Planning in Rural Pennsylvania in 2020:
Analysis of the Use and Effectiveness of Municipal Land Use Tools

By:

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Executive Summary

This study analyzed the use of planning tools across rural and urban Pennsylvania municipalities and counties in 2020. Using data from two separate surveys, one of municipal officials and one of county planning directors, and supplemented by key person interviews, the research examined the extent to which land use planning and regulation is occurring, the character of the tools and how they are being used, the extent to which planning influences local decision-makers as they manage their built and natural environments, the perceived effectiveness of land use planning efforts, and barriers to planning.

This research provides an update to a similar study published by the Center in 2001. Since 2001, several changes in Pennsylvania have impacted local planning environments, including statewide demographic and economic shifts, and several major state-level legislative actions aimed at strengthening local planning capacity. Since 2001, there has also been increased attention to smart growth, sustainable development, and hazard mitigation planning. The study examines the extent to which these changes impacted the use and character of planning and land use regulatory tools, and other municipal approaches to managing the physical environment.

Key Findings:

- Use of primary planning tools across Pennsylvania has increased since 2001. Notably, comprehensive plan use has increased 12 percent, and the use of joint comprehensive plans has also increased. Larger, faster-growing municipalities in urban counties and more urbanized regions are more likely to use planning tools than municipalities in rural counties.
- Use of comprehensive plans to inform decision-making has increased overall, but plans remain underused: 35 percent of municipalities and 38 percent of counties reported not using

plans at all to guide decision making. Plans are underused in planning for infrastructure and capital budgeting.

- Since 2001, inter-municipal interaction increased, and counties play important roles in facilitating these interactions. There was also greater interaction between municipal governments and water and sewer authorities, and more coordination with PennDOT.
- There was a notable increase in the use of "other" types of plans, including emergency management plans, hazard mitigation plans, and stormwater management plans since 2001. These plans are generally not coordinated with comprehensive plans.
- The biggest barriers to effective planning include lack of funding and resources, lack of professional staff, limited support by elected officials, limited support by the public, and lack of training in planning and land use by elected officials.

Policy Considerations

- **Support for multi-municipal planning and land use regulations**: Encourage efforts to implement multi-municipal plans, including research to understand implementation barriers and special grants to create joint planning commissions and regional zoning ordinances; encourage additional multi-municipal interactions by enhancing requirements for the review of plans, regulations, and development proposals by neighboring municipalities. Strengthen the role of county planning agencies in facilitating inter-municipal reviews.
- **Increase funding for rural planning and plan updates**: Create special rural planning grants for qualified communities to increase planning capacity and grants targeted to updating plans and regulations. New programs can be coordinated through existing funding programs or targeted to counties and other state providers of planning services.

- **Municipalities Planning Code Amendments**: Heighten the standing of comprehensive plans relative to land use regulations. Require comprehensive plans to include an assessment of interrelationships across all municipal plans (such as sewage facilities plans, hazard mitigation plans, and others) to better integrate all planning activities. Make capital improvement plans a required element of a comprehensive plan.
- **Raise awareness of the value of planning and provide training for local leaders**: Provide resources to support training for elected and appointed local officials on the planning process, planning and regulatory tools, and use of plans in decision making. Consider requiring training in land use planning for local elected officials, planning commissioners, zoning hearing board members, and zoning officers, as well as for municipal solicitors and municipal engineers.

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Introduction

Local governments in Pennsylvania play a key role in managing development and shaping their communities. Land-related decisions and actions by municipal and county government officials have a significant impact on the immediate needs of a municipality or county, as well as its long-range growth and development. Development management is multi-faceted and involves planning and implementation to directly guide physical change or indirectly affect the process of change and management of the built and natural environment (Berke, Godshalk, *et al* 2006). Communities that manage land effectively are in a better position to attract desired development and investment, minimize government cost, enhance public safety, preserve community character, and support overall quality of life. Decisions made by local governments ultimately impact the long-range growth and development of the Commonwealth.

Managing land use is a technical and political process. Locally, development management spans a wide policy and regulatory framework, and can include citizen planning commissions, local comprehensive plans, regulation through zoning and subdivision and land development ordinances, acquisition and capital spending using public funds, and more. Politically, development management can be thought of as crafting a "policy framework to guide the many political decisions that otherwise would be made incrementally, without coordination." (Porter, 1996, p.6)

All local governments and counties in Pennsylvania have access to an array of tools to manage and shape their built and natural environments, but there is great variation in their use across the state. With attention to rural communities, the focus of this research was to quantify the extent to which land use planning and regulation is occurring in Pennsylvania, its character, and the extent to which planning is influencing local decision-makers as they management their

built and natural environments. This research updates a study conducted in 2000 and published in a report by the Center for Rural Pennsylvania in 2001 (Lembeck, et. al, 2001). Since 2001, several changes in Pennsylvania have impacted local planning environments, including statewide demographic and economic shifts, and several major state-level legislative actions aimed at strengthening local planning capacity.

A recent body of planning research has emerged that focuses on the links between comprehensive plans, plan implementation practices, how plans impact the local development management process, and factors that influence the likelihood that communities will engage in land use planning. A comprehensive plan is the cornerstone to any system of development management. It sets the course for the future of a municipality and serves as an official guidance document. Best understood as a long-range (typically 20-year) policy document, a comprehensive plan provides the legal and political rationale to support a local government's development management system and provides the basis to guide physical settlement patterns within the local jurisdiction. Plans include recommendations for future municipal actions but also serve as a basis for private decisions and a framework for consensus building (Berke, Godshalk, *et al*, 2006; Guyadeen and Seasons, 2016). Researchers have asked fundamental questions about whether comprehensive plans are needed (Neuman, 1998), how they should be developed and evaluated (Hoch, 2007; Talen, 1996), and how they are best implemented (Berke, Backhurst, et al, 2006; Stevens, 2013; Talen and Knaap, 2003). Higher quality comprehensive plans have been found to better influence local governments' development decisions (Burby & Dalton, 1994). Implemented through land use regulation and capital improvements, plans should inform zoning and subdivision and land development ordinances, as well as capital budgets and plans. A comprehensive plan can be considered successful if it is used for land development

decision-making and helps decision-makers make sense of their situations (Faludi, 2000; Laurian et al., 2004; Alexander, 2011).

Research on the effectiveness of comprehensive plans increased with the advent of nationwide attention to smart growth and hazard mitigation, and the subsequent state-level initiatives. Smart growth and sustainable development took hold throughout the United States in the late 1990's. In 2002, the American Planning Association (APA) released the two-volume Growing Smart Legislative Guidebook: Model Statutes for Planning and Management of Change (Meck, 1999). The APA reported that approximately 2,000 land use reform bills had been introduced across the U.S. by 2002 (APA, 2002). Around the same time, hazard mitigation planning emerged as a primary topic for governments at all levels following the passage of the federal Disaster Mitigation Act of 2000. State and local governments are required to develop a hazard mitigation plan as a condition for receiving certain types of emergency and non-emergency disaster assistance.

Recognizing the importance of local planning to achieve broader goals related to sustainable development, smart growth, and hazard mitigation, a body of scholarship grew around assessing the quality of local plans in achieving these broader development management objectives. Most studies focused on comprehensive plans, due to their central role in guiding and regulating development and analyzed plans in relation to specific policies or issues such as natural hazard mitigation, coastal area management plans, watershed protection, and comprehensive land use plans (Berke and Godschalk, 2009; Berke et al, 2012; Berke et al., 2013). Other researchers emphasized the role of plans in communicating local development policy and argued that plans need to be evaluated both *as an outcome* of the local plan-making process and *as an input* into the local development management decision-making process

(Norton, 2008). This approach focuses on determining the factors that influence how local officials use plans in making development decisions. (Norton, 2008).

Research has identified common factors that influence the likelihood that communities will engage in planning. These include:

- *Population size*: Larger and more populated municipalities have more development-related problems and are more likely to plan and adopt development regulations (Berke, et al, 2006).
- *Median home value*: Wealthier communities are more likely to plan (Berke et al, 2006).
- *Population growth*: Communities facing growth pressures are more likely to plan (Berke et al, 2006).
- *Disaster frequency*: Communities that more recently faced disasters are more likely to plan (Berke, Lyles & Smith, 2014).

For communities that do engage in planning, researchers have identified the following as factors that influence plan quality:

- *Currency of plans*: Newer plans addressed more current issues and were more likely to incorporate best practices (Stevens, 2013).
- *Qualified planning staff*: Municipalities with qualified planning staff tend to have higher-quality plans and planning process in place that better address local needs (Loh & Norton, 2015; Norton, 2005a).
- *Access to planning expertise*: Use of planning consultants has been found to result in stronger local plans (Bunnell & Jepson, 2011, Loh & Norton, 2015, Stevens 2013).

- *Local commitment to planning*: Local political commitment has been found to support stronger plans (Norton, 2005a).

Researchers have explored the unique challenges of land use planning in rural areas. Rural residents and rural communities are more skeptical toward government and rules that limit what they can do with their land (Daniels, 2008). Resources exist to support local planning in rural areas ((Daniels et. al., 2007), but research has found that rural residents have mixed feelings about land use planning, and planning can be a contested issue (Zabik & Prytherch, 2013). This is particularly challenging in politically fragmented regions with a history of local political autonomy where landowners place a high value on property rights. Municipalities that place a strong emphasis on economic development, tax base, and employment can especially perceive land use regulations as unnecessary burdens (Zabik & Prytherch, 2013).

Researchers have investigated the impacts of state-level policy on local planning. Early studies on state mandates found that higher quality local plans were more likely in states with local planning mandates than in those without (Berke and French, 1994; Dalton & Burby, 1994). Recent work has questioned this finding and has shifted focus from mandates to an examination of how specific state planning program design features affect local plans, including the degree of technical assistance, the availability of qualified staff, and funding (Bunnell and Jepson, 2011; Hoch, 2007, Norton, 2005b). Access to resources has been found to be a more important determinant in the quality of local plans than state planning mandates.

Role of Government in Planning

Across the United States, local governments have a primary responsibility in managing local land development (Porter, 2007). Local planning authority comes from a variety of state,

regional, and local sources.[1] In Pennsylvania, the statutory framework for land use is defined in the Municipalities Planning Code (MPC). Established by Act 247 of 1968, the MPC delegates most land use decisions to municipalities. The primary land use planning and regulatory tools enabled by the MPC include planning agencies, comprehensive plans, zoning, and subdivision and land use regulations. These, along with several other provisions, are available to every local municipality in the state.

Pennsylvania county governments are active in planning and land use regulation, and like municipalities, they receive their authority from the MPC.[2] The planning powers provided to counties are very similar to those given to other local governments, with some expanded activities and responsibilities. Counties have an important role in regional planning and encouraging consistency across multiple municipalities, and between municipalities and the county. Counties are also important providers of data and information about county conditions, regional trends, and current planning practices.

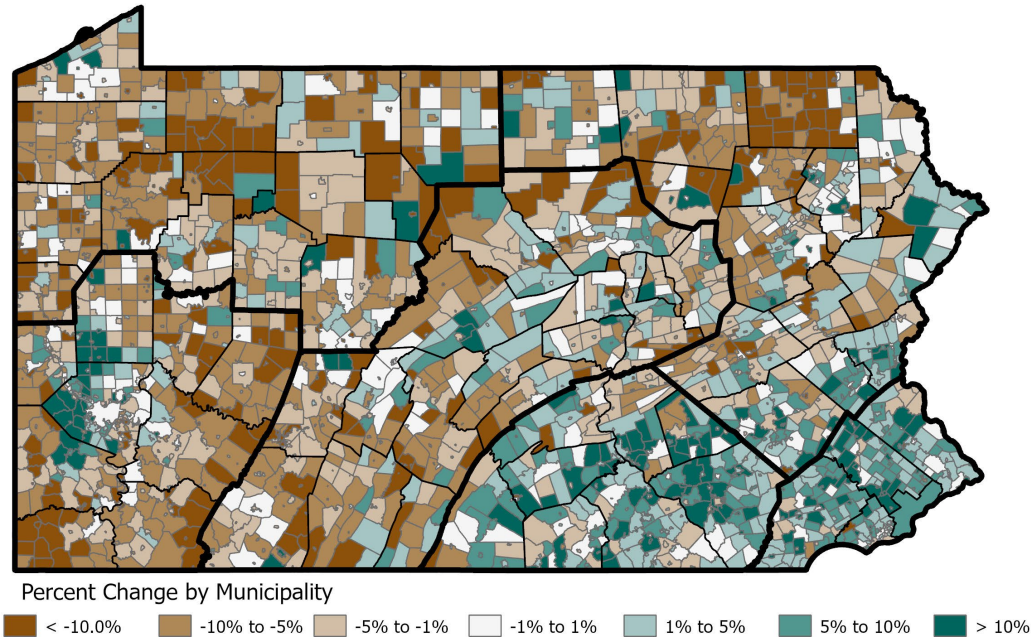
Land use and development is impacted in other ways by state agencies. The state is responsible for regulating certain land uses such as resource extraction and landfills. The state invests in transportation and other infrastructure, as well as economic and community development projects. The state owns and manages certain land resources including parks, forests, and game lands. The MPC requires the Governor's Center for Local Government Services within the Department of Community and Economic Development to prepare a land use and growth management report every five years (Municipalities Planning Code, Section 107). The fourth such report was completed in 2020.

[1] Although there are no direct federal land use laws, there are federal programs that influence land use, including programs of the U.S. Department of Transportation and the U.S. Environmental Protection Agency.
[2] The MPC identifies counties as municipalities. For the purposes of this research, the term municipality is used to denote a local government (township or borough), as distinct from a county.

Changes Impacting Planning in Pennsylvania Since 2001

Local land development priorities change over time in response to several factors, including changing markets, demographics, and changing environmental conditions. Since the publication of the 2001 report on land use, several changes have impacted municipalities in the Commonwealth, including the continuation of a major demographic shift in population to the southeastern corner of the state (Penn State, 2019). This population shift has been accompanied by a substantial loss of population in many rural areas. Figure 1 shows population change in Pennsylvania from 2010 to 2020 and affirms the continuing rural to urban demographic shift.

Figure 1. Population Change by Municipality, 2010-2020



The Great Recession of 2008 and the crisis in financial markets slowed development across the state. From 2006 to 2011, the amount of land used by the built environment, including homes and businesses, increased only 1.7 percent, compared to 131 percent from 1992-2005 (PA State Planning Board, 2015). Numbers of building permits remained at historic lows between

2008 and 2014. Development rebounded in some areas, but across the Commonwealth, rural municipalities continue to face challenges with residential and commercial blight from vacant and deteriorating properties, as well as an aging housing stock and an increase in the number of vacant housing units (PA State Planning Board, 2020).

Retail markets have transformed with the rise of e-commerce, which is having a significant impact on shopping centers, regional malls, and downtown retail cores, while also bringing new development opportunities to areas such as the I-78 and I-80 corridors, which are attractive for warehouse and distribution facilities. Natural gas development has also brought economic opportunities to some regions. Telecommunications technologies have impacted where and how people work, and how much space is required for offices and industries, trends that were exacerbated by the COVID-19 pandemic. It is still too early to tell if the unusual employment shifts witnessed over this period will abate, or if the changes are here to stay. Either way, local communities are challenged to respond to both short- and long-term trends.

Growing Smarter Legislation

Legislative and executive efforts in Pennsylvania have strengthened the powers of local government to regulate development. In 2000, the state legislature enacted a major overhaul of the Pennsylvania Municipalities Code (MPC) in response to the Governor's "Growing Smarter" legislative agenda. These reforms, known as *Acts 67 & 68 of 2000*, are commonly referred to as the "Growing Smarter" legislation.

One purpose of the Growing Smarter legislation was to support sound land use practices locally by encouraging municipalities to adopt and implement land use plans and regulations and by providing new tools for local governments to work with neighboring municipalities to coordinate land use planning. A second purpose was to discourage the awarding of state financial

assistance, especially from the PA Department of Environmental Protection (DEP) and the Pennsylvania Department of Transportation (PennDOT), for infrastructure or facilities development if proposed projects were inconsistent with local comprehensive plans land use regulations. The Growing Smarter legislation directed state agencies to consider, and in some circumstances rely upon, local land use ordinances and comprehensive plans when reviewing applications for the funding or permitting of infrastructure or facilities (Sections 619.2 and 1105 of the MPC). Significant provisions of the Growing Smarter legislation included:

- Greater requirements for consistency between county and municipal comprehensive development plans.
- New provisions related to intergovernmental cooperative planning and implementation.
- Permission for state agencies to consider relevant comprehensive plans when making infrastructure permitting decisions.

Goals and Objectives

The overall research goal was to examine the current state of local development management and the overall effectiveness of land use planning across Pennsylvania. There were four specific goals.

The first goal was to determine the extent and character of planning agencies. This included: quantifying the number of local governments that have planning agencies and their character and form; identifying regional and rural/urban variation in the extent and character of planning agencies; and determining if and how comprehensive plans inform planning agency decision-making.

The second goal was to determine the extent, character, and impact of comprehensive plans in local and county governments. This included: determining the number of local and

county governments that have comprehensive plans, the character of plans, and any barriers to their development; identifying regional and rural/urban variation in the extent and character of plans; assessing the effectiveness of plans in informing local land use decision-making and in influencing land use regulations; and identifying barriers to plan implementation.

The third goal was to determine the extent, character, and effectiveness of zoning and subdivision and land development (SALDO) use. This included: quantifying the number of local governments that use zoning and SALDO regulations, and the character of the ordinances; identifying regional and rural/urban variation in the extent and character of regulations; and determining the extent to which zoning and SALDO regulations are consistent with comprehensive plans.

The fourth goal was to determine the extent, character, and effectiveness of alternative forms of land use tools used by Pennsylvania municipalities. Objectives to this goal included determining the extent to which communities use other land use tools beyond the four primary tools, identifying regional and rural/urban variation in the use of tools, and assessing the effectiveness of alternative land use tools in implementing comprehensive plans.

The fifth goal was to identify public policy considerations, with the specific objective to identify opportunities for state agencies to modify existing policies and programs and/or expand resources to better serve local municipalities in their planning efforts.

Methodology

Determining Planning Effectiveness

To determine planning effectiveness, this research used the approach from Center's 2001 report, *Measuring the Effectiveness of Comprehensive Planning and Land Use Regulations in*

Pennsylvania, focusing on the use of planning tools, and the extent to which plans and regulations are meeting local planning goals. The following criteria were used:

1. The extent to which the four primary planning tools – planning agencies, comprehensive plans, subdivision and land development ordinances (SALDO), and zoning ordinances – were used in local governments and counties in Pennsylvania.
2. The extent to which other land use tools were used.
3. The extent to which plans and regulations were achieving local planning goals established by the municipality or county.
4. The extent to which comprehensive plans were used to inform municipal decision-making.
5. The perceived barriers to effective planning.

Data

Data were collected from several sources, including a survey of county planning directors, a survey of municipal officials, and the U.S. Census. Key person interviews of municipal administrators were also completed. The mix of quantitative and qualitative research methods was especially useful due to the complex nature of planning. The interviews provided a more nuanced account than could be captured in the survey of how local communities engaged in the planning process.

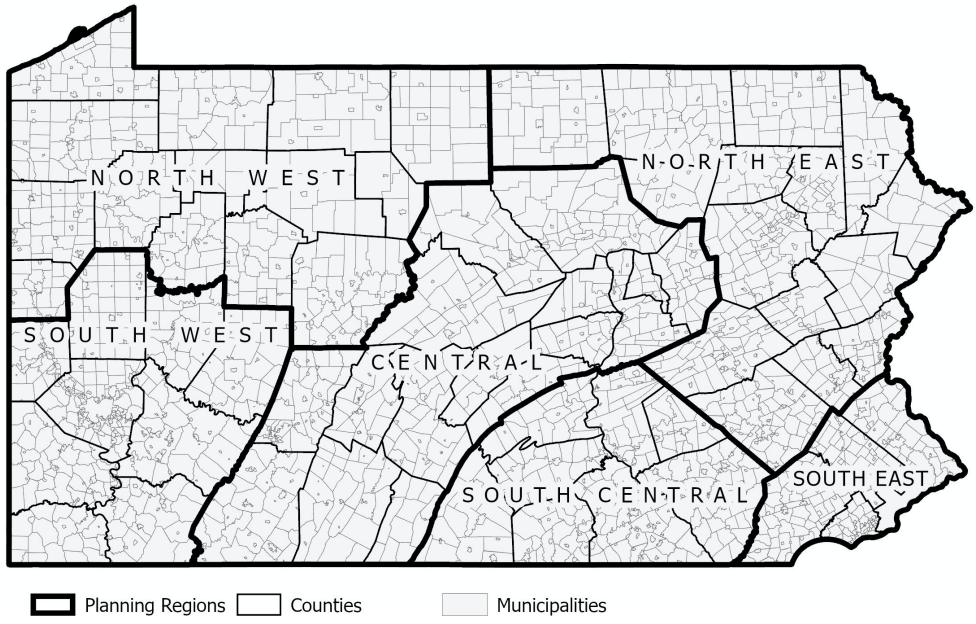
The Center for Rural Pennsylvania provided data on county and municipal demographics, specifically population and population change from 2000 to 2020. Data were based on the Population and Housing Unit Estimates from the U.S. Census Bureau.

The researchers used the Center for Rural Pennsylvania's 2010 rural/urban definitions. Using a measure of population density, the Center classifies a rural county as one with fewer

than 284 persons per square mile, and a rural municipality as one with fewer than 284 persons per square mile or a total population less than 2,500, except when more than 50 percent of the municipal population lives in an urbanized area as defined by the U.S. Census Bureau. According to this definition, Pennsylvania has 48 rural counties (72 percent) and 19 urban counties (28 percent). Of the 2,562 municipalities, 1,592 are rural (62 percent) and 970 are urban (38 percent).

The researchers divided the state into the following six regions, as shown in Figure 2.

Figure 2. Map of Planning Regions



Project Steering Committee

A Project Steering Committee with members from across the six regions of the Commonwealth was convened to assist the researchers with the project. Members were selected based on their experience in planning in urban and rural settings. The project steering committee was asked to review, and pilot test the two survey instruments, discuss the findings of the analyses, and review and provide feedback on the policy considerations developed by the

researchers. Table 1 provides a list of the members of the project steering committee and their affiliations.

Table 1. Steering Committee Members

Northeast **Amanda Raudenbush** Planning Director, Bethlehem Township (Northampton County)	***South Central*** **Tara Hitchins** Assistant Township Manager, East Lampeter Township (Lancaster County) **Pam Shellenberger** Chief Planner, York County Planning Commission
Southeast **Brian O'Leary, AICP** Executive Director Chester County Planning Commission **Mark Evans, AICP** Planning Consultant, Derck & Edson	***Northwest*** **Amy McKinney** Planning Director Lawrence County Planning Department
Central **Ethan Imhoff, AICP** Executive Director Cambria County Planning Commission	***Southwest*** **Brian Lawrence** Executive Director Westmoreland County Redevelopment Authority **Denny Puko, AICP** Planning Consultant, Denny Puko Planning Consultant, LLC **AJ Schwartz, AICP** Planning Consultant, Environmental Planning & Design **John Trant** Planning Consultant, Strategic Solutions

The research team met three times with the project steering committee on June 10, 2020, July 21, 2020, and April 22, 2021. All meetings were held virtually, using Zoom. During the first meeting, the overall goals of the research project were presented. The different components of the research methodologies were reviewed, and expectations of participation were discussed. There was discussion about the administration of the surveys, including strategies to promote awareness and recruit participants. After the first meeting, steering committee members received

links to both surveys. They were asked to provide feedback on content and the overall survey experience. During the second steering committee meeting, survey feedback and modifications to the surveys were discussed. Between the second and third meetings, both surveys were administered. The third meeting of the steering committee took place after survey data were collected and analyzed. Preliminary results were presented, and findings were discussed. Policy considerations were also discussed.

Survey Design and Instrument Development

During March, April and May 2020, the research team developed two survey instruments. Many questions were adapted from the Center's 2001 land use report, modified to reflect current planning practices and to explore current topics. Both surveys were approved by the West Chester University Institutional Research Board.

Survey administration procedures were similar. Both were administered electronically using the Qualtrics digital survey platform. Each survey instrument was programmed separately using the Qualtrics web survey software. The Qualtrics platform supports a variety of question and response types. The program allows for automatic skipping of questions that are not relevant based on responses. Respondents would thereby only be presented with questions that were relevant, based on their unique responses. Messages were sent from a West Chester University (WCU) email address account. The email included a customized link with a respondent identifier. Recipients could use the link to access the web-based survey programmed into WCU's Qualtrics account.

Each survey targeted the entire population of the groups surveyed. One survey targeted local municipalities and was sent to every township, borough, and town in the Commonwealth.[3]

[3] Cities were excluded from the municipal survey. Planning and land use regulation in cities is substantively different than that of townships and boroughs. The researchers therefore determined that any findings would likely not be comparable.

Municipal respondents were identified using the official municipal contact list maintained by the Pennsylvania Department of Community and Economic Development (DCED). A second survey was sent to all county planning directors, except for Philadelphia County.

Researchers aimed for an 80 percent response rate for the county survey and a 40 percent response rate for the municipal survey. It was important to the study that the returned surveys were representative of all regions of the state, as well as all the municipal types, population sizes, and growth characteristics of communities, and rural/urban settings.

