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Purpose

Chester County is committed to quality of design in its built environment.

Quality design of new development is characterized by context sensitivity and the thoughtful arrangement of details that define streets, public spaces, and communities. Ultimately, quality design improves a community’s function and appearance by unifying diverse elements.

The purpose of this guide is to:

- Foster new development that is compatible with community and historic character
- Protect residential neighborhoods from adverse impacts
- Encourage walkability and alternative modes of transportation
- Improve the environment
- Guide appropriate development

The design elements in this guide are focused on locations where new development is most likely to occur—downtown areas, underutilized non-residential properties, older industrial properties, and parking lots.
Audience

This guide is intended for use by developers, design professionals, community members, municipal attorneys, elected officials, administrative staff, engineers, planners, businesses, county planning commission members and staff, and the general public. Each has a role in ensuring that new development fits within its context and contributes to the vitality of Urban Center landscapes.

Foundation

The foundation for this guide is Landscapes3, Chester County’s comprehensive plan. The plan, completed in 2018, establishes a preservation and growth vision for the county and its municipalities. Within the plan, the Landscapes Map identifies six landscape categories where growth and rural resource protection should occur to achieve the vision. The four landscape categories within Growth Areas can best accommodate future growth, are planned for a full range of infrastructure, and are highly suitable for redevelopment. The two landscape categories of the Rural Resource Areas are not appropriate for significant growth, strongly reflect the agricultural and rural character of the county, and serve as a focus of preservation efforts.

Landscapes Map

Growth Areas
- Urban Center
- Suburban Center
- Suburban
- Rural Center

Rural Resource Areas
- Rural
- Agricultural
Vision

The vision for Urban Center landscapes is historic downtowns and established neighborhoods that serve as civic, economic, and population centers with a traditional town character. Urban Center landscapes may accommodate substantial future growth at a medium to high intensity with a mix of uses, including commercial, civic, and cultural destinations. Transportation infrastructure and amenities support a walkable community that is integrated into the public transportation and roadway systems.

Urban Center landscapes are located in and around Chester County’s 15 boroughs and one city, as well as extending from Pottstown Borough.
The planning principles and design elements established in the Landscapes3 vision for the Urban Center landscapes serve as the basis for the format of this guide.

This section has four themes: Growth Outlook, Preservation Focus, Land Use Patterns, and Infrastructure. The importance of each principle is discussed and examples of supportive policies that guide municipal action and facilitate private investment are listed. For further information, a link to on-line resources is provided.

The guidelines for the treatment of development and related features based on well-established patterns of building and quality design.

This section has three themes: Building Character, Site Amenities, and Transportation. Each guideline is introduced with an overview of “why” it is important to the health, safety, and welfare of the county’s Urban Centers. The overview is followed by an illustration or graphic to express design considerations and best practices to carry out each design element. A regulatory strategy from a local or national source is found at the bottom of each topic as well as a link to additional on-line resources.
Planning Principles

Key objectives, values, and priorities to consider when creating long range plans, investing in infrastructure, or evaluating proposed development.

GROWTH OUTLOOK
PRESERVATION FOCUS
LAND USE PATTERNS
INFRASTRUCTURE
GROWTH OUTLOOK

Substantial future growth
The county’s existing Urban Center development patterns can accommodate some of the anticipated increase in the county’s population over the next few decades.

Example Policies
• Accommodate new development in underutilized areas such as old industrial land, closed institutions, parking lots in downtowns, and vacant lots.
• Ensure new development is walkable and served by transit to improve residents’ mobility and help reduce dependence on personal automobiles for travel.
• Encourage large and growing institutions, community facilities, and businesses to be role models of high quality architecture, green infrastructure, and preservation of historic buildings.

MUNICIPAL EXAMPLE
• Delineate a designated redevelopment areas where higher density development in a compact, resource-efficient pattern of development is permitted or encouraged and urban services, including public transportation, are available.

Phoenixville Borough Comprehensive Plan, 2011; p. 37

As a community that is almost fully developed, West Chester Borough is planning carefully to ensure that future growth does not exceed the capacity of the existing natural, physical, and social infrastructure.

PRESERVATION FOCUS

Adaptive reuse of historic buildings to maintain unique community character and walkability
The reuse of historic resources is important due to their cultural and historic significance to a community and the role they play in enhancing a community’s sense of place and economy through tourism and other economic activity.

Example Policies
• Encourage developers, homeowners, and businesses to reuse existing buildings instead of demolition.
• Incentivize adaptive reuse, retrofit, and renovation projects to maximize existing infrastructure.
• Educate and train new and small developers, including community organizations, to bring greater diversity and sustainability to community development.

MUNICIPAL EXAMPLE
• Consider the adoption of a Historic Preservation Ordinance that provides alternative use incentives to encourage the preservation of historic buildings.

Avondale Borough Comprehensive Plan, 2019; p. 39

The Sharples Works Apartments in West Chester Borough was originally a 19th century industrial use. Original structural and surface elements are integrated into the building’s interior spaces.

Toolbox
Adaptive Reuse

The Sharples Works Apartments in West Chester Borough was originally a 19th century industrial use. Original structural and surface elements are integrated into the building’s interior spaces.
PRESERVATION FOCUS

Development compatibility with traditional building setbacks, heights, and neighborhood character

Traditional urban form, such as rectangular blocks with pedestrian-scale buildings placed next to sidewalks, makes Urban Centers attractive and inviting. Building designs and heights should enhance and complement the image and form of downtowns, provide transition to the edges of downtowns, and protect the scale and quality in areas of distinctive physical or historical character.

Example Policies

- Allow only limited variation from the established community character, concentrating tallest buildings in downtown cores.
- Ensure new building placement allows light and air into the site, adjacent streets, and surrounding properties.
- Ensure new building placement preserves and enhances public view corridors that focus attention on natural or built features, such as landmark buildings or open spaces.

MUNICIPAL EXAMPLE

- Consider development regulations that extend the mixed-use, historic character of the downtown to strategic areas that are suitable for significant, larger-scale redevelopment and hold potential to generate considerable activity.

