

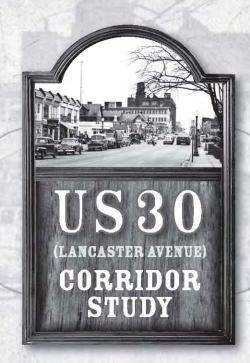
US30 (LANCASTER AVENUE) CORRIDOR STUDY

CREATING LINKAGES and CONNECTING COMMUNITIES *executive summary*

DECEMBER 2011



CITY OF PHILADELPHIA | HAVERFORD TOWNSHIP | LOWER MERION TOWNSHIP | NARBERTH BOROUGH | RADNOR TOWNSHIP



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The Delaware Valley Regional Planning Commission is dedicated to uniting the region's elected officials, planning professionals, and the public with a common vision of making a great region even greater. Shaping the way we live, work, and play, DVRPC builds consensus on improving transportation, promoting smart growth, protecting the environment, and enhancing the economy. We serve a diverse region of nine counties: Bucks, Chester, Delaware, Montgomery, and Philadelphia in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer in New Jersey. DVRPC is the federally designated Metropolitan Planning Organization for the Greater Philadelphia Region leading the way to a better future.



The symbol in 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.

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ACKNOWLEDGEMENTS

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EXECUTIVE SUMMARY

STUDY BACKGROUND

US 30, also known as Lancaster Avenue, is one of the region's most critical transportation corridors. Comprised of a network of important roadways and rail lines, the US 30 Corridor links a series of distinct and historic communities and is home to some of the region's most identifiable places.

Approximately 11 miles in length, the US 30 Corridor Study Area (Figure 1) extends from 52nd Street in West Philadelphia to Old Eagle School Road in Radnor Township, near the border between Delaware and Chester counties. The Study Area spans three counties and includes portions of the City of Philadelphia; Lower Merion, Haverford, and Radnor townships; and Narberth Borough. The Study Area's boundary extends roughly one mile north and south of Lancaster Avenue and includes many stations along SEPTA's Paoli/Thorndale Regional Rail Line and the Norristown High Speed Line (NHSL).

The US 30 Corridor Study was initiated by DVRPC, with the support of Delaware and Montgomery counties and the City of Philadelphia, to help coordinate transportation and land use planning across the municipalities that line this important corridor. By coordinating these efforts, DVRPC seeks to promote a more sustainable region and implement the goals and objectives presented in *Connections: The Regional Plan for a Sustainable Future.*

This document is the study's Executive Summary. The full report, US 30 (Lancaster Avenue) Corridor Study: Creating Linkages and Connecting Communities (Publication #11003B), is the result of a two-year planning process that began in Summer 2009. During this time, DVRPC facilitated multiple public participation opportunities and worked extensively with a variety of stakeholders. A Technical Advisory Committee (TAC) composed of professional staff from Delaware and Montgomery counties, the City of Philadelphia, corridor municipalities, and agencies such as PennDOT and SEPTA was created to provide local and technical expertise and help guide the direction of the study. During the course of the study, over 100 residents and stakeholders participated in public open houses held in West Philadelphia, Lower Merion Township, and Radnor Township. These meetings allowed the public to learn about the study and offer their input on corridor issues and problems. Additionally, DVRPC created an online mapping application, which allowed residents to help identify corridor needs and recommend improvement strategies.

Assets, Constraints & Opportunities

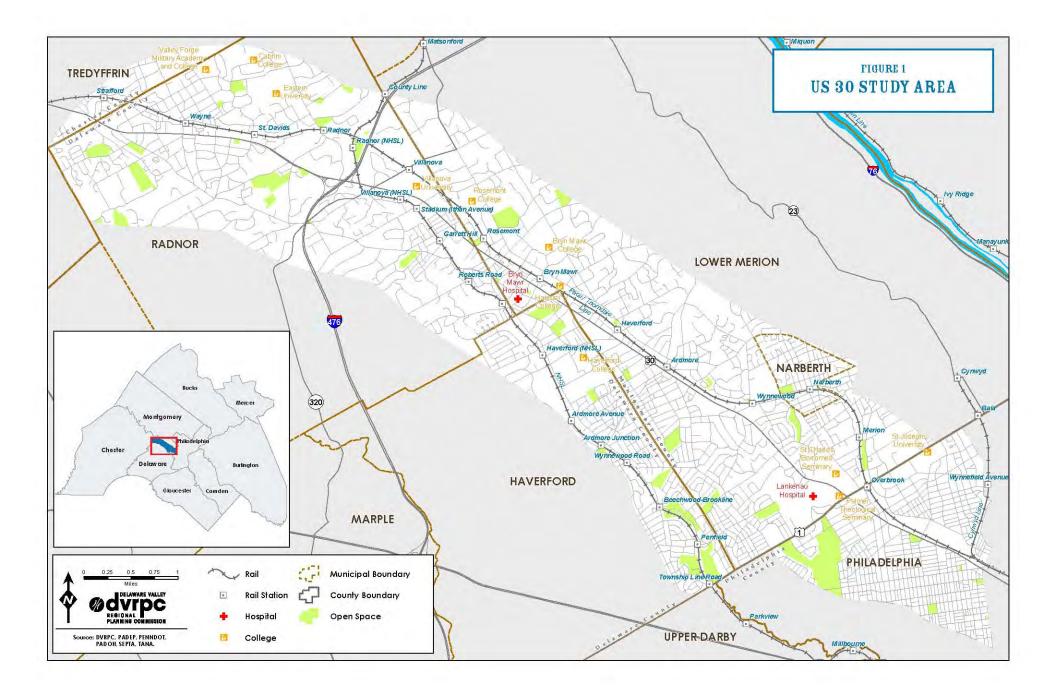
An extensive inventory of existing conditions data was gathered as part of the study process. Based on this research and analysis, the study team developed the following list of assets, constraints, and opportunities for the US 30 Corridor.