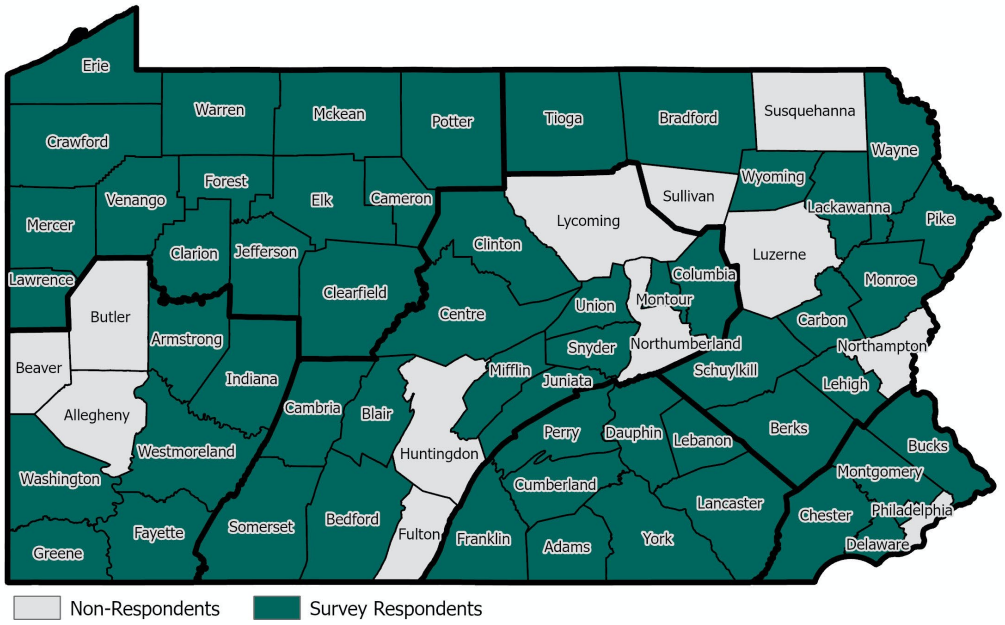
Prior to the administration of the surveys, the researchers employed outreach efforts that included a presentation at the County Planning Directors Association of Pennsylvania meeting on August 28, 2020, and a presentation at the Pennsylvania Planning Association meeting on October 19, 2020. The principal investigator also reached out to the directors of Pennsylvania State Association of Townships (PSATS) and the Pennsylvania State Association of Boroughs (PSAB) to request their support and promotion of the survey to their members.

County Survey

The county survey was administered first. An introductory letter was emailed on September 28, 2020, and a link to an online Qualtrics survey was emailed on September 30, 2020, to 65 Pennsylvania counties.[4] Non-responders received up to four subsequent follow-up attempts in October 2020. Responses were received from 55 counties, which represents a response rate of 85 percent (See Figure 3). While it is not known for certain who completed the survey, it is likely that most surveys were completed by the county planning director.

[4] Pennsylvania has a total of 67 counties. Philadelphia County was excluded, and since Northampton and Lehigh County have one Planning Director, the two counties received one survey.

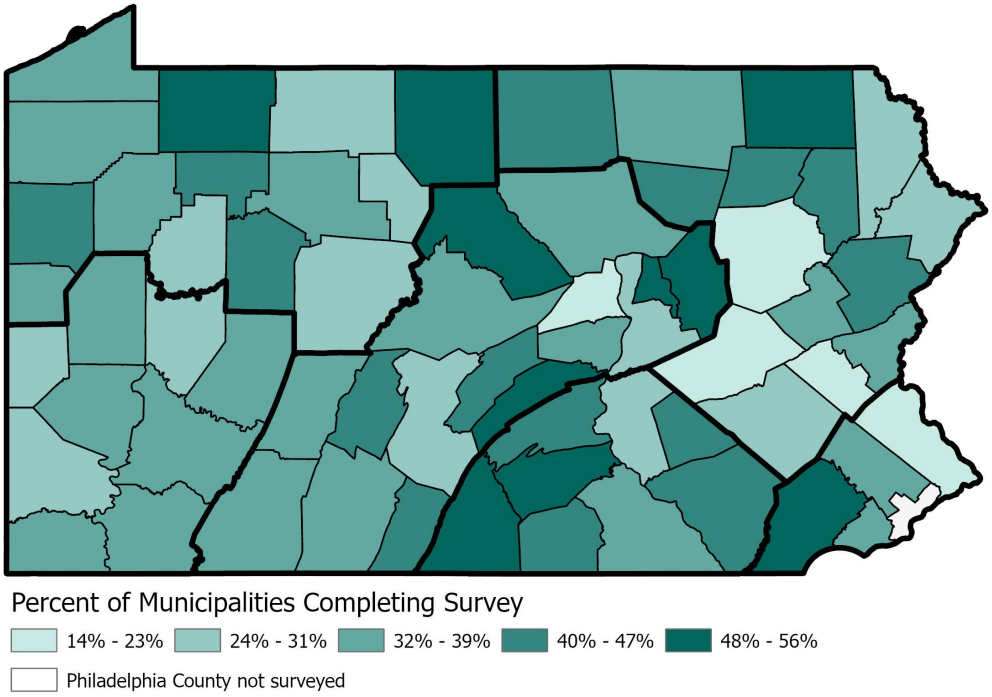
Figure 3. Map of Counties that Responded to the Land Use 2020 Survey



Municipal Survey

There are 2,561 municipalities in Pennsylvania, including cities, townships, boroughs, and one town. An introductory letter and link to the online Qualtrics survey was emailed to 2,505 municipalities in October 2020. Non-respondents received up to seven subsequent reminders to complete the survey. Surveys were sent weekly until the survey closed in December 2020. Approximately 60 email addresses came back as undeliverable. The researchers were able to manually update approximately 40 of these contacts and resend the survey. For the remaining 20, paper copies of the survey were mailed. Useable responses were received from 896 municipalities, for a response rate of nearly 36 percent. Figure 4 shows the percent of municipalities responding to the survey and grouped at the county level. Responses were received from municipalities in each of the 66 counties.

Figure 4. Municipalities that Responded to the Municipal Survey (Municipalities grouped by County)



It cannot be known with certainty who filled out the municipal survey. For larger municipalities, it was likely a township or borough manager or zoning officer. For smaller municipalities, with part-time staffs, it is possible that a municipal engineer or an elected official knowledgeable about planning and development activities completed the survey.

Table 2 summarizes survey size and responses for each of the two surveys.

Table 2. Survey Size and Responses

Survey	Total Surveys Sent	Total Usable Completed	Percent Completed
Municipal Officials	2505	896	35.8%
County Planning Directors	65	55	84.6%

Survey Representativeness

Table 3 provides a breakdown of respondents for the municipal and county surveys based on rural/urban designations. The proportion of rural and urban municipal respondents closely parallels the overall proportion of rural (62 percent) and urban (38 percent) municipalities in Pennsylvania. Similarly, the proportion of rural and urban county responses is very close to the overall proportion of rural (72 percent) and urban (28 percent) counties in the state.

Table 3. Urban and Rural Composition of Survey Responses

Survey	Urban		Rural	
	Number	Percent	Number	Percent
Municipal Officials	323	36%	573	64%
County Planning Directors	14	25.5%	41	74.5%

Municipal responses were analyzed to determine the extent to which they represented the six regions of the state. Table 4 includes the percent of responses by region, which closely tracks the percent of all municipalities located within each region.

Table 4. Municipal Responses by Region

Region	# of municipalities in region	% of all municipalities in PA	# responses from region	% responses from region
Southeast	234	9.2%	89	9.9%
Northeast	555	21.9%	182	20.3%
South Central	312	12.3%	123	13.7%
Central	495	19.5%	184	20.5%
Southwest	520	20.5%	164	18.3%
Northwest	418	16.5%	154	17.2%
TOTAL	2,534		896 (35.4%)	--

A similar analysis was completed to determine if the survey responses were representative across the three municipal types (boroughs, townships of the first class, and townships of the second class) and population sizes (See Table 5). Across nearly all categories of municipal types and sizes, the proportion of survey responses parallels the overall proportion of municipalities in the population. Survey responses were slightly over-sampled in townships of the first class with populations of 5,000 to 9,999 residents, and slightly under-sampled in townships of the first class with populations over 20,000. Because these are urban municipalities and the total number of municipalities that fall into each of these categories is small, the research team did not believe that these discrepancies would impact the reliability of the findings. Results of the full analysis for the three municipal types are in Appendix A. Based on the analysis, the research team deemed the survey responses to be representative of Pennsylvania's overall municipal population.

Table 5. Municipal Respondents by Municipal Type and Size

Population Group	Borough		Township 1st Class		Township 2nd Class	
	% municipalities in group	% response	% municipalities in group	% response	% municipalities in group	% response
< 500	24.2%	26.4%	1.1%	0%	10.7%	10.2%
500 – 999	17.0%	21.1%	1.1%	0%	16.0%	14.8%
1,000 – 2,499	24.9%	22.4%	6.4%	6.1%	33.4%	35.5%
2,500 – 4,999	18.8%	18.0%	14.0%	15.2%	19.3%	17.0%
5,000 – 9,999	10.9%	7.1%	12.9%	21.2%	11.9%	14.0%
10,000 – 14,999	2.1%	3.1%	15.0%	15.2%	3.9%	4.6%
15,000 to 19,999	1.0%	1.0%	17.2%	18.2%	2.7%	2.6%
20,000 and higher	1.0%	1.0%	32.3%	24.2%	2.1%	1.3%

Key Person Interviews

Once the surveys were completed and survey data analyzed, the researchers conducted semi-structured interviews with local government officials. The purpose of the interviews was to further investigate local planning systems and practices, the willingness of local municipalities to engage in land use planning and regulation, perceived effectiveness of different planning tools, and use of state-level resources to support local planning. Interviewees were selected from rural municipalities of different sizes and types, and across different regions of the state. The targeted number of interviews was eight to 10. To recruit participants, researchers reached out to 40 municipalities, initially by email, and later by phone.

Two interviewees were recruited via email, and four were recruited by telephone. Ultimately six interviews were completed. While fewer than the targeted number, the six municipalities adequately represented the targeted population for this research study. Summarized in Table 6, key person interviewees represented a mix of townships of the second class and boroughs. All except one were in rural counties, and the six represented five of the regions of the state. The urbanized southeast region was not targeted for interviews.

Table 6. Municipal Interviews

Interviewee	Municipal Type	County	Region
1	Township of the second class	Rural	Central
2	Township of the second class	Urban	Northeast
3	Borough	Rural	South Central
4	Township of the second class	Rural	Southwest
5	Borough	Rural	Southwest
6	Township of the second class	Rural	Northeast

Each interviewee served his or her municipality in an official capacity. One was the chairperson of the planning commission, one an appointed official, three were administrators including a township or borough secretary or the equivalent, and one was a staff person who served as the municipal zoning supervisor. Semi-structured interviews were conducted by a member of the research team. Subjects were asked to respond to a set of questions (see the Interview Guide in Appendix B). Each interview lasted about 15 to 20 minutes. Five of the interviews were recorded and the interview notes were subsequently transcribed. One interviewee requested to respond to the questions in writing, in lieu of an oral interview.

Results

Part 1. Overall Extent of Primary Planning Tool Use in Pennsylvania Municipalities

According to the survey results, across the Commonwealth, 59 percent of municipalities had a planning commission, 64 percent had a comprehensive plan, 64 percent had a subdivision and land development ordinance, and 58 percent had a zoning ordinance. More than 40 percent reported using all four of these land use planning tools, while approximately 19 percent reported using none of the tools, and the remaining 41 percent reported using one to three of the tools.

Overall, these findings indicate an increase in the use of planning tools over the past 20 years. The 2001 land use study reported that 37 percent of municipalities used all the tools and 29 percent used none of the tools. Considering the major tools, the most notable change since 2001 was the increase in the reported use of comprehensive plans. In the previous study, 52 percent of respondents reported having a comprehensive plan. There was a 12 percent increase in the use of comprehensive plans across the Commonwealth.

Regional differences persist in the use of planning tools. Figure 5 and Figure 6 show the spatial pattern of the use of *all tools* and *no tools* by Pennsylvania municipalities. To preserve

confidentiality of survey responses, the figures show the municipal data aggregated at the county level. In the more urbanized southeast and southcentral regions, there was a higher incidence of the use of all tools in local municipalities. Figure 7 provides a breakdown of the percent of municipalities using each of the four planning tools in each of the six regions. To make sense of these results, it is important to consider the maps and the chart together. The six regions are relatively large, and the overall numbers hide variations within each of the regions, especially in the larger regions. The maps show sub-regional differences in the use of tools. In the northwest, southwest, central, and northeast regions, there are areas that use planning tools considerably more than other areas.

Figure 5. Municipalities Using All Tools (Municipalities grouped by County)

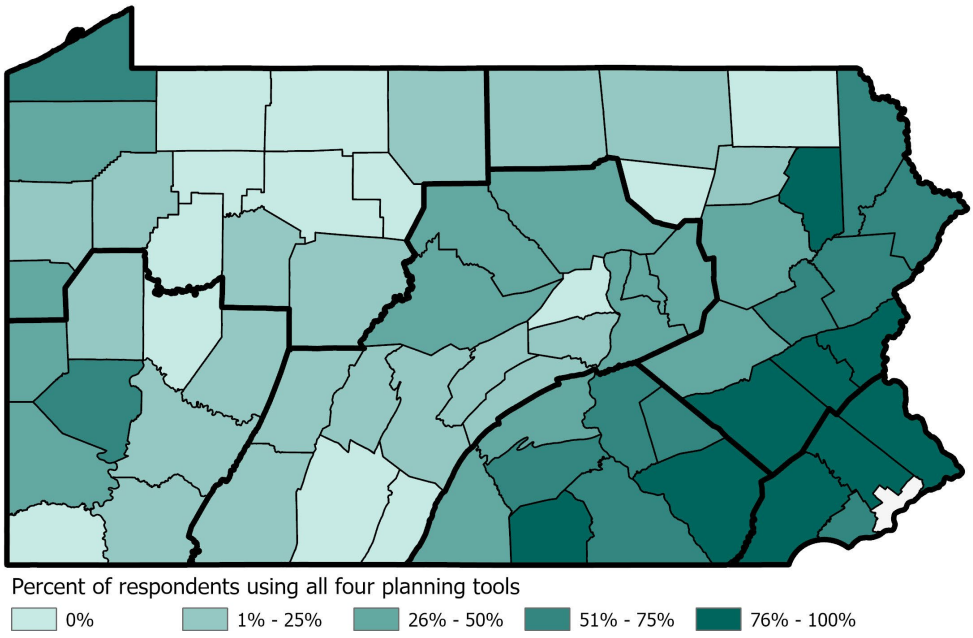
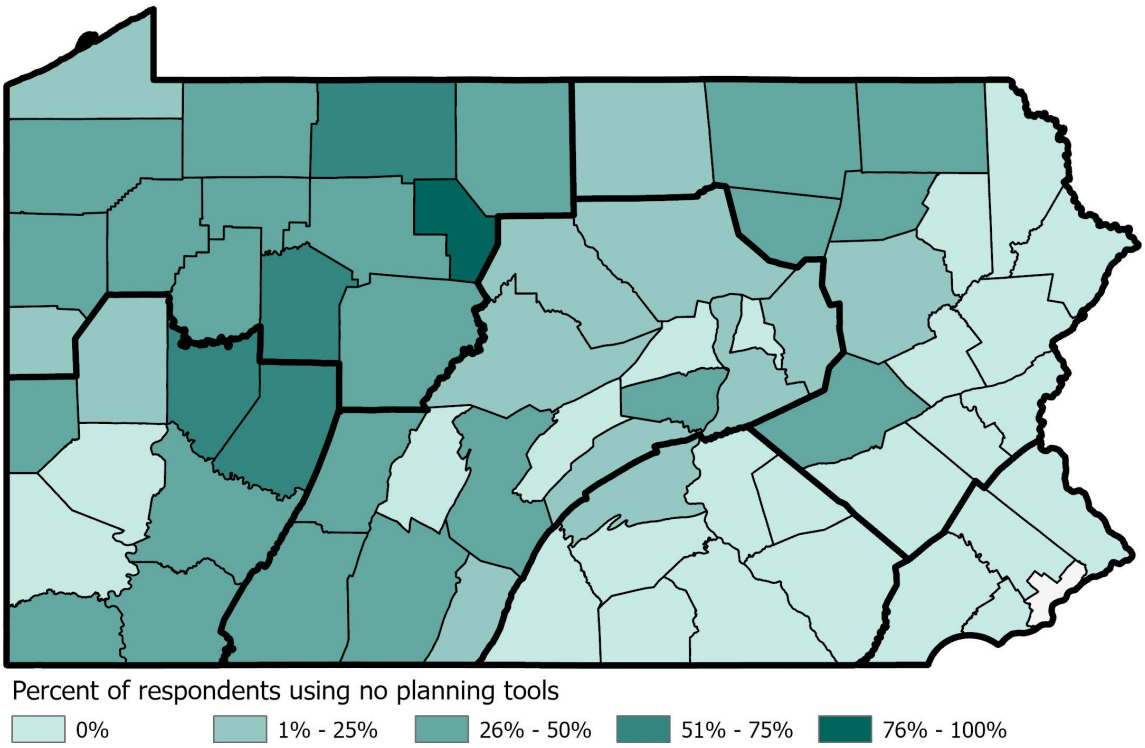
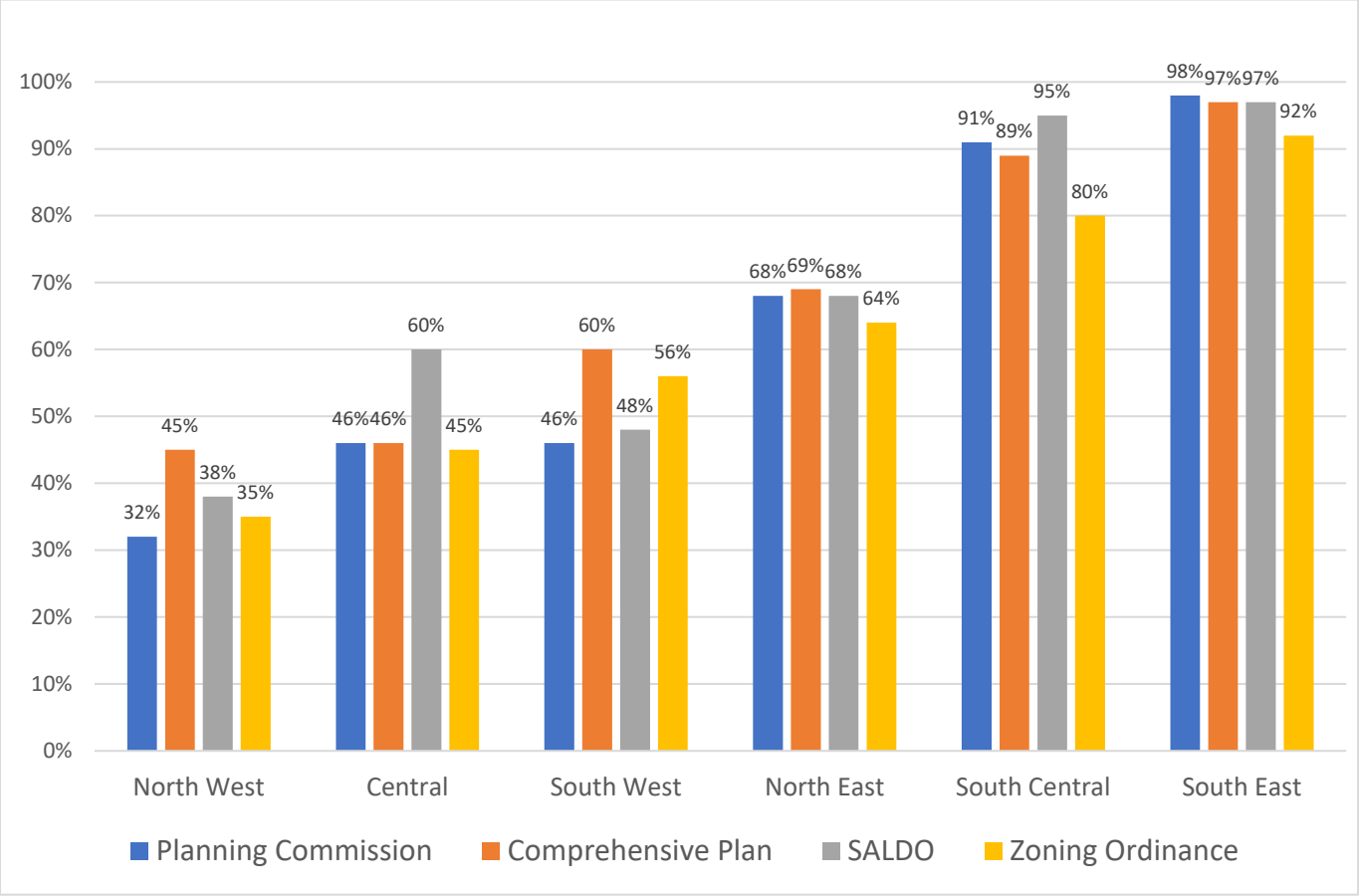


Figure 6. Municipalities using No Tools (Municipalities grouped by County)



Municipalities located in the southeast region were the most likely to have all four tools (84 percent), while municipalities located in the northwest reported the lowest use of all four tools (18 percent). Whereas none of the municipalities in the southeast reported using no tools, nearly 26 percent of municipalities in the northwest reported using none of the four major tools (although still a high number, is it considerably lower than in 2001, when 50 percent of municipalities in the northwest had reported using none of the tools). Similarly, in the central region, 21 percent of municipalities reported using no tools, but this was down from 37 percent in 2001.

Figure 7. Use of Principle Planning Tools by Region
n=896



Rural and urban differences in the use of planning tools are further affirmed when comparing municipalities located in rural counties with those in urban counties (See Figure 8). Whereas 5 percent of municipalities in urban counties reported using none of the tools, 27 percent of municipalities in rural counties used none of the tools; and while 74 percent of municipalities in urban counties used all of the tools, only 25 percent of municipalities in rural counties used all of the tools. More than one in four (27 percent) municipalities in rural counties reported not using any planning tools to manage development. While this represents a notable improvement from the 43 percent reported in 2001, it is still a considerable number.

Figure 8. Municipal Use of Planning Tools by Rural/Urban County
n=896

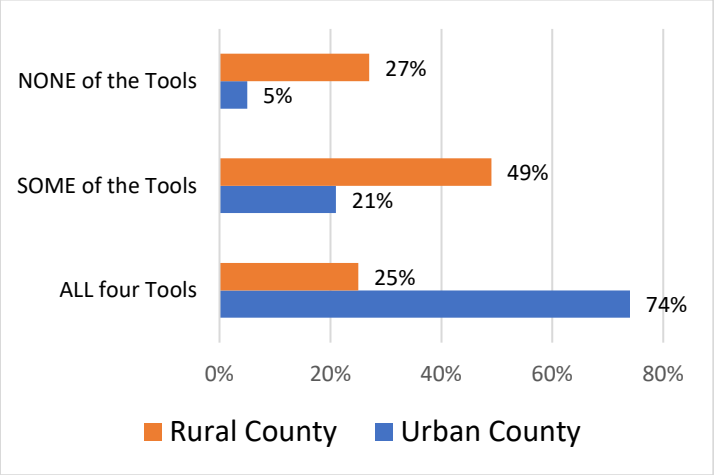
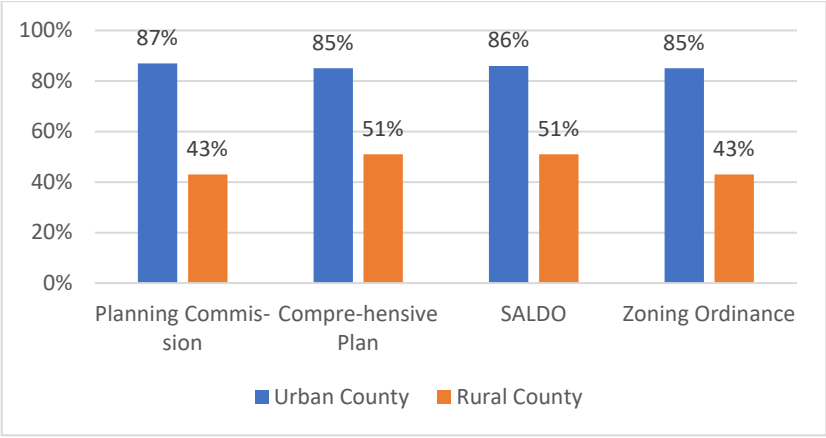


Figure 9 provides a breakdown of the use of the four primary tools by municipalities located in rural and urban counties. For each of the four tools, there is a notable difference in their use across municipalities in rural and urban counties. Use of all four tools increased in municipalities located in rural counties since 2001: planning commissions (44 percent to 51 percent.); zoning (34 percent to 43 percent); subdivision and land development (43 percent in to 51 percent); and comprehensive plans (33 percent to 51 percent).[5]

Figure 9. Specific Planning Tools Used by Municipalities by Urban and Rural County
(% of municipalities) n=896



[5] Comprehensive plan use in municipalities in urban counties increased from 72 percent in 2001 to 85 percent in 2020.

