



2. EXISTING CONDITIONS

Introduction

Related plans and studies contain a wealth of information and inventories of existing conditions for the study area. In particular, the *Western Chester County – Future Focus Study* completed in 2011, included an extensive background analysis of demographic trends, economic indicators, transportation issues, and land use for the broader western Chester County region. As a result, this chapter summarizes new data and highlights significant changes to existing conditions since 2011. Appendix A includes the following reference maps presenting existing conditions for the study area based primarily on Geographic Information System (GIS) data provided by the Chester County Planning Commission and DVRPC:

- DVRPC Land Use (2010)
- DVRPC Traffic Volume Estimates (2012)
- Chester County’s Livable Landscapes
- Chester County Planning Commission’s Roadway Functional Classification
- Chester County Planning Commission’s Bicycle Functional Classification
- Chester County Planning Commission’s Transportation Improvements Inventory (TII)
- Bicycle and Pedestrian Facilities
- Public Transportation Facilities
- Community Facilities
- Pipeline Transmission Zones
- Protected Open Space
- Steep Slopes
- Water and Sewer Service Areas
- Water Resources
- Subdivision and Land Development Activity (2010–Present)

Demographic Trends and Characteristics

Based on Census 2010, over 47,600 people were living within the six sponsor municipalities for the Route 30 Multimodal Transportation Study. Between 2010 and 2040, DVRPC forecasts that the population of the study area will increase by 15,500 or 32% with the growth concentrated in Caln, Coatesville, Valley, and West Caln. Assuming an average household size of 2.5, an additional 6,200 housing units may be needed to accommodate this future growth. DVRPC also forecasts that jobs in the study area will increase by 6,000 in same 30 year time period. The graphs on this page illustrate the population and employment forecasts by municipality.

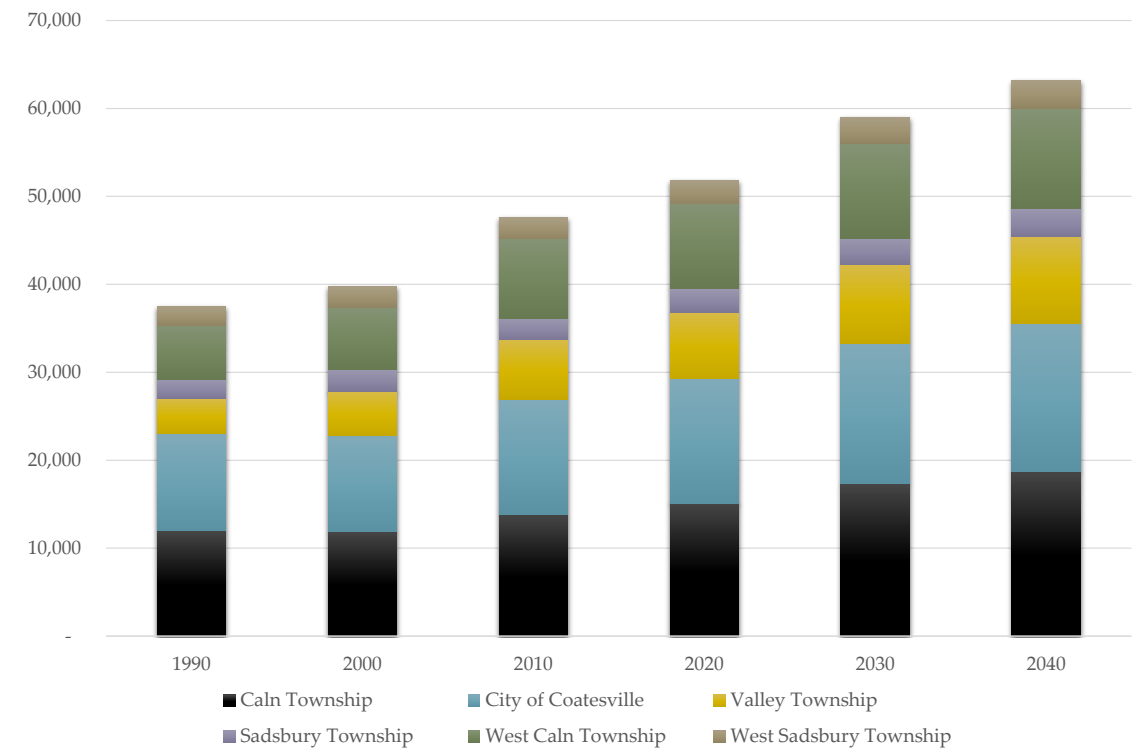
Land Use and Development Activity

There are several developments along the Route 30 corridor that have been completed since 2011, including:

