Park Forest Growing Green

Park Forest
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Growing Green: **Park Forest Sustainability Plan**

Adopted May 14, 2012

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With technical assistance provided by the Chicago Metropolitan Agency for Planning and Center for Neighborhood Technology

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Central Park Wetlands viewing platform.

Section 1
Introduction

What is sustainability?

Finding a succinct and clear definition of "sustainability" can be a challenging task. As this Plan's public kickoff meetings demonstrated, sustainability means different things to different people, groups, and organizations.

The term "sustainability" is typically used in one of three ways:

> **Sustainability means meeting the needs of the present without compromising the ability of future generations to meet their needs.** (Brundtland Report, Our Common Future, 1987)
>
> **Sustainability requires that any public policy or investment meet certain environmental, economic, and social equity goals.**
>
> **Sustainability regards the total wealth of society as natural, human, and man-made capital that should be preserved or increased, in addition to financial wealth.** (CMAP Sustainability Regional Snapshot, 2007)

Another way to understand sustainability is through the "3 E's"—environment, economy, and equity. Sustainability can be thought of as the healthy interrelationship between these three areas. Balancing these three "pillars" of sustainability with the need to use resources more efficiently results in a sustainable community.

The Three "E's"

Source: Sustainability Planning Toolkit, ICLEI

What is a Sustainability Plan?

This Sustainability Plan is a road map for Park Forest to examine many different topic areas related to sustainability and the 3 E's. For the purposes of this Plan, five key themes have been identified as overarching categories: Planning and Design, Natural Systems, and Energy and Climate relate most directly to the environment, Economic Development relates most directly to the economy, and Equity and Social relates most directly to the equity of the Village.

Subtopics to be addressed within these major themes are:

Planning and Design

- **A. Development Patterns**
- **B. Transportation and Mobility**

Natural Systems

- **A. Open Space and Ecosystems**
- **B. Waste**
- **C. Water**

Energy and Climate

- **A. Energy**
- **B. Greenhouse Gases**

Economic Development

- **A. Green Economy**
- **B. Local Food Systems**
- **C. Municipal Policies and Practices**

Equity and Social

- **A. Education**
- **B. Community Health and Wellness**
- **C. Housing Diversity**
- **D. Arts and Culture**

Although the economy and equity are addressed within each Plan category, all topics relate back to the environment. For example, within the subtopic of Education, educational initiatives related to the sustainability of the natural environment are of primary consideration, not the overall functionality and performance of the Village's school system.

Park Forest's Sustainability Plan includes:

- A **sustainability assessment** to establish baseline conditions and compile existing programs and initiatives (see Appendix C).
- A series of **goals, indicators, and strategies** for each subtopic area as the plan for moving forward.
- A detailed **implementation strategy**.
- **Monitoring and reporting guidelines** to ensure that the goals of the Plan are realized.

Sustainability Plans are unique in that they typically include an emphasis on quantitative measures and data to assess existing conditions and establish targets for improvement. Baseline indicators (quantitative measures of existing conditions) and target indicators (corollary quantitative measures for the Village's goals) were developed for each subtopic area to give the Village a way to measure its progress into the future. Both Village monitoring of these indicators and reporting back to the community are important to ensure that Park Forest is achieving its goals and increasing resident awareness of sustainability-related issues.

Why does Park Forest need a Sustainability Plan?

Park Forest has a history of promoting sustainable living and development, from the long-running farmers' market in DownTown to the compact footprints of its housing stock to the Central Park Wetlands restoration project. The Village also has a progressive history of fostering racial, cultural, and economic diversity and cohesion. To strengthen its sustainability, the Village seeks a more cogent strategy for decision-making in this realm. This Sustainability Plan will serve to:

1. **Provide a road map for improving environmental, economic, and social conditions related to sustainability.**
2. **Bring together existing initiatives and conditions as a baseline for developing strategies and recommendations.**
3. **Raise awareness about sustainability in the community at large and encourage stakeholders to be involved.**
4. **Guide government officials in decision-making.**
5. **Help to shape the Village's sustainability-related identity and provide justification for related grants and awards.**

Relationship with the GO TO 2040 Comprehensive Regional Plan

The purpose of this Plan is to provide guidance for local decision-making, increase awareness of sustainability-related issues, and address community needs and desires in an effort to achieve a sustainable future. However, the Village is a part of the larger Chicago metropolitan economic region and both influences and is influenced by the region.

A summary of the recently released GO TO 2040 Regional Plan, prepared by the Chicago Metropolitan Agency for Planning (CMAP), is included in the Regional Context sub-section of I. Introduction. In addition to an overview of GO TO 2040's themes and policies, specific regional recommendations that are likely to have an impact on the content of Park Forest's new Sustainability Plan are identified.

GO TO 2040 states, "municipalities are critical to the success of GO TO 2040 because of their responsibility for land use decisions, which create the built environment of the region and determine the livability of its communities. The most important thing that a municipality can do to implement GO TO 2040 is to take this responsibility very seriously." By undertaking a planning process to create a Sustainability Plan, Park Forest is taking responsibility for guiding its future, and demonstrating its commitment to helping shape the future of the region as well.

Planning Process

The planning process to create the Village's Sustainability Plan has lasted approximately one year and included multiple steps. The process has been crafted with assistance from Village officials and has been designed to include the input of Village residents, business owners, and others. The key steps in the planning process are illustrated in Figure 1.

Public Participation

Public participation is a cornerstone of the Sustainability Plan planning process. Including input from public workshops; one-on-one interviews with community leaders, government officials, and stakeholders; focus groups; and Plan Commission and Village Board meetings help to ensure that the Plan represents the goals, vision, and needs of the community to create a sustainable future. To that end, a Technical Advisory Committee (primarily comprised of Village staff) and a Citizens Advisory Committee (primarily comprised of community leaders) were established and involved throughout the planning process to gather feedback

In addition to these committees, Village residents, business owners, elected and appointed officials, and staff, a number of other participants and organizations have been involved throughout the process. These include Center for Neighborhood Technology (CNT), International Council on Local Environmental Initiatives (ICLEI), and CMAP.

Figure 1. Project timeline

Regional Context

History of Park Forest

The Village of Park Forest, incorporated on February 1, 1949, was designed by Philip Klutznick and American Community Builders as one of the largest planned communities in the country (second only to Levittown, New York). Park Forest was intended to accommodate veterans returning home from World War II. The Village was planned cohesively with both automobiles and pedestrians in mind. Neighborhoods were organized around open space, schools, churches, and commercial nodes to ensure that residents could easily meet their daily needs on foot.

Park Forest was also home to one of the nation's first regional shopping malls, known as Park Forest Plaza. The mall was developed in the early 1950s by the Klutznick and Manilow families, and was a successful commercial enterprise in the Village for 25 years (see image). Anchors included Sears, Goldblatt's, and Marshall Fields. However, Park Forest Plaza encountered tough competition when Lincoln Mall opened in 1973 at a major intersection off the highway in neighboring Matteson. Park Forest Plaza's central location in the heart of the community was ideal from a local planning perspective, but its lack of proximity to major highways and arterial streets resulted in reduced visibility and, therefore, reduced patronage. The Plaza soon fell into disrepair.

The Village purchased the vacant mall in 1995 with the intention to turn it into a more traditional, mixed-use downtown. After the creation and adoption of a DownTown Master Plan in 1997, the Village moved quickly to make the plan a reality, with major activities including:

- Construction of Main Street to connect Orchard Drive with Western Avenue.
- Renovation of storefronts in a traditional style.
- Creation of a Village green.
- Reduction of the overall amount of commercial space.
- Increase in the number of housing units and density near DownTown. (Source: DownTown Plan)

Park Forest is also well known for its diverse housing stock. The majority of Park Forest's housing was built between its incorporation and 1960; this era primarily included the creation of ranch-style single-family homes and townhomes. Higher density housing was located near Park Forest Plaza. Although most of the townhomes were originally rental properties, in the 1960s 1,996 of those units were converted to owner-occupied, cooperative housing. The cooperative developments are one of the defining characteristics of the Village today. In addition, as part of the redevelopment of DownTown, 65 new single-family homes were built adjacent to DownTown in what is called Legacy Square. These homes are more modern in appearance than the vernacular architecture, and also offer slightly larger footprints than the smaller, post-war homes that comprise the majority of the Village's housing stock.

Park Forest Plaza, one of the nation's first shopping malls and the current site of DownTown Park Forest (at left) (source: Village of Park Forest); Co-op housing in Park Forest (below).

Image and Culture

The Village is well-known for a variety of characteristics, such as being a planned community, being the site of one of the first shopping centers in the country, having a diverse housing stock, and supporting and attracting high quality arts and culture institutions. The fact that the Village, from the outset of its development, has incorporated what are being labeled today as "sustainable" development patterns - a strong core of commercial surrounded by higher density housing, with neighborhoods having proximate access to daily needs - sets it apart from typical suburban development patterns seen in other parts of the region. Another defining trait of Park Forest is that its residents embrace and celebrate economic, racial, religious, and social diversity as an asset. As such, two key visions related to image and culture were identified by Village stakeholders during the public kickoff meetings, including: (1) a desire to build upon the Village's unique identity as an inherently sustainable community and (2) a will to preserve and enhance the Village's diversity.

Regional and Sub-regional Context

Park Forest lies on the southern edge of the Chicago metropolitan area, approximately 35 miles south of the Chicago loop, and is situated in southern Cook County and northern Will County. The Village is bordered by Olympia Fields to the north, Chicago Heights to the east, University Park to the south, and Richton Park and Matteson to the west. There are also unincorporated lands around the Village's boundary.

Park Forest is located about five miles east of Interstate 57, adjacent to commuter rail. U.S. Highway 30 (Lincoln Highway) runs along the northern boundary of Park Forest and links the Village with I-57 as well as Chicago Heights, Matteson, and Olympia Fields. The Metra Electric District line runs to the west of Park Forest, with the 211th Street station located within the Village and the Matteson and Richton Park stations just outside of its boundary.

Regional forecasts performed by CMAP indicate that Park Forest is projected to grow by 30 percent by 2040. By contrast, Park Forest's neighbors are projected to grow exponentially: University Park by 296 percent, Richton Park by 117 percent, Crete by 113 percent, and Matteson by 41 percent. This reflects the fact that the majority of land in Park Forest is currently developed and will be unable to accommodate the kind of population growth that is going on in adjacent communities. However, the Village can capitalize on development opportunities that come its way via the subregion's influx of population.

There are commercial and retail locations in town that serve some of the needs of residents, such as within DownTown, along Western Avenue, in the business park, and in nodal locations within residential neighborhoods. However, the Village has experienced high vacancy rates among these properties, with about 38 percent of all commercial properties standing vacant. This has led many residents to shop in neighboring communities like Olympia Fields and Matteson.

Figure 2. Regional and sub-regional context

Figure 3. Park Forest Context

Park Forest and GO TO 2040

The Chicago Metropolitan Agency for Planning is the official regional planning organization for the northeastern Illinois counties of Cook, DuPage, Kane, Kendall, Lake, McHenry, and Will. CMAP developed and now guides the implementation of GO TO 2040, metropolitan Chicago's first comprehensive regional plan in more than 100 years. To address anticipated population growth of more than 2 million new residents, GO TO 2040 establishes coordinated strategies that help the region's 284 communities address transportation, housing, economic development, open space, the environment, and other quality-of-life issues. The plan contains four themes and 12 major recommendation areas:

Livable Communities

1. **Achieve Greater Livability through Land Use and Housing**
2. **Manage and Conserve Water and Energy Resources**
3. **Expand and Improve Parks and Open Space**
4. **Promote Sustainable Local Food**

Human Capital

5. **Improve Education and Workforce Development**
6. **Support Economic Innovation**

Efficient Governance

7. **Reform State and Local Tax Policy**
8. **Improve Access to Information**
9. **Pursue Coordinated Investments**

Regional Mobility

10. **Invest Strategically in Transportation**
11. **Increase Commitment to Public Transit**
12. **Create a More Efficient Freight Network**

GO TO 2040's recommendations relate to several of Park Forest's strengths and opportunities.

- Link transit, land use, and housing
- Address greenhouse gas emissions
- Protect and enhance water, natural resources, and green infrastructure
- Promote water and energy conservation and efficiency
- Promote local food systems

Many of the above recommendations are already being addressed to a certain extent within the Village, from the 211th Street Transit Oriented Development study, to the restoration of Central Park wetlands, to the Village pilot programs that have been undertaken related to water and energy (such as the solar hot water system at the Aqua Center and the rain barrel program).

Previous Plans, Studies, & Reports

Strategic Plan for Land Use and Economic Development

The Village's Strategic Plan, adopted in 2008, functions as its Comprehensive Plan, in combination with the DownTown Master Plan and 211th Street Metra TOD study. The document identifies residential, commercial, and employment opportunities for the Village and implementation strategies to accomplish goals. In addition, the Plan establishes six redevelopment sub-areas that will be the primary focus of the Village's redevelopment efforts over the next 15 years. The six sub-areas and their proposed uses include:

1. **DownTown gateway parcels** - mixed-use and higher density residential development. Commercial development along Western Avenue.
2. **Sauk Trail Corridor** - commercial nodes and condominium development at three key intersections along the Corridor. Gateway recommendations on either end of Sauk Trail.
3. **Norwood Square Shopping Center** - primarily commercial redevelopment along Western, with limited institutional and employment uses.
4. **Park Forest business park** - commercial, industrial, and employment uses.
5. **Western Avenue annexation area** - a potential future annexation area that could accommodate mostly employment uses, but also multifamily, single-family, and small commercial nodes.
5. **Eastgate neighborhood** - new townhouses and single-family homes, and renovation of existing homes.

DownTown Master Plan and Update

Park Forest Plaza was built in the early 1950s and was the region's first shopping mall, anchored by Sears, Marshall Fields, and Goldblatt's. At its outset, the mall was wildly popular but over time its success dwindled and its owners eventually allowed it to become blighted and tax delinquent. The Village purchased the Plaza in December of 1995 with a vision to transform the area into a traditional, mixed-use downtown. The Village adopted a Master Plan for DownTown Park Forest in April of 1997, which was followed by an update to that plan in 2002. The Chicago Chapter of the Urban Land Institute and the Campaign for Sensible Growth also co-sponsored a Technical Assistance Panel in 2003 to make recommendations about how the Village could augment the viability of DownTown.

At this point in time, the recommendations from the Master Plan and the Technical Assistance Panel have nearly all been implemented. Although there are still parcels awaiting redevelopment, DownTown is now characterized by a completely different development pattern, with storefronts built up to the sidewalk, pedestrian access, an interconnected street system, and a mix of land uses. The Strategic Plan for Land Use and Economic Development builds upon the recommendations of the DownTown Master Plan to affirm that future redevelopment should continue in the same vein, emphasizing higher intensity mixed-use and residential uses. These recommendations are supportive of sustainability in that they decrease dependence on automobiles to meet daily needs, reducing vehicle miles traveled, and build community.

Vision for DownTown Park Forest (Source: DownTown Master Plan).

211th Street Metra Station Transit Oriented Development (TOD) Study

The 211th Street Metra station is within the Village boundaries of Park Forest, Matteson, and Olympia Fields. The station currently functions primarily as a park-n-ride for commuters but is not capitalizing on its economic development potential. This study looks at the transit oriented development (TOD) redevelopment opportunities for the three municipalities within 1/2 mile of the station (also referred to as the station area). For Park Forest, the station area has three major redevelopment parcels, all along Lincoln Highway/US Highway 30 directly adjacent to the station. The three parcels consist of a commuter parking lot and two vacant former car dealerships. These parcels are considered underutilized due to their low intensity of uses and large amount of surface parking.

The overarching goals of the study are to establish a welcoming gateway for the three communities, create better neighborhood connections to the station, and encourage mixed-use development in the station area. Specific to Park Forest, recommendations in the study include converting the three opportunity sites to mixed-use commercial and multifamily residential uses. There are also recommendations related to modernizing the 211th Street station and making the streetscape more pedestrian friendly. The three Villages are undertaking an Implementation Study to create amendments to municipal development regulations and corridor design guidelines, determine which financial incentives would assist in the Plan's implementation, and develop a financial analysis and pro forma.

Homes for a Changing Region: Phase IV

Homes for a Changing Region (*Homes*) is a multi-phase initiative undertaken jointly by the Metropolitan Mayors Caucus (MMC) and Chicago Metropolis 2020 (CM 2020). CMAP and the Metropolitan Planning Council (MPC) have also recently participated in *Homes*.

The goal of the project is to provide communities in the Chicago metropolitan region with in-depth housing analysis that would play a key role in enabling them to plan effectively for the future housing needs of citizens. In Phase 1 of *Homes*, MMC, MPC and CMAP worked with Fregonese Associates, a private consulting firm, to project the housing supply and demand in the Chicago metropolitan region to identify imbalances that would impact the regional housing market, and to provide recommendations that address these imbalances at the local, regional, and state levels.

The *Homes* study for Park Forest was completed in January 2012.

Thorn Creek Watershed Based Plan

In 2005, the Northeastern Illinois Planning Commission, through funding provided by U.S. Environmental Protection Agency, developed the Thorn Creek Watershed Based Plan. Park Forest is a part of this watershed, although only minute portions of Thorn Creek proper fall within the municipal boundaries. Thorn Creek's water quality has been declining over the past several decades due to increased development in the subregion. The increased urbanization of the area has resulted in increased pollutant load from stormwater runoff, which has caused degraded habitat for aquatic communities. Goals for the plan from watershed stakeholders included protecting and restoring aquatic and terrestrial habitat, protecting and enhancing groundwater quality and quantity, and reducing flooding. A major recommendation of the Plan includes implementing lot level best management practices (BMPs) to retain stormwater on-site, an item that would best be managed at the municipal level.

Renewing Will County

Will County is currently in the process of updating and greening its zoning and building codes through an Energy Efficiency and Conservation Block Grant (EECBG). The EECBG program goals are to reduce emissions, reduce energy use, implement energy efficiency measures, and create and retain jobs. The County is undertaking this task as part of implementing its Will County Long Term Energy Efficiency and Conservation Plan and its Land Resource Management Plan. The revisions to the ordinance will make it easier to use and update it to reflect current standards. The zoning and building codes will be updated to promote energy efficiency in buildings and consider renewable energy opportunities, such as geothermal, and wind turbine and solar panel installations.

Demographic Profile

To gain insight into the market and demographic dynamics that impact the Park Forest community, data from the U.S. Census was gathered for analysis. Data discussed in this section comes from the 2000 U.S. Census, 2010 U.S. Census (when available), and the 2005-2009 American Community Survey, all collected by the U.S. Census Bureau.

Park Forest can be characterized generally as a moderate income community, with significant pockets of middle-class and working-class family households. Park Forest's housing stock is a balanced mix of single-family homes and multifamily structures. The overwhelming majority of Park Forest's area is located in Cook County, with a small section located in Will County. For ease of comparison, Park Forest demographic data is compared with the region at large. Analysis of U.S. Census and American Community Survey data yields the following findings.

Park Forest's population dropped slightly in the last decade. Between 2000 and 2010, Park Forest's population declined by about six percent (from 23,462 to 21,975 residents). That figure is consistent with the slow to negative population growth of the region during the past decade. Since 2000, Cook County's population dropped by two percent, while region-wide, population grew by only one percent.

Park Forest underwent a shift in its racial and ethnic makeup in the last decade. At the start of the last decade white residents comprised the majority of Park Forest's population. However, by 2010, the number of white residents in Park Forest decreased by more than 45 percent and the number of black residents increased by nearly the same rate, making blacks the majority in the community. Park Forest has modest numbers of residents of other backgrounds; only around ten percent of residents report a background other than white or black.

The Village has increased its median household income in the last decade. Park Forest had a lower median income in 2009 than Cook or Will Counties ($48,069 versus $53,903 for Cook and $74,118 for Will). However, since 2000, the Village's median household income (in nominal dollars) has increased by almost five percent. In addition, it has gained in income brackets above $100,000.

Park Forest is similar in its age profile to the Chicago region. Across all age cohorts, Park Forest is within about three percent of the regional average. The largest differences are within the 20 to 34 age cohort, where Park Forest has less than the regional percentage, and the 50 to 64 bracket, where it has more than the region's average.

Table 1. Population and households

Measure	Park Forest			Region
	Count, 2010	Count, 2000	Percent Change	Count, 2010
Population	**21,975**	**23,462**	**-6.3%**	**8,431,386**
Households	**8,750**	**9,074**	**-3.6%**	**3,088,156**
Persons Per Household	**2.46**	**2.52**	**-2.4%**	**2.84**

Source: 2010 Census, U.S. Census Bureau.

Table 2. Age cohorts

Age Cohort	Park Forest		Region	
	Count	Percent	Count	Percent
Under 19 Years	**6,284**	**28.6%**	**2,346,937**	**27.8%**
20 to 34	**3,964**	**18.0%**	**1,790,049**	**21.2%**
35 to 49	**4,455**	**20.3%**	**1,807,886**	**21.4%**
50 to 64	**4,473**	**20.4%**	**1,534,488**	**18.2%**
65 to 79	**2,006**	**9.1%**	**679,470**	**8.1%**
Over 80	**793**	**3.6%**	**272,556**	**3.2%**
Total	**21,975**	**100.0%**	**8,431,386**	**100.0%**

Source: 2010 Census, U.S. Census Bureau.

Table 3. Employment statistics

Statistic	Park Forest Rate	Region Rate
Labor Force Participation	**12,224**	**4,374,448**
Unemployment	**11.2%**	**10.1%**

Source: Illinois Department of Employment Security.

Table 4. Race and ethnicity

Race/Ethnicity	Park Forest		Region	
	Count	Percent	Count	Percent
Black	**12,977**	**59.1%**	**1,492,847**	**17.8%**
Non-Hispanic White	**6,759**	**30.8%**	**4,483,433**	**53.3%**
All Hispanic	**1,407**	**6.4%**	**1,789,439**	**21.3%**
Other	**675**	**3.1%**	**139,567**	**1.7%**
Asian	**157**	**0.7%**	**500,198**	**6.0%**
Total	**21,975**	**100.0%**	**8,405,484**	**100.0%**

Source: 2010 Census, U.S. Census Bureau.

Table 5. Percent change in race and ethnicity, 2000-2010

Race/Ethnicity	Count, 2010	Count, 2000	Percent Change
Black	**12,977**	**9,144**	**41.9%**
Non-Hispanic White	**6,759**	**12,412**	**-45.5%**
All Hispanic	**1,407**	**1,169**	**20.4%**
Other	**675**	**549**	**23.0%**
Asian	**157**	**188**	**-18.1%**
Total	**21,975**	**23,462**	**-6.3%**

Source: 2010 Census, 2000 U.S. Census; U.S. Census Bureau.

Table 6. Educational attainment

Attainment Level	Park Forest		Region	
	Count	Percent	Count	Percent
Some high school, no diploma	**2,319**	**13.8%**	**817,950**	**14.9%**
High school diploma or equivalent	**4,541**	**27.0%**	**1,352,056**	**24.7%**
Some college, no degree	**4,667**	**27.7%**	**1,074,241**	**19.6%**
Associate degree	**1,377**	**8.2%**	**356,740**	**6.5%**
Bachelor's degree or higher	**3,942**	**23.4%**	**1,873,198**	**34.2%**
Total	**16,846**	**100.0%**	**5,474,185**	**100.0%**

Source: 2005-2009 American Community Survey, U.S. Census.

Table 7. Household income, nominal dollars

Household Income	Park Forest		Cook County	Will County
	Percent, 2009	Percent, 2000	Percent, 2009	Percent, 2010
Less than $25,000	**22.6%**	**19.6%**	**23.6%**	**11.9%**
$25,000 to $50,000	**30.5%**	**33.1%**	**23.0%**	**18.8%**
$50,000 to $75,000	**23.1%**	**24.6%**	**18.3%**	**19.9%**
$75,000 to $100,000	**13.9%**	**13.8%**	**12.4%**	**17.3%**
$100,000 to $150,000	**7.8%**	**6.9%**	**12.8%**	**20.0%**
$150,000 to $200,000	**1.8%**	**1.1%**	**4.8%**	**7.3%**
$200,000 and over	**0.3%**	**0.1%**	**5.2%**	**4.9%**
Median Household Income	**$48,069**	**$45,922**	**$53,903**	**$74,118**

Source: 2005-2009 American Community Survey, U.S. Census.

Community Outreach

A primary goal of this planning process was to optimize community engagement, focusing on populations that have typically been underrepresented or harder to reach in previous planning processes. Particularly for the Park Forest Sustainability Plan project, the community outreach strategy aims to draw upon a wide variety of stakeholders with different understandings of and preferences about sustainability. The Village has an active core of citizens who participate in community events, civic groups, and other Village functions. The community outreach activities are designed to include other residents and stakeholders as well, such as students and young adults; multi-family property owners and residents; industrial business owners; and transit-dependent residents. This section provides an overview of the outreach activities that have occurred to date for this project.

Village Board and Commissions Meeting

Early in the planning process, the Village's Board of Trustees and members of various Village Commissions met to learn background about the Sustainability Plan and to provide feedback about what priorities should be addressed in the plan. Participants started by defining what "sustainability" meant to them, with responses centering around the idea of maintaining current quality of life without sacrificing the community's future. Next, the officials described the sustainability-related strengths of Park Forest, including:

- Parks and open spaces
- Arts and cultural activities
- Diversity of residents
- Transparent and proactive government
- Heritage as planned community
- Affordable and diverse housing stock
- Friendly spirit and community that is flexible to change

The officials also shared their greatest priorities for the future sustainability of the Village. These issues ranged across the "3 E's" of sustainability, from encouraging residential energy efficiency to connecting greenways to making the Village more bike- and pedestrian-friendly. There were other common interests, such as growing the Park Forest economic engine to create jobs and retain residents, and attracting a competitive grocery store while increasing local food options in the community.

Technical Advisory Committee Meeting

The Technical Advisory Committee (TAC) is a group comprised of Village department directors and other staff who have expertise in Village activities as well as the myriad of topics considered in the Sustainability Plan. This advisory body was established to provide technical expertise in reviewing components of the Plan and guiding its overall direction.

On July 12, 2011, the TAC held their first meeting, which consisted of a small-group discussion exercise during which participants shared their broad vision for the community's future, as well as specific goals within each of the plan's subtopics. There was a shared vision among many TAC members that Park Forest would become a model for a sustainable community — a leader in "green" initiatives and self-sufficiency that would be replicable in other communities across the region. Many of the topical goals related to the Village government being more accountable to the community's residents, from becoming a clearinghouse on energy-efficient practices and residential retrofitting to improving services like public recycling and environmental education. TAC meetings were also held on September 20 to discuss the draft Sustainability Assessment and on March 1 to discuss the draft Sustainability Plan.

Citizens Advisory Committee Meeting

To complement the professional expertise of the TAC, the Citizens Advisory Committee (CAC) was created to include a collection of active community residents, who can provide the perspective of concerned citizens on the complex breadth of topics in the Sustainability Plan. This advisory group was assembled to assure that the Plan aligns with residents' daily needs and long-term goals, provide additional review and input as Plan components are developed, and begin to build consensus for the Plan to encourage its implementation.

The first meeting of the CAC occurred at the Central Park Wetlands Discovery Center on July 13, 2011. Like the TAC meeting, the CAC participated in a small-group exercise during which the members shared their vision for the future of the village and their goals on specific topics. Much of the visioning conversation revolved around the need to educate and retain young adults in the community, from teaching the youth about the sustainable legacy of Park Forest to preserving community assets and creating more jobs to give youth a high quality of life in the future. The CAC expressed many goals about preserving the Village's open spaces, promoting community engagement in local food initiatives, and increasing the accessibility of the housing stock for seniors and people with disabilities. Another meeting was held on October 24 to present the draft Assessment to the CAC and begin to gather feedback.

Participants at the youth workshop.

The Mayor speaks during the public kickoff meeting in July.

Youth Workshop

Since planning for sustainability is inherently future-oriented, the Village organized a public meeting specifically geared toward children and young adults. The purpose of this workshop was to learn from Park Forest's youth population about what sustainability issues matter most to them. Over 120 participants — primarily summer program campers and counselors as well as high school students, ranging in age from 10 to 22 years old — attended the evening meeting on July 12, 2011.

Table facilitators from CMAP and the Center for Neighborhood Technology (CNT) worked individually with small groups of young people, asking a series of questions about what the participants currently do in their daily lives to be environmentally sustainable and what they envision for the future that relates to sustainability. Common responses included:

- Plant more trees.
- Ride bikes and take transit around the community.
- Conserve water at home.
- Create art projects to help talk about the environment.
- Shop at the farmers market and start small gardens.
- Pick up trash and participate in "clean-up" events.

Technical Stakeholder Interviews

To aid in the accurate treatment of various topics in this Sustainability Assessment, a variety of Park Forest stakeholders were interviewed about technical areas in the plan. This exchange of information occurred either in person, on the phone, or electronically, and every section of this report benefited from the expertise of at least one of the stakeholders.

Public Kickoff Meeting

In order to learn the perspectives and key concerns of the general public in Park Forest as related to the Sustainability Plan, the Village (with assistance from CMAP and CNT staff) held a public meeting on the evening of July 14, 2011. Over 60 residents and other stakeholders in the Village turned out to participate in a series of small-group discussions revolving around different topics to be addressed in the Plan.

After a brief presentation explaining the planning process, participants sat at tables in groups of 10 to 12 people while facilitators rotated around the room to discuss the five broad topics in the plan. Each table shared vision statements as well as goals for each topic of the Plan, and prioritized their top goals per topic at each table. Next, those high-priority goals were shared with the entire group, and were entered into an interactive keypad polling system, which allowed the participants to collectively rank the various goals. The residents prioritized goals ranging from improved transportation options to better water management practices to a commitment to reduce energy waste.

Local Business Meetings

In September 2011, CMAP staff spoke at a business breakfast in the Village about how business sustainability relates to the development of the Village's Sustainability Plan and "green" practices for businesses. Additionally, CMAP met with a smaller group of business leaders who own businesses in the Village's industrial park about their particular challenges and initiatives that relate to sustainability.

Public Workshop

As a follow up to the initial public meetings in July, a public workshop was held to gauge community opinion about potential strategies for each section of the Plan. On November 30, 2011, approximately 50 participants gathered at Dining on the Green in DownTown to discuss the proposed direction of the Plan, with facilitation from staff at CMAP and CNT. The meeting centered on the use of MetroQuest, a web-based engagement tool that was specifically catered to the needs of the project. The tool prompted participants to indicate whether they would like to include or exclude potential strategies from the Plan's development. Facilitated discussions explored topics such as whether to consolidate commercial uses along major roadways, how to ensure sustainable development without discouraging investment, and how to pursue the development of a community gardens program in the Village. The MetroQuest web tool was also available as an interactive website for three months after the public meeting, allowing over 120 additional residents and community stakeholders to share their thoughts on the potential strategies. Please see Appendix D for a further description of the MetroQuest results.

the proposed strategies for each related Plan section. Community stakeholders who had expressed interest in the specified topics gathered for small group conversations (ranging from three to around 15 participants). These discussions provided additional direction to the planning team about which strategies to emphasize, how to better address public concerns, and how to build on current efforts or momentum in the community.

Public Open House

On March 20, 2012, an open house meeting was held at Dining on the Green to give the general public an opportunity to review and comment on the draft Sustainability Plan. A total of approximately 30 participants attended the open house to learn about and discuss the draft Plan's recommendations. Display boards presented the draft strategies and their corresponding indicators, which were proposed to promote the Village's long-term sustainability. In particular, participants' comments expressed support for and interest in the Plan's recommendations on education, energy, and nonmotorized transportation.

Home (top) and choose strategies (bottom) pages of the MetroQuest web tool.

Vision Statements

The public outreach process yielded a variety of vision statements that pertain to what stakeholders would like to see for the future of Park Forest. These statements have helped to shape the direction and implementation items in the Plan.

To achieve a sustainable future, Park Forest will:

1. **Build on and promote what we already have (environmental initiatives, diversity, history, Village services, wealth of open space) to attract and retain residents.**
2. **Flourish economically. The Village will attract and retain stable local businesses and residents will support those businesses.**
3. **Develop and support strong community leaders, including youth.**
4. **Provide many relevant and engaging educational opportunities for sustainability-related topics.**
5. **Promote and further enhance the social and economic diversity of Village residents.**
6. **Become a "complete community" that is self-sufficient and meets the daily needs of all residents.**
7. **Become a model community for sustainable practices.**
8. **Improve the community's multi-modal network, with accessibility to different types of transit and enhanced walkability.**
9. **Improve community involvement and communication between residents and the Village government.**
10. **Take pride in homes, businesses, neighborhoods, and the community as a whole.**
11. **Continue to incorporate sustainability into municipal policies and the Village budget.**

Logan Park walkway.

Section 2
Plan Recommendations

This chapter of the Park Forest Sustainability Plan makes recommendations for actions to be taken by the Village, local residents and businesses, and others. It contains 14 sections divided by topic area, following the themes discussed in the introduction. Each of the 14 sections identifies goals, recommends strategies, proposes indicators by which to track progress, and discusses implementation and funding.

Many topics addressed in this Sustainability Plan do not fall neatly into one category. In several places in this chapter, references are made to other sections of the chapter where a strategy is discussed at greater length.

The 14 sections of this chapter are:

1. Development Patterns	24
2. Transportation and Mobility	30
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Figure 1A. Land use map

1. Development Patterns

Sustainable development patterns promote walkability (the ability to get to destinations on foot) and alternative modes of transportation to reduce the number of vehicle miles traveled and improve quality of life.

As a planned community, Park Forest inherently has many features of a walkable place, such as abundant access to open space and schools and relatively dense housing stock, particularly when compared with other suburbs. Features like these allow residents to meet some of their daily needs on foot or by bicycle instead of by car, reducing fuel consumption and air pollution.

Although the Village is a bedroom community, commercial and institutional uses were originally located to ensure that homes were within walking distance to daily needs, such as going to school, picking up groceries, or playing at a park. Today, most residents are still within walking distance of a park or school; however, because of high commercial vacancy rates, few enjoy walkable access to purchase goods and services. In addition, Village development regulations do not permit the mixed-use, pedestrian-friendly commercial development that is desired for key community centers, and are silent on many other pertinent sustainable development topics. The overall focus of the Development Patterns section recommendations is to encourage and facilitate green development that supports walkability and alternative modes of transportation.

Topic Area Goals

The following goals related to Development Patterns were identified and defined through the planning process. Each goal is addressed through one or more of the strategies outlined below.

1. Create policies and standards for sustainable new development.
2. Pursue transit oriented development and transit-supportive land uses in new development.
3. Place continued emphasis on density and infill development.
4. Change land uses from residential to commercial in strategic locations along major arterials to create neighborhood commercial nodes for walkability.
5. Ensure that all areas in the Village are pedestrian friendly and within walking distance to amenities (such as convenience stores).

Figure 1A. Walkable access to existing & potential commercial uses

Proposed Strategies

The following details the strategies proposed to achieve the identified topic area goals outlined above. Where appropriate, baseline and/or target indicators are also included as a means of monitoring progress. The baseline indicator is a quantitative measure that illustrates the existing conditions related to a strategy, while the target indicator represents a quantitative goal for the Village to strive toward related to the strategy. Further information related to the implementation of these strategies may be found in the Implementation Matrix to follow.

1. Update the Village's development regulations to require and/or incentivize sustainable development.

Target Indicator:
Update the Village's Zoning and Subdivision Codes by 2015.

The Sustainability Audit of Zoning and Subdivision Codes performed as part of this Plan (see Appendix B) identifies many sustainable code provisions that could be included in an update of the Village's development regulations. These provisions relate to zoning districts, permitted uses, subdivision requirements, parking, and vegetation. Some of the key recommendations from the Audit are outlined in this section. Depending on the priority level for different provisions, either requiring or providing incentives for various items may be appropriate. The code update should result in the majority of development occurring by-right instead of going through special review or the planned unit development process. This will create a more welcoming scenario for developers as well as a more predictable impact on the built environment, and reduce the staff time associated with plan review and negotiations.

2. Create a new walkable, mixed-use district for key areas.

Current Village zoning regulations do not include a mixed-use district that responds to the type of development desired for key locations, such as DownTown, the 211th Street Metra station area, and small neighborhood commercial centers. Successful mixed-use areas typically include building facades along the sidewalk to create an interesting pedestrian environment (as is currently the case in DownTown) and a mix of uses (such as residential above commercial). However, current regulations for the C-1 and C-2 commercial districts inhibit these development characteristics.

The update of the Village's development codes should include the creation of a new mixed-use district, to be permitted in key areas (DownTown, the 211th Street Metra station area, and small neighborhood commercial nodes as designated in the 2008 Strategic Plan). The district should require buildings to be located along the sidewalk, with parking in the rear. A vertical mixing of uses should be allowed but auto-oriented uses (such as auto service and repair shops and drive throughs) should be prohibited. Walkability-related features, such as clear glass storefronts, functional entrances along the street, and limited curb cuts, could also be considered as requirements.

Density versus vehicle travel for U.S. urban areas

Increased density tends to decrease per capita vehicle travel (Source: FHWA 2005).

Legacy Square embodies the characteristics of an "urban residential" district.

3. Create a new "urban residential" district that permits a variety of housing types adjacent to mixed-use areas.

Mixed-use and transit oriented areas benefit from a minimum residential density (nationally recognized as 6-8 dwelling units per acre as a minimum and around 12 dwelling units per acre as ideal), which helps to ensure that there is sufficient population to support the uses and services located there. This concept was recently illustrated in the Village with the construction of Legacy Square adjacent to DownTown, which has an average density of around 13 dwelling units per acre.

When amending its ordinances, the Village should create an urban residential district that permits a range of residential types, such as small-lot single family homes, townhouses, and multifamily uses, at a minimum average density of around 12 dwelling units per acre. This district may be mapped adjacent to DownTown, 211th Street Station, and designated areas of higher density housing in the 2008 Strategic Plan for Land Use and Economic Development. Typical residential setbacks currently range from 15 to 25 feet; the Village may want to consider reduced setbacks for this district.

4. Permit accessory units in single family districts.

The Village consists of many well-established neighborhoods but could benefit from increased density, which would help to support commercial uses. Existing single family uses in the Village, by and large, max out at around 6.1 dwelling units per acre, about half of the recommended minimum density of 12 dwelling units per acre to support commercial and transit uses. This minimum density can be achieved by permitting and promoting accessory dwelling units on existing residential lots, which would add density without changing appearance or bulk. The zoning code is currently silent on accessory dwelling units as such, but accessory structures have a maximum permitted height of 14 feet (which would not permit a granny flat above the garage). Standards should be created to permit accessory dwelling units in residential areas, and can specify such criteria as location (primary and/or accessory structure), number of units permitted, and allowed square footage.

5. Increase walkable access to commercial uses.

Target Indicator: Add 5 new neighborhood commercial tenants (per Figure 1A) by 2020.

The Sustainability Assessment found that while the Village's residents have excellent walkable access to institutional (educational) uses, walkable access to commercial uses could use improvement. Either as part of the zoning code update, or as the opportunity arises for commercial redevelopment, the Village should consider rezoning key parcels to commercial uses as outlined in the 2008 Strategic Plan (see Figure 1-a for potential commercial areas). It may be appropriate to apply the new mixed-use district outlined above to these new commercial areas to ensure pedestrian-friendliness.

In addition, the Village should consider permitting (but not requiring) the conversion of single-family homes to commercial uses in key locations (such as along Sauk Trail). This would increase resident access to commercial uses and enhance opportunities for home-based businesses. Regulations could stipulate that new commercial uses in such locations maintain the residential character of the area.

6. Update subdivision regulations to encourage walkable neighborhoods.

Several design considerations impact the walkability of a development, including the layout of lots, blocks, and streets; access to commercial, open space, and institutional uses; and, for residential subdivisions, the inclusion of a variety of housing types. The Village's update of its subdivision regulations should address these design features to ensure walkable neighborhood development (see Code Audit for full details). For instance, limiting block length to 800 feet (instead of the current maximum of 1,600 feet) would help to make walking and cycling more attractive and efficient and also cut down on emissions from vehicles. Also, creating street types that are appropriate to their context will help to define the public realm (see Transportation and Mobility chapter).

As noted in the previous strategy, walkable access to commercial uses is a potential area of improvement for the Village. To that end, the updated subdivision regulations should permit a limited amount of commercial space (i.e. 20,000 square feet) within residential subdivisions. The regulations can specify location of the commercial use on a corner parcel or intersection with a major street, maximum building footprint, permitted uses, and design requirements (if desired).

Finally, to ensure diversity in new housing stock, a variety of housing types, such as townhomes, small-lot single family homes, and mid-size single family homes, should be encouraged or required for new residential subdivisions. Standards could incorporate flexible bulk regulations that permit a range of housing types, which result in an overall average density of 6 to 12 dwelling units per acre.

Implementation Approach

The matrix below provides a starting point for implementing the various strategies identified in this Plan section. Strategy 1, updating the Village's development regulations, is an umbrella strategy in that it provides a platform for accomplishing the rest of the strategies in this section and many recommendations outlined in the Sustainability Audit of Zoning and Subdivision Codes (see Appendix B) as well. Although it would be beneficial to address the strategies at the same time, the Village may also choose to undertake some strategies in a piecemeal fashion if funding for a comprehensive overhaul of regulations is unavailable.

Funding

Updating ordinances is typically funded through a governmental body's general revenue source, when available. Given current economic realities, it is unlikely that Park Forest will be able to fund its update from general revenues. The Village has received grant funding for past planning processes, such as the Strategic Plan for Land Use and Economic Development and the 211th Street Transit Oriented Development Implementation Study, from the Illinois Department of Commerce and Economic Opportunity (IL DCEO). The Village has sought alternative funding sources for this activity in the past, including a recent application for a U.S. Department of Housing and Urban Development (HUD) Community Planning Challenge Grant, but has been unsuccessful. It is recommended that the Village continue to apply for appropriate grant funding (through opportunities such as the IL DCEO's Ike Disaster Recovery Planning Program and RTA's TOD Plan Implementation program) to undertake an update of its development regulations.

Table 1A. Implementation matrix

STRATEGY	LEAD & PARTNERS[1]	PHASING[2]	RESOURCES[3]
1. Update the Village's development regulations to require and/or incentivize sustainable development.	**VPF DEDP**	**Immediate**	**See Appendix B: Zoning & Subdivision Code Audit**
2. Create a new walkable, mixed-use district for key areas.	**VPF DEDP**	**Immediate**	
3. Create a new "urban residential" district that permits a variety of housing types adjacent to mixed-use areas.	**VPF DEDP**	**Immediate**	
4. Permit accessory units in single family districts.	**VPF DEDP**	**Immediate**	
5. Increase walkable access to commercial uses.	**VPF DEDP**	**Long-term**	**2008 Strategic Plan for Land Use & Economic Development**
6. Update subdivision regulations to encourage walkable neighborhoods.	**VPF DEDP**	**Immediate**	**LEED for Neighborhood Development**

1 VPF DEDP = Village of Park Forest Department of Economic Development and Planning
2 When implementation should occur: Short-term, 0-3 years; Mid-term, 4-6 years; Long-term, 7+ years; Immediate = as soon as funding/staff time is available
3 Links and further resources and case studies may be found in Appendix A

Figure 2A. Multimodal transportation options

2. Transportation and Mobility

Enhancing the transportation options available to those who live and work in Park Forest is critical to the community's sustainability.

The transportation sector makes up the Village's largest percentage of greenhouse gas emissions (nearly 50 percent), with the community's private automobile trips (often measured in vehicle miles traveled or VMT) directly contributing to Park Forest's carbon footprint. The average household in Park Forest drove over 52 miles per day in 2007, or over 19,000 miles annually, which exceeded the Cook County average by over 4,000 miles per year. Furthermore, nearly 46 percent of households in the Village own two or more personal vehicles, and over 75 percent of residents drive alone for their work commutes. Achieving a substantial decrease in the Village's emissions levels will require both a shift in personal trip-taking behavior, as well as an increased commitment to improving alternative transportation options for the citizens of Park Forest.

The Village does have a variety of public transportation options, provided primarily by the Pace suburban bus system and the Metra commuter rail system. The Metra Electric train line consistently serves commuters traveling to and from downtown Chicago. However, the Village's four Pace bus routes have experienced decreases in ridership over the past decade, despite their capability to connect users throughout the south suburbs. Park Forest's history as a planned community with curvilinear streets is conducive to nonmotorized travel (walking or bicycling trips). Compared to other municipalities in the south suburbs of the Chicago region, Park Forest is considered more affordable (with an Housing + Transportation Index of 42 percent) and has a higher Transit Access Index (which is a measure of transit availability) than any of its surrounding communities. The Village has notable assets to build upon, both in strengthening its alternative transportation options and in attracting visitors and new residents to the community. This section proposes strategies that, when pursued in tandem, will enable residents to drive less, thereby lowering the Village's greenhouse gas emissions (GHG) significantly and encouraging a healthier lifestyle for the community.

Topic Area Goals

The following goals related to Transportation were identified and defined through the planning process. Each goal is addressed through one or more of the strategies outlined below.

1. Decrease vehicle miles traveled per household in order to reduce the community's use of fossil fuels.
2. Provide better transit service and increase Pace access to Metra trains and intermodal linkages.
3. Become more bicycle- and pedestrian-friendly.
4. Resurface, maintain, and improve Village streets.
5. Assess alternate transportation methods, including car sharing

Proposed Strategies

The following details the strategies proposed to achieve the identified topic area goals outlined above. Where appropriate, baseline and/or target indicators are also included as a means of monitoring progress. The baseline indicator is a quantitative measure that illustrates the existing conditions related to a strategy, while the target indicator represents a quantitative goal for the Village to strive toward related to the strategy. Further information related to the implementation of these strategies may be found in the Implementation Matrix to follow.

1. Reduce the community's annual vehicle miles traveled (VMT).

Baseline Indicator: The total household VMT for Park Forest in 2007 was 181,395,646 miles.

Target Indicator: Reduce total household VMT by 10 percent overall, or around 5-6 miles per day per household, by 2025.

While our region's transportation network is a critical part of our economic prosperity, our vehicle travel is a detrimental contributor to GHG. The Assessment showed that nearly 50 percent of emissions from Village were attributed to the transportation sector, and primarily to private vehicle use. Lowering the Village's VMT is important to meeting its sustainability aims and reducing the amount its transportation sector contributes to the community's emissions rates. If just half of Park Forest's households reduced their VMT by 10 miles a day (the equivalent of one roundtrip driving commute to and from Chicago's "loop" per week), the Village would reduce its overall VMT by 10 percent, making it in line with Cook County's average per household.

The ability of the Village to reduce VMT in this way is heavily dependent on its land use patterns (such as having options for residents to live near where they work, shop, and access transit) and public transportation choices. Reducing VMT should occur concurrently with the implementation of other strategies, particularly those that will help to create an environment conducive to reduced vehicle dependence, such as improving Pace and Jolly Trolley service, increasing density to support transit and improve walkable access to daily needs, and enhancing the attractiveness of cycling and walking options. Additional strategies may be considered to reduce VMT as well. For instance, while there is disagreement over the effectiveness of user-based fees, consensus exists around the need for strategies to reflect market behavior. Techniques such as "no drive" days or other requirements that restrict free choice to drive are not found to be nearly as effective as incentives and pricing that reflects roadway use. Strategies for creating incentives to change travel behavior are essential to consider as the Village strives to reduce its VMT. Diverse approaches such as working with employers to reward carpooling and ride-sharing commutes, and supporting the increase of the state's Motor Fuel Tax and indexing it to inflation, are both ways of encouraging changes in travel behavior away from private auto dependency and toward alternative modes.