Example Policies

- Encourage both mixed-use buildings and a mix of uses in separate buildings where appropriate.
- Ensure mixed land use development provides safe, convenient, accessible, and attractive design features to promote walking and biking.

MUNICIPAL EXAMPLE

- Consider development regulations that extend the mixed-use, historic character of the downtown to strategic areas that are suitable for significant, larger-scale redevelopment and hold potential to generate considerable activity.

LAND USE PATTERNS

Medium to high intensity mixed use redevelopment and infill development

Mixing residential and nonresidential land uses in close proximity to each other and everyday destinations (e.g., shops, schools, open space, workplaces) can increase walking and biking and reduce the need to make trips by automobile. Development on infill sites takes advantage of existing infrastructure while helping to steer development away from greenfield sites.

Example Policies

- Encourage both mixed-use buildings and a mix of uses in separate buildings where appropriate.
- Ensure mixed land use development provides safe, convenient, accessible, and attractive design features to promote walking and biking.

MUNICIPAL EXAMPLE

- Consider development regulations that extend the mixed-use, historic character of the downtown to strategic areas that are suitable for significant, larger-scale redevelopment and hold potential to generate considerable activity.

Toolbox

Traditional Neighborhood Development ▶
LAND USE PATTERNS

Revitalization of brownfields and greyfields

Revitalization of brownfields and greyfields can take advantage of existing public infrastructure and reactivate these sites into community assets (i.e. institutions, recreational facilities, etc.), assist in accommodating the housing needs of a growing population, or become commercial or mixed-use tax ratables.

Example Policies

• Identify and inventory difficult sites and determine the impediments that stand in the way of redevelopment.
• Prepare a strategic plan that includes a comprehensive approach to remediation and redevelopment.
• Make developers and property owners aware of financial and programmatic assistance available.
• Assist developers with site acquisition, as appropriate.

MUNICIPAL EXAMPLE

• Identify and rezone blighted and underutilized industrial and commercial areas and allow greater flexibility of use, bulk, and design provisions and streamline review processes.

Phoenixville Regional Comprehensive Plan, 2019; p. 3.1 and 3.14.

Toolbox

Brownfield and Greyfield Development
Commercial Landscapes Series

LAND USE PATTERNS

Transit oriented development

Creating transit oriented development patterns optimizes the potential of developable land and addresses issues like auto dependency, traffic congestion, and access to affordably-priced housing.

Example Policies

• Ensure diverse housing types are permitted, including both market-rate and affordably-priced units and housing for seniors and others with mobility impairments.
• Coordinate private development efforts with transit providers, including transit agencies’ capital investments, service frequency, and intermodal connections.
• Ensure convenient and comfortable connections to bus routes, thereby expanding access to train stations.

MUNICIPAL EXAMPLE

• Allow higher residential densities, higher intensities of non-residential land uses and/or a larger variety of uses, including mixed-uses, in the vicinity of a train station. Consider the presence of historic districts and conservation areas in determining design parameters.

Downingtown Borough Comprehensive Plan, 2013; p. 5.7.

Toolbox

Transit Oriented Development
Commercial Landscapes Series
LAND USE PATTERNS

New housing inclusive of a broad range of types and income levels
Providing a range of housing types accommodates varying lifestyle choices and affordability needs and makes it possible for households of different sizes and income levels to live in close proximity to one another.

Example Policies
• Promote new housing that is compatible with existing development in the area.
• Advance the understanding of urban housing design among members of the design and development community.
• Examine the impact of land use regulations and building codes on the feasibility of rehabilitating the existing stock of affordable housing with a focus on making the requirements and standards more rehab supportive.

MUNICIPAL EXAMPLE
• Protect and improve the existing housing stock to meet the housing needs of current and future residents by providing for housing options that accommodate households at various life stages and income levels.
  Avondale Borough Comprehensive Plan, 2019; p. 18.

Toolbox
Housing Diversity
Affordable Housing Bonuses

LAND USE PATTERNS

New or expanded institutions and community services
Vital, healthy institutions and community services bring stability and presence to neighborhoods. The design of these facilities can inspire, transform, and catalyze communities.

Example Policies
• Support expansion of anchor institutions, such as libraries or medical facilities, within the community in order to attract employees, utilize vacant parcels, and support local business growth.
• Encourage institutional uses and public buildings and facilities to incorporate architectural and site design that reflects their civic importance and that identifies their role as focal points for the community.
• Encourage institutions and neighborhoods to work pro-actively to address issues such as traffic and parking, hours of operation, outside use of facilities, and facility expansion.

MUNICIPAL EXAMPLE
• Maintain efforts to retain public entities, such as a library or post office in the downtown, and enhance the viability of these facilities.
LAND USE PATTERNS

Expanded cultural and arts facilities
Expanding facilities dedicated to performing arts, museums, or other types of cultural organizations and facilities creates a competitive advantage and a high quality-of-life for Urban Centers.

Example Policies
- Identify appropriate sites for future expansion and development of cultural facilities.
- Encourage the reuse of industrial and institutional buildings for arts and creative industry use.
- Support the siting of arts facilities in locations where impacts upon nearby uses can be most easily managed. Give preference to locations near downtowns and public transit.
- Encourage the provision of space for the arts in new and refurbished public buildings and spaces.

MUNICIPAL EXAMPLE
- Encourage appropriate cultural uses and events that will enhance arts and culture and attract patrons to the downtown.


LAND USE PATTERNS

Pedestrian oriented uses in downtowns, with limited drive-through facilities or auto-service elements
Traditional downtowns have a mix of higher density housing, pedestrian-oriented retail uses, and intense business uses that are typically compact in arrangement. Uses that are less intense and spread out, and uses that are auto-oriented discourage pedestrian activity.

Example Policies
- Encourage uses in downtowns that respond to pedestrian activity.
- Prohibit parking lots as primary uses along viable, commercial corridors.
- Discourage auto-oriented commercial “strip” development.
- Encourage, where feasible, the development of outdoor sidewalk cafés and similar uses which animate the street.

MUNICIPAL EXAMPLE
- Develop a downtown retail strategy to ensure a mix of uses that will appeal to a broad population while preserving the existing community character.


