

Planning for Complete Communities in Delaware

Summary Report to the Town of Elsmere

Complete Communities

DELAWARE attractive, inclusive,
TOWN OF ELSMERE efficient, healthy &
PILOT PROJECT resilient places

January 2013

written by

Theodore Patterson, Natasha Nau, and Christopher Anderson

project co-managed by

Marcia Scott and Theodore Patterson



**Institute for Public Administration
School of Public Policy & Administration
College of Arts & Sciences
University of Delaware**

www.ipa.udel.edu

-serving the public good, shaping tomorrow's leaders

in collaboration with the

Delaware Office of State Planning Coordination

and funded by the

Delaware Department of Transportation

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Preface

Delaware, like the rest of the nation, continues to be challenged by shifts in the housing market, changing demographics, and an uneven economy. To respond to these challenges, Delaware jurisdictions will need to plan for and manage growth, design attractive and walkable communities, reinvest in downtown cores, protect natural and environmental resources, plan for efficient land use, and provide multimodal transportation and housing choices while striving to maintain the character and sense of place that makes each Delaware town and city unique.

To support wise land-use decisions and encourage economic development, transportation and housing choices, a healthy environment, and strong communities, the Institute for Public Administration (IPA) at the University of Delaware embarked on a project to develop a framework to plan for Complete Communities in Delaware.

This project builds upon an existing partnership with our colleagues at the Delaware Department of Transportation (DelDOT) and the Delaware Office of State Planning Coordination (OSPC). It provided an opportunity for our project partners, colleagues, and community leaders working on transportation, land-use, healthy communities, and community sustainability issues to learn what works and how to strengthen our critical alliances.

To determine how complete communities can be achieved in Delaware, two pilot communities were selected—one of which was the Town of Elsmere. The town’s administrative staff chose a diverse group of stakeholders who were invited to attend a series of facilitated outreach workshops. An overall project report will be prepared, which will be made available on the publications section of IPA’s website as well as the Planning for Complete Communities in Delaware website (*completecommunitiesde.org*).

We sincerely appreciate the time commitment and support of those involved working with the pilot communities who contributed to the success of this project. IPA’s plan is to transform learning lessons and outcomes from this project into a future project phase. Plans are to initiate development of an online Delaware Complete Communities Planning Toolbox to build local-government capacity with new planning approaches, implementation tools, and community-engagement strategies. We hope our work will help Delaware local governments build livable and resilient communities while preserving the many characteristics that make each community unique, healthy, and prosperous.

Jerome R. Lewis, Ph.D.
Director, Institute for Public Administration

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Executive Summary

The University of Delaware conducted community-planning projects in two selected towns in Delaware starting in spring 2012 and culminating in November 2012 at the Complete Communities Delaware 2012 Summit. The Town of Elsmere was one of the two towns selected for this project and the focus of this report.

The purpose for the community-planning projects was to engage town stakeholders in considering how to make their communities “more complete.” Five key topic areas were identified as aspects of a complete community: 1) complete streets, 2) efficient land use, 3) healthy and livable, 4) inclusive and active, and 5) sustainable. These five components are defined in detail later in this document. An extensive literature review of relevant research relating to these topic areas was completed and is included in this document for reader reference.

A comprehensive outreach strategy was used to initiate discussion and public involvement in each town. The comprehensive outreach strategy consisted of promotional literature, online communication, town and media promotion, presentations and public workshops, and the 2012 Summit. Flyers were created and distributed to promote upcoming project workshops and events. Regular email communication, a project website, a Facebook page, and a Twitter account were used to engage stakeholders in the project online. During the project, local newspapers and town governments covered and promoted upcoming meetings and project topics.

Presentations and public workshops were held in March, May, and August 2012. Three public workshops were held. Workshop #1 focused on defining what a “complete community” meant, based on input from the public. Workshop #2 focused on the completion of a visual-preference survey where attendees were asked to select what images they felt best matched what they envisioned for making their town more complete. Workshop #3 focused on specific small-group discussion of town issues identified during prior workshops. The first Complete Communities Delaware Summit was held in November 2012 and featured a number of panelists and speakers who discussed components of complete communities as well as success stories for Delaware local leaders to consider enacting in the future.

A path forward is presented at the end of this document, outlining a number of considerations for the Town of Elsmere. The considerations outline short-term and long-term policy changes that can be made in Elsmere to enhance the town and strengthen it in the 21st century. To implement these potential changes, the Town of Elsmere’s Town Council, Planning Commission, Town Administration, business community, and civic groups will need to work in coordination with one another to broker positive solutions for the town.

Background

Problem Statement

Suburbia is now home for a majority of Americans and Delawareans. Yet characterless, segregated built suburban environments have led many to question the livability and sustainability of the “American dream.” Like the rest of the nation, auto-dependent travel behavior in Delaware has increased traffic congestion, commuting costs, air pollution, and government investment in costly infrastructure. Compartmentalized, built environments have limited transportation choices, opportunities for active recreation, healthy lifestyles, and access to healthy foods. Inactivity and sedentary lifestyles have contributed to skyrocketing health care costs, chronic obesity, and related diseases. Strip malls and big-box centers have diminished the vitality and profitability of many central business districts (CBDs), once the hub of economic activity. Aging highway commercial corridors have become visual blight and vestiges of dysfunctional land use.

Even more compelling is a dramatic housing market shift away from sprawling suburbia to compact, urban town centers. Contributing factors include the decreasing size of American households, dramatic growth in the aging population, higher commuting expenses, and increasing single-family home-energy costs. These factors, combined with the recent economic recession, mortgage crisis, and collapse in housing market, have increased the demand to live in compact, denser areas with convenient access to public transportation, places of employment, schools, retail shops and restaurants, recreational opportunities, and activity hubs. In addition, recent studies show there are higher levels of social capital and economic vitality associated with more walkable communities. There is greater market demand, especially among zoomers (younger baby boomers), to live in town centers that are easy to access, convenient to public transit, service-oriented, perceived to be safe and clean, vibrant and active, diverse and sociable.

Delaware’s changing demographics will also impact livability issues. Delaware is expected to be one of the “grayest” states in the nation, and Sussex County’s senior population will double by 2030. Census data from 2010 indicates that 11.2% of the Elsmere population is 65 years old or older. Mobility issues are not only challenging to persons with disabilities in Delaware, but will cause additional concerns as the state’s population rapidly ages. Many retirees are relocating to Delaware’s beach resorts, age-restricted communities, and lower-cost remote or rural areas. In addition, while Delaware seniors wish to “age in community,” many existing and new communities are not designed to be “aging-friendly.” Often, communities lack multimodal options, walkable and transit-friendly features, universal and compact building design, a sense of safety and security, and supportive social environments. Because there is a correlation between aging and disability, many of these seniors will lose their ability to drive as they age.

This will place even greater demands on Delaware’s already burdened paratransit system and other social services.

Recently, the issue of community livability and sustainability has come to the forefront of federal transportation policy and planning. Advocates urge an integrated approach to plan for communities that provide a good quality of life and meet the needs of people of all ages, abilities, ethnicities, and income levels. This integrated approach to transportation planning, land-use planning, and community design—called Complete Communities—is also gaining momentum at the state and local government levels. According to University of Arizona urban-planning professor Gary Pivo, the objective of complete communities is, “to use less land and reduce the separation of land uses in order to achieve a variety of values including open space protection, community vitality, affordable housing, air quality, transit use, and more walkable places.”

Project Scope of Work

The Planning for a Complete Communities in Delaware project is being undertaken by the Institute for Public Administration (IPA) at the University of Delaware in collaboration with the Delaware Department of Transportation (DelDOT) and the Delaware Office of State Planning Coordination (OPSC). The purpose of this project is to research how to move toward complete communities in Delaware in order to maintain the state’s fiscal health, economic competitiveness, and efficient service delivery. The research will serve to:

- Determine what principles, planning practices, incentives, design strategies, and/or public policies support complete communities.
- Develop a planning framework for state of Delaware.

Research tasks focused on the following research questions:

- What constitutes a “complete” community?
- What are the benefits of complete communities?
- How can complete communities be achieved in Delaware; what are hurdles that need to be overcome?

The project scope of work consisted of a focused literature review of planning initiatives to date in Delaware, literature scan to identify features/characteristics of complete communities, a series of facilitated outreach meetings in two pilot communities, a public policy forum on complete communities, and preparation of a white paper to summarize project outcomes.

Preliminary Research

What Constitutes a Complete Community?

To address the research question, “what constitutes a complete community?” IPA conducted literature scans of State policies, initiatives, and planning-related publications; IPA research related to land use, health policy, and transportation planning; and best-practice research related to smart growth (from 2002–2011). A series of matrices were developed to summarize the results of the literature inventory, which has been published and can be found online at IPA’s Planning for Complete Communities in Delaware website at completenessde.org/delawares-progress. The following section provides an overview of each series of literature inventories and identifies predominant themes associated with planning for livable, resilient communities in Delaware.

Overview of Literature Inventories

Literature Inventory of State of Delaware Policies and Initiatives, 2001–2011

A literature scan was conducted of state-issued reports, gubernatorial executive orders, legislation, press releases, and news articles that document the state’s progress toward complete communities. The state of Delaware continues to build upon a strong intergovernmental approach to guiding land-use decisions that support the state’s strategies for policies and spending, promote responsive government, and enhance the state’s quality of life. Themes identified within the literature inventory of state of Delaware policies and initiatives are summarized below.

Sound Land-Use Planning and State Investment

Sound land-use planning in Delaware has formed the basis of many policy initiatives to guide investment, protect valued resources and the environment, improve community design, create more transportation options, and mitigate sprawl. While Delaware local governments have authority for land-use decisions, development decisions and patterns of land use may have significant impacts beyond local jurisdiction boundaries. To effectively coordinate with the local land-use process, the Preliminary Land Use Service (PLUS) was instituted to effectively coordinate with local land-use processes by providing state agency review for major land use–change proposals prior to submission to local governments. The document *Delaware Strategies for State Policies and Spending* provides a policy framework for planning in Delaware. The purpose of the document is to coordinate local land-use decision-making with State agency investment infrastructure and services. Two fundamental policies are stated to guide these strategies:

- State spending should promote quality, efficiency, and compact growth.
- State policies should foster order and resource protection, not degradation.

The 2010 update of this document highlights the need to move toward “complete communities” to foster “mixed-use and compact development pattern(s)” that are “suited to maintaining Delaware’s fiscal health and preserving the many characteristics of that make Delaware a desirable place to live and work.” As advocated in this document, complete communities typically include an integrated pedestrian and bicycle network, newer streets interconnected with older streets, intermingling of residential and commercial uses, and the inclusion of parks or open space networks within developments.

Good Community Design

The *Better Models for Development in Delaware* publication was designed to provide guidance to improve land development, foster good community design, and combat sprawl in Delaware. Along with 11 core values, it proposes six principles for better development:

- Conserve farmland, open space, and scenic resources.
- Maintain a clear edge between town and countryside.
- Build livable communities with a balance of jobs, homes, services, and amenities.
- Preserve historic resources.
- Respect local character in new construction.
- Reduce the impact of the car.

OSPC’s *Delaware by Design* emphasizes design using compact- and sustainable-planning practices that maximize community and minimize sprawl. Changing demographics are expected to impact housing preferences of aging baby boomers and the young millennial generation. Because older adults want to downsize homes and young professionals prefer living in transit-accessible downtowns or first-tier suburbs, there will be more single-person households, and the new-home market demand will shift from single-family homes on large lots to attached and small-lot homes.

Integrated Transportation System and Multimodal Transportation

Automobile-oriented transportation planning, segregated land uses, and dispersed development patterns have contributed to a cycle of automobile dependency. After decades of building car-oriented roadway networks, many streets lack connectivity and do not safely accommodate pedestrians or bicyclists. In recent years, there has been a growing recognition of the need to plan, design, construct, and maintain streets that meet the needs of all roadway users—that is, creating “complete streets.”

Complete streets are part of Delaware Governor Jack Markell’s agenda. Following Gov. Markell’s issuance of an executive order to create a Complete Streets Policy in 2009, DelDOT was charged with policy implementation to “promote safe access for all users, including pedestrians, bicyclists, motorists and [transit] riders of all ages to be able to safely move along and across the streets of Delaware.” Other Delaware legislative direction includes planning for and/or developing strategic investments for non-motorized travel connections within and

between cities and towns, rail-to-trail and rail-with-trail development, state rail improvements, capital-improvement plans for a “Walkable, Bikeable Delaware.”

Economic Competitiveness

Patterns of land use and development can impact the economic sustainability of Delaware communities. Development patterns that erode scenic vistas, consume resources, weaken community character, separate people, and foster automobile dependency can have dire fiscal, social, and economic consequences. State policies and initiatives have sought to manage growth in a way that protects Delaware’s unique quality of life and fosters economic competitiveness. In addition to guiding principles within *Delaware Strategies for State Policies and Spending*, Gov. Markell issued several executive orders that focus on positioning Delaware for economic development opportunities. In 2009 an executive order authorized an Economic Development Ombudsperson position and rapid-response teams to foster collaboration among and between Delaware agencies for economic development projects. In 2010 an executive order was issued to urge state action to lead the transformation of Delaware as a national model for a clean-energy economy. The FY12 Bond and Capital Improvements Act of Delaware appropriated funds for strategic investments that promote economic growth and job creation in Delaware.

Physical Activity, Healthy Lifestyles, and Community Livability

Communities with more bikeable, walkable, and non-motorized transportation options can help address rising obesity rates and contribute to healthier lifestyles. The Delaware Complete Streets Policy was implemented to offer greater transportation equity and mobility options to people of all ages and abilities—including children, older adults, people with disabilities, and other special-needs population groups. A 2009 executive order by Gov. Markell established a Council on Health Promotion and Disease Prevention to develop and coordinate strategies, policies, programs, and statewide actions to promote healthy lifestyles, combat obesity, and prevent lifestyle-related diseases. The Delaware Coalition for Healthy Eating and Active Living (DE-HEAL) has developed a strategic plan and hosted annual summits to foster improved health of Delawareans by promoting good nutrition and increasing physical activity. Other initiatives have included forming groups to build community-based alternatives for persons with disabilities and study long-term care–housing options.

Protect Natural Resources

Better Models for Development in Delaware emphasizes the need to conserve and protect environmental, historic, and natural resources. In addition, the *Delaware Strategies of State Policies and Spending* document reinforces the need to direct state investments in infrastructure and services in areas with existing infrastructure and/or areas intended for growth. Moreover, a 2010 executive order by Gov. Markell stresses the need for the state to lead by example in reducing greenhouse-gas emissions, using clean, renewable energy and transportation, conserving energy, recycling, and conducting environmentally responsible

construction and procurement activities.

Literature Inventory of University of Delaware IPA Publications (2002–2011)

A literature inventory was also conducted to catalogue IPA white papers and reports on topics related to complete communities since 2002. Themes identified within the IPA literature inventory are summarized below.

