



# Comprehensive Plan

Village of Pingree Grove | Adopted October 19, 2015

Prepared by



with assistance from





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## **Thank You to the Pingree Grove Community**

A special thank you to all who participated in the planning process for the Village of Pingree Grove Comprehensive Plan. This Plan was made possible by the contributions and insights of the residents, business owners, property owners, and representatives from various groups and organizations.





# CONTENTS

1 Chapter 1  
Introduction

7 Chapter 2  
Community  
Profile

39 Chapter 3  
Land Use &  
Development

75 Chapter 4  
Transportation  
& Mobility

89 Chapter 5  
Community  
Facilities

103 Chapter 6  
Parks,  
Open Space &  
Recreation

115 Chapter 7  
Water  
Resources

129 Chapter 8  
Image &  
Identity

143 Chapter 9  
Implementation

A Appendix  
Green  
Infrastructure  
Toolbox





# INTRODUCTION

# 1

The Village of Pingree Grove has grown exponentially since the adoption of its previous Comprehensive Plan in 2003. At that time, the Village was a small hamlet of less than 200 residents with a significant residential subdivision pending development. That project included what is now known as the Cambridge Lakes and Carillon neighborhoods and transformed the Village with the addition of more than 5,500 residents. Understanding that a new vision was needed for a changed community, in September 2014, the Village of Pingree Grove kicked-off a 12-month process to create a new Comprehensive Plan.

This Plan establishes a community vision to serve the Village over the next 15 to 20 years. The Plan functions as the Village's primary policy guide for growth and development and provides recommendations for transportation and mobility, community facilities, parks and environmental areas, water resources, and image and identity.

## PURPOSE OF THE COMPREHENSIVE PLAN

A Comprehensive Plan is a municipality's guide for growth, development, and physical improvement. These documents should be reflective of a local community, utilizing extensive community input to identify the vision residents have for their future and providing tangible actions that can be undertaken to achieve that vision.

At its foundation, a Comprehensive Plan is a "how-to" guide, providing guidance on land use patterns, movement to and through the community, maintenance and expansion of community facilities, the management of parks and environmental resources, and the establishment of a local identity. Community input was pivotal to crafting the Comprehensive Plan, with opportunities for residents to voice their opinions, provide feedback, and share ideas provided throughout the planning process.

## CHICAGO METROPOLITAN AGENCY FOR PLANNING

The Chicago Metropolitan Agency for Planning (CMAP) is the official regional planning organization for the northeastern Illinois counties of Cook, DuPage, Kane, Kendall, Lake, McHenry, and Will. Funding for the Village of Pingree Grove Comprehensive Plan was provided by CMAP as part of its Local Technical Assistance program.

## Local Technical Assistance (LTA) Program

In October 2010, CMAP was awarded a Sustainable Communities Regional Planning grant by the U.S. Department of Housing and Urban Development (HUD) to assist with the implementation of GO TO 2040, the comprehensive regional plan to help the seven counties and 284 communities plan together for sustainable prosperity through mid-century and beyond.

With funding from this grant, CMAP launched the LTA program which provides grants and consultant assistance to local government to engage in planning activities that advance the principles of the GO TO 2040.

# ORGANIZATION OF THE PLAN

The report is organized as follows:

**Chapter 1: Introduction.** This section outlines the purpose, structure, and the organization of the comprehensive plan and planning process. It also reviews the legal planning jurisdiction and boundary agreements that define the area's scope and definition.

**Chapter 2: Community Profile.** This section provides a review of the community as it exists today, including existing land use, current zoning and development controls, and a review of market and demographics. The section also includes a summary of community outreach conducted in support of the planning process.

**Chapter 3: Land Use & Development.** This section illustrates and describes the type and location of future land uses within the Village of Pingree Grove and its growth areas. The section also includes the Residential Areas Framework, Commercial and Industrial Areas Framework, and IL Route 47 Subarea, providing detailed recommendations and policies targeted to specific areas of the Village.

**Chapter 4: Transportation & Mobility.** This section reviews and provides recommendations regarding the Village's transportation system, including automobile, pedestrian, bicycle networks, as well as public transit options.

**Chapter 5: Community Facilities.** This section reviews and provides recommendations regarding public services and amenities provided within the community, including civic services, police and fire protection, education, library services, and healthcare services.

**Chapter 6: Parks, Recreation & Open Space.** This section reviews and provides recommendations regarding parkland, recreational opportunities, and natural areas of the community, including methods for preserving the Village's rural character and distinct environmental features.

**Chapter 7: Water Resources.** This section reviews and provides recommendations for the community's water resources, including an analysis of where the Village lies within the local watershed and methods to improve water conservation.

**Chapter 8: Image & Identity.** This section reviews and provides recommendations regarding the Village's image and identity, including methods to increase the regional prominence and visual appearance of Pingree Grove.

**Chapter 9: Implementation Strategy.** This section provides a detailed strategy for implementing the various recommendations of the comprehensive plan, including a review of potential funding and partnering options to achieve the goals of the community.

## Vision, Goals & Objectives

The Pingree Grove Comprehensive Plan serves as a roadmap for future planning and development within the City for the next 15 to 20 years. A unique vision statement, goal, and set of objectives are provided at the start of each Plan chapter, defining the overall approach to a distinct component of the Village of Pingree Grove.

■ **Vision Statements** are written as a retrospective in the year 2030 that identifies how the community has changed for the better. They describe each component of the Village as it exists 15 years in the future following the adoption and subsequent implementation of the Comprehensive Plan.

■ **Goals and Objectives** provide more specific direction as to how the City can achieve its desired outcomes and form the framework for planning recommendations, policies, future projects, and actions.

## PLANNING PROCESS

The Comprehensive Plan is the result of a multi-step process that involves residents, stakeholders, Village staff, and the consultant team:

**Step 1: Project Initiation.** The planning process began with a “kick-off,” which included meetings with key Village staff, CMAP personnel, and an initiation workshop with the Comprehensive Plan Advisory Committee (CPAC) on November 6, 2014.

**Step 2: Community Outreach.** Community outreach and citizen participation is the cornerstone of the planning process. Outreach activities included a community workshop on December 11, 2014, key person interviews in November and December, and a market analysis public presentation on January 29, 2015. Additional web-based outreach efforts included a project website, online resident and business questionnaires, and an interactive mapping tool.

**Steps 3 & 4: Market & Demographic Analysis.** Existing Conditions Analysis-These steps are closely related and included an analysis of existing conditions that identified current issues and opportunities. They also included a detailed assessment of projected market demand as well as recent demographic trends. It is based on information provided by the Village, feedback from community outreach, as well as fieldwork, surveys, inventories, independent data sources such as ESRI and the U.S. Census, and analyses of past plans, studies, and current planning initiatives. This step culminated in the creation of an Existing Conditions Report, which contains information and documentation for steps one through four.

**Step 5: Community Vision, Goals, Objectives, and Policies.** This step included a hands-on community workshop that invites the community to put pen to paper and illustrate their vision for the future of Pingree Grove. Preliminary goals, objectives, and policies were then prepared based on the vision and previous steps in the planning process.

**Step 6: Draft Sub-Area Plan.** Based on the analysis of existing conditions, outreach activities, and community goals, preliminary plans were prepared for the Route 47 corridor. This plan includes recommendations on land use and development, circulation and parking, and urban design frameworks. The draft sub-area plan was prepared at the same time as Village-wide plans and policies to best coordinate the resulting documents.

**Step 7: Village-Wide Plans & Policies.** This step entails the preparation of Village-wide Plans for land use and development, transportation and mobility, natural resources and environmental features, community facilities, housing, economic development, and the community’s image and identity within the Chicago region. These future plans provide the Comprehensive Plan its “core” and formally presents the Village’s goals, objectives, and policies.

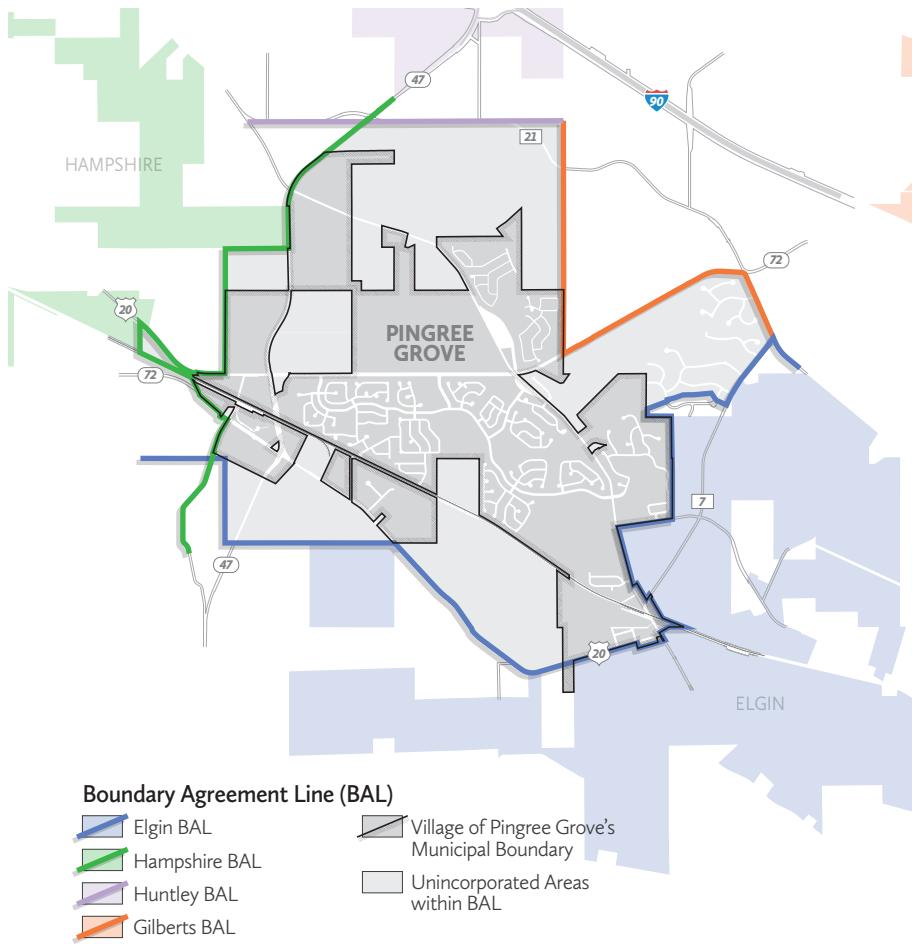
**Step 8: Comprehensive Plan Document.** The draft Comprehensive Plan document was presented to Village staff and the CPAC to begin the adoption process. Based on their comments, the final plan was formally presented to the Planning & Zoning Commission at a public hearing, before ultimately progressing to the Village Board for consideration and official adoption.

## PLANNING JURISDICTION

A comprehensive plan generally addresses issues within the municipal boundary as well as unincorporated areas adjacent to the Village, which is often called the “planning area.” Illinois State Statute (65 ILCS 5/11-12-5) allows a Comprehensive Plan to plan for an area extending 1.5 miles from the current corporate boundary.

This extraterritorial jurisdiction cannot include land that is incorporated by other municipalities, areas claimed through a formal boundary agreement, or the extraterritorial jurisdiction of another community. The Village’s existing boundary agreements allow for the development of mutual planning documents with adjacent municipalities where desired.

The Village of Pingree Grove planning area is highlighted in the maps and figures used throughout the plan and is defined by existing boundary agreements the Village has with place in each of its neighboring communities.



## Planning Area

Pingree Grove's planning area is generally defined to the north at Big Timber Road, to the east at Reinking Road, to the south at IL Route 72, and generally to the west through a series of parcels located west of IL Route 47. The Village's exact boundaries, as well as areas with the potential for annexation, are illustrated in the adjacent map.

## Boundary Agreements

Boundary agreements between municipalities set jurisdictional control and annexation powers over adjacent, unincorporated land. These agreements help avoid "bidding wars" between communities over potential developments and ensures the adequate provision of infrastructure and services as development occurs.

The Village of Pingree Grove has boundary agreements with the City of Elgin, Village of Gilberts, Village of Hampshire, and the Village of Huntley. Each of these agreements will last 20 years from adoption. Given their limited lifespan, the Village should continue to coordinate with neighboring municipalities to review and update established boundaries and renew existing agreements as needed.

### *City of Elgin*

The Village of Pingree Grove entered into a boundary agreement with the City of Elgin in 2004 that establishes a mutual north-south border at Reinking Road. Specifically, the boundary roughly follows U.S. Route 20, Reinking Road, Highland Ave, and Damisch Road.

### *Village of Gilberts*

The Village of Pingree Grove entered into a boundary agreement with the Village of Gilberts in 2008 and established a mutual border near the Rutland Forest Preserve, to the northeast of Pingree Grove.

### *Village of Hampshire*

The Village of Pingree Grove entered into a boundary agreement with the Village of Hampshire in 2008 that establishes a mutual border that generally follows a north-south delineation aligned with Thurman Road through agricultural land, establishing a maximum western boundary for Pingree Grove.

### *Village of Huntley*

The Village of Pingree Grove entered into a boundary agreement with the Village of Huntley in 2008 and established a mutual border along the east-west corridor of Big Timber Road in the vicinity of Eakin Creek, establishing a maximum northern boundary for Pingree Grove.



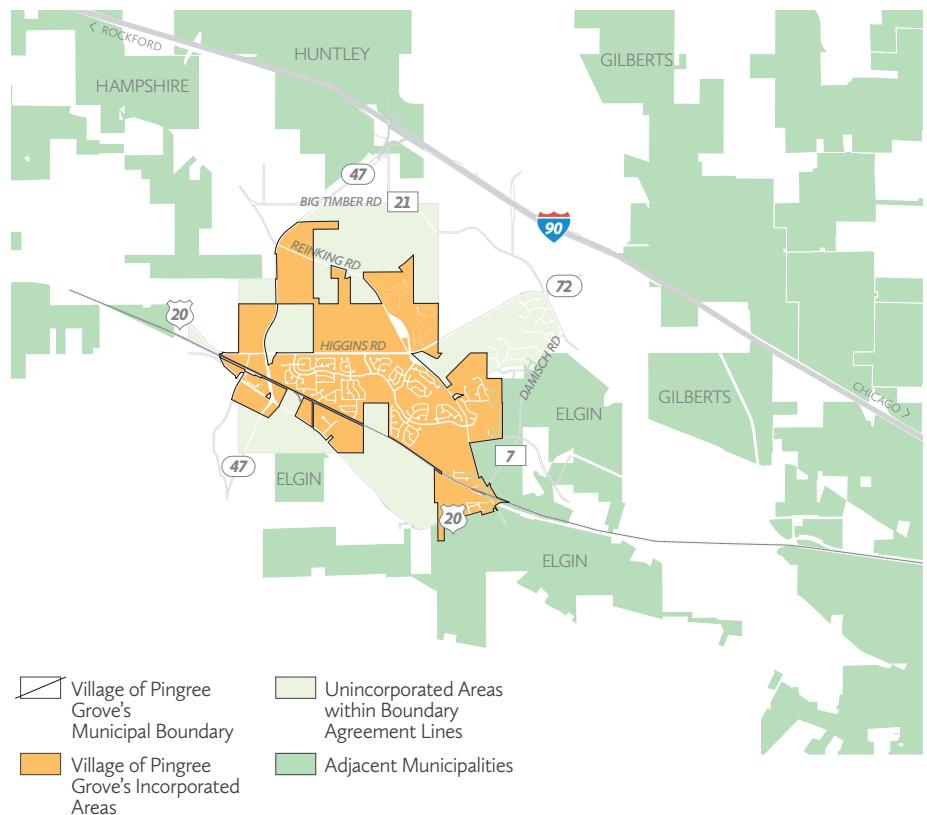
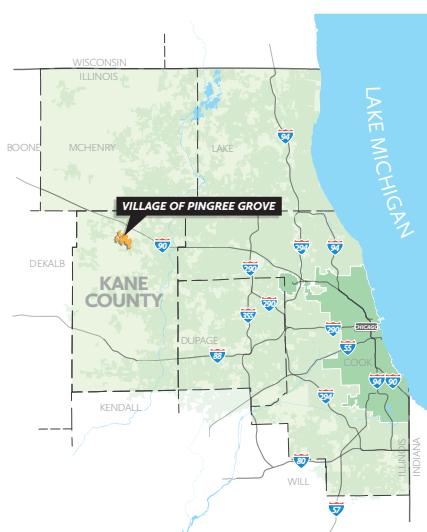
DINGREE GROVE



# COMMUNITY PROFILE

# 2

Pingree Grove's history as a small rural hamlet, its location within the growing Kane County, and recent plans and initiatives have contributed to its development trajectory over the last decade. This chapter summarizes an initial understanding of Pingree Grove today and provides a baseline for the policies and recommendations of the Comprehensive Plan.



## REGIONAL SETTING

Pingree Grove, Illinois is located in northern Kane County along U.S. 20, approximately 7 miles west of the Fox River and 50 miles northwest of the Chicago Loop. The Village is accessible via several major highways, including IL Route 47 and IL Route 72 and in close proximity to Interstate-90. Pingree Grove is generally bordered by the Village of Huntley to the north, the Village of Hampshire to the west, and the City of Elgin and Village of Gilberts to the east. Pingree Grove is also bordered by hundreds of acres of unincorporated Kane County, particularly to the west, southwest, and south.

## Rapid Growth

Pingree Grove is located in Kane County, which in recent decades has rapidly transitioned from agricultural areas and small towns along the Fox River into one of the nation's fastest growing suburban counties. Since 1980, Kane County has doubled in population to now include more than a half-million residents.

Despite this growth, Pingree Grove still retains a lot of its agricultural roots. Corn and soybean fields are common land uses and contribute to the rural character of the area. However, the area's proximity to the Chicago suburbs is still apparent even in these agricultural uses, such as Goebbert's Pumpkin Patch and the numerous nurseries which supply and cater to the broader metropolitan market.

The local terrain features more rolling hills and wooded areas than is typical of other parts of the northeastern Illinois region, and the mix of forest preserves and active agricultural uses adds a "country-side" charm to the area. Although in close proximity to the Randall Road corridor and Elgin, the area generally provides a quiet, secluded, and natural setting with modern, suburban housing.



## COMMUNITY HISTORY

The Pingree family, who's roots were in New England, settled in Illinois and provides the community its earliest history. The Pingrees bought farmland from the Federal Government in 1838, which Dr. Daniel Pingree described as, "a wolf-howling wilderness." The Pingrees also have a long history of civic service in Kane County, having surveyed land, held local government offices, and platting part of the Village of Gilberts.

The Village's settlement begins in the mid-19th Century, when members of the Pingree Family began subdividing their land. One farm was sold to the local school district, which is used today by the fire station and "Old Village Hall." After growing to nearly 600 residents, the area was officially incorporated on February 14, 1907 as the Village of Pingree Grove.

Although the area remained a Fox River Valley farming community of about 100 people throughout the 1900s, the Village exploded with population growth over the last decade, reaching more than 5,700 residents in 2014. Beginning construction in 2004, the Cambridge Lakes and later Carillon developments were the catalyst for this growth, which were recognized by both the Home Builders Association of Greater Chicago and the National Association of Home Builders with awards for some of the highest-quality suburban development in the nation. This recent growth occurred concurrently with rapid development of the Randall Road corridor and the western portions of Elgin, ultimately transforming Pingree Grove into a contemporary Chicago area suburb.

## Local Plans

### 2003 Comprehensive Plan Update

The Village adopted its first Comprehensive plan in 1981, with a subsequent update completed in 2001 to forecast development. Similarly, the Village's 2003 Comprehensive Plan Update was developed in response to projected growth estimates and demonstrated interest among the development community. The update was intended to aid Village staff and officials in making decisions regarding future land use, infrastructure, transportation, and public services. It should be noted that at the time of the 2003 plan update, the Village had under 200 residents, representing a very different community in size and focus.

Much of the plan's goals and recommendations focus on maintaining the existing Village character while preparing for expected growth. This includes attracting predominantly residential growth with commercial and employment land uses to support new residents. The update includes specific frameworks for land use, community facilities, and transportation. While much has changed since the 2003 plan's adoption, many of the plan's goals remain important as the Village seeks to prepare for and guide the development of key areas including the IL Route 47 corridor.

#### *Land Use Plan*

The planning area for this Comprehensive Plan is considerably smaller than that of the 2003 plan due to a series of boundary agreements that were put in place in the mid- to late-2000s. The areas that remain under Pingree Grove's planning jurisdiction either remain undeveloped or have been developed in a manner similar to what is recommended in the 2003 plan. The most significant departure from the 2003 plan regarding land use is the development of the Heritage District, what today remains a low density residential area, as a mixed use Village center. Other planned commercial areas at the intersections of IL Route 72 with IL Route 47 and Reinking Road are currently zoned for commercial development and being marketed, but development of this kind has been limited.

#### *Public Services & Infrastructure*

The 2003 Plan update includes several recommendations for the expansion and modification of public services and infrastructure to support new development. The Village has made notable progress in implementing these recommendations including:

- The creation of a Village Police Department and construction of a police station;
- The development of a new fire station; and,
- The creation of a Public Works Department and corresponding development of a municipal sanitary sewer and water supply and distribution system.

In addition to these initiatives, the Village worked with the development community to create a development agreement for the Cambridge Lakes and Carillon subdivisions that advanced many of the goals of the 2003 Comprehensive Plan Update.

#### **Pingree Grove Strategic Plan**

In 2013 Pingree Grove developed a three year strategic plan with the assistance of the Center for Governmental Studies at Northern Illinois University. The strategic plan is intended to guide staff and elected officials in the organization of Village services and general growth management of the municipality. The plan establishes four strategic priorities to foster thoughtful policymaking in Pingree Grove, which are supported by performance indicators and implementation action steps. The plan's four strategic priorities focus on growth, finance, operations, and customers, with the ultimate aim of providing residents quality civic services.

## Pingree Grove Heritage District Master Plan

Developed in 2010, the Heritage District Master Plan addresses potential redevelopment and growth within the Village's Heritage District, located near the intersection of U.S. Route 20 and Reinking Road. The plan envisions a dense, mixed-use area comprising retail, office, and residential options, including lofts, rowhouses, cottages, and single family homes. The Master Plan also contains detailed visualizations to display what the Heritage District could potentially look like after future development. Implementation of this plan has thus far been minimal and the Comprehensive Plan provides an opportunity to identify whether current market conditions and community aspirations favor the build-out of this vision.

## Regional Plans

### Quality of Kane Initiative

The Quality of Kane Initiative is a county-wide planning campaign that unites the county's various planning efforts under a single vision. The initiative focuses on maintaining and enhancing a healthy population, healthy living, and healthy communities within Kane County. This is accomplished through the integration of land use, transportation, and health planning efforts by the Kane County Planning Cooperative, providing guidance and support for county and local decision makers. Comprising numerous county planning efforts, at the core of the Quality of Kane Initiative are four major plans: The Kane County 2040 Plan, The Kane County 2040 Long Range Transit Plan, The Fit Kids 2020 Plan, and The 2012-2016 Community Health Improvement Plan.

*4th Draft*

**Kane County 2040  
Green Infrastructure Plan**



Adopted by the Kane County Board December 10, 2013

### Kane County 2040 Green Infrastructure Plan

Also a part of the Quality of Kane Initiative, the Kane County 2040 Green Infrastructure Plan analyzes existing natural resources of the county and recommends green infrastructure priorities and approaches. The plan includes recommendations relating to:

- Protection of valuable green space;
- Flood control;
- Water quality improvement;
- Water supply replenishment;
- Habitat protection;
- Local food production, and;
- Site Planning Integration.

The Village's proximity to various woodlands, forest preserves, and Tyler Creek provide significant opportunities to preserve green infrastructure and sensibly incorporate these features into the community. Given the potential for growth within the Village, key plan recommendations for Pingree Grove include the use of neighborhood and site best management practices; farmland protection; conservation easements on private land, and conservation development.

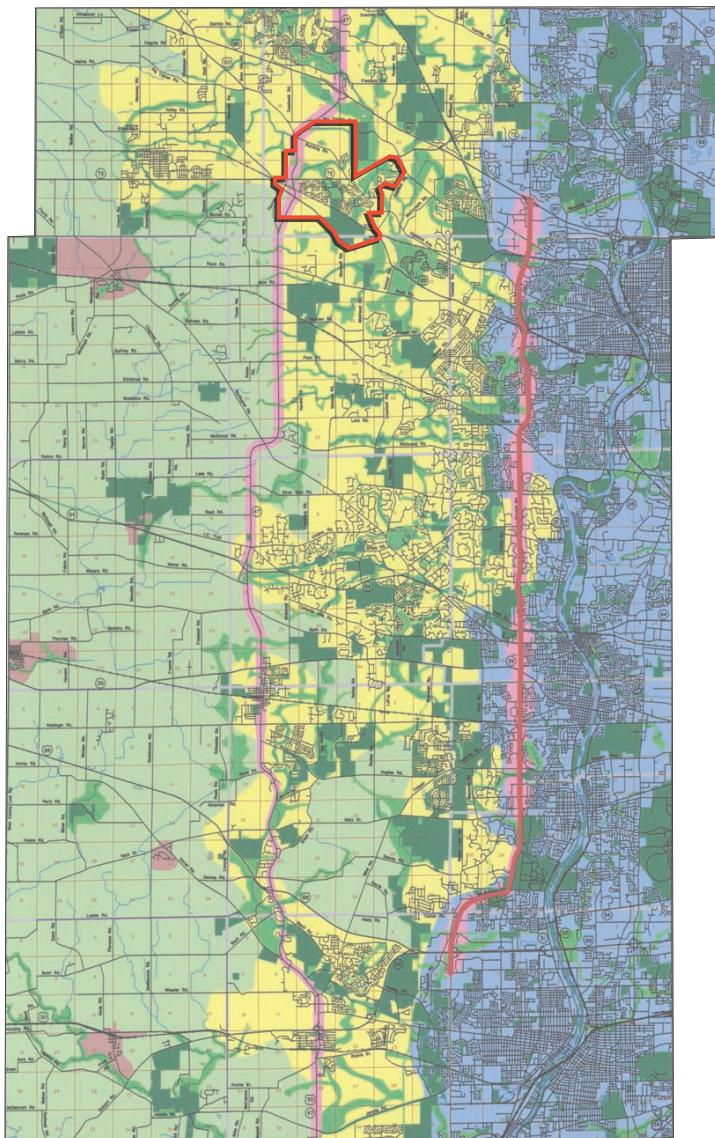
## Kane County 2040 Plan (2012)

Kane County 2040 Plan acts as a regional comprehensive plan, providing guidance and direction on a variety of important planning topics. As part of the Quality of Kane initiative, the Plan acts as an important foundation for land use policy within the County, dividing the region into three distinct land use areas.

■ **Sustainable Urban Area:** The eastern portion of Kane County consisting of established and relatively built out suburban communities where development strategies focus on downtown revitalization, redevelopment, infill, and neighborhood preservation.

■ **Critical Growth Area:** Pingree Grove is situated on the western edge of the Critical Growth Area that makes up the central portion of the county. This area is expected to see significant growth due to regional expansion and transportation improvements. The Critical Growth Area presents opportunities to apply Smart Growth and Livability Principles and implement sustainable development practices.

■ **Agriculture/Food, Farm and Small Town Area:** The westernmost portion of the Village is located in the area of Kane County where agriculture preservation and the protection of the county's natural resources is the focus.

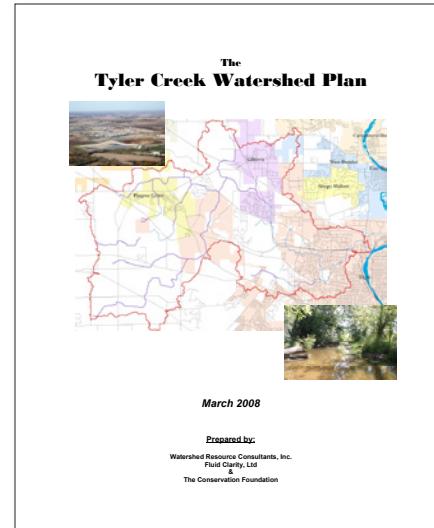


## 2040 Conceptual Land Use Strategy - Kane County

	Sustainable Urban Area		Existing Open Space
	Critical Growth Area		Proposed Open Space
	Agricultural/Food, Farm, Small Town Area		Pingree Grove Planning Area

## Kane County 2040 Long Range Transit Plan (2011)

As a central part of the Quality of Kane Initiative, the Kane County 2040 Long Range Transit Plan describes the County's long-term vision for public transit, which includes Metra rail and Pace bus services. Reducing the dependence on automobiles, improving access for low-income populations, and establishing sustainable land use patterns that encourage walking and biking are at the heart of the Plan's recommendations. The Plan identifies Pingree Grove as having a low level of transit dependency, demonstrating the areas reliance on automobile transportation. Pertaining to Pingree Grove, the Plan discusses the potential for north-south transit service along IL Route 47, which could have an effect on transit dependency and growth within the Village and other critical growth areas along the corridor.

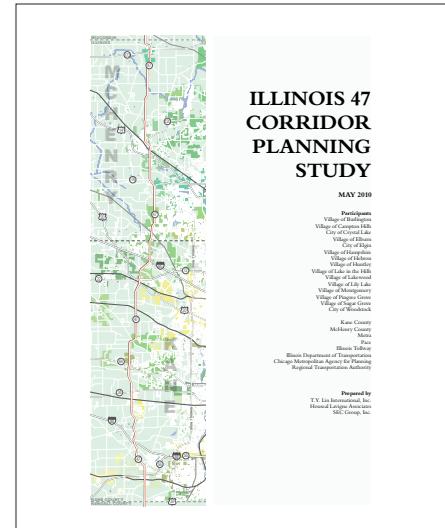


## Tyler Creek Watershed Plan

The 2008 Tyler Creek Watershed Plan updated previous plans from the 1990s through a formal collaboration between the City of Elgin, Fox Valley Land Foundation, The Conservation Foundation, Friends of the Fox River, and CMAP. The plan outlines four goals for proper management of the watershed:

- Maintain the Quality of Tyler Creek
- Prevent Further Negative Impacts of Land Use Change on the Watershed's Natural Resources
- Reduce Flood and Flood Damages in Existing Developed Areas of the Watershed
- Create an Effective and Lasting Watershed Stakeholder Organization

The Tyler Creek Watershed Coalition was created to advocate for plan implementation and water conservation, and addresses a key plan recommendation. Additional recommendations also focus on fostering regular data collection, coordinating necessary capital improvements, and creating public education outreach on watershed preservation. For a full discussion of the Tyler Creek Watershed Plan, see **Chapter 8: Water Resources**.



## Illinois 47 Corridor Study

Completed in 2010, the IL 47 Corridor Study analyzes the various planning challenges found within the corridor. The study area includes 15 municipalities, stretching from the Village of Hebron in northern McHenry County to the Village of Montgomery in southern Kane County. The study focuses on seven growth management objectives:

- Keep Traffic Moving
- Coordinate Local, Regional, and State Decision-Making
- Promote Economic Development
- Encourage Growth Nodes That Promote Transit and Walking
- Protect Natural Areas
- Promote Placemaking
- Strengthen Existing Developed Areas

Located in one of the Chicago region's primary growth areas, communities along this corridor are expected to significantly expand over the next 10-15 years. The study provides an implementation toolbox to enact Smart Growth policies and practices. Pingree Grove has evaluated this study and could leverage these tools to promote their local vision and desired outcomes within the portion of IL Route 47 that passes through the Village.



## MARKET & DEMOGRAPHIC OVERVIEW

### Demographics

An analysis of the market and demographics conditions of Pingree Grove has been conducted to inform the development of the Comprehensive Plan and provide a foundation for creating policy recommendations.

The completed market and demographic analysis focused on five sections: Demographics (1), Housing (2), Retail (3), Employment (4), and Industrial and Office (5). Each section presents current market trends, implications, and projections to the best extent possible given available information. The analysis provides a collective overview of Pingree Grove's current position within the competitive market and the greater Chicago Metropolitan Region.

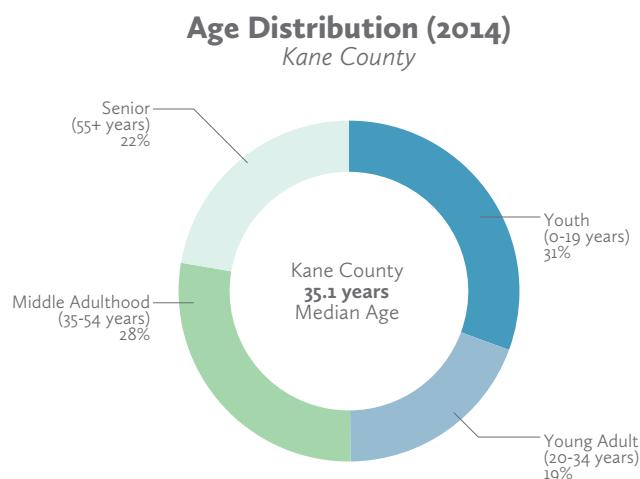
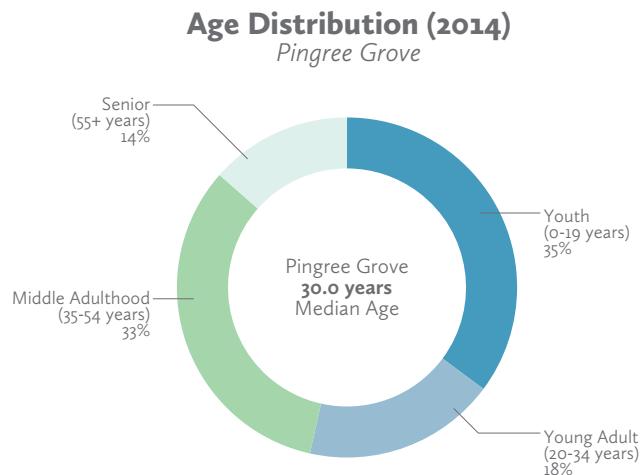
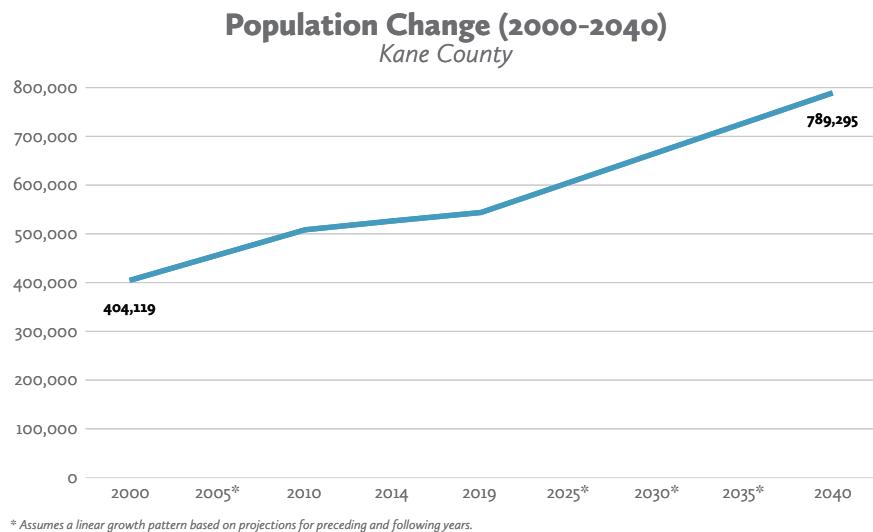
Data for this study was acquired from a variety of publicly available sources including the 2010 U.S. Census, the 2008-2012 American Community Survey (ACS), the Illinois Department of Employment Security (IDES), the U.S. Census Center of Economic Studies, and CMAP's Homes for a Changing Region report. Data was also obtained from ESRI Business Analyst and NAI Hiffman, both nationally recognized providers of business and market data.

## Population

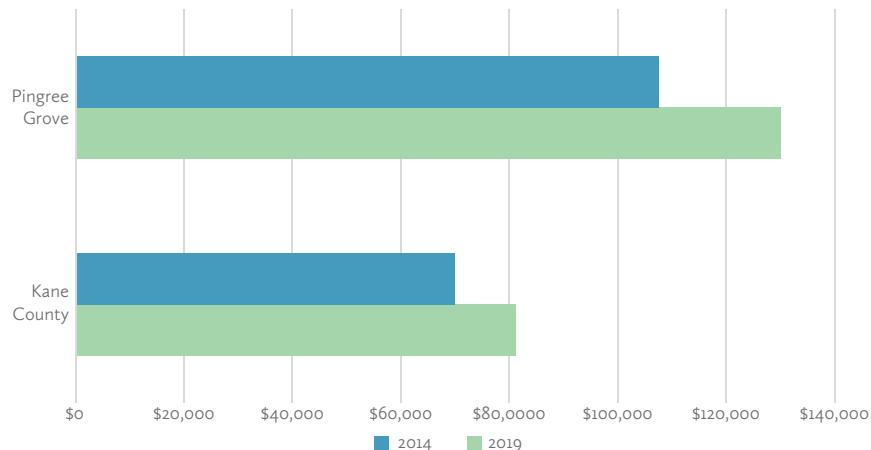
Pingree Grove is located on the northwest edge of the Chicago metropolitan area in one of the fastest growing counties in Illinois. The Village has seen a significant population increase in the past decade, growing by more than 4,500% between 2000 and 2014. With only 124 residents in 2000, Pingree Grove expanded to 5,738 residents in 2014 and is expected to see an additional projected growth of roughly 15,000 residents between 2010 and 2040, an increase of 333%. CMAP projects the Village's population to be nearly 20,000 by 2040, on trend with the growing population of Kane County, which is expected to almost double in population by 2040.

## Age

Between 2010 and 2019, Pingree Grove's population is projected to age, from a median age of 30.0 in 2010 to 34.2 in 2019. The Village's current median age is younger than that of Kane County, which has a median age of 35.1. This lower median age is due to the large proportion of youth (0-19) and middle-aged (35-54) residents and reflects the large number of young families living in Pingree Grove.



