

PennDOT Connects: Zoning for Mixed Uses and to Accommodate Higher Densities

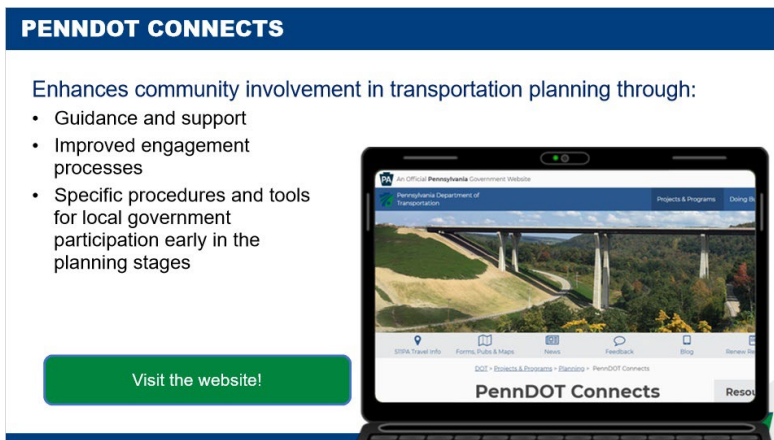
1.1 WELCOME



Notes:

Welcome to PennDOT's Zoning for Mixed Uses and to Accommodate Higher Densities training. This course is part of the PennDOT Connects initiative.

1.2 PENNDOT CONNECTS

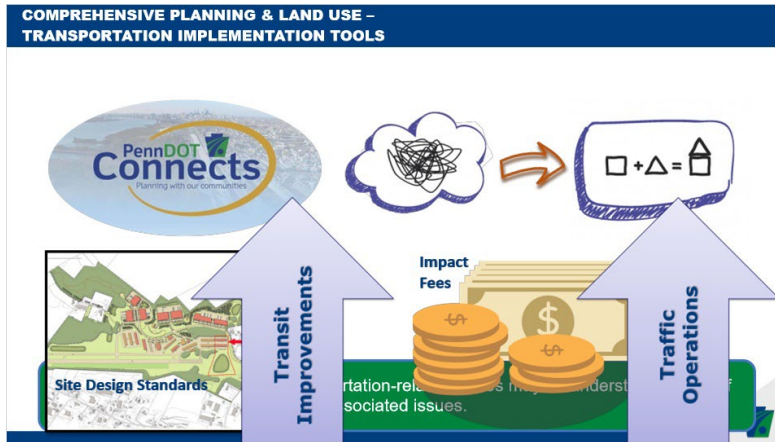


Notes:

PennDOT Connects enhances community involvement in transportation

planning through guidance and support, improved engagement processes, and specific procedures and tools for local government participation early in the planning stages. Be sure to visit the website for more information about the services provided by the PennDOT Connects initiative.

1.3 COMPREHENSIVE PLANNING AND LAND USE – TRANSPORTATION IMPLEMENTATION TOOLS



Notes:

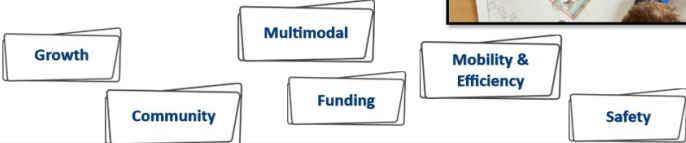

The training component of the PennDOT Connects initiative combines relevant topics in such a way that transportation-related issues may be understood in light of associated issues. The intent is that complex issues might become less complicated for municipal officials to navigate. For example, understanding how site design standards might enhance the development of transit improvements. Another example might consider the use of impact fees for improving traffic operations.

1.4 COMPREHENSIVE PLANNING AND LAND USE – TRANSPORTATION IMPLEMENTATION TOOLS (CONT.)

**COMPREHENSIVE PLANNING & LAND USE –
TRANSPORTATION IMPLEMENTATION TOOLS (CONT.)**

Training series covers:

- Accommodating Growth
- Enhancing Community Character
- Encouraging Multimodal Travel
- Identifying Funding
- Improving Mobility and Efficiency
- Improving Safety



Growth **Multimodal** **Mobility & Efficiency**
Community **Funding** **Safety**

Notes:



This training series will cover issues associated with Comprehensive Planning and Land Use – Transportation Implementation Tools, such as:

- Accommodating Growth,
- Enhancing Community Character,
- Encouraging Multimodal Travel,
- Identifying Funding,
- Improving Mobility and Efficiency, and
- Improving Safety.

1.5 COURSE OBJECTIVES

COURSE OBJECTIVES

- Recognize that zoning certain areas for higher densities can improve the character, transportation safety, and mobility of certain neighborhoods.
- Identify potential zoning opportunities that could enhance community character and transportation safety.
- Conceptualize potential moderate- to higher-density development toward improving the movement of people and goods.

 Course Duration = 20 minutes 

Notes:

Before we continue, please take a moment to review the specific learning objectives for this training. When you have reviewed these objectives, click “Next” to continue.