Assets

- The corridor contains a robust transportation infrastructure with multimodal travel options.
- The corridor has a rich history and contains many valuable historical and cultural resources.
- The corridor is home to many of the region's most important educational and medical institutions.
- Much of the corridor's population is well educated with incomes significantly higher than the region's median.

Constraints

- Many areas of the corridor lack the necessary pedestrian and bicycle facilities to make walking and biking viable transportation options.
- Despite some well-defined development centers, much of US 30 does not have a coherent identity or sense of place.
- Portions of the Study Area in West Philadelphia have suffered from disinvestment and some traditionally commercial areas now experience high rates of vacancy.



- The narrow roadway width of some sections of US 30 constrains potential pedestrian, bicycle, and vehicular circulation improvements.
- Large areas of impervious coverage exacerbate existing stormwater and flooding issues.
- Parks and open space are not always well connected to residential neighborhoods; many recreation areas are only accessible by automobile.
- The supply and location of parking is inadequate to meet peak demand at several rail stations and within some commercial areas.

Opportunities

- The corridor is well positioned to continue to develop in a sustainable manner because of its rich transit network and established development centers.
- Traditional town center areas of the corridor represent unique and distinctive places to live, work, and recreate.
- The corridor contains a series of vacant and underutilized parcels which may be repurposed to better serve the needs of local populations.
- Newer, more sustainable methods of stormwater management can help municipalities achieve environmental management goals.
- Numerous recent studies and plans conducted for portions of the corridor form a solid

foundation for future recommendations.

- In many places, vehicular and pedestrian circulation can be enhanced by defining and consolidating property access points.
- Resident demand for healthy lifestyle choices and sustainability indicate support for initiatives such as neighborhood walkability.

GOALS AND OBJECTIVES

DVRPC corridor studies provide policy analysis, recommendations, and technical assistance regarding transportation, land use, and environmental issues to municipalities. In particular, this study focuses on linking transportation investments to land use decisions in a manner that encourages smart growth.

The purpose of this study is to develop solutions that will improve safety for vehicles and pedestrians, reduce travel delays, enhance economic development opportunities, create linkages, rationalize land use, and manage area stormwater.

With feedback from corridor municipalities, the Technical Advisory Committee, and the public, the US 30 study team has identified the following goals for the US 30 Corridor: Foster distinctive, attractive settings with a strong sense of place. The corridor is already home to many of the region's most distinctive destinations. Strengthening the connections between these destinations will enhance the identity of the corridor.

2. Preserve and enhance cultural and historic resources. Celebrating the corridor's rich history requires more than preservation. New development should respect the traditional character found in much of the Study Area.

- **3. Promote municipal cooperation.** The future of Lancaster Avenue depends on the ability of neighboring communities to work together to solve interrelated land use and transportation issues.
- 4. Identify and prioritize critical roadway improvements. US 30 will remain a critical transportation corridor. Prioritizing projects that will improve circulation can mitigate congestion while enhancing safety.
- 5. Create walkable and bikable communities. Creating complete streets that accommodate vehicles, pedestrians, and cyclists will lessen auto dependence and lead to a more balanced transportation system.

GOALS & OBJECTIVES

- CORRIDOR-WIDE RECOMMENDATIONS
- 6. Enhance access to public transit. The corridor already contains one of the region's richest transit networks. Existing investments can be maximized by improving the accessibility and effectiveness of public transit.
- 7. Encourage smart growth land use and development patterns. Smart growth practices such as focusing development in town centers, mixing land uses, and providing a range of housing options can reinforce the corridor's sense of place and improve quality of life.
- 8. Enhance the sustainability of the corridor. Many parts of the corridor have already begun to implement environmental best practices. Additional investments in the corridor's green infrastructure can help manage stormwater more effectively, improve water quality, and beautify the Study Area.

CORRIDOR-WIDE RECOMMENDATIONS

Corridor studies are unique because they address linear study areas that often cross municipal and county boundaries. By thinking holistically about the US 30 Corridor, this study can help provide guidance on future infrastructure improvements and promote coordination between the numerous public and private agencies and organizations that have a stake in the corridor's future. The following corridor-wide recommendations pertain to the entire corridor, or large stretches of it, and suggest ways to improve the mobility, safety, and character of the US 30 Study Area.

