

Introduction

This chapter focuses on key strategies and priority improvement projects to implement the vision of a cohesive, complementary and connected corridor along Business 30, or Lincoln Highway, within the study area. The vision for the Business 30 Corridor presented in Chapter 3 identifies twelve segments, each with a unique character to provide options for living, working, and shopping along the corridor in urban, suburban, and rural contexts. Synopses for each segment presented in this chapter include:

- Summary of existing conditions, focusing on land use and transportation issues
- Summary of existing and recommended land use and zoning, consistent with the vision for the segment
- Overview of existing and future roadway cross section, consistent with the vision for the segment
- Key strategies and action items to implement the corridor vision

The land use and transportation recommendations were developed based on existing conditions, the corridor vision, and stakeholder and community input.

In addition, seven locations along the Business 30 Corridor were identified and selected as priority roadway segments or intersections for improvement to implement the corridor vision. Priority projects are presented as part of the segment synopses, with the exception of the US 30 and PA 10 Intersection and Airport Road Corridor, which are presented in Chapter 4 as part of the US 30 Bypass Interchange Area Plans. Overviews of each priority project presented in this chapter include:

- Summary of existing conditions
- Summary of key elements of the conceptual plan
- Implementation plan with recommended action items, suggested timeframes, partners, and potential funding sources
- Cost estimate based on the conceptual plan
- Conceptual plan of improvements

Land Use and Zoning

A summary of key existing land uses and current zoning districts are provided for each section. When the existing zoning, SALDO, and other municipal policies are not consistent with the corridor vision, potential policy changes are identified. The general zoning and ordinance recommendations are intended to be a guide for municipalities for future ordinance updates. Specific ordinance language must be developed in order to fully consider and institute any land use policy changes.

Roadway Cross Sections: Existing and Future

Generalized roadway cross sections were developed based on existing conditions within each segment. Utilizing PennDOT Design Guidelines and the vision for the segment, future roadway cross sections were also developed. The future cross sections are intended to convey the desired facilities to support multimodal transportation along the Business 30 Corridor. The cross section expresses a vision that can be implemented over time through routine maintenance, capital improvement projects, or as part of adjacent private development projects. The future cross sections can be refined as projects advance to the design phase.

Priority Projects

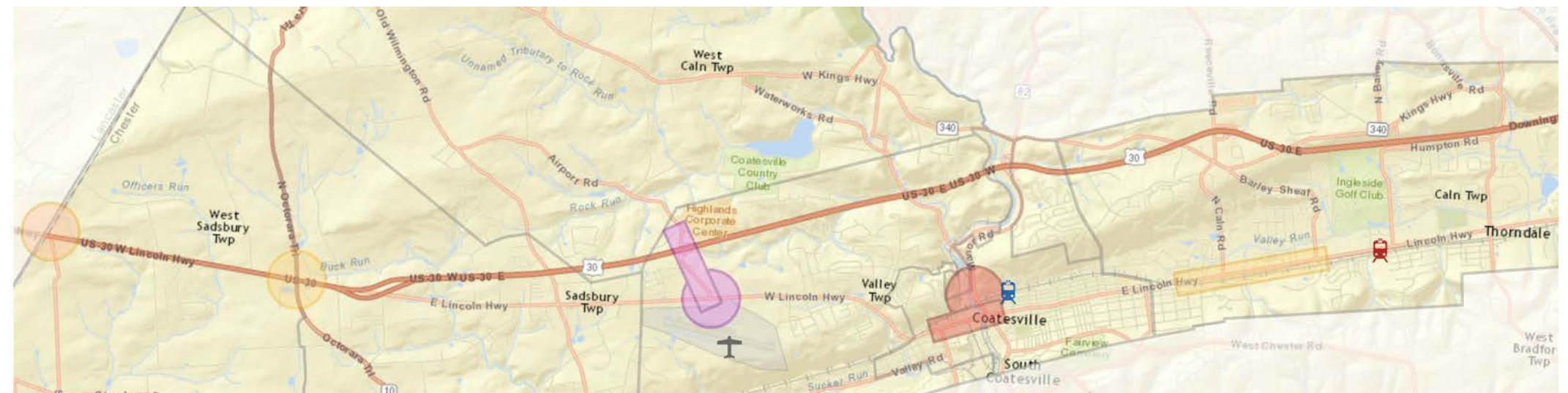
Seven priority projects were identified along the Business 30 Corridor. The locations were selected based on existing conditions, corridor vision, previous plans/studies, planned improvements, nearby land development activity, and input from the SAC. For each priority project, a conceptual plan was developed that depicts transportation improvements to implement the corridor vision. The conceptual plans were revised based on input from the SAC, PennDOT, and the public. Cost estimates were developed based on the conceptual plans. In some cases, a priority phase of the project was identified due to the broad scope of the broader priority project. A detailed implementation plan is provided for each priority project, including recommended action items, suggested timeframes, partners, and potential funding sources.

Implementing the Corridor Vision

For each segment, key strategies were identified to implement the land use and transportation elements of the corridor vision. Corresponding recommended action items and implementation partners were identified for most strategies. The recommended action items are based on the land use and zoning recommendations, as well as the future roadway cross sections.

In addition to the key strategies and action items identified specifically for each segment, the following strategies are broadly applicable for the entire Business 30 corridor:

- **Improved traffic signal coordination through regular maintenance, re-timing, and traffic signal equipment and communication upgrades**
- **Bus stop enhancements, including pedestrian facility connections and amenities, such as shelters**



US 30 & Swan Road /
County Line Road
West Sadsbury

US 30 & PA 10
Sadsbury & West Sadsbury
*See Chapter 4

Airport Road Corridor
Valley & West Caln
*See Chapter 4

Business 30 & Airport Road
Valley
*See Chapter 4

PA 82 & Wagontown Road
Coatesville & Valley

Business 30 between
1st Avenue & Strode Avenue
Coatesville

Business 30 between
Barley Sheaf Road & Veterans Drive
Caln

Cost Estimates

An engineer’s conceptual opinion of cost was developed for six of the transportation priority projects identified along the Business 30 corridor. The cost estimates are based on the conceptual plans presented in this Chapter, which were developed using aerial photography, available GIS data, and field reconnaissance. Below are several notes and assumptions regarding the engineer’s conceptual opinion of cost presented in this Chapter and Appendix B.

- Cost estimates are based on the Conceptual Plans, which were developed using aerial photography, available GIS data, and field reconnaissance.
- Construction: Based on quantities derived from the Conceptual Plans and unit prices from recently bid local projects with PennDOT oversight.
- Engineering, Permitting, & Inspection: Depend on requirements associated with specific funding sources. Estimates are modest and could be higher if federal funds are used, or lower if local funds are used.
 - Engineering & Permitting: 25% of Total Construction Cost
 - Inspection: 12% – 15% of Total Construction Cost
- Right-of-Way: Includes rough estimates for right-of-way to be acquired. Does not include the cost of legal fees associated with right-of-way acquisition process.
- Utilities: Includes rough estimate for relocation of existing surface utilities. Does not include the cost of underground utility relocations.
- Contingency: 10% of Infrastructure Cost, per PennDOT Publication 352
- Inflation: Not included and all costs reflect 2016 dollars.

PennDOT Design Guidelines

The development of future roadway cross sections and priority project conceptual plans were based on current design standards and guidelines, including the following key publications:

- *Design Manual Part 2 (DM-2): Highway Design*, Publication 13M, PennDOT, 2015
- *Smart Transportation Guidebook*, PennDOT and NJDOT, 2008
- *A Policy on Geometric Design of Highways and Streets, 6th Edition*, American Association of State Highway and Transportation Officials (AASHTO), 2011
- *Guide for the Development of Bicycle Facilities, 4th Edition*, American Association of State Highway Officials (AASHTO), 2012
- *Guide for the Planning, Design, and Operation of Pedestrian Facilities*, American Association of State Highway Officials (AASHTO), 2004
- *Manual on Uniform Traffic Control Devices*, Federal Highway Administration, 2009

Appropriate design criteria were selected based on the road typology of Regional Arterial and the land use context identified in the corridor vision.

**TABLE 1.3 (ENGLISH)
MATRIX OF DESIGN VALUES – REGIONAL ARTERIAL**

Regional Arterial	Rural	Suburban Neighborhood	Suburban Corridor	Suburban Center	Town/Village Neighborhood	Town/Village Center	Urban Core
Lane Width ¹	11' to 12'	11' to 12'	11' to 12'	11' to 12'	10' to 12'	10' to 12'	10' to 12'
Shoulder Width ^{2, 3}	8' to 10'	8' to 10'	8' to 12'	4' to 6' (if No Parking or Bike Lane)	4' to 6' (if No Parking or Bike Lane)	4' to 6' (if No Parking or Bike Lane)	4' to 6' (if No Parking or Bike Lane)
Parking Lane	NA	NA	NA	8' Parallel	8' Parallel	8' Parallel	8' Parallel
Bike Lane ⁴	NA	5' to 6' (if No Shoulder)	6' (if No Shoulder)	5' to 6'	5' to 6'	5' to 6'	5' to 6'
Median (if needed)	4' to 6'	16' to 18' for Left Turn; 6' to 8' for Pedestrians Only	16' to 18' for Left Turn; 6' to 8' for Pedestrians Only	16' to 18' for Left Turn; 6' to 8' for Pedestrians Only	16' to 18' for Left Turn; 6' to 8' for Pedestrians Only	16' to 18' for Left Turn; 6' to 8' for Pedestrians Only	16' to 18' for Left Turn; 6' to 8' for Pedestrians Only
Curb Return ⁵	30' to 50'	25' to 35'	30' to 50'	25' to 50'	15' to 40'	15' to 40'	15' to 40'
Travel Lanes	2 to 6	2 to 6	4 to 6	4 to 6	2 to 4	2 to 4	2 to 6
Cross Slopes (Minimum) ^{6, 7}	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Cross Slopes (Maximum) ⁸	8.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Bridge Widths ^{9, 10, 16, 17}	Lane Widths Plus Shoulders Each Side	Lane Widths Plus Shoulders Each Side	Lane Widths Plus Shoulders Each Side	Lane Widths Plus Shoulders Each Side	Lane Widths Plus Shoulders Each Side	Lane Widths Plus Shoulders Each Side	Lane Widths Plus Shoulders Each Side
Vertical Grades (Minimum) ¹¹	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Vertical Clearance (Minimum)	16'-6", See Chapter 2	16'-6", See Chapter 2	16'-6", See Chapter 2	16'-6", See Chapter 2	16'-6", See Chapter 2	16'-6", See Chapter 2	16'-6", See Chapter 2
Clear Sidewalk Width	NA	5'	5' to 6'	5' to 6'	6' to 8'	6' to 10'	6' to 12'
Buffer ¹³	NA	6'+	6' to 10'	4' to 6'	4' to 6'	4' to 6'	4' to 6'
Shy Distance	NA	NA	NA	0' to 2'	0' to 2'	2'	2'
Total Sidewalk Width	NA	5'	5' to 6'	9' to 14'	10' to 16'	12' to 18'	12' to 20'
Clear Zone Widths ¹⁴	See Chapter 12	See Chapter 12	See Chapter 12	See Chapter 12	See Chapter 12	See Chapter 12	See Chapter 12
Right-of-Way Widths ¹⁵	Varies	Varies	Varies	Varies	Varies	Varies	Varies
Desired Operating Speed (Design Speed)	45-55 mph	35-40 mph	35-55 mph	30-35 mph	30-35 mph	30-35 mph	30-35 mph

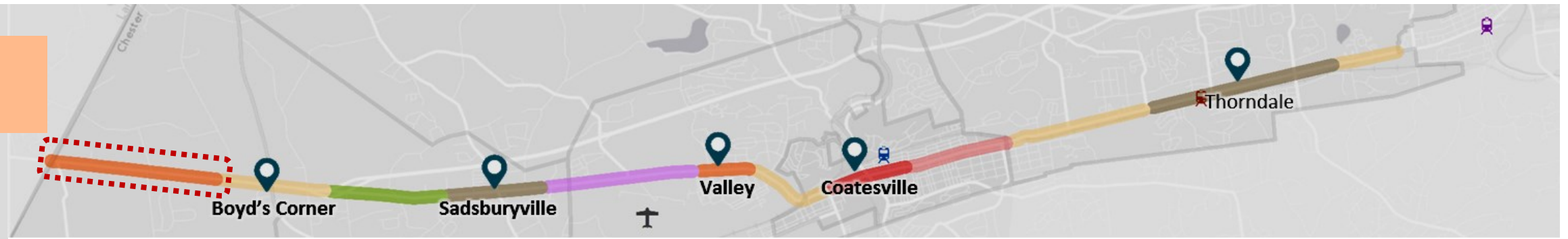
Excerpt from *Design Manual Part 2 (DM-2): Highway Design*, Publication 13M, PennDOT, 2015, Table 1.4 for Regional Arterial

Current Potential Funding Sources

For many of the transportation priority projects, a key action item is to identify and pursue funding for design, right-of-way acquisition, or construction. There are numerous public funding sources at the federal, state, regional, county, and municipal levels that could be appropriate and applicable for various projects. The table on this page presents a summary of current competitive grant programs available in the Greater Philadelphia region for the types of projects identified in this plan. Each program has different eligible projects and uses of funds, matching requirements, and timelines for implementation. The implementation plan lists potential funding sources for specific priority projects that should be considered and evaluated further, based on specific grant program guidelines and requirements. Additionally, there may be opportunities for sponsor municipalities and other project partners to coordinate efforts and jointly pursue funding for projects that cross municipal borders and provide regional benefits.

Program -Administering Agency	Relevant Types of Projects	Funding Details
Multimodal Transportation Fund (MTF) <ul style="list-style-type: none"> - Commonwealth Financing Authority (CFA) with DCED - PennDOT 	<ul style="list-style-type: none"> - Bicycle & pedestrian facilities, including streetscapes - Connectivity improvements - Transit improvements - Noise barriers 	<ul style="list-style-type: none"> - Two annual competitive grant programs - State funds (Act 89) - 30% match - \$100,000 minimum - \$3 million maximum
Automated Red Light Enforcement (ARLE) <ul style="list-style-type: none"> - PennDOT 	<ul style="list-style-type: none"> - Traffic signal upgrades - Safety improvements 	<ul style="list-style-type: none"> - Annual competitive grant program - Funded by revenue from automated red light enforcement - No match required
Green Light – GO <ul style="list-style-type: none"> - PennDOT 	<ul style="list-style-type: none"> - Existing traffic signal operations and maintenance improvements 	<ul style="list-style-type: none"> - Annual competitive grant program - State funds (Act 89) - 50% match
Congestion Mitigation and Air Quality (CMAQ) <ul style="list-style-type: none"> - DVRPC 	<ul style="list-style-type: none"> - Bicycle & pedestrian facilities - Traffic flow & congestion reduction - Transit improvements 	<ul style="list-style-type: none"> - Federal funds (FAST Act) - Match requires funding all pre-construction activities
Transportation Alternatives Program (TAP) <ul style="list-style-type: none"> - PennDOT - DVRPC 	<ul style="list-style-type: none"> - Bicycle & pedestrian facilities - Stormwater management 	<ul style="list-style-type: none"> - Federal funds (FAST Act) - Match requires funding all pre-construction activities - \$50,000 minimum - \$1 million maximum
Community Conservation Partnerships Program (C2P2) <ul style="list-style-type: none"> - DCNR 	<ul style="list-style-type: none"> - Greenways & trails - Parks & recreation areas 	<ul style="list-style-type: none"> - Annual competitive grant program - Various federal and state funds - 20% - 50% match
Greenways, Trails and Recreation Program (GTRP) <ul style="list-style-type: none"> - Commonwealth Financing Authority (CFA) with DCED & DCNR 	<ul style="list-style-type: none"> - Greenways & trails - Parks & recreation areas 	<ul style="list-style-type: none"> - Annual competitive grant program - State funds (Act 13) - 15% match - \$250,000 maximum
Community Development Block Grant (CDBG) <ul style="list-style-type: none"> - Chester County Department of Community Development 	<ul style="list-style-type: none"> - Install or construct public facilities, such as streets, street lights, curbs, sidewalks, water mains, sewer mains and storm water mains 	<ul style="list-style-type: none"> - Federal funds - Municipalities with eligible areas include: Coatesville, Caln, Valley
Community Revitalization Program (CRP) <ul style="list-style-type: none"> - Chester County Department of Community Development 	<ul style="list-style-type: none"> - Streetscapes and sewer, water, and stormwater infrastructure 	<ul style="list-style-type: none"> - County funds - Coatesville is the only eligible municipality - 25% match - 1,000,000 maximum
Transportation and Community Development Initiative (TCDI) <ul style="list-style-type: none"> - DVRPC 	<ul style="list-style-type: none"> - Land use and transportation plans 	<ul style="list-style-type: none"> - Federal funds - Regional competitive program - 20% match - \$25,000 minimum - \$100,000 - \$175,000 maximum
Vision Partnership Program (VPP) <ul style="list-style-type: none"> - Chester County Planning Commission 	<ul style="list-style-type: none"> - Land use and transportation plans 	<ul style="list-style-type: none"> - County funds - Biannual county-wide competitive program - 30% match - \$30,000 - \$50,000+ maximum