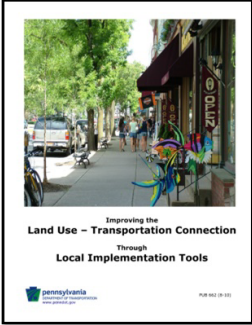
- Recognize that zoning certain areas for higher densities can improve the character, transportation safety, and mobility of certain neighborhoods.
- Identify potential zoning opportunities that could enhance community character and transportation safety.
- Conceptualize potential moderate- to higher-density development toward improving the movement of people and goods.

1.6 INTRODUCTION TO ZONING FOR MIXED USES AND TO ACCOMMODATE HIGHER DENSITIES

INTRODUCTION TO ZONING FOR MIXED USES AND TO ACCOMMODATE HIGHER DENSITIES

Zoning can promote a mix of uses and higher density development patterns:

- Transit-oriented development
- Transfer of development rights
- Traditional neighborhood development
- Form-based codes
- Cluster development



Improving the
Land Use - Transportation Connection
Through
Local Implementation Tools

pennsylvania
DEPARTMENT OF TRANSPORTATION
662 (8-12)

Notes:

PennDOT Publication 662 is the foundational resource for much of this training. Other useful resources about this topic will be introduced later in the module. Publication 662 suggests that zoning can promote a mix of uses and higher density development patterns through ordinances that encourage innovation, such as:

- Transit-oriented development,
- Transfer of development rights,
- Traditional neighborhood development,
- Form-based codes, and
- Cluster development.

1.7 INTRODUCTION TO ZONING FOR MIXED USES AND TO ACCOMMODATE HIGHER DENSITIES (CONT.)



Notes:

With increasing demand for Active Transportation Plans and multimodal design solutions, local authorities are encouraged to develop, execute, and enforce actions to manage safety and mobility for all modes of travel. For example, the Municipalities Planning Code authorizes zoning actions and the adoption of comprehensive plans and ordinances to encourage municipalities to proactively plan for the implementation of multimodal improvements. Deviating from or granting exceptions to comprehensive plans, zoning ordinances, or codes may result in the need to implement costly design solutions post construction.


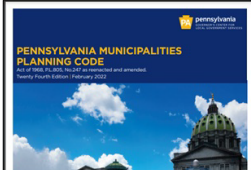
1.8 INTRODUCTION TO ZONING FOR MIXED USES AND TO ACCOMMODATE HIGHER DENSITIES (CONT.)

INTRODUCTION TO ZONING FOR MIXED USES AND TO ACCOMMODATE HIGHER DENSITIES (CONT.)

The MPC directly supports higher density development through:

- Article VII – Planned Residential Development
- Article VII-A – Traditional Neighborhood Development

(3) For the purpose of encouraging innovation and the promotion of flexibility, economy and ingenuity in development, including subdivisions and land developments as defined in this act, and for the purpose of authorizing increases in the permissible density of population or intensity of a particular use based upon expressed standards and criteria set forth in the zoning ordinance.



Notes:

The Municipalities Planning Code also directly supports higher density development through:

- Article VII - Planned Residential Development, and
- Article VII-A - Traditional Neighborhood Development.

Section 605(3) of the Municipalities Planning Code also encourages innovation and flexibility by allowing increases in the permissible density of population or intensity of a particular use based upon expressed standards and criteria set forth in the zoning ordinance.

1.9 PURPOSES OF ZONING FOR MIXED USES AND HIGHER DENSITIES

PURPOSES OF ZONING FOR MIXED USES AND HIGHER DENSITIES

Purposes addressed by Zoning for Mixed Uses include:

- Improving safety, mobility, and efficiency
- Maintaining or improving community character
- Encouraging multimodal transportation
- Accommodating growth within the transportation and natural environments



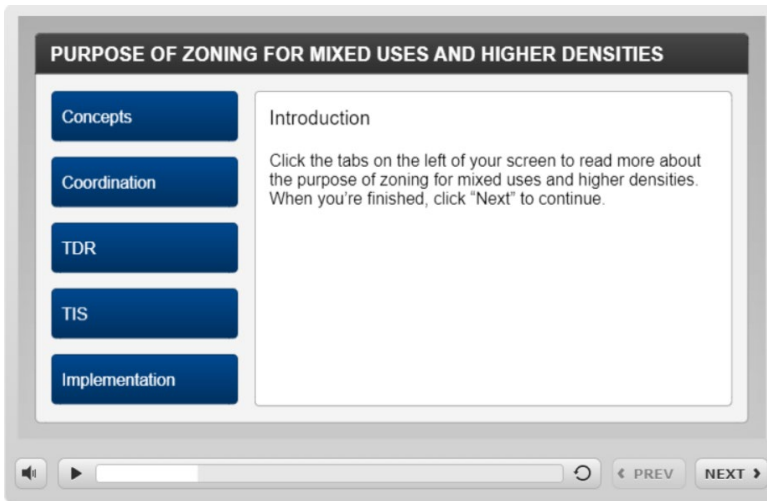
Notes:

Purposes that can be addressed by Zoning for Mixed Uses include:

- Improving safety, mobility, and efficiency, such as reducing Single Occupancy Vehicle trips;
- Maintaining or improving community character, such as focusing on new development within existing infrastructure;
- Encouraging multimodal transportation by increasing bicycle, pedestrian, and transit choices; and
- Accommodating growth within the transportation and natural environments.