Planning Tool Use by Population Size

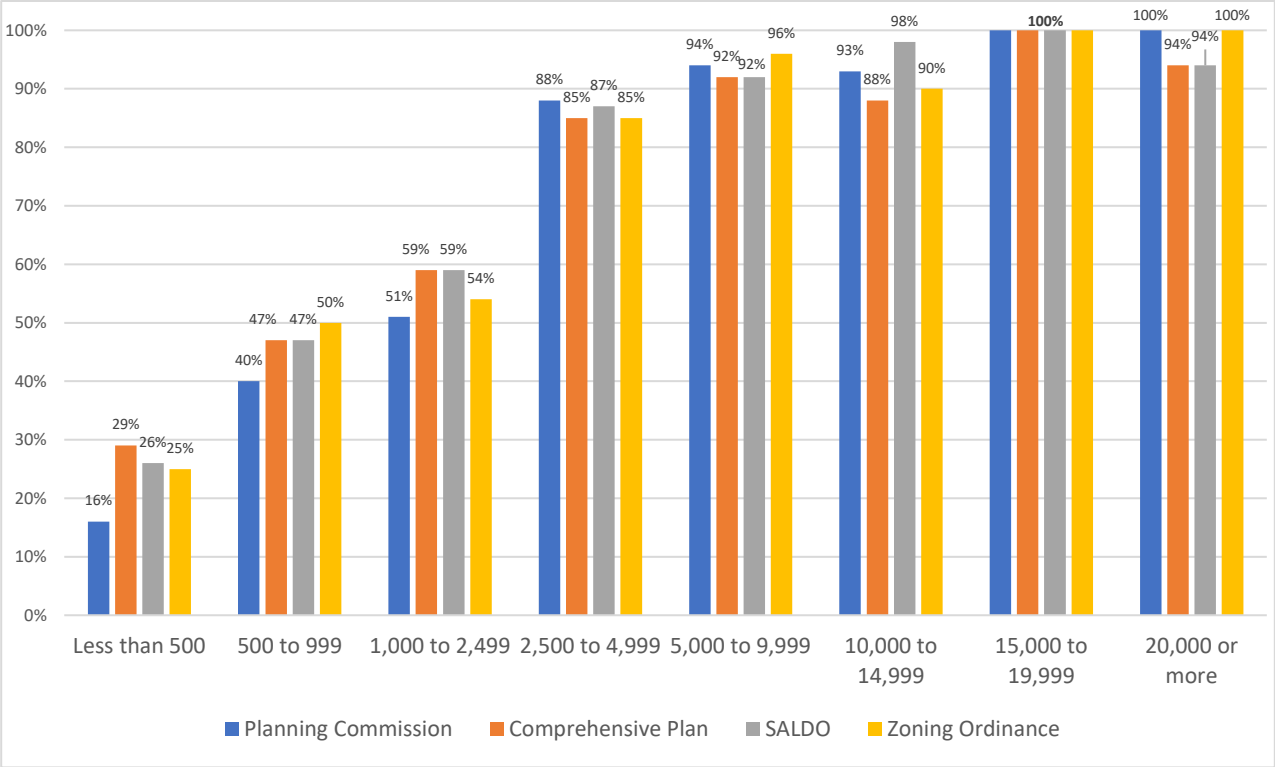
Population size is a factor in whether municipalities use planning tools. Table 7 and Figure 10 provide a breakdown of municipalities by size and use of planning tools. The smaller the population, the less likely a municipality uses the basic tools. Larger municipalities reported a higher use across all types of tools. Only 6 percent of municipalities with fewer than 500 residents used all four tools, compared to nearly 80 percent or more for municipalities with more than 5,000 residents. About 47 percent of the smallest municipalities reported using none of the tools; and while low, this number was down from 58 percent in 2001.[6] Of all the primary tools, the biggest increase since 2001 was in the use of comprehensive plans. Across nearly every population size category, reported use of comprehensive plans increased by more than 10 percent.

Table 7. Use of Principal Planning Tools, by Population Size
(% of municipalities with that population) n=896

Population Size	ALL four Tools	SOME of the Tools	NONE of the Tools
Less than 500	6%	47%	47%
500 to 999	16%	58%	26%
1,000 to 2,499	33%	45%	21%
2,500 to 4,999	69%	28%	3%
Urban	77%	18%	0
Rural	61%	32%	6%
5,000 to 9,999	84%	15%	1%
10,000 to 14,999	78%	22%	0%
15,000 to 19,999	100%	0%	0%
20,000 or more	100%	0%	0%

[6] These survey results do not reveal whether smaller municipalities are getting access to SALDO and/or zoning from the county.

Figure 10. Use of Primary Planning Tools by Population Size n=896



Planning Tool Use by Population Growth Rate

Municipal use of planning tools in Pennsylvania is also related to the rate of population change. Population growth rates over the past 20 years were calculated based on census data as reported by the Center for Rural Pennsylvania. Table 8 and Figure 11 show that municipalities with faster growth rates were more likely to use planning tools than slower growing municipalities or those experiencing population loss. Of the municipalities with the fastest rates of growth (14 percent increase or higher), 77 percent reported using all four tools while 2 percent reported using none of the tools. Of the municipalities experiencing the most rapid decline (12 percent decline or lower) 15 percent reported using all tools, while 32 percent used none.[7]

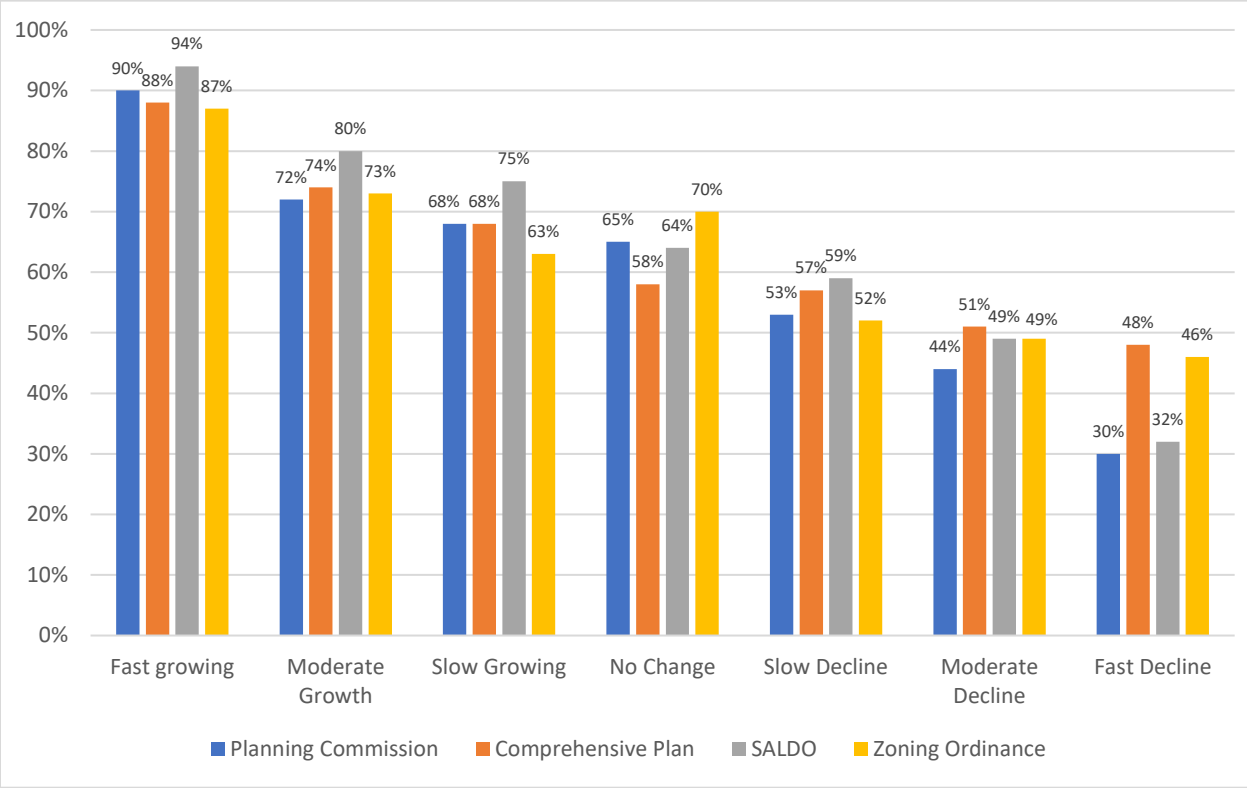
[7] The 2001 study also reported use of tools in relation to population change and building development but used self-reported rates of growth. Considering the different data collection techniques, this analysis could not make a direct comparison to the previous study.

Table 8. Use of Principal Planning Tools by Population Growth Rate
(% of municipalities) n=896

Population Change*	ALL four Tools	SOME of the Tools	NONE of the Tools
Fast Growing (14% and above)	77%	21%	2%
Moderate Growth (5% to 13.9%)	60%	32%	8%
Slow Growing (1.5% to 4.9%)	55%	26%	18%
No Change (-1.5% to 1.5%)	45%	34%	21%
Slow Decline (-6.5% to -1.49%)	30%	47%	23%
Moderate Decline (-11.9% to 6.51%)	26%	48%	26%
Fast Decline (-12% and below)	15%	53%	32%

* Population change is based on total municipal population change from 2000 to 2019.

Figure 11. Use of Primary Planning Tools by Population Growth Rate
n=896



Planning Use by Type of Municipality

Use of planning tools differed across the three municipal types. Table 9 shows that townships of the first class reported the highest use of tools overall and across each of the four primary tools. About 82 percent of townships of the first class reported using all four tools, compared to 34 percent of boroughs and 42 percent of townships of the second class. Nearly one in five (20 percent) of both boroughs and townships of the second class reported using none of the tools. Compared to boroughs, townships of the second class reported a higher use of subdivision and land development ordinances, while boroughs reported a higher use of zoning ordinances. The most notable difference from 2001 was in the use of comprehensive plans by boroughs (11 percent) and townships of the second class (12 percent).

Townships of the first class are quite different in character from the other types. They have larger populations, higher population densities, and are more urbanized than their counterparts.

Table 9. Use of Principal Planning Tools by Municipality Type
n=896

Municipality Type	ALL four Tools	SOME of the Tools	NONE of the Tools	Planning Commis-sion	Compre-hensive Plan	SALDO	Zoning Ordinance
Boroughs	34%	46%	20%	57%	59%	53%	64%
Townships of the First Class	82%	18%	0%	88%	91%	94%	100%
Townships of the Second Class	42%	38%	20%	59%	65%	69%	53%

Survey results indicate that larger, faster-growing, municipalities located in urban counties and the more urbanized of the six regions were much more likely to use planning tools. While there has been an increase in the use of tools, especially comprehensive plans, since 2001,

still 27 percent of smaller municipalities in rural Pennsylvania counties are not using tools that could help them in managing land development.

Currency of Primary Planning Tools

Currency of planning tools is an important indicator of planning effectiveness. To remain useful, comprehensive plans, zoning, and subdivision and land development ordinances need to be up-to-date to reflect current conditions, trends, and interests of residents and other stakeholders. More current plans and regulatory tools are also more likely to reflect recent amendments to the Municipalities Planning Code (MPC). The MPC now calls for comprehensive plans to be reviewed and/or updated every 10 years (Article 3, Section 301(c)).

Municipal survey results indicate that 40 percent of municipalities with comprehensive plans initially adopts their plans after 2000, after the enactment of the Growing Greener legislation. The map of *newer plans* (those updated between 2010 and 2020) in Figure 12 shows that there are newly updated plans throughout every region of the state, with a disproportionately larger number in the more urbanized southeast and southcentral regions. The map of *older plans* (those updated before 1990) in Figure 13 shows a larger number of older plans in the more rural northeast, northwest, and central regions.

Figure 12. Newer Municipal Comprehensive Plans (Municipalities Grouped by County)

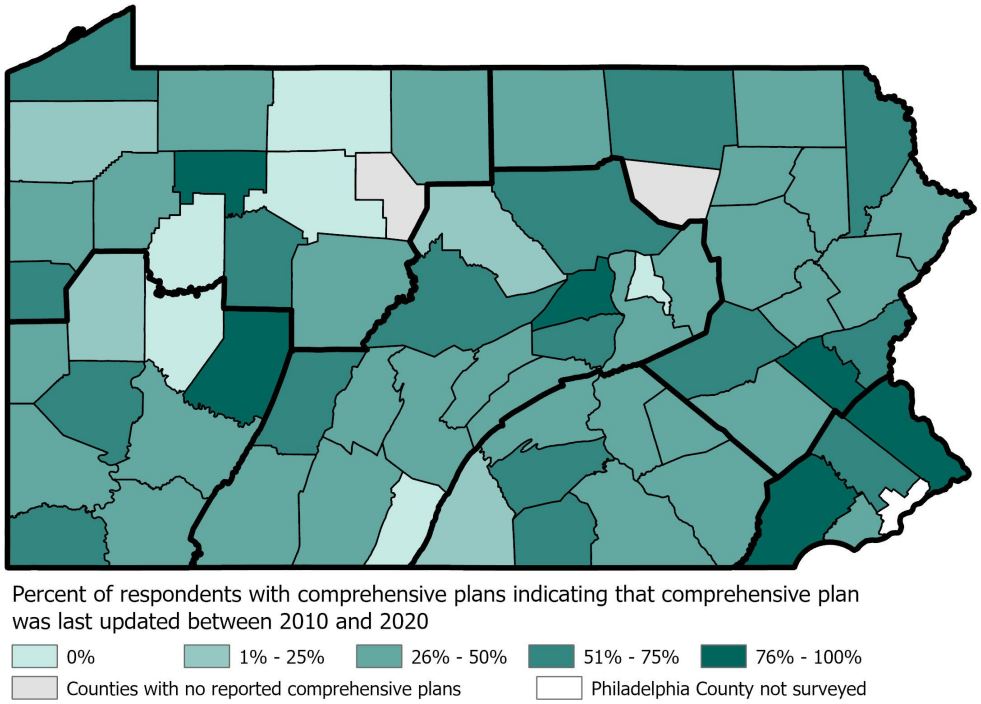
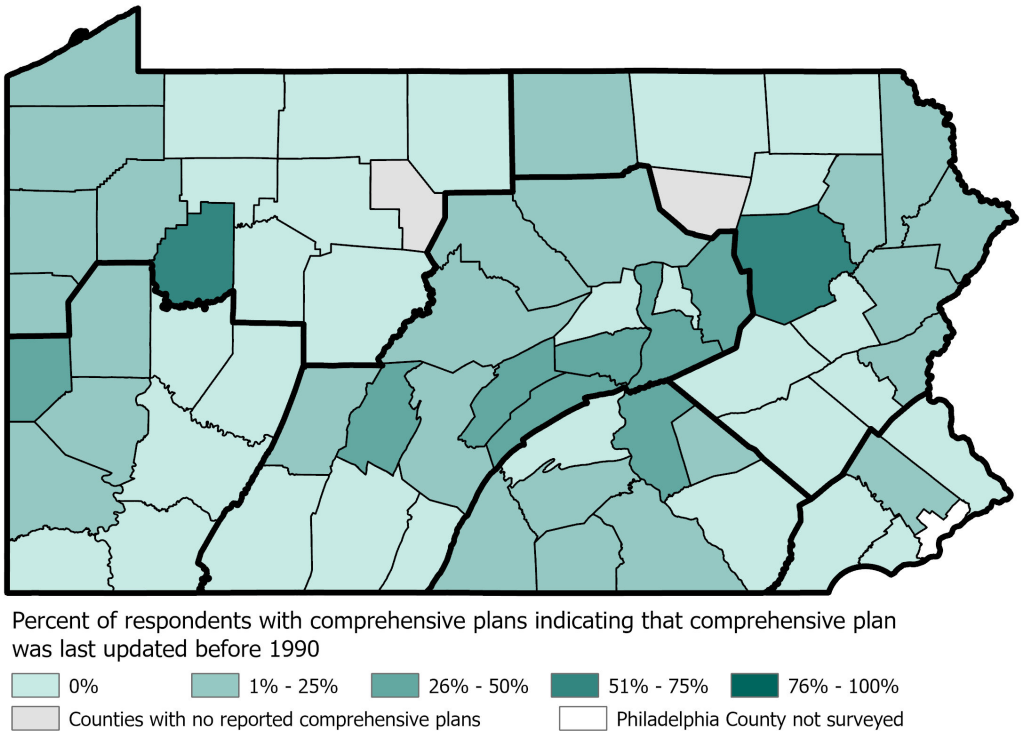


Figure 13. Older Municipal Comprehensive Plans (Municipalities Grouped by County)



The increased use and currency of plans is encouraging, but good planning practice does not stop with the update of a plan. Another related measure of effectiveness is the extent to which land use regulations, especially zoning and SALDO, are revised to reflect the updated plan.[8]

Table 10 provides a summary of municipal responses regarding the initial adoption and revisions to comprehensive plans, SALDO, and zoning ordinances. Whereas the 2001 land use report found that 1979 was the average year municipalities first adopted a comprehensive plan, survey findings from this research found that the average timespan to be 1990-1999.[9] The percent of municipalities that have revised plans since initial adoption was considerably higher in 2020 (65 percent) compared to 2000 (39 percent). Of the communities that reported updating their plans and ordinances, a large percentage have made updates within the last 10 years: comprehensive plans (69 percent), SALDO (67 percent), and zoning (74 percent).

Table 10. Revisions to the Principal Planning Tools
(% of municipalities with a plan or ordinance) n=525

Adoption / Updating	Comprehensive Plan	SALDO	Zoning Ordinance
Average Timespan First Adopted	1990-1999	1980-1989	1990-1999
Percent who have updated/revised since it was first adopted	65%	61%	78%
Percent of those updating who did so within the past 10 years	69%	67%	74%

Part 2. Planning Commissions: Use, Character, and Development Management Impact

Across all municipal types and sizes, research has emphasized the role of planning commissions in the local planning process (APA 2002). Planning commissions play an important

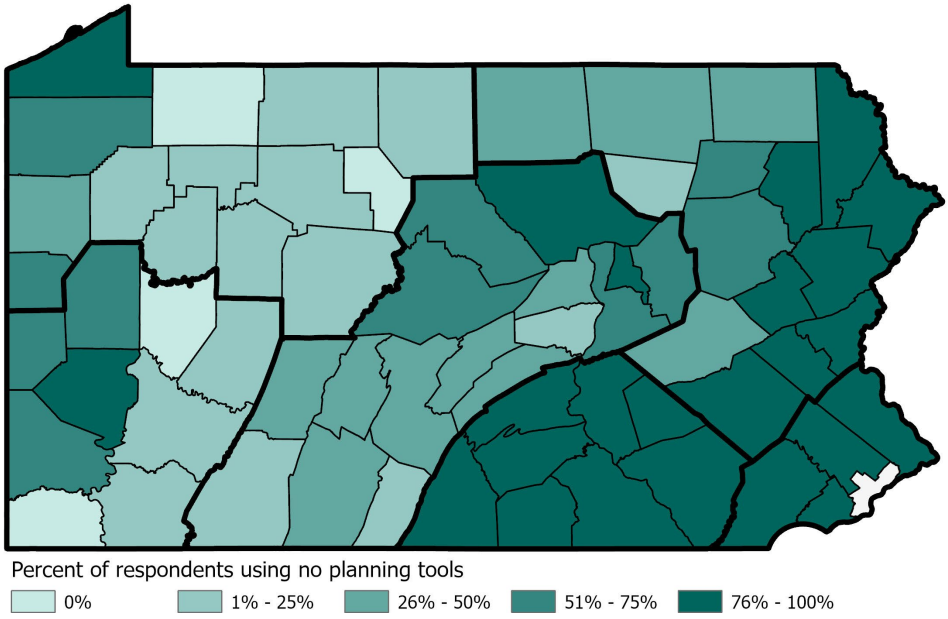
[8] Land use regulations in Pennsylvania are generally not *required* to be based on a comprehensive plan.
[9] The earlier study asked respondents to identify a specific year; the current study asked respondents to identify a range of years.

role in engaging residents in the planning process as well as educating the broader public about the advantages of planning and the planning process. Local governments are granted the power to have planning commissions by the Municipalities Planning Code (MPC). The MPC uses the more general term "planning agency" because it provides for three distinct types of planning organizations, including planning commissions, planning departments, and planning committees. Planning commissions are composed of citizen volunteers, with the possibly that elected and/or appointed officials can serve as members. Planning departments are comprised of paid professional staff, including professional planners, landscape architects, and other professionals with technical expertise to support planning. Planning committees are typically made up of members of the elected governing body. Counties and larger municipalities can have both planning commissions and planning departments. The MPC also provides for two or more municipalities to form multi-municipal planning commissions.

Municipal Planning Commissions

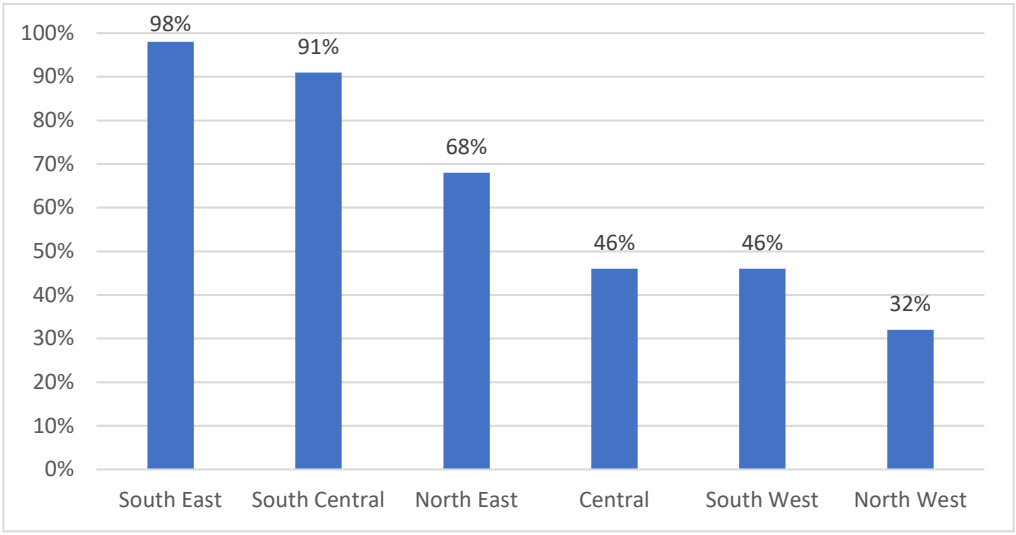
Nearly 60 percent of municipal respondents indicated that they had a planning commission, committee, or department., This overall number is close to the 62 percent that was reported in the 2001 Land Use Report. Municipalities in urban counties reported a significantly higher use of planning commissions (87 percent) compared to municipalities in rural counties (43 percent). There is a variation across regions in use of planning commissions, as displayed in Figure 14. The more urbanized regions of the Commonwealth are more likely to use planning commissions.

Figure 14. Municipal Planning Commission Use (Municipalities Grouped by County)



Approximately 98 percent of municipalities in the southeast region reported using planning commissions, compared to 32 percent in the northwest region (See Figure 15).

Figure 15. Planning Commissions by Region
n=525



Planning commission members often do not have professional expertise or technical knowledge about planning and land use regulations. To be most effective, planning commissions

need access to technical assistance from professionals. Municipalities provided various types of resources and support to their planning commissions (See Table 11). The most common type of assistance was the use of a municipal solicitor (73 percent), followed by a municipal engineer or surveyor (71 percent). Just over half of municipalities provided secretarial services, more than one-third provided support from municipal planning staff, and 19 percent provided planning consultants.

Table 11. Assistance Given to the Planning Commission by the Municipality
(% of municipalities with a planning commission) n=518

Type of Assistance	Provide
Use of a municipal solicitor	73%
Use of a municipal engineer or surveyor	71%
Use of a paid secretary	53%
Municipal planning staff	37%
Planning consultant	19%
Use of other engineer or surveyor	14%
Use of an independent lawyer	6%

Planning commissions have the potential to influence the governing body in matters related to planning and land use. Municipal respondents were asked to identify planning commission activities that might influence their governing bodies (See Table 12). Providing information to the governing body was most common (85 percent). Fewer municipalities indicated that planning commissions attended regular meetings (43 percent) or met regularly with governing bodies (20 percent). Only 23 percent made recommendations regarding improvements of capital projects based on the comprehensive plan.

Table 12. Activities Performed by the Planning Commission
(% of municipalities with a planning commission) n=518

Activity	Performs
Provides information to the governing body	85%
Representative attends regular meetings of the governing body	43%
Recommends improvements of capital projects based on Comprehensive Plan	23%
Meets on a regular basis with the governing body	20%
Submits a written annual report to the governing body	19%

Municipal respondents were also asked to indicate how often the planning commission used the comprehensive plan to guide decision making. More than 43 percent of municipalities indicated that they used the comprehensive plan *always* or *often*, while nearly 35 percent reported using the plan *rarely* or *never*. Plan use by planning commissions has increased somewhat since 2001, when it was reported that 28 percent of municipalities used comprehensive plans often, while one third of municipalities used comprehensive plans *hardly ever* or *never*. The percentage of planning commissions that did not use the plan to guide decisions has not changed much in the past 20 years.

Table 13. Frequency of Use of the Comprehensive Plan by the Planning Commission to Guide Decisions
(% of municipalities with a planning commission) n=425

Frequency	Percent
Always (nearly 100% of the time)	15%
Often (about 75% of the time)	28%
Sometimes (about 50% of the time)	22%
Rarely (about 25% of the time)	25%
Never	10%

Municipalities with planning commissions were asked to indicate the nature of interactions with adjacent municipalities. Nearly half indicated that they had no interaction with other planning commissions. About 42 percent reported that contact was through the planning commission, which was up from 26 percent in 2001. Informal interactions occurred through informal communications (35 percent), occasionally meeting together (25 percent), and the referral of development plans (10 percent). Despite the increase in joint comprehensive plans, a comparatively smaller number of municipalities (16 percent) indicated that they were members of joint planning commissions (this number was, however, up from 8 percent in 2001). These results suggest that, while the primary focus of local planning commissions is still on the individual municipality, there has been some increase in looking across adjacent municipalities in local planning.

Table 14. Contact with Planning Commission in Adjacent Municipalities
(% of municipalities with a planning commission) n=425

Type of Contact	Yes
Does not interact with other planning commissions	49%
Contact with neighboring planning commissions is through the County planning commissions	42%
Informal communications occur between/among commissions	35%
Planning commissioners occasionally meet together	25%
Municipality is a member of a joint planning commission	16%
Development plans are routinely referred to other municipalities, even when not required	10%
Commissions send representatives to each other's meetings	9%

Municipalities were asked about the nature of interactions with water and sewer authorities, which generally operate independently of municipal officials. Infrastructure decisions and land use go hand-in-hand, and coordination between local governments and

authorities can result in greater efficiency in the land development process. Nearly 53 percent of municipalities reported that they have a water and/or sewer authority, either individually or jointly with other municipalities. Since 2001, there has been a notable increase in the amount of interaction. Whereas 25 percent of municipalities reported meeting with authorities to discuss infrastructure needs in 2001, 70 percent reported doing so in 2020. Across all types of contact listed in Table 15, municipalities reported greater interaction.

The increased interaction is likely a result of Acts 67 & 68 of 2000, the Growing Smarter legislation, which required state agencies to consider local comprehensive plans and zoning ordinances when reviewing grant applications or funding requests for facilities and infrastructure. Act 68 sought to strengthen the relationship between planning agencies and municipal authorities and water companies by requiring that providers of major infrastructure, specifically water and sewer, notify municipalities of planned expansions when a new, not yet approved, development is proposed. Municipalities are called to respond and indicate whether the expansion is "generally consistent" with the zoning ordinance.