WEST SADBURY Neighborhood Services



Municipalities

West Sadsbury Township

Limits

Chester County/Lancaster County border to
Moscow Road

Length

1.7 miles

Existing Zoning

CS: Community Services
O-C: Office-Commercial

Roadway Cross Section

One travel lane in each direction with a center left-turn lane

AADT

19,500

Speed Limit

55 MPH

Existing Conditions

- Mix of land uses with several key developable properties fronting Lincoln Highway (US 30)
- Consistent roadway cross section with a continuous center turn lane and wider shoulders
- High vehicular travel speeds
- High percentage of trucks or heavy vehicles
- Wide, uncontrolled, and closely spaced commercial driveways
- Off-set intersections
- Safety issues with access to and crossing Lincoln Highway (US 30) from side streets due to high travel speeds and limited sight distance
- Safety for non-motorized vehicles, including buggies
- Lack of bicycle and pedestrian facilities










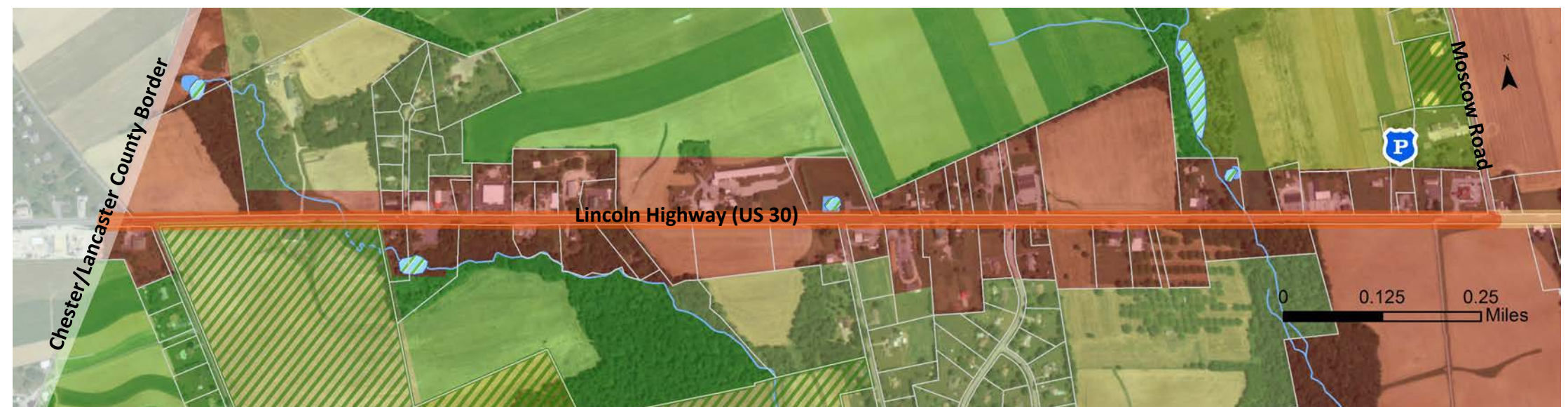
Land Use and Zoning

Major existing land uses fronting this segment of Lincoln Highway include individual retail establishments, small strip malls, professional offices with neighborhood services, and farmland. Beyond the frontage of Lincoln Highway, the dominant land uses are agricultural (including several properties with conservation easements) and residential. West Sadsbury Township's existing Community Service zoning district is intended to support small scale uses, which can include retail and professional office. This is consistent with the vision for this segment of the corridor.

Legend

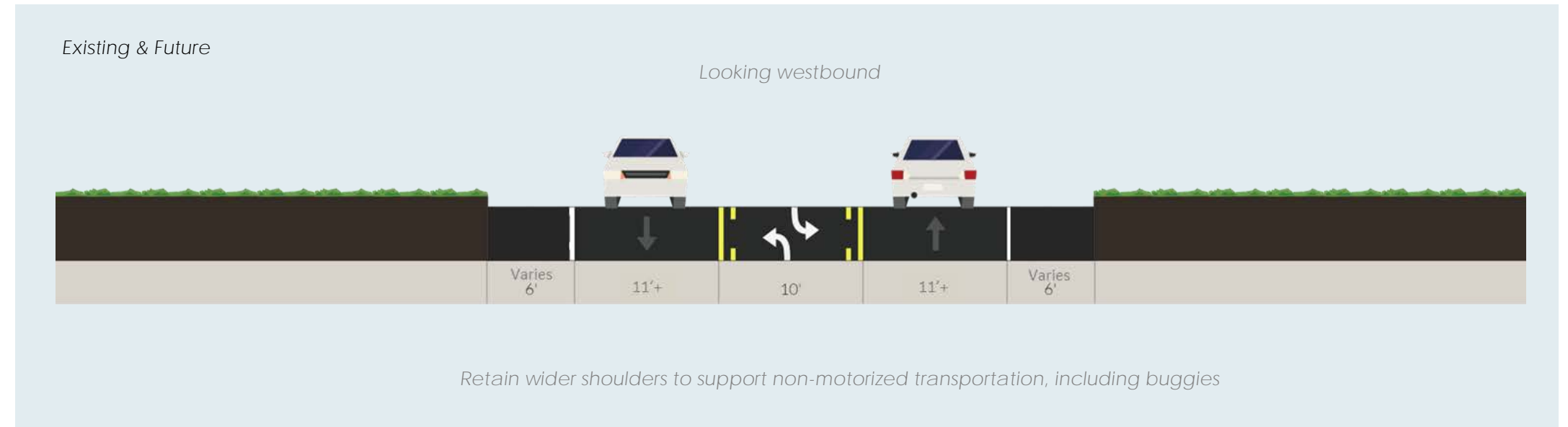
Generalized Zoning

 Residential	 Agricultural & Open Space
 Commercial	 Protected Open Space
 Institutional	 Wetlands
 Industrial	



Roadway Cross Section

The existing cross section includes one travel lane in each direction with a consistent center left-turn lane and varying width shoulders. Although there are no recommended changes to the cross section, it is important that wider shoulders are maintained along this segment of Business 30 to support non-motorized transportation, including buggies.



Implementing the Corridor Vision

Key Strategies	Recommended Action Items	Partners
Access management	<ul style="list-style-type: none"> – Implement recommendations in <i>Managing Access along US 30 in Western Chester County</i> (DVRPC, 2010), including requiring new developments to connect to existing developments or enable future connections to be made 	<ul style="list-style-type: none"> – West Sadsbury Township
Plan for a well-connected roadway network	<ul style="list-style-type: none"> – Adopt an Official Map with new roadway connections 	<ul style="list-style-type: none"> – West Sadsbury Township
Maintain wide shoulders for non-motorized travel	<ul style="list-style-type: none"> – Coordinate with PennDOT on future resurfacing projects for Lincoln Highway 	<ul style="list-style-type: none"> – PennDOT – West Sadsbury Township
Support speed limit reduction	<ul style="list-style-type: none"> – Coordinate with PennDOT to reduce the speed limit, which may require the completion of a Speed Restrictions Engineering and Traffic Study 	<ul style="list-style-type: none"> – West Sadsbury Township – PennDOT
Enhance safety at key intersections through signalization, roadway realignment, and other treatments	<ul style="list-style-type: none"> – See Priority Project for Business 30 and Swan Road/County Line Road Intersection 	
Support local businesses and community services		<ul style="list-style-type: none"> – Western Chester County Chamber of Commerce – West Sadsbury Township

Municipalities

West Sadsbury Township

Location

Lincoln Highway (US 30) and Swan Road/
County Line Road Intersection

Summary Description

Realignment of County Line Road to Swan Road at Lincoln Highway (US 30) to improve safety and operations

Existing Conditions

- Two unsignalized offset intersections.
- Lincoln Highway (US 30) posted speed limit of 55 mph.
- Realignment was identified in *Managing Access along US 30 in Western Chester County* (DVRPC, 2010) to address access management and future roadway connectivity.



Key Elements of the Conceptual Plan

- Relocate a segment of County Line Road at US 30 to align with the existing Swan Road. The relocation results in abandonment of the existing segment of County Line Road.
- Provide and maintain access to adjacent properties.
- Potential signalization of the newly realigned intersection, dependent upon a signal warrant evaluation.

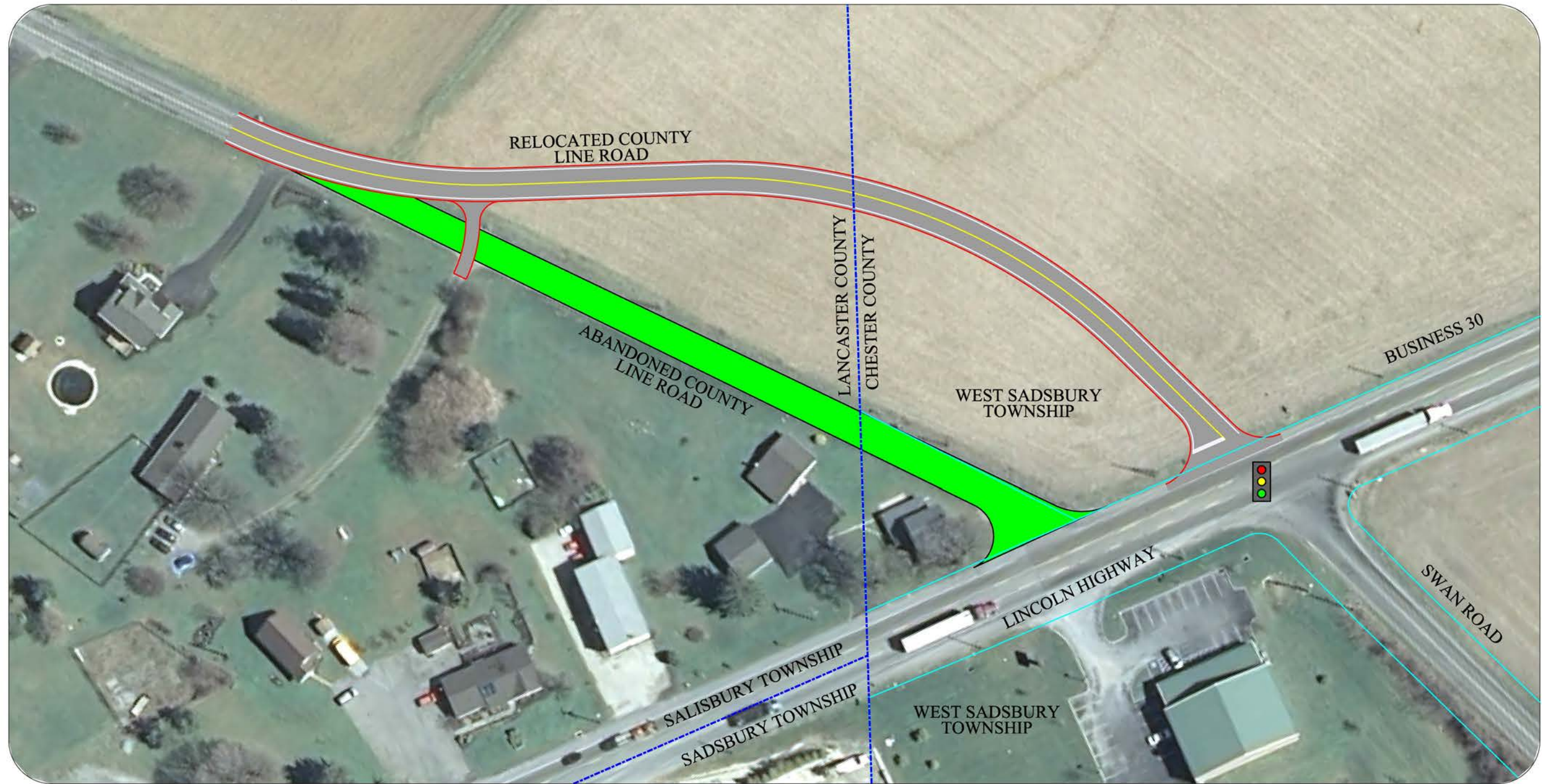
Cost Estimate

Preliminary Engineering	\$ 86,800
Final Design	\$130,200
Right-of-Way	\$ 256,000
Utilities	\$ 30,000
Construction + Inspection	\$ 998,000
TOTAL	\$ 1,501,000







Cost estimate includes signalization of the intersection. If a traffic signal is not warranted, the total project cost is reduced to \$1,047,000.

Recommended Action Items	Suggested Timeframe	Partners	Potential Funding Sources
Coordinate with Salisbury Township (Lancaster County) and Sadsbury Township (Lancaster County) regarding the Township's support for advancing the project	Near Term (1 – 3 years)	- West Sadsbury Township	
Complete a comprehensive traffic signal warrant evaluation	Near Term (1 – 3 years)	- West Sadsbury Township - PennDOT	- Municipal funds
Adopt an Official Map showing the future roadway realignment	Near Term (1 – 3 years)	- West Sadsbury Township	- Municipal funds - Chester County VPP
Pursue grant funding for design, right-of-way, and construction	Near Term (1 – 3 years)	- West Sadsbury Township - State Legislators	- Municipal funds (for required match) - PennDOT – Multimodal Transportation Fund - CFA – Multimodal Transportation Fund

BUSINESS 30 (LINCOLN HIGHWAY) & SWAN ROAD / COUNTY LINE ROAD INTERSECTION REALIGNMENT

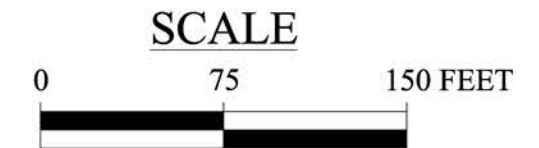
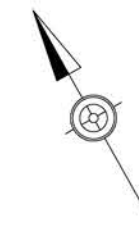


LEGEND

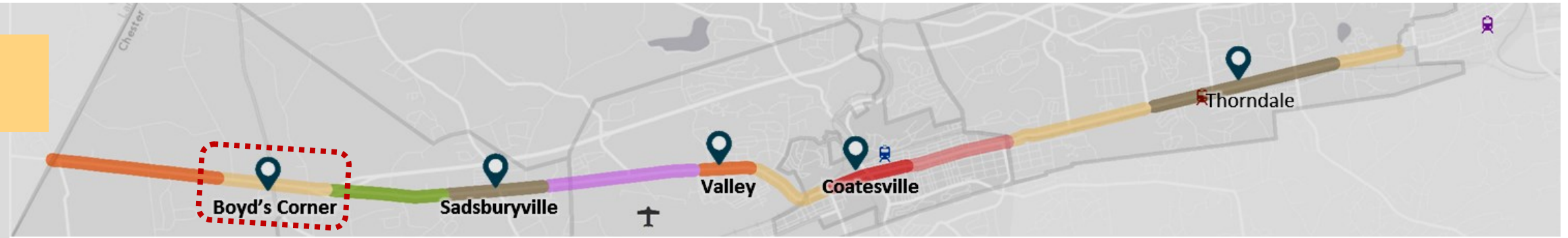
	ABANDONED EXISTING ROAD		PROPOSED ROAD WITH PAVEMENT MARKINGS
	MUNICIPAL / COUNTY BORDER		PROPOSED EDGE OF ROAD
	EXISTING PROPERTY LINE		
	POTENTIAL TRAFFIC SIGNAL		

CONCEPT PLAN KEY ELEMENTS:

- Relocate existing County Line Road
- Align road with existing Swan Road
- Potential signalization of relocated County Line Road and Swan Road. (dependent upon signal warrant evaluation)



BOYD'S CORNER Suburban Retail Center



Municipalities

Sadsbury Township
West Sadsbury Township

Limits

Moscow Road to Compass Road/US 30 Bypass Interchange

Length

0.7 miles

Existing Zoning

GC: General Commercial (West Sadsbury)
C-2: General Commercial (Sadsbury)

Roadway Cross Section

Two lanes in each direction with turn lanes at key intersections

AADT

9,700 - 17,600

Speed Limit

55 MPH

Legend

Generalized Zoning

 Residential	 Agricultural & Open Space
 Commercial	 Protected Open Space
 Institutional	 Wetlands
 Industrial	

Existing Conditions

- Transitional area to/from the US 30 Bypass expressway
- Land use dominated by existing commercial development and farmlands with significant development potential
- Crossroads of Lincoln Highway (US 30) and Octorara Trail (PA 10) has high volumes of turning movements
- Numerous closely spaced commercial driveways
- Limited roadway network and connections
- High percentage of trucks or heavy vehicles
- Bus service provided by ChescoBus—Coatesville Link
- Safety for non-motorized vehicles, including buggies
- Lack of bicycle and pedestrian facilities



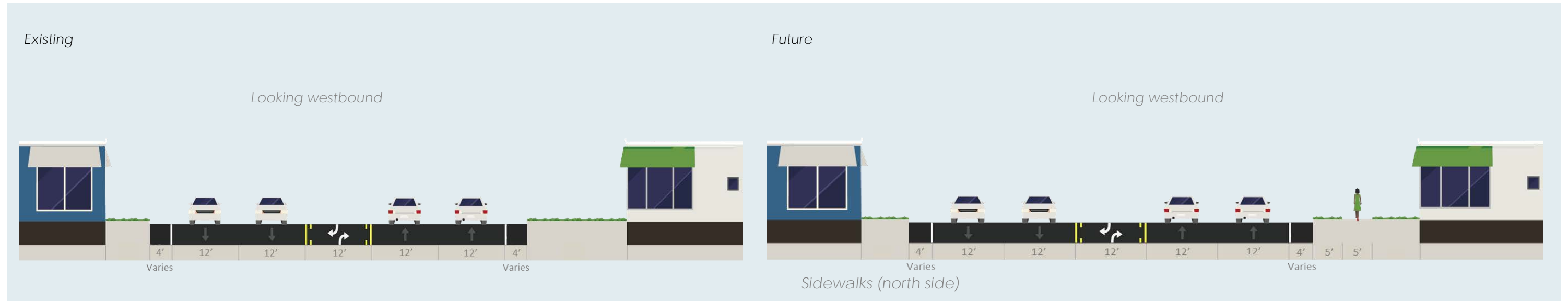
Land Use and Zoning

Boyd's Corner at the intersection of Lincoln Highway and Octorara Trail is a regional commercial center with a large big-box shopping center on the southwest corner, several individual retail establishments fronting Lincoln Highway, and vacant properties that have plans or potential for significant development. In order to support the vision for a Suburban Retail Center, key recommendations include allowing mixed use development with multi-family residential based on market conditions. See Chapter 4 for more detailed land use and zoning recommendations for this area.