**Median Household Income (2014, 2019)**  
Pingree Grove & Kane County



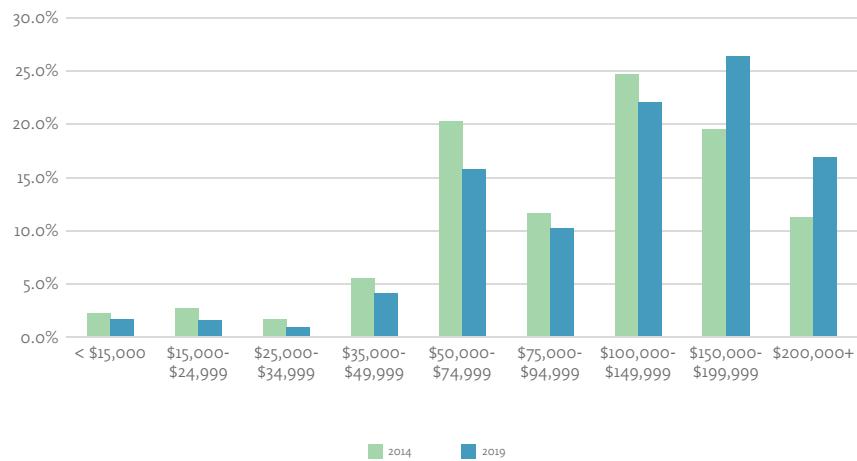
## Income

Pingree Grove's current median household income (\$107,635) is considerably higher than that of the rest of Kane County (\$69,967). Furthermore, the Village's median income is projected to increase between 2014 and 2019 by about \$12,000 at an annual growth rate of 9%. Higher income households are on the rise in Pingree Grove, with an 84% increase in households earning \$150,000 or more, compared to only an 8% increase in lower income households.

## Market Implications

With an anticipated increase of 3,000 residents between 2010 and 2019, Pingree Grove has a growing population. A rising population will create additional demands on Village services and facilities, but will also support the development of new retail within the area. Similarly, rising incomes may translate into additional local spending power, particularly when considering Pingree Grove's incomes are higher than county, state, and national averages. The increase in median age is a clear indicator of families and individuals choosing to remain within the community.

**Households by Income (2014, 2019)**  
Pingree Grove



## Residential Market

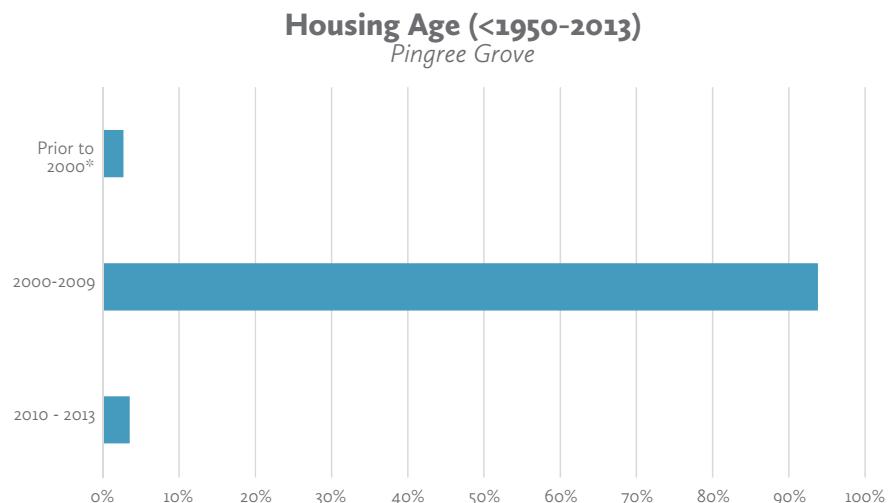
### Housing Units & Age

As of 2014, the Village has 1,899 housing units. Pingree Grove's housing stock is relatively new, with 94% of housing units built between 2000 and 2009. This mimics the large growth in population seen during this time. Vacancies were less than 7% in 2010 and it is estimated that vacancies will continue to make a small portion of the Pingree Grove housing stock.

It is projected that the total number of housing units will have grown by nearly 900 units between 2010 and 2019, also supporting projected increases in the Village's population.

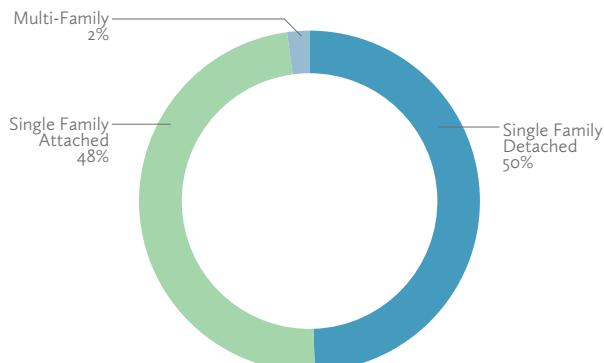
### Type & Tenure

The typical Pingree Grove housing unit is an owner-occupied, single-family detached home. Nearly 8 in 10 units are owner occupied, with only 6% of housing units vacant. Multi-family housing types represent a very small percentage of residential options in Pingree Grove, with 50% single-family detached and 48% single-family attached, largely concentrated in the Cambridge Lakes development.



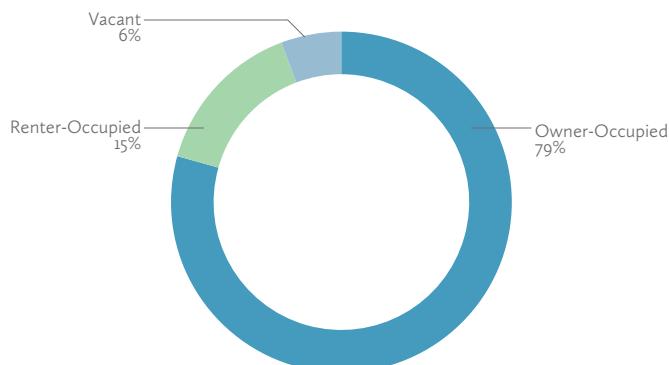
### Housing by Type (2009-2013 Avg.)

Pingree Grove



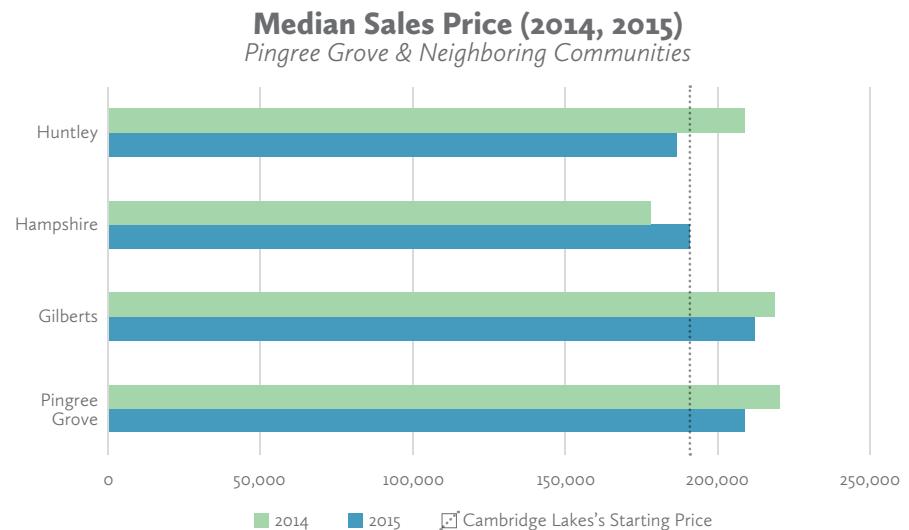
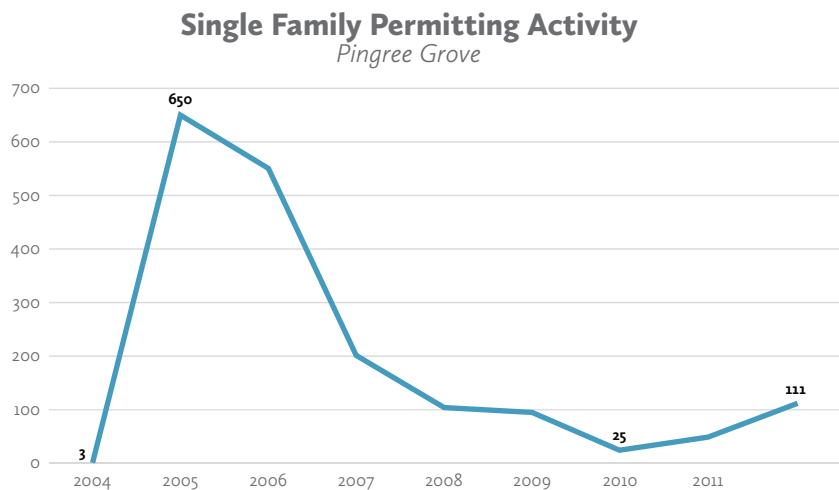
### Housing by Tenure (2009-2013 Avg.)

Pingree Grove



## Housing Trends

While the Village saw several years of declining permit activity in the wake of the Recession, new construction has increased in recent years. Trends in the Pingree Grove market generally mirror regional trends with Kane County growing overall. Compared to surrounding communities, Pingree Grove sales prices are higher; however, the March 2014-2015 median sales price declined by 5% in the last year. Hampshire is the only neighboring community to see an increase in median sales price, raising by 7%. Home prices are higher in Pingree Grove than in Kane County on average. The starting price for a single family home in Cambridge Lakes, which represents a significant proportion of homes for sale within the Village, is \$191,500 and is higher than the median sales price of both Huntley and Hampshire.



## Affordable Housing

In 2003, the Illinois General Assembly passed the Affordable Housing Planning and Appeal Act (AHPAA) (310 ILCS 67) to address the lack of moderately-priced housing than exists in many communities. The AHPAA established a target of 10% affordable housing share of year-round housing stock. Using the 2011 American Community Survey 5-Year Estimates, the Illinois Housing Department Authority (IHDA) determined that 1.4% of the Pingree Grove housing stock is affordable. (15 of 1,103 units).

Communities like Pingree Grove that fall below this target are classified by IHDA as a Non-Exempt Local Government that must adopt and submit an Affordable Housing Plan to IHDA. The Land Use Plan, including the Residential Areas Framework, incorporates all of the required components of an Affordable Housing Plan. Once adopted, the Comprehensive Plan can should be submitted to IHDA within 60 days to satisfy Affordable Housing Plan requirements.

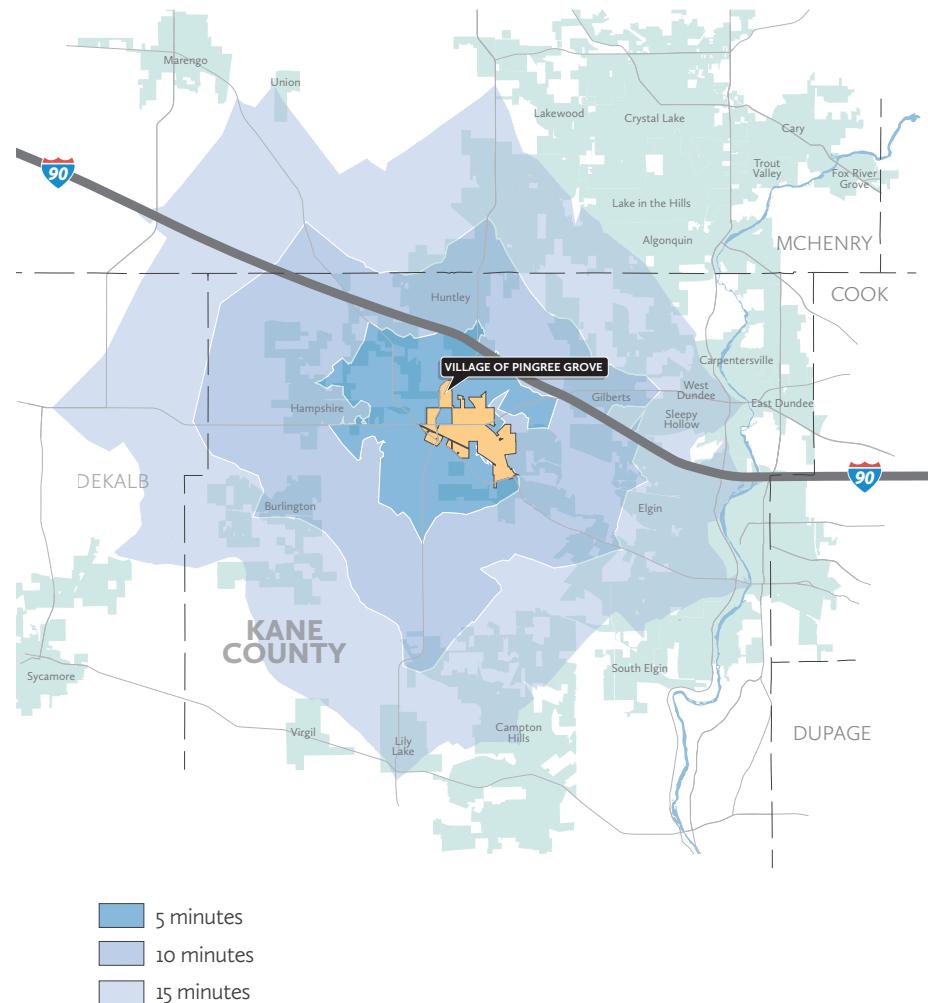
## Market Implications

The Village has a unique, nearly 50/50 mix of single family detached and single family attached housing stock. While this provides for some housing diversity, the large majority of homes within Pingree Grove are owner occupied single-family units. Pingree Grove has a stable housing market that appears to be rebounding from the recent recession, but potential demand exists for increased multi-family and rental units. Including over 1,700 acres, the Village has a large amount of available land with the potential for future residential development, including various incomplete areas within the existing Cambridge Lakes and Carillon subdivisions. Carillon also provides a valuable asset for residents living in Pingree Grove to downsize and remain within the Village as they age and join the “empty nester” demographic.

## Retail Gap

A “gap analysis” uses a comparison of supply and demand within a five, ten, and fifteen minute drive time for a specific point within the community. Five and ten minute drive times represent the local market areas, while a fifteen minute drive times represents a more regional market. For example, consumers will generally travel five and ten minutes for groceries, but longer for more durable and less frequently purchased goods such as appliances. Drive times for the Village were determined from the northern intersection of IL Route 47 with IL Route 72 and U.S. Route 20.

A “gap analysis” compares aggregate consumer spending (demand) to aggregate retail sales (supply) within a given retail category and drive time. When demand is greater than supply, “leakage” exists, suggesting that residents are spending dollars outside of the measured area. Accordingly, retail categories with leakage are potential opportunities for growth, as local demand for these goods and services already exists but is unmet by existing supply. Leakage is noted on the accompanying charts as a positive number in green.



## RETAIL GAP ANALYSIS SUMMARY (2014)

PINGREE GROVE: INTERSECTION OF IL ROUTE 47 & IL ROUTE 72

Summary Demographics	5 Minute Drivetime	10 Minute Drivetime	15 Minute Drivetime			
Population	7,210	39,413	148,352			
Households	2,415	15,280	51,998			
Median Disposable Income	\$77,659	\$60,862	\$60,141			
Per Capita Income	\$41,362	\$39,048	\$35,701			
Overview	5 Minute Drivetime	10 Minute Drivetime	15 Minute Drivetime			
Total Retail Gap	\$77.6	\$32.8	\$1,065.4			
Total Retail Trade	\$65.8	\$28.2	\$973.9			
Total Food & Drink	\$11.8	\$50.7	\$91.4			
Retail Gap by Industry Group	Retail Gap (\$M)	Potential (Sq. Ft.)*	Retail Gap (\$M)	Potential (Sq. Ft.)*	Retail Gap (\$M)	Potential (Sq. Ft.)*
Motor Vehicle & Parts Dealers	\$17.4	--	\$83.3	--	\$219.3	--
Furniture & Home Furnishings Stores	\$1.9	4,689	\$9.3	23,238	\$27.0	67,594
Electronics & Appliance Stores	\$2.5	6,310	\$12.7	31,827	\$18.9	47,275
Bldg Materials, Garden Equip. & Supply Stores	\$3.5	8,777	\$13.2	32,945	\$20.3	50,775
Food & Beverage Stores	\$14.5	36,307	\$74.7	186,863	\$145.6	363,967
Health & Personal Care Stores	\$5.4	13,555	\$29.9	74,665	\$93.2	232,943
Gasoline Stations	-\$2.2	--	\$20.0	--	\$74.0	--
Clothing & Clothing Accessories Stores	-\$7.6	-19,043	-\$18.4	-45,957	-\$24.2	-60,564
Sporting Goods, Hobby, Book, & Music Stores	\$3.0	7,398	\$13.8	34,495	\$36.5	91,130
General Merchandise Stores	\$18.5	46,232	\$29.3	73,178	\$129.5	323,629
Miscellaneous Store Retailers	\$2.1	5,135	\$8.5	21,168	\$13.1	32,860
Nonstore Retailers	\$9.2	--	\$45.9	--	\$120.8	--
Food Services & Drinking Places	\$11.8	29,403	\$50.7	126,730	\$91.4	228,623

\*Potential is based on an average sales of \$400/sq. ft. Motor Vehicles & Parts Dealers, Gas Stations, and Nonstore Retailers are not included in this calculation.  
Source: ESRI Business Analyst; Houseal Lavigne Associates

## Retail Potential

Nearly every retail category within a 5, 10, or 15 minute drivetime exhibits leakage. This means there is the potential to capture retail dollars currently being spent outside of the market area. It is important to note the difference between market potential and the tangible development of a particular site or location. While leakage may exist in the market, the opportunity for development includes a variety of factors including the availability of developable land, construction cost, rents, site conditions, access, exposure/visibility, adjacent uses, traffic counts and other issues.

As shown in the Retail Gap Analysis table, when a per-square-foot amount of \$400 is applied, demand is effectively translated to a potential number of square feet that could be supported within a five, ten, or fifteen minute drivetime. Converting leakage figures into square footage demonstrates the size and scale of retail that could be potentially supported by market area households.

While sales-per-square-foot revenues vary by individual retailer and industry sources, general assumptions of supportable square footage can be made by using a benchmark average. A generally accepted range for national retailers is \$200 to \$400 per-square-foot. The use of a per-square-foot amount on the higher end of this range allows for a more conservative approach so as not to overstate retail potential.

When typical store size is taken into consideration, a few select categories appear to currently provide sufficient support for a new retail location in Pingree Grove. These include:

■ **Health & Personal Care Stores:** This category includes retailers such as Walgreen's and CVS which has typical stores of between 10,000 and 15,000 square feet. Within the 5 minute drivetime, market support is approximately 13,500 square feet while at the 10 minute drivetime market support is nearly 75,000 square feet.

■ **Food & Beverage Stores:** This category includes grocery stores such as a Jewel-Osco or Kroger with a typical store size of 45,000 to 60,000 square feet. It also includes smaller specialty food stores such as small format grocers like Trader Joe's (10,000 to 15,000 square feet) and specialty retailers like meat and fish markets, or candy/nut stores (5,000 to 10,000 square feet). Within the 5 minute drivetime, market support is approximately 36,500 square feet and at the 10 minute drivetime market support is nearly 187,000 square feet.

■ **Food Services & Drinking Places:** This category includes both full-service and limited service (i.e. pay first) restaurants as well as bars and taverns. Sit-down Restaurants vary widely in size from 3,000 to 7,500 square feet while limited service restaurants tend to be smaller (1,200 to 3,000 square feet). This retail category exceeds 32,000 square feet in potential at the 5 minute drivetime and more than 165,000 square feet at the 10 minute drive time.

## Future Retail Demand

Taking note of the Village's considerable growth in the past decade, population increases will have an impact on retail demand. The addition of 4,500 households through full build-out of the planning area will have a major effect on the local market, including between \$186.6 to \$229.5 million in new annual spending power. This could also create between 466,000 and 573,000 square feet of retail potential within the market area. Applying a benchmark for suburban retail development of approximately 10,000 square feet of retail space for every acre of developable land, this translates to between 45 and 60 acres of new demand.

## Market Implications

The retail gap analysis indicates local market potential in several retail categories. While leakage represents potential growth opportunities for Pingree Grove, the Village will also have to compete with neighboring communities within these market areas. The Village's potential to capture a share will be further dependent on many factors and influences. For example, while there appears to be a dearth of restaurant options in the Pingree Grove market area, the 'bedroom community' nature of the Village may be a limiting factor for non-convenience oriented restaurants that would have to rely significantly on dinner and weekend service to support the business.

The Pingree Grove market area is highly competitive and gaps within the current market could be filled by development in nearby communities. This includes a large amount of retail space currently for lease or property serviced and available for development in areas near I-90 in nearby Huntley.

The relatively low population density within the immediate market area presents a challenge in supporting new retail over the near to mid-term. Additional projected housing units and higher incomes could provide the support necessary for community-scale retail. Given the overabundance of potential commercial property along IL Route 47 relative to projected demand; locations where commercial development is most feasible will need to be prioritized.

## Employment

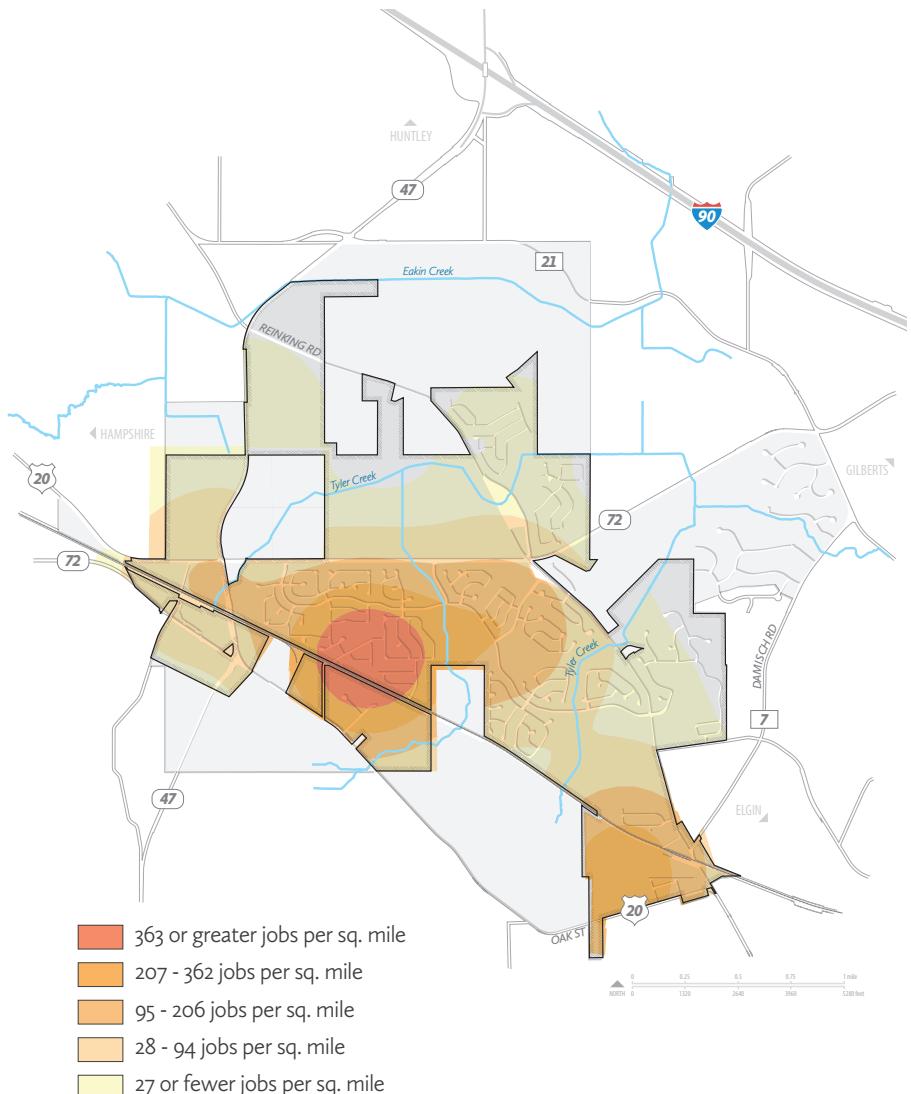
### Total Employment

Between 2002 and 2011, the Village gained 329 additional jobs, contributing largely to Pingree Grove's total employment of 494 jobs. A large uptick occurred between 2008 and 2011, with total employment jumping from 175 in 2008 to 494 in 2011. This is most likely related to the location and expansion of Minuteman International headquarters to a U.S. Route 20 facility in Pingree Grove. Elgin Die Mold is the only other business with more than 20 employees, providing 80 jobs in the Village.

### Employment by Industry & Labor Flow

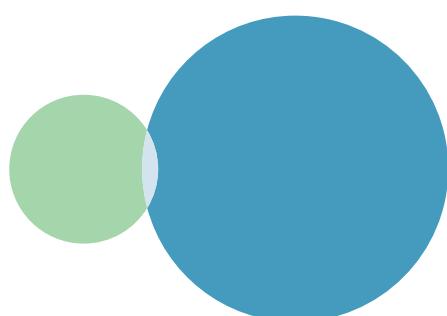
The Village's largest employment industry is agriculture, which accounts for 46% of all 494 jobs. This sector includes businesses like Goebbert's Pumpkin Patch as well as local nurseries. Manufacturing is the second largest employment sector providing 19% of all primary jobs.

Currently, Pingree Grove is predominantly a bedroom community with the majority of its residents commuting to jobs outside of the Village. Nearly all (99%) of employed residents work outside of Pingree Grove, with only 7% of local jobs being filled by residents.

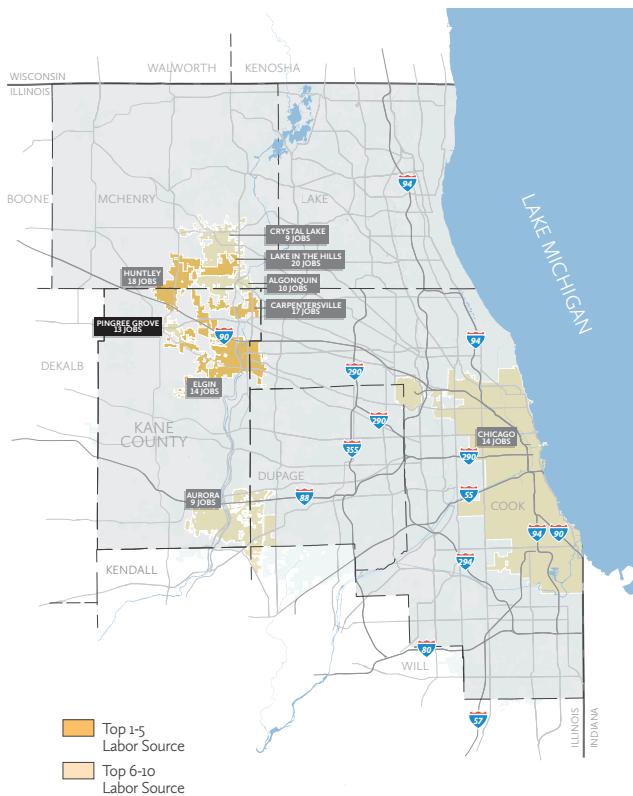
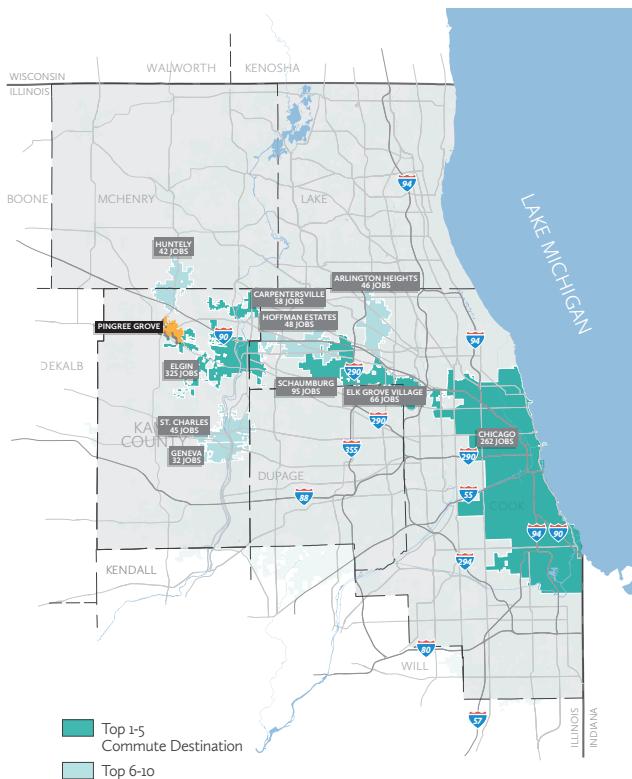


### Inflow / Outflow Job Counts (2011)

Pingree Grove



481 - Work in Pingree Grove  
2,134 - Live in Pingree Grove, Work Elsewhere  
13 - Live and Work in Pingree Grove



## Commute & Labor Shed

Commute and labor sheds demonstrate where employees are commuting to and commuting from in relation to Pingree Grove. The commute shed shows where residents who live within Pingree Grove commute to for work. The top five destinations for employed residents leaving the Village for work are Elgin, Chicago, Schaumburg, Elk Grove Village, and Carpentersville, though Pingree Grove residents work in many scattered municipalities in the Chicago Metropolitan Region.

A labor shed shows where non-residents travel from to work within Pingree Grove. The top five origins from which people travel are Elgin, Lake in the Hills, Gilberts, Huntley, and Carpentersville.

## Industrial & Office Market Overview

The Chicago Metropolitan Area is the 2nd largest industrial and the largest manufacturing market in the country. The area conducts 70% of all rail and intermodal activity in the United States, with all 6 Class-1 railroads converging in Chicago. In addition, 1/3 of the county's population live within a one day drive.

The Chicago market has positive market momentum moving into 2015, with 18 straight quarters of positive absorption and declining vacancy. Overall, vacancy has dropped from 12.1% in Quarter 2 of 2012 to 7.95%, which is below 8% for the first time since 2001.

Pingree Grove falls within the I-90 Northwest sub-market, known as "The Golden Corridor." In the area, the development of the IL Route 47 interchange has facilitated market expansion farther west along the I-90 corridor. Vacancy currently sits at a rate of 9.1%, which is higher than the rest of the Chicago area. The sub-market does have positive absorption, but there is still roughly 3.2 million square feet of space available. Leasing activity in Quarter 3 of 2014 was nearly 3 times that of Quarter 2.

Within the Village's sub-market, 73% of industrial construction activity is within Elgin, with a notable increase in build-to-suit projects. Two significant industrial projects are currently under construction, representing just over 1 million square feet in industrial space. These include the Weber-Stephens Products distribution center in Huntley (757,000 sq. ft.) and the Prairie Business Park spec space in Gilberts (276,000 sq. ft.)

The Chicago area office market has remained slow in recent years, but is improving. Pingree Grove sits within the Northwest Suburban Office Market, which includes major concentrations of space in Schaumburg, Arlington Heights, Rolling Meadows, Hoffman Estates, and Elgin. The market's vacancy rate (21.8%) is beginning to decrease, but remains high for the region (16%), with approximately 9.5 million square feet of space available in the area. A minimum amount of new construction is occurring in the market.

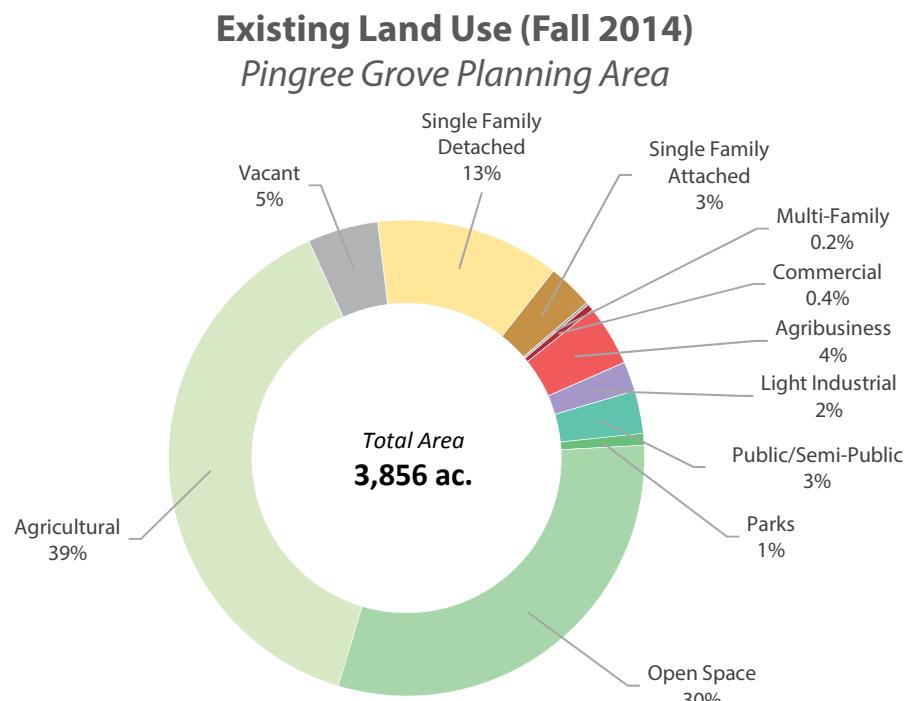
## Issues & Opportunities

The Village is located within markets that are improving, with positive absorption and declining vacancies. The area has a very competitive market, where access to major arterials and I-90 should benefit the Village; however, closer sites in other communities remain more advantageous. Office development potential is limited, with most new development likely in the form of professional office space integrated into larger commercial developments.

Pingree Grove will need to be very proactive in marketing and attracting development to the Pingree Grove Business Park, likely including the use of incentive packages. Pingree Grove may benefit from targeting businesses that do not need to be immediately adjacent to the interstate. Research and development or limited-scale manufacturing may be suitable.

# EXISTING LAND USE

The Village of Pingree Grove is comprised a variety of land uses and development types, and every parcel has been categorized into one of 11 land use designations.



## Agriculture

The agriculture land use category consists of land that is cultivated for raising crops and livestock. It also includes land used for the storage of equipment and goods related to agricultural processes. It can also include agribusinesses and properties that attract agritourism.

## Residential

### Single Family Detached

Single family detached homes are stand-alone structures for individual families. They are typically owner-occupied, although some may be rental homes.

### Single Family Attached

Single family attached structures are individual housing units that are attached horizontally with separate entrances. Examples of single family attached structures include townhomes and duplexes.

### Multi-family

Multi-family residential structures include multiple housing units stacked vertically and horizontally. Apartment and condominium complexes and senior housing facilities are included under the multi-family land use designation.

## Commercial

Commercial land uses consist of a wide array of types that include retail, restaurants, hotels, service, and professional offices.

## Agribusiness

Agribusiness land uses include nurseries, horse stables, cooperatives, and other agriculture related uses with a retail component.

## Industrial

Industrial uses range from the manufacturing and/or assembly of goods from raw materials, to lighter uses like warehousing and fulfillment centers that distribute finished products. These uses can generate a variety of noise, visual, and environmental impacts to the surrounding community.

## Public / Semi-Public

Public/Semi Public land uses include public-access elements and consist of government, education, medical, and religious uses.

## Parks & Open Space

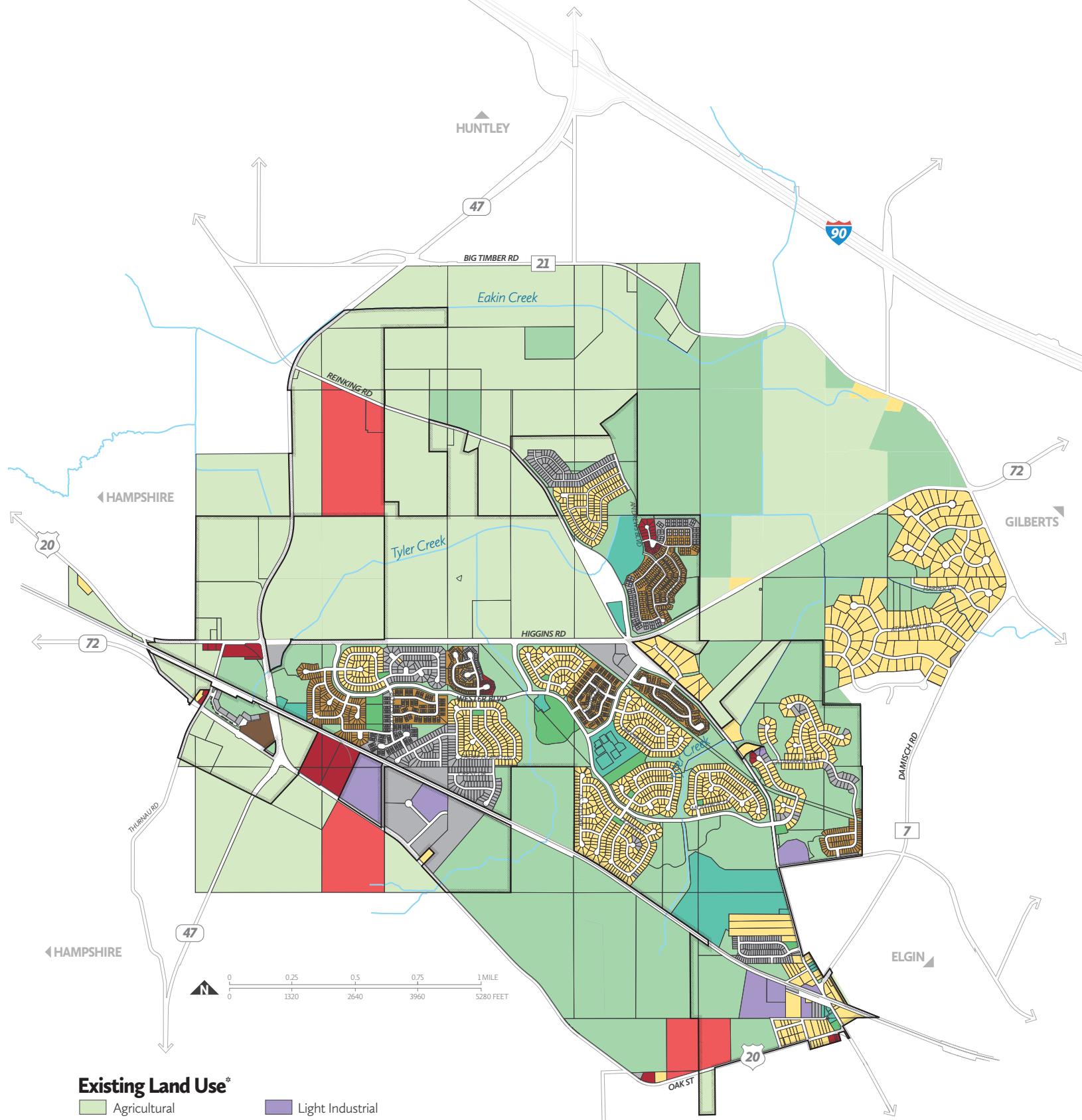
Parks include public or private sites and facilities that provide active and passive recreational amenities. Open space areas include land that has not been designated as active parks, but may contain environmental features such as large tree stands, streams, and wetlands.