2. Work with Pace to explore improved service and additional transit amenities.

Baseline Indicator: Average weekday Pace ridership from June 2011 was 1,490 passengers.

Target Indicator: Increase the combined average weekday ridership levels by 33 percent (to approximately 2,000 passengers) by the year 2020.

While the Metra train system is well utilized, inefficiencies in current Pace routes and high headway times have discouraged community use of the suburban bus system. As Table 2A indicates, the Village's access to jobs around the region via public transportation is on par with the regional average, whereas Park Forest's automobile access falls below the region's percentage. Additionally, Park Forest has higher average household density per residential acre but lower median income than the majority of its neighboring municipalities. This indicates the strength of the Village's transit amenities and the existence of a population that would potentially utilize a more robust bus system with the improvement of service and amenities.

In cooperation with Pace, the Village should conduct a needs assessment to identify the most under-served and transit-dependent areas of the community, as well as the Pace system enhancements that would best serve to increase the bus system's appeal for residents. Potential fixed route improvements that Pace has considered for a time when funds are available include:

- The reinvestigation of demand and bus stops along the Metra-feeder route 362.
- The potential for new bus service along Sauk Trail Road, which is the most heavily trafficked east-west road through the Village.
- The merging of the current routes 366 and 367 for one-trip connectivity between Chicago Heights, DownTown Park Forest, Governors State University, and Lincoln Mall, including adjusting these routes to most efficiently serve demand through DownTown.

Park Forest residents should also begin to better utilize other Pace-provided demand response and ridesharing programs to help eliminate single-occupancy car trips. For instance, Pace runs a vanpooling program where it coordinates a daily van service for residents in one area who are all going to work in the same approximate area elsewhere. Additionally, Pace administers a ridesharing program that allows residents in the same area to coordinate a carpool system. While about 30 percent of Park Forest residents commute to downtown Chicago for their work trips, the majority of workers commute to other destinations north and northwest of the village (like the University of Chicago and Tinley Park Mental Health Center) that lack public transit access but could be well-served by carpooling. A more thorough needs assessment and utilization of Pace programs could uncover these types of service improvements, and perhaps also identify opportunities for pilot testing bus amenities like real-time information at bus stops.

3. Expand Jolly Trolley service.

Baseline Indicator: There were around 18,700 riders in 2011.

Target Indicator: Increase ridership by 10 percent by 2017.

Jolly Trolley demand response service supplements Pace's fixed bus routes in Park Forest. Funded primarily by Pace and administered by Rich Township, Jolly Trolley is predominantly utilized by the senior citizen population in the community (although the service is offered to all residents). While it is a popular, affordable option for many residents to attend to their local shopping, access a Metra station as part of a longer trip, or reach medical care facilities in the greater region, the constraints of its three-vehicle fleet and hours of operation limit its growth and broader appeal. In the short-term absence of increased Pace bus service, the Village should work with Pace to explore the potential of expanding Jolly Trolley's service. By increasing the vehicle fleet and adding service later into the afternoon and early evening, the demand for Jolly Trolley among a wider audience could grow. The addition of just one passenger per hour of service would exceed the target of a ten-percent increase in ridership. While the acquisition of new buses and a marketing campaign to boost awareness of increased service would be costly, its benefit to the community through more consistent service could greatly improve residents' accessibility and reduce their need for private car trips.

4. Develop a public marketing campaign to promote transportation alternatives.

Improving transit service and nonmotorized travel options is not enough to effectively reduce VMT. To connect residents with alternatives, the Village should launch a public campaign to communicate the cost savings of using public transportation, the biking and walking routes available in the community, and the possibilities for cutting out car trips to reduce fossil fuel use. Printed materials could be made available at Village Hall, with other resources online and on local cable access.

Research shows that an even more effective method for changing travel behavior is to launch an individualized campaign, rather than simply making materials available for interested parties in public venues. Individualized marketing, which would involve before and after surveys of households, would require more labor and investment than a general public campaign. However, the individualized, targeted approach yields successful results in changing trip behavior, particularly shifting private vehicle drivers to walking, biking, and car passenger modes. Evaluations of such marketing campaigns that were launched in Portland, Oregon, Durham, North Carolina, and various other cities internationally reported a range in percentage reductions (from three percent to upwards of 14 percent) in personal car travel in the tested areas. Since local characteristics and transit service options are key factors to the success of such marketing efforts, a more modest goal could be set for a community like Park Forest.

Table 2A. Access to jobs in the region, by travel mode

	PARK FOREST	COOK COUNTY	REGION
Regional Jobs Accessible by Automobile (one-way commute time of 45 min. or less)	**9.2%**	**27.4%**	**15.9%**
Regional Jobs Accessible by Transit (one-way commute time of 75 min. or less)	**20.6%**	**31.1%**	**20.9%**

Sources: Chicago Metropolitan Agency for Planning, weighted travel model for roadway and public transportation.

5. Establish car sharing services at Metra stations and other key locations around the Village.

Car sharing is an increasingly common option, especially in denser, urban environments where residents have a variety of public transportation choices. The presence of car sharing services has been shown to reduce automobile ownership amongst car sharing members, as well as to diminish the community's VMT and road congestion as the product of having less cars driving as frequently. The Chicago region hosts many car sharing options, such as I-GO and Zipcar. These services have cars located in neighborhoods, in commercial districts, and near transit stations to help create door-to-door travel options, and are often used for short errands and shopping trips. One model that is often more successful in suburban communities makes the car-share vehicles available for municipal employees during regular business hours and open to the public during peak hours and into the evening, when users might be more inclined to run errands.

Potential users need to exist to establish a car sharing location in a given community. Park Forest would first need to explore the potential demand, perhaps starting by approaching the cooperatives and other multi-family residential areas in the Village where a critical mass of residents live. Car sharing options — particularly at the 211th Street, Matteson, or Richton Park stations of the Metra Electric line – have the potential to attract people from outside of Park Forest to take the train and use the shared car to patronize a business or arts institution in the Village.

6. Encourage the use of fuel-efficient vehicles by providing needed infrastructure.

Another way to reduce emissions is through the use of alternative fuels in private vehicles instead of gasoline. Vehicles that are powered by sources other than gasoline are becoming more prevalent across the U.S.; however, they are typically more expensive to purchase because demand is still growing. Additionally, it can be difficult to use such vehicles when their alternative power/fueling sources are not readily available in a consumer's community. The Village should not only promote the use of such vehicles, but also permit their use through municipal codes. Providing an electric vehicle plug-in station in DownTown Park Forest or another central location in the Village would give residents a convenient option for charging their vehicle if they were interested in choosing an electric car. Also, encouraging Homewood Star Disposal and other locations to sell alternative fuels, such as compressed natural gas (CNG), would facilitate the use of fuels other than gasoline for residents, making it easier for them to emit GHGs at lower rates.

7. Create street types appropriate for Village context areas.

Park Forest should reexamine the usability of its roadways to ensure that they are suitable for a variety of travelers. Many communities in the U.S. have considered and adopted "Complete Streets" ordinances, which institutes a policy that transportation planners and engineers must design and operate the local roadways with all users in mind. The Village should go one step further to define street types (essentially street sections) that match the context of the areas in which they are applied and conform to Complete Streets principles.

Street types can define travel lane width, location of bicycle facilities, on-street parking requirements, sidewalk width, parkway width, target speed, and other design characteristics. Street types can be developed for all streets and should relate to the major context zones that they are adjacent to. For example, the street type for Western Avenue (an auto-oriented street) would be significantly different from one for DownTown's Main Street (a mixed-use street). For Park Forest, it may be useful to develop street types for alleys, residential local streets, collector streets, boulevards, mixed-use streets, and arterials. Finally, the Village should map its street types so that when existing roads are improved, the street types can be implemented. Street types should also be utilized for new subdivisions.

8. Continue to evaluate the Village's Capital Plan to ensure sustainable transportation improvements.

The Village currently updates its Five Year Capital Plan on an annual basis, which covers capital improvements for all Village Departments. The Village should continue to do so, particularly keeping sustainable transportation improvements in mind. Such improvements could include resurfacing and maintaining streets with permeable and/or recycled materials, incorporating enhanced cycling and pedestrian amenities, and implementing the street types to be defined by strategy 7. In particular, the Department of Public Works should continue to evaluate the condition of Village sidewalks and prioritize improvements accordingly. In addition, the Village could require that certain sustainable practices be included in bid responses, or require two bids, one including traditional materials and practices and one that incorporates sustainability, to have a point of comparison from which to make decisions (as the Village of Oak Park, Illinois has recently done) (see strategy 1 of the Municipal Policies and Practices chapter for more information).

Pedestrian cut-through from one block to the next (top); Sharrows along a local residential street in Salem (bottom) (source: http://www.salem.com/Pages/SalemMA_PressReleases/I03150577).

Figure 2B. Proposed bicycle routes

9. Create a bicycle routes plan that establishes criteria for new bike lanes and trailways.

The Village has a legacy of being a bike-friendly community. Discussions with Village officials and bicycle advocates have yielded a proposed bicycle routes plan (see Figure 2B) that outlines safe, efficient routes to destinations across the village. These proposed bikeways could take different forms, such as:

- A multi-use path, where cyclists and pedestrians share a widened off-road sidewalk along a roadway. This is recommended along Western Avenue, as an extension of the path that currently exists to the north of South Street.
- Dedicated bike lanes, which are striped separate lanes for cyclists alongside cars. There are planned lanes as part of the upcoming Orchard Drive capital improvements and should be considered with other road projects in the future.
- Sharrows, which are markings on roadways (those that cannot be widened to include separate bike lanes) indicating that motorists and cyclists will share the lane. This shared lane marking is often a lower cost improvement than constructing new bike lanes, but residents' lack of familiarity with the sharrow marking raises the need for public education to protect both cyclist and motorist safety.

The Village should move forward with establishing criteria to prioritize these proposed bikeway projects. This could be achieved by first either reestablishing the Bicycle Advisory Committee or another sub-group of citizens who are well versed in cycling throughout Park Forest. The group, working with the Public Works Department, should consider the proposed routes and evaluate their strengths based on various factors, such as alignment with future capital improvements to roadways and bridges and potential connections to and expansions of regional trailways like the Old Plank Road Trail. The prioritization process should be undertaken in conjunction with the creation of street types for the Village, which would designate where different types of bicycle facilities would be located. These evaluation efforts can begin immediately.

10. Explore bicycle parking requirements for new developments.

Bicycle parking facilities, such as bike racks and lockers, are essential to growing the biking network around Park Forest. Cyclists need to have a reliable way to secure their bikes when they use this nonmotorized form of transportation to get to a destination, such as a local store or municipal institution. When the Village updates its zoning code, it should include provisions for either requiring bicycle parking at both public buildings and private developments over a minimum size. In this way, all capital improvements and new development projects will include an emphasis on accommodating nonmotorized transportation in a similar practice to meeting automobile parking spot needs.

11. Improve walkability and pedestrian safety throughout the community.

A community's walkability is an important measure of its livability, since the ability to walk between points of origin and destination is related to public health and safety, community character, and local business vitality. Pedestrian "cut-throughs" (mid-block walkways allowing for shorter trips on foot) exist throughout the Village as an artifact of Park Forest's beginnings as a planned community. Promoting these cut-throughs as a part of the Village's nonmotorized network would help improve pedestrian access and safety throughout Park Forest. This should include such measures as public education about the intended use of cut-throughs (to discourage loitering), and raising awareness among adjacent property owners about their maintenance responsibilities. The Village should emphasize that improved maintenance and even security lighting is likely to help reduce criminal activity. Additionally, the Village should prioritize the existing cut-throughs using a set of criteria that weighs indicators like current usage, connectivity between residential areas and commercial areas, and access to institutions such as schools. Ranking the cut-throughs in this way and focusing on the most used paths (like the one between 21st Century School and Rich East High School) will allow the Village to prioritize limited funds for public upkeep.

An assessment of the broader pedestrian network, particularly as it applies to children who walk to school, is also an essential action for the Village to take. Using crash data, traffic count data, and other measures that affect pedestrian safety, such a study could help the Village identify where traffic-calming measures and pedestrian crosswalks should be incorporated into the street grid to enhance walkability. For example, several residents suggested that crosswalks in key locations along Western Avenue would remove it as a barrier between residential areas on the east side of the Village and DownTown.

Implementation Approach

The matrix below provides a starting point for implementing the various strategies identified in this Plan section. The over-arching theme to the Transportation and Mobility chapter is the need to reduce the community's VMT. However, many in the community noted their lack of ability to choose a mode other than driving because of the condition of the built environment and public transportation system. These systemic conditions are essential to address in reducing VMT but are also longer-term strategies that will require ongoing commitment. In the interim, the Village should focus on strategies that increase public awareness of transportation options, enhance the bicycling and walking environments, and expand public transportation options when possible (such as Jolly Trolley and Pace-provided demand response and ridesharing programs).

Funding

Many of the strategies proposed in this section may be funded through the Village's operating budget or capital improvements funding (such as strategies 1, 4, 5, 6, 9, and 10). Pace and/or Rich Township may also be at least partial contributor(s) to items 2 and 3. Finally, the creation of street types and a bicycle routes plan for the Village will likely require funding from grant programs; the Village should pursue these opportunities as they become available.

Table 2B. Implementation matrix

STRATEGY	LEAD & PARTNERS[1]	PHASING[2]	RESOURCES[3]
1. Reduce the community's annual vehicle miles traveled (VMT).	**VPF**	**Long-term**	**VTPI report**
2. Work with Pace to explore improved service and additional transit amenities.	**VPF, Pace, Rich & Bloom Townships**	**Long-term**	
3. Expand Jolly Trolley service.	**VPF, Pace, Rich & Bloom Townships**	**Mid-term**	**Pace purchasing department**
4. Develop a public marketing campaign to promote transportation alternatives.	**VPF PIO/SC, Environment Commission**	**Immediate**	**FTA's Individualized Marketing Demonstration Program**
5. Establish car sharing services at Metra stations and other key locations around the Village.	**VPF, Metra**	**Mid-term**	**i-GO car sharing; Zipcar car sharing**
6. Encourage the use of fuel-efficient vehicles by providing needed infrastructure.	**VPF**	**Mid-term**	
7. Create street types appropriate for Village context areas.	**VPF DPW**	**Short-term**	**National Complete Streets Coalition**
8. Continue to evaluate the Village's Capital Plan to ensure sustainable transportation improvements.	**VPF DPW & DF**	**Ongoing**	**Oak Park, IL**
9. Create a bicycle routes plan that establishes criteria for new bike lanes and trailways.	**VPF DPW, Bicycle Advocacy Committee**	**Mid-term**	**Active Transportation Alliance**
10. Explore bicycle parking requirements for new developments.	**VPF DEDP**	**Short-term**	**LEED-ND NPD Credit 5 for standards**
11. Improve walkability and pedestrian safety throughout the community.	**VPF DCD & PD, school districts**	**Ongoing**	**Illinois Safe Routes to School**

1 VPF = Village of Park Forest; PIO = Public Information Officer; SC = Sustainability Coordinator; DEDP = Department of Economic Development and Planning; DPW = Department of Public Works; DCD = Department of Community Development; PD = Police Department; DF = Finance Department.

2 When implementation should occur: Short-term, 0-3 years; Mid-term, 4-6 years; Long-term, 7+ years; Immediate = as soon as funding/staff time is available.

3 Links and further resources and case studies may be found in Appendix A.

Figure 3A. Access to open space

3. Open Space and Ecosystems

Open space in a community helps to mitigate water quality and flooding issues, provide access to recreational opportunities, and augment quality of life.

As a planned community, Park Forest was designed with access to open space in mind. As a result, the Village has an exceptionally high amount of open space per capita and the vast majority of Park Forest residents are within a five-minute walking distance (1/4 mile) of a park or other open space feature. The Village has worked hard to restore the Central Park Wetlands, a 90-acre wetlands area near DownTown that helps to absorb millions of gallons of stormwater annually. This site and others, such as the Thorn Creek Nature Preserve, help to provide vital habitat for native plants and animals.

However, the Village also faces issues in the realm of open space management. With an increasingly tightening municipal budget, the maintenance and upkeep of open space areas can be a challenge. The Village has taken steps to address this already, including the integration of native and other plant varieties that reduce maintenance and associated cost. This section will address ways to build upon and further strengthen Park Forest's open spaces and ecosystems.

Topic Area Goals

The following goals related to Open Space and Ecosystems were identified and defined through the planning process. Each goal is addressed through one or more of the strategies outlined below.

1. Preserve and promote our open spaces, especially Central Park wetlands.
2. Apply innovative land management practices to different open space types to cut maintenance costs and increase environmental benefits.
3. Continue to increase native plantings and education/wayfinding signage about its value for the public.
4. Maintain parkways and remove or treat ill trees as needed.
5. Plant new long-lived trees.
6. Provide appropriate habitat for native plant and animal species.

Proposed Strategies

The following details the strategies proposed to achieve the identified topic area goals outlined above. Where appropriate, baseline and/or target indicators are also included as a means of monitoring progress. The baseline indicator is a quantitative measure that illustrates the existing conditions related to a strategy, while the target indicator represents a quantitative goal for the Village to strive toward related to the strategy. Further information related to the implementation of these strategies may be found in the Implementation Matrix to follow.

1. Preserve public open space areas.

Baseline Indicator: The Village currently owns and maintains around 400 acres of public open space and parks.

Target Indicator: Retain 100 percent of existing public open space and parks.

The Village's current open space areas are a major asset for the community's livability. The Village should strive to maintain the same level of access to open space that residents currently enjoy. In addition, within the constraints of the municipal budget, the Recreation and Parks Department should continue to improve upon the quality and maintenance of parks and other natural areas. Adequate lighting, playground equipment and facilities, and grounds maintenance should be of primary concern in ensuring that Park Forest's open space areas are functional, safe, and inviting places. In 1998, a task force was convened to assess 20 park sites in the Village and identify and prioritize improvements that were needed. The Village should consider revisiting this effort to prioritize future initiatives for park improvements. The Village should keep in mind that for some open space areas, the most sustainable option may be to remove facilities or structures that may lack sufficient funding for maintenance. This will enable the Village to retain the land as an asset without it falling into disrepair.

2. Create a network of green infrastructure to help manage stormwater.

The success of the Central Park Wetlands restoration project has prompted the Village to consider the expansion of functional wetlands as an effective stormwater management strategy. There are at least three areas in town that would be appropriate to initially explore as additional wetlands areas (a parcel adjacent to Rich East High School, a three-acre parcel east of the Central Park Wetlands, and Keokuk Park), with a goal of creating an integrated wetland complex that is tied together by the stormwater controls within the Village. The Village should first conduct a feasibility study and then develop an engineering plan to direct stormwater from the outlying sites into Central Park Wetlands to improve the quality of the wetlands and alleviate flooding issues.

3. Continue to encourage the use of native and adapted plant materials.

Utilizing native or adapted plants has many environmental benefits, including reduced use of potable water for irrigation and pesticides, enhanced habitat for native wildlife, and elimination of fuel consumption and pollution associated with mowing. The Village has emphasized the use of native materials in public areas for over ten years, and has been encouraging developers to use native species in their projects as well. The Village should formalize a list of preferred plant and tree species for developers to use in site planning, as well as for informational purposes for the general public. In addition, the Village should expressly prohibit the use of invasive species.

4. Require new trees in larger new developments.

The Village should continue to add to its tree canopy by requiring new developments to plant new trees. Current Village requirements include a minimum of one street tree per every 60 feet of street frontage for new subdivisions, but no requirements exist for developments that do not require a subdivision. The Village should require a minimum of one street tree per every 40 feet of street frontage for all new developments and subdivisions over one acre in size. In addition, to increase canopy coverage and mitigate the urban heat island effect, the Village should consider requiring that a minimum percentage of parking lot hardscape (such as 50 percent) be replaced with or shaded by a combination of any of the following: tree canopy shade (projected canopy within 10 years of installation); shade from other structures (such as electric vehicle charging stations or other open structures); pavement with a solar reflectance index (SRI) of at least 29; permeable pavers; or landscape islands. See Appendix B: Sustainability Audit of Zoning and Subdivision Codes for more information.

5. Continue to discourage the use of chemical pesticides.

In September 2011, the Village adopted a policy to minimize the use of chemical pesticides on Village-owned or Village-leased property. Although the Village has been using natural and organic substitutes for chemical pesticides for some time, the policy further reinforces the importance of the topic and brings awareness to residents as well. The Village should continue to pursue outreach and education efforts to residents in this area (including continuing to host sessions on natural lawn care) to reduce public and private use of such chemicals.

Table 3A. Village parks

PARK	TYPE	ACREAGE	AMENITIES
Algonquin Park	**Neighborhood park**	**4.9 ac.**	
Cedar Park	**Neighborhood park**	**1.4 ac.**	**Tennis courts, small gazebo, playground**
Central Park	**Community park**	**87.5 ac.**	**Discovery Center, wetlands, ball fields, tennis courts, playground, 2 pavilions**
Eastgate Park	**Play lot**	**1.4 ac.**	**Basketball courts, ball field**
Illinois Park	**Neighborhood park**	**6 ac.**	**Ball field, playground, tennis courts**
Indiana Park	**Neighborhood park**	**6 ac.**	**Ball field, playground, tennis court**
Keokuk Park	**Natural area**	**28 ac.**	
Logan Park	**Neighborhood park**	**9.9 ac.**	**Ball field, playground, picnic shelter**
Marquette Park	**Neighborhood park**	**4.4 ac.**	**Ball fields, playground**
Memorial Park	**Memorial**	**1.5 ac.**	
Murphy Park	**Neighborhood park**	**1.9 ac.**	**Playground**
Old Plank Road Trail	**Trail**	**15.7 ac.**	**Multi-use trail**
Onarga Park	**Neighborhood park**	**5.6 ac.**	**Ball field, playground**
Shabbona Park	**Neighborhood park**	**4.6 ac.**	**Tennis courts, playground**
Somonauk Park	**Community park**	**16.4 ac.**	**Pavilion, in-line skating facility, basketball courts, ball fields, playgrounds**
Thorn Creek Forest Preserve	**Forest preserve**	**102.1 ac.**	**Trails, Nature Center**
Veterans Park	**Memorial**	**2.61 ac**	
Winnebago Park	**Neighborhood park**	**34 ac.**	**Playground**

Source: Village of Park Forest.

Native and adapted landscaping in DownTown.

Implementation Approach

The matrix below provides a starting point for implementing the various strategies identified in this Plan section. Strategies 1, 3, and 5 encourage the Village to continue and expand upon activities already taking place; their implementation should be ongoing. Strategy 2 should be undertaken as funding becomes available. Finally, strategy 4, requiring new trees for new developments, should be included in the general update of development regulations (a strategy further outlined in the Development Patterns section and Code Audit).

Funding

The majority of activities in this section can be funded through existing budgets already in place. Strategy 2 will likely require funding from an outside source to conduct a feasibility study, develop an engineering plan, and ultimately construct the wetlands complex. This funding has been sought from grant sources in the past, including a recent application to the Smart Growth Implementation Assistance grant program administered by the U.S. Environmental Protection Agency. To fund this important and innovative strategy, the Village should continue to seek out such grant opportunities as they become available.

Table 3B. Implementation matrix

STRATEGY	LEAD & PARTNERS[1]	PHASING[2]	RESOURCES[3]
1. Preserve public open space areas.	**VPF DRP**	**Ongoing**	
2. Create a network of green infrastructure to help manage stormwater.	**VPF DRP, DPW, & DCD**	**Short-term**	**Illinois Green Infrastructure Grants, EPA SGIA grant program**
3. Continue to encourage the use of native and adapted plant materials.	**VPF DRP & DEDP**	**Ongoing**	
4. Require new trees in larger new developments.	**VPF DEDP**	**Short-term**	**LEED-ND NPD Credit 14**
5. Continue to discourage the use of chemical pesticides.	**VPF DRP, Environment Commission**	**Ongoing**	

1 VPF = Village of Park Forest ; DRP = Department of Recreation & Parks; DPW = Department of Public Works; DCD = Department of Community Development; DEDP = Department of Economic Development & Planning.

2 When implementation should occur: Short-term, 0-3 years; Mid-term, 4-6 years; Long-term, 7+ years; Immediate = as soon as funding/staff time is available.

3 Links and further resources and case studies may be found in Appendix A.

Old Plank Road Trail (above) (source: Village of Park Forest); Logan Park's playground (right).

4. Waste

Waste prevention, recycling, and composting are integral to sustainability planning for a number of reasons. The way we produce, consume, and dispose of our food accounts for over forty percent of U.S. greenhouse gas emissions.

Landfilling consumes energy and can contaminate water and degrade natural habitat, and in northeastern Illinois there is less than a decade of projected landfill capacity remaining. For these reasons, it is important to divert waste from landfills by reducing the amount of waste that will later need to be thrown away, recycling appropriate materials, and composting organic waste to break it down naturally.

The Assessment found that in 2010, occupants of Park Forest's single family homes had a recycling and composting rate of around 25 percent, while the national average was around 34 percent. Raising awareness about recycling was identified by the community as a key to increasing the rate of recycling. On the other hand, the Village is leading the way by showcasing deconstruction projects and building reuse.

The goals and strategies included in this section are designed to decrease the amount of waste sent to landfill by raising awareness and understanding of recycling, making it easier for residents and businesses to recycle, and encouraging innovative techniques like deconstruction.

Topic Area Goals

The following goals related to Waste were identified and defined through the planning process. Each goal is addressed through one or more of the strategies outlined below.

1. Strengthen the culture of recycling, reducing waste, and reusing materials through educational initiatives.
2. Increase recycling options in public places.
3. Consider composting as an option to reduce biodegradable waste sent to landfills.
4. Develop a strategy for dealing with hazardous materials.

Proposed Strategies

The following details the strategies proposed to achieve the identified topic area goals outlined above. Where appropriate, baseline and /or target indicators are also included as a means of monitoring progress. The baseline indicator is a quantitative measure that illustrates the existing conditions related to a strategy, while the target indicator represents a quantitative goal for the Village to strive toward related to the strategy. Further information related to the implementation of these strategies may be found in the Implementation Matrix to follow.

1. Pursue actions that will help to increase recycling rates.

Baseline Indicator: In 2010, single family homes in the Village recycled and composted about 25 percent of their waste.

Target Indicator: Meet the national average recycling rate of 34 percent by 2017 and achieve at least a 60 percent recycling rate by 2025.

Convenient access to recycling bins and clear signage about what can be properly recycled help to ensure that residents and businesses recycle effectively. The Village should work with waste haulers to place stickers with instructions on existing recycling bins. Public service announcements can also be included on Park Forest's public access channel to further reinforce proper recycling practices. Recycling containers should be made available in all public places as financial resources to do so become available, and public garbage cans should be labeled as "landfill" instead of "waste" to reinforce the impacts of waste disposal. In addition, the Village should require that all dumpsters be accompanied by recycling containers in future development, and in existing development when funding becomes available.

Businesses and institutions in particular can enhance efficiency and save money though effective waste strategies. The Village should promote the use of waste audits and provide information such as the Illinois Recycling Association's 2010 publication, "RECYCLING WORKS: A Tool Kit for Reducing Waste in the Workplace."

2. Work with waste haulers to track data on recycling rates.

Target Indicator: Establish a Village-wide baseline recycling rate by 2015.

Currently, the only recycling data available to the Village is that collected by Homewood Star Disposal for single family residences. Other sectors contract individually with waste haulers for services and often times, these haulers cross multiple municipal boundaries during a single pick-up route (making municipally-specific data collection a challenge). The Village should work with the waste haulers that serve other sectors (such as commercial, housing co-ops and multi-family residential, and institutional) to develop a way to track the volume of waste and recyclables collected from those sectors. Establishing baseline recycling rates will enable the Village to set a standard for measuring progress for waste (per strategy 1).

Clear signage and instructions on a recycling kiosk.

3. Facilitate composting in the Village.

Target Indicator: Establish a composting pilot program by 2017.

Organic waste is the third largest category of landfilled waste in Cook County. Composting involves the biological decomposition of organic materials such as leaves, grass, and food waste. This decomposition creates a product (called humus) that can be used to improve soil for local food production, home gardens, or landscaping. Public opinion on composting can be mixed due to various misconceptions. For example, many believe that the composting process itself results in undesirable odors. However, odors that occur are primarily the result of missteps, such as trying to compost grass clippings by themselves, poor drainage, or lack of aeration. The Village should take steps to increase composting by disseminating information that dispels myths, describes the benefits, and provides detailed instructions on how to compost. The Village should also continue to widely promote the availability of compost units at the farmers' market, work with schools to incorporate an educational component on composting, and work with the garden club, the South Suburban Food Co-op, and others to sponsor a composting workshop.

To bring more awareness to the local level, the Village should consider sponsoring a compost collection pilot program. One such program initiated in Denver provides 65-gallon green composting carts to homes for weekly collection in the pilot area, which can be used for food scraps, soiled paper, and yard debris. The City delivers the organic material to a commercial composting facility, where it is transformed into compost to be sold to farmers and landscapers. Due to its success, the pilot program was extended as a fee-based service program (at a rate of around $30 per quarter).

4. Require recycling of construction and demolition debris and offer incentives for deconstruction and materials reuse.

Target Indicator: Create a construction and demolition debris recycling ordinance by 2015.

The debris generated during the construction, renovation, and demolition of buildings and roads makes up 25-40 percent of the national solid waste stream. It is the largest single category of landfilled waste in Cook County. The Village should require recycling of construction and demolition debris (C&D) and provide information on locations that will accept the debris. The City of Chicago's C&D ordinance (2006) requires a minimum of 50 percent of the debris produced on-site (excluding hazardous waste) to be recycled. The ordinance applies to new residential buildings with four or more units, non-residential buildings over 4,000 square feet, and certain building rehabilitations. Chicago's ordinance is typical of C&D ordinances across the nation. The Village should lead by example by, at a minimum, recycling 50 percent of C&D in any new construction or rehabilitation of existing public buildings.

The Village should also consider expediting permitting, granting fee waivers, or creating other incentives for deconstruction and reuse of building material. As has been the trend in the past, the Village should continue to deconstruct and reuse building materials when demolishing publicly owned properties. Promotion of Habitat for Humanity's ReStore, a non-profit retail center for used building materials, will help to build a market for deconstructed materials.

5. Partner with schools to enhance education about reducing, reusing, recycling, and composting waste.

Target Indicator: Institute a recycling program at every Park Forest school by 2017.

Targeting schools can be an effective way to increase knowledge and awareness of how to recycle and compost, not only for children but for the parents at home as well. The Village should work with schools to identify ways to create or enhance existing programs and disseminate a resource list of available teaching tools, funding, and other resources. A goal should be for all schools serving the Village to institute an effective recycling program, and as many as possible should institute composting programs. A number of communities in the region are participating in the Illinois Department of Commerce and Economic Opportunity's Zero Waste Program, which provides grants to encourage schools across Illinois to develop programs to become waste-free through reducing, reusing, and recycling waste. Examples of initiatives include using student "waste ambassadors" to sort food waste, recycling, and trash and instituting waste-free lunches on Fridays.

6. Develop an electronic waste recycling program.

In January 2012, the State of Illinois banned electronic waste from landfills and established a statewide system for recycling or reusing computers, monitors, televisions, and printers discarded from residences. This is accomplished by requiring electronics manufacturers to participate in the management of discarded and unwanted electronic products. The Village should work with the South Suburban Mayors and Managers Association and the Metropolitan Mayors Caucus to identify appropriate ways to facilitate reuse and recycling of electronic waste, including disseminating information to residents and businesses about locations and retailer programs, and holding a yearly drop-off event. The Village should also notify residents that Vintage Tech (an environmentally safe recycling business that partners with ReStore for reusing the electronics they collect) will pick up electronic waste at no charge.

7. Coordinate a yearly household hazardous waste collection event.

Unless disposed of properly, hazardous waste can create health risks for people and damage the environment. Examples of household hazardous waste are oil based paints and paint thinners, herbicides and insecticides, gasoline, used motor oil, lawn chemicals, fluorescent lamp bulbs, pharmaceuticals, rechargeable batteries, and cleaning products. The Village should disseminate information on the dangers of hazardous waste, proper disposal, and drop off locations. The Illinois Environmental Protection Agency (IEPA) website also lists the location of drop-off facilities in the region, acceptable materials, applications for municipalities to cosponsor an event, and a fact sheet with information on disposing of pharmaceuticals. The Village may either want to distribute information about sub-regional events to the general public or partner with adjacent communities or private entities to hold hazardous waste drop-off events, particularly given that the closest drop-off facilities are located in Naperville and Chicago.

Implementation Approach

The matrix below provides a starting point for implementing the various strategies identified in this Plan section. One important forward step for the Village will be determining a way to track recycling and composting rates across all use sectors (instead of just single family residences). Determining this indicator will allow the Village to monitor the effectiveness of various strategies that are undertaken. Due to their potential impact on waste diversion, the first four strategies in this section should be considered priority action items.

Funding

The Illinois Department of Commerce and Economic Opportunity (DCEO) has a variety of funding programs for waste-related initiatives. Its Illinois Recycling Grants Program, Food Scrap Composting Revitalization and Advancement (F-SCRAP) Program, and Zero Waste Schools Program are three grant opportunities that the Village should consider submitting applications for; these grants represent potential funding sources for strategies 1, 3, 5, and 6. Through an Energy Efficiency and Conservation Block Grant, Cook County also offers grants and low interest loans for suburban Cook County municipalities, businesses, and residences for composting projects. The remainder of this section's strategies may be funded primarily through existing staff time and resources.

Table 4A. Implementation matrix

STRATEGY	LEAD & PARTNERS[1]	PHASING[2]	RESOURCES[3]
1. Pursue actions that will help to increase recycling rates.	**VPF**	**Short-term**	**U.S. EPA, Delta Institute, IL Recycling Association**
2. Work with waste haulers to track data on recycling rates.	**VPF, Homewood Star, other waste haulers**	**Short-term**	**U.S. EPA, StopWaste**
3. Facilitate composting in the Village.	**VPF, Environment Commission**	**Mid-term**	**Denver, CO, U.S. EPA, University of IL Extension**
4. Require recycling of construction and demolition debris and offer incentives for deconstruction and materials reuse.	**VPF DCD, ReStore**	**Short-term**	**Chicago, IL, ReBuilding Exchange**
5. Partner with schools to enhance education about reducing, reusing, recycling, and composting waste.	**VPF PIO/SC, local schools**	**Mid-term**	**WasteFreeLunches, Seven Generations Ahead**
6. Develop an electronic waste recycling program.	**VPF, neighbor communities, SSMMA, MMC**	**Short-mid term**	**IEPA, Illinois Recycles, Earth911**
7. Coordinate a yearly household hazardous waste collection event.	**VPF, IEPA**	**Short-mid term**	**IEPA**

1 VPF = Village of Park Forest; DCD = Department of Community Development; PIO = Public Information Officer; SC = Sustainability Coordinator

2 When implementation should occur: Short-term, 0-3 years; Mid-term, 4-6 years; Long-term, 7+ years; Immediate = as soon as funding/staff time is available

3 Links and further resources and case studies may be found in Appendix A

5. Water

Access to water is vitally important to the sustainability of Park Forest — without it, the Village ceases to be a desirable place to live and work. Park Forest is dependent on groundwater for its potable water supply.

Pressure on the shallow aquifer system could result in some well interference or even water shortages due to increased development and population growth (particularly in Will County) and possible future drought conditions within the region. Additionally, the sanitary and storm sewer systems were constructed in conjunction with the overall development of the Village and are approaching the end of their life cycles.

Park Forest's Annual Water Quality Report in 2010 indicated that no regulated contaminants were detected in the Park Forest water supply during required testing. However, national and regional reports indicate a growing concern regarding the emergence of unregulated contaminants due to the improper disposal of pharmaceuticals, which can end up in water supply sources. Likewise, Park Forest is part of the Thorn Creek watershed, which is facing concerns about surface water quality; multiple water bodies have been identified as impaired by EPA standards within this watershed. Finally, regional and local flooding issues have also been identified as a growing concern.

Topic Area Goals

The following goals related to Water were identified and defined through the planning process. Each goal is addressed through one or more of the strategies outlined below.

1. Improve stormwater management.
2. Continue to promote the use of native plantings.
3. Maintain the Village's public water source.
4. Protect water quality; reduce the chemicals and pollutants that end up in water.
5. Promote water efficiency and reuse.
6. Educate the public about the importance of water and water conservation techniques.

Proposed Strategies

The following details the strategies proposed to achieve the identified topic area goals outlined above. Where appropriate, baseline and/or target indicators are also included as a means of monitoring progress. The baseline indicator is a quantitative measure that illustrates the existing conditions related to a strategy, while the target indicator represents a quantitative goal for the Village to strive toward related to the strategy. Further information related to the implementation of these strategies may be found in the Implementation Matrix to follow.

1. Develop a plan to identify ways to prevent strain on the Village's shared water supply.

Target Indicators: Organize a coordinated water supply planning process by 2015. Adopt CMAP's Model Water Use Conservation Ordinance by 2015.

The sustainable use and protection of its water source must be a top priority for the Village. To maintain safe and reliable water supply services now and into the future, the Village should engage in a long-term planning process regarding its shallow dolomite limestone aquifer. This planning process should be done in partnership with surrounding communities, particularly those growing municipalities within Will County, to assess the potential impacts of future development on the Village's aquifer water source. The Village should also adopt the model water use conservation ordinance issued by CMAP to assist with long-term reductions in potable water usage within the Village. Once these items have been completed, the Village should consider setting a target for reducing its potable water consumption.

2. Improve utility services via infrastructure upgrades.

Infrastructure upgrades are required to ensure safe, reliable water service now and into the future, and to protect water quality. Park Forest's current sanitary and storm sewer infrastructure is nearing the end of its life cycle. As a result, local flooding and water quality issues are becoming more of a problem. Sanitary sewer repairs, as well as any future water supply repairs and maintenance, should not only be undertaken in response to emergencies, but also proactively pursued to avoid costly damage and risks associated with water system failures. Likewise, it is recommended that the Village upgrade its storm sewer infrastructure when possible to avoid contamination of local water bodies and flooding by improving its drainage and grading, as well as reducing the incidents of inlet clogging. Continuing to include proactive measures in its capital plan for infrastructure investments and allocating funding for this critical need is of vital importance for the Village.

3. Review current water service rates to ensure long-term sustainability.

Target Indicator: Compare the Village's current water service rate structure with future needs for system operation and infrastructure costs by 2015.

Park Forest currently issues water service bills every two months with a fixed cost per 1000 gallons as well as a flat rate fee. Since 2008, there have been small, scheduled rate increases every year, which will run through 2012. Given upcoming sanitary and storm sewer infrastructure needs, the Village should engage in a water rate study to assess the current rate structure and its ability to equitably cover the cost of running the Village's water service system as a whole. Consideration for adopting increasing block rates, seasonal rates and conservation pricing should be evaluated based-off of the Village's established level of service. CMAP provides best practices in water service pricing in its Model Water Use Conservation Ordinance.

4. Encourage best practices in outdoor irrigation and water reuse.

A 2010 review of Park Forest's demand for water shows that a majority of peak usage occurs during the hottest months of the year, from May to October. The Village should adopt an outdoor watering ordinance that seeks to reduce potable water use for irrigation purposes. CMAP has sample language for such an ordinance in its Model Water Use Conservation Ordinance. Park Forest should also encourage its residents to use native landscaping and collect rainwater for outdoor irrigation use by continuing its rain barrel distribution program and providing guidelines for best practices in using and installing cisterns and rain barrels.

5. Better manage stormwater to minimize water pollution and flooding issues.

Target Indicator: Establish a stormwater management ordinance by 2015.

In the Village's current Zoning and Subdivision Codes there is little mention of employing stormwater management best practices for new development. New developments over one acre are required to provide a stormwater conveyance system appropriate for the size of the development and also file a notice of intent with the Illinois Environmental Protection Agency (IL EPA). New buildings within the floodplain currently must be approved by the Village Manager to ensure that the development will not change the flow of floodwater or drainage and negatively impact surrounding properties. The Village should establish a stormwater management ordinance, which will require new developments over a minimum size to capture a percentage of stormwater onsite. The ordinance must, at a minimum, meet the requirements of Cook and Will Counties, as well as the IL EPA's guidelines. The Village should also promote and encourage natural retention and infiltration practices of stormwater onsite via green infrastructure through its stormwater management ordinance. By capturing raindrops where they fall and reducing rainwater volume and flow to storm sewer systems, the community can help alleviate localized flooding and improve local water quality. The Village should also consider prohibiting or limiting development within the floodplain.

It is also recommended that the Village establish a separate stormwater utility fee to assist with necessary upgrades and improvements to the storm sewer infrastructure. This is a growing trend within the region; Rolling Meadows, IL is a good example.

6. Raise public awareness and provide education about water resources.

By raising public awareness regarding water resources, communities can move forward with necessary changes to ensure the long-term sustainability of this very important natural resource. The Village is currently required to implement some educational activities due to IL EPA requirements but the Village should seek to augment its education and outreach initiatives regarding various water resource management issues through informational flyers and workshops. Some of these key issues are listed below.

- Engage in outreach with residents and businesses to help conserve the Village's water supply. Campaign initiatives could include the need for water conservation, the promotion of current water efficient fixtures and appliances, as well as the Village becoming a U.S. EPA WaterSense member. WaterSense is an EPA-led program that promotes water efficiency and conservation and labels water-efficient products, appliances, and fixtures.
- Educate the public about the design and future upgrades of Park Forest's storm sewer infrastructure so that Village residents can better understand the role they play in helping to reduce local flooding. Topics such as green infrastructure should also be included to encourage its use throughout the Village.
- Raise public awareness about the importance of protecting water resources and how Village residents and businesses can help by properly disposing of pharmaceutical waste to avoid drinking water supply contamination.

Water Reuse

Reuse of rainwater and graywater (waste water from bathtubs, showers, sinks, and laundry) for toilet flushing and other non-potable uses in buildings is a growing practice in the country and region. Unfortunately, Illinois's current plumbing codes are not up-to-date with international plumbing standards, which allow for these water reuse practices. Until the State adopts new standards, municipalities are not allowed to adopt their own. There is legislative activity happening now to hopefully amend the Illinois code to reflect more current standards, which would include rainwater harvesting and graywater system reuse guidelines. If this initiative is successful, the plan recommends Park Forest encourage these water reuse practices within the Village to help conserve water supplies.

Implementation Approach

The matrix below provides a starting point for implementing the various strategies identified in this Plan section. Many of the strategies in this section, including strategies 1, 2, 3, and 5, should be considered priority items, as their implementation is critical to both environmental and fiscal sustainability. For example, upgrading infrastructure (strategy 2) is a huge expense for the Village that can be at least partially addressed by strategies 3 and 5. These activities should work together to move the Village toward sustainable water infrastructure. In addition, strategy 1 is essential to ensuring that generations to come have access to fresh water and should be undertaken as soon as is feasible.

Funding

Many of the strategies within this chapter will require additional resources and funding to be implemented. While strategies 3 and 5 have the potential to provide additional revenue to the Village to improve water service infrastructure, funding above and beyond rate increases will be necessary. The Illinois State Revolving Loan Funds and the Illinois Green Infrastructure Grant Program are two such sources of potential funding for the Village. Also, some of the strategies outlined in the chapter may be housed and integrated into existing Village departments without a lot of additional cost (such as water resource education initiatives). Likewise, Park Forest should tap into the wealth of resources available within the region to assist with public outreach and technical assistance. Local watershed groups and water advocacy organizations often offer free workshops and education materials for public distribution.

Table 5A. Implementation matrix

STRATEGY	LEAD & PARTNERS[1]	PHASING[2]	RESOURCES[3]
1. Develop a plan to identify ways to prevent strain on the Village's shared water supply.	**VPF DPW, surrounding communities (Will County)**	**Short-term, ongoing**	**CMAP Water 2050 Plan, CMAP Model Water Conservation Ordinance**
2. Improve utility services via infrastructure upgrades.	**VPF DPW & DF**	**Mid-term**	
3. Review current water service rates to ensure long-term sustainability.	**VPF DPW & DF**	**Ongoing**	**CMAP Model Water Conservation Ordinance, Water Pricing Primer**
4. Encourage best practices in outdoor irrigation and water reuse.	**VPF DPW**	**Ongoing**	**CMAP Model Water Conservation Ordinance**
5. Better manage stormwater to minimize water pollution and flooding issues.	**VPF DPW & DRP**	**Short-term, ongoing**	**Stormwater management model ordinances**
6. Raise public awareness and provide education about water resources.	**VPF, Environment Commission, local watershed groups**	**Ongoing**	**Alliance for the Great Lakes, Alliance for Water Efficiency**

1 VPF = Village of Park Forest; DPW = Department of Public Works; DF = Department of Finance; DRP = Department of Recreation & Parks
2 When implementation should occur: Short-term, 0-3 years; Mid-term, 4-6 years; Long-term, 7+ years; Immediate = as soon as funding/staff time is available
3 Links and further resources and case studies may be found in Appendix A

6. Energy

Energy is an integral part of sustainability planning. Rising energy costs and changing energy needs raise economic, environmental, and even security concerns that impact local government, businesses, and households. Addressing these concerns through energy planning can strengthen economic development by reducing long-term energy costs and lessen environmental impacts by reducing greenhouse gas emissions.

Energy planning can be addressed in part at the local level through implementing policies and programs to gain energy efficiency, which reduce consumption and decrease demand. Since energy consumption in buildings is the greatest contributor to greenhouse gas emissions in the nation, reducing such consumption is often the focus of energy planning. The overall focus of this section is to improve energy efficiency, encourage green building practices, and promote the generation and use of renewable energy in the Village of Park Forest.

Topic Area Goals

The following goals related to Energy were identified and defined through the planning process. Each goal is addressed through one or more of the strategies outlined below.

1. Reduce energy consumption, energy costs and greenhouse gas emissions by increasing energy efficiency and renewable energy options.
2. Set standards and develop municipal policies to support renewable energy sources.
3. Increase the percentage of energy in the community provided by renewable sources.
4. Continue to promote existing Village pilot projects.
5. Pursue renewable energy systems for municipal or large residential complexes first to provide a model for residents.

Energy Efficiency

Energy efficiency focuses on reducing consumption, which can be achieved through numerous avenues and measures, from simple behavior changes to increased building insulation. There are increasing amounts of information and resources available to assist communities in setting achievable energy efficiency goals with coordinated, actionable strategies. It is most important, when considering strategies for implementation, to understand that what works for a community may not work for another.

Energy consumption in households and businesses is impacted by many factors including building envelope, size, age, and occupant behavior. The latter two are key characteristics that likely impact energy consumption of Park Forest's building stock. When compared with an earlier regional energy analysis, the Park Forest Sustainability Assessment shows that average household energy consumption is lower than Cook County and the region's household averages. Nearly three-fourths of homes in the Village were built before 1970 and, therefore, did not benefit from the building technologies and energy codes that newer homes built in the more recent housing booms of the 1990s and 2000s utilized. However, the typical Park Forest home is a moderate size, which helps reduce energy consumption. Furthermore, the common building layout of the Village's tract housing provides a unique opportunity for addressing universal themes in capturing energy efficiency.

Proposed Strategies

The following details the strategies proposed to achieve the identified topic area goals above. Where appropriate, baseline and/or target indicators are also included as a means of monitoring progress. The baseline indicator is a quantitative measure that illustrates the existing conditions related to a strategy, while the target indicator represents a quantitative goal for the Village to strive toward related to the strategy. Further information related to the implementation of these strategies may be found in the Implementation Matrix to follow.