Roadway Cross Section

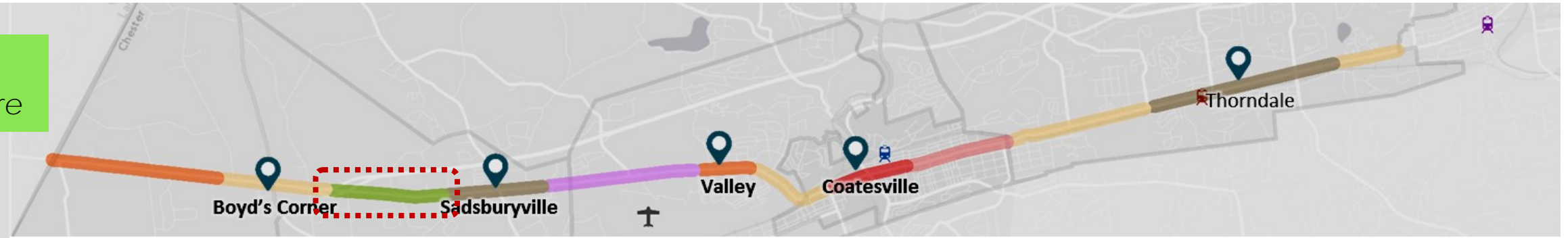
The existing cross section includes two travel lanes in each direction with a consistent center or dedicated intersection left-turn lane and varying width shoulders. By providing the loop road connections in this area at the US Route 30/PA Route 10 intersection, the travel lanes are recommended to remain unchanged. In order to create a pedestrian friendly environment with other facilities in the area, it is recommended to provide consistent sidewalk along the north side of US Route 30 in this section. See Chapter 4 for more detailed transportation recommendations for this area.



Implementing the Corridor Vision

Key Strategies	Recommended Action Items	Partners
Access management	<ul style="list-style-type: none"> – Implement recommendations in <i>Managing Access along US 30 in Western Chester County</i> (DVRPC, 2010) 	<ul style="list-style-type: none"> – West Sadsbury Township – Sadsbury Township
Plan for a well-connected roadway network	<ul style="list-style-type: none"> – Implement recommendations in <i>Managing Access along US 30 in Western Chester County</i> (DVRPC, 2010) – Adopt an Official Map for new roadway connections – See Priority Project for US 30 and PA 10 in Chapter 4 	<ul style="list-style-type: none"> – West Sadsbury Township – Sadsbury Township
Accommodate non-motorized travel, including bicyclists, pedestrians, buggies	<ul style="list-style-type: none"> – See Priority Project for US 30 and PA 10 in Chapter 4 	
Plan for and accommodate public transit, including a park-n-ride lot	<ul style="list-style-type: none"> – Support implementation of park-n-ride lot as part of proposed Sadsbury Commons Development – See Priority Project for US 30 and PA 10 in Chapter 4 	<ul style="list-style-type: none"> – TMACC – West Sadsbury Township – Sadsbury Township
Support regional serving commercial and office developments	<ul style="list-style-type: none"> – Implement recommendations in <i>Western Chester County: Future Focus Study</i> (2011) – Consider and evaluate options for incorporation of Transferable Development Rights (TDR) into zoning ordinance – See Development Recommendations for US 30 and PA 10 Interchange Area in Chapter 4 	<ul style="list-style-type: none"> – West Sadsbury Township – Sadsbury Township – Western Chester County Chamber of Commerce – Chester County Economic Development Council

SADSBURY Open Space & Agriculture



Municipalities

Sadsbury Township

Limits

Compass Road/US 30 Bypass Interchange to Whitetail Lane

Length

1.4 miles

Existing Zoning

R-1: Low-density Residential
R-R: Rural Residential
C-1: Limited Commercial

Roadway Cross Section

One travel lane in each direction with a striped center median and shoulders

AADT

9,400

Speed Limit

45 - 55 MPH

Legend

Generalized Zoning

Residential	Agricultural & Open Space
Commercial	Protected Open Space
Institutional	Wetlands
Industrial	

Existing Conditions

- Land use dominated by protected open space and agricultural uses
- High vehicular travel speeds
- Striped center median that is not useful
- Bus service provided by ChescoBus—Coatesville Link
- Lack of bicycle facilities
- Limited sidewalks and pedestrian facilities, particularly near Sadsburyville



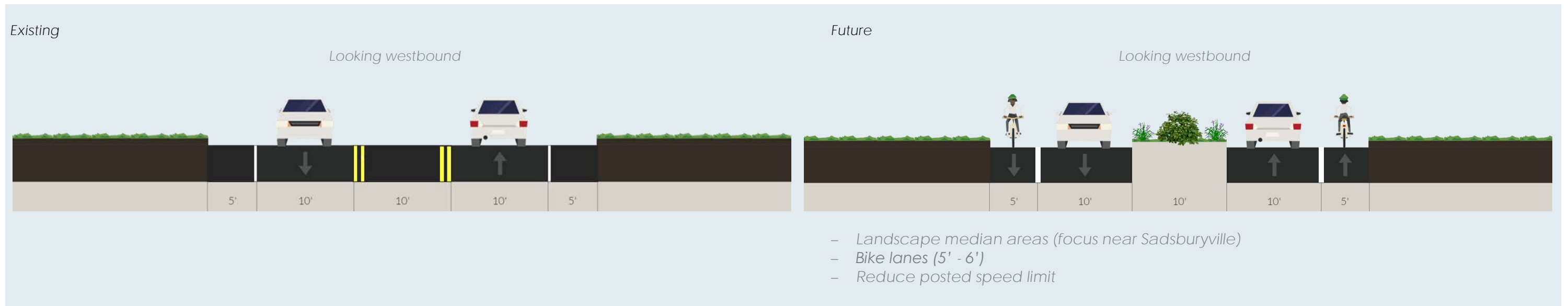
Land Use and Zoning

Key existing land uses along this segment of Lincoln Highway include single family residential, farmland, and protected open space. There is development potential, but it is limited due to the Floodplain Overlay south of Lincoln Highway. The C-1 zoning district for several properties between the US 30 Bypass and Lincoln Highway is not compatible with the vision of preserving open space and continued agricultural use within this segment. Future land use plans and changes to the zoning ordinance should be coordinated with PennDOT's future plans for reconstruction of the US 30 Bypass, particularly the western terminus of the Bypass.



Roadway Cross Section

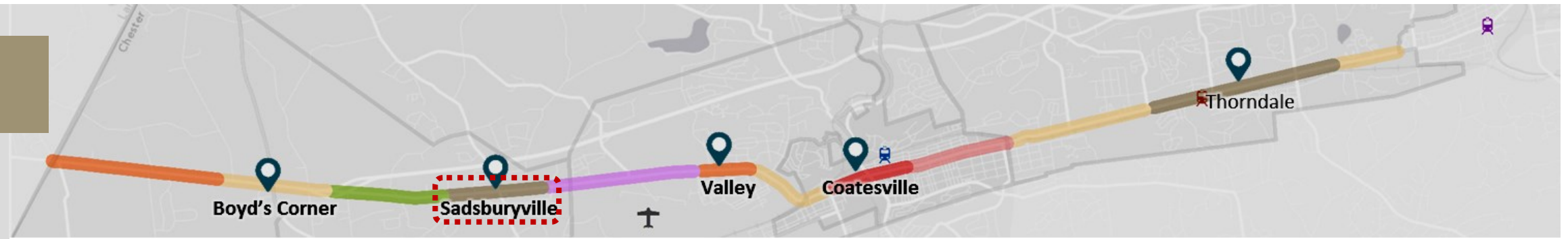
The existing cross section includes one travel lane in each direction with a striped center asphalt median. Since the center asphalt median is not used for vehicular traffic movements, it is recommended to provide landscape median areas in key gateway locations, such as in the vicinity of Sadsburyville. Additionally, consistent shoulders exist on both sides today, which are recommended to be utilized for bike lanes.



Implementing the Corridor Vision

Key Strategies	Recommended Action Items	Partners
Access management	<ul style="list-style-type: none"> - Implement recommendations in <i>Managing Access along US 30 in Western Chester County</i> (DVRPC, 2010) 	<ul style="list-style-type: none"> - Sadsbury Township
Plan for a well-connected roadway network	<ul style="list-style-type: none"> - Implement recommendations in <i>Managing Access along US 30 in Western Chester County</i> (DVRPC, 2010) - Adopt an Official Map for new roadway connections 	<ul style="list-style-type: none"> - Sadsbury Township
Maintain wide shoulders or provide bicycle lanes for non-motorized transportation (bicyclists, pedestrians, buggies)	<ul style="list-style-type: none"> - Inventory and evaluate current shoulder widths to identify constraints for implementing bike lanes - Develop a conceptual plan for medians and bike lanes and pursue funding for design and construction - Coordinate with PennDOT to reduce the speed limit, which may require the completion of a Speed Restrictions Engineering and Traffic Study 	<ul style="list-style-type: none"> - Sadsbury Township - PennDOT
Gateway treatments and traffic calming measures	<ul style="list-style-type: none"> - Develop a conceptual plan for medians and bike lanes and pursue funding for design and construction 	<ul style="list-style-type: none"> - Sadsbury Township - PennDOT
Preserve open space and agricultural uses	<ul style="list-style-type: none"> - Encourage and support agricultural conservation easements - Consider and evaluate options for incorporation of Transferable Development Rights (TDR) into zoning ordinance 	<ul style="list-style-type: none"> - Sadsbury Township

SADSBURYVILLE Historic Village



Municipalities

Sadsbury Township

Limits

Whitetail Lane to Independence Way

Length

1 mile

Existing Zoning

SVD: Sadsburyville Village

Roadway Cross Section

One lane in each direction with a center left-turn lane

AADT





8,500- 9,400

Speed Limit

35 - 45 MPH

Legend

Generalized Zoning

 Residential	 Agricultural & Open Space
 Commercial	 Protected Open Space
 Institutional	 Wetlands
 Industrial	

Existing Conditions

- Historic village centered at the crossroads of Lincoln Highway (Business 30) and Old Wilmington Road
- Minimal building setbacks, particularly in the heart of the village
- New multi-family residential developments recently built (or to be constructed) on the north and south sides of Lincoln Highway
- Bus service provided by ChescoBus—Coatesville Link
- Existing sidewalks are narrow and discontinuous
- Transportation Enhancements project to be constructed in 2016—2017 and will complete sidewalk connections and provide traffic calming measures



Land Use and Zoning

Sadsburyville is a historic village centered around the crossroads of Lincoln Highway (Business 30) and Old Wilmington Road with a mix of land uses, including small businesses, restaurants, and residential properties. Sadsbury Township's existing SVD—Sadsburyville Village zoning district is intended to maintain the unique historic character of the village with appropriate uses and design standards. The existing zoning is consistent with the vision for this segment of Business 30.



Roadway Cross Section

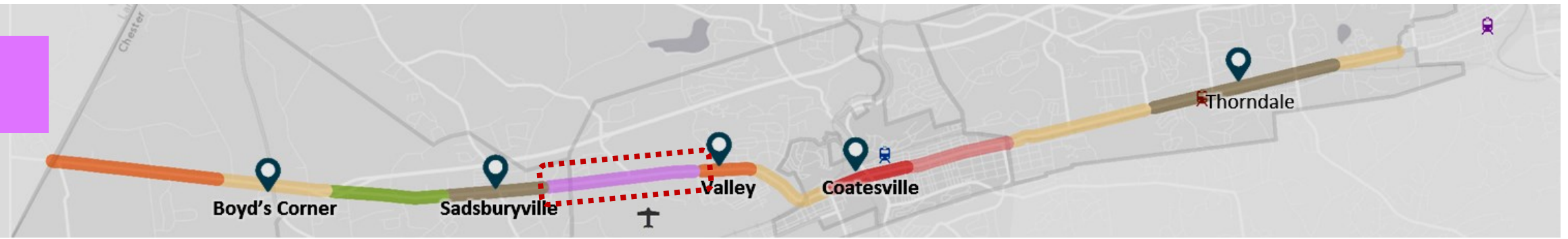
The existing cross section includes one travel lane in each direction with a center left-turn lane and no shoulders. In 2016, construction will begin on Sadsbury Township’s Transportation Enhancements project within the Village of Sadsburyville. As part of the project, sidewalks will be constructed on the north side of Business 30 to reinforce the historic village character, provide pedestrian accommodations, and calm traffic.



Implementing the Corridor Vision

Key Strategies	Recommended Action Items	Partners
Sidewalk and streetscape enhancements	<ul style="list-style-type: none"> – Implement Sadsbury Township’s Transportation Enhancements project 	<ul style="list-style-type: none"> – Sadsbury Township – PennDOT
Gateway treatments and traffic calming measures	<ul style="list-style-type: none"> – Implement Sadsbury Township’s Transportation Enhancements project 	<ul style="list-style-type: none"> – Sadsbury Township
Access management	<ul style="list-style-type: none"> – Implement recommendations in <i>Managing Access along US 30 in Western Chester County</i> (DVRPC, 2010) 	<ul style="list-style-type: none"> – Sadsbury Township
Plan for a well-connected roadway network	<ul style="list-style-type: none"> – Implement recommendations in <i>Managing Access along US 30 in Western Chester County</i> (DVRPC, 2010) 	
Preserve historic buildings		
Encourage appropriate density (2-story buildings) fronting on Business 30		
Support locally owned businesses	<ul style="list-style-type: none"> – Implement recommendations in <i>Western Chester County: Future Focus Study (2011)</i> – Solicit input from local business prior to undertaking transportation and access improvements 	<ul style="list-style-type: none"> – Sadsbury Township – Western Chester County Chamber of Commerce – Chester County Economic Development Council

VALLEY & SADBURY Industrial & Business



Municipalities

Sadsbury Township, Valley Township

Limits

Independence Way to Washington Avenue

Length

1.4 miles

Existing Zoning

I-1: Industrial (Sadsbury)

R-1: Residential (Valley)

RC: Regional Commercial (Valley)

PD: Planned Development (Valley)

NCO: Neighborhood Commercial Office (Valley)

Roadway Cross Section

One travel lane in each direction with a center left-turn lane

AADT

7,900 - 8,500

Speed Limit

45 MPH

Legend

Generalized Zoning

 Residential	 Agricultural & Open Space
 Commercial	 Protected Open Space
 Institutional	 Wetlands
 Industrial	

Existing Conditions

- Key land uses include the Chester County G.O. Carlson Airport and related industrial development
- The Airport Road corridor serves as the gateway and connection from the US 30 Bypass to Valley Township, Sadsburyville, and the airport
- High percentage of trucks or heavy vehicles utilize this segment of Lincoln Highway due to nearby industrial land uses and the partial Airport Road interchange at the US 30 Bypass
- Significant development potential
- Bus service provided by ChescoBus—Coatesville Link
- Lack of bicycle and pedestrian facilities



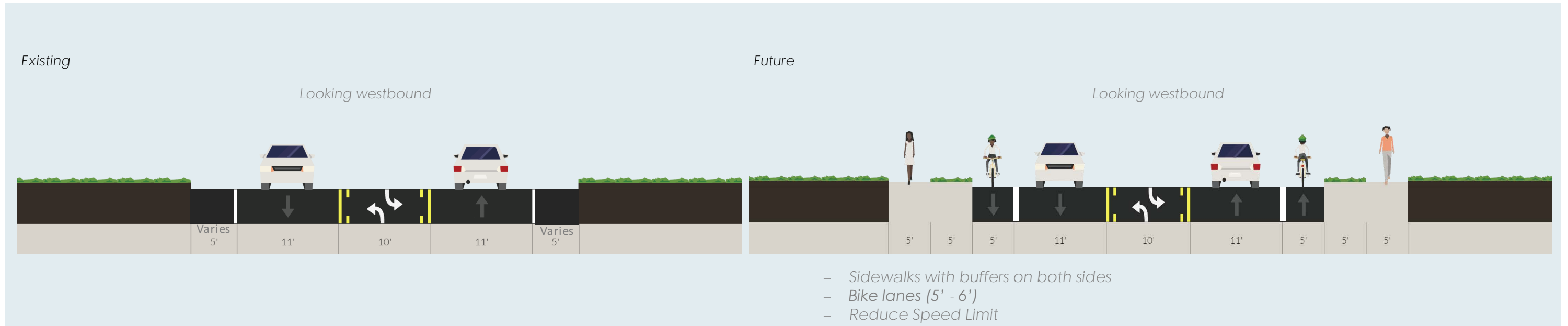
Land Use and Zoning

The Chester County G.O. Carlson Airport is the dominant land use on the south side of Lincoln Highway. To the west of the Airport, there is a cluster of industrial development, with some industries strategically located in close proximity to the airport. On the north side of Lincoln Highway, there is a mix of residential, retail, and developable parcels. It is recommended that development in the Regional Commercial District should be compatible with the Airport and nearby industrial uses.