As an example of a mixed-use development, note this image from *PennLive*, which captures the proposed Susquehanna Union Green development at the intersection of Linglestown Road and Progress Avenue in Harrisburg.

1.10 PURPOSES OF ZONING FOR MIXED USES AND HIGHER DENSITIES



Notes:

Click the tabs on the left of your screen to read more about the purpose of zoning for mixed uses and higher densities. When you're finished, click "Next" to continue.

Concepts

Higher density development can be achieved using several concepts, each

advancing the purpose of accommodating future growth. These concepts include:

- Transit-Oriented Development, also known as “TOD,”
- Transfer of Development Rights, and
- Mixed Use and Form-Based Codes.

Coordination

When effectively coordinated with transit system providers, TOD can accommodate a significant amount of a municipality’s future growth without the single-occupancy vehicle generation rates expected with more conventional approaches.

TDR

Much like TOD, Transfer of Development Rights, also known as “TDR,” can focus development in smaller areas that are better served with transportation system access, and that may accommodate greater transit service. Increases in bicycle/pedestrian activity may also be realized, thereby reducing vehicular traffic generation rates.

TIS

Negotiations are often supported by municipal comprehensive plans and the developers’ required Transportation Impact Studies (TIS). These documents should clearly identify anticipated transportation or infrastructure needs.

Implementation

Mixed Use and Form-Based Zoning, which are not mutually exclusive, can be implemented in a way that addresses safety concerns during design, while providing for a mix of use types. Providing for residential development near office and lower-intensity commercial uses, as well as providing pedestrian accommodations, can significantly reduce vehicular traffic generation, and improve safety.

1.11 WHEN TO CONSIDER IMPLEMENTING



Notes:

Take a moment to read this list of when to consider implementing the mixed-use zoning concept. When you're finished, click "Next" to continue.

- Your Comprehensive Plan calls for areas of high-density residential zoning, whether traditional or clustered.
- Your Comprehensive Plan and your community support the concept of mixed-use development.
- Your Comprehensive Plan identifies portions of the municipality for high-density development and other areas for open space preservation.
- There is a willingness in your municipality to accept less traditional zoning approaches or control over specific uses, focusing more on the form of future development.
- There is a desire in your municipality to facilitate transit access for future development.
- Your community expresses a desire to accommodate its fair share of development in a smaller portion of the municipality, preserving more open space for the future.

1.12 ADVANTAGES TO ZONING FOR MIXED USES

ADVANTAGES TO ZONING FOR MIXED USES



Advantages of Zoning for Mixed Uses:

- Reduce the number of access points onto a roadway corridor
- Provide compatible uses within walking or bicycling distance
- Accommodate uses within a smaller footprint

Notes:

There are several advantages that may be realized from adopting the zoning for mixed uses concept.

A more concentrated, mixed-use development can reduce the number of access points onto a roadway corridor.

The concept can provide for a mix of compatible uses within walking or bicycling distance from residential areas and it can reduce local automobile traffic.

The concept can accommodate a number of uses within a smaller footprint, helping to preserve more open space.

1.13 ADVANTAGES TO ZONING FOR MIXED USES (CONT.)

ADVANTAGES TO ZONING FOR MIXED USES (CONT.)



Other Advantages of Zoning for Mixed Uses:

- More walkable neighborhoods
- Efficient bus transit
- Sense of community in neighborhoods
- Neighborhoods easily linked to adjacent higher-density or urban areas
- Public amenities can be accommodated and maintained

Notes:

In addition to those overarching advantages just covered, your community may realize other, more specific, and qualitative advantages, such as:

- A high percentage of a neighborhood is walkable,
- Bus transit tends to be efficient,
- Neighborhoods often develop a keen sense of community,
- Neighborhoods can easily be linked to adjacent higher density or urban areas, and
- Significant public amenities can be accommodated and maintained.

1.14 CONSIDERATIONS TO ZONING FOR MIXED USES

CONSIDERATIONS TO ZONING FOR MIXED USES

Challenges to Zoning for Mixed Uses:

- Higher-density or mixed-use areas can be controversial in existing, low-density communities
- May only support neighborhood-level commercial uses, not regional commercial uses
- Densities may be too low to overcome sprawl
- Requires large areas to support a mix of uses

The slide includes a photograph of a residential street with houses and a car, illustrating a low-density community.