Environment

The focus of the following environmental recommendations is on stormwater management, as this is the primary cause of water quality impairment in the Study Area. A strategic and coordinated approach to stormwater management, using best management practices that retain rainwater on-site and emphasize natural processes of infiltration and biologic uptake, can address many of the corridor's environmental issues while enhancing the community's overall quality of life.

The study identifies numerous strategies to improve stormwater management throughout the corridor, such as restoring floodplains and stream corridors, preserving open space, retrofitting parking lots and stormwater outfalls, and increasing public awareness. In addition to enhancing water quality, many of these recommendations provide additional environmental aesthetic, and social benefits, including improved habitat and open space, increased vegetation and tree cover, and improved air quality.

Land Use

The US 30 Study Area is a substantially builtout corridor with infrastructure that is largely established. However, despite being an established corridor, the land use context of US 30 changes frequently, and often dramatically, as one travels through the Study Area. Lancaster Avenue passes through a diverse range of urban, suburban, and village center environments, each with its own character. Despite the local nature of many land use issues, a number of broad corridor-wide land use concerns emerged during the course of this study.

Many of these concerns stem from the dual nature of US 30 as both an important regional highway and the main street for a number of communities. In some places along the corridor, the need to move vehicles safely and efficiently detracts from the pedestrian environment and conflicts with the creation of walkable town centers. Other issues result from the tension between old and new along the corridor. The study suggests several strategies, based on Smart Growth principles, that can be used to address these issues:

- Focus growth into the corridor's existing mixed-use town centers.
- Ensure new development is compatible with the existing built environment.
- Revitalize and protect downtown and main street areas.
- Retrofit existing commercial strips to improve access, circulation, and appearance.
- Enhance the identity of the corridor and improve wayfinding signage.

Pedestrian Mobility

The sidewalks, crosswalks, and trails that make up the corridor's pedestrian facilities vary widely in condition and quality throughout the Study Area. Along the majority of the corridor, the existing roadway consists of a 40-foot right-ofway comprised of four 10-foot lanes without shoulders and narrow four-foot sidewalks. A fivefoot minimum sidewalk width with a five-foot to 10-foot buffer area is ideal to protect pedestrians from traffic. To comply with the Americans with Disabilities Act (ADA), utility poles and signs must be placed such that a minimum of 36-inches of clear sidewalk width is preserved for pedestrians. Additionally, pedestrian warning signs should be upgraded to fluorescent yellow-green background throughout the corridor.

In order for the many signalized intersections along the corridor to be more pedestrian friendly, the following amenities should be installed at all signalized intersections:

- Countdown pedestrian signals;
- ADA-compliant curb ramps;
- High-visibility crosswalks;
- Upgraded pedestrian timing to new Manual of Uniform Traffic Control Devices (MUTCD) requirements for walking speed; and
- Consideration of the prohibition of right turns on red to reduce vehicle/pedestrian conflicts.

Complete Streets

Complete streets accommodate all users and help to create walkable and bikable communities. Many areas in the corridor lack the necessary pedestrian and bicycle infrastructure to make walking and bicycling viable transportation options. Complete streets, along with improved utilization of the available transit options, will lessen auto dependence and lead to a more balanced transportation system. Corridor-wide recommendations include:

- Incorporate traffic calming and green streets elements into future roadway improvements to promote pedestrian safety and sustainability.
- Provide ADA-compliant sidewalks and curb ramps throughout the corridor.
- Install high-visibility crosswalks and

pedestrian signals at signalized intersections along the corridor.

- Install "SHARE THE ROAD" signage and route identification signage along bicycle routes.
- Install bicycle racks in recreational and commercial areas, as well as rail stations.
- Maintain existing on-street bicycle facilities through street sweeping and pavement marking upgrades.
- Install streetscape elements, including pedestrian-scale lighting and street furniture, where appropriate.
- Redesign key roadway segments to enhance vehicular and pedestrian circulation in both neighborhoods and centers.

Bicycle Recommendations

Eighty-six miles of bicycle routes and trails currently exist or are proposed within the US 30 Corridor. The study recommends that an additional 35 miles be incorporated into this existing network to improve connectivity and safety for cyclists.

Furthermore, the study seeks to identify ways that existing and proposed bicycle facilities can be improved to promote connectivity, safety, and convenience. The recommendations contained in the report are primarily concerned with making bicycle routes more attractive by minimizing conflicts between motorized traffic and bicycle traffic. CORRIDOR-WIDE RECOMMENDATIONS

CORRIDOR-WIDE Public Transit CORRIDOR-WILL RECOMMENDATIONS Intermodal Connections

Coordination of bus and rail schedules should be employed where possible to enable a seamless transfer from one mode to the next. These complementary modes should operate on headways in consistent increments in order to make arrivals and departures more predictable for users. Even on lightly traveled routes with long headways, it is better to have a schedule that is in onehour or half-hour increments which gives some consistency to the customer. This approach is very important in retaining and attracting new riders, as well as connecting individuals to large employment centers.

Many train stations in close proximity to a bus route are absent from the bus schedule. To assist in publicizing the coordination to transit riders, measures such as adding regional rail stations to all bus route schedules to assist riders with intermodal coordination will help. In addition, highly visible wayfinding signs pointing to nearby bus stops at regional rail stations should be installed.