Roadway Cross Section

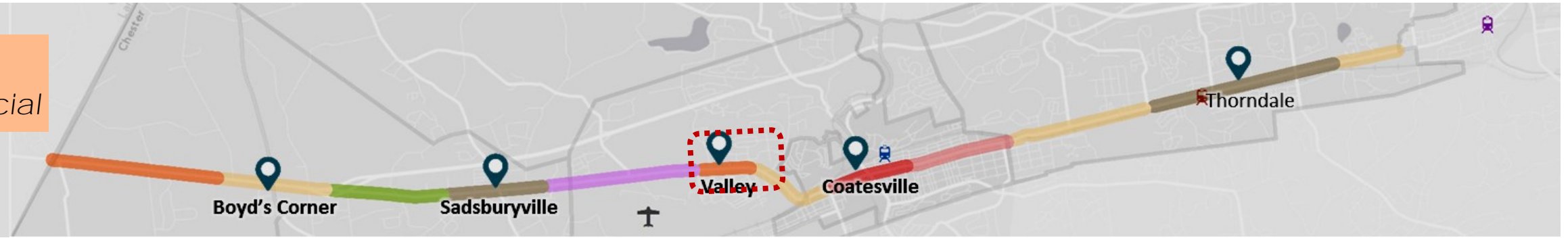
The existing cross section includes one travel lane in each direction with a center left-turn lane and varying shoulders along both sides. Sidewalks are provided in limited locations. In the future, it is recommended to provide continuous and connected sidewalks along both sides of Lincoln Highway (Business 30), which is consistent with Valley Township’s code, and utilize the shoulders for bike lanes.



Implementing the Corridor Vision

Key Strategies	Recommended Action Items	Partners
Access management	<ul style="list-style-type: none"> - Implement recommendations in <i>Managing Access along US 30 in Western Chester County</i> (DVRPC, 2010) - See Priority Project for Airport Road Corridor in Chapter 4 	<ul style="list-style-type: none"> - Valley Township - Sadsbury Township
Plan for a well-connected roadway network	<ul style="list-style-type: none"> - Implement recommendations in <i>Managing Access along US 30 in Western Chester County</i> (DVRPC, 2010) - Adopt an Official Map for new roadway connections - See Priority Project for Airport Road Corridor in Chapter 4 	<ul style="list-style-type: none"> - Valley Township
Plan for improved access at the US 30 Bypass	<ul style="list-style-type: none"> - Continue to advocate and coordinate with PennDOT regarding completion of the Airport Road interchange - See Priority Project for Airport Road Corridor in Chapter 4 	<ul style="list-style-type: none"> - Valley Township
Minimize conflicts between heavy vehicles and non-motorized transportation (bicyclists, pedestrians, buggies)	<ul style="list-style-type: none"> - Coordinate with PennDOT to reduce the speed limit, which may require the completion of a Speed Restrictions Engineering and Traffic Study - See Priority Project for Airport Road Corridor in Chapter 4 	<ul style="list-style-type: none"> - Valley Township - Sadsbury Township
Support development/ redevelopment of vacant or under-utilized lots	<ul style="list-style-type: none"> - Implement recommendations in <i>Western Chester County: Future Focus Study</i> (2011) - See Development Recommendations for Airport Road Interchange Area in Chapter 4 	<ul style="list-style-type: none"> - Valley Township - Western Chester County Chamber of Commerce - Chester County Economic Development Council
Support existing and future industrial and business development	<ul style="list-style-type: none"> - Implement recommendations in <i>Western Chester County: Future Focus Study</i> (2011) 	<ul style="list-style-type: none"> - Valley Township - Western Chester County Chamber of Commerce - Chester County Economic Development Council

VALLEY Neighborhood Commercial



Municipalities

Valley Township

Limits

Washington Avenue to Front Street

Length

0.5 miles

Existing Zoning

NCO: Neighborhood Commercial Office

Roadway Cross Section

One travel lane in each direction with a center left-turn lane and varying width shoulders

AADT

7,900

Speed Limit

35 MPH

Existing Conditions

- Primary land uses include elementary school, municipal complex, single family residential homes, and small scale retail/professional offices
- Numerous and closely spaced commercial and residential driveways
- Limited roadway connections, particularly crossing and connecting across Lincoln Highway (Business 30)
- Bus service provided by ChescoBus—Coatesville Link, but bus stop amenities provided
- Lack of bicycle facilities and limited sidewalk connections










Land Use and Zoning

The mix of land uses in this segment include institutional uses with an elementary school and existing municipal complex, along with residential and neighborhood serving commercial. Current zoning is consistent with the vision for neighborhood serving commercial development, which allows for small professional offices and businesses with residential uses.

Legend

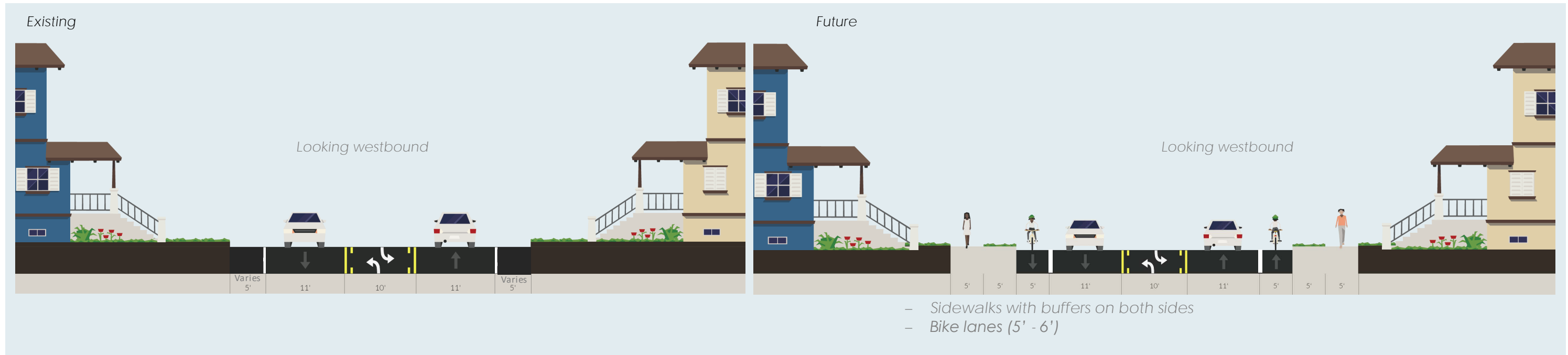
Generalized Zoning

 Residential	 Agricultural & Open Space
 Commercial	 Protected Open Space
 Institutional	 Wetlands
 Industrial	



Roadway Cross Section

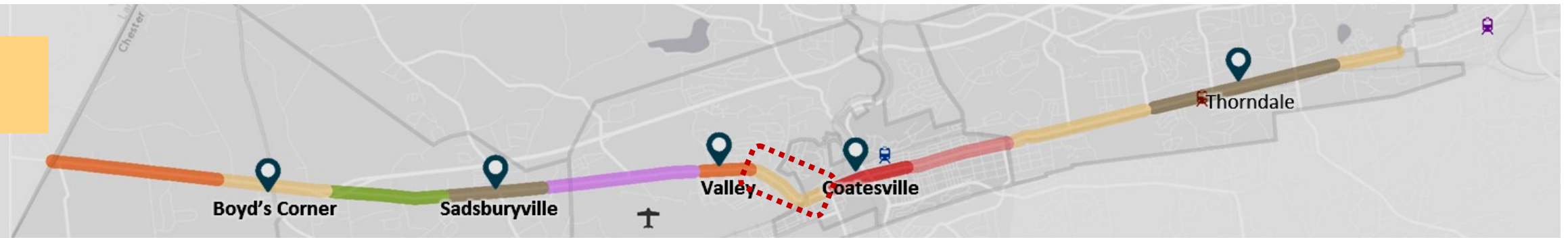
The existing cross section includes one travel lane in each direction with a center left-turn lane, and shoulders on both sides. In the future, it is recommended to provide grass buffers and sidewalks along both sides of Business 30, which is in keeping with Valley Township’s code, and utilize the shoulders for bike lanes to connect to existing bike lanes to the east in Coatesville.



Implementing the Corridor Vision

Key Strategies	Recommended Action Items	Partners
Access management	<ul style="list-style-type: none"> - Implement recommendations in <i>Managing Access along US 30 in Western Chester County</i> (DVRPC, 2010) 	<ul style="list-style-type: none"> - Valley Township
Sidewalk and streetscape enhancements	<ul style="list-style-type: none"> - Coordinate with property owners/developers to implement sidewalks and streetscape enhancements as part of land development projects (in accordance with existing Township ordinances) - Identify key missing gaps in the sidewalk network and develop conceptual plans and pursue funding for design and construction 	<ul style="list-style-type: none"> - Valley Township
Bicycle facilities	<ul style="list-style-type: none"> - Inventory and evaluate current shoulder widths to identify constraints for implementing bike lanes - Coordinate with PennDOT to implement bicycle lanes as part of a future resurfacing project 	<ul style="list-style-type: none"> - Valley Township - PennDOT
Encourage small locally owned businesses	<ul style="list-style-type: none"> - Implement recommendations in <i>Western Chester County: Future Focus Study</i> (2011), 	<ul style="list-style-type: none"> - Valley Township - Western Chester County Chamber of Commerce - Chester County Economic Development Council
Plan for future use of Township owned properties	<ul style="list-style-type: none"> - Implement recommendations in <i>Western Chester County: Future Focus Study</i> (2011), including focusing on planning efforts related to the future municipal complex near Airport Road and the potential re-use and redevelopment of the existing municipal facilities near Front Street 	<ul style="list-style-type: none"> - Valley Township

VALLEY Suburban Mixed Use



Municipalities

City of Coatesville, Valley Township

Limits

Front Street to Strode Avenue (PA 82)

Length

0.9 miles

Existing Zoning

NCO: Neighborhood Commercial Office
R-2: Residential

Roadway Cross Section

Front Street to Nichols Avenue: One travel lane in each direction with a center-turn lane and varying width shoulders

Nichols Avenue to Mt. Pleasant Street: Two travel lanes westbound and one travel lane eastbound

Mt Pleasant Street to Strode Avenue: One travel lane in each direction with shoulders or on-street parking and sidewalks

AADT

7,900

Speed Limit

25 - 35 MPH

Legend

Generalized Zoning

Residential	Agricultural & Open Space
Commercial	Protected Open Space
Institutional	Wetlands
Industrial	

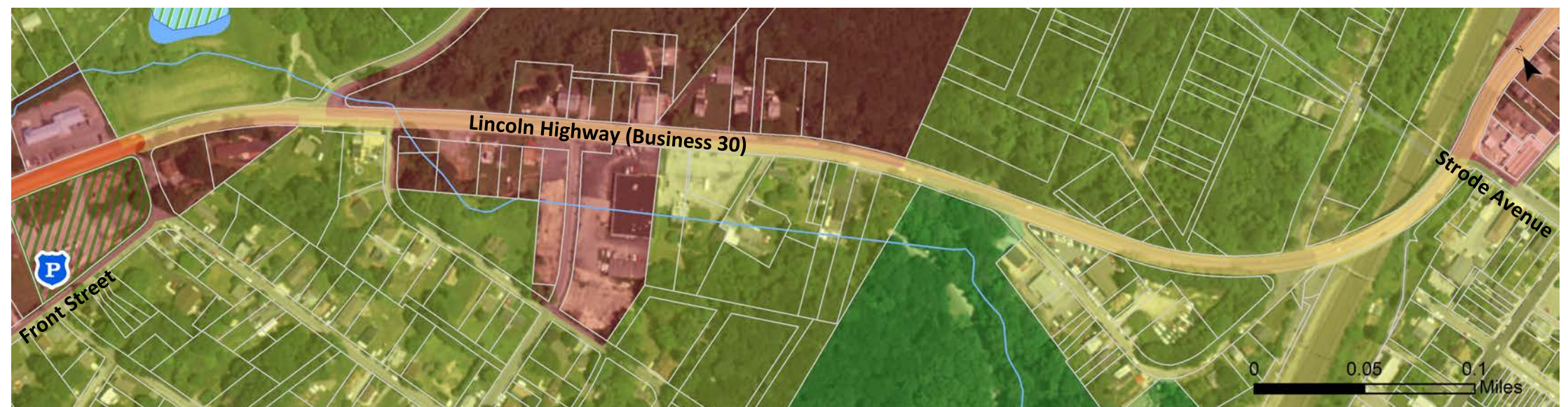
Existing Conditions

- Gateway and transitional area between Valley Township and the City of Coatesville
- Bridge over Amtrak/Norfolk Southern Rail lines is a significantly above grade and the rail line limits circulation
- Steep topography along Lincoln Highway (Business 30) and adjacent to the roadway limits development potential and roadway connectivity
- Inconsistent roadway cross section due to the transitional nature of this segment and the steep topography
- Bus service provided by ChescoBus—Krapf’s A and Coatesville Link
- No bicycle facilities
- Limited sidewalks provided, particularly west of Coatesville



Land Use and Zoning

Existing land uses include limited and low density commercial and residential development with vacant (or under-utilized) and undeveloped (or wooded) parcels. Steep topography in the area and the Amtrak/Norfolk Southern rail lines limit development potential. Current zoning is consistent with the vision for suburban mixed use area.

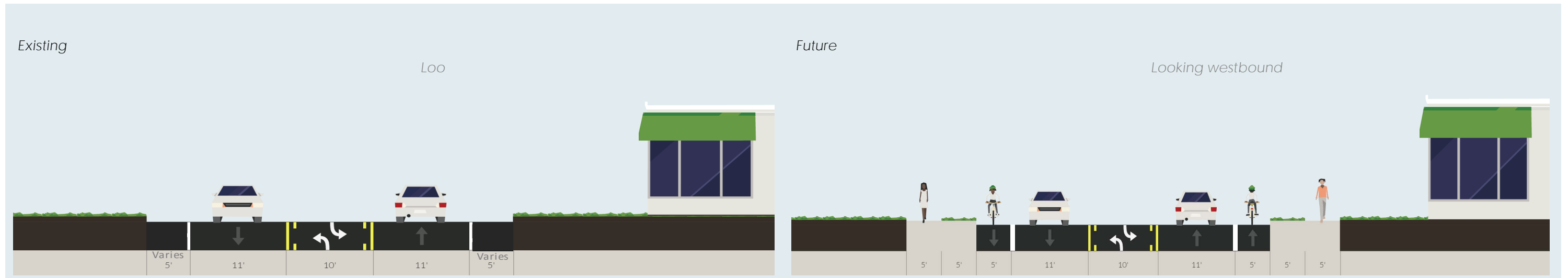


Roadway Cross Section

The existing cross section is inconsistent and changes due to the steep topography and other conditions.

- *Front Street to Nichols Avenue:* One travel lane in each direction with a center-turn lane and varying width shoulders
- *Nichols Avenue to Mt. Pleasant Street:* Two travel lanes westbound (and uphill) and one travel lane eastbound with varying width shoulders
- *Mt Pleasant Street to Strode Avenue:* One travel lane in each direction with shoulders or on-street parking and sidewalks

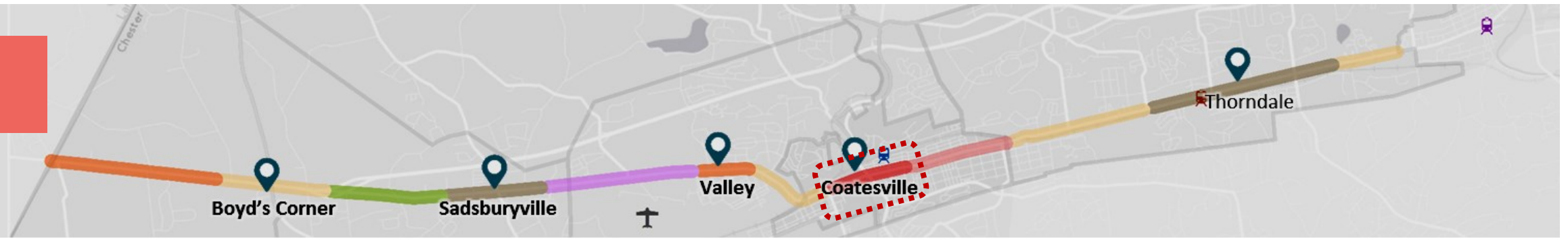
In the future, it is recommended to utilize the shoulders for bicycle lanes to connect with existing bicycle lanes to the east and provide consistent grass buffers and sidewalks along both sides of Lincoln Highway.