Notes:

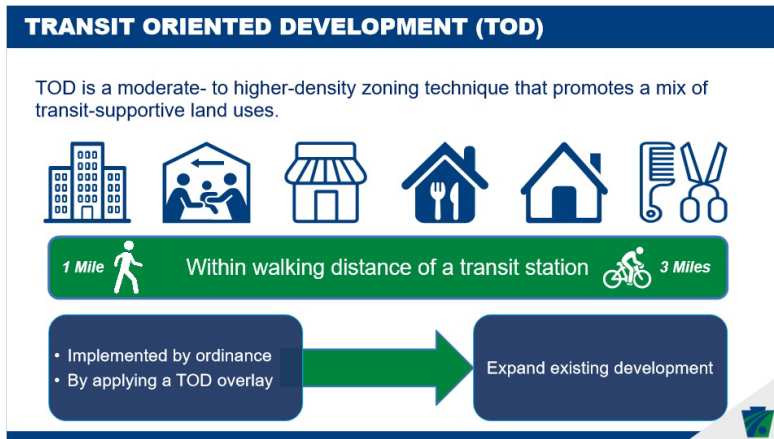
There may be several challenges to considering zoning for mixed uses. For example, areas of higher density or mixed uses can be controversial in existing, low-density communities.

Another consideration is placing residential development in areas zoned for mixed uses may only support neighborhood-level commercial uses, but not regional commercial uses.

Consider that densities may be too low to overcome an overall pattern of sprawl.

Finally, zoning for mixed uses requires relatively large areas to support a mix of uses.

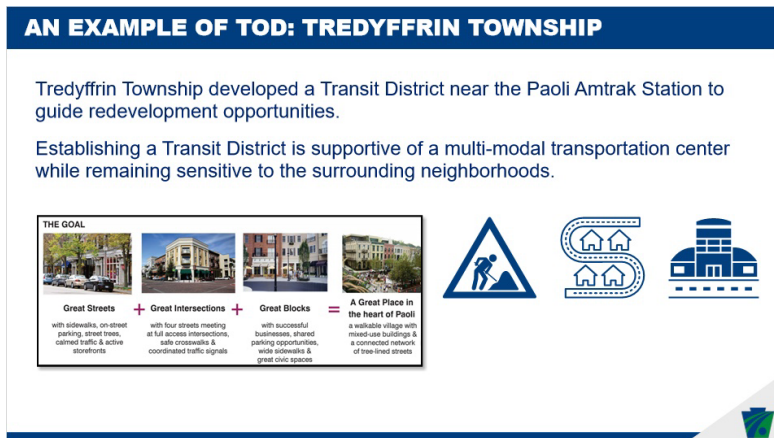
1.15 TRANSIT ORIENTED DEVELOPMENT (TOD)



Notes:

Transit Oriented Development (TOD) is a moderate- to higher-density zoning technique that promotes a mix of transit-supportive land uses, such as offices, day care centers, convenience stores, restaurants, residential, and personal services within an easy walking distance of a transit station (or transit access shed). A pedestrian would reasonably travel within a one-mile radius of the transit stop, and a bicyclist would reasonably travel within a three-mile radius of the transit stop. These zoning districts may be implemented as specified by ordinance, without further complication, or by applying a TOD overlay to the district, and can be used to expand existing development to make them more amenable to existing transit routes or to create new areas where transit service can be made available.

1.16 AN EXAMPLE OF TOD: TREDYFFRIN TOWNSHIP

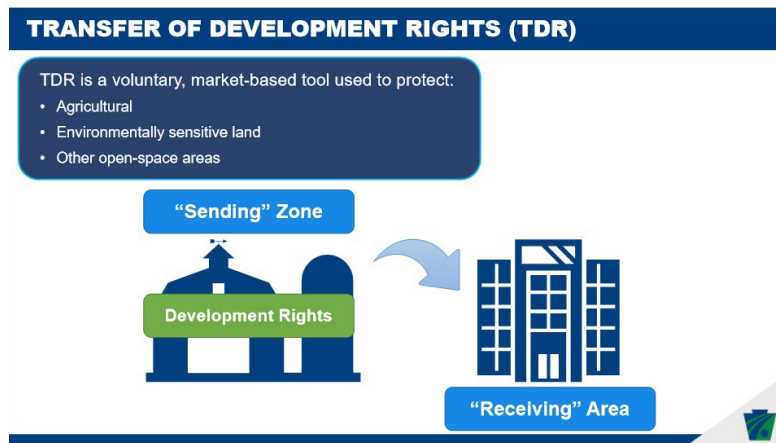


Notes:

Tredyffrin Township in Chester County employed the TOD concept by developing a Transit District near the Paoli Amtrak Station to guide redevelopment opportunities consistent with the Township’s Comprehensive Plan, specifically the Paoli Community Master Plan. Establishing a Transit District is supportive of a multi-modal transportation center while remaining sensitive to the surrounding neighborhoods. Additional purposes of the district are to:

- Permit development that is complementary to the multi-modal transportation center and help further define the prominence and importance of the core area to the Paoli community;
- Tie the streetscape and pedestrian amenities of the district into adjacent mixed use and residential areas, further promoting walkability; and
- Provide for a comprehensively planned, integrated mixed-use development, according to a master plan consistent with the goals and objectives of the Township and Chester County.

