



Overview

The *Pottstown Region Traffic Analysis* aims to identify roadway improvements to support safety and future traffic growth in the Pottstown Region with a focus on study locations selected by the PMRPC.

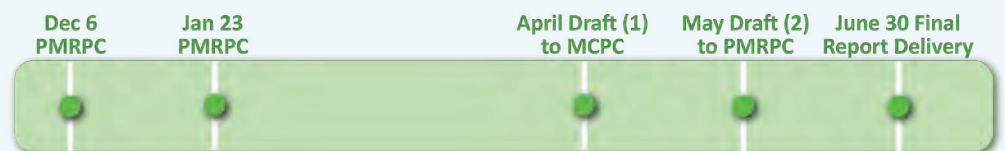
Planning Process

To date, the PMRPC has met twice to discuss the project. At the kickoff meeting in December 2017, the committee members provided feedback on the scope of work. At the second meeting in January 2018, they participated in a workshop to identify the study locations. The final study locations were determined in March 2018.

This Document

Since March 2018, the DVRPC has conducted traffic counts, fieldwork, crash data analyses, and, where applicable, microsimulation modeling to identify predominantly low cost roadway improvements that would be achievable in the short-term. This document summarizes the draft recommendations for 9 of the 18 study locations, presented at the December 6, 2018 PMRPC meeting. The timeline below summarizes next steps.

Timeline



Source of Aerial Imagery: Southeastern PA Regional Task Force, 2017

1 Manatawny Street and Grosstown Road

Traffic Volumes

Crash Summary



PennDOT Crash Data (2012-2017)

⊗ Fatal injury ⊙ Hit pedestrian

Approach	AM Peak Hour Volumes	PM Peak Hour Volumes
NB	68 (16 L, 52 R)	115 (38 L, 77 R)
EB	122 (43 R, 79 T)	120 (33 R, 87 T)
WB	58 (24 L, 34 T)	226 (91 L, 135 T)

Observations

- Murgia Park is 0.25-mile east of this intersection. There are no pedestrian connections to the park.
- Sharrows were proposed on Grosstown Road in the *DVRPC Trails Feasibility Study* as a Lower West Trail connection between the Schuylkill River Trail and the Manatawny Trail.
- The posted speed limit on Manatawny Street is 35 mph. No speeding was recorded in free flow conditions during fieldwork.
- The sightline of vehicles turning right from Grosstown Road is obstructed by the house on the southwest corner.

Recommendations



2 Manatawny Street and Sell Road

Traffic Volumes

Crash Summary



PennDOT Crash Data (2012-2017)

● Hit fixed object
● Angle

Approach	AM Peak Hour Volumes	PM Peak Hour Volumes
SB	48 (4 L, 44 R)	131 (16 L, 115 R)
EB	137 (58 L, 79 T)	145 (62 T, 83 L)
WB	59 (8 R, 51 T)	146 (18 R, 128 T)

Observations

- The posted speed limit on Manatawny Street is 35 mph. During field observations, vehicles were recorded traveling at an average free flow speed of 41 mph WB and 38 mph EB.
- This intersection does not warrant a traffic signal.
- The sightline from the stop sign on Sell Road is obstructed by trees on the northeast and northwest corners.
- There are existing T-intersection advance warning signs on the Manatawny Street approaches.

Recommendations



3 Manatawny Street and Glasgow Street

Traffic Volumes

Crash Summary



PennDOT Crash Data (2012-2017)

● Head-on ● Angle ● Hit fixed object
● Serious injury

Approach	AM Peak Hour Volumes	PM Peak Hour Volumes
NB	133 (84 L, 9 R, 40 T)	210 (91 L, 36 R, 83 T)
SB	86 (2 L, 27 R, 57 T)	96 (6 L, 27 R, 63 T)
EB	72 (14 L, 56 R, 2 T)	190 (54 L, 122 R, 14 T)
WB	38 (17 L, 7 R, 14 T)	38 (27 L, 3 R, 8 T)

Observations

- The posted speed limit on Manatawny Street is 25 mph. During field observations, vehicles were recorded traveling an average free flow speed of 35 mph SB and 37 mph NB.
- Intersection is located in a Census Tract where 16% (6% higher than county average) of residents have one or more physical and/or mental disabilities.
- There is a PART Day Line stop on the WB side of Glasgow Street.

Recommendations



4 High Street and Moser Road

Traffic Volumes

Crash Summary



PennDOT Crash Data (2012-2017)

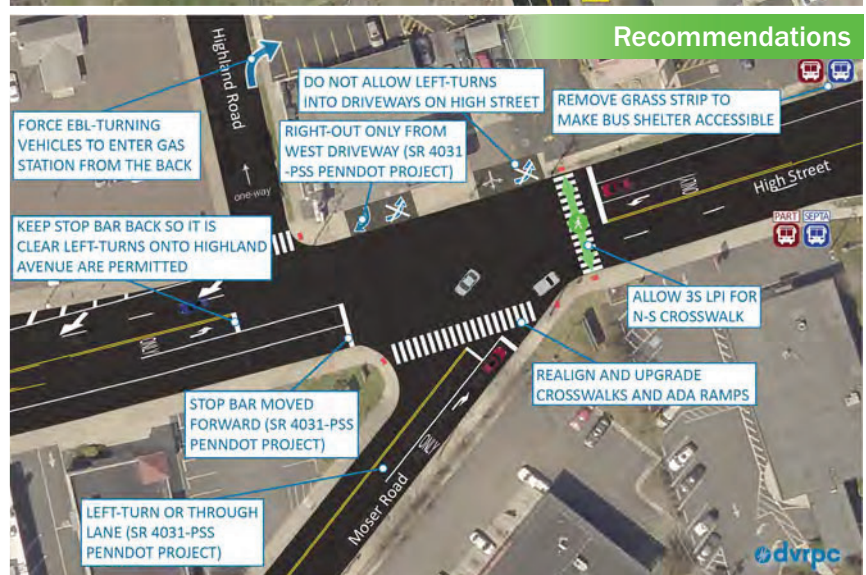
● Rear-end ● Angle ● Sideswipe (same direction)
● Serious injury