Kennett Square Borough encourages active ground floor uses in its downtown to promote an energetic streetscape.
**INFRASTRUCTURE**

**Upgraded utilities to support revitalization**

Urban Centers supported by reliable water mains, storm and sanitary sewers, electrical grids, and telecommunications facilities are positioned for investment in rehabilitated existing buildings and new building construction.

**Example Policies**

- Target utility upgrades in older and substandard areas to provide a foundation for community revitalization efforts and improve quality of life for residents in these areas.
- Preserve land for water and wastewater facilities and potential expansion.
- Ensure that infrastructure upgrades are carefully scheduled and coordinated with development and redevelopment plans in order to minimize traffic rerouting, disruptive subsurface excavation, and utility shut-offs.
- Allow for solar, wind, geothermal, and other alternative energy use to promote sustainability.

**Municipal Example**

- Prioritize various streetscape enhancements where maintenance or enhancements of public infrastructure are needed most.

  *Oxford Borough Revitalization Plan Update, 2015; p. 71.*

**INFRASTRUCTURE**

**Streets designed to improve pedestrian and bicyclist safety and mobility**

A key component of livable and attractive Urban Centers is a safe and convenient place for people to walk and bike as part of their daily activities.

**Example Policies**

- Support a complete streets approach to reduce crossing distances for pedestrians, provide for adequate separation between motor vehicle traffic, bicyclists, and pedestrians, and develop connected networks of walking and bicycling facilities.
- Require sidewalks along all streets.
- Encourage bike racks at key locations and as part of new development.

**Municipal Example**

- Focus on pedestrian and vehicular safety through the management of roadway design, speed, volume, and safety in and around areas with increased pedestrian activity.

  *Elverson Borough Comprehensive Plan, 2014; p. 2-4.*

**Toolbox**

- Bicycle and Pedestrian Facilities: Policy
- Multimodal Circulation Handbook for Chester County, PA
INFRASTRUCTURE

Upgraded train stations and bus stops
Trains stations and bus stops encourage transit use and are welcoming entry points for Urban Centers. When people approach an Urban Center via train or bus, train stations and bus stops provide a first impression of the community.

Example Policies
• Provide safety features and amenities at stations, such as lighting, wayfinding signage, canopies, enclosed waiting areas, artwork, and covered bike shelters.
• Improve train stations and bus stops using universal design principles.
• Create sustainable parking strategies for train stations to meet demand for park and rides.

MUNICIPAL EXAMPLE
• Update regulations to incorporate recommendations from public transportation planning documents completed for the region, including the SEPTA Bus Stop Design Guidelines, to ensure a safe and comfortable bus stop experience.

Toolbox
Transit Stops and Centers ►
Universal Design for Public Spaces ►

INFRASTRUCTURE

Small parks, central greens, and active recreational facilities
These facilities provide space for recreation, scenic beauty, and outdoor activities for workers, visitors, and residents.

Example Policies
• Prioritize improvements to existing parks and the creation of new parks in underserved areas.
• Encourage the development of outdoor plazas within downtowns, around train stations and civic buildings, and in other areas with high volumes of pedestrian activity.
• Ensure that all residents live within a 10-minute walk of a neighborhood park or a recreation facility.
• Connect parks to existing protected areas of the county’s natural landscapes.
• Encourage institutional and private open space to be more accessible to local users.

MUNICIPAL EXAMPLE
• Develop a master plan for parks, recreation, and trail connections.

Toolbox
Urban Green Spaces ►
Modern communications infrastructure

Modern, efficient, and reliable communication infrastructure is important to residents and visitors, and is vital to economic development.

Example Policies

• Promote digital infrastructure that provides affordable broadband data communications anywhere, anytime to residents.
• Protect the visual character of the community from potential adverse impacts of communications facilities.
• Establish provisions to place cables and wires underground, wherever feasible.

Municipal Example

• Support quality communications infrastructure.
Design Elements

Guidelines for the treatment of development and related features based on well-established patterns of building and quality design
Building heights similar to nearby properties or building setbacks from street and neighboring properties after a few stories

Building scale, window patterns, rhythm, and form that complement the historic pattern

Buildings at the sidewalk in downtowns

Front door on primary street
BUILDING CHARACTER

Quality building design supports a vibrant urban environment and contributes to the creation of a cohesive, distinctive, and active public realm. This section provides guidance on how the design of new buildings should relate to their surrounding context and engage people in the streetscape.
BUILDING CHARACTER

Multi-story buildings

Multi-story buildings allow for the appropriate intensity of Urban Center land use while matching the existing historic character. Verticality in buildings also contributes to walkable downtowns by creating a sense of enclosure.

Minimum height
Specify minimum building heights based on context to ensure a sidewalk’s sense of enclosure is present. In downtowns, for instance, ensure new buildings, and additions and alterations to existing buildings, are vertical in character and no less than two stories in height.
Downingtown Borough Zoning Ordinance, Section 256-56.1, F.

Maximum height
Define maximum overall building heights and differentiate between base height, upper story setbacks, and total building height. In some districts, buildings can be higher if they respect certain upper story setback dimensions.
Kennett Square Borough Zoning Ordinance, Section 23-23.

Reference context
Infill projects should reflect the vertical proportions of the adjacent traditional street wall pattern.

Build two stories minimum
Existing Main Street buildings are typically two stories or greater.

Toolbox
Form Based Codes and Zoning Ordinances
The height of new buildings should match or gradually transition from the existing scale and unique characteristics of nearby properties. Once a building reaches a certain height, upper story setbacks can ensure that light and air can reach the sidewalk below and that the building more fully matches historic character.

**Use stepbacks and stepdowns**

Large structures may take the approach of stepping in their side or rear elevations to gradually reach their desired height while still respecting the buildings in their immediate vicinity.

**Upper story setbacks**

Ensure architectural design and detailing of tall buildings are varied in order to minimize the impact and scale of the building height and to visually enhance the appearance of the building. With upper story setbacks, the total height of the building may be greater than the height of the street wall, but is less visible to the pedestrian on the street.

