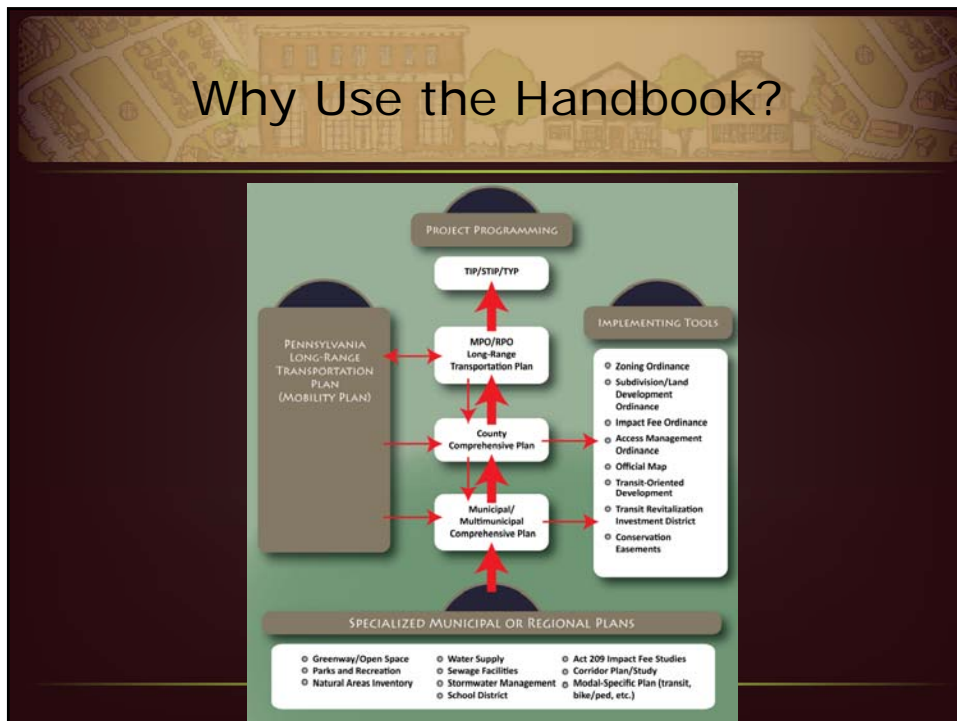




Improving the Land Use – Transportation Connection through
Local Implementation Tools

Why Create Handbooks?

- Simplify the Municipalities Planning Code
- Provide “Ready to Go” Ordinance Language
- Help local government decide what is right for their community
- Encourage local planning
- Educate
- Link land use & transportation planning
- Foster planning relationship between local government & PennDOT
- Share Pennsylvania Best Practices
- Implement PennDOT’s Smart Transportation Initiative



Improving the Land Use – Transportation Connection through Local Implementation Tools

- **Common Community Goals**

- Importance of Comprehensive Planning
- Improving Safety
- Maintaining or Improving Community Character
- Funding the Maintenance of the Existing Transportation System
- Improving Mobility and Efficiency
- Encouraging Multimodal Transportation
- Accommodating Growth within the Transportation and Natural Environments

Improving the Land Use – Transportation Connection through Local Implementation Tools

- **Partnership in Achieving Goals**



Role of the Comprehensive Plan in Implementation

- Establishes community goals and objectives
- Contains recommendations and schedule for implementation phase
- Provides framework for using Implementation Tools Handbook
- Serves as a resource for state agencies in making infrastructure and funding decisions

Implementation Tools

Access Management and Coordinated HOP Processing

- **Applicable Goals**

- Improving Safety
(reduces conflicts)
- Improving Mobility and Efficiency
(decreases congestion)
- Accommodating Growth within the Transportation and Natural Environments
(increases system capacity)



Access Management and Coordinated HOP Processing

- **Key Advantages**

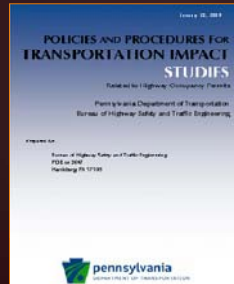
- Improves public safety for vehicles, pedestrians, and bicyclists
- Reduces congestion and improves efficiency
- “Inexpensive” solution for improving capacity and safety
- On- and off-site needs can be addressed
- Reduced fuel consumption and air emissions