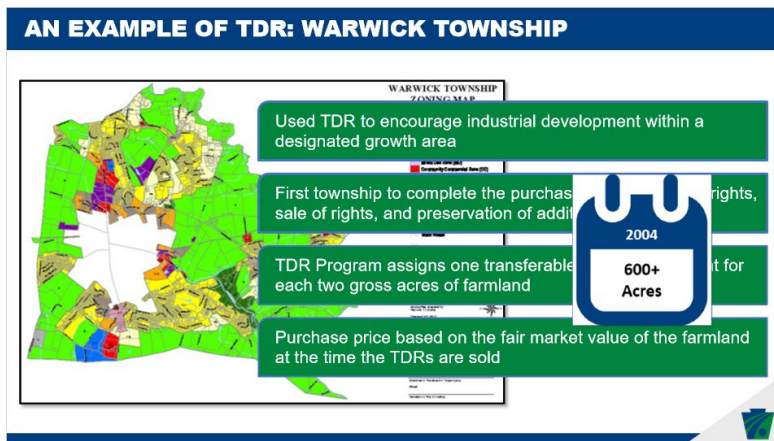
1.17 TRANSFER OF DEVELOPMENT RIGHTS (TDR)



Notes:

Transfer of Development Rights (TDR) is a voluntary, market-based tool that can be used to protect agricultural, environmentally sensitive land, and other open-space areas by transferring the development rights from land in this “sending” zone to other designated “receiving” areas within the municipality where development is more appropriate.

1.18 AN EXAMPLE OF TDR: WARWICK TOWNSHIP

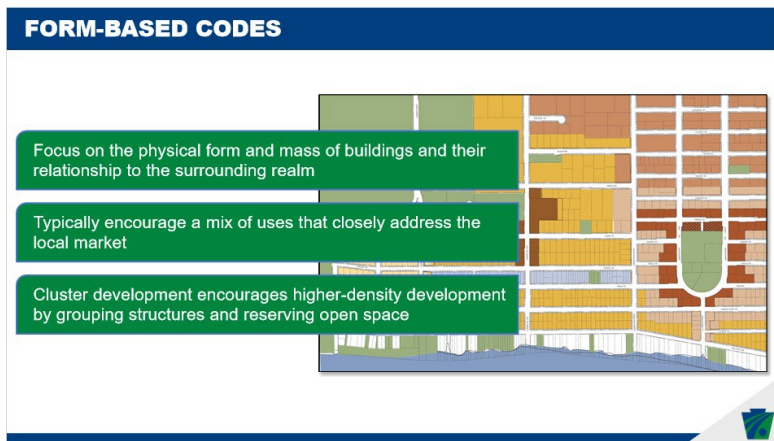


Notes:

As an example, Warwick Township, Lancaster County, used the TDR concept to encourage industrial development within a designated growth area while protecting farms and farming within rural areas of the township. By 2004, more than 600 acres had been preserved. Warwick is the first township in Lancaster County to complete the cycle of purchase of development rights from farmers, the sale of rights to a developer for use in the township's industrial receiving zone, and preservation of additional farmland with the cash generated from the sale.

Under Warwick Township's Zoning Ordinance, the TDR Program assigns every farm within the Agricultural zone, known as the sending area, one transferable development right for each two gross acres of farmland. TDRs are purchased from farmers who wish to preserve their farmland. The purchase price is based on the fair market value of the farmland at the time the TDRs are sold. Since 1991, the TDR program has been successful in preserving 26 farms comprising more than 1,500 acres of farmland.

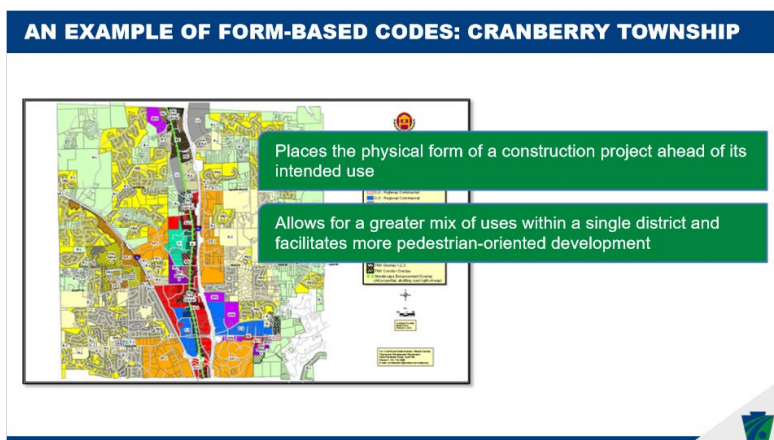
1.19 FORM-BASED CODES



Notes:

Form-based codes focus on the physical form and mass of buildings and their relationship to the surrounding public realm rather than the separation of uses. Form-based codes typically encourage a mix of uses that closely address the local market. As an example, cluster development encourages higher-density development by grouping structures on a portion of the available land while reserving a significant amount of the site as protected open space. This is accomplished by establishing the number of units allowed for a parcel independent of any minimum lot size.