Healthy and Walkable Communities

Research shows that a neglect of community-design principles, lack of walkable infrastructure, and compartmentalized built environments have led to less-active lifestyles and a greater incidence of chronic obesity and related diseases. IPA's work has focused on the need to foster healthy and walkable communities through smart-growth principles, transportation and land-use policies, designing pedestrian-friendly infrastructure, enhancing recreation programming, and improving opportunities for healthy eating.

Several publications and websites produced by IPA explain how behavior and the health of a community can be impacted by changes to development patterns, the built environment, and public policies. Published in 2008, *Healthy Communities: A Resource Guide for Delaware Municipalities* shows how improving the walkability of a community can lead to environmental, health, and economic benefits. IPA's online *Toolkit for a Healthy Delaware* provides tools for local governments to assess their respective municipality's opportunities for physical activity and access to healthy foods and environments. The *Comprehensive Plan Assessment Tool*, *Walkability Assessment Tool*, and *Health-Impact Assessment Tool* can be used by Delaware local governments to determine how existing or comprehensive plans, built infrastructure, planned land use, community design, and transportation policies can affect the public's health. *Complete Streets in Delaware: A Guide for Local Governments* was published in 2011 to help Delaware towns, cities, and counties achieve complete streets in order to provide more balanced transportation systems and to create healthy, livable environments for pedestrians, bicyclists, and transit riders of all ages and abilities.

Mobility-Friendly and Transit-Ready Design

Recent IPA public policy forums, training, and/or research have focused on the issues of walkability, mobility, interconnectivity, and transit-oriented design. Policy changes, both at the local and state level, have been recommended to foster active community environments, smarter growth (including social, economic, and environmental sustainability), and pedestrian-friendly infrastructure and design.

New transportation strategies are needed to solve mobility problems and strengthen the resiliency of transportation systems. IPA has conducted research on mobility-friendly design standards including concepts such as transit-oriented design, traditional neighborhood design, neo-traditional design, new urbanism, sustainable design, and smart growth. Research has

also been conducted on interconnectivity and altering development patterns to reduce dependence on the automobile. Issues of safety, security, routine and winter maintenance, and compliance with the Americans with Disabilities Act (ADA) for pedestrian facilities have been the subjects of IPA research. Finally, IPA research has studied options for funding infrastructure improvements and transportation assets, innovative transportation-financing mechanisms, facilitating more-efficient freight and passenger movement, improving performance through technology and advanced systems management, “right-sizing” paratransit in Delaware, and establishing public-private partnerships to enhance multimodal transit options.

Integrated Land-Use and Transportation Planning

Decades of auto-centric transportation investment, auto-oriented land-use policies, and sprawling development patterns have led to an unbalanced transportation system. Consequences of an unbalanced transportation system include segregated zoning uses, impacts to community livability, safety problems, issues of transportation equity, economic degradation, environmental concerns, and disconnected transportation networks.

Land-use and transportation planning influence the economy, environment, community livability, and quality of life of a region. IPA helps local governments manage growth by developing comprehensive plans and land-use regulations that consider the need for multimodal transportation options. IPA’s *Comprehensive Plan Assessment Tool*, *Integrating Transportation/Transit Planning in the Overall Planning Process*, *Transit-Oriented Development: Identification of Optimal Characteristics*, and *Enhancing Mobility to Improve the Quality of Life for Delawareans* all reinforce the need to provide a proactive and aggressive approach to transportation/land-use planning integration. Strategic tools are needed to foster more integrated planning, community design strategies, and public policies that foster community livability, accessible transportation, aging-friendly communities, mobility-friendly design, and transit-oriented development.

Research by IPA and others indicates a clear connection between healthy, walkable environments and a community’s economic vitality. Pedestrian-friendly neighborhoods with downtown streetscapes, recreation facilities, trails, and shared-use paths not only promote healthier living, but also support the development of a good local business climate. Walkable design can increase property values, reduce commuting costs, promote tourism, and capture emerging “lifestyle” retail markets. Visually attractive streetscapes, pedestrian-oriented light fixtures, and traffic-calming measures can all kick-start a town’s economic development. Comprehensive plans that emphasize the need for multimodal transportation options can provide the framework for local governments to grow smarter and consider the need for more efficient, compact, walkable, and sustainable community design.

Literature Inventory of Best Practice Research (2005–2012)

In addition to the literature scan of State of Delaware and IPA publications, a literature inventory was prepared to identify best-practice research being conducted on topics related to complete communities. Themes identified within the best practice research are summarized below.

Community Livability

The Victoria Transportation Institute (VTI), the AARP Public Policy Institute, the American Institute for Architects (AIA), the Federal Highway Administration (FHWA), and the Partnership for Sustainable Communities—a collaboration among the U.S. Department of Housing and Urban Development (HUD), Department of Transportation (DOT), and Environmental Protection Agency (EPA)—have all conducted extensive research on community livability. VTI’s research notes that community livability is strongly dependent on factors such as social engagement, perceptions of safety and security, and quality of community design and place. AARP’s focus has been to foster livable communities that provide affordable and appropriate housing, supportive services, and adequate mobility options. These factors combine to facilitate personal independence, ability to “age in community,” and engage residents in civic and social life. AARP asserts that livable communities include transportation options, walkability, safety and security, shopping, housing, health services, and recreation and cultural services.

AIA’s ten principles for livable communities focus on community design, which can lead to economic resiliency. Communities will draw new residents, jobs, and investment if they are designed on a human scale with mixed-use design, preserve urban centers, offer transportation choices, conserve landscapes, build upon neighborhood identity, and offer vibrant public spaces. The Partnership for Sustainable Communities defines livable communities as “mixed-use neighborhoods with highly-connected streets promoting livability for all users.” It has identified six livability principles to highlight the importance of transportation options, energy-efficient housing choices for diverse populations, economically competitive neighborhoods, federal funding directed toward existing communities, collaborative initiatives, and investment in healthy, safe, and walkable neighborhoods. These principles are echoed in FHWA’s *Livability in Transportation Guidebook*.

Smart Growth

EPA provides several guidebooks that explain the concept of and illustrates examples of smart growth. Ten smart-growth principles are recognized and can be used as the basis of comprehensive plans, government regulatory practices, and community design. VTI further explains that smart-growth policies integrate transportation and land-use decisions to encourage mixed-use development rather than auto-dependent suburban communities. Smart Growth America has formed a national coalition to research, advocate for, and lead organizations to build urban, suburban and rural communities with housing and

transportation choices near jobs, shops and schools. The American Planning Association’s “Great Places in America” series provides case studies and examples of characteristics and guidelines for great neighborhoods, streets, and public spaces. A *Sprawl Repair Manual* offers design, regulatory, and implementation strategies to transform single-use, car-dominated developments into complete communities with better economic, social, and environmental performance. The National Association of REALTORS® (NAR) publishes *On Common Ground* magazine, which features articles that promote smart-growth strategies.

Complete Streets

The definition of complete streets has evolved from federal initiatives that simply support “routine accommodation” to DOT’s decree to “incorporate safe and convenient walking and bicycling facilities into transportation projects.” Complete streets can be described as transportation systems that are designed, built, and maintained to safely accommodate travelers of all ages and abilities—motorists, pedestrians, bicyclists, and public-transit users—including children, non-drivers, older adults, and persons with disabilities.

A movement toward complete streets has gained momentum at the federal, state, and local levels. Spearheading the movement is the National Complete Streets Coalition, Smart Growth America, stakeholder groups (e.g., NAR, AARP, APA) and transportation professionals working to enact complete-streets policies across the country. A recent publication by the National Complete Streets Coalition traces the growth of the complete-streets movement, role in transforming roadway design and planning processes, and benefits for non-motorized travelers. Complete-streets policies provide increased walkability and pedestrian safety, reduce traffic congestion, promote physical activity while increasing the appeal of a community. The Coalition and Smart Growth America also extol the virtues of smart-growth transportation strategies—including complete-streets policies—as a fiscally responsible investment that creates economic opportunity and reduces infrastructure costs.

Changing Housing Preferences

Along with the NAR, the Urban Land Institute (ULI) and National Association of Home Builders (NAHB) have documented a shift in housing and transportation choices by two major demographic groups—baby boomers (those born between 1946 and 1964) and Millennials (children of boomers). By the end of the decade, 40 million baby boomers will turn 65, and there will be over 58 million 65-and-older adults by 2020. A recent study by ULI indicates that although the senior population will increase, most boomers want to age in place, rather than move to senior housing communities. If baby boomers move, they prefer to downsize from single-family homes on large lots to live near family or in transportation-oriented urban areas/town centers. Because many suburbs will create “naturally occurring retirement communities,” local governments will need to make changes to infrastructure, provide transportation for seniors, and encourage more affordable housing options. NAR points to research that people are driving less and predicts that the trend for Generation Y (Millennials)

will be homes that provide the benefits of urban living, proximity to transit, and access to culture. The National Association of Home Builders reports that Millennials value walkability, economic use of space, and shared amenities more than sprawling lawns, “McMansions,” and car-oriented suburban life.

Great Places and Healthy Community Design

Transportation systems, development patterns, community design, and planning practices can have profound effects on the health, quality of life, and sustainability of a community.

According to the Centers for Disease Control and Prevention (CDC), healthy community design needs to be interwoven into community planning, transportation, and land-use decisions. APA states that the design of healthy communities must:

- Provide a unique sense of community and place.
- Preserve and enhance valuable natural and cultural resources.
- Equitably distribute the costs and benefits of development.
- Expand the range of transportation, employment, and housing choices in a fiscally responsible manner.
- Value long-range regional sustainability rather than short-term, incremental or geographically isolated actions.

Best practices in community design also include strategies such as use of creative development practices, conservation design, character-driven community design and developing policies to promote mixed-use development, affordable housing, transit-oriented development and traditional “New Urbanist” subdivisions. While design matters, placemaking strategies can lead to the building of vibrant public spaces, celebrate places that matter, and preserve community character.

Five Elements of a Complete Community

From the series of literature scans, the IPA research team identified five elements of a complete community. The five elements, and additional descriptive characteristics, are explained below.

1. Complete Streets

Complete streets are transportation systems designed, built, and maintained to safely accommodate users of all ages and abilities—motorists, pedestrians, bicyclists, and transit users. This element:

- A. Achieves principles of connectivity—within towns and surrounding areas—by
 - Integrating multiple transportation options
 - Reducing separation between home, school, and work
- B. Fosters walkable, bikeable, and transit-friendly communities
- C. Reduces automobile dependency



2. Efficient Land Use

Efficient land use is about making development decisions to minimize driving time and distances between jobs, homes, and community services. Efficient land use:

- A. Provides a mix of complementary land uses
- B. Supports compact building design
- C. Strengthens and revitalizes downtown commercial areas and “Main Streets”





5. Sustainable and Resilient

Sustainability focuses on restoring or revitalizing existing infrastructure and assets, growing a vibrant and diverse economy, preserving the environment; promoting energy-efficient practices, and conserving and protecting natural, cultural, and historic resources. This element:

- A. Fosters use of existing infrastructure and redevelopment
- B. Promotes job growth business diversity—existing and new
- C. Cultivates responsible environmental management



Comprehensive Outreach Strategy

A comprehensive outreach strategy was planned, prepared, and implemented to engage a broad set of stakeholders and constituencies. Specifically, the strategy included development of a “Planning for Complete Communities” website, selection of two “pilot” communities, identification of stakeholders for each pilot community, conducting/facilitating a series of workshops in each community, and hosting a Complete Communities Summit in November 2012. Additionally, the outreach strategy outlined the staffing breakdown for the project, key stakeholders and target audience of pilot communities, target dates and agenda items for pilot community workshops, and the target audience and possible agenda for a final public policy forum on complete communities.

Development of Complete Communities Website

A “Planning for Complete Communities in Delaware” website was developed using WordPress (www.completecommunitiesde.org). It served as the primary mechanism for outreach to key stakeholders, community members, and other constituencies.

Planning for Complete Communities in Delaware

Complete Communities
attractive, inclusive,
efficient, healthy &
resilient places

DELAWARE Project Site

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Formulating a Framework for Complete Communities

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Sites of Interest

Walk Score®
How Walkable is Your Community?

Toolkit for a Healthy Delaware
Toolbox, Assessment and Walk Together

Toolkit for a Healthy Delaware

Taken from: <http://www.ospcw.net/civictalk/wordpress/wp-content/uploads/2012/09/09091214-121001121014-1.htm>

For the past nineteen years, IPA has conducted a series of public policy forums, along with their accompanying research and reports, focusing on infrastructure policy. The purpose has been to facilitate a continuing process of discussion, planning, and action for the formulation of policies and programs designed to meet future infrastructure needs of Delaware as well as the development of long-term strategies for regional infrastructure priorities. Recent infrastructure policy forums and/or research have focused on the issues

While designed to “grow” future website content as the project progresses in future phases, the following initial tabs were created:

- **Home**—introduces IPA and its role conducting research on complete communities. It explains the purpose and scope of the project. Links to project partners and other sites of interest are provided.
- **Summit 2012**—provides information related to the Complete Communities Delaware 2012 Summit event, held November 13, 2012.
- **Introduction**—provides the problem statement for this project and explains why complete communities are needed in Delaware. This webpage also solicits input from viewers who may wish to comment.
- **Elements**—provides the five major elements of a complete community and the associated sub-characteristics. Visual collages are also displayed.
- **Pilot Communities**—describes components of the outreach strategy for this project, including the series of workshops planned for and conducted in each pilot community.
- **Research**—provides outcomes of IPA’s review of documents generated by the state of Delaware since 2001, IPA publications, and best practices. Links are provided to matrices summarizing each of the three literature scans.
- **News and Events**—describes upcoming events and recent news articles about topics related to complete communities.
- **Contact Us**—lists and provides contact information for IPA project team members.

Plans for future expansion include an online Complete Communities Toolbox that will provide tools, resources, and strategies for citizen planners.

Website sidebars and widgets

- The homepage features the following sidebars with linkages to:
 - Project Partners—including DelDOT, OSPC, and IPA
 - Sites of Interest—including *Toolkit for a Healthy Delaware* and *Walkscore*
- Social Media—a link is provided to the Complete Communities Facebook page and Twitter account

Identification of Pilot Communities

In consultation with DelDOT and OSPC officials, criteria were developed for the selection of two pilot communities to work on with this project. First, pilot communities were sought with an “upstate” and “downstate” geographic location. Second, the project team targeted a community that is essentially “built-out” and one that is still growing. The Town of Elsmere (New Castle County) and the City of Milford (Kent/Sussex Counties) were identified as ideal candidates for the Planning for Complete Communities in Delaware project. The managers of

the Town of Elsmere and the City of Milford were contacted and tentatively accepted the offer to participate as a pilot community, contingent on town/city council approval.