Lower Merion Township, PA Zoning Ordinance, Section 155-213.

**Exceptions to height limits**

Allow flexibility for structures or objects that may penetrate a height limit, such as elevator bulkheads or parapets.

Lititz Borough Zoning Ordinance, Section 304.
Building scale, window patterns, rhythm, and form that complement the historic building pattern

A building’s character is expressed through scale, window patterns, rhythm, and form. How these features are designed for new buildings plays a key role in maintaining the historic character of the county’s Urban Centers and contributing to a high-quality built environment.

**Scale**

**RECOMMENDED**

Relate the size and proportion of new buildings to the scale of adjacent buildings. Although the highlighted building is larger in square footage than existing adjacent buildings, this illustration demonstrates that the existing scale of the area is maintained.

**NOT RECOMMENDED**

Avoid monolithic, uniform buildings that in height, width, or mass sharply contrast with the scale of existing adjacent buildings.

**Frontage detailing**

Allow for wider street frontages when a building facade incorporates elements of architectural detailing that help to break down the scale of the building.

Atglen Borough Zoning Ordinance, Section 1104, A, 5.

**Window Patterns**

**RECOMMENDED**

Relate new window and doorway systems with the proportion, scale, and amount in nearby historic buildings.

**NOT RECOMMENDED**

Avoid introducing incompatible window patterns that contrast the number and size of windows found in existing surrounding historic buildings.

**Windows on primary facades**

Set standards for the location and ratio of windows on primary facades for ground floors and upper floors.

Township of Lower Merion Zoning Ordinance, Section 155-6.4.H.2.a.
Rhythm

**RECOMMENDED**

New buildings should relate to the predominant vertical expression of neighboring buildings. Larger buildings can relate by interrupting the facade to depict smaller masses.

**Facade articulation**

Ensure the main facade of buildings is designed to emphasize entryways, windows, corners, and vertical elements of the building facade, as well as other special features.

Township of Lower Merion Zoning Ordinance, Section 155-6.4.G.2.a

**NOT RECOMMENDED**

Avoid new buildings that do not relate to the rhythm of existing adjacent buildings such as the building above, which has a long horizontal facade that is out of place.

Form

**RECOMMENDED**

Relate roof forms of new buildings to those existing in the area. The shape of windows, doors and other design elements should also have characteristics that complement surrounding building forms.

**Roofline variation**

Ensure rooflines have variation on a street to provide visual interest.

West Grove Borough Zoning Ordinance, Section 904, I, 2.

**NOT RECOMMENDED**

Avoid introducing roof shapes and pitches not traditionally used in Urban Center landscapes.
Buildings at the sidewalk provide a sense of enclosure in downtowns, which supports walkability, street level activity, and retail vibrancy.

**Build-to line**
Ensure buildings abut the sidewalk and specify maximum setbacks for the purposes of a courtyard, plaza, recessed entrance, or an outdoor dining area adjacent to the public street.

Atglen Borough Zoning Ordinance, Section 1104, A, 1.

**Recesses and projections**
Allow for windows and doors to recess or project beyond build-to lines or setbacks to add variety to the building wall. Also allow for other architectural elements like stoops, awnings, canopies, balconies, and planters to be incorporated for variation. Define maximum projections, clearance height for pedestrian flow, and other relevant dimensions.

Media Borough Zoning Ordinance, Section 311-61, A.

**Scale front setbacks**
When existing buildings are set back farther from the street, new buildings may establish a precedent for placement closer to the street.

**Incorporate compatible retail frontage**
Maintain the prevailing pattern of floor to ceiling height at the ground floor retail space.
BUILDING CHARACTER

Windows at ground-level on shopping streets with views into retail and other publicly-accessible uses

A visual connection between a public street and commercial interiors encourages customers to stroll from one business to the next and to support multiple businesses during a shopping trip.

Add interest, depth, and protection
Integrate awnings with the overall building design to reinforce building facade patterns and add interest, depth, and protection for windows and doors.

Avoid opaque facades
Place a high ratio of transparent windows at ground-level facades on Main Streets to allow views into working areas or lobbies, pedestrian entrances, or storefront displays. Minimize signage, blinds, and plantings that may block views of commercial interiors.

Define transparency types
Define the type of elements that comply with transparency requirements. Doors, windows, and displays can be encouraged, while long stretches of solid glazing without any articulation should be restricted. For commercial store fronts, require minimum transparency levels for security gates and limit garage walls. Require that any security gate be placed behind the glass line. This can enhance the pedestrian experience when commercial establishments are closed.

Atglen Borough Zoning Ordinance, Section 1104, A., 1.

Transparency
Define minimum and maximum transparency levels for the ground level for front facades and walls facing a street, parking area, or sidewalk.

Conshohocken Borough Zoning Ordinance, Section 27-2203, 1, A, 13.
Residential buildings

Building orientation and entrances
Define building orientation and entrance locations in relation to specific land uses and street types. The facade of dwellings and principal nonresidential buildings should be oriented or face toward a street or a public or private open space designed as a green or plaza that includes pedestrian walkways for circulation. Phoenixville Borough Zoning Ordinance, Section 27-403, 3.

Residential neighborhood buildings on corner lots should visually address both street frontages. The primary facade should include the front entry as a dominant feature. The secondary street-facing facade should include articulation, such as a porch.

Multi-family buildings in downtowns and residential neighborhoods should have primary entry doors or a common entrance oriented to the primary street or a public space. Entrances should also be covered and/or recessed behind the building facade.

A main building entrance facing a primary street provides a key visual connection between the public and private realm. In downtowns, a clearly visible and easily accessible main building entrance attracts customers.
Mixed-use buildings on corner lots

Corner entrances and articulation
When buildings are located on corners, if possible the entrance shall be located on the corner with an appropriate building articulation, such as a turret, canopy, or other similar building feature that demarcates the building entry.

All primary building entrances shall be accentuated. Permitted accentuated entrances include: recessed, protruding, canopy, portico, and overhang.

Atglen Borough Zoning Ordinance, Section 1104, A, 6.  

Locate the primary entrance to corner buildings on corners. One option to articulate the corner is to cut the building at 45 degree angle, or a similar curved dimension.