1. Provide informational resources and solicit financial resources for home and business energy audits.

Target Indicators: 15 percent of homes conduct energy audits by 2015; 30 percent of businesses conduct energy audits by 2015.

The majority of buildings in Park Forest were built over 30 years ago; most homes were built between 1949 and 1960 and, while the Park Forest Business Park was developed in the 1980s, the majority of commercial properties were built prior to that time. Therefore, due to the overall age of the building stock, there are a variety of energy efficiency improvements that would reduce energy consumption and costs. The Village can tap into financial resources through existing programs such as Energy Impact Illinois to assist building owners in obtaining professional energy audits, paired with funds to assist in implementing subsequent audit recommendations.

Additionally, informational resources such as do-it-yourself energy assessments and utility bill analysis can assist building owners and occupants as well. These programs should stress that performing an audit will not actually result in improved energy efficiency or savings; rather, further action and vigilance is needed on the part of the audit recipient to achieve such benefits.

2. Develop a retrofit program for existing buildings.

Target Indicators: 5 percent of homes complete retrofits by 2025; 10 percent of businesses complete retrofits by 2025.

A building retrofit is a whole-systems approach to reducing energy consumption throughout a building by as much as 30 percent when applying a mix of energy conservation measures (ECMs) and technology. Typical ECMs address building envelope, heating, cooling, hot water heaters, lighting systems, passive day lighting, and others appliances and equipment. Technologies most often used are air-sealing and insulation, energy efficient windows, high efficiency boilers and furnaces, heat recovery systems, programmable thermostats or energy management systems, solar or tankless hot water systems, energy efficient lighting, and high efficiency equipment to reduce plug load. Building retrofits are a critical component to any energy reduction strategy due to the durable nature of our buildings. The Village can utilize existing programs including Energy Impact Illinois to jumpstart retrofit activity.

3. Encourage replacement of older inefficient appliances with energy efficient appliances.

Air conditioning and refrigeration are the two largest contributors to electricity consumption in the home. Combined, they typically make up approximately 30 percent of all residential electricity usage. Both appliances almost exclusively use electricity and typically have relatively short lifecycles in comparison to the house itself; therefore, these appliances are usually replaced when repairs become too costly. Despite the "short" lifecycle of these appliances, federal energy efficiency standards are often upgraded well before the lifetime of an appliance is exhausted, meaning the refrigerator that "works just fine" is actually very inefficient. Further, it has become common practice to keep older, still-working appliances as extra amenities, such as a refrigerator in the garage, or an extra window unit in a spare bedroom. Appliance replacement strategies that require a complete trade-in of an old appliance to get a rebate ensure that new appliances are not just adding more energy consumption, but actually replacing older, inefficient appliances. The Village should consider partnering with ComEd, stores, or manufacturers for rebate programs.

4. Develop an energy efficiency campaign to encourage modifying energy use behavior and habits.

The ability to translate environmental concerns into simple changes in behavior can result in a substantial energy savings of between five and fifteen percent. These simple changes include tasks such as turning off unused lights, performing simple air conditioning maintenance, reducing heating and increasing cooling temperatures by three degrees, and unplugging electronic devices that continue to draw energy when not in use. Coordinated action at the household level, multiplied community-wide can result in significant energy savings. There are many examples from across the country and even within the Chicago region from which the Village could begin to model its own campaign through a series of workshops, green fairs, and ongoing green communication "prompts" that encourage long-lasting changes in energy habits.

5. Spread the word about residential real time pricing (RRTP).

Target Indicator: Add 500 RRTP members to ComEd's WattSpot by 2017 and 1,000 members by 2025.

Although energy efficiency typically focuses on reducing consumption, certain measures also help reduce peak demand. For example, replacing an inefficient air conditioner with a more efficient unit and operating it at the same time as the old air conditioner reduces overall consumption and thus electricity demand because there is less "drain" on the electrical grid. The same applies for energy efficient lighting or appliances that are on during peak demand times. Residential real time pricing programs like ComEd's WattSpot allow customers to tap into market price electricity which actually changes by the hour. Using a system of price indicators and communication, customers can make choices to change their energy use patterns that help save money while reducing demand on the overall electrical grid. This relationship between energy consumption and peak demand is important to understand when analyzing the impacts of energy efficiency measures. The Village should encourage resident participation in RRTP through the energy efficiency campaign outlined in the above strategy.

6. Develop and implement a community energy challenge.

An energy challenge in the form of a competition between classrooms or schools can result in a number of benefits, including education for students, who in turn take those lessons home, and energy savings for the school district. Numerous examples of such programs can be found online, including "energy detectives," home energy audits, conducting hands-on school energy audits, and discovering at-school energy-saving behavior modifications. The Village and school-focused stakeholders should research programs and available resources and identify best practices to consider for implementation in Park Forest.

Green Buildings

Green buildings address sustainability in a comprehensive manner by focusing on energy use, natural resources, site/location, materials and other factors. A well-thought out municipal green building program can make a significant impact on a community's greenhouse gas emissions. In the Chicago metropolitan area, about 61 percent of emissions come from buildings, while in Park Forest, 47.3 percent of emissions come from buildings. An emphasis on indoor air quality may also result in a better environment for inhabitants, improving community health. Efficient buildings can have financial benefits, especially for low-income families who may spend up to 20 percent of their income on energy costs.

Proposed Strategies

The following details the strategies proposed to achieve the identified topic area goals above.

7. Develop incentives for new buildings and developments to be built to established green building standards.

Target Indicator: Build 50 percent of new construction buildings to green standards by 2025.

Green buildings and developments offer significant opportunities for energy savings, as well the conservation of water and resource materials in new buildings. Green building programs (such as those administered by the U.S. Green Building Council and Green Globes U.S.) typically feature a rating system that measures the degree of energy efficiency achieved. Municipalities that implement green building programs range from mandatory, required building code regulations to voluntary, incentive-based programs. To encourage this high level of sustainability, the Village should offer incentives, such as fast tracked permitting, property tax credits, or fee waivers, to developments that meet the criteria of a predetermined green building rating system.

8. Develop a green building handbook to assist building owners in implementing green practices.

Target Indicator: Build 30 percent of major renovations to green standards by 2025.

Whether or not Park Forest develops a green building program, the Village should highlight and encourage the integration of green building practices for home and business repairs, major renovations, and regular, ongoing maintenance practices. The Village produced a home maintenance handbook in 1980 that identified energy conservation measures for homeowners seeking to make upgrades to their homes; this handbook can be used as a starting point for providing updated information and tools on a variety of topics including, but not limited to, air sealing and insulation, window replacement, and air conditioner maintenance. Once developed, this resource should be widely distributed to Park Forest citizens for their information and use.

Renewable Energy

Renewable energy sources (such as wind, solar, and geothermal power) are defined as naturally recurring energy sources that may be harvested without the detrimental effects of carbon emissions. Switching from traditional sources of fuel to renewable energy sources, whether generating or purchasing, is one way that the Village both as a government entity and as a community can reduce its greenhouse gas emissions and energy bills. Demand for renewable energy systems is increasing as concerns over the cost of fossil fuels rise, and innovations in technology are expected to make such systems more affordable and accessible in the future.

Proposed Strategies

The following details the strategies proposed to achieve the identified topic area goals above.

9. Create and adopt an onsite renewable energy generation ordinance.

Target Indicator: Adopt a renewable energy ordinance by 2015.

Onsite renewable energy systems generate electricity from renewable sources, such as solar, wind, geothermal, and biomass. As renewable energy options become more commonplace in our region, the Village can take two simultaneous actions to support it. First, the Village can assess its current building and zoning ordinances to make sure that existing regulations do not inadvertently prohibit onsite systems. Height, roof, side yard and accessory uses may be a few areas to begin this analysis. Second, the Village can develop its own small (on-site) renewable energy policy to provide guidelines and uniformity that assist building owners.

10. Pursue renewable energy systems that provide a model for residents.

Renewable energy is not a new concept, as communities along the coasts and in desert areas have historically tapped into hydropower and solar resources. In our region, rising energy costs coupled with concerns about the environment have recently spawned considerable interest in renewables. The Village has been proactive in pursuing renewable energy opportunities, most recently with the installation of a solar hot water system in the Park Forest Aqua Center. Further Village-sponsored wind and solar projects on municipal buildings (such as a solar hot water heater for the fire station) and potentially on private demonstration sites (such as a demonstration project for a co-op building or single family home) could provide evidence-based results that would garner support and buy-in from the community as a viable strategy to improve the long-term sustainability of Park Forest. Also, as an economic incentive, the Village should consider the creation of a district energy system adjacent to DownTown that would provide DownTown businesses with discounted or free renewable energy. Due to the large potential expense of this item, the Village should continue to seek out grant and other funding opportunities to pursue this and other renewable energy demonstration projects.

11. Set standards and develop municipal policies to support renewable energy sources.

The Village should consider establishing a long term task force to initiate and oversee discussion and implementation regarding renewable energy in Park Forest, including small, on-site renewable energy for private owners, viability of renewable energy at municipal-owned buildings, the viability of large-scale projects, and all-green power through community aggregation and purchasing of renewable energy for all electric customers.

Implementation Approach

The matrix on the following page provides a starting point for implementing the various strategies identified in this Plan section. It should be noted that many of the proposed strategies relate to providing resources and information and modifying regulatory code provisions to either enable or incentivize energy-related provisions; however, simply providing information and changing codes will not result in actual energy savings. Whenever possible, implementation of real energy-savings measures (such as those that would result from strategies 2, 3, 4, 5, 7, and 8) should be prioritized to ensure that the Village is moving forward in achieving energy efficiency and reducing related greenhouse gas emissions.

Funding

Additional resources and funding will be needed to implement many of the proposed energy strategies. Some strategies may involve additional resources from Village staff (such as developing green building incentives) and some actions may be incorporated into existing municipal departments (such as promoting RRTP programs or developing an energy campaign). Other strategies may require significant up-front costs; however, it is important to note that implementation of strategies can result in significant cost savings or "return on investments," which should be considered when assessing implementation costs.

Recently, unprecedented funding for energy efficiency and conservation measures has become available at the federal, state, and local levels. For example, Energy Impact Illinois (EI2) is a federally-funded retrofit ramp-up program in the Chicago region. Its goal is to create a sustainable energy retrofit market, which is a resource that the Village could tap into for retrofits for all building sectors. Additionally, the U.S. Department of Energy offers important energy efficiency information for homes, other building types, vehicles, industry, and government; tools and resources can be accessed online, including various free webinars.

At the state level, the Illinois Department of Commerce and Economic Opportunity (DCEO) provides both funding and informational resources such as matching funds for public sector agencies and energy efficient appliance rebate programs for the private sector. A host of other federal and state funding opportunities including the Weatherization Assistance Program and Neighborhood Stabilization Program are available to local governments interested in reducing their energy consumption. Federal and state tax incentives and rebates for energy efficiency and renewable energy projects are available to local government as well as individual building owners.

The Village can also take advantage of the Illinois Smart Energy Design Assistance Center (SEDAC), which offers free energy audit services and technical assistance. Finally, the Village should examine grant opportunities by local foundations whose funding priorities closely match the sustainability goals outlined in this section, as well a variety of income-based energy programs available through both government and nonprofit agencies.

Table 6A. Implementation matrix

STRATEGY	LEAD & PARTNERS[1]	PHASING[2]	RESOURCES[3]
1. Provide informational resources and solicit financial resources for home and business energy audits.	**VPF DCD, CNT, CMAP**	**Short-mid term**	**SEDAC, Energy Impact Illinois, CNT**
2. Develop a retrofit program for existing buildings.	**VPF DCD & DRP**	**Long-term**	**Energy Impact Illinois, U.S. Better Buildings Program**
3. Encourage replacement of older inefficient appliances with energy efficient appliances.	**VPF DCD & PIO/SC, Environment Commission with utilities**	**Short-term**	**EnergyStar, ComEd Smart Ideas**
4. Develop an energy efficiency campaign to encourage modifying energy use behavior and habits.	**VPF DCD, Environment Commission, with utilities**	**Immediate**	**Flex Your Power (CA), Cool Cities (Sierra Club)**
5. Spread the word about residential real time pricing (RRTP).	**VPF DCD, ComEd, CNT**	**Short-term**	**CNT, ComEd, Ameren Power Smart Pricing**
6. Develop and implement a community energy challenge.	**VPF DCD, school district(s), Environment Commission**	**Mid term**	**Alliance to Save Energy, U.S. Department of Energy**
7. Develop incentives for new buildings to be built to established green building standards.	**VPF DCD**	**Short-term**	**USGBC**
8. Develop a green building handbook to assist building owners in implementing green practices.	**VPF DCD, Environment Commission**	**Short-mid term**	**Seattle Office of Sustainability Green Homes Guide**
9. Create and adopt an onsite renewable energy generation ordinance.	**VPF DCD**	**Short-term**	**Illinois Solar Energy Association, Illinois Wind**
10. Pursue renewable energy systems that provide a model for residents.	**VPF DCD, DCEO**	**Short-mid term**	**Illinois Solar Energy Association, Illinois Wind**
11. Set standards and develop municipal policies to support renewable energy sources.	**VPF DCD**	**Short-mid term**	**Oak Park aggregation plan**

1 VPF = Village of Park Forest; DCD = Department of Community Development; DRP = Department of Recreation & Parks; PIO = Public Information Officer; SC = Sustainability Coordinator; DCEO = Department of Commerce and Economic Opportunity; SEDAC = Illinois Smart Energy Design Assistance Center.

2 When implementation should occur: Short-term, 0-3 years; Mid-term, 4-6 years; Long-term, 7+ years; Immediate = as soon as funding/staff time is available.

3 Links and further resources and case studies may be found in Appendix A.

Table 7A. Other emissions-related strategies

STRATEGY	PAGE #
Development Patterns	
Update the Village's development regulations to require and/or incentivize sustainable development.	27
Transportation & Mobility	
Reduce the community's annual vehicle miles traveled (VMT).	32
Work with Pace to explore improved service and additional transit amenities.	32
Expand Jolly Trolley service.	33
Develop a public marketing campaign to promote transportation alternatives.	33
Establish car sharing services at Metra stations and other key locations around the Village.	33
Encourage the use of fuel-efficient vehicles by providing needed infrastructure.	34
Create street types appropriate for Village context areas.	34
Create a bicycle routes plan that establishes criteria for new bike lanes and trailways.	36
Explore bicycle parking requirements for new developments.	36
Improve walkability and pedestrian safety throughout the community.	36
Waste	
Pursue actions that will help to increase recycling rates.	44
Facilitate composting in the Village.	44
Require recycling of construction and demolition debris and offer incentives for deconstruction and materials reuse.	45
Energy	
Provide informational resources and solicit financial resources for home and business energy audits.	52
Develop a retrofit program for existing buildings.	52
Encourage replacement of older inefficient appliances with energy efficient appliances.	52
Develop an energy efficiency campaign to encourage modifying energy use behavior and habits.	53
Spread the word about residential real time pricing (RRTP).	53
Develop and implement a community energy challenge.	53
Develop incentives for new buildings and developments to be built to established green building standards.	53
Develop a green building handbook to assist building owners in implementing green practices.	53
Create and adopt an onsite renewable energy generation ordinance.	54
Pursue renewable energy systems that provide a model for residents.	54
Set standards and develop municipal policies to support renewable energy sources.	54

7. Greenhouse Gases

Greenhouse gases (GHG) are gases, such as carbon dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O), that trap heat in the Earth's atmosphere. Greenhouse gases come from both natural sources and human activities. It is widely understood that concentrations of greenhouse gases (especially carbon dioxide) have recently increased in the earth's atmosphere, especially since the start of the Industrial Revolution, due to increased combustion of fossil fuels.

Fossil fuels consist of hydrogen and carbon and, when burned to create energy, the carbon combines with oxygen to create carbon dioxide. However, the amount of carbon dioxide produced depends on the carbon content of the fuel. For example, coal (used to produce electricity) emits nearly twice as much carbon dioxide per unit of energy as natural gas. While burning any fossil fuel contributes to greenhouse gas emissions, nuclear power and renewable energy sources offer significantly lower emissions during energy production. Understanding this relationship is important when selecting strategies to reduce greenhouse gas emissions.

The consumption of energy in buildings is the greatest contributor to greenhouse gas emissions in the nation. However, the Village's emissions inventory (summarized in the Sustainability Assessment) showed that in 2010, the transportation sector contributed the largest amount of GHG emissions (49.5 percent), with the buildings sector following (47.3 percent). Residential uses comprised about 74.4 percent of the emissions in the building sector, while commercial uses represented 24.2 percent and government uses represented 1.4 percent.

To achieve the greatest reductions in greenhouse gas emissions in Park Forest, the focus of this section is reducing vehicle miles traveled (which are responsible for the majority of transportation-related emissions) and energy consumption in buildings, particularly for the residential sector. This chapter presents the following important takeaways for Park Forest:

1. Understanding the strong relationship emissions has to transportation and energy.
2. Putting in place a process to measure and document outcomes in transportation and energy strategies that will later allow the Village to measure the broader impact on the community's emissions inventory.

Topic Area Goal

The following goal related to Greenhouse Gases was identified and defined through the planning process.

1. Reduce greenhouse gas emissions generated in the Village of Park Forest.

This goal is addressed partially by the strategies outlined below but, since emissions are affected by so many factors, various other sections of this Plan (such as Transportation and Mobility, Energy, Waste, and Development Patterns) also include related strategies. To avoid repetition in text, Table 7-a summarizes relevant strategies from these other Plan sections; refer to the specific sections for more information. The two subsections below (Transportation and Energy) explain how each topic links to greenhouse gas emissions and identifies additional strategies that build upon the strategies noted in other Plan sections.

Figure 7A. Community emissions by sector, 2010

Table 7B. Community emissions by sector, 2010

EMISSIONS SOURCE SECTORS	CO2 EQUIVALENT (METRIC TONS OR TONNES)	SHARE OF TOTAL CO2 EQUIVALENT (%)
Buildings	**114,142**	**47.3%**
Residential	**84,867**	**35.2%**
Commercial, Industrial, & Institutional	**27,586**	**11.4%**
Government	**1,689**	**0.7%**
Transportation	**119,196**	**49.5%**
Waste	**7,621**	**3.2%**
Total	**240,959**	**100.0%**

Source: ICLEI CACP 2009 software

Emissions Reduction Target

Traditionally, GHG emissions targets are established in a comprehensive climate planning process. After a target is set, specific strategies are designed to meet that goal. However, establishing an emissions target for Park Forest is the reverse approach, as strategies vetted by the Village and community stakeholders feed in to a target emissions goal. Updated greenhouse gas emissions targets should continue to relate directly to selected development patterns, energy, transportation, and waste strategies.

Baseline Indicator: In 2010, Park Forest emitted approximately 240,959 tonnes of CO2 equivalent.

Target Indicator: The Village will reduce its GHG emissions by 6 percent, or approximately 14,500 tonnes, from the baseline year by 2025.

Transportation

Transportation is the largest contributor to greenhouse gas emissions in Park Forest. Strategies that can decrease this impact fall into two areas: reducing vehicle miles traveled and reducing fuel consumption (or "tailpipe emissions"). Strategies that address potential savings are compiled below; please refer to the Transportation section for further details.

Proposed Strategies

The following details additional strategies proposed to achieve the identified topic area goal above.

1. Adopt and implement a municipal vehicle anti-idling management policy.

Park Forest should encourage more efficient fuel use by adopting a municipal vehicle idling management policy commonly referred to as "anti-idling," which limits idling for municipal vehicles except for specific situations like traffic, emergency response teams, or extreme weather conditions. The Fire Department is currently in the process of adopting such a policy; this practice should be extended to all Village departments. Ultimately, the Village can extend this policy to a Village-wide anti-idling campaign to educate the public about the benefits of reduced idling.

2. Require new residential construction to include electric vehicle hookups.

Park Forest cannot control the rollout of electric vehicles or potential impact of fuel prices, but the Village can help shape consumer attitudes and do its part to ensure that adequate recharging infrastructure is in place. In the recently released Electric Vehicle Markets Forecast, Colorado-based Pike Research predicts that sales of EVs will increase rapidly, and that by 2017 annual sales will reach 359,000 in the United States. The Chicago-Naperville-Joliet, IL-IN-WI Metropolitan Statistical Area (MSA) is expected to be one of the top five MSAs in the country for electric vehicle purchases from 2011 through 2017. The report highlights four distinct factors that will impact the EV market: 1) vehicle availability; 2) fuel prices; 3) government market influence; and 4) consumer attitudes and recharging infrastructure. The Village should consider requiring that new residential developments include electric vehicle hookups.

3. Require all new commercial construction to include facilities for electric and low emission vehicles.

For communities concerned about sustainability, electric vehicles (EVs) offer significant benefits regarding emissions, fuel economy, fuel cost, fuel flexibility, and energy security. With essentially zero "tailpipe" emissions and energy costs significantly lower than the cost of gasoline, EVs are a viable solution for sustainable-minded communities like Park Forest. However, "a significant factor in the consumer adoption of EVs will be the ability to extend the range of battery-only power. This can be accomplished by the wise installation of publicly available charging locations. " The Village should require new commercial construction that receives at least one Village incentive to include facilities for electric and/or low emission vehicles (LEVs). The Village should also lead by example by providing charging stations at Village facilities, such as Village Hall, the library, and the two Village-owned commuter parking lots. Preferred parking for LEVs is an additional way to shape consumer attitudes.

Energy

The consumption of energy in buildings is the second largest contributor to greenhouse gas emissions in Park Forest. Strategies that can reduce this impact again generally fall into two areas, energy efficiency and renewable energy. Strategies that address energy efficiency and renewable energy are compiled below; please refer to the Energy section for further details.

Proposed Strategies

The following details additional strategies proposed to achieve the identified topic area goal above.

4. Require energy audits (or energy disclosure) at time-of-sale for buildings.

Energy audits or disclosures of energy consumption provide detailed information to a buyer about building performance and recommendations for improving energy efficiency that range from low/no-cost strategies to those requiring long-term financial investments. Requiring energy audits or disclosures at the time-of-sale will equip consumers with information about a building's energy use and help them make important choices about energy efficiency investments. Numerous municipalities, counties, and states are establishing time-of-sale requirements for audits, utility data disclosures or efficiency checklists. Nationally and even locally with MyHomeEQ, the real estate market is capturing the value of understanding a building's energy consumption patterns.

5. Include energy as part of the development review process for new construction buildings.

The traditional development review process considers the impact of traffic, water utility services, increased population, natural resources (landscaping), schools, and protection services (fire), among other topics. The Village should consider examining the impact new developments have on utility infrastructure by assessing proposed annual energy consumption and demand to create awareness and encourage improved energy efficiency whenever possible.

Implementation Approach

The matrix below provides a starting point for implementing the various strategies identified in this Plan section. All of this section's strategies can be undertaken as a part of the larger development codes update proposed in the Development Patterns section.

Funding

Because the strategies proposed in this section would fall under the umbrella of a general development regulations update, funding for these items would be covered through the funding procured for that task (see Development Patterns section).

Table 7C. Implementation matrix

STRATEGY	LEAD & PARTNERS[1]	PHASING[2]	RESOURCES[3]
1. Adopt and implement a municipal vehicle anti-idling management policy.	**VPF**	**Short-term**	**Clean Air Counts**
2. Require new residential construction to include electric vehicle hookups.	**VPF DEDP & DCD**	**Short-term**	**Oregon I-5 Metro Areas case study**
3. Require all new commercial construction to include facilities for electric and low emission vehicles (LEVs).	**VPF DEDP & DCD**	**Short-term**	**Oregon I-5 Metro Areas case study**
4. Require energy audits (or energy disclosure) at time-of-sale for buildings.	**VPF DCD, CNT**	**Short-term**	**Austin, TX Energy Conservation Audit Disclosure (ECAD)**
5. Include energy as part of the development review process for new construction buildings.	**VPF DEDP & DCD**	**Short-term**	**Austin, TX Smart Growth Matrix**

1 VPF = Village of Park Forest; DEDP = Department of Economic Development and Planning.
2 When implementation should occur: Short-term, 0-3 years; Mid-term, 4-6 years; Long-term, 7+ years; Immediate = as soon as funding/staff time is available.
3 Links and further resources and case studies may be found in Appendix A.

8. Green Economy

Nurturing and expanding Park Forest's budding green economy is a potential key to the community's financial and environmental sustainability.

To do so, Park Forest should build off of its current base and maximize opportunities for new growth and development. Green businesses can be defined as those whose primary function is to produce goods or provide services that benefit the environment or conserve natural resources. Green businesses are particularly related to renewable energy sources, energy efficiency, pollution reduction and removal, greenhouse gas reduction, alternative transportation, recycling and reuse, natural resources conservation, environmental education, and green job training. By this definition, Park Forest currently has six green businesses, which account for two percent of all businesses in the community. These businesses provide around 146 green jobs (which comprise roughly three percent of all jobs in Park Forest's economy). The community's green businesses and jobs represent a springboard from which to grow. Park Forest can physically accommodate commercial growth given the large amount of diverse and affordable available space for new enterprises. Currently, Park Forest has 375,724 square feet of vacant commercial space, of which about 45.5 percent is retail, 21.9 percent is office, and 32.6 percent is industrial space.

Another way to support a more sustainable commercial sector is through the greening of local businesses' practices. The Assessment found evidence that some Park Forest businesses participate in green practices, several were interested in hearing how they could be green, and many expressed the need for continued local support.

Topic Area Goals

The following goals related to Green Economy were identified and defined through the planning process. Each goal is addressed through one or more of the strategies outlined below.

1. Support and promote local businesses (including home based businesses).
2. Support and promote green businesses and jobs.
3. Promote and incentivize businesses that apply green practices and/or use local products.
4. Attract businesses that would allow residents to meet some of their daily needs on foot (such as a grocery store).
5. Connect local businesses with education, training, and jobs related to sustainability.

Proposed Strategies

The following details the strategies proposed to achieve the identified topic area goals outlined above. Where appropriate, baseline and/or target indicators are also included as a means of monitoring progress. The baseline indicator is a quantitative measure that illustrates the existing conditions related to a strategy, while the target indicator represents a quantitative goal for the Village to strive toward related to the strategy. Further information related to the implementation of these strategies may be found in the Implementation Matrix to follow.

The South Suburban Food Co-op in DownTown is one of six green businesses in the Village.

1. Reach out to newly forming and/or growing green businesses.

To first identify potential green businesses suitable for Park Forest, contacts should be made through the Village's existing green businesses and the Illinois Green Industry Association, an association of green businesses in Illinois. The Village's current green businesses and IGIA's staff and members could help connect the Village with green businesses looking for space. This strategy can and should be linked with other strategies described below that incentivize, promote, encourage, and otherwise support green businesses.

2. Develop financial incentives to attract and promote green businesses and jobs.

Baseline Indicator: Currently, there are 6 green businesses located in Park Forest.

Target Indicator: Attract 3 new green businesses by 2017 and 6 new green businesses total by 2025.

The Village should offer attractive financial incentives to potential and existing green businesses. Incentives may include discounted business licenses, tax abatements to landlords with green business tenants, and, for Village-owned properties, discounted rents for green business tenants. Another potential incentive could include partially subsidizing energy costs for businesses in DownTown or the business park via the development of a district renewable energy system, such as a geothermal heat pump or solar panels on buildings oriented north-south.

3. Establish a green business incubator.

Green business incubators are increasing in popularity around the country and exist in varying degrees of size and complexity. At its essence, a green business incubator is a program designed to provide services to green business entrepreneurs who are in the early stages of establishing a green business. Most incubators offer clients various tangible advantages (office space with affordable rent, shared utility and administrative expenses), as well as intangible advantages (shared vision among the tenants, networking, collaboration, and business advice). The establishment and operation of a green business incubator usually occurs through public, private, and/or nonprofit sector partnerships. The Village may be an appropriate entity to foster the creation of the incubator due to its abundance of commercial space and potential to offer technical assistance to tenants. Potential partners could include Prairie State College, Governors State University, or another educational entity. The incubator could also serve to advance the first strategy in this section, to make contact with and attract new green businesses. Successful examples of green business incubators include the Project for Innovation, Energy, and Sustainability (PiES) in Davidson, North Carolina as well as the Bethesda Green incubator in Bethesda, Maryland.

4. Create a Green Chapter for businesses.

Park Forest's business community or a group like the Chicago Southland Economic Development Corporation or Chicago Southland Chamber of Commerce (CSCC) should create a "Green Chapter," which would provide opportunities for green businesses to network with one another, as well as with other "Green Chapters" around the country. These opportunities could include networking, business sharing, and informational events as well as virtual opportunities via webinars, blogs, and open or restricted-access websites. Several other green chambers or "eco chapters" have been established, such as the Las Vegas Chamber of Commerce. Such organizations can include green businesses as well as traditional businesses with green practices and procedures.

5. Implement a green business certification program.

To encourage green businesses and practices, the Village, CSCC, Green Chapter, or another group should implement a green business certification program which would identify and recognize green businesses or businesses with green practices in the community or sub-region. The organizing entity could encourage businesses to apply to already-established green certification programs such as the Green Business Network's GreenGain Certification program or the Illinois Green Business Association's Green Certified Business program. Both certification programs look to certify businesses with green-friendly practices.

Another option would be for the Village to create its own certification program, which would establish qualifying criteria for an entity to become a Village-certified "Green Business." This type of certification would enable certified businesses to enjoy specific promotional and marketing benefits which could include a special "certified" green business decal, inclusion in a green business directory, and/or showcasing opportunities at the Village's business breakfasts. The Village can further explore criteria and benefits from other established certification programs mentioned above.

6. Provide sustainability-related resources to businesses.

Recognizing and understanding businesses and their obstacles to incorporating sustainability are key concepts for the Village in encouraging green practices. Education and partnerships with and among the business community are critical to furthering sustainability efforts. The Village or a related partner (such as the Green Chapter outlined above) could serve as an information clearinghouse for businesses, helping them connect to information and funding opportunities through various resources, such as ComEd Smart Ideas Program, Nicor Gas Energy Efficiency Program, Illinois Energy Star Appliance Rebate Program, Illinois Energy Office, and the Illinois Department of Commerce and Economic Opportunity (DCEO).

In addition, existing businesses would benefit from workshops and training sessions on green practices, processes, and building updates, particularly those that may result in cost savings. The Village's quarterly business breakfast has been successful in the past at attracting businesses for a wide variety of topic areas, and represents a great opportunity to promote green business practices. The Village should devote at least one business breakfast meeting per year to educating businesses about sustainability-related topic areas. The meetings might report on information and funding opportunities that the Village has compiled, or related organizations could be brought in to make presentations. Such organizations and partners could include Center for Neighborhood Technology, Delta Institute, Energy Impact Illinois, and Illinois Green Business Association (IGBA).

7. Work with businesses to implement green purchasing.

Many businesses may be reluctant to implement green practices or purchase green products due to a perception of increased cost, especially in the short-term. Combining individual business's orders into a collective bulk order for green products, appliances, or energy creates an economy of scale that brings unit costs down. There are several methodologies for coordinating this type of effort. Businesses could casually join together to collectively order green appliances or products from a manufacturer and negotiate a lower price. This option may be difficult to initiate without prior expertise on the part of the businesses and would necessitate one of the businesses stepping up to serve as a leader to shepherd the group through the process.

Another option is to encourage businesses in the Village to participate in an already established program, such as the Delta Institute's Buying Better program. Buying Better is a free online purchasing program that enables individual businesses to purchase green goods at a reduced price due to the program's critical mass of membership. Buying Better ensures that the products offered meet widely accepted and transparent standards, such as those of USGBC's LEED certification program, EPA's Comprehensive Procurement Guidelines, or EPA's Environmentally Preferable Purchasing standards.

8. Explore green-skills vocational training opportunities.

In an effort to promote green jobs and workforce development, the Village, CSCC, Green Chapter, or another organization can help establish green collar job training programs. Such job training programs offer training in home energy audits, solar installation, energy efficiency, and other related topics. This could occur through a special program at the high school or local community college, or through a private company. To date, the Village has been working with the South Suburban Chapter of the Chicago Manufacturing Renaissance Council to offer job training for manufacturing jobs at Rich East High School. The Village potentially could build on those activities to include green jobs training at Rich East as well. Examples of job training programs can be found at those community colleges in the Illinois Community College Sustainability Network (ICCSN) and the Illinois Green Economy Network (IGEN).

9. Hold interactive events in the DownTown to promote local businesses.

To help promote local businesses, the Village should continue to hold events, such as Midsummer Madness and Main Street Nights, in the DownTown area. These events are important in bringing residents together in DownTown, both building upon its importance as a community center and increasing local business exposure. DownTown events may also provide a marketing opportunity for home-based businesses as well. The Village can collaborate with the Southland Chamber of Commerce for partnership opportunities and further marketing ideas. As several have done already, local businesses could also consider adopting a "frequent buyer" card where those who frequent participating businesses receive a discount after a certain threshold of spending is met. The Ridgewood Chamber of Commerce in Ridgewood, New Jersey, has developed such a program. The Village should also continue efforts to support the 3/50 Project, which is a national project that encourages consumers to shop locally. The Project suggests that consumers visit three local, independently owned businesses per month and spend a minimum of $50 to support such businesses and keep dollars in the community.

Implementation Approach

The matrix below provides a starting point for implementing the various strategies identified in this Plan section. The strategies that involve working with external partners will need to be coordinated and timed according to the partners' availability and commitment. Other activities, such as strategies 6 and 9, are already underway in the Village and can be continued and enhanced. The Village should prioritize the strategies undertaken to maximize impact.

Funding

Many of the strategies in this section, particularly those that relate to reaching out to and providing resources to businesses (strategies 1, 2, 4, 5, 6, 7, 9), can likely be absorbed by existing staff and budget. Other strategies can be funded by grants, particularly from the Illinois Department of Commerce and Economic Opportunity (DCEO); DCEO's Employer Training Investment Program (ETIP) may be an appropriate source to fund strategy 8.

Table 8A. Implementation matrix

STRATEGY	LEAD & PARTNERS[1]	PHASING[2]	RESOURCES[3]
1. Reach out to newly forming and/or growing green businesses.	**VPF DEDP, EDAG, current Village businesses**	**Short-term**	**Illinois Green Industry Association (IGIA)**
2. Develop financial incentives to attract and promote green businesses and jobs.	**VPF DEDP & DCD**	**Long-term**	**CNT, Delta Institute**
3. Establish a green business incubator.	**VPF DEDP**	**Mid-term**	**Project for Innovation, Energy, & Sustainability in Davidson, NC**
4. Create a Green Chapter for businesses.	**Lead: CSEDC or CSCC, VPF DEDP support**	**Mid-term**	**Las Vegas Chamber of Commerce, IGIA**
5. Implement a green business certification program.	**VPF DEDP & DCD, CSCC, or new Green Chapter**	**Mid-term**	**Green Business Network, Illinois Green Business Association**
6. Provide sustainability-related resources to businesses.	**VPF DEDP, CSCC, or new Green Chapter**	**Short-term**	**See narrative**
7. Work with businesses to implement green purchasing.	**VPF DEDP, local business leaders**	**Mid-term**	**Buying Better program (Delta Institute)**
8. Explore green-skills vocational training opportunities.	**VPF, Rich East HS, GSU, Prairie State University, CMRC**	**Long-term**	**Illinois Community College Sustainability Network**
9. Hold interactive events in the DownTown to promote local businesses.	**VPF DEDP, CSCC**	**Ongoing**	**CSCC, Ridgewood Chamber of Commerce**

1 VPF DEDP = Village of Park Forest Department of Economic Development and Planning; EDAG = Economic Development Advisory Group; CSCC = Chicago Southland Chamber of Commerce, CSEDC = Chicago Southland Economic Development Corporation, DCD = Department of Community Development; CMRC = Chicago Manufacturing Renaissance Council

2 When implementation should occur: Short-term, 0-3 years; Mid-term, 4-6 years; Long-term, 7+ years; Immediate = as soon as funding/staff time is available

3 Links and further resources and case studies may be found in Appendix A

9. Local Food Systems

A sustainable local food system can address concerns related to health, quality of life, economics, and the environment.

Local food for Park Forest refers to a product available for direct human consumption that is grown, processed, packaged, and distributed within northeastern Illinois and adjacent regions. The Village has two long-standing enterprises that provide excellent access to fresh produce for its residents: the Downtown farmers' market, operating for 38 years, and the South Suburban Food Co-op, in business for 37 years and now with over 340 members.

Despite these amenities, Village residents lack access to larger grocery stores within Village boundaries. However, there are several supermarket options just outside the Village in neighboring communities. There are also three convenience stores - 7-Eleven, CVS, and Walgreens — in the Village that provide some fresh produce, but convenience stores are typically limited in their options and are more costly than supermarkets. This reduced access makes it even more essential for Park Forest to grow its local food base.

Topic Area Goals

The following goals related to Local Food Systems were identified and defined through the planning process. Each goal is addressed through one or more of the strategies outlined below.

1. Promote local food through education initiatives.
2. Promote and support the Farmers Market and South Suburban Food Coop.
3. Support the development of community gardens on vacant lots as a temporary use.
4. Engage the community in bolstering a local food economy.

Proposed Strategies

The following details the strategies proposed to achieve the identified topic area goals outlined above. Where appropriate, baseline and /or target indicators are also included as a means of monitoring progress. The baseline indicator is a quantitative measure that illustrates the existing conditions related to a strategy, while the target indicator represents a quantitative goal for the Village to strive toward related to the strategy. Further information related to the implementation of these strategies may be found in the Implementation Matrix to follow.

1. Establish a community garden program.

Target Indicator: Create 15 new community gardens by 2015 and 30 total by 2025.

Initiating community gardens on the Village's vacant properties and elsewhere would enhance neighborhood character, foster a sense of community, and decrease Village costs of mowing and other maintenance. The first step is to ensure that local ordinances are compatible with community garden use. Numerous cities across the country have revised their zoning ordinances to allow community gardens as a permitted use in many or all zoning districts. If the Village wishes to permit sales of produce from the gardens, the ordinance revision's language should protect neighbors from potential conflicts such as parking and signage.

The Village, in conjunction with the Environment Commission, should also develop criteria and evaluate potential public sites for community gardens. Lot suitability should be determined by both the physical conditions of the land and neighborhood characteristics. The physical characteristics of well-suited sites include those with a minimum of six hours of sunlight per day; fertile, well-draining soil (compost can improve soil quality); and access to water. Additional considerations include access to the site, convenience, and informal surveillance (people present during the day). Denser, multifamily areas that have reduced access to open space and those close to community centers (such as DownTown) are good options. The Village may also want to consider incorporating community gardens on street ends, unused schoolyard areas, senior centers, and rooftops.

There are many different community gardening models across the nation. One example is Adopt-a-Lot, which varies programmatically from city to city; most offer property suitable for gardening at no charge in return for maintenance and upkeep. Liability insurance, or waiver of liability by the gardeners, is typically required. Other cities set up lease programs whereby a not-for-profit organization, or group of individuals with a not-for-profit sponsor, may establish gardens for a nominal fee, with specific rules, such as attendance at an educational workshop, allowance for some public access (20 hours a year), and procurement of liability insurance. Agreements for tenure and conditions for use of the land are sometimes developed in partnership with the landowners and gardeners. The Village may want to consider raised beds for shorter term leases or temporary uses, and long term leases or permanent use for gardens that serve multiple goals, such as providing access to fresh food in lower income areas, serving as teaching gardens near schools and providing healthy lunches, providing activities for senior citizens, and donating produce to churches to give to those in need.

Community garden at St. Irenaeus church.

2. Explore the creation of standards for raising honeybees and fowl on residential lots.

Park Forest's local food economy would be enhanced by further expanding residents' opportunities to develop a variety of food sources closer to their homes. To advance that effort, standards could be developed for the keeping of small animals, such as fowl and honeybees, in single-family residential areas. The public engagement process for this Plan yielded some resident concerns over safety issues or nuisances that could be created by such practices. These concerns can be addressed through the crafting of careful guidelines. For example, standards related to keeping chickens may include setting a maximum number of chickens per lot, requiring chickens to be kept in a pen or coop, requiring a minimum distance that the structure must be located from neighboring residences (such as 20 feet), and prohibiting slaughtering. While beekeeping may at first seem a safety concern to many, it can be a truly benign activity when proper standards are applied. These standards can include setting a maximum number of hives, specifying the location of the hive(s) (such as in the rear of the lot, with a minimum setback from rear and side property lines), requiring a flyover barrier and screening or fencing, and orienting the hive entrance away from walkways and heavily trafficked areas.

3. Support the farmers' market and South Suburban Food Cooperative.

The farmers' market and South Suburban Food Co-op are two invaluable resources that provide Village residents with increased access to quality food options. The Village should take steps to ensure that these two institutions remain in Park Forest and thrive. Educational and outreach initiatives can help increase demand for products sold. The Village can promote the educational events offered by the Co-op. The Village could also assist in seeking technical and financial assistance to promote and support both institutions.

In addition, the Village can foster increased sales at the farmers' market by creating an organizational structure that enables farmers to accept electronic benefits transfer (EBT) cards (which replaced food stamps) for purchases. Food stamp recipients used to be able to use paper coupons at farmers' markets, but the conversion to the EBT Link card has meant that market operators must purchase machines to accept the benefits. While there may be initial costs associated, acceptance of Link cards at markets can be an economic boon to farmers and vendors. The City of Chicago instituted a pilot program at five markets in 2010 that resulted in Link sales of $29,000, nearly triple the total farmers' market sales for the entire state in 2009. Various organizations and agencies are available to assist, including USDA programs to encourage farmers' markets to accept Link or EBT cards; Experimental Station, a nonprofit organization with extensive experience with and training for Link at farmers' markets; and Wholesome Wave, a national nonprofit organization that administers a double value coupon program for Link users.

4. Expand food-related educational opportunities.

Learning about and consuming fresh local food can help improve residents' health and also increase demand, which can provide an impetus for growers to produce food locally for direct consumption and help foster a local food economy. As residents learn about the benefits of healthy local foods, home and community gardeners may be encouraged to grow produce for their own use or for donation to shelters and pantries that serve food to those in need.

The Village's Recreation and Parks Department should incorporate locally produced food in their cooking classes and institutions could draw upon local food and nutrition experts in the region for guest speakers. The Village should also encourage the South Suburban Food Co-op to hold workshops and seminars by providing meeting space. Additionally, free nutrition education, assistance, and resources can be provided to school staff though the Illinois Nutrition Education and Training Program. The Village can also work with local, regional and state agencies and organizations to host community and home gardening workshops and distribute existing materials such as food growing toolkits, fact sheets, brochures and other resources to assist gardeners in growing food, including components on pesticide-free gardening, composting, and other best practices.

Entertaining activities such as festivals, parties, competitions, cooking demonstrations, garden produce exchanges, and other events that feature locally grown food can enhance a sense of community, promote healthy eating, and encourage growing food in home gardens. In addition, the Village can establish a demonstration garden on public property and arrange tours for scouts, schools, seniors, and other groups.

5. Work with schools to launch "Farm to School" programs.

Schools can take part in the U.S. Department of Agriculture's (USDA) Farm to School Program initiative, an effort to connect schools with regional or local farms in order to serve healthy meals using locally produced foods. USDA staff works with state and local governments, school district, farmers and others to meet the needs of school nutrition programs, support regional and local farmers, and provide support for health and nutrition education. Seven Generations Ahead provides support and resources to develop a program.

Implementation Approach

The matrix below provides a starting point for implementing the various strategies identified in this Plan section. Efforts are already underway to initiate a community gardening program in Park Forest. Strategies 3 and 4 (educational programming and support of food-related institutions) are also underway to some extent, and related activities should be enhanced as opportunities arise. Ideally, standards for raising small-scale animals on residential lots would be incorporated into the Village's general development regulations revisions; however, public acceptance of the idea should continue to be monitored to ensure support of such standards. Lastly, Farm to School programs should be pursued subsequent to school district interest and commitment.

Funding

The Environment Commission is currently working to obtain funding for the Village's community gardening program through grants. Finding appropriate grant funding for this effort should continue to be a priority. The Village will also partially fund this strategy, as it is offering some compensation to groups that volunteer to manage the gardens. Strategy 5, launching "Farm to School" programs, can also be funded through grant opportunities; non-profit groups such as the National Gardening Association offer grants to schools looking to incorporate gardens on school sites. Lastly, the USDA National Farmers' Market Promotion Program is a technical assistance and grant program for local governments, agricultural cooperatives, farmers' markets, and other groups to improve and expand farmers' markets, CSAs, and other local food markets.

The remainder of strategies can be funded through existing budget or staff time; strategy 2 could be included under the general development regulations update task proposed in the Development Patterns section.

Table 9A. Implementation matrix

STRATEGY	LEAD & PARTNERS[1]	PHASING[2]	RESOURCES[3]
1. Establish a community garden program.	**VPF DRP, Environment Commission; with schools, churches, etc.**	**Ongoing**	**Illinois Nutrition Education & Training Program**
2. Explore the creation of standards for raising honeybees and fowl on residential lots.	**VPF DCD, Environment Commission**	**Mid-term**	**Missoula, MT case study, Madison, WI case study**
3. Support the farmers' market and South Suburban Food Cooperative.	**VPF, Cook County, Food Co-op**	**Ongoing**	**Experimental Station; Wholesome Wave**
4. Expand food-related educational opportunities.	**VPF DRP & HD, PF Garden Club, Food Co-op**	**Ongoing**	**IL Nutrition Education & Training program, Slow Food Chicago**
5. Work with schools to launch "Farm to School" programs.	**VPF HD, PF Garden Club, Food Co-op, Districts 162 & 163**	**Mid-term**	**Seven Generations Ahead**

1 VPF = Village of Park Forest; DRP = Department of Recreation & Parks; HD = Health Department; DCD = Department of Community Development

2 When implementation should occur: Short-term, 0-3 years; Mid-term, 4-6 years; Long-term, 7+ years; Immediate = as soon as funding/staff time is available

3 Links and further resources and case studies may be found in Appendix A

10. Municipal Policies and Practices

A large part of this Plan addresses goals and strategies for encouraging residents and businesses to reduce their long term impact on the environment.

This section on Municipal Policies and Practices, instead, acknowledges that only by setting a high standard through its own actions can the Village become the most sustainable community in the Chicago metropolitan area. This section outlines the ways in which Village government itself has committed to acting in a sustainable manner in decisions related to environmental stewardship, financial planning and spending, and human interactions.

Topic Area Goals

The following goals related to Municipal Policies & Practices were identified and defined through the planning process. Each goal is addressed through one or more of the strategies outlined below.

1. Establish a sustainable purchasing and maintenance policy that addresses all Village functions.
2. Become a resource for information about sustainable practices that can benefit Park Forest residents and businesses.
3. Integrate sustainability into all capital projects undertaken by the Village.
4. Seek ways to provide public services in collaboration with other public and private service providers.
5. Create a Sustainability Capital Plan.
6. Create opportunities for Village staff to make sustainable decisions in their day-to-day work responsibilities.

Proposed Strategies

The following details the strategies proposed to achieve the identified topic area goals outlined above. Where appropriate, baseline and/or target indicators are also included as a means of monitoring progress. The baseline indicator is a quantitative measure that illustrates the existing conditions related to a strategy, while the target indicator represents a quantitative benchmark for the Village to strive toward related to the strategy. Further information related to the implementation of these strategies may be found in the Implementation Matrix to follow.

1. Adopt an environmentally preferable purchasing policy.

Target Indicator: Conduct all Village purchasing and contracting in accordance with an adopted policy by 2013.