Plan for Facilitated Workshops and Summit

A series of three workshops was planned in each pilot community. The workshops were tentatively scheduled for March, May, and July 2012 and designed to facilitate discussion on themes associated with livable, resilient, and sustainable communities in Delaware. The goal of the workshops was to gain input to help develop consensus on elements/characteristics of a complete community, 2) community design preferences, and 3) town/city-specific initiatives that can build upon or enhance existing plans and strategies that have been undertaken or are underway in each community.

Public-Engagement Strategies

In addition to the launch of the Planning for Complete Communities in Delaware website, the following public-engagement strategies were used:

- **MailChimp**—enabled IPA to design and prepare e-mail messages or “campaigns” that were targeted specifically to each municipal stakeholder group. The online messaging platform allowed IPA to update e-mail contacts, provide links to Complete Communities website content, combine social networking to increase message impact, and track who received and/or responded to messages.
- **Press Releases**—allowed IPA to distribute information to citizens on the project, workshop events, and requests for survey participation via print and electronic media.
- **Municipal Websites of Pilot Communities**—provided information on the project, notices about workshops, and links to the Complete Communities website.
- **Social Media**—included Facebook and Twitter. Stakeholders and interested citizens could “find us on Facebook” (www.facebook.com/pages/Planning-for-Complete-Communities-in-Delaware) or “follow us on Twitter” (@CompCommunityDE) to learn more about the project and workshops, engage in interactive discussion, and/or participate in a survey.
- **Postcards/Flyers**—inserted in electric bills and placed in public buildings (e.g., libraries/senior centers), solicited area residents to take an online survey

Pilot Community Initiative

Cooperative Process

Administrative Staff Support

John Giles, the Town Manager of Elsmere, was actively involved and supportive of the of the Complete Communities initiative. Giles assisted IPA in putting together a spreadsheet of stakeholders with their contact information (i.e., elected officials/council members, representatives from the business community, civic organizations, schools, nonprofits, and realtors). Elsmere's information technology (IT) support enhanced promotion of project-related events through website announcements. Diana Poole, Assistant to the Town Manager, provided support to IPA staff regarding information requests and event planning.

Presentation to Elected Officials

On Monday, February 9, 2012, IPA made a presentation at the Elsmere Town Council meeting. During this presentation, IPA's Elsmere Project Team identified reasons for planning for Complete Communities that included healthy community benefits, enhanced livability, transportation efficiency, economic development opportunities, environmental-protection resources, lower infrastructure costs, and better community design.

Analysis of Municipal Comprehensive Plan

To gain a better understanding of what initiatives Elsmere had already pursued in becoming a complete community, IPA analyzed Elsmere's 2010 Comprehensive Plan. The analysis of this document is provided below.

The Town of Elsmere's 2010 Comprehensive Plan

The *2010 Update to the 2004 Town of Elsmere Comprehensive Plan* contains numerous recommendations related to elements of a complete community as well as stated town-specific concerns voiced by stakeholders.

Housing

- Recommendation Four: *Review Zoning Code* (Efficient Land Use)
- Recommendation Five: *Revise the town code to increase the maximum building height permitted by right in selected areas* (Efficient Land Use/Sustainable)

- Recommendation 7: *Take steps to allow the disabled or senior citizens to continue to live in their homes.* (Healthy and Livable)
- Recommendation 12: *Encourage infill consistent with the overall goals of the comprehensive plan and in the appropriate locations and at an appropriate scale.* (Efficient Land Use/Sustainable)

Community Facilities and Services

- Recommendation 2: *Create a re-greening of Elsmere Program* (Efficient Land Use/Inclusive and Active/Healthy and Livable)
- Recommendation 3: *Promote Elsmere as a town with greenway trails* (Healthy and Livable)
- Recommendation 5: *Look into alternative uses of some parks* (Healthy and Livable/Inclusive and Active)

Transportation

- Recommendation 1: *Institute a sidewalk inspection and repair program* (Complete Streets)
- Recommendation 7: *Address interconnectivity in Elsmere by updating sidewalks to ADA standards and adding striped crosswalks at necessary intersections.* (Complete Streets)
- Recommendation 9: *Continue to pursue a greenway trail along the existing rail line to connect Maple Ave Park and Fairgrounds Park.* (Healthy and Livable)

Land-Use Plan

- Recommendation 9: *Convert Kirkwood Hwy into the town's Main St.* (Efficient Land Use/Inclusive and Active)
- Recommendation 10: *Make the town more inviting and easy to navigate for consumers who are new to the town.* (Efficient Land Use/Inclusive and Active)
- Recommendation 11: *Expand the utilization of open space and parks.* (Efficient Land use/Healthy and Livable)
- Recommendation 13: *Consider creating an historic overlay district.* (Efficient Land Use/Inclusive and Active)
- Recommendation 14: *Direct Development so that it is consistent with town values.* (Efficient Land Use/Inclusive and Active)
- Recommendation 15: *Create a "re-greening of Elsmere" program.* (Efficient Land Use/Inclusive and Active/Healthy and Livable)

Series of Facilitated Workshops

The stakeholder group that was invited to project workshops is listed in Appendix A.

Summary notes for all three Elsmere workshops held throughout the spring and summer are located online (completenessde.org/pilots/elsmere/workshops).

Overall, the engagement process completed through project workshops and presentations yielded useful public input and created circumstances within which excellent discussions occurred. Each workshop is assessed, respectively, in the following paragraphs. Additionally, general takeaways and areas for improvement are included.

Workshop #1, held on March 8, 2012, at the Elsmere Town Hall, addressed how participants define a complete community. IPA staff presented major elements of complete communities to participants, seeking their input on which elements were most important to their town. IPA staff also asked participants what was missing; if other elements were more pertinent to their town's circumstances, participants were asked to identify them.

Workshop #1 was successful. The purpose of Workshop #1 was to define a complete community. Input coming from this workshop was excellent. IPA staff left the workshop with clear direction on how the group felt and what they thought was important for their town.

Workshop #2, held on May 10, 2012, at the Elsmere Town Hall, engaged participants in a Visual Preference Survey (VPS). A VPS is a tool that is useful at assessing the public's perspective on images of natural and built environments. The process involves asking participants to view and rate a wide variety of images depicting streetscapes, land use, site design, building type, aesthetics, and amenities. Photos contained in this survey illustrate potential options for future development efforts, not specific proposals. The value of the VPS is in the range of opinions, the shared common ground, and the desires expressed by the public, giving a sense of what they would like to see in their community. The purpose of this survey is to further define the vision of our two Delaware pilot communities—the Town of Elsmere and the City of Milford.

Format

The design and content of the Planning for Complete Communities VPS was based upon a similar 2007 survey undertaken by the City of Peachtree City, Ga.¹ Questions were designed based upon IPA's research into complete communities, conversations with community

¹ Results Summary: Visual Preference Survey City of Peachtree City, Ga.
www.peachtree-city.org/documents/21/22/2007_VPS_Results_REPORT.pdf

stakeholders, comments from public workshops, and objectives stated in official planning documents from our pilot communities. The VPS utilized images from our pilot communities as well as other Delaware municipalities and places throughout the world. These photos composed a collection of existing spaces, including buildings, streets, housing, options for recreation, and design scenarios. Three photo surveys were conducted during October and November of 2011. In addition to Elsmere and Milford, IPA staff visited Newark, Del., Wilmington, Del., Lewes, Del., and Georgetown, Del., to compile photos for the survey.

Two versions of the Complete Communities VPS were developed. The first was administered in person during a public workshop. A second variant was administered online using a customized web survey. Each contained 34 base questions, featuring four or six images depicting current infrastructure, places, and buildings as well as options for future development.

The breakdown of each survey is contained below:

Version 1: In Workshop

- 34 Base-preference questions
- Additional comments

Version 2: Online

- 4 Demographic Questions
- 34 Base-preference questions
- Additional comment

Participants were asked to rate the appeal of each image presented within the 34 base questions of the survey. To accurately measure the appeal of each photo, a scale was developed. Images are rated from a possible high of (+3) to a possible low of (-3). Positive numbers indicate how appealing participants feel the photo is. Conversely, negative numbers indicate how unappealing the photo is. A selection of (0) by participants denotes indifference or neutrality to an image. Photo rankings are shown using an average of participant’s responses. The mode is the numerical ranking (-3, -2, -1, 0, 1, 2, or 3) selected the most number of times. The mean, or average, divides the sum by the total number of responses, giving an accurate reading of overall preference on the scale -3 to 3. Some results show clear negative or positive responses (as demonstrated by a mean closer to -3 or 3), while others show either a neutral or polarized response (as demonstrated by a mean closer to zero).

Figure 1. VPS Response Scale

-1	-2	-1	0	1	2	3
Strongly Unappealing	Unappealing	Somewhat Unappealing	Neutral	Somewhat Appealing	Appealing	Strongly Appealing

Methodology

Two versions of the VPS were released to the public. The first was facilitated with our stakeholders during Workshop #2. The online version of the VPS was made live to the public on May 11, 2012, and was active until July 10, 2012. The responses were as follows:

Facilitated in Person:

- Workshop # 2 (5/10/12) – 13 Responses

Online Version:

- 3 Responses

The number of responses gathered from Elsmere is insufficient to provide statistically significant data. However, it does provide a starting point to encourage discussion on a future vision of the town.

Our in-person facilitation of the VPS during Workshop #2 provided some constructive comments, which were later incorporated into the online version of the survey. During the course of the workshop, participants indicated some difficulty in viewing photos as well as distinguishing differences between the photos. This resulted in partial or incomplete responses for some questions. As a result, images were made larger, and borders were included to help make photos stand out from the background template. Additionally, due to the large number of comments during Workshop #2, a comments section was added to the online version of the VPS.

Several methods were used to promote the online survey to our pilot communities. Social networking played a prominent role in our outreach strategy. In addition to our Facebook page (www.facebook.com/pages/Planning-for-Complete-Communities-in-Delaware/112137562233625) and Twitter (@CompCommunityDE) feeds, additional advertising was purchased on Facebook that targeted Elsmere residents. The pilot communities also contributed by prominently featuring the project on their municipal websites. More traditional forms of advertising were also utilized. Flyers were distributed to stakeholders and posted in public venues, including the local library in each community.

Outcomes

The next several pages of this summary provide a sampling of the results gathered from the Elsmere VPS. These data include:

- *Demographic Information:* The online survey included four demographic questions to gain a better profile of survey participants.

- *Significant Preferences:* This section features a selection of VPS questions that were rated with the highest and lowest visual preferences.
- *Comments:* Comments received from our stakeholders regarding the VPS are outlined in this section.

Demographic Information*

Figure 2. What is Your Age?

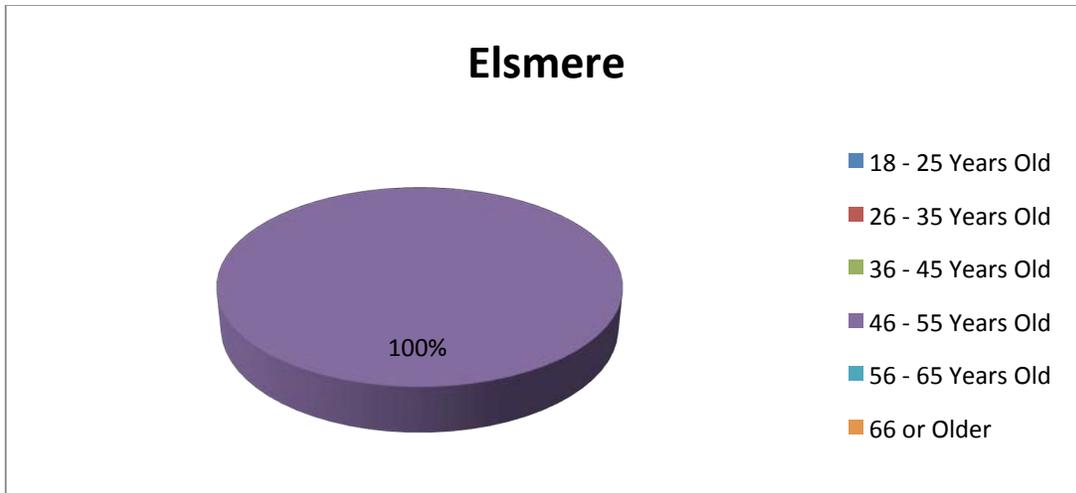


Figure 3. How Long Have You Been a Resident of Delaware?

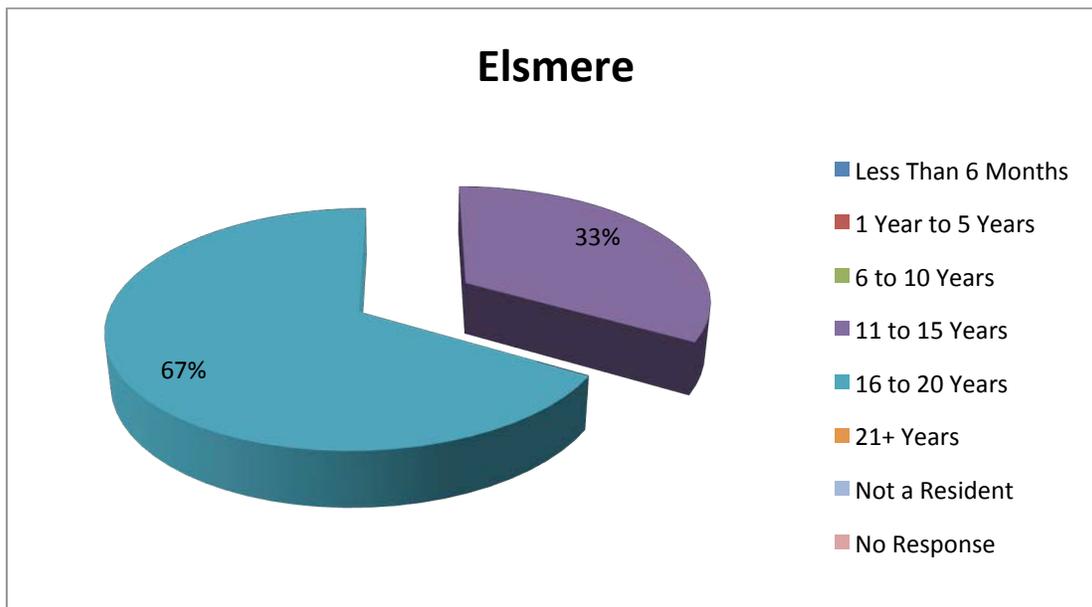


Figure 4. How Long Have You Been a Resident of Your Community?