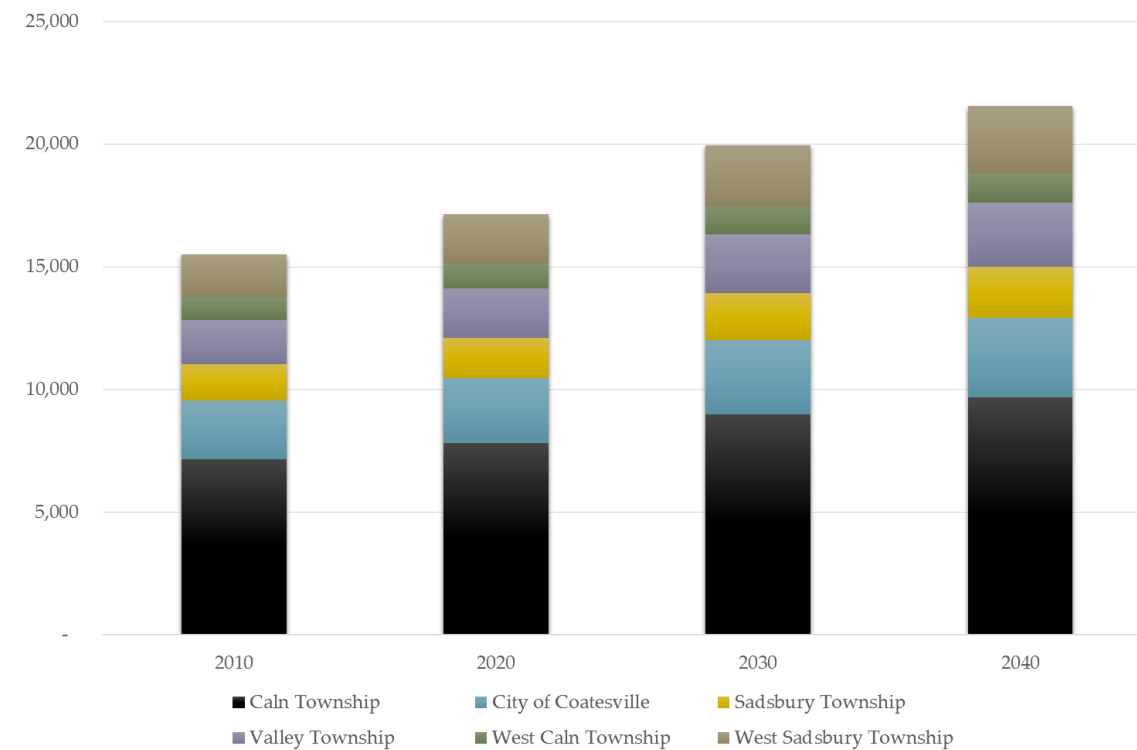
- CVS at the Reeceville Road interchange on the US 30 Bypass in Caln Township
- Courtyard Marriott hotel at the PA 82 interchange on the US 30 Bypass in the City of Coatesville
- Lancaster General Hospital Medical Building (as part of Sadsbury Commons – Phase) at the intersection of US 30 and PA 10 in Sadsbury Township

The “Flats” property on Business Route 30, just west of 1st Avenue in Coatesville is still available, even though the Velodrome concept included in the *Future Focus Study* is no longer being actively pursued. Additional development projects in the pipeline at the US 30 Bypass Interchange areas are listed in Chapter 4.

Population Growth and Forecasts



Employment Forecasts



Source: DVRPC

Market Conditions

Recommendations of new real estate development have considered current market conditions influencing residential and commercial (retail and office) space and development patterns throughout the study area and, in particular, a consideration of existing uses along Business Route 30 and the future reconstruction of the US 30 Bypass.

Residential

As a result of the projected growth in households over the next 30 years, there will be ongoing demand for additional residential development. In particular, there is market support for professionally-managed rental housing, because the current supply is limited in the study area. However, achievable rents may not support the cost of construction and creative financing mechanisms may need to be explored. Special housing uses for households with modest and moderate incomes – workforce and affordable housing, and housing for seniors able to live independently – also have market support. The presence of medical institutions within the study area helps to generate added demand for accommodations for seniors.

The market for sales housing is divided. While the residential sales market west of Coatesville is soft, statistics for sales housing east of Coatesville show recent sales price appreciation and an adequate absorption pace. Market conditions suggest that the eastern portion of the study area should be an initial focus for new sales housing. Absorption of new sales housing should be monitored closely and used to pace the phasing of new residential development. As outlined, a substantial amount of residential development is already planned near the interchange areas. Successful economic development strategies aimed at increasing employment opportunities and attracting new jobs will continue to be essential to bolster ongoing demand for housing and to maintain a jobs/housing balance in the study area.