1.20 AN EXAMPLE OF FORM-BASED CODES: CRANBERRY TOWNSHIP



Notes:

As an example, Cranberry Township in Butler County adopted a form-based approach to land use regulations. This concept places the physical form of a construction project ahead of its intended use, leading to more efficient, pedestrian-oriented building patterns suitable for mixed uses. Form-based zoning allows for a greater mix of uses within a single district and facilitates more compact, pedestrian-oriented development. A growing number of communities throughout the country have already adopted such form-based codes.

1.21 MIXED-USE ZONING

MIXED-USE ZONING

Can lead to the development of identifiable neighborhoods with a strong degree of community cohesion.

Provides a means for residents to address the feel, look, and use:

- Building architectural requirements
- Landscaping requirements
- Signage types and use
- Environmental requirements

Mixed-use zoning helps a community achieve its vision.

The infographic features a photograph of a modern urban development with a prominent curved glass building, a paved walkway, and greenery. A small logo is visible in the bottom right corner of the infographic.

Notes:



Mixed-use zoning can lead to the development of identifiable neighborhoods with a strong degree of community cohesion and provides a means for residents of a community/municipality to address the visual feel, look and use, such as building architectural requirements, landscaping requirements, signage types and use, and environmental requirements. When successfully implemented, mixed-use zoning helps a community achieve its vision.

1.22 AN EXAMPLE OF MIXED-USE ZONING: LANCASTER

AN EXAMPLE OF MIXED-USE ZONING: LANCASTER

Allows suburban-like and light uses:

- Service
- Clean manufacturing
- Wholesaling
- Warehousing
- Others



Use of the mixed-use provisions assures that the mixed-use character of the city can continue as infill and redevelopment continues in the city.

Notes:

For example, the mixed-use districts in the City of Lancaster, Lancaster County, allow most suburban-like uses, as well as light uses, such as service, clean manufacturing, wholesaling, warehousing, and others that are compatible with office, retail, and other urban commercial uses. Use of the mixed-use provisions assures that the mixed-use character of the city can continue as infill and redevelopment continues in the city.

1.23 AN EXAMPLE OF MIXED-USE ZONING: HAMPDEN TOWNSHIP

AN EXAMPLE OF MIXED-USE ZONING: HAMPDEN TOWNSHIP

Existing Conditions and Challenges



The effort has been a multi-year effort by the Township aimed at attracting redevelopment and new development.



Notes:

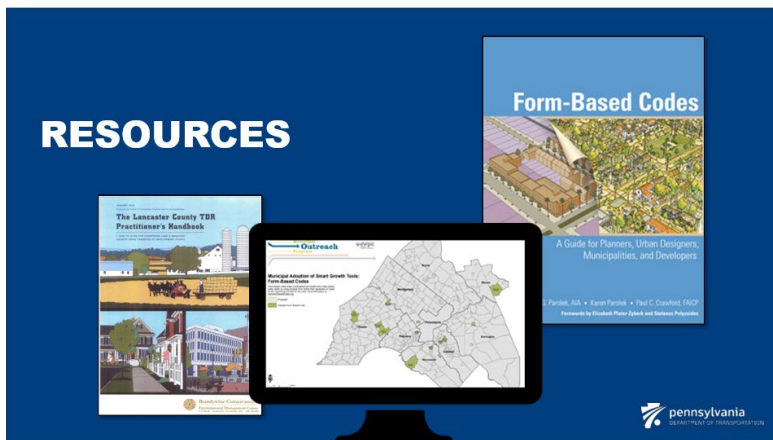
Here we present a second example of mixed-use zoning. Hampden Township, Cumberland County is exploring new or revised zoning ordinances for the

Carlisle Pike, Trindle Road, and Simpson Ferry Road area. The effort has been a multi-year effort by the Township aimed at attracting redevelopment and new development. The project area's decades-old development patterns are a byproduct of dated and inflexible ordinances that often impeded modern redevelopment. Some of the existing conditions and challenges in the project area include:

- Traffic congestion,
- Lack of pedestrian accommodations,
- Aged infrastructure, and
- Less than optimal aesthetic quality.

If the mixed-use zoning district is approved, it will allow for commercial and residential redevelopment in the southern portion of the Township that will better serve the future needs of residents and business owners.