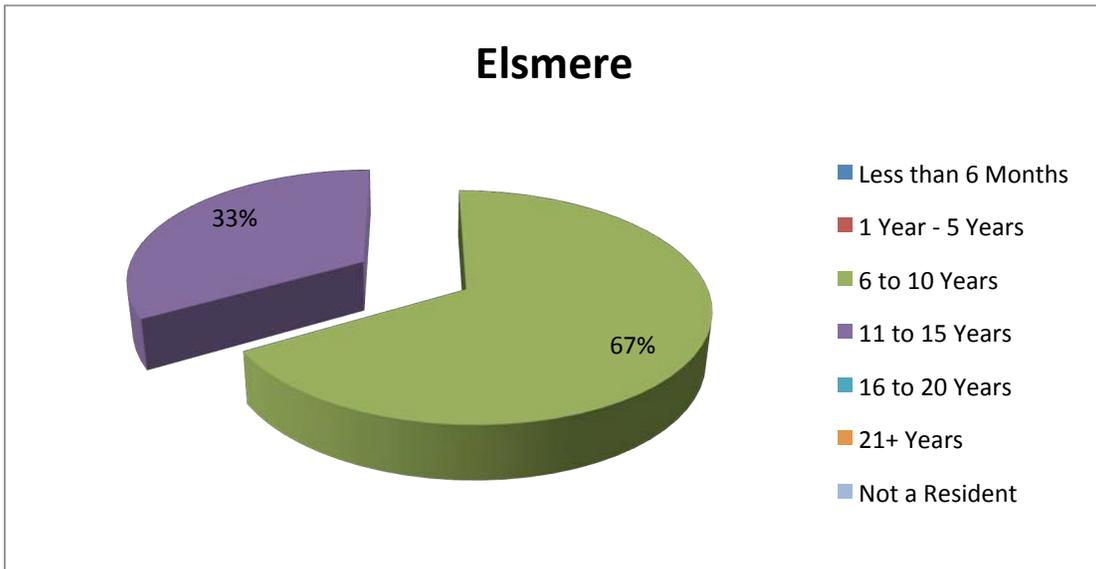
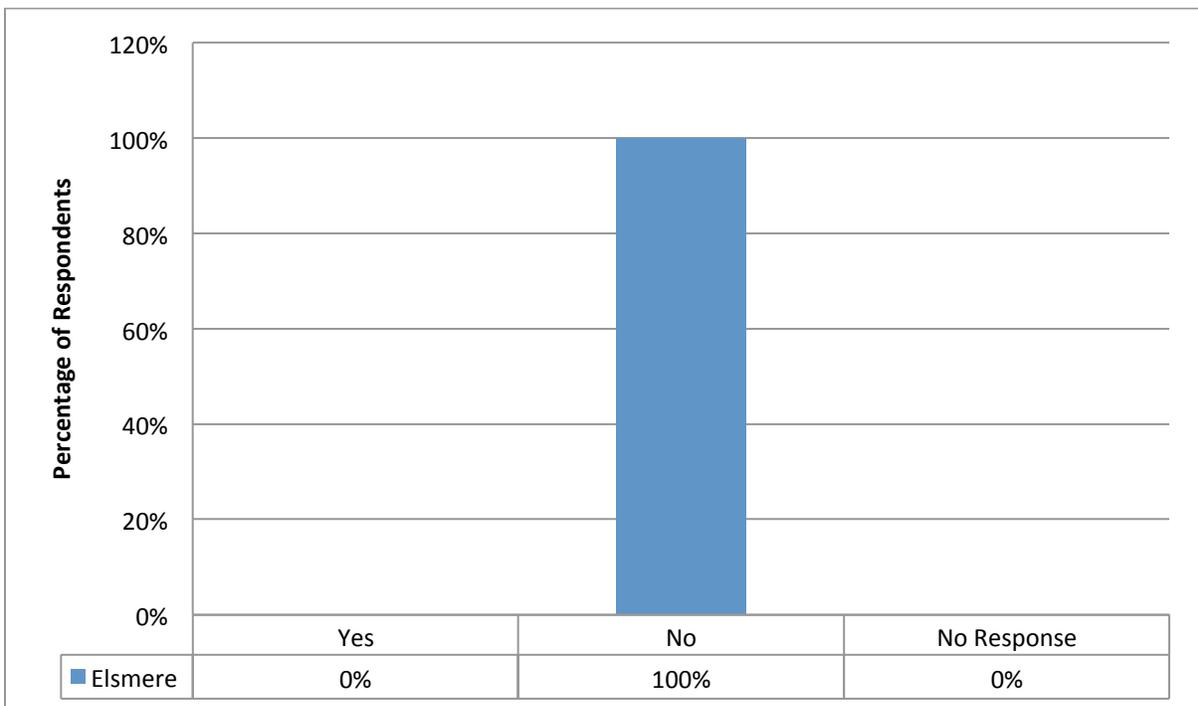
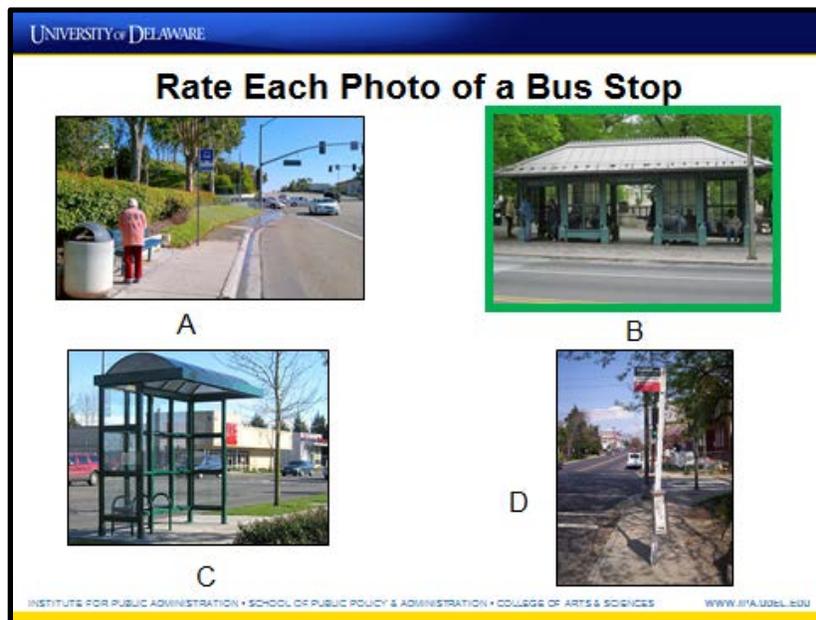


Figure 5. Do You Work Within Town Limits?



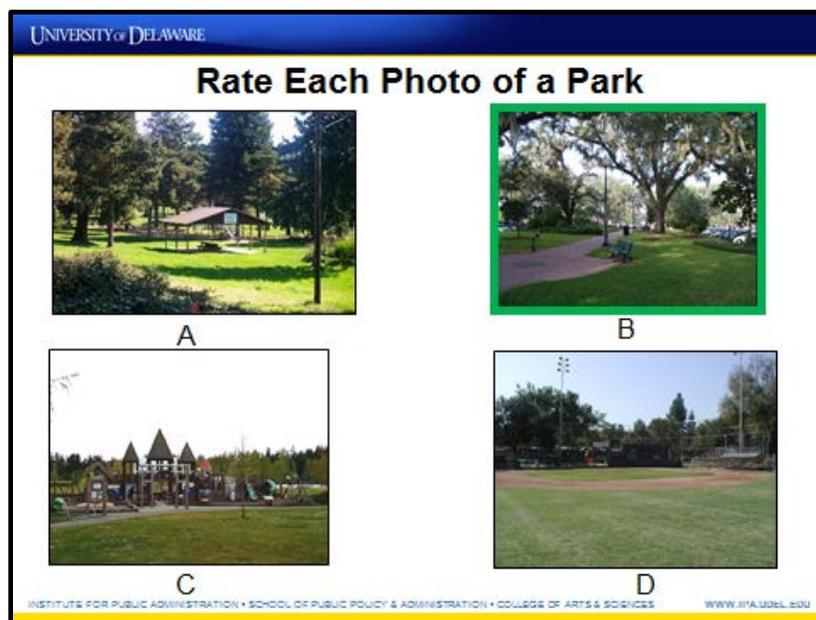
During our analysis of the Elsmere VPS results, a number of questions revealed strong visual preferences for one or more photos. Below are a few examples.

Figure 6. Bus-Stop Preference



In question #8 participants were asked to rate photos of various options of bus stops. All of the respondents indicated a strong positive preference for Photo B, answering either Appealing (2) or Strongly Appealing (3).

Figure 7. Park Preferences



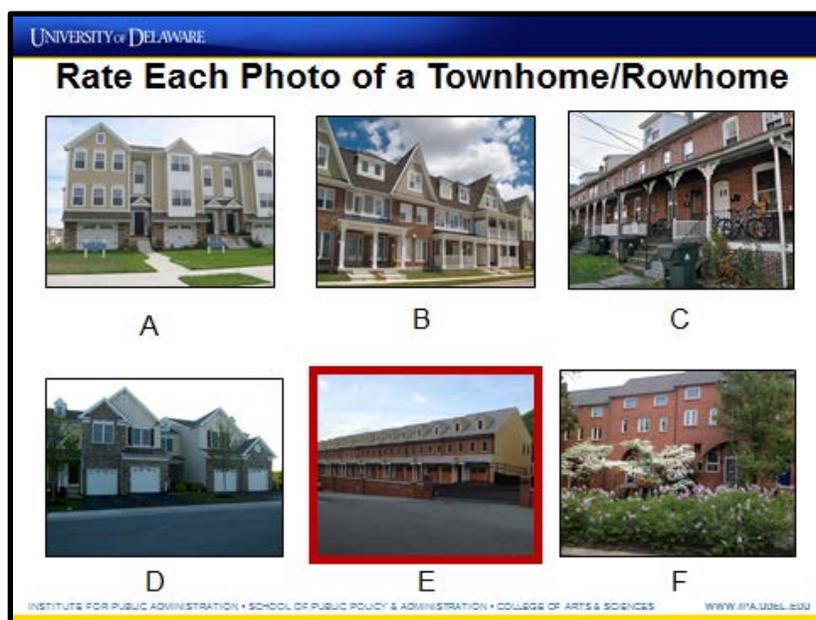
In question #31 participants were asked to rate photos of various parks. 81.25 percent of respondents indicated a strong positive preference for Photo B, answering either Appealing (2) or Strongly Appealing (3).

Figure 8. Social-Recreation Preferences



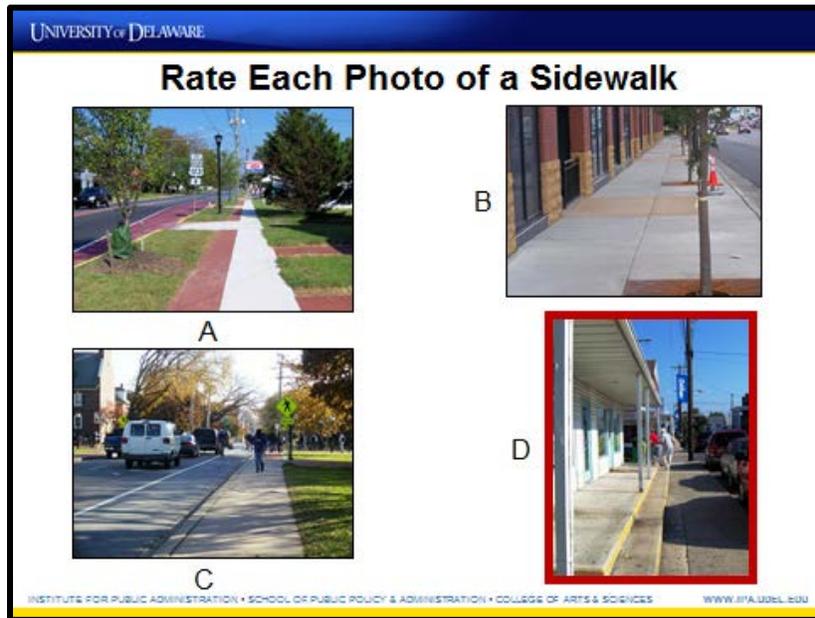
In question #30 participants were asked to evaluate various scenarios of social interaction. Ninety-four percent of respondents found Photo A appealing, replying with either Appealing (2) or Strongly Appealing (3).

Figure 9. Townhome/Rowhome Preferences



In question #17 participants were asked to rate examples of townhomes and rowhomes. Nearly 69 percent of respondents indicated that Photo E was unappealing, replying either Strongly Unappealing (-3) or Unappealing (-2).

Figure 10. Sidewalk Preferences



In question #2 participants were asked to rate photos of sidewalks. Three-quarters of the respondents indicated that Photo D was unappealing, answering either Unappealing (2) or Strongly Appealing (3).

**Note: The number of responses gathered from the Elsmere VPS is insufficient to provide statistically significant data. However, it does provide a starting point to encourage discussion on a future vision of Elsmere. The above results represent the combined data set from both the facilitated and online versions of the Elsmere visual preference survey.*

During Workshop #2, stakeholders in both communities voiced comments about the survey. Many of these comments reflected concerns that the VPS was too generic and not specific to each pilot community. As the Complete Communities project moves forward, it may be beneficial to further refine the VPS to include more community-specific content.

Comments received from Elsmere stakeholders include:

1. Photos were too general. They had little to do with Elsmere or its situation. It does not take into consideration our uniqueness.
2. Slides on utilities, schools, traffic calming, and historic preservation were missing.

The VPS given in Workshop #2 proved to be ineffective in the context of this project because it was too generic and not relevant to each specific town's interests. Further, participants felt the VPS was unrealistic for their town. The VPS is more conducive for specific community design and architectural preference exercises.

Workshop #3, held on August 9, 2012, at the Elsmere Fire Hall, was the most successful of the three workshops held. During Workshop #3, participants moved from station to station, each focusing on different town-specific issues. Participants at each station were provided with maps, graphics, and data to inform discussion.

While at each station, participants had the opportunity to engage in in-depth, candid conversations with peers on the specifics of the issues presented at the station. Participants appreciated this approach, since it gave them the ability to discuss detailed aspects of their town that may or may not have been discussed before.

A general takeaway from the workshop process was the importance of building consensus. For example, visual renderings of a Main Street-type transformation of Route 2 in Elsmere generated positive discussions around topics such as lifting prohibitive regulations like height restrictions and hurdles to allowing on-street dining. After considering various building heights, participants actually did come to agreement on building height allowances that expanded Elsmere's redevelopment potential while keeping intact the historic neighborhood flavor of the town.

Another important take away from the workshop process was that often it is the case that the loosening of regulations can lead to more innovative development and design. Density, zoning, parking, setback, and height restriction regulations often impede private developers from producing building products that would support complete-communities concepts.