- **Key Disadvantages**

- Can be controversial with business owners
- Limited ability to retrofit existing driveways

Access Management and Coordinated HOP Processing

Resources and Examples



Adaptive Re-Use of Buildings and Property

Applicable Goals

- Maintaining or Improving Community Character (matches underutilized buildings and infrastructure to new development)



Former Mansfield Armory



Former Watt & Shand Store

- Accommodating Growth within the Transportation and Natural Environments (reduces infrastructure demand in greenfield areas)

Adaptive Re-Use of Buildings and Property

- **Key Advantages**
 - Can reduce development pressure on greenfield areas
 - Can increase tax revenues
 - Can improve economic conditions in blighted areas
- **Key Disadvantages**
 - May require financial and/or regulatory incentives

Adaptive Re-Use of Buildings and Property

Resources and Examples



Multimunicipal Zoning/Intergovernmental Cooperative Agreements

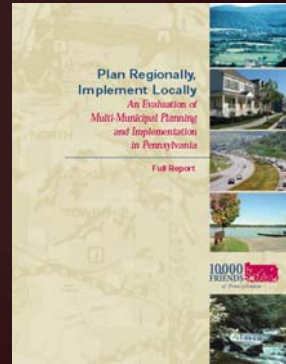
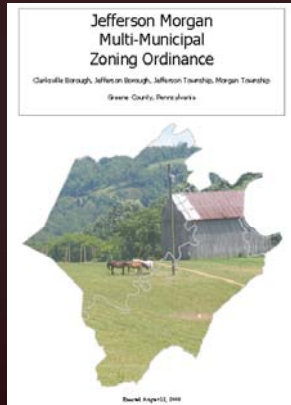
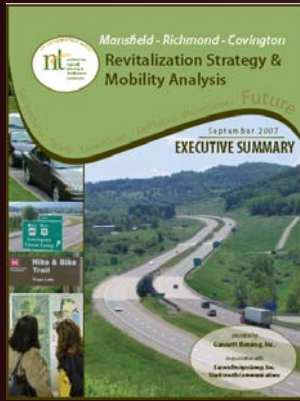
- **Applicable Goals**
 - Maintaining or Improving Community Character
(focuses development across boundaries to adequate infrastructure)
 - Accommodating Growth within the Transportation and Natural Environments
(helps preserve open space and demand on rural roadways)

Multimunicipal Zoning/Intergovernmental Cooperative Agreements

- **Key Advantages**
 - Significant cost savings can be realized through sharing of services, joint purchase of materials, etc.
 - All reasonable land use types need not be accommodated within a single municipality
- **Key Disadvantages**
 - Cooperative agreements may be controversial
 - Long-term implementation of cooperative agreements can be challenging
 - Enforcement across municipal boundaries may be difficult

Multimunicipal Zoning/Intergovernmental Cooperative Agreements

Resources and Examples



Official Maps

Applicable Goals

- Improving Mobility and Efficiency (facilitates better interconnection and reserves area for improvements)
- Accommodating Growth within the Transportation and Natural Environments (helps target development and depict needed improvements)




Official Maps


- **Key Advantages**
 - May help reserve the lands necessary for public purposes
 - Municipal plans for public improvements can be clearly presented to residents and developers
- **Key Disadvantages**
 - May be controversial, especially in cases where eminent domain is necessary
 - May still require funding for property acquisition and improvement construction
 - One year limitation in acquiring property


Official Maps

Resources and Examples



The Official Map





Parking Considerations

Applicable Goals

- Maintaining or Improving Community Character
(matches transportation facilities to existing development)



- Encouraging Multimodal Transportation
(discourages SOV trips)

Parking Considerations

• Key Advantages

- Reducing parking requirements can lead to more efficient development patterns
- May facilitate the use of brownfield-type areas as less expensive options than large greenfields
- Can encourage the use of transit and/or bike-ped
- Smaller parking areas can lead to greatly reduced stormwater management issues

• Key Disadvantages

- Reducing parking requirements in areas with already inadequate supplies can lead to congestion
- Inadequate parking may limit the profitability of commercial/industrial/office facilities