## Vacant

Vacant areas include land that is not currently in active use, but may be developed in the future.

## Utilities

Utility uses include sites and facilities that accommodate critical infrastructure, wastewater treatment sites, water towers, power generation and substations, and electrical support towers. Railroad uses are also included.



## Existing Land Use\*

A legend showing eight categories of land use, each represented by a colored square and a label:

- Agricultural (Light Green)
- Single Family Detached (Yellow)
- Single Family Attached (Orange)
- Multi Family (Brown)
- Commercial (Red)
- Agribusiness (Pink)
- Light Industrial (Purple)
- Public / Semi-Public (Teal)
- Parks (Green)
- Open Space (Light Green)
- Vacant (Grey)

\* Data collected in October 2014

## ZONING & DEVELOPMENT POLICIES

Zoning and development codes are important municipal tools and play a critical role in the implementation of the community's goals and policy objectives. Zoning ordinances establish the types of permitted uses and prescribe the overall character and intensity of allowed development. This section details Pingree Grove's existing development controls. Additional discussion regarding recommended revisions to the Village's zoning regulations to implement Comprehensive Plan recommendations is included in **Chapter 9: Implementation**.

### Village of Pingree Grove Zoning Ordinance (1990 Code § 21.1.010)

The Village of Pingree Grove Zoning Ordinance was adopted in 1990 and amended in 1991, 2004, and 2011. The Zoning Code defines 10 separate zoning districts that include the following:

- R-1: Residence and Agricultural District
- R-2: Rural Residence District
- R-3: Residence District
- R-4: Residence District
- R-5: Attached and Multiple-Family Residence District
- SR: Single-Family Residence District
- HD: Heritage District
- C-1: General Commercial District
- I-1: General Industrial District
- Planned Unit Development

## CURRENT DEVELOPMENT CONTROLS

### RESIDENTIAL DISTRICTS

District	Nature of Permitted Uses	Min. Lot Area	Min. Lot Width	Max. Height	Min. Sq. Ft.
R-1: Residence and Agricultural District	Intensive agriculture and low density single-family estate homes	200,000 sq. ft.	300 ft.	35 ft.*	1900 sq. ft.
R-2: Rural Residence District	Low density, large-lot single-family homes with permitted rural accessories	12,000 sq. ft.	85 ft.	35 ft.	1,700 sq. ft.
R-3: Residence District	Single-family residential development in a suburban environment	9,500 sq. ft.	75 ft.	45 ft.	1,500 sq. ft.
R-4: Residence District	Single-family residential development in a suburban environment	8,500 sq. ft.	65 ft.	35 ft.	1,300 sq. ft.
R-5: Attached and Multiple-Family Residence District	Attached and multiple-family residence district	4,000-5,000 sq. ft.	150 ft.	35 ft.	700-800 sq. ft.
SR: Single-Family Residence District	Low density, large-lot single-family homes	15,000 sq. ft.	95 ft.	35 ft.	1,900 sq. ft.

### COMMERCIAL DISTRICTS

District	Nature of Permitted Uses	Min. District Size	Min. Lot Width	Max. Height	Max. Lot Coverage
C-1: General Commercial District	A general commercial zone that permits a variety of uses by special use permit	4 acres	100 ft.	35 ft.**	35%

### INDUSTRIAL DISTRICTS

District	Nature of Permitted Uses	Min. District Size	Min. Lot Width	Max. Height	Max. Lot Coverage
I-1: General Industrial District	Permits a broad range of light industrial, manufacturing, warehousing, office, and retail development	4 acres	100 ft.	45 ft.**	45%

### SPECIFIC USE DISTRICTS

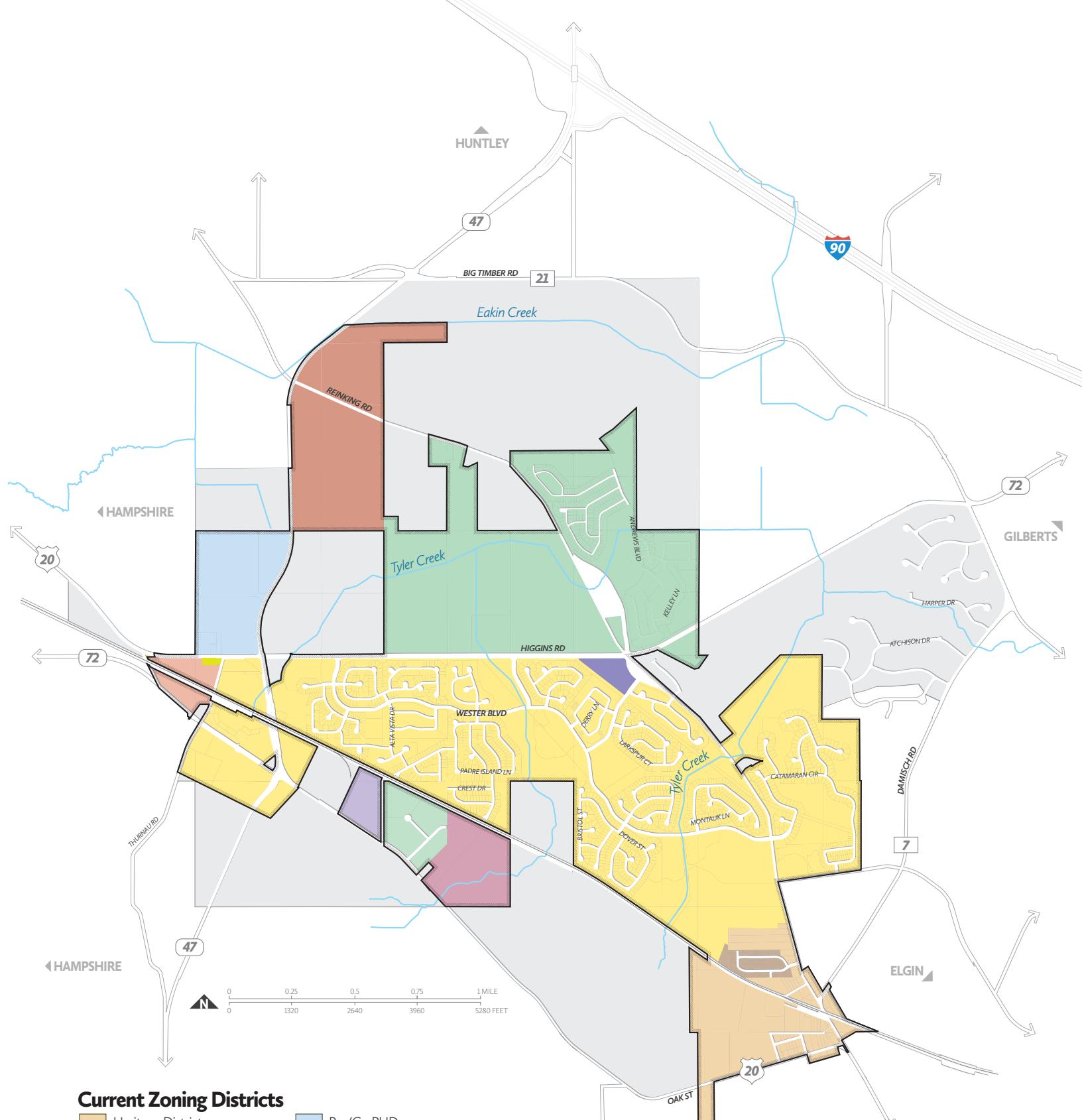
District	Nature of Permitted Uses	Min. District Size	Min. Lot Width	Max. Height	Max. Lot Coverage
HD: Heritage District	Limited to single-family residential and legal nonconforming uses that existed as of January 1, 2004	-	-	45 ft.	-

### PLANNED UNIT DEVELOPMENTS

District	Nature of Permitted Uses	Min. District Size	Min. Lot Width	Max. Height	Max. Lot Coverage
Planned Unit Development	Planned developments requiring special approval and permitting mixed-uses	PD Process	PD Process	PD Process	PD Process

\* no height restrictions on agricultural structures

\*\* agricultural buildings and structures may be 60' and church steeples and towers shall not exceed 75'



## Current Zoning Districts

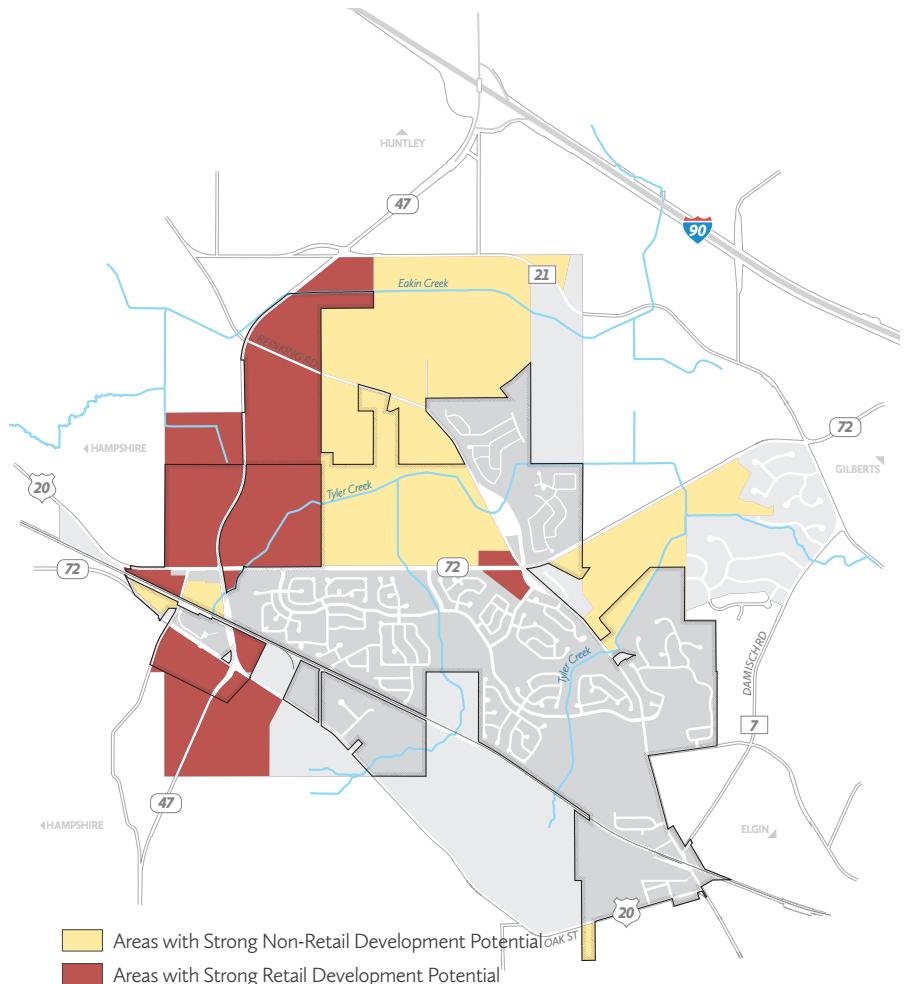
Heritage District	R-5/C-1 PUD O&S PUD
R-1 Residence and Agricultural District	C-1 PUD Old Oaks PUD
I-1 General Industrial District	C-1 PUD Kellenberger Schambach PUD
R-1/R-5/C-1 PUD Cambridge Lakes	C-1/I-1 PUD Bell Land PUD
R-1/R-5/C-1 PUD Cambridge Lakes North	C-1/I-1 PUD Harrison PUD
R-1/R-5/C-1 PUD Goebberts	R-5 PUD Red Oaks PUD

## ANNEXATION & GROWTH AREAS

Kane County has doubled in population in the last 30 years and housing growth continued even during the recession. Regional forecasts anticipate the Chicago region will accommodate nearly 2.5 million more residents in 2040 than it does today, and a meaningful number of those citizens will reside in Kane County. Today there is active residential construction in Pingree Grove and the local housing market remains very competitive. Therefore, managing this growth and evaluating future annexations is an essential part of the comprehensive planning process.

### Growth Areas

The Village of Pingree Grove has clear opportunities to expand to the north and west, but there are limited opportunities to annex to the south and east. The Village's ultimate eastern extent is largely defined by the Rutland Forest Preserve and a boundary agreement with the Village of Gilberts. Additionally, Pingree Grove's eastern expansion area is limited by a boundary agreement with the City of Elgin, which wraps around the Village to the south and southeast, adjacent to the Pingree Grove Forest Preserve. As such, Pingree Grove is in-effect nearly landlocked, although it is not yet built-out.



### Growing North

There is very little developed land north of Illinois Route 72 although certain areas, such as Goebbert's Pumpkin Patch, are already within Village limits. There is clear potential for future development in this area, generally in the vicinity of Tyler Creek. There are also specific parcels of land north of the Village available for annexation (such as the Milne, Vinci, Burnidge, and C&L Farms properties), which are in proximity to Huntley and Hampshire, generally at the intersection of Big Timber Road and Illinois 47. This growth area abuts the Rutland Forest Preserve and will ultimately build-out the Village to the north.

### Growing West

The Village has two opportunities to expand its boundary west. First, it can evaluate the Dominguez property adjacent to U.S. Route 20. The CP Railroad corridor cuts through this area, which is currently a commercial nursery and landscaping business, adjacent to light industrial in the unincorporated area referred to as Allens Corners. Secondly, the Village can consider annexing the Nissen, Knight-Poppen, and Koulouris properties, all of which are agricultural uses and have Illinois 47 frontage.

## **Growing South**

There are limited opportunities to annex south, although the Village could consider bringing the Forest Preserve into its boundaries, as well as agricultural lands south of the Illinois 47 and 72 (Higgins Road) intersection. The Village will need to evaluate the merits of annexing that open space with the Kane County Forest Preserve. The potential for annexation, growth, and development along Illinois Route 47 is discussed in the IL Route 47 Subarea Plan.

## **Growing East**

Although there are limited growth areas to the east, the Village can consider annexing agricultural land along Illinois Route 72 as well as two existing residential areas. The Triple Oaks Farm subdivision is approximately 50 single family detached homes, which have recently sold for prices in the range of the low \$300,000s to more than \$500,000. Another annexation consideration is the established single family areas accessed from Harper, Atchison, and Homestead Drives; there are approximately 65 homes, and they are smaller and have typically sold in the mid- to upper-\$200,000s in recent years. None of these areas feature sidewalks, curb-and-gutter, or streetlights, and use “rural-residential” styled stormwater management design like open-air ditches. The Village should evaluate the long-term cost-benefit of annexing these properties and providing new services and infrastructure to these existing residential units.



## COMMUNITY OUTREACH

Including the public's concerns, ideas, and insights about Pingree Grove is a critical part of crafting the Comprehensive Plan. Community input offers valuable local knowledge about the Village today and creates the baseline for planning efforts. An integral part of the Comprehensive Plan has been listening to and categorizing the viewpoints and perspectives heard throughout the planning process, and identifying key issues and opportunities for the plan to address.

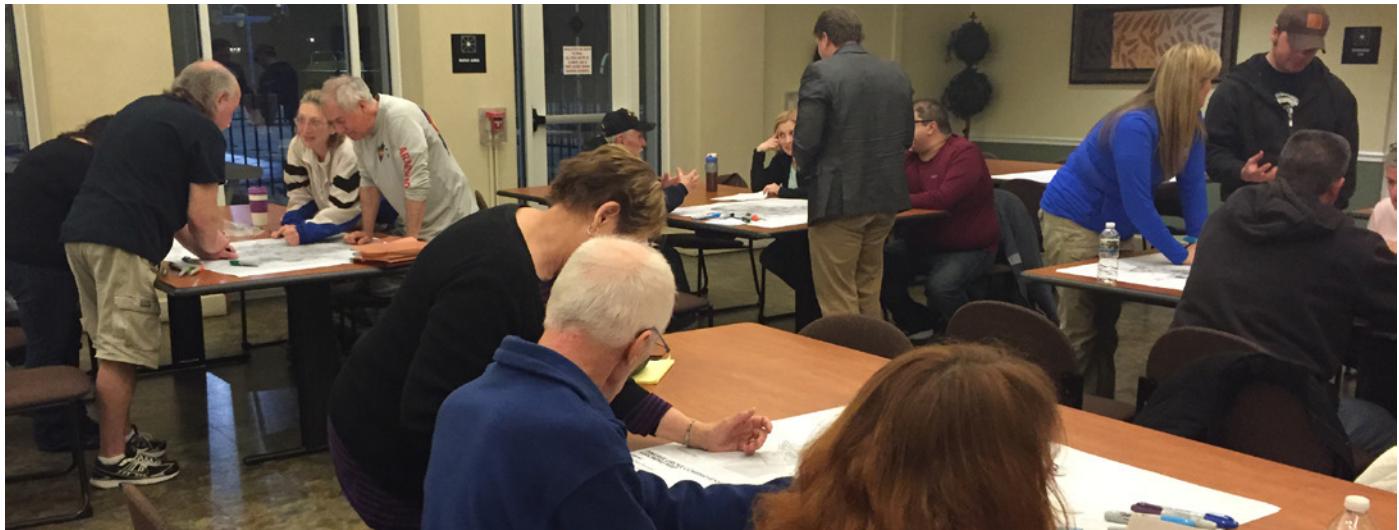
### Outreach Opportunities

A major focus for community outreach has been traditional face-to-face workshops, interviews, and focus groups. The purpose of these in-person sessions is to ask pointed questions, receive detailed responses, generate open dialogue and discussion among participants, and allow the planning team the opportunity for targeted follow-up questions. Face-to-face outreach was supplemented by a project website and several online tools used to solicit input from the community. Comprehensive Plan outreach opportunities included:

- **A Kick-off Meeting and Workshop** was held on November 6, 2014 with members of the Comprehensive Plan Advisory Committee (CPAC) composed of residents, stakeholders, and community experts who met throughout the planning process to review plan documents and recommendations.
- **A Community Workshop** was conducted on December 11, 2014 with nearly 40 members of the Pingree Grove community.
- **Key Person Interviews** were conducted throughout December 2014 and January 2015 with key community stakeholders, including Village staff and local business owners.

- **A Visioning Workshop** was held on March 26, 2014 where 15 members of the community put pen to paper and illustrated their vision for Pingree Grove, highlighting potential strategies to address local issues and identifying desired land use and development throughout the Village and its planning area.
- An **Online Questionnaire**, which yielded more than 184 responses, was posted on the project website to solicit input from those unable to attend face-to-face outreach efforts.

- A **sMap Online Mapping Tool** was posted on the project website to allow residents to identify, map, and provide comments on specific, or general, areas of concern within the Village and 17 maps were creating identifying over 160 points of interest in the community.



## Comprehensive Plan Advisory Committee

Outreach efforts included on-going communication with Village staff and the Advisory Committee. As a representative group of local residents, business owners, and elected and appointed officials deeply involved in the planning process, the Advisory Committee served as a “sounding board” for the process. Committee members volunteered their time to ensure that the Comprehensive Plan serves as a meaningful tool to implement the changes that the larger Pingree Grove community desires to see.

Input received from the various community outreach efforts was used in conjunction with an assessment of existing conditions to establish an informed vision of Pingree Grove’s desired future and to guide plan recommendations.

## Priority Issues & Opportunities

This section represents a summary of what was heard from the Pingree Grove community throughout the public engagement process. These issues and opportunities were derived from public input highlighted in the earlier Existing Conditions Analysis and reported to the Advisory Committee before being used to further develop the Plan’s vision, goals, objectives, and recommendations.

## Regional Prominence

Participants felt Pingree Grove is still a secret and the community is not as well-known in the Chicago region as other growing cities, such as Elgin, Gilberts, Huntley, and others in the immediate Kane and McHenry County areas. Similarly, there was an interest in developing a more distinctive “Pingree Grove brand,” which could be implemented through physical investments like interstate signage, gateway monuments, and streetscaping projects. Comments indicated a concern that the community lacks aesthetic appeal along its most prominent corridors including the Heritage District. The community desires strategic improvements and placemaking efforts, particularly in the Heritage District, that will establish a stronger Pingree Grove brand throughout the region and attract more visitors to the community.

## The Heritage District

While considering an important asset, participants argued the Heritage District should be prioritized for redevelopment to strengthen it as a community focal point and create a local “Village Center” destination. Respondents argued the area’s historic qualities were important to preserve and improve in order to provide a contrast to the newer parts of the Village. There was some frustration that the Heritage District Master Plan has not been implemented. Long Grove and Galena were cited as potential models in terms of creating “park once,” highly walkable districts. Participants spoke to the need for a central gathering place, perhaps located in the Heritage District.

## Growth Management

Participants acknowledged Pingree Grove will be presented with plenty of opportunities for new growth, and welcomed this as a positive. However, there were also concerns about strategically managing that growth, with goals ranging from technical planning for infrastructure expansion, to ensuring that new developments do not negatively impact the Village’s semi-rural character. Participants were also concerned about how new growth will impact traffic and cause greater congestions. There was interest in anticipating priority growth areas, so the Village can ensure current zoning controls and utilities are in place ahead of construction and development.

## Maintaining Community Character

Participants frequently cited the Village’s suburban character in balance with nature as a key community assets and expressed a strong desire to manage and maintain that identity in the face of increased development. Furthermore, participants indicated a desire for this aesthetic to play a central role in Pingree Grove’s identity and brand moving forward. While new commercial and residential development is desired, “open vistas,” “dark skies,” and “a scenic countryside” were cited as assets to be preserved.

## Expanding Parks & Recreation Offerings

There was a significant amount of group conversation about the need to plan for preservation of certain open spaces and to protect the semi-rural character of the area, while also investing in traditional parks and recreation amenities. Generally, feedback stated that the community was already lacking adequate parkland, and overly reliant on pocket parks within Cambridge Lakes. There was also interest in expanding the breadth and quality of recreational programming within Pingree Grove, as well as expanding the public facilities needed to house these activities.

## Retail Development

Workshop participants described Pingree Grove as a bedroom community and indicated a desire for more retail development. Respondents noted that the Village lacks many shopping and food options, which requires residents to leave the Village for daily goods and services. Huntley and the Randall Road corridor were commonly identified as the closest existing retail locations. Participants also argued that new businesses are necessary to reduce overreliance on the residential tax base. While comments cited a need for more local retail, restaurant, and service options in Pingree Grove, some in attendance were cautious about creating a “big box row” along Illinois 47. Comments underscored a desire to provide more local neighborhood stores, such as a grocery store, but in a manner that limits congestion and negative impacts to residential quality-of-life.

## New Municipal Facilities

Participants anticipated a need for new municipal facilities for Village operations, but there was also a desire to see such investment go beyond meeting operation needs alone, and to serve as a source of pride for the community. Participants demonstrated interest in identifying a “town center” and locating Village offices in a municipal complex that includes a central gathering space. Specifically, participants anticipated moving the fire station to the other side of Illinois 72, building a new Village Hall, and addressing the eventual need for a new Public Works facility/salt dome. The new police station area was cited as a potential location for this investment.

## New Local Amenities

Many participants listed the need for various local amenities for everyday convenience, which would continue to build the Village's suburban quality-of-life. Respondents noted the lack of local healthcare facilities, daycare facilities, convenience stores, pharmacies, and a grocery store. Without local options, residents must travel longer distances to reach amenities in other municipalities, which reinforces the Village's "bedroom community" nature.

## Long-range Financial Strategies

There was a general concern about long-range financial strategies for the Village and a reference to the recent financial task force's work. One talking point was the need to diversify the local tax base and develop additional revenue streams related to commercial and industrial activity. Participants noted that without industrial or commercial uses only residential levies make up the local tax base. Another discussion centered on the Village's ability to fund long-term maintenance of infrastructure and community facilities. Most of the Village's infrastructure was rapidly installed during a small window of time, which means it will all reach its recommended end-of-life point simultaneously. Participants felt that long-term financial strategies, such as Smart Growth approaches, would be necessary to prepare for future financial burdens.

## Building Community

Participants expressed some concern that Pingree Grove lacks a sense of community across the Village and is generally defined by poor connectivity between Cambridge Lakes, Carillon, and the Heritage District. Community members commented that the Village can feel like three separate developments within the same municipality. Interest was shown for developing more community events, activities and programming, and facilitating better communication across the Village. Although connectivity may be lacking, there was a feeling among participants that residents still have pride in Pingree Grove and feel strongly about why they moved to the community. In the same vein, participants were concerned about the limited communication between residents and Village officials, which some felt may partially explain the lack of pro-active citizen involvement and volunteerism. Lastly, there was a desire to see more on-going community outreach, public information efforts, and public relations through the community centers and other tools, like a new Village newsletter.

## Importance of Quality Schools

Participants acknowledged the critical link between future residential development and the quality of local schools. The Cambridge Lakes Charter School was cited as an asset and received positive reviews from participants; however, there were concerns about the site's size and limited potential to expand in the future. Concerns were raised about the school campus being heavily-oriented to Cambridge Lakes and lacking good access to outside areas. Some the facility as a neighborhood school and inadequate to serve the entire Village as growth continues. Respondents discussed the feasibility of a second school, where it should be located, and how the Village should be planning for educational facilities in the future. There is a general consensus to monitor the education environment in Pingree Grove, and participants cited past concerns about long bus rides (i.e. 45 minutes) for young students and the negative impact that could have on the continued residential quality-of-life of current residents, as well as the ability to attract new homeowners in the future.

## Transportation Infrastructure

Respondents expressed concern about traffic safety and congestion, mostly located at prominent intersections on U.S. 20, Illinois 72, Illinois 47, Big Timber Road, and Reinking Road. Further, these intersections were noted as lacking pedestrian safety and causing congestion. Community members felt that a number of improvements would be necessary, including intersection realignments, introduction of traffic signals, and construction of new turn lanes. It should be noted that the IL Route 72 and Big Timber Road intersection is not part of the Village's jurisdiction.



The Village of Pingree Grove is looking for community input concerning the upcoming Comprehensive Plan and we need your help!

[Learn More](#)

#### Get Involved



sMap! - Map Based Community Outreach



Community Meetings



Questionnaires

## Online Questionnaire

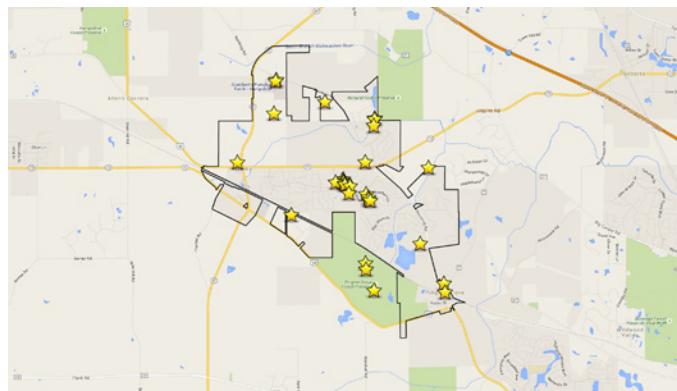
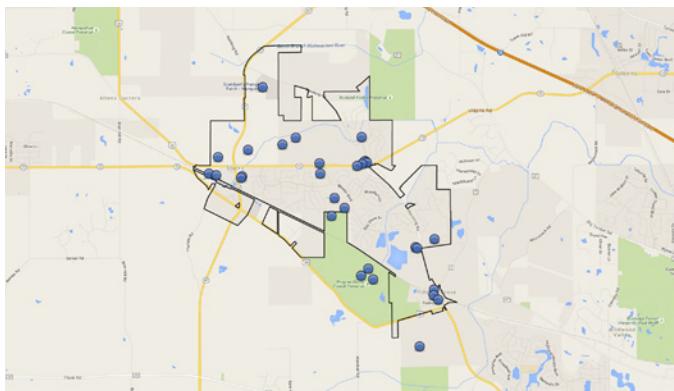
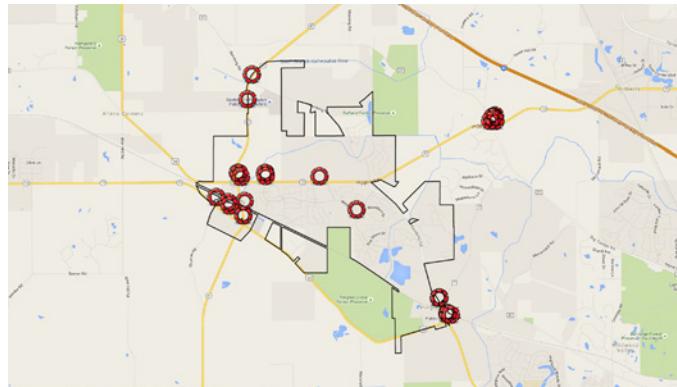
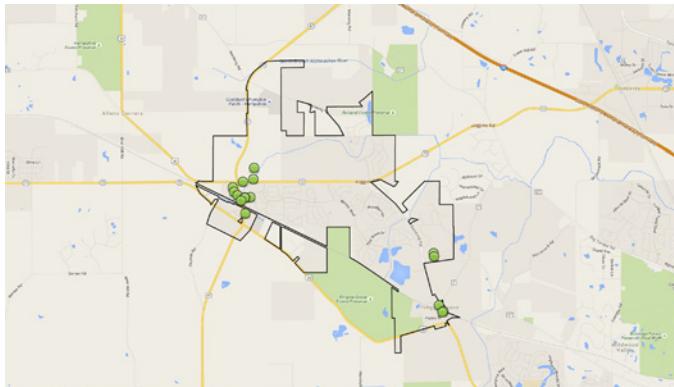
Available through the project website, the questionnaire was launched in September 2014 and remained open throughout the existing conditions analysis and visioning portions of the planning process. A total of 184 residents submitted answers to the questionnaire. The majority of respondents have lived in Pingree Grove for 1 to 10 years and are between the ages of 25 and 44.

Residents emphasized neighborhoods as the Village's greatest strength, selected by 28% of respondents. Other assets included small town character, friendliness of community residents, safety and security, community appearance, and quality of housing. While housing quality was highlighted, many felt that Pingree Grove's overall quality was staying about the same, or actually getting worse.

The majority of residents are satisfied with the quality of life in Pingree Grove, and only approximately 10% of respondents expressed dissatisfaction. It should also be noted; however, that 55% of respondents felt the quality of life in the Village has remained about the same over the past 10 years.

Many questions regarding Village services and amenities received a large amount of "Don't Know" or "Unsure" responses, commonly representing elements the Village lacks, such as various educational facilities. This may reflect that many residents are new to the community.

The lack of commercial and shopping areas were listed as the Village's number one weakness, with participants overwhelmingly in support of new retail stores, restaurants, and entertainment options. Additional disadvantages included poor mass transit options, high taxes, and the lack of medical facilities. Respondents identified commercial and shopping areas, development and growth potential, and taxes as the top three issues for the comprehensive plan to address.



## sMap

sMap is an online mapping tool that residents can use to create their own custom maps of Pingree Grove and share their priority issues, concerns, and suggested improvements. This feedback is geographically tagged to specific locations on the map. Participants were able to classify points in the categories of community asset, development priority site, problematic intersection, public safety concern, undesirable use, key transit destination, desired use or development, and poor appearance.

As of the drafting of this Existing Conditions Report, online participants created 17 maps with a total of 160 points. The following is a summary of common trends noticed consistently throughout those maps created:

■ **Heritage.** The Heritage District was discussed for necessary improvements and amenities, such as new civic buildings or a Metra train station.

■ **Retail.** Sites for new and desired developments were noted throughout the Village, largely concentrated at the intersection of Illinois 72 and Illinois 47, and intersection of Illinois 72 and Reinking Road.

■ **Poor Appearance.** 10 of 12 points in the Poor Appearance category were located in the western end of Pingree Grove, concentrated around the intersection of Illinois 72 and Illinois 47, with multiple participants noting the poor state of the water tower.



**Problematic Intersections.** Points were largely concentrated on four focus areas; specifically, the Heritage District, the intersection of Illinois 72 and Reinking Road, the center of Cambridge Lakes, and mainly around the intersection of Illinois 72 and Illinois 47. With 28 points identified, problematic intersections was the largest category, with participants highlighting issues surrounding the Village's largest roads and the entrances and exits to Cambridge Lakes. Though not within Village jurisdiction, many maps noted issues at the intersection of Big Timber Road and Illinois 72.



**Desires.** Many points demonstrated a desire for greater recreational facilities and mobility, including pedestrian bridges, dog parks, and increased access to the Pingree Grove Forest Preserve.



**Assets.** Community Asset points focused on the Pingree Grove Forest Preserve. Goebbert's Pumpkin Patch, Cambridge Lakes Community Center, and Cambridge Lakes Charter School.





# LAND USE & DEVELOPMENT

# 3

The Land Use and Development chapter identifies desired future land use for all areas of the Village of Pingree Grove and its related growth areas. The chapter includes an overall Land Use Plan with more detailed and area specific recommendations in the Residential Areas Framework, Commercial and Industrial Areas Framework, and the IL Route 47 Subarea Plan.

Utilizing the recommendations of this chapter, the Village of Pingree Grove should strive to enact manageable growth of residential, commercial, and industrial land uses. Projections indicate that the Village can expect considerable growth in residential development; however, new single family attached and multi-family options should be encouraged to continue to attract young professionals, young families, and first-time homeowners to the area. As growth continues, more expansive commercial and industrial development will be necessary to diversify the local tax base and ensure financial stability. The IL Route 47 corridor will be an important generator for both commercial, industrial, and employment-based uses bringing greater activity and revenue to the community.

## KEY THEMES

### Heritage District

Considered to be Pingree Grove's "Village Center," the Heritage District is of unique importance to the community. Though today it primarily consists of single family homes, the Heritage District is envisioned as a pedestrian-friendly district featuring a mix of traditional single family housing and rowhomes surrounding a mixed use center. The mixed use area would feature boutiques, restaurants, neighborhood retailers, and multi-family residences. Moving forward, new single family attached and mixed use development should be encouraged near the intersection of U.S. Route 20 and Reinking Road to help establish the Heritage District as the community's mixed use town center. In addition, historic preservation should be focused within the district to ensure that the community's cultural assets are retained in the face of new development.

### Balanced Growth

Pingree Grove's tax base is largely concentrated in property taxes generated from residential development. The high concentration of single family dwellings and minimal commercial and industrial development has placed a higher tax burden on residential uses (which make up 97% of the Village's equalized assessed value). There is a noted concern among residents that a lack of a non-residential tax base will inhibit the Village's ability to continue to provide high quality community facilities and services. Future development should be encouraged in accordance with the Land Use Plan to provide for a more balanced approach to growth that broadens the tax base.

As significant single family residential development occurs in areas north of IL Route 72, a mix of commercial, light industrial, and multi-family development should also be encouraged along the IL Route 47 corridor.

### Conservation Design

Heralded as a suburban community with a country landscape, land use and development must preserve the important natural assets which have defined the community. As the Village sees continued growth, conservation design should be encouraged for all new development. Where appropriate, natural resources such as waterways, remnant oak woodlands, and wetlands should be incorporated into site design, preserving these features while creating unique and innovative developments. Residential land uses should be encouraged to utilize conservation design techniques where smaller single family lots are clustered together to preserve areas of open space that incorporate naturalized stormwater infrastructure, public parkland, and natural features such as wetlands and wooded areas. Other land uses can also benefit from the conservation of green infrastructure and sustainable development to reduce energy costs, decrease waste output, and even increase buildable area.

### Agriculture & Community Identity

Pingree Grove is a community with plural personalities: that of a bedroom community in the Chicago suburbs, and also that of a historic Illinois farming community. As a community proud of its rural landscape and scenic "countryside" vistas, agricultural land is an important feature in the Village of Pingree Grove. Despite this community pride, residents have indicated a strong desire to encourage new development within the community, including the addition of new employment and commercial development that can serve to diversify and broaden the Village's tax base.

Given the Village's location in a rapidly growing portion of the Chicago region, agricultural areas within the Village and its planning area are likely to be developed over the long term. As Pingree Grove experiences growth and development, there will come a time when farm activities are no longer compatible with surrounding residential and commercial areas. The recommendations of this Plan strive to prevent the premature conversion of agricultural land and open space, and promote its continued use for farming until it is no longer feasible or desirable by the landowners.



## LAND USE PLAN

All parcels within the Village and its planning jurisdiction have been designated one of 9 land use categories. These land use categories should serve as the basis for development review as well as revisions and amendments to the Village's Zoning Regulations. The land use categories include:

- Single Family Detached Residential
- Single Family Attached Residential
- Multi-Family Residential
- Corridor Commercial
- Neighborhood Commercial
- Light Industrial
- Agribusiness
- Public/Semi-Public
- Parks & Open Space

## Maintaining Flexibility

It should be underscored that the Land Use Plan is a general guide for growth and development of Pingree Grove and serves as a foundation for future decision-making. It is not a site-specific development plan. While the Land Use Plan provides specific guidance on land use decisions, it is also flexible enough to allow for creative approaches to land development that are consistent with the policies and guidelines included in the Comprehensive Plan.

## Existing Entitlements

Where applicable, the Land Use Plan reflects the intended future land use for properties that were entitled prior to adoption of the Comprehensive Plan. The roadway alignments and open space areas identified are approximate and intended to reflect Village-wide policies that encourage connectivity and preservation. As development occurs, future road alignments and greenway boundaries may differ from those shown in the Land Use Plan and subsequent figures provided in this Comprehensive Plan.