Bus Service

SEPTA should evaluate the feasibility of adding Sunday service on Routes 1, 103, and 106. These three routes within the corridor have no Sunday service.

Transit Stops

Passenger amenities at corridor bus stops should be improved with benches, shelters, trash receptacles, and newspaper stands, where possible. While the new generation of SEPTA bus stop signs will show both the route numbers and the terminal point of the route, additional information and amenities will improve the transit experience for riders along US 30.

Many commuter rail stations along the corridor would benefit from better automobile access. Additionally, moderate parking capacity gains may be achieved through better management of existing facilities, which might include the conversion of some permit spaces to daily spaces.

Bicycle Access

For corridor rail stations to fully become intermodal nodes, they must serve cyclists better than they currently do. Where feasible, SEPTA should implement a policy of providing sufficient bicycle parking on both sides of every rail station on the Paoli/Thorndale line and NHSL. As a first step, there are plans to install new bicycle racks at Villanova on the Paoli/Thorndale line and at every station on the NHSL.

Pedestrian Access

Walking is a critical part of almost every journey, so it is important for a balanced transportation network to provide a safe walking environment. This need is particularly acute around rail stations where pedestrians often mix with vehicles. Many corridor train stations require upgrades to sidewalks and pedestrian crossings to protect walkers from vehicular traffic.

Access Management

Many of the major intersections along the corridor have access driveways located very near the intersection. Access management techniques, such as restricting access to right-in, right-out movement or relocating driveways further away from an intersection, may improve operations and reduce the potential for crashes along US 30. In some cases, some driveways on Lancaster Avenue should be closed and moved to the minor street approach in order to reduce conflicts.

ORGANIZING THE CORRIDOR

The US 30 Corridor, as defined in this study, is a large complex area composed of a diverse range of urban and suburban environments. Much of this study deals with how US 30 operates over its entire length. However, corridor studies must also address the localized issues that vary from place to place along the corridor.

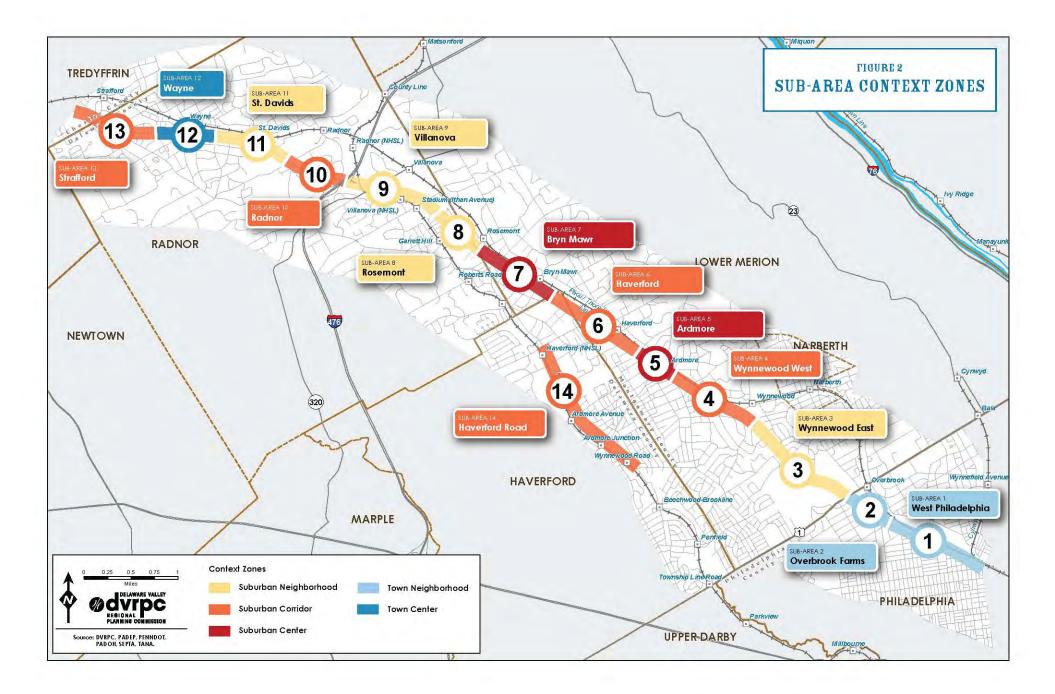
For the purposes of this study, the US 30 corridor has been broken into a series of 14 sub-areas. These sub-areas extend along Lancaster Avenue and also include a stretch of Haverford Road. Together, these sub-areas form a framework for discussing the location-specific recommendations that are found in the report.

The extent of each sub-area was determined by land use and transportation context, as well as municipal jurisdiction. Some sub-areas correspond to well-known neighborhoods, while others encompass transitional areas and less well-defined locales. Corridor sub-areas are depicted in Figure 2.

Each sub-area has also been classified according to its land use context (also depicted in Figure 2). A context area is an area of land that contains a unique combination of built and natural characteristics, which can include land uses, architectural styles, urban form, building density, roadway design, topography, and other natural features. Each sub-area has been classified according to a land use classification system developed jointly by the New Jersey and Pennsylvania Departments of Transportation in the *Smart Transportation Guidebook*. This system includes seven context areas that range from least to most developed: Rural, Suburban Neighborhood, Suburban Corridor, Suburban Center, Urban Neighborhood, Urban Center, and Urban Core.