Table 15. **Contact with Water or Sewer Authority**
(% of municipalities with a water or sewer authority) n=472

Type of Contact	Yes
Meet with authority to discuss water and sewer needs in the municipality	70%
Provides authority copies of new plans	59%
Sends authority subdivision and land development plans for comments	53%
Requests input from authority to develop new plans and ordinances	51%
Provides authority copies of land use ordinances	49%

County Planning Agencies

Every county has a planning agency. Many counties have a combination of a *planning department,* with a professional planning staff, and a *planning commission*, which typically

includes citizen planners without professional planning backgrounds. Nearly 93 percent of counties have planning departments. More than 96 percent of counties reported having a county planning commission. Most counites – more than 75 percent – have nine-member commissions, and more than 70 percent reported that planning commission members served for eight years or more.

Most county planning departments and commissions are managed by planning directors. County planning directors are well qualified professionally. While some planning directors are relatively new to the directorship, serving for less than three years (see Table 16), they come to the position with many years of planning experience. In four of the six Pennsylvania regions, planning directors have 20 or more years of experience, on average.

Table 16. Average Tenure and Experience of County Planning Directors

Region	Number of Planning Directors (N=55)	Average Years Planning Director in this County	Average Years of Total Planning Experience
Southeast	3	3.4	21.3
Northeast	11	4.9	22.3
South Central	8	8.9	27.9
Central	13	8.8	20.0
Southwest	6	12.7	12.7
Northwest	14	8.5	14.2
TOTAL		**8.1**	**19.2**

Staffing resources varied across the six regions (see Table 17). Whereas the statewide average of full-time planners on staff was six, the central region had an average of 1.6 full-time planners compared to 20.3 in the southeast region. Every county reported staffing for GIS support, with a statewide average of 1.7 full-time and 0.6 part-time positions. The increase in

full-time GIS support staff is a notable change from 2001, when the average full-time GIS support statewide was 0.4. Over half of counties reported having a full-time GIS person in 2020, compared to approximately 25 percent in 2001.

Table 17. County Planning Department Staffing
(maximum number in a county is in parentheses) n=55

	Statewide	Southeast	Northeast	South Central	Central	Southwest	Northwest
Professional Planners							
Full-time	6 (30)	20.3	6.2	9.2	1.6	3	4.3
Part-time	1.4 (7)	0	1	3	0.5	1	1
Other Professionals							
Full-time	1.8 (19)	0.5	1.2	3	1.3	6	1.1
Part-time	1(3)	0	0.5	2	1	1	1
GIS Support							
Full-time	1.7 (3)	3.0	1.8	2.0	1.4	1.0	1.2
Part-time	0.6 (2)	0	0	1.5	0	0	0
Clerical							
Full-time	1.8 (9)	3.3	1.8	2.7	1.0	1.7	1.0
Part-time	0.8 (2)	0	0.5	1.5	0.8	0	0

Counties provided many types of planning assistance to municipalities (See Table 18). Core support included technical assistance and consultation, and data and information services. There are differences across regions in some types of assistance such as preparing comprehensive plans, special studies, and land use regulations. Counties in more urbanized regions have more resources to provide a greater range of types of assistance. Southeast region

counties, for instance, provided a full array of planning services, whereas counties in the northeast provided a more narrowly tailored set of services.[10]

Counties routinely review subdivision and land development applications for municipalities. The level of review varies, but since 2001, the scope of review has increased. More than 74 percent of counties indicated that they provide an overview to assure compliance with municipal regulations, while 50 percent completed a full technical review against municipal standards. More than 59 percent reviewed applications against county standards, and more than 72 percent reviewed applications against county plans. This increased level of review is likely a direct result of the Growing Smarter legislation, which added new review requirements and responsibilities for county planning agencies to promote planning coordination and consistency.

Table 18. County Planning Assistance Provided to Municipalities
(percent by region) n=55

Type of Assistance	State-wide Average	South-east	North-east	South Central	Central	South-west	North-west
Provide technical planning assistance/consultation	93%	100%	91%	87.5%	100%	100%	86%
Provide data and information	98%	100%	100%	100%	100%	100%	93%
Attend meetings of municipal planning commissions	62%	67%	54.5%	100%	61.5%	83%	36%
Prepare comprehensive plans	59%	100%	45.5%	37.5%	58%	67%	71%
Prepare special studies	57%	100%	45.5%	75%	54.5%	67%	43%
Prepare model SALDO ordinances	44%	67%	27%	87.5%	33%	50%	36%

[10] More than 94 percent of counties reported that some or all services are provided at no cost to municipalities, while more than 56 percent reported that some services are provided under a cost-sharing arrangement, and 32 percent contracted directly with municipalities for some services.

Prepare zoning amendments	41%	100%	9%	50%	50%	50%	36%
Prepare SALDO amendments	41%	67%	9%	50%	42%	67%	43%
Prepare zoning ordinances	39%	100%	9%	50%	50%	50%	29%
Prepare SALDO ordinances	39%	67%	9%	37.5%	42%	50%	50%
Prepare model ordinances for some land uses	39%	100%	45.5%	75%	25%	0%	29%
Prepare model zoning ordinances	31.5%	100%	18%	75%	33%	0%	14%

In addition to technical planning assistance, counties have other types of interactions with municipalities (see Table 19). The most common interactions included meeting with municipal officials, sharing information on grant opportunities and MPC amendments, holding meetings on special topics, providing training programs, and presenting at local government associations.

Table 19. County Planning Agency Interactions with Municipalities
(% by activity) n=55

Interaction	Regularly	Occasion -ally	Not at All
Meet with municipal officials	35%	59%	6%
Send updates on grant opportunities, MPC amendments, etc.	57%	31%	11%
Presentations at annual meetings of local government associations	38%	51%	11%
Hold group meetings for municipal officials on special topics	22%	65%	13%
Send county planning agency annual report	56%	19%	26%

Conduct training programs for municipal officials and planners	24%	47%	29%
Attend regular municipal planning commission meetings	9%	58%	33%
Send county planning agency newsletter	18%	15%	67%

Part 3. Comprehensive Plans: Use, Character, and Impact on Managing Development

Comprehensive plans are the backbone of a local planning effort, providing a vision for the physical development of a jurisdiction. Plans detail socio-economic and other societal trends and outline local challenges. Comprehensive plans are long range, with time horizons of 20 years or more. The goals stated in comprehensive plans can inform and help guide local government and private decisions about how a municipality or county should develop. Plans set the framework for land use regulations, such as zoning and subdivision and land development, and for infrastructure development and capital budgeting.

Municipalities are not required to have comprehensive plans. The MPC does, however, require counties to prepare and adopt comprehensive plans. The MPC outlines the components that should be included in a comprehensive plan. With the Act 68 amendments to the MPC, the number of required comprehensive plan elements for municipalities was increased to 10, including a statement of community development objectives, current and future land use, housing needs, protection of natural and historic areas, transportation and community facilities and services, a statement of interrelationships among plan elements, plan implementation strategies, a plan for the reliable supply of water, and a statement of compatibility with neighboring municipalities. An energy conservation plan element is optional. Counties have four

additional required elements, which include consideration of important natural resources, developments with regional impacts, and the protection of agricultural and historic resources.

Municipal Comprehensive Plans

More than 64 percent of the municipalities who responded to the survey reported having a comprehensive plan, which is an increase from 52 percent in 2001. Townships of the first class reported the highest use of comprehensive plans, at 91 percent, and 64 percent of townships of the second class and 61 percent of boroughs reported having comprehensive plans. While the overall use of comprehensive plans has increased since 2001, municipalities in urban counties (85 percent) were still more likely to have comprehensive plans than those in rural counties (51 percent). Figure 16 shows the spatial distribution of comprehensive plan use. While there is variation within each of the regions, the map indicates a more extensive use of plans in the more urban southeast and southcentral regions.

Figure 16. Municipal Comprehensive Plan Use (Municipalities Grouped by County)

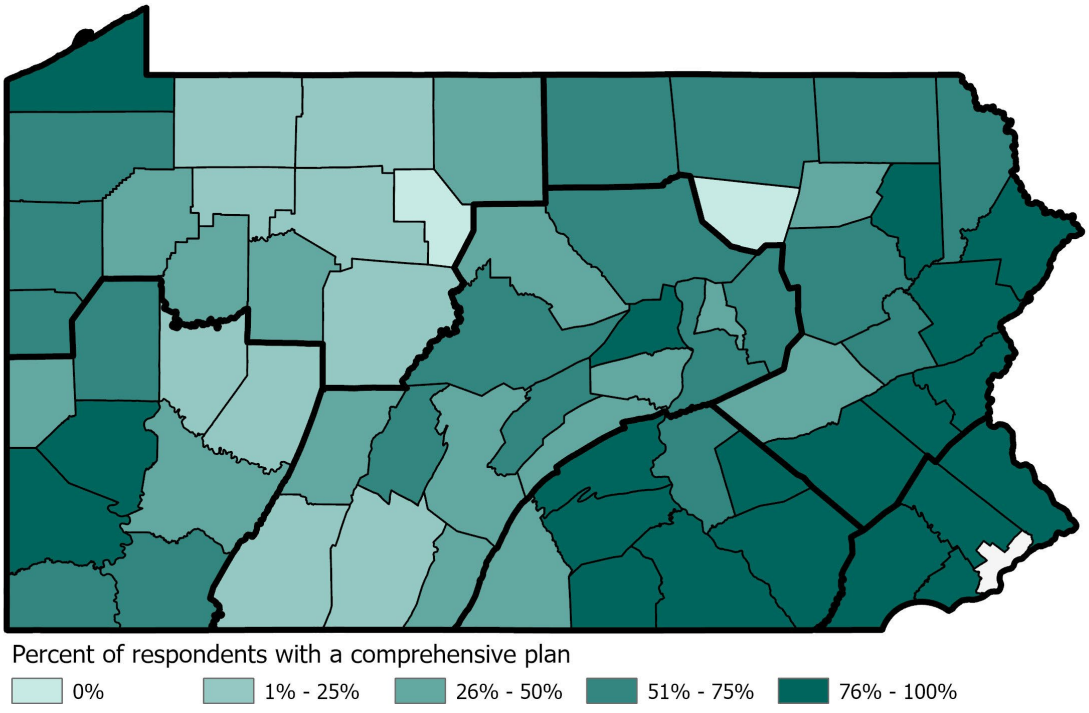
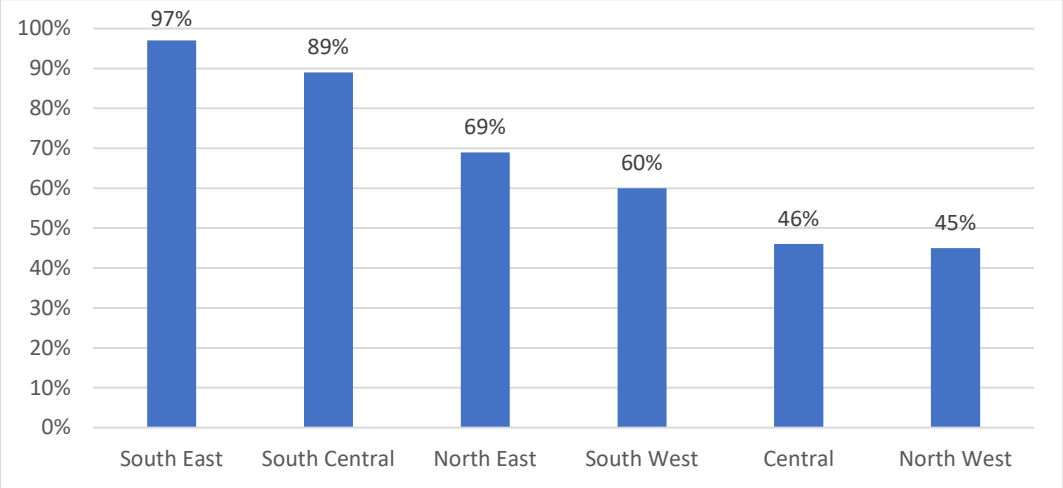


Figure 17 shows the percent of municipalities within each region that reported the use of a comprehensive plan. Nearly 97 percent of municipalities in the southeast region use comprehensive plans, compared to 45 percent in the northwest region.

Figure 17. Comprehensive Plans by Region

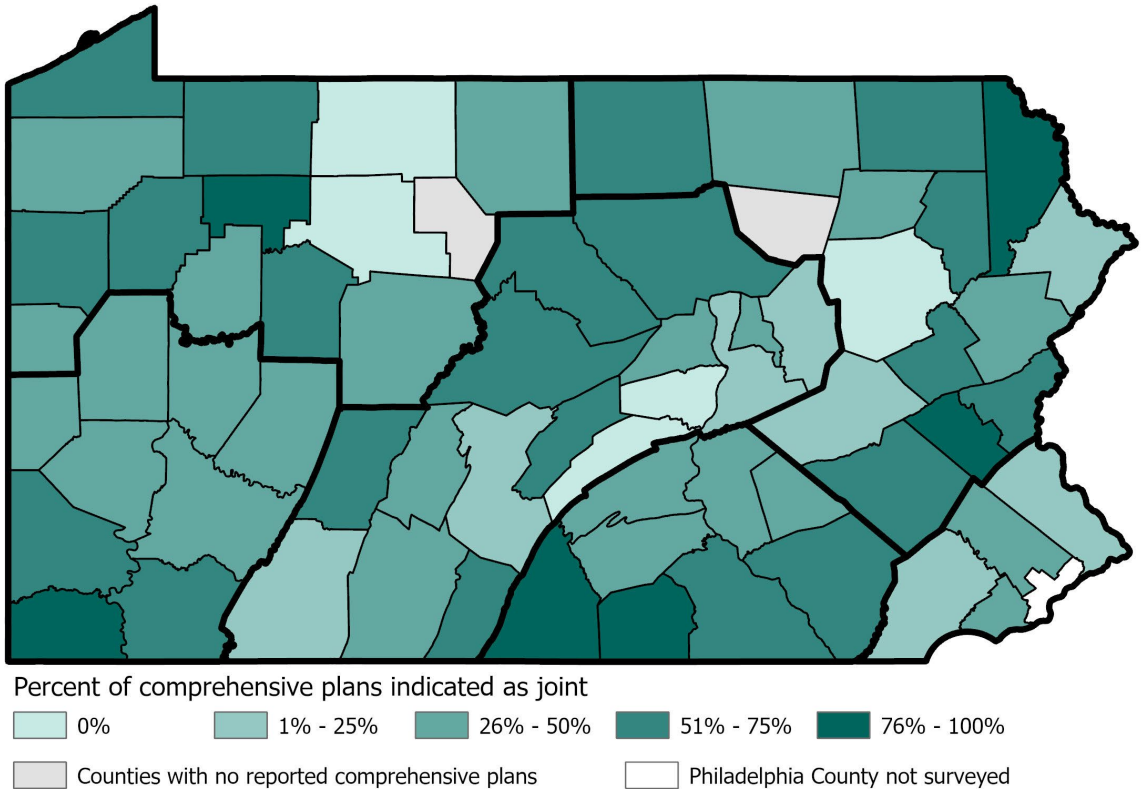


Of the municipalities with comprehensive plans, 48 percent indicated that their comprehensive plan was a multi-municipal or *joint* comprehensive plan with a neighboring municipality. This is a significant change since 2001 and is likely an outcome of the Growing Smarter legislation that encouraged multi-municipal planning. Table 20 and Figure 18 show that the use of joint comprehensive plans is higher in rural regions of the state compared to urban regions. This is likely because many of these communities engaged in planning for the first time. Municipalities in urban counties have more established practices of planning on their own.

Table 20. Multi-Municipal Plans by Urban and Rural County
n=564

Urban or Rural County	Have Joint Comprehensive Plan	Have Single Comprehensive Plan
Rural County	52%	48%
Urban County	44%	56%

Figure 18. Use of Joint Municipal Comprehensive Plans (Municipalities Grouped by County)



Municipalities who reported that they had updated their comprehensive plans were asked to indicate reasons for the update (See Table 21 for reasons by order of importance). More than 82 percent of municipalities indicated that *new issues or problems* were important or very important reasons to update the plan. *Age of an existing plan* and *need for a new plan as a basis to update land use regulations* were cited as the second and third most important reasons. The lowest scoring reasons included *requests from neighboring municipalities for joint planning*, and the *availability of grants*.

Table 21. Reasons for Updating the Comprehensive Plan
n=351

Reasons	Very Important	Important	Not Important	Don't Know
New issues/problems needed to be addressed	40%	42%	4%	14%
Plan was too old to be useful	27%	46%	10%	17%
Needed a new plan as basis for updating zoning and/or subdivision regulations	26%	42%	13%	19%
New provisions in the Municipalities Planning Code (MPC)	10%	43%	17%	29%
Grant was available	18%	25%	24%	33%
Neighboring municipality asked us to undertake joint planning	6%	18%	35%	40%

An important indicator of planning effectiveness is the extent to which comprehensive plans help to guide decision making. Ideally, plans should inform all decisions regarding the management of the physical environment. Municipal officials in Pennsylvania are not, however, statutorily obligated to use their comprehensive plans. Section 303 (c) of the MPC states "…no action by the governing body of the municipality shall be invalid nor shall the same be subject to challenge or appeal on the basis that such action is inconsistent with, or fails to comply with, the provisions of the comprehensive plan."

Municipalities with comprehensive plans were asked to indicate how often the comprehensive plan was used by the governing body to guide decisions and to identify the specific purposes for which the governing body used the comprehensive plan (See Table 22). Nearly 38 percent reported that the governing body uses the plan *always* or *often*, and 25 percent used plans *sometimes*, while 37 percent reported using the plan *rarely* or *never*.

Table 22. How Often the Comprehensive Plan is Used by the Governing Body to Guide Decisions
(% of municipalities with a comprehensive plan) n=472

Frequency of Use	Communities with Comprehensive Plan
Always (100% of the time)	12%
Often (75% of the time)	26%
Sometimes (50% of the time)	25%
Rarely (25% of the time)	24%
Never	13%

To better understand how comprehensive plans are used by the governing body, the survey asked municipal officials to respond to 10 purposes, listed in Table 23. The most common purposes were for activities related to land use regulations including zoning changes, reviewing development proposals, and conducting hearings on conditional uses. Plans were used less frequently to inform decisions around infrastructure development such as preparing water and sewer system plans, budgeting, and preparing capital improvement programs. While plans are being used to guide development reviews, they are not being used to their fullest capacity.

Table 23. Purposes for Which the Governing Body Uses the Comprehensive Plan
(% of municipalities with a comprehensive plan) n=435

Purposes	Uses Comprehensive Plan for this Purpose
Considering zoning amendments and/or rezonings	66%
Reviewing land development proposals	46%
Applying for government grants	43%
Conducting hearings on conditional uses	33%
Preparing Stormwater Management Plans (Act 167)	24%

Preparing capital improvement programs	22%
Applying for MS4 permits	18%
Preparing sewer system plans	13%
Preparing the annual budget	12%
Preparing water system plans	8%

County Comprehensive Plans

All Pennsylvania counties are required to prepare a comprehensive plan and update them every 10 years (MPC, Section 301(c)). A county comprehensive plan is a useful planning tool not just for the county, but for all the municipalities located in the county. The Growing Smarter legislation provided additional provisions to reinforce consistency between county and municipal plans.

More than 96 percent of counties reported updating their comprehensive plans since 2000, and 70 percent reported updating their plans since 2010 (See Table 24). Currency varies across urban and rural counties. In the southeast region, 100 percent of counties reported plan updates since 2010. In the northwest, however, only 46 percent of counties updated their plans since 2010, and there are a few counties in the northwest that have plans that date to the 1990s.

Table 24. Currency of County Comprehensive Plans
(year updated, % by region) n=55

Year of Update	State-wide Average	South-east	North-east	South Central	Central	South-west	North-west
Between 1990 and 1999	4%	0	0	12.5%	0	0	7.7%
Between 2000 and 2009	26%	0	27%	12.5%	27%	0	46%
Between 2010 and today	70%	100%	73%	75%	73%	100%	46%

The most effective plans reflect the input of different stakeholders (Burby, 2003). County planning directors were asked to indicate the participants involved in plan creation (See Table 25). County planning departments play a lead role in county comprehensive plan development, and in most counties, municipal planning officials and municipal planning commissions are also involved in plan preparation. Nearly all counties reported that stakeholder and citizen groups had opportunities to offer comments as part of the plan development process.

Table 25. Participants in County Comprehensive Plan Development
n=55

	Yes
County departments participate in plan preparation	85%
County departments comment on draft plan elements	72.5%
Municipal officials participate in plan preparation	80%
Municipal officials comment on draft plan elements	79%
Municipal planning commissions participate in preparation	60%
Municipal planning commissions comment on plan elements	72%
Stakeholder/citizen groups offer comments	98%

County planning directors were asked to identify the relative importance of seven factors in updating the county comprehensive plan. The most important factors included: *new issues and/or problems that needed to be addressed*, *MPC mandate*, and *age and/or adequacy of the existing plan*. More than 58 percent of counties indicated that the availability of a grant was a factor. Less important factors for plan updates included *the need to better support changing land use regulations*, and as a *requirement for a grant*.

Table 26. Importance of Factors for County Comprehensive Plan Updates
(percent of responses) n=55

	Extremely Important	Impor-tant	Not Important	Don't Know
New issues/problems needed to be addressed	52%	38%	4%	6%
MPC mandate	36%	44%	10%	10%
Previous plan was too old to be useful	26%	52%	16%	6%
Previous plan was inadequate	16%	44%	22%	18%
Grant was available to prepare plan	32%	26%	32%	10%
Needed a new plan as basis for new or updated land use regulations	12%	40%	36%	12%
Needed plan as requirement for grants	12%	34%	40%	14%

The most common purposes for which counties use their comprehensive plan included reviewing zoning and SALDO amendments submitted by local municipalities, reviewing municipal actions related to infrastructure and public facilities, and reviewing applications for subdivision and land development referred by municipalities.[11] Plans are also used by more than half of the counties for regulatory compliance including Act 537 reviews and Act 14 notifications.[12]

Many counties also reported using comprehensive plans to help coordinate infrastructure planning, including setting county highway priorities (58 percent), and reviewing water and/or sewer service areas of private entities (53 percent). While not as common, county comprehensive plans are also used for commenting on new or existing agricultural security areas (45 percent),

[11] Counties are empowered to review all local actions regarding infrastructure, including streets, water and sewer lines, sewage treatment facilities, and public grounds and other public facilities (MPC, Article 3, Section 304)
[12] Pennsylvania Act 537 requires counties to review proposed changes to a municipality's sewage facilities plan. Act 14 requires applicants for a Pennsylvania Department of Environmental Protection (DEP) permit to notify the municipalities and counties wherein which the permitted activity is located.

commenting on agricultural conservation easement purchases (45 percent), and open space acquisition (40 percent).

Table 27. Purposes for Which the County Planning Agency Uses the Comprehensive Plan *(% of counties)* n=55

Purposes	Uses Plan for this Purpose
Review zoning and SALDO ordinances/amendments referred by municipalities	75%
Review municipal actions regarding streets, public grounds, public structures, water, sewer lines or sewage treatment facilities as per MPC Section 304	75%
Review subdivision and land development applications referred by municipalities	69%
Act 537 sewage facility reviews	67%
Review Act 14 notifications	60%
Setting county highway priorities	58%
Review/approval of subdivision and land development applications under jurisdiction of county SALDO	55%
Review of proposed water and/or sewer service areas of private entities	53%
Spending targeted funds such as CDBG, Act 13, Affordable Housing Trust Fund	53%
Comment on new or 7th-year review of Agricultural Security Areas	45%
Comments to county Ag Land Preservation Board on agricultural conservation easement purchases	45%
Open space acquisition	40%
Prioritizing replacement of county-owned bridges	31%

Compared to municipal officials, county planning directors reported a lower frequency of use of the county comprehensive plan by the county governing body to guide decisions (see Table 28). While 21 percent reported that the comprehensive plan was used by county

commissioners *very often*, 41 percent indicated that comprehensive plans were *sometimes* used to guide decisions, and nearly 38 percent of counties reported that county planning commissioners used comprehensive plans *rarely* or *never* for decision making.

Table 28. How Often the County Comprehensive Plan is Used by County Commissioners to Guide Decisions
(% of counties) n=55

Uses it…	Percent of Counties
Always (nearly 100% of decisions)	0
Very Often (about 75% of decisions)	21%
Sometimes (about 50% of decisions)	41%
Rarely (about 25% of decisions)	32%
Never	6%

Part 4. Zoning and SALDO: Use, Character, and Development Management Impact

Zoning and subdivision and land development (SALDO) ordinances are the two most used land use regulations by local governments. Whereas zoning regulates the use of land, and the intensity or density of development, SALDO regulates how the land is to be physically divided, thereby influencing the layout and design of development. The MPC does not require that these regulations conform with the comprehensive plan.

Municipal Zoning

Compared to SALDO, zoning provides a higher level of control over development. It has, or at least is perceived to have, a more influential impact on individual property owners. The source of authority for zoning in Pennsylvania is Article VI of the MPC. While counties are authorized to zone, most zoning is enacted at the municipal level. County zoning ordinances can only be in effect in municipalities in the county that have not adopted their own zoning

regulations. The MPC provides for the appointment of a zoning officer and outlines the enforcement requirements for the zoning ordinance. Every municipality that enacts a zoning ordinance is required to have a zoning hearing board. Article IX of the MPC authorizes and outlines the powers, rules, and procedural responsibilities of a zoning hearing board. For communities that engage in joint planning, and enact plans by joint municipal planning commissions, the MPC allows joint municipal zoning ordinances (Article VIII-A of the MPC) to implement the multi-municipal plans.[13]

The spatial pattern of zoning use across Pennsylvania is very similar to that of planning commissions and comprehensive plans. Overall, 58 percent of municipalities reported that they use zoning ordinances. Figure 19 shows that the more urbanized regions have a higher incidence of zoning use. Within the rural regions, there is variation in zoning use across the region, with the more urbanized areas showing a higher incidence of zoning use.