## Residential Land Uses

### Single Family Detached Residential

Detached single family homes should continue to be a defining land use in the community. This land use includes the majority of Pingree Grove's residential neighborhoods consisting of quarter-acre lot subdivisions in curvilinear block patterns. Additional variety is provided in smaller lot homes surrounding the Heritage District or larger "estate" lots of neighborhoods to the east, like Triple Oaks Farm. As single family neighborhoods are developed, complementary investment in local community facilities and transportation networks is needed to ensure new residents are well-served.

### Single Family Attached Residential

While not as prominent in land area, Pingree Grove has numerous townhome and duplex residential neighborhoods such that half of the housing stock comprises single family attached housing. Strategic single family attached development should be encouraged along key routes, including the IL Route 72 and Reinking Road, and can be used to buffer between single family neighborhoods and areas of more intense development such as multi-family neighborhoods, high traffic corridors, and light industrial areas. Single family attached development should be encouraged to maintain a significant share of development within the overall housing stock as single family detached housing is developed elsewhere.

### Multi-family Residential

The multi-family residential land use consists of structures that contain multiple living units sharing common areas such as entrances, often stacked vertically. Multi-family development should be encouraged along the IL Route 47 corridor where it can serve as a buffer between commercial areas and single family neighborhoods. Multi-family residential should be sited with convenient access to commercial uses, natural areas, and diverse transportation modes where possible. It should also be encouraged as a component of mixed use development within the Heritage District. The development of multi-family housing is a key component in providing high-quality, affordable housing choices within the Village and striving to meet the requirements of the Affordable Housing Planning and Appeal Act.

## Commercial Land Uses

### Corridor Commercial

Corridor commercial uses include businesses that provide goods and services to residents of the community as well as passing motorists on major transportation corridors. These areas contain a mix of retail from large community-scale shopping centers with multiple tenants and outlet development, to smaller standalone businesses. The Village currently has limited corridor commercial; however, market potential along IL Route 47 will encourage development. Site design should ensure that corridor commercial uses are properly buffered from residential uses and do not hinder safety and flow of major transportation routes.

### Neighborhood Commercial

Neighborhood commercial areas include the retail and service providers that cater to the day-to-day needs of the local community. Uses may include smaller retail stores and boutiques, restaurants, and service shops. While the Village currently has minimal neighborhood commercial development, future growth in Pingree Grove and nearby portions of Elgin will create additional demand for commercial uses that can support the Heritage District and existing subdivisions. Site design of neighborhood commercial uses should be accessible for both automobiles as well as pedestrians travelling from adjacent residential areas.

## Industry & Employment Land Uses

### Light Industrial

Light industrial uses represent a large part of the Village's business community and contribute to the economic health of the Village. These uses includes office, research and development, light distribution and warehousing, light manufacturing, construction, and wholesale supplies. The scale and intensity of these uses should vary based on context and respect the scale and character of nearby housing when located near a residential area. When adjacent to commercial districts or residential neighborhoods, buffering and screening should be in place to appropriately mitigate potential negative impacts and nuisances. Generally speaking, uses and activities in these areas should be inside and of relatively low intensity, in terms of impact on adjacent properties. Where possible, future light industrial development should be organized in a campus-like setting.

## Agribusiness

Agribusiness land uses include nurseries, horse stables, cooperatives, and other agriculture related uses with a commercial component. These uses are scattered throughout the planning area and add to the distinct rural character of the community. Properties designated as agribusiness may be developed for residential or commercial purposes over the long-term, but should remain intact until a time land-owners and the Village find it appropriate for the property to be annexed and/or developed.



## IL 47 Flex District

The IL 47 Flex District provides for flexibility in the development of large properties along the Village's most heavily travelled corridor. The IL 47 Flex District land use is intended to accommodate a variety of uses including commercial, business park, and multi-family. The Village should prioritize commercial development at key intersections along the IL Route 47 corridor (represented by the Corridor Commercial use), while encouraging non-retail development within the IL 47 Flex District. Regardless of end use, the Village should be open to development that is of high quality design and construction that supports the goals of the Comprehensive Plan.

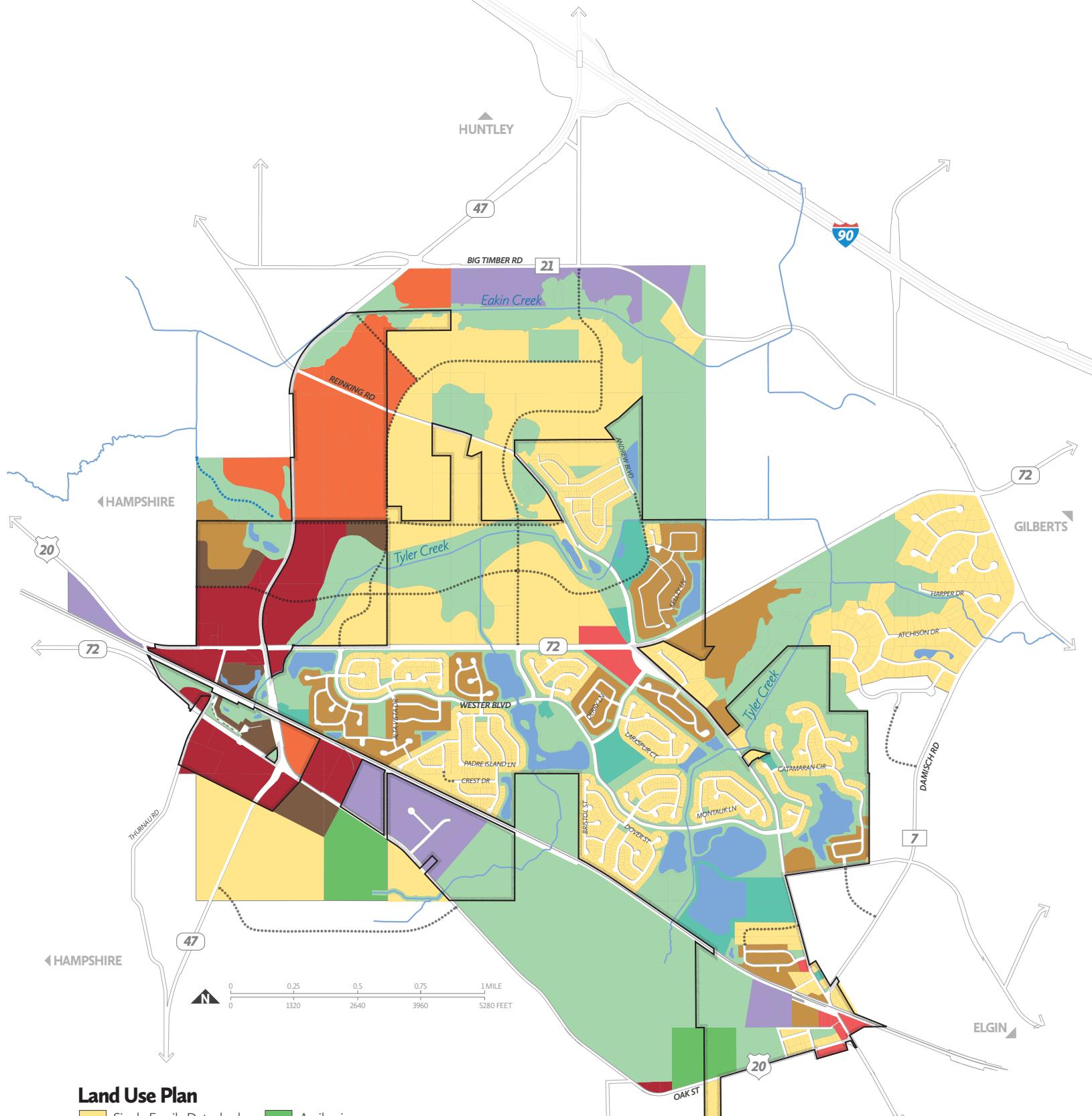
## Public/Semi-Public

The Public/Semi-Public land use includes a range of uses that generally serve the public such as government facilities, schools, churches, Village sites and buildings, and utilities. Although use is restricted to HOA residents, common use facilities like the Cambridge Lakes Community Center and Carillon Club House are classified as semi-public. As the Village continues to grow, public/semi-public uses should be expanded to provide adequate civic services to residents throughout the community. Public/Semi-Public land uses and related policies are further discussed in **Chapter 6: Community Facilities**.

## Parks & Open Space

The Parks and Open Space land use includes several Village maintained parks, smaller parks maintained by the Cambridge Lakes Home Owners Association, community gardens, and the skate park. Park uses include outdoors areas for passive and active recreation.

Also included are areas of open space that contain natural areas such as wetlands, floodplains, wooded areas, etc. Additional discussion of park and open space land uses can be found in **Chapter 7: Parks, Recreation & Open Space** and **Chapter 8: Water Resources**.



### Land Use Plan

- Single Family Detached
- Single Family Attached
- Multi Family
- Corridor Commercial
- Neighborhood Commercial
- IL 47 Flex District
- Agribusiness
- Light Industrial
- Public / Semi-Public
- Parks / Open Space
- Proposed Roadway Alignment or Extension\*

\* Proposed roadway alignments and extensions are intended to illustrate best practice and do not have any impact on existing entitlements and development agreements.



## RESIDENTIAL AREAS FRAMEWORK

### VISION

*The Village of Pingree Grove offers a range of high quality, livable, and unique housing options nestled within thriving residential neighborhoods. New residential developments north of IL Route 72 and to the southwest along IL Route 47 offer new residents a range of housing option at a range of price points to match their lifestyle. Residents living in the Cambridge Lakes and Carillon subdivisions continue to have a high quality of life while new housing complemented by mixed use development have established the Heritage District as a true Village Center for the Pingree Grove community. New development throughout the Village has also implemented a conservation-oriented design that links Pingree Grove's neighborhoods together through an extensive network of greenspace, allowing residents to enjoy access to nature that is unparalleled among other communities in the Fox Valley region. The Village remains a place new residents and families desire to live and grow.*



## GOAL

Develop quality residential neighborhoods and districts that provide a range of housing density, affordability, and styles and ensure manageable and sustainable long term growth.

## OBJECTIVES

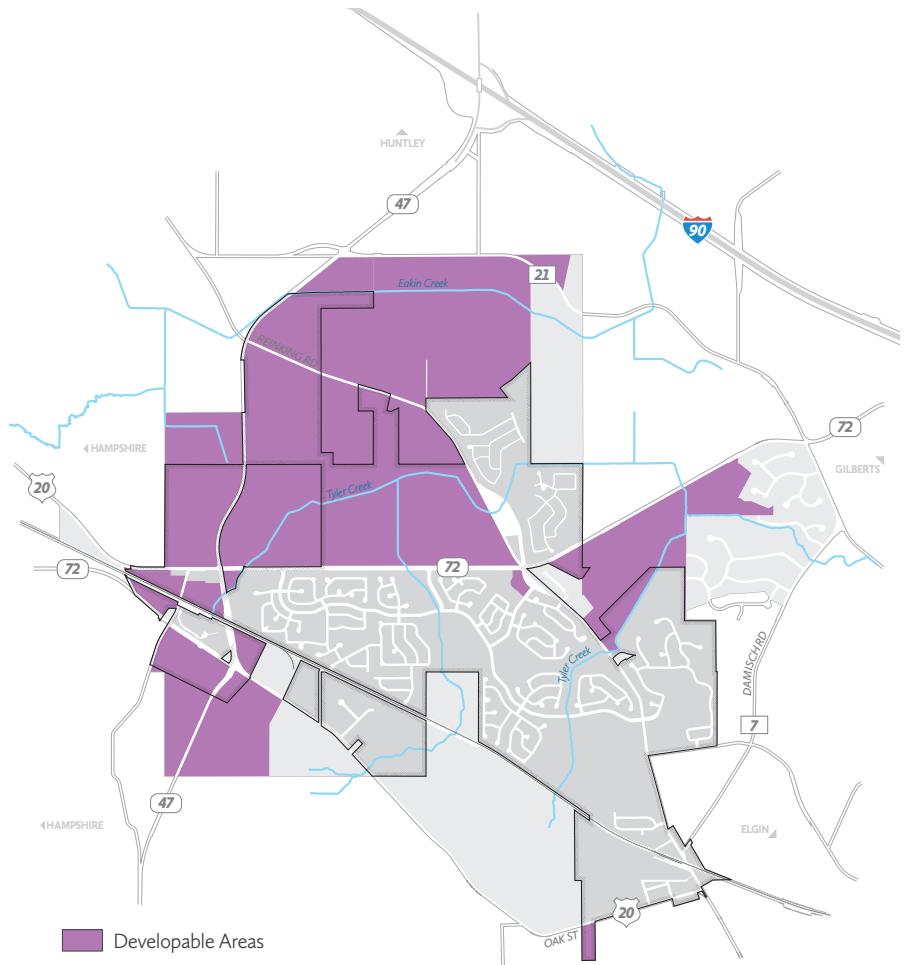
- Encourage infill of vacant or undeveloped residential areas to ensure efficient use of infrastructure.
- Diversify the local residential market and create a greater housing balance through development of multi-family, single family attached, and single family detached options.
- Encourage the use of low impact development and conservation design that will protect the Village's rural character and natural areas.
- Develop and implement an affordable housing plan that meets Illinois Housing Development Authority requirements and supports greater population diversity.
- Promote a mix of residential and neighborhood-scale commercial within the Heritage District to create a unique and pedestrian-friendly mixed use center.

## RESIDENTIAL AREAS FRAMEWORK

The Village of Pingree Grove is defined by the quality of its residential areas, offering desirable suburban housing options with direct access to the rural countryside. The Residential Areas Framework identifies key issues and related strategies effecting residential areas of the Village. The primary goal of the Residential Areas Framework is to preserve and enhance the quality and character of existing housing stock while highlighting strategies to ensure that future residential development best suits the Pingree Grove community.

### Development Potential

Projections indicate that the Pingree Grove population could triple in size through the year 2040. Based on current densities, this population would utilize much of the undeveloped areas that remain within the Village's planning area. At more than 1,700 acres, the Village has a large amount of available land with the potential for future residential development, including various incomplete areas within the existing Cambridge Lakes and Carillon subdivisions. If all growth areas were to develop at the same gross density as the Cambridge Lake subdivision (2.6 dwelling per acre) there is the potential to accommodate an additional 4,500 homes. While the complete development of the planning area may not occur over the life of the Comprehensive Plan, it is likely that such development will occur through the year 2040. Proactive coordination and careful review of development proposals in alignment with the Land Use Plan will help the Village ensure residential build-out is manageable and strategic.



### Traditional Single Family Neighborhoods

The areas north of IL Route 72 and south of U.S. Route 20 should be targeted for traditional single family development. As with the Cambridge Lakes subdivision, nodes of single family attached development may be appropriate within these predominantly single family detached neighborhoods. Subdivisions should include dedicated recreational space, pedestrian amenities, and access to community facilities. Where possible, connectivity to adjacent residential and commercial areas should also be provided via a regular street grid.

### Low Impact Development

New residential development should focus on preservation of the Village's existing rural character through Low Impact Design (LID). LID is an approach to residential development that preserves contiguous areas of open space and natural areas by clustering smaller residential parcels on select areas of the site. The overall housing density remains the same, but the site design allows for larger areas of common open space that can be used as neighborhood or community parkland. This approach to development also provides for naturalized stormwater management while minimizing the amount of roadway and utility infrastructure needed to serve a given development.

Low impact design should be strongly encouraged in Pingree Grove's growth areas where critical sensitive areas (CSAs) such as floodplains, wetlands, areas of high slope, and wooded areas could be impacted by typical subdivision development. CSAs should be preserved and integrated within the development and the existing topography should be used to dictate the design of new development, preserving an area's natural drainage. This approach would promote the integration of green infrastructure as a community asset, work to leverage open space to establish physical connections between neighboring residential areas, and provide a more sustainable policy for water resource management.

## Infill Residential

A number of existing residential neighborhoods have incomplete or vacant sections still available for development, including portions of the Cambridge Lakes and the Carillon subdivisions. Completion of these subdivisions and other infill development should be encouraged. In addition to providing a more complete urban fabric and higher quality of life, infill development promotes the efficient use of Village resources and infrastructure that have already been invested in established neighborhoods. Measures should be taken to facilitate new development that is of the same high quality as nearby homes that have already been built. Overall, the reinvestment in and improvement of existing neighborhoods should be pursued equally with the development of other areas.

## Heritage District Residential

The Heritage District should be promoted as a unique area within the Village where a mix of residential and neighborhood-scale commercial development reflects the rural history of the community. Single family development should be encouraged within the Heritage District including smaller lot single family detached and single family attached homes. Existing vacant residential, such as the Chesapeake neighborhood, should be prioritized for new residential development.

The District also includes several industrial uses with extensive outdoor storage, which do not match the desired character of the area. In accordance with the Land Use Plan, these uses should be targeted for residential uses, including single family attached options that complement future commercial development. In addition, mixed use development featuring ground floor retail with residential units on upper floors should also be encouraged.

## Zoning Update

The Village should reevaluate and revise existing zoning regulations to align with recommended land uses for the Heritage District. This process could include permitting single family attached housing in this area in addition to restaurant and retail uses and mixed use development. As a complement to revised zoning regulations, the Village should also consider adopting design guidelines to ensure that new development complements established single family areas.

## Pingree Creek

Shodeen Homes currently owns a 780-acres site in Elgin immediately adjacent to the Village along the U.S. Route 20 and Reinking Road corridors. A plan has been approved for a development known as Pingree Creek, which includes more than 2,700 dwelling units consisting of a mix of small lot single family homes, townhomes, and multi-family development. The Development will introduce a significant amount of residential uses to the area, as well as some commercial, in areas immediately adjacent to the Heritage District to the north, south, and east. This should increase activity and improve the value of residential property within the District.

The Village should coordinate with Elgin and Shodeen Homes to ensure that the Heritage District retains its preferred character while benefiting from nearby development. This can include the coordination of related improvements that will benefit both areas, such as gateway or wayfinding signage for the Heritage District. Roadway improvements related to the Pingree Creek development also stand to benefit the Village and the Heritage District and discussed in further detail within **Chapter 4: Transportation and Mobility Plan**.



## Housing Balance

The Village has a unique, nearly 50/50 mix of single family detached and single family attached housing stock. While this provides some housing diversity, the large majority of homes are owner-occupied single family units. The regional housing market appears to be rebounding from the recent recession; however, potential demand exists for increased single family attached and multi-family units. This combination of housing type would balance the housing stock and accommodate a wider range of resident ages and incomes.

## Single Family Attached

Though the Village does have a good share of single family attached housing, a large portion of this is concentrated in age-restricted senior housing of the Carillon development. Where applicable, the Village could benefit from additional single family attached uses housing that would provide new housing options. Single family attached housing should be encouraged in areas preferred for conservation design, as condominiums, townhouses and similar attached options naturally lend themselves to cluster development applications. This includes areas adjacent to natural areas along the Tyler Creek corridor and other greenways.

## IL Route 47 Multi-family

The Village currently has limited multi-family housing options. Moving forward, the Village should encourage multi-family developments to provide housing options for young professionals, young families, and seniors. Multi-family developments should be concentrated along Illinois 47 within close proximity to commercial corridor uses.

Where appropriate, multi-family developments can be used as buffers between residential uses and more intense uses, such as commercial or industrial. Multi-family residential development may also be a component of neighborhood-scale, mixed use development within the Heritage District. I



## Multi-family Design Considerations

With limited examples of multi-family development within Pingree Grove, the following design components should be considered when evaluating proposals for multi-family development:

- Internal rear or side alleyways, or internal parking and loading areas should be provided and screened from public rights-of-way.
- Landscaped berms should be used to screen multi-family areas from abutting single family residential areas.
- Developments should meet minimum site and open space landscaping requirements.
- Structures with several units should incorporate varied setbacks along the building frontage.
- Barracks-style multi-family buildings with long, unvaried frontages and roof-lines should be avoided.
- Exterior stairways should be avoided. Where exterior stairways are necessary, they should be enhanced with quality materials and architectural detail that complement the larger structure.
- Multi-family development should be broken into several structures of varied size and scale that respects the scale of adjacent development.



## Affordable Housing Plan

In 2003, the Illinois General Assembly passed the Affordable Housing Planning and Appeal Act (AHPAA) (310 ILCS 67) to address the lack of moderately-priced housing that exists in many communities. The AHPAA established a target of 10% affordable housing share of year-round housing stock. Using the 2011 American Community Survey 5-Year Estimates, the Illinois Housing Department Authority (IHDA) determined that 1.4% of the Pingree Grove housing stock is affordable. (15 of 1,103 units).

Since less than 10% of the housing stock in Pingree Grove is affordable as defined by IHDA, the Village is required to submit an Affordable Housing Plan as a non-exempt community. This section, in concert with the recommendations of the Land Use Plan and Residential Areas Framework, satisfies Affordable Housing Plan requirements identified in the AHPAA.

### Affordable Housing Goal

The Village will strive to achieve a minimum of a 3% increase in its overall percentage of affordable housing within its jurisdiction. This will result in a total of 4.4% of all housing being defined as affordable housing.

### Affordable Housing Units Necessary for Exemption

Per the AHPAA statute, the construction of 95 affordable dwelling units would be required to augment the existing housing stock and exempt the Village of Pingree Grove from the act.

- **Target Percent Affordable:** 10%
- **Existing Housing Units:** 1,103
- **Existing Affordable Housing Units (per IHDA's determination in 2013):** 15
- **Affordable Housing Units needed for existing housing to meet goal** =  $1,103 \times 10\% = 110 - 15 = 95$



In the year 2040, when Pingree Grove is projected to be fully built-out, the construction of approximately 545 affordable housing units would be needed to reach the 10% target identified in the AHPAA.

- **Additional Housing Units at Full Build-out:** 4,500 home (year 2040).
- **Total Affordable Housing Units to meet goal** = (1,103 existing DUs + 4,500 new DUs) x 10% = 560
- **New Affordable Housing Units Needed in 2040:** 560 - 15 = 545

## Definition of Affordable Unit

Per the calculations used in the 2013 List of AHPAA Non-Exempt Local Governments, an owner-occupied unit is defined as affordable with a home value of \$ 149,133. An affordable rent is defined as \$916.

- **Affordable Rental Payment:** \$61,045 (Chicago MSA AMI) x 60% x 30% (portion of income affordable for housing) / 12 = \$916 per month
- **Affordable Monthly Payment:** \$61,045 (Chicago MSA AMI) x 80% x 30% (portion of income affordable for housing) / 12 = \$1,221 per month
- **Median Real Estate Taxes Paid:** \$6,115 (\$510 per month)
- **Affordable Monthly Mortgage Payment (excl. property taxes):** \$1,221 - \$510 = \$711

Using the present value calculation typical for determining an affordable sales price in mortgage lending and assuming a 4.8% interest rate (the average rate for conventional mortgages between 2008 and 2013), a 30-year loan term and a 10% down payment – an affordable home value in Pingree Grove was determined to be \$149,133.

## Areas Appropriate for Affordable Housing Construction

At the time of its non-exempt determination, the majority of the housing stock in the Village was less than 10 years old. The new condition of housing in Pingree Grove may have priced housing units above the affordability limits. As housing in the Village begins to mature, it is anticipated that units will become more affordably priced and evenly distributed throughout the Village.

Moving forward, the Village will also consider increasing its affordable housing stock through continued development of single family attached units and multi-family units where appropriate. These sites could include area along the IL Route 47 corridor as well as strategic single family attached infill development and mixed-use, multi-family development within the Heritage District. New development of affordable housing is preferred to renovation or adaptive reuse because of the very young age of the Village's housing stock. The majority (94%) of Pingree Grove's existing housing was built in the early 2000s to the present. Opportunities for renovation are not likely to occur in any significant number until the housing stock has aged considerably, and new construction offers the most imminent solution to providing affordable housing in the Village.

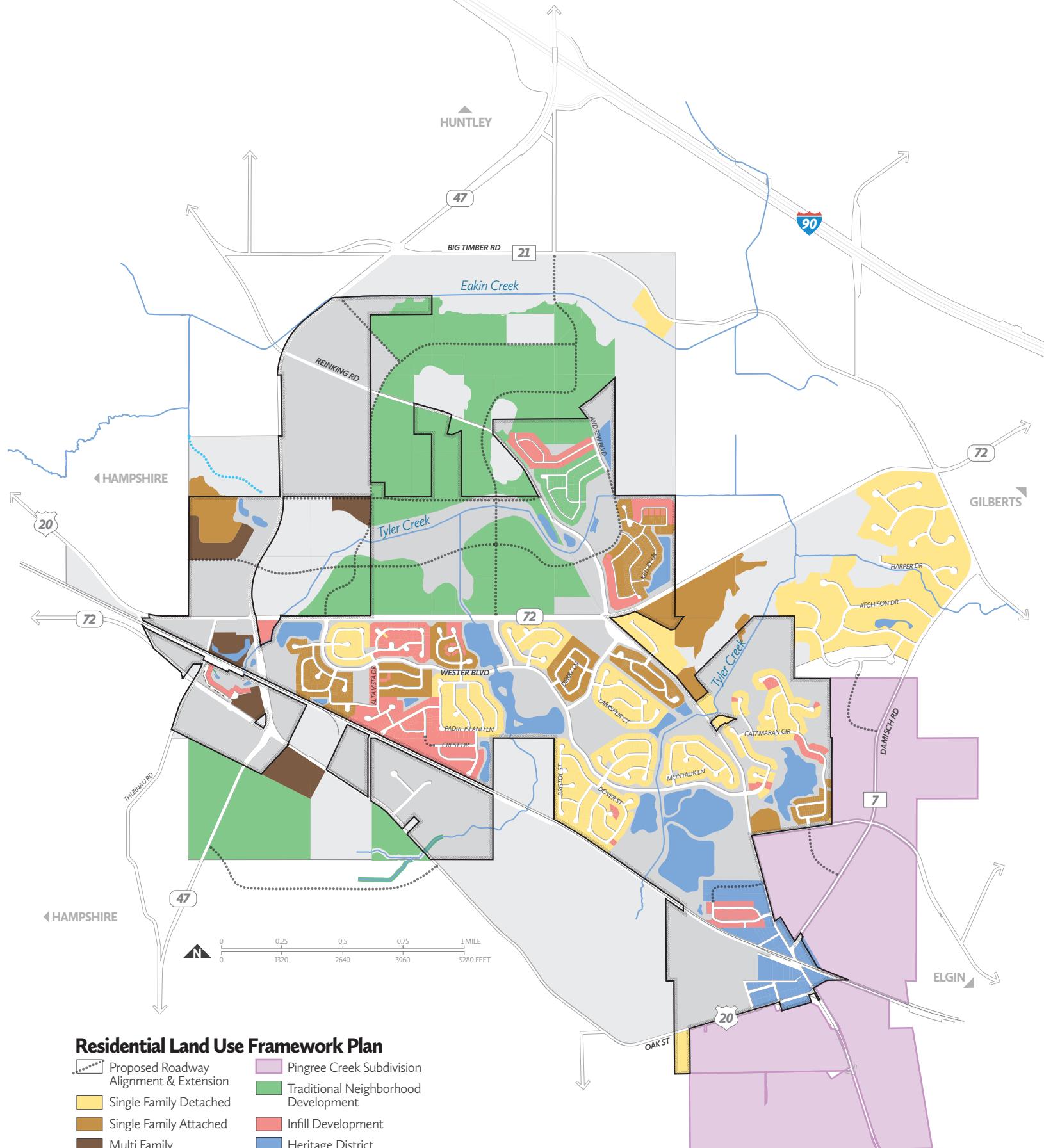
## Incentives to be considered for Affordable Housing

With an affordable home value of \$149,133, many of the single family attached homes currently for resale within the Cambridge Lakes subdivision are considered affordable. A sample of 15 duplex and townhome units currently listed for sale have an average asking price of \$147,500. Even when factoring in monthly HOA assessments (averaging \$130 for the sample), the affordable housing unit home value is approximately \$125,000 and close to market rate.

With so many housing units likely already priced close to the defined affordable home value, the Village could work with existing and future HOAs to implement strategies to reduce assessments and drastically increase the number of affordable, owner-occupied housing units in the Village. Allowing for moderately intense multi-family development, increasing density to 10-12 units per acre (compared to 8 units per acre for existing townhome developments), would also allow for lower cost units likely within the affordable housing threshold.

Potential incentives to facilitate affordable housing development and reduce housing assessments include:

- Permitting xeriscaping to cut down on lawn care costs;
- Consolidation of improvements by way of cluster developments or PUDS to minimize the amount of infrastructure needed to support a development;
- Streamlining the development process through priority permit processing of affordable housing development proposals;
- Updating the zoning ordinance in accordance with the Land Use Plan to consider higher densities in strategic areas including the IL Route 47 corridor.

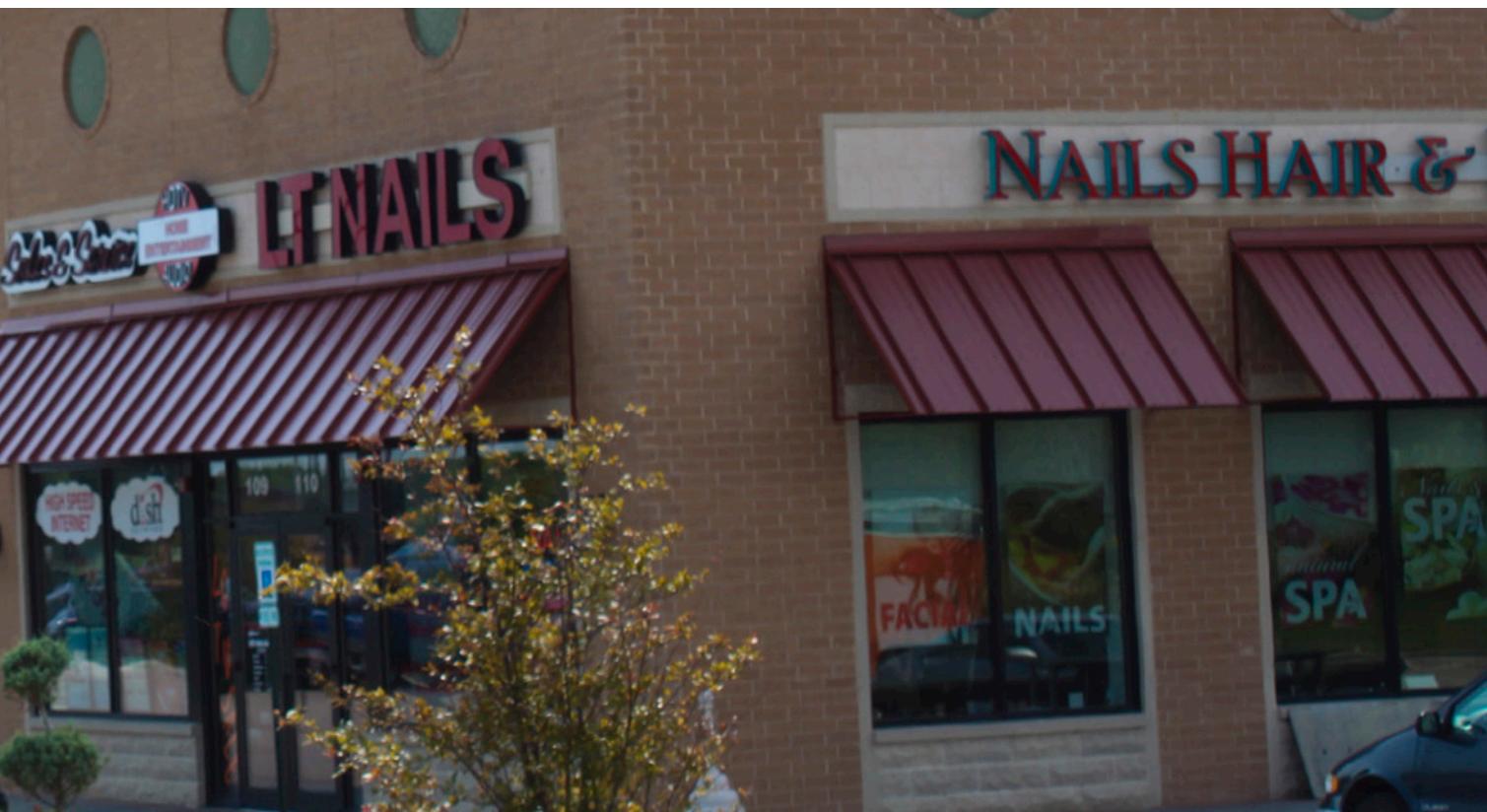




## COMMERCIAL & INDUSTRIAL AREAS FRAMEWORK

### VISION

*The Village of Pingree Grove contains a healthy variety of commercial and industrial spaces which contribute to the quality of life and financial stability of the Village. Residents and visitors alike can shop in nationally known retailers along the IL Route 47 corridor, while smaller neighborhood centers serve day-to-day needs. The Heritage District has become a true village center where residents enjoy spending time, shopping at niche retailers, and dining out. New business and industrial parks have helped stabilize the local economy while maintaining the rural character foundational to the community. With new employment options directly inside the community, residents are now able to live, work, shop, and play all within Pingree Grove.*



## GOAL

Develop quality commercial and industrial areas that meet the goods and service needs of local residents, expand local employment options, balance the local tax base, and establish Pingree as a location to shop and work.

## OBJECTIVES

- Prioritize commercial development at the key intersections along IL Route 47, catering to both local residents and regional visitors.
- Encourage the development of smaller neighborhood commercial providing daily goods and services within closer proximity of residential areas.
- Encourage smaller neighborhood commercial uses in the Heritage District to help establish the area as a thriving village center.
- Support agribusinesses within the community while allowing for appropriate redevelopment as identified in the Land Use Plan.
- Ensure adequate infrastructure including water, sewer, utilities, and telecommunications are provided to areas targeted for business and industrial park development to attract new employment-related development to the Village.
- Establish a well-defined package of economic development tools and incentives and a marketing campaign to facilitate economic development.
- Require the use of low impact development and integration of green infrastructure to protect and promote the Village's rural character and natural assets.

## COMMERCIAL & INDUSTRIAL AREAS FRAMEWORK

Pingree Grove has very limited commercial development; however, population projections will create a demand for additional commercial development in the future. Based on population projections, new households in the planning area will create demand for at least approximately 45 to 60 acres of local-serving commercial development. Increased market support for commercial development will also enable new retailers in the Village to recapture existing demand of goods and services that is currently being met outside of the Village. While some industrial businesses do exist, new industrial development will benefit the local economy and reduce the residential tax burden. The primary goal of the Commercial and Industrial Areas Framework is to grow and enhance commercial and industrial uses within Pingree Grove that broaden the tax base without detracting from the Village's residential and rural character.

### IL Route 47 Commercial

Given the abundance of developable land along Illinois 47 relative to project demand, commercial development should be prioritized around the intersections of IL Route 47 with U.S. Route 20 and IL Route 72 directly north and south of the railroad. These two intersections maximize opportunities to leverage cross-traffic while providing retailers close proximity to a growing residential population. The Village should encourage corridor commercial uses within identified areas along Illinois 47.

These areas are appropriate for "big box" stores, national retailers, and community-scale retail centers with large shared parking areas. Commercial service uses can also have an appropriate place in general commercial areas, but must be compatible with adjacent and nearby retail and commercial shopping areas and be located so as to not occupy prime retail locations.

### Corridor Commercial Design Considerations

In the absence of quality examples of large-scale commercial development within Pingree Grove, the following design components should be considered when evaluating proposals:

- Commercial development should be encouraged to provide structures that are architecturally detailed on all sides and have no visible services.

- Signage, attractive landscaping, lighting, and other signature elements should be consistent with the design and architecture of new development and incorporated to help accentuate the businesses located within the site.
- Clustered commercial development and shared parking facilities should be promoted including the use of shared frontage roads.
- Corridor commercial development should provide cross easement access, minimize curb cuts, and consolidate access drives.
- All parking areas should be screened with landscaping and low-lying fencing or masonry walls.
- Lot depths should accommodate extensively landscaped setbacks along arterials and boundaries with adjacent land uses.
- Detention and retention facilities should be incorporated into site design and utilized as features within the development, but should not occupy prominent corners.

The IL Route 47 corridor is critical to the economic health of the Village. In addition to the recommendations and policies provided in this section, the **IL Route 47 Subarea Plan** provided at the end of this chapter includes more detailed recommendations for this important corridor.

## Green Infrastructure Case Study

### MIXED USE BUSINESS OR COMMERCIAL

Coordination of site design with existing natural and made-made elements can help provide unique developments that are conscious of green infrastructure. The LEED Platinum Kresge Foundation Headquarters facility in Troy, Michigan is a high-performance green building and site developed with respect for a rural agricultural aesthetic. Through adaptive reuse, the site blends a historic 1840's stone farmhouse and outbuildings with a contemporary office complex, connecting each pre-existing building through the modern structure. The facility specifically provides abundant natural daylight and views of nature, which has resulted in overwhelming employee satisfaction regarding the workplace environment.



## Neighborhood Commercial

In addition to larger corridor commercial, the Village has the potential for neighborhood commercial located in the Heritage District and at the intersection of Reinking Road and Illinois 72. Neighborhood commercial should include smaller businesses that meet the day-to-day needs of Village residents. Site design should be pedestrian-friendly and include connections to existing pedestrian systems to accommodate adjacent residents. Structures should be smaller in size and match the nature of adjacent residential areas or uses.

## Heritage District Commercial

The Heritage District is an important part of the Pingree Grove community due to its historic character and connection to the area's roots. Though occasionally described as the Village's "downtown" the district lacks the amenities to stand as a distinct focal point, such as a community gathering place or niche retail, local shops, and eateries. The Village should reposition uses within the Heritage District to encourage the development of a "small-town" commercial node.

Attracting small businesses and shops to the area will help create a community center that provides unique retail opportunities, though parcel assembly may help enable development in some areas. In addition, mixed use development featuring ground floor retail with residential units on upper floors should also be encouraged in these areas. Commercial development within the Heritage District will also be supported by the completion of the Pingree Creek project in Elgin, which will include commercial uses along U.S. Route 20.