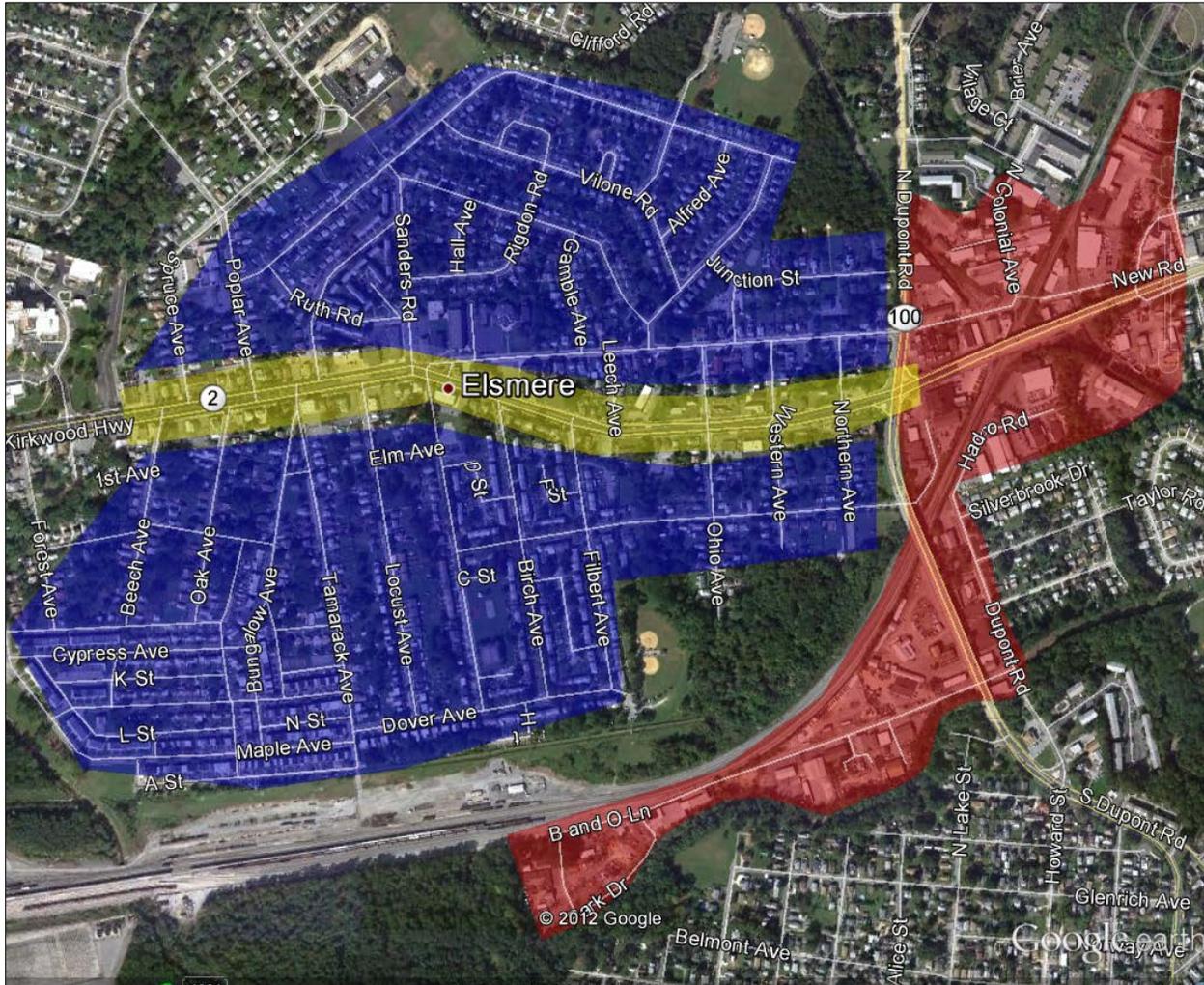
The greatest area for improvement pertaining to this community-planning process was public involvement. It was very difficult to increase turnout among residents to workshop meetings. In future projects, notifications provided via mail, phone calls, or newspaper may improve turnout. More must be done to include the public in workshop discussions. Further, rather than engaging small working groups, public meetings should be geared toward including a large number of people.

Walking Tour

In addition to workshops and prior to the third workshop, the Elsmere project team conducted a walking tour of the town with Elsmere stakeholders to better understand town-specific issues. The tour was conducted on August 7, 2012. By walking and driving around town with stakeholders, the IPA project team was better able to pinpoint problem areas in town about which people were concerned. All stakeholders met at Town Hall that evening, a brief introduction was given, and two teams then left in separate vans to examine specific components of the town.

Using an aerial map, target areas were defined, based on IPA suggestions and participant feedback. Below is the map showing target areas in Elsmere for the walking tour.

Figure 11. Target Areas for Elsmere Walking Tour



Source: IPA staff-generated using Google Earth

The blue area denotes residential areas targeted in Elsmere. The red area denotes eastern business zones, and the yellow area denotes the Kirkwood corridor. The fourth area not shown on the map includes park areas that were visited during the walking tour.

Each group selected two areas to focus on during their walking tour. The choices were Kirkwood Corridor, park areas, residential areas, and western business/industry areas. Participants self-selected the group they would join.

Each team would drive to areas, park, and walk a couple streets in the area. The key questions given to participants were:

- *What are the strengths of this area?*
- *What are the weaknesses?*
- *How do we fix the weaknesses? What are potential solutions?*

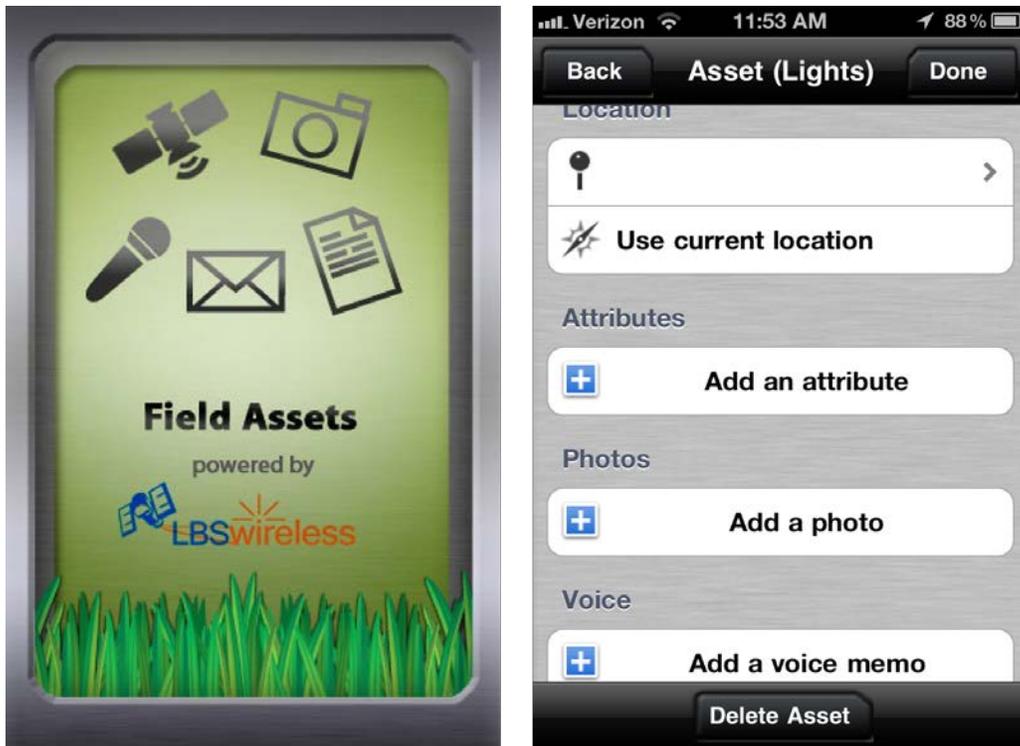
The tours ended back at Elsmere Town Hall, where participants from both groups were given the opportunity to provide final feedback and hear feedback from the other group. Input acquired from the walking tours was incorporated into this document in the Path Forward to Become a Complete Community section.

Field Research, Mapping, and Visualization

Field research was conducted regarding street lighting, sidewalks, and street trees. For these three topic areas, inventories and maps were completed. The maps generated are shown in Appendix B.

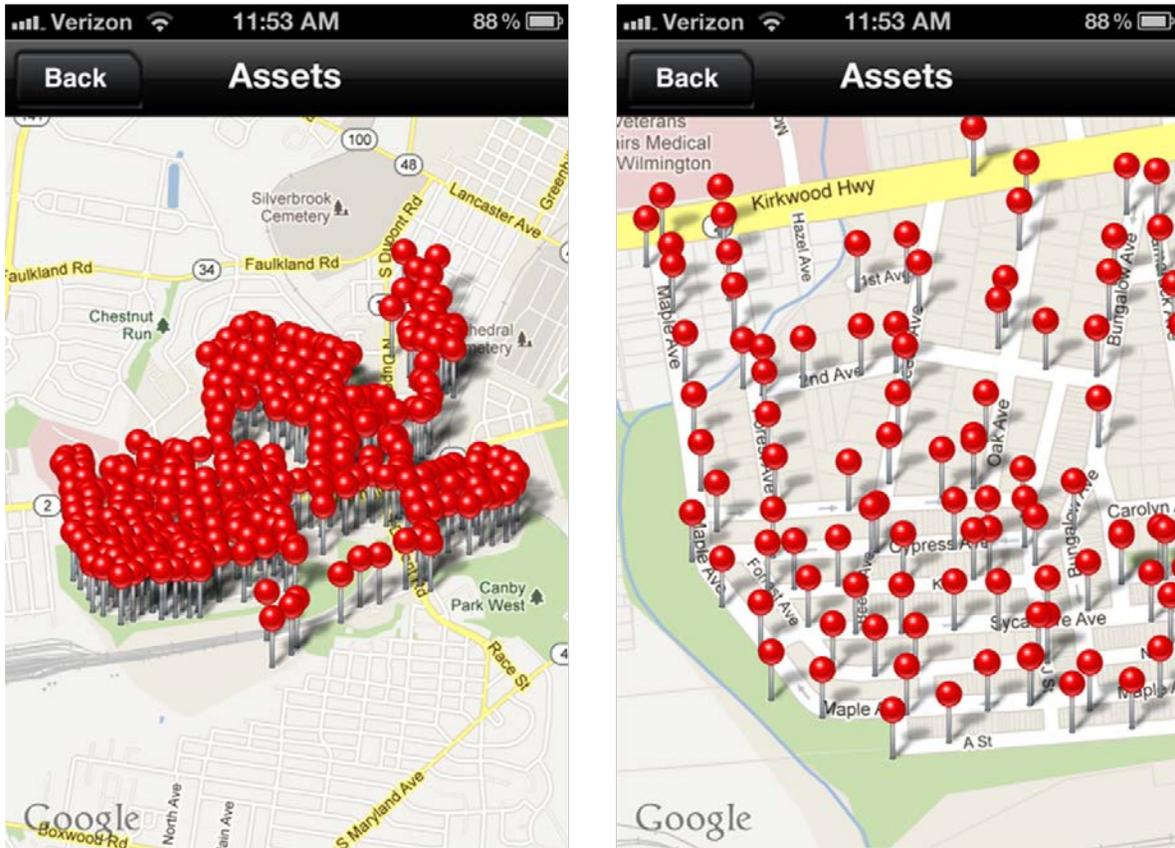
For street lighting and sidewalk data, IPA staff used a cellular-phone application that allowed field researchers to pinpoint light locations and sidewalk deficiencies. Using the application, IPA researchers were also able to associate notes, images, or voice memos with each point recorded.

Figure 12. Cellular-Application Dashboard



The data collected using the cellular phone application were then imported into a GIS application to generate the maps located in Appendix B of this document. The raw data mapped in its original form can be seen below.

Figure 13. Raw Data Mapped in Cellular Application



In addition to geo-locating streetlights throughout Elsmere, a nighttime-lighting inventory was conducted to identify lighting deficiencies in Elsmere. The recommendations related to the nighttime inventory are incorporated into the Path Forward to Become a Complete Community section of this document. Inoperable light fixtures were identified so that information could be passed on to Delmarva Power, the entity responsible for providing street lighting in Elsmere.

The street-tree inventory was completed using aerial photography from Elsmere to identify tree cover.

Visual renderings were created to simulate changes in the Town of Elsmere’s height restrictions using Google SketchUp and Google Earth. The below before-and-after renderings show fly-over views of the Kirkwood Highway corridor in downtown Elsmere.

Figure 14. Kirkwood Corridor Before (1st View)



Figure 15. Kirkwood Corridor After (1st View)



Below is another before-and-after fly-over view of the Kirkwood Highway Corridor.

Figure 16. Kirkwood Corridor Before (2nd View)



Figure 17. Kirkwood Corridor After (2nd View)



Path Forward to Become a Complete Community

What is a Complete Community?

Transportation systems, development patterns, community design, and planning decisions all can have profound effects on health of residents, economic vitality of businesses, and sociability of people. So, the way communities are designed and built impacts community character, quality of life, transportation choices, active-recreation opportunities, sense of place, and meaningful engagement of community members.

While planning for future land is important, there are several reasons why communities need to plan for more than future land use. With regard to the complete-communities concept, research indicates:

- **There is a link between the built environment and the physical, social, and economic health of a community.** For the past half-century, America has been building vehicle-dependent environments that lead to obesity, poor health, social isolation, high infrastructure costs, and neglect of downtown cores.
- **Auto-centric development is costly!** Sprawling land-use patterns have altered travel behavior, led to physical inactivity, and contributed to soaring costs for health care and auto-oriented transportation systems.
- **Walkable communities provide health, transportation, and environmental benefits.**
- **Well-conceived, comprehensive plans provide the foundation for healthy and complete communities.**
- **Housing preferences are changing.** Demographic changes are driving housing-market choices. Aging baby boomers want to downsize from large, single-family homes, while young Millennials and Generation Y'ers want affordable housing options near jobs, transit, and walkable centers of activity. In addition, the majority of older (65+) Americans want to age in their current homes.
- **Sense of place matters!** Placemaking recognizes that cities/towns should be people-oriented with walkable destinations, great public spaces, and opportunities for social and economic activity. Even if a building or place is beautifully designed, it will not be successful unless it has four key attributes—sociability, access and linkages, uses and activities, safe/attractive image and comfort (Project for Public Spaces).
- **A community's appeal can drive economic prosperity.** Studies acknowledge the economic importance of place. Businesses are drawn to convenient locations that attract people, provide a compelling experience, and are destination-oriented.

So, a complete community may be defined as one that considers transportation options and connectivity, mixed and efficient uses of land, healthy environments, job growth and business diversity, and an involved citizenry that helps define a community's unique character and sense of place.

One important principle that was reinforced during the course of this project is that there is not a one-size-fits-all prescription for a complete community. While stakeholders in each pilot community developed a consensus on the five elements of a complete community, additional characteristics were identified that were specific to each pilot community and incorporated the perspectives of diverse stakeholders. Outcomes from the first two workshops drove the need to move from a generic "Planning for Complete Communities in Delaware" approach to a more community-driven process that reflected each pilot community's vision and issues of concern and would build on plans or initiatives already underway. As a result, themes emerged for each pilot community that formed a basis for a stakeholder-driven "path forward" to become a complete community. The following Town of Elsmere path-forward considerations were identified during the course of the project and are categorized by the five elements of a complete community.