Commercial

There are large concentrations of existing retail uses along Business Route 30 and at Boyd’s Corner (US 30 and PA 10). Despite these concentrations, there is support for additional new retail uses in the study area, both on Business Route 30 and at US 30 Bypass interchanges. In particular, there is demand for restaurants, banks, sporting goods, pet facilities, health and personal care stores, and auto-related uses such as auto parts and gas stations. In addition to these retail uses, there is an opportunity to entice recreational operations to one or more locations with access to the Brandywine Creek and/or the regional trail network.

As with residential development, the market for commercial office space differs in the western and eastern portions of the study area. Stakeholders noted that commercial office space east of PA 82 typically is fully leased, while space is readily available to the west. While the development of office space generally supports business attraction efforts, identifying one or more large public sector or service-related entities to anchor a building might help to “jump-start” this type of development at a location west of Coatesville. New commercial office space could compete with the proposed expansion of Highlands Corporate Park, which has been attracting this type of user to space initially intended for light industrial users.

Hotels have been proposed at several locations in the study area. Although the current supply is limited, it is advisable to introduce one additional new hotel development. Targeting a suite or budget lodging property would add to the inventory, while precluding direct competition with the Marriott Courtyard at the PA 82 interchange in Coatesville.



Roadway Network

This study is focused on two key roadway corridors within the study area, specifically the US 30 Bypass and Lincoln Highway (Business Route 30). The US 30 Bypass is a limited-access expressway with two lanes in either direction and a varying width medians and shoulders. Existing weekday daily traffic volumes are provided in the figure below. There are six interchanges within the study area, including US 322, PA 340, Reeceville Road, PA 82, Airport Road, and the western terminus of the expressway just east of PA 10.

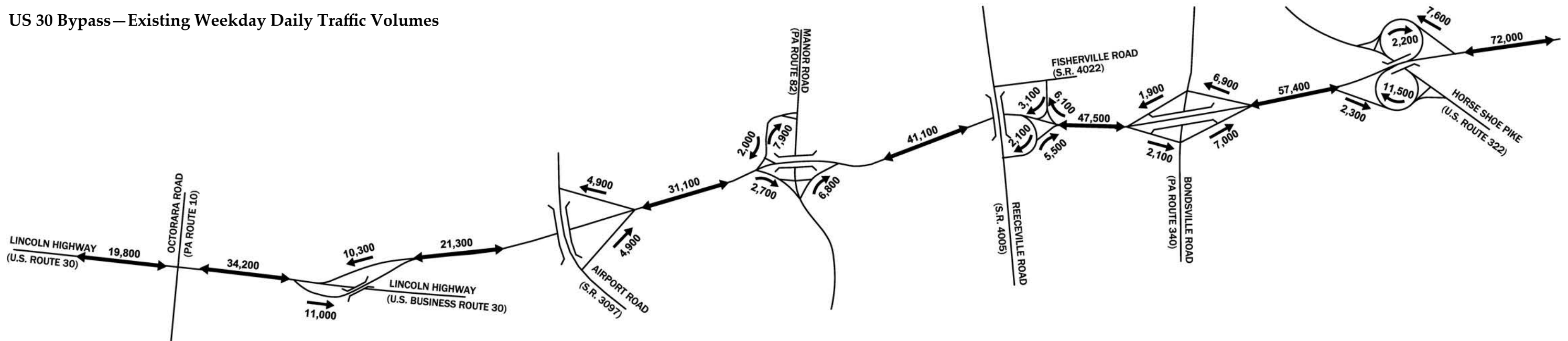
Lincoln Highway (Business Route 30) is a principal or regional arterial serving as a key commercial corridor and main street with a varying cross section through the study area. There is a symbiotic relationship between the US 30 Bypass and Business 30 and as a result, the connecting or intersecting north-south roadways carry higher traffic volumes and are key corridors for both commercial and residential development. Additionally, Business 30 provides access to local and regional transit services, including the Krapf A Bus, Coatesville Link Bus, Thorndale Regional Rail Station, and the current and future Coatesville Train Station. Key issues associated with the US 30 Bypass and Business Route 30 are documented later in this chapter.

Listed on the table are other priority roadway improvements within the study area that have been identified and documented in previous plans and studies, including Chester County’s Transportation Improvements Inventory (TII). These are priority locations to address transportation needs and implement improvements, but were not a primary focus of this Route 30 Multimodal Transportation Study.