At this time, environmentally preferable purchasing is conducted on an ad hoc basis according to the interest and values of individual Village Departments. In order to ensure a more deliberate use of Village resources, an environmentally preferable purchasing policy (EPP) should start with a formal resolution adopted by the Mayor and Board of Trustees that establishes the framework for implementation of the policy. This policy would be a general statement about the importance of acting sustainably in all purchasing and contracting decisions, with specific guidance when appropriate. Some examples of possible details to be addressed in the Village's EPP are outlined below.

The purchase of recycled and/or environmentally-friendly products and the construction of capital improvements using sustainable measures often come at a higher cost. Therefore, it would be appropriate for the Board to establish an acceptable price differentiation to purchase environmentally-preferable products, and a means of giving credit to contractors who propose sustainable options for capital projects.

The EPP could also address a preference for local purchasing. "Local" can be defined to include adjacent communities, primarily those with overlapping tax jurisdictions such as school districts and townships. However, the more the Village meets its needs for goods and services at Park Forest businesses, the more the Village will support its economic development goals as well. The Department of Economic Development and Planning can support this policy by creating educational material for staff about what is available within the Village. This could include, for example, catering, auto repairs, food and supplies, and other small item purchases. When considering the cost of a preferential local purchasing policy, the total cost of time, mileage, gas, and other costs to obtain purchases outside the Village should be taken into account.

The Village should consider establishing a centralized purchasing program/agent in order to make bulk purchases and ensure that all Village Departments and staff are adhering to a policy to use products such as recycled paper, energy efficient appliances and other equipment, green cleaning products, and other environmentally preferable purchases. In order to implement this element as efficiently as possible, the Village should consider working with local businesses on a joint purchasing program, or participate in the Delta Institute's Buying Better Program. This collaborative effort would be consistent with strategy 7 in the Green Economy section of the Plan, and would allow for the greater savings, and financial sustainability, that can be gained from bulk purchases.

The central purchasing agent could also have the responsibility for reviewing all bid packages or proposals for major capital projects or significant purchases to ensure that they address environmental issues, such as reduced greenhouse gas emissions and increased environmental performance for conventional products. For example, all bid documents should include language that defines sustainable options for the proposed work and require bidders to provide associated bid options for Village consideration. Bid documents should also require the bidder to provide a narrative describing sustainability initiatives and procedures such as material sources and delivery methods. Strategy 4 in the Waste section of the Plan recommends establishing a requirement for recycling of construction and demolition debris, and incentives for deconstruction and materials reuse. This recommendation should be incorporated into Village contracts as well. Finally, bidders who propose to purchase locally, as defined by the Village, should get preference for contracts with the Village.

2. Conduct a municipal fleet study to guide fleet purchase and operating decisions.

Target Indicator: Complete a municipal fleet study and conduct all fleet purchases, maintenance, and operating decisions in accordance with an adopted policy by 2015.

Park Forest has direct control over its municipal vehicle and equipment fleet, and the manner in which the Village chooses to maintain these resources will set a very visible example to the private sector about the value of sustainable practices. At this time, environmentally preferable fleet purchase and operating decisions are made on an ad hoc basis based on the interest and values of individual Village Departments. Park Forest should take a comprehensive look at the municipal fleet to find ways to reduce total mileage and fuel consumption, while at the same time saving taxpayers' money. Improving fleet efficiency includes examining types of fuels used, the mix of vehicles within the fleet, and other practices that maximize efficiencies whenever and wherever possible. Some cost and fuel-saving strategies that could be considered include:

- Reduce the number of cars by sharing among departments with less frequent needs.
- Institute fleet purchasing requirements including size requirements.
- Increase usage of low emissions vehicles and alternative fuels when feasible.
- Implement a "check out system" for trucks and SUVs that aren't always needed.
- Encourage multi-tasking so driving trips serve more than one purpose.
- Require a "make the case" rule when considering truck/SUV purchases.
- Put in place a system for aggressive and proactive fleet maintenance.
- Encourage businesses with fleets to consider similar operational practices.

Options for alternative fuels that the Village could explore include biodiesel fuels, compressed natural gas, and electric vehicles. Biodiesel fuels refer to a diesel-equivalent, processed fuel that is derived from biological sources, like vegetable oils. These fuels can be used in unmodified diesel-engine vehicles. Biodiesel is biodegradable and non-toxic, and typically produces about 68 percent less net carbon dioxide emissions than petroleum-based diesel in its full lifecycle. The waste management company located in the Village has installed compressed natural gas for use in its own vehicle fleet. The Village could explore a joint purchasing agreement with this company to take advantage of the infrastructure already installed. Hybrid electric vehicles are another option, which combine a conventional propulsion system with an on-board rechargeable energy storage system to achieve better fuel economy than a conventional vehicle. Electric vehicles provide significant emissions reductions, but require external charging.

3. Adopt an environmentally preferable facility maintenance policy.

Target Indicators: Conduct a sustainability audit of all Village facilities by 2017; Reduce annual kWh, therms, and water use in Village facilities by 10 percent by 2025.

The Village should conduct a thorough sustainability audit of building envelopes, operations and maintenance of building systems, and occupant behavior to identify potential means of saving energy (electricity and natural gas) and water, and reducing costs for both. The results of this study might include recommendations for potential energy-saving improvements, such as insulation, replacement of windows and roofs and HVAC systems, or lighting upgrades. Water saving improvements should also be considered, such as the installation of water efficient fixtures in all Village facilities and parks.

A sustainability audit should also result in recommendations for operations and maintenance to ensure that all HVAC systems and other appliances are running optimally, establish a regular maintenance schedule, and utilize technological advances such as programmable thermostats and light sensors. Finally, a sustainability audit should examine the manner in which employees and visitors use Village facilities and make recommendations for simplifying their sustainability decisions. For example, recommendations could include office policies that address lighting and electricity load from office equipment and thermostat settings. Simple changes such as installing motion detecting light switches, a policy to turn off lights and computers when not in use, and promoting the use of task lighting in lieu of ceiling lights can result in significant reductions in electricity use and set a very visible example to the public.

An environmentally preferable facility maintenance policy should also consider ways to take full advantage of all Village-owned facilities. For example, when the Aqua Center was renovated in 2010, the interior space was reconfigured to reduce the space in the bath house, move the concession stand into the main building, and create the Wetlands Discovery Center, a Parks Department wood shop and consolidated storage for municipal supplies. Similar space utilization studies should be conducted for other Village facilities and properties, such as the Tennis and Health Club, the Public Works Yard, and Village parks.

4. Educate Village staff to reduce municipal waste.

Target Indicators: Conduct a municipal waste audit by 2013; Divert an additional 10 percent of waste generated in Village facilities from landfills by 2015; Achieve near zero waste sent to landfills in Village facilities by 2025; Purchase 50 percent of all paper products as recycled content paper and Forest Stewardship-certified pulp by 2017.

In the years prior to the development of the Park Forest Sustainability Plan, Village staff already had implemented numerous measures and demonstration projects designed to recognize the importance of setting a public example of environmental stewardship. Implementation of this Plan will require the ongoing dedication of all Village staff in order to ensure that the goals are achieved. Some of these implementation measures will come as a result of simple changes in how staff goes about their day-to-day responsibilities.

All staff members should have a recycling bin in their office and use it liberally. However, even the amount of recycling that is generated from Village offices can be reduced by changes to staff consumption behaviors that reduce waste at the source. Source reduction activities are those that decrease the amount or toxicity of waste that enters the solid waste stream, and activities that increase product durability, reusability, and repair-ability. One way to begin a program of source reduction is to conduct a waste audit, which is a formal structured process used to quantify the amount and types of waste being generated and identify how current waste practices can be improved with measures to reduce, reuse, and recycle. Assistance for such an analysis is available through the U.S. Environmental Protection Agency. A baseline for future tracking of waste diverted from landfills can be established from which to measure progress toward an ultimate goal of zero waste.

Some measures that would likely be recommended by a waste audit include encouraging employees to read and edit documents on the computer instead of printing hard copies, using shared file systems such as the Village employee intranet and public hard drives, programming printers to print documents on both sides when printing cannot be avoided, using refillable products, and eliminating single use utensils and cups. When Village staff has incorporated these concepts into their work day, it will be easier to encourage Village residents and businesses to change their day-to-day behaviors in many of the same ways.

Municipalities are beginning to think about the resources used and often wasted at meetings. In addition to in-house recycling and waste reduction guidelines for departments, Park Forest can "green" its meetings by establishing policies on handouts and presentations made available online; double-sided paper and recycling of unused meeting handouts when meeting materials are necessary; reusable badges, signage and paper products; and reusable food service ware. The Village can involve and highlight local sustainable business partners and sponsors when available, and potentially develop a preferred local sustainable vendors list.

5. Create opportunities for reducing vehicle miles traveled by Village staff.

Village staff can become more sustainable by reducing vehicle miles traveled in the course of their work day, and by providing opportunities for residents and other customers to reduce their need to travel to Village facilities to conduct business. Internet access provides many opportunities to reduce travel by taking advantage of telecommuting, webinars, file-sharing, email/instant messaging, teleconferencing, and e-government solutions. These internet resources and tools reduce the need for travel and as a result, reduce VMT, fuel consumption and greenhouse gas emissions. A telecommute program for Village staff can allow "nonessential staff" to replace at least one day a week in the office. Telecommuting is cited by the EPA as an emission reduction strategy. Online municipal e-government services help eliminate unnecessary travel for the community as well. A recent study suggests that "more than half of all Americans contact the government in a given year," and that 30 percent of inquiries are for simple transactions such as paying a bill. Common online services include payment of bills, fines or taxes; applying for services, permits and licensing; and general requests for information.

6. Address financial sustainability throughout implementation of the Plan.

The Government Finance Officers Association (GFOA) has adopted a Best Practice that describes how public finance issues should be incorporated into a government's efforts to think and act sustainably. The Village should incorporate the GFOA's three primary recommendations into the Sustainability Plan to ensure that the financial impacts of plan implementation are managed appropriately.

The GFOA recommends adequate reporting as part of the planning and budgeting process to assess the effectiveness of the strategies included in the Plan. The Target Indicators included in the Plan will fulfill this role as long as they become an integral part of the budget process. Using these target indicators, the Village should develop a return on investment (ROI) model to assess the affordability of sustainability projects. While this may be difficult for those strategies that have intangible benefits (for example, impacts on environmental or social equity sustainability), the effort should be made to compare costs with the perceived benefits of the strategy. This model will assist in the evaluation of program impact and allow for appropriate modifications to strategies for which the expected ROI is not being achieved. Finally, the GFOA makes several recommendations for integrating sustainability goals into planning and budgeting, including:

- Consider full lifecycle costs when making investment decisions.
- Promote preventative investments.
- Supplement budgeting with methods to systematically improve efficiency.

- Create the right incentives to encourage staff to incorporate sustainability considerations in their work.
- Ensure that capital improvement planning accounts for socio-economic equity concerns.
- Maximize an assets resistance to extreme events.
- Regularly update long-range financial plans and forecasts.

7. Create the position of Village Sustainability Coordinator and establish a Village Sustainability Team.

Target Indicators: Modify job descriptions to designate primary sustainability responsibilities to at least one representative from each Village Department by the end of 2012; Hire a Sustainability Coordinator by 2014.

In the short term, this strategy will be fulfilled by assigning sustainability responsibilities to at least one staff representative from each Village Department. Together, these staff members will form the Village Sustainability Team and will be responsible for ensuring that their Department maintains its focus on implementation of the relevant Plan elements. Over the longer term, however, the Village should consider creating the position of Sustainability Coordinator to work inter-departmentally with a Village-wide focus on implementation of the Plan.

Managing implementation of the Sustainability Plan through the efforts of a Sustainability Coordinator will help to reduce the duplication of effort and ensure that key tasks do not fall through the lines between one Department and another. For example, most of the sections in the Plan make recommendations for public education measures. The Sustainability Coordinator would create a comprehensive educational campaign to involve Village residents, businesses, and employees and elected officials of the Village. This campaign will include compiling and organizing sustainability-related resources to enable the Village to serve as a clearinghouse of information, and arranging educational programming, events, and materials for the public and Village staff.

The Village can enhance its ability to implement the Plan by using the momentum of resident and stakeholder participation that took place during Plan development. As suggested in the Education section of this Plan, one potentially effective way to spread the message of sustainability throughout the community would be for the Sustainability Coordinator to create and foster neighborhood groups throughout the community who will, in turn, involve individual residents within each neighborhood with many aspects of Plan implementation (i.e. planting and maintaining community gardens, installing rain barrels, retrofitting their homes to be more energy efficient, promoting a "shop Park Forest" mindset, etc.). The Coordinator would be a liaison to these groups, providing them with up-to-date resources, technical advice on grant applications or regulatory questions, and responding to other concerns on behalf of the Village.

The Sustainability Coordinator would be in the best position to monitor the target indicators and other benchmarks to ensure that the implementation of the Plan is proceeding. Many of these indicators will be impacted by community efforts and/or multiple Village Departments and the community at large. The Coordinator would also be responsible for identifying and establishing a consistent funding source for implementation of sustainable capital projects throughout all Village Departments, educational initiatives, and other measures that implement the Plan.

8. Leverage Park Forest's involvement in regional organizations to enhance sustainability on a larger scale.

The Village is an active member of a number of different regional organizations, including the South Suburban Mayors and Managers Association, the South Suburban Special Recreation Association, the Combined Agency Response Team for emergency response, SouthCom for combined emergency dispatch, and many more. Working with these organizations, the Village can expand and enhance sustainability throughout the region through such efforts as combined purchasing agreements and dissemination of educational material.

Involvement of Park Forest's youth will be critical to long term implementation of the Plan. Several strategies outlined in the Education section of the Plan address this need through creating opportunities to engage youth in sustainability projects and incorporating sustainability lessons in school curricula. The Village should work closely with Park Forest schools and the five different school districts that are part of the community to spread the message of sustainability to the young people of the South Suburbs.

Implementation Approach

The matrix on the following page provides a starting point for implementing the various strategies identified in this Plan section. Implementation of the Plan relies on having dedicated, involved staff. Therefore, strategy 7 should be the highest priority. Undertaking the studies and developing the policies recommended by strategies 1, 2, and 3 should begin as soon as the Village Sustainability Team is in place. Strategies 4, 5, 6, and 8 should begin immediately after Plan adoption because they can be incorporated into ongoing work activities, such as annual budgeting and capital plan documents, creation of educational material, and staff involvement with professional and regional organizations.

Funding

Strategy 7 is the only strategy included in this section that represents a significant, on-going cost to the Village. Grant funds have been requested from The Chicago Community Trust and The Funders Network to enable the Village to hire a Sustainability Coordinator for a two year period. The remainder of the strategies can be implemented with little or no cost to the Village, except for staff time. The National League of Cities and the Sustainable Cities Institute offer numerous examples and resources for conducting waste audits and municipal fleet studies, and creating environmentally preferable purchasing policies and fleet and facility maintenance policies.

Table 10A. Implementation matrix

STRATEGY	LEAD & PARTNERS[1]	PHASING[2]	RESOURCES[3]
1. Adopt an environmentally preferable purchasing policy.	**VPF DF**	**Short-term**	**Flagstaff, AZ; State of New Jersey**
2. Conduct a municipal fleet study to guide fleet purchase and operating decisions.	**VPF**	**Short-term**	**Flagstaff, AZ; State of New Jersey; National League of Cities**
3. Adopt an environmentally preferable facility maintenance policy.	**VPF DRP**	**Short-term**	
4. Educate Village staff to reduce municipal waste.	**VPF PIO/SC**	**Ongoing**	**National League of Cities, Sustainable Cities Institute, U.S. EPA**
5. Create opportunities for reducing vehicle miles traveled by Village staff.	**VPF**	**Ongoing**	**National League of Cities**
6. Address financial sustainability throughout implementation of the Plan.	**VPF DF**	**Ongoing**	**Government Finance Officers Association**
7. Create the position of Village Sustainability Coordinator & establish a Village Sustainability Team.	**VPF Village Manager**	**Immediate**	**Prairie State Local Government Sustainability Network, Urban Sustainability Directors Network**
8. Leverage Park Forest's involvement in regional organizations to enhance sustainability on a larger scale.	**VPF**	**Ongoing**	

1 VPF = Village of Park Forest; DF = Finance Department; DRP = Department of Recreation & Parks; PIO = Public Information Officer; SC = Sustainability Coordinator.

2 When implementation should occur: Short-term, 0-3 years; Mid-term, 4-6 years; Long-term, 7+ years; Immediate = as soon as funding/staff time is available.

3 Links and further resources and case studies may be found in Appendix A.

Table 11A. Proposed education-related strategies

STRATEGY	PAGE #
Develop a public marketing campaign to promote transportation alternatives.	33
Pursue actions that will help to increase recycling rates.	44
Partner with schools to enhance education about reducing, reusing, recycling, and composting waste.	45
Raise public awareness and provide education about water resources.	49
Provide informational resources and solicit financial resources for home and business energy audits.	52
Develop an energy efficiency campaign to encourage modifying energy use behavior and habits.	53
Spread the word about residential real time pricing (RRTP).	53
Develop a green building handbook to assist building owners in implementing green practices.	53
Pursue renewable energy systems that provide a model for residents.	54
Provide sustainability-related resources to businesses.	63
Explore green-skills vocational training opportunities.	63
Expand food-related educational opportunities.	67
Work with schools to launch "Farm to School" programs.	67
Further develop and promote health-related programs and events.	80

11. Education

Many educational efforts related to sustainability currently exist in Park Forest, from School District 163's Science Depot program to the work of the Village's Environment Commission.

At least eight of Park Forest's schools provide sustainability-related items in their curricula, with most of those components taught via science classes. The Village has undertaken a variety of "green" initiatives in recent years, piloting projects to demonstrate how solar power works and to display how buildings can be repurposed in lieu of new construction. Additionally, the Village has a number of local entities that promote sustainability through their programming, including the Wetlands Discovery Center, the Thorn Creek Nature center, and the Park Forest Public Library.

During the early public engagement process of this sustainability plan, stakeholders expressed the need to augment the community's projects and programs related to sustainability, emphasizing the importance of increasing public awareness. Residents stated that more education across a variety of topics is needed, from public transportation options to residential retrofitting to water conservation techniques. Increasing residents' awareness of and participation in these sustainability efforts — which can be achieved both through programming for residents and school curricula — is vital to the community's implementation of such actions. Therefore, this section will focus on strategies for keeping the Village of Park Forest's residents and other stakeholders informed and involved in sustainable practices, both at the community and individual levels.

Topic Area Goals

The following goals related to Education were identified and defined through the planning process. Each goal is addressed through one or more of the strategies outlined below.

1. Increase school curricula and programming related to environmental issues and continue the strong relationship between Park Forest schools and parks.
2. Promote community collaboration around the preservation of natural resources.
3. Provide general education materials and programming for residents about sustainability topics.

Proposed Strategies

The following details the strategies proposed to achieve the identified topic area goals outlined above. Where appropriate, baseline and/or target indicators are also included as a means of monitoring progress. The baseline indicator is a quantitative measure that illustrates the existing conditions related to a strategy, while the target indicator represents a quantitative goal for the Village to strive toward related to the strategy. Further information related to the implementation of these strategies may be found in the Implementation Matrix to follow.

1. Provide enhanced opportunities for youth to engage in sustainability.

The Village and many schools in Park Forest already have a well-established relationship for sustainability programming, primarily through the Wetlands Discovery Center. Strengthened connections between community institutions will not only help prepare young people for our planet's future challenges, but also will aid in molding environmentally responsible stewards of the Village's legacy. Advancing students' exposure to sustainability related topics through school programming is an important way of fostering familiarity with opportunities for their future. For instance, students, faculty, or facilities staff from Governor's State University could speak to students (either through special assemblies or in classrooms) about their research or practices that relate to sustainability. Especially for students of the intermediate schools or Rich East High School, nurturing an understanding of the value of sustainability and possibilities for future studies and careers would be invaluable education to supplement curricular learning.

Also, through internships, volunteerism, and other learning opportunities, the Village could engage young people in their sustainability initiatives. Actively seeking out the assistance of students for community gardening projects and resource conservation efforts will help advance the community's goals and will develop students' understanding of sustainability topics. Lastly, concurrent with the Village's heightened recycling efforts, Park Forest's schools could make a commitment to further reduce waste as well, utilizing the enthusiasm of students for this initiative. Organizations like Seven Generations Ahead provide school assessments, educational programming, and strategies for finding cost savings through increased recycling.

Educational signage in the Central Park wetlands.

2. Conduct school curricula review to identify areas where sustainability lessons can be integrated.

Target Indicator: Conduct curriculum review and integrate sustainability into lesson plans in all Park Forest schools by the 2017-18 school year.

Many school districts and Boards of Cooperative Educational Services (BOCES) across the county are recognizing the importance of integrating sustainable lessons into their classrooms. The Park Forest – Chicago Heights School District 163's Science Depot program is an excellent example of hands-on science lessons that allow students to explore real world situations and apply logic skills. However, there are other areas of curricula — such as math, English languages, arts, and economics — that can carry lessons about sustainability. A review of each school's curricula across grades and classrooms, followed by the integration of low-cost teaching tools and lesson plans, can bring sustainability into students' lives across disciplines. There are many services that offer curriculum reviews, implementation strategies, and toolkits (see Implementation Matrix), and these sorts of curriculum changes are often implemented at the district-wide or BOCES level so that individual schools have comparable offerings.

3. Create "neighborhood groups" as a means of distributing information.

The Village is largely residential and, while scattered neighborhood groups exist, establishing a formalized system of neighborhood or community groups would aid in the dissemination of information that residents often want but do not know where to find. The groups would also help to create more of a sense of place and ownership of a resident's particular area of the Village. These neighborhood groups should be delineated by the community (a citizens group called the Park Foresters has already taken steps toward this), perhaps organized around schools or other logical geographic boundaries.

Resident leaders for each group could pass along sustainability-related resources provided by the Village or other entities to participants in the group and also serve as a liaison between residents and Village staff. These representatives could share information and resources compiled as a result of the various education-related strategies outlined in this Plan and volunteer opportunities in schools and community gardens. Another function of these groups could be to convey concerns from residents to the Village, such as issues related to crime, safety, and maintenance. If it is found that digital communication would prompt greater participation, the idea of forming online neighborhood groups could be explored.

4. Develop the Village as a clearinghouse for sustainability resources, along with new related Village programming.

To augment current Village programming and promotion of sustainability, the community should undertake additional programs that would help educate residents and visitors and celebrate the Village's sustainability efforts. In the Village Hall lobby (where there are currently display areas and a monitor for playing promotional videos), an educational exhibition should be created to compile different resources and facts about sustainability in Park Forest. Specific ideas for programming and information for related topics may be found in the various chapters of this Plan, and are also summarized in Table 11A. Additionally, the Village could organize a tour of the community's sustainable initiatives and "green" pilot projects. There could be a self-guided walking tour option for people to follow along with a map and brochure, as well as occasional guided tours from Village staff and other experts who could share more detail about each of the sites. With the participation of residents, these guided tours could include stops at homes that demonstrate model water conservation or reuse, native landscape techniques, or retrofitting to promote individual efforts to be energy efficient.

Lastly, Village Hall, adjacent Village green area, and DownTown Park Forest should be the site of a new series of events, taking the form of a sustainability festival or a "green week." Residents would have the opportunity to attend workshops and relevant film screening, bring in home items that are difficult to recycle (like electronics), and participate in a walking/cycling parade that celebrates nonmotorized transportation options. This series of sustainable events could be held in coordination with the farmers market, so that local farmers could be available to talk about sustainable agriculture. To further these sustainability education efforts, Village Hall (perhaps in partnership with displays at the Park Forest Public Library) should serve as a clearinghouse for residents and other stakeholders to learn about different steps they can take to live more sustainably. The Village could collect materials and market itself as a reliable resource for community members to learn how to "green" their businesses and homes, what public transportation options are available, etc.

5. Create a Sustainability Interpretive Center.

Baseline Indicator: Signage is currently provided at one demonstration site (Central Park Wetlands).

Target Indicator: Display signage at each "green initiative" site or sustainability project by 2017.

A Sustainability Interpretive Center would educate the public about ways that sustainable concepts can be incorporated into their everyday lives. For Park Forest, the best way to do this is to take advantage of the demonstration projects that the Village has already implemented, add to those projects with the many recommendations included in this Plan, and tie all these elements together into a "virtual" learning center that encompasses the entire Village.

Features such as the Central Park Wetlands, rain gardens, community gardens, and the solar panels and green roof at the Aqua Center can be promoted and explained with interpretive signage that informs the public about how each location contributes to the sustainability of the community. Existing educational centers such as the Park Forest Public Library, the Wetlands Discovery Center, and the Thorn Creek Nature Center can incorporate permanent displays that are dedicated to education about sustainability measures that can be implemented by residents and businesses. The virtual interpretive center can also be tied together with a walking/biking tour of each location, and other educational material that provides information to the public about how they can incorporate sustainability into their daily lives.

The Village could also find a location that the Environment Commission would use as their venue for educating the public about different aspects of sustainability. This might include dissemination of information, showing movies related to environmental subjects, and the sale of products such as rain barrels and compact fluorescent light bulbs.

Implementation Approach

The matrix below provides a starting point for implementing the various strategies identified in this Plan section. The Village has already taken some preliminary steps toward strategies 1 and 5, and should continue to build upon these as important elements of building sustainability-related knowledge in the community. One common observation that was heard throughout the planning process was a lack of on-the-ground knowledge of the great resources that the Village has compiled with regard to sustainability. Many strategies in this Plan relate to gathering information and resources for the citizens of the Village but these resources will have diminished value without an effective means of distribution. To that end, it is important that the Village create neighborhood groups (per strategy 3) as soon as possible to ensure effective communication of resources.

Funding

Strategies 1, 3, and 4 can primarily be funded through staff time and resources from the Village and/or school districts. Strategy 2 could be partially funded by the relevant school districts and supplemented by additional grant funding. In the past, the Village has applied for an EPA Environmental Education grant for the creation of educational signage for the Village's green initiatives (strategy 5), but was not successful; similar opportunities should be pursued in the future to obtain funding for this strategy.

Table 11B. Implementation matrix

STRATEGY	LEAD & PARTNERS[1]	PHASING[2]	RESOURCES[3]
1. Provide enhanced opportunities for youth to engage in sustainability.	**VPF PIO/SC, school districts**	**Ongoing**	**Seven Generations Ahead**
2. Conduct school curricula review to identify areas where sustainability lessons can be integrated.	**VPF PIO/SC, school districts**	**Mid-term**	**The Cloud Institute, BOCES Sustainability Curriculum**
3. Create "neighborhood groups" as a means of distributing information.	**VPF PIO/SC, The Park Foresters**	**Short-term**	
4. Develop the Village as a clearinghouse for sustainability resources, along with new related Village programming.	**VPF PIO/SC, Environment Commission**	**Short-term**	**Bay Area Green Tours, Sustainability Festival (Bridgewater, Can.)**
5. Create a Sustainability Interpretive Center.	**VPF DRP**	**Mid-term**	

1 VPF Village of Park Forest; DRP = Department of Recreation & Parks; PIO = Public Information Officer; SC = Sustainability Coordinator

2 When implementation should occur: Short-term, 0-3 years; Mid-term, 4-6 years; Long-term, 7+ years; Immediate = as soon as funding/staff time is available

3 Links and further resources and case studies may be found in Appendix A

12. Community Health and Wellness

Residents are Park Forest's most important assets, and promoting and enhancing health and wellness is one way to support the valuable role they play in a productive, engaged, and sustainable community.

In suburban Cook County, 63 percent of adults and 40 percent of children are classified as overweight or obese. Breaking the trend towards an overweight and obese population is critical to decreasing the risk of heart disease, diabetes, and other serious illnesses and conditions. Major avenues toward doing so include promoting healthy eating and regular exercise. Making health a priority also involves addressing prevention of disease and injury, and ensuring that health services are connected to those in need. Additionally, studies have shown that social ties affect mental and physical health and mortality risk, and that they are a potential resource that can be harnessed to promote population health.

The Village supports health and wellness by providing and promoting a variety of opportunities for social interaction, recreation, education, nutrition, and health-related services. The Health, Recreation and Parks, and Police Departments play key roles in this area. Enhancing and increasing resident knowledge of and participation in such activities is a focus of this Chapter.

Topic Area Goals

The following goals related to Community Health and Wellness were identified and defined through the planning process. Each goal is addressed through one or more of the strategies outlined below.

1. Promote and connect residents, especially seniors, with existing health services in the community.
2. Continue to address common health problems via the Village's Health Department; include proactive prevention-oriented activities when possible.
3. Promote and enhance educational opportunities for residents related to healthy living, such as sessions on healthy diets or swim lessons.

Proposed Strategies

The following details the strategies proposed to achieve the identified topic area goals outlined above. Where appropriate, baseline and/or target indicators are also included as a means of monitoring progress. The baseline indicator is a quantitative measure that illustrates the existing conditions related to a strategy, while the target indicator represents a quantitative goal for the Village to strive toward related to the strategy. Further information related to the implementation of these strategies may be found in the Implementation Matrix to follow.

1. Expand upon the Health Department's role in ensuring community-wide health.

The Village's Health Department is unique in its ability to focus on community health issues. Its programming, which is focused primarily on nursing services, currently reaches many different populations within the southern suburbs. The Health Department should expand its role where appropriate, further serving as the organizing entity for health-related events and resources for the Village. The Department could create a public health advisory committee, consisting of Village department liaisons (particularly the Recreation and Parks Department) and potentially representatives from health care providers, senior centers, and others engaging in health and wellness-related activities, to help further health and wellness goals in a holistic manner. The group can identify needs, establish priorities, form partnerships in providing services, and promote or develop new programs. The Department could also consider establishing a calendar of events with speakers who could present to schools, community organizations, and target populations (such as seniors).

The Health Department should also work to develop a system to collect health indicator data for the Village, which can then help guide programming in the future. This generalized data could be based upon incidences of major disease and obesity rates, and collected through patient consent, school districts, and/or public surveys. It should be emphasized that the data collected will not be linked to individuals; rather, it will be aggregated to show trends to inform future outreach and programming efforts.

2. Further develop and promote health-related programs and events.

Baseline Indicator: In 2011, 1,678 people enrolled in Village-provided recreational programs.

Target Indicator: Increase enrollment in Village-provided recreational programs by 20 percent by 2017.

Health-related programs and events are currently held on many topics by various Village Departments, such as the Health Department and Recreation and Parks Department, as well as by private entities, such as the South Suburban Food Co-op. Programming is currently done largely at the discretion of various organizations and have focused on recreational opportunities, contaminants and pollutants, and nutrition and cooking. Due to the popularity of current recreational programming and importance of obesity issues, it is recommended that the Recreation and Parks Department continue those efforts and potentially expand recreational programming targeted to young adults (a demographic identified as slightly weaker in recreational opportunities). In addition, the Health Department or public health advisory committee should also identify whether services and programs are adequately reaching the intended audiences and consider opportunities to reach new audiences.

To promote events, Committee members and partners should share calendars of upcoming existing and potential health and wellness-related activities in advance to identify opportunities to work together and facilitate distribution of promotional information at partner events. Promotional materials could take a variety of forms, such as traveling exhibits, a health and wellness website and other means, designed with appropriate audiences in mind, such as schools, businesses, and neighborhoods, with considerations of age, ethnicity, and differing abilities. A joint Village and partners' calendar could be created featuring health and wellness-related programs and events, such as swimming lessons, cooking and exercise classes, lectures on topics such as healthy eating, using non-toxic cleaning supplies, home safety, and acquiring health insurance.

3. Increase safety and perception of safety.

Studies have demonstrated that improving community safety may be effective at increasing levels of physical activity in adults and children. When people feel safe in the community, they are more likely to visit parks, walk to the store, and let their children play outside. The Police Department should work with stakeholders, such as the Health Department, public health advisory committee, health care providers, schools, youth, and neighborhood groups to identify problem areas, such as dangerous intersections and areas needing better lighting. A survey can identify areas where residents feel concerned for their safety. Features of a safe built environment include safe, well-maintained paths and sidewalks; clean, well-lit parks, playgrounds, and other public spaces; and places where people can safely walk and bike. New development plans should be required to take into account best practices in designing for safety, such as the best height and type of lighting for pedestrians and design that provides for informal surveillance, such as windows that overlook sidewalks and parking lots.

4. Incentivize Health Impact Assessments for larger new developments.

Health Impact Assessments (HIAs) are procedures and tools that can help determine the potential health outcomes of a project or policy before it is built or implemented, including negative outcomes such as obesity, physical inactivity, asthma, injuries, and social inequity. An HIA targets issues where there is evidence that the built environment can influence human health. Measures of health impacts of a development could include opportunities for physical activity, access through biking and walking, the density and mix of uses, food and healthcare access, safety, and environmental quality.

The number of measures, outcomes, and other factors, and the level of detail of the assessment can be developed through a collaboration of stakeholders such as the public health advisory committee mentioned above. Procedures can be established to track community health information that can be useful when making decisions about the built environment. HIAs are a relatively recent concept, so educating stakeholders and the general public about how development can impact health is an important step in the process. The Village should seek to work with its Health Department, outside nonprofit groups, and funders to conduct an HIA for an appropriate proposed policy or development. Depending on how this process goes, the Village should discuss incorporating HIAs into the development review process more explicitly.

Implementation Approach

The matrix below provides a starting point for implementing the various strategies identified in this Plan section. Strategies 2 and 3 are being addressed already to a certain extent by existing activities, and should continue to be monitored and enhanced on an ongoing basis. Expansion of the Health Department's role (strategy 1) should happen as soon as administration and coordination are feasible. Strategy 4 would ideally be implemented through the development regulations update proposed in the Development Patterns section.

Funding

The majority of items proposed in this section can likely utilize existing staff time and resources, as opposed to requiring the acquisition of additional external funding. Strategy 4 may be included under funding for the umbrella strategy of updating development regulations.

Table 12A. Implementation matrix

STRATEGY	LEAD & PARTNERS[1]	PHASING[2]	RESOURCES[3]
1. Expand upon the Health Department's role in ensuring community-wide health.	**VPF HD, health advisory committee**	**Short-term**	
2. Further develop and promote health-related programs and events.	**VPF HD & DRP, health advisory committee**	**Ongoing**	**Kane County Fit Kids 2020 Plan**
3. Increase safety and perception of safety.	**VPF PD & DEDP**	**Short-term**	**Crime Prevention Through Environmental Design (CPTED)**
4. Incentivize Health Impact Assessments for larger new developments.	**VPF DEDP**	**Short-term**	**Centers for Disease Control & Prevention**

1 VPF = Village of Park Forest, HD = Health Department, DRP = Department of Recreation & Parks, PD = Police Department, DEDP = Department of Economic Development & Planning

2 When implementation should occur: Short-term, 0-3 years; Mid-term, 4-6 years; Long-term, 7+ years; Immediate = as soon as funding/staff time is available

3 Links and further resources and case studies may be found in Appendix A

Housing co-ops.

13. Housing Diversity

Variety in a community's housing stock adds to its ability to attract and retain residents from all walks of life. This is particularly important for Park Forest, where a key goal identified during the public kickoff meetings was to retain the population's diversity.

The Village currently has a wide range of options in its housing supply, from smaller lot single family homes to townhomes or co-ops to multifamily units.

Providing smaller housing stock, such as apartments, condominiums, townhomes, and small single-family homes, allows a community to accommodate young families, those of modest means, and seniors who may be looking for less property to maintain. Smaller homes are also a sustainable choice because they intrinsically use fewer resources and less energy. Inasmuch as it adds density, compact housing provides a greater number of residents to support commercial enterprises and transit. On the other end of the spectrum, larger or higher-end housing stock allows residents to remain in the community as they increase their incomes and also provides greater revenue for a municipality in the form of property taxes, which is helpful for financial sustainability.

Topic Area Goals

The following goals related to Housing Diversity were identified and defined through the planning process. Each goal is addressed through one or more of the strategies outlined below.

1. Continue to emphasize diversity of housing stock to attract different types of residents.
2. Provide a wide range of housing types, including housing appropriate for seniors aging in place and veterans.
3. Improve the perception and marketing of smaller single family homes.
4. Provide housing stability and retention of residents.

Proposed Strategies

Concurrent with the planning process to create this Plan, the Village was working with the Metropolitan Mayors Caucus, Metropolitan Planning Council, and CMAP to create a housing policy plan through the Homes for a Changing Region project. The major recommendations from that plan are noted below, many of which are touched upon in other sections of this Plan; for further information, see the Homes for a Changing Region report.

1. Use regulatory changes to encourage mixed-use and commercial development (see Development Patterns section).
2. Focus on stabilizing the Eastgate neighborhood.
3. Encourage new development in the DownTown area (see Development Patterns and Green Economy section).
4. Continue moving forward with planning of the 211th Street Metra Station (see Development Patterns section).
5. Coordinate residential rehabilitation programs (see Energy section).
6. Promote energy efficiency programs (see Energy section).
7. Continue playing a leadership role in subregional housing planning.

14. Arts and Culture

Park Forest is well known in the sub-region and beyond as a center for events related to arts and culture. The Village is currently home to nine organizations that are oriented around showcasing fine and performing arts.

Arts and culture are a part of the community's sustainability because such amenities enhance quality of life for residents, help to attract and retain new residents, and draws visitors throughout the south suburbs and the greater region. There is also an opportunity to further incorporate environmental sustainability into cultural events, as well as further solidify it as part of the Village's identity.

Several of the arts institutions located in Park Forest — from the Illinois Theatre Center to Freedom Hall Nathan Manilow Theatre – offer programming that appeals to a diverse audience at low or no cost to the patron. This type of accessibility to and engagement with the arts for a wide range of ages, ethnicities, and backgrounds is a hallmark of a thriving, sustainable community. This emphasis should be celebrated and touted as one of Park Forest's attractions. The overarching intent of this section's recommendations is to build upon the Village's existing cultural assets, both to support the community's arts-related activities for the benefit of residents, and also to develop Park Forest's capacity and identity as a cultural destination in the Chicago region.

Topic Area Goals

The following goals related to Arts and Culture were identified and defined through the planning process. Each goal is addressed through one or more of the strategies outlined below.

1. Support and retain existing fine arts institutions.
2. Establish green practices for events, including "zero waste" events.
3. Further develop a "green" identity for the Village.

Proposed Strategies

The following details the strategies proposed to achieve the identified topic area goals outlined above. Where appropriate, baseline and/or target indicators are also included as a means of monitoring progress. The baseline indicator is a quantitative measure that illustrates the existing conditions related to a strategy, while the target indicator represents a quantitative goal for the Village to strive toward related to the strategy. Further information related to the implementation of these strategies may be found in the Implementation Matrix to follow.

1. Continue partnerships with arts advocacy organizations to further strengthen the work of local institutions.

From the award-winning Illinois Philharmonic Orchestra to the second oldest juried fine arts fair in the Chicago region, many of Park Forest's arts endeavors have a regional presence. Many of these arts and cultural institutions – including the Village itself – have received consistent support and funding from the Illinois Arts Council (IAC) and other institutions that work to bolster the arts sector. In the fiscal years of 2009 through 2011, the Village of Park Forest and the arts institutions located in the community received a combined grant amount of anywhere from $23,000 to over $30,000 from the Illinois Arts Council. However since 2007, state funding for arts and cultural institutions has been steadily scaled back in Illinois due to overall budget cuts, thus making the procurement of public funding all the more competitive.

Therefore, the Village and the community's individual arts institutions should make every effort to stay connected to the arts funders and advocates across the region and the state. This includes continuing to submit grant applications, as well as aligning their programmatic work to the objectives expressed in the IAC's strategic planning. Additionally, the Village's arts institutions should use the resources and training materials provided by advocacy organizations like Arts Alliance Illinois in order to better prepare themselves for seeking out philanthropic support.

2. Forge a coalition of arts institutions in the Village for shared events and marketing.

The collection of arts institutions and cultural events that exists in Park Forest is a unique community asset, and the Village should take advantage of this industry cluster by helping to establish a coalition that collaborates on shared programming and marketing. Formalizing the collaboration between these institutions will strengthen them all individually by exposing patrons of one organization to the work of another that they may not have been aware of. This type of coalition could range from simple branding and a webpage to house links to each of the individual organizations, to a shared event – akin to a gallery or museum walk – during which patrons can explore the programs and offerings from the Fieldcrest School of Performing Arts to the Tall Grass Arts Association. Promoting Park Forest as an arts cluster will bring further attention to the community's institutions and will reinforce the Village's role as a cultural destination in the broader region. Lastly, this coalition could engage other local businesses – particularly those in the DownTown Park Forest area – to participate in and contribute to the celebration of arts in the Village.

3. Develop a festival space that solidifies the Village as a cultural destination around the region.

With the demolition of large, commercial properties in DownTown Park Forest and a dearth of new development activity across the nation, the vacant space that is adjacent to Village Hall has been identified as a prime site for an expanded public space and event venue. The Village's efforts to create this public space should be sustained, as its development could serve to expand the Park Forest Main Street Nights summer series and other community events. Expanded outdoor facilities could help attract residents from around Chicago's south suburbs to various community events and entertainment.

4. Commit to sustainable Village events and provide related information for private events.

Baseline Indicator: None of the Village's events have formally followed a set of sustainable criteria.

Target Indicator: 50 percent of Village events will meet sustainable criteria by 2015, and 100 percent by 2020.

The public process for this Plan revealed a commonly expressed interest in the incorporation of environmental sustainability into the Village's public events. Sustainable event characteristics may include using sustainable vendors (such as those using primarily local or organic food), providing compostable or recyclable flatware for food products, and offering greater composting and recycling options. Event planners that partner with recycling service providers can recycle or compost over 90 percent of the products discarded with proper planning and an educated public that is willing to participate. Homewood Star's community involvement and services could be utilized to work toward similar waste reduction targets for Park Forest events. Additionally, many other municipalities around the region have formalized guides and checklists for how they work toward "zero waste" events and how other local organizations can do the same. The Village should first internally define what constitutes a "sustainable event," basing the criteria both on what is important for sustainability and what is financially reasonable. The Village should then increase the number of sustainable Village-sponsored events by 10 percent each year, striving for all of its events to meet sustainable event criteria by 2025. Park Forest should similarly provide materials publicly to share the strategies that they are adopting for their own cultural events and festivals. The Village could potentially further incentivize the incorporation of sustainable event characteristics by offering discounts at Village facilities (such as Dining on the Green and Freedom Hall) to those private events that meet the criteria.

This mural depicts iconic community events in Park Forest.

5. Create more public art installations using the talent of local artists.

Building on the public art that currently exists in the Village, Park Forest should increase the presence of art installations in public spaces to further its identity as an arts center. The Village should make a commitment to the procurement of public art pieces and commissioning of additional mural projects that celebrate different aspects of the community's heritage. This commitment would encourage healthy partnerships between the Village and various schools, arts, and community groups, which could contribute to the inception and execution of public murals and other beautification projects.

One model for making this commitment is a municipal commitment to diverting a small percentage of capital funding for new projects and building improvements toward obtaining art. Alternatively, some municipalities create design guidelines and requirements for developers to set aside one percent of the cost of new development for incorporating art into the project. Public art could be pursued through the station improvements planned as part of the implementation of the 211th Street Metra Station Transit Oriented Development Plan. Integrating sculptural, graphic, or other art from local artisans into Park Forest's transit station would help solidify the community's identity.

6. Launch a marketing campaign to promote the Village's sustainable identity.

The Village has documented its myriad "green" initiatives, including building renovations, energy-saving demonstration projects, and eco-friendly local businesses. However, to solidify its reputation and identity as a sustainable community, the Village needs to further promote these initiatives and its sustainable efforts through a marketing campaign and a renewed Village brand. Being one of the first municipalities in the region to create a Sustainability Plan for its future is an excellent advancement of the Village's commitment to sustainable practices.

For greater awareness on the local, regional, and national scale of Park Forest's concerted "green" efforts, the Village should consider promotional materials, such as an electronic map of the Village's green assets and a predetermined self-walking tour that visitors can partake in starting from Village Hall. Additionally, strengthening its relations with Governors State University — a nearby institution which has a number of sustainable demonstration projects on campus — will help tie the Village to other robust campaigns to promote environmental responsibility. Lastly, the Village is a member of the Chicago Southland Convention and Visitors Bureau, which represents and promotes many of the cultural and recreational opportunities throughout the Chicago region's south suburbs. Taking better advantage of the resources that this bureau offers, such as the media connections, could provide Park Forest with another platform for sharing its sustainable identity with a larger audience.

Implementation Approach

The matrix below provides a starting point for implementing the various strategies identified in this Plan section. One item identified as particularly important to the Village through the public process is strategy 6, to enhance the Village's sustainable identity. This strategy could assist with other elements of the Plan, such as attracting investment and improving community access to resources through sharing of information.

Funding

The majority of strategies outlined in this section can be funded through the existing operating budget. Private donations could be an appropriate source for some strategies, such as the development of a festival space or creation of public art. Public art could also be enhanced if the Village were to require a nominal percentage of development costs to be set aside, as is discussed in strategy 5.

Table 14A. Implementation matrix

STRATEGY	LEAD & PARTNERS[1]	PHASING[2]	RESOURCES[3]
1. Continue partnerships with arts advocacy organizations to further strengthen the work of local institutions.	**VPF DEDP**	**Ongoing**	**Arts Alliance Illinois; Illinois Arts Council; IAC's 2007-2012 Strategic Plan**
2. Forge a coalition of arts institutions in the Village for shared events and marketing.	**VPF DEDP, local arts institutions**	**Mid-term**	**New York City model program: El Barrio Today**
3. Develop a festival space that solidifies the Village as a cultural destination around the region.	**VPF DRP, other VPF departments**	**Short-term**	
4. Commit to sustainable Village events and provide related information for private events.	**VPF DEDP**	**Short-mid term**	**Eureka! Recycling; Seven Generations Ahead's Zero Waste Community Events**
5. Create more public art installations using the talent of local artists.	**VPF DEDP, arts institutions, developers**	**Ongoing**	**Urbana, IL; Chicago, IL**
6. Launch a marketing campaign to promote the Village's sustainable identity.	**VPF PIO/SC, GSU, Chicago Southland CVB**	**Mid-term**	**Chicago Southland Convention and Visitors Bureau**

1 VPF = Village of Park Forest; DEDP = Department of Economic Development and Planning; DRP = Department of Recreation & Parks; PIO = Public Information Officer; SC = Sustainability Coordinator.

2 When implementation should occur: Short-term, 0-3 years; Mid-term, 4-6 years; Long-term, 7+ years; Immediate = as soon as funding/staff time is available.

3 Links and further resources and case studies may be found in Appendix A.

Aqua Center green roof.

Section 3
Monitoring and Reporting

Monitoring progress on the Plan's goals and reporting back to the community is important in a variety of ways. It helps to keep the Village on track, inform residents, business owners, and stakeholders about sustainability-related activities and resources, and bring recognition for the hard work Park Forest has been doing.

To that end, the Village should create a yearly progress report that includes two major components:

1. A "sustainability scorecard" that provides an at-a-glance snapshot of the Village's progress by Plan section (see Figure 1 for an example). The scorecard for each section should include a list of strategies; associated target indicators and measured indicators during reporting years (see Table 1); approximate percent complete for each strategy; and the number of strategies completed and underway.
2. A brief narrative that contains further information on the previous year's activities and the proposed activities and work plan for the coming year.

The report should be posted on the Village's website and social media sites and announced at public events and the Village's cable TV channel. CMAP may assist in developing the progress report over the first couple years of the Plan's implementation through continued technical assistance.