Approach	AM Peak Hour Volumes	PM Peak Hour Volumes
NB	145 (99 L, 44 R, 2 T)	175 (52 L, 121 R, 2 T)
SB	4 (1 L, 1 R, 2 T)	7 (3 L, 4 R, 0 T)
EB	224 (2 L, 14 R, 208 T)	330 (3 L, 43 R, 284 T)
WB	256 (66 L, 1 R, 189 T)	488 (130 L, 12 R, 346 T)

Observations

- 3 of the 8 crashes shown on the left involved an eastbound vehicle making a left-turn onto Highland Road.
- The wide northbound right-turn encourages speeding.
- The gas station owner must agree with improvements affecting access management at this location.
- Bike MontCo* and the *DVRPC Trails Feasibility Study* identify High Street as a bicycle route; however, a safer east-west connection could be made on parallel residential streets.

Recommendations

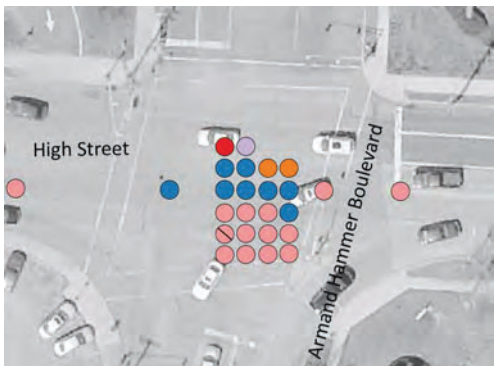




5 High Street and Armand Hammer Blvd

Traffic Volumes

Crash Summary



PennDOT Crash Data (2012-2017)

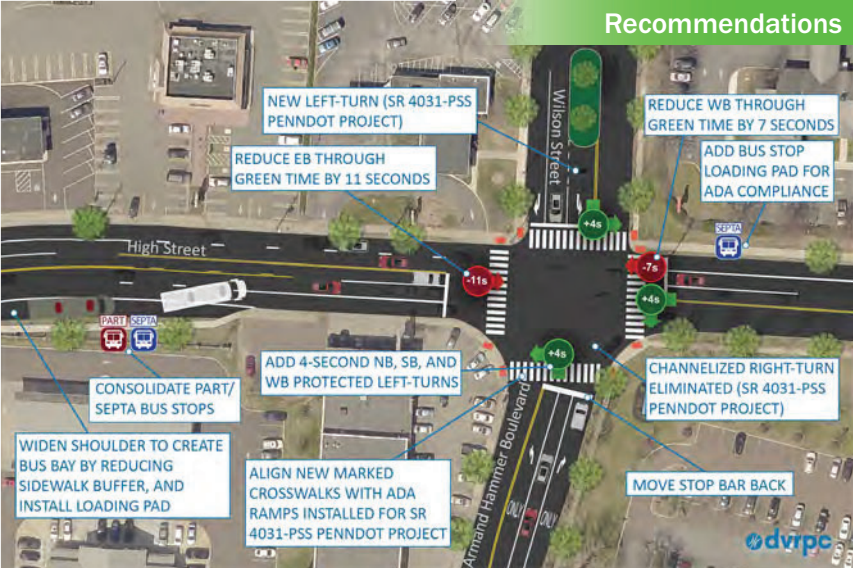
● Rear-end ● Angle ● Sideswipe (same direction)
● Serious injury ● Hit pedestrian ● Hit fixed object

Approach	AM Peak Hour Volumes	PM Peak Hour Volumes
NB	247 (43 L, 5 R, 199 T)	810 (290 L, 320 R, 200 T)
SB	335 (115 L, 151 R, 69 T)	142 (37 L, 22 R, 83 T)
EB	641 (6 L, 284 R, 351 T)	603 (22 L, 142 R, 439 T)
WB	527 (252 L, 32 R, 243 T)	849 (257 L, 44 R, 548 T)

Observations

- The SEPTA and PART buses currently stop in front of the Firestone driveway on High Street.
- The EB and NB approaches currently experience greater delays than the WB and SB approaches. In the PM peak hour, the LOS for the NB left-turn is a D.
- Angle crashes were most common here. 4 involved vehicles making a southbound left-turn, and there is no protected phase for this movement.