Roadway Improvements Identified and Documented in Previous Plans and Studies

Location	Municipalities	Improvement
PA 82 and PA 340	City of Coatesville, Valley Township, West Brandywine Township	Intersection improvements to reduce congestion and enhance safety
Lincoln Highway (Business Route 30) and PA 82 (1st Avenue)	City of Coatesville	Intersection improvements, including minor roadway realignment/widening on PA 82 to eliminate split phase traffic signal timing— <i>Design underway</i>
Lincoln Highway (Business Route 30) and Bondsville Road (PA 340)	Caln Township	Intersection improvements, including minor roadway widening/realignment, operational improvements, and implementation of a pedestrian facility on the east side of Bondsville Road between G.O. Carlson Boulevard and Lincoln Highway
PA 340 and Reeceville Road/North Caln Road	Caln Township	Intersection improvements, including roadway widening/realignment and operational improvements to reduce congestion and enhance safety
PA 340 and North Caln Road/Olive Street	Caln Township	Intersection improvements, including roadway widening/realignment and operational improvements to reduce congestion and enhance safety
G.O. Carlson Boulevard Extension	Caln Township	Extension and connection of G. O. Carlson Boulevard between Bondsville Road (PA 340) and Lloyd Avenue

US 30 Bypass—Existing Weekday Daily Traffic Volumes



In addition to the extensive roadway network, other key elements of the multimodal transportation system in the study area are highlighted below. Existing public transportation facilities and bicycle and pedestrian facilities are depicted on reference maps in Appendix A.

Passenger and Freight Rail

The Amtrak Keystone Corridor/SEPTA Paoli-Thorndale rail line runs parallel and south of the US 30 Bypass Corridor, providing passenger rail service to the east (to Philadelphia and New York City with connections to Amtrak’s Northeast Corridor) and to the west (to Harrisburg with connections to Pittsburgh). Norfolk Southern also operates along the Amtrak Keystone rail line through the study area, primarily serving the ArcelorMittal steel production facility in Coatesville. The Amtrak owned rail line is generally one-mile south and parallel to the US 30 Bypass. Like the expressway, the rail line limits the north-south roadway connectivity within the study area. As a result, corridors that cross both the rail line and US 30 Bypass are critical for regional mobility. These north-south corridors includes Bondsville Road, Reeceville Road/North Caln Road, PA 82, and Old Wilmington Road.

There are two train stations within the study area: SEPTA’s Thorndale Regional Rail Station and Amtrak’s Coatesville Station. Currently, Amtrak serves the Coatesville Train Station and SEPTA regional rail service on the Paoli-Thorndale line terminates at the Thorndale Train Station, just east of Coatesville. The Delaware Valley Regional Planning Commission (DVPRC) Long Range Plan, *Connections 2040*, identifies the extension of SEPTA regional rail service west to Coatesville, Parkesburg, and Atglen as an unfunded Major Regional Transit System Expansion Project. Additionally, relocation and improvements to the Coatesville Train Station are currently in design.

Bus

The Krapf A Bus and ChescoBus—Coatesville Link Bus are two fixed route bus services that operate along the Business 30 corridor through the study area. The A Bus provides 19 weekday round trips between Coatesville and West Chester and three evening round trips between Coatesville and Exton. The Coatesville Link, which is managed by the Transportation Management Association of Chester County (TMACC), provides 13 weekday round trips between Coatesville and Parkesburg with key stops at Handicrafters, Brandywine Hospital, Veterans Administration Medical Center, and West Sadsbury Commons shopping center. A key transfer point between the A Bus and Coatesville Link is at Veterans Drive in Caln Township. Many of the bus stops along the Business Route 30 corridor lack connecting pedestrian facilities, bus shelters, and other amenities.

Aviation

The Chester County Airport, also known as the G. O. Carlson Airport, is C-II reliever airport located approximately 0.5 miles south of the US 30 Bypass Airport Road Interchange. The airport serves as a regional hub for small private planes and corporate jets with approximately 50,000 takeoffs and landings annually. There is the potential for airport operations to increase with long-term plans to extend the runway in order to accommodate the needs of the largest corporate aircraft. There is a concentration of light industrial and airport related industries located in close proximity to the Chester County Airport in both Sadsbury and Valley Townships. Access to the Chester County Airport and surrounding light industrial and airport related land uses is currently constrained by the missing eastbound off-ramp and westbound on-ramp at the Airport Road Interchange.

Non-motorized

Non-motorized transportation within the study area includes not only bicyclists and pedestrians, but also horse and buggies due to the Amish population clustered in western Chester County and near the Chester/Lancaster County Boundary. The Octorara Regional Comprehensive Plan (2004) and Sadsbury Township Comprehensive Plan (2014) identify safety issues for buggy traffic on roadways with increasing traffic volumes and noting particular problems on roadways with limited sight distance due to horizontal or vertical geometries. PA Route 10, Airport Road, and Business Route 30 are some of the corridors within the project area where horse and buggies and other forms of non-motorized transportation are more common.