[13] Joint planning and zoning were incentivized with Act 67 of 2000, which expanded the "fair share" requirements for municipalities engaged in joint planning. In effect, it allowed a broadened geographic area for "fair share" where multi-municipal planning and generally consistent zoning occurs. If a party were to challenge the validity of a zoning ordinance in a municipality that had adopted a multi-municipal comprehensive plan, and had zoning ordinances generally consistent with the plan, the entire multi-municipal area would be considered in meeting fair share requirements.

Figure 19. Municipal Zoning Use (Municipalities Grouped by County)

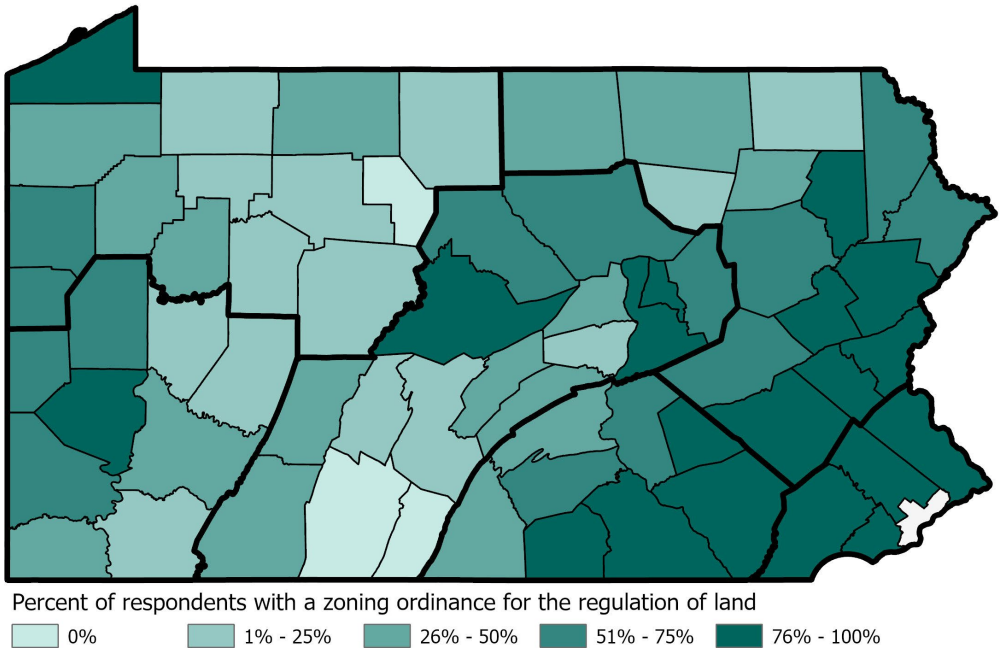
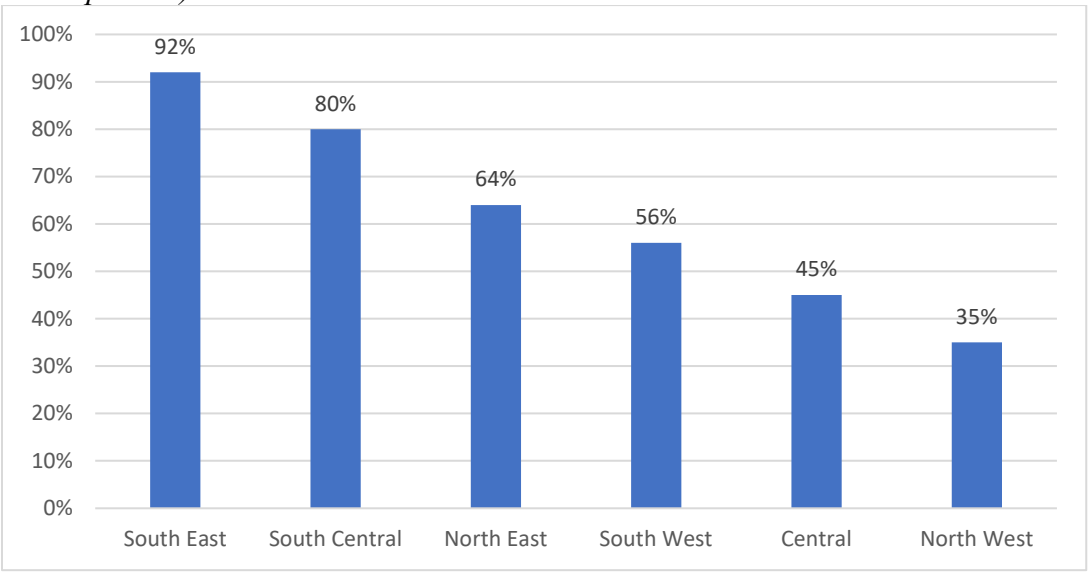


Figure 20 affirms the differential use of zoning across the six regions. Whereas nearly all municipalities in the southeast region reported zoning use, only 35 percent of municipalities in the northwest region used zoning.

Figure 20. Use of Zoning Ordinances by Region
(% of municipalities) n=542



Municipalities in urban counties are much more likely to use zoning than those in rural counties (See Figure 9), as 85 percent of municipalities in urban counties reported using zoning, and 43 percent of those in rural counites reported using zoning. The use of rural zoning in 2020 increased from 2001, when 34 percent of municipalities in rural counties used zoning.

As with comprehensive plans, zoning ordinances need to evolve with changing conditions in a municipality to stay effective. Of the municipalities with zoning, 78 percent reported that they had updated or revised their zoning ordinances since initial adoption, and 74 percent indicated that they have updated their ordinances within the past 10 years.

Municipalities with updated zoning ordinances were asked to indicate the level of importance of seven reasons for their update (See Table 29). The most important reasons included having an ordinance that was too old, and rapid development changes in the municipality. An update to the comprehensive plan and changes to the MPC were, respectively, the third and fourth most important factors. These results suggest that municipalities are more likely to update zoning ordinances in response to changing conditions. Legal challenges to zoning, in the form of curative amendments, were not as important a reason.

Table 29. Reasons for Updating the Zoning Ordinance
n=376

Reasons	Very Important	Important	Not Important	Don't Know
Ordinance was too old	39%	44%	8%	9%
Rapid development changes in the municipality	32%	38%	21%	10%
Comprehensive plan was updated	21%	40%	21%	18%
Changes in the Municipalities Planning Code (MPC)	19%	40%	22%	20%
Too many variances	13%	35%	32%	21%
Too many curative amendments	7%	19%	45%	29%

To better understand the zoning process, the survey asked municipalities with zoning a series of questions regarding the parties involved in the administration and update of zoning ordinances, the activities of the zoning officer, and the operation and activities of the zoning hearing board. Table 30 presents the major parties involved in drafting changes to the zoning ordinance. The top parties include municipal solicitors (60 percent), zoning officers (57 percent), elected officials (53 percent), and planning commissions (51 percent). Planning consultants and planning staff were not as involved, which likely reflects the lack of funding for these resources.

Table 30. Local Drafters of Zoning Changes
(% of municipalities with a zoning ordinance) n=487

Official or Agency	Drafts
Municipal solicitor	60%
Zoning officer	57%
Elected governing body	53%
Planning commission	51%
Planning consultant	29%
Municipal manager	28%
Planning staff	16%
Other municipal staff	13%
Other consultant	10%
Other elected official	4%

Zoning officers have important responsibilities in the administration and enforcement of zoning. They are often regarded as the most knowledgeable of zoning ordinance content and application. Common activities of the zoning officer included representing the municipality at zoning hearing board meetings and advising the governing body of necessary zoning changes

(See Table 31). It is also not uncommon for zoning officers to attend meetings of the governing body and the planning commission.

Table 31. Zoning Officer Activities
(% of municipalities with a zoning ordinance) n=476

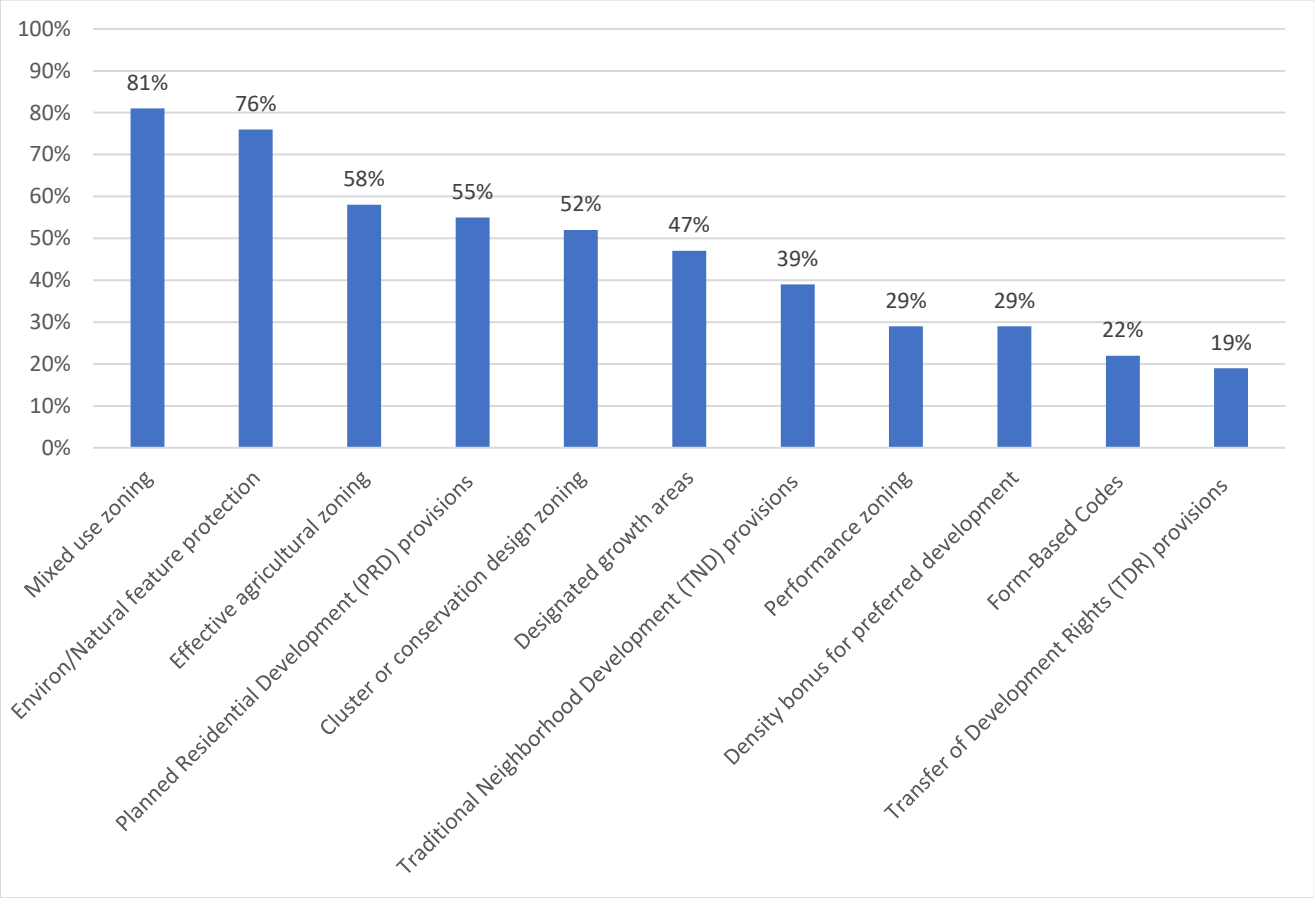
Activity	Performs Activity
Represents municipality at zoning hearing board hearings	76%
Advises governing body about changes needed in the zoning ordinance	66%
Attends governing body meetings	57%
Attends meetings of planning commission	47%
Drafts zoning amendments	39%

If a municipality has a zoning ordinance, it needs a zoning hearing board. A quasi-judicial body, a zoning hearing board hears appeals to zoning decisions, grants variance requests, and makes decisions related to non-conforming properties. The zoning hearing board is intended to be impartial and operates independently from the governing body and planning commission. Article IX of the MPC details the rules and procedures for the zoning hearing board.

Municipalities have several zoning tools at their disposal, as enabled by the MPC. Tools include mixed-use zoning, planned residential development, special provisions for agricultural zoning, transfer of development rights, traditional neighborhood development, and more. A full glossary of these terms is included in Appendix C.

Municipal officials were asked to identify tools used in their zoning ordinances (See Figure 21). The most used zoning tools include mixed-use zoning and environmental or natural feature protection. Nearly half of municipalities reported using effective agricultural zoning, planned residential development, cluster or conservation design, and designated growth areas. The tools that scored the lowest included form-based codes and transfer of development rights.

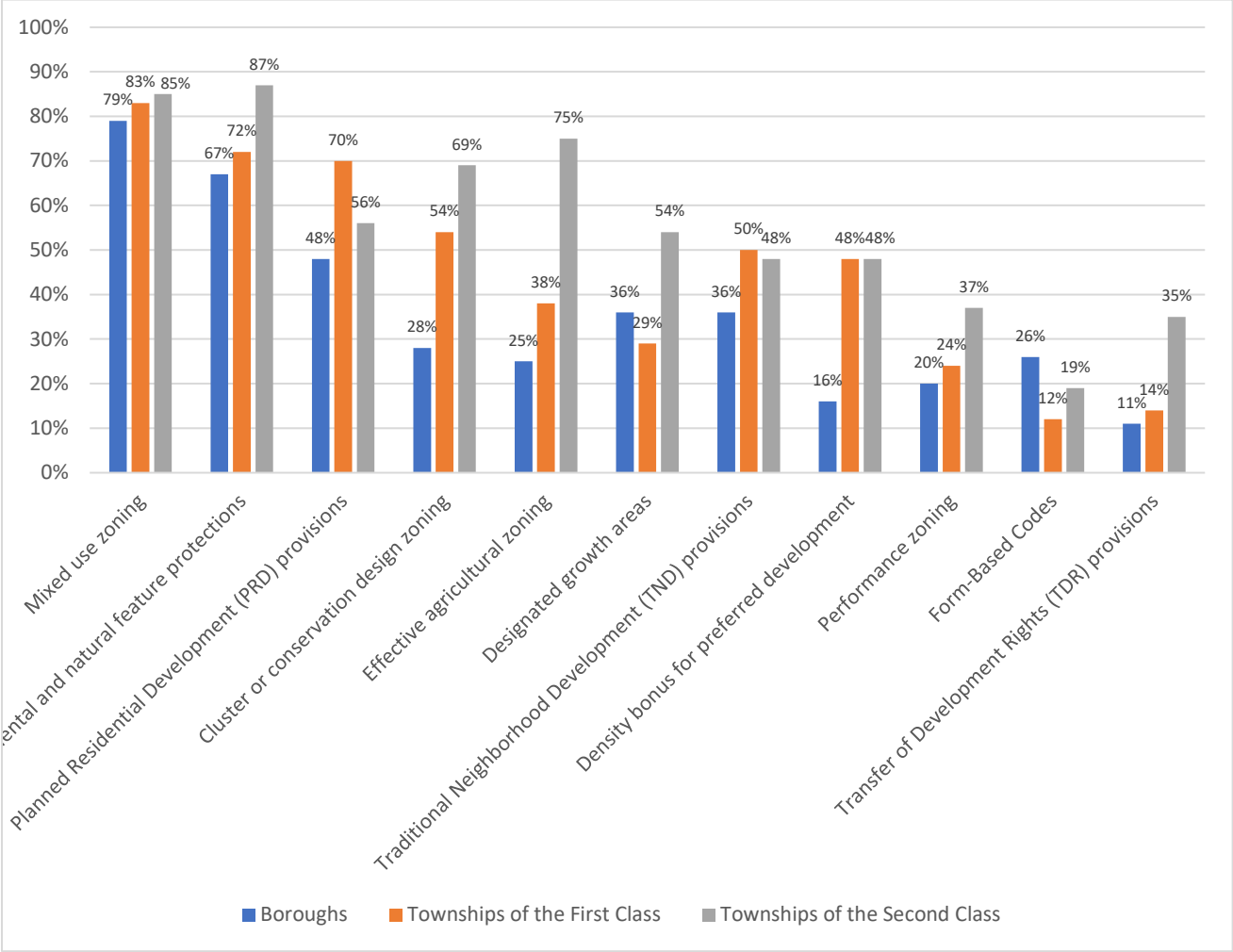
Figure 21. Features Included in Municipal Planning and Land Use Regulation
(% of municipalities with zoning) n=450



Zoning tools have different purposes and objectives, and not all tools are suitable for every type of municipality. Figure 22 breaks down the zoning tool responses by type of municipality. Mixed-use zoning and natural features protections are common among all types of municipalities. Cluster/conservation design, effective agricultural zoning, and designated growth areas are more widely used by townships of the second class, likely due to the higher amount of undeveloped and agricultural land in these municipalities.

Compared to the 2001 study results, there were notable increases in the use of the following tools: cluster and conservation design, designated growth areas, effective agricultural zoning, and density bonuses. Use of transfer of development rights also increased but remains low overall.

Figure 22. Features Included in Municipal Zoning Ordinances by Municipal Type
(% of municipalities with zoning ordinances) n=450



Municipalities have several tools for agricultural zoning. While many zoning provisions are useful to protect agriculture, many communities reported use of *effective agricultural zoning*. Effective agricultural zoning, sometimes called agricultural protection zoning, is a tool that communities can use to encourage the preservation of farmland and agricultural industries and discourage the development of land uses that are incompatible with farming. Such regulations strictly limit the construction of buildings and structures unrelated to agricultural activities in agricultural zones. Table 32 lists features that might be included in zoning to address issues related to agriculture and compares the use of these features in municipalities that reported

having effective agricultural zoning to those that did not. The most used provisions include permitting agriculture-related businesses, farm stands, and bed and breakfast uses. A maximum lot size for a residence is the next most used tool. For every feature, municipalities with effective agricultural zoning reported greater use. Compared to the 2001 study findings, the overall use of all the agricultural zoning features increased in 2020.

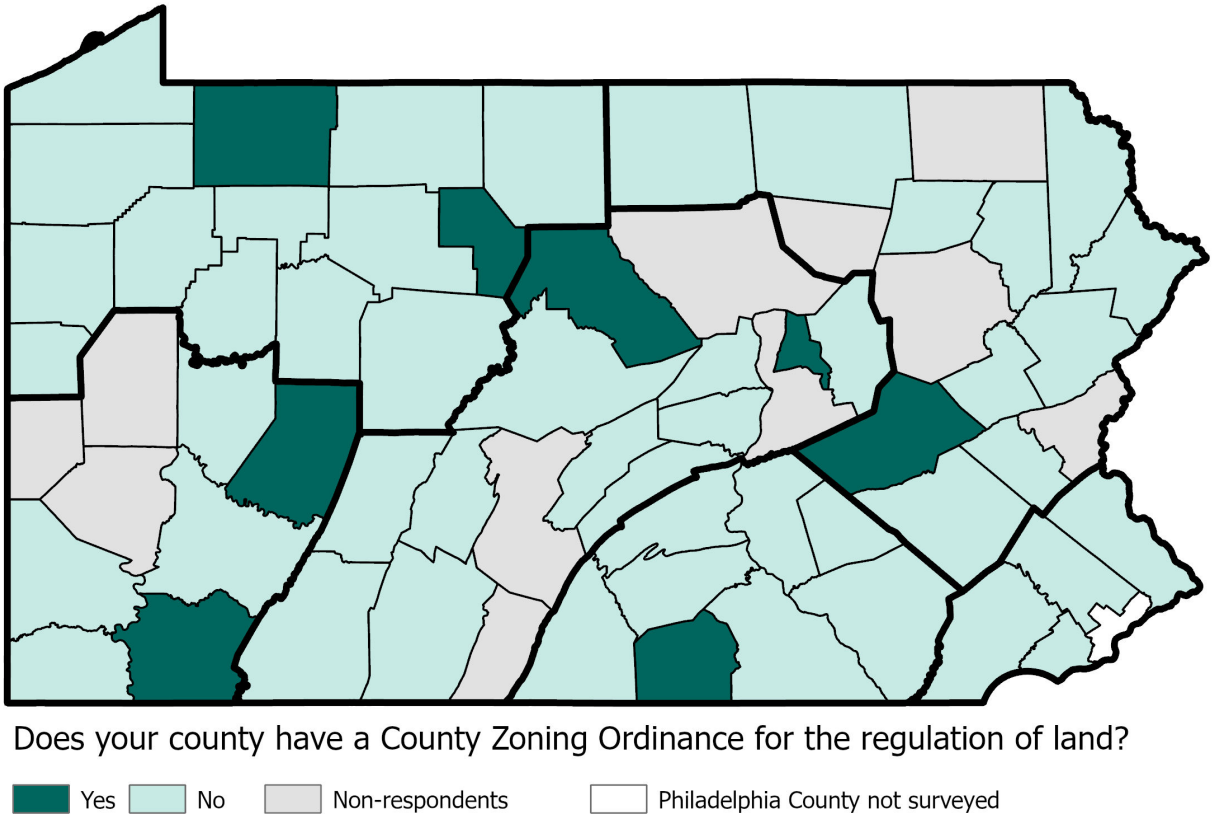
Table 32. Agricultural Zoning Features
(% of municipalities with zoning) n=450

Feature	% with Zoning Having this Feature	% with Effective Agricultural Zoning with this Feature
Permits agriculture-related businesses	62%	84%
Permits farm stands	61%	79%
Permits bed & breakfast use	53%	64%
Maximum lot size requirement for residence	44%	57%
Guidelines included for siting residential lots in agricultural zones	32%	49%
Provisions to protect crops, such as setbacks for fences/trees	31%	45%
Provisions for intensive agriculture	30%	46%
Provision for manure management	30%	46%
Provisions for concentrated animal feeding operations	30%	45%
A sliding, fixed, or percentage scale is used to determine the number of lots	23%	36%
Permits residential only as a special exception or conditional use	16%	22%
Cannot subdivide a farm property to less than viable farm acreage	14%	23%

County Zoning

County zoning authority is limited to those municipalities within a county that do not have their own regulations. Statewide, 15 percent of counties reported having a county zoning ordinance (See Figure 23).

Figure 23. Counties with Zoning



Counties with zoning were asked to identify specific features in their zoning. Like municipalities, two of the three most common tools identified were mixed-use zoning and environmental and natural features protections. The third was effective agricultural zoning.

Table 33. Features of County Zoning Ordinances
n=8

Feature	% County Zoning Ordinance with Feature
Mixed-use zoning	62.5%
Effective agricultural zoning	62.5%
Environmental and natural feature protections	62.5%
Designated growth areas	50%
Cluster or conservation design zoning	37.5%
Performance zoning	25%
Mediation option to resolve land use disputes	25%
Planned Residential Development (PRD) provisions	25%
Density bonus for preferred development	12.5%
Transfer of Development Rights (TDR) provisions	12.5%
Traditional Neighborhood Development (TND) provisions	12.5%
Form-Based Codes	0%

Municipal SALDO

Article V of the MPC authorizes municipalities to regulate subdivision and land development activity. Subdivision refers to the act of dividing land and creating new lots, and land development involves making improvements to the land to support development and building activities. Counties are also authorized by the MPC to have SALDO; however, the county regulation is in effect only in those municipalities in the county that do not have their own SALDO ordinance. It has been estimated that over 94 percent of municipalities have SALDO regulations in place, either through the local municipality or county SALDO (State Land Report, 2020). The results reported in this section refer to the use of a municipal SALDO.

Municipal survey results indicated that SALDO remains the most common form of land use regulation in Pennsylvania, still just slightly ahead of zoning. In the survey, 64 percent of municipalities reported having a local SALDO, including 94 percent of townships of the first class, 69 percent of townships of the second class, and 53 percent of boroughs. Municipalities in urban counties are more likely to have SALDOs (86 percent) compared to municipalities in rural counties (51 percent).

Figure 24 shows the relatively widespread use of local SALDOs across Pennsylvania. There are pockets, however, in the northwest region and more rural areas of the southwest and central regions where a local SALDO is not used.

Figure 24. Municipal SALDO Use (Municipalities Grouped by County)

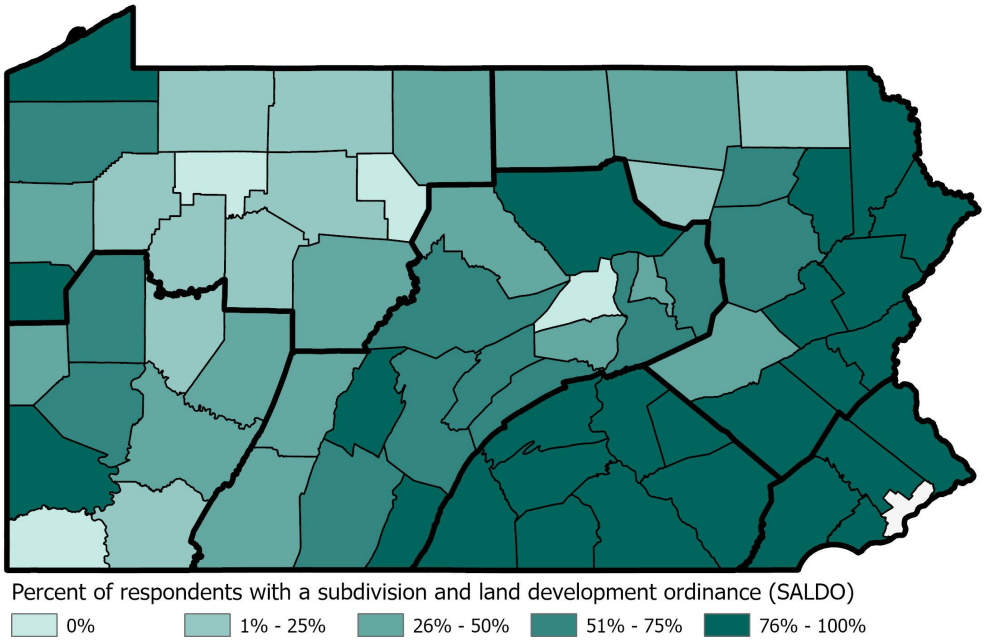
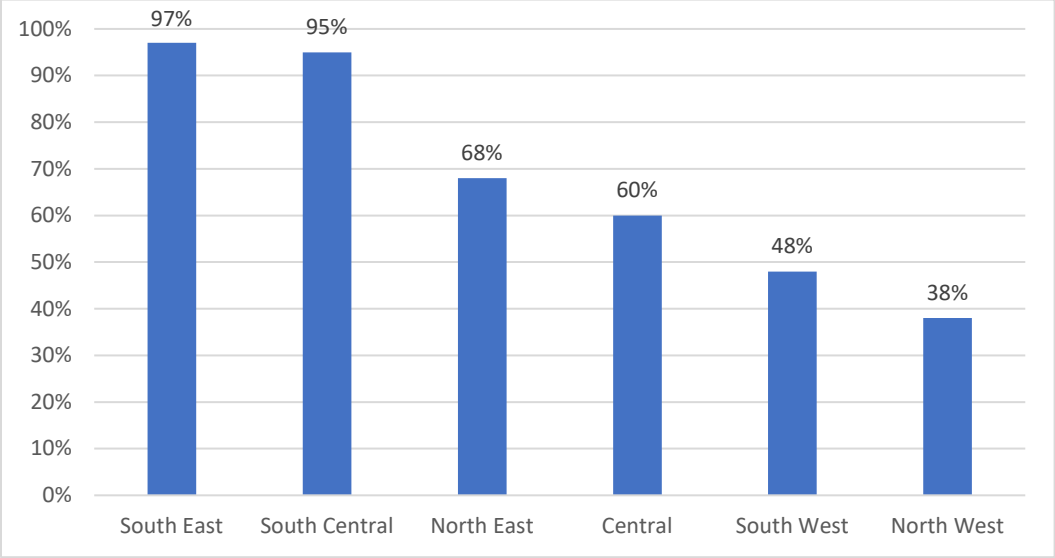


Figure 25 affirms the regional differences. While nearly all municipalities in the southeast and south central regions used SALDOs, only 38 percent of municipalities in the northwest region and 48 percent in the southwest region used them. The biggest change since 2001 was an increase from 82 percent to 95 percent of SALDO use in the south central region.