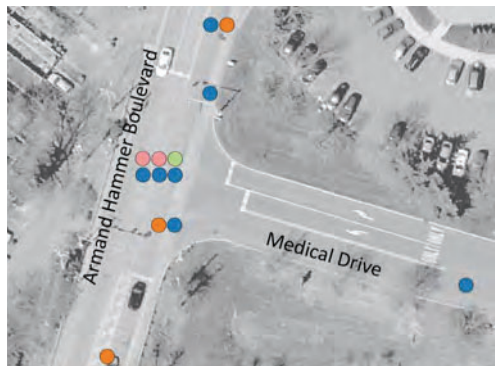
Recommendations



6 Armand Hammer Blvd and Medical Drive

Traffic Volumes

Crash Summary



PennDOT Crash Data (2012-2017)

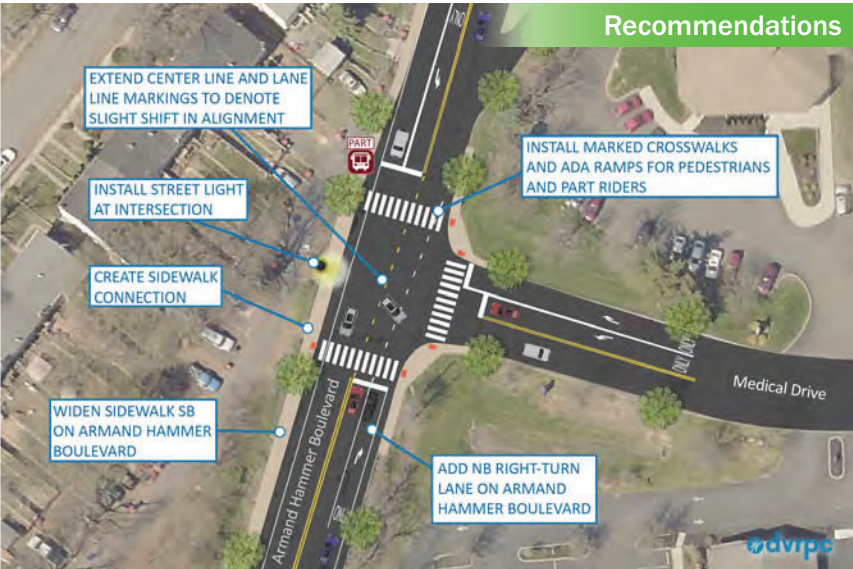
● Head-on ● Angle ● Hit fixed object
● Rear-end

Approach	AM Peak Hour Volumes	PM Peak Hour Volumes
NB	647 (157 R, 490 T)	817 (61 R, 756 T)
SB	820 (146 L, 674 T)	575 (66 L, 509 T)
WB	52 (19 L, 33 R)	390 (168 L, 222 R,)

Observations

- There is a gap in the sidewalk on Armand Hammer Boulevard at this intersection.
- The PART bus stops on the SB side of Armand Hammer at this intersection, but there is no pedestrian infrastructure.
- The NB approach is currently operating at a LOS C in the AM peak hour and LOS F in the PM peak hour.
- 4 of 7 rear-end crashes were caused by NB vehicles either slowing or stopping in the travel lane.

Recommendations



7 Armand Hammer Blvd and Industrial Hwy

Traffic Volumes

Crash Summary



PennDOT Crash Data (2012-2017)

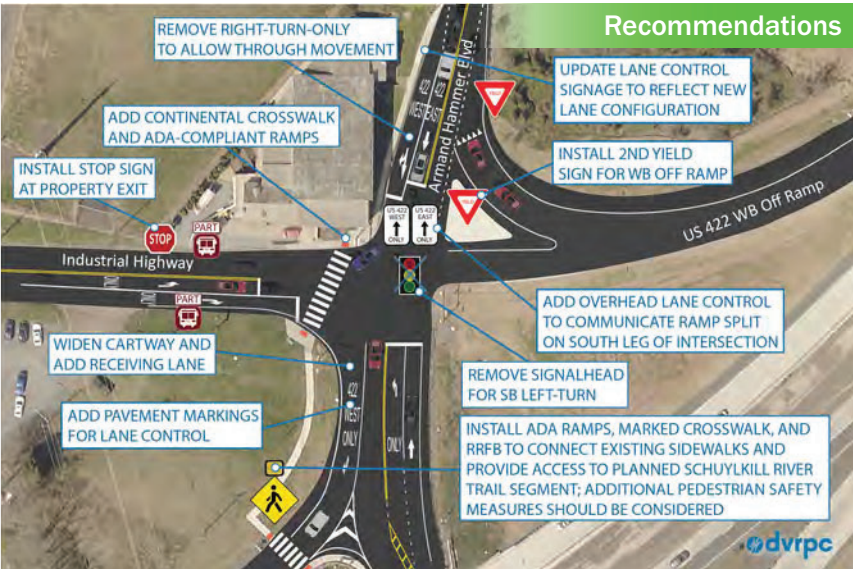
● Sideswipe (opposite direction) ● Rear-end ● Angle ● Hit fixed object ● Other
● Serious injury ● Head-on ● Hit pedestrian

Approach	AM Peak Hour Volumes	PM Peak Hour Volumes
NB	342 (23 L, 319 T)	313 (44 L, 269 T)
SB	662 (43 R, 619 T)	715 (152 R, 563 T)
EB	322 (114 L, 208 R)	235 (94 L, 141 R)
WB	304 (14 L, 217 R, 73 T)	596 (4 L, 217 R, 217 T)

Observations

- 10 of 13 angle crashes involved EB left-turning vehicles; 9 of 15 rear-end crashes involved WB vehicles.
- There is 1 PART stop on either side of Industrial Highway. Ridership at this location is very low.
- There is an existing sidewalk connection to the US 422 WB on-ramp and a pedestrian crossing sign at the ramp.
- SB through volumes are high, while SB right-turn volumes are low.