Facilities for bicyclists and pedestrians within the study area include sidewalks, trails, bicycle lanes, and wide shoulders with share the road signs. The River Walk Trail in Coatesville is one of the few multi-use trail facilities within the study area. However, there are several active trail planning initiatives, including extension of the River Walk Trail and development a West Branch Brandywine Trail to the north and south and extension of the Chester Valley Trail.



Key Issues

The evaluation of existing conditions and input from the Study Advisory Committee (SAC) and representatives from the real estate and business community led to the recognition of the following three key issues facing the Route 30 corridor in terms of transportation and land use. These issues informed the development of the corridor vision and recommendations for the US 30 Bypass interchange areas, Business Route 30 corridor, and regional trail connections.

WEST VS. EAST

There are significant differences between areas east and west of PA 82 and the Brandywine Creek, both in terms of existing conditions and future challenges and opportunities. As a result, different strategies and solutions may be appropriate in the western or eastern portions of the study area.

US 30 BYPASS VS. BUSINESS ROUTE 30

In terms of transportation, safety and congestion are common issues along both the US 30 Bypass and Business Route 30. PennDOT's future reconstruction project will likely address these and other deficiencies on the Bypass, but no significant improvements are currently planned for Business Route 30. Continued close coordination between PennDOT, the municipalities, and other partners is needed to ensure that transportation investments in both the US 30 Bypass and Business Route 30 serve the needs of the community and region.

In terms of land use, the US 30 Bypass interchange areas are attractive locations for commercial development, due to the high visibility and access to the regional highway system. However, commercial development at the interchanges can threaten the viability of the "main street" businesses located along Business Route 30. As a result, there is a need to develop diverse and distinctive places along both corridors to minimize competition and maintain vibrant communities.

JOBS VS. HOUSING

There is a significant mismatch between employment opportunities and housing options within the study area, resulting in traffic congestion and long commutes. As a result, there is a need for greater diversity for both jobs and housing options within the study area.

Summary of "Top Ten" Issues

Based on input from Study Advisory Committee (SAC) members

US 30 Bypass

- Congestion and need for additional capacity
- Safety improvements and ramp reconfigurations at interchanges
- Completion of the Airport Road interchange
- Accommodating growth at the Route 10 intersection
- Poor pavement condition and roadway surface
- Lack of signage and traveler information through Intelligent Transportation Systems (ITS)

Business Route 30

- Congestion
- Access management
- Signal timing
- Improvements at key intersections
- Beautification, uniformity, and consistency
- Establishing a "sense of place"
- Walkability and the need for sidewalk connections
- Increase transit ridership and enhance bus stops
- Need to support retail development

Regional Passenger Rail

- Upgrades to the Coatesville Train Station
- Expansion of transit options, including the extension of SEPTA service west to Coatesville and beyond

Revitalization in the City of Coatesville

Summary of "Top Three" Assets or Opportunities

Based on responses from stakeholder interviews

- US 30 Bypass offering access to employment centers in West Chester, Exton, Great Valley, and King of Prussia
- Business Route 30, particularly walkable communities
- Amtrak and SEPTA train service and stations
- Chester County G.O. Carlson Airport
- Business parks
- Available developable land, particularly in the western portion of the study area
- Open space
- Opportunities for recreation, including golf courses, parks, playgrounds
- Brandywine Creek
- Iron and Steel Heritage Museum

West

Valley, Sadsbury, West Sadsbury, West Caln Townships



Presentation and Greenfield Development

- Significant protected open space and agricultural lands
- Large undeveloped parcels
- Commercial space readily available
- Limited and incomplete roadway network
- Sparse sidewalks
- Limited bus service



VS.