## Heritage Park

Heritage Park, located at the corner of Reinking Road and U.S. Route 20, represents a potential opportunity to accommodate commercial development within the Heritage District. The park also has a unique place in Pingree Grove's history with the Pingree family having provided the land for public use in the late 1800s.

The Village should consider establishing a pedestrian plaza on the southern portion of the Heritage Park property while encouraging mixed use development to the north in combination with the redevelopment of the adjacent vacant fire station property and former Village Hall site. The plaza could provide opportunities for outdoor dining or entertainment while also providing space for visitors to relax.

As discussed in **Chapter 6: Parks, Recreation, and Open Space**, recreation and open space aspects of the current Heritage Park site could be relocated to another nearby location, preferably the vacant backlots located south of Public Street.



## Agribusiness

Agribusiness within Pingree Grove should be supported and promoted as a defining feature of the Village's community character. These businesses bring visitors to the community and help to market Pingree Grove within the region. While agribusinesses should be supported, redevelopment of these areas should be consistent with adjacent uses and the character of the area. When possible, maintaining these areas as agribusiness should be favored; however, redevelopment of existing agribusiness to new uses should not be discouraged as long as the new development is in line with the Land Use Plan.

The Goebbert's Pumpkin Patch site has been identified in the Land Use Plan as an appropriate location for a mix of commercial, business park, and/or multi-family development. While Goebbert's currently remains a viable and valued business in the community, should the site become eligible for redevelopment, the Village should encourage redevelopment in accordance with the Land Use Plan.

## Green Infrastructure Case Study

### MANUFACTURING OR DISTRIBUTION FACILITY

Through the integration of sustainable innovations and system to site design, manufacturing and distribution facilities can maintain and enhance green infrastructure while retaining the necessary space for general operations. One example is the Aquascapes national headquarters and manufacturing facility in St. Charles. Completed in 2004, the 250,000 sq. ft. facility employs a green roof system, permeable unit pavers, and bioretention to meet Kane County's stormwater ordinance. Water runoff from the development is slowed down via gravel beds and bioswales and filtered by plant life before entering the watershed system.

Green infrastructure amenities allowed the development to use 30% more building area than would have been possible using conventional practices. The on-site parking lot renovation included the first large scale permeable paver installation in the Midwest, which can accommodate over 475 cars.



## Employment-related Development

The Village is located within office and industrial markets that are improving with positive absorption and declining vacancies. The area has a very competitive market, where access to major arterials and I-90 should benefit the Village; however, sites in other communities located closer to these amenities remain more advantageous. Neighboring Huntley and Gilberts represent the most significant competition with regard to these employment-related uses.

## Growth Area Business Parks

While Gilbert's will focus its office and industrial uses further to the east, Huntley's Comprehensive Plan calls for business park development along the Big Timber Road corridor immediately adjacent to the Pingree Grove growth area. The Village should encourage the development of business park or light industrial uses along the south side of Big Timber Road to complement future development in Huntley while establishing a buffer to new residential development in Pingree Grove's northern growth area.

Additional light industrial or business park development should be located on the east side of IL Route 47 south of Reinking Road, which can also benefit from immediate access to the I-90 corridor. Larger developments should include site design and branding efforts to create unique business or industrial parks in a campus-like setting. Where applicable, site design should include best management practices for sustainable development.

## Green Infrastructure Case Study

### OFFICE, RESEARCH, OR COMMERCIAL CAMPUS

Greater benefits can accrue through the integration of green infrastructure strategies as a district, neighborhood, or campus scale. The recently expanded and renovated Johnson Controls Headquarters complex in Glendale, Wisconsin includes four new LEED Platinum buildings. The complex also includes a number of associated site improvements, including solar thermal systems for hot water supply, geothermal heat pumps for buildings heating and cooling, rainwater harvesting for internal use, permeable paver units, bioretention, and native landscapes. Though the development doubled the total square footage of office space on the campus, energy use was cut by 21%, water use was reduced by nearly 600,000 gallons per year, and greenhouse gas emissions were reduced by 857,000 million pounds per year.



## Pingree Grove Business Park

Located along U.S. Route 20 south of the Illinois 47/Illinois 72 intersection, the Pingree Grove Business Park is the Village's only formal business park. The area recently saw the construction of an Uplands Concrete facility as the first tenant. Along with adjacent light industrial uses, the new facility demonstrates the potential for industrial growth in the area. In order to improve the area, the Village established the Bell-Harrison TIF Redevelopment Project Area which encompasses the business park.

To further encourage development in the Pingree Grove Business Park, the Village should consider implementing branding tools, such as gateway and signage enhancements, on-line marketing, and develop a defined package of economic development incentives that tenants could pursue. Where applicable, site design should include best management practices for sustainable development that could be used as a unique branding element to draw new businesses to the area.

## Economic Development

Commercial and industrial development is an increasingly critical priority for Pingree Grove. While growth areas support a large amount of residential development, commercial and industrial uses are important to the Village's economic health. The current reliance on a residential tax base underscores the need for expanded economic development. The Village must be proactive in their marketing and promotion techniques and application of incentives to attract new businesses and industries to the community.

## Incentives Program Evaluation

The Village currently promotes its Economic Development Incentive Program, which is designed to help Pingree Grove "achieve its long-term goals expressed in the Comprehensive Plan and Heritage District Master Plan." While the program encourages the evaluation of TIF Districts, Business Improvement Districts (BIDs), annexation agreements, recapture agreements, sales tax rebate agreements, and the use of Special Service Areas (SSAs), there is no official stance on the use of such incentives.

Following adoption of the Comprehensive Plan, the Village should adopt a clearly-articulated and established public economic development program, including supported tools and incentives designed to encourage investment and redevelopment. Understanding that the Village has limited staff to undertake this effort, it is fiscally prudent to initially retain the services of an economic development professional for assistance. Eventually, as development occurs and activity increases, a full or part-time position could be added to Village staff.

Economic development tools and their potential application are discussed in **Chapter 9: Implementation**. The recommendations of this plan should serve as the foundation for a more detailed economic development program.

## Marketing

Pingree Grove will need to be very proactive in marketing and attracting development to the Pingree Grove Business Park. One example is the "HuntleyFirst" campaign which has aggressively sought new development in Huntley through incentive packages. Pingree Grove should launch a marketing campaign including both online and physical promotional presence. This should include materials demonstrating the benefits of locating a business in Pingree Grove as well as information regarding incentives and programs offered. Marketing efforts should be widespread, but businesses that do not require immediate interstate access should be specifically targeted, such as research and development or limited-scale manufacturing.

## Impact Fees

When discussing potential commercial development within Pingree Grove, it is important to consider Kane County's Road Improvement Impact Fee. This ordinance was created to provide for the County's highway system, requiring that all new developments pay an assessed fee, designed to act as a "fair share" of payment for transportation improvements necessitated by increased development. The impact fee was developed as a means to supplementing other funding sources for transportation expansions.

In 2012, following the economic downturn, the impact fee ordinance was amended to reduce fees in the hopes of supporting new business growth in Kane County and help the market to stabilize. Between 2012 and 2015, all impact fees were reduced to 50% of their original cost. Starting in April 2015, all impact fees will be reduced to 55% of their original cost, and in April 2016, all impact fees will be reduced to 60% of their original cost. This was done with the intent of incrementally returning fees to their original costs as the market stabilizes. In 2012, County Board members unsuccessfully moved to eliminate the impact fee entirely.

The Village should support an impact fee policy that best enables economic development and business growth within Pingree Grove. In the short term, the Village should encourage the County to keep impact fees on a reduced fee schedule, which will continue to attract business development to the region. In the long term, the Village should encourage Kane County to establish a process by which local communities can provide meaningful input on potential changes to impact fee collection and administration.

One potential shift in the impact fee program could be to establish a process by which impact fee revenue must be put to use in the area it was collected. This would ensure that fees collected from businesses moving to Pingree Grove are reinvested directly within the community and nearby infrastructure as a benefit to the area being levied. Overall, as the County continues to assess its strategy for impact fees moving forward, the Village should provide active support to help determine a viable long-term approach to the use of impact fees in Kane County.

### *Impact Fees in Pingree Grove*

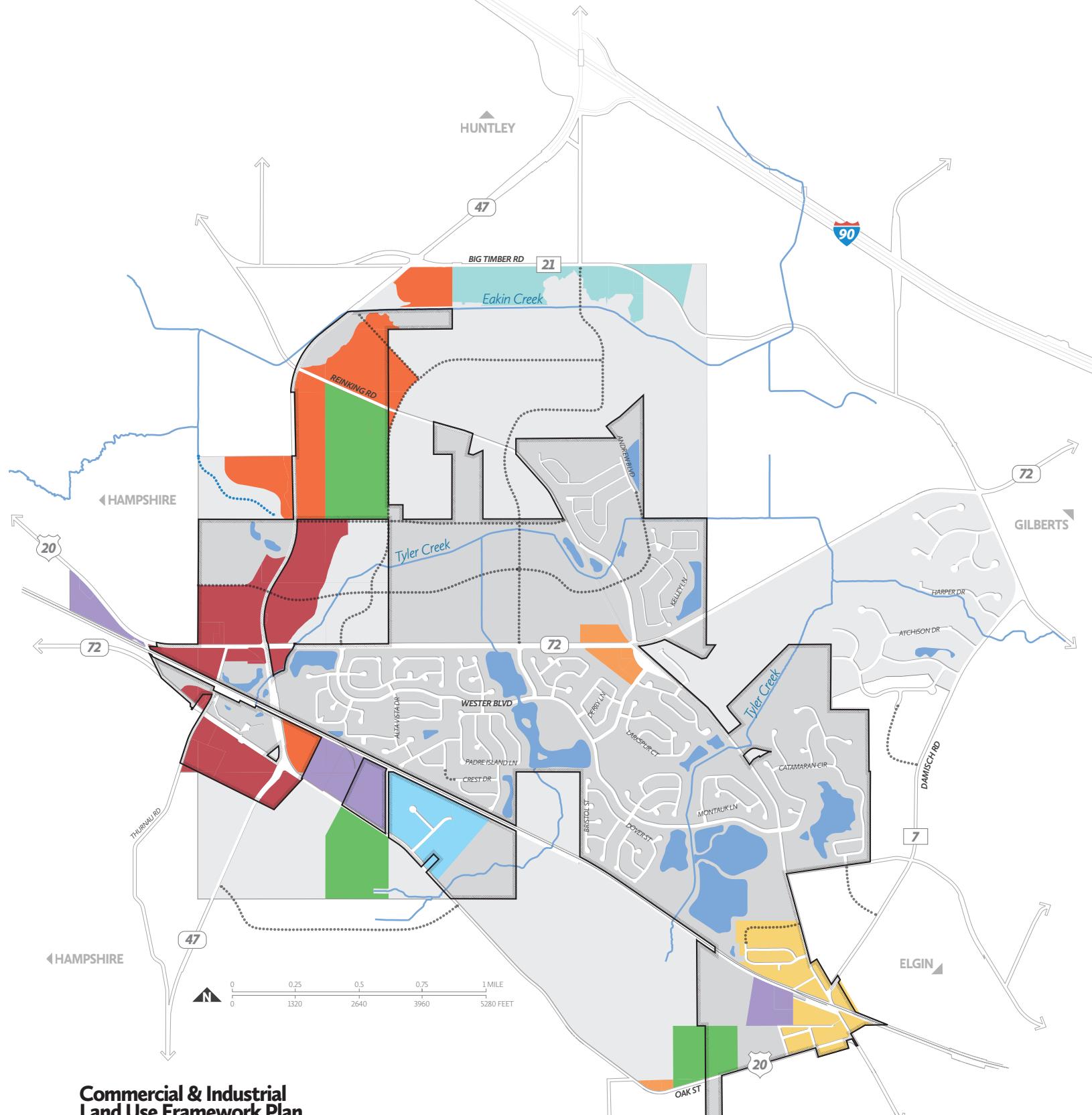
To provide an idea of costs that could be incurred by future Pingree Grove businesses, impact fees have been calculated for a 50,000 square foot and 100,000 square foot retail development. Impact fees are assessed according to development type (commercial or residential), location within the county, and size as measured in impact units (1,000 sq. ft. = 1 impact unit). These are applied to an impact fee rate based on trip generation and other transportation factors.

#### *50,000 sq. ft. Commercial Property*

- 50,000 sq. ft. = 50 impact units (each 1,000 sq. ft.)
- Impact rate for North Kane County = \$5,852.28
- 50% reduction = \$2,926.14
- \$2,926.14 impact rate x 50 impact units = \$146,307 impact fee

#### *100,000 sq. ft. Commercial Property*

- 100,000 sq. ft. = 100 impact units (each 1,000 sq. ft.)
- Impact rate for North Kane County = \$8,807.94 per impact
- 50% reduction = \$4,403.97
- \$4,403.97 impact rate x 100 impact units = \$440,397



## Commercial & Industrial Land Use Framework Plan

- Proposed Roadway Alignment & Extension
- Agribusiness
- Light Industrial
- IL 47 Commercial Area
- IL 47 Flex District
- Growth Area Business Park
- Pingree Grove Business Park
- Neighborhood Node
- Heritage District

\* Proposed roadway alignments and extensions are intended to illustrate best practice and do not have any impact on existing entitlements and development agreements.

## ILLINOIS ROUTE 47 SUBAREA

### VISION

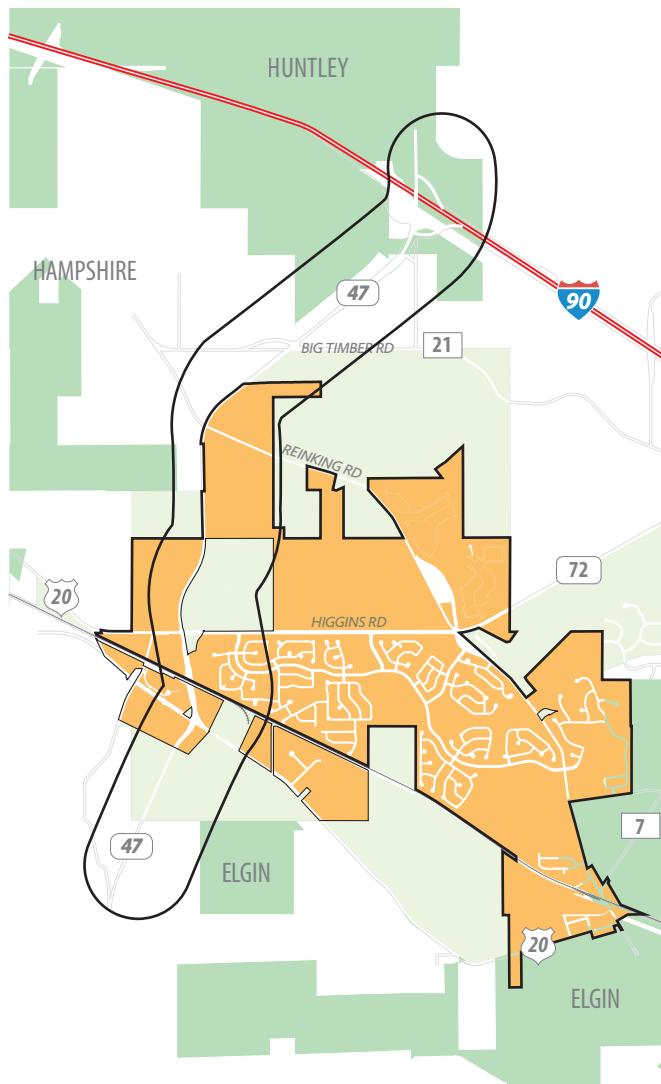
*The IL Route 47 corridor is a thriving commercial corridor that enables residents to live, work, and shop in a safe and inviting environment. Improved access from I-90 and a growing number of households in the Village and nearby areas has supported the development of commercial shopping centers and business parks. With a unique focus on conservation and the use of green infrastructure, these developments have leveraged Pingree Grove's natural areas including the Tyler Creek corridor to serve as amenities for residents and visitors alike. The corridor presents a unified appearance that bolsters Pingree Grove regional image, with new housing and commercial areas utilizing a cohesive style of architecture, landscaping, and high-quality design.*



## INTRODUCTION

IL Route 47 is a strategic north-south roadway in the western six-county Chicago Region, connecting 15 municipalities between Kane and McHenry Counties. Pingree Grove, like most municipalities in the region, views IL Route 47 as an economic engine that offers potential for tax revenue, economic development, and prosperity. This push to spur economic development is represented in the large amount of commercial land use that has been shown along IL Route 47 in most municipal comprehensive plans and Pingree Grove is no different.

This IL Route 47 Subarea Plan identifies the desired improvements and opportunities that exist along the corridor, and provides recommendations to maximize the full potential of the corridor. IL Route 47 is Pingree Grove's best, if not only, opportunity for large concentrations of shopping and employment uses. The recommendations presented in the subarea plan promote orderly development that maximizes economic development in a manner that contributes positively to the Village of Pingree Grove's character, image, and identity.



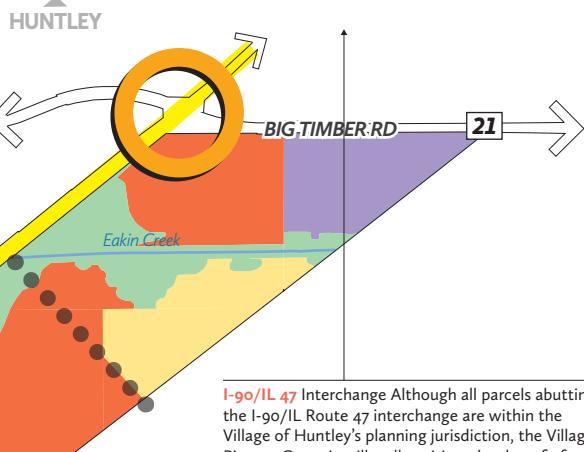
The **IL Route 47 Corridor** is a thriving commercial corridor that enables residents to live, work, and shop in a safe and inviting environment. The corridor presents a unified appearance that bolsters Pingree Grove regional image, with new housing and commercial areas utilizing a cohesive style of architecture, landscaping, and high-quality design.

**Strategic Regional Arterial (SRA) IL Route 47**  
IL Route 47 has historically functioned as a 2-lane rural highway through Pingree Grove. However the SRA report prepared by IDOT in 1995, identifies a 4-lane cross section through the Village, consisting of 4 12-foot through lanes with a grass median in a 160 foot right of way.

**Eakin Creek Naturalization** This channelized portion of Eakin Creek should be made to meander through the area in a manner that more closely reflects its natural state. This will improve the environmental qualities of the property while creating opportunities to reduce the floodplain and accommodate development with corridor frontage. Remnant oak woodlands throughout the corridor should also be incorporated into site design to enhance corridor appearance.

**US 20 & IL Route 72 Intersections**  
These intersections provide the Village with an exciting opportunity for commercial development, accommodating larger commercial shopping centers and developments, however smaller scale commercial uses providing close-to-home shopping opportunities are also appropriate.

**Architectural Character** Architectural character will be a critical component in creating a unique and exciting IL Route 47 corridor through Pingree Grove. The existing Starks Crossing retail center has established a nice precedent or standard, for quality architecture and materials for the corridor.

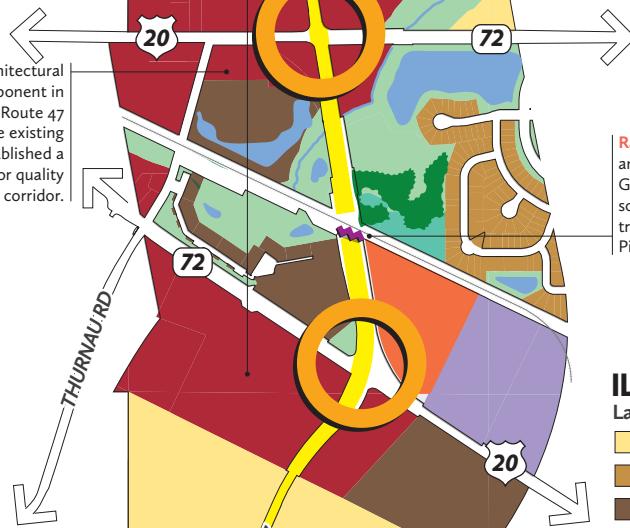


**I-90/IL 47 Interchange** Although all parcels abutting the I-90/IL Route 47 interchange are within the Village of Huntley's planning jurisdiction, the Village of Pingree Grove is still well positioned to benefit from economic development provided by the Interstate.

**Agritourism** Goebbert's Pumpkin Patch and Farm has blossomed into a regional destination that attracts visitors to the Pingree Grove community. In the event the property is sold and developed, appropriate uses may include business park, commercial, and multi-family development. Until such time, the existing use provides a unique attraction for the community that should be leveraged to draw additional commercial uses to the

**IL 47 Flex District** Simply because IL Route 47 has (or will have) high traffic volumes does not mean there is a market potential for commercial development along the entire corridor. Instead these parcels should be promoted for business park or multi-family development. Commercial development may be appropriate in this area over the long term, but the Village should encourage retail uses to concentrate at key intersections in the Village.

**Tyler Creek** Tyler Creek and its wooded tree line adds a unique element and character to the area, and an opportunity for adjacent property to incorporate this natural amenity into their site design and development.



**Railroad Overpass** The C.P. Railroad overpass provides an opportunity to establish a gateway to the Pingree Grove community. Improvements to the face of the south side of the overpass could welcome motorists traveling north along IL Route 47 to the Village of Pingree Grove.

## IL Route 47 Corridor Plan Legend

### Land Uses

- Yellow: Single Family Detached
- Brown: Single Family Attached
- Dark Brown: Multi Family
- Red: Corridor Commercial
- Orange: IL 47 Flex District
- Purple: Light Industrial
- Teal: Public / Semi-Public
- Green: Parks / Open Space

### Improvements

- Yellow line: Strategic Regional Arterial
- Orange circle: Existing Traffic Signal
- Orange circle with dots: Potential Traffic Signal
- Purple wavy line: Gateway Sign
- Dashed blue line: Naturalized Creek
- Green area: Wooded Areas
- Blue area: Goebbert's Pumpkin Patch
- Black dashed line: Potential Roadway Alignment



## Strategic Regional Arterial

IL Route 47 is designated as a Strategic Regional Arterial (SRA) by IDOT and the Chicago Metropolitan Agency for Planning (CMAP). Strategic Regional Arterials are a network of highways in Northeastern Illinois designed to accommodate significant volumes of long distance regional traffic to supplement the expressway system and complement the region's major transit and highway facilities.

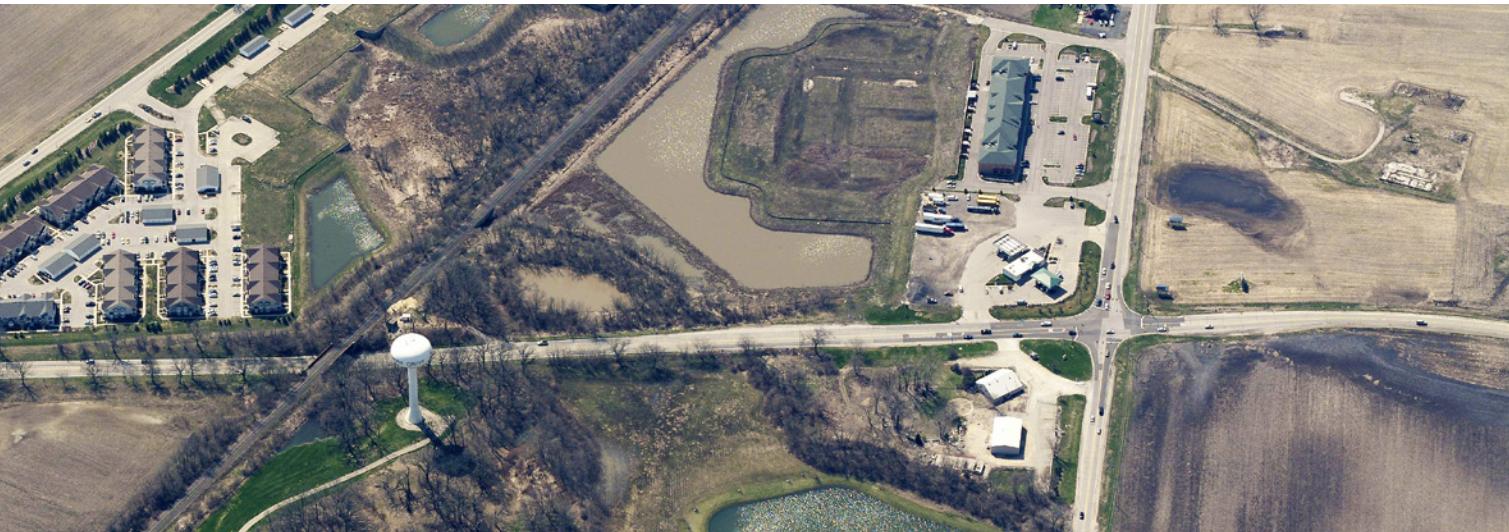
IL Route 47 has historically functioned as a 2-lane rural highway through Pingree Grove. However the SRA report prepared by IDOT in 1995, identifies a 4 lane cross section through the Village, consisting of 4 12-foot through lanes with a grass median in a 160 foot right of way.

## Traffic Signals

There are two existing traffic signals along the IL Route 47 Corridor, providing for safe turning movements at U.S. Route 20 and IL Route 72, two major streets that pass through the corridor. In addition to traffic and safety benefits, signalized intersections also provide ideal locations for commercial development. The SRA report recommends "major" intersections, including U.S. Route 20 and IL Route 72 include single turn lanes for right and left hand turns, with additional signals constructed at intersections along the corridor when warranted. While not explicitly stated, spacing of intersections will likely be limited to  $\frac{1}{4}$ -mile (1,320 feet). With limited traffic signals anticipated for the corridor, the Village should strive to maximize the full economic potential of each traffic signal, reserving adjacent areas for businesses and uses that require favorable and optimal access to IL Route 47.

## I-90/IL 47 Interchange

Although all parcels around the I-90/IL Route 47 interchange are within the Village of Huntley's planning jurisdiction, the Village of Pingree Grove is still well positioned to benefit from economic development provided by the Interstate. The Village should work with IDOT to promote the Village of Pingree Grove as either the only, or one of several southern communities at the highway exit. Current signage provides direction to the Village of Huntley to the north and the Village of Elburn to the south. Given the proximity to the interchange, and the fact that Elburn is located 17 miles south, Pingree Grove seems better suited. Additionally, as development occurs along the IL 47 Corridor, the Village should work with IDOT to have restaurants, service stations, and other businesses added to the signage promoting local attractions in Pingree Grove at the interchange.



## Creek Corridors

Tyler Creek passes through the IL Route 47 subarea, between Higgins Road and the C.P. Railroad. The headwaters of Eakin Creek form to the west of the corridor where the creek bends to parallel Big Timber Road, passing under IL Route 47. These creeks and the wooded areas that flank their banks add a unique element and character to the area, and an opportunity for adjacent property to incorporate the natural amenity into their site design and development.

The Village should require adequate setbacks from Eakin Creek and Tyler Creek and their floodplains to help ensure its protection and its utilization as a green corridor providing connections to existing and future residential areas. Where appropriate, channelized sections of the creeks should be naturalized and made to meander. Detailed floodplain mapping should also be undertaken to ensure that development can be properly accommodated.

## Wooded Areas

Mature trees enhance a corridor's attractiveness, increase development quality, prevent soil erosion, and absorb carbon emissions. Efforts should be made to preserve the existing stands of mature trees including remnant oak woodlands along the corridor, encouraging new developments to incorporate them into their design. Preservation initiatives should also include protection from construction.

## Railroad Underpass

The C.P. Railroad passes over IL Route 47, with the overpass separating train activity from traffic along the corridor. The railroad overpass provides an opportunity to establish a gateway to the Pingree Grove community. Improvements to the face of the south side of the overpass could welcome motorists travelling north along IL Route 47 to the Village of Pingree Grove.

## Bicycle Parking

With planned and existing trials, Pingree Grove has strong potential to become a biking community. To foster the use of bicycles between the Village's residential neighborhoods and IL Route 47 uses, bicycle amenities should be provided at popular destinations, local businesses, and community facilities along the corridor.

## US 20 & IL Route 72 Intersections

The intersection of these two busy corridors with IL Route 47 provides the Village with an exciting opportunity for commercial development, accommodating larger commercial shopping centers and developments. Although commercial uses capable of drawing from the larger region may be preferred, existing and future development in Huntley are likely better positioned. So while the Plan recognizes the potential for a larger regional shopping destination at this location, smaller scale development providing close-to-home shopping opportunities for Pingree Grove is also appropriate. As commercial uses develop, coordination with the existing uses will be essential. Circulation, design cues, complimentary uses, and more should be considered as incremental development occurs.

## Flex District

Several significant redevelopment opportunities exist along the IL Route 47 corridor. As a high traffic corridor in a growing area of the region, a variety of uses could be accommodate along IL Route 47 as Pingree Grove and nearby communities mature. To ensure long term stability and quality of future commercial districts, the Village should strive to focus retail development at the intersections of IL Route 47 with IL Route 72 and U.S. Route 20. Non-retail commercial development, business parks, and multi-family development should be encouraged along other portions of the corridor. While retail uses may be appropriate for these areas, such uses should not be a considered as a primary component of development unless opportunities within targeted areas are largely developed.

## Agritourism

Goebbert's Pumpkin Patch and Farm has blossomed into a regional destination that attracts visitors to the Pingree Grove community. While Goebbert's should be encouraged to remain in business in Pingree Grove, opportunities for the sale of the property will increase as development occurs along other portions of the IL Route 47 corridor. In the event the property is sold and developed, appropriate uses include business park and multi-family development. Until such time, the existing use provides a unique attraction for the community that should be leveraged to draw additional commercial uses to the corridor.

## Commercial Signs

As the IL Route 47 corridor developments, commercial signs will be a necessity for the operation and advertising of local businesses. Future signage however, should not be the primary element that defines the character of the corridor and the identity of Pingree Grove. The Village should ensure its signage regulations allow for sufficient and appropriate signage for businesses along IL Route 47, while ensuring signage does not detract from the corridor's appearance.

## Screening

Screening should be used to enclose or hide unsightly areas, such as secondary site activities from public view. Service areas, utilities and mechanical systems, dumpster areas, and other necessary but unsightly elements deter from the overall character of the corridor or community. To the extent possible, building mechanical and communications systems should be located on rooftops and screened with extended parapets that are integrated into the design of the overall building. At the ground level, infrastructure and secondary activities should be screened by decorative landscaping or low walls that use materials and design elements similar to the primary structure. Screening of surface parking lots adjacent to public rights-of-way may also be desirable, however if parking lots are developed attractively (e.g. as a plaza), this may not be necessary.

## Cross-Access

Establishing connections between uses that allow mobility between sites without using IL Route 47 or other roads is called "cross access". As development occurs along IL Route 47 the Village should require cross access to between uses, coordinating vehicle circulation to minimize curb cuts and access points. Businesses with cross-access also benefit from providing patrons' and service vehicles with the ability to easily visit multiple destinations without accessing busy streets. Businesses should also be encouraged to limit pedestrian obstructions such as fences and walls to allow for pedestrian connections between properties.

## On-Site Landscaping

Plant material adds personality and character by softening the built environment. All parking lots along the corridor should be landscaped around their perimeter and within their interior. Shade trees, evergreens, shrubs, and flowers should be used to beautify sites and connecting them to the Tyler Creek corridor and other larger green networks. Local or native species should be used to strengthen the local ecology and the sense of heritage where possible.

## Architectural Character

Architectural character will be a critical component in creating a unique and exciting IL 47 corridor through Pingree Grove. The existing Starks Crossing retail center has established a nice precedent or standard, for quality architecture and materials for the corridor. All future development should integrate appropriate materials, architectural details, and building forms to elevate the corridor's appearance and image of the Pingree Grove community. Major massing elements, such as corner turrets, articulated entrances, and varying rooflines, should be used to create visual interest and blank façades should be avoided. All buildings should provide clearly defined entrances on the façades facing streets, and lighting, signage, and fenestration should create a welcoming and pedestrian-oriented atmosphere.

## Low Impact Development

Low Impact Development (LID) is an approach to development (or re-development) that works with nature to manage stormwater as close to its source as possible. It employs principles such as preserving and recreating natural landscape features, and minimizing impervious surfaces to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product. With a significant amount of development anticipated for the corridor, it can be expected that IL Route 47 will have a significant amount of pavement and concrete. By requiring, or promoting, LID principles and practices, stormwater can be managed in a way that reduces the impact of built areas and promotes the natural movement of water within an eco-system or watershed.





# TRANSPORTATION & MOBILITY

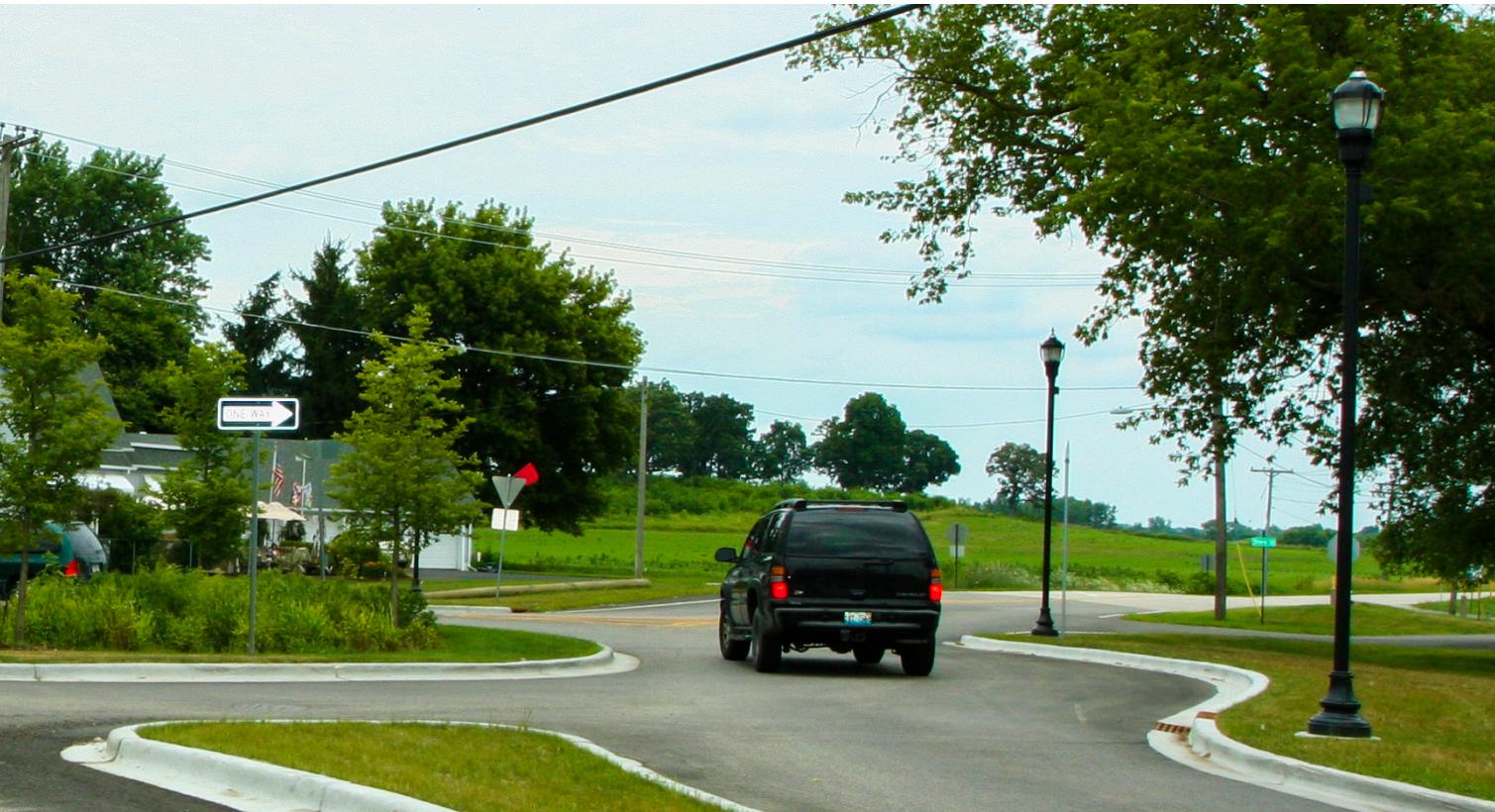
# 4

The Village of Pingree Grove is served by a small but efficient transportation system, dominated by the local roadway network. Primarily an auto-oriented community, the Village's road hierarchy provides local mobility and regional accessibility to the larger Chicago metropolitan area. While the Village does offer adequate pedestrian and bicycle infrastructure, connections between different areas and developments within the city are limited. As development occurs within the Village's growth areas, improvements and expansion of local transportation infrastructure, including pedestrian and bicycle connections, will be necessary to reduce impacts related to an increase population. In addition, new transit options are important to consider as the Village improves its prominence within the region.



## VISION

The Village of Pingree Grove has a robust transportation network that offers residents convenient access throughout the community, in the car, on a bike, or on foot. Automobile travel to and through the community is efficient and safe, with new or extended roadways bringing visitors to new commercial and residential subdivisions. The U.S. Route 20 realignment has made the roadway a safe and welcoming entrance into the community, spurring growth in the Heritage District in concert with the development of nearby areas.



## GOALS

Provide a safe and efficient transportation network through improvements to the existing roadway system, expansion of roadways to provide access to growth areas, and greater accessibility to the surrounding region.