A combination of special paving materials, street furnishings or plantings can also articulate corner building entrances.

Consider a prominent architectural element, such as increased building height or massing, a cupola, or turret, or a pitched roof at or near the corner of the building.
CHAPTER 3  Design Elements

- Public restrooms
- Streetscaping in downtown areas
- Places to sit
- Public art
- Stormwater management through green infrastructure along streets and within properties
- Central greens and plazas in larger developments
SITE AMENITIES

Site amenities enable social interaction, create inviting, equitable, and accessible public spaces, and promote environmental sustainability. This section provides guidance on the site amenities that add to the function and vitality of the human environment.
Strategically locate artwork
Consider site factors such as circulation and adjacent uses when selecting and placing temporary or permanent art.

Enhance sense of place
Incorporate sculpture, murals, and local artifacts as key public features, located with attention to visibility and educational opportunities. Public art that interprets a natural or cultural story enhances a sense of place.

Customize functional features
Integrate art in the structural elements of new development, such as tree grates, walls, walkways, fences, and lighting, so they can become works of art while serving a functional purpose.

Encourage public art
Provide bonuses, such as an increased height allowance, to encourage public art as part of the design of a building or as part of the outdoor pedestrian space.

West Chester Borough Zoning Ordinance, Section 112-33, 5, d.

Public art
High quality public art adds interest to the pedestrian experience, gives vibrancy to public spaces, and directly influences how people connect with a place.
SITE AMENITIES

Central greens and plazas in larger developments

Establishing central greens and plazas in larger developments integrates a community amenity that serves a variety of users including development tenants and visitors and the public. These types of spaces may function as settings for recreation and relaxation, social interaction, and places for public art.

Provide synergy with buildings
Provide an active front to buildings on at least one side of a central green or plaza to provide opportunities for interaction with and use of the space.

Encourage human interaction
Create public space to be attractive to a diversity of users and at different times of the day.

Make public spaces inviting
Locate features near the center of a public space to draw people into and through the space.

Make public spaces comfortable
Outdoor furniture is an essential element in creating useful and functional outdoor space.

Public open space
Require open space in new land development projects designed as spaces to be used by the public. Spaces of 500 to 2,000 square feet can be designed as plazas. Plazas can include ornamental structures, such as fountains, along with benches, low walls and gazebos for sitting. Greens are larger public spaces of 2,000 to 10,000 square feet that provide open lawn areas for informal play or picnicking. All public spaces should be built according to a detailed landscape plan.

Phoenixville Borough Zoning Ordinance, Section 27-407, 1.
**SITE AMENITIES**

**Dense street tree canopy**

A dense street canopy enhances walkability by protecting pedestrians from heat and sun and providing enclosure and comfort. Street trees also increase property value, improve community image, filter urban pollutants, and capture rainwater runoff.

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**Help manage stormwater**

Continuous planting strips are typically more appropriate in lower density neighborhoods and can be tied into local water management strategies.

**Help cool the streetscape**

Plant large shade trees, where space allows, to create a more dense canopy.

**Plant for long-term growth**

Plant trees in a planting strip between sidewalk and the street in order to allow for healthy root growth and to provide continuous definition and shade for both street and sidewalk. If sub-grade conditions restrict the adequate depth for planting trees, consider raised planters.

**Carefully select tree species**

How a mature tree canopy may affect street lighting, overhead utilities or views of signage and building fronts should be considered in the street tree species selection and spacing. Columnar shaped trees may be more appropriate on commercial streets.

**Type of vegetation**

Specify street trees appropriate to the region that are salt and drought tolerant. Consider the type of shade desired, the available dimensions of planting strips, and the intensity of use. Busy sidewalks, for instance, might require more resilient types of ground cover.

**Minimum tree planting**

Require property owners or developers to plant a minimum number of street trees. Determine the number according to property characteristics such as frontage width or, in case of an enlargement, the amount of increase in square footage.

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**Planting location and size**

Specify minimum distances between trees and light poles and other vertical elements evident in the along the roadside. Also require minimum caliper (trunk diameter) and heights at time of planting.

Pottstown Borough Tree Ordinance, Section 104, 3. &gt;

Downingtown Borough Zoning Ordinance, Section 287-65.3, L. &gt;

West Grove Subdivision and Land Development Ordinance, Section 350-38. &gt;
SITE AMENITIES

Stormwater management through green infrastructure along streets and within properties

Green infrastructure reduces stormwater discharges, which reduces potential combined sewer overflows, lowers pollutant loads, decreases flood risks, and improves water table replenishment. The vegetation used in green infrastructure also helps reduce ozone and particulate pollution levels that cause respiratory ailments. The economic benefits of green infrastructure can include lower development capital costs, construction and maintenance job creation, and increased property values.

Site design
Require a natural hydrology site design process to integrate green infrastructure and minimize artificial stormwater conveyance and storage facilities. This process looks to minimize earth disturbance (both surface and subsurface); maximize protection of or improvement to natural resources; maximize infiltration and the use of natural site infiltration features, patterns and conditions, and evapotranspiration features; and minimize the cumulative area to be covered by impervious surfaces.

Borough of West Chester, PA, Part II, General Legislation, Stormwater Management, Section 94-304.

Toolbox
Stormwater Management: Best Management Practices
Street lighting that minimizes light trespass is critical to the safety and security for all users within the street, including pedestrians, bicyclists, and drivers. Their location, scale, height, visibility, and design detailing all impact the legibility, functionality, and aesthetic of the sidewalk. The decorative quality of street lighting contributes to an Urban Center’s distinctiveness and visual appeal.

**Design for pedestrian volumes**
Base the design of light levels on land use activity level (i.e., higher light levels in retail areas, lower light levels in residential areas).

**Direct light downward**
Choose light fixtures that direct light downward to avoid excessive light producing glare, light trespass, and skyglow.

**Specify height**
Set maximum heights for light fixtures for parking lots (e.g., 20 feet) and pedestrian walkways (e.g., 14 feet).
Atglen Borough, Zoning Ordinance, Section 1104, L.