Implementing the Corridor Vision

Key Strategies	Recommended Action Items	Partners
Access management	<ul style="list-style-type: none"> - Implement recommendations in <i>Managing Access along US 30 in Western Chester County</i> (DVRPC, 2010) 	<ul style="list-style-type: none"> - Valley Township
Sidewalk connections	<ul style="list-style-type: none"> - Coordinate with property owners/developers to implement sidewalks and streetscape enhancements as part of land development projects (in accordance with existing Township ordinances) - Identify key missing gaps in the sidewalk network and develop conceptual plans and pursue funding for design and construction 	<ul style="list-style-type: none"> - Valley Township
Bicycle facilities	<ul style="list-style-type: none"> - Inventory and evaluate current shoulder widths to identify constraints for implementing bike lanes - Coordinate with PennDOT to implement bicycle lanes as part of a future resurfacing project 	<ul style="list-style-type: none"> - Valley Township - PennDOT
Support development/ redevelopment of vacant or under-utilized lots	<ul style="list-style-type: none"> - Implement recommendations in <i>Western Chester County: Future Focus Study</i> (2011) - Identify and market key vacant or under-utilized parcels for desired uses 	<ul style="list-style-type: none"> - Valley Township - Western Chester County Chamber of Commerce - Chester County Economic Development Council
Preserve areas of open space	<ul style="list-style-type: none"> - Encourage and support open space and conservation easements 	<ul style="list-style-type: none"> - Valley Township

COATESVILLE Urban Core



Municipalities

City of Coatesville

Limits

Strode Avenue (PA 82) to 5th Avenue

Length

0.8 miles

Existing Zoning

- I-2: Heavy Industrial
- C-1: Neighborhood Commercial
- C-2: Central Business

Roadway Cross Section

One travel lane in each direction with continuous sidewalks. On-street parking and bicycle lanes provided in some areas.

AADT

9,300 - 13,300

Speed Limit

25 MPH

Legend

Generalized Zoning

 Residential	 Agricultural & Open Space
 Commercial	 Protected Open Space
 Institutional	 Wetlands
 Industrial	

Existing Conditions

- Central business district and “Main Street” of Coatesville on Lincoln Highway east of 1st Avenue (PA 82) with local retail establishments and services on narrow parcels
- Former and active industrial area west of 1st Avenue and the Brandywine Creek, including the “Flats” redevelopment site and Arcelor Mittal Steel Mill
- Residential neighborhood west of the industrial area with narrow parcels
- Grid street network pattern east and west of the industrial area
- Bus service provided by ChescoBus—Krapf’s A and Coatesville Link
- Existing bicycle lanes west of 2nd Avenue
- Sidewalks provided on both side of Lincoln Highway with streetscape enhancements and bump-outs at some locations
- Riverwalk trail and Gateway Park provide recreational opportunities and open space on the east and west sides of the Brandywine Creek



Land Use and Zoning

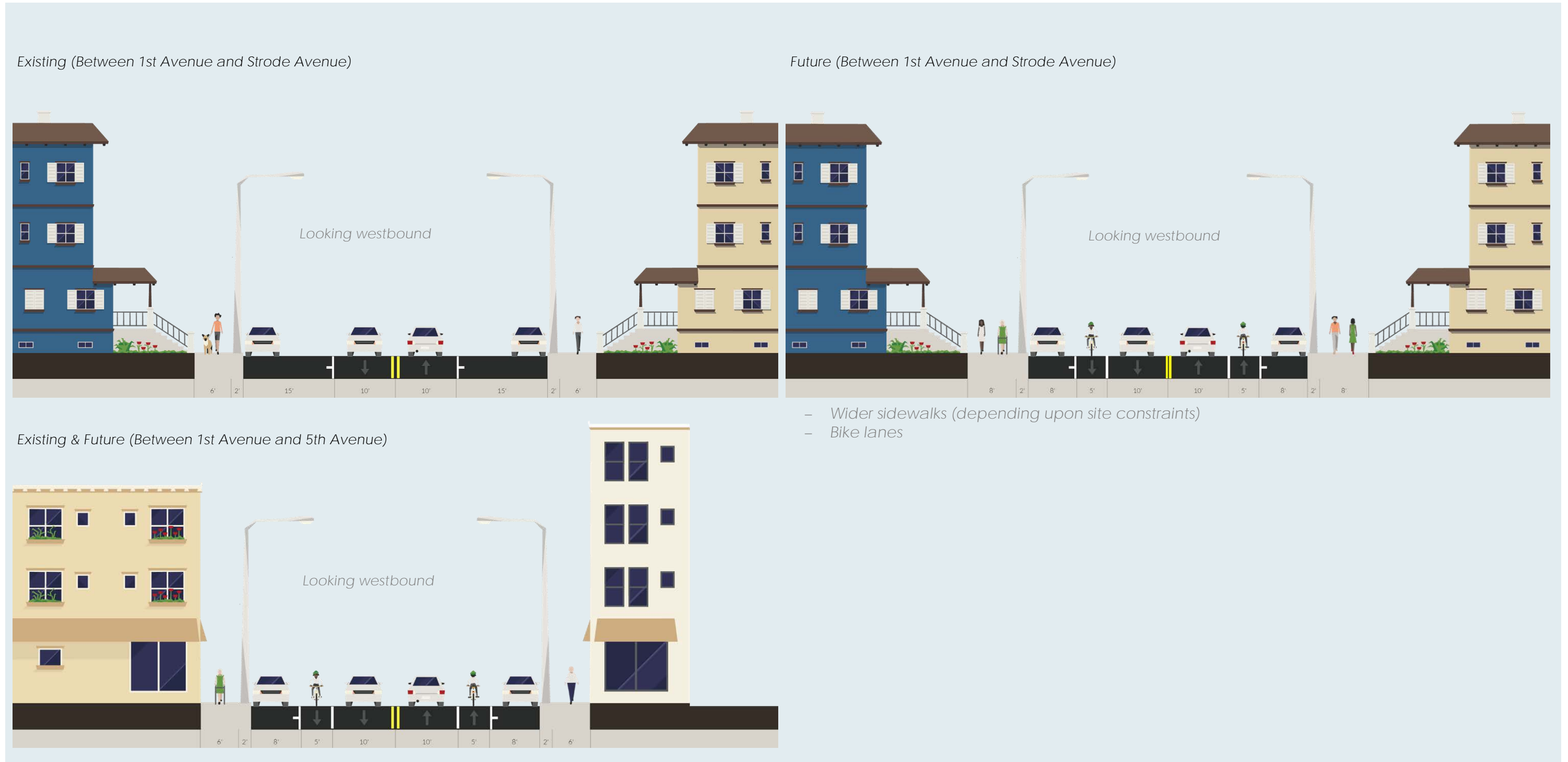
Downtown Coatesville has a mix of land uses fronting on Lincoln Highway, including residential, industrial, and commercial. There are significant redevelopment opportunities, particularly the “Flats” property on the north side of Lincoln Highway west of PA 82. In order to support redevelopment of the “Flats,” rezoning from industrial to C-2 is recommended. Other zoning recommendations include consideration of a Form Based Code or other strategies to provide flexibility to maintain the urban character and walkable community.



Roadway Cross Section

Within Coatesville, the existing cross section between 1st Avenue and Strode Avenue includes one travel lane in each direction with wide shoulders or parking lanes and sidewalk on each side. In the future, it is recommended to provide bike lanes, which will connect to existing bike lanes further east in the City. Additionally, it is recommended to provide wider sidewalks where possible based upon constraints.

Between 1st Avenue and 5th Avenue, the existing cross section provides one travel lane in each direction, with bike lanes, parking lanes, and sidewalks on each side. This existing cross section should be maintained in the future. This segment is a model for a “Complete Street” and no changes are recommended.



Key Strategies	Recommended Action Items	Partners
Retain urban character	<ul style="list-style-type: none"> – Consider form-based code. 	<ul style="list-style-type: none"> – City of Coatesville
Enhance public safety	<ul style="list-style-type: none"> – Seek additional resources for crime prevention and addressing negative perceptions about criminal activity. – Identify and target enforcement at crime “hot spots.” 	<ul style="list-style-type: none"> – City of Coatesville
Promote higher density and mixed-use redevelopment	<ul style="list-style-type: none"> – Pursue form-based code. 	<ul style="list-style-type: none"> – City of Coatesville
Preserve and promote historic district	<ul style="list-style-type: none"> – Target assistance program and additional resources to preserve and reuse key historic structures 	
Maintain and upgrade infrastructure, particularly stormwater management	<ul style="list-style-type: none"> – Develop a comprehensive needs assessment and capital improvement plan for stormwater management system and other critical City-owned infrastructure 	<ul style="list-style-type: none"> – City of Coatesville
Plan for parking	<ul style="list-style-type: none"> – Complete a parking inventory and evaluation of parking current usage, future demands, infrastructure, and policies 	<ul style="list-style-type: none"> – City of Coatesville
Focus on opportunities for job creation (and job training)	<ul style="list-style-type: none"> – Implement recommendations in <i>Western Chester County: Future Focus Study</i> (2011) 	<ul style="list-style-type: none"> – City of Coatesville – Chester County – Chester County Economic Development Council – Chester County Workforce Development Board
Value and promote waterfront access as part of the Flats redevelopment		
Expand public access, trails, and recreational opportunities along the Brandywine Creek	<ul style="list-style-type: none"> – Implement recommendations in <i>Western Chester County: Future Focus Study</i> (2011) – Implement recommendations and advance priority projects identified in the <i>Brandywine Creek Greenway Strategic Action Plan</i> (2014) – Complete <i>Mill Trail Plan</i> (underway, 2016) 	<ul style="list-style-type: none"> – City of Coatesville – Valley Township – South Coatesville – Modena – Chester County

Municipalities

City of Coatesville

Location

Lincoln Highway (Business 30) between Strode Avenue (PA 82) and First Avenue (PA 82)

Summary Description

Bicycle lanes on Lincoln Highway

Existing Conditions

- Narrow sidewalks and no building setbacks
- Existing bump-outs at select intersections
- High demand for on-street parking, particularly for residential and commercial properties
- Wider shoulders and stone wall along the “The Flats”
- Wider shoulders and fence along Arcelor Mittal Steel Mill
- Connection to the Riverwalk



Key Elements of the Conceptual Plan

- 5’ wide bicycle lanes, where feasible
- Maintain on-street parking
- Maintain existing curbing
- Bus stop locations, enhancements, and amenities to be coordinated with redevelopment plans based on future demand.

Related Improvements

The City of Coatesville is currently designing improvements for the intersection of Lincoln Highway (Business 30) at 1st Avenue (PA 82), which will eliminate the split phase traffic signal operations and reduce congestion at the intersection. The project is also being closely coordinated with the planned redevelopment of properties on the east side of 1st Avenue (PA 82).

Cost Estimate

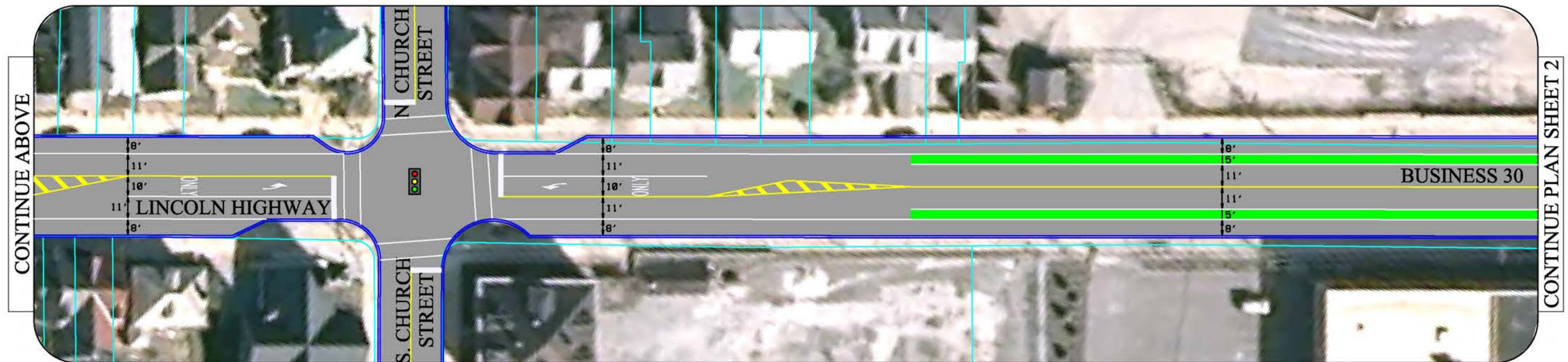
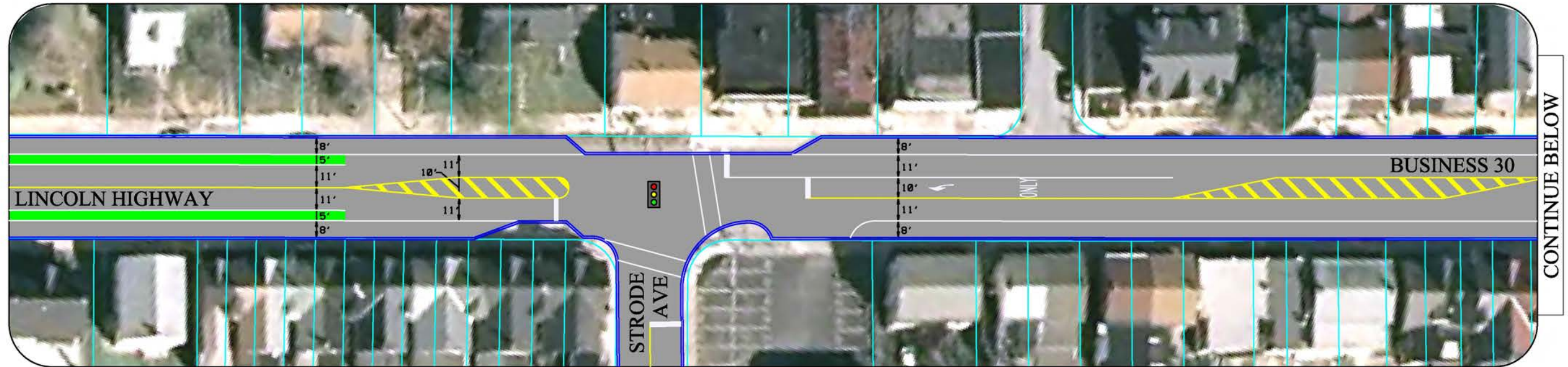
Preliminary Engineering	\$ 33,600
Final Design	\$50,400
Right-of-Way	-
Utilities	-
Construction + Inspection	\$ 638,000
TOTAL	\$ 722,000

Cost estimate includes mill and overlay of Lincoln Highway (Business 30).

Recommended Action Items	Suggested Timeframe	Partners	Potential Funding Sources
Coordinate with potential developers of “The Flats” to implement the bicycle lanes, bus stop enhancements and other streetscape improvements on Business 30 as part of the land development project	Ongoing	<ul style="list-style-type: none"> - City of Coatesville - PennDOT - TMACC 	
Identify enhancements to the proposed bike lanes and existing streetscapes, if this segment of Lincoln Highway is selected as an alignment for the Chester Valley Trail Extension	Ongoing	<ul style="list-style-type: none"> - Chester County - City of Coatesville 	
Coordinate with PennDOT to implement bicycle lanes as part of a future resurfacing project	Long Term (5–10 years)	<ul style="list-style-type: none"> - City of Coatesville - PennDOT - Chester County 	

BUSINESS 30 (LINCOLN HIGHWAY) IMPROVEMENTS BETWEEN 1ST AVENUE AND STRODE AVENUE

PLAN SHEET
1 OF 2



LEGEND

- ROADWAY WITH PROPOSED PAVEMENT MARKINGS
- EXISTING CURB
- EXISTING PROPERTY LINE
- EXISTING CONCRETE MEDIAN
- EXISTING TRAFFIC SIGNAL
- PROPOSED BIKE LANE
(COLOR FOR ILLUSTRATIVE PURPOSES ONLY.
BIKE LANE PAVEMENT MARKINGS TO BE USED.)

CONCEPT PLAN KEY ELEMENTS:

- 5' wide bicycle lanes, where feasible
- Maintain on street parking
- Maintain existing curbing

NOTE:

-The City of Coatsville is designing improvements for the intersection of Lincoln Highway (Business 30) at 1st Avenue.
- Bus stop locations, enhancements, and amenities to be coordinated with redevelopment plans based on future demand.