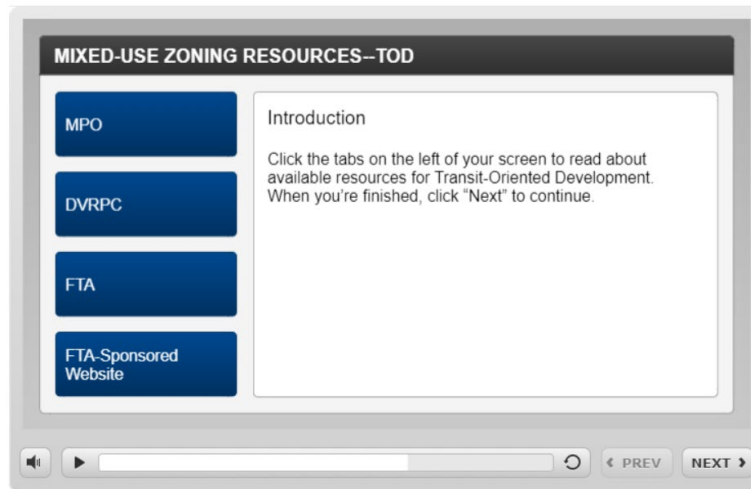
1.24 RESOURCES



Notes:

In the next portion of this module, we will explore several resources available for learning more about the application of Mixed-Use Zoning. First, we will explore TOD resources.

1.25 MIXED-USE ZONING RESOURCES--TOD



Notes:

Click the tabs on the left of your screen to read about available resources for Transit-Oriented Development. When you're finished, click "Next" to continue.

MPO

Your Metropolitan Planning Organization (MPO) will have information on their website. Some offer TOD tools, allowing access to resources and planning information.

DVRPC

The Delaware Valley Regional Planning Commission (DVRPC) has roughly 20 TOD plans in its region, as well as 45 transit stations. Its website contains a list of links and resources for TOD.

FTA

The Federal Transit Administration (FTA) has resources and training, as well as an informative video on TOD.

FTA-Sponsored Website

The FTA sponsors a website called "National Resources & Technical Assistance for Transit-Oriented Development." This website allows users to search TOD resources specific to their particular needs.

1.26 MIXED-USE ZONING RESOURCES – TDR



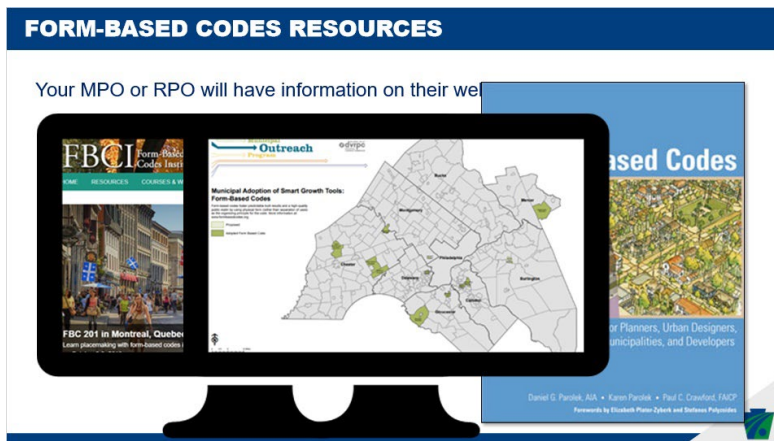
Notes:

There are several useful resources for learning about transfer of development rights. Lancaster County has developed a TDR Handbook for establishing TDR programs at the single- and multi-municipal level in Lancaster County. The information in the handbook is derived from the successful establishment and administration of four single-municipal TDR programs in that county and may be valuable for learning how one county approached the concept.

The Pennsylvania Land Trust Association, "conservationtools.org," also offers information about TDR.

Earlier we covered the DVRPC and its resources for TOD. The same website contains a list of valuable links and resources for TDR, as well.

1.27 FORM-BASED CODES RESOURCES

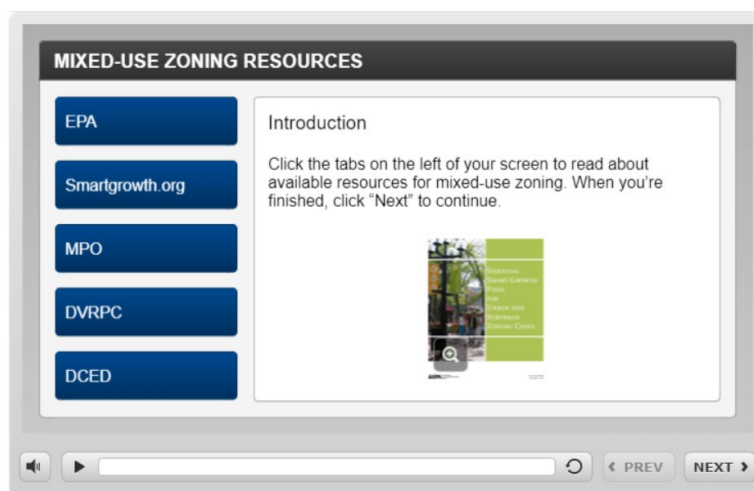


Notes:

There are several resources available for Form-Based Codes. Your MPO or RPO will have information on their websites. Some offer Form Based-Codes tools, allowing access to resources and planning information.