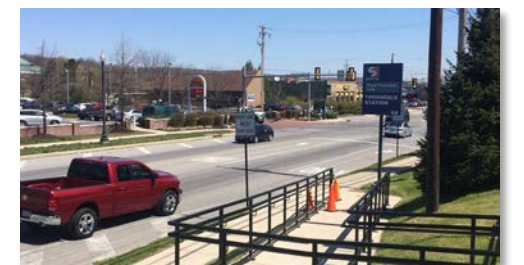


East

Caln Township and City of Coatesville

Infill and Redevelopment

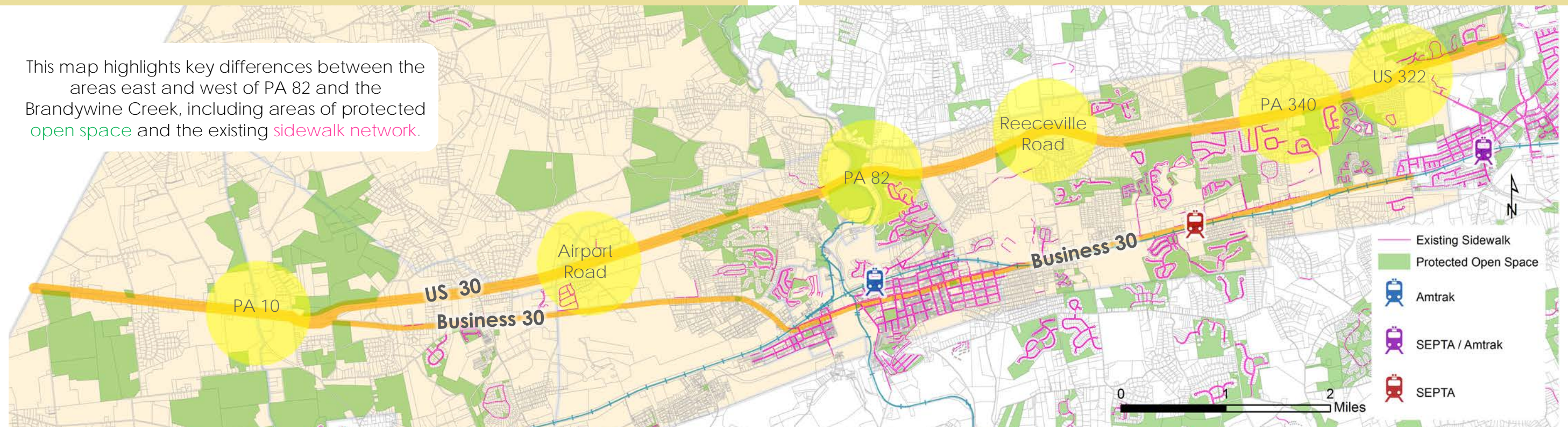
- Well developed
- Smaller parcels
- Higher densities
- Higher percentage of non-owner occupied housing units
- Congestion
- Widespread sidewalks
- Regular bus service
- Railroad line and stations



In the West...Development is easier, but will bring more congestion, consume more open space and farmland, and require more public infrastructure

In the East...Opportunities for "game changing" development are limited and existing development needs to be supported or revitalized in some areas

This map highlights key differences between the areas east and west of PA 82 and the Brandywine Creek, including areas of protected open space and the existing sidewalk network.



US 30 Bypass

vs.

Business Route 30



Limited Access Regional Highway

Key Issues

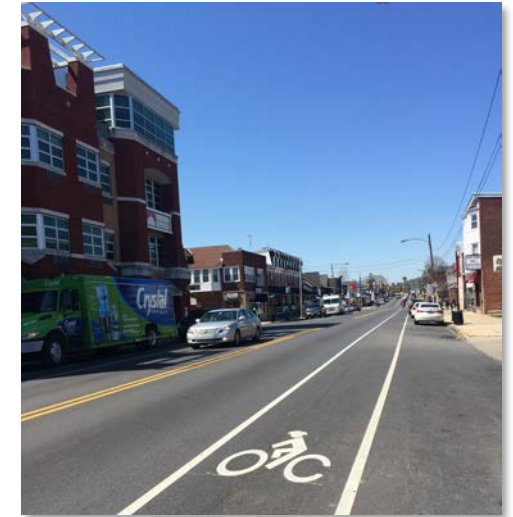
- Congestion and need for additional capacity
- Safety concerns, especially at interchanges
- Interchange ramp reconfigurations
- Airport Road interchange incomplete
- Poor pavement quality and smoothness
- Lack of Intelligent Transportation Systems (ITS)
- Inadequate signage

Initial funding has been identified for the US 30 Coatesville – Downingtown Bypass Reconstruction Project, which will address many of these issues.

Key Issues

- Walkability
- Beautification and establishing a “sense of place”
- Uniformity and consistency
- Access management
- Signal timing
- Transit supportive infrastructure
- Congestion, particularly at key intersections
- Need to support retail development

Since significant funding and resources have not been identified to address issues along Business Route 30, improvements will likely need to be implemented in a phased approach over time through close coordination between the municipalities, PennDOT and other partners.