Recommendations



8 Vaughn Road and PA 724

Traffic Volumes

Crash Summary



PennDOT Crash Data (2012-2017)

● Angle ● Hit fixed object
● Rear-end

Approach	AM Peak Hour Volumes	PM Peak Hour Volumes
NB	54 (22 L, 32 R, 0 T)	30 (19 L, 11 R, 0 T)
SB	1 (0 L, 1 R, 0 T)	1 (1 L, 0 R, 0 T)
EB	951 (0 L, 10 R, 941 T)	715 (0 L, 38 R, 677 T)
WB	571 (2 L, 1 R, 568 T)	993 (12 L, 0 R, 981 T)

Observations

- There are no advance warning signs on PA 724 for this intersection.
- There are no breaks in the shoulders to denote the presence of driveways.
- The Vaughn Road street sign is not visible from PA 724.
- The intersection is not well lit, and 4 of the 8 crashes occurred in dark conditions.

Recommendations



9 Hoeffcker Road and PA 100

Traffic Volumes

Crash Summary



PennDOT Crash Data (2012-2017)

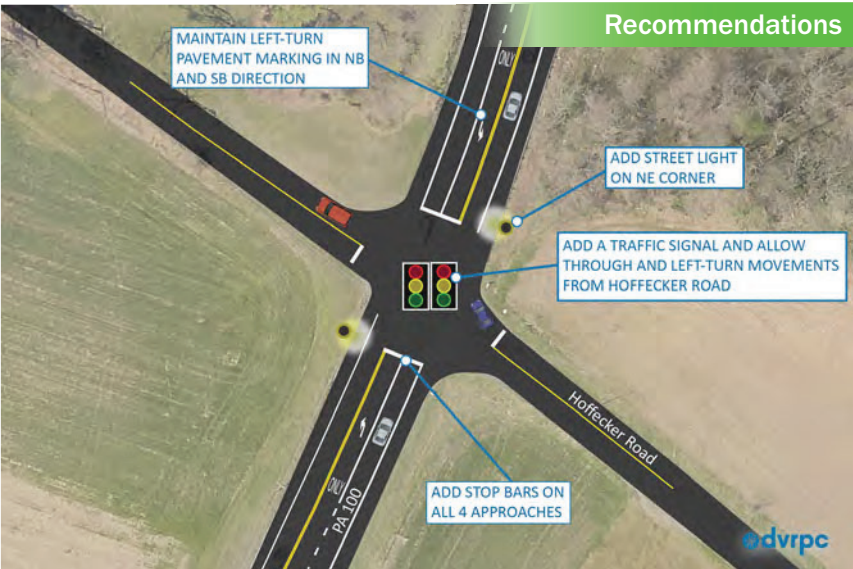
● Head-on ● Angle ● Hit fixed object
● Rear-end ● Serious injury

Approach	AM Peak Hour Volumes	PM Peak Hour Volumes
NB	549 (13 L, 6 R, 530 T)	1124 (53 L, 6, 1065 T)
SB	1017 (82 L, 2 R, 933 T)	735 (53 L, 6 R, 676 T)
EB (R-only)	28 (25 R, 3 T)	25 (25 R)
WB	59 (3 L, 54 R, 2 T)	71 (2 L, 64 R, 5 T)

Observations

- The pavement markings need maintenance, including the stop bars.
- The EB right-turn-only rule is not obeyed. The majority of crashes at this location were angle crashes, and one of these resulted in a major injury. 2 of these angle crashes involved an eastbound vehicle traveling straight or making a left-turn.
- This intersection could warrant a signal based on future volumes.

Recommendations





POTTSTOWN REGION TRAFFIC ANALYSIS



Preliminary Analysis and Study Recommendations for the December 6, 2018 PMRPC Meeting

Level of Service (LOS)

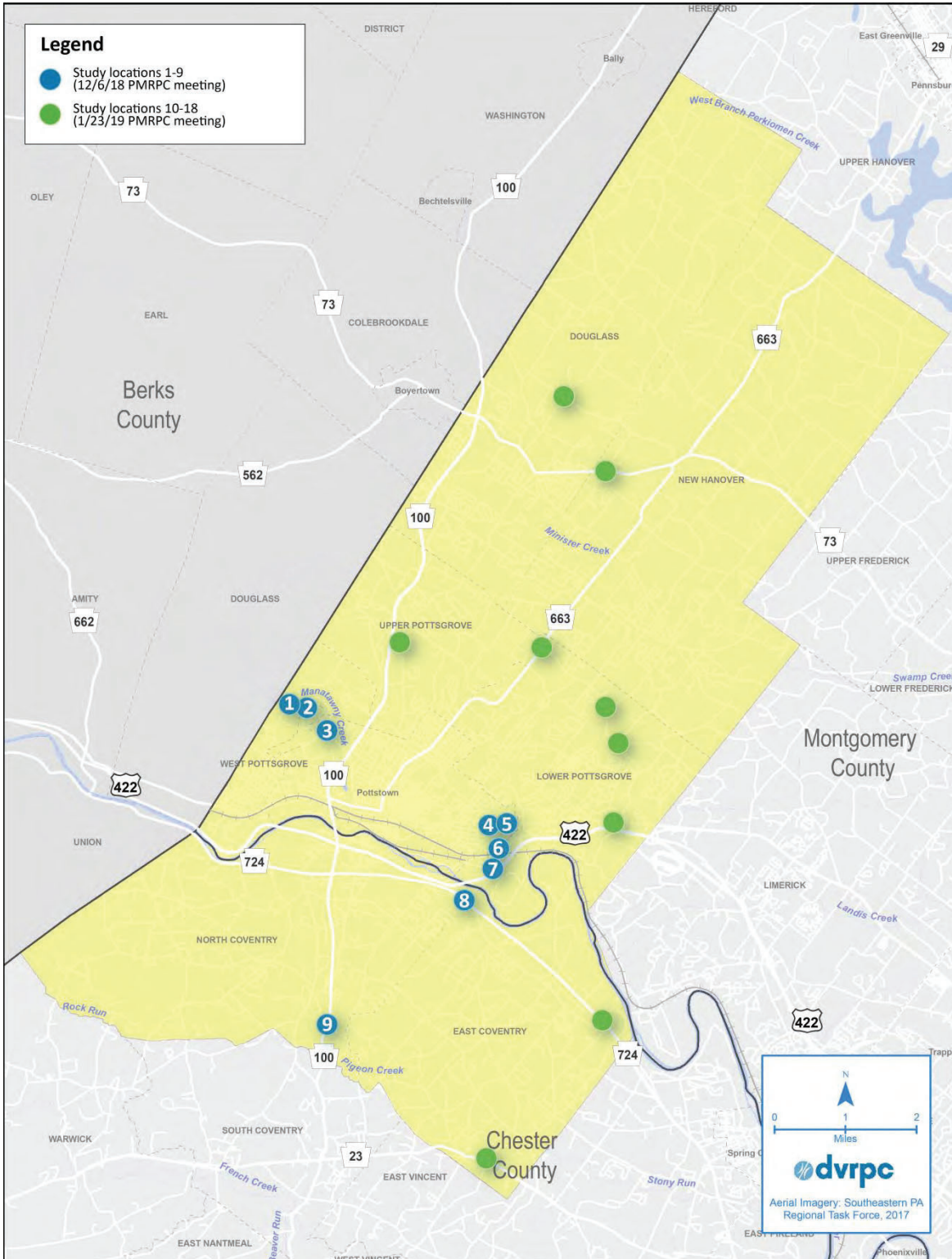
LOS ($v/c \leq 1.0$)	Control Delay (sec/vehicle)	Qualitative Description of Traffic Operations
A B C	≤ 10 > 10-20 > 20-35	Stable and Predictable
D	> 35-55	Predictable, but Approaching Unstable
E F	> 55-80 > 80	Unstable and Unpredictable