Parking Considerations

Resources and Examples



Site Design and Roadway Standards

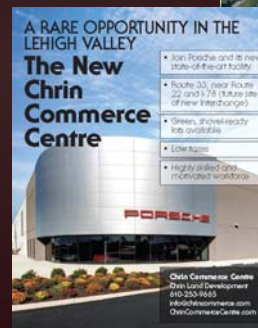
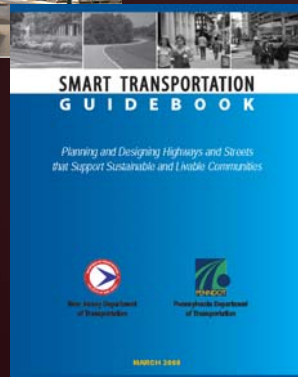
- **Applicable Goals**
 - Improving Safety
(establishes safe design standards)
 - Maintaining or Improving Community Character
(matches design standards to context)
 - Improving Mobility and Efficiency
(helps maintain system capacity)
 - Encouraging Multimodal Transportation
(provides for vehicular, bicycle, and pedestrian facilities)

Site Design and Roadway Standards

- **Key Advantages**
 - Helps establish consistent, safe road conditions
 - Typically minimizes problems associated with storm water flooding
 - Can address issues relating to a wide range of safety concerns and minimize maintenance needs
 - Can provide for uniform standards in residential and commercial settings and minimize visually-unappealing maintenance issues
 - Provides for transportation system design standards matched closely to land use context
- **Key Disadvantage**
 - Improvements required of a developer can only be implemented on-site for new development

Site Design and Roadway Standards

Resources and Examples



Traditional Neighborhood Development

- **Applicable Goal**

- Maintaining or Improving Community Character
(provides for compact growth close to existing development)



Traditional Neighborhood Development

- **Key Advantages**

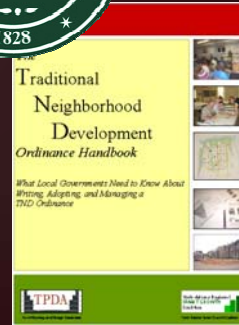
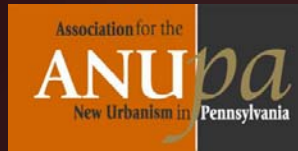
- High percentage of the neighborhood is walkable
- Bus transit tends to be efficient
- Growth may be accommodated in smaller areas than contemporary development patterns
- Neighborhoods often develop strong sense of community
- Can be easily linked to high density/urban areas

- **Key Disadvantages**

- Residential development in the TND may only support neighborhood commercial uses
- Density may not overcome overall pattern of sprawl
- Requires relatively large areas to support a mix of uses

Traditional Neighborhood Development

Resources and Examples



Break!



Traffic Operations

- **Applicable Goals**

- Improving Safety
(reduces traffic conflicts and congestion)

- Improving Mobility and Efficiency
(adds/manages capacity)



Traffic Operations

- **Key Advantages**

- Can be significantly less expensive ways of improving system capacity than lane addition
- Can improve safety conditions

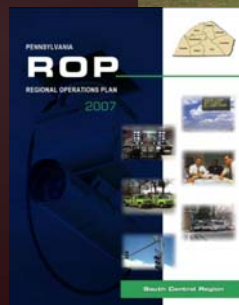
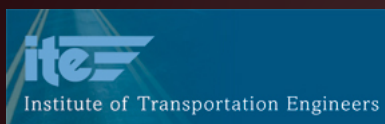
- **Key Disadvantages**

- May not provide adequate capacity improvement in rapidly growing areas

Traffic Operations

- Resources and Examples

Welcome to the
City of Lebanon, Pennsylvania



Urban Growth Areas/ Rural Preservation

- Applicable Goals

- Maintaining or Improving Community Character
(compresses development footprint to areas with infrastructure)
- Accommodating Growth within the Transportation and Natural Environments (reduces demands on rural transportation system)



Urban Growth Areas/ Rural Preservation

- **Key Advantages**

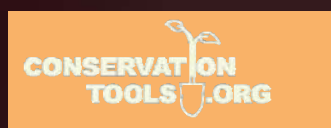
- Can help guide the establishment of zoning district boundaries and planning for public sewer and water service
- Can encourage higher densities and walkable communities and minimize the need for new roads
- Can direct development to planned future growth areas and preserve the surrounding rural landscape