Understanding the surrounding land use context is essential to planning for the future of any transportation facility. For example, the character of development surrounding a particular roadway can provide guidance as to who will need to use the road and how they will use it.

The US 30 Corridor is diverse enough to include every context zone except rural and urban core areas. In practice, land uses do not always fit neatly into a defined context area and boundaries between these context areas may be difficult to pin down. When classifying sub-areas, the project team chose the classification that most closely matches the existing and proposed land uses. This study uses the land use context of each sub-area as an organizing framework for recommended improvements and the selection of roadway design values. For example, the issues encountered in suburban and urban centers typically differ from those found in suburban neighborhoods and corridors. A brief summary of recommendations for each of the 14 sub-areas follows.



SUB-AREA RECOMMENDATIONS



Looking north along 52nd Street toward the Park West Town Center.



The Overbrook Farms Station of the Paoli/ Thorndale line near City Avenue and 63rd Street.

SUB-AREA 1: WEST PHILADELPHIA

Sub-area 1 begins at 52nd Street and Lancaster Avenue, the eastern edge of the US 30 Study Area, and extends just over one mile west to the intersection of 62nd Street and Lancaster Avenue. Traditionally the neighborhood's business center, this stretch of Lancaster Avenue includes many marginal and vacant commercial buildings and properties. Several residential neighborhoods converge within or near the sub-area which is also home to Overbrook High School. Improvements recommended for this area include:

- Explore reuse and redevelopment options for vacant and underutilized parcels along Lancaster Avenue and the former Acme distribution site north of the train tracks along Upland Way.
- Consider special treatments for the intersection of 52nd and Lancaster and the stretch of 52nd Street between Lancaster Avenue and the recently constructed Park West Town Center. In addition to making any necessary structural repairs to the Amtrak bridges over 52nd Street, various treatments, such as lighting, public art, paving materials, and plantings, should be assessed for their potential to improve the area.
- Explore the feasibility of consolidating local transit stops at the intersection of Lancaster Avenue and 52nd Street to facilitate safer and more convenient transfers.
- Implement various pedestrian improvements such as the installation of pedestrian countdown timers at the intersections of Lancaster Avenue and 56th Street and Lancaster Avenue and 57th Street.

SUB-AREA 2: OVERBROOK FARMS

This sub-area extends from 62nd Street in West Philadelphia to City Avenue along the border between Philadelphia and Lower Merion Township. The sub-area includes the Overbrook Farms Historic District and the Overbrook Station of the Paoli/Thorndale line. Improvements recommended for this area include:

- Initiate streambank restoration efforts along Indian Creek in Morris Park. Outfalls in this area are in need of retrofits to prevent further erosion.
- Implement a comprehensive strategy for revitalizing the 63rd Street Commercial Corridor. The *Master Plan Strategy for 63rd Street* contains a useful framework for discussing land use, streetscape and placemaking elements, traffic calming, and façade improvements.

- SUB-AREA RECOMMENDATIONS
- Install streetscape improvements, such as new sidewalks, street trees, and pedestrian-scale lighting, along segments of Lancaster Avenue and 63rd Street.
- Upgrade pedestrian amenities at key intersections, such as Lancaster Avenue and Sherwood Road, to improve pedestrian circulation.

SUB-AREA 3: WYNNEWOOD EAST

The Wynnewood East Sub-area includes portions of Lower Merion Township between City Avenue and Clover Hill Road. The eastern portion of this 1.3 mile stretch of Lancaster Avenue is defined by the large institutional presence of Lankenau Medical Center and St. Charles Borromeo Seminary. West of these institutions, the sub-area is dominated by single-family detached homes, some of which back directly up to Lancaster Avenue. Improvements recommended for this area include:

- Restore the streambanks along the tributary to Cobbs Creek within the Barnett Environmental Center in the Grange Field and County Open Space to enhance stormwater management and mitigate erosion.
- Complete the sidewalk network by constructing or improving sidewalks along portions of Lancaster Avenue. The priority area for sidewalk improvements is a stretch of the south side of Lancaster Avenue just west of Indian Creek Lane.
- Place edge line pavement markings along this portion of Lancaster Avenue, including striping of catch basins and storm inlets to alert bicyclists of their location.
- Reduce the posted speed in this subarea by 5 MPH to 35 MPH.
- Conduct additional studies to assess the impact of a road diet along Lancaster Avenue between City Avenue and Clover Hill Road. A road diet might improve pedestrian safety and vehicular movement by changing the configuration of the roadway from two travel lanes in each direction to one travel lane in each direction with a center median, shoulders and a dedicated turn lane at major intersections.

Lancaster Avenue at City Avenue near the border between Philadelphia and Lower Merion Township.



Residential area of Lancaster Avenue in Sub-area 3 Wynnewood West.