POTTSTOWN REGION TRAFFIC ANALYSIS



Map of Study Locations



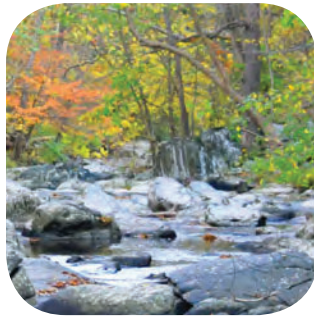


Landscapes

Chester County Comprehensive Plan

Draft

Executive Summary



This plan serves four primary purposes:

- Establishes a preservation and growth vision for the county and its municipalities
- Guides county government decision-making
- Guides local municipal planning and implementation
- Provides a framework for collaboration across municipal boundaries

Challenges

Population and business growth pressure will continue to affect the county, with 146,000 new residents projected between 2015 and 2045. The senior population is anticipated to double and the county's racial and ethnic makeup will become more diverse. Preferences on how and where we live, work, and shop are also shifting.

Landscapes3 continues the legacy of planning leadership and collaboration found in Chester County. This plan provides a response to new growth and change, supports our thriving communities, and preserves the unique characteristics that make the county such a cherished place.



Creating the Plan

Landscapes3 built on the collaborative processes that made prior plans so successful. Opportunities for providing ideas, concerns, and comments were provided throughout the multiyear process.



Vision

In 2045... Chester County abounds with healthy natural areas, robust farms, cherished historic sites, diverse housing, thriving businesses, quality education, accessible transportation, and vibrant communities for all.



Renewing the Legacy

Balancing preservation and growth remains the central theme of Landscapes. To continue this balance, *Landscapes3* recommits to core principles that will position the county and its municipalities for success:

Resource Preservation

Recommit to protecting the county's open spaces, natural areas, and historic landscapes