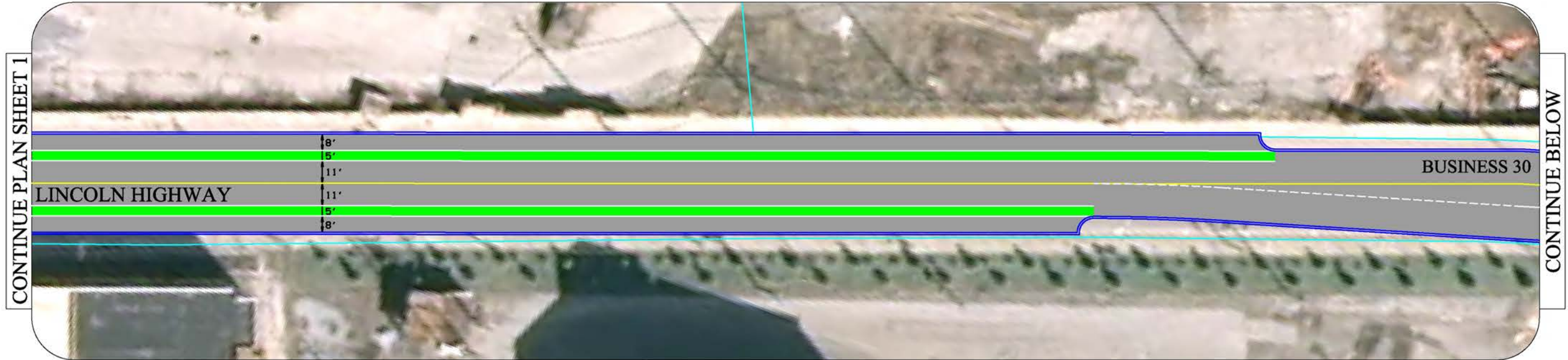


SCALE



BUSINESS 30 (LINCOLN HIGHWAY) IMPROVEMENTS BETWEEN 1ST AVENUE AND STRODE AVENUE

PLAN SHEET
2 OF 2



LEGEND

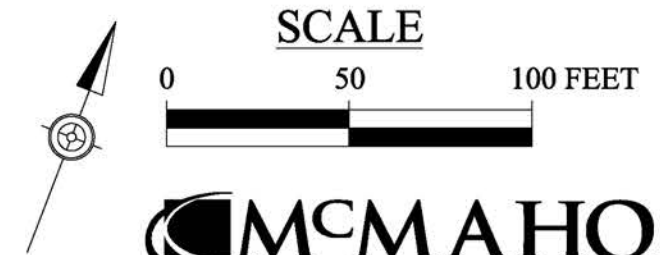
- ROADWAY WITH PROPOSED PAVEMENT MARKINGS
- EXISTING CURB
- EXISTING PROPERTY LINE
- EXISTING CONCRETE MEDIAN
- EXISTING TRAFFIC SIGNAL
- PROPOSED BIKE LANE
(COLOR FOR ILLUSTRATIVE PURPOSES ONLY. BIKE LANE PAVEMENT MARKINGS TO BE USED.)

CONCEPT PLAN KEY ELEMENTS:

- 5' wide bicycle lanes, where feasible
- Maintain on street parking
- Maintain existing curbing

NOTE:

- The City of Coatsville is designing improvements for the intersection of Lincoln Highway (Business 30) at 1st Avenue.
- Bus stop locations, enhancements, and amenities to be coordinated with redevelopment plans based on future demand.



MCMMAHON
TRANSPORTATION ENGINEERS & PLANNERS

Municipalities

City of Coatesville

Location

Intersection of PA 82 and Wagontown Road

Summary Description

Low cost safety improvements, including transverse rumble strips, signage, and striping

Existing Conditions

- High travel speeds on PA 82
- Skewed angle intersection
- Steep topography, particularly adjacent to the roadway to the east and west of PA 82
- Railroad and Brandywine Creek limit alternative alignments for Wagontown Road



Key Elements of the Conceptual Plan

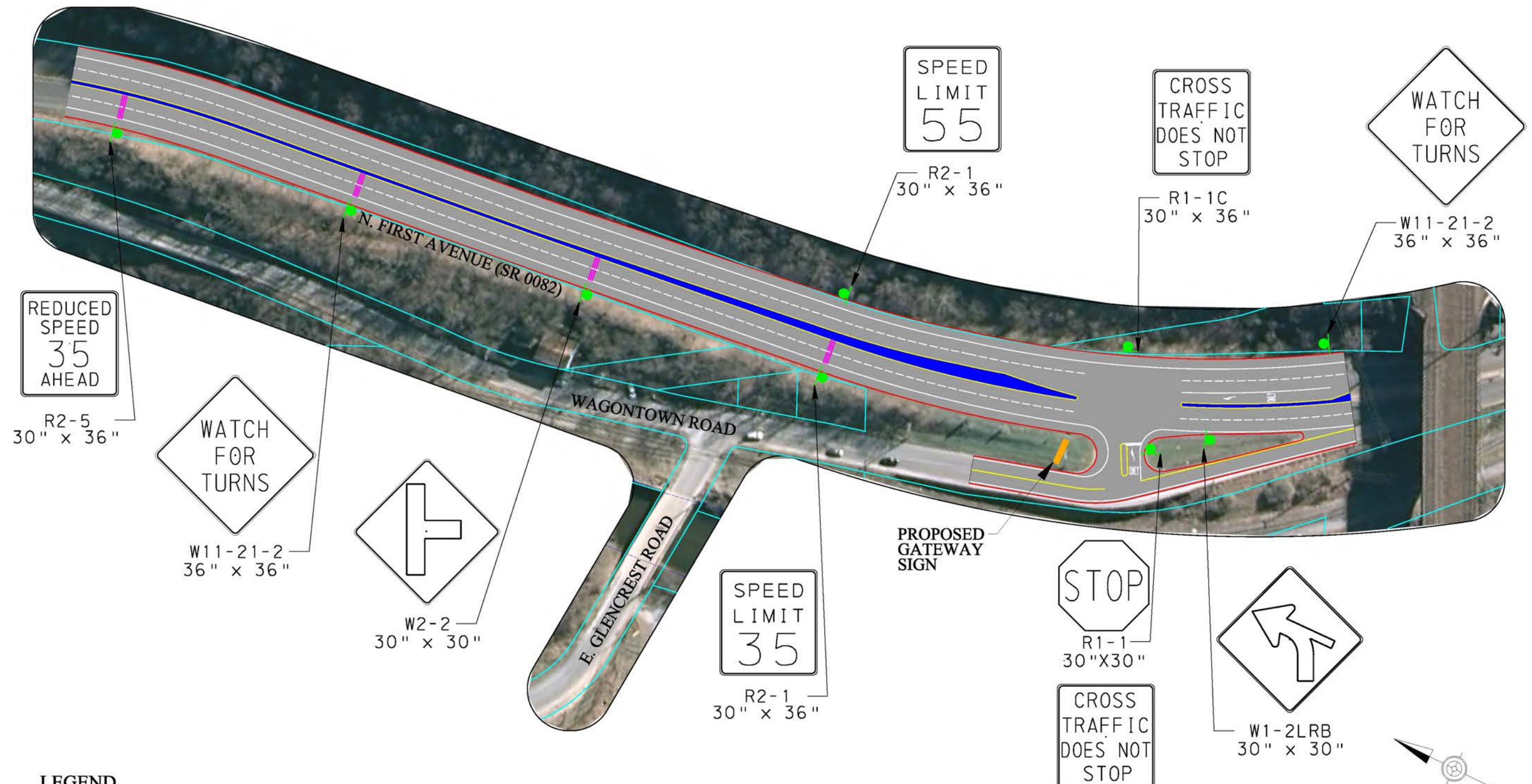
- Define and narrow the access for Wagontown Road at PA 82
- Additional signage to warn of speed limit changes and cross traffic
- Transverse rumble strips on PA 82 southbound to alert motorists to the speed limit reduction and intersection with Wagontown
- Gateway sign on PA 82 southbound, just north of Wagontown Road intersection

Cost Estimate

Preliminary Engineering	\$ 9,200
Final Design	\$ 13,800
Right-of-Way	-
Utilities	-
Construction + Inspection	\$ 87,000
TOTAL	\$ 110,000

Recommended Action Items	Suggested Timeframe	Partners	Potential Funding Sources
Coordinate with PennDOT to implement identified improvements as part of an ongoing low-cost safety improvement or maintenance project	Near Term (1 – 3 years)	<ul style="list-style-type: none"> - City of Coatesville - PennDOT - Chester County 	
Pursue funding for a PA 82 Corridor Study to evaluate a potential road diet (reduction in travel lanes), along with safety and multimodal improvements	Near Term (1 – 3 years)	<ul style="list-style-type: none"> - City of Coatesville - Valley Township - PennDOT - Chester County 	<ul style="list-style-type: none"> - Municipal funds (for required match) - Chester County - VPP - DVRPC – TCDI

SR 0082 & WAGONTOWN ROAD GATEWAY AND TRAFFIC CALMING



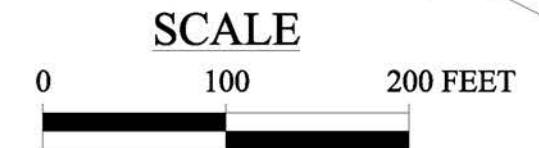
- LEGEND**
- EXISTING CONCRETE MEDIAN
 - EXISTING EDGE OF ROAD
 - EXISTING PROPERTY LINE
 - ROADWAY WITH PROPOSED PAVEMENT MARKINGS
 - PROPOSED TRANSVERSE RUMBLE STRIPS

CONCEPT PLAN KEY ELEMENTS:

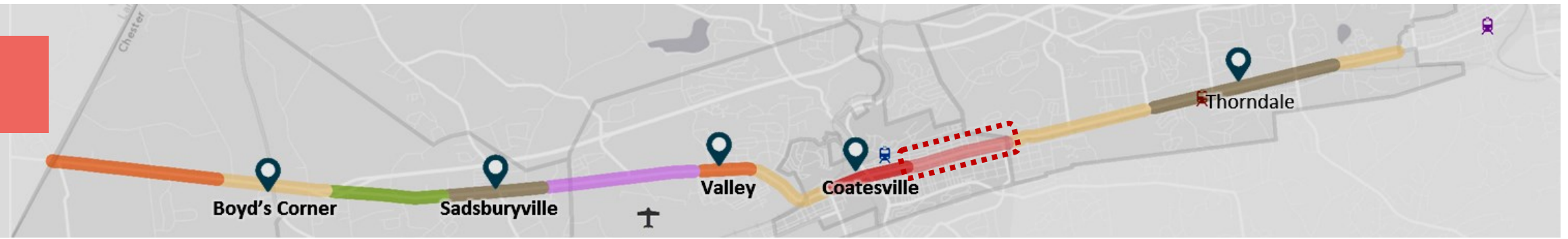
- Low cost safety improvements including transverse rumble strips, signage, and striping.

NOTE:

In addition to the low cost safety improvements presented in this conceptual plan, the SR 0082 corridor between the Route 30 Bypass and Business Route 30 should be further evaluated for a road diet and other safety improvements.



COATESVILLE Urban Neighborhood



Municipalities

City of Coatesville

Limits

5th Avenue to 13th Avenue

Length

0.9 miles

Existing Zoning

- PS: Public Service
- C-1: Neighborhood Commercial
- C-2: Central Business
- C-3: Highway Commercial
- RN-3: Residential Neighborhood

Roadway Cross Section

One travel lane in each direction with continuous bicycle lanes and sidewalks on both sides of Lincoln Highway (Business 30)

AADT

9,300 -11,700

Speed Limit

25 - 35 MPH

Legend

Generalized Zoning

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Residential | Agricultural & Open Space |
| Commercial | Protected Open Space |
| Institutional | Wetlands |
| Industrial | |

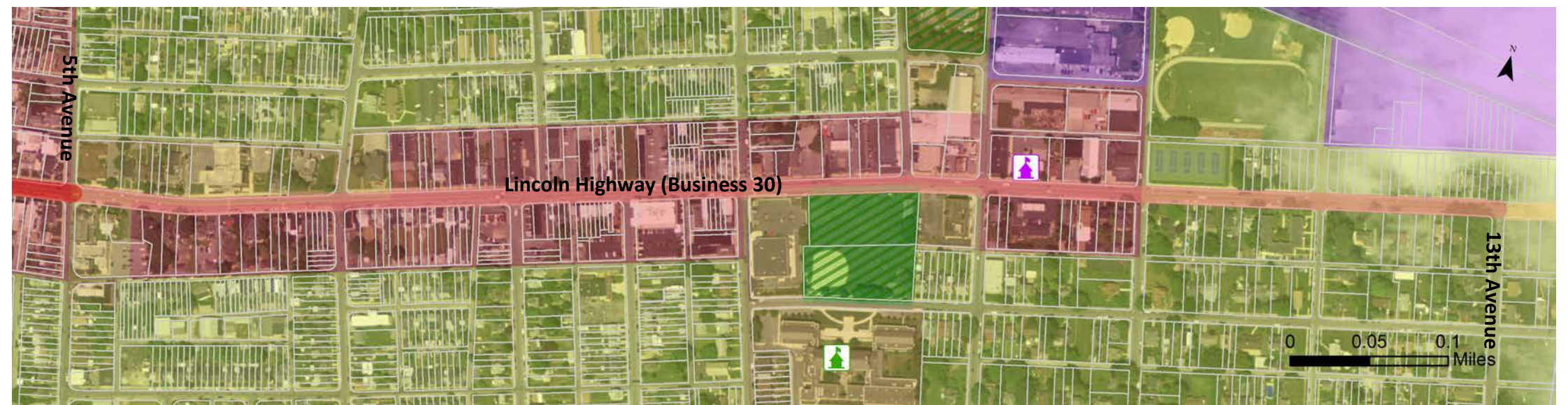
Existing Conditions

- Key land uses include neighborhood serving retail, community services, and multi-family residential properties along Lincoln Highway
- Victor Abdala, Sr. Park with ballfields and play equipment is centrally located with frontage on Lincoln Highway
- Grid street network pattern
- Consistent on-street parking, bicycle lanes, and sidewalks are provided
- Bus service provided by ChescoBus—Krapf’s A and Coatesville Link

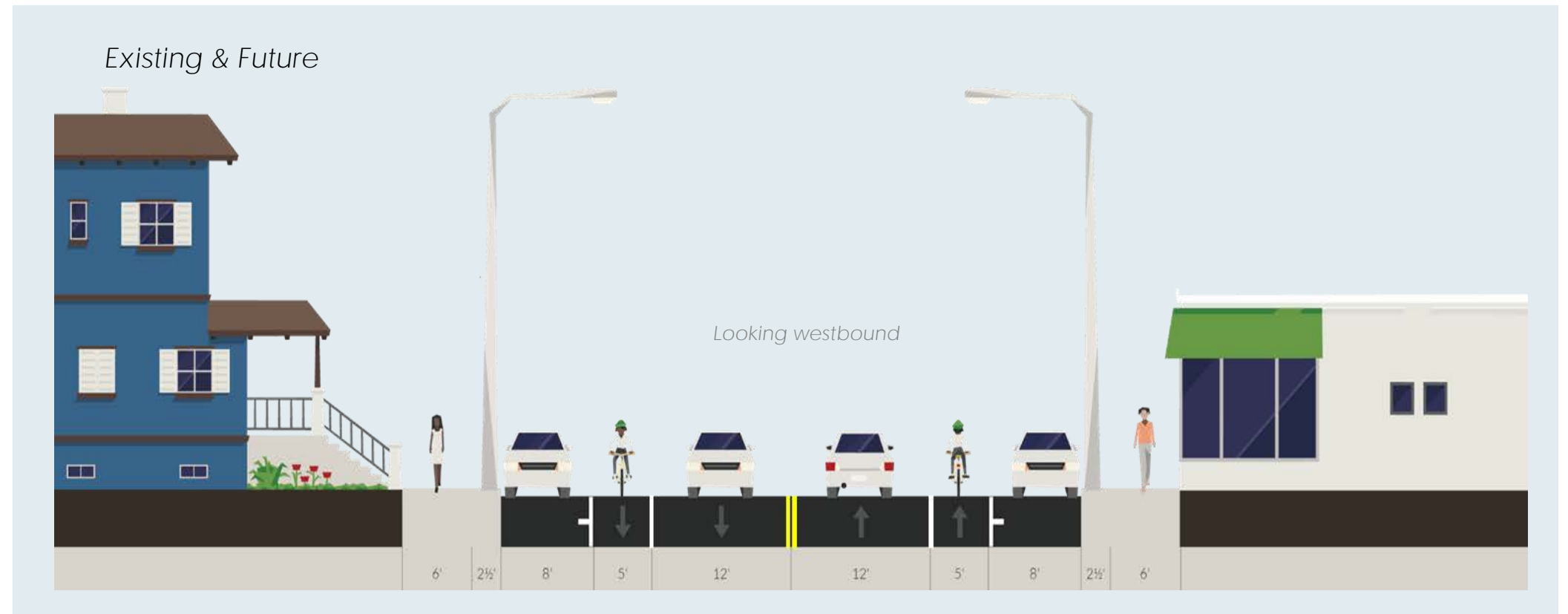


Land Use and Zoning

The existing mix of commercial and residential land uses is consistent with the corridor vision for an urban neighborhood with retail and services to support the surrounding residential area, creating a vibrant and walkable community.



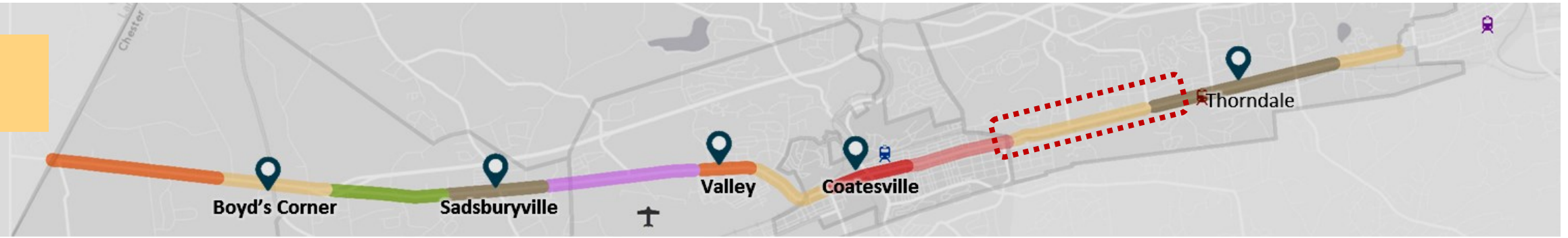
The roadway cross section includes one travel lane in each direction, bicycle lanes, on-street parking, and sidewalks on both sides. This segment is a model for a “Complete Street” and no changes are recommended.