SUB-AREA 4: WYNNEWOOD WEST

Sub-area 4 extends from the intersection of Lancaster Avenue and Clover Hill Road to the intersection of Lancaster Avenue and Simpson Road. Wynnewood West includes the Wynnewood Commercial District, which is comprised of a mixture of traditional and convenience retail businesses and services that primarily cater to Lower Merion Township residents. Improvements recommended for this area include:



Wynnewood West shopping center on Lancaster Avenue near Wynnewood Road in Sub-area 4.



Shops and restaurants line Lancaster Avenue through much of the Ardmore Sub-area.

• Utilize landscaping and edge treatments, such as fencing to screen and delineate large parking lots, and better delineate sidewalks.

SUB-AREA RECOMMENDATIONS

- Install wayfinding signage to identify the Wynnewood Station of the Paoli/Thorndale line.
- Improve pedestrian access to the Wynnewood Rail Station by adding a crosswalk across Penn Road at the north parking lot.
- At Lancaster Avenue at Wynnewood Road/Old Wynnewood Road, stripe the eastbound center lane as an exclusive left-turn-only lane. Prohibit left turns during peak hours from Hampstead Circle and the Whole Foods driveway. Additionally, make the intersection "smaller" by reducing the width between approaches on Lancaster Avenue. This could be accomplished through a textured pavement bump out in the northeast corner of the intersection and/or a pedestrian refuge island for the southbound rightturn lane.

SUB-AREA 5: ARDMORE

The sub-area extends from Simpson Road to Woodside Road and includes the Lower Merion Township Building, Ardmore Station of the Paoli/Thorndale line, and the Ardmore Business Historic District, which contains numerous restaurants and shops. Improvements recommended for this area include:

- Enhance eastern entrance into village center at Lancaster Avenue and Simpson Road with an appropriate gateway treatment.
- Install streetscape improvements, such as new sidewalks, street trees, pedestrian-scale lighting, and street furniture, along Lancaster Avenue between Ardmore Avenue and Holland Avenue/Woodside Road.
- Install additional warning signage and pavement markings on Lancaster Avenue near the Philadelphia Sports Club to promote driver awareness of the midblock crosswalk at this location.
- At the intersection of Anderson Avenue and Coulter Avenue, consider implementing right-in, rightout access at the Suburban Square parking lot to reduce congestion and improve pedestrian access at this location.

SUB-AREA : SUB-AREA 6: HAVERFORD

RECOMMENDATIONS

This sub-area stretches from Woodside Road to Lee Avenue/Old Lancaster Road and includes portions of both Lower Merion Township and Haverford Township. This diverse sub-area contains a variety of land uses and the character of Lancaster Avenue varies considerably throughout the sub-area. Recommended improvements include:

- Investigate potential locations for a municipal parking lot (or lots) to serve commercial properties in the Haverford Township portion of the sub-area.
- Complete the sidewalk network by constructing or improving sidewalks along Lancaster Avenue between Penn Street and Martin Avenue and in the vicinity of Old Buck Lane and Old Lancaster Road.
- Consider restricting left turns at the intersection of Lancaster Avenue and Haverford Station Road during peak hours to improve intersection operations during these times.
- Add exclusive left-turn lanes at the intersection of Lancaster Avenue and Penn Street/Pennswood Road by removing on-street parking along the north side of Lancaster and striping left-turn lanes.

SUB-AREA 7: BRYN MAWR

This sub-area stretches from Old Lancaster Road/Lee Avenue to County Line Road and includes the Bryn Mawr Station of the Paoli/Thorndale line, Bryn Mawr Hospital, Bryn Mawr College, and Harcum College. Recommended improvements for this subarea include:

- Encourage redevelopment of Municipal Lot 7. Any development of this site must be held to high design and use standards because of its prominent location.
- Improve the sidewalk and streetscape along Lancaster Avenue between Old Lancaster Avenue and a point approximately one block west.
- Install overhead and side-mounted flashing yellow beacons (or rectangular rapid flashing beacons) to the existing pedestrian warning signage at Lancaster Avenue and Morton Road, near the Bryn Mawr Film Institute, to promote driver awareness of the pedestrian crossing at this location. In addition, install yield lines at least 20 feet in advance of the midblock crosswalk.
- Channelize traffic along Morris Avenue near the Bryn Mawr Station ("Tango Tangle") and modify the area north of the station, as proposed by the Gannett Fleming 2007 report.



The intersection of Lancaster Avenue and Haverford Station Road in Sub-area 6.



The Bryn Mawr Film Institute in Sub-area 7 is a local landmark.



Radnor Township marker in Unkefer Park in the Rosemont Sub-area.



The intersection of PA 320 (Spring Mill Road/Sproul Road) and Lancaster Avenue in the Villanova Sub-area.

SUB-AREA 8: ROSEMONT

The Rosemont Sub-area is a largely residential neighborhood that spans from County Line Road to Barley Cone Lane. Although two multi-family buildings are located in the eastern portion of the sub-area, single-family homes on smaller lots are common throughout the neighborhood. This sub-area contains the Rosemont station of the Paoli/Thorndale Line and the Garret Hill station of the NHSL. Recommended improvements for this sub-area include:

- Install wayfinding signage identifying the Rosemont Station of the Paoli/Thorndale line.
- Upgrade pedestrian amenities at all signalized intersections along Lancaster Avenue.
- Improve pedestrian access to the Garrett Hill rail station (NHSL) by constructing and improving sidewalks along Eachus Avenue.
- Investigate the potential for adding a lead left-turn phase for eastbound traffic at the intersection of Lancaster Avenue and Airdale Road in the AM peak hour. This will ease delay for drivers accessing the Rosemont Station.