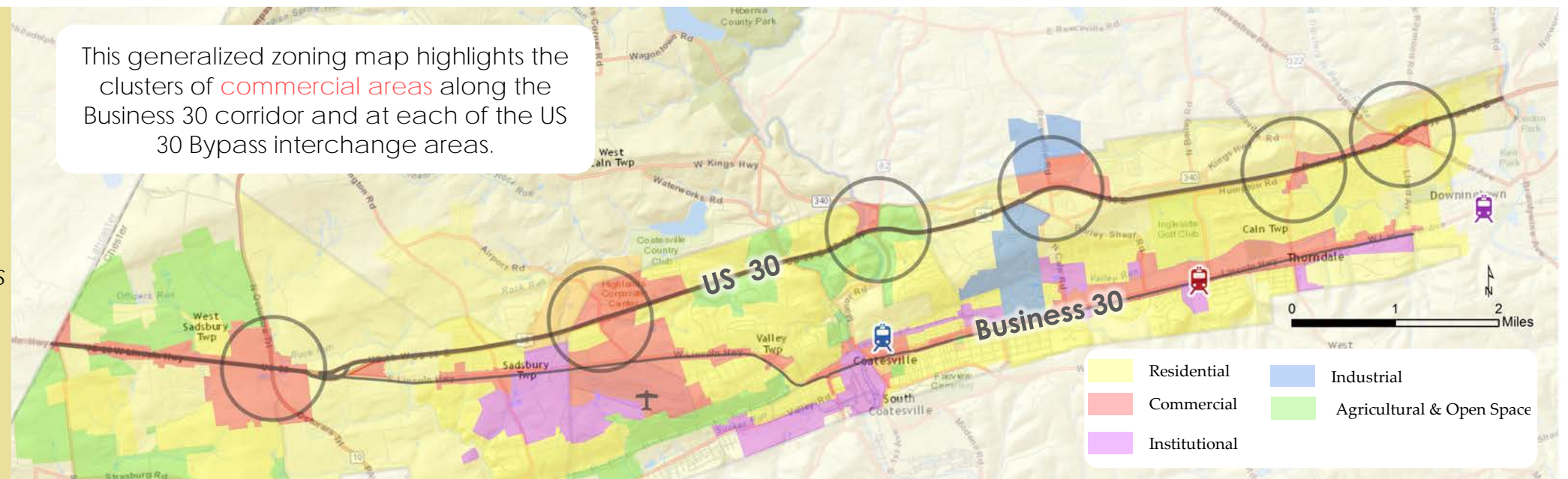


Traditional “Main Street”

Competition for Commercial Development

The economic vitality of the already struggling areas on Business 30 (Lincoln Highway) is threatened by new development at US 30 Bypass interchange areas.

This generalized zoning map highlights the clusters of commercial areas along the Business 30 corridor and at each of the US 30 Bypass interchange areas.

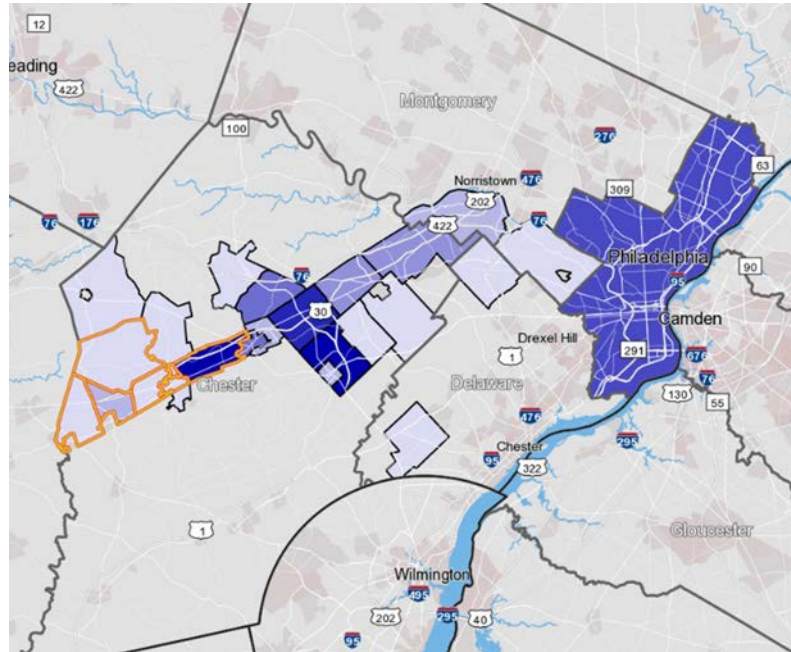


Jobs

VS.

Housing

Where do residents work?



Source: Census LEHD, 2013

85% of working residents (17,600 people) commute out of the study area for work.