Data Sources

Target indicators should be calculated per the reporting years noted in Table 1. Target indicators should be continuously evaluated and adjusted to respond to varying financial, environmental, and social conditions. Also, this Plan includes indicators for the most useful and/or highest priority strategies, but the Village should add indicators in the future as it deems necessary. The majority of this Plan's indicators may be calculated from data sources that the Village itself houses. The indicators below either require external requests or further data gathering or calculation.

Total household VMT
The Village may choose to add an odometer reporting requirement to its vehicle registration form, which would provide a convenient source of VMT data. Another option would be to collect odometer readings data from the State of Illinois Department of Transportation.

Average weekday ridership levels for Pace
Data may be obtained from the Regional Transportation Asset Management System www.rtams.org.

Ridership data for Jolly Trolley
Data may be requested from Rich Township.

Recycling rate
Recycling rates for the single family sector may be requested from Homewood Star Disposal. Other recycling rates should be determined per strategy 2 in the Waste section.

Energy audits
Data may be collected via Village-wide survey.

ComEd WattSpot
Data may be requested from ComEd.

Greenhouse gas emissions
The Village may either calculate emissions in-house (via ICLEI software or another comparable program) or hire an external consultant to conduct an emissions inventory.

Figure 1. Scorecard example

DEVELOPMENT PATTERNS	2013	2014	2015	2016	2017
Strategies Complete	**0**	**5**	**5**		
Strategies Underway	**6**	**6**	**6**		
	PERCENT COMPLETE				
STRATEGY	0		50		100
1. Update Village's development regulations to require or incentivize sustainable development.					
Target Indicator: Update the Village's Zoning & Subdivision Codes by 2015.					
Measured Indicator: The Village's Zoning & Subdivision Codes were updated in 2014.					
2. Create a new walkable, mixed-use district for key areas.					
3. Create a new "urban residential" district that permits a variety of housing types.					
4. Permit accessory units in single family districts.					
5. Increase walkable access to commercial uses.					
Target Indicator: Add 5 neighborhood commercial tenants by 2015.					
Measured Indicator: 3 neighborhood commercial tenant have been added.					
6. Update subdivision regulations to encourage walkable neighborhoods.					

Short-Term Work Plan

There are numerous recommendations in this report that are denoted as immediate or short-term implementation items, which will ideally be addressed within the next three years. Many of these items, particularly those related to regulatory updates and educational initiatives, are foundational steps that will help to provide the right climate for future longer-term strategies. For example, regulatory updates to permit mixed-use development in key locations is a first step toward attracting desired tenants and even green businesses to those locations and then enhancing walkable access to daily needs. Foundational strategies should be prioritized in moving ahead with implementation. This section provides some additional detail on the implementation of short-term strategies to assist in their realization in the near-term future.

Regulatory Revisions

If possible, it would be ideal to address all of the Sustainability Plan's recommended regulatory revisions at the same time during one process. The number of recommended code revisions (summarized below, with additional recommendations in Appendix B: Sustainability Audit of Zoning and Subdivision Codes) underscores the importance of this task in achieving many of the Plan's goals. To undertake this process, the Village first needs to secure grant funding, potentially through RTA's TOD Plan Implementation program or another grant program; the Village could also apply for further staff assistance through CMAP's Local Technical Assistance program. After procuring funding, the Village should work with a qualified consultant to update its regulations.

- *Update the Village's development regulations to require and/or incentivize sustainable development.*
- *Create a new walkable, mixed-use district for key areas.*
- *Create a new "urban residential" district that permits a variety of housing types adjacent to mixed-use areas.*
- *Permit accessory units in single family districts.*
- *Update subdivision regulations to encourage walkable neighborhoods.*
- *Create street types appropriate for Village context areas.*
- *Explore bicycle parking requirements for new developments.*
- *Require new trees in larger new developments.*
- *Require recycling of construction and demolition debris and offer incentives for deconstruction and materials reuse.*
- *Better manage stormwater to minimize water pollution and flooding issues.*
- *Develop incentives for new buildings to be built to established green building standards.*
- *Create and adopt an onsite renewable energy generation ordinance.*
- *Adopt and implement a municipal vehicle anti-idling management policy.*
- *Require new residential construction to include electric vehicle hookups.*
- *Require all new commercial construction to include facilities for electric and low emission vehicles (LEVs).*
- *Require energy audits (or energy disclosure) at time-of-sale for buildings.*
- *Include energy as part of the development review process for new construction buildings.*
- *Increase safety and perception of safety.*
- *Incentivize Health Impact Assessments for larger new developments.*

Educational Initiatives

Connecting stakeholders with information and changing behaviors is important to the Village's sustainability. As such, there are many short-term strategies in the Plan that relate to educational initiatives (summarized below). Some of these are primers to longer-term strategies; for example, developing a marketing campaign to promote transportation alternatives is meant to ramp up interest in such alternatives before significant further investments in Pace or Jolly Trolley are made. A majority of the activities can be undertaken in-house with existing budgets. However, some (such as developing a marketing campaign to promote transportation alternatives and developing an energy efficiency campaign) could benefit from additional grant funding for hired expertise and/or materials.

For each of these strategies, the Village should designate an individual as the lead for collecting the related resources. If funding is obtained to hire a sustainability coordinator, he/she could be at least initially be responsible for this task. Resources should be kept in a central physical location (such as Village Hall lobby) and also in a centralized online location (such as a dedicated website or page on the Village's web site). Resources should be periodically updated to ensure their relevance and timeliness.

- *Develop a public marketing campaign to promote transportation alternatives.*
- *Pursue actions that will help to increase recycling rates.*
- *Spread the word about residential real time pricing (RRTP).*
- *Develop an energy efficiency campaign to encourage modifying energy use behavior and habits.*
- *Develop the Village as a clearinghouse for sustainability resources, along with new related Village programming.*
- *Create "neighborhood groups" as a means of distributing information.*
- *Provide sustainability-related resources to businesses.*
- *Encourage replacement of older inefficient appliances with energy efficient appliances.*

Internal Activities

The following strategies are activities that primarily relate to internal Village actions that the Plan recommends. These activities are unlikely to require additional funding and a point person within Village staff should first be identified for each item's implementation.

- *Work with waste haulers to track data on recycling rates.*
  The Village should identify all waste haulers that are serving Park Forest by contacting multifamily property managers and business owners. It may also be fruitful to reach out to other communities in the region that have developed sustainability plans, such as Oak Park and River Forest, to understand their approaches toward gathering this data. The Village could explore which waste haulers are willing and able to provide data on recycling rates. Residents and businesses who contract with waste haulers for services should be connected with those who track related data.

- *Reach out to newly forming and/or growing green businesses.*
  To address this task, the Village should develop a database of green businesses via contacts made through its existing green businesses and the Illinois Green Industry Association (an association of green businesses) and then strategically reach out to these businesses as a means of marketing and providing information about Village amenities.

- *Expand upon the Health Department's role in ensuring community-wide health.*
  The Plan calls for the Health Department to become the organizing entity for health-related events and resources. The Department already performs some of these duties to a certain extent. To first evaluate how to effectively expand upon related events and resources, the Health Department should create and seek the assistance of a public health advisory committee. This committee, potentially comprised of Village department liaisons and representatives from health care providers, senior centers, and other interested individuals, can take some of the burden from the Department in terms of assessing current programming and proposing new programming. Depending on the recommendations of the committee, the Department can either expand its activities within existing budgets or seek additional grant or state funding sources.

  The Health Department or public health advisory committee should also explore the collection of health indicator data to help inform its programming efforts. First, potential sources of data should be identified and evaluated, whether from public surveys, information collected via public schools, or through patient consent for the Health Department's services. It should be emphasized that data will be aggregated and generalized; individual health records will continue to be protected. The data collection should be related to specific points of interest, such as obesity rates and rates of other major diseases (such as heart disease, diabetes, and cancer). These data sets can be used to develop baseline and target health indicators, and set programming objectives.

Other Activities

- *Develop a plan to identify ways to prevent strain on the Village's shared water supply.*
  To accomplish this strategy, the Village should first contact affected municipalities and Will County to start a conversation about the shared water source. Interested parties should form a task force to develop a plan for the future. The planning process may require additional expertise and/or funding from external sources. Partners such as CMAP and sub-regional water planning groups should be considered.

- *Develop a festival space that solidifies the Village as a cultural destination around the region.*

  The Village has already identified space adjacent to DownTown Park Forest as appropriate for a festival space. The next step is to define what the space should look like and procure funding to transform the area. The Village should apply for grant funding to hire a consultant, who could create a plan for the area and oversee construction of the site.

- *Create a network of green infrastructure to help manage stormwater.*
  The Village has already been proactive in pursuing this strategy by identifying next steps and applying for related grant funding. The Village should continue to apply for grant funding that could be used towards a feasibility study and engineering plan for the three potential wetlands areas.

Table 1. Target indicators & reporting year(s)

STRATEGY	TARGET INDICATOR	REPORTING YEAR(S)
DEVELOPMENT PATTERNS		
Update the Village's development regulations to require and/or incentivize sustainable development.	Update the Village's Zoning and Subdivision Codes by 2015.	2015
Increase walkable access to commercial uses.	Add 5 new neighborhood commercial tenants by 2020.	2015, 2020
TRANSPORTATION & MOBILITY		
Reduce the community's annual vehicle miles traveled (VMT).	Reduce total household VMT by 10 percent overall, or around 5-6 miles per day per household, by 2025.	2015, 2020, 2025
Work with Pace to explore improved service and additional transit amenities.	Increase combined average weekday ridership levels by 33 percent (approximately 2,000 passengers) by 2020.	2015, 2020
Expand Jolly Trolley service.	Increase ridership by 10 percent by 2017.	2015, 2017
OPEN SPACE & ECOSYSTEMS		
Preserve public open space areas.	Retain 100 percent of existing public open space and parks.	2015, 2020, 2025
WASTE		
Pursue actions that will help to increase recycling rates.	Meet the national average recycling rate of 34 percent by 2017 and achieve at least a 60 percent recycling rate by 2025.	Bi-yearly (start 2015)
Work with waste haulers to track data on recycling rates.	Establish a Village-wide baseline recycling rate by 2015.	2015
Facilitate composting in the Village.	Establish a composting pilot program by 2017.	2017
Require recycling of construction and demolition debris and offer incentives for deconstruction and materials reuse.	Create a construction and demolition debris recycling ordinance by 2015.	2015
Partner with schools to enhance education about reducing, reusing, recycling, and composting waste.	Institute a recycling program at every Park Forest school by 2017.	2015, 2017
WATER		
Develop a plan to identify ways to prevent strain on the Village's shared water supply.	Organize a coordinated water supply planning process by 2015. Adopt CMAP's Model Water Use Conservation Ordinance by 2015.	2015
Review current water service rates to ensure long-term sustainability.	Compare the Village's current water service rate structure with future needs for system operation and infrastructure costs by 2015.	2015
Better manage stormwater to minimize water pollution and flooding issues.	Establish a stormwater management ordinance by 2015.	2015
ENERGY		
Provide informational resources and solicit financial resources for home and business energy audits.	15 percent of homes conduct energy audits by 2015; 30 percent of businesses conduct energy audits by 2015.	2015
Develop a retrofit program for existing buildings.	5 percent of homes complete retrofits by 2025; 10 percent of businesses complete retrofits by 2025.	2015, 2020, 2025
Spread the word about residential real time pricing (RRTP).	Add 500 RRTP members to ComEd's WattSpot by 2017 and 1,000 members by 2025.	2015, 2020, 2025
Develop incentives for new buildings and developments to be built to established green building standards.	Build 50 percent of new construction buildings to green standards by 2025.	2015, 2020, 2025
Develop a green building handbook to assist building owners in implementing green practices.	Build 30 percent of major renovations to green standards by 2025.	2015, 2020, 2025
Create and adopt an onsite renewable energy generation ordinance.	Adopt a renewable energy ordinance by 2015.	2015

Table 1. Target indicators & reporting year(s) continued

STRATEGY	TARGET INDICATOR	REPORTING YEAR(S)
GREENHOUSE GASES		
(not applicable - overarching indicator)	The Village will reduce its GHG emissions by 6 percent, or approximately 14,500 tonnes, by 2025.	2015, 2020, 2025
GREEN ECONOMY		
Develop financial incentives to attract and promote green businesses and jobs.	Attract 3 new green businesses by 2017 and 6 new green businesses total by 2025.	Bi-yearly (start 2015)
LOCAL FOOD SYSTEMS		
Establish a community garden program.	Create 15 new community gardens by 2015 and 30 total by 2025.	Bi-yearly (start 2013)
MUNICIPAL POLICIES & PRACTICES		
Adopt an environmentally preferable purchasing policy.	Conduct all Village purchasing and contracting in accordance with an adopted policy by 2013.	2013
Conduct a municipal fleet study to guide fleet purchase and operating decisions.	Complete a municipal fleet study and conduct all fleet purchases, maintenance, and operating decisions in accordance with an adopted policy by 2015.	2015
Adopt an environmentally preferable facility maintenance policy.	Conduct a sustainability audit of all Village facilities by 2017; Reduce annual kWh, therms, and water use in Village facilities by 10 percent by 2025.	2015, 2017, 2020, 2025
Educate Village staff to reduce municipal waste.	Conduct a municipal waste audit by 2013; Divert an additional 10 percent of waste generated in Village facilities from landfills by 2015; Achieve near zero waste sent to landfills in Village facilities by 2025; Purchase 50 percent of all paper products as recycled content paper and Forest Stewardship-certified pulp by 2017.	Bi-yearly (start 2013)
Create the position of Village Sustainability Coordinator and establish a Village Sustainability Team.	Modify job descriptions to designate primary sustainability responsibilities to at least one representative from each Village Department by the end of 2012; Hire a Sustainability Coordinator by 2014.	2013, 2014
EDUCATION		
Conduct school curricula review to identify areas where sustainability lessons can be integrated.	Conduct curriculum review and integrate sustainability into lesson plans in all Park Forest schools by the 2017-18 school year.	2017
Create a Sustainability Interpretive Center.	Display signage at each "green initiative" site or sustainability project by 2017.	2015, 2017
COMMUNITY HEALTH & WELLNESS		
Further develop and promote health-related programs and events.	Increase enrollment in Village-provided recreational programs by 20 percent by 2017.	2015, 2017
ARTS & CULTURE		
Commit to sustainable Village events and provide related information for private events.	50 percent of Village events will meet sustainable criteria by 2015, and 100 percent by 2020.	2013, 2015, 2017, 2020

The following table summarizes all of the Sustainability Plan's strategies and target indicators. In this Plan, target indicators are provided for select strategies where they will be most useful in measuring progress towards the Village's sustainability goals.

Table 2. Summary of all strategies & target indicators

STRATEGY	TARGET INDICATOR
DEVELOPMENT PATTERNS	
Update the Village's development regulations to require and/or incentivize sustainable development.	Update the Village's Zoning and Subdivision Codes by 2015.
Create a new walkable, mixed-use district for key areas.	
Create a new "urban residential" district that permits a variety of housing types adjacent to mixed-use areas.	
Permit accessory units in single-family districts.	
Increase walkable access to commercial uses.	Add 5 new neighborhood commercial tenants by 2020.
Update subdivision regulations to encourage walkable neighborhoods.	
TRANSPORTATION & MOBILITY	
Reduce the community's annual vehicle miles traveled (VMT).	Reduce total household VMT by 10 percent overall, or around 5-6 miles per day per household, by 2025.
Work with Pace to explore improved service and additional transit amenities.	Increase combined average weekday ridership levels by 33 percent (approximately 2,000 passengers) by 2020.
Expand Jolly Trolley service.	Increase ridership by 10 percent by 2017.
Develop a public marketing campaign to promote transportation alternatives.	
Establish car sharing services at Metra stations and other key locations.	
Encourage the use of fuel-efficient vehicles by providing needed infrastructure.	
Create street types appropriate for Village context areas.	
Continue to evaluate the Village's Capital Plan to ensure sustainable transportation improvements.	
Create a bicycle routes plan that establishes criteria for new bike lanes and roadways.	
Explore bicycle parking requirements for new developments.	
Improve walkability and pedestrian safety throughout the community.	
OPEN SPACE & ECOSYSTEMS	
Preserve public open space areas.	Retain 100 percent of existing public open space and parks.
Create a network of green infrastructure to help manage stormwater.	
Continue to encourage the use of native and adapted plant materials.	
Require new trees in larger new developments.	
Continue to discourage the use of chemical pesticides.	

Table 2. Summary of all strategies & target indicators continued

STRATEGY	TARGET INDICATOR
WASTE	
Pursue actions that will help to increase recycling rates.	Meet the national average recycling rate of 34 percent by 2017 and achieve at least a 60 percent recycling rate by 2025.
Work with waste haulers to track data on recycling rates.	Establish a Village-wide baseline recycling rate by 2015.
Facilitate composting in the Village.	Establish a composting pilot program by 2017.
Require recycling of construction and demolition debris and offer incentives for deconstruction and materials reuse.	Create a construction and demolition debris recycling ordinance by 2015.
Partner with schools to enhance education about reducing, reusing, recycling, and composting waste.	Institute a recycling program at every Park Forest school by 2017.
Develop an electronic waste recycling program.	
Coordinate a yearly household hazardous waste collection event.	
WATER	
Develop a plan to identify ways to prevent strain on the Village's shared water supply.	Organize a coordinated water supply planning process by 2015. Adopt CMAP's Model Water Use Conservation Ordinance by 2015.
Improve utility services via infrastructure upgrades.	
Review current water service rates to ensure long-term sustainability.	Compare the Village's current water service rate structure with future needs for system operation and infrastructure costs by 2015.
Encourage best practices in outdoor irrigation and water reuse.	
Better manage stormwater to minimize water pollution and flooding issues.	Establish a stormwater management ordinance by 2015.
Raise public awareness and provide education about water resources.	
ENERGY	
Provide informational resources and solicit financial resources for home and business energy audits.	15 percent of homes conduct energy audits by 2015; 30 percent of businesses conduct energy audits by 2015.
Develop a retrofit program for existing buildings.	5 percent of homes complete retrofits by 2025; 10 percent of businesses complete retrofits by 2025.
Develop an energy efficiency campaign to encourage modifying energy use behavior and habits.	
Spread the word about residential real time pricing (RRTP).	Add 500 RRTP members to ComEd's WattSpot by 2017 and 1,000 members by 2025.
Develop incentives for new buildings and developments to be built to established green building standards.	Build 50 percent of new construction buildings to green standards by 2025.
Develop a green building handbook to assist building owners in implementing green practices.	Build 30 percent of major renovations to green standards by 2025.
Create and adopt an onsite renewable energy generation ordinance.	Adopt a renewable energy ordinance by 2015.
Pursue renewable energy systems that provide a model for residents.	
Set standards and develop municipal policies to support renewable energy sources.	

Table 2. Summary of all strategies & target indicators continued

STRATEGY	TARGET INDICATOR
GREENHOUSE GASES	
Adopt and implement a municipal vehicle anti-idling management policy.	The Village will reduce its GHG emissions by 6 percent, or approximately 14,500 tonnes, by 2025.
Require new residential construction to include electric vehicle hookups.	
Require all new commercial construction to include facilities for electric and low emission vehicles.	
Require energy audits (or energy disclosure) at time-of-sale for buildings.	
Include energy as part of the development review process for new construction buildings.	
GREEN ECONOMY	
Reach out to newly forming and/or growing green businesses.	
Develop financial incentives to attract and promote green businesses and jobs.	Attract 3 new green businesses by 2017 and 6 new green businesses total by 2025.
Establish a green business incubator.	
Create a Green Chapter for businesses.	
Implement a green business certification program.	
Provide sustainability-related resources to businesses.	
Work with businesses to implement green purchasing.	
Explore green-skills vocational training opportunities.	
Hold interactive events in the DownTown to promote local businesses.	
LOCAL FOOD SYSTEMS	
Establish a community garden program.	Create 15 new community gardens by 2015 and 30 total by 2025.
Explore the creation of standards for raising honeybees and fowl on residential lots.	
Support the farmers' market and South Suburban Food Cooperative.	
Expand food-related educational opportunities.	
Work with schools to launch "Farm to School" programs.	
COMMUNITY HEALTH & WELLNESS	
Expand upon the Health Department's role in ensuring community-wide health.	
Further develop and promote health-related programs and events.	Increase enrollment in Village-provided recreational programs by 20 percent by 2017.
Increase safety and perception of safety.	
Incentivize Health Impact Assessments for larger new developments.	

Table 2. Summary of all strategies & target indicators continued

STRATEGY	TARGET INDICATOR
MUNICIPAL POLICIES & PRACTICES	
Adopt an environmentally preferable purchasing policy.	Conduct all Village purchasing and contracting in accordance with an adopted policy by 2013.
Conduct a municipal fleet study to guide fleet purchase and operating decisions.	Complete a municipal fleet study and conduct all fleet purchases, maintenance, and operating decisions in accordance with an adopted policy by 2015.
Adopt an environmentally preferable facility maintenance policy.	Conduct a sustainability audit of all Village facilities by 2017; Reduce annual kWH, therms, and water use in Village facilities by 10 percent by 2025.
Educate Village staff to reduce municipal waste.	Conduct a municipal waste audit by 2013; Divert an additional 10 percent of waste generated in Village facilities from landfills by 2015; Achieve near zero waste sent to landfills in Village facilities by 2025; Purchase 50 percent of all paper products as recycled content paper and Forest Stewardship-certified pulp by 2017.
Create opportunities for reducing vehicle miles traveled by Village staff.	
Address financial sustainability throughout implementation of the Plan.	
Create the position of Village Sustainability Coordinator and establish a Village Sustainability Team.	Modify job descriptions to designate primary sustainability responsibilities to at least one representative from each Village Department by the end of 2012; Hire a Sustainability Coordinator by 2014.
Leverage Park Forest's involvement in regional organizations to enhance sustainability on a larger scale.	
EDUCATION	
Provide enhanced opportunities for youth to engage in sustainability.	
Conduct school curricula review to identify areas where sustainability lessons can be integrated.	Conduct curriculum review and integrate sustainability into lesson plans in all Park Forest schools by the 2017-18 school year.
Create "neighborhood groups" as a means of distributing information.	
Develop the Village as a clearinghouse for sustainability resources.	
Create a Sustainability Interpretive Center.	Display signage at each "green initiative" site or sustainability project by 2017.
ARTS & CULTURE	
Continue partnerships with arts advocacy organizations to further strengthen the work of local institutions.	
Forge a coalition of arts institutions in the Village for shared events and marketing.	
Develop a festival space that solidifies the Village as a cultural destination around the region.	
Commit to sustainable Village events and provide related information for private events.	50 percent of Village events will meet sustainable criteria by 2015, and 100 percent by 2020.
Create more public art installations using the talent of local artists.	
Launch a marketing campaign to promote the Village's sustainable identity.	

The Chicago Metropolitan Agency for Planning (CMAP) is the region's official comprehensive planning organization. Its GO TO 2040 planning campaign is helping the region's seven counties and 284 communities to implement strategies that address transportation, housing, economic development, open space, the environment, and other quality of life issues. See www.cmap.illinois.gov for more information.

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Clockwise from upper right:
Downtown information kiosk;
Central Park wetlands bridge;
housing co-ops;
Downtown farmers' market.

FY12-0094

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Appendix A
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Appendix B
Sustainability Audit of Zoning & Subdivision Codes

This appendix to the Park Forest Sustainability Plan presents recommendations on ways that Park Forest's Zoning and Subdivision Ordinances could be revised to incorporate sustainability-related best practices and principles. When comprehensive regulatory updates are undertaken in the future, these recommendations should be further analyzed. Code updates that are not closely linked to sustainability are not included in this audit, and should be considered anew during the regulatory update process.

Districts & Uses

Issue	Existing Code Provision(s)	Recommended Changes	Tier	Priority	References/Notes
Mixed-Use Commercial Areas					
Mixed-use commercial district	Sec. 118-152 minimum building setback of 25' in C-1 & C-2 districts. Sec. 118-153 dwelling units permitted above commercial uses when approved as part of a development plan. No regulation of parking location. Current open space and lot size requirements and building coverage limits prevent urban form	Create a mixed-use district for DownTown, 211th St station area, & neighborhood commercial areas. Require buildings built along the sidewalk or in a small build-to zone adjacent to the sidewalk, and parking in rear or single bay on the side; permit residential uses above commercial by-right; reduce required lot size and increase permitted building coverage. Consider applying some of these requirements to C-1 and/or C-2 districts.	I	High	Commercial & Mixed-Use Development Handbook; 211th Street TOD Implementation Study
Walkability to daily needs	Sec. 118-153. Permitted uses for C-1 & C-2 include auto-oriented uses (auto service stations and repair shops, drive-through establishments)	Permit uses in the new mixed-use district (oulined above) that focus on daily needs (dry cleaning, child care, coffee shop, corner store, pharmacy, etc.); prohibit auto-oriented uses	I	Medium	LEED-ND NPD Credit 3
Pedestrian-friendly design	None	Provide incentives for or require design features that enhance walkability in the mixed-use district, such as incorporation of clear glass storefronts, functional street side entries, limited curb cuts. Expressly permit sidewalk cafes, street furniture, & planters	I/II	Medium	Use LEED-ND NPD Credit 1: Walkable Streets as a starting point for developing standards
Human scale	Sec. 118-152 minimum acreage for district designation - C-1, 1 acre; C-2, 3 acres.	Eliminate minimum acreage requirements in all commercial or mixed-use districts to enable a smaller scale of commercial development	I	High	Commercial & Mixed-Use Development Handbook
Drive through limitations	Sec. 118-153, 118-154. Drive through establishments are permitted without limitations in C-1, C-2	Limit drive-through facilities in number and location in mixed-use areas	I	High	

Issue	Existing Code Provision(s)	Recommended Changes	Tier	Priority	References/Notes
Residential Areas					
Transit and commercial supportive density	Art. III permits a maximum density of 17 du/ac. Majority of residential zoned R-1, maximum of 6.1 du/ac.	Develop standards for accessory dwelling units for single family districts to double potential density. Utilize a new "urban residential" district (see below) adjacent to transit and mixed-use areas	I	High	Portland, OR
Urban residential district	Art. III permits a maximum density of 17 du/ac but open space and lot size requirements and building coverage limits prevent urban form	Create a new urban residential district that permits small lot single family, townhouse, and multifamily uses (minimum average 12 du/ac). Map this district for the Eastgate and Hidden Meadows areas, Sauk Trail nodes, and adjacent to mixed-use locations. Reduce required lot size and increase permitted building coverage	I	High	LEED-ND NPD Prerequisite 2; 2008 Strategic Plan for Land Use & Economic Development
Home occupations	Sec. 118-43(c). Home occupations permitted with reasonable conditions. Sale of commodities and signage not permitted	Continue to permit home occupations. Create standards for associated small-scale signage	I	Medium	Eugene, OR
All Areas					
High performance buildings	None	Provide incentives for developments that meet LEED criteria or another similar green building rating system (provisions in both the zoning and building codes may be appropriate)	III	Low	Chicago, IL

Tier I: Low-hanging fruit (modification of regulations would be beneficial to both the Village & developers); Tier II: An added development requirement; Tier III: An added new development requirement that could be perceived as onerous & should be incentivized

Neighborhoods/Subdivisions

Issue	Existing Code Provision(s)	Recommended Changes	Tier	Priority	References/Notes
Uses					
Walkable commercial access	Sec. 118-52, 118-72, 118-92, 118-112, 118-132. Commercial uses not permitted within any residential district. Some commercially zoned properties are located within existing residential neighborhoods	Permit a corner store or other small-scale retail (less than 20,000 square feet) within residential subdivisions	I	Medium	Richmond, VA
Housing diversity	Sec. 94-9. Minimum lot dimensions are 60' width, 120' depth; minimum lot size is 7,200 square feet (6.1 du/ac)	Encourage or require diversity in housing types (townhouse, live-work, small-lot single family, and larger lot single family) for new subdivisions through use of urban residential district	I/II	Medium	LEED-ND NPD Credit 4; Albemarle County, VA; Montgomery County, MD
Adaptable, accessible housing	None	Encourage developments to incorporate a minimum percentage of accessible/ adaptable units	III	Low	LEED-ND Credit 11
Streets					
Walkable blocks	Sec. 94-8. Maximum permitted block length is 1600'; all blocks over 800' require a mid-block crosswalk. Sec. 94-6. Intersections with primary streets should occur not less than every 1250'.	Set a maximum block length of 800' and preferred length of 300-600' for residential subdivisions (no mid-block crosswalks should be required for these block lengths)	I	Medium	LEED-ND NPD Prerequisite 3
Street types	Sec. 94-6. Collector street - 80', minor street - 50', alleys not permitted	Create street types that consider their context and all users for use in subdivisions. Permit narrower streets when feasible. Encourage the use of alleys	I	Medium	SmartCode Version 9.2
Cul-de-sacs	Sec. 94-7. Cul-de-sacs are permitted freely. Maximum length of 400'.	Permit cul-de-sacs only if necessary due to topography or subdivision dimensions	I	Medium	
Street trees	Sec. 94-40. A minimum of 1 tree every 60' of street frontage is required	Continue to require street trees. Consider increasing frequency to 1 tree per 40' of frontage	I	Low	LEED-ND NPD Credit 14

Tier I: Low-hanging fruit (modification of regulations would be beneficial to both the Village & developers); Tier II: An added development requirement; Tier III: An added new development requirement that could be perceived as onerous & should be incentivized

Issue	Existing Code Provision(s)	Recommended Changes	Tier	Priority	References/Notes
Parking Requirements					
Minimum parking requirements	Sec. 118-280. Required spaces. In some instances, existing parking requirements result in an oversupply of parking spaces.	Update minimum parking requirements to ensure an appropriate amount of parking by use. Revised standards should be based on features of context areas, including proximity/availability of transit/other modes	I	High	ITE Parking Generation Manual
Maximum parking limits	None	Incorporate maximum parking limitations to restrict impervious surfaces (see next page: "green parking lots" recommendation)	I	Medium	RMLUI Sustainable Code; San Francisco, CA
Parking credits	None	Provide parking space credits based on proximity to transit and public and on-street parking	I	Medium	Olympia, WA; RMLUI Sustainable Code
Shared parking	Sec. 118-273. Shared parking allowed for separate uses if total number meets sum of what is required for each use; dual function may be permitted by Board if proven that demand does not overlap	Permit lowered total parking requirements by right if peak demand differs between users	I	Medium	SmartCode Version 9.2
Small car parking spaces	Sec. 118-279. 90 degree parking spaces shall be 9' x 18'6"	Permit small car spaces (7'6" x 16'6") for up to 35% of all spaces by right	I	Medium	Dallas, TX
Narrow residential driveways	Sec. 118-242(b). Maximum driveway width for residential lots (other than R-1B district) is 24'.	Set maximum curb cut size of 12' for all single family residential lots	I	Medium	GAP Form-Based Code (Bloomington, IL)
Bicycle parking spaces	None	Require bicycle parking spaces for new multifamily and commercial developments based on number of units or employees	II	Medium	LEED-ND NPD Credit 5
Materials					
Recycled materials	Sec. 118-276(c). 6-9 inches of gravel or crushed stone base course required for various parking areas	Require parking lot paving to include a minimum of 20% recycled materials	II	Low	Chicago, IL; LEED-ND GIB Credit 15
Reflectivity	None	Encourage a Solar Reflectance Index (SRI) of 29 or greater for paving materials	II	Low	LEED-NC SS Credit 7.1
Permeable pavement	Sec. 118-276(c). 6-9 inches of gravel or crushed stone base course required for various parking areas	Permit permeable paving materials in lieu of current paving requirements	I	High	

Landscape

Issue	Existing Code Provision(s)	Recommended Changes	Tier	Priority	References/Notes
Parking lot buffers	Sec. 118-278. 10' landscape buffer required between residential lots and parking lots	Continue to require a residential landscape buffer. Consider requiring a street side buffer to screen parking lots from view of the street	I	Medium	
Green parking lots	Article VI. does not mention parking lot landscape aside from residential landscape buffer	Consider requiring that a minimum percentage of parking lot hardscape (suggest 50%) be replaced by a combination of tree canopy shade (canopy within 10 years of installation), shade from other structures (i.e. electric vehicle charging stations or open structures), pavement with SRI of at least 29, permeable pavers, or landscape islands	II	Medium	LEED-ND GIB Credit 9
Green roofs	Sec. 118-7. Open space is defined as "total horizontal land area of a lot or development excluding roadways, streets, parking areas, loading areas, or buildings"	Include green roofs in the Village's definition of open space and permit the square footage to count towards open space requirements. Provide incentives in higher intensity, mixed-use areas where there is more impervious coverage	I/II	Medium	Chicago, IL
Native landscape	None	Permit and encourage the use of native plantings in development landscapes	I	Medium	
Community gardens	None	Permit community gardens as a use in all districts. Develop standards to guide the development of gardens	I	High	See the Local Food Systems chapter
Private open space	Secs. 118-7, 118-152, 118-55, 118-118, 118-135. Most districts have an open space ratio or maximum building coverage associated with them.	Continue to limit impervious cover for single family and commercial areas. Reduce the amount of open space required for new urban residential and mixed-use developments	I	High	Reduced open space to be mitigated by green parking lots recommendation above
Street trees	Sec. 94-40. A minimum of 1 tree every 60' of street frontage is required (subdivisions)	Require a minimum of 1 tree per 40' of frontage for all new developments	I	Medium	
Tree protection	None	Develop a tree ordinance to protect existing trees	II	High	Austin, TX

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Appendix C
Sustainability Assessment

This appendix represents the Sustainability Assessment for the Village of Park Forest, the first major step that was taken toward creating its Sustainability Plan. In undertaking such a Plan, thoroughly evaluating existing conditions is necessary to establish baseline indicators and identify existing conditions, programs, and initiatives which together paint a picture for the ways that the Village and its residents are approaching sustainability today. This Assessment represents the threading together of approximately four months of data gathering, research, analysis, and public outreach activities, and is meant to act as an agreed upon starting point for creating a sustainability vision for the future of Park Forest. The outreach process has yielded visioning and goal statements, which are incorporated in this document as a reference for shaping Plan recommendations.

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Section 1
Development Patterns

Park Forest is a walkable community. Many of its residents are within 1/4-mile walking distance of commercial uses and the majority of households in the Village are within walking distance of a school.

Sustainable development patterns are those that promote walkability (the ability of inhabitants to get to destinations on foot) and alternative modes of transportation to reduce the amount of vehicle miles traveled and improve quality of life. As a planned community, Park Forest inherently has many features of a walkable place, such as abundant access to open space and schools, relatively dense housing stock compared with other suburbs, and neighborhood commercial nodes. Features like these allow residents to meet many of their daily needs on foot or by bicycle instead of by car, reducing fuel consumption and air pollution.

There are economic benefits to having a walkable community as well. Increased foot traffic for businesses means increased exposure and likelihood of unplanned visits. In addition, with rising fuel costs, homebuyers may increasingly be looking to purchase homes in places that offer reduced auto dependence. Walkability is also believed to strengthen community connections; studies have shown that as people increase the amount of time they spend outside, they also increase the number of chance interactions they may have with others. Lastly, increased walkability has been tied to improved public health; one study found that the average woman in a walkable community weighed six pounds less than the average woman residing in a more auto-oriented environment, and the average man weighed ten pounds less.

Existing Land Use & Development Patterns

Park Forest was originally designed as a walkable community. Although the majority of the Village is residential, commercial space and institutional uses were strategically located to ensure that homes were within proximate walking distance to daily needs, such as going to school or picking up groceries. After residential uses, open space comprises over 22 percent of land uses and institutional uses make up over 9 percent. The commercial and industrial uses in Park Forest are relatively small, comprising 3.4 and 2.0 percent of land respectively (see Figures 1-a and 1-b and Table 1-a).

Figure 1-a. Land Use Map

Residential Uses

Park Forest's building stock, particularly in residential areas, is diverse but relatively homogeneous in age and architectural style. About 58 percent of the residential buildings are single-family homes and the remaining are multifamily units (of which over 20 percent are cooperatives). Single-family homes in the Village are typically one to two stories tall and located on lots approximately 60-70 feet wide. They are also built somewhat close to the street, with most set back about 15 feet. The average footprint for a two-bedroom home is around 950 square feet, while the typical footprint for a three-bedroom home is approximately 1,050 square feet.

There are some exceptions to this pattern present within the Village. Legacy Square, a new development directly adjacent to DownTown, includes single-family homes on significantly smaller lots (at between 25 and 50 feet wide) that have a bulkier appearance from the street from the predominant pattern in Park Forest (see images to the right). The homes are a little larger, with a range from 1,100 to 1,500 square feet. While the majority of single-family development in Park Forest is zoned for a maximum of 6.1 dwelling units per acre (per the R-1: Single Family Residential District), Legacy Square is denser at 13 dwelling units per acre. Increased residential density is beneficial for walkability in that it may help to support commercial uses and transit services. Legacy Square is also the only residential development in Park Forest to utilize alleys, which help to minimize potential pedestrian conflicts with vehicles at driveways.

Multifamily uses also comprise a noteworthy portion of the Village's housing stock. Rental units were originally introduced into Park Forest to provide suitable housing for servicemen returning from World War II. Most of those rental units have since been converted to cooperative housing, although many remain. Most of the multifamily uses are located on the east side of the Village on parcels zoned as R-2A: Multiple Family Residential District, which allows for a minimum lot width of 90 feet and maximum density of 17 dwelling units per acre. The multifamily developments are characterized by

Legacy Square (bottom) differs in scale and architectural features from Park Forest's traditional housing stock (above).

Figure 1-b. Land Use Pie Chart

Source: CMAP Land Use, 2005

Table 1-a. Land Use

Land Use Category	# of Acres	% of Total Acreage
Residential	1,905	60.5%
Open Space	699	22.2%
Institutional	303	9.6%
Commercial	103	3.3%
Industrial	62	2.0%
Infrastructure	41	1.3%
Vacant	36	1.1%
Total	3,149	100.0%

Source: CMAP Land Use, 2005

long blocks with some of the buildings fronting on public streets and others fronting on open space within the blocks. Blocks range from 500-750 linear feet for the short ends to 1,000-2,600 linear feet for the long ends; a walkable block length, as a rule of thumb, is typically no greater than 800 linear feet for a long end. Most of the multifamily blocks are insular in nature, with access drives for parking but little in terms of throughways for outside traffic. This pattern helps to create community and a safe environment for children to play. In addition, many of the blocks incorporate pedestrian walkways that help to make the area more walkable.

Commercial, Industrial, and Institutional Uses

There are various scales of commercial development within Park Forest, including small commercial nodes within neighborhoods, DownTown shops, and larger, auto-oriented commercial and industrial development along the major thoroughfares and in the industrial park. While the infrastructure is present to have walkable access to commercial uses throughout the Village, unfortunately many of the commercial spaces remain vacant. Despite the vacancies, the presence of smaller neighborhood nodes of commercial uses is a unique feature of the community that could contribute greatly to neighborhood walkability in terms of meeting daily needs on foot.

In terms of built form, commercial properties in Park Forest generally fall into two categories: mixed-use style development with buildings built up to the sidewalk (as in DownTown and some of the neighborhood nodes) or an auto-oriented style of development with buildings set back and parking in front (as is the case for Norwood Square, along Western Avenue, etc.).

Institutional uses, such as churches, schools, social services, and government, are located throughout the Village. Park Forest is home to nine public schools (including Rich East High School) and five private schools. There are also several churches in the community, from Lutheran to Protestant to Catholic, and a synagogue.

Open Space

Open space is a key asset in Park Forest. The Village has a wide variety of open space types, including forest preserve, wetlands, memorial parks, and parks with recreational facilities (including a skate park and a dog park). See the Open Space chapter for more information.

Proximity of Uses

A major determinant of a community's walkability has to do with the location of its commercial and institutional uses in relation to its residential uses. Park Forest was deliberately laid out with churches, schools, and commercial nodes in proximity to its residential neighborhoods. Figure 1-c shows the location of Park Forest's existing commercial uses (with the exception of industrial uses) and schools. A 1/4-mile distance from a destination is widely accepted as a walkable distance for most people. As such, the map shows a 1/4-mile buffer around each of the Village's commercial entities and schools to indicate a walkable zone. Walkable zones are colored in orange for commercial and light blue for schools; prime walkable zones, or overlapping areas where residents have access to both commercial ventures and schools, are shown in purple.

Auto-oriented commercial node surrounded by an expanse of parking (top); pedestrian-oriented retail in DownTown (bottom).

Figure 1-c affirms that Park Forest's residents excellent access to schools; the majority of households in the Village are within walking distance of a school. However, many of the residential areas in the Village are lacking walkable access to commercial uses. A prime walkable zone lies in the center of the community, near DownTown and along Sauk Trail. The southern half of the Village is most in need of walkable access to commercial uses. In that area, there is one vacant neighborhood commercial node centrally located along Blackhawk Drive; its revitalization would help to improve walkability in the southern portion of the community. Additionally, the redevelopment currently being planned for the area around the 211th Street Metra station, in the northwest corner of Park Forest, will increase the number of options residents in that area have in terms of meeting their daily needs on foot.

Figure 1-c. Walkable Access to Commercial & Educational Uses

Regulatory Environment

For more information, see Appendix B: Sustainability Audit of Zoning & Subdivision Codes.

Development Patterns: Identified Goals

The following goals were identified for this topic area during the public kickoff meetings:

1. Create policies and standards for sustainable new development.
2. Pursue transit-oriented development and transit-supportive land uses in new development.
3. Place continued emphasis on density and infill development.
4. Change land uses from residential to commercial in strategic locations along major arterials to create neighborhood commercial nodes for walkability.
5. Ensure that all areas in the Village are pedestrian friendly and within walking distance to amenities (such as convenience stores).

Section 2
Green Building

In 2010, the average Park Forest household used 846 therms of natural gas and 6,804 kilowatt hours of electricity. By comparison, the average Illinois household used about 1,100 therms and 9,900 kilowatt hours.

A green building may be defined as a building that incorporates elements that positively impact the indoor and outdoor environment, and also strives to achieve the most efficient and least disruptive use of land, water, energy, and resources. Green buildings typically address smart site selection (location of the development site, access to services and transit, and protection of open space and habitat); water and energy efficiency; materials and resources (building reuse, incorporation of reclaimed and recycled materials); and indoor environmental quality (air quality and ventilation).

Green buildings are beneficial for community sustainability in a variety of ways. They help to reduce energy use and preserve natural resources. Inclusion of green components within buildings can make a significant impact on a community's greenhouse gas emissions. In the Chicago metropolitan area, about 61 percent of emissions come from buildings,while in Park Forest, 47.3 percent of emissions come from buildings. An emphasis on indoor air quality may also result in a better environment for inhabitants, improving community health. Efficient buildings can have financial benefits, especially for low-income families who may spend up to 20 percent of their income on energy costs. This figure could be greatly reduced through incorporation of energy efficient building systems.

Since Park Forest is a mostly built out community with access to many amenities, such as transit and open space, most sites that could potentially be selected within the community for infill redevelopment would be considered sustainable. Examples of poor redevelopment sites within the Village include existing open space or nature preserve. Information on water usage may be found in the Water section of this Assessment. As such, this section will focus mostly on energy efficiency and treatment of materials and resources.

Energy Consumption

The Village is comprised of about 60.1 percent residential uses, 22.1 percent open space, 9.4 percent institutional, 3.4 percent commercial and mixed use, 2.0 percent industrial, and 3 percent other uses. Tables 2-a and 2-b indicate the amount of natural gas and electricity usage in the Village in 2010 by building sector. The amount of natural gas used totaled over 9.2 million therms, with the residential sector consuming 82 percent of that amount. Residential consumption appears to be greater than the residential sector's share of the Village's overall land uses. When reviewing natural gas usage per account, however, it is clear that non-residential entities use far more natural gas (4,625 therms per account for commercial/industrial versus 846 therms per account for residential). This usage pattern is likely explained by the larger footprints of commercial and industrial buildings, particularly when compared with Park Forest's compact housing stock.

The trend is even more exaggerated when considering the Village's electricity usage in 2010. During that period of time, residential users still consumed a majority of the electricity in Park Forest, although the residential sector's share of the overall total was much less than it was for natural gas (67 percent versus 82 percent) and is much closer to its composition of the Village's land use. The non-residential sector used 11 times more electricity per account than the residential sector (76,686 kWh per account for non-residential versus 6,804 kWh per account for residential).

Energy Efficiency

As a planned community, most of the homes in Park Forest were built within a short period of time, from 1949 to 1960. While the Park Forest Business Park was developed in the 1980s, the majority of commercial properties were built prior to that time. Due to the overall age of the building stock, there are a variety of upgrades in regards to energy efficiency that would help to reduce energy consumption and lower utility costs in existing buildings. Some examples include the installation of energy efficient windows, improvement of building envelope and insulation, and upgrading building HVAC systems to maximize efficiency. While some of these improvements have been undertaken by individual property owners, during the public kickoff meetings many homeowners asked that the Village provide a guidebook for affordable residential retrofitting for green building and energy efficiency, indicating a desire for guidance on these topics.

Village Initiatives

The Village has undertaken many programs over the years to help property owners make their buildings more energy efficient:

- In 1980, the Village produced a home maintenance handbook which identified energy conservation measures for homeowners seeking to make upgrades to their homes.
- In the 1990s, a rate write down program was created for homeowners to increase energy efficiency by replacing doors and windows.
- More recently, in late 2010 the Village was awarded a $75,000 Energy Efficiency Community Block Grant (EECBG) from Cook County for home weatherization projects. Qualified home owners are eligible for up to $5,000 for upgrades including insulation, sealing of openings and ductwork, installation of a programmable thermostat, and other energy saving measures.

The Village has also taken steps toward making its own buildings more energy efficient. The Aqua Center was renovated in 2010 to make electrical and HVAC improvements and to install a solar hot water heater system on the roof. The work also included the installation of ten skylights throughout the facility to increase the amount of natural light in the building and reduce electricity usage.

At Freedom Hall, tungsten halogen light fixtures in several areas have been replaced with energy efficient T8 flourescent fixtures via a grant from Illinois Clean Energy Community Foundation. Many older low-efficiency lamps at the Park Forest Police Department and Library have also been replaced with T8 bulbs for energy savings.

Materials and Resources

At the end of their life cycles, buildings can be renovated with the same use, renovated with a new use (called adaptive reuse), or demolished. The preservation and renovation of existing buildings helps to maintain the historic and cultural fabric of the community and greatly conserve energy and natural resources. Reusing buildings for their originally intended purpose is not always possible as time goes on. Adaptive reuse (transformation of an existing building to a new use) is one way to prevent the unnecessary demolition of building stock. When existing buildings cannot be renovated or reused, demolition can incorporate deconstruction practices to reclaim and reuse building materials. The Village has been proactive in using deconstruction in recent years; see the Waste section for more details.

The Village has also embraced adaptive reuse in handling its existing buildings. In the early 1990s, the Village renovated a former department store to become its Village Hall. In 2005, the Police Department renovated the Fire Department's former facility to meet its specific needs. This choice was environmentally sound in that it conserved natural resources by reusing the existing building and fiscally sound in that building reuse saves a significant amount of money over constructing a new building. Additional renovation plans include the installation of motion sensors in all appropriate offices, restrooms, and storerooms that will turn off lights when the rooms are not in use and replacement of older, inefficient windows.

Table 2-a. Natural Gas Usage by Sector (2010)				
Sector	Total Usage (therms)	% of Total Usage	Average # of Accounts	Usage per Account (therms)
Residential	7,577,514	82%	8,953	846
Non-residential	1,669,486	18%	361	4,625
Total	9,247,000	100.0%	9,314	993
Source: Nicor Gas (January-December 2010)				

Table 2-b. Electricity Usage by Sector (2010)				
Sector	Total Usage (kWh)	% of Total Usage	Average # of Accounts	Usage per Account (kWh)
Residential	63,429,017	67%	9,322	6,804
Non-residential	30,597,660	33%	399	76,686
Total	94,026,677	100.0%	9,721	9,673
Source: ComEd (January-December 2010)				

The Park Forest Police Department recently renovated the Fire Department's old space to suit its needs, including converting the fire truck garage into a gym.

