriented businesses, such as gas stations, car washes, and repair shops in close proximity to the train station.** If necessary, additional uses of this sort should be situated to the northeast of the station, along Baltimore Pike and closer to the Granite Run Mall.
2. **Avoid placing drive-through businesses and big-box retail stores close to the station.** Like auto-oriented enterprises, these uses should be located along major roadways to the northeast of the station, near the Granite Run Mall. Drive-through businesses and big-box stores often require large, paved access ways and surface parking lots. They create limited pedestrian traffic and are not considered transit-friendly uses.
3. **Prevent the placement of industrial and warehouse properties on parcels near the Wawa station site.** In general, such uses generate minimal pedestrian traffic and are not transit-supportive. Given the residential character of the study area, large industrial properties would also fail to fit into the existing context of the surrounding community.
4. On parcels near the rail line and station, **prohibit the construction of single-family homes on large lots.** Any new residential development near the Wawa station should be built at transit-supportive densities. The development team's original proposal for the Franklin Mint site called for a gross residential density of slightly more than eight dwelling units per acre. Though adequate, comparable suburban TODs have been able to sustain residential densities of around 12 units per acre.
5. **Minimize the amount of surface parking permitted near the station.** As possible, encourage the creation of structured parking facilities, shared parking, on-street parking, and multimodal transportation access (bicycle, pedestrian, transit) in order to minimize the amount of land that is dedicated to paved parking lots.



A mix of housing types should be included in the redevelopment of the Franklin Mint site, rather than only large-lot single-family detached homes.

Conclusion

An important opportunity exists to create a new, first-rate example of transit-oriented development around the reopening Wawa SEPTA station. Adjacent to a large redevelopment site in a growing suburban area, Wawa is an ideal location for a new, mixed-use town center. Bringing well-conceived development to the nearby Franklin Mint property will also create a sense of place that will benefit the surrounding communities of Middletown Township and Chester Heights Borough, both of which lack established downtown commercial districts. As SEPTA and local government officials move forward with their plans for this section of Delaware County, they should consider the recommendations outlined in this report and remain mindful of the impact their actions will have for generations to come.

Acknowledgements

Thank you to the following individuals for their assistance with this study:

David Fogel, SEPTA
Natalia Bobak, SEPTA
Bill Caden, SEPTA
Mike DiCamillo, SEPTA
Jerry Kane, SEPTA
Gerald Maier, SEPTA
John McGee, SEPTA
John Pickett, Delaware County Planning Department
Tom Shaffer, Delaware County Planning Department
Lee Senior, Delaware County Planning Department
Alex Flemming, Delaware County Planning Department
W. Bruce Clark, Middletown Township Manager
Thomas Comitta, Thomas Comitta Associates Inc.
Mark Dambly, Pennrose Properties
Steven Wolfson, Wolfson Verrichia Group Inc.
John Dewey, Dewey Companies
Frank McKee, The McKee Group
Debra Stein, GCA Strategies

DVRPC Staff:

Karin Morris, AICP, Manager, Office of Smart Growth, Project Manager
Richard G. Bickel, AICP, Director of Planning
Sara Belz, Regional Planner
Greg Heller, Planning and Urban Design Analyst
Sean Lawrence, GIS Analyst
Becky Maule, Graphic Designer
Glenn McNichol, Senior GIS Analyst
Maria Solovieva, Graduate Student Intern

All photos by DVRPC unless otherwise noted.

Bibliography

Alburger, Bette. "Middletown OKs mint site analysis." *The Delaware County Daily Times*. January 9, 2007.

Alburger, Bette. "R-3 rail line extension on track." *The Delaware County Daily Times*. October 18, 2004.

Delaware Valley Regional Planning Commission. *Destination 2030: The Year 2030 Plan for the Delaware Valley*. 2005.

Delaware Valley Regional Planning Commission. *Population and Employment Forecasts, 2000-2030, 9-County DVRPC Region*. March 2005.

Listokin, David, with Ioan Voicu, William Dolphin, and Matthew Camp. *Who Lives in New Jersey Housing? A Quick Guide to New Jersey Residential Demographic Multipliers*. Center for Urban Policy Research, Edward J. Bloustein School of Planning and Public Policy, Rutgers University. November 2006.

Logue, Tim. "Caught in 'Middle:' Town center proposal for old Franklin Mint site causes uproar." *The Delaware County Daily Times*. December 4, 2006.

Mason, Todd. "Rails giving way to Delco Trail." *The Philadelphia Inquirer*. November 29, 2006.

McKee, Jason. "Middletown planners oppose town center." *The Delaware County Daily Times*. December 12, 2006.

Middletown Township. *Middletown 2020: A Smart Growth Initiative*. March 2001.

Poticha, Shelley. *Rethinking TOD, Getting it Implemented*. Reconnecting America, Center for Transit-Oriented Development. PowerPoint Presentation.
www.reconnectingamerica.org/pdfs/CNU2004.pdf.

Save Middletown Township! Website. www.savemiddletown.com.

Southeastern Pennsylvania Transportation Authority. *Elwyn to Wawa Service Restoration Feasibility Study*. June 2000.

Southeastern Pennsylvania Transportation Authority. *Fiscal Year 2008 Capital Budget and Fiscal years 2008-2019 Capital Program Proposal*. 2007.

Southeastern Pennsylvania Transportation Authority. *Planning Analysis for the Proposed Elwyn to Wawa Rail Restoration Project*. November 1991.



Transitioning to TOD: **A Transit-Oriented Development Plan for SEPTA's Wawa Station on the R3 Regional Rail Line**

Publication Number: 07025

Date Published: June 2007

Geographic Area Covered: Chester Heights Borough, Delaware County, Pennsylvania;
Middletown Township, Delaware County, Pennsylvania.

Key Words: transit-oriented development (TOD), mixed-use, zoning, land use, development opportunities, town center, site design, traffic calming, access management, streetscapes, SEPTA, R3 Regional Rail

ABSTRACT:

This document, *Transitioning to TOD: A Transit-Oriented Development Plan for SEPTA R3 Wawa*, grew out of the work done on *Linking Transit, Communities, and Development: Regional Inventory of Transit-Oriented Development Sites*, which was published in 2003. The regional inventory identified a priority list of 45 TOD opportunity sites that support the goals and policies of DVRPC's *Destination 2030* long-range plan. Although not included in the 2003 report, the reopening Wawa R3 Regional Rail station was selected as the focus of this study because its location offers tremendous new possibilities for transit-oriented development. Recommendations included in this document cover such areas as land use, zoning, comprehensive plans, access management, and development opportunities. This study is oriented toward an asset-based approach that aims to identify and capitalize on the existing strengths of the surrounding communities, specifically Middletown Township and Chester Heights Borough.

Delaware Valley Regional Planning Commission
190 N. Independence Mall West
8th Floor
Philadelphia PA 19106-1520

Phone: 215-592-1800
Fax: 215-592-1925
Internet: www.dvrpc.org

Staff Contacts:	Karin Morris, AICP	Sara Belz
Direct Phone:	215-238-2858	215-238-2930
Email:	kmorris@dvrpc.org	sbelz@dvrpc.org





DELAWARE VALLEY
REGIONAL PLANNING
COMMISSION

190 N Independence Mall West
8th floor
Philadelphia, PA 19106-1520
P: 215.592.1800
F: 215.592.9125
www.dvrpc.org