Figure 25. SALDO Use by Region
(% of municipalities) n=573



More than 66 percent of municipalities indicated that they had substantially updated their subdivision and land development ordinances since 2010, and 91 percent have completed updates since 2001. Municipalities were asked to indicate the factors that influenced efforts to update their subdivision and land development ordinances. The top reasons included out-of-date ordinances, changes to the zoning ordinance, consistency with other state laws and requirements, and the need for a more effective tool to manage development. Comprehensive plan updates were regarded as important or very important reasons for SALDO updates by 62 percent of respondents.

Table 34. How important were the following reasons for substantially updating the subdivision and land development ordinance
5=Very Important; 3=Important; 1=Not Important *(% of responses)* n=324

Reasons for Updating	Very Impor-tant	Impor-tant	Not Impor-tant	Don't Know
Subdivision and land development ordinance was out of date	38%	45%	5%	11%
Changes made to the zoning ordinance	42%	36%	7%	14%
Make consistent with other state laws/requirements, such as sewage facilities, stormwater management, erosion/sedimentation	31%	44%	6%	20%
Ordinance not effective in managing development – results not what community wanted	24%	39%	14%	24%
Comprehensive Plan was updated	28%	34%	17%	22%
Changes in the Municipalities Planning Code (MPC)	19%	39%	16%	26%

County planning directors were asked to indicate the importance of the same six reasons for updating county subdivision and land development ordinances. An out-of-date ordinance was cited as the top reason, followed by the need to make the ordinance consistent with other state laws and requirements, changes to the MPC, and the lack of effectiveness of the existing SALDO. An update to the county comprehensive plan was very important or important to 54 percent of counties.

Table 35. Reasons for Updating County SALDO
5=Very Important; 3=Important; 1=Not Important *(% of responses)* n=28

	Very Important	Impor-tant	Not Important
Subdivision and land development ordinance was out of date	64%	25%	11%
Make consistent with other state laws/requirements, such as sewage facilities, storm water management, and/or erosion and sedimentation	39%	50%	11%
Changes in the Municipalities Planning Code (MPC)	26%	52%	22%
Ordinance not effective in managing development - results not what the county wanted	19%	42%	39%
County comprehensive plan was updated	23%	31%	46%
Rapid development in the county	14%	39%	47%
Changes made in other county ordinances	8%	31%	61%

The MPC requires that the county planning agency review all plans submitted to municipalities for subdivision and land development approval. Municipal survey respondents were asked to indicate the usefulness of the county reviews. More than 93 percent of municipalities indicated that county reviews were very useful (58 percent) or somewhat useful (35 percent).

Part 5. Use of Other Planning Tools

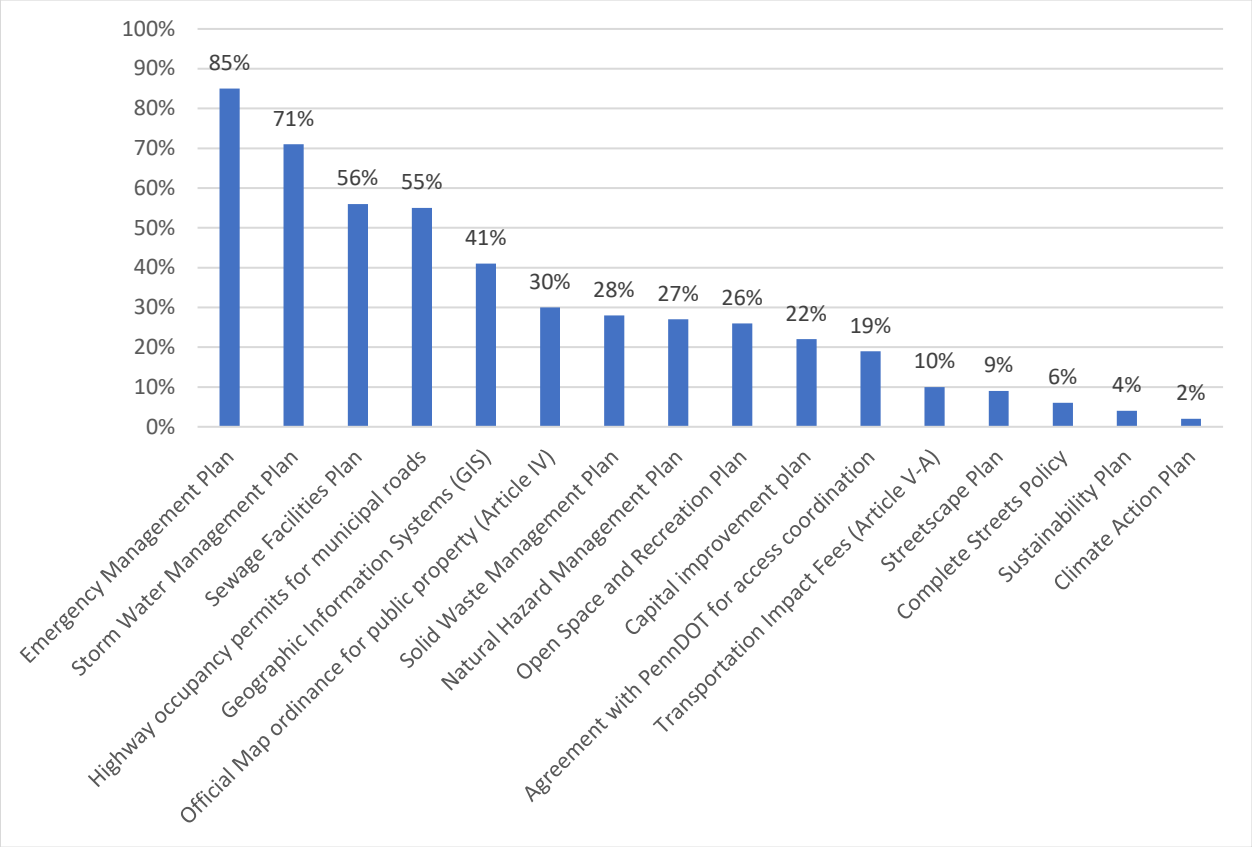
In addition to the four major planning tools, municipalities have several other tools that can be used to manage the built environment. Goal Four of the research was to determine the nature and extent of other tools used by local municipalities and counties to support planning and development management. Other planning tools include functional plans, such as for emergency management, stormwater management, or sewage facilities, which are required under certain

conditions, and tools such as official maps, transfer of development rights, and transportation impact fees which are enabled by the MPC and available to all local governments. Working with the project steering committee, the research team identified 16 other planning tools used by local municipalities and 17 other planning tools used by counties. The Glossary of Terms in Appendix C describes each of these tools. Municipal and county respondents were asked to indicate tools in use.

Municipal Planning Tools

Municipalities reported a high use of emergency management plans (85 percent) and stormwater management plans (71 percent) (See Figure 26). More than half of municipalities used sewage facilities plans (56 percent) and highway occupancy permits for municipal roads (55 percent). Forty-one percent of municipalities used Geographic information systems (GIS). The least-used tools included some newer planning techniques, such as streetscape plans (9 percent), complete streets policies (6 percent), sustainability plans (4 percent), and climate action plans (2 percent).

Figure 26. Percent of All Municipalities Using Other Planning Tools
n=789



Communities face unique challenges and different types of municipalities would be expected to use different types of tools. Table 36 presents the use of other planning tools by municipal type. The more urbanized townships of the first class showed a higher use, overall, of nearly all tools.

There were notable differences in the use of capital improvement plans, a tool that would be suitable for all municipal types. Whereas 63 percent of capital improvement plans were used by townships of the first class, the number was substantially lower for boroughs (23 percent) and townships of the second class (19 percent). Capital improvement plans can be a very useful planning tool to coordinate and prioritize public expenditures to align with comprehensive plans.

The reported use of capital improvement plans did increase substantially since 2001, when reported use across all municipal types was 5 percent or lower.

There was a notable increase in the use of tools to coordinate infrastructure planning with the Pennsylvania Department of Transportation (PennDOT) since 2001.[14] The changes to the MPC through Acts 67 & 68 of 2000 require PennDOT to consider comprehensive plans and zoning in reviewing highway occupancy permits and funding decisions. The increased use of these tools in combination with the increase in comprehensive plans suggests greater coordination between local land use and transportation planning.

The power to enact municipal capital improvement impact fees is granted to municipalities (or counties) with an adopted comprehensive plan, SALDO, and zoning (section 501.A). Nearly 17 percent of municipalities indicated that they considered requiring transportation impact fees from developers. This was up only slightly from 2001. Just under 1 percent reported adopting a transportation impact fee. This is a powerful planning tool that is little used in Pennsylvania. The top reasons that municipalities cited for not implementing transportation impact fees were that they did not have enough development to justify using it, it was too costly to prepare and implement, and it was too complicated.

Table 36. Percent of Municipalities Using Different Planning Tools by Type of Municipality
(% of all municipalities with feature) n=789

Feature	Boroughs (n=279)	Townships of the 1st Class (n=32)	Townships of the 2nd Class (n=478)
Emergency Management Plan	84%	88%	85%
Storm Water Management Plan	70%	94%	70%
Sewage Facilities Plan	45%	78%	60%

[14] Reported use of *highway occupancy permits* in 2001 was 6 percent of boroughs, 23 percent of townships of the first class, and 25 percent of townships of the second class. Reported use of *agreement with PennDOT for access coordination* in 2001 was 5 percent for boroughs, 6 percent for townships of the first class, and 10 percent for townships of the second class.

Highway occupancy permits for municipal roads	38%	44%	66%
Geographic Information Systems (GIS)	39%	66%	41%
Official Map ordinance for public property[15]	27%	59%	30%
Solid Waste Management Plan	29%	34%	27%
Natural Hazard Management Plan	24%	28%	29%
Open Space and Recreation Plan	22%	53%	27%
Capital improvement plan	23%	63%	19%
Agreement with PennDOT for access coordination	20%	34%	18%
Transportation Impact Fees	5%	16%	12%
Streetscape Plan	13%	28%	5%
Complete Streets Policy	9%	6%	4%
Sustainability Plan	6%	9%	3%
Climate Action Plan	3%	10%	1%

County Planning Tools

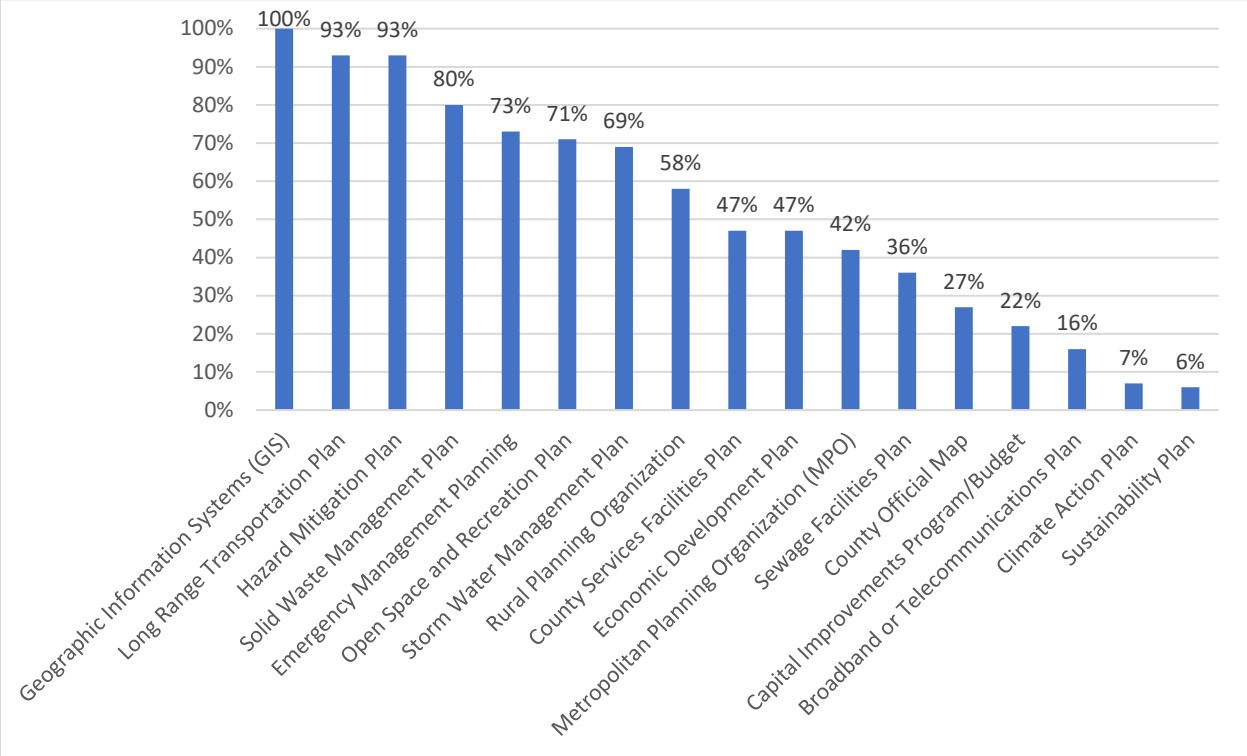
Figure 27 shows the use of county planning tools. All counties use GIS. County assessment offices typically rely on GIS for the land records system and many counties indicated that they provide GIS services to municipalities in the county. This is an important service as the cost of developing a GIS can be prohibitively costly to many municipalities. Other common planning tools used by nearly all counties included long-range transportation plans (93 percent)

[15] The reported use is likely higher than actual use. A quality check of the survey responses identified discrepancies between reported and actual use. It is likely that respondents did not distinguish between official maps and zoning maps, which can sometimes be referred to as official maps due to their legal standing.

and hazard mitigation plans (93 percent). Counties were also actively involved with solid waste management (80 percent), emergency management (73 percent), and open space and recreation planning (71 percent). Each of these sectors is regional in scale, and therefore planning for them can be done more efficiently by counties than by smaller local governments.[16]

Planning tools not used by most counties included climate action plans and sustainability plans. These tools have gained use nationally over the past 10 years. Despite the rising challenges related to the changing climate in Pennsylvania and growing awareness around sustainable development, these tools have yet to be embraced by most counties.

Figure 27. Percent of Counties Using Planning Tools
n=55



[16] Some of the activities are mandated. Act 167 of 1978, the Pennsylvania Storm Water Management Act, requires every county to develop comprehensive storm water management plans for each watershed in its jurisdiction. The Act 166 Floodplain Management Act requires municipalities with existing floodplains to adopt floodplain management regulations to comply with the National Flood Insurance Program. Counties often provide guidance. The Federal Disaster Mitigation Act of 2000 specifically addresses mitigation planning and requires state and local governments to prepare multi-hazard mitigation plans as a precondition for receiving FEMA mitigation funds for a number of grant and assistance programs, including mitigation project funding (Section 322). Act 10, the Pennsylvania Municipal Waste Planning, Recycling, and Waste Reduction Act, requires counties to develop Municipal Solid Waste Management Plans and update them every 10 years.

There is variation across regions in the use of many of these tools (See Table 37). Tools with the most variability include rural planning organizations and metropolitan planning organizations, economic development plans, and sewage facilities plans.[17] Economic development plans and sewage facilities plans are more commonly used in counties located in urban regions.

There are several tools that were little used across all regions. Most counties were not directly involved in capital budgeting or capital facilities services planning, or in planning for broadband and telecommunications. As with municipal planning, a better integration of capital improvement planning and budgeting and land use planning would better support more efficient infrastructure planning. With the rise of e-commerce and telecommunications more generally, broadband connectivity should be regarded as an essential infrastructure to support local communities, especially in rural areas without access to reliable broadband connectivity.

Table 37. Percent of Counties Using Different Planning Tools, by Region, by Percent
n=55

Land Use Planning Tool	State-wide	South-east	North-east	South Central	Central	South-west	North-west
County Comprehensive Plan	100	100	100	100	100	100	100
Geographic Information Systems (GIS)	100	100	100	100	100	100	100
Long Range Transportation Plan	93	100	91	100	92	67	100
Hazard Mitigation Plan	93	100	91	88	100	67	100
Solid Waste Management Plan	80	66	64	75	85	100	86
Emergency Management Planning	73	100	55	50	85	67	86
Open Space and Recreation Plan	71	100	91	75	77	83	36

[17] Metropolitan planning organizations (MPO's) and rural planning organizations (RPO's) are involved in transportation planning for the region. A region must meet a certain population threshold to be considered an MPO. Every region of the state is covered by an MPO or an RPO. In addition to transportation planning, these organizations commonly perform a variety of other planning tasks related to transportation, including economic development and environmental resource planning.

Storm Water Management Plan	69	100	64	63	69	50	79
County Subdivision & Land Development Ordinance	67	33	64	50	62	83	86
Rural Planning Organization	58	0	79	25	85	17	79
Economic Development Plan	47	100	64	38	39	50	36
Metropolitan Planning Organization (MPO)	42	100	21	75	15	83	21
Sewage Facilities Plan	36	100	46	13	31	67	21
County Official Map	27	33	46	0	31	33	21
Capital Improvements Program/Budget	22	67	18	13	23	33	14
County Services Facilities Plan	16	0	27	0	39	17	0
Broadband or Telecommunications Plan	16	0	9	0	31	17	21
County Zoning Ordinance	15	0	9	13	11	33	14
Climate Action Plan	7	33	18	13	0	0	0
Sustainability Plan	6	0	9	0	8	17	0

Part 6. How Well Tools Achieve Land Use Planning Goals

An important indicator of planning effectiveness is the extent to which planning tools enable the realization of planning goals. A series of survey questions asked respondents to indicate how effective planning tools were in achieving local planning goals.

Municipal Planning Goal Achievement

Respondents were first asked to identify municipal planning goals from a list of 17 possible goals (See Figure 28).

The general goal of *promoting general welfare of residents* was cited often for both rural and urban respondents (63 percent rural; 78 percent urban), followed by *managing stormwater* (55 percent rural; 81 percent urban), *keeping down municipal costs* (64 percent rural; 65 percent urban), and *maintaining community character* (50 percent rural; 76 percent urban). The goals

cited least often included *creating affordable housing* (10 percent rural; 20 percent urban) and *minimizing greenhouse gases* (5 percent rural; 16 percent urban).

Municipalities in urban counties cited nearly every planning goal more often than did municipalities in rural counties, except for the goal to *preserve agricultural land/farms*, which was 43 percent for both groups. Rural communities cited *protecting private property values* and *protecting groundwater supply* more often than many of the other goals.

Planning goals would be expected to differ across municipal type. Municipalities have different settings and challenges and therefore need to establish local policies suitable to addressing needs within their local setting and structure. The more urbanized townships of the first class more frequently identified certain goals, including managing stormwater, protecting natural resources, managing growth and development, and protecting open space. Boroughs more frequently cited stimulating growth and development, protecting property values, and enhancing downtown commercial areas. Townships of the second class more frequently identified protecting groundwater and preserving agriculture and farms.

Figure 28. Stated Goal of Municipal Planning and Land Use Regulation by Urban and Rural County
n=690

For each planning goal they identified, survey respondents were asked to indicate the extent to which planning and land use regulation were achieving the goal. Respondents scored goal achievement on a scale of five for *always*, three for *sometimes*, and one for *never* (See Figure 29). The planning goals that scored the highest in achievement included managing

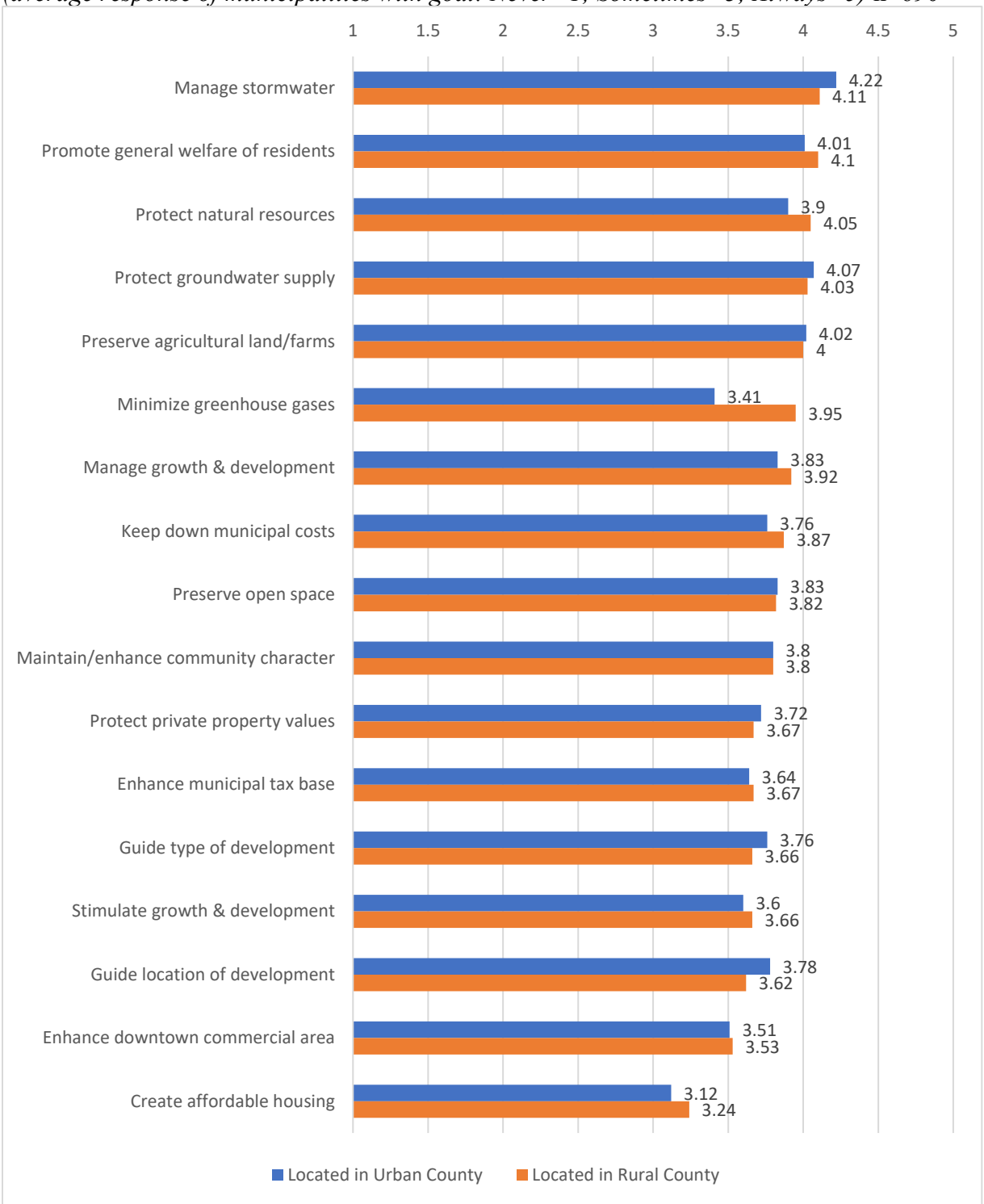
stormwater, promoting general welfare of residents, protecting natural resources, protecting groundwater supply, preserving agricultural land and farms, managing growth and development, preserving open space, and maintaining community character. With scores at or above 3.75, the results indicate that municipalities believe that land use planning tools are consistently effective in achieving those goals.

Lower scores were reported for the following goals: protecting private property values, enhancing the municipal tax base, guiding type of development, stimulating growth and development, enhancing downtown commercial areas, and creating affordable housing.

These findings suggest that municipalities are having better outcomes using planning tools in managing development to achieve physical outcomes such as protecting important natural resources and managing stormwater, but they are having less success achieving economic outcomes, and using planning tools to realize the type of development that they desire.