Regulatory Mechanisms

Often times, green building practices are hindered by municipal building and zoning codes. The Village has been taking steps toward reducing those barriers in its regulations. The Department of Community Development has updated the Village's building code to the 2009 ICC International Building Code and the 2009 ICC International Energy Conservation Code (IECC). The IECC contains minimum energy efficiency provisions for residential and commercial buildings and building envelope requirements to maximize thermal performance and prevent air leakage. It also provides guidance on mechanical systems, lighting systems, and the use of new materials and techniques.

To enhance the implementation of these codes, the Village is participating in a project funded by the Energy Efficiency Community Block Grant (EECBG). Consultants hired by the Metropolitan Mayors Caucus will undertake a gap analysis of the Village's codes and enforcement procedures and provide recommendations for improvements. They will also provide training to the Village inspectors on enforcement and inspection procedures related to compliance with the IECC. In 2012, the Village plans to adopt the ICC's International Green Construction Code (IgCC), which will include more provisions specific to green building.

Green Building: Identified Goals

The following goals were identified for this topic area during the public kickoff meetings:

1. Provide guidance for affordable residential retrofitting and upgrades, as well as incentives related to green building.
2. Create energy-efficiency standards for municipal buildings.
3. Re-use building materials and deconstruct buildings when possible.
4. Encourage the construction of green buildings in the Village, especially in the style of existing homes.
5. Compile resources for green building and become a clearinghouse for new technologies and information.
6. Promote maintenance and improvement of buildings for general upkeep of building stock.

366
6619
Physicians

Section 3
Transportation & Mobility

The average household in Park Forest drove over 52 miles per day in 2007, or over 19,000 miles annually. This exceeded the Cook County average by over 4,000 miles per year.

The transportation sector is a major component of Northeastern Illinois' sustainability and continued economic prosperity. Park Forest's transportation network, which is comprised of the Village's roadways, sidewalks, trails, and railways and the modes of travel over each of them, is a part of the larger regional system. The Village's transportation system includes both motorized vehicular travel and non-motorized travel (modes that do not use a motor-powered vehicle, such as bicycling or walking). Overall, the transportation sector accounts for about a third of the nation's greenhouse gas emissions, and it is the fastest-growing source of emissions. The commonly-held strategy for reducing transportation's contribution to emissions is three-fold: (1) lowering the number of miles people drive as measured by vehicle miles traveled (VMT); (2) developing alternative fuel sources; and (3) adopting innovative vehicle technology.

As the result of being a planned community, Park Forest has curvilinear streets and sidewalk cut-throughs that are conducive to a walkable environment. However, nearly 46 percent of households in the Village own two or more personal vehicles and over 75 percent of residents drive alone for their work commutes (see Table 3-d). Understanding how the physical network interacts with the travel mode choices in Park Forest sheds light on the sustainability of Park Forest's transportation system. While mobility throughout the Village is a priority, the goal of increasing accessibility (the proximity and ease of connection between transportation modes) in Park Forest will greatly improve the sustainability and quality of life of the community.

The affordability of transportation modes factors into the accessibility of a community's transportation system. The cost of transportation for the average Park Forest household ranges from 20 to 23 percent of household income (HHI). This percentage of HHI increases to 25 and 26 percent in communities located south and west of Park Forest, such as Monee, Manhattan, and unincorporated Will County. Traditionally, a community's affordability has been based primarily on housing costs, with the commonly accepted threshold that housing is affordable when 30 percent or less of HHI is spent on it. However, the Center for Neighborhood Technology (CNT) has developed a more thorough method of evaluating community affordability – the H+T Index – which examines both housing and transportation costs together and sets an affordability threshold at a combined 45 percent of HHI. Park Forest's H+T Index level is 42 percent, as compared to its neighbors Matteson (at 49.1 percent), University Park (at 47.5 percent), and Richton Park (at 45.1 percent). This data shows that, within the subregion, Park Forest is a more affordable community, both in housing and transportation costs, than many of its neighbors.

Figure 3-a. Park Forest Road Classifications

Source (average daily traffic counts): Getting Around Illinois, Illinois Department of Transportation statewide interactive Annual Average Daily Traffic map, 2009/2010

Transportation Infrastructure

According to roadway classifications (see Figure 3-a), the majority of Park Forest's road network is comprised of local streets, which provide access to private property and are utilized mostly by local traffic. There are a handful of collector streets – Sauk Trail Road, Western Avenue, Monee Road, Stuenkel Road, and Main Street – that link the local roads in the Village to principal and minor arterial roads. Arterials carry traffic at higher speeds and volume than collector roads (see Figure 3-a for traffic counts). The only arterial road in Park Forest is U.S. Route 30, or Lincoln Highway, which is also a Class II truck route. The Village maintains 64.9 miles of local and collector streets, with the other collector and arterial roadways throughout Park Forest maintained by Cook County, Will County, or the Illinois Department of Transportation (IDOT).

Since the Village and its roads were all built post-World War II, Park Forest currently faces aging transportation infrastructure. Many of the roadways in Park Forest need maintenance and improvement, and such projects are regularly included in local, county, and state capital plans (see Table 3-a). Additionally, the Village's Public Works Department plans to undergo another wave of resurfacing projects in 2013 and 2014. These maintenance and improvement projects will increase the safety, reliability, and usability of the Village's transportation infrastructure. In addition, the projects will have the added benefit of making the neighborhoods look more attractive, and therefore more marketable.

Orchard Drive Capital Project

Orchard Drive is a main north-south thoroughfare in the Village, connecting major arterial and collector streets on opposite ends of the Village with DownTown Park Forest. The street currently has substandard lane widths (at ten feet wide), and unsafe angles at some points where the road curves. The Orchard Drive capital project will reduce the number of vehicle travel lanes from two-lanes to one-lane in each direction (with one shared unidirectional lane along much of the roadway) and also add bicycle lanes in both directions. The project will not only improve roadway safety (with wider lanes and angles at road curves) but will also introduce a critical non-motorized travel link in the Village via dedicated bike lanes. This repurposing of lanes on Orchard Drive – the first such project to designate bike lanes on a roadway in the Village – will augment the Village's sustainable transportation options.

Table 3-a. Transportation Capital Projects

Location	Type	Management/ Funding	Time-frame
Indianwood Blvd., Orchard Dr. to Monee Rd.	Street lighting (payment)	VPF - Motor Fuel Tax Fund	Current
Lincoln Hwy.	Streetscaping	VPF - ITEP funds	Current
Orchard Dr., Lincoln Hwy. to Sauk Trail	Phase II Design	VPF - Motor Fuel Tax Fund & federal funds programmed through SSMMA	Current
Orchard Dr., Lakewood Blvd. to Sauk Trail	Resurfacing	100% ARRA funded	Current
Thorn Creek Bridge	Phase II Design	VPF - Motor Fuel Tax & State Highway Bridge Program funds	Current
Lincoln Hwy. (*extends beyond VPF boundary*)	Resurfacing	IDOT	2012
Orchard Dr., Lincoln Hwy. to Lakewood Blvd.	Reconstruction	VPF & federal Surface Transportation Program funds	2012
Thorn Creek Bridge	Reconstruction	VPF & State Highway Bridge Program funds	2013
Indianwood Blvd., Sauk Trail to Western Ave.	Resurfacing	VPF & State Highway Bridge Program funds	2014
Lakewood Blvd., Sauk Trail to Orchard Dr.	Resurfacing	VPF - federal funds programmed through SSMMA	2014

VPF: Village of Park Forest; IDOT: Illinois Department of Transportation; SSMMA: South Suburban Mayors and Managers Association

Sources: Village of Park Forest 2010/2011 Budget, Motor Fuel Tax Fund capital projects; Illinois Department of Transportation, Fiscal Year 2012-2017 Proposed Highway Improvement Program; Chicago Metropolitan Agency for Planning, 2010-2015 Transportation Improvement Program map

Private Vehicular Transportation

Despite its negative environmental impacts, private vehicular transportation comprises the majority of trips made in the U.S. today. The convenience of driving as well as land use patterns – such as the common mismatch between where people live and where they work – have created a car-dependent society, such that about almost 77 percent of Park Forest residents (and 76 percent of all Americans) currently drive alone for their daily work commutes (see Table 3-d). Car ownership patterns (see Table 3-b) reinforce this car dependence, with over 90 percent of occupied housing units in Park Forest having at least one vehicle available for daily use.

Vehicle Miles Traveled

The standard method for monitoring and evaluating how much a person or community travels via private vehicle is measuring the vehicles miles traveled (VMT). Trends since the 1980s have shown that overall VMT in the U.S. has grown at almost double the rate of vehicle registrations, and at triple the rate of the U.S. population's growth. This indicates that people today are spending more time in their cars, either driving more frequently or driving farther distances. The average Park Forest household in 2007 drove 19,171 miles annually, which exceeded the Cook County average by over 4,000 miles per year and the regional average by about 1,700 miles. According to this statistic, the average household in Park Forest drove over 52 miles per day in 2007. The total household VMT for Park Forest in 2007 was calculated by the Center for Neighborhood Technology (CNT) as 181,395,646 miles, as compared to Cook County's total household VMT of 28,587,771,005.

The Village's annual on-road VMT – the driving that occurred on roadways only within Park Forest's municipal boundaries – exceeded 220 million miles in 2007, averaging 602,841 miles a day. This on-road VMT measurement is used to calculate the amount of greenhouse gas emissions that motorized transportation causes in a given community. In Park Forest, 49.5 percent of its greenhouse gas emissions are attributed to the transportation sector, the majority of which is generated by private vehicles using gasoline fuel. While reducing VMT is an effective way to lower a community's emissions, our inherent dependence on cars does not make this an easy strategy. Lowering VMT often requires an accompanying increase in access to public transportation and non-motorized travel options.

Table 3-b. Vehicles Available per Household

Number of Vehicles	Housing Units, Park Forest (percent)	Housing Units, Cook County (percent)	Housing Units, U.S. (percent)
None	7.2%	17.2%	8.8%
One	46.7%	40.1%	33.2%
Two	36.3%	31.1%	38.0%
Three +	9.8%	11.7%	20.0%

Source: 2005-2009 American Community Survey, U.S. Census Bureau

Public Transportation

Regional public transit options that serve the Village include Metra commuter train service and Pace suburban bus service (see Figure 3-b). Additionally, there is a circulator connector bus called "The Jolly Trolley" that primarily serves Park Forest residents. Much of the public transportation service connects DownTown Park Forest to residential neighborhoods in the Village, as well as other destination points outside the Village (like Governors State University or Lincoln Mall). In 2009, approximately 12 percent of Park Forest residents commuted to work via public transit, which is similar to the 12.5 percent of public transit commuters in the six-county Regional Transportation Authority's jurisdiction (see Table 3-d), and exceeds the national average of 5 percent.

Metra Service

Metra's Electric District (ME) is a train line that connects the region's south suburbs to Downtown Chicago, and is the only Metra line that uses a catenary system of overhead wires that power the trains with electricity (rather than diesel). While ME has three branches, its Main Line – 31.5 miles running on Canadian National Railway (CN) tracks – serves Park Forest. The 211th Street station of the ME is located where Park Forest's municipal boundaries intersect with those of Matteson and Olympia Fields. Other stations along ME's Main Line that serve Park Forest residents are the Matteson station and the Richton Park station, with the University Park station terminus within a mile's distance of Park Forest. Both the 211th Street station and the Richton Park station are in compliance with the Americans with Disabilities Act (ADA) standards (although the 211th Street station is a long walk from the parking lot), and a limited number of bicycles are allowed on ME trains during peak and off-hour trips.

The approximate area of Park Forest that is within a walkable half-mile distance to a Metra station is 0.372 square miles. While this area is relatively small compared to the 4.9 square miles of the whole Village, the dominant land use around each of these three Metra stations is residential. In 2008, the 211th Street station area was the subject of a transit-oriented development (TOD) study to capitalize on its economic development potential. It was determined that the underutilized parcels in the station area that are located within Park Forest's municipal boundary should be redeveloped in a walkable pattern with multifamily and mixed-use commercial uses.

Figure 3-b. Multimodal Transportation Options

A range of 13 to 20 percent of train riders get to these three Metra stations by walking, riding a bicycle, or taking other public transit (see Table 3-c). Approximately 15 percent of commuters using the 211th Street station are Park Forest residents. For those who drove private vehicles to access the Metra train, approximately 15 to 20 percent of people shared the car with others (either through carpooling or being dropped off by another driver). The parking utilization rate for both the 211th Street and the Richton Park stations hovered around the commonly accepted "full" level of 85 percent, which indicates that the parking supply meets the demand. In addition, the overall boarding (i.e. entering the train from a given station) and alighting (i.e. exiting the train at a given station) statistics demonstrate fairly consistent ridership over the past two decades, meaning that there is stable and continued demand for commuter rail service in the Park Forest area.

Pace Service

Four Pace suburban bus routes currently serve Park Forest, with connections to other Pace routes that run beyond the Village as well as to Metra train stations. 100 percent of the Pace vehicle fleet is ADA compliant, and there are numerous "dial-a-ride" services to supplement their accessible fixed routes. Furthermore, all busses are equipped with front-loading bike carriers so that Pace users can access the bus via bicycle. As seen in Table 3-e, the four Pace bus routes that run through Park Forest provide a variety of connections to neighboring municipalities, amenities, and other transit services. Pace route restructuring recommendations were made in 2007, including the absorption of Route 366 by Route 367 (but still maintaining the same service) and adding a new route (368) that would connect Governors Gateway Industrial Park with the University Park Metra station and other Pace routes. To date, these recommendations have not been executed.

Pace bus service is accessible to more of Park Forest's residents than Metra train service, with over 3 square miles (or approximately 65 percent) of the Village being within a quarter-mile of a Pace stop (see Figure 3-b). This walkable access to bus stops facilitates the ease of utilizing non-motorized travel to connect to Pace service.

Bus ridership across all four Pace routes that serve Park Forest has decreased over the last decade, with an approximate loss of riders of around 30 percent. One potential explanation is the headway (time between successive busses at one stop) along these routes; the minimum headway along the routes is 30 minutes (see Table 3-e). A long headway is often perceived as an inconvenience by riders and is cited in transportation literature as a common deterrent to increasing ridership. Since service frequency is determined by Pace, Village coordination with Pace is necessary to decrease headways.

"Jolly Trolley" Connector Bus Service

The "Jolly Trolley" is a Village-run connector bus service that links Park Forest residents to community amenities and other public transit services. This demand-responsive bus service is administered by Rich Township for the Park Forest community, providing door-to-door transit for seniors, students, and adults of all ages. The Jolly Trolley operates a fleet of three vehicles – originally Pace short buses – that make pre-reserved trips and also pick up customers every hour on weekdays between 9 a.m. and 3:30 p.m. at two pre-determined stops in DownTown Park Forest. Jolly Trolley approximates about ten percent of their trips are connecting to other transit services (like Metra stations), while the majority of trips taken are to other amenities for shopping reasons (groceries, prescriptions, etc.). The Trolley costs $3 per trip for an adult or $1.50 per trip for seniors, disabled persons, and students; riding the Trolley is free for children under 7, as long as they are with a fare-paying adult.

Table 3-c. Characteristics of Metra Train Stations that Serve Park Forest

Station	Mode of Access (2006 survey)						Village Area Within 1/2-Mile Radius of Station*	Parking Capacity & Utilization (2008 count)	2006 Ridership	1995 Ridership
	Drove Alone	Car-pool	Drop off	Walk	Bus	Other				
211th Street (Lincoln Hwy.)	69%	4%	15%	6%	7%	na	0.21 sq. mi.	721 spaces; 78% utilized	1,149 total boarding; 1,166 total alighting	1,173 total boarding; 1,163 total alighting
Matteson	72%	4%	11%	12%	1%	1%	0.04 sq. mi.	911 spaces; 56% utilized	879 total boarding; 849 total alighting	937 total boarding; 949 total alighting
Richton Park	61%	4%	15%	17%	2%	1%	0.12 sq. mi.	1,049 spaces; 87% utilized	1,625 total boarding; 1,686 total alighting	1,651 total boarding; 1,631 total alighting

*Data from spatial analysis using Metra rail line data in ArcGIS

Source: Regional Transit Asset Management System (RTAMS), Metra Weekday Ridership and Rail Station data

Figure 3-c. Nonmotorized Transportation

Non-motorized Transportation

Non-motorized transportation, such as bicycling and walking, causes the least environmental harm of all travel modes. Since these modes are generally accessible for a range of populations – such as children and elderly citizens for whom driving a car is not an option – providing ease of non-motorized transportation is also socially equitable. Additionally, the physical activity that is a part of non-motorized travel provides tremendous health benefits within a community.

Bicycling

Park Forest is linked to a larger regional network of trailways in several areas of the Village (see Figure 3-c). Both the Old Plank Road Trail and Thorn Creek Trail are classified as Primary Regional Trails, and serve as part of the backbone of trailways around the Northeast Illinois region that connect to smaller community trails and paths. These trails are heavily traveled for recreational purposes, particularly over the weekends. There are many proposed extensions of and connections between the existing trails in Park Forest. For instance, the University Park Trail, which runs along the southern end of the Village, is proposed to be extended in both directions, connecting Park Forest with both University Park and Steger.

Also, through the Orchard Drive capital project, new bike lanes will create a north-south connection between Old Plank Road Trail, DownTown Park Forest, and the Thorn Creek Trail. This reconfiguration will produce the first dedicated bike lanes that are integrated with roadways in the Village. There are currently bike racks at locations throughout the Village, including at schools, the Aqua Center/Central Park, the Public Library, Village Hall, Thorn Creek Nature Center, and the Tennis and Health Club, and there are new bike locker facilities at the Matteson Metra station.

Walking

The Village also offers a pedestrian-friendly environment for its residents. There are approximately 103 miles of sidewalk throughout Park Forest, allowing residents and visitors to walk between homes, places of employment, and other amenities. There are also 4.2 miles of walking paths in Village parks. While the curvilinear street grid in the Village creates long blocks in some residential areas (making it more difficult for some pedestrians to find a direct route), there are approximately 3 dozen pedestrian cut-throughs scattered throughout Park Forest to facilitate walkability. 28 cut-through paths run between residential properties – making it easier and faster to get from one block to another – while several others connect residential neighborhoods to open space or school properties in the Village.

These pedestrian cut-throughs are owned by the Village but neighboring residents are responsible for their maintenance. This sometimes poses an issue with residents who fail to maintain the pathways. However, the cut-throughs have the potential for anchoring a Safe Routes to School proposal, which Park Forest schools have previously attempted to secure grant money for without success.

Pedestrian cut-through from one block to the next.

Transportation & Mobility: Identified Goals

The following goals were identified for this topic area during the public kickoff meetings:

1. Reduce vehicle miles traveled per household.
2. Provide better transit service and increase PACE access to Metra trains and intermodal linkages.
3. Become more bicycle- and pedestrian-friendly.
4. Resurface, maintain, and improve Village streets.
5. Assess alternate transportation methods, including car sharing.

Table 3-d. Mode Share (% of work trips)

	Park Forest	Cook County	Chicago Region
Total Workers	10,299	2,554,120	3,847,606
Worked at Home	*327*	*60,580*	*108,824*
Drive Alone	76.8%	64.8%	71.3%
Carpool	10.1%	11.6%	11.3%
Transit	11.8%	18.1%	12.5%
Walk	0.5%	3.7%	3.2%
Other	0.8%	1.7%	1.5%

Note: Mode shares are expressed as percentages of the working population that did not work from home.

Source: RTAMS, "Work Trip Mode Share by Area": http://www.rtams.org/rtams/ctppModeShareByArea; U.S. Census Bureau, 2005-2009 American Community Survey

Table 3-e: Pace Suburban Bus Routes serving Park Forest

Route #	Service Description	Connects with Other Municipalities	Connects with Other Transit Routes	Scheduled Headway	Avg. Weekday Ridership, June 2011	Avg. Weekday Ridership, June 2000	Avg. Saturday Ridership, June 2011	Avg. Saturday Ridership, June 2000
357	Suburban Link service on Lincoln Hwy	Chicago Heights, Ford Heights, Matteson, Olympia Fields	Metra Electric Line (211th Street station); Pace Bus Routes 352, 358, 366, 372, and 890 (at Chicago Heights Transfer Center)	27-33 minutes	971	1,357	663	915
362	Community Service for South Park Forest to and from Richton Park Metra; weekday peak-hour service only	Chicago Heights, Richton Park	Metra Electric Line (Richton Park station); Pace Bus Routes 366 and 367 (connect in downtown Park Forest)	approximately 45 minutes; limited trips	23	92	N/A	N/A
366	Suburban Link service between downtown Park Forest and Chicago Heights Transfer Center	Chicago Heights	Pace Bus Routes 362 and 367 (connect in downtown Park Forest), and Routes 352, 357, 358, 372, and 890 (at Chicago Heights Transfer Center)	30 minutes (peak weekday service); 60 minutes (off-hour weekday service and Saturday/Sunday service)	335	377	168	244
367	Suburban Link service between University Park Metra station, Governors State University, and downtown Park Forest	University Park	Metra Electric Line (University Park station); Pace Bus Routes 362 and 366 (connect in downtown Park Forest)	34-38 minutes (peak weekday service); 60 minutes (off-hour weekday service and Saturday service)	161	221	65	110

Route 357: schedule (http://www.pacebus.com/pdf/schedules/357sched.pdf) and route map (http://www.pacebus.com/pdf/maps/357map.pdf)
Route 362: schedule (http://www.pacebus.com/pdf/schedules/362sched.pdf) and route map (http://www.pacebus.com/pdf/maps/362map.pdf)
Route 366: schedule (http://www.pacebus.com/pdf/schedules/366sched.pdf) and route map (http://www.pacebus.com/pdf/maps/366map.pdf)
Route 367: schedule (http://www.pacebus.com/pdf/schedules/367sched.pdf) and route map (http://www.pacebus.com/pdf/maps/367map.pdf)

Source: Regional Transit Asset Management System (RTAMS), June Average Weekday Ridership by Pace Bus Route and Pace Bus Route Detail; www.pacebus.com

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Section 4
Open Space & Ecosystems

With over 2,000 acres of parks, open land, and recreational facilities, Park Forest has an exceptionally high amount of open space per capita. An accepted standard for adequate access to open space is a ratio of 10 acres per 1,000 residents. The Village has almost 10 times the amount suggested by that standard.

Open space and related recreational facilities in the Village were identified during project kick-off meetings as highly valued by residents. Open space is important for the sustainability of a community for several reasons. Open space with the right location and characteristics can help to manage stormwater and prevent flooding. When a community has a large amount of impervious surface (surfaces that are unable to absorb water), stormwater is less able to percolate into the ground, resulting in flooding. Open space also filters and cleanses stormwater runoff before it reaches streams and rivers. The water infiltrated into the groundwater table through open space areas recharges the shallow aquifer, which Park Forest depends on for its water supply.

Open space is also aesthetically pleasing and can increase the economic value of a community. Many studies have concluded that proximity to open space results in increased property values and quality of life. Maintaining access to open space, particularly those with recreational facilities and trails, helps to keep residents active and promote public health. With the growing obesity epidemic, access to recreational opportunities is more pressing now than ever before. In Illinois, nearly 64 percent of adults are overweight or obese, while the childhood obesity rate of nearly 21% is the fourth worst in the country. Ensuring access to public open space facilities and parks is one way to provide an outlet for physical activity to residents of all income levels.

Figure 4-a. Access to Open Space

Open Space & Parks

As a planned community, Park Forest was designed with excellent access to open space (see Figure 4-a). Open space can be thought of as any publicly owned land that is characterized by undeveloped and landscaped area as opposed to land primarily used for another purpose, such as homes, retail, or industry. Open space includes forest preserve, parks, and other open lands.

The parks subcategory of open space encompasses improved open spaces primarily intended for public recreation or enjoyment, such as Central Park, Old Plank Road Trail, or Veterans Park. The Village maintains over 400 acres of public parks, which vary in the facilities and amenities that are provided. The majority of the community parks (summarized in Table 4-a) include recreational facilities such as baseball fields, tennis courts, and playgrounds. Play lots (often called tot lots or pocket parks) are the smallest parks, typically serving residents of smaller adjacent neighborhood areas. Neighborhood parks draw residents from a larger geographic area and are a little bigger than play lots. Community parks, such as Somonauk Park or Central Park, draw residents from the community at large who are seeking larger open spaces or other amenities. Some community parks, natural areas, and memorial parks are oriented to more passive recreational pursuits, such as Veterans Park and Memorial Park.

Access to Open Space

Access to open space is important for quality of life and to sustain a healthy community. The majority of residents within the Village are within a five-minute walk (1/4-mile) of a park or other open space feature (see Figure 4-a). Only approximately 70 households (170 residents, or less than one percent of the total Village population) currently lack access to open space within this five-minute walking distance (shown in red on the map), indicating that residents have excellent access to open space areas.

Greenway Network

Greenway networks help to conserve and connect open spaces, place people in contact with nature, promote public health via trail systems, and provide corridors of habitat in urban areas. Thorn Creek Nature Preserve (to the south) and Sauk Trail Woods (to the east) are part of a large subregional greenway system extending to the northeast, which includes Indian Hill Woods, Halsted Woods, Joe Orr Woods, and Wampum Lake Woods (see Figure 4-b).

Ecosystems

Open space helps to support biodiversity and wildlife habitat. Biodiversity can be defined as the variety of life forms within a given ecosystem. High biodiversity is typically an indicator of greater ecosystem health. Several open spaces within Park Forest serve to provide habitat to help ensure biodiversity, including the Thorn Creek Preserve and Central Park Wetlands.

Central Park wetland viewing platform with interpretive signage.

Thorn Creek Nature Preserve

The Thorn Creek Nature Preserve, which is partially within Village boundaries, is a resource jointly owned and managed by the Villages of Park Forest and University Park, Will County Forest Preserve District, and Illinois Department of Natural Resources. The 1500-acre preserve includes 102 acres that are owned by the Village of Park Forest. Due to its distinct natural characteristics, the area is designated as an Illinois Nature Preserve and is a vital habitat for native plants and animals. It features oak-hickory woodland, parts of Thorn Creek and its tributaries, Owl Lake, a large wetland complex, pine stands, and three miles of trails. Thorn Creek Nature Center, which includes exhibits and a library, is housed on-site in an historic building built in 1862.

Central Park Wetlands

Beginning in 2000, the Village began the restoration of a 45-acre wetland/peat bog in Central Park. The wetlands are part of a 90-acre park site near DownTown and the heart of the community. Key to the project was restoring the wetlands' natural hydrology, which had been altered in the early 1960's by the installation of underground drainage tiles. Redevelopment proposals for the wetlands area have been stymied by the presence of wetland soil types.

As a result of the wetlands restoration, the number of native plant species present has more than tripled since 2001, from 46 to 147. The Floristic Quality Index (FQI), a quantitative measure of the quality or "nativeness" of a natural area , has also improved from 16.1 in 2001 to 42 in 2007. Volunteers from Thorn Creek Audubon Society also conduct a bird census every summer at the Wetlands. Since 2001, the number of bird species identified in the wetlands has increased from 30 to over 100. The wetlands have also been valuable in helping to manage stormwater and minimize flooding (see the Water section for more details).

The wetlands continue to be maintained by Village staff and an involved and dedicated group of volunteers. Educational programming associated with the wetlands is coordinated with area schools, and study of the wetlands has become a component of the science curriculum in school districts around the region. Interpretive signage and observation decks help students and other visitors to learn about the area.

Native Plantings

Over the past ten years, the Village has emphasized the use of native plant material in public areas. Native landscapes, which require less maintenance than turf grass or ornamental landscapes over the long term, reduce the energy and fuel associated with mowing, maintenance, and labor, and greatly reduce, if not eliminate, the use of chemicals in the landscape. It should be noted, however, that native landscapes do require maintenance to become established and stay healthy. In planting street trees, the Village strives to achieve diversity in species, with not more than five percent of any one species of tree in a given group of plantings. Developers are also strongly encouraged to use native plantings in their projects.

Open Space & Ecosystems: Identified Goals

The following goals were identified for this topic area during the public kickoff meetings:

1. Preserve and promote our open spaces, especially Central Park Wetlands.
2. Apply innovative land management practices to different open space types to cut maintenance costs and increase environmental benefits.
3. Continue to increase native plantings and education/ wayfinding signage about its value for the public.
4. Maintain parkways and remove or treat ill trees as needed.
5. Plant new long-lived trees.
6. Provide appropriate habitat for native plant and animal species.

Old Plank Road Trail (top); Logan Park's playground (bottom).

Table 4-a. Village Parks

Park	Type	Acreage	Amenities
Algonquin Park	Neighborhood park	4.9 ac.	
Cedar Park	Neighborhood park	1.4 ac.	Tennis courts, small gazebo, playground
Central Park	Community park	87.5 ac.	Discovery Center, wetlands, ball fields, tennis courts, playground, 2 pavilions
Eastgate Park	Play lot	1.4 ac.	Basketball courts, ball field
Illinois Park	Neighborhood park	6 ac.	Ball field, playground, tennis courts
Indiana Park	Neighborhood park	6 ac.	Ball field, playground, tennis court
Keokuk Park	Natural area	28 ac.	
Logan Park	Neighborhood park	9.9 ac.	Ball field, playground, picnic shelter
Marquette Park	Neighborhood park	4.4 ac.	Ball fields, playground
Memorial Park	Memorial	1.5 ac.	
Murphy Park	Neighborhood park	1.9 ac.	Playground
Old Plank Road Trail	Trail	15.7 ac.	Multi-use trail
Onarga Park	Neighborhood park	5.6 ac.	Ball field, playground
Shabbona Park	Neighborhood park	4.6 ac.	Tennis courts, playground
Somonauk Park	Community park	16.4 ac.	Pavilion, in-line skating facility, basketball courts, ball fields, playgrounds
Thorn Creek Forest Preserve	Forest preserve	102.1 ac.	Trails, Nature Center
Veterans Park	Memorial	2.61 ac	
Winnebago Park	Neighborhood park	34 ac.	Playground

Source: Village of Park Forest

Figure 4-b. Subregional Greenway Network

Section 5
Waste

In 2010, occupants of Park Forest's single-family homes sent 75 percent of their waste to a landfill, 15 percent to a recycling facility and 10 percent to be composted as yard waste. By way of comparison, a 2009 U.S. EPA report estimated that, on average, Americans recycled and composted about 33.8 percent of their trash.

Waste prevention, recycling, and composting are integral to sustainability planning for a number of reasons. According to a 2009 emissions report by the United States Environmental Protection Agency (U.S. EPA), the way we produce, consume, and dispose of our products and our food accounts for 42 percent of U.S. greenhouse gas (GHG) emissions. Landfilling waste also consumes energy and can contaminate water and degrade natural habitat. Space is an issue as well, considering that there are only eight more years of projected landfill capacity in northeastern Illinois (47 years fewer than in southern Illinois). It is necessary to divert waste from landfills by reducing the amount of waste that will later need to be thrown away, recycling appropriate materials, and composting organic waste to break it down naturally.

Recycling is environmentally beneficial in a number of ways. Using recycled materials to manufacture items uses less energy than using raw materials, thus decreasing the amount of carbon dioxide emitted into the atmosphere. Diverting organic materials from landfills via composting also reduces the methane released when the materials decompose. Also, if there is reduced land needed for landfills, more land can be devoted to better and higher uses.

While preventing waste at the source is most effective in addressing the issue, there are also numerous benefits to recycling. From an economic standpoint, recycling protects and expands manufacturing jobs. An Illinois Department of Commerce and Economic Opportunity (DCEO) study estimates that recycling creates six to ten times as many jobs as landfilling, and also notes that recycling replaces materials often mined and manufactured outside the state with materials collected and processed within Illinois.

Waste & Recycling

Like many communities, the Village's trash removal and recycling is handled by a few different entities. For single-family homes, Star Disposal conducts all waste and recycling pick-up on a weekly basis. Multifamily and commercial uses contract independently with various waste services providers, such as Star Disposal, Waste Management, Skyline Disposal Company, and Allied Waste. The volume of waste and recycled materials collected for multifamily and commercial properties in the Village is unavailable; contract haulers are not required to provide data about the volume of waste collected. However, Star Disposal was able to provide information related to single-family homes in Park Forest.

In 2010, Star collected 6,875 tons of waste from Park Forest's single-family homes, which was sent to landfills in Wilmington, Illinois, and Newton County, Indiana. Star collected 1,369 tons of single-stream recycling consisting of newspaper, cardboard, mixed paper, plastic bottles and jugs, glass bottles and jars, aluminum and steel cans, and 935 tons of yard waste. All recyclables are mixed together in the truck and sorted at the materials recovery facility. By this count, occupants of single-family homes sent 75 percent of waste to a landfill, and 25 percent to be recycled (ten percent of which was composted yard waste). For comparison's sake, a 2009 U.S. EPA report estimated that Americans recycled, on average, about 33.8 percent of their trash (of which 8.6 percent was composted).

Star Disposal has a business recycling program that can be tailored to the needs of the business. They have worked with contractors to provide documentation to track recycled volume per job site to help them meet Leadership in Energy and Environmental Design (LEED) project specifications.

Electronic & Hazardous Waste

The overall volume of electronic waste has been growing rapidly due to changing technological times. It is important to address this source of waste in particular due to the fact that it often contains hazardous materials that must be disposed of carefully. While the Village does not currently host an electronic waste drop off, a location is provided at the ReStore in Chicago Heights, run by the Chicago South Suburbs Habitat for Humanity, which the Village plans to promote. Hazardous waste in general (liquids, solids, gases and sludge) is not included in the material that Star Disposal collects, however there is a long-term household hazardous waste facility in Chicago (in addition to Rockford and Naperville).

Recycling, garbage, and yard waste wait to be picked up on a residential street.

Composting

Composting creates humus (natural fertilizer for plants), diverts food waste from landfills, and reduces production of the greenhouse gas methane. While figures for food waste composting in Park Forest are difficult to quantify, figures are available for yard waste. As noted earlier, Star Disposal collected 935 tons of yard waste in 2010, which was taken to a farm outside of Peotone to be ground into compost. The compost was then either applied to land or sold.

The Village has also begun to sell composting units at the Farmers Market. To date, three units have been sold. The units are on a stand so that they can be rotated end over end and have vent tubes to allow air to circulate through the interior. Compostable material such as kitchen scraps, yard waste, and other organic waste is put in and the unit is rotated periodically. After a few weeks, compost for a garden is ready.

Building Reuse: Deconstruction

Park Forest has undertaken several deconstruction projects. Deconstruction is the careful and systematic disassembly of buildings in order to recover the maximum amount of material for their highest and best reuse. Deconstruction uses less energy and fewer raw materials than recycling and emits less pollution. When dismantled carefully, buildings can provide a significant quantity of reusable lumber; the deconstruction of a typical 2,000 square foot wood frame house can recover 6,000 board feet of lumber (the equivalent of 33 mature trees).

In 2011 to date, five buildings have been deconstructed in the Village, including four vacant, blighted homes in the Eastgate neighborhood. The Eastgate homes were partially deconstructed with an EECBG grant administered by the Delta Institute. The process included a job training component to train demolition contractors and out-of-work construction workers on the deconstruction process. The 116,000 square foot Marshall Fields Building demolition was also done in a manner that diverted the vast majority of the building materials from landfills. Between the four buildings, only 53,000 pounds of material was sent to the landfill, from a total 865,000 pounds (about six percent). The remaining materials were reused or recycled.

Waste: Identified Goals

The following goals were identified for this topic area during the public kickoff meetings:

1. Strengthen the culture of recycling, reducing waste, and reusing materials through educational initiatives.
2. Increase recycling options in public places.
3. Consider composting as an option to reduce biodegradable waste sent to landfills.
4. Develop a strategy for dealing with hazardous materials.

Figure 6-a. Water Resources

*Flood plain data for Cook County is from 2010; data for Will County is from 1996.

Section 6
Water

Park Forest independently manages the provision of water for its residents. In 2010, Park Forest won an award from the Illinois Section American Water Works Association for the best tasting water in Illinois.

Access to water is vitally important to the sustainability of Park Forest – without it, the Village ceases to be a desirable place to live and work. In addition to an adequate water supply, the quality and quantity of stormwater runoff and capacity and condition of water infrastructure are equally important to the health and well-being of the community. Water issues can generally be broken down into four major categories: water supply, surface water quality, stormwater, and infrastructure.

Water Supply

Water Source & Quantity

Park Forest is dependent on groundwater for its potable water supply, and the replenishment of the aquifers and quality of the groundwater supply are primary concerns. The health and vitality of residents in the community depend on having access to safe, clean water. Park Forest's water is pumped from 6 wells within 1/2-mile radius of its water treatment plant that tap into a shallow dolomite limestone aquifer (see Figure 6-a). Water is pumped to the treatment plant where it is softened and filtered, and then pumped to consumers through underground water mains.

In November 2007, a new Village Water Supply & Treatment Plant opened. The 22,000 square foot treatment plant distributes more than 500 million gallons of water annually to residents and businesses. The Village's former treatment facility wasted about 15 percent of the water extracted from the aquifer, while the new plant recycles water and saves about one month's worth of water demand every year by comparison. In addition, the water plant's process creates a lime-soda ash by-product. This waste product (sludge) is applied to land by farmers to provide correct soil conditions for planting.

Since shallow aquifer systems are continually replenished by rainfall, many consider a shallow aquifer's ability to produce water more stable than the deep aquifer system. However, as 2050 approaches, it is expected that pressure on Park Forest's shallow aquifer system, shared with other nearby communities, will continue to increase as population (in Will County in particular) rises. This pressure could result in well interference or even water shortages in the area if the region experiences a lengthy drought.

Table 6-a. Water Demand, 2010				
Month	Total Water Billed (gal.)	Sector (gal. consumed)		
		Commercial	Single Family	Multi-family
Jan.	75,983,820	6,009,030	47,373,310	16,225,740
Feb.		6,375,740		
Mar.	70,881,540	6,672,560	43,134,590	14,918,800
Apr.		6,155,590		
May	73,084,340	6,777,800	43,058,990	16,652,390
Jun.		6,595,160		
Jul.	78,661,890	8,274,890	47,101,690	15,759,120
Aug.		7,526,190		
Sep.	79,395,270	7,984,110	46,685,190	16,316,790
Oct.		8,409,180		
Nov.	73,042,430	7,182,020	44,422,320	15,030,270
Dec.		6,407,820		
Total	451,049,290	84,370,090 (share: 18.7%)	271,776,090 (share: 60.1%)	94,903,110 (share: 21%)
Source: Village of Park Forest				

Table 6-b. Average Monthly Water Consumption by Sector, 2010			
Sector	Total Water Billed (gal.)	Avg. Number of Accounts	Avg. Monthly Use per Account
Single Family	271,776,090	5,565	4,070 gal. / month
Multifamily	94,903,110	2,884	2,742 gal. / month
Commercial	84,370,090	199	35,331 gal. / month
Total	451,049,290	8,648	4,346 gal. / month
Source: Village of Park Forest			

Source Water Quality

The Village is required by the Safe Drinking Water Act, administered by the EPA, to test for contaminants to ensure that residents have access to clean and safe drinking water. In 2010, Park Forest's Annual Water Quality Report indicated that no regulated contaminants were detected in the Park Forest water supply during required testing. Regulated contaminants include copper, lead, chlorine, trihalomethanes, arsenic, barium, and combined radium, among others. In addition, in 2010 Park Forest won an award from the Illinois Section American Water Works Association for the best tasting water in Illinois. Park Forest competed against seven other Illinois towns or entities, including Aurora and Geneva, which had advanced to the final round after winning local and regional competitions.

Demand for Water

Village demand for water (2010) is summarized in Tables 6-a and 6-b. Table 6-a shows monthly water usage for single family, multifamily, and commercial sectors. The summary shows that the majority of peak usage occurs during the hottest months of the year, from May through October. There is an outlier for the single family and multifamily sectors, which show a high usage in the January-February billing cycle.

Table 6-b provides more detail about average monthly consumption of water by sector. The commercial sector uses the most water per month, at an average of 35,331 gallons. The single family and multifamily sectors are closer in their consumption averages, with the single family sector averaging 4,070 gallons per month and the multifamily sector averaging about 2,700 gallons per month. This disparity is likely due to larger household sizes among single family homes.

Surface Water Quality

Park Forest is a part of the Thorn Creek watershed (see Figure 6-b), within which there are some concerns about surface water quality. In 2008, nine river segments and one lake in the watershed were identified on Illinois' 303(d) list (as part of Section 303(d) of the Clean Water Act) as impaired. Of the bodies of water identified on the 2008 list, a 4.68-mile segment of Thorn Creek (Water ID: IL_HBD-03) is most affected by Park Forest's storm sewer and wastewater discharges. Thorn Creek runs through the Village and along its southern boundary. The primary causes of impairment include low dissolved oxygen and fecal coliform. Fecal coliform is a bacteria that may be caused by animal waste on turf grass lawns, failing sanitary sewer or septic systems, or other infrastructure-related problems. Low dissolved oxygen levels may be attributed to high fecal coliform counts or low flow conditions. To help rectify these conditions, the Thorn Creek Watershed Plan identifies a maximum amount of pollutants that the waterway can absorb and still meet minimum water quality standards (known as a total maximum daily load (TMDL). Unrelated to the 303(d) list, several streams that branch off from Thorn Creek within Park Forest are also routinely maintained and cleaned by Village staff.

The rain garden at the Park Forest Tennis and Health Club helps to manage stormwater runoff from the roof.

Stormwater Management

Stormwater management includes techniques that minimize the quantity of stormwater runoff from a site. During rain events, stormwater flows over the ground and picks up natural and human-made pollutants, such as motor oil, sediment, pesticides, and road salt. When stormwater reaches a water body, it then causes water pollution and degraded natural habitat. Runoff is exacerbated by the urban conditions of Park Forest, where stormwater has little opportunity to be filtered by natural landscapes. Some stormwater management techniques can help to ameliorate these issues.

Not only can stormwater runoff result in negative water quality impacts, but also in flooding and damaged property. If problems exist with a community's ability to manage stormwater, the most obvious symptom is flooding, which has been identified as a concern by Village residents and staff. Early residential developments within the Village were designed with natural drainage ways running lengthwise through the middle of blocks (between the rear property lines of the adjacent lots). These drainage ways were meant to collect stormwater and convey it to the ends of the blocks to enter the storm sewer system. Properties were graded at two percent to ensure that water flowed to the rear of the lots. Over time, however, grade changes and other improvements have disrupted the flow of stormwater towards the rear of lots resulting in flooding and standing water. Village staff are assisting residents as they come forward with flooding issues, but larger education and outreach to residents about the importance of drainage to prevent flooding has not been done. Flooding is also an issue for many Village streets, as recent large storms have shown. The source of street flooding appears to be the limited size and clogging of inlets rather than the capacity of the storm sewer.

The Village has been very proactive in addressing flooding through innovative methods of stormwater management. The Central Park Wetlands restoration project, which retains nearly 100 percent of the water reaching the wetlands, prevents approximately 45 million gallons of stormwater annually from entering the sewer system for a one inch rainfall.

In 2009, in conjunction with the Village's Environment Commission, the Village installed a demonstration rain garden at the southeast corner of the Park Forest Tennis and Health Club. The rain garden absorbs the runoff from approximately 10,000 square feet of the tennis building roof. Rain gardens have also been installed at the south end of Winnebago Park and at the Aqua Center to demonstrate how rain gardens look and function. In 2007, the Village completed a 144 square foot demonstration green roof on the Park Forest Aqua Center, which is accessible by the public. Green roofs absorb water that would otherwise result in runoff and also help to insulate buildings and keep roofs cool in the summer, decreasing heating and cooling costs and associated energy usage. The Village, again in partnership with the Environment Commission, also started a rain barrel program, with more than 120 rain barrels distributed to Village residents so far. The rain barrels, which are available at the Farmers Market, are intended to bring water conservation and smart use to the residential level.

On the private side, new developments over one acre are required to provide a stormwater conveyance system appropriate for the size of the development. However, in the current Zoning and Subdivision Codes, there is little mention of employing stormwater best management practices to reduce the volume or improve the quality of stormwater runoff, which would also reduce the burden on the storm sewer system. New buildings within the floodplain must be approved by the Village Manager to ensure that the development will not change the flow of floodwater or drainage, which could make other property more susceptible to damage.

Water Infrastructure

The Village's water infrastructure consists of its water distribution, sanitary sewer, and storm sewer systems. The water distribution system includes 72 miles of water mains, six wells, the water filtration and softening plant, and five million gallons of water storage. The Village Public Works department operates and maintains 42 miles of storm sewer, 68 miles of sanitary sewer, four lift stations, and an excess flow facility. The contents of the sanitary sewer are conveyed to the Thorn Creek Basin Sanitary District in Chicago Heights for treatment and discharge to Thorn Creek. The condition of the sanitary and storm sewer systems in the Village is a concern. Since these systems were constructed in conjunction with the overall development of the Village 50-60 years ago, they are concurrently approaching the end of their life cycles. In 2010, the Village received $500,000 from an EPA Water and Wastewater Infrastructure grant for critical sanitary sewer repairs.

The Village's storm sewer network collects and conveys stormwater to natural drainage ways and creeks. As with most stormwater systems, runoff is not treated and preventing the flow of pollutants and contaminants to the receiving water bodies is important. Under Section 303(d) of the Clean Water Act, the Illinois Environmental Protection Agency (IEPA) regulates MS4 (municipal separate storm sewer system) communities where stormwater is not treated prior to discharge into area waterbodies. To remain in compliance with these requirements, the Village Department of Public Works routinely visually inspects storm sewer outfalls and creeks for pollutants and adheres to a stormwater management program that includes several other mitigation measures to reduce pollution.

This sewer grate in Chicago carries a reminder to protect area waterways.

Water: Identified Goals

The following goals were identified for this topic area during the public kickoff meetings:

1. Improve stormwater management.
2. Continue to promote the use of native plantings.
3. Maintain the Village's public water source.
4. Protect water quality; reduce the chemicals and pollutants that end up in water.
5. Promote water efficiency and reuse.
6. Educate the public about the importance of water and water conservation techniques.

Figure 6-b. Thorn Creek Watershed

Section 7
Greenhouse Gases

In 2010, Park Forest emitted approximately 10.96 tonnes of emissions per person of CO_2 equivalent. Cook County's average per capita emissions in 2007 was 14.86 tonnes.

Greenhouse gases are atmospheric gases that trap energy in the form of heat from the sun and directly relate to the quality of our atmosphere and climate. Greenhouse gases occur naturally but are also produced from human sources; such gases include carbon dioxide, methane, and nitrous oxide. It is widely understood that concentrations of greenhouse gases (especially carbon dioxide) have recently increased in the earth's atmosphere, especially since the start of the Industrial Revolution, due to increased combustion of fossil fuels.

This increase in greenhouse gases has been linked with the potential for accelerated climate change. Research has shown an unequivocal average temperature increase at the Earth's surface by 1.2 - 1.4°F since 1900. In the upper Midwest, climate change may result in more frequent and intense storm events and heat waves, as well as longer periods of drought.