**Specify location**
Specify that street lights are located along both sides of streets at regular intervals.
West Chester Borough, Subdivision and Land Development Ordinance, Section 97.A.23.

**Specify color and finish**
Specify a color and finish for street lights to ensure community-wide consistency.
West Chester Borough, Subdivision and Land Development Ordinance, Section 97.A.23.

**Contribute to cultural character**
Ensure lighting fixture styles contribute to local character and cultural values.

**Accommodate accessories**
Consider incorporating artwork, banners, and hanging planter baskets on pole lights.
SITE AMENITIES

Streetscaping in downtown areas

Attractive and inviting streetscaping through a unified strategy for landscaping, street furnishing, and wayfinding signage can enhance safety, provide greater mobility and access to transportation choices, and create visual interest and expression of community character.

Coordinate with pedestrian movement
Position lighting, street furniture, and signage on the street edge, or amenity zone, of sidewalks to help separate pedestrians from vehicle travel lanes.

Contribute to the personality of the place
Express neighborhood character in streetscape design through: wayfinding and informational signage, public art opportunities, banners, and street furnishings.

Enhance the pedestrian experience
Place furnishings on streets with high levels of pedestrian activity.

Unified approach
Develop a district-wide unified approach and strategy for bollards, bike racks, waste receptacles and other street furniture through community engagement. Develop guidelines to inform local decisions on materials, dimensions, and design of street furniture. Ensure furniture is designed to complement the design of sidewalks, walkways, building entrances and green spaces, to help define outdoor public space, to minimize pedestrian and vehicular conflicts, and to enhance pedestrian safety and comfort.

Malvern Borough, Subdivision and Land Development Ordinance, Section 181-516, B, 3.

Screening for certain uses
Require screening such as planting or artwork at the property line for specific land uses (industrial, for example) as well as parking areas.

Media Borough Zoning Ordinance, Section 311-84, B.
Places to sit

Comfortable places to sit creates opportunities for people to rest, socialize, read, or people watch. Public spaces with ample seating are more age-friendly and make commercial and retail business areas more inviting.

Provide comfort with shade
Seating should be located under trees, where possible, to provide shade.

Provide a sense of safety
Arrange seating with clear views of the whole space to provide comfort.

Draw people into public spaces
Create seating in public spaces with tables and chairs, benches, or low seating walls serving as enclosures for landscaping or some other feature.

Street furniture family
Suggest types of furniture to be used for outdoor seating, including permanent rather than temporary benches and tables, umbrellas, and fences, and list preferable materials according to variables like their resistance to weather, levels of transparency, and maintainability. Provide guidance on maximum dimensions for outdoor café seating areas so they do not disturb the pedestrian clearway zone along sidewalks.

West Chester Borough, Chapter 90A-6.

Design standards
Set minimum design standards for planting, lighting, and seating for large areas where buildings are set back or where public plazas are proposed.

Bangor Borough Zoning Ordinance, Section 500.44, A, 4.
Public restrooms on downtown streets and in public spaces provide comfort and convenience for pedestrians. People can stay longer to support businesses. And for older people, access to public restrooms increases confidence in mobility and independence in the public realm.

**Make restrooms accessible from the street**
The location and appearance of public restrooms should be sympathetic to surroundings and easily identifiable and accessible, while at the same time have adequate privacy.

**Development bonus**
Consider offering development bonuses or grants to businesses to provide restrooms open to the public. For public restrooms inside a building, ensure accessibility is on a ground floor and their location is designated by signs readily located by pedestrians. For stand-alone restrooms, place them where they will be used and where they will be needed. Public restrooms in sidewalk areas should not be located in front of a building entry and should be out of the line of vision of any eating establishment.

Seattle, WA, Zoning Ordinance, Chapter 23.49.013, A.
Alleys, when available

Parking behind buildings or in garages

Sidewalks along streets

Bicycle facilities, such as bike racks and lockers

Loading and delivery facilities
TRANSPORTATION

A safe, comfortable, and efficient transportation network incorporates design that reinforces walkability, enhanced connectivity, and improves the quality of life for users. This section provides guidance on the design of elements supporting pedestrian safety, multimodal accessibility, and the use of public transportation.
TRANSPORTATION

Grid or modified grid street pattern

The grid street pattern, typical in most Urban Center street systems, maximizes street connections, which enhances the flow and accessibility for all transportation modes.

Follow existing street patterns
New streets and alleys should connect to existing grid or modified grid networks and restore historic grid patterns erased by past development.

Streets, alleys, and blocks
For new or extended neighborhoods, ensure streets follow a grid pattern of street blocks and interconnecting streets and alleys, pedestrian ways, and sidewalks, to facilitate both vehicular and pedestrian circulation.

Honey Brook Borough, Subdivision and Land Development Ordinance, Section 22-503.

Official map
The official map guides improvements such as connecting and improving the local street network, including widening, narrowing, and extensions. It also represents an effective negotiation tool for municipalities, which can help to ensure that development is compatible with and supportive of public goals.

West Chester Borough, Chapter 17, Official Map.

Toolbox
Roadway Connectivity
Bus shelters and pull-off areas for drop-offs and pick-ups

Bus shelters are streetscape amenities that increase comfort and visibility of bus stops. Shelters typically provide seating and protection from sun, rain, and other elements. Pull-off areas provide more efficient vehicle access than parking by allowing multiple vehicle loads throughout the day. Pull-off areas also decrease traffic congestion that can occur during the drop-off and pick-up of riders using ride-hailing and ride-sharing services.

Provide assistive technologies
Incorporate innovative technology to provide up-to-date, real-time rider information and other features to enhance rider experience, whenever possible.

Improve the user experience
Co-locate bus stops with pedestrian and bicycle amenities such as benches, bicycle parking, shaded areas, wayfinding signage, and trash receptacles.

Provide space for pedestrians
Maintain an adequate clear path on the sidewalk adjacent to bus shelters.

Promote bus stops through building design
Integrate a bus shelter into the design of a building through the use of overhangs or recesses when insufficient sidewalk space is available. Identify these types of shelters with signage.