Town of Elsmere's Path Forward to Become a Complete Community

The following are considerations for implementation in the Town of Elsmere. By implementing the below considerations, the Town of Elsmere can become more attractive and vibrant in the future. The considerations are categorized based on the five previously defined elements of a complete community.

Complete Streets

Repair B&O Lane road conditions, bridge, and flooding issues. The Town of Elsmere should continue coordination with the federal government, New Castle County, DelDOT, CSX, and the local business owners on the roadway to resolve existing road-quality and bridge-deterioration issues.

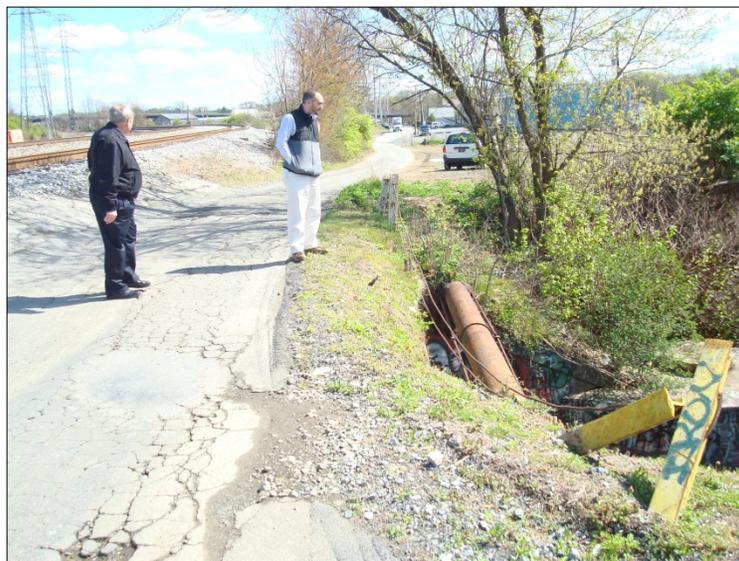
Further coordination is needed regarding potential flooding issues that could be rectified by installation of drains, swales, or basins to divert water away from the roadway in the event of flooding.

During stakeholder workshops, business owners operating on B&O Lane complained about the poor road conditions and cited them as an impediment to their business operations. Business owners on B&O Lane are very frustrated with the existing situation and would like the issue to be resolved as soon as possible. The following images show conditions on B&O Lane taken by IPA staff in 2012:

Figure 18. Major Erosion Problems Under B&O Lane Bridge



Figure 19. Poor Road Conditions and Exposed Utility Pipes at Bridge on B&O Lane



Coordinate with DelDOT on sidewalk repair issues identified by IPA staff during field inventories. The below table provides location number and damage description for 24 locations identified during fieldwork in Elsmere. Reference the Elsmere Sidewalk Inventory map in Appendix B2 for numbered locations.

Table 1. Sidewalk Damage Inventory

Issue #	Description
1	Damaged, cracked, missing a lot of stone
2	Large hole in center, very cracked
3	There is no sidewalk
4	Wearing down of sidewalk (picture involved)
5	All of Harvey Place is ripped up on this side
6	Sidewalk is missing between houses 304 and 308 Southern Road
7	Sidewalk tile is caved in
8	Degradation and holes
9	Prior fixed sidewalk needs repair with large cracks and shallow holes
10	Missing sidewalk
11	Degradation
12	Large bump in pavement
13	Deteriorated sidewalk in front of 1345-1347 Sycamore Avenue
14	Huge crack on the corner
15	Very uneven sidewalk
16	There is deterioration on the stretch of sidewalk outside of the house

Below are two examples of some of the sidewalk damage observed in Elsmere.

Figure 20. Broken and Uneven Sidewalk Segments



Figure 21. Dislocated Sidewalk Segments



Examples of sidewalk ordinances are listed below for reference in evaluating potential code changes to improve the sidewalk network in Elsmere.

- **Rockville, Md.**

Sidewalk Prioritization Policy:

www.rockvillemd.gov/transportation/pdf/SidewalkPrioritizationPolicy.pdf

- Conserves money and resources while promoting pedestrian safety
 - “Missing Sidewalk”: any existing/potential pathway that if hard-surfaced would be routinely used by pedestrians
 - Prioritizes building of sidewalks based on a numerical score (sum of traffic conditions and a utility score) and determines what sidewalks should be built short term vs. long term
- Factors:
 - Pathway’s proximity to public transportation, schools, public recreation
 - If filling in missing pathway would give pedestrians easier access to other paths
 - Missing pathway is in an area of high pedestrian activity
 - If the missing pathway is on a major or minor street

- **Zoning Code Ordinance for Rockville, Md.:**

www.rockvillemd.gov/zoning/Ordinance06-06-11/ZoningOrdinance06-06-11-Article17.pdf

- Purpose: encourage safe environment for pedestrians, create a visually attractive landscape, connect to surrounding areas, and promote commerce.
- Sidewalk Guidelines: *minimum of 15 feet:*

- Buffer tree lawn: 7 feet
- Actual Path: 6 feet
- Safety Area: 2 feet
- Installation: Decisions of where to build sidewalks are based on the sidewalk prioritization–policy evaluation (above) and also the plans of Rockville’s Planning Commission.

- **Dover, Del.**

Sidewalk Zoning Ordinances for Dover, Del.:

- Most streets should have a width of five feet unless the distance from curb to building line is less than five feet. In this case, they shall extend from building line to the curb.
 - On State Street, from Lookerman Street to the Dover Green, from the building line to the curb and on all other parts of the street, not less than six feet wide
 - Much wider in places of recreation
 - (Code 1968, § 28-20; Code 1981, § 19-56)
- Location:
 - Sidewalks must be located on streets in the city that:
 - Have a distance from the building line to the curblines of at least ten feet.
 - Have a distance from the building line to the curblines of at least seven feet but not more than ten feet. The outside edge of the sidewalk shall be located two feet from the curblines.
 - Have a distance from the building line to the curblines of less than seven feet with the inner edge of the sidewalk at the building line extending outward toward the curb.

- **Westerly, R.I.:**

Zoning Ordinances Pertaining to Installation of Sidewalks

City of Westerly, Code A261-30(B)(15)(a). www.ecode360.com/7755625#7755640

- Sidewalks required to be installed:
 - On at least on one side of any newly planned development.
 - If development is located a mile or less away from private or public school.
 - If development has reasonable proximity to public recreational areas.

- If the development is in a place of heavy traffic congestion with risk of pedestrian endangerment.

Consider identified lighting fixture preferences when deciding on new lighting infrastructure. Stakeholders in Workshop #3 were asked to rank lighting-fixture preferences. Stakeholders preferred the following Delmarva styles in order: Traditionaire, Arlington, Granville with Ribs, and Granville.

Report light fixture outages to Delmarva Power. IPA staff conducting a nighttime-lighting inventory and found the following light fixtures to be out:

Table 2. Lighting-Fixture Outages in Elsmere

Light Inventory Number	Delmarva Lamp Number
68	4410B3304751843199
66	806/247524
65	4572043226
62	4753543297
113	68021244751043006

In addition to outages, IPA staff noted that Second Street, N Street, J Street, and Carolyn Street were all poorly lit streets. Streets such as Dover, Birch, and Linden have trees obstructing streetlights.

Stakeholders identified that sidewalks are needed at Vilone Park. Currently, the entrance road to Vilone Park does not have sidewalks on either side. The surrounding residential community does have sidewalks. Vilone Park is heavily used, especially during baseball season, as it has two baseball fields used by the local Little League.

Review IPA’s publication, Complete Streets in Delaware: A Guide for Local Governments (www.ipa.udel.edu/publications/CompleteStreetsGuide-web.pdf), particularly Chapter 7, and work with DelDOT to provide safe, equitable, and accessible transportation to all users and modes. The IPA Complete Streets Implementation Checklist can provide a foundation to achieve complete streets by evaluating the extent to which Elsmere’s vision, plans, policies, design standards, and facility-maintenance practices are consistent with complete-streets principles.

Address barriers to walkability. Identify where sidewalk gaps are present and develop a plan to install new sidewalks to correct gaps, as funding permits.

Ensure that the city has a current and up-to-date ADA transition plan.

Ensure that property owners are aware of Elsmere Code, Chapter 192 to maintain, repair, or replace sidewalks and for keeping sidewalks in good repair, safe condition, free of vegetation and hazards. Review recommendations in Chapter 12 of IPA's *Winter Maintenance of Pedestrian Facilities in Delaware: A Guide for Local Governments* (www.ipa.udel.edu/publications/SnowRemoval.pdf).

Efficient Land Use

Allow for higher-density development. To attract new investment in Elsmere, density restrictions on several zoning districts may need to be revisited. By allowing for higher densities, the business case for investors interested in redeveloping older, deteriorated properties in Elsmere improves greatly.

Currently, apartment districts allow for higher density, but all other zoning districts restrict density to no more than 2.5 units per acre or 1 establishment per acre.

Allowing for higher densities in the Community Commercial District might offer an initial opportunity to enhance Elsmere's Kirkwood Highway corridor. During stakeholder workshops, many in attendance expressed a desire for more destinations in Elsmere and for more commerce and activity downtown. By increasing allowable density along Kirkwood Highway, the Town of Elsmere could attract private-sector investment for new commercial enterprises that would enhance downtown.

While the vast majority of the land area in Elsmere is in residential use, less than 15 percent is used for commercial, industrial, or office purposes. By allowing for more units per acre in Community Commercial areas, residential land uses in Elsmere will be balanced by jobs and business-oriented land uses.

It may be optimal to set minimum, rather than maximum, densities. In this way, market forces can dictate density in town based on consumer demand for land uses of varying densities.

Make zoning district regulations more flexible and conducive for complementary land uses. Currently, Elsmere has no mixed-use zoning districts; as a result, land uses are segregated between residences and businesses. The Town of Elsmere Code does include Planned Unit Development (PUD) language, which allows for some mixed-use development; however, commercial development within a PUD is limited. In downtown Elsmere, allowing for a four-story building with residential units on the 2nd, 3rd, and 4th floors with retail on the ground floor might be a useful building type for creating a destination/attraction-based downtown setting.

Rather than adding new language to the Town of Elsmere Code, a loosening of allowable uses in existing zoning districts could be optimal.

Explore potential to develop parts of Fairgrounds Park. Open, buildable land in Elsmere is scarce, and, given Elsmere’s strong park network, it may be optimal at some point for the town to privatize land to allow for additional development in town.

Healthy and Livable

Consider the feasibility of investing in lighting for the new Elsmere dog park and Vilone Park. The new Elsmere dog park is popular with residents who not only desire daytime access to the park, but nighttime access as well. Vilone Park is also a popular town park, featuring two baseball fields used by the local little league.

Explore opportunities to improve the Joseph R. Walling Park. A general idea suggested by stakeholders was to build a skate park in Elsmere. Installing a skate park at the Joseph R. Walling Park may be an option to consider.

Consider converting Bryan Martin Park to a soccer field rather than black-top. Stakeholders noted that the children in the neighborhood often use the park to play soccer, not for black-top uses.

Inclusive and Active

Allow for on-street dining along side streets in Elsmere in close proximity to Kirkwood Highway and consider reducing minimum-setback requirements. On-street dining on Kirkwood Highway will not be possible given speed of traffic and other safety concerns. However, on-street dining along side streets leading away from Kirkwood Highway presents an opportunity to enhance Elsmere’s downtown atmosphere and encourage consumers to visit Elsmere and stay for extended periods of time. By giving consumers more reasons to stay and spend money in Elsmere, economic conditions in town can greatly improve to the benefit of all residents in Elsmere.

Incorporating build-to-line elements into the Elsmere Zoning Code could make conditions right for on-street dining to take shape. Redesigning the streetscape to include wide curb bump-outs on side streets would help improve safety for on-street dining; however, DelDOT would consider such projects on a case-by-case basis.

See below information about outdoor-dining ordinances passed by other jurisdictions:

- **Norwalk, Conn.: Outdoor Dining/Sidewalk Cafes Zoning Code**
www.generalcode.com/codification/sample-legislation/sidewalk-cafes#Norwalk
 - Only allowed (after receiving a permit) to have outdoor dining in zones specifically designated by Planning Commission. For Elsmere, outdoor dining could be implemented into Community Commercial Districts.
 - Some sample ordinances from Norwalk, Conn.:

- Outdoor dining may be located on public sidewalks adjacent to or abutting the indoor restaurant that operates the outdoor dining. Outdoor dining shall extend no further than the actual street frontage of the operating restaurant.
- Outdoor dining operation shall provide not less than five contiguous feet of sidewalk clear of obstructions to allow unimpeded pedestrian traffic.
- Seasonal operation of outdoor dining

- **Seaford, Del.: Outdoor Dining ordinances**

Seaford Zoning Code:

www.seafordde.com/pdfs/Code_Zoning_Ordinance_wjp_9-25-092.pdf

Chapter 15, Article 3, Section 15-29 A5. (General Commercial District, Uses by Right)

- Outdoor-eating areas must meet these requirements:
 - Submission of detailed site plan
 - Clearly defined and attractive visual boundaries that separate eating area from surrounding areas
 - Outdoor areas that are not connected to restaurant must have clear paths for safe pedestrian access and must be easily accessible to disabled.
 - No outside beverage bars
 - Capacity of outdoor area should not exceed 25 percent of indoor area capacity or 50 seats (whichever is lowest).

Evaluate the perception of Elsmere as a “speed trap.” Excessive ticketing was identified as an issue that may be negatively impacting Elsmere’s image. Business owners identified the inconvenient use of their parking facilities for radar enforcement, ticketing of incoming trucks delivering supplies to businesses, and ticketing of regular customers (detering them from coming back) as major problems impacting Elsmere’s image. Residents and business owners should open dialogue with the Elsmere police department to find solutions that keep Elsmere roads safe without hurting Elsmere’s image as a destination or inhibiting the operation of local businesses.

Sustainable and Resilient

Increase or lift the existing building height restriction of 35 feet. After reviewing various height scenarios during Workshop #3, stakeholders indicated that raising the height to approximately 50 feet—the equivalent of four stories—would be optimal. It is recommended that the Town of Elsmere consider lifting the height restriction beyond 50 feet to allow for future development and redevelopment that will attract larger employers, new residents, and new destinations. All zoning districts in Elsmere should be considered for the increase in height restriction. However, of highest priority should be Community Commercial–zoned properties along State Route 2 (Kirkwood Highway).

Since the Town of Elsmere is largely built-out, new development will have to be implemented vertically. The existing height restriction of 35 feet in Elsmere is not only unsustainable but a disincentive to investment in town. Located in densely populated New Castle County, adjacent to Wilmington, Elsmere will benefit greatly from creating a regulatory environment competitive with neighboring jurisdictions and communities.