SUB-AREA 9: VILLANOVA

Subarea 9 extends from Barley Cone Lane to I-476 and is influenced by the presence of Villanova University and its proximity to the interstate. While the majority of Villanova's campus lies on the north side of Lancaster Avenue, the university may be looking to redevelop its properties along the south side of US 30 in the future. Spring Mill Road/State Highway 320 is an important north-south connector street that serves to funnel local traffic to I-476. Recommended improvements for this subarea include:

- Install gateway treatments along Lancaster Avenue at Ithan Avenue and Spring Mill Road to help identify Villanova University as a distinct presence on the US 30 Corridor.
- Consider revising existing zoning regulations to allow the development of Villanova parcels south of Lancaster, as described in the Villanova University Campus Master Plan.
- Complete the sidewalk network by constructing or improving sidewalks along segments of Lancaster Avenue, Spring Mill Road, and Aldwyn Lane.
- Consider various transportation demand management options to encourage the use of carpooling, transit, and nonmotorized transportation to reduce the number of single-occupant vehicle trips to the campus.

RECOMMENDATIONS

SUB-AREA

SUB-AREA RECOMMENDATIONS Explore alternatives for improving the intersection of Lancaster Avenue and PA 320 (Spring Mill Road/Sproul Road).

SUB-AREA 10: RADNOR

The Radnor Sub-area runs from I-476 to St. David's Square, a large shopping center on the south side of Lancaster Avenue. The sub-area is dominated by the Radnor High School and its athletic fields, as well as a large commercial office complex bounded by Lancaster Avenue and Radnor Chester Road. Recommended improvements for this sub-area include:

- Improve wayfinding signage to the Radnor Station of the Paoli/Thorndale line and the NHSL along Lancaster Avenue, Radnor Chester Road, and King of Prussia Road, as appropriate.
- Explore opportunities to better connect the Radnor Station of the Paoli/Thorndale line to adjacent commercial development. Distinctive pedestrian walkways through the large parking fields can create a safe and effective connection between office buildings and existing sidewalks.
- Improve pedestrian access to the Radnor Station (NHSL) by installing a crosswalk across King of Prussia Road.
- Reconfigure the driveway lanes at the intersection of Lancaster Avenue and St. Davids Square to accommodate a pedestrian refuge area at the continuous right-turn toward the Lincoln Financial Corporation (west and east drives). Also consider installing pedestrian bump outs within the existing shoulder/right-turn lane width to provide pedestrians with shorter crossing distances.

SUB-AREA 11: ST. DAVIDS

Sub-area 11 extends from the St. Davids Square Shopping Center to Aberdeen Avenue. In this area, Lancaster Avenue includes a mix of residential, small office, and commercial uses. Chamounix Road serves as a critical north-south connector street, which links residential areas north and south of US 30. Recommended improvements for this sub-area include:

- Restore the streambank along the Darby Creek where it crosses through Encke Park to prevent further erosion at this location.
- Explore long-term opportunities for redevelopment or redesign of the Acme property east of Aberdeen Avenue. New buildings and parking configuration should enhance the pedestrian environment along Lancaster Avenue.



The Radnor Hotel, located at the intersection of Lancaster Avenue and Radnor Chester Road in Sub-area 10.



The St. Davids Community Park, in Sub-area 11, is one of the few public green spaces that front directly onto Lancaster Avenue within the study area.



This section of North Wayne Avenue is part of the Wayne Business District in Sub-area 12.



The intersection of Lancaster Avenue and Old Eagle School Road/Sugartown Road in the Strafford Sub-area.

• Complete the sidewalk network by constructing or improving sidewalk along portions of Lancaster Avenue and Chamounix Road

SUB-AREA RECOMMENDATIONS

• Consider widening Lancaster Avenue at Chamounix Road/St. Davids Road to accommodate 10-foot wide left-turn lanes. This will enable turning vehicles to move out of the through traffic lanes while waiting to make the turn.

SUB-AREA 12: WAYNE

The Wayne Sub-area extends from Aberdeen Avenue to Bloomingdale Avenue/Banbury Way and includes the downtown Wayne Business District and portions of three historic districts. Although similar in many ways to Ardmore and Bryn Mawr, Wayne has the most established town center context of any sub-area along the corridor. The business district is home to a wide variety of retail shops, restaurants, commercial properties, and community uses on Lancaster Avenue and North and South Wayne avenues. Recommended improvements for this sub-area include:

- Enhance western gateway to downtown Wayne at the intersection of Lancaster Avenue and Bloomingdale Avenue/Banbury Way and develop gateway treatment for the eastern edge of downtown at Aberdeen Avenue.
- Explore potential for mixed-use, transit-oriented development near the Wayne Station of the Paoli/ Thorndale line. Any future development could incorporate a parking structure designed to serve the larger Wayne Business District.
- Improve the physical appearance and pedestrian environment of North Wayne Avenue by installing a planted median with a distinctive pedestrian crossing.
- Consider back-in angle parking for areas with pull-in angle parking. Back-in angle parking can ease friction and reduce conflicts between through traffic and vehicles making parking maneuvers.