The Form-Based Codes Institute provides current information, resources, and training on their website. There are resources available at no cost, but their primary resource guide, *Form Based Codes: A Guide for Planners, Urban Designers, Municipalities, and Developers*, is copyrighted and available for purchase.

1.28 MIXED-USE ZONING RESOURCES



Notes:

Click the tabs on the left of your screen to read about available resources for mixed-use zoning. When you're finished, click "Next" to continue.

EPA

In 2009, the Environmental Protection Agency, or EPA, published a guide to help municipalities revisit zoning codes to ensure incorporation of smart growth principles entitled, "The Essential Smart Growth Fixes for Urban & Suburban Zoning Codes."

The guide outlines smart growth goals for each area and a mix of strategies for implementation. The strategies range from modest changes and major modifications to wholesale changes to the ordinance. For each subject area, the document also outlines expected benefits, practical pointers, and a list of examples and references.

Smartgrowth.org

The website smartgrowth.org is a project of the Maryland Department of Planning, funded by the US EPA Office of Sustainable Communities, and makes available several online tools about smart growth principles including webinars and blogs.

MPO

As another resource, your MPO will have information on their website. Some offer Mixed-use Zoning tools, allowing access to resources and planning information.

DVRPC

The DVRPC website contains a list of valuable links and resources for planning, some of which address Mixed-use Zoning.

DCED


The Department of Community and Economic Development (DCED) offers useful information about planning in its planning library (found under Local Government, Planning & Training).

1.29 SUMMARY

SUMMARY

Reducing the demand for vehicular trips through zoning can have a significant effect on safety conditions, achieved through:

- Transit Oriented Development (TOD)
- Transfer of Development Rights (TDR)
- Mixed-Use/Form-Based Codes



The applicability of zoning for mixed uses and accommodating higher densities in maintaining or improving community character is dependent on the future land use component of a municipality's comprehensive plan.

Notes:

In summary, reducing the demand for vehicular trips through zoning can have a significant effect on safety conditions. This can be achieved through:

- Transit Oriented Development, or TOD,
- Transfer of Development Rights, or TDR, and
- Mixed-Use/Form-Based Codes.

The applicability of zoning for mixed uses and accommodating higher densities in maintaining or improving community character is highly dependent on the future land use component of a municipality's comprehensive plan.

1.30 Knowledge Check

Now, let's take a moment to see what you've learned.


Question 1 (True or False)

A key advantage of mixed-use zoning is that it can accommodate a community's fair share of uses within a smaller footprint, helping preserve more open space.

A key advantage of mixed-use zoning is that it can accommodate a community's fair share of uses within a smaller footprint, helping preserve more open space.

True
 False

Click "Submit" when you have made your selection.



Correct	Choice
X	True
	False

Feedback when correct:

That's right! By increasing density in areas that can accommodate it, less development is necessary in other areas, preserving open space and other sensitive land.


Question 2 (Multiple Response)

Advantages of Transit Oriented Development are: (Select all that apply.)

Advantages of Transit Oriented Development are: (Select all that apply.)

Enhanced transit ridership
 Decreased auto-dependency
 Supports walkability

Click "Submit" when you have made your selection(s).



Correct	Choice
X	Enhanced transit ridership
X	Decreased auto-dependency
X	Supports walkability

Feedback when correct:

That's right! All three are advantages that may contribute to a vibrant neighborhood.

Question 3 (Multiple Response)

Transfer of Development Rights enhances a community by: (Select all that apply.)



Correct	Choice
X	Encouraging industrial development within designated growth areas
X	Protecting farms with rural areas
X	Ensuring sound land practices

Feedback when correct:

That's right! Transfer of Development Rights ensures sound land practices by encouraging industrial development in the locations most suitable, while



preserving farming and open land practices in the appropriate locations for it.

1.34 NEXT STEPS

NEXT STEPS

Integrate Mixed-Use Zoning in your municipality.

- Begin the conversation by exploring the available resources.
- Coordinate with your planning partners, transit agencies, and PennDOT.
- Work with your solicitor toward developing appropriate ordinances.
- Engage the public early and often, with special attention to the development and business communities.



Notes:

Now take a moment to review some steps you can take toward integrating Mixed Use Zoning use in your municipality. When you're finished, click "Next" to continue.

Integrate Mixed-Use Zoning in your municipality.

- Begin the conversation by exploring the available resources.
- Coordinate with your planning partners, transit agencies, and PennDOT.
- Work with your solicitor toward developing appropriate ordinances.
- Engage the public early and often, with special attention to the development and business communities.

1.35 CONTACT INFORMATION



Notes:

Congratulations! You have completed this training.

The PennDOT Connects Municipal Outreach, Training, and Technical Assistance program can assist municipalities free of charge. If you have questions or need assistance, please use the email address, or phone number on your screen.

Additionally, the PennDOT Connects website contains more information on Connects and contact information for the PennDOT District Planners.

Now, please click the button on your screen to provide an evaluation of this training.