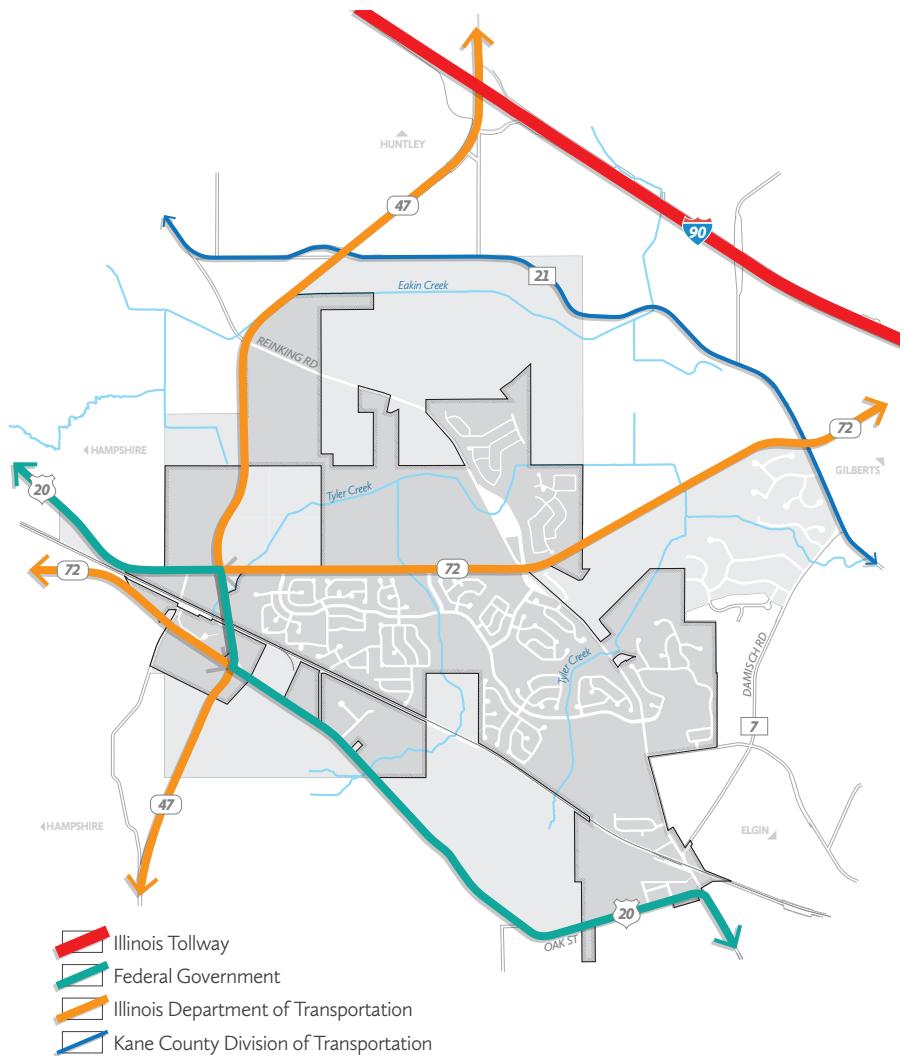
## OBJECTIVES

- Introduce new collector roadways and local connections as development occurs within future growth areas.
- Evaluate and optimize traffic signal timing as growth occurs along major intersections.
- Coordinate with IDOT to ensure sufficient right-of-ways are provided by adjacent property owners to accommodate corridor widening as existing farmland is developed.
- Partner with IDOT and neighboring communities to make necessary realignments and improvements to major intersections, including the intersection of U.S. Route 20 and Reinking Road.
- Coordinate with Metra to evaluate the potential of future potential Metra station within close proximity of the Heritage District.

## ROADWAY NETWORK

The existing roadway network includes key regional routes that should continue to provide adequate access to surrounding areas as the Village grows. Reinking Road, the central north-south connection, will have great importance as growth areas north of IL Route 72 introduce increased traffic. Currently closed just west of the Carillon subdivision, improvements to connect the roadway between IL Route 72 and IL Route 47 will be necessary for future residential growth. IL Route 47 will continue to provide a secondary north-south connection along Pingree Grove's west side, including access to I-90.

IL Route 72 will continue to serve as the Village's primary east-west connection, providing access to Gilberts to the east and Hampshire to the west. Finally, U.S. Route 20 will remain an important transportation corridor moving roughly southeast-northwest along Pingree Grove's western edge, acting as a link to Elgin and other Chicago suburbs southeast of the Village. U.S. Route 20 is a historic roadway, extending coast-to-coast as the longest non-continuous road in the United States. Beyond these major transit corridors, lower traffic roadways provide additional accessibility.



## Jurisdiction

Roadways within Pingree Grove are under the jurisdiction of multiple agencies. U.S. 20 is a United States Highway; thus, under the jurisdiction of the federal government, but locally maintained by the Illinois Department of Transportation (IDOT). In addition, Illinois 47 and Illinois 72 are under the jurisdiction of IDOT.

Big Timber Road, as part of County Highway 21, is under the jurisdiction of Kane County Division of Transportation. Given jurisdictional overlap in the Village's transportation system, infrastructure projects require close coordination among agencies. All other roadways within Pingree Grove are under Village jurisdiction.

## FUNCTIONAL CLASSIFICATIONS

All streets within the Village of Pingree Grove are classified according to a hierarchical system that is based on elements such as the number of travel lanes, traffic volumes, level of access, and mobility. The Village's network can be outlined into the following functional classifications:

- Interstate Highway
- Arterials
- Collectors
- Local Roads

### Interstate Highways

Although the Village of Pingree Grove does not contain any Interstate Highways, proximity to Interstate 90 has an important effect on the local transportation network, and can provide significant support for future growth. Interstate access is highly desired by both commercial and private motorists. These roadways are designed to provide the highest level of service, featuring the greatest number of travel lanes, supporting higher volumes of traffic, allowing higher speeds, and providing the highest degree of access control. Interstate Highways create continuous flow of traffic by limiting access through entrance and exit ramps and minimizing flow disruptions. Pingree Grove has access to I-90 via Illinois 47, providing accessibility to the Chicago region.

### Arterials

Providing the second highest level of service, arterial roads allow the greatest local speeds and traffic volumes. These roads generally connect to interstates and other arterial roads, providing routes within the Village and through the area to other communities. In addition, arterial roads provide access to commercial and residential facilities, but with some degree of access control. Access to arterials roads is usually limited in order to increase traffic flow and level of service, though interruptions may be more numerous in urbanized areas, such as drives and intersections.

Pingree Grove is served by three principal arterial roadways, those being U.S. 20, IL Route 47, and IL Route 72. These roads provide high levels of access throughout the Village, as well as serve traffic moving through the area. In addition, a segment of County Highway 7, located on Reinking Road and Damisch Road, serves as a minor Arterial.

### Highland Avenue Improvements

Though not contained within Pingree Grove, Highland Avenue serves as a minor arterial in Elgin, and is one of three river crossings in their Downtown. Highland Avenue has high potential as an important roadway leading into Pingree Grove and currently provides access to a single family attached neighborhood on the east end of the Village. Currently, Highland Avenue exists as an unpaved gravel roadway. The Village should coordinate with the City of Elgin to ensure Highland Avenue is paved and receives necessary roadway treatments. This project will become more important as additional growth occurs both within Pingree Grove and in Elgin's Pingree Creek development to the south of Highland Avenue.

### Collectors

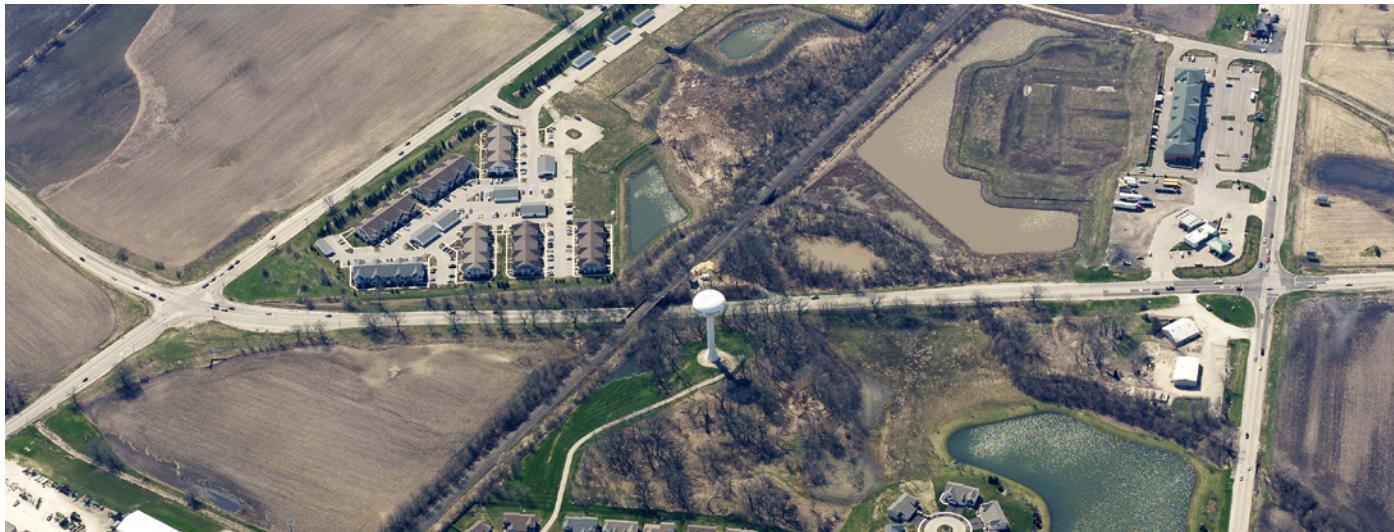
Collector roads yield a lower level of service, operating at low speeds with shorter uninterrupted distances. Collectors connect arterial roads to low-volume local roads. Pingree Grove's primary collector road is Reinking Road, which connects numerous residential access roads to the larger arterial roads of IL Route 72 and U.S. Route 20, including critical service to Cambridge Lakes and the Carillon. Wester Boulevard and Cambridge Lakes Drive serves as minor collectors within the Cambridge Lakes subdivision.

### Future Roadway Connections

As development occurs in areas north of IL Route 72, additional collector roads should be established. These routes should connect to existing collector roads at intersections with arterials and link existing and future residential development with community assets. New collector roadways should establish right-angle intersections wherever possible. Potential conceptual alignments are shown in the Transportation Plan figure.

### Locals

Most of Pingree Grove's roadways are local roads that provide basic connections to specific sites, primarily linking residential uses, private residential roadways, and higher-volume streets. Local roads see the lowest volume of traffic in the Village's street hierarchy, as they provide site-specific access to smaller groups of residents and often lack through-connections between areas. In addition, local roads often allow on-street parking. Within Pingree Grove, local roads include any roadways not defined as interstates, arterials, or collectors.



## ROADWAY IMPROVEMENTS

There are various IDOT, Kane County, and local improvements that will positively impact the Village's roadway network. These projects include intersection improvements, roadway resurfacing, and roadway reconstruction along various routes within Pingree Grove. The following improvements include both finished and planning projects for the area.

### I-90 Expansion

The I-90 expansion project, expected to be complete in 2016, is an important roadway improvement currently underway in the corridor at multiple points in the Chicago region and northern Illinois. This project will add an additional travel lane in each direction to increase the mobility and function of the tollway. The inside shoulder will be widened to provide potential future transit or an express travel lane.

This project will result in widening I-90 from 6 lanes to 8 lanes (4 running in each direction), including bus rapid transit lanes operating on widened inside shoulders. As part of this expansion, the interchange at Randall Road is expected to receive various improvements, including additional travel lanes, which will help decrease delays exiting and entering the interstate.

### IL Route 47

IL Route 47 has been modified and improved in multiple ways in recent years, including the opening of a full access interchange at I-90 north of Pingree Grove, which was completed in 2013. The interchange provides enhanced vehicular mobility and was part of a multi-year I-90 expansion project currently underway throughout the Chicago region.

Currently, there is traffic congestion at intersections on IL Route 47, primarily due to the lack of turn lanes and inefficient signal timing. The installation of left turn lanes began in 2015 to alleviate congestion during peak periods. In the long-term, IL Route 47 will be widened to add an additional through-lane to both the north and south junctions. Given the current size of the railroad viaduct, it is not expected that the structure will require widening. The Village should work with IDOT to evaluate and optimize traffic signal timing after these improvements to keep high traffic intersections running efficiently. The timing of new signals as future intersections will also be critical to traffic flow along the corridor.



As future development occurs to the north of IL Route 72, the need for the IL Route 47 corridor to be widened will increase. The Village should coordinate with IDOT in the future to ensure that a sufficient right-of-way is provided by the adjacent property owners to accommodate corridor widening as the existing farmland is developed. Additional discussion of the IL Route 47 corridor can be found in the **IL Route 47 Subarea Plan in Chapter 3: Land Use & Development**)

## Reinking Road

Reinking Road is not heavily utilized except as an access point to Goebbert's Pumpkin Patch from the west, or to the Carillon development from the south. Currently, Reinking Road does not connect from IL Route 72 north to IL Route 47, the roadway having been closed due to disrepair where Reinking cross the Tyler Creek. As residential development occurs, Reinking Road will play an increasingly important role in connecting neighborhoods located north of IL Route 72. The Village should consider improving Reinking Road as a collector road with a boulevard treatment extending from key intersections similar to the existing treatment surrounding the intersection at Andrew Boulevard.

## Illinois 72 & Reinking Road

The intersection of IL Route 72 and Reinking Road was recently reconstructed to include left and right turn lanes on all approaches. This capacity improvement will be beneficial to traffic increases as a result of the Cambridge Lake and Carillon subdivisions. This will also aid in traffic management along Reinking Road, particularly when northbound access is reopened. Reinking Road is a key connection within Pingree Grove and the development of north-south access will help relieve congestion on other key routes such as IL Route 47 and Big Timber Road.



This photo shows the existing alignment of the U.S. Route 20 and Reinking intersection which is problematic due to the high speed of traffic approaching the curve and limited sight lines.

## U.S. Route 20

There are several curves and changes in grade along U.S. Route 20 as it passes through Pingree Grove that cause sight distance issues for intersecting roadways. In the future, various roadway improvements may be necessary to increase safety along U.S. 20, including signage for hidden roadways, maintenance of trees and landscaping to increase sight distance, and the potential reconfiguring of various intersections. The Village should coordinate with IDOT and local developers to ensure that these types of improvements are identified and implemented as development occurs.

## U.S. Route 20 Realignment at Reinking Road

The intersection of Reinking Road and U.S. Route 20 occurs along a generally sharp curve. This problematic intersection was identified throughout the community outreach process as a concern among residents. Before the curve, speed limits lower to 30 mph to accommodate safety hazards of the curve. On-site observations indicate that drivers do not slow at a sufficient rate, creating a potential safety hazard. The high speeds also make it difficult for drivers to slow down or stop appropriately for those turning left onto Reinking Road when going eastbound on U.S. Route 20.

The Village should continue to partner with IDOT and the City of Elgin to identify a preferred solution to reconfigure the Reinking Road and U.S. Route 20 intersection. It is vital that the realignment occur in a manner that enhances safety while minimizing negative impacts on existing and potential future businesses located in Pingree Grove. Ultimately, the final determined alignment will be based on a mutual agreement of all parties with the Village's key concern of maintaining the traffic visibility for the Heritage District intact. IDOT will not support any design that either the Village of Pingree Grove or the City of Elgin oppose.

## Long-term Realignment Solution

The Village is engaged in discussion with IDOT and the City of Elgin to identify a new alignment and configuration of the Reinking Road and U.S. Route 20 intersection. As the primary land owner surrounding the intersection, the developer of the proposed Pingree Creek development in Elgin is a key partner in identifying a long term realignment solution and has been actively involved in discussions.

Several realignment options are under consideration including:

■ **SRA South By-Pass:** This solution would establish a bypass 0.5 miles to the south of the current intersection, reconnecting with current U.S. Route 20 alignment roughly 0.75 miles west of the Reinking Road intersection.

■ **Increase Curve of U.S. Route 20:** This solution establishes a wider, more gradual turning radius in proximity to the existing intersection. This alignment is currently proposed for the Pingree Creek development.



#### ■ Maintaining the Existing Intersection

**Location:** This option would keep the intersection near the existing location based upon one of three potential intersection configuration options. A traffic signal or a traffic circle may be needed to address future traffic demands at the intersection.

► **Reinking Road Alignment:** This option would realign Reinking Road to form a 90 degree intersection with the existing U.S. Route 20 curve.

► **T-Intersection:** This option would reconfigure the intersection to form a full three-way stop intersection with a traffic signal. This alignment would likely require dual left turn lanes on U.S. Route 20 and may necessitate more significant right-of-way acquisition compared to other options.

► **Traffic Circle Intersection:** This solution entails the installation of a traffic circle designed to fit largely within existing right-of-way with limited encroachments into private property areas and the relocation of sidewalks and/or utilities onto properties located in Pingree Grove or Elgin.

#### *Near-term Solutions*

If realignment of the intersection cannot be implemented in a timely manner, the Village should work with IDOT to identify and enact short-term solutions to improve safety of the intersection. For example, the addition of a center turn lane or passing lane near the intersection would likely be beneficial in the near term. In addition, a center line and edge line rumble strips should be considered to alert drivers of lane departure at the intersection. Improved signage should be installed to alert drivers both in advance of and at the intersection.

## TRAIL NETWORK

In addition to automobile transportation, the Village has a system of community trails largely contained within the Cambridge Lakes Subdivision, connecting the neighborhood to important community assets. The paths provide access to neighborhood parks, the Cambridge Lake Charter School, and the Cambridge Lakes Community Center. An extension of the trail also connects the subdivision to the Pingree Grove Police Department, utilizing the Village right-of-way along Reinking Road. The Village has examined creating a system of community trails, building from the existing trails within Cambridge Lakes. For a further discussion of trails and potential trail extensions, see **Community Trails in Chapter 6: Parks, Recreation & Open Space.**

## RAILROADS

Running southeast to northwest, Pingree Grove is bisected by a freight railway owned by the Canadian Pacific Railway company. This line connects the Canadian Pacific Railway System eastward, from Chicago to Iowa, linking the network as far south as Kansas City and north to central and western Canada. This railway is an important geographic feature which has and will continue to shape the Village's development. The physical barrier created by the railroad infrastructure reduces mobility for automobiles and non-motorized options.

On the Village's western edge, the railroad limits mobility by severing connections between IL Route 72 and U.S. Route 20. As a result, both roads share a railroad bridge with IL Route 47, forcing drivers to make turns at two intersections to follow these designated highway routes. The addition of a new fire station at IL Route 72 and Reinking Road will help minimize issues related to emergency response, but the railroad does limit mobility through Pingree Grove and can be confusing for drivers unfamiliar with the area.

## Pedestrian Access

While IL Route 47 currently has a 4 lane configuration, additional widening may be needed as development occurs along the corridor. Accommodating additional lanes may require replacement of the railroad bridge, which would be a significant long term project for IDOT. Should this ever occur, additional pedestrian access such as a multi-use path or sidewalk should also be accommodated within the widened rail underpass.

## METRA COMMUTER RAIL

The Village of Pingree Grove does not have any established public transit options. Metra services are located at three stations in Elgin including the Big Timber Road station which is relatively close to the Village just east of Randall Road. The Railroad is owned by Canadian Pacific and used by Metra's Milwaukee District/West line, offering commuter trains from Elgin to many northwest suburbs and ultimately Chicago's Union Station.

Community input received during the planning process indicated support for the extension of Metra service to the community with a station located adjacent to the Heritage District.

## Long Term Project

While the extension of service to Pingree Grove has been discussed in the past, in recent years Metra has shifted its budget focus from service expansion to that of enhancements to existing facilities and service lines. Metra has been unable to adequately invest in its existing system in recent years creating a backlog of improvements needed to bring the system into a state of good repair. Anticipated shortfalls in federal funding for capital projects over the next 10 years are likely to exacerbate the need for repairs and limit Metra's ability to expand service for the foreseeable future.

In addition, the extension of Metra's Milwaukee District/West Line west of Big Timber Road was not included in the GO TO 2040 comprehensive regional plan's list of major capital projects (on either the constrained or unconstrained lists). As such, extension of service to Pingree Grove is not projected to be funded prior to 2040.



## Transportation Plan

- Interstate Highways
- Principle Arterials
- Minor Arterials
- Collectors
- Proposed Roadway Alignment or Extension\*
- M Potential Future Metra Station

- Proposed Intersection Realignment
- Potential Roundabouts
- Existing Roundabouts
- Proposed Traffic Signals
- Existing Signalized Intersections
- Existing Average Daily Traffic (IDOT)

\* Proposed roadway alignments and extensions are intended to illustrate best practice and do not have any impact on existing entitlements and development agreements.



## Ridership Survey

In conjunction with Metra's system wide ridership count in spring 2014, Metra also surveyed riders on various topics, including their trip origin and station mode of access. In 2014, 66 of 1,554 riders surveyed originated from either Pingree Grove (26 individuals) and Hampshire (40 individuals). While ridership survey results indicate limited demand among existing Metra ridership, as residential development continues in Pingree Grove and nearby portions of Elgin, demand for transit may grow.

No formal plans or studies have been undertaken regarding the extension of service to Pingree Grove, but the Village should continue to maintain communication with Metra regarding its interest in extending service over the long term. If significant residential development occurs in the area, including nearby portions of Elgin, Hampshire, and Huntley, the Village should consider partnering with Metra to survey ridership again at nearby stations and identify riders from Pingree Grove and nearby communities like Hampshire and Gilberts that could also benefit from expansion of services to Pingree Grove.

## Community-Based Transit

Implementation of transit services such as "Community-Based Transit" (e.g. Demand-Response, Vanpools, Flexible Bus Routes, and Circulators that provide connections to bus routes and rail stations) and fixed route bus service can help build the market for high-capacity modes such as commuter rail. If expanded transit service is desired in Pingree Grove, the Village should consider working with Pace Suburban Bus Service to explore the feasibility of community-based transit options.

The Kane County 2040 Transit Plan identifies several community-based transit strategies for Pingree Grove that could serve as a stepping stone to regular transit service as demand and use increase.

These strategies include:

- **Access to Major Activity Centers:** Provide fixed route bus service in Pingree Grove to Elgin, starting in Huntley or Hampshire, 3 days per week.
- **Metra Feeder Services:** Establish municipal vanpool service from Pingree Grove to Elgin including the Pace Elgin Transportation Center and/or Big Timber Metra station (with optional origins in Hampshire or Huntley), 5 days per week. This strategy also includes potential service along IL Route 47 connecting to a future potential Huntley Metra Station.
- **Improve Access to Transit:** Develop Park-and-Ride facilities and related amenities in Pingree Grove to provide a transportation hub outside of the current transit service area and facilitate vanpools and community shuttle services.



## Future Station Location

Over the long term, should Metra choose to pursue service expansion to the Pingree Grove area, the Village should support a station location in or near the Heritage District. The Pingree Creek development, which is approved for development in the City of Elgin adjacent to the Heritage District, includes a potential future Metra station location in the area to the west of the existing U.S. Route 20 and Reinking Road intersection. The Village should support this location if it can be guaranteed that ingress and egress to the proposed station site would be provided from Reinking Road along the Village boundary.

This potential future Metra station location would maximize tax generating development within the Heritage District while allowing nearby Pingree Grove commercial development to benefit from commuter traffic accessing the site from Reinking Road. This station location would also encourage additional multi-family or single family attached development within the Heritage District.





# COMMUNITY FACILITIES

# 5

Community facilities provide local residents with the services and amenities necessary to maintain a high quality of life. This includes civic services, fire and police protection, education, library services, community centers, and basic healthcare facilities. Within Pingree Grove, a number of civic services and amenities are provided and regulated by outside organizations, which requires that the Village maintain regular communication and active cooperation. As the community continues to grow, both internal and external coordination will be necessary to ensure that community facilities can be improved and expanded to accommodate a growing population.



## VISION

The Village of Pingree Grove offers a complete range of quality, accessible services and amenities which bring the community together and build a sense of local pride. New facilities including a Village Hall, Fire Station, and Public Library provide convenient services and provide space to residents to spend time and enjoy local amenities. The new community center also provides a unique adaptive reuse of a former farmstead that emphasizes the Village's history while offering recreational programming and gathering spaces. Over the years, improvements to local roadways and utilities have maintained the Village's appearance and services to make Pingree Grove a preferred community for new residents.



## GOALS

Provide a quality range of community services and amenities by developing new community facilities and identifying future needs to be addressed through service expansions and improvements.

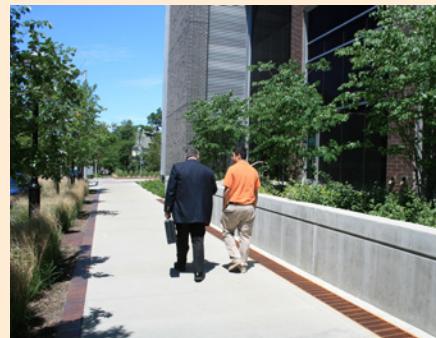
## OBJECTIVES

- Relocate and construct a new Village Hall that provides centrally located civic services for existing and future residents.
- Actively monitor maintenance and upkeep of public infrastructure and establish a financial strategy to address future improvements.
- Coordinate with local education providers to improve existing facilities and effectively manage expected growth in educational needs and related impacts.
- Coordinate with the Ella Johnson Public Library District to provide services in Pingree Grove and potentially establish a new library facility in the community.
- Develop a community center that provides centrally located programming, recreational opportunities, and gather space for existing and future residents.

## Green Infrastructure Case Study

### MUNICIPAL COMPLEX

Sustainable efforts can be used within municipal complexes to encourage local conservation and add distinctive character to a community's central structures. The recently completed Ann Arbor Police and Court building was constructed as an addition to the existing City Hall and Administrative complex. The project included an additional structure connected to the original, as well as a full site redevelopment. The facility uses high-performance green building and site practices including green roofs, permeable unit pavers, bioretention, and rainwater harvesting and reuse. The project uses harvested rainwater for an innovative water art installation to call attention to the importance of sustainable water practices in support of the cherished local watershed.



## VILLAGE GOVERNMENT & DEPARTMENTS

The Village of Pingree Grove provides a variety of municipal services to its residents. Daily operations are divided into six municipal departments, reporting to the Mayor and Village Board. The six departments are:

- Finance
- Police
- Public Works
- Water & Sewer
- Building
- Communications

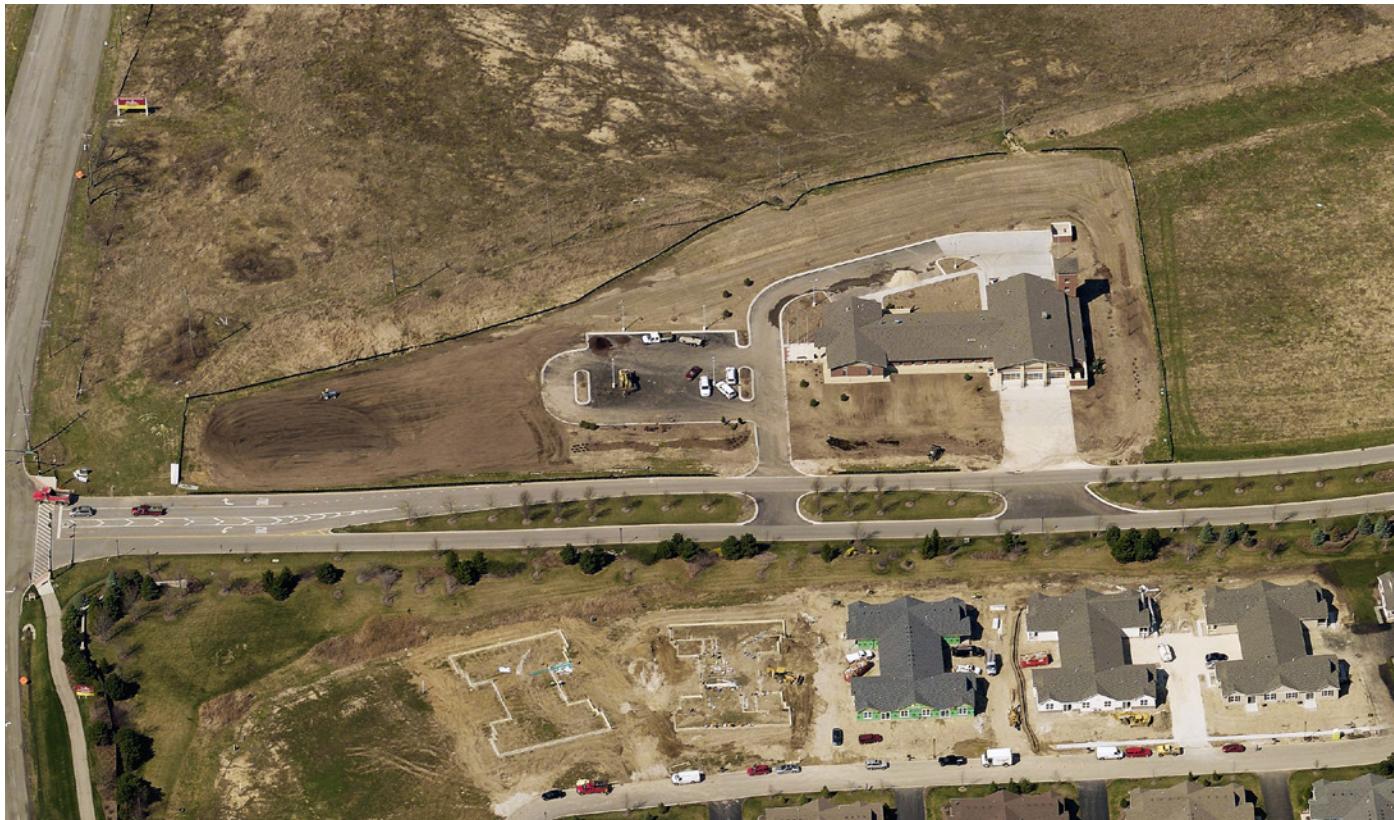
## Pingree Grove Village Hall

Located in the Heritage District on Reinking Road, the Pingree Grove Village Hall is home to the Village Board Chambers and the general administration of the municipality. The facility is a modified modular or trailer building and has been identified by both Village stakeholders as well as the public as needing a long-term replacement strategy. There is also discussion of relocating the facility and creating a larger civic campus with other public buildings.

The Village should evaluate potential options for constructing a new Village Hall that better suits the demands of staff and residents. A newly constructed, permanent Village Hall would help establish an improved image and character for the community. While a detailed facilities needs assessment and site selection process are needed to identify a long term location for the Village Hall, there are several sites that exhibit the potential to accommodate such a facility.

Two of these potential locations include:

- **North of Pingree Grove Police Station.** This site is located just north of the police station, public works facility, and water treatment facility. This location would help create a "civic campus" with multiple community facilities located in close proximity. In addition, the Village already owns the site in question, which would allow for more immediate development with lower initial costs.
- **Adjacent to Pingree Grove Fire Station.** This site is located directly adjacent the Pingree Grove Fire Station. Though dependent on other factors, this location could also create a "civic campus" with the fire station, Village Hall, and public library located in close proximity. The Village does not currently own any of this land; thus, this location would require parcel acquisition for development. In the long term, however, should Pingree Grove reach full build-out of all growth areas, this site would be more centrally located within the community.



## Public Safety

### Pingree Grove Police Department

The Village's police department operates from One Police Plaza, located on Reinking Road. The department operates a local call center and is operational 24/7. The Police Department also manages various public education and crime prevention programs, such as participating in the Illinois Traffic Safety Challenge and the Citizens' Police Academy.

Comments from Police Department representatives indicate that staffing needs are currently adequate, but that additional officers will be needed as the Village grows. While several part-time office positions have been created to address service demands in a financial constrained environment, as funding allows, the department desires to increase the number of full-time officers to enhance quality of service over the long term.

The Village and Police Department should partner to create a long-term growth plan to anticipate future budget and Departmental needs. This would include identifying potential funding sources to accommodate additional staff and hours of operation. The Police Department operates out of a new station facility that was built to accommodate several additional staff members and is well positioned to accommodate growth of the department for the foreseeable future.

## Fire Protection

The Village is served by the Pingree Grove & Countryside Fire Protection District which operates two stations, with one in Elgin and one located in Pingree Grove. The district includes 5 full-time employees and 55 on-call firefighters. The district's recently constructed 12,700 square foot station on Reinking Road near IL Route 72 serves 51 square miles and an estimated 40,000 residents. The new facility includes sleeping quarters for 7 firefighters, fitness and other training facilities, and a community room open to the public that can host 50 individuals. The fire protection district is well-positioned to serve Pingree Grove's future population and no additional facilities would likely be needed.

## Green Infrastructure Case Study

### GREEN STREET OR PUBLIC REALM

Beyond single structure sustainable design, efforts can be made on a larger scale to integrate green infrastructure into the public realm. In West Union, Iowa, the entire downtown district was retrofit with high-performance green infrastructure adapted to the local conditions and culture. Strategies included permeable unit pavers, bioretention, street trees, LED lighting, and an innovative district-scale renewable energy system. The system has helped ensure community resiliency and economic prosperity for business owners and residents.



## Public Works and Water & Sewer

The Pingree Grove Department of Public Works is located in the Heritage District and the Water & Sewer Department operates from the Village's treatment facility. Both locations are on Reinking Road. The Village is in need of a new or expanded public works facility as well as a new salt dome in the near-term. Related to the Village Hall discussion, there is consideration of a central civic campus for all future municipal facilities.

These departments are responsible for street maintenance, water distribution, water treatment, sewer collection, and wastewater treatment.

### Street Maintenance

The Village of Pingree Grove recently began developing a long-term capital improvement plan that will strategically address expenses and funding sources for future projects. Accordingly, the Village's engineer completed a comprehensive roadway maintenance program report in 2014 to address resurfacing and reconstructing streets on a rotating cycle. The Village owns and maintains 14.1 miles of paved roads, all of which were accepted from developers approximately 7-10 years ago when Cambridge Lakes and Carillon were developed. The Village also owns and maintains 8-9 miles of "binder only" and gravel roads.

The Village has been working to develop a system of condition-rating and prioritizing repair locations to avoid a scenario where many roadways fall into disrepair at the same time and require a large capital allocation all at once. Further, the Village should coordinate with IDOT, Kane County, and adjacent municipalities to ensure successful management of the roadway system and long-term roadway costs.

## Water Utility

The Village of Pingree Grove's water supply is pumped through a network of 8-16" water mains from two wells located at a depth of 1,330 feet into the Galesville aquifer. Current water demand is well met. These wells are capable of supplying 2,800 gallons per minute (gpm), each having a capacity of 1,400 gpm. Contaminants in the water are treated via an ion exchange softening system before being pumped into surrounding homes. The system was completed around 2005 and includes a million gallons of storage within the Village's water tower. The elevated storage tank provides for an emergency supply of water and maintains adequate water pressure for the community.

If development were to occur in accordance with the Land Use Plan, additional water storage will be needed to meet demand and will likely require the construction of another water tower potentially on far north side of Village. The Village should continue to monitor water demand as development occurs to ensure that necessary improvements and expansions can be made incrementally as demand rises.

## Sewer System

The Village owns and maintains approximately 27 miles of separate sanitary sewers and four lift stations. It operates its own wastewater treatment plant that was built in 2005. This plant is located along Police Plaza behind the police department. The plant capacity rating is 3.0 million gallons per day (MGD) with a design average flow of 1.0 MGD. Current average annual daily flow (AADF) into the plant is approximately 0.35 MGD, or about 35% of capacity according to Public Works.

Sanitary sewers have substantial excess capacity; however, as development occurs over time, the Village should complete a detailed analysis to determine the actual pipe capacities and whether upgrades would be needed to serve the expected land use and density scenarios that are likely to continue till full build-out.

## Sewer Treatment System Design

The Village's treatment infrastructure is designed using technology unique to Illinois. The Village uses a three step wastewater treatment plant that includes a tertiary treatment step. Most water treatment plants include preliminary and secondary treatments, but Pingree Grove's facility uses a sand trap to further remove fine suspended solids. This process produces a clear effluent that is less harmful to the environment and is used for irrigation on Village-maintained parkways and medians.

## Stormwater Management

Most of the community drains to a tributary of Tyler Creek which ultimately discharges to the Fox River. Stormwater management within the Village will have a potentially significant impact on the health of the watershed. Additional discussion of Tyler Creek can be found in **Chapter 7: Water Resources**.

The Village owns and maintains its own separate storm sewer system. Connections and watershed development permits are administered by the Village Engineer. The Village has adopted the Kane County stormwater ordinance and thus all regulations are in effect Village-wide.

In keeping with the Village's focus on conservation and green infrastructure, the Village should implement Best Management Practices (BMPs) and Low Impact Development (LID) practices in future residential and commercial areas. Sustainable water resource management, including stormwater management, has the potential to be a distinguishing design element integrated throughout the Pingree Grove Community. For a further discussion of strategies for stormwater management, see **Chapter 7: Water Resources**.

# SCHOOLS

Pingree Grove does not have its own local, public school district. The community is served by other jurisdictions and a charter school that was developed as part of the Cambridge Lakes Subdivision.

## Public Schools Serving the Village

The Village of Pingree Grove is served by the following, existing public school districts:

- Community Unit School District 300 located in Carpentersville
- Central School District 301 in Burlington
- Gary D. Wright Elementary (part of District 300) located in Hampshire

### Community Unit School District 300

District 300 is aware of Pingree Grove's growth and has been actively planning for an increase in students. The school district has adequate space in its existing elementary and middle school buildings for the next 10 to 15 years, if the schools operate full capacity and based on enrollments increasing at current levels. Hampshire High School was constructed to absorb increased enrollment and has ample space to accommodate more students beyond the life of the Comprehensive Plan. Further, District 300 is beginning an Attendance Boundary & Facility Study to determine its future needs and best boundary arrangements in greater detail. The Village should work cooperatively with the district to ensure that growing enrollment needs and necessary expansions can be accommodated in the future.

### *Planning for New Schools*

The District is also evaluating the need for more school sites and facilities. Based on its current understanding of estimated population growth, the District foresees a likely potential need to build a new school in the next 5 to 7 years. The District is evaluating the need for both an additional elementary school as well as middle school.

**Elementary School:** A new elementary school would serve 600 to 700 students and likely be located on a site between approximately nine and twelve acres in size. The District would prefer a dry land site in close proximity to a neighborhood that also features a direct route to a local collector or arterial roadway for easy bus access. Potentially, conceptual locations could be in proximity to IL Route 72, either north or south, and near Reinking Road.