Figure 29. How Well Municipal Regulations are Achieving Goals, by Urban/Rural Location

(average response of municipalities with goal: Never=1; Sometimes=3; Always=5) n=690



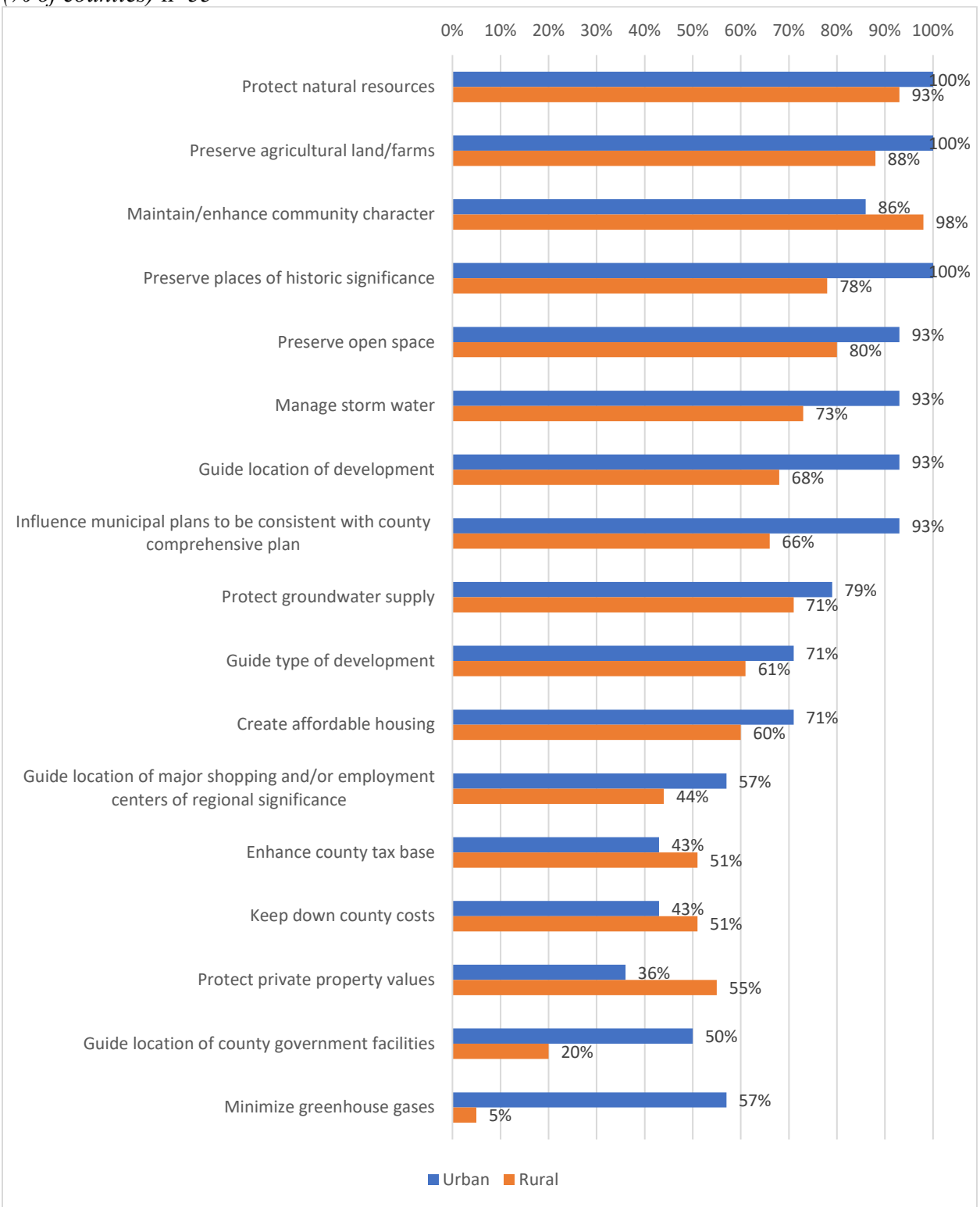
County Planning Goal Achievement

County planning directors were asked to identify county planning goals (See Figure 30). The most cited goals included: *protecting natural resources* (92 percent rural counties; 100 percent urban counties), *preserving agricultural land and farms* (88 percent rural; 100 percent urban), *protecting community character* (98 percent rural; 86 percent urban),protecting open space (80 percent rural; 93 percent urban), and *preserving places of historic interest* (78 percent rural; 100 percent urban).

There was variation between urban and rural counties for several goals. Urban counties reported the following goals more often than rural counties: *managing stormwater*, *guiding the location of development*, and *influencing municipal plans to be consistent with county plans*. Rural counties noted the following three goals higher than urban counties: *protecting property values*, *enhancing the county tax base*, and *keeping down county costs* (these were cited as goals for at least 50 percent of rural counties).

The two goals that were identified the least included *guiding location of county government facilities* and *minimizing greenhouse gases*. While both were identified as goals for 50 percent or more of urban counties, they were identified for only 5 percent of rural counties.

Figure 30. County Planning Goals, by Urban/Rural County
(% of counties) n=55



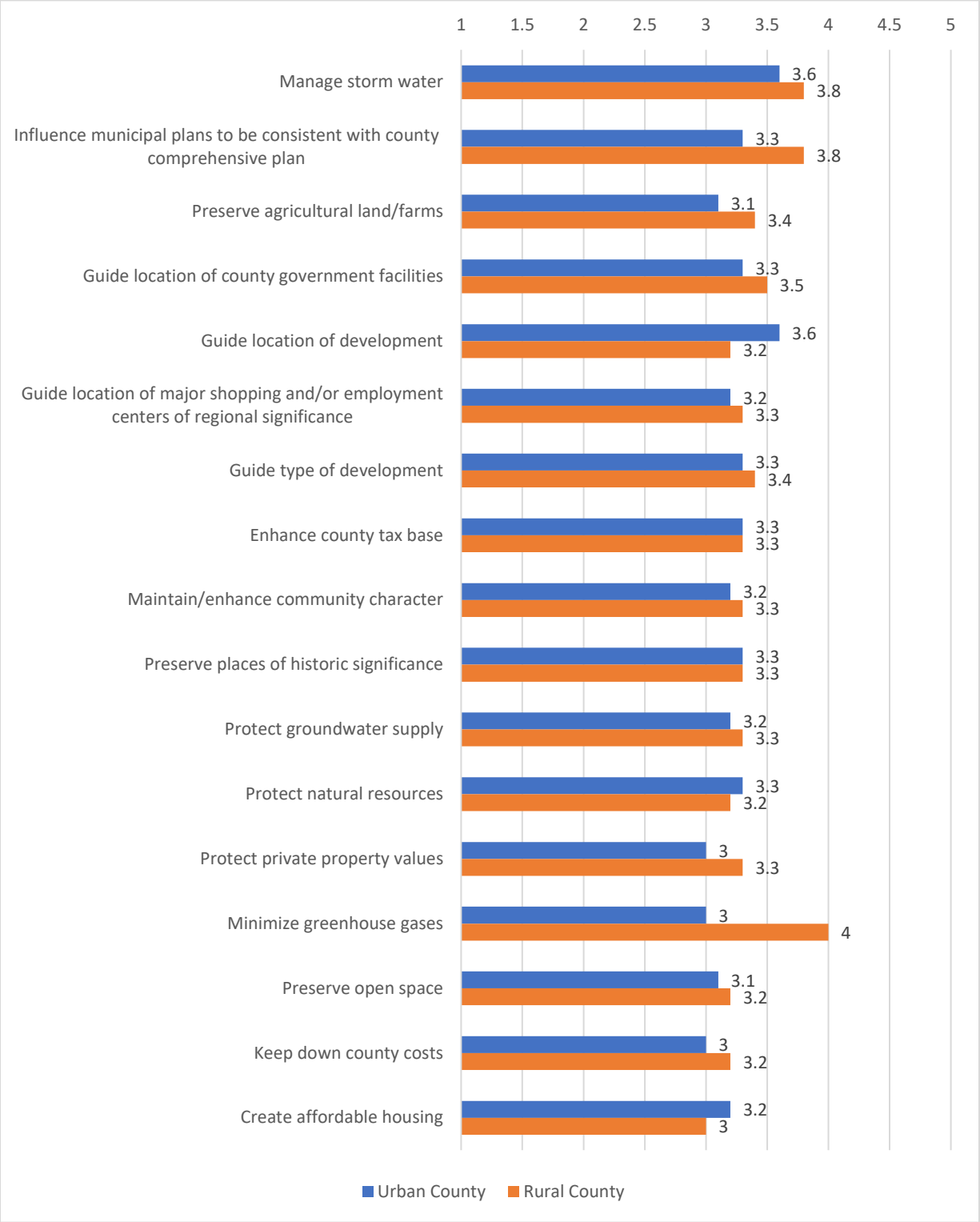
For each goal selected, county planning directors were asked to indicate the extent to which planning and land use tools achieved the goal, on a scale of five for *always*, three for *sometimes*, and one for *never* (See Figure 31). For rural counties, goal achievement was highest for *managing stormwater* and *influencing municipal plans to be consistent with county plans*. For urban counties, goal achievement was highest for *managing stormwater* and *guiding location of development*.

Rural and urban achievement scores were very close across several goals, including *guiding location of regional employment centers*, *guiding type of development*, *enhancing the county tax base*, *maintaining community character*, *preserving places of historic interest*, *protecting groundwater supply*, and *protecting natural resources*. Nearly all scores were 3.2 or 3.3 for each goal, indicating that counties believe that land use planning and regulations are *sometimes* able to achieve these goals. Overall, counties scored achievement lower across all goals than did municipalities.[18]

Achievement scores were lowest for the following goals: *protecting property values, protecting open space*, *keep down county costs*, and *creating affordable housing*. Except for protecting open space, the lowest scoring goals are consistent with those reported in the municipal survey, indicating that counties too do not achieve planning outcomes related to economic goals as readily as they achieve physical outcomes.

[18] For many of these goals, counties are unable to achieve them on their own. They need the cooperation of each local municipality.

Figure 31. How Well County Planning and Land Use Regulations are Achieving Goals, by Urban/Rural County
(*avg response of counties with this goal; Never =1; Sometimes = 3; Always =5***)** n=55



Part 7. Barriers to Effective Planning

Another measure of planning effectiveness is the presence of barriers that impede the ability to do planning. In each survey, municipal officials and county planning directors were asked to respond to potential barriers and actions to overcome them.

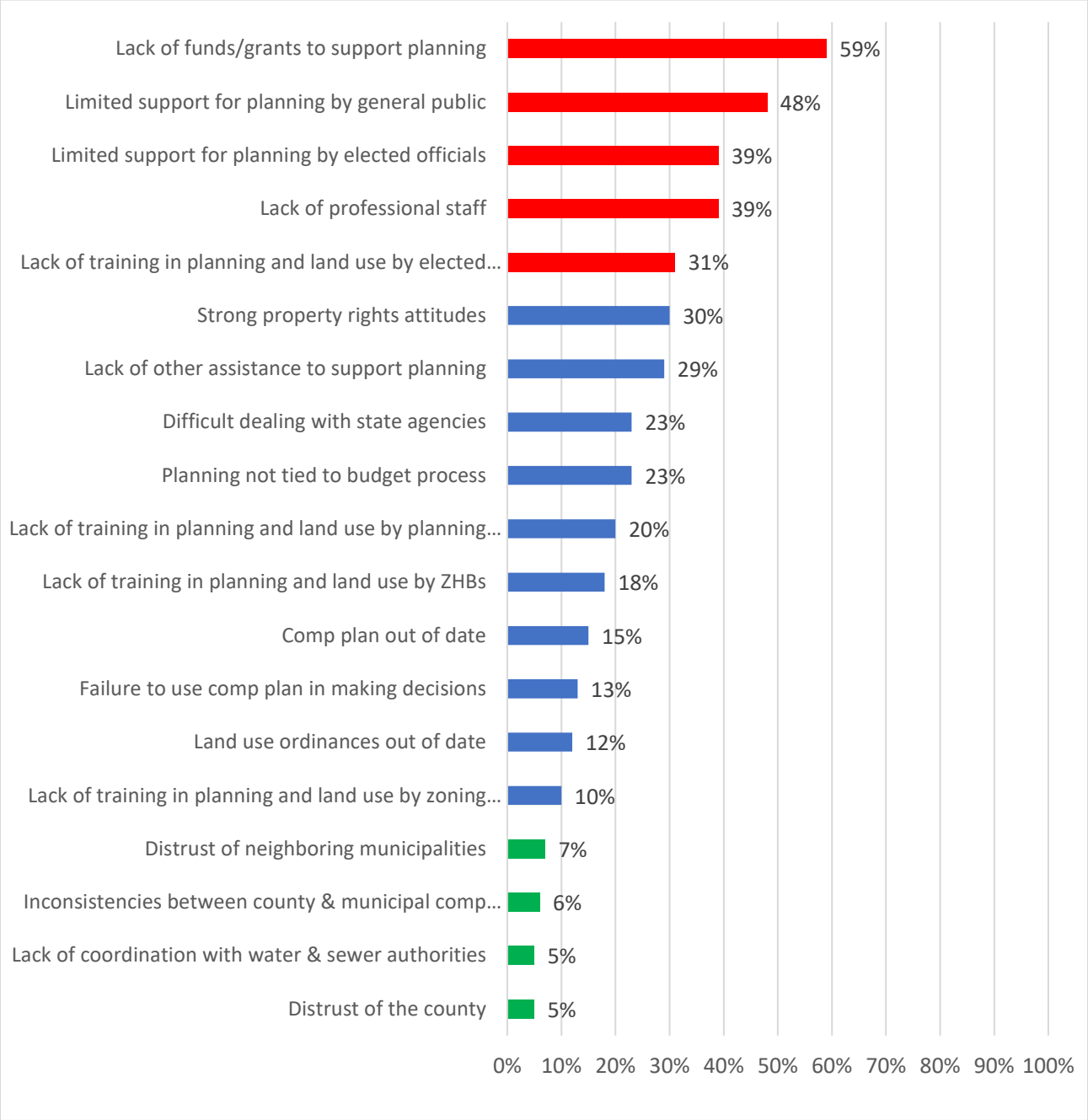
Municipal officials were presented with 19 items that could impede planning and were asked to indicate if they regarded the item as a barrier. In a follow-up question, respondents were also asked to rank the top five barriers they identified, in order of significance.

Figure 32 shows the overall ranking of perceived barriers to effective planning by municipal officials. The highest perceived barriers included: *lack of funding and resources*, *lack of professional staff*, *limited support by elected officials, limited support by the general public*, and *lack of training in planning and land use by elected officials*. These considerations are all, in a sense, inter-related. Lack of training can result in lack of awareness of the purpose of planning, and therefore lack of support, interest, or leadership in promoting planning. Lack of interest results in lack of funding. Without leadership and advocacy for planning, the public is unlikely to gain awareness of and support for planning.

The top barriers are nearly identical to those reported in the 2001 study.

The following items were generally not perceived as barriers for most municipalities: *distrust of neighboring municipalities or of the county*, *inconsistency between county and municipal plans*, *inconsistency between municipalities and water and sewer authorities*. These results, which suggest better coordination across municipalities, counties, and water and sewer authorities and are likely a result of the increased interactions across entities resulting from the Growing Smarter legislation.

Figure 32. Municipal Officials: Barriers to Effective Planning
n=620

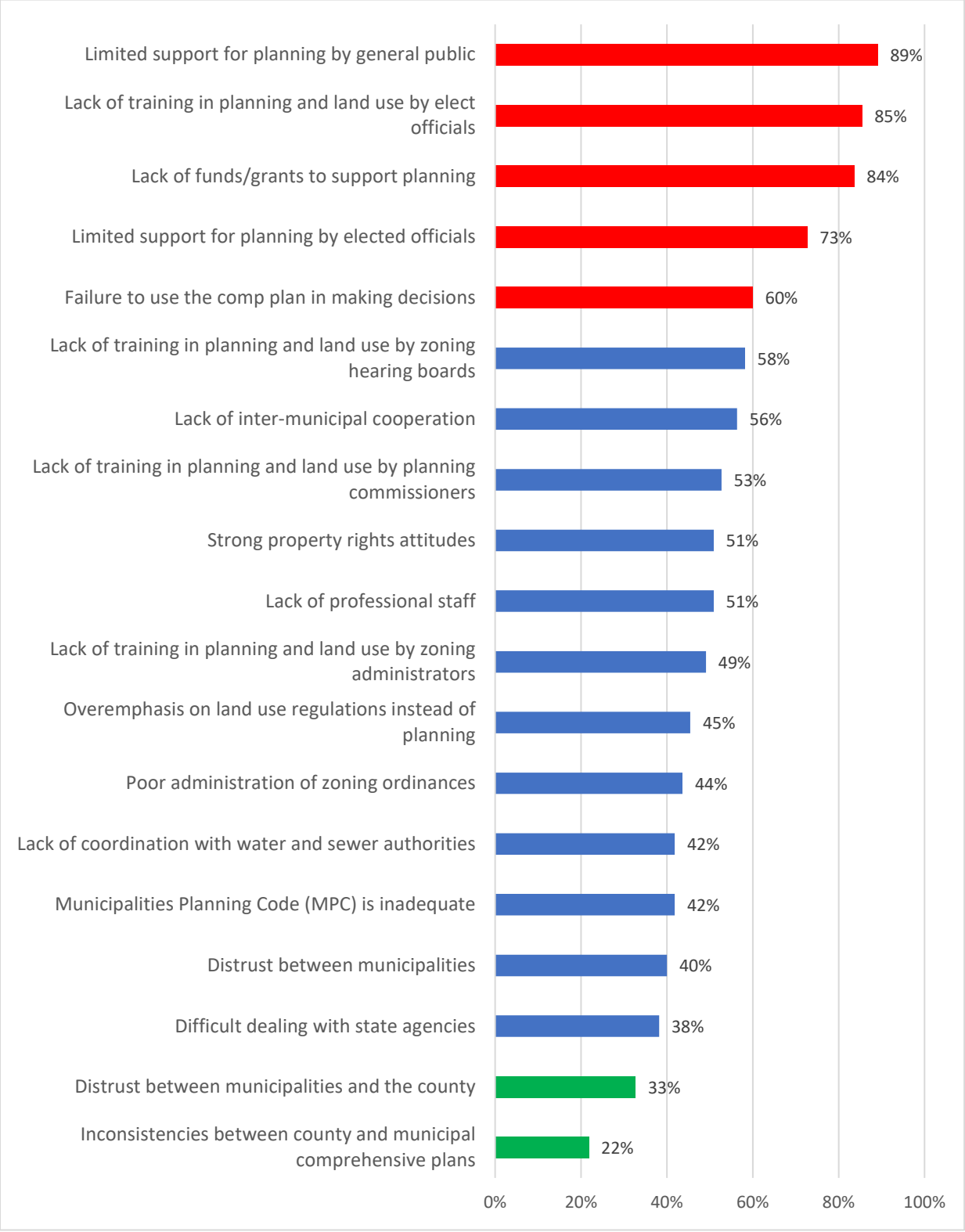


County planning directors were asked to respond to a similar set of potential barriers to effective planning and development management (See Figure 33). County planning directors scored all the barriers higher than did municipal officials. For example, whereas 59 percent of

municipal officials considered lack of funding to be a barrier, more than 80 percent of county planning directors identified this barrier. The top barriers identified by county planning directors were consistent with those of municipal officials. The highest ranked barriers included: *limited support for planning by the general public*, *lack of training by elected officials*, *lack of funding*, and *limited support of planning by elected officials*. County planning directors also scored *failure to use comprehensive plans in decision making* in the top five.

The results from both surveys suggest that the biggest impediments to effective planning, as perceived by municipal and county officials, are strongly related to the human element of planning, especially at the local level. The lack of support for planning by elected officials, likely related to the lack of understanding of the value of planning, is a major impediment. Lack of resources to support planning was also identified as a top barrier, but it is likely that greater awareness and support by elected officials could result in greater resources.

Figure 33. County Planning Directors: Barriers to Effective Planning
n=55



Municipal and county respondents were presented with 15 possible actions to improve planning effectiveness and were asked to rank them regarding their usefulness (See Table 38). Findings were consistent regarding the highest-ranking actions. Top actions for each group included: *regular update of the comprehensive plan*, *grants to update plans*, *updated regulations*, and *training for elected officials*. Municipal officials scored special grants for rural planning in the top five. The results affirm that municipal officials and county planning directors recognize the value of plans and their currency.

Table 38. Actions to Improve Planning: Municipal and County Ranking (*indicates a tie)

Action to Improve Planning	**MUNICIPAL**	**COUNTY**
	Overall Rank	**Overall Rank**
Regular update of comprehensive plan	1	2
Grants to update plan	2	1
Update regulations to conform to plan	3	3
Require elected officials' training	4	4*
Special grants for rural planning	5	9
Require planning commissioner training	6	5
Require zoning administrator training	7	4*
Require plan/regulations consistency	8	7
Require infrastructure before development	9	13
Mandate planning and land use regulations	10	6
Require zoning hearing board training	11	10
Impact fees for other services/facilities	12	14
Reduce transportation impact fee complexity	13	15
Permit official sketch plans	14	12
Require adjacent municipality review	15	11

Training of Local Officials

Planning and land use regulation are complex activities that require specialized professional knowledge and technical skills. In local governments across Pennsylvania, these activities are carried out by elected officials, appointed officials, and residents who generally do not have professional backgrounds in managing the built environment. Many local governments do not have the planning resources to assist local governing bodies and planning commissions. When technical expertise is provided, it is often from municipal engineers and municipal solicitors, who are usually not trained in planning.

In both surveys, respondents were asked questions related to training requirements and resources available to their planning commission members, zoning hearing board members, and zoning officers (See Table 39). Only 7 percent of municipalities required training for planning commission members and zoning hearing board members. A larger number – 37 percent – require training for zoning officers.[19] These results are little changed from 2001.

Table 39. Municipal Training Requirements
n=639

Officials	Yes	No	Don't Know
Planning Commission members	7%	74%	19%
Zoning Hearing Board members	7%	93%	
Zoning Officer	37%	63%	

Municipalities and counties were asked about the usefulness of training for planning commissioners, zoning hearing board members, zoning officers, and elected officials, to make planning more effective (See Table 40). The results suggest widespread support for additional

[19] Of municipalities that do require training, more than 80 percent reported that the municipality paid for the training.

training for all officials. County respondents scored the usefulness of training higher than did municipal respondents, but there is strong support across both for widespread training.

Table 40. Usefulness of Training to Improve Planning Effectiveness

Type of Training	Very Useful	Useful	Not Useful
Require training for planning commissioners			
Municipal Responses	33%	46%	21%
County Responses	57%	40%	4%
Require training for zoning hearing board members			
Municipal Responses	33%	45%	22%
County Responses	62%	30%	8%
Require training for zoning officers/administrators			
Municipal Responses	39%	43%	18%
County Responses	72%	23%	5%
Require training of elected officials on planning and land use regulations			
Municipal Responses	36%	46%	18%
County Responses	70%	28%	2%

Recruitment challenges need to be considered in the development of a training program. Municipalities were also asked about their experiences recruiting and retaining volunteers to serve on their planning commissions and zoning hearing boards. Overall, 46 percent of municipalities reported difficulty in recruiting planning commission members, and 13 percent reported frequent turnover of planning commission members. Similarly, 42 percent of municipalities reported difficulty recruiting zoning hearing board members and 17 percent

indicated frequent turnover of zoning hearing board members. Overall, boroughs experienced more difficulty in recruiting and retaining volunteer members.

Part 8. Key Person Interviews

Key person interviews reinforced the survey findings and added additional insight to the unique challenges of small rural communities in managing their physical environments. Local planning cultures varied across the six sampled municipalities, but there were striking similarities regarding perceived development challenges and opportunities, local capacity to effectively address challenges with planning and land use regulations, and perceived need to better support local planning.

The nature and scale of development pressures differed across municipality types. Whereas boroughs mostly had to deal with smaller development projects, rural townships faced larger projects including the potential of large-scale development from e-commerce and related housing pressures, as well as increased demand for park development. Interviewees indicated that they did not feel equipped to effectively manage oversight of large projects or lead a planning effort to adequately engage stakeholders in a comprehensive development review process.

Interviewees cited challenges to their communities related to changing demographics, but also noted opportunities stemming from changing economic conditions. They identified projects that were underway, including multi-municipal rails-to-trails initiatives, commercial corridor revitalization projects, large planned multi-use developments, recreation facilities, and public space initiatives integrated with stormwater management. Most interviewees reported that their communities were attempting to implement newer forms of development including mixed-use zones, higher densities, planned developments, and redevelopment of commercial districts or

corridors, and smaller scale “urban” agriculture on small lots. Proposals for newer development forms commonly ran in to obstacles from existing regulations.

It was commonly expressed that local planning systems were not adequately prepared for larger projects, or to manage growth effectively in response to changing economic conditions. Municipalities tried to embrace best practices on their own but did not believe they had adequate planning resources to effectively respond to development opportunities coming from broad economic changes. Another common challenge was an inability to maintain infrastructure to support larger development projects. In addition to technical assistance, interviewees expressed the need for outside planning leadership and expertise to help guide their communities through a planning and development approval process, especially for larger projects.

Planning systems in most of the communities were limited. Four of the local governments had comprehensive plans, but they were not frequently used. Four had planning commissions, but most members had little knowledge of planning. Development management processes involved systems that included engineers and solicitors, part-time municipal staff, and local elected officials. Municipal engineers and solicitors had primary responsibility in interpreting ordinances and advising local officials. Planning consultants were rarely used. Land use development decisions were guided by land use regulations, and often made without consideration to larger planning policies or considerations.

The guiding document for development decisions was the zoning ordinance, if one existed, or a SALDO. In one municipality, a standalone floodplain ordinance was the primary tool to guide development. Ordinances were generally not informed by a comprehensive plan. As one interviewee noted, “the comprehensive plan takes a back seat.” Interviewees commonly regarded planning as a useful activity but noted obstacles to the implementation of

comprehensive plans and to the lack of resources to support an effective planning process. Existing regulations were thought to adequately address the most prevailing issues in the development review process, including natural resource protection, stormwater management, and, in some cases, floodplain management. The regulatory aspects of planning, especially zoning and SALDO, were thought to be easiest to execute in the context of the existing local resources.

In response to a question about the how comprehensive plans were used, two interviewees noted the importance of the currency of plans. There was a higher degree of "buy-in" when plans were current and/or when individuals were directly involved in making the plans. Frequent staff turnover in at least two of the municipalities meant that new staff inherited and therefore were not invested in existing plans. Moreover, most municipal staff did not have planning experience to fully understand the purpose and value of the comprehensive plan.