- **Key Disadvantages**

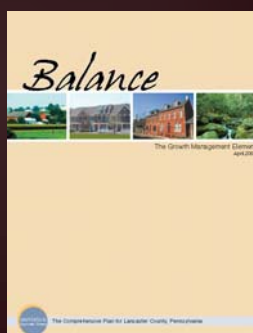
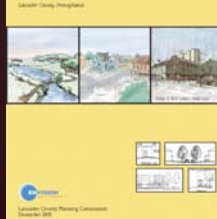
- Requires consistent zoning and public water and sewer management
- May be best suited for multimunicipal applications
- Should be regularly reevaluated

Urban Growth Areas/ Rural Preservation

Resources and Examples



Model Subdivision and Land Development Ordinance



Zoning for Mixed Uses & Higher Densities

- **Applicable Goals**

- Improving Safety, Mobility, and Efficiency
(reduces SOV trips)
- Maintaining or Improving Community Character
(focuses new development within existing infrastructure)
- Encouraging Multimodal Transportation
(increases bicycle, pedestrian, and transit choices)
- Accommodating Growth within the Transportation and Natural Environments
(reduces development footprint toward existing infrastructure)

Zoning for Mixed Uses & Higher Densities

- **Key Advantages**

- Provides for a mix of compatible uses within walking or bicycling distance from residences and reduces local automobile traffic
- Bus transit tends to be efficient
- Typically strong sense of community
- Can be easily linked to adjacent urbanized areas
- Significant public amenities can be accommodated and maintained

- **Key Disadvantages**

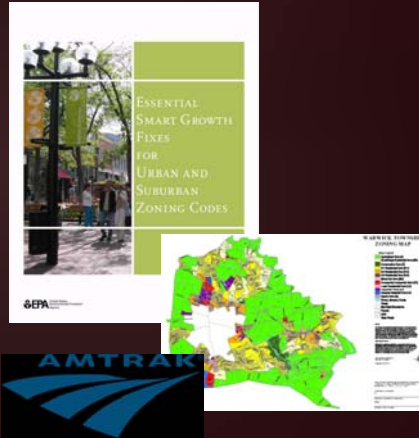
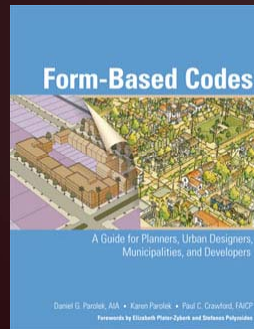
- Can be controversial in existing low-density communities
- Densities may be too low to overcome overall pattern of sprawl
- Can require large areas to support mix of uses

Zoning for Mixed Uses & Higher Densities

Resources and Examples



West Manchester

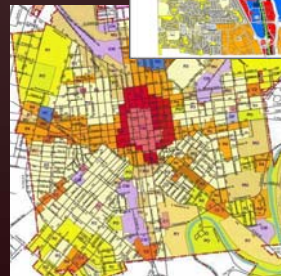


Zoning for Mixed Uses & Higher Densities

Resources and Examples



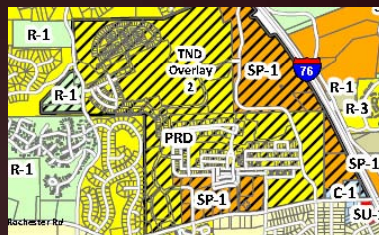
The
**Traditional
Neighborhood
Development
Ordinance Handbook**
*What Local Governments Need to Know About
Writing, Adopting, and Managing a
TND Ordinance*



Zoning Overlays

- **Applicable Goals**

- Improving Safety
(addresses corridor-specific issues)
- Accommodating Growth within the Transportation and Natural Environments
(provides development options in congested areas or those with adequate capacity)



Zoning Overlays

- **Key Advantages**

- Greater flexibility than with conventional zoning districts
- Can address site specific conditions along corridors, in floodplains, steeply-sloped areas, etc.