**Middle School:** A new middle school would serve 900 to 1,100 students and likely be located on an approximately twenty acres, dry land site. The District prefers this site have direct access to local collector or regional arterial and higher visibility will be more critical because certain school activities and events attract visitors from outside of the immediate area. The potential location would probably be north of Illinois 72, but could locate either east or west of Reinking Road.

The Village should work with the district to identify a location for a new school. A site located north of IL Route 72 with direct access to a collector (Reinking Road) or regional arterial (IL Route 47 or 72) roadway would be desirable. The Land Use Plan identifies a specific site viable for the development of a future elementary or middle school facility located north along Reinking Road east of Goebbert's Pumpkin Patch.

## Green Infrastructure Case Study

### PARKING FACILITIES

Often one of the trickiest topics in terms of green infrastructure and environment, sustainable efforts can help reduce negative impacts of parking lots and structures. The Morton Arboretum in Lisle, Illinois constructed one of the nation's first SITES certified projects with their visitor's center parking lot. The lot integrates green infrastructure strategies including interlocking unit permeable pavers, bioretention, and rainwater harvesting and re-use. Rather than reducing, these systems expanded parking capacity while benefiting the adjacent Meadow Lake with reduced flood, improve water quality, and an enhanced aquatic habitat. Demonstrating that large parking lots can also feature sustainable systems, the visitor's center parking lot has a capacity of over 600 cars.



## Cambridge Lakes Charter School

The Cambridge Lakes Charter School (CLCS) is located on a 15 acre campus on Wester Boulevard in the Cambridge Lakes Subdivision. The school opened in 2007 to serve the Pingree Grove community but also attracts students from throughout the northern Kane County area, including transfer students from CUSD-300. The K-8 school offers a range of athletic, art, and music programming as well as indoor and outdoor recreational facilities.

### Addressing Site Issues

The CLCS school site has issues with traffic circulation and access that currently impacts surrounding properties and roadways. CLCS was built using a traditional neighborhood school site design, which brings benefits like proximity to housing and connectivity through sidewalks and trails. This design should yield a certain percentage of students who walk or bicycle to school, but the majority of students are driven to school, with this number further impacted by the number of transfer students and tuition-paying students traveling in from outside of the Village.

As a result of these factors, CLCS has considerable circulation issues and, in some instances, motorists have to queue and stage in the Community Center parking lot to help manage traffic flow. There are concerns this will worsen as enrollment increases with new development.

The Village should continue to coordinate with CLCS to manage school related traffic and identify techniques to better handle congestion. This could include pursuing revisions to the school's approved development plan to accommodate new parking and queuing areas.

One potential solution would be the development of shared-space areas on the CLCS property that can accommodate both car and pedestrian uses. The school currently has a large swath of undeveloped land located between the actual facility and Wester Boulevard. This area could be used for a parking lot or staging during pick-up and drop-off hours while accommodating student recreation during school hours. This would ensure that continued use of open spaces surrounding the school while reducing congestion related to school operations.

## PUBLIC LIBRARY

The Village of Pingree Grove and its entire planning area are located within the Ella Johnson Public Library District. The district serves a population of over 16,000 and covers an area of over 100 square miles including all of Hampshire Township, plus areas of Burlington, Plato, and Rutland Townships.

The Ella Johnson Public Library facility is located in Hampshire, at 109 South State Street and the Village of Pingree Grove does not have a public library facility. There is a strong interest in expanded library services in Pingree Grove and the Village should partner with the library district to evaluate the potential for the establishment of a public library facility within the community. While siting will be dependent on library district needs, any new facility should be located with close proximity to existing and future Pingree Grove residents as well as the Pingree Creek development in Elgin.

As identified within the Land Use Plan, a potential site for a new library facility would be adjacent to the new fire station northwest of the intersection of Reinking Road and Illinois 72. While the Village continues to grow north of Illinois 72, this location would place library services at the center of Pingree Grove. In addition, the site would help with the establishment of a civic campus or centralized area for residents, including the library, fire station, and potentially a new town hall structure.

The Cambridge Lakes Subdivision also operates a library from within the community center, but it is only available to neighborhood residents. There is a Free Little Library located in the Heritage District.

## HEALTHCARE

Pingree Grove does not have a traditional hospital within its boundaries and emergency care needs are met by hospitals and urgent care facilities in Elgin, or elsewhere in Kane County and the Chicago region. There are no local medical offices in the Village at this time, although there is a dentist and a veterinarian clinic. Outreach participants noted the lack of local medical service opportunities as a community weakness. Demand will continue to rise for these services as new residential development occurs including age restricted housing developments with a significant senior population.

The Village should consider support for medical service uses as needed. As Pingree Grove continues to grow, the Village should also consider conducting a market study to document the need for a healthcare facility. The results of the study could be used to market opportunities to area healthcare providers and health campus development interests as well as identify potential tools and incentives to attract desired development.



## COMMUNITY CENTER

Pingree Grove currently lacks a dedicated facility or location for community events, activities, and general gathering space. The Cambridge Lakes and Carillon subdivisions each have community center facilities that include amenities such as exercise facilities, meeting rooms, a pool, a library, and other amenities; however, this facility is closed to residents living outside the subdivision. The Cambridge Lakes Community Center does work with the Village to host some events and programs; however, as the community continues to expand outside of the subdivision, the need for a dedicated and community-wide facility will grow. Understanding that HOA-supported community centers provide a partial solution to resident needs, the Village should actively seek the development of a dedicated community center that is open to all members of the public.

Identified in the Land Use Plan, the vacant barn structure located along the east side of Reinking Road could work as a potential location for a new community center. The existing structure has strong potential for adaptive reuse as a community facility. Creative reuse of the existing structure will help create a unique community center and local landmark building on the Village's rural heritage. The site provides a centralized location with direct access to Reinking Road, surrounding residential areas, and the Cambridge Lakes Community Trails system.

## STRATEGIC MUNICIPAL FINANCIAL PLANNING

One of Pingree Grove's main challenges in the next 10-20 years is anticipating and planning for the maintenance and replacement of its infrastructure over time. Pingree Grove grew rapidly in the beginning of the last decade, but after 2009 new development and construction slowed considerably. The implication is that the Village's public infrastructure will require significant repair costs simultaneously, as it reaches the end of its lifespan. This dynamic complicates traditional capital improvements planning and the management of routine maintenance programs used in many municipalities. The Village recognizes this operating environment and has been developing a comprehensive financial planning strategy to pro-actively address its challenges.

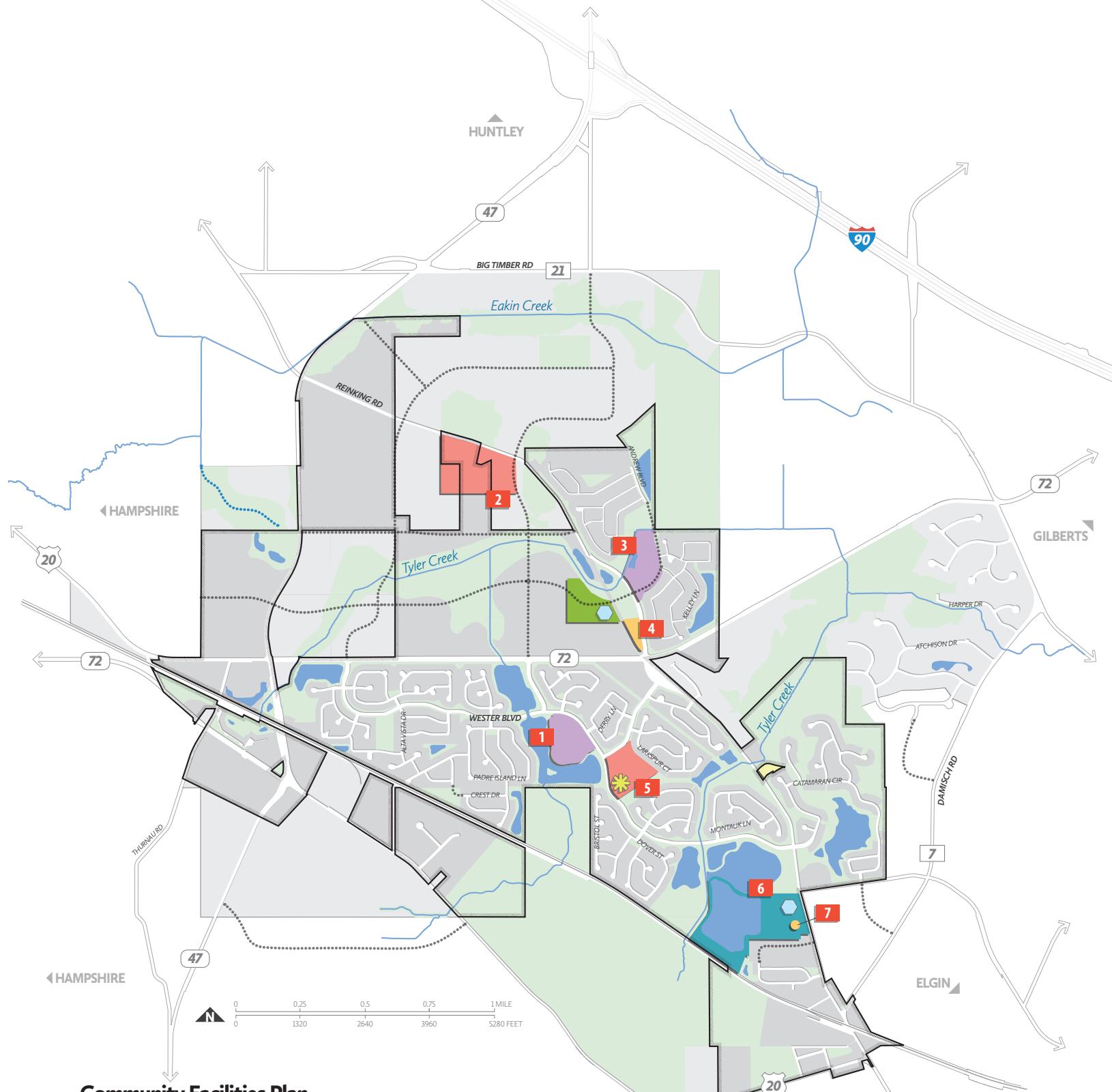
An important component of these ongoing financial planning activities is ensuring that future land use and development decisions do not further contribute to these fiscal challenges. There are a variety of techniques the Village could employ to better link its financial planning with its land use and development planning. Generally, the Village should work to include strategic financial planning criteria and analysis as part of their long-range land use planning and development review processes.

### CIP Coordination

Initially, recommendations from the Comprehensive Plan can be directly "rolled into" the Village's CIP and maintenance operations budgets. These dollars should be prioritized in a manner that maximizes return-on-investment and strategically reinvests in Pingree Grove's infrastructure. Certain projects will require further and more detailed engineering analysis as well as a thorough examination of funding and financing strategies. But having a well-developed long-range infrastructure management plan for the existing parts of Pingree Grove will provide a baseline for the evaluation of future, proposed development projects.

### Financial Data Modeling

In an effort to evaluate the impact of proposed developments, the Village could evaluate using the International City/County Management Association's (ICMA) Evaluating Financial Condition manual and the Municipal Financial Indicators Evaluation Kit (ICMA IndiKit), which examines municipal finances across 42 indicators and helps provide a foundation for long-range planning. This financial performance management system uses these metrics to monitor, track trends, and regularly report on the Village's finances, analyzing local trends against nationally-recognized benchmarking. The Village could build on this analysis to develop a financial data model that helps evaluate the fiscal impact of proposed development and estimate long-range financial implications for CIP and maintenance operations planning. This analysis could be integrated into the Village's existing infrastructure management programming so the impact is more clearly quantified and anticipated in the early stages of the development review process.



## Community Facilities Plan

- Potential New Village Hall Locations (includes Building Department)
- Proposed Roadway Alignment & Extension
- Village of Pingree Grove
- Education
- Cambridge Lakes Charter School Site Improvement

- Public Safety
- HOA Community Centers
- Potential Future Community Center
- Potential Future Library Campus

\* Proposed roadway alignments and extensions are intended to illustrate best practice and do not have any impact on existing entitlements and development agreements.

### Existing & Future Community Facilities

1 Cambridge Lakes Community Center	3 Carillon Community Center
2 New School Campus (potential future)	4 Fire Station
	5 Cambridge Lakes Charter School
	6 Village Treatment Facility
	7 Police Station



**COMMUNITY GARDENS**



# PARKS, RECREATION & OPEN SPACE

# 6

Pingree Grove is a unique Chicago suburb because it offers some of the highest quality outdoor recreation and open space opportunities in the metropolitan region. Many residents have chosen to live in the community because it provides an appealing mix of traditional parks and recreation facilities alongside a semi-rural landscape that includes large forest preserves and wildlife conservation areas. The Parks, Recreation, and Open Space chapter focuses on maintaining and expanding the Village's inventory of parks within its established residential areas while enhancing access to these areas via an integrated network of trails. As Pingree Grove grows into the rural areas that surround the Village, the development of new parks and the preservation and incorporation of natural areas should be a priority.



## VISION

Pingree Grove's parks system offers residents a variety of spaces for recreation, leisure, and enjoying the outdoors. Leaving their home, residents are able to walk to nearby neighborhood parks, bike along expansive greenways and creek corridors, or drive to a larger park for sports and activities. Using the Village's wide-spread community trails system, residents can rely on alternative transportation to safely travel to Village parks, community facilities, and local forest preserves. Trails also provide access to commercial areas. The Village has made excellent use of the new park located adjacent to the Pingree Grove Forest Preserve, including gatherings and activities that bring the community together. Residents are able to take full advantage of a range of recreational programs and activities that take place in parks across the Pingree Grove.



## GOAL

Expand recreational opportunities and programming to meet the demands of current and future residents while preserving the Village's rural character through development of new parkland, coordination of recreational amenities, and preservation of existing natural features.

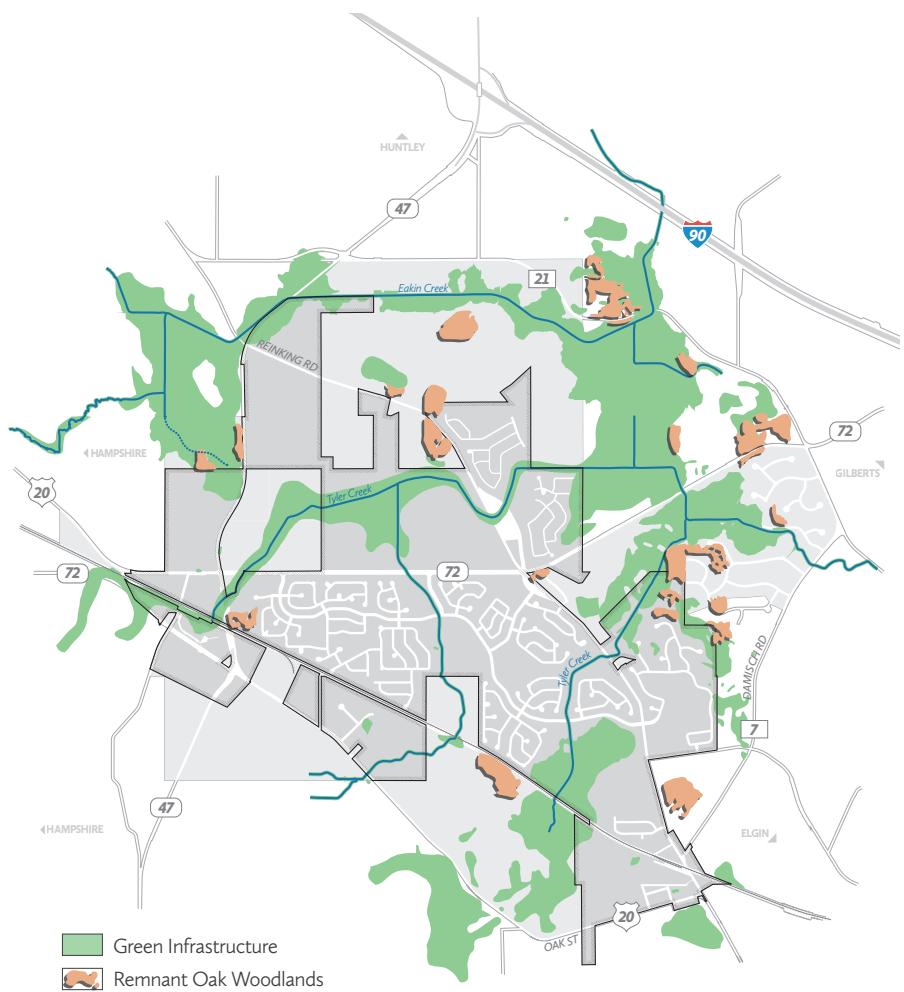
## OBJECTIVES

- Explore partnering with the Hampshire Township Park District and local homeowners associations to bring expanded recreational programs to the Village, ensuring that service is carefully organized between different organizations.
- Identify locations for future parkland and related facilities in preparation for continued growth, categorizing sites for larger community parks and smaller neighborhood parks.
- Identify locations for new and expand existing community trails to increase recreational opportunities and improve walkability.
- Coordinate with the Kane County Forest Preserve District to identify opportunities to improve access to local forest preserves including Pingree Grove Forest Preserve and Rutland Forest Preserve.
- Incorporate greenways, naturalized creek corridors, and conservation areas into future residential and commercial development.

## FOCUS ON CONSERVATION

Open space is a central component of the community's rural character and stands as one of the Village's defining features for residents and visitors alike. Maintaining high-quality greenways, forested areas, and an urban tree canopy will be critical to Pingree Grove's future. The Village should take a strong conservation approach to all new development to promote the preservation and integration of natural features within new neighborhoods, commercial areas, and business park development. This should include coordination with developers to ensure the design of these areas respects green infrastructure.

The adjacent map identifies areas of green infrastructure that should be considered for preservation to provide a consistent network of green space that serves Pingree Grove's neighborhoods. By connecting green infrastructure into greenways and shared trails, the Village can provide recreational amenities, improve connectivity and pedestrian access, and showcase the Village's top assets while allowing for future growth. Where applicable, areas of green infrastructure should include dedicated parkland and programming that take advantage of the natural landscape. Further, the Village should clearly identify natural areas to be protected from development, establishing a precedent of conservation.



## PARKS INVENTORY

The Village owns five parks, mainly located within the Cambridge Lakes Subdivision. This includes the subdivision's skate park, recreational fields adjacent to the school, and the baseball fields. These areas are maintained by the Public Works Department, with the exception of the baseball fields, which are maintained through a local use agreement. In addition, the Village also owns and maintains Centennial Park and Heritage Park, both located along Reinking Road in the Heritage District area.

### Tot Lots

In addition to Village-owned parks, Cambridge Lakes includes eight neighborhood parks, often referred to as "tot lots," which primarily include small fenced playgrounds. These properties are similar to "mini parks" found in many other municipalities, and they are typically designed for a local neighborhood population, providing convenient access for daily use. These lots are owned and maintained by the Cambridge Lakes Home Owners Association.

### Community Gardens

The Pingree Grove Community Gardens are located just outside the Cambridge Lakes Subdivision at the intersection of Wester Boulevard and Reinking Road. The gardens reside on Village property, but are maintained by community residents who use the area to grow decorative plants, flowers, and vegetables. The Village Community Garden Committee provides for oversight and management of the community gardens.

## Future Park Locations

As Pingree Grove sees greater residential development, the need for parkland and areas specifically dedicated to recreation will increase. In preparation for future parkland needs, the Village should identify locations for future parks and related facilities.

### Neighborhood & Community Parks

Larger community parks help to provide parkland and recreational opportunities not just for residents within direct proximity of the park, but for the larger Pingree Grove community. The existing tot lots lack the amenities, such as parking, to effectively address parkland needs for all of the Village's residents. The Village should identify potential locations for larger community parks which will provide dedicated recreational space, programming, and an area for community gatherings and events. Where possible new parks should be located within or adjacent to areas of green infrastructure to leverage conservation areas as recreation amenities.

The exact placement of local parks should be determined based on a combination of factors including, but not limited to proximity to other parks, presence of natural areas, and ease of access by local residents. The following potential park locations have been identified based on the desired location of future residential development in the Land Use Plan:

- **Tyler Creek Greenway.** A neighborhood park should be located within or adjacent to the floodplain surrounding Tyler Creek to the north of IL Route 72 west of Reinking Road.
- **Reinking Road Wetland.** The Reinking Road corridor is flanked by remnant oak woodlands and a wetland area. These sensitive natural areas should be buffered by open space, including recreation amenities.
- **Pingree Grove Forest Preserve Park.** The northwest corner of U.S. Route 20 and Prairie Street should be improved as a community park and special event location as further detailed in **A New Village Park: The Land Lease Concept** on page 106.

## Tot Lot Locations

While tot lots benefit the adjacent residents, they do not contribute significantly to the larger Village need for open space and parkland. Many of these tot lots do not provide any parking or have inadequate parking to accommodate more extensive usage and higher traffic. This limits park use to those within walking distance, thus placing an emphasis on serving the closest housing units.

Tot lots are provided in several areas of the Cambridge Lakes development, but their locations near the entrance to various neighborhoods hinders accessibility for families located farther way from neighborhood entry-points. Moving forward, the Village should consider requirements that would position local-serving tot lots and larger neighborhood parks in more central locations within neighborhoods. Sites adjacent or near main roadways should be reserved for larger community parks.

## Heritage Park Relocation

The intersection of U.S. Route 20 and Reinking Road is the current location of Heritage Park. As discussed in the Land Use Plan, this area is a primary gateway to the community that will grow in importance as future residential and commercial development occurs as part of the Pingree Creek project in adjacent Elgin. Commercial development is encouraged in this area to better leverage these changes.

As discussed in Chapter 3: Land Use & Development, it is recommended that the Village should consider the creation of a plaza on the southern end of the property to maximize development potential. The Village could then partner with property owners in the Heritage District to relocate the recreation and open space aspects of the current Heritage Park site to another nearby location, preferably the vacant backlots located south of Public Street.

The Public Street location would ensure that recreational opportunities are maintained in the district while making land which fronts Reinking Road available for redevelopment. The rear portion of lots fronting U.S. Route 20 near Reinking Road could accommodate a significant park space while retaining access to these properties from U.S. Route 20. This new park location would also better serve future single family attached housing to be located in the area north of Public Street.

## COMMUNITY TRAILS

An important recreational amenity for Pingree Grove is its system of community trails, most notably the Cambridge Lakes Running and Bicycle Trails. In addition to providing a number of parks, the Cambridge Lakes subdivision also maintains a system of shared-use trails for walking, running, and bicycling. Threaded throughout the subdivision, these trails connect disparate sections of the neighborhood with important community assets. Traveling along the paths, residents have access to neighborhood parks, the Cambridge Lake Charter School, and the Cambridge Lakes Community Center. An extension of the trail also connects the subdivision to the Pingree Grove Police Department, utilizing the Village right-of-way along Reinking Road. Residents have expressed interest in expanding the trail network to other parts of the community and using them to connect residential areas to parks and open space.

The Village should evaluate and establish additional community trails to increase recreational options and improve walkability. A larger system of trails should build from the existing trails within the Cambridge Lakes and Carillon subdivisions. Plans have examined extending the Cambridge Lakes trails south along the tributary stream, eventually leading across the CP railroad tracks into the Pingree Grove Forest Preserve.

As development occurs, new trails should be established along creek corridors, connecting residents to adjacent neighborhoods as well as local forest preserves. In addition, the CP railroad corridor provides a community trail opportunity. Where possible, trails should be used to connect existing and future parks and community facilities.

Potential trail alignments have been identified in the Parks, Recreation, and Open Space Plan figure. These primarily follow proposed greenways and connect areas where significant natural areas are present.

## PARKS & RECREATION PROGRAMMING

The Village of Pingree Grove does not have a dedicated Parks District or Parks & Recreation Department. Recreational programs are provided, maintained, and developed by a few different community stakeholders, mainly the Hampshire Township Park District and the Cambridge Lakes Homeowners Association. The Village itself does not offer any regular recreational programming.

## Cambridge Lakes Homeowners Association

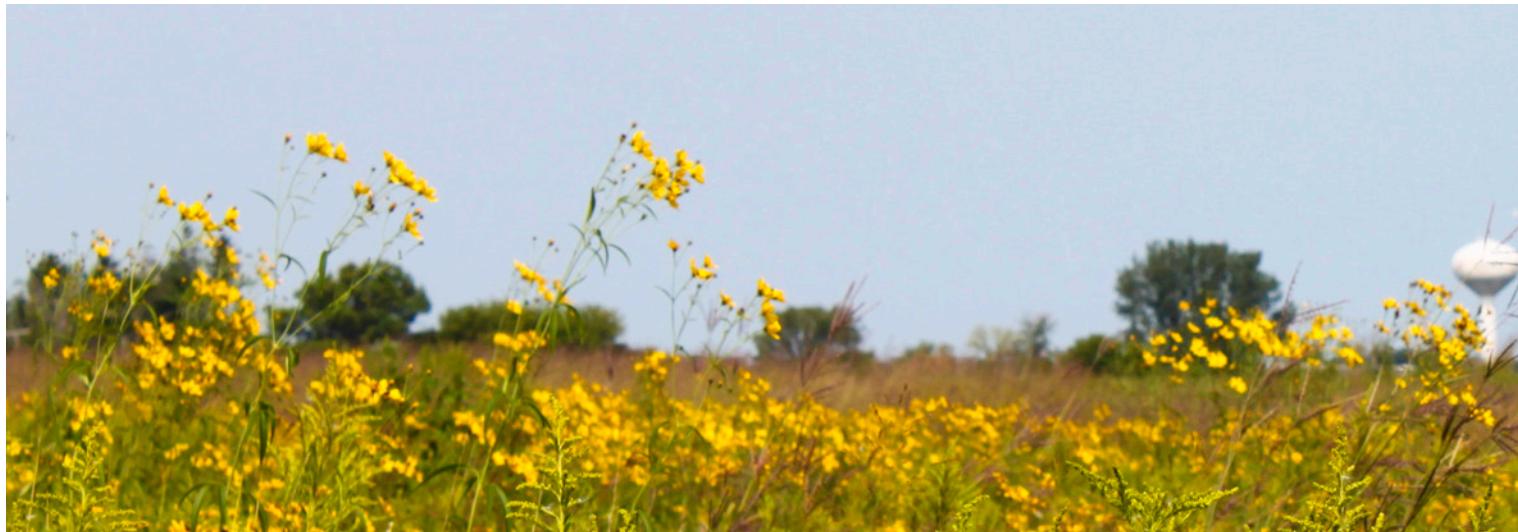
Many residents have access to recreational facilities and programs through homeowners' associations, most notably the Cambridge Lakes Homeowners Association. The Homeowners Association provides a number of amenities for private subdivision residents, including park space, a community center, and various recreational programs and special events. These facilities and programming are funded through homeowner fees and registration costs.

## Hampshire Township Park District

The Hampshire Township Park District provides a variety of programs to residents of all ages, including sports, horseback riding, martial arts, and music lessons. Programs also include activities geared toward seniors and the Extended Care daycare program. In early 2015, the Park District qualified for an Open Space Land Acquisition & Development (OSLAD) Grant from the Illinois Department of Natural Resources (IDNR) to redevelop Bruce Ream Park. Improvements will include a new playground, splash pad, shared-use path with fitness stations, sand volleyball court, sledding hill, and sports facilities.

As the Park District primarily serves Hampshire Township to the northwest, Pingree Grove does not fall within their service area. Village residents can still participate in park district programs, either paying a non-resident rate or paying a fee equal to the Park District's service area tax, qualifying them for the resident rates during program registration. Hampshire Township Park District staff noted that a significant share of park district users are actually Pingree Grove residents.

In the past, the Hampshire Township Park District has considered incorporating Pingree Grove into their service area, though action was never taken. The Park District has remained open to expanding; however, the change would require close cooperation between the Park District, Village staff, and homeowners' associations within Pingree Grove.



## Park District Expansion

Without a dedicated Park District or Parks Department, Pingree Grove residents rely on homeowners associations and the park district for recreational programming and facilities. Given that a significant share of park district users are currently Pingree Grove residents, expansion of the park district service area to include Pingree Grove could benefit the Village and community. Inclusion of Pingree Grove in the park district would offer recreational opportunities in a simplified manner while helping to expand and strengthen park facilities and amenities. The Village should work with the Hampshire Township Park District to evaluate the potential of expanding its boundaries to include the Village and its growth areas. The evaluation should include a discussion of existing parks facilities within the Village regarding ownership, maintenance, improvements, and future funding.

## Evaluating Shared Service Models

Although the opportunity to expand the Hampshire Township Park District does exist, this would result in a duplication of service, as Cambridge Lakes residents would pay for both a district tax and a homeowners association fee. Many residents already do pay a fee voluntarily; however, coordination to reduce the duplication of services is warranted as part of considering this programming opportunity. The Village should take a leadership role in creating shared service models between the park district and homeowners associations that reduce costs to residents while maximizing benefit.

## OPEN SPACE & NATURAL AREAS

Open space areas in Pingree Grove consist of greenspace utilized for stormwater management as well as undeveloped natural areas and sensitive environmental features. Open spaces may include forested areas, grasslands, wetlands, non-agricultural fields, watersheds, and retention ponds. While facilities may be included to allow accessibility, open spaces do not include parks and recreational amenities.

Pingree Grove has an assortment of open spaces that both provide local access to the environment and preserve the Village's rural character, including forest preserves, forested areas, non-agricultural fields, the Tyler Creek Watershed, and a number of retention ponds that serve the local subdivisions.



## Rural Character & Open Space

Open spaces are even more critical in Pingree Grove than many other communities. The Village's identity is closely intertwined with the area's semi-rural character; therefore maintaining high-quality open space, forested areas, and an urban tree population is critical.

One of the Village's key natural assets are local remnant oak woodlands, which are not currently protected from development. These areas provide unique green infrastructure and biodiversity within the Village, contributing to the community's natural landscape. However, many of these wooded areas are located near highways and well-positioned for future development. In the face of future growth, the Village should protect remnant oak woodlands and look to encourage, where appropriate, that woodlands are incorporated into the design of residential and commercial developments. As a conservation effort, oak woodlands should have prescribed burns every 4 to 6 years to increase bio-diversity, aid in understory regeneration, and maintain natural stormwater management. The Village should also coordinate with the Kane County Kane County Development Department, who worked with Chicago Wilderness to create an inventory of oak woodlands to address the diminishing stock within the county.

## Forest Preserves & Campgrounds

The Kane County Forest Preserve District owns and operates two properties immediately adjacent to Pingree Grove. These preserves provide natural areas, wildlife habitats, and recreational space for Village residents. The Pingree Grove Forest Preserve and Rutland Forest Preserve combine to provide a large percentage of the open space available in the immediate area. The Village should work with the forest preserve district to identify opportunities to improve access to local forest preserves, such as trails connecting with residential areas.

Village residents also benefit from a number of other Kane County preserves in close proximity to Pingree Grove, including Muirhead Springs Forest Preserve, Hampshire Forest Preserve, Freemans Forest Preserve, Burnidge Forest Preserve, and the Jake E. Cook Park & Forest Preserve. Finally, the County also operates the Paul Wolff Campground, located within the Burnidge Forest Preserve, and Camp Tomo Chi-Chi Knolls, a 260-acre natural area dedicated to camping and recreation for youth groups.

## Rutland Forest Preserve

Located to the northeast of Pingree Grove, the Rutland Forest Preserve offers hiking, picnic areas, and winter activities, including a snowmobile trail. In the late 1980s, a site inventory revealed that the excavated area at the center of the preserve is a peat bog that had been drained and dug out by hand. The preserve also includes Eakin School, a historical one-room school house constructed in 1859. The site now provides local residents with a historical setting for picnics and outdoor recreation.

## Pingree Grove Forest Preserve

The Pingree Grove Forest Preserve is the Village's most distinctive recreational space. Located just south of the Village along U.S. Route 20, the preserve comprises 455 acres of wetlands, grasslands, and forested areas. The site provides a variety of trails suitable for both hiking and horseback riding. The preserve's natural habitats are home to a diverse range of wildlife, particularly native birds such as Great Blue Herons and Sand Hill Cranes. The preserve is also frequented by the endangered yellow-headed Blackbird and the American Bittern, making Bird-watching a popular activity and drawing visitors from throughout the Chicago region.



### *A New Village Park: Forest Preserve Land Lease*

The Village has approved a land lease with the Kane County Forest Preserve for use of the eastern-most section of the Pingree Grove Forest Preserve. The Village will lease the parcel located at the corner of U.S. Route 20 and Prairie Street, which currently includes the eastern entrance into the forest preserve.

The Village would like to locate a dog park and community event space at the site. The Village would also like to provide an improved connection to the adjacent Pingree Grove Forest Preserve. The size of the parcel would give the Village a large enough site to host community-wide events such as an annual fair or festival. Given the demand for additional community space, the Village should consider exploring similar opportunities to establish new parkland where available.

## **AGRICULTURAL LAND**

There is a strong community desire to encourage growth, including the addition of new employment and commercial areas, but there is a desire to preserve the area's rural character. As indicated in the Land Use Plan, over the long term it is not envisioned that any significant incorporated areas of the Village will remain dedicated to agriculture. Focusing growth and development in targeted areas and promoting farmstead preservation will help the Village retain aspects of its rural character in the face of development.

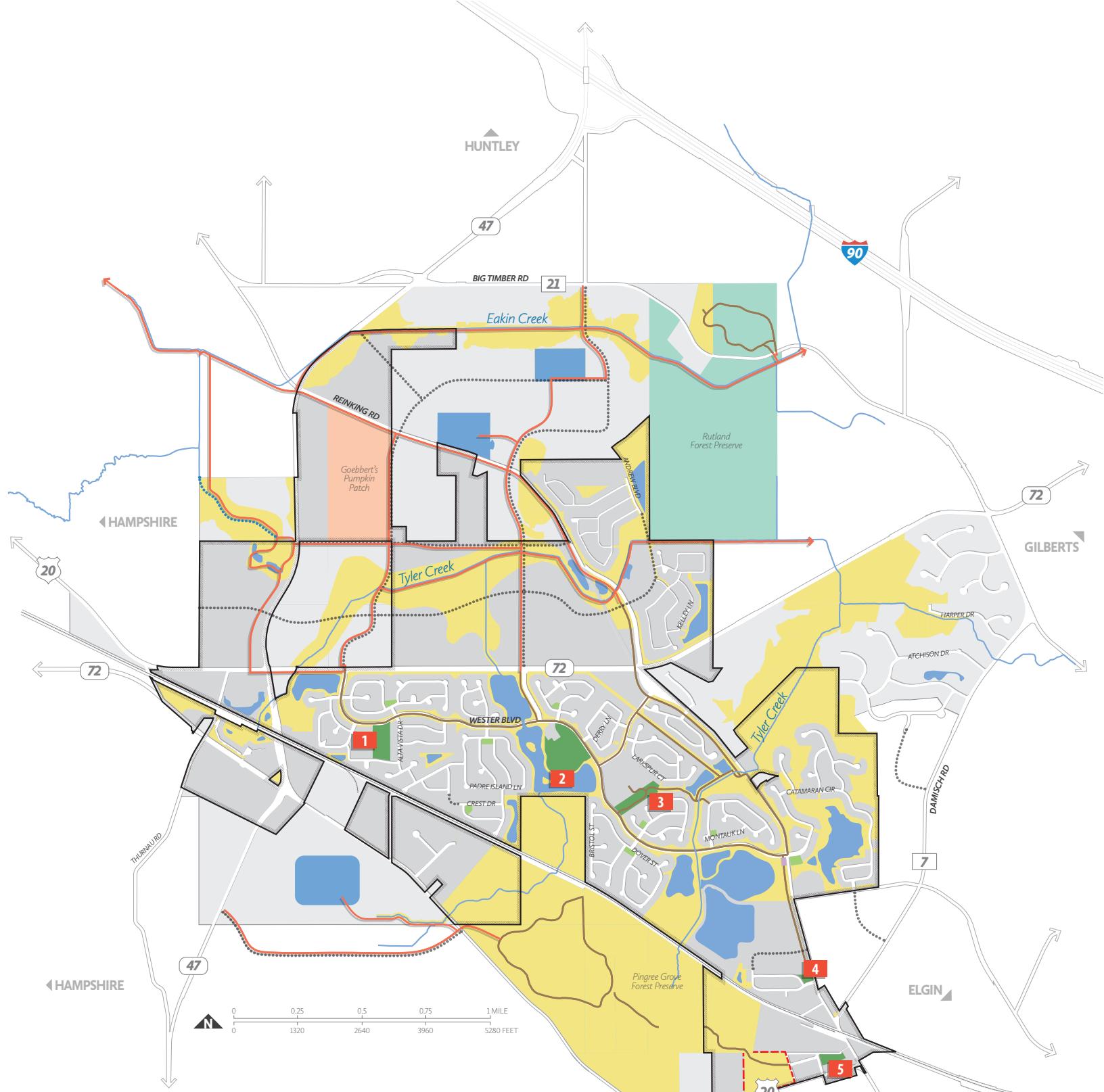
### **Development Priorities & Farmland Conversion**

As Kane County grows and the Village matures, additional opportunities will be presented to farmers and landowners to sell their properties for development, particularly along the IL Route 47 frontage and at major intersections. While several aspects of the Village's rural character can be retained through open space preservation and the integration of green infrastructure into new development, the ability of farms to operate in their current capacity will be hampered as the community grows and new development takes place.

In accordance with the Land Use Plan, development should be encouraged in areas adjacent to primary corridors before more remote areas to the north of IL Route 72. This will minimize the premature conversion of productive farmland and maintain large contiguous areas for agriculture, minimizing impacts to operating farms and agribusiness users. As neighborhoods and commercial areas are built, creek corridors should be naturalized and greenways should be reestablished and incorporated into development.

### **Farmstead Preservation**

The Village should encourage developers to preserve existing structures that reflect the rural history and heritage of Pingree Grove when planning and designing new residential subdivisions. The Village should identify initiatives, such as incentives or development bonuses, which encourage the preservation of farmsteads, barns, silos, homes and sites of unique character or historical significance.