Bus shelter location
Integrate on-street bus stop shelters along existing bus routes and based on the density or intensity of proposed land uses. Adjust thresholds to meet community objectives or the intent of the associated zoning district. Provide development incentives for the construction of facility improvements.

Township of Lower Merion, Zoning Ordinance, Section 155-6.6.M.

Large development drop-off areas
Provide for adequate pick-up/drop off areas for high density housing, retail centers, and business complexes. Require efficient access, egress, and internal circulation of traffic.

Norristown Borough, Zoning Ordinance, Section 320-308.

Toolbox
Transit Stops and Centers
Alleys create improved access and walkability in Urban Centers. Alleys provide access to private spaces for waste and recycling pickup services and for utilities. Rear alley access eliminates the need for a driveway entrance from the street, which allows for narrower lots, greater density, less disjointed frontages, and greater walkability.

Alleys and side access
Ensure opportunities for alleys are explored for new developments or shown on an official map. When a new principal building is proposed, if a rear or side alley exists adjacent to the lot, or an existing alley can feasibly be extended, it should be used as access for any new vehicle garage, driveway or parking spaces, except a corner lot may have a garage, driveway or parking accessing a street that is not along the front lot line.

City of Bethlehem, PA, Zoning Ordinance, Section 1311.09.

Create green alleys
Integrate stormwater management opportunities, such as pervious pavement.
TRANSPORTATION

Easy pedestrian access

Safe and welcoming pedestrian routes encourage walking to access goods and services, decrease the potential of crashes between automobiles and bicyclists, allow children to walk safely to school, and give the elderly and disabled, who may not be able to operate a motor vehicle, an option to get around on foot.

Directly connect to amenities
Sidewalks should connect directly to front building entrances, bus shelters, and bicycle racks.

Use traffic calming measures
Consider curb bumpouts at intersections to slow traffic, shorten crossing distance, and enhance pedestrian visibility.

Design comfortable and safe routes
Consider the potential for more direct and pleasant pedestrian connections when development opportunities arise.

Provide safe street crossings
Install crosswalks at signalized intersections and key crossings in neighborhoods with designated school walking routes, and at certain types of uncontrolled crossings. Crosswalks should be used with signing to provide maximum instruction and/or warning to motorists.

Limit number of curb cuts
Reduce and consolidate curb cuts for large scale developments to reduce vehicular conflicts with pedestrians. Limit the number of curb cuts in a sidewalk by defining the minimum distance between curb cuts, or the maximum number of curb cuts per the length of lot frontage. Prohibit curb cuts along lot frontages that are not wider than a specified dimension.

Malvern Borough, Zoning Ordinance, Section 220-1303, G.

Crosswalks
Design crosswalks and their transition to adjacent sidewalks or trails to facilitate access and use by persons who are physically disabled, in compliance with the ADA. Where a crosswalk is located at an arterial or collector street, determine appropriate use of textured crosswalks, pedestrian signalization, curb extensions, bulb-outs, raised medians, raised crosswalks, and other pedestrian safety methods.

Phoenixville Borough, Subdivision and Land Development Ordinance, Section 22-420.
Sidewalks play a critical role in the character, function, and accessibility of Urban Center neighborhoods and downtown destinations. A direct, continuous clearway is especially needed along a block, because it is difficult for people with low or no vision, or physical mobility challenges to maneuver sudden or frequent changes in path alignment.

**Location and connection**

Require sidewalks along both sides of the street. Require sidewalks to connect the street frontage to all front building entrances, parking areas, green space or civic space, and any other destination that generates pedestrian traffic. Require sidewalks to connect to existing sidewalks on abutting tracts and other nearby pedestrian destination points, including train stations and bus stops. Sidewalks should not be waived unless physical or environmental circumstances prevent construction.

Atglen Borough, Zoning Ordinance, Section 1104, C.

**Minimum width**

Require minimum sidewalk widths depending on the type of street, land use, density, and the presence of destinations like schools, hospitals, and transit stops. A minimum width of eight feet is typical for blocks containing mixed use or commercial buildings. For blocks, street frontages, or areas where mixed use or commercial buildings are not present or areas that connect with adjacent zoning districts, the minimum sidewalk width is typically five feet.

Atglen Borough, Zoning Ordinance, Section 1104, C.

**Pedestrian clearway zone**

Allow for outdoor uses to occur within the right-of-way while requiring that minimum clear path dimensions be maintained along the sidewalk’s ground plane.

Lititz Borough Zoning Code, Section 216, C.

**Widening**

Require sidewalk widening for new developments and enlargements in neighborhoods where sidewalks do not comply with proposed minimum width requirements. In some cases this may mean pulling buildings back from the property line.

Phoenixville Borough, Subdivision and Land Development Ordinance, Section 22-419, 2, B.

**Toolbox**

Bicycle and Pedestrian Facilities: Design
An open parking lot adjacent to and visible from a street or public space creates a void in the built street edge that decreases pedestrian comfort and weakens historic character and sense of place. Parking garages can minimize the footprint and visibility of parking.

**Parking behind buildings or in garages**

**Increase capacity**
Share parking among more than one use to maximize the efficiency of the facilities.

**Incentivize alternative fuel vehicle use**
Provide for electric-vehicle car-charging stations and offer priority parking spaces for car-sharing services.

**Apply a universal design approach**
Design parking so it is usable by all persons, including those with disabilities.

**Enhance the visual character of streets**
Avoid standalone garages, and instead integrate parking behind, on top, or below new buildings. For parking structures visible from primary streets, incorporate facade treatments and public art to minimize visibility of parked vehicles and enhance visual appeal.

**Open parking lot location**
Prohibit open parking lots in certain districts, such as downtown commercial streets, or require the location of parking spaces within a lot to be behind the building and not between the sidewalk and building front.
*Atglen Borough Zoning Ordinance, Section 1104, l, 2.*

**Open parking lot screening**
Where a parking lot abuts a public sidewalk, alley, or street, require that it be enclosed by a knee-wall, fencing, or landscape plantings a minimum of three feet in height in addition to a landscaped buffer a minimum of three feet wide.
*West Grove Borough Subdivision and Land Development Ordinance, Section 350-377, B, 4.*

**Toolbox**
Parking Facilities: Design
Cycling is a healthy and affordable transportation option that can help decrease vehicle traffic congestion. Bike racks and lockers can provide safe locations to secure bicycles so people can explore, shop, or dine in Urban Centers.