The community-wide greenhouse gas emissions inventory outlined below documents existing conditions and establishes a baseline by which to measure future progress towards meeting energy goals and targets. Most emissions can be traced back to the burning of fossil fuels, such as natural gas and coal for electricity used in buildings and petroleum combusted as fuel for automobiles. For the purposes of the inventory, the emissions studied included carbon dioxide, methane, and nitrous oxide gases. Their values were then converted to CO_2e (carbon dioxide equivalent) according to their global warming potentials. CO_2e is a widely accepted measure which can be used internationally to compare municipal emissions rates.

Table 7-a. Community Emissions by Sector, 2010		
Emissions Source Sectors	CO_2 Equivalent (metric tons or tonnes)	Share of Total CO_2 Equivalent (%)
Buildings	114,142	47.3%
Residential	84,867	35.2%
Commercial, Industrial, & Institutional	27,586	11.4%
Government	1,689	0.7%
Transportation	119,196	49.5%
Waste	7,621	3.2%
Total	240,959	100.0%
Source: ICLEI CACP 2009 software		

Figure 7-a. Community Emissions by Sector, 2010

Community-Wide Greenhouse Gas Emissions Inventory

The greenhouse gas emissions inventory performed for the purposes of this report shows that in 2010, Park Forest emitted approximately 240,959 tonnes of CO2 equivalent (or about 10.96 tonnes per person). For comparison, Cook County's average emissions rate in 2007 was 14.86 tonnes per person. Park Forest's relatively low rate of emissions per capita may be at least partially explained by the smaller footprint of its housing stock compared with many other municipalities in the County. Also, the Village's commercial sector, which historically has had a much higher rate of energy consumption per account than the residential sector, has a high vacancy rate of 37.6 percent. If commercial vacancy decreased, the Village's emissions rate would likely increase accordingly.

Table 7-a and Figure 7-a above shows the breakdown of community emissions by sector. The majority of emissions in 2010 were caused by the transportation sector (49.5 percent of emissions) and building sector (47.3 percent). Residential uses comprised about 74.4 percent of the emissions attributed to buildings, while commercial uses represented 24.2 percent and government uses represented 1.4 percent. The waste sector, including solid waste and wastewater, contributed 3.2 percent of emissions. These findings suggest that modifications to residential buildings and transportation patterns (vehicle miles traveled) represent the greatest opportunities to reduce emissions in Park Forest.

Stationary Source Emissions

Stationary source emissions, which comprise 47.3 percent of all of the Village's emissions, include those related to the consumption of natural gas, electricity, and other types of energy (such as fuel oil) in buildings. For the purposes of this inventory, building sectors have been defined as residential; commercial, industrial, and institutional (such as churches and schools); and government. .

Each building sector's greenhouse gas emissions is summarized in Table 7-a. This data shows that residential buildings comprise over a third (35.2 percent) of all emissions. This is not surprising when considering that the majority of Park Forest's buildings are residential in nature. Commercial, industrial, and institutional buildings also comprise a noteworthy portion of emissions, at 11.4 percent, and government buildings and uses make up another 0.7 percent.

Mobile Source Emissions

Mobile source emissions, which are responsible for 49.5 percent of Village emissions, are those attributed to the transportation sector. Such emissions are typically derived from the municipality's on-road vehicle miles traveled (VMT). On-road VMT includes any miles that were traveled on road links within Village boundaries. For the purposes of this inventory, estimates for Park Forest's total on-road VMT from 2007 was used.

The transportation sector accounts for about one-third of all emissions at the national level. In comparison, Park Forest's transportation sector is responsible for about half of its emissions. One potential explanation for this relatively high emissions rate is that Park Forest's building stock produces emissions at lower levels than is typical due to the smaller average footprint of buildings in the community (especially for residential uses). Therefore, other sectors are attributed a larger share of emissions by default. Additionally, the Village's location at the edge of the metropolitan region and associated auto-dependence results in increased miles traveled on Village roads and, therefore, increased emissions.

Table 7-b. Total Energy Usage by Sector (2010)

Sector	Natural Gas Usage (therms)	Electricity Usage (kWh)
Residential	7,577,514	63,429,017
Commercial, Industrial, & Institutional	1,580,920	27,152,045
Government	88,566	3,445,615
Total	9,247,000	94,026,677

Source: Nicor Gas (January-December 2010); ComEd (January-December 2010)

Waste Emissions

Waste emissions include those that may be attributed to solid waste and wastewater. This sector comprises a relatively small proportion of Park Forest's emissions, at 3.2 percent. Solid waste includes paper products, food waste, plant debris, wood, textile, or other waste that is disposed from various sources (see Table 7-c). Solid waste emissions are determined by the type and amount of waste disposed. Wastewater is liquid waste that is discharged by commercial, residential, industrial, or institutional sources. Wastewater emissions are determined by the amount of wastewater discharged and the method of wastewater treatment.

Due to the fact that solid waste and wastewater are taken to landfills and treatment centers that are usually outside of the control of municipalities, many emissions models do not mandate that these emissions are included in the total emissions inventory. The amount of solid waste and wastewater produced, however, is within the control of the municipality. To provide a comprehensive snapshot of Park Forest's emissions, emissions related to solid waste and wastewater are presented and included in this inventory.

Table 7-c. Composition of Solid Waste (2010)

Type	Amount (pounds)	Share of Total (%)
Paper Products	19,482,218	29.5%
Wood or Textiles	19,405,177	29.4%
All Other Waste	16,761,766	25.4%
Food Waste	6,903,268	10.5%
Plant Debris	3,379,164	5.1%
Total	65,931,593	100.0%

Source: Illinois Commodity/Waste Generation and Characterization Study, 2009 & CMAP

Data Sources

Emissions were estimated using the International Council on Local Environmental Initiatives' (ICLEI) Clean Air and Climate Protection (CACP) 2009 software. Data to conduct this greenhouse gas emissions inventory were obtained from various sources including the following:

- Community-wide natural gas consumption data for 2010 was obtained from Nicor;
- Community-wide electricity consumption data for 2010 was obtained from ComEd;
- Total on-road vehicle miles traveled (VMT) data was provided by the Center for Neighborhood Technology's "Park Forest Energy and Emissions Profile." This data set is for the year 2007;
- Composition of the vehicle classification on Park Forest's road links was obtained from CMAP's spring 2011 travel demand model;
- Total volume of solid waste and waste composition was estimated with Cook County data from the Illinois Commodity/Waste Generation and Characterization Study (2009); and
- Total volume of wastewater and wastewater treatment were estimated from data provided by the Thorn Creek Basin Sanitary District.

Greenhouse Gases: Identified Goals

The following goal was identified for this topic area during the public kickoff meetings:

1. Reduce emissions, energy consumption, and energy waste.

Section 8
Renewable Energy

There are three projects either built or in the works related to renewable and alternative energy in the Village.

Renewable energy sources (such as wind, solar, and geothermal power) are defined as naturally recurring energy sources that may be harvested without the detrimental effects of carbon emissions. Switching from traditional sources of fuel to renewable energy sources is one way that Park Forest, both as a government entity and as a community, may be able to reduce its greenhouse gas emissions and energy bills. Demand for renewable energy systems is increasing as concerns over the cost of fossil fuels rise, and innovations in technology are expected to make such systems more affordable and accessible in the future.

Existing Projects

In 2010, the Park Forest Aqua Center installed a solar hot water system. Five solar collectors on the roof of the Aqua Center gather heat (see image), which is used to heat water in two 120-gallon solar water storage tanks in the building. The water is then used for showers in the Center. The system is a demonstration project for residents, and it is highly visible from Orchard Road. Some desire has been expressed to undertake another renewable energy demonstration project of a grander scale, such as a wind turbine on a municipal building. The undertaking of such a project would be contingent on finding appropriate funding mechanisms.

The private sector has also recently been showing interest in pursuing renewable and alternative energy systems. Alternative energy systems are those that produce energy without a high amount of carbon dioxide emissions or without burning fossil fuels. Homewood Star Disposal, located in Park Forest's business park, has a project in the pipeline to fuel some of its garbage truck fleet via compressed natural gas, a cleaner fuel than diesel.

Regulatory Climate

While energy efficiency standards have been adopted via the 2009 ICC International Energy Conservation Code (IECC), the Village's current Zoning, Subdivision, and Building Codes are largely silent on renewable energy systems as such. The absence of standards may be a deterrent for those who are interested in pursuing such systems. To facilitate green building, the Village is planning to adopt the International Code Council's International Green Construction Code (IgCC), which is currently being developed and is expected to be finalized in 2012. The IgCC includes building provisions related to renewable energy systems, which would give the Village a starting point for processing requests to implement such systems.

Renewable Energy: Identified Goals

The following goals were identified for this topic area during the public kickoff meetings:

1. Set standards and develop municipal policies to support renewable energy sources.
2. Increase the percentage of energy in the community provided by renewable sources.
3. Continue to promote existing Village pilot projects.
4. Pursue renewable energy systems for municipal or large residential complexes first to provide a model for residents.

Solar panels on the roof of the Aqua Center (top) which heat the water in storage tanks in the building below to be used for showers (bottom).

Section 9
Green Economy

The green economy represents an opportunity for the Village. Currently, two percent of all businesses in Park Forest are sustainability-related, with about 150 jobs associated with those businesses.

To achieve long-term sustainability, the local economy has to flourish and serve the residents of Park Forest. One popular topic during the public kick-off meetings related to growing the local economy to add to the vibrancy of the Village. The environmental, or "green," sector is a niche market that the Village can focus on to add to its economic sustainability. The green sector is a booming industry which includes environmentally-oriented businesses and jobs, from the manufacturing of solar panels to the sale of organic and natural products. Providing a place for this sector within Park Forest's economy not only adds depth and richness to the Village's economic base, but also provides residents with access to green products and services. With regard to social equity, expanding the green sector can provide Park Forest residents with proximity to high quality, well-paying local jobs.

Matching housing with jobs is beneficial for the environment as well. Of Park Forest residents who work outside of their homes, two-thirds work in a location that is greater than 10 miles from the Village, which points toward heavy auto-dependence for commuting (see Table 9-a). When residents do not have to commute for long distances to get to their places of employment, they save money on transportation costs and, if they are driving to work, reduce the amount of household vehicle miles traveled and greenhouse gas emissions.

Green Businesses & Jobs

There has been a national trend of increased interest in green businesses, jobs, and practices, particularly in light of greater concern for the environment, the gradual decline of America's manufacturing industry, and high unemployment rates. There are many ways to define "green" businesses. For the purposes of this report, green businesses are defined as those whose primary function is to produce goods or provide services that benefit the environment or conserve natural resources. Green businesses are particularly related to renewable energy sources, energy efficiency, pollution reduction and removal, greenhouse gas reduction, alternative transportation, recycling and reuse, natural resources conservation, environmental education, and green job training. Using this definition, Park Forest currently has six businesses that qualify as "green businesses," which represents about two percent of all businesses in Park Forest. The Village's green businesses provide approximately 146 "green jobs," which comprises about three percent of all jobs in Park Forest's economy.

Given the amount, diversification, and availability of commercial space in the Village, Park Forest has the capacity to accommodate and support future green businesses and jobs. Currently, Park Forest has slightly less than one million square feet in total commercial property (retail, industrial, and office properties). As shown in Table 9-b, almost half of the commercial spaces are retail, almost one-third is industrial space, and the remaining balance is office space.

The vacancy rate for commercial space is about 37.6 percent, indicating many opportunities to accommodate new enterprises. The high rate of vacancy indicates an oversupply in the market. Many market analysts consider ten percent vacancy to be ideal, as that amount allows for movement within the market without downward pressure on rents. Park Forest's retail space has the highest vacancy rate, followed by industrial and office space.

Commercial & Retail Space

The majority of retail properties are located in Park Forest's DownTown area and were built in the 1950s. Although these spaces are classified as retail, they can also be used for office space due to their flexible functionality. Other scattered retail properties include the Norwood Square Shopping Center on 26th Avenue and Western, two neighborhood commercial nodes, and one-story retail buildings mostly built in the 1970s and 1980s, which are located around the Sauk Trail and Central Park Avenue intersection. Currently, retail has the highest vacancy rate of the three sectors, and could potentially accommodate green commercial ventures, such as a green home goods store or organic restaurant.

Small-scale retail in DownTown Park Forest.

Office & Industrial Space

The Village's office space is mainly located at Central Park Avenue and Sauk Trail and on Western Avenue near Steger Road. Almost all of these office spaces are located in one-story buildings that were built in the 1980s or earlier. Industrial properties are mainly located along North and South Street between Western and North Orchard Drive. Some of these properties were originally developed prior to 1970, while others have been renovated or built in the past 25 years. Green business opportunities for these sectors could include research and development for energy innovation, light manufacturing of renewable energy systems, green job training facilities, and educational spaces for sustainability-related programming.

Home-based Businesses

Since 2007, the overall number of businesses in the Village has increased by 11 percent (see Table 9-c). Most of this growth occurred between 2007-2008, when the total number of businesses increased by over 30. Despite the overall rise in the number of businesses, the number of commercial businesses has actually declined almost four percent in the past four years, while the number of home-based businesses has increased by 28 percent. Today, home-based businesses make up the majority of local businesses in Park Forest. Although this trend is likely due to the economic recession, it is also a green trend. Home based businesses are inherently sustainable, as the majority of employees live and work on-site, reducing the amount of vehicle miles traveled and therefore, fuel consumption and air pollution. These businesses also increase the number of service- and office-related venues within walking distance of area residents, helping them to reduce household VMT as well.

Greening of Businesses

In addition to green businesses and jobs, another trend is the greening of businesses, where a business's practices and production processes are environmentally friendly or minimize the consumption of natural resources. An email survey conducted in August 2011 by Village staff asked local businesses to comment on the extent to which green practices have been incorporated in day-to-day operations of their businesses. The responses included:

- Recycling paper, bottles, cans, scrap steel, aluminum, cardboard, and plastic products
- Utilizing environmentally safe products in production processes
- Employing electronic systems to replace all paper records and reports
- Using green cleaning products to clean office and production space
- Requiring the use of reusable cups and glass instead of disposable kitchenware
- Utilizing energy-efficient appliances such as furnaces, lighting fixtures, and light bulbs

Green Economy: Identified Goals

The following goals were identified for this topic area during the public kickoff meetings:

1. Support and promote local businesses (including home based businesses).
2. Support and promote green businesses and jobs.
3. Promote and incentivize businesses that apply green practices and/or use local products.
4. Attract businesses that would allow residents to meet some of their daily needs on foot (such as a grocery store).
5. Connect local businesses with education, training, and jobs related to sustainability.
6. Attract green businesses to locate in Park Forest by offering incentives, such as energy-efficiency, water-efficiency, or other cost-saving features.

Table 9-a. Commute Distances for Village Residents

Commute Distance	Percentage of Commuters
Less than 10 miles	33.6%
10 - 24 miles	23.4%
25 - 50 miles	36.2%
Greater than 50 miles	6.8%

Source: Longitudinal Employer-Household Dynamics, U.S. Census Bureau

Table 9-b. Commercial Properties & Vacancy Rates by Sector* (2011)

Sector	Vacant Space (sq. ft.)	Total Space (sq. ft.)	Sector Share of Total Space (%)	Vacancy Rate (%)
Retail	202,324	454,770	45.5%	44.5%
Industrial	123,600	325,170	32.6%	38.0%
Office	49,800	218,770	21.9%	22.8%
Total	375,724	998,710	100.0%	37.6%

*Excluding multifamily properties

Source: Co-Star Group, Inc.

Table 9-c. Count and Type of Businesses, 2007-2011

Type	2007	2008	2009	2010	Percent Increase, 2007-2010
Commercial Businesses	149	150	144	143	-4.0%
Home-based Businesses	131	163	170	168	28.2%
Total	280	313	314	311	11.1%

*As of 3/15/10

Source: Co-Star Group, Inc.

Section 10
Local Food Systems

The Village has two long-standing institutions that provide great access to fresh produce for its residents: the DownTown farmers' market (operating for 38 years) and the South Suburban Food Cooperative (in business for 37 years).

Local food refers to a product available for direct human consumption that is grown, processed, packaged, and distributed within a certain distance (typically between 100-300 miles from a community). A sustainable local food system can address growing concerns related to health, quality of life, economics, and the environment.

The interrelationship between health and fresh, nutritious food is becoming clearer as more studies making that connection enter into the discussion. For example, the GO TO 2040 Plan notes that more than 60 percent of people in the region are overweight or obese, but not necessarily well nourished. It further notes that access to healthy food decreases the risk of obesity and other diet-related chronic diseases.

From an economic standpoint, purchasing food that is grown locally means that those dollars remain in the area, supporting local businesses and jobs. Developing community gardens on vacant, unused parcels can also have a positive impact on nearby property values. Individuals reap economic benefits in that local food reduces the number of miles that food has to travel, which limits the impact of rising fuel costs on food prices.

The reduction in number of miles that food travels has environmental benefits as well. The average food item travels 1,500 miles while the average locally produced item travels only 56 miles. Local food production and purchasing can thereby reduce greenhouse gas emissions produced by the fossil fuels burned during transportation. Other environmental benefits include conservation of valuable open space as food producing land, which can help with stormwater management.

Food Access

Access to fresh food is an important health consideration. In fact, some studies have shown that diseases such as cancer, cardiovascular disease, diabetes, and liver disease have a positive correlation with increased distance to the nearest grocer, especially in predominantly black communities. While Park Forest is host to a successful farmers' market and the South Suburban Food Cooperative, there are no supermarkets or larger grocers within the Village boundary. However, there are several options, including a couple supermarkets, located within three miles of the Village boundary in neighboring communities. Three convenience stores, CVS, 7-Eleven, and Walgreens, are located in the Village. Convenience stores are typically limited in their options, particularly with regard to fresh food, and are more costly than supermarkets.

DownTown Farmers' Market

A farmers' market is not just a place to buy food. It also provides a social gathering spot for the community and allows people to meet the farmers who grow their food. The Village's DownTown farmers' market has been in operation for 38 years, making it one of the longest running markets in the south suburbs. The market, which features 22 farm vendors and ten local business vendors, offers locally grown produce, eggs, and meat, as well as baked goods, gourmet cheeses, sandwiches, and homemade crafts. Both organic and conventionally grown products are available. Growers come from Lansing, Manhattan, Mokena, and Frankfort, as well as Indiana and Michigan. Local civic groups can give demonstrations at the market and hold fundraisers and other events at no charge. The market also sponsors nutrition programs at Village Hall during market hours.

Since 1999, the market has accepted vouchers for the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). In 2001, the market was selected for the Senior Farmers Market Nutrition Pilot Program, which provides coupons for fresh produce. Currently, the market does not have the facilities to accept Illinois LINK cards distributed by the Illinois Department of Human Services in lieu of food stamps. The Village recognizes the potential to facilitate the purchase of healthy and fresh food by lower income residents via LINK cards; however administrative requirements associated with the cards may be too great at this time.

South Suburban Food Cooperative

The South Suburban Food Cooperative was established 37 years ago in Park Forest and recently returned to the Village in May 2011 after moving to nearby Matteson for several years. The Co-op now occupies a highly visible, 3,300 square foot location in DownTown Park Forest. Since the move, the Co-op has continued to expand their membership and now has over 300 members. The Co-op's objectives are to provide healthy, affordable food and support local farmers. Towards these ends, they serve as a small market for fresh produce, dried goods, and all-natural household supplies and also conduct seminars and workshops on food preparation and other topics. While locally grown products are sold at the Co-op, the food also comes from several larger distributors around the country. Not all products offered are organic; however, many of the Co-op's producers are in the process of becoming certified organic farmers and others are using best practices such as the reduced use of pesticides. The Co-op attracts members from distances of up to 30 miles away.

Community Gardens

Community gardens improve access to fresh and healthy food, promote a sense of community, and provide an opportunity to engage in a healthy outdoor activity. Currently, a community garden is located just south of Village Hall in Park Forest, next to St. Irenaeus Catholic Church. The garden is managed jointly by the Church and South Suburban Food Co-op, and maintained by about 20 volunteers. Items grown include vegetables, flowers, fruits, herbs, and other plants.

The Village is interested in expanding the number of community gardens to promote local food production and reduce maintenance costs on vacant properties owned by the Village. The Environment Commission has also been proactive in pursuing community gardens and will be hosting an educational seminar regarding gardens and a bike ride, featuring green elements throughout the Village. Currently, there are 40-50 vacant and soon to be vacant parcels in Village possession. If vacant parcels were converted to community gardens, it is estimated that the Village would save between $11,000 and $18,500 annually in maintenance costs for mowing. However, there are regulatory and administrative constraints that need to be resolved before community gardens could be implemented on a broad scale. Community gardens are not currently mentioned in any context within the Village Zoning Code. Also, an entity, governmental or otherwise, would need to take charge of monitoring and administering the gardens.

Local Food Systems: Identified Goals

The following goals were identified for this topic area during the public kickoff meetings:

1. Promote local food through education initiatives.
2. Promote and support the farmers market and South Suburban Food Co-op.
3. Support the development of community gardens on vacant lots as a temporary use.
4. Engage the community in bolstering a local food economy.

Section 11
Municipal Policies & Practices

Andrew S. Winston noted in his book Green Recovery, "the smartest companies are recommitting to sustainability, and using environmental thinking not only to stay profitable, but also to drive innovation and help customers through dark times." This same philosophy applies to municipalities that are looking for ways to become more resilient and innovative in the way they provide services so that stagnant or dwindling public finances can be stretched to meet growing needs.

Focusing on sustainability, or "going green", can help municipalities save money, strengthen their financial standing, and set an example for environmental stewardship. This chapter focuses on the policies and practices that the Village of Park Forest implements within its organizational structure to be sustainable.

Park Forest has a long-standing commitment to the three E's of sustainability – environment, economy, and equity. A review of the chapters in this Plan on Development Patterns, Open Space & Recreation, and Community Health & Wellness reveals many examples of the environmental initiatives that have been part of Park Forest's history from the beginning. The Village Board and Administrative commitment to financial sustainability starts with the Board Goal that states the Village will, "establish policies that assure an acceptable and sustainable level of financial, environmental and infrastructure components of the Village." Financial initiatives that are designed to implement this Goal include constant monitoring and tracking of budgets and expenditures; maintenance of a minimum of three months of reserve funds; and internal audit and procedural review that ensures the integrity of financial information. Park Forest's commitment to equity can be traced back to the early 1960's when the Park Forest Social Action Committee went door-to-door throughout the community to ease the transition for African-American families moving into the Village. This commitment to a diverse community has continued to the present day.

Sustainable Purchasing & Maintenance

The U.S. Environmental Protection Agency (USEPA) defines environmentally preferable purchasing as acquiring "products and services that have a lesser or reduced effect on human health and the environment when compared to competing products and services that serve the same purpose". While the Village of Park Forest has not adopted a formal policy regarding environmentally preferable purchasing (EPP), the Staff has initiated a number of actions that are consistent with such a policy.

All Public Works and Recreation and Parks Department vehicles purchased in the past several years have been low emission vehicles (LEV). At this time, all vehicles in the Parks and Recreation Department and most in the Public Works Department are LEV. The Police Department's administrative vehicles are all four cylinders because they are more efficient on gas usage. All restrooms in Village parks are furnished with spring-loaded water faucets so they turn off automatically. This helps to minimize water usage in the parks where the restrooms are not constantly monitored. While local purchasing is not a Village requirement, many departments make a point to use local caterers, local automobile repair facilities, and other local services whenever possible. The Police Department has initiated a policy of purchasing green cleaning products for all routine needs.

Most Village departments have already incorporated sustainable practices in the manner in which they maintain Village facilities and equipment. Renovations to the Police Department, Park Forest Public Library, and Freedom Hall incorporated energy efficient lighting. All Village-owned commercial buildings in DownTown Park Forest have had new, energy efficient windows and HVAC systems installed in the past several years. Little-used areas of Village parks are not mowed, or are on a reduced mowing schedule, and native landscaping has been incorporated into public parks and landscape medians whenever possible. Most recently, the Village Board adopted a Sustainable Pest Control and Pesticide Reduction Policy to apply to the maintenance of all Village-owned and leased property.

Village staff and elected officials have found a great number of ways in which they can use resources more effectively and efficiently. Whenever appropriate, Village vehicles are refurbished to extend their useful life, and Police vehicles are passed on to other departments when they are cycled out of the Police rotation. In 2006, the Board of Trustees began operating with paperless agendas. All Trustees have Village-issued laptop computers and receive their meeting agendas and other communications through the web site or email communications. Internal documents are maintained on the intranet site for staff to review and edit without the need for printing. The Village contracts for a regular audit of electric usage in Village-owned buildings, and the Water Department audits the use of water in Village buildings and private homes. Excessive use of water is noted and property owners are provided with assistance to determine and correct the cause of the problem. Utility bills will be offered to customers via email, as an option to paper bills sent through the U.S. Post Office. This will save paper and mailing costs.

As an organization, Park Forest can influence its own financial and environmental sustainability by establishing a purchasing and maintenance policy that addresses environmentally preferable products, local purchasing, sustainable property and equipment maintenance practices, and the sustainable use of resources.

Capital Projects

One of the areas in which the Village can have the most visible impact on sustainability is in the installation and upgrade of public infrastructure, including water and sewer lines, storm water management systems, roads, sidewalks, public parking lots, and facilities in Village parks. Many of these projects are described in the chapters on Transportation & Mobility, Open Space & Recreation, Waste, and Water. The manner in which these projects are planned and implemented is the subject of this Chapter. For example, the re-design and reconstruction of Orchard Drive was initiated because of the unsafe geometrics of the street. In the process of designing a safer roadway, the Village chose to incorporate bicycle lanes in both directions from US30/Lincoln Highway to Lakewood Boulevard. Whenever possible, paving projects in the Village use recycled asphalt and concrete. During the 2011 demolition of the former Marshall Fields building, 100 percent of the concrete and 5 percent of the bricks were crushed and used to fill the basement of the building, the remaining 95 percent of the bricks were salvaged and sold for reuse, and 100 percent of the steel was salvaged and sold for reuse. Tennis courts at Village parks have been converted to other uses as interest in tennis has decreased over the years. Former tennis courts at Forest Trail, Indiana, Somonauk, and Illinois Parks are now skate board parks, in-line hockey courts, basketball courts, and a playground. Capital projects that are planned, designed, and executed with sustainability in mind will result in a community that is more livable and set an example for private projects of a similar nature.

Education & Demonstration Projects

The Village has a long history of implementing environmental demonstration projects in order to educate the public about how to become more sustainable in their daily lives. The Recreation and Parks Department has created three demonstration rain gardens, the Environment Commission sells rain barrels and composting kits at the Farmers' Market, and free reusable canvas grocery bags are available for residents at Village Hall. The Central Park Wetlands has become an outdoor classroom for as many as 2,000 school children who come from Park Forest schools as well as the surrounding suburbs and Chicago to learn about the environment. The 2010 renovation of the Aqua Center made this educational focus a year-round endeavor with the construction of the Wetlands Discovery Center classroom. The Aqua Center renovation also included a solar hot water heating system as a demonstration renewable energy project. The volunteer Environment Commission sponsors as many as six workshops and/or movies each year to educate and inspire Park Forest residents to take action to protect the environment. To date, a total of eight sustainability projects have been initiated by the Village as demonstration projects.

Sub-Regional Collaboration

In a large metropolitan area where the boundaries from one suburb to another are almost indistinguishable, the private market pays far less attention to Village boundaries than do Village officials. Retail stores draw customers from a wide geographic area that crosses municipal boundaries. Residents live in one Village

and work in another, often far from where they live. The most sustainable communities are those that are willing to look outside their boundaries to work in partnership with their neighbors. In January 2002, the Villages of Matteson, Richton Park, and Olympia Fields joined forces to create SouthCom, and Park Forest became a partner in October 2005. SouthCom is a joint emergency dispatch center that has created a state-of-the-art facility because the four communities have been able to leverage a great many more resources than would have been available to each community on its own. The Village is an active member of the Chicago Southland Housing and Community Development Collaborative, a regional organization that is working to address housing issues across the boundaries of 42 municipalities in the south suburbs.

Even economic development can benefit from sub-regional collaboration, as the partnership among Park Forest, Olympia Fields, and Matteson demonstrates with their work on the 211th Street Metra Station Transit Oriented Development plan and development project. Sub-regional collaboration can also be used to lower the cost of purchasing green products by making bulk purchases and sharing equipment, and it can be used to create regional storm water management systems to minimize flooding throughout a drainage basin. This kind of collaboration makes more efficient use of Village staff and financial resources, and it benefits a much larger population across municipal boundaries.

Funding for Sustainability Initiatives

Many of the major environmental and sustainability initiatives that the Village of Park Forest has implemented have been funded with grants. The renovations to the Aqua Center, that included installation of a solar water heating system and the construction of the Wetlands Discovery Center, were partially funded with a grant from the Illinois Department of Natural Resources. The Village partnered with Cook County and The Delta Institute to deconstruct four homes in the Eastgate neighborhood, and received a large Cook County Community Development Block Grant that funded the deconstruction of the former Marshall Fields building. An Energy Efficiency and Conservation Block Grant (EECBG) from Cook County funded efficiency upgrades to more than 15 homes owned by low incomes residents of the Village. A Neighborhood Stabilization Program grant and a HOME grant from Cook County, and a Community Development Block Grant from the State of Illinois will fund the purchase, renovation and sale of approximately 25 single family homes. Habitat for Humanity Chicago South Suburbs is the Village's developer for these grants and is rehabilitating all homes to incorporate energy efficiency. However, the Village has also used its ingenuity and existing resources to implement projects such as the demonstration rain gardens and the demonstration green roof at the Aqua Center. Implementing sustainability initiatives does not have to cost additional money, especially if the long term benefits of the initiatives are taken into account. Finding funds for sustainability initiatives can simply be a matter of using existing funds to purchase goods and services and construct infrastructure in ways that produce more sustainable outcomes.

Table 11-a. Sustainability Demonstration Projects
Rain gardens at Tennis & Health Club, Winnebago Park, & Aqua Center
Green roof at Aqua Center
Solar hot water heating system at Aqua Center
Rain barrels sold at Farmers' Market
Composting kits sold at Farmers' Market
Canvas shopping bags distributed at Village Hall
Recycling bins provided to DownTown businesses in Village-owned buildings
Native landscaping in DownTown Park Forest & Village parks
Four homes deconstructed in Eastgate Neighborhood
EECBG grant provided energy efficiency upgrades to more than 15 homes

Decision-Making Framework

Many organizations that want to integrate sustainability into their organizational structure have implemented the "triple bottom line" (TBL) approach to decision-making. The TBL approach measures success not only by financial performance, which is the traditional bottom line, but also by environmental stewardship and social responsibility. This integrated approach to decision-making addresses the economic, environmental, and social equity impacts of municipal policies and practices. Although the Village is very tuned in to sustainability, it has not yet formally adopted such a decision-making framework. This Plan represents an opportunity to determine the extent to which sustainability should be a prerequisite in all decisions made by Village elected officials and staff.

Municipal Policies & Practices: Identified Goals

The following goals were identified for this topic area during discussions with the Technical Advisory Committee:

1. Establish a sustainable purchasing and maintenance policy that addresses all Village functions.
2. Become a resource for information about sustainable practices that can benefit Park Forest residents and businesses.
3. Integrate sustainability into all capital projects undertaken by the Village.
4. Seek ways to provide public services in collaboration with other public and private service providers.
5. Create a Sustainability Capital Plan.
6. Create opportunities for Village Staff to make sustainable decisions in their day-to-day work responsibilities.

INDIANA
SCHOOL

Section 12
Education

At least eight of Park Forest's schools provide sustainability-related items in their curricula, with most of those components taught via science classes.

During the public kick-off meetings, education was brought up repeatedly as an integral component of creating a sustainable community. While many Village programs are held on topics related to sustainability, many community stakeholders feel that existing programs and initiatives should be more broadly publicized to increase awareness. Additionally, multiple new topic areas have been identified as presenting opportunities for further enrichment, both in programming for residents and in school curricula. Providing educational programs on a wide variety of sustainability-related topics will help greatly in achieving a sustainable future, as residents and business owners will develop the tools they need to take action. Education on particular topics, such as energy efficiency, may also have cost savings that will help to improve individual financial situations.

Village Schools

Park Forest's ten public schools are dispersed throughout the community; a summary of the schools and their characteristics may be found in Table 12-a. Seven of the schools are a part of School District 162 or 163. Currently, all but one Park Forest school (Illinois School) has a percentage of low-income students that exceeds the state percentage of 45.4. The Illinois Board of Education defines low-income students as, "those that come from families that receive public aid; live in institutions for neglected or delinquent children; are supported in foster homes with public funds; or are eligible to receive free or reduced-price lunches." Despite this fact, all schools (with the exception of Rich East High School) either meet or are close to meeting the State's minimum percentage to meet reading and math standards.

Sustainability in Schools

At least eight of Park Forest's schools provide sustainability-related items in curricula, with most of those components taught through science curricula. All schools in District 162 and 163, as well as Rich East Campus High School, have recycling programs that (at a minimum) include paper recycling. In addition, School District 163 (which includes five of Park Forest's schools) has established the "Science Depot," a hands-on science program that is calibrated to the Illinois' science standards. The program gives students the opportunity to learn about science principles through real-life interactive activities. During lunch, students are able to work on projects of their choice related to science, allowing them to explore their own interests. Recent projects have included topics such as alternative energy, green roofs, storm water management (rain gardens, rain barrels, wetlands), and examples of the benefits of biodiversity. These projects are featured at an environmental science expo, which is open to the public. Thousands of students and hundreds of residents attended the last expo.

Sustainability-Related Education Opportunities

Several local anchors have been identified that offer educational programming related to sustainability, including the Park Forest Library, Thorn Creek Nature Center, Wetlands Discovery Center, and the Village' Environment Commission. The Library's programs range from art classes for toddlers to free internet and computer education classes for adults and seniors. The Thorn Creek Nature Center, located on the site of the Thorn Creek Nature Preserve, exists to teach visitors about the Preserve's environmental features and connect people with nature. The Center has a reference library, which includes a children's section, and programming including nature retreats and nature camps. The Wetlands Discovery Center is also the site of many programs related to sustainability. Area teachers coordinate with the Village to reserve time for programming at the Center, which has become a regional destination. The programs are generally environmental in nature, focusing on the importance of the adjacent Central Park Wetlands and its natural systems. The site also acts as a demonstration center for sustainability-related projects, featuring a solar water heater system, butterfly garden, small green roof, and rain gardens.

Educational programming in the Central Park wetlands (Source: Village of Park Forest).

The Environment Commission has also pursued a wide variety of activities to increase awareness of environmental issues, including selling rain barrels and composting units, showing sustainability-related films, distributing compact fluorescent light bulbs, and making resources available to residents (such as how to properly dispose of medications and limit the use of herbicides and pesticides). These outreach activities are invaluable in spreading the word about how residents can help to impact Village sustainability.

Education: Identified Goals

The following goals were identified for this topic area during the public kickoff meetings:

1. Increase school curricula and programming related to environmental issues and continue the strong relationship between Park Forest schools and parks.
2. Promote community collaboration around the preservation of natural resources.
3. Provide general education materials and programming for residents about sustainability topics.

Table 12-a. Park Forest Public Schools

Name	Grades Served	District	# of Students	% Low-income	Mobility Rate*
Illinois School	K - 8	162	490	44.9%	0
Indiana Elementary School	4 - 6	162	425	68.7%	36
21st Century Preparatory Center	K - 3	163	220	75.9%	35.1
Talala Elementary School	K - 5	Crete Monee CUSD 201 U	282	78.0%	20.2
Algonquin Primary Center	Pre-K - 2	163	200	82.5%	48.8
Forest Trail Middle School	7-8	163	626	83.1%	24.2
Mohawk Intermediate School	4-6	163	188	88.3%	39.4
Blackhawk Intermediate Center	3-6	163	229	89.1%	57.7
Rich East Campus High School	9-12	Rich Township High School District 227	1,134	99.2%	23.7

*Mobility rate: number of times students enroll in or leave a school during the school year (sum of the students transferred out and students transferred in, divided by the average daily enrollment, multiplied by 100)

Source: State of Illinois Board of Education School Report Card 2010

Table 12-b. Educational Attainment

	Park Forest		Region	
Attainment Level	Count	Percent	Count	Percent
Some high school, no diploma	2,319	13.8%	817,950	14.9%
High school diploma or equivalent	4,541	27.0%	1,352,056	24.7%
Some college, no degree	4,667	27.7%	1,074,241	19.6%
Associate degree	1,377	8.2%	356,740	6.5%
Bachelor's degree or higher	3,942	23.4%	1,873,198	34.2%
Total	16,846	100.0%	5,474,185	100.0%

Source: 2005-2009 American Community Survey, U.S. Census

Source: Village of Park Forest

Section 13
Community Health & Wellness

In 2011 to date, 940 residents (over four percent of the Village population) have enrolled in recreational programming via the Village Parks and Recreation Department. In addition, over 700 non-residents have registered as well, indicating that this programming has a sub-regional draw.

Community health is a very broad topic with many potential points of interest related to sustainability. The state of the environment has many impacts on human health - pollution affects the quality of the air we breathe and water we drink. In addition, sprawling patterns of development have been linked to many serious diseases. Three diseases that have been found to be closely linked to environmental factors and land use are heart disease, obesity, and diabetes, discussed below. Unfortunately, data related to public health is not currently being collected at the local municipal level; County data is used as a proxy for some indicators (Cook County is used because it represents the majority of land in Park Forest).

Table 13-a. Rate of Death for Selected Diseases				
Place	All Causes	Heart-Related Disease	Cerebro-vascular Disease	Cancer
Suburban Cook County	21,734	30.4%	6.8%	24.2%
Park Forest	184	31.5%	6.0%	25.0%
Source: Cook County Department of Public Health, 2002				

Disease & Other Health Concerns

Table 13-a shows the rate of death for major diseases in suburban Cook County and the Village of Park Forest. In 2002, Park Forest had a slightly higher rate of heart-related diseases and cancer than the County, and a slightly lower rate of cerebrovascular disease, but was largely on par with the County averages. Specific to populations under 65 years of age, the premature heart disease death rate in Park Forest is 0.21 per 1,000 people, lower than the Chicago region average of 0.34 deaths per 1,000 people.

Obesity, defined as a body mass index (BMI) of over 30 , has become a primary concern for public health in recent years, particularly in suburban Cook County. According to the Cook County Department of Public Health, 63 percent of adults and 40 percent of children in the County are overweight or obese. The trend has been upward in nature – rates have doubled for adults and tripled for children in the recent past. High rates of obesity and overweight population are associated with the development of many health problems, such as heart disease, some types of cancer, type 2 diabetes, strokes, arthritis, breathing problems, and depression.

Both obesity and diabetes are linked to premature death. Diabetes rates in Cook County are significantly higher than in the rest of the region (7.1 percent versus an average of 5.2 for the remaining counties). Diabetes is associated with a sedentary lifestyle, high blood pressure, obesity, unhealthy eating habits, and high cholesterol.

The presence of lead-based paint can result in poisoning, especially in children. About one-half of homes built between 1940 and 1960 – the prime era of construction for Park Forest – used heavily leaded paints. Lead-based paint can retard mental and physical development and cause irreversible brain damage in children. The percent of children six years or younger with elevated blood lead levels has consistently been decreasing in Cook County, going from around 10 percent in 2001 to about 2 percent in 2007. This trend has likely been due to outreach to increase awareness of the dangers of lead-based paint.

Table 13-b. Incidence of Crime, 2010	
Crime	Number of Reports
Homicide	4
Criminal Sexual Assault	18
Robbery	21
Aggravated Battery	18
Assault	14
Burglary	194
Burglary of Motor Vehicle	91
Theft	194
Motor Vehicle Theft	27
Arson	4
Source: Park Forest Police Department	

Public Safety

Maintaining a safe community helps to retain existing residents and attract new residents as well. Safety can also play a large role in encouraging residents to get outdoors and be active, which is vital for public health. Some concerns about crime and safety in Park Forest were voiced during the project's public kick-off meetings. While the incidence of some crimes (such as assault) decreased in Park Forest in 2010, other crimes (such as burglaries) have recently increased (see Table 13-b).

The Park Forest Police Department (PFPD) has been proactive in conducting activities to help reduce crime and build character. Many of these activities are directed toward youth in the community. The PFPD supports productive and engaging programming for youth outside of school, such as wrestling intramurals and the PAAC program. The PFPD also administers the Guided Vision program, where youth offenders participate in counseling and community service work. There are some initiatives geared towards adult populations as well. Neighborhood meetings are held periodically in the Village, where the PFPD is on hand to respond to complaints and resident concerns. Seminars have also been held for seniors on preventing senior abuse and fraud.

Wellness & Recreational Opportunities

The Village has three long-established service providers that support the health and wellness of residents in Park Forest: the Health Department, Recreation and Parks Department, and Police Department. The Village also sponsors several health-related events, such as the Annual Chat & Chew Bazaar and Health Fair, Spring Senior Fair, Flu Clinic, School Physical Day, and Hearing Aid Awareness Week.

Swim lessons at the Aqua Center (Source: Village of Park Forest).

Health Department

Unique among municipalities of its size, the Village has its own Health Department. The Park Forest Health Department was established in 1952 and provides low cost preventive health and home-based nursing services to the southern suburbs. It offers a range of services appropriate for all age ranges. Wellness visit programs, occupational therapy, speech therapy, medical social services, physical therapy, weight management support, and registered nurse and home health aide care are available for adults and seniors, while children benefit from immunizations and school and sports physicals. The presence of the Health Department in the Village ensures that residents have excellent access to medical care.

Park Forest's Health Department also focuses on environmental health through educational programming. The department works closely with local groups like the Park Forest Environment Commission to identify topics to be addressed. Such topics have included disposal and contaminants in batteries, mold, water quality, and waste. The Health Department also provides educational programming for children on nutrition.

Recreation & Parks Programming

The Park Forest Recreation and Parks Department is also an active contributor to the Village's health and wellness via recreation-based programming. In a typical year, the Department holds almost 200 programs. In 2011 to date, there have been over 940 resident enrollments in Recreation and Parks programs, with an additional 738 enrollments from outside of Park Forest. The high number of non-resident enrollments indicate that the services provided by the Recreation and Parks Department are in high demand and that the Village is recognized in the subregion as a leader in this realm.

Recreational activities range from ballet for beginners to adult exercise classes to senior activities. The Recreation and Parks Department also has a variety of summer camps that encourage interaction with the natural environment and provide educational components regarding the Central Park wetlands. In addition, the Department offers children's cooking classes to promote healthy eating habits among youth. The Village's Aqua Center provides health and safety educational opportunities including swimming lessons, junior lifeguard classes, lifeguard classes, and CPR training and certification.

PAAC Program

The Park Forest Police Athletic and Activities Center (PAAC), administered by the PFPD, provides additional recreational opportunities and mentorship for youth of ages 10 to 15 throughout the summer. The activities include swimming, softball, baseball, soccer, tennis, basketball, and track and field, to name a few. PAAC's enrollment cost is relatively affordable and the program is open to non-Park Forest residents.

Healthy Diets

In 2009, 76.8 percent of residents in Cook County indicated that they consume few fruits and vegetables on a daily basis, which is a risk factor for premature death. As discussed in the Local Food Systems chapter, Park Forest residents lack access to a major supermarket within Village boundaries but do have the South Suburban Food Cooperative and farmers' market in town for fresh produce. In addition to providing healthy food, the South Suburban Food Cooperative also provides seminars and workshops related to healthy living and eating that are open to the public.

Community Health & Wellness: Identified Goals

The following goals were identified for this topic area during the public kickoff meetings:

1. Promote and connect residents, especially seniors, with existing health services in the community.
2. Continue to address common health problems via the Village's Health Department; include proactive prevention-oriented activities when possible.
3. Promote and enhance educational opportunities for residents related to healthy living, such as sessions on healthy diets or swim lessons.

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Section 14
Housing Diversity

The Village has diversity in its housing stock. About 58 percent of Park Forest's housing units are single-family homes, 33 percent are townhomes or co-ops, and 9 percent are multifamily.

Variety in a community's housing stock adds to its ability to attract and retain residents from all walks of life. This is particularly important for Park Forest, where a key goal identified during the public kickoff meetings was to retain the population's diversity. Providing smaller housing stock, such as apartments, condominiums, townhomes, and small single-family homes, allows a community to accommodate young families, those of modest means, and seniors who may be looking for less property to maintain. Smaller homes are also a sustainable choice because they intrinsically use fewer resources and less energy. Inasmuch as it adds density, compact housing provides a greater number of residents to support commercial enterprises and transit. On the other end of the spectrum, larger housing stock allows residents to remain in the community as they increase their incomes and also provides greater revenue for a municipality in the form of property taxes, which is helpful for financial sustainability.

Characterization of Housing Stock

The following timeline depicts major residential phases of development in the Village:

- **1948-1959** - the first and most significant phase, which included the development of single-family homes, townhomes, and two six-unit buildings in a traditional, post-war style (see images on the next page).
- **1960-1970** - additional ranch, split-level, mid-level, and colonial homes were built. Thorncreek Estates, which are larger and more expensive than the majority of housing stock in the Village, was also mostly built during this time. In 1969, Juniper Towers, a subsidized senior apartment building, was constructed. Approximately 2,600 of the original rental townhomes were sold and have since operated as cooperative housing.
- **1970-1979** - additions to the housing stock included mostly condominiums and apartments. Garden House, a 12-story, 146-unit apartment building, was built in 1979 and remains the tallest building in Park Forest.
- **1980-present** - in the recent past, the focus has shifted toward new frame, two-story single-family homes and senior housing. Victory Center, a complex containing senior independent living and assisted living buildings, was built in 1999. The Tamarack Street development, which offers larger and more

upscale housing types, was also built in the early 2000s. Most recently, the Legacy Square development, adjacent to DownTown, includes 68 contemporary single-family homes.

Housing Types & Tenure

Since 1980, Park Forest's population has been slowly but steadily declining, resulting in a population loss of 16.2 percent in the past 30 years. Despite a population loss of around 1,500 residents between 2000 and 2010, the total number of housing units increased by 368. The units added to the housing stock during this period included single-family homes and senior housing units. In addition, the average household size decreased from 2.52 persons in 2000 to 2.46 in 2010, indicating that households became marginally smaller.

89 percent of housing units in Park Forest are occupied and 11 percent are vacant. In addition, about 70 percent of units are owner–occupied or cooperatives. 58.2 percent of housing units are single-family homes, 32.7 percent are townhomes or co-ops, and 9.1 percent are multifamily. There are high owner-occupancy rates across all three of these unit categories, although Figure 14-b shows that home ownership occurs at a lower frequency for households making less than $35,000. Between 2000 and 2010, owner-occupied units increased by 2.3 percent, an intriguing trend despite the weak economy.

Typical post-war housing in the Village - single-family (top) and townhouse (middle).

Table 14-a. Housing Type by Tenure

Tenure	Single-Family	Town-house	Multi-family	Total
Owner-occupied	4,494	353	18	4,865
Renter-occupied	1,200	844	877	2,921
Cooperative	0	1,996	0	1,996
Total	5,694	3,193	895	9,782

Source: Data compiled from VPF, adjusted to American Community Survey data

Table 14-b. Tenure by Household Income

Tenure	<15k	15k-35k	35k-50k	50k-75k	75k-100k	100k-150k	>150k
Owner-occupied	296	1,132	1,223	1,689	1,054	625	182
Renter-occupied	680	929	418	346	169	60	0
Total	976	2,061	1,641	2,035	1,223	685	182

Source: 2005-2009 American Community Survey 5-Year Estimate

Figure 14-a. Housing Type by Tenure

Source: Data compiled from VPF, adjusted to American Community Survey data

Figure 14-b. Tenure by Household Income

Source: 2005-2009 American Community Survey 5-Year Estimate

Figure 14-c. Units Affordable by Income Level

Source: Homes for a Changing Region

Affordability

Park Forest has a median household income below the Chicago MSA average ($48,069 versus $60,289) and a higher unemployment rate, at 9.8 percent unemployment. These statistics point toward the need to provide a mix of housing options for a wide range of income levels. To enhance Park Forest's income diversity, higher end housing types should also be considered.