## Parks & Recreation Plan

- Forest Preserves
- Potential Future Parks
- Parks
- Tot Lots / Neighborhood Parks
- Goebbert's Pumpkin Patch
- Proposed Roadway Alignment & Extension

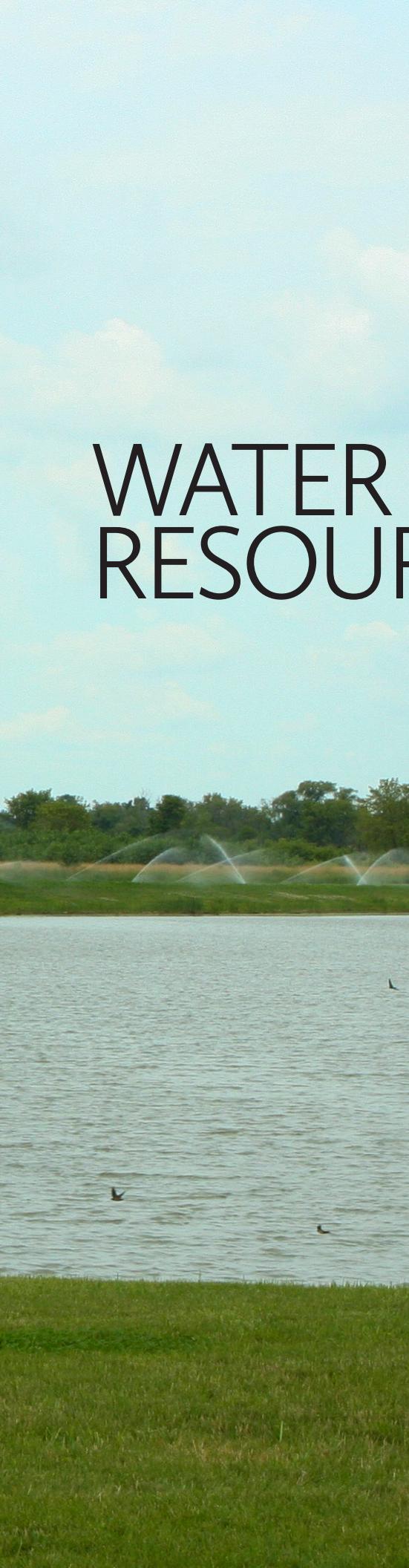
- Existing Bike and Trail Network
- Proposed Bike and Trail Network
- Park Lease Site

\* Proposed roadway alignments and extensions are intended to illustrate best practice and do not have any impact on existing entitlements and development agreements.

### Park Facilities

<span style="background-color: #CC0000; border: 1px solid black; padding: 2px 5px; display: inline-block;">1</span> Skate Park / Soccer Fields	<span style="background-color: #CC0000; border: 1px solid black; padding: 2px 5px; display: inline-block;">3</span> School Park / Soccer Fields
<span style="background-color: #CC0000; border: 1px solid black; padding: 2px 5px; display: inline-block;">2</span> Ball Fields	<span style="background-color: #CC0000; border: 1px solid black; padding: 2px 5px; display: inline-block;">4</span> Centennial Park
	<span style="background-color: #CC0000; border: 1px solid black; padding: 2px 5px; display: inline-block;">5</span> Heritage Park (potential new location)





# WATER RESOURCES

# 7

Pingree Grove is involved in multiple water conservation plans and efforts and water resource management is a critical community issue, underscored by the Village's location in the Fox River Basin. More effectively managing the region's natural resources has received a greater emphasis in the Chicago metropolitan area in recent years, and in response a number of regional alliances, plans, policies, and best practices have been developed to promote water conservation. Strategic water resource management will help ensure Pingree Grove can consistently provide necessary services to its residents while also conserving and protecting its local natural resources.



## VISION

*The Village of Pingree is a water-conscious community and has emerged as a leader in preserving water resources within the Northwest Chicago region. The community has been active in preservation of the Tyler Creek and its tributaries and conservation efforts have helped to keep the creek a clean, providing a healthy watershed while boosting its role as a significant asset in the community. New development has included innovative efforts that reduce impacts on local water resources while supporting Pingree Grove's stance as a sustainable community.*



## GOAL

Demonstrate a dedication to water conservation through preservation of local water resources, encouraging conservation-conscious development, and taking an active role in regional water conservation efforts.

## OBJECTIVES

- Take an active role in local and regional water conservation programs and initiatives.
- Consider adopting and enforcing development regulations that ensure proper conservation and protection of all local watersheds, including the possible formal adoption and implementation of the Tyler Creek Watershed Plan.
- Identify and preserve important water resources and related natural areas that should be protected from future development.
- Update development standards, codes, ordinances, and guidelines to encourage conservation-based green infrastructure practices.
- Consider adopting a local watering ordinance that is in line with those of other Northwest Water Planning Alliance communities.

## MUNICIPAL WATER PRODUCTION

The Village provides residents with potable water that is sourced from two groundwater wells.

### Treatment Facilities

The Village treats and distributes its own water using sustainable technology to conserve water. The Village wastewater treatment plant includes a tertiary treatment step. Most water treatment plants include preliminary and secondary treatments, but Pingree Grove's facility uses a sand trap to further remove fine suspended solids. This process produces a clear effluent that is less harmful to the environment and is currently used for irrigation of public open spaces, including features such as parkways, medians, local parks, and recreational fields. The use of reclaimed wastewater for these applications is more environmentally and fiscally responsible compared to the use of potable or raw groundwater.

### Enhancing Natural Assets

As part of the Village's commitment to environmental quality, a bio-swale stormwater management system has been installed within the Heritage District.

Bio-swales are sloped drainage areas that use native plants to slow runoff and naturally filter the Village's stormwater, before returning it to Tyler Creek. The Village's eight bio-swales are maintained by local volunteers; however, upkeep has been demanding on their time and resources. Consistent maintenance is needed to preserve local bio-swales as important assets for water conservation and district beautification.

To expand the degree of living systems such as bioswales and other green infrastructure effectively, a structure for the management of these systems in concert with a range of funding and support resources must be articulated. This approach needs to allow the long-term expansion of green infrastructure within the Village to be cash-positive through combining and managing some appropriate combination of grants/support funding, service fees, volunteer effort, and other potential resources.

### NORTHWEST WATER PLANNING ALLIANCE

The Village is a member of the Northwest Water Planning Alliance (NWPA), a collaborative of over 70 communities and county governments aimed at cooperative planning for shared groundwater resource management. The NWPA was formed in 2010 in the wake of Chicago Metropolitan Agency for Planning's publication Water 2050: Northeastern Illinois Regional Water Supply/Demand Plan. The NWPA seeks to provide cooperative planning and stewardship for the region's shared rivers and groundwater resources to ensure sustainability of the water supply for the people, economy, environment, and future generations of the area.

## Outdoor Water Ordinances

A critical part of managing water resources and promoting their conservation is addressing outdoor watering and landscape maintenance practices. Both the CMAP Model Water-Use Conservation Ordinance (2010) and NWPA outdoor watering recommendations restrict water use to certain days and times of day throughout the year. The Village's watering ordinance places minimal restrictions on watering, essentially allowing water 24 hours a day, seven days a week.

### Pingree Grove's Existing Regulations

The Village's watering ordinance (Section 9-4-7: Conservation Measures within the Village Code) regulates potable water usage for watering of landscapes and lawn. Restrictions to water usages are based on a three condition system:

- Green: Condition Green allows unregulated usage of potable water for watering.
- Yellow: Condition Yellow restricts usage of potable water for watering to alternate days, assigning odd days of the month to odd numbered residences and even days of the month to even numbered residences.
- Red: Condition Red prohibits use of potable water for watering.

### NWPA's Regional Water Conservation Lawn Watering Ordinance

The NWPA offers a model outdoor watering ordinance that is designed to maintain healthy lawns and plants while advancing conservation. Much like CMAP's Model Water-Use Conservation Ordinance, the NWPA recommendation is centered on an irrigation schedule of odd/even (address) watering days during restricted times of day. This approach is recommended to be in effect year-round as the condition "Green" or default schedule.

### *Conditions Tied to Publicly Available Data*

The NWPA ties the local “Yellow” and “Red” condition status to regional conditions documented by the US Drought Monitor map, which is updated weekly and readily accessible online. The use of readily available data enables a consistent and level playing field among neighboring communities that share groundwater resources and empowers citizens to easily self-monitor local conditions, acting in concert with municipal expectations and enforcement.

Based on the US Drought Monitor, once the region transitions to a moderate or severe drought status, condition “Yellow” takes effect and the use of automatic sprinkler systems is prohibited. Watering with a hand-held hose is still allowed and exemptions are also made for new lawns. In the case of extreme or exceptional drought, as indicated by the US Drought Monitor, condition “Red” is triggered and use of water outdoors for any purpose is prohibited.

### *Aligning Pingree Grove with Regional Goals*

Rather than exercising color-coded conditions, Pingree Grove’s ordinance allows for unlimited watering as the default condition. Drier conditions that are not clearly specified in Village code can prompt a Village proclamation that first leads only to odd/even day watering (condition “Yellow”). Outdoor use can be prohibited under a condition “Red” situation, but in general the environmental exigencies or water supply availability triggers specified in the code lack specificity and are likely not understood by the community.

The Village ordinance is not aligned with neighboring communities who utilize the NWPA guidelines and this will reduce the ability to collaboratively plan for and steward shared groundwater resources. The Village code also lacks other necessary elements such as proper watering guidance for new sod or seeded lawn installations. The Village should utilize NWPA policies to update their watering ordinance and related regulations to match other NWPA communities. This will help reduce burdens on the local water system and demonstrate the community’s commitment to sustainable initiatives.

## **WATERSENSE PARTNERS**

Members of the NWPA are encouraged to join the United States Environmental Protection Agency’s (EPA) WaterSense Program. Similar to many of the NWPA’s goals, the WaterSense Program aims to preserve water through efficient use. The program provides information on water-efficient products and practices, aiding consumers and communities with water conservation efforts. Municipalities become partners by pledging to adhere to WaterSense Goals, following program policies, and providing local data regarding WaterSense initiatives.

As part of its dedication to water conservation, the Village should consider becoming a member of the WaterSense Program. As a promotional partner, the Village would be mainly involved in encouraging water conservation and promoting products with efficient water usage. The program is free to join as a municipality.

## TYLER CREEK WATERSHED

Tyler Creek is an important regional watershed that flows into the Fox River. The Village of Pingree Grove already includes a segment of the creek in its boundaries, but its growth areas could include even more of this natural water resource, allowing Pingree Grove greater control in its impacts on local water quality. Further, two tributaries flow through much of the Village, near Cambridge Lakes, and the majority of Pingree Grove is contained within the watershed.

### Water Quality

The Illinois Department of Natural Resources (IDNR) has designated Tyler Creek as a Biologically Significant Stream (BSS) for most of its length from its headwaters to its mouth at the Fox River. A BSS is a unique resource in Illinois, and the biological communities in such streams should be protected at both the designated BSS stream reach as well as upstream. Tyler Creek is one of just 20 BSS stream segments in the 11 counties of northeastern Illinois, and what happens in Pingree Grove will significantly influence the health of this very special stream.

### Tyler Creek Watershed Plan

The Tyler Creek Watershed has been the focus of a number of plans and studies, starting with the 1996 Watershed Plan guided by the Openlands Project and supported by the City of Elgin, Village of Gilberts, Kane County, and Kane County Forest Preserve District. The creek was further addressed by the City of Elgin's 1997 Tyler Creek Management Plan and designated as a high-priority watershed for preventative planning by the Fox River Ecosystem Partnership.

The 2008 Tyler Creek Watershed Plan was built from previous efforts by updating relevant information and analysis and was led by a collaboration of the City of Elgin, Fox Valley Land Foundation, The Conservation Foundation, Friends of the Fox River, and CMAP. The plan outlines four goals for the effective management of the watershed:

- Maintain the Quality of Tyler Creek
- Prevent Further Negative Impacts of Land Use Change on the Watershed's Natural Resources
- Reduce Flood and Flood Damages in Existing Developed Areas of the Watershed
- Create an Effective and Lasting Watershed Stakeholder Organization

## Upper Tyler Sub-watershed

The Village of Pingree Grove is primarily located within the Upper Tyler sub-watershed. Subarea recommendations focus on preserving vital wetlands and maintaining water quality. The Plan does not offer many recommendations or projects specific to Pingree Grove; however, several goals and objectives of the plan are still important to the Village. In many cases, the actions proposed to protect the Tyler Creek watershed also match best practices for water conservation more generally, and these strategies still benefit the Village's groundwater supply.

## Tyler Creek Watershed Coalition

The Village of Pingree Grove is primarily located within the Upper Tyler sub-watershed. Subarea recommendations focused on preserving vital wetlands and maintaining water quality. The Plan does not offer many recommendations or projects specific to Pingree Grove; however, several goals and objectives of the plan are still important to the Village. In many cases, the actions proposed to protect the Tyler Creek watershed also match best practices for water conservation more generally, and these strategies still benefit the Village's groundwater supply.

## Implementation

The Village is identified as a responsible party for 7 of 10 general watershed plan recommendations, but has never formally adopted the Tyler Creek Watershed Plan. The Village also is not an active participant in the coalition. As such, implementation of the plan's recommendations has not occurred since its completion in 2008.

The Village should take an active role in preservation of the Tyler Creek by becoming involved in related conservation efforts. The Village may wish to evaluate and formally adopt of the Tyler Creek Watershed Plan and coordination with the City of Elgin and Village of Gilberts to endorse and adopt plan recommendations. Many of the watershed plan's recommendations are focused on habitat protection and restoration and could be used to turn natural areas into amenities for the Village and address community concerns regarding preserving Pingree Grove's rural character and striking a balance with nature.

## Monitoring & Evaluation

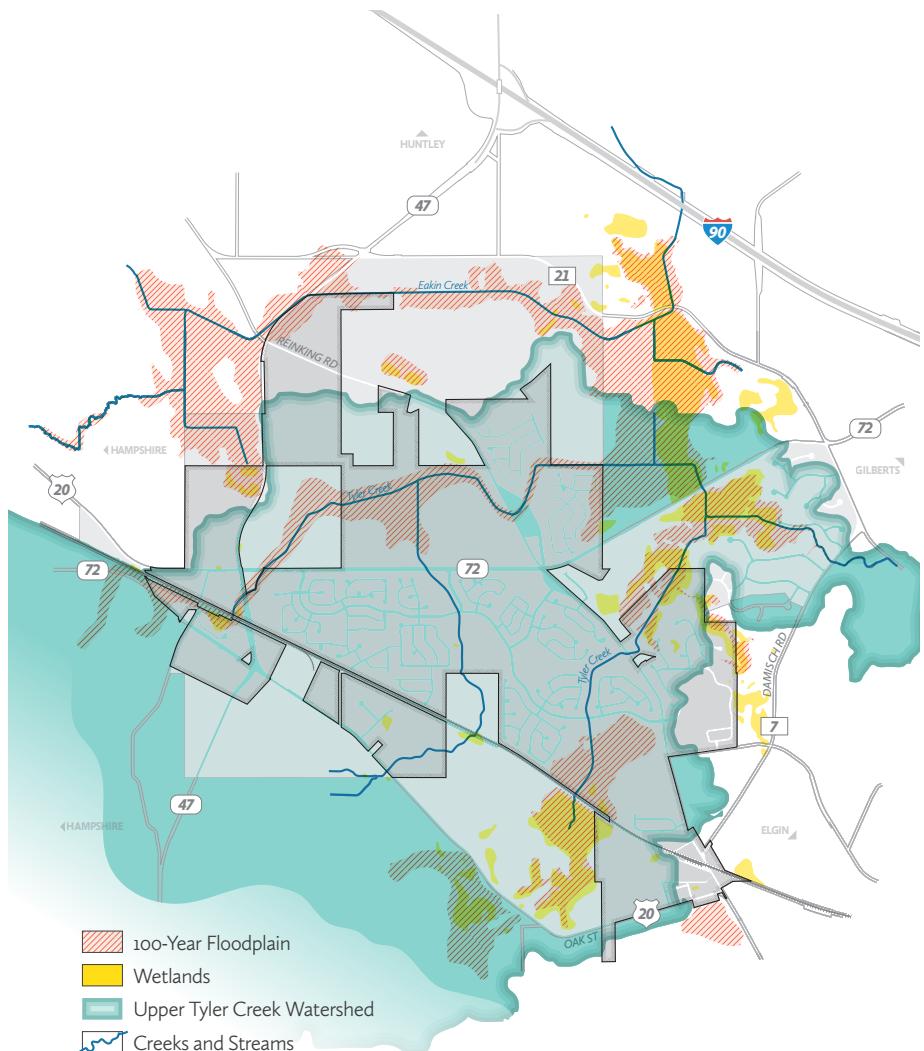
Several watershed plan recommendations relate to water quality monitoring and evaluation. The Village should consider partnering with the Fox River Study Group (FRSG) and its members to establish a locally managed stream monitoring program to collect and evaluate basic water quality data. In doing so, the Village can offset costs of creating the system by sharing resources with surrounding communities. Such a system would supplement the limited data currently collected by the IEPA and environmental advocacy groups. The Village should also consider working with FRSG to update and revise the Tyler Creek Watershed model appropriately to provide a more accurate assessment of water quality in the watershed for predicted land development scenarios. This will better prepare the Village for residential and commercial development in identified growth areas.

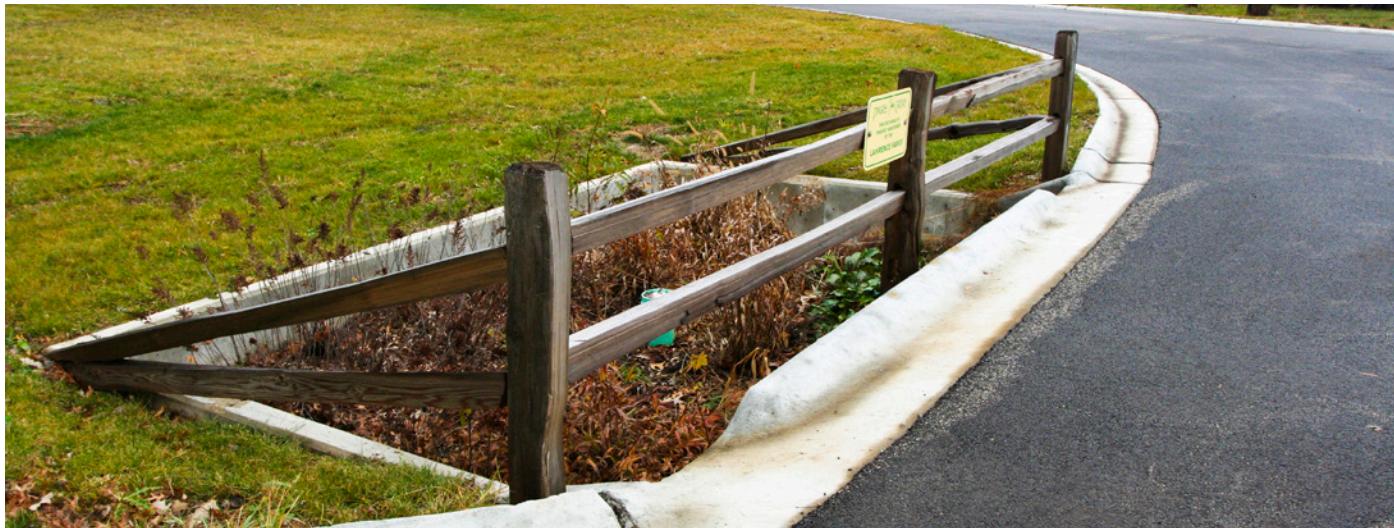
## Development Regulations & Property Improvements

The Tyler Creek Watershed Plan also identified numerous aspects of local development regulations that can be modified to lessen the impacts of development on the watershed. Given that Tyler Creek and related tributaries run through a large portion of the Village's growth areas, it is important that local development regulations and strategies ensure proper management of the watershed. The Village should consider updating its regulations and policies for development and property improvement to ensure proper conservation of the Tyler Creek Watershed.

The Village should consider the following changes to its Zoning Regulations and Subdivision Regulations (Titles 11 and 12 respectively within the Village Code):

- As new development occurs, properties with segments of Tyler Creek and related tributaries that have been channelized should incorporate de-channelization into site design and planning.
- Require conservation design practices for land planning and stormwater management design to be used in all new developments. This will help minimize stormwater discharge, maximize groundwater recharge, and maintain or enhance water quality in the watershed's streams. Examples of conservation design practices are identified in the Green Infrastructure Strategies section of this chapter.
- As part of a development application, require complete detailed floodplain mapping for all streams and drainage ways currently mapped as FEMA Flood Zone A, or that are unmapped. This mapping should include a drainage area equal to or greater than one square mile. Floodplain mapping could be completed on a "reach-by-reach" basis and funded by developers as a condition of land development approval.
- Establish a natural areas overlay district ordinance, used to identify all lands that a community wishes to protect or conserve from development impacts. When creating such an overlay district, the Village would establish natural areas in which development should not take place. The ordinance is enforceable, guiding development toward those areas that do not fall within the overlay district. This enables continued growth without loss of important natural areas. It is recommended that areas identified as green infrastructure that are currently not developed or contain limited improvements be included within the overlay district.





## GREEN INFRASTRUCTURE STRATEGIES

In support of the Village's stated priorities, policies, current and anticipated future issues, some of the key elements and recommendations of the Comprehensive Plan focus on a Green Infrastructure (GI) approach to land use, community/public facilities, and building/site development practices. GI encompasses a range of strategies and techniques from planning scale to site/building scale.

From a planning scale, GI strategies preserve and expand a network of multi-use open spaces as a framework for more consolidated development of commercial, institutional, and residential sites. At the site/building scale, GI includes assorted methods to slow, cool, cleanse, and infiltrate surplus rainwater as local to the source as possible. Green roofs, permeable pavement, bio-retention/rain gardens, urban trees, and other site-specific practices each provide a range of benefits and values while supporting a water agenda. At every scale, GI relies on soil, vegetation, and natural process to effectively manage water resources AND to provide a wide range of other benefits and values at the same time.

GI strategies are essential tools to help achieve some of the key objectives articulated in the Plan, and are a fundamental component of Conservation Development practice. Through a holistic, integrated application of GI strategies and techniques, new site, building or infrastructure development and retrofits of existing land uses can do more than minimize negative impacts associated with development—these methods can actually restore ecological functions in a very cost effective manner.

When properly designed, engineered, and managed, GI onsite practices, in concert with a larger GI greenway network, offer the ability to provide a wide range of benefits. GI site and building development practices support and optimize the ability for open spaces to provide the greatest range of ecosystem services, including:

- Improved water quality in downstream aquatic resources, including wetlands, streams, and the Fox River
- Reduced flooding and more stable localized hydrology
- Cleaner air and water
- Improved urban ecology and biodiversity
- Increased recreational opportunities;
- Improved community and individual health and well-being

- Reduced energy use
- Higher property values
- Reduced long-term maintenance and operations costs for public infrastructure
- Overall improved performance and quality of life for residents and business owners
- Preservation of the rural character of Pingree Grove;
- Locally authentic beauty and authenticity that will strengthen and reinforce the Village's unique identity

The core focus of GI treats all water as a valuable resource, including stormwater, wastewater, and potable water. This mindset is aligned with many of the Village's current policies and practices, but could be expanded through implementation of the following strategies.

## Expand, protect, and restore the Village's existing network of natural areas and aquatic resources.

The Village currently encompasses substantial areas of protected open spaces, including the Pingree Grove and Rutland Forest Preserves and parks/open space within existing neighborhoods, in addition to an extensive network of wetlands and floodplains directly associated with Tyler Creek. However, the biological integrity and overall ecological function of natural areas greatly improves to the degree that larger networks are interconnected, as well as expanding recreational potential through trails and public accessibility of these spaces.

Through proactive planning, close coordination with property owners and developers, and cooperation with other agencies, the Village can build upon the extensive amount of natural areas currently protected. This includes wetlands, woodlands, and prairies, as well as flood prone areas, hydric soils (subject to high water table/inundation) and other environmental qualities. These areas should be identified and prioritized for open space uses as development occurs in the Village's growth areas. To the degree possible, natural areas should also be linked with the existing open space network.

## Apply conservation-based green building and site development practices into new commercial, institutional, and residential developments.

There are a growing number of methods to absorb, cool, collect, and infiltrate rainwater within the built environment. This is complimented by new methods of improving other performance characteristics for roofs, pavement, landscapes, and man-made surfaces. Green roofs, permeable pavement, bioretention, street trees, and rainwater harvesting/re-use practices not only mitigate the impact of stormwater runoff, but conserve water resources and reduce the need to use drinking water in the landscape. These green infrastructure practices achieve the greatest overall function and value when they are integrated into a building or site development with a systems approach. This approach is intended to address all of the project's water, energy, waste, and materials processes as an integrated system. The practice of high-performance, green building and site design and implementation is the basis of noted rating systems LEED, SITES, Living Building Challenge, One Planet Communities, and others, which help facilitate and incentivize integrated design for high-performance, green results.

## Pursue demonstration projects to further explore the potential for the Village to capitalize on Green Infrastructure practices.

Each investment in public infrastructure, including streets, sidewalks, parks, public buildings, and other facilities, provides an opportunity for the community to benefit from green infrastructure practices. While these practices are now widely promoted within the Northeastern Illinois region, and across the country, they are still not widely used. As with any change in standard practice, it requires a combination of policy, incentive, and local examples to gain acceptance and widespread use. To catalyze implementation, capital projects currently planned within the Village could be used to demonstrate green infrastructure applications.

The potential for new Village facilities, such as a library, town hall, or community center, provides a perfect opportunity for the Village to explore and implement a cutting-edge, sustainable facility that will serve the community most effectively and demonstrate desired policies and practices regarding green infrastructure. Also, private development should be encouraged and incentivized to incorporate these practices more aggressively. Demonstration applications should be monitored for performance and acceptance and adapted to Pingree Grove's priorities.

## Develop and implement a long-term operations and management plan for Green Infrastructure throughout the Village.

In order for Green Infrastructure to be most effective and achieve the greatest level of performance over time, it is essential that long-term maintenance and management of these systems are considered and properly planned for during the design phase. While typically overall maintenance requirements are less than conventional practices over time, many GI strategies include living plants and other materials that need regular inspection and maintenance to ensure their on-going performance.

The Village has the opportunity to further capitalize upon the aggregated benefits of a green infrastructure approach through centralized maintenance and management operations. As the use of these systems is expanded throughout the Village, their care and maintenance can be further optimized. The overall objective is to provide the greatest degree of services and benefits for the community within appropriate cost/resource parameters.

## Foster partnerships with allied agencies and organizations.

As previously noted, Kane County's 2040 Green Infrastructure Plan strongly recommends and encourages similar green infrastructure practices. Partnerships are reciprocal, and many public agencies and private not-for-profit foundations have programs that encourage and potentially support green infrastructure practices. CMAP's 2020 plan and the Chicago Wilderness Biodiversity Recovery Plan are all in unison with the 2040 plan with regards to green infrastructure practices for environmental and other benefits. Illinois EPA, Chicago Wilderness, the Fox River Ecosystem Partnership, the Conservation Foundation, and others all focus on the critical importance of conservation-based development practices in areas like Pingree Grove that are converting natural and agricultural lands to development.

The Village of Pingree Grove has the opportunity to become a model for conservation-based development practices within the County and the region. Through the establishment of a green infrastructure sub-committee and/or sustainability coordinator, the Village should have a voice in regional policy, incentives, and programs relative to development and land management practices enhanced through green infrastructure.

## Update applicable Development Standards, Codes, Ordinances, and Guidelines to encourage, incentivize, and regulate conservation-based Green Infrastructure practices throughout the Village.

Development methods and practices largely follow policy and requirements set forth by regulatory authorities. A critical next step towards embracing and implementing green infrastructure practices in the Village is to conduct a thorough review of all applicable codes, ordinances, and policies that could be elevated, modified, or augmented to implement green infrastructure throughout the Village. Model conservation-based codes have been developed in outer communities, and there may be additional resources and technical support available through Kane County, CMAP, and others to support the Village.

## Promote, encourage, and incentivize restorative farming practices and agricultural operations as part of the Village's rural heritage.

Pingree Grove's agricultural heritage and landscape character are essential aspect of the community. A key to preserving this heritage and land use in the most economically viable way is to promote restorative agriculture and agritourism as land use priorities. There is a growing trend towards restorative, sustainable agriculture practices such as growing crops in a way that infiltrates rainwater; minimizes the use of harmful fertilizers, pesticides, and herbicides; builds soil health; and produces healthier, more valuable food, fiber, and other crops. In addition to organic local produce, which is growing in popularity and demand in markets throughout the region, there is an increasing demand for specialty grains that are used in specialty baked good, craft brewing and distilling, and other products.

Native grassland agriculture provides another opportunity to restore the watershed and support the local economy. Native grassland can be used to graze cattle, bison, and other healthy meats which are growing in popularity. Native grasses such as switchgrass are being used for biofuels and offers a distinct sustainability advantage over corn (ethanol) as it is a perennial crop and doesn't require intensive industrial-scale agricultural practices.

By promoting and facilitating these agricultural practices, especially in critical non-protected environmental areas, viewsheds, and open space connections, development sites can be used as amenities and to help boost the Village's economy with locally grown produce, grains, meat, and value-added craft food products. Further, these kinds of healthy, human-scaled farming landscapes and production facilities attract visitors and business enterprise, as evidenced by Goebbert's Pumpkin Patch.

## Monitor and record water usage data reported annually or monthly to establish local trends and provide regionally applicable data.

The NWPA and WaterSense programs both discuss the importance of tracking water usage for a municipality on an annual or monthly basis. Tracking usage helps to build a record of how water consumption is changing over time and project future trends in demand and need. On a larger scale, some regional organizations track water usage as a means of determining policy for the region. The Village should review and consider establishing a system for monitoring water usage that accounts for water usage including elements such as average daily demand and peak, average daily demand and peak during the summer season, current water rates, and change in water rates over time. This data will help to characterize water usage in Pingree Grove and establish direction for water supply planning and management.





# IMAGE & IDENTITY

# 8

As a relatively young community, Pingree Grove is establishing a “residential lifestyle” brand that promotes families, outdoor recreation, quality local education, superior community facilities, and proximity to greater Fox River Valley attractions. Despite experiencing new growth and development, the Village has retained a distinctive “countryside” character that should be strengthened moving forward.

Current residents generally embrace more growth, but there are also concerns about Pingree Grove ultimately becoming a one-dimensional bedroom community. A delicate balance exists between preserving the area’s natural landscape alongside growing pressure to add needed suburban amenities. Residents clearly want both a suburban lifestyle and a semi-rural setting, and the use of green infrastructure and preservation and integration of natural areas into new development will be critical to maintaining this balance in the future. The Community Identity chapter inventories the various desirable features and attributes of the Village’s existing identity and examines opportunities to strengthen that identity.



## VISION

*The Village of Pingree Grove is a regionally prominent destination with a noted identity that welcomes visitors and residents alike to the community. People from across the Chicago Metropolitan Region travel to the Village to enjoy its rural landscape, thriving agritourism, and numerous annual and seasonal festivals. Pingree Grove has become known as the “City in the Country,” where high quality homes and retail shopping are interwoven with greenways, parks, and natural open spaces. Residents new and old are proud to be a part of a community that has honored its past while moving into the future.*



## GOAL

Through the preservation and enhancement of existing historic, cultural, and natural assets, create a local and regional identity that defines the Village as a place to visit, live, and enjoy.

## OBJECTIVES

- Establish wayfinding signage and gateway features to better define the Village's location within the surrounding region
- Introduce streetscaping improvements and roadway alterations to improve pedestrian and bicycle access while creating a unique and welcoming environment
- Retain and enhance the Village's rural character through incorporation of green infrastructure, encouraging sustainable design and conservation, and support of agritourism.
- Identify and protect important historic and cultural assets that define Village's character, working to better integrate and enhance these features.
- Develop spaces for larger community gatherings and programming and increase the number of annual and seasonal events and activities that bring visitors to the area and create a stronger sense of community



## BUILDING COMMUNITY IDENTITY

Understanding the separate issues facing Pingree Grove's four distinct character areas, specific strategies have been developed for building a united community identity. These include recommendations geared toward specific issues within and between the four character areas, as well as larger community wide concerns.

### Sense of Community

Pingree Grove reflects a community in transition and presents four distinct "character areas" within the Village. These areas include: 1) the historic Heritage District, 2) the traditional Cambridge Lakes single family subdivision, 3) the age-restricted Carillon development, and 4) rural areas and agriculture uses surrounding the Village.

During the outreach process, residents frequently identified a sense of disconnection between the various areas of the Village, noting that Pingree Grove does not feel like a unified community, but rather three separate enclaves surrounded by rural countryside. Several initiatives are recommended in the Comprehensive Plan that will serve to better unify the community. These include the establishment of a Village-owned Community Center, the expansion of the trail network, and improved access and connections between areas.

## Streetscaping, Gateways & Wayfinding

A common complaint of highly-developed and built-out suburban areas is that motorists travel highway corridors that pass through a series of towns, but an individual never truly knows where they are. Municipalities can create defined districts by adding streetscaping and wayfinding along major corridors, as well as creating prominent gateway entrances at major intersections. Pingree Grove has invested in its entryways as well as streetscaping in the Heritage District to begin this effort.

Pingree Grove is also establishing a brand through its recognizable logo. The use of earth tone colors, a prairie-style font, and acorns and leaves is distinctive from the Village's neighbors and captures its natural setting. This design has been effectively used on community signage, park monuments, the water tower, and even customized street signs. This branding should be applied to all signs and external communications associated with the Village. Example initiatives are identified in the following sections.

### Major Gateways

Apart from the water tower near IL Route 47 and IL Route 72, few features exist that clearly identify the Village of Pingree Grove. The Village should identify and install gateway treatments at all major gateways to Pingree Grove. All gateway features should include signage welcoming individuals to Pingree Grove that utilizes the Village's logo. In addition, gateways should be landscaped and provide visual interest that clearly marks an individual's entrance into the community. Though many factors may vary based on location, all gateway features should use a similar design to create a united image or brand across all entrances to the Village. Gateway features should be installed at the following major entrances to Pingree Grove:

- Along Illinois 47 south of I-90 Interchange
- Along Illinois 47 south of intersection with U.S. Route 20
- Along Illinois 72 west of intersection with Illinois 47
- Along Illinois 72 east of intersection with Reinking Road
- Intersection of U.S. Route 20 and Reinking Road
- Along U.S. 20 west of Intersection with Illinois 47

The Intersection of U.S. Route 20 and Reinking Road offers a unique opportunity for a gateway feature as Development of the Pingree Creek project will result in a repositioning of the intersection. Should the project be executed, construction will provide a convenient time for adding a gateway feature to the intersection. The Village should work with the City of Elgin and necessary investors to coordinate development of a gateway feature that matches the Pingree Creek development while distinguishing Pingree Grove as a separate community.



## I-90 Wayfinding

Despite being a community of nearly 5,000, Pingree Grove currently lacks any official wayfinding on Interstate 90 and at the IL Route 47 interchange. Motorists exiting I-90 are directed north to Huntley or south to Elburn, a community of 5,600 approximately 14 miles to the south of Pingree Grove. The Village should work with IDOT and Kane County to coordinate wayfinding signage directing drivers to Pingree Grove (in addition to other nearby communities) along major transportation corridors, specifically along I-90 and IL Route 47.

## Reinking Road Boulevard Treatment

Roadways with boulevard configurations feature two lanes of traffic separated by a parkway usually planted with trees, shrubs and flowers. Boulevard treatments establish a level of appeal to otherwise non-descript roadways through visual interest. Boulevards are used along key routes throughout the Cambridge Lakes development, particularly at entrances to the neighborhood. Reinking Road has a boulevard configuration marking the entrance to the Carillon development.

As improvements are made to connect Reinking Road west, a boulevard treatment should be considered to be extended north. Similar boulevard treatments should be applied at other major intersections along Reinking Road and along its approach to IL Route 47. Reinking Road should form a spine for development in the northern growth area. Intersecting local roadways could then receive similar treatments as they split off Reinking Road to the north and south to enter new neighborhoods.

## Pedestrian Access

Pingree Grove has several significant barriers to pedestrian access and mobility which isolate residential neighborhoods from each other and commercial areas, both existing and future. The Village should take a proactive stance in improving pedestrian access through necessary streetscape improvements along key roadways. All central roadways, specifically IL Route 47, IL Route 72, and Reinking Road, should be improved with sidewalks and crosswalks at all traffic signals. As development occurs, IL Route 72 and Reinking Road should receive additional traffic signals to accommodate automobile traffic moving into residential subdivisions. Any new intersections should include crosswalks with enhanced features such as walk signals or pedestrian refuge islands intended to improve a pedestrian sense of ease and safety crossing the roadway. In addition, internal sidewalks and similar pedestrian amenities should be required within all future residential and commercial developments.



## Marketing & Branding Pingree Grove

In recent years the Village has been professionally branded and marketed, in effect, as a byproduct of D.R. Horton's efforts to market its Cambridge Lakes and Carillon projects. So, as D.R. Horton sold its projects, it also sold Pingree Grove. Their leadership and vision has been important in establishing the Village as a larger community, and their projects have been very successful. However, as these residential areas mature and begin to turnover to new homeowners and residents, how Pingree Grove is sold to the region will decentralize and be an offshoot of traditional real estate activities.

The Village should utilize existing marketing elements, including the Village logo, to create a clear Pingree Grove brand. This should include promotional materials, placemaking elements on gateway signage and within the Heritage District, and an online presence. The brand should create a clear and easily comprehensive image of Pingree Grove's that communicates important assets and local character. Promotional material should be geared toward defining the Village within the region and attracting new residents and businesses to the community.

## Natural Setting, Preserves & Recreation

Residents have consistently cited one of Pingree Grove's defining characteristics as "residential living in balance with nature." The local terrain features more rolling