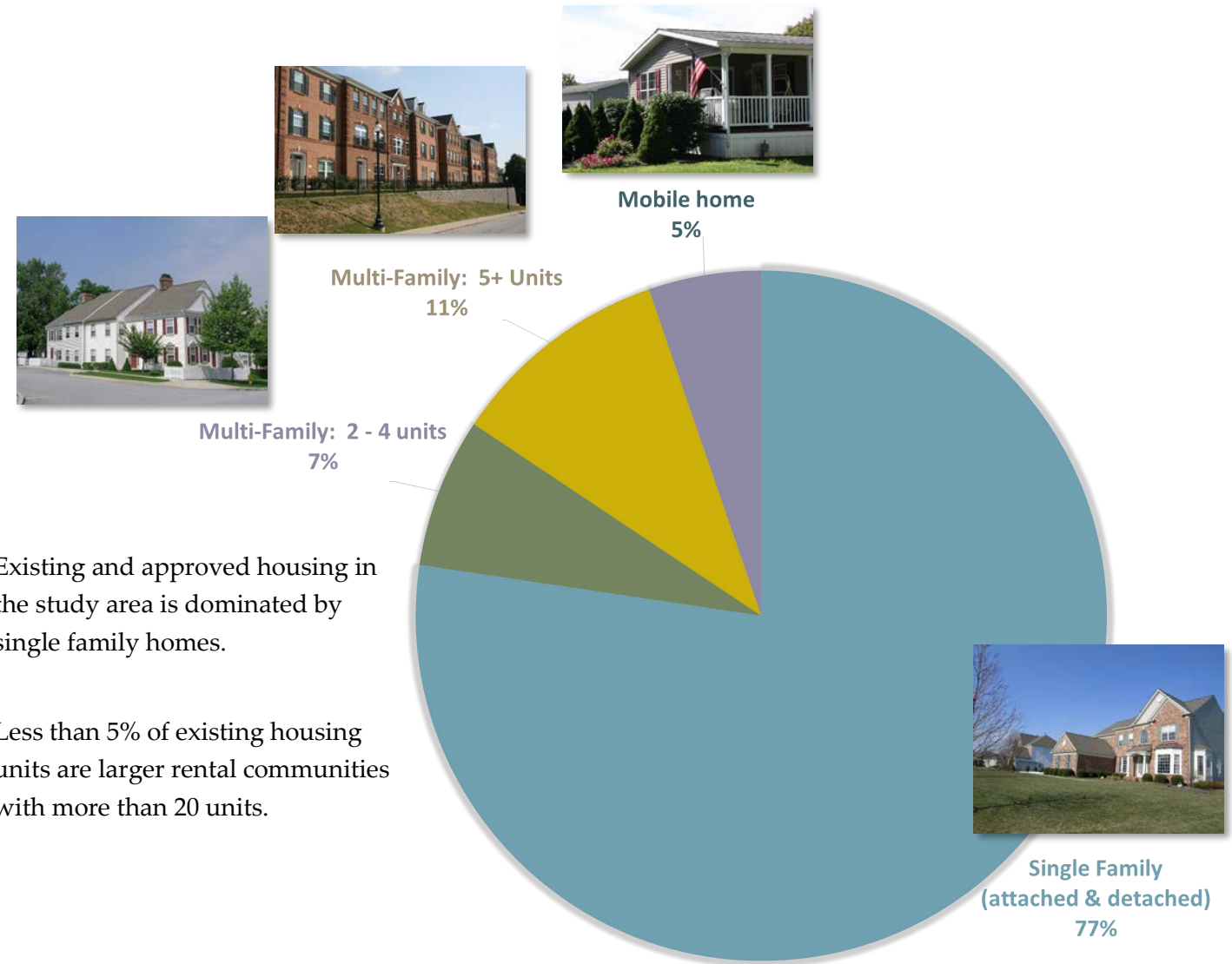
Over half of these residents travel east to work using US 30, US 202, and the Amtrak/SEPTA regional rail to employment centers in Great Valley, King of Prussia, and Philadelphia.

Workers are commuting to the study area for jobs in:

- Health care
- Manufacturing
- Retail

Residents are commuting outside of the study area for jobs in:

- Information
- Finance
- Scientific and technical services
- Management
- Educational services



Source: ACS 5-Year Estimates, 2013

Existing and approved housing in the study area is dominated by single family homes.

Less than 5% of existing housing units are larger rental communities with more than 20 units.

The mismatch and imbalance between jobs and housing in the study area impacts traffic congestion, commute times, and housing affordability.

These issues will likely intensify over the next 30 years with 15,000 more people forecasted to live in the study area.

Greater diversity and choices in both jobs and housing will enable people to live and work in the study area.