Revitalized Centers

Guide compatible growth to the county's urban and suburban centers

Housing Diversity

Provide for diverse and affordable housing meeting the needs of all residents

Transportation Choices

Expand public transit, pedestrian, and bicycle networks

Collaboration

Promote effective multi-municipal and partner cooperation

Resiliency

Respond to changing markets, technology and environmental forces

Landscapes Map

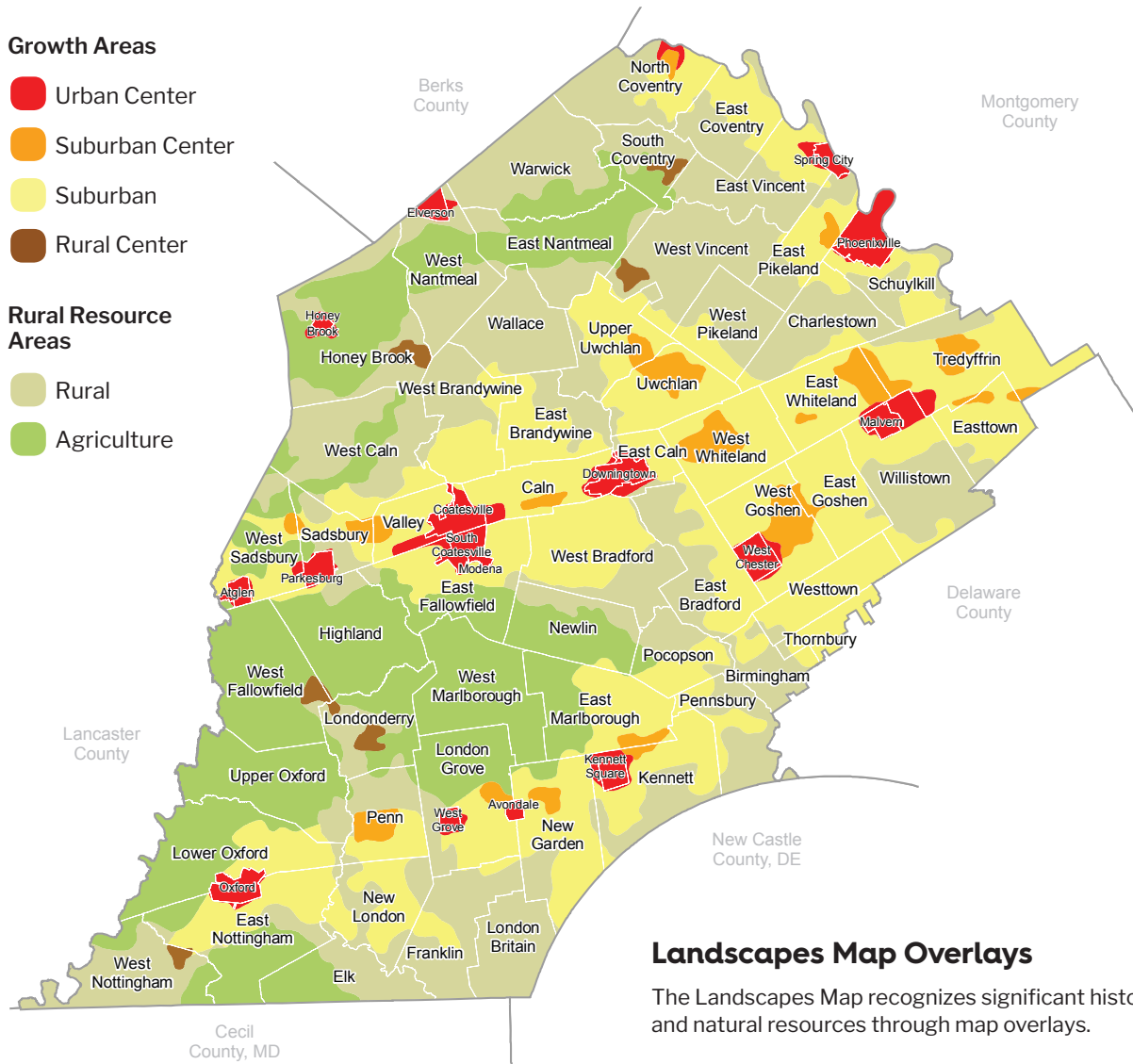
The Landscapes Map is Chester County's guide for growth and rural resource protection to help achieve our vision. The map's six categories—four in the Growth Areas and two in the Rural Resource Areas—guide future growth while protecting the special characteristics of the county.

Growth Areas

- Urban Center
- Suburban Center
- Suburban
- Rural Center

Rural Resource Areas

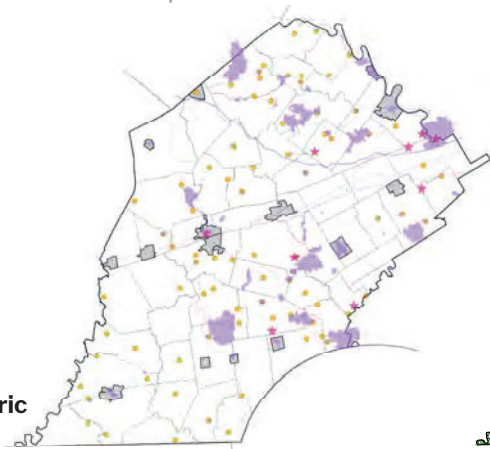
- Rural
- Agriculture



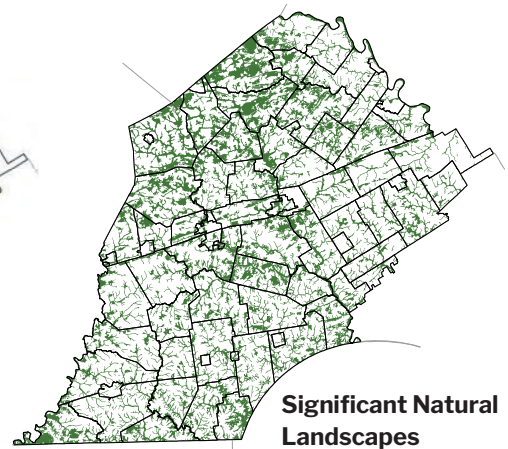
Landscapes Map Overlays

The Landscapes Map recognizes significant historic and natural resources through map overlays.

Significant Historic Landscapes



Significant Natural Landscapes



The Landscapes Map focuses on place, choice, and community, and helps make the Landscapes3 vision a reality across all of our landscapes.

Growth Areas

- Can best accommodate future growth
- Planned for a full range of infrastructure
- Highly suitable for redevelopment

Urban Center

Historic downtowns and established neighborhoods that serve as civic, economic, and population centers.



Suburban Center

Regional economic, population, and transportation centers with varying land uses.



Suburban

Predominantly residential communities with locally-oriented commercial uses and community facilities.



Rural Center

Often an extension of a village at a historic crossroads.

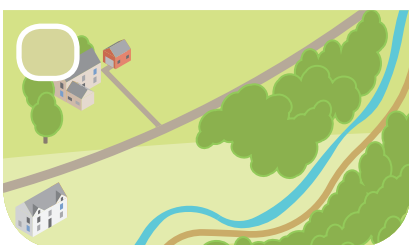


Rural Resource Areas

- Not appropriate for significant growth
- Strongly reflect the agricultural and rural character of the county
- Serve as a focus for preservation efforts

Rural

Open and wooded lands, with scattered villages, farms, and residential uses.