Implementing the Corridor Vision

Key Strategies	Recommended Action Items	Partners
Retain urban character and density	<ul style="list-style-type: none"> – Consider form-based code. 	<ul style="list-style-type: none"> – City of Coatesville
Enhance public safety	<ul style="list-style-type: none"> – Seek additional resources for crime prevention and addressing negative perceptions about criminal activity. – Identify and target enforcement at crime “hot spots.” 	<ul style="list-style-type: none"> – City of Coatesville
Preserve and re-purpose buildings	<ul style="list-style-type: none"> – Target assistance program and additional resources to preserve and reuse key historic structures 	<ul style="list-style-type: none"> – City of Coatesville
Improve connectivity and access for bicyclists, pedestrians, and transit riders		

CALN Suburban Commercial



Municipalities

Caln Township

Limits

13th Avenue to Barley Sheaf Road

Length

1.5 miles

Existing Zoning

I: Institutional
C-1: Highway Commercial
Lincoln Highway Overlay

Roadway Cross Section

One travel lane in each direction with a center left-turn lane and varying width shoulders. Sidewalks are provided in some areas.

AADT

13,100 - 14,000

Speed Limit

35 - 40 MPH

Legend

Generalized Zoning

Residential	Agricultural & Open Space
Commercial	Protected Open Space
Institutional	Wetlands
Industrial	

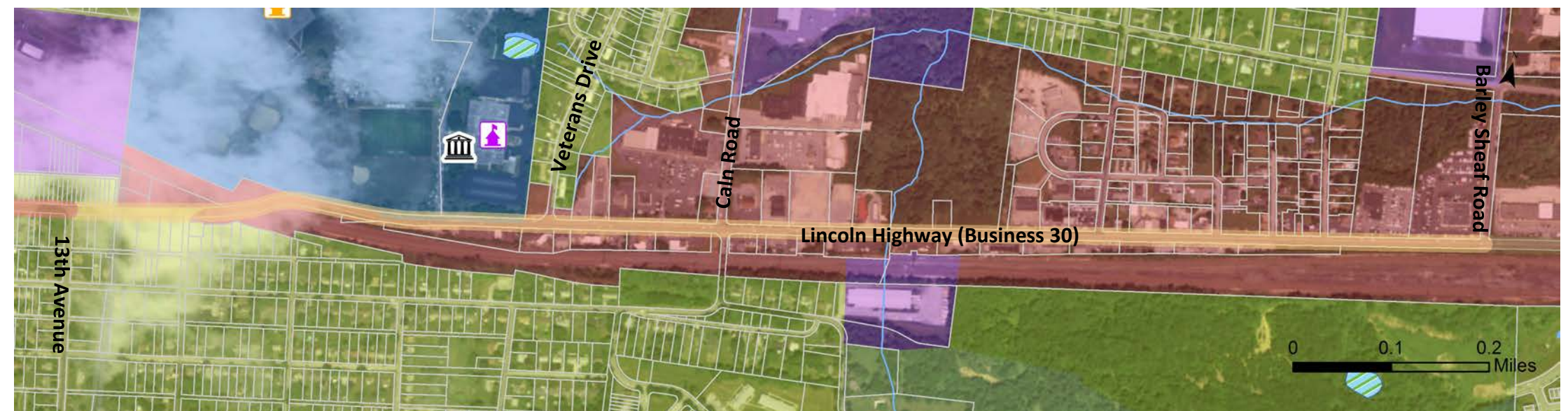
Existing Conditions

- Transitional area between the City of Coatesville and Thorndale Village
- Mainly commercial and institutional land uses with some vacant and under-utilized parcels
- Amtrak/SEPTA rail line parallel and south of Lincoln Highway (Business 30) limits roadway connectivity, as well as development opportunities
- Roadway underpass of the rail line at Caln Road is constrained due to narrow width and the short distance between Lincoln Highway and the Amtrak/SEPTA rail line
- Wide, uncontrolled and closely spaced commercial driveways
- Bus service provided by ChescoBus—Krapf’s A and Coatesville Link and several bus stops have shelters
- Limited sidewalk connections provided on the north and south sides of Lincoln Highway

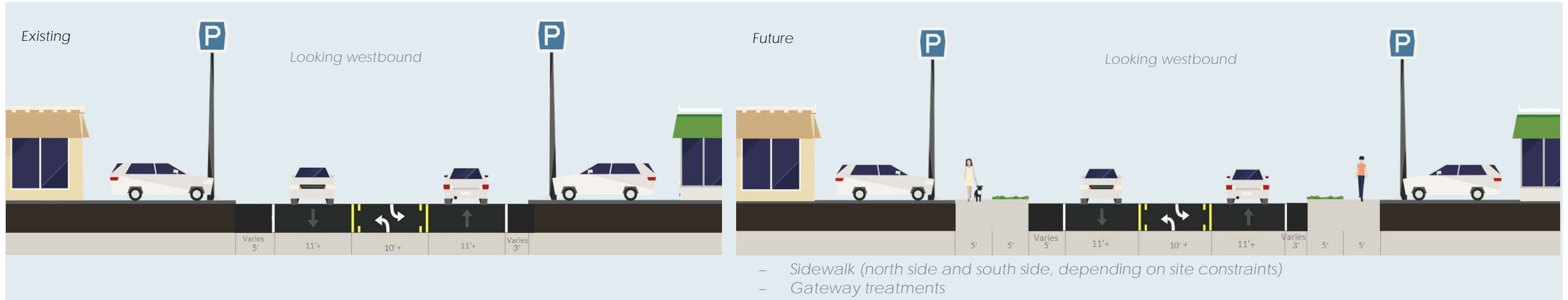


Land Use and Zoning

The existing land uses include auto-oriented commercial and retail establishments and institutional uses with Coatesville Senior High School and access to the Coatesville Veterans Affairs Medical Center. There are development/redevelopment opportunities for vacant or under-utilized, but the Amtrak/SEPTA rail line on the south side creates narrow depth parcels and limits access and circulation. The existing Lincoln Highway Overlay District provides flexibility related to setback, parking, and other requirements, particularly for constrained parcels. Access management strategies, include cross access and shared parking, can also help to reduce congestion, improve operations, and support redevelopment.



The existing cross section includes one travel lane in each direction with a center left-turn lane and varying shoulders along each side. Currently, many parking areas are located immediately adjacent to the existing roadway. In the future, it is recommended to provide grass buffers and sidewalks along both sides, dependent upon site constraints. Additionally, it is recommended to utilize the center lane, where not needed for turning movements, to provide gateway treatments.



Implementing the Corridor Vision

Key Strategies	Recommended Action Items	Partners
Sidewalk connections	<ul style="list-style-type: none"> Coordinate with property owners/developers to implement sidewalks and streetscape enhancements as part of land development projects (in accordance with existing Township ordinances) Develop conceptual plans and pursue funding sources for design and construction of missing sidewalk connections that are not likely to be implemented as part of a land development project See the Priority Project for Business 30 between Veterans Drive and Barley Sheaf Road 	<ul style="list-style-type: none"> Caln Township
Gateways and improved signage	<ul style="list-style-type: none"> See the Priority Project for Business 30 between Veterans Drive and Barley Sheaf Road 	<ul style="list-style-type: none"> Caln Township PennDOT
Beautification with attractive streetscapes and building facades	<ul style="list-style-type: none"> Continue to promote the LERTA District as an incentive for property owners to make improvements and implement the Lincoln Highway Streetscapes 	<ul style="list-style-type: none"> Caln Township Western Chester County Chamber of Commerce Chester County Economic Development Council
Access management	<ul style="list-style-type: none"> Review and evaluate potential updates to access management requirements in Caln Township’s SALDO based on PennDOT’s <i>Access Management Handbook</i>, including requiring new developments to connect to existing developments or enable future connections to be made 	<ul style="list-style-type: none"> Caln Township
Plan for a well-connected roadway network	<ul style="list-style-type: none"> Adopt an official map with new roadway connections 	<ul style="list-style-type: none"> Caln Township
Support assembly of smaller lots and development/redevelopment of vacant or under-utilized lots	<ul style="list-style-type: none"> Promote existing LERTA District and Lincoln Highway Overlay District zoning ordinance requirements, including the provision for waiver of some zoning requirements by the Board of Commissioners Consider form-based zoning 	<ul style="list-style-type: none"> Caln Township

Municipalities

Caln Township

Location

Lincoln Highway (Business 30) between Veterans Drive and Barley Sheaf Road

Summary Description

Completion of sidewalk connections along with streetscape, traffic calming, access management, and bus stop enhancements to improve safety and operations

Existing Conditions

- Vacant and underutilized parcels
- Lack of identity and consistent streetscape treatments
- High traffic volumes and travel speeds
- Numerous wide, uncontrolled, and closely spaced commercial driveways
- Discontinuous and disconnected sidewalks
- Bus stops with limited connecting pedestrian facilities



Key Elements of the Conceptual Plan

- Continuous sidewalk on the north side of Business 30
- Continuous sidewalk on the south side of Business 30 between Veterans Drive and Caln Road
- Enhanced bus stops with amenities and pedestrian connections
- Medians with gateway signs for traffic calming
- Defined and/or consolidated driveways for safety and access management

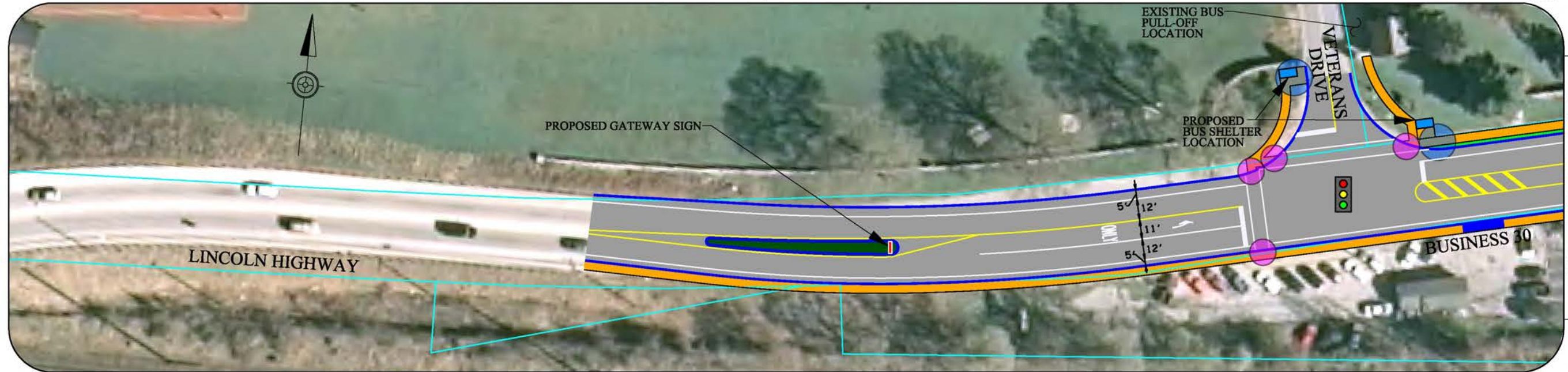
Recommended Action Items	Suggested Timeframe	Partners	Potential Funding Sources
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Coordinate with property owners/developers to implement sidewalk and streetscape enhancements and define/consolidate driveways as part of land	Ongoing	- Caln Township	
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<p>Priority Phase: Veterans Drive to Caln Road</p> <ul style="list-style-type: none"> - Pursue grant funding for design, right-of-way, and construction <p>Cost Estimate</p> <table border="1"> <tr> <td>Preliminary Engineering</td> <td>\$ 90,800</td> </tr> <tr> <td>Final Design</td> <td>\$ 136,200</td> </tr> <tr> <td>Right-of-Way</td> <td>\$ 96,000</td> </tr> <tr> <td>Utilities</td> <td>-</td> </tr> <tr> <td>Construction + Inspection</td> <td>\$ 1,041,000</td> </tr> <tr> <td>TOTAL</td> <td>\$ 1,364,000</td> </tr> </table>	Preliminary Engineering	\$ 90,800	Final Design	\$ 136,200	Right-of-Way	\$ 96,000	Utilities	-	Construction + Inspection	\$ 1,041,000	TOTAL	\$ 1,364,000	Near Term (1 – 3 years)	<ul style="list-style-type: none"> - Caln Township - PennDOT - Chester County - TMACC 	<ul style="list-style-type: none"> - Municipal funds (for required match) - PennDOT – Multimodal Transportation Fund - CFA – Multimodal Transportation Fund - Transportation Alternatives Program (TAP) - Congestion Mitigation and Air Quality Improvement Program (CMAQ)
Preliminary Engineering	\$ 90,800														
Final Design	\$ 136,200														
Right-of-Way	\$ 96,000														
Utilities	-														
Construction + Inspection	\$ 1,041,000														
TOTAL	\$ 1,364,000														

BUSINESS 30 (LINCOLN HIGHWAY) IMPROVEMENTS IN CALN TOWNSHP

PLAN SHEET
1 OF 4



LEGEND

- | | | | |
|--|-----------------------------------------|--|---------------------------|
| | PROPOSED BUFFER AREA | | EXISTING PROPERTY LINE |
| | ROADWAY WITH PROPOSED PAVEMENT MARKINGS | | EDGE OF ROAD |
| | PROPOSED SIDEWALK | | PROPOSED CURB |
| | PROPOSED MEDIAN | | PROPOSED ADA RAMP UPGRADE |
| | PROPOSED DRIVEWAY APRON | | SIGNED BUS STOP |
| | EXISTING TRAFFIC SIGNAL | | |

CONCEPT PLAN KEY ELEMENTS:

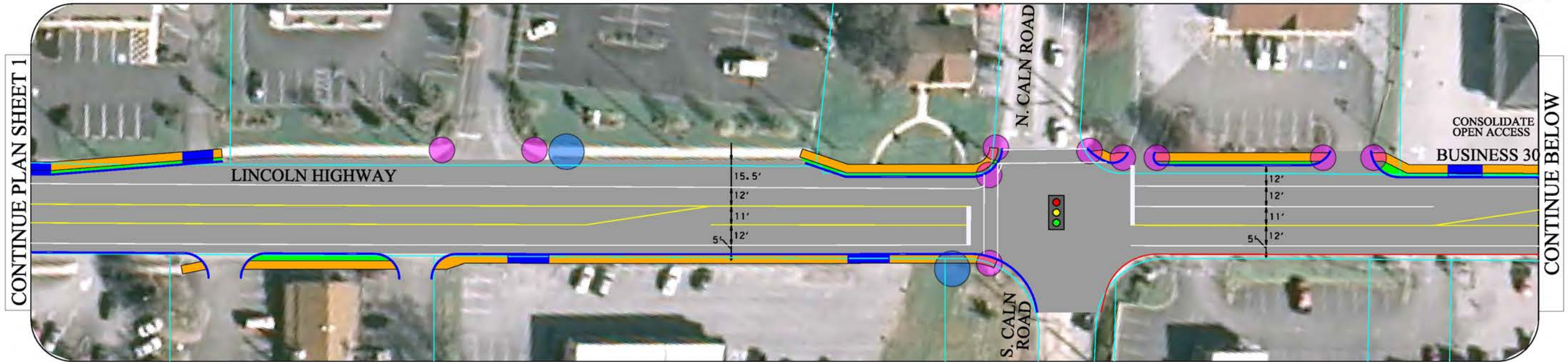
- Continuous sidewalk on north side of Business 30
- Continuous sidewalk on south side of Business 30 between western limit and Caln Road
- Enhanced bus stops with amenities and pedestrian connections
- Medians with gateway signs for traffic calming
- Defined and/or consolidated driveways for safety and access management

SCALE














BUSINESS 30 (LINCOLN HIGHWAY) IMPROVEMENTS IN CALN TOWNSHP

PLAN SHEET
2 OF 4



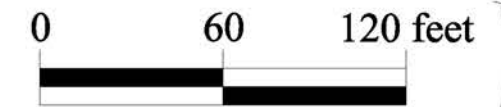
LEGEND

	PROPOSED BUFFER AREA		EXISTING PROPERTY LINE
	ROADWAY WITH PROPOSED PAVEMENT MARKINGS		EDGE OF ROAD
	PROPOSED SIDEWALK		PROPOSED CURB
	PROPOSED MEDIAN		PROPOSED ADA RAMP UPGRADE
	PROPOSED DRIVEWAY APRON		SIGNED BUS STOP
	EXISTING TRAFFIC SIGNAL		

CONCEPT PLAN KEY ELEMENTS:

- Continuous sidewalk on north side of Business 30
- Continuous sidewalk on south side of Business 30 between western limit and Caln Road
- Enhanced bus stops with amenities and pedestrian connections
- Medians with gateway signs for traffic calming
- Defined and/or consolidated driveways for safety and access management