**Bicycle facilities, such as bike racks and lockers**

**Avoid obstructing pedestrian routes**
The alignment of bike racks should minimize parked bicycles impact on the use of the sidewalk or curbside.

**Locate within view of active uses**
Good locations for bike shelters are near retail stores or office building entrances.

**Provide storage in enclosed spaces**
Provide secured bicycle storage and parking within buildings, including parking garages.

**Balance function and aesthetics**
Bike racks may be stand-alone items bolted into the surface of the sidewalk or roadway or they may be integrated with other items in the street such as street light poles and planters. The visibility of the rack determines its usefulness to cyclists.

**Promote bicycle infrastructure**
Incorporate bicycle infrastructure, such as bike lanes, bike signals at intersections, and bike corner turning allowances into developments to safely connect cyclists to networks and destinations.

**Bicycle lanes**
For public access purposes, specify where a development is required, when feasible, to locate bicycle lanes on a street right-of-way, such as a principal arterial or a major collector.

Phoenixville Borough, Subdivision and Land Development Ordinance, Section 22-422, 1-2.

**Bicycle racks**
Specify residential and nonresidential development thresholds for providing bike racks. For instance, for every nonresidential use greater than five thousand square feet in size require a bike rack able to secure a minimum of five bicycles.

Atglen Borough Zoning Ordinance, Section 1104, I, 1.

Toolbox
Bicycle and Pedestrian Facilities: Design
The vitality of Urban Centers depends, in part, on the transport, delivery, and pick-up of all kinds of goods—packages, supplies, and groceries—at homes, offices, and businesses. Strategically placed on-street delivery facilities aid in a more orderly flow of traffic and improve conditions related to safety and convenience.

**Loading and delivery facilities**

**Provide for convenient use**
End of block loading zones are conveniently located near curb ramps.

**Reduce delivery truck traffic**
Consider encouraging storage lockers in building lobbies to minimize truck dwell times.

**Allow for efficient flow and operations**
Dedicate curb space for loading and unloading to allow commercial vehicles to park close to their destination and eliminate the need for double parking or circling the block.

**Right-size according to context**
Size loading zones to accommodate single or more vehicle occupancy.

**On-street loading**
For commercial districts, where possible, restrict loading by locating garage access on service alleys or streets with lower pedestrian activity, by establishing loading hours, and by applying other loading management strategies.

City of Philadelphia, Zoning Code, Section 14-806 Off-Street Loading.

**Off-street loading access**
Apply minimum number of loading docks and minimum dimensions to new construction as well as to renovations of apartments, retail, and office buildings. Encourage alleys in development to allow access to off-street loading bays or internal (including underground) loading and delivery facilities. Do not allow off-street loading space in a required front setback.

City of Philadelphia, Zoning Code, Section 14-806 Off-Street Loading.
Adaptive Reuse
The process of repurposing existing buildings for viable new uses and modern day functions, rather than demolishing them. Reuse allows for a building’s continued use and helps it remain a viable community asset. For more information: Chesco Planning, Adaptive Reuse

Americans with Disabilities Act (ADA)
A federal Act that prohibits discrimination against people with disabilities in regard to employment, transportation, public accommodations, communications, and access to state and local government programs and services. For more information: U.S. Department of Labor

Best Management Practice
A technique to most appropriately manage natural resources on a site, based on unique site conditions, planning, and engineering requirements. A BMP involves site development design that incorporates the most suitable technique, or combination of techniques, to best manage the resource. For more information: StormwaterPA

Brownfields
Abandoned or underutilized industrial and commercial sites that have, or may potentially have, some environmental contamination. Brownfields are most often located in developed areas with existing utilities and transportation facilities. Because of environmental problems and costs associated with clean up, brownfields are often passed over for development while large investments are made to convert greenfields into industrial and commercial uses. (See also Greyfields) For more information: Chesco Planning, Redevelopment

Complete Streets
A transportation approach where the design enables safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. For more information: National Complete Streets Coalition

Greyfields
Economically obsolescent, outdated, or underutilized retail commercial lands such as older retail malls or strip centers that no longer attract adequate investment or tenants. Greyfields typically are not environmentally contaminated, but may contain older types of infrastructure that needs to be replaced or significantly updated. (See also Brownfields) For more information: Chesco Planning, Redevelopment

Growth Area, Designated Growth Area
A region described in a comprehensive plan that includes and surrounds a city, borough or village, and within which: residential and mixed use development is permitted or planned for at densities of one unit to the acre or more; commercial, industrial, and institutional uses are permitted or planned for; and public infrastructure services are provided or planned. In Landscapes3, this area is comprised of the Urban Center, Suburban Center, Suburban, and Rural Center landscapes. For more information: Pennsylvania Municipalities Planning Code
**Multimodal**
Involving several modes of transportation, including vehicular, pedestrian, bicyclist, public transit, and ride hailing services. For more information: Chesco Planning, Transportation Planning

**Multi-use Trail**
Facilities commonly used by bicyclists, pedestrians, and other non-motorized modes of travel such as equestrians, cross country skiers, rollerbladers, baby strollers, and those utilizing wheelchairs. Multi-use trails are primarily found within state parks, county or municipal parks, or as regional trails such as Chester County’s Chester Valley and Struble trails. For more information: Chesco Planning, Transportation Planning and Chesco Planning, Trail and Path Guide

**Smart Growth**
An approach to development that encourages a mix of building types and uses, diverse housing and transportation options, development within existing neighborhoods, and community engagement. For more information: Smart Growth America

**Universal Design**
Process and associated features that remove barriers to access and seek to create buildings and public spaces that are inherently accessible to all people, including the elderly and people with disabilities. For more information: Government Services Administration

**Walkability**
A measure of how friendly a place or area is to walking. Walkability is an important concept in sustainable urban design. For more information: Smart Growth America