Another commonly cited challenge was the limited understanding of planning by elected officials and residents. Local officials often did not differentiate between the role of the comprehensive plan and the purpose of land use regulations and did not fully understand or appreciate the linkages between the two activities. Interviewees indicated that elected officials and planning commissioners were often unaware of the planning tools that existed and their uses. Residents were commonly described as, at best, apathetic to planning. At least two interviewees noted that residents at times demonstrated antipathy to planning, distrusting any involvement of government in regulating private property.

The biggest limitations to rural planning were the lack of resources, both funding and time, and the lack of knowledge and understanding of the planning process. Access to planning professionals was needed to provide technical assistance to municipal staff, and general guidance

to planning commissions and residents about the planning process and role of the comprehensive plan. Funding was especially needed to keep plans and ordinances up-to-date to respond to new challenges. Without technical assistance, comprehensive planning would continue to be very difficult to undertake.

The need for outside planning leadership and expertise was expressed by multiple interviewees. Leadership was regarded as bringing awareness of planning issues and the value of planning itself. Working with volunteers and/or lay people in the development planning process presents a special challenge when local government staff do not have the background to effectively promote planning. Nearly all the interviewees stated that an enhanced planning effort would require bringing awareness of planning issues and processes to municipal leaders and residents.

All interviewees noted that their municipalities relied on the county in their planning efforts. They used county planning resources and found county staff to be essential to supporting local planning efforts. In one municipality, the county handled all development review. Counties provided essential guidance on the technicalities of the development review process. At least two interviewees expressed the desire for additional county resources, especially for visioning exercises.

The most direct engagement that municipalities had with the state regarding development planning was through Pennsylvania Department of Environmental Protection (PaDEP) permit review processes. There were no perceived challenges meeting the requirements of the MPC.

Conclusions

In the face of challenges stemming from statewide demographic shifts, structural changes in the economy, and threats posed from a changing climate, local and county governments across

Pennsylvania are challenged to respond as they manage growth and development. Municipalities in Pennsylvania have considerable powers to control land use and manage development, and all local governments and counties in Pennsylvania have access to a wide selection of planning tools. Put to work, these tools can help communities manage development and prepare for the future. The extent to which planning tools are used, however, is in large part up to local municipalities.

Since the passage of Growing Smarter legislation in 2000, the incentives for local communities to engage in planning and the range of planning tools available to local governments and counties increased through both executive and legislative initiatives. Counties have gained additional planning responsibilities, and state agencies are required to consider local land use regulations in many permitting and funding decisions.

Use of the four primary planning tools by municipalities increased since 2001. The use of comprehensive plans increased by about 10 percent across all types of governments and regions. Municipalities in rural counties saw an increased use of all four primary tools: planning commissions, zoning, subdivision and land development ordinances increased by about 10 percent, and comprehensive plan use increased by about 20 percent. Overall, tools are newer and more current as counties and municipalities have adapted to changing conditions.

Efforts to better coordinate planning across multiple jurisdictions and between municipalities and counties through the Growing Smarter program have had some success. This is evident in more coordination across municipalities, between counties and local governments, and between local governments and various authorities. There were more joint planning initiatives, especially in municipalities in rural counties. Counties were more active in planning and local municipalities reported valuable interactions with counties. Counties also served

important roles in facilitating interactions across municipalities. Interactions between local municipalities and water and sewer authorities in the development process increased.

Use of comprehensive plans in decision making increased, but plans are still underused in the development management process, especially by elected officials in local and county governments. More than one third of municipalities with comprehensive plans used them little, if at all, in guiding development decisions. Comprehensive plans were not being used to guide capital budgeting or planning for capital improvements, likely resulting in less efficiency in resource planning. In many rural communities, land use regulations still supersede planning. Zoning and SALDO were likely to guide most decisions about land development.

Planning tools are still underused in rural areas, especially the smaller municipalities in areas losing population. Rural municipalities are losing out on the opportunity to address new planning challenges through better development management. Smaller municipalities in rural areas do not have resources and access to planning expertise that would enable them to take full advantage of existing tools.

The increase in joint planning has not been matched with a corresponding increase in the formation of multi-municipal planning commissions or joint zoning to realize the full benefit of multi-municipal planning.

Local government and county concerns have expanded to include emergency management, disaster risk management and hazard mitigation, controlling flooding and stormwater, managing solid waste, sewage, water, as well as economic development. Land use and development are key aspects of each of these, and therefore each should be considered in connection with the overall planning effort. The central planning function for local governments is the comprehensive plan, but as local planning responsibilities have expanded, plan-making has

extended into several areas. Plans commonly used include open space and recreations plans, capital improvement plans, stormwater management plans, emergency management plans, and hazard mitigation plans. The effectiveness of such plans hinges on their coordination with local land use planning and zoning. There is a need to focus on ways to better integrate these tools with comprehensive planning and regulations.

Other planning tools, including climate action plans, sustainability plans, complete streets policy, and others, are growing in use nationally. In Pennsylvania, these tools have mostly taken hold in urban areas.

Local governments and counties are having more success achieving physical outcomes with planning tools, including redirecting growth, protecting natural resources, and agricultural land preservation. They have not had as much success using planning to achieve economic or social outcomes, including economic revitalization, protecting property values, and protecting affordable housing. Additional training and resources are needed, especially in rural communities, to help local officials better understand how planning tools can be used for these purposes.

Larger, growing, more urbanized municipalities have more resources, and greater capacity to plan. Planning capacity in smaller rural areas needs to increase to enable these communities to take advantage of planning tools and resources. Planning and land use regulations are technical endeavors that require trained and knowledgeable professionals to take full advantage of the planning tools available. Under-resourced municipalities face myriad day-to-day challenges and while they see the value of planning, they don't have the time or training to lead an effective planning process or understand how to take advantage of the tools available

to them. They need technical assistance, training, and funding to connect their planning commission members and others to the expertise needed to better engage in planning.

Local governments are accessing more planning resources from county planning departments. Relationships between counties and local governments have improved and there is greater trust across these levels of government.

There is a need to better educate the public on the value of planning and communicate its benefits. All levels of government have responsibility to support and affirm the value of planning as a process to efficiently manage development. Such support will enhance the legitimacy of the planning process.

Policy Considerations

All communities in Pennsylvania face complex development challenges. Local governments have the decision-making responsibility and access to a wide range of tools to support local planning and regulation of the built environment. The very localized nature of land use planning and regulation in Pennsylvania presents special challenges. Local municipalities and counties are unique and planning needs vary across multiple dimensions: urban and rural, regional location, population size and growth rates, and municipal type. Practices are not easily transferable across locations. Smaller, rural communities do not have the resources and access to expertise to take full advantage of the planning process and existing tools.

To improve planning effectiveness for rural communities, policy should be directed at increasing local planning capacity by providing access to training and technical assistance and promoting the legitimacy of planning by educating local officials and residents on its benefits.

Support for multi-municipal planning and land use regulation

The MPC encourages, but does not mandate, interactions across neighboring planning commissions. The Growing Smarter legislation strengthened provisions for multi-municipal planning. Several municipalities, especially rural municipalities, have engaged in joint planning. However, many municipalities who engaged in joint planning have not maintained an ongoing multi-municipal planning relationship. To fully realize the benefits of joint planning, efforts are needed to encourage the implementation of multi-municipal planning. There is a need to better understand the reasons that multi-municipal planning relationships have not progressed to joint planning commissions or joint zoning. Further research should be targeted to understand the barriers and how best to support further multi-municipal efforts. Once the barriers are better understood, the Commonwealth should support municipalities to build on joint planning with special grants to create joint planning commissions and regional zoning ordinances.

Overall, municipal interaction has increased, even without formal joint planning. It is important to continue to encourage interaction among neighboring municipalities to build on existing multi-municipal interactions. Consistency in planning across municipalities can be improved with *required* reviews of plans, regulations, and development proposals by neighboring municipalities. County planning agencies should continue to have a role in facilitating inter-municipal reviews.

Funding for Rural Planning and Plan Updates

Many smaller rural municipalities are still not engaged in planning and missing the opportunity to realize the benefits of planning and land use regulations. It is recommended that funding be targeted to these communities to help them access planning expertise and increase their planning capacity. This can take the form of special rural planning grants for communities

that meet characteristics related to size, economic characteristics, and/or location. Funding could be made directly to rural counties to target the planning needs of their smaller rural municipalities. Funding could also be used for local governments to engage the planning services of local nonprofit organization, or even a circuit rider planning program.

Currency of comprehensive plans and ordinances is important to planning effectiveness. To keep plans and regulations up-to-date, dedicated funding should be targeted to support the regular update of plans and regulations. Section 301(c) of the MPC requires that comprehensive plans be reviewed every 10 years (it does not, however, specify the scope of the review, nor does it specify the frequency for updates).

New funding sources should be coordinated with existing funding through programs such as the Municipal Assistance Program (MAP), which is administered by the Governor's Center for Local Government Services in the Pennsylvania Department of Community and Economic Development (DCED).[20]

Funding could also be targeted to state universities with planning and planning-related programs (such as Geography and GIS) and university extension offices and centers, to fund internships and collaborative community engagement activities to connect university planning and planning-related resources to rural municipalities.

MPC Amendments

Consider amending the Municipalities Planning Code (MPC) to heighten the standing/status of comprehensive plans relative to land use regulations. For municipalities, the authority to *prepare* and *adop*t plans is separate, and the MPC does not require that municipalities adopt a comprehensive plan. Counties, on the other hand, are required to both

[20] Funding from MAP assists local governments to plan for and implement municipal projects in three groups of activities: shared services, community planning, and floodplain management.

prepare and adopt county comprehensive plans. It is recommended that all comprehensive plans be required to be adopted. This would raise the status of comprehensive plans in communities that have them.

Efforts are needed to raise the awareness of comprehensive plans to local governing bodies. Section 207 of the MPC requires that planning commissions prepare an annual report for the governing body. The annual report could have a requirement to include issues related to comprehensive plans, such as currency and consistency with regulations and other planning tools. Such reporting would have the benefit of regularly raising awareness of comprehensive plans and encouraging their use by governing bodies.

To strengthen the ties between comprehensive planning and land use regulations, the MPC could be amended to include stronger provisions to require that land use regulations be based on a comprehensive plan. Land use regulations in Pennsylvania are generally not required to be based on a comprehensive plan. To be most effective, regulations should have some basis in a comprehensive plan. The MPC has very inconsistent standards related to plan and regulations consistency. Article VIII-A requires that a joint municipal zoning ordinance be based on an adopted joint municipal comprehensive plan. In Article V Subdivision and Land Development, the MPC says SALDOs may include provisions requiring plan layouts to conform to the comprehensive plan. Article VI Zoning indicates that an ordinance "should reflect" the statement of community development objectives. Section 603(2)(j) states that zoning ordinances shall be generally consistent with the municipal comprehensive plan, or statement of community objectives (in municipalities that do not have plans). Section 303(c), however, states that no action by the municipal governing body can be considered invalid on the basis that the action is inconsistent with the comprehensive plan, a provision which undermines all efforts to promote

consistency in some of the other provisions calling for consistency. Any real effort to encourage plan and regulatory consistency needs to include the repeal of Section 303(c).

In many municipalities and counties, there are often several planning activities that are going on simultaneously but are treated as unrelated. Lack of plan coordination is a big impediment to effective local planning. One of the increased requirements for the scope of comprehensive plan requirements in the MPC could be to include an assessment of interrelationships across all municipal plans. Efforts to better integrate these activities will produce better development outcomes. The Act 537 Sewage Facilities Act, for instance, which require sewage facilities planning, does not require alignment with comprehensive plans. It is recommended that the Sewage Facilities Plans required by Act 537 be made a required element of a municipal or county comprehensive plan, and adopted as part of a municipal or county plan.

Use of capital improvements programming and budgeting has increased, but the tool is still not widely used in municipalities or counties. While the MPC does refer to this plan in Section 301 (4.2), it does not make it a requirement or require consistency with comprehensive plans. By requiring capital improvement plans and budgets, local governing bodies and planning commissions would have to coordinate to align plan goals and implementation strategies to the availability of financial resources for capital investment. It is recommended that a capital improvements plan be made a required element of a comprehensive plan. State agencies could require that municipalities and counties provide a capital improvements program as well as a comprehensive plan to obtain funding for capital projects.

Infrastructure and development go hand-in hand. There is, however, currently no requirement to integrate the planning of water and sewer infrastructure with comprehensive planning. Section 608.1 does require that infrastructure providers notify municipalities of their

intent to expand facilities to proposed developments. This provision should be strengthened to require that they show that the expansion is consistent with local plans and regulations.

Education, Training and Enhanced Awareness of the Value of Planning and Support Local Leadership

Training in development management remains a significant issue. There is broad consensus that improvement in planning and land use regulation will come through training on the benefits and techniques of planning. It is recommended that resources be provided to support training for elected and appointed local officials on the planning process, planning and regulatory tools, and use of plans in decision making. Training could be provided through the PA Local Government Training Partnership, which is an initiative on behalf of the six major local government associations: Pennsylvania State Association of Township Supervisors (PSATS), Pennsylvania State Association of Boroughs (PSAB), Pennsylvania State Association of Township Commissioners (PSATC), County Commissioners Association of Pennsylvania (CCAP), Pennsylvania Municipal League (PML) and Pennsylvania Municipal Authorities Association (PMAA).

Some level of training should be required for local elected officials, planning commissioners, zoning hearing board members, and zoning officers, so that these individuals can be effective in carrying out local planning and regulatory responsibilities. Some level of training in planning and land use regulation should also be required for municipal solicitors and municipal engineers.

Local municipalities are increasingly looking to counties for more planning services. Funding resources can go to counties for municipal training programs. Other entities can also provide assistance to help local governments increase their planning competency, including

educational institutions, such as local colleges and universities, professional organizations such as the Pennsylvania Planning Association (PPA), PSATS, PSAB, the County Planning Directors Association, locally based nonprofit organizations, and planning consultants. All of these can be useful resources for training.

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Appendix A Analysis of Municipal Survey Representativeness

Appendix Table 1: Responses by Population Size and Type of Municipality				
BOROUGHS				
Population Size Group	**Total Boroughs**	**% Boroughs in population group**	**# responses in population group**	**% responses in population group**
Less than 500	232	24.2%	85	26.4%
500 to 999	163	17.0%	68	21.1%
1,000 to 2,499	238	24.9%	72	22.4%
2,500 to 4,999	180	18.8%	58	18.0%
5,000 to 9,999	104	10.9%	23	7.1%
10,000 to 14,999	30	2.1%	10	3.1%
15,000 to 19,999	10	1.0%	3	1.0%
20,000 or more	10	1.0%	3	1.0%
TOTAL	957	100%	322	--

Appendix Table 2: Responses by Population Size and Type of Municipality				
TOWNSHIPS OF THE FIRST CLASS				
Population Size Group	**Total Townships of 1st Class**	**% TWP1 in population group**	**# responses in population group**	**% responses in population group**
Less than 500	1	1.1%	0	0%
500 to 999	1	1.1%	0	0%
1,000 to 2,499	6	6.4%	2	6.1%
2,500 to 4,999	13	14.0%	5	15.2%
5,000 to 9,999	12	12.9%	7	21.2%
10,000 to 14,999	14	15.0%	5	15.2%
15,000 to 19,999	16	17.2%	6	18.2%
20,000 or more	30	32.3%	8	24.2%
TOTAL	93	100%	33	--

Appendix Table 3: Responses by Population Size and Type of Municipality				
TOWNSHIPS OF THE SECOND CLASS				
Population Size Group	**Total Townships of 2nd Class**	**% TWP2 in population group**	**# responses in population group**	**% responses in population group**
Less than 500	155	10.7%	55	10.2%
500 to 999	232	16.0%	80	14.8%
1,000 to 2,499	485	33.4%	192	35.5%
2,500 to 4,999	281	19.3%	92	17.0%
5,000 to 9,999	173	11.9%	76	14.0%
10,000 to 14,999	57	3.9%	25	4.6%
15,000 to 19,999	39	2.7%	14	2.6%
20,000 or more	31	2.1%	7	1.3%
TOTAL	1,453	100%	541	--

Appendix B Key Person Interview Guide

I. Basic Information about Interviewee and his/her broad perspective on planning

1. What is your position and title?
2. How long have you been in your current position?
3. As you look ahead 10 to 20 years, what do you believe are the three biggest challenges and three biggest opportunities that your municipality faces?
4. In what ways do you think planning can help address these challenges and opportunities?

II. Land use planning in general

1. Please explain how decisions about land use are made.
    a. **OPTIONAL**: What committees/commissions/groups are involved with land use planning and what is(are) their role(s) in the planning process?
2. Do you believe that the current land use planning process is effective? How could decision making about land use be strengthened, or improved?

III. **IF RELEVANT**: Use of Comprehensive Plans

1. Please tell me about your experience with comprehensive plans in the municipality.
2. How is the comprehensive plan used? How does it influence land use decision-making? Please give some examples.
3. Please describe any barriers to the use (and implementation) of your comprehensive plan.

IV. **IF RELEVANT**: Zoning and/or Subdivision and Land Development Regulations

1. Please tell me about how the primary tools (Zoning and/or SALDO) are used to make land use decisions and/or regulate land use.
    a. **IF RELEVANT (FOR MUNIS WITH COMP PLANS)**: In what ways (if any) is your zoning ordinance influenced by your comprehensive plan?
    b. **IF RELEVANT (FOR MUNIS WITH COMP PLANS)**: In what ways (if any) is your subdivision and land development ordinance influenced by your comprehensive plan?

V. Use of other Land Use Tools

1. Please tell me if there are other land use planning tools that are used to guide land use decisions.
    a. **OPTIONAL (FOR MUNIS WITH COMP PLANS)**: Is the use of these tools influenced by the comprehensive plan? If so, please give examples.

VI. State Impacts and Resources

1. Please explain ways that the state impacts land use in your community.
2. Please describe any state resources that you have used to support land use planning and land use regulation.
3. Please describe your experiences complying with the Municipalities Planning Code.
4. What additional resources would assist you to strengthen your land use planning process?

VII. Summary

1. What other thoughts can you share about land use planning in your community?

Appendix C Glossary of Terms

Broadband or Telecommunications Plan: Identifies and evaluates current wireless communication infrastructure, detects coverage gaps, and makes recommendations for future facility design and placement.

Capital Improvement Program: A short/medium-term (5-10 years) plan that outlines capital projects and equipment acquisitions, along with a timetable and funding options, which connects a municipality to a comprehensive plan and the entity's annual budget.

Climate Action Plan: A comprehensive and detailed roadmap that defines the particular activities and operations that a government agency will undertake to minimize greenhouse gas emissions.

Cluster Zoning: Also known as density zoning, it is a form of zoning in which the density of an entire area is decided as opposed to lot-by-lot, and the developer has more leeway to design, construct, and place structures within the cluster zone.

Complete Streets Policy: A policy initiative to design and operate streets that provides the safety and mobility of all users, including individuals of all ages and abilities, regardless of whether they are driving, walking, bicycling, or taking public transportation.

County Services Facilities Plan: A guide for short/medium-term planning for the municipality's services facilities, including an assessment of existing buildings and services, such as the function and purpose of a site within the county, the public services offered, and the facility's location.

Density Bonus Development Incentive: An incentive-based approach/instrument that enables a developer to increase the maximum amount of development permitted on a site in exchange for financial or in-kind assistance, to achieve public policy objectives such as affordable housing, environmental conservation, and public spaces.

Designated Growth Area: Within an urban growth boundary, there is an area(s) of the municipality in which the locality will concentrate the majority of its future growth to mitigate the negative impacts of sprawling development on the environment, infrastructure, and community facilities, while also complying with applicable planning requirements.

Economic Development Plan: Analyzes the local/regional economic conditions, identifies methods, initiatives, and projects to strengthen or revitalize the local/regional economy, and establishes policy direction(s) for economic growth or revitalization, which frequently consists of components such as "vision/mission," "goals," "strategies," and "actions," and is linked to performance measurement processes.

Effective Agricultural Zoning: A land management instrument, also known as agricultural preservation zoning, that encourages farming while discouraging non-agricultural land uses that are incompatible with farm operations, which is an effective approach when used to protect areas where local agriculture dominates the landscape and economy.

Emergency Management Plan: A plan that lays out how people, property, and the environment will be safeguarded in the event of a disaster or emergency by detailing the measures and actions to be executed in response to natural, man-made, or national security hazards. Simply, its goal is to prevent emergencies from happening, but if that is impossible, it will launch an effective action plan to alleviate the consequences and effects of any emergencies that arise.

Form Based Codes: A type of performance zoning, it is a method of regulating land development to attain a particular/given urban form, and through municipal regulations, fosters predictable built results and a high-quality public realm by using physical form as the organizing principle, with less emphasis on land use (e.g., separation of uses).

Geographic Information Systems (GIS): An important resource for managing data and producing maps. it is a system for creating, managing, analyzing, and mapping various forms of data and ties data to a map by combining location information with various types of descriptive data. Simply, it allows for the capture and analysis of various spatial and geographic data to gain knowledge and insights.

Hazard Mitigation Plan: Reduces the impact of disasters, thereby reducing loss of life and property by identifying natural disaster risks and vulnerabilities in an area/region and establishing long-term measures to protect people and property from similar events after identifying these risks.

Highway Occupancy Permits for Municipal Roads: Required for any entity wishing to access a state right-of-way, ensuring safe traffic passage while allowing applicants reasonable access. Driveway or local road permits cover the installation, alteration, or removal of property passes. Other types of Highway Occupancy Permits include utility permits and miscellaneous permits.

Long Range Transportation Plan: Captures the residents' overall vision and goals for the regional transportation system and directs project prioritization and federal transportation funding expenditures. It is a federally mandated document for all metropolitan areas, which must be updated periodically (usually once every 5 years) to ensure compliance with federal regulations.

Metropolitan Planning Organization (MPO): An organization federally established, funded, and mandated to carry out metropolitan transportation planning as a transportation policy-making body composed of members and representatives from municipal and governmental transport administrations.

Mixed-Use Zoning: Provisions that "vertically" or "horizontally" combine multiple uses such as residential, commercial, cultural, institutional, and entertainment into a single location/space. It allows for a physically and functionally complimentary mix of these purposes and provides pedestrian connections and walkability within it.

Natural Hazard Management Plan: A type of Hazard Mitigation Plan (see definition above) focusing on managing natural hazards. See also Emergency Management Plan definition.

Official Map: A combination of a map and an ordinance, which permits a municipality to demarcate the sites of future public lands and infrastructure such as roads, trails, parks, and open space, and is also useful in implementing parts of the comprehensive plan.

Open Space and Recreation Plan: A guide for open space planning and an instrument for planning the future of municipal conservation and recreation resources, based on a public engagement process, and represents the needs of the community.

Overlay Zoning: Imposes a zoning district on top of one or more previously established zoning district(s), imposing additional or tougher regulations and criteria for covered properties than the underlying zoning district. It can be used by municipalities to safeguard unique assets (e.g., historic buildings and wetlands) and to encourage specific types of development (e.g., mixed-use developments).

PennDOT Access Management: A program of PennDOT to properly regulate and control how vehicles can access major roadways by, such as, limiting the number of driveways and intersections with local roadways. While it can be challenging to strike a balance between local accessibility and overall mobility, the instrument aims to promote the safety and efficiency of the local community's road networks.

Performance Zoning: A zoning technique and development guide that regulates the design and location of a use depending on the features of a particular site rather than imposing fixed area and bulk rules within zoning districts. Also known as "flexible" or "impact" zoning, it expands the range of permitted uses and allows additional control over the effects of land use.

Planned Residential Development: A system of zoning regulations that allow considerable flexibility for residential development projects in the placement, grouping, and use of restructures on a tract of land to facilitate more efficient/affordable or creative residential use developments.

Rural Planning Organization: Comparable to Metropolitan Planning Organizations (see definition above) in that it serves rural communities in local/regional transportation planning by assessing multimodal transportation needs, evaluating short- and long-term financing priorities, and making policy and project recommendations.

Sewage Facilities Plan: Required for a municipality in Pennsylvania to establish and implement plans that address present sewage disposal issues and provide for the new, future sewage disposal demands within the municipality, which is also called "Act 537 plan/program."

Solid Waste Management Plan: A document that outlines how a municipality will collect, manage, dispose of, and potentially reduce solid waste generated as a result of everyday activities of the residents as well as various industrial, commercial, and development activities.

Stormwater Management Plan: A document that lists various measures and processes of stormwater collection, storage, and conveyance by the related management facilities in a municipality, to reduce (both mitigate and prevent) rainwater or melted snow flow onto the

roadways, lawns, and other areas within the municipality while aiming for preserving/improving water quality.

Streetscape Plan: A road map that guides decisions for improving neighborhood (typically downtown) streetscapes with safer and more aesthetically pleasing redesign or reconstruction possibilities, aiming for improving the pedestrian walking experience, the public spaces adjacent to the streets, and the vehicular traffic flows.

Sustainability Plan: Provides a comprehensive vision for a municipality, typically with strategies, actions, and metrics, to achieve and balance the "three pillars of sustainability" that are social equity ("people"), economic growth ("prosperity"), and environmental preservation/action ("planet").

*Traditional Neighborhood Development (TND***)**: A type of development form intended to establish walkable communities, minimize traffic congestion, encourage walkability, foster community character, and provide a range of housing options (the MPC added a TND designation in 2003, Section 10701-A(b)).

Transfer of Development Rights: A zoning approach that can conserve land (e.g., public open space) by redirecting development that would otherwise take place on that land (the sending area) to a receiving area that is more suitable for denser development as developers can purchase the development rights from the sending area and transfer the rights to the receiving area to increase the density of their new development.

Transportation Impact Fees: These are typically one-time charges placed on developers by municipalities to help cover the capital cost of transportation facilities, infrastructure, and services attributable to the new development, which can be calculated by, for instance, its estimated impact on creating an additional amount of traffic near the new development site.

Urban Growth Boundaries: Used to denote areas where a government seeks to foster or discourage land development through public infrastructure investments, land-use laws, and property acquisitions. The instrument favors relatively high-density development within an urban growth boundary, referred to as the designated/urban growth area.

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