Convene an Elsmere business stakeholder group to consider signage-law changes and zoning-code enforcement in Elsmere. During the public-engagement process, many Elsmere business owners identified Elsmere’s signage regulations as cumbersome and unpredictable. They noted difficulty working with zoning-code officials. Business owners were frustrated with slow permitting and what they felt were excessive restrictions on signage. To better understand business concerns and consider changes to the signage laws that would support local business growth, town officials should meet with business owners to foster mutual understanding and determine a path forward.

Create a Historic Overlay District. Stakeholders in Elsmere expressed interest in creating a Historic Overlay District downtown. This new overlay was also recommended in the Elsmere Comprehensive Plan adopted in 2010. See below examples of Historic Overlay District ordinances enacted:

- **Odessa, Del.: Ordinance 2011-01**
 - Any new structure’s appearance must be in keeping with the architectural style, scale, appearance and aesthetic of homes. Any new structure should complement and follow the architectural language of the street on which it is located.
- **Dover, Del.: City of Dover Code**
 - Planning Commission creates historic-district commission to make recommendations for the creation of historic zones and to make guidelines/recommendations for the preservation of approved historic zones. (Part II, Appendix B, Article X, Section 3.11)
 - Appointed by City Council, Dover residents
 - Two of the commissioners must be professionally trained in archaeology, history, architecture, historic preservation, etc.
 - Prevents degradation of historic districts by requiring architectural-review certificates to approve any modification or construction of a new or existing structure in designated historic districts.
- **New Castle County, Del.: Ordinances for Historic Areas**
www.ecode360.com/NE1562
 - Code (Part II, Chapter 230, Article VII, Section 230-50A): Created Historic Area Commission and the City Council appoints these members:

- An architect holding membership in the American Institute of Architects and having interest and knowledge in the protection, preservation, and restoration of the colonial aspects of the city, appointed by City Council
- A City resident having municipal voting privileges and appointed by City Council
- A City resident who is a member of the New Castle Historical Society selected by the Society, appointed by City Council
- A City resident having municipal voting privileges, appointed by the Mayor
- A Planning Commission member, appointed by City Council
- Historic Commission approves historic-area certificates out to modifications in the historic area that it deems compatible with the feel and conditions of the historic area. (Part II, Chapter 230, Article VII, Section 230-52)

The Delaware State Historic Preservation Office (SHPO) can provide municipalities in Delaware with technical assistance related to historic-preservation ordinances and policies. The Town of Elsmere, when considering this issue, should contact and cooperate with SHPO.

Appendices

Appendix A. List of Stakeholders

Appendix B. GIS Maps

B1. Elsmere Lighting Inventory

B2. Elsmere Sidewalk Inventory

B3. Elsmere Tree Canopy

Appendix C. References

Appendix A. List of Stakeholders

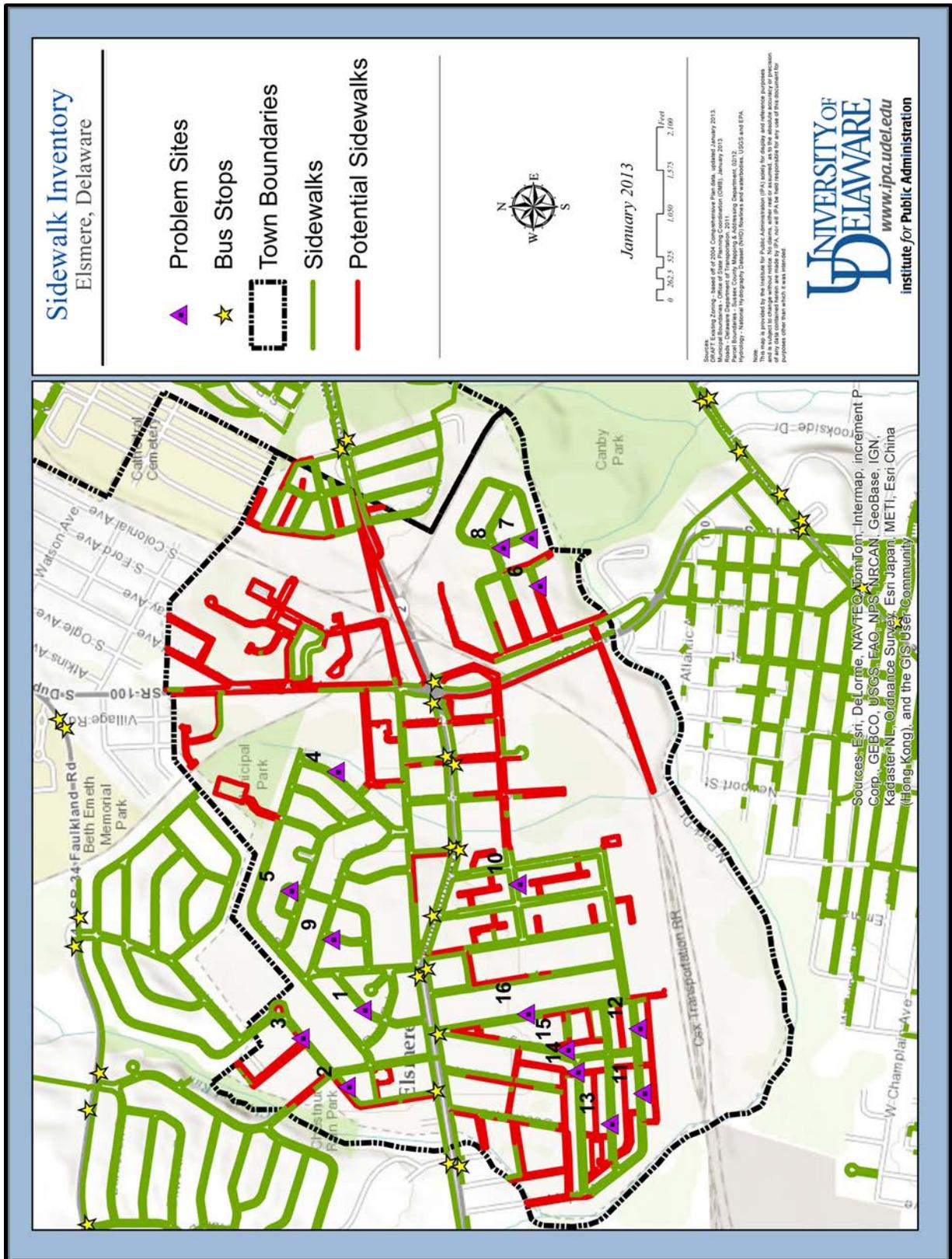
Name	Affiliation
Elaine Negley	Greenbrier Village Board
Diane Thompson	All Saints Catholic School
Klay D'Iorio	Greenbrier Village Board
Stanley Terry	Elsmere Business Association (EBA)
Laura Giles	Town of Elsmere
Marco Boyce	DelDOT
Robert Goerlitz	Elsmere Business Association
Herb Inden	OSPC
Ron Russo	Dogwood Hollow Civic Association
Mike Groome	Private Business Owner
Robert Kacperski	Town of Elsmere
John Giles	Town of Elsmere
Larry Mitchell	State Representative
Diana Poole	Town of Elsmere
Charles Lindell	Elsmere Planning Commission
Joann Personti	Town of Elsmere

Appendix B. GIS maps

Appendix B includes a series of maps that were produced for the Town of Elsmere by Nicole Minni, who works for IPA's Water Resources Agency. A preliminary version of these maps was used for the exercises in Workshop #3 (which were discussed previously). The input received from the stakeholders who attended Workshop #3 was mapped using GIS, the final hard-copy maps were delivered to Town Manager John Giles in October 2012, and the final maps can be found in this section of the Appendices.

Electronic GIS-map products from the Town of Elsmere Complete Communities project are the intellectual property of the University of Delaware. However, GIS maps and data associated with the Town of Elsmere Complete Communities project are available to the Town of Elsmere officials at an additional charge and can be delivered electronically by sending a written request to Nicole Minni (*nminni@udel.edu*). Use of all GIS maps and data created for the Town of Elsmere Complete Communities must acknowledge the University of Delaware's Institute for Public Administration.

Appendix B2. Elsmere Sidewalk Inventory



Appendix C. References

- AARP Public Policy Institute (2005). Livable communities: an evaluation guide. Retrieved from http://assets.aarp.org/rgcenter/il/d18311_communities.pdf
- AARP Public Policy Institute (May 2009). Planning complete streets for an aging America. Retrieved from <http://assets.aarp.org/rgcenter/ppi/liv-com/2009-12-streets.pdf>
- AARP Public Policy Institute (Nov. 2010). Home and community preferences of the 45+ population. Retrieved from <http://assets.aarp.org/rgcenter/general/home-community-services-10.pdf>
- American Institute for Architects (2011). 10 principles for livable communities. Communities by Design. Retrieved from <http://www.aia.org/about/initiatives/AIAS075369>
- APA (2012). Characteristics and guidelines of great neighborhoods. Great Places in America. Retrieved from <http://planning.org/greatplaces/neighborhoods/characteristics.htm>
- APA (2012). Characteristics and guidelines of great streets. Great Places in America. Retrieved from <http://planning.org/greatplaces/streets/characteristics.htm>
- APA (2012). Characteristics and guidelines of great public spaces. Great Places in America. Retrieved from <http://planning.org/greatplaces/spaces/characteristics.htm>
- Arendt, R. (2010). Envisioning better communities – seeing more options, making wiser choices. APA Planners Press and the Urban Land Institute. Retrieved from www.greenerprospects.com/ebc_d.html
- Barrish, C. (April 6, 2006). Livable Delaware or miserable Delaware? *The News Journal*. Retrieved from www.delawareonline.com/article/20060406/NEWS/604060360/Livable-Delaware-Miserable-Delaware-
- Beck, C. M. (Aug. 2010). Healthy communities: the comprehensive plan assessment tool. Newark, DE: Institute for Public Administration, University of Delaware.
- Broberg, B. (Summer 2010) Generation y: The future generation of home buyers. *On Common Ground pp.4-9*. National Association of Realtors. Retrieved from <http://www.realtor.org/publications/on-common-ground/summer-2010-megatrends-for-the-decade>
- Broberg, B. (Winter 2011) Attracting the talent. *On Common Ground pp. 48-53*. National Association of Realtors. Retrieved from www.realtor.org/publications/on-common-ground/winter-2011-placemaking-and-economic-environment
- Broberg, B. (Winter 2011). Placemaking. *On Common Ground pp. 4-9*. National Association of Realtors. Retrieved from www.realtor.org/publications/on-common-ground/winter-2011-placemaking-and-economic-environment
- CalTrans (Jan. 9, 2009). Smart mobility framework: phase I report (revised). Retrieved from www.dot.ca.gov/hq/tpp/offices/ocp/documents/smf_files/Phase_I_Report_Final.pdf
- CalTrans (Feb. 2010). Smart mobility 2010: a call to action for the new decade. Retrieved from www.dot.ca.gov/hq/tpp/offices/ocp/documents/smf_files/SMF_handbook_062210.pdf
- City of Milford (2008). Comprehensive plan books 1-4. Retrieved from www.cityofmilford.com/index.aspx?NID=81
- City of Milford (2011). Milford south east master plan. Retrieved from www.cityofmilford.com/DocumentView.aspx?DID=693

Planning for Complete Communities in Delaware: Summary Report to the Town of Elsmere

- Commission on Community-Based Alternatives for Persons with Disabilities (Jul. 2007). A path forward: building a community-based plan for Delaware. Retrieved from www.udel.edu/cds/downloads/A_Path_Forward.pdf
- Dannenber, Frumkin, Jackson, editors. (Aug. 2011). Making healthy places: designing and building for health, well-being, and sustainability. Retrieved from <http://makinghealthyplaces.com>
- DeCoursey, W.J. (Dec. 2010). Delaware transportation operations plan and performance assessment – NCC. Newark, DE: Institute for Public Administration, University of Delaware.
- DeCoursey, W.J. (2005) Mobility friendly design standards summit II. Newark, DE: Institute for Public Administration, University of Delaware.
- DeCoursey, W.J. (Jul. 2011). Safe routes to school mode-share analysis. Newark, DE: Institute for Public Administration, University of Delaware.
- DeCoursey, W.J. (Nov. 2007). Transit-oriented design: illustrations of TOD characteristics. Newark, DE: Institute for Public Administration, University of Delaware.
- Delaware Cabinet Committee on State Planning Issues (Jan. 2008). Report to the Governor and the 144th General Assembly. Retrieved from http://stateplanning.delaware.gov/information/documents/ccspi_rep_01_03_08.pdf
- Delaware Cabinet Committee on State Planning Issues (Oct. 2010). Report to the Governor and the 146th General Assembly. Retrieved from http://stateplanning.delaware.gov/information/documents/2010_cabinet_committee_annual_report.pdf
- Delaware Department of Health and Social Services (Apr. 2010). Final report of the long term care housing taskforce. Retrieved from www.deha.org/LTC%20Housing%20TF%20Report%2004192010.pdf
- Delaware Department of Health and Social Services (2010). Physical activity, nutrition, and obesity prevention comprehensive plan. Retrieved from http://dhss.delaware.gov/dhss/dph/dpc/files/pano_comp_plan-09.pdf
- Delaware Department of Transportation (Oct. 2005). Delaware bicycle facility master plan. Retrieved from http://deldot.gov/information/projects/bike_and_ped/bike_facilities/pdfs/pdf-oct-05/full_report-oct2005_rev.pdf
- Delaware Department of Transportation (2010). Delaware long-range transportation plan. Retrieved from http://deldot.gov/information/pubs_forms/delrtp/delrtp_102510.pdf
- Delaware Department of Transportation (Jun. 2006). Delaware rail-to-trail and rail-with-trail facility master plan. Retrieved from http://deldot.gov/information/projects/rails_to_trails/pages/MASTER_PLAN_FINAL/MAIN_BODY/COVERS_Laminated.pdf
- Delaware Department of Transportation (Apr. 2011). Delaware state rail plan. Retrieved from http://deldot.gov/information/pubs_forms/srp/srp_final_draft_041211.pdf
- Delaware Department of Transportation (Jul. 2007). Delaware statewide pedestrian action plan. Retrieved from http://deldot.gov/information/projects/bike_and_ped/delaware_ped/pdfs/DE_Ped_Action_Plan_appendix.pdf
- Delaware Department of Transportation (Dec. 2009). Request for policy implement: complete streets policy. Retrieved from http://deldot.gov/information/pubs_forms/manuals/complete_streets/006_complete_streets_policy.pdf

Planning for Complete Communities in Delaware: Summary Report to the Town of Elsmere