Agricultural

Large concentrations of active and diverse farm operations, along with related support services.



Goals

Landscapes3 has six goal areas for achieving the vision. These goal areas include objectives and detailed recommendations that provide guidance to the county and its partners.

PRESERVE

PROTECT

APPRECIATE

LIVE

PROSPER

CONNECT

Landscapes has made it easy to figure out the places to invest in preservation and the places to invest in infrastructure to support growth.

Kathi Cozzone
Chester County Commissioner

How We PRESERVE

open space • farmland • nature preserves • parks • forests • scenic views

Goal

Advance the protection and stewardship of open space, farmland, and natural and cultural features to realize economic, ecological, and quality of life benefits.



Objectives

- A** **Protect a significant portion of Chester County** as preserved farms, open space, forests, public parks or nature preserves.
- B** **Prioritize preservation efforts** to reflect the critical resources of agricultural soils, wildlife habitat, water resources, and public recreation opportunities.
- C** **Support a regional approach to preservation** that enhances the resiliency of ecosystems and provides the greatest return on investment.
- D** **Promote stewardship** of water resources, natural habitats, woodlands, historic landscapes, scenic vistas, recreational resources, and farms.
- E** **Promote the benefits of protecting and appropriately managing open space** by pursuing initiatives that inform and educate.

Recommendations Overview

- 1** Expand open space education
- 2** Increase protected farmlands
- 3** Expand protection of natural habitats
- 4** Create additional recreation properties
- 5** Enhance protection of cultural resources
- 6** Expand the network of protected open space
- 7** Encourage restoration and stewardship
- 8** Support open space policies and ordinances
- 9** Convene open space summits

If I close my eyes and picture Chester County, it is green.

Pam Brown
Director of Conservation, French and Pickering
Creeks Conservation Trust

Agriculture is very important to the fabric of our communities.

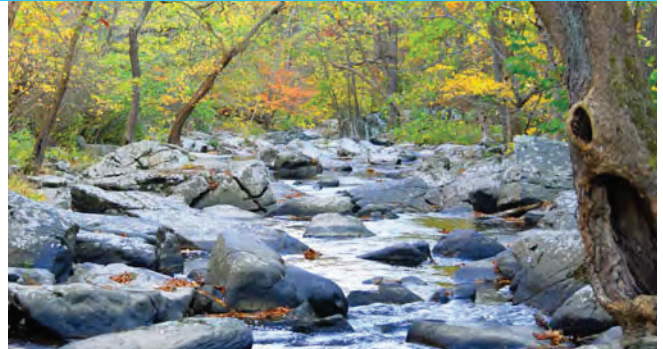
Michelle Kichline
Chester County Commissioner

How We PROTECT

woodlands • streams • wetlands • soil health • steep slopes • natural heritage areas

Goal

Protect and restore critical natural resources to ensure a resilient environment that supports healthy communities.



Objectives

- A** **Guide development** away from sensitive natural resources and toward areas appropriate for accommodating growth.
- B** **Support comprehensive protection and restoration** of the county's ecosystems including woodlands, wetlands, surface waters, riparian corridors, groundwater, floodplains, soil health, steep slopes, aquatic and wildlife habitats, and natural heritage areas.
- C** **Support municipal and regional natural resource protection** efforts, and promote a resource-based planning approach.
- D** **Promote the environmental, aesthetic, and economic value** of protecting and restoring natural resources to residents and municipalities.
- E** Promote groundwater recharge, stormwater runoff and pollution reduction, flood mitigation and resiliency, and water quality improvement and protection to **support safe and healthy communities**.
- F** **Ensure a safe, clean, long-term supply of water** to meet the current and future needs of residents and businesses.

Recommendations Overview

- 1 Promote benefits of natural resource protection
- 2 Provide natural resource policy and ordinance assistance
- 3 Enhance countywide water resources planning
- 4 Monitor impacts of change on water resources
- 5 Enhance stormwater technical assistance and collaboration
- 6 Promote innovative practices for improved water quality
- 7 Enhance flood resiliency
- 8 Support municipal on-lot sewage management programs

Protect wildlife and prevent introduction of invasive species.
Survey respondent

Local efforts can protect the environment and educate community members on ways to enhance and protect natural resources.

Lisa Moore
Manager, Kennett Township

How We APPRECIATE

historic buildings • historic viewsheds • cultural landscapes • villages • historic town centers

Goal

Preserve the historic resources and landscapes that define our cultural heritage to inspire the future through tangible connections to our shared past.



Objectives

- A** **Preserve historic resources** in their context while supporting appropriate reuse as a vital part of our community infrastructure and character.
- B** **Protect historic town centers and villages** for continued prominence in our future growth and sense of place.
- C** **Identify and foster** historic and natural resource connections to advance their protection and maintain quality of life.
- D** **Preserve the stories** of our cultural heritage and connect them to our residents and our future.
- E** **Protect historic viewsheds** as a critical component of our sense of place and character.

Recommendations Overview

- 1** Expand heritage tourism programs
- 2** Expand historic interpretation and education
- 3** Update historic resource inventories
- 4** Expand preservation training
- 5** Foster creation of historic funding programs
- 6** Enhance the historical record of the county
- 7** Promote adaptive reuse and compatible development

Historic preservation and interpretation enhances our community by offering activities to residents of all ages through partnerships, programs, and special events.

James Zeigler
Executive Director, National Iron & Steel Heritage Museum

Preserving historical structures can go hand-in-hand with development to create economic benefit.