The Homes for a Changing Region study, which is currently underway, is examining housing trends in Park Forest and how the Village's housing stock fits into the subregion and region. As shown on Figure 14-c, the study has identified the number of units available in the Village that are affordable for each income category. The US Department of Housing and Urban Development (HUD) generally defines affordability as when a household pays no more than 30 percent of its annual income on housing costs. Figure 14-c shows that the income bracket of $15,000-$35,000 is overserved by about 1,000 units, while the three income brackets above $75,000 are underserved. This data points toward an oversupply of affordable units at the $15,000-$35,000 range and a shortage of higher end units for those with greater incomes. Most other income categories are relatively well served. According to 2010 census data, the median housing value of homes in Park Forest is $119,600, which is $35,200 more than the median housing value in 2000, indicating an upward trend for housing values in the Village.

Senior Housing

Based on the public kickoff meetings, a large number of seniors identified that they enjoy living in their single-family homes but find maintenance and accessibility of such homes an increasing challenge as they age. Appropriate housing options for seniors are more difficult to find due to physical limitations and the need for smaller living spaces. The Village has some housing specifically designed for seniors. Victory Centre, located just east of DownTown, is a senior housing complex which offers 87 units of independent and supportive housing. Two additional senior buildings, Juniper Towers and Garden House, are managed by the Cook County Housing Authority. Universal design principles, which focus on ensuring that housing is accessible to the elderly and those with disabilities, were not identified as a current requirement for development in the Village.

New senior housing near DownTown.

Housing Diversity: Identified Goals

The following goals were identified for this topic area during the public kickoff meetings:

1. Continue to emphasize diversity of housing stock to attract different types of residents.
2. Provide a wide range of housing types, including housing appropriate for seniors aging in place and veterans.
3. Improve the perception and marketing of smaller single family homes.
4. Provide housing stability and retention of residents.

Table 14-c. Units Affordable by Income Level

	<15k	15k-35k	35k-50k	50k-75k	75k-100k	100k-150k	>150k
Households at Income Level	976	2,061	1,641	2,035	1,223	685	182
Estimated Units at Income Level	817	3,077	1,931	2,190	574	128	85

Source: Homes for a Changing Region

Section 15
Arts & Culture

Park Forest is known around the region for its cultural focus. The Village is currently home to nine organizations that are oriented around showcasing the arts.

Park Forest is well-known in the sub-region and beyond as a center for events related to arts and culture. Arts and culture are part of a community's sustainability because such amenities enhance quality of life for residents, help to attract and retain residents, and attract visitors throughout the south suburbs and the region. Bringing in visitors for events is important for economic development in that it increases the amount of money brought into the community and the exposure that Park Forest gets in the region. There is also an opportunity to further incorporate environmental sustainability into events and the Village's identity. Sustainable events can include initiatives such as the inclusion of sustainable vendors, healthy food options, and zero or reduced waste goals.

Arts- & Culture-Related Programming

There are a number of organizations in Park Forest that provide the bulk of programming related to arts and culture, such as Freedom Hall's Nathan Manilow Theater, Tall Grass Arts Association, Illinois Philharmonic Orchestra, Grande Prairie Choral Arts, and the Illinois Theater Center. Other arts and culture providers in Park Forest are the Park Forest Library, the Muzicnet School of Music, Salon Artist Gallery and the Fieldcrest School of Performing Arts. Additional collaborations exist with nearby entities such as Governors State University Arts Center and The Drama Club and Union Street Gallery in Chicago Heights.

Freedom Hall has been presenting performance events since 1976, including a variety of dance, music, comedy, and lectures. The venue provides programs throughout the year for varying target audiences, such as children, adults and seniors. The cost for the programs is either free or minimal. Freedom Hall's programs take place at the Nathan Manilow Theater, which is a 280 patron seating venue. The goal is to present cultural events in the community and the Chicago Southland region. An emphasis has been placed on providing a well-balanced series to patrons in a professional manner, guaranteeing exposure to inspiring, challenging, and entertaining artists and performances.

The Tall Grass Arts Association began in 1956 as the Park Forest Art Center. Their programs include exhibits, classes, lectures, tours, performances, film series, an Annual Beaux Arts Ball, and an annual juried art fair with artists throughout the Midwest. Tall Grass is a not-for-profit organization with part-time employees and unpaid volunteers. Classes and performances occur throughout the year for children and adults (including seniors). They also have tours and performances for school children in regional and underserved Chicagoland communities. While Tall Grass has fees for some events, many are offered free of charge.

The Illinois Philharmonic Orchestra (IPO) is a 75-member orchestra that began performing in 1978. The non-profit is the largest performing arts organization in the Chicago Southland. The Orchestra's headquarters are in Park Forest, although it performs around the region, with performances taking place between November and May. The IPO draws audiences from over 68 south and southwest suburbs including Chicago, as well as the adjacent states of Indiana and Michigan. The IPO integrates a broad range of repertoire, artistry, education, diversity, and collaborations with its performances. Recently, the IPO was named the "2010 Professional Orchestra of the Year." The IPO provides programs for children, youth, and adults of all ages, with both paid and free events available.

The Illinois Theater Center was founded in 1976 as the first equity professional theater in the far south suburbs. They feature a main stage series of six plays and offer additional programs related to art, drama, music, dance, and creative writing. These include acting classes, readings of classic plays, a summer fest musical, outdoor performances, and a summer arts marathon. There are specific programs targeted to children, teens, and adults of all ages. In addition to these amenities being open to all members of the community, the Illinois Theater Center has ongoing projects designed for the physically and mentally challenged, the economically disadvantaged, and ethnic minorities. The program cost for these programs is minimal or free of charge.

There are also several festivals and parades that take place in Park Forest. These include Main Street Nights, the Tall Grass Arts Fair, 4th of July Parade and fireworks, the opening day for Park Forest Baseball, and the Kiwanis Club's Pancake breakfast. Main Street Nights is sponsored by the Park Forest Parks and Recreation department and consists of a series of seven live concerts free of charge and open to the public. There are typically over 200 attendees present at each concert. All other events are well attended and have been identified as important contributors to the culture of the Village.

As the above summary shows, there are a number of music, visual arts, theater, and festival options for residents in Park Forest. Most programs and amenities are provided at no cost or relatively minimal cost and cater to a variety of audiences. In addition, these entities have a broader audience than the Village proper. In meaningful ways, the arts and culture organizations in Park Forest are ambassadors for the Village in the south suburbs and beyond.

Public Art

The Village has been proactive in developing public art pieces, particularly in and around DownTown. There are two murals, one as a tribute to three major arts institutions in Park Forest (Illinois Theater Center, Illinois Philharmonic Orchestra, and Tall Grass Arts Association) and one representing iconic Village activities, such as the Kiwanis Club pancake breakfast and DownTown farmers' market. Both murals were painted by regionally located artists. There are also several sculptures located in DownTown, which are artifacts remaining from when the area was a shopping mall (see images).

This mural depicts iconic community events in Park Forest.

Public art in DownTown.

Sustainable Events

There are many ways to incorporate environmental sustainability into public events. Some examples include utilizing sustainable vendors, focusing on healthy food options, and committing to reduced or zero waste events. Current events in the Village incorporate some of these principles to a limited extent, although opportunity for improvement has been identified by residents, business owners, and Village staff.

Sustainable vendors are those that have incorporated approaches into their standard business practices that conserve natural resources. Initiatives can be simple choices such as using compostable or recyclable kitchenware and flatware to serve food products, or offering composting or recycling as options for waste. The introduction of organic and/or healthier food options at events is another way to improve the overall health of the community. Reduced or zero waste events involves planning ahead to reduce solid waste from an event, reuse various elements such as banners, and set up recycling and/or composting for appropriate materials such as paper cups, food scraps, and plastic water bottles that are generated by the event. Such events are also a great opportunity to educate event participants about the importance of reducing waste. During stakeholder interviews, both residents and event coordinators voiced their support of participating in reduced waste events yet they realized such an event would require additional planning work and potentially financial resources.

Sustainability-Oriented Identity

Park Forest has a strong image and history based on the fact that it is a unique planned community built to provide housing for veterans returning from World War II. The Village inherently reflects some of the key components important at the time and that are now featured in sustainable developments. Some of those features include compact homes, a walkable street network, access to open space and institutional uses, and access to multiple modes of transportation. The Village now has the opportunity to build upon its history, inherent assets, and environmentally sustainable initiatives to create a new and improved image as a model sustainable community. Such a rebranding presents an opportunity to enhance the pride and retention of existing residents, attract new residents and businesses, and enhance the economic vitality and image of the Village. In addition, a continued focus on sustainability may create a niche for Park Forest with regard to green economic development and tourism. The Village already has great assets to build from, such as its beautiful parks and wetlands, the farmers market, Old Plank Road Trail, the 1950's House Museum, and all of the various arts centers.

Arts & Culture: Identified Goals

The following goals were identified for this topic area during the public kickoff meetings:

1. Support and retain existing fine arts institutions.
2. Establish green practices for events, including "zero waste" events.
3. Further develop a "green" identity.

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Housing Diversity

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Appendix D
Community Outreach Summary

Developing a Public Engagement Strategy

A significant feature of CMAP's Local Technical Assistance (LTA) program is the commitment to broad-based public involvement. The local planning projects that result from the program's competitive application process are each strengthened by the engagement of residents, business owners, and other community members from each municipality or study area. In particular, the LTA program focuses on both reaching and involving those groups and populations that are traditionally underrepresented in planning processes, including low-income persons, minorities, non-English speaking persons, and persons with disabilities.

It is therefore essential to formulate an approach to public engagement that is tailored to each LTA community. In this way, both CMAP and municipal staff can set outreach goals for the project, and keep track of the effectiveness of various strategies to determine what is replicable for future public engagement. This approach is captured in a document called a "project outreach strategy" (PROUST), which describes outreach goals and activities as they align with the steps of the project scope. The PROUST is a malleable document that can and should be updated throughout the project, according to which methods are effective and which target groups require further outreach efforts.

For the Park Forest Sustainability Plan, this PROUST document was supported by background research and initial conversations with the Village staff and other key stakeholders. The first steps to developing the public engagement strategy for Park Forest were: to find out what types of public participation had occurred in the Village prior to this project (see Figure 8 for a relevant worksheet); to learn more about the demographics of the community; and to begin building a comprehensive list of the key stakeholders to involve in the planning process (see Figure 9 for a relevant worksheet).

From this background research, the initial direction of the PROUST was devised, establishing an overarching goal that the project's public outreach would draw from a wide variety of populations with different understandings of and preferences about sustainability. Having learned from the municipality that the Village staff had been successful in the past with engaging neighborhood groups, religious institutions, and social/civic groups in their public meetings, CMAP was able to build on that base and focus on bringing additional groups into the sustainability planning process. This included but was not limited to: youth; multi-family property residents; industrial businesses; transit-dependent residents.

Each LTA project also has a steering committee that serves as a review body at each step of the project. In the case of Park Forest's Sustainability Plan, the decision to form two separate review groups allowed CMAP staff to receive feedback from a variety of perspectives about sustainability. The Technical Advisory Committee (TAC) was comprised of departmental directors and other staff from across the Village, all of whom have a detailed understanding of municipal operations in their field. The second review body was the Citizens Advisory Committee (CAC), which was comprised of active residents and community members in Park Forest. Leaders of the Rotary Club, citizens active with their neighborhood

groups, and other engaged residents helped provide the perspective of the broader population of the Village, balancing the more technical input from municipal staff.

Overall Lessons Learned

Given the outreach strategy determined from the outset of the project, the community engagement activities throughout the project were relatively successful at reaching a diverse range of perspectives about sustainability. Working directly with organizations that cater to specific target populations – like the Police Athletic and Activity Center (P.A.A.C.) to reach its summer campers – was a highly effective way of reaching some typically underrepresented groups. In Park Forest, the municipal staff is extremely helpful in disseminating information about public meetings, and residents seemed to stay tuned into community resources like the Village website, *eNewsPF*, and the quarterly publication of *Discover* magazine. Some targeted groups, like transit-dependent and lower-income residents, were harder to reach specifically and, while adjustments were made to work with the Village's Housing Authority, these groups should continue to be the subject of targeted community engagement as the Village moves forward and updates its sustainability plan.

In particular, the MetroQuest web tool was an extremely effective way of reaching a wider group of people than those who were able to attend public meetings in the evening. In the end, there were over 350 visits to the MetroQuest website, providing CMAP and the Village with countless ideas and strong trends about which types of strategies to include or exclude in the final sustainability plan. This electronic resource fit well with the needs and abilities of the Park Forest community, and therefore it is recommended that the Village use electronic and computer-based outreach methods for future planning processes.

First Phase: Education and Goal-Setting

For the first phase of public engagement, project staff set out to clearly outline the major topics of the sustainability plan and make as many different groups in the community aware of the planning process from the very outset. The two main goals were to familiarize both residents and community leaders with the process of planning for a sustainable future, and to learn from the community members about which issues related to sustainability were most important to them.

This goal-setting process started with speaking to the Village Board and other municipal commissioners and learning about their goals and priorities. Community outreach efforts – designed to bring the project's targeted groups and populations into the process by inviting them to initial public meetings – included:

- Working with the Village to send public meeting announcements via postcard to every residence;
- Using traditional media outlets like the Discover magazine, local newspapers (both in print and electronic), and local access cable;
- Working with other community institutions like the Public Library, various churches, and Rich Township Senior Center to disseminate printed materials;

- Working with multi-family housing administrators, including the various cooperative housing entities and the Autumn Ridge complex, to disseminate printed materials to residents;
- Working with local businesses, nonprofit organizations, and the DownTown Park Forest staff to disseminate printed information to staff and patrons/customers;
- Using the Rich East High School's auto-dialer announcement system to call every family about the initial public meetings;
- Inviting previously identified stakeholders to spread information about the project to their family, friends, neighbors, and students.

Initial Public Meetings and Results

The first phase of public input included both a youth-oriented meeting and a more general "all ages" meeting, both of which were held on evenings in July 2011, at the Dining of the Green Banquet Hall in DownTown Park Forest.

The youth meeting was designed specifically for children and young adults to learn about the planning process and explore different topics related to sustainability, sharing with CMAP and municipal staff about their goals for the future of their community. Over 120 young people, ranging in age from 10 to 21, attended from a youth summer camp program and the local high school to participate in the meeting. After an introduction to the project and the topics of the sustainability plan, the participants were broken up into small groups of approximately 10 people to have discussions about their main issues related to the environment, the economy, and equity in the community (which are the "3 E's" of sustainability). Facilitators recorded the participants' biggest concerns and their ideas about how to address topics like water conservation, energy efficiency, and land development. The young people had lively discussions and illustrated some of their most important ideas at each table.

The general public meeting was open to residents of all ages, and it had a similar format of an introductory presentation, followed by small-group discussions of the different topics of the sustainability plan. Over 50 residents and community leaders attended the public meeting, participating in interactive keypad polling throughout the meeting, which allows people to answer questions and for aggregated group results to be displayed in real time (see Figure 1 for an example).

The majority of participants answered demographic questions (see Table 5), and then everyone was divided into five working groups to discuss their vision and goals for the following five topic areas: Planning & Design; Natural Systems; Energy & Climate; Economic Development; and Equity & Social. Each group identified their top two goals per sustainability issue, and then the whole group of meeting participants returned to the keypad polling to vote on their individual preferences for the most important goals of those that were expressed during the small group discussions. Figure 2 provides a sample slide of the group's preferences for different goals related to transportation in the Village, and Table 5 contains the group voting results for each of the various topics.

Figure 1: Keypad Polling Slide about Outreach Methods for Public Kick-Off Meeting, July 14, 2011

Figure 2: Sample Keypad Polling Slide: Group Voting on Top Goals Expressed by Meeting Participants, July 14, 2011

Second Phase: Strategies for the Future

Building from the vision statements and goals that were expressed during the first phase of public engagement, the next step was to ask the community to help identify the strategies that could best achieve their goals for Park Forest's future sustainability. A public workshop was held on November 30, using the same methods for public outreach to alert residents about the meeting. Approximately 40 participants attended, spending time working in small groups to brainstorm potential strategies for each topic of the sustainability plan. Next, just as with the first public meeting, the most popular strategies were compiled and the entire group used keypad polling to vote on their favorite strategies. Participants could also indicate which potential strategies they would choose to exclude from the sustainability plan. See Table 6 for demographic data on the meeting participants.

Also as part of this exploration of strategies with the public, a series of four focus groups were held for residents interested in sharing further feedback about specific topics. These focus groups, held in January 2012, covered the topics of Transportation, Education, Economic Development, and Green Building.

MetroQuest Web Tool

The primary public engagement tool used for the second phase of public outreach in the development of Park Forest's sustainability plan was an online interactive tool called MetroQuest. MetroQuest is a public engagement software package that can be customized to gather community input on planning processes. As part of the Local Technical Assistance (LTA) program, CMAP contracted with MetroQuest to utilize this software for public engagement activities on many of the LTA projects. The CMAP project team, with input from the Village and the Center for Neighborhood Technology, worked to develop a project-specific version of MetroQuest to meet the public engagement needs of Park Forest's sustainability plan.

The purpose of using this tool was twofold. First, employing an online tool gave this project potential to engage more stakeholders than traditional face-to-face meetings, as MetroQuest was available to the broader public for a period of three months. Second, it was critical to understand which strategies were most and least important to local stakeholders. The input received through this process helped to shape the combination of strategies that were ultimately included in the plan.

In addition to collecting public feedback online, this MetroQuest module needed to be flexible enough to be used in multiple venues – as it is important to collect the same data from all stakeholders. Therefore, MetroQuest was used not only as a stand-alone online tool, but also as the foundation of the interactive part of the second public workshop.

In the first phase of public outreach, CMAP gathered input as to what the residents of Park Forest's vision and goals were for a sustainability plan. Armed with this information, CMAP set out to include many of the common issues, themes, and ideas expressed at prior workshops into MetroQuest for the second phase of public engagement. Ultimately, there were ten goals included in MetroQuest. Each goal

had four or five strategies that were put forth for public feedback, 47 strategies in all. All the goals and strategies can be seen in Table 1.

Table 1: Park Forest MetroQuest Goals and Strategies

Goal	Strategy
Biking and Walking:	Designate bike lanes on key streets
Become more bicycle and pedestrian	Require bicycle parking for new commercial developments
friendly.	Expand connections with the regional trail system
	Maintain and promote existing mid-block walkways (cut-throughs from one block to another)
	Ensure that street designs consider the needs of all users and residents
Buildings and Development:	Create new zoning and building standards to require sustainable development
Encourage green buildings and	Require preservation of natural resources in development regulations
development.	Convert residential land at key intersections to commercial uses to create neighborhood shopping areas
	Create a homeowners manual that includes guidance on affordable, sustainable home improvements
	Provide information to the general public on grants, incentives, and programs related to green building
Community Health and Wellness:	Set up a system to collect health indicator data to track community health
Improve the overall health and	Connect more residents with the Health Department's services
wellness of the community.	Develop public programs and events to prevent disease and improve overall wellness
	Increase variety in Village-provided recreational programming
Energy:	Provide resources for home or business energy audits to encourage efficient energy use
Reduce greenhouse gas emissions	Encourage replacement of older, less efficient appliances with energy efficient appliances
through increasing energy efficiency	Develop an energy efficiency campaign to encourage modified energy use behavior and habits
and alternative energy options, while	Create an ordinance to allow for onsite renewable energy generation
reducing energy costs.	Develop a community energy challenge to lower energy consumption
Flooding and Water Pollution:	Allow and incentivize green infrastructure (permeable pavement, rain gardens, green roofs)
Improve our community's ability to	Require new developments to retain a percentage of stormwater onsite
reduce flooding and water pollution.	Run educational programs about water pollution and how to prevent flooding
	Upgrade storm sewer infrastructure to alleviate flooding and prevent water contamination
Green Economy:	Develop financial incentives to promote and attract green businesses
Focus on the green economy as a niche	Create a green business recognition program
for economic development.	Provide assistance to businesses in implementing green practices
	Create a buying co-op for the Village and local businesses to purchase goods in bulk at lower prices
	Create opportunities for a wider range of businesses to operate out of residences
Local Food:	Create community gardens program
Bolster the local food economy.	Develop standards for urban agriculture to permit small farm animals on residential lots
	Institute a “farm to school” program to connect students with where food comes from
	Develop educational programming on local food, nutrition and cooking
Public Transportation:	Work with Pace to explore improved service and transit amenities (including real-time arrival information)
Enhance the Village's transit services	Expand Jolly Trolley connector service
and amentities.	Provide information to the public about the value and savings associated with public transit
	Establish car sharing services at Metra stations and other key locations
	Residents pledge to take one less trip per week by private vehicle
Waste:	Pledge to increase the amount of waste recycled by residents and businesses
Reduce the amount of waste sent	Develop a composting pilot program to collect food waste in a targeted residential area
to landfills.	Require recycling of construction and demolition debris
	Provide businesses with resources for waste audits to identify opportunities to reduce waste
	Install recycling receptacles in all public places
Water Resources:	Develop a plan to identify ways to prevent strain on the Village's shared water supply
Ensure the community is managing and	Raise public awareness about the dangers of dumping pollutants in the Village's water sources
utilizing water resources sustainably.	Launch a campaign to raise awareness about the importance of water efficiency and conservation
	Improve utility services via accurate water pricing and improving infrastructure
	Allow and encourage rainwater reuse for irrigation and toilet flushing

Park Forest MetroQuest Site Experience

Upon visiting MetroQuest the user was taken through a series of facts about the Village. This first screen, Our Challenge, sets the stage (see Figure 3). Stating that Park Forest is one of only a handful of the 284 municipalities in our region that is embarking on a sustainability plan, the introductory screen is meant to compel the user to think about the need for sustainability in the Village.

Figure 3: "Our Challenge" Screen of MetroQuest Website

There were five facts about the village that would scroll on this front page. Each fact came directly from the existing conditions report:

> Park Forest was originally designed so that residents and visitors could walk to amenities like stores, schools, and parks. The Village is ahead of the curve for achieving sustainability, but there is also some room for improvement.
>
> Driving is responsible for almost half of Park Forest's greenhouse gas emissions. In 2007, Park Forest's average resident drove over 50 miles per day.
>
> Energy costs are rapidly rising. The typical Park Forest household spent over $1,500 on natural gas and electricity last year.

Inactive lifestyles and poor diets have negative effects on public health. In Cook County, about 63% of adults and 40% of children are classified as overweight or obese.

Given the challenges we face, how will we create a sustainable future for Park Forest? That depends on you. Click on the Rank Goals tab to the right to get started.

The second screen, Rank Goals, included the aforementioned list of goals for prioritization (see Figure 4). These goals came directly from input received at public workshops, and consequently became some of the chapters for the sustainability plan. The user was then asked to rank at least five goals that were important to him or her by pulling them above the yellow line with the computer's mouse.

Figure 4: "Goals" Screen of MetroQuest Website

Each goal had a brief description and fact from the existing conditions report:

> Biking and Walking: Become more bicycle and pedestrian friendly. Non-motorized transportation, such as bicycling and walking, causes the least environmental harm of all travel modes.
>
> Buildings and Development: Encourage green buildings and development. In the Chicago metropolitan area, about 61 percent of emissions come from buildings, while in Park Forest, 42.9 percent of emissions come from buildings.

Community Health and Wellness: Improve the overall health and wellness of the community. Unique among municipalities of its size, Park Forest has its own Health Department. The Health Department was established in 1952 and provides low-cost preventative health and home-based nursing services to the southern suburbs.

Energy: Reduce greenhouse gas emissions through increasing energy efficiency and alternative energy options, while reducing energy costs. Switching from traditional sources of fuel to renewable energy is one way that residents and the Village may be able to reduce greenhouse gas emissions and energy bills.

Flooding and Water Pollution: Improve our community's ability to reduce flooding and water pollution. The Central Park Wetlands prevents approximately 45 million gallons of stormwater annually from entering the sewer system for a one-inch rainfall.

Green Economy: Focus on the green economy as a niche for economic development. The green economy represents an opportunity for the Village. Currently, two percent of all businesses in Park Forest are sustainability-related, with about 150 jobs associated with those businesses.

Local Food: Bolster the local food economy. The Village has two long-standing institutions that provide great access to fresh produce for its residents: the DownTown farmers' market (operating for 38 years) and the South Suburban Food Cooperative (in business for 37 years).

Public Transportation: Enhance the Village's transit services and amenities. The average household in Park Forest drove over 19,000 miles annually in 2007, which exceeded the Cook County average by about 4,000 miles.

Waste: Reduce the amount of waste sent to landfills. Last year, single family homeowners in Park Forest recycled 25 percent of their waste. The national average for municipal recycling is around 34 percent.

Water Resources: Ensure the community is managing and utilizing water resources sustainably. In November 2007, a new Village Water Supply and Treatment Plant opened. This new plant recycles water and serves about one month's worth of water demand every year.

Once completed, the user could then move on to screen three, Choose Strategies (see Figure 5). This screen allowed users to review a few of the potential strategies for inclusion in the sustainability plan. In an effort to keep the online experience engaging but not overwhelming, staff chose to include strategies that they were looking for the most feedback on.

Since every strategy included on the website would yield a positive impact on achieving each goal, it was important to give users some additional information to help them determine which strategies – in their opinion – might be most appropriate. To do this, CMAP looked at each strategy across every goal and gave each a one, two, or three "impact" score, and a one, two, or three "cost" score (see Figure 6). Some strategies were high cost, low impact while others were low impact but high cost, and still others were mid-level impact and cost. The "impact" and "cost" scores were measured by tool bars at the bottom of the Choose Strategies page. The purpose of this metric was to urge the user to think about possible trade-offs while selecting strategies for inclusion or exclusion.

Figure 5: Instructions on the "Choose Strategies" Screen of MetroQuest Website

Figure 6: Sample Strategy from the "Choose Strategies" Screen of MetroQuest Website

Once users had given their feedback, the final screen, Get Involved, gave users additional project information and links to Park Forest and CMAP's project information pages (see Figure 7). The Get Involved page also asked users for their name, email address, gender, and age. None of the demographic information was mandatory. However, participants who left contact information were contacted about the final public open house and will be added to distribution lists for future project updates.

Figure 7: "Get Involved" Screen of MetroQuest Website

MetroQuest Outreach and Results

On November 30, 2011, MetroQuest was unveiled at a public meeting at Dining on the Green in DownTown Park Forest. The site was used during the meeting as an introduction to thinking about possible strategies before participants broke off into small group discussions. After the break-out discussions, MetroQuest was utilized to end the meeting. Table groups were asked to share their top strategies with the room and this information was put directly into MetroQuest. Finally, each goal's strategies were voted on using keypad polling.

At this meeting, most of the top strategies that participants selected ended up aligning with the top strategies expressed by the general public through MetroQuest (see Table 2 for the list of ranked

strategies). These similarities between the public workshop feedback and the input from MetroQuest spanned the different goals.

At the meeting, keypad polling revealed that the most popular strategies were to: create a community gardens program; install recycling receptacles in all public places; develop an energy efficiency campaign; and upgrade storm sewer infrastructure.[1] Each of these strategies was also on the top 20 list of strategies from MetroQuest. Other popular strategies during the public meeting were to work with Pace to improve transit options, connect residents to the Health Department's services, and provide more information about green building resources. While the participants voted on their top strategy for each goal individually, this workshop was based upon building consensus on a single top strategy. However, participants were told that they too could give detailed, individual feedback online using MetroQuest.

Table 2: Top 20 Strategies Ranked at the Public Workshop

Workshop Ranking	Goal	Strategy	Keypad Polling Percentage
1	Local Food	Community gardens program	52.8%
2	Waste	Recycling receptacles in public places	50.0%
3	Energy	Energy efficiency campaign	47.4%
4	Flooding & Water Pollution	Upgrade storm sewer infrastructure	47.2%
5	Biking & Walking	Designate bike lanes on key streets	46.0%
6	Community Health	Connect residents w/ Health Dept.	42.9%
7	Public Transportation	Jolley Trolley	40.6%
8	Green Economy	Assist businesses in green practices	40.0%
9	Water Resources	Campaign on water conservation	37.8%
10	Public Transportation	Improved service & amenities (Pace)	37.5%
11	Biking & Walking	Street designs consider all users	32.4%
12	Flooding	Allow/incentivize green infrastructure	30.6%
13	Buildings & Development	Information related to green buildings	29.7%
14	Community Health	Increase variety in recreational programs	28.6%
15	Waste	Pledge to increase recycling	27.8%
16	Buildings & Development	Homeowners manual	27.0%
17	Water Resources	Water pricing and improved infrastructure	27.0%
18	Green Economy	Green business recognition program	22.9%
19	Flooding & Water Pollution	Educational programs (pollution/flooding)	22.2%
20	Local Food	"Farm to school" program	22.2%

[1] Keypad polling results, conducted by CMAP, November 30, 2012.

Following this public meeting, emails were sent to meeting participants, as well as people who had previously signed up to be involved in the development of the Sustainability Plan but could not make it to the public meeting. The emails encouraged individuals to participate and share the MetroQuest website with others who might be interested in being involved. Staff also made and distributed posters with the web address throughout the Village in public places and at housing co-ops. In addition to the work CMAP outreach staff did to promote the site, the Mayor of Park Forest made a video which asked residents to participate in the public input process. This video was linked on the Village's home screen of their website. Lastly, local press coverage of the sustainability planning process in *eNewsPF* also promoted the MetroQuest tool and encouraged readers to access the site and give their input.

The Park Forest Sustainability Plan MetroQuest site was live from November 30, 2011 through February 29, 2012. During this three month period when the MetroQuest site was live, CMAP received direct input from 128 individuals. The site also received approximately 320 unique visitors during this same time period. Online users were able to rank goals, weigh in on proposed strategies, suggest additional goals, add general comments about each goal, and suggest new strategies for consideration. The following two tables display the ranked data received though MetroQuest.

Table 3: Average MetroQuest Goal Rankings

Overall Rank	Average Position	Goal
1	2.95	Energy
2	3.12	Buildings
3	3.14	Waste
4	3.22	Water Resources
5	3.29	Green Economy
6	3.37	Community Health
7	3.38	Local Food
8	3.40	Public Transportation
9	3.81	Flooding
10	4.00	Biking

Table 4: MetroQuest Top 20 Strategy Rankings

Rank	Goal	Strategy	Average
1	Public Transportation	Work with Pace to explore improved service and transit amenities	3.08
2	Flooding & Water Pollution	Allow and incentivize green infrastructure (permeable pavement, rain gardens, green roofs)	3.04

3	Water Resources	Improve utility services via accurate water pricing and improved infrastructure	3.04
4	Local Food	Create community gardens program	3.03
5	Biking & Walking	Expand connections with the regional trail system	2.97
6	Flooding & Water Pollution	Upgrade storm sewer infrastructure to alleviate flooding and prevent water contamination	2.94
7	Water Resources	Allow and encourage rainwater reuse for irrigation and toilet flushing	2.93
8	Local Food	Institute a “farm to school” program to connect students with where food comes from	2.90
9	Waste	Install recycling receptacles in all public places	2.83
10	Buildings & Development	Provide information to the general public on grants, incentives and programs related to green building	2.82
11	Energy	Encourage replacement of older, less efficient appliances with energy efficient appliances	2.80
12	Community Health	Connect more residents with the Health department’s services	2.78
13	Community Health	Increase variety in Village-provided recreational programming	2.78
14	Green Economy	Develop financial incentives to promote and attract green businesses	2.77
15	Energy	Develop a community energy challenge to lower energy consumption	2.77
16	Water Resources	Raise public awareness about the dangers of dumping pollutants into the Village’s water sources	2.73
17	Energy	Create an ordinance to allow for onsite renewable energy generation	2.72
18	Biking & Walking	Ensure that street designs consider the needs of all users and residents	2.71
19	Waste	Pledge to increase the amount of waste recycled by residents and businesses	2.71
20	Green Economy	Provide assistance to businesses in implementing green practices	2.69

Third Phase: Review of Draft Plan

The final phase of the project’s public outreach efforts focused on providing the public with an opportunity to review and comment on the draft Sustainability Plan, which they helped to shape with their input and ideas over the previous ten months. The Public Open House was held in Park Forest during the evening of March 20, 2012. There was no formal presentation; rather, attendees were encouraged to arrive whenever was most convenient to read through and discuss the Plan draft's recommendations (which were outlined on poster boards). A total of approximately 30 attendees

participated in the opportunity to learn more about the final strategies and corresponding indicators proposed in the Plan to promote the Village's long-term sustainability.

CMAP and Village staff were available to answer questions. There was also a short electronic presentation that ran on a loop, which gave an overview of the planning process and Plan elements. Participants left comments on both the display boards as well as comment cards. In particular, these public comments expressed support for and interest in the plan's recommendations on education, energy, and nonmotorized transportation.

Keypad Polling Answers from Public Meetings

Table 5: Keypad Polling Results of Questions at Public All-Ages Kick-Off Meeting, July 14, 2011

1.) Test Question: What is your favorite summertime activity? (multiple choice)	**Responses**	
Exploring Thorn Creek Woods	5	10%
Walking around the Farmer's Market	5	10%
Taking a bike ride on Old Plank Road Trail	9	18%
Hangin' by the pool at the Aqua Center	8	16%
Other fun activity!	23	46%
Totals	**50**	**100%**

2.) How old are you? (multiple choice)	**Responses**	
Under 25	1	2.08%
25-40 years old	1	2.08%
41-60 years old	16	33.33%
61-75 years old	22	45.83%
76 years or better	8	16.67%
Totals	**48**	**100%**

3.) What is your race? (multiple choice)	**Responses**	
African American	10	21.74%
American Indian	1	2.17%
Asian American	0	0%
Hispanic	0	0%
Pacific Islander	0	0%
White	31	67.39%
Other/prefer not to answer	4	8.70%
Totals	**46**	**100%**

4.) How are you affiliated with the Village? (multiple choice)	**Responses**	
Resident	40	80%

Business owner	0	0%
Employed in Village	0	0%
Both live and work in Village	8	16%
Student	0	0%
Other	2	4%
Totals	**50**	**100%**

5.) I found out about this meeting from… (multiple choice)	**Responses**	
Postcard mailed to my home	17	35.42%
Poster / postcard around town	2	4.17%
Village website	1	2.08%
eNewsPF or other media publication	11	22.92%
A neighbor/friend/family member	13	27.08%
Rich East HS auto-dialer call	0	0%
Other	4	8.33%
Totals	**48**	**100%**

6.) How much do you know about sustainability? (multiple choice)	**Responses**	
I work in the field / expert	10	19.61%
I try to be sustainable in my life – recycling, etc.	31	60.78%
I care about it, but do not know much	5	9.80%
I am a blank slate and I am here to learn!	5	9.80%
Totals	**51**	**100%**

Top 2 Goals for Development Patterns?

	Responses
Infill development on vacant land	24%
Preserving open space	22%
Improving housing stock	26%
Urban design standards downtown	7%
Change land use along major arterials	21%
Totals	**100%**

Top 2 Goals for Green Building?

	Responses
Efficient practices for municipal buildings	32%
Residential retrofits	44%
Reuse of building materials	24%
Totals	**100%**

Top 2 Goals for Transportation?

	Responses
Nonmotorized Networks	16%
Easier Biking	10%
Create better linkages between travel modes	28%
Better road maintenance	21%
Improved bus service	13%
Explore car-sharing	6%
Prepare for increased traffic in community	6%
Totals	**100%**

Top 2 Goals for Water?

	Responses
Rainwater harvesting	12%
Native landscaping	15%
Reducing chemicals	31%
Onsite management of stormwater	10%
Maintain the public water system	32%
Totals	**100%**

Top 2 Goals for Open Space?

	Responses
Using native landscaping	59%
Increase land devoted to parks	41%
Totals	**100%**

Top 2 Goals for Greenhouse Gases?

	Responses
Reduce energy consumption	19%
Reduce energy waste	19%
Improve infrastructure	18%
Reduce emissions from vehicle miles traveled	9%
Improve energy technology	16%
Commitment from all to reduce consumption	19%
Totals	**100%**

Top 2 Goals for Renewable Energy?

	Responses
Increase percent of energy provided from renewable sources	29%
Develop local renewable energy sources	24%
Provide incentives for participation	16%
Promote district energy in Village	13%
Partner with other governments	18%
Totals	**100%**

Top 2 Goals for Local Business/Green Jobs?

Responses

Support and attract green businesses	22%
Make efforts to retain current businesses	21%
Attract businesses that take advantage of transportation assets	9%
General business attraction	25%
Promote businesses that apply green practices	23%
Totals	**100%**

Top 2 Goals for Local Food Systems?

	Responses
Promote locally produced foods	53%
Patronize the Village's farmers market	47%
Totals	**100%**

Top 2 Goals for Education?

	Responses
Better materials about the community's history	34%
Support education for Village officials	13%
Community collaboration	25%
Support educators	28%
Totals	**100%**

Top 2 Goals for Arts and Culture?

	Responses
Support existing arts resources	43%
"Zero-waste" events	30%
Healthier food options at events	27%
Totals	**100%**

Table 6: Keypad Polling Results of Demographic Questions at Second Public Meeting, November 30, 2011

What is your age?

	Responses
Under 19	4%
20 – 29	0%
30 – 39	4%
40 – 49	8%
50 – 59	20%
60 – 69	32%
70 or better	32%
Totals	100%

What is your race/ethnicity (select all that apply)?

	Responses
African American / Black	33%
American Indian / Native American	3%
Asian American	0%
Hispanic / Latino	3%
Pacific Islander	0%
White	45%
Other/prefer not to answer	15%
Totals	100%

How are you affiliated with the Village?

	Responses
Resident	66%
Business owner	3%
Employed in the Village	3%
Both live and work in the Village	19%
Other	9%
Totals	100%

Additional Tables and Outreach Templates

Table 7: General comments received through MetroQuest suggesting additional goals

Additional Goal Suggestions
Using what we already have.
A community where the residents can feel safe to walk down the street and not be accosted by teen thugs. A community where you can feel safe to leave your home and no worry it will be burglarized.
Area businesses: coffee shop, upscale grocery, restaurant that serves delicious and healthful food.
Businesses
Education. Park Forest needs to demand better schools, better school boards and governance for our school systems. Then our community will be a desired place to live.
Encourage youth training programs to help create gardens and help recycle waste.
fix the brown tap water, number 1 PRIORITY
lower property taxes
Public Education
RESTAURANTS BOWLING ALLEY GROCERY STORES MORE MOVIE THEATERS
Safety of residents at home and in schools - moving out of the community seems to be happening more and more often and that is certainly not "green."
Top Quality School System: Ranked High for Student Accomplishment/academic excellence, Wide Range of excellent programs in the arts

Eliminate rentals within the Village. This will help reduce crime. I'm sure if a study is done, it will show there is a larger of proportion of crimes committed within the village from renters than from homeowners.
Public safety. Crime has steadily increased since I moved to town in 1990 and it is due to the Section 8 and other elements from Chicago moving to Park Forest.
Reduce real estate taxes. challenge every amenity and program to reduce or eliminate programs that no longer serve a larger number of residents. Our taxes are almost twice what surrounding similar property and the market values reflect that. Bringing businesses to the village requires giving up normal tax revenue setting us up for temporary business ventures who leave when the full tax burden is about to become in effect. While schools make up a sizable percentage of our tax bill, I still think there are ways to reduce not continue to increase the village portion.
Good Schools

Table 8: User comments from MetroQuest on specific goals

Goal	Comment
Biking	The best way to be more bike/ped friendly is to reduce risk of crime so people are not afraid to go out on the Old Plank Trail or in the forest preserves. I am afraid to go out alone now. I grew up in PF and biked everywhere - I miss it.
Biking	We need bike lanes and signs indicating these lanes.
Buildings	well-kept homes, no gutters growing weeds, no garages bulging with storage items, no attention to cleanliness, driveways with vehicles parked on lawns as well as driveways. let's be able to take pride in our neighborhoods, that they are clean and safe.
Community Health	Our health department can't do much under its mission. How about provide consulting to residents on health insurance, and how to get Medicaid or Medicare if eligible, or other low cost health insurance? Health Insurance is the biggest factor in access to health care.
Energy	Many alternative energy executions cost much more than they will ultimately save. Federal subsidies, uncalculated materials and construction costs and then inefficient production of energy wastes public and private money. Much more can be done to provide energy independence, stem the historic flow of treasure from our country to outside powers to import energy we could drill and refine here. I see many electric solar companies going bust now that the federal money has run out, acres all over the country of idle windmills that need maintenance never accounted for in the initial proposals and mandated corn ethanol creating world hunger, increased prices for corn for all uses, poor gas mileage using ethanol and higher energy costs than traditional petroleum. While I agree with the concept, spending money just for the idea when the present technology is not yet there for the alternative energy companies to make it in an open market competitive environment means it should not be mandated at additional cost to taxpayers because of underlying political considerations.
Energy Waste Flooding	Any time I see the words "sustainable" and "development" used in the same sentence, a HUGE red flag goes up for me because of Agenda 21. I would like to know if Park Forest, IL is part of Agenda 21.
Flooding	The wetlands is one of my most favorite places in the South Sub.
Green Economy	I like the idea of green economy but please watch how much legislation is put in place. I do not always feel that PF is business friendly - we

	keep our fingers in our residents' business too often and make it too hard to work here. Reward good things, incent positive steps but don't make it restrictive.
Green Economy	I would like to know who this is that is green related.
Local Food	When you look at food production, distribution and consumption as a whole it produces about 26% of our CO2 emissions. We need to look not only at having supply outlets in town but also we need to look at producing food locally. Most food we eat travels 1500 miles to reach our plates. Our local crops have become corn and soybean. The small farmer has been driven from the land. We need to look at helping residential property owns to develop sustainable land by encouraging local gardening, poultry, bee keeping, etc. Not only would residents have a healthier lifestyle but we would reduce the emissions impact our food supply has on the environment. More information can be found in "Diet for a Hot Planet" Anne Lappe, at your local library.
Local Food	"Local" needs to be defined. I don't consider vendors from Michigan and Southern Illinois to be local. Most of the crops I see at the Park Forest Farmers Market are NOT local; they are from Texas, Kentucky (sweet corn, tomatoes) and come from the same sources that Dominick's and Jewel uses to get produce. The down town farmers market is kind of a joke and marketing ploy if you ask me. If the market increased standards and truth in labeling, perhaps the market would grow a spine and a reputation for being a good place to get truly local produce. How about a permanent location with permanent stalls and more days a week?
Local Food	The co-op is a good thing but they cannot offer prices that the big stores can. Not everyone can afford the high prices. The village should be active in trying to get a food store here, by giving incentives for someone to come here.
Local Food	I have long thought that the farmers market although a fun place has undermined and helped take the profit from every grocery store it competed with since it's beginnings. No Park Forest business enjoys the constant relentless marketing the farmers market has enjoyed.
Public Transportation	Public transportation infrastructure is poor unless you commute to Chicago for work. With no grocery store in town many people are bereft of options to get to shopping areas for the basic necessities of life.
Waste	We need recycle bins in the center areas. Promote recycling more.

Table 9: Suggested strategies received through MetroQuest

Additional suggested strategies
Ask Pace to construct a weather barrier at the bus stop area.
attract new businesses to the village
Get us a grocery store
Highlight federal, state, and local funding available for greening your homes, as well as the quotes from utility companies.
I am leery of any village using eminent domain to take residential land for development.
Promote beekeeping within village limits
Promote gardening and fruit trees on homeowner lots
Set higher standards for the farmers market, such as defining what "local" is, and making vendors disclose the origination of their "crops".

cook books and free recipe ideas can be tied in with the community health programs and encourage children to explore cooking the things coming out of the community garden.
Find a better location for the farmers market.
I have invented a wind and water paddle wheel the concept idea is to use it to filter gutter water and when not in use collect wind off roof. store and save energy!
I have lived in this area all my life and the fact that the Village of PF has been given the water rights without the consent of the original tribal owners is tragic.
not all streets are handicapped accessible and no attention is paid to repairing streets in need of patching.
PF already has enough empty buildings to last a lifetime do not even think about building more until you fill the vacant space you have caused to leave by raising taxes and over regulation.
PF has children walking in the streets, biking in the streets and people ignore drivers rights in favor of ticketing the driver. We have sidewalks in PF teach the children to use them. As far as biking lanes go I think it's a bad idea which will lead to more accidents.
The laws are on the books for a reason and unless they can show good cause the law should not be changed. And to over burden the homeowners with costly building upgrades is a dis-service to families which should be allowed to grandfather in on many repairs.
The vacant lots PF is promoting by demolition of single family residences can be recreated into community garden plots.
The Village already over taxes the residents if they (PF) were allowed to buy in bulk I fear they would just keep the savings for themselves and charge the residents the retail price.
The Village neglects the walk through areas counting on the neighboring residents to maintain the property.
to require new developments to retain their own rainwater will be costly and require additional consideration as well as reducing the collection of funds paid to the village.
with regard to an energy consumption contest how about asking the school kids to design posters on energy awareness and conservation.

Figure 8: Previous Public Participation Worksheet

The following worksheet template is used by CMAP outreach staff at the beginning of every LTA project, both to become better acquainted with the community and to ascertain what methods of public

engagement will be most effective for the given project. The details gathered with this worksheet, along with additional research about the demographics and background of the community, form the basis of the PROUST strategy document.

LTA Outreach Community Participation Information Form

Community Information			
Community Name & Address:			
Main Contact/Title:			
Main Contact Email:		**Phone /Fax:**	
Community Website:	**Best time to contact:**		

Instructions

To provide a clear concept of your community and to allow Chicago Metropolitan Agency for Planning (CMAP) to assist with and/or generate a strong public participation process, please answer the following questions.

What are examples of community participation that have occurred to date and relate to this LTA project (and how was such feedback incorporated into your planning activities)?

Please describe a typical public meeting in your community. What have been the previous successes and challenges while utilizing community participation in any planning process?

Please describe your priority audience and any specific goals when presenting community plans:

What tools do you utilize to collect community input for various community projects?

What are the "hot button" topics that tend to galvanize the public and get people to events in your community?

Please describe your typical methods for advertising a community/public meeting:

Who is your media contact, and will we want to distribute in languages other than English?

Do the constituents in your community tend to be tech-savvy and computer-literate?

Should we post event information on your municipal website, and if so who is the IT contact person?

Please list three ideal community locations for public meetings:

1)

2)

3)

What are the AV capabilities – projector(s), screen(s) or blank walls, local access TV broadcasting?

When are the preferred days and times of day to hold a public meeting in your community?

Are there other community events scheduled in the coming months when we could partner?

When are the Planning Commission and Zoning Board meeting dates (or are they accurate on your website)?

Figure 9: Stakeholder Analysis Worksheet

STAKEHOLDER ANALYSIS

Identify potential stakeholder (individual or group)	Position regarding this plan (supportive, dissenting, etc.)	Potential Steering Committee member?	Candidate for other outreach?	Notes about resources	Contact person(s) & information
	_____	☐	_____		
	_____	☐	_____		
	_____	☐	_____		
	_____	☐	_____		
	_____	☐	_____		
	_____	☐	_____		
	_____	☐	_____		

Adapted from the University of Wisconsin - Center for Land Use Education's *Public Participation Plan*, 2004