- **Key Disadvantages**

- May complicate the administration of the zoning ordinance
- Can be difficult to determine all applicable requirements between underlying zone and overlay

Zoning Overlays

- Resources and Examples

Borough Of Cornwall



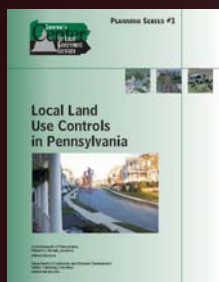
Financial Tools

Capital Improvement Programming

- **Key Advantage**
 - Brings together a full range of funding options for evaluation, going beyond what is eligible for federal funding through the MPO/RPO TIP and the STIP
- **Key Disadvantage**
 - Requires close coordination to monitor applications and improvements receiving funding from multiple sources

Capital Improvement Programming

- **Resources and Examples**



College Township, PA
[Gateway to the Centre Region](#)



West Lampeter Township
 Lancaster County, PA



Developer Negotiation

- **Key Advantages**
 - Encourages private investment in transportation infrastructure
 - Links development with municipal and MPO/RPO plans
- **Key Disadvantages**
 - Most productive with higher development demand
 - Ineffective negotiations can result in the loss of a desirable development project
 - Development approval cannot be predicated on a developer's willingness to contribute to off-site improvements

Developer Negotiation

- **Resources and Examples**



Liberty Township
Adams County, PA

Loan & Funding Reimbursement Programs

- **Key Advantages**
 - Borrowing may allow for advancing of projects that could otherwise take considerable time
 - PIB is established, successful, and supported by local elected officials
 - PCTI and SRTS projects are 100 percent federally-funded and do not require a local match
- **Key Disadvantages**
 - PIB requires a long-term, dedicated revenue
 - Grant/Loan funding sources are very competitive

Loan & Funding Reimbursement Programs

- **Resources and Examples**



Springfield Township
Fayette County, PA



Pennsylvania Infrastructure Bank



City of Altoona, Pennsylvania



WELCOME TO
CARLISLE BOROUGH
EST. 1751
"Excellence in Community Service"



Bradford City
McKean County, PA



SAFE ROUTES TO SCHOOL ACADEMY

Tax Increment Financing

- **Key Advantages**
 - Tax increases with rising property values helping to keep pace with inflation
 - May help to stimulate economy in a blighted area
- **Key Disadvantages**
 - Not a direct transit capital investment revenue source
 - Potentially high administrative costs, in that new revenue collection mechanisms would likely need to be formed

Tax Increment Financing

- **Resources and Examples**

Conshohocken Borough
Montgomery County, PA

FRAZER
TOWNSHIP
PENNSYLVANIA



Transit Revitalization Investment Districts

- **Applicable Goals**
 - Funding the Maintenance of the Existing Transportation System
(encourages private sector investment near transit facilities)
 - Encouraging Multimodal Transportation
(provides development densities to support transit)
 - Accommodating Growth within the Transportation and Natural Environments
(targets development near transit facilities)

Transit Revitalization Investment Districts

- **Key Advantages**
 - Helps to facilitate better cooperation among state, local, transit, and private entities
 - State agencies to give local governments access to other state-administered programs and capital resources
 - Intended to support ridership and encourage denser and more walkable communities
 - Can support investment on underutilized areas with transit access
 - TRID development can create transit villages by stimulating PPPs, establishing value capture areas, and encouraging private sector investment
- **Key Disadvantages**
 - No implementation experience in Pennsylvania
 - Potentially high administrative costs

Transit Revitalization Investment Districts

- Resources and Examples



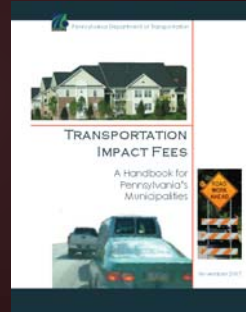
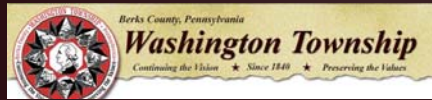
Transportation Impact Fees

- **Key Advantage**
 - Can be used for off-site improvements that can otherwise not be mandated by a municipality
- **Key Disadvantages**
 - Current law makes funding state projects difficult
 - Impact fees are only applicable to new development
 - Revenues are highly dependent on development opportunities in the area where implemented

Transportation Impact Fees

- Resources and Examples

East Coventry Township



Discussion on **New** Resources and Examples




PennDOT Planning Series

- www.dot.state.pa.us
(Forms, Publications, & Maps)
 - Addressing Traffic Noise – Publication 573
 - Access Management – Publication 574
 - Impact Fees – Publication 639
 - Comprehensive Planning – Publication 688
 - Implementation Tools – Publication 622

Questions?





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