Survey respondent

Our history and historic buildings give us a sense of place. They must be protected.

Survey respondent

How We LIVE

neighborhoods • housing • community facilities • parks and recreation • community health

Goal

Nurture diverse and well-rounded communities with a balance of residential opportunities and convenient access to community facilities, services, and amenities.



Objectives

- A Provide opportunities for a diverse housing mix** that complements community character and contributes to vibrant, safe, and inclusive neighborhoods.
- B Accommodate housing at costs accessible to all residents** in locations close to job opportunities.
- C Support safe and accessible places for people of all ages and abilities**, from children to seniors, through development of appropriate housing, community facilities, and amenities.
- D Maintain and support** coordinated systems and organizations for emergency services, human services, and public health to protect and enhance individual and community well-being.
- E Foster healthy living** by supporting walkability and access to quality recreation options, and healthy and affordable food.
- F Support access to quality educational opportunities and community facilities** through development, maintenance, and promotion of appropriate facilities and programs.

Most of all, I think it's the people we have here that make Chester County a special place.

Terence Farrell
Chester County Commissioner

Recommendations Overview

- 1 Provide housing policy and ordinance assistance
- 2 Identify new approaches for affordable housing
- 3 Explore public/private partnerships for workforce housing
- 4 Promote universal design in housing and public spaces
- 5 Promote impactful public health policy and services
- 6 Promote healthy lifestyle choices
- 7 Promote increased access to fresh, healthy, and local food
- 8 Provide exemplary emergency services
- 9 Support emergency service responders
- 10 Enhance and expand recreational opportunities
- 11 Support human and social services to serve evolving community needs
- 12 Integrate education facilities with communities
- 13 Implement county solid waste plan

How We PROSPER

job centers • business parks • retail centers • agriculture • main streets • industrial areas

Goal

Grow our economic strength through developing and sustaining a skilled workforce, adaptable work areas, supportive infrastructure, a culture of innovation, and engaged communities.



Objectives

- A Promote a diverse industry base and flexible workplaces** that can adapt to rapidly evolving market, demographic, and technological trends.
- B Support communication and collaboration between the public and private sectors** to further economic development initiatives and community health.
- C Support redevelopment and strategic infrastructure investment** to maximize community assets, capitalize on existing infrastructure, and provide areas for residential and commercial growth.
- D Encourage the agricultural industry** so that its diverse business models and workforce can adapt and thrive, continuing as a vital component of county industry and land use.
- E Coordinate and support workforce development** across age ranges, skill sets, and business sectors to create a workforce prepared for current and future opportunities.
- F Support the redevelopment of traditional main streets** while encouraging other commercial areas to incorporate the walkability, sense of place, and human-scale of these existing main streets.

Recommendations Overview

- 1 Expand workforce development
- 2 Create a redevelopment program
- 3 Support flexible zoning
- 4 Retain and expand existing businesses
- 5 Market the county's location and amenities
- 6 Create and grow businesses
- 7 Ensure economic development strategies remain responsive
- 8 Revitalize Urban Centers
- 9 Encourage Suburban Center investment
- 10 Support agricultural economic development

Local businesses are our backbone.
Survey respondent

Working together regionally has been and will continue to be a strength in the county.

Donna Steltz
Executive Director, Western Chester County Chamber of Commerce

How We CONNECT

roadways • sidewalks • trails • public transportation • airports •
freight • communications • utilities • energy • pipelines

Goal

Advance efficient, reliable, and innovative transportation, utility, and communications infrastructure systems that responsibly serve thriving and growing communities.



Objectives

- A** **Meet travel needs and reduce congestion** through transportation demand management, roadway improvements, and expanded public transportation.
- B** **Provide for the integrated development of transit-related, autonomous vehicle, automated traffic management**, and other technologically driven transportation options into the overall transportation network and the land development process.
- C** **Provide universally accessible sidewalks, trails, and public transit connections** to create a continuous active transportation network within designated growth areas, and develop multi-use trails to interconnect all communities.
- D** Ensure that rail, aviation, and select highway facilities provide for a **safe, efficient, and competitive transport** of freight, goods, and people through and within the county.
- E** **Promote safe, sustainable, and resilient** energy and communications systems at the local, regional, and national level.
- F** **Coordinate water and sewage facilities planning** with land use planning so that development is directed toward designated growth areas with adequate and well maintained infrastructure.

Recommendations Overview

- 1 Advance implementation of transportation improvements
- 2 Advance multimodal transportation
- 3 Embrace smart transportation improvements for roadways
- 4 Conduct a freight study
- 5 Promote bus service within growth areas
- 6 Expand regional rail service
- 7 Create a countywide, interconnected trail network
- 8 Enhance pipeline safety and communication
- 9 Support resilient and clean energy network
- 10 Integrate water, sewer, and land use planning

Being able to walk or ride a bicycle in your community is essential.

Survey respondent

Implementation

Who and How

Achieving the Landscapes3 vision requires leadership, collaboration, and inclusion. The county will lead Landscapes3 implementation in collaboration with a variety of partners, all of which are essential to success. Specific implementation activities include:

- Education and advocacy
- Planning
- Technical assistance
- Programs and services
- Regulation
- Construction

Measuring Progress

An annual progress report will track 18 metrics and related projects to help realize achievement of the Landscapes3 vision across all of our landscapes and within all of our communities. Metrics include:

- Protected open space
- Municipalities with natural resource regulations
- Level of heritage tourism
- Types of housing constructed
- Taxable assessments in Urban Centers
- Active transportation options

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To view full plan:

www.chescoplanning.org/Landscapes3



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