SCALE














BUSINESS 30 (LINCOLN HIGHWAY) IMPROVEMENTS IN CALN TOWNSHP

PLAN SHEET
3 OF 4



LEGEND

- | | | | |
|-------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------|---------------------------|
|  | PROPOSED BUFFER AREA |  | EXISTING PROPERTY LINE |
|  | ROADWAY WITH PROPOSED PAVEMENT MARKINGS |  | EDGE OF ROAD |
|  | PROPOSED SIDEWALK |  | PROPOSED CURB |
|  | PROPOSED MEDIAN |  | PROPOSED ADA RAMP UPGRADE |
|  | PROPOSED DRIVEWAY APRON |  | SIGNED BUS STOP |
|  | EXISTING TRAFFIC SIGNAL | | |

CONCEPT PLAN KEY ELEMENTS:

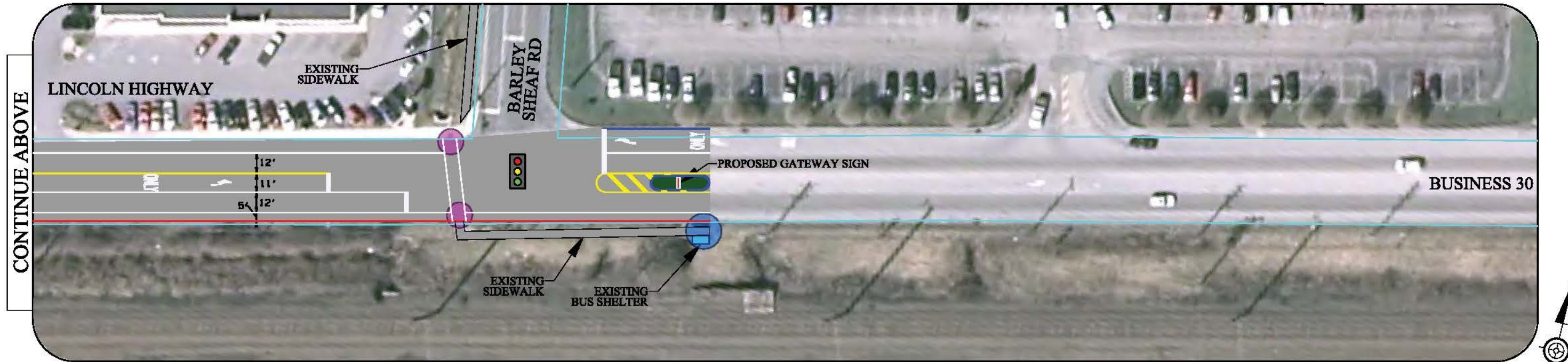
- Continuous sidewalk on north side of Business 30
- Continuous sidewalk on south side of Business 30 between western limit and Caln Road
- Enhanced bus stops with amenities and pedestrian connections
- Medians with gateway signs for traffic calming
- Defined and/or consolidated driveways for safety and access management

SCALE














BUSINESS 30 (LINCOLN HIGHWAY) IMPROVEMENTS IN CALN TOWNSHP

PLAN SHEET
4 OF 4

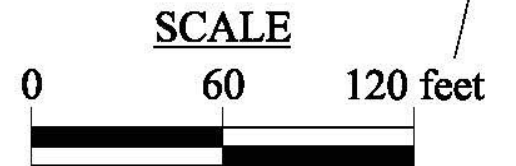


LEGEND

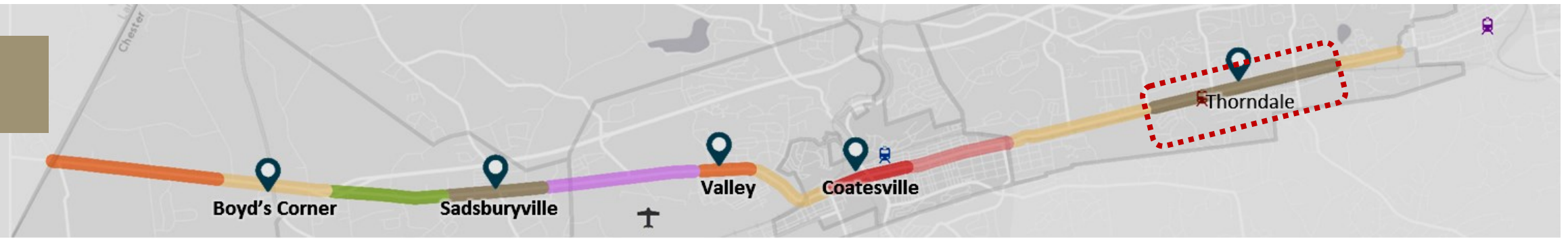
- | | | | |
|-------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------|---------------------------|
|  | PROPOSED BUFFER AREA |  | EXISTING PROPERTY LINE |
|  | ROADWAY WITH PROPOSED PAVEMENT MARKINGS |  | EDGE OF ROAD |
|  | PROPOSED SIDEWALK |  | PROPOSED CURB |
|  | PROPOSED MEDIAN |  | PROPOSED ADA RAMP UPGRADE |
|  | PROPOSED DRIVEWAY APRON |  | SIGNED BUS STOP |
|  | EXISTING TRAFFIC SIGNAL | | |

CONCEPT PLAN KEY ELEMENTS:

- Continuous sidewalk on north side of Business 30
- Continuous sidewalk on south side of Business 30 between western limit and Caln Road
- Enhanced bus stops with amenities and pedestrian connections
- Medians with gateway signs for traffic calming
- Defined and/or consolidated driveways for safety and access management



THORNDALE Transit Village



Municipalities

Caln Township

Limits

Barley Sheaf Road to Caln Village Shopping Center

Length

1.8 miles

Existing Zoning

TV-1: Thorndale Village

Roadway Cross Section

One travel lane in each direction with a center left turn lane and varying width shoulders. Sidewalks are provided in some areas.

AADT

10,500- 13,100

Speed Limit

35–40 MPH

Legend

Generalized Zoning

 Residential	 Agricultural & Open Space
 Commercial	 Protected Open Space
 Institutional	 Wetlands
 Industrial	

Existing Conditions

- SEPTA Thorndale Regional Rail Station is in the heart of the Thorndale Village
- Amtrak/SEPTA rail line parallel and south of Lincoln Highway (Business 30) limits roadway connectivity, as well as development opportunities
- Roadway underpasses of the rail line at South Bailey Road and Bondsville Road (PA 430) are constrained due to narrow widths and the short distance between Lincoln Highway and the Amtrak/SEPTA rail line
- G.O. Carlson Boulevard, which is parallel and to the north, provides an alternative to Lincoln Highway for motorists, bicyclists, and pedestrians
- Off-set intersections
- Commercial land uses are dominant, including big-box retail shopping centers and individual retail establishments
- Bus service provided by ChescoBus—Krapf's A
- Limited sidewalk connections provided on the north and south sides of Lincoln Highway

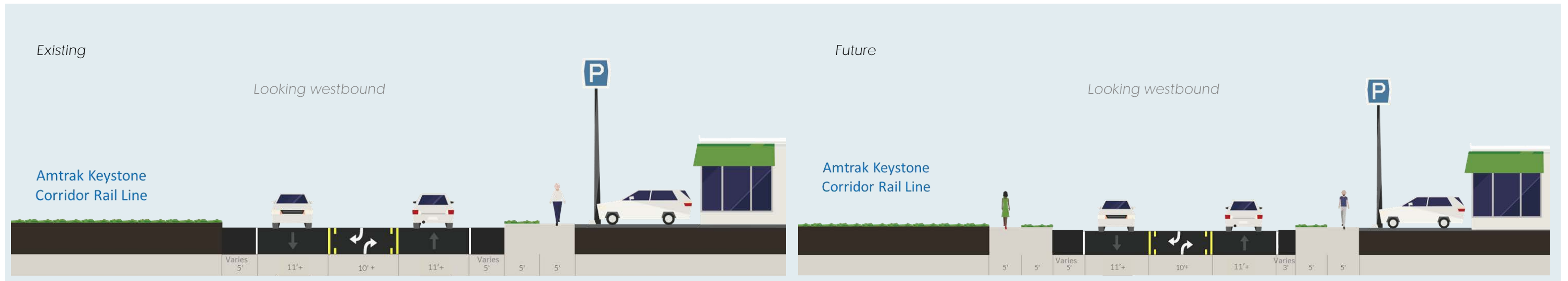


Land Use and Zoning

The existing land use in this segment is predominately commercial, including several large shopping centers with big-box retail and grocery stores. Additionally, there are several institutional uses and community facilities, including the SEPTA Thorndale Regional Rail Station, Caln Elementary School, and Thorndale Fire. There are redevelopment opportunities, but the Amtrak/SEPTA rail line on the south side creates narrow depth parcels and limits access and circulation. The existing Lincoln Highway Overlay District provides flexibility related to setback, parking, and other requirements, particularly for constrained parcels.



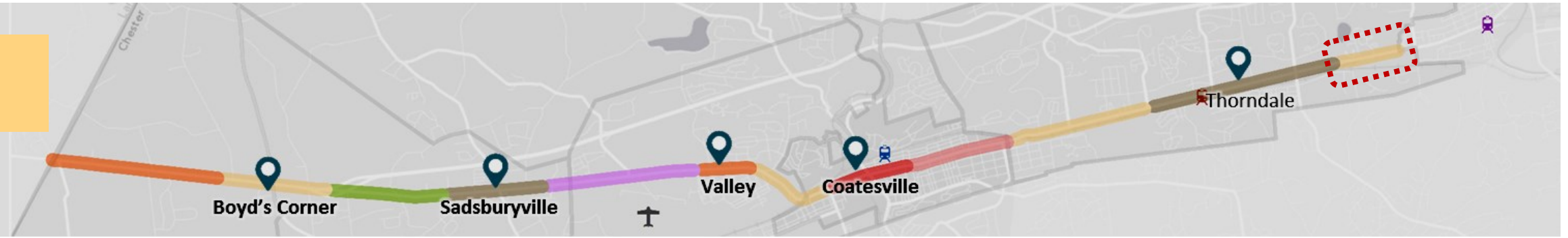
The existing cross section includes one travel lane in each direction with a center left-turn lane and varying shoulders along each side. Currently, sidewalk is generally provided on the north side of Lincoln Highway (Business 30), with some missing connections. In the future, it is recommended to provide grass buffers and sidewalks along both sides, dependent upon site constraints.



Implementing the Corridor Vision

Key Strategies	Recommended Action Items	Partners
Sidewalk and streetscape enhancements	<ul style="list-style-type: none"> Coordinate with property owners/developers to implement sidewalks and streetscape enhancements as part of land development projects (in accordance with existing Township ordinances) Develop conceptual plans and pursue funding sources for design and construction of missing sidewalk connections that are not likely to be implemented as part of a land development project 	<ul style="list-style-type: none"> Caln Township
Access management	<ul style="list-style-type: none"> Review and evaluate potential updates to access management requirements in Caln Township's SALDO based on PennDOT's <i>Access Management Handbook</i>, including requiring new developments to connect to existing developments or enable future connections to be made 	<ul style="list-style-type: none"> Caln Township
Plan for a well-connected roadway network	<ul style="list-style-type: none"> Continue to plan and pursue funding options to complete missing segments of G.O. Carlson Boulevard Adopt an official map with new roadway connections 	<ul style="list-style-type: none"> Caln Township
Reduce congestion and enhance safety at key intersections	<ul style="list-style-type: none"> Identify funding and implementation options to improve the intersection of Lincoln Highway and Bondsville Road (PA 340), including minor roadway realignment and widening, as well as a pedestrian facility on the east side of Bondsville Road between G.O. Carlson Boulevard and Lincoln 	<ul style="list-style-type: none"> Caln Township
Encourage appropriate density (3+ story buildings) fronting on Business 30	<ul style="list-style-type: none"> Promote the existing Lincoln Highway Overlay District zoning ordinance requirements 	<ul style="list-style-type: none"> Caln Township
Support assembly of smaller lots	<ul style="list-style-type: none"> Promote existing LERTA District and Lincoln Highway Overlay District zoning ordinance requirements, including the provision for waiver of some zoning requirements by the Board of Commissioners Consider form-based zoning Consider providing municipal shared parking lot in strategic locations to eliminate parking requirements for constrained parcels 	<ul style="list-style-type: none"> Caln Township

CALN Suburban Mixed Use



Municipalities

Caln Township

Limits

Caln Village Shopping Center to East Veterans Drive (Caln/Downingtown Border)

Length

0.7 miles

Existing Zoning

TV-1: Thorndale Village
I-1: Light Industrial
C-1: Highway Commercial
Lincoln Highway Overlay

Roadway Cross Section

One travel lane in each direction with a center left-turn lane and varying width shoulders

AADT








10,500

Speed Limit

35–45 MPH

Legend

Generalized Zoning

 Residential	 Agricultural & Open Space
 Commercial	 Protected Open Space
 Institutional	 Wetlands
 Industrial	

Existing Conditions

- Transitional area between Thorndale Village and Downingtown Borough
- Mix of land uses with several vacant or underutilized properties, particularly on the south side of Lincoln Highway where parcels have a narrow depth and abut the Amtrak/SEPTA rail line
- Amtrak/SEPTA rail line parallel and south of Lincoln Highway limits roadway connectivity, as well as development opportunities
- Bus service provided by ChescoBus—Krapf’s A
- “Share the Road” signage and wide shoulders, but no dedicated bicycle facilities
- Lack of well connected pedestrian facilities

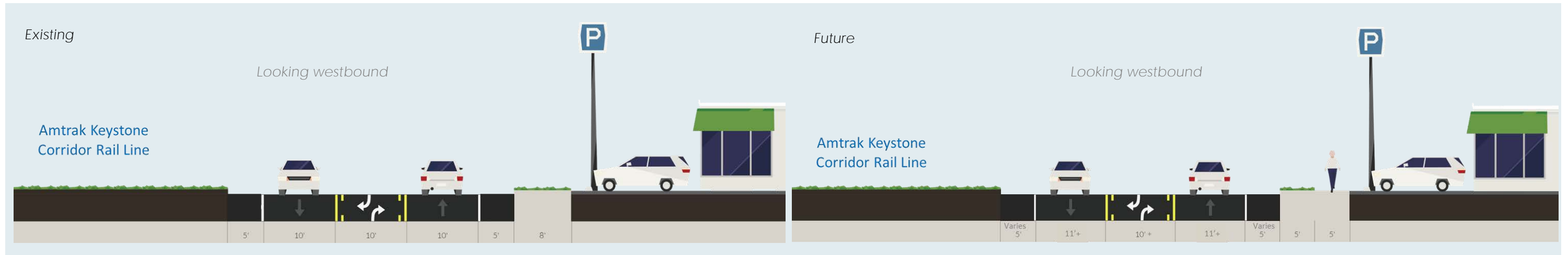


Land Use and Zoning

The mix of land uses within this segment of Lincoln Highway (Business 30) includes residential and commercial with strip mall shopping centers and individual businesses. There are development and redevelopment opportunities on both sides of Lincoln Highway, but the Amtrak/SEPTA rail line on the south side creates narrow depth parcels and limits access and circulation. The existing Lincoln Highway Overlay District was established to provide flexibility related to setback, parking, and other requirements, particularly for constrained parcels. Form-based zoning could also be considered to help to encourage appropriate development and redevelopment of the commercial properties.



The existing cross section includes one travel lane in each direction with a center left-turn lane and varying shoulders along each side. In the future, it is recommended to provide consistent sidewalk with a grass buffer area on the north side.



Implementing the Corridor Vision

Key Strategies	Recommended Action Items	Partners
Sidewalk connections and streetscape enhancements	<ul style="list-style-type: none"> Coordinate with property owners/developers to implement sidewalks and streetscape enhancements as part of land development projects (in accordance with existing Township ordinances) Develop conceptual plans and pursue funding sources for design and construction of missing sidewalk connections that are not likely to be implemented as part of a land development project 	<ul style="list-style-type: none"> Caln Township
Beautification with attractive streetscapes and building facades	<ul style="list-style-type: none"> Continue to promote the LERTA District as an incentive for property owners to make improvements and implement the Lincoln Highway Streetscapes 	<ul style="list-style-type: none"> Caln Township Western Chester County Chamber of Commerce Chester County Economic
Gateways and improved signage	<ul style="list-style-type: none"> Identify a viable location and develop a conceptual design for median with a gateway sign near the Township's eastern border 	<ul style="list-style-type: none"> Caln Township
Access management	<ul style="list-style-type: none"> Review and evaluate potential updates to access management requirements in Caln Township's SALDO based on PennDOT's <i>Access Management Handbook</i>, including requiring new developments 	<ul style="list-style-type: none"> Caln Township
Plan for a well-connected roadway network	<ul style="list-style-type: none"> Continue to plan and pursue funding options to complete missing segments of G.O. Carlson Boulevard 	<ul style="list-style-type: none"> Caln Township
Support assembly of smaller lots	<ul style="list-style-type: none"> Promote existing LERTA District and Lincoln Highway Overlay District zoning ordinance requirements, including the provision for waiver of some zoning requirements by the Board of Commissioners Consider form-based zoning Consider providing municipal shared parking lot in strategic locations to eliminate parking requirements for constrained parcels 	<ul style="list-style-type: none"> Caln Township