SUB-AREA 13: STRAFFORD

Sub-area 13 extends from Banbury Way to Old Eagle School Road near the boundary between Radnor Township and Tredyffrin Township. The westernmost sub-area, Strafford is primarily a mix of shopping centers and strip commercial development, including the Eagle Shopping Center and Lancaster County Farmers' Market. Recommended improvements for this sub-area include: SUB-AREA RECOMMENDATIONS Consider redesigning the shopping center that includes the Lancaster County Farmers' Market near Lancaster Avenue and Eagle Road. The market is a valuable amenity for the community, and redesigning this property and the adjacent strip commercial development can enhance this unique destination, while improving vehicle and pedestrian access to the site.

- Evaluate shared access and parking through the rear of businesses, as feasible, for properties along the south side of Lancaster Avenue between Conestoga Road and Old Sugartown Road.
- Consider back-in angle parking for a portion of Lancaster Avenue just east of Old Eagle School Road, where pull-in angle parking currently exists.
- Install a planted median pedestrian refuge on Old Eagle School Road between Fairfield Lane and Forrest Lane to create a crossing area between the SEPTA parking area and Our Lady of the Assumption Church.



Haverford Road near the intersection of Wynnewood Road in Sub-area 14.

SUB-AREA 14: HAVERFORD ROAD

Sub-area 14 is the only sub-area not centered on US 30. Instead, the Haverford Road Sub-area focuses on a section of Haverford Road from Karakung Drive to Buck Lane in Haverford Township. This roughly 1.6 mile stretch of roadway parallels the Norristown High Speed Line. Recommended improvements for this sub-area include:

- Explore the potential for putting stormwater BMPs, such as a rain gardens or cisterns, into place for streambank protection where the parking lot runoff enters the stream at the Karakung Little League field.
- Consdider creating wetlands along Cobbs Creek along Haverford Road in the area between the Haverford and Ardmore Avenue stations of the NHSL.
- Explore redevelopment opportunities for properties near the Ardmore Junction Station of the NHSL.
- Continue to implement design guidelines contained in the Haverford Township Comprehensive Plan Addendum, which provide a long-term vision for the Haverford Road as a mixed-use and multimodal corridor that capitalizes on its proximity to the NHSL.
- Enlarge the island area around the "Christmas Tree" at Haverford Road and Ardmore Avenue and channelize traffic to accommodate new pedestrian amenties.
- Install warning signage along Ardmore Avenue to warn drivers of the high pedestrian activity in the vicinity of the Haverford Road and Ardmore Avenue intersection.



North Wynnewood Avenue borders the Narberth Playground Area.



Conestoga Road travels through the heart of the Garret Hill neighborhood in Radnor Township.



The intersection of Church Road and Montgomery Avenue in Lower Merion Township.

• Consider adding signalization and detection to allow SEPTA buses to more easily cross Haverford Road at the Ardmore Junction Station.

IMPLEMENTATION

ADDITIONAL AREAS OF STUDY

In addition to the corridor sub-areas, three additional areas were studied as part of the US 30 Corridor. One of these areas is the Borough of Narberth, which lies just north of Lancaster Avenue and is a stop on the Paoli/Thorndale Regional Rail Line. The other two areas include portions of major roadways that parallel Lancaster Avenue, and therefore serve as alternate routes. In the central portion of the Study Area, Montgomery Avenue links the eastern and western portions of Lower Merion, connecting Villanova and Bala Cynwyd. Conestoga Road lies in the western third of the Study Area, and connects Wayne with Haverford Road and Bryn Mawr.

Pedestrian, roadway, and intersection improvements have been recommended for sections of Narberth, Montgomery Avenue, and Conestoga Road. These improvements are intended to improve safety and mobility of all road users in these areas.

IMPLEMENTATION

The recommendations presented in the US 30 Corridor Study aim to alleviate congestion, improve safety for pedestrians and motorists, support economic development opportunities, protect environmental resources, and enhance the quality of life within communities along US 30. The process of implementing these recommendations will involve multiple phases over the next several years and will likely require coordination across municipal boundaries. Realizing these objectives will require the participation of numerous public and private partners.

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Abstract:	This study was conducted by DVRPC to help coordinate transportation and land use planning across the municipalities that line a portion of US 30. The study focuses on US 30 (Lancaster Avenue) between 52nd Street in West Philadelphia and Old Eagle School Road in Radnor. By coordinating these efforts, DVRPC seeks to promote a more sustainable region and implement the goals and objectives presented in <i>Connections: The Regional Plan for a Sustainable Future</i> . This study seeks to address transportation and livability issues, such as safety, walkability, traffic circulation, stormwater management, and natural resource protection, while enhancing the existing historic and cultural assets of the corridor. The suggested recommendations promote vehicular, pedestrian and bicycle safety; improved access to transit; and new development that aesthetically and functionally complements the character of the study area.		
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