- Delaware Office of State Planning Coordination (Jul. 2004). Delaware strategies for state policies and spending – Update.
- Delaware Office of State Planning Coordination (Apr. 2005). Livable Delaware: livable neighborhoods. Department of Environmental Resources and Environmental Control.
- Delaware Office of State Planning Coordination (Aug. 2005). Livable Delaware progress since 2001.
- Delaware Office of State Planning Coordination (Apr. 2005). Saving open lands, funding infrastructure: transfer of development rights, community development districts. Department of Natural Resources and Environmental Control.
- Delaware Office of State Planning Coordination (2010). State strategies for policies and spending. Retrieved from http://stateplanning.delaware.gov/strategies/2010_state_strategies.pdf
- Delaware State Senate (2001). SB 183: An act to amend Chapter 91 of Title 7 of the Delaware code. 141st General Assembly. Retrieved from <http://www.legis.delaware.gov/LIS/LIS141.NSF/vwLegislation/SB+183?Opendocument>
- Delaware State Senate (Sept. 2002). SB 353: An act to amend Title 17 of the Delaware code relating to a safe routes to school program. 141st General Assembly. Retrieved from <http://www.legis.delaware.gov/LIS/LIS141.NSF/vwLegislation/SB+353?Opendocument>
- Delaware State Senate (2003). SB 65: An act to amend Titles 9 and 29 of the Delaware code relating to land-use planning. 142nd General Assembly. Retrieved from <http://www.legis.delaware.gov/LIS/LIS142.NSF/vwLegislation/SB+65?Opendocument>
- Delaware State Senate (May 2011). SCR 13: requesting the Delaware Department of Transportation study the building and maintaining of non-motorized travel connections with and between cities and towns in Delaware and to link these connections to form uninterrupted networks for walking and bicycling. 146th General Assembly. Retrieved from <http://www.legis.delaware.gov/LIS/LIS146.NSF/vwLegislation/SCR+13?Opendocument>
- Delaware State Senate (Jul. 2011). SB 130: FY12 Bond and Capital Improvements Act of the State of Delaware. 146th General Assembly. Retrieved from <http://legis.delaware.gov/LIS/LIS146.NSF/93487d394bc01014882569a4007a4cb7/a8660565cc609dce852578a2006dbecd?OpenDocument>
- Dworsky, B. (Jun. 2007). Assessing the needs of Delaware’s older drivers. Newark, DE: Institute for Public Administration, University of Delaware.
- Edwards, G. (Oct. 2009). Delaware’s transportation agenda in the northeast corridor. Newark, DE: Institute for Public Administration, University of Delaware.
- Facciolo, C. (May 11, 2011). The silver tsunami. *Delaware Today*. Retrieved from www.delawaretoday.com/Delaware-Today/Health-and-Fitness/Spring-Summer-2011/The-Silver-Tsunami
- FHWA (October 28, 2011). Livability in transportation guidebook: planning approaches that promote livability. Retrieved from www.fhwa.dot.gov/livability/case_studies/guidebook/livabilitygb10.pdf
- Filisko, G.M. (Summer 2009). Spurring growth with transit-oriented development: developers are helping transform the way cities grow. *On Common Ground* pp. 20-23. National Association of Realtors. Retrieved from www.slideshare.net/REALTORS/smart-growth-on-common-ground-summer09

Planning for Complete Communities in Delaware: Summary Report to the Town of Elsmere

- Franzen, T. (Sept. 2009). Scoping out Delaware's role in facilitating business travel as it relates to the Wilmington Redevelopment Area, Wilmington Train Station, and New Castle County Airport, a working paper. Newark, DE: Institute for Public Administration, University of Delaware.
- Goldberg, D. (Summer 2010). Retrofitting the suburbs. *On Common Ground pp. 40-45*. National Association of Realtors. Retrieved from www.realtor.org/publications/on-common-ground/summer-2010-megatrends-for-the-decade
- Goldberg, D. (Winter 2011) Zoning for prosperity. *On Common Ground pp 36-41*. National Association of Realtors. Retrieved from www.realtor.org/publications/on-common-ground/winter-2011-placemaking-and-economic-environment
- Hunter, A.W. (May 2004). The certificate of necessity process evaluation: recommendations and findings. Newark, DE: Institute for Public Administration, University of Delaware.
- Hunter, A.W. (Jul. 2003). The future of school siting, design, and construction in Delaware. Newark, DE: Institute for Public Administration, University of Delaware.
- Institute for Public Administration (2010). *The 2010 update to the 2004 town of Elsmere comprehensive plan*. Town of Elsmere, DE. Retrieved from www.ipa.udel.edu/localgovt/municipalities/elsmere/elsmere_plan-update.pdf
- Jacobson, E., DeCoursey, W.J., & Rosenberg, N. (Feb. 2011). The Health-Impact Assessment (HIA): a useful tool. Newark, DE: Institute for Public Administration, University of Delaware.
- Jacobson, E., O'Hanlon, J., & Scott, J. (Jul. 2009). Leading tomorrow's senior centers. Issue brief 2. Newark, DE: Institute for Public Administration, University of Delaware.
- Jacobson, E., O'Hanlon, J., & Scott, J. (Jul. 2009). Senior centers and aging-related challenges. Issue brief 1. Newark, DE: Institute for Public Administration, University of Delaware.
- Kepner, A. (Jan. 20, 2006). Can old and new main streets get along? *The News Journal*. Retrieved from www.delawareonline.com/article/20060620/NEWS/606200358/Can-old-new-Main-Streets-get-along-
- Lehman, M. (Jul. 2007). Healthy and walkable communities. Newark, DE: Institute for Public Administration, University of Delaware.
- Markell, J. (Apr. 2009). Executive Order No. 6 - creating a complete streets policy. Retrieved from http://governor.delaware.gov/orders/exec_order_6.shtml
- Markell, J. (Aug. 2009). Executive Order No. 9 - the creation of an economic development ombudsperson and rapid response teams to promote prosperity and sustainable growth. Retrieved from http://governor.delaware.gov/orders/exec_order_09.shtml
- Markell, J. (Feb. 2010). Executive Order No. 18 - leading by example toward a clean energy economy and a sustainable natural environment. Retrieved from http://governor.delaware.gov/orders/exec_order_18.shtml#TopOfPage
- Markell, J. (May 2010). Executive Order No. 19 - Promoting healthy lifestyles and creating the council on health promotion and disease prevention. Retrieved from http://governor.delaware.gov/orders/exec_order_19.shtml
- Markell, J. (Apr. 2011). Executive Order No. 26 - Delaware strategies for state policies and spending. Retrieved from <http://regulations.delaware.gov/register/june2011/governor/14%20DE%20Reg%201401%2006-01-11.pdf>

Planning for Complete Communities in Delaware: Summary Report to the Town of Elsmere

- McCann, B. (Summer 2009). Complete streets 2009: Pedestrian and bike-friendly street successes. *On Common Ground* pp. 48-51. National Association of Realtors. Retrieved from www.smartgrowthamerica.org/documents/cs/media/cs-oncommonground-summer09.pdf
- McMahon, E., Phillips, B. and Mastran, S.S. (2004). Better models for development in Delaware: ideas for creating more livable and prosperous communities. Arlington, Va: Conservation Fund.
- Minner, R.A. (Mar. 2001). Executive Order No. 14 Regarding Gov. Minner's "Livable Delaware" Agenda. Retrieved from www.deldot.gov/information/pubs_forms/manuals/livable_delaware/pdf/exec_order_14.pdf
- Minner, R.A. (Jul. 2003). Executive Order No. 50: creating the governor's commission on community-based alternatives for individuals with disabilities. Retrieved from <http://web.archive.org/web/20081124194504/http://governor.delaware.gov/orders/webexecorder50.shtml>
- Minner, R.A. (Sept. 2004). Executive Order No. 59: implementing the strategies for state policies and spending. Retrieved from <http://web.archive.org/web/20081124194427/http://governor.delaware.gov/orders/webexecorder59.shtml#TopOfPage>
- Minner, R.A. (Mar. 2006). Executive Order No. 83: establishment of an advisory council on walkability and pedestrian awareness. Retrieved from www.deldot.gov/information/projects/bike_and_ped/delaware_ped
- Mitchell, I. (Aug. 2006). Building inter-metropolitan rail corridors. Newark, DE: Institute for Public Administration, University of Delaware.
- Moran, Stahl, & Boyer (2010). Economic development strategy. City of Milford, DE. Retrieved from www.cityofmilford.com/DocumentView.aspx?DID=638
- Moran, Stahl, & Boyer (2010). Resource profile for economic growth. City of Milford, DE. Retrieved from www.cityofmilford.com/DocumentView.aspx?DID=639
- Moreland, L. (Jul. 2005). Interurban rail transportation: Moving People and Goods in the 21st Century. Newark, DE: Institute for Public Administration, University of Delaware.
- Moreland, L. (Oct. 2003). The impact of federal transportation policy on the state of Delaware: TEA-21 reauthorization. Newark, DE: Institute for Public Administration, University of Delaware.
- Newman, J. (Summer 2010). Are people driving less: studies indicate a reduction in vehicle miles traveled. *On Common Ground* pp. 10-15. National Association of Realtors. Retrieved from www.realtor.org/publications/on-common-ground/summer-2010-megatrends-for-the-decade
- Newman, J. (Winter 2011). Transit options: Supporting communities during tough times. *On Common Ground* pp. 22-27. National Association of Realtors. Retrieved from www.realtor.org/publications/on-common-ground/winter-2011-placemaking-and-economic-environment
- Norris, G. (Unknown). Bicycle & pedestrian master plan: walk it – bike it – share it. City of Milford, DE. Retrieved from www.cityofmilford.com/DocumentView.aspx?DID=686
- O'Donnell, E. (Mar. 2006). Interconnectivity: a review of the current status and steps necessary to increase the level of interconnectivity of future development in Delaware. Newark, DE: Institute for Public Administration, University of Delaware.
- O'Donnell, E. (Jul. 2008). Sidewalks and shared-use paths: improving mobility and designing transit-ready communities. Newark, DE: Institute for Public Administration, University of Delaware.

Planning for Complete Communities in Delaware: Summary Report to the Town of Elsmere

- O'Donnell, E. (Sept. 2007). Sidewalks and shared-use paths: safety, security and maintenance. Newark, DE: Institute for Public Administration, University of Delaware.
- O'Donnell, E. & Moreland, L. (Dec. 2002). Traffic mitigation agreements: policy forum report. Newark, DE: Institute for Public Administration, University of Delaware.
- O'Donnell, E. & Patterson, T. (Jun. 2010). Transit Oriented Development (TOD): identification of optimal characteristics in Delaware. Newark, DE: Institute for Public Administration, University of Delaware.
- O'Donnell, E. & Scott, M. (Nov. 2009). Improving freight movement in Delaware central business districts. Newark, DE: Institute for Public Administration, University of Delaware.
- Office of the Governor (Mar. 2001). Ruth Ann Minner and Lt. Gov. John Carney unveil "Livable Delaware" agenda to control growth.
- Office of the State Treasurer (Jul. 2007). Delaware facing forward. Retrieved from www.delawareonline.com/assets/pdf/BL8137585.PDF
- O'Hanlon, J. & Scott, J. (Aug. 2010). Healthy communities: the walkability assessment tool. Newark, DE: Institute for Public Administration, University of Delaware.
- Partnership for Sustainable Communities (June 16, 2009). Six livability principles. HUD, DOT and EPA. Retrieved from www.sustainablecommunities.gov/aboutUs.html#2
- Pruetz, R. (Aug./Sept. 2012) Planning: rural challenges, rural choices. APA Planners Press. Retrieved from www.planning.org/planning/default.htm
- Ryerson Masters of Urban Planning (Dec. 2010). Complete Communities final report. Retrieved from http://completenesscommunities.ca/draft_report/CC_Report_Final.pdf
- Scott, M. (Jun. 2009). Feasibility of bus rapid transit within the mid-Atlantic region. Newark, DE: Institute for Public Administration, University of Delaware.
- Scott, M. (Dec. 2007). Framing the issues of Paratransit services in Delaware. Newark, DE: Institute for Public Administration, University of Delaware.
- Scott, M., Boyle, M., Eckley, J., Lehman, M., & Wolfert K. (Aug. 2008). Healthy communities: a resource guide for Delaware municipalities. Newark, DE: Institute for Public Administration, University of Delaware.
- Scott, M., Calkins, A., & Coons, R. (Jul. 2010). Enhancing mobility to improve quality of life for Delawareans. Newark, DE: Institute for Public Administration, University of Delaware.
- Sexton, C.J. (Summer 2010). Promoting the active living benefits of walkable neighborhoods. *On Common Ground pp. 22-27*. National Association of Realtors. Retrieved from www.realtor.org/publications/on-common-ground/summer-2010-megatrends-for-the-decade
- Tachieva, G. (Sept. 24, 2010). Sprawl repair manual. Retrieved from <http://www.sprawlrepair.com/More.html>
- Urban Land Institute (Jun 2010). Moving the needle: regional coalitions as catalysts for sustainable development. Retrieved from www.uli.org/CommunityBuilding/~/_media/CommunityBuilding/SGAIN%20Rpt%20%2006%202010%20finalweb.ashx
- U.S. Environmental Protection Agency (Sept. 18, 2012). Smart Growth Illustrated. Retrieved from www.epa.gov/piedpage/case.htm

Planning for Complete Communities in Delaware: Summary Report to the Town of Elsmere

- U.S. House of Representatives (2001). HB 192: An act to amend Title 30 of the Delaware code relating to the realty transfer tax. 141st General Assembly. Retrieved from www.legis.delaware.gov/LIS/LIS141.NSF/vwLegislation/HB+192?Opendocument
- U.S. House of Representatives (2001). HB 255: An act to amend Title 9, Title 22, Title 29 of the Delaware code relating to land-use, comprehensive plans, and annexations. 141st General Assembly. Retrieved from <http://www.legis.delaware.gov/LIS/LIS141.NSF/vwLegislation/HB+255?Opendocument>
- U.S. House of Representatives (Jul. 2002). HR 90: Creating a commission to assess and make recommendations on community-based alternatives for person with disabilities. 141st General Assembly. Retrieved from www.legis.delaware.gov/LIS/LIS141.NSF/vwLegislation/HR+90?Opendocument
- Van Gleson, J. (Summer 2010) Retiring to your home: aging in place support groups provide seniors the option to remain in their current neighborhoods. *On Common Ground pp. 46-51*. National Association of Realtors. Retrieved from www.realtor.org/publications/on-common-ground/summer-2010-megatrends-for-the-decade
- Victoria Transportation Institute (Sept. 10, 2012). Comparing smart growth and sprawl. Retrieved from www.vtpi.org/tdm/tdm38.htm
- Victoria Transportation Institute (Jun. 17, 2011). Community livability. Retrieved from www.vtpi.org/tdm/tdm97.htm
- Warren, R., Athey, L., & Fasano, W. (Feb. 2004). Overview of mobility friendly design standards: a framework for Delaware. Newark, DE: Institute for Public Administration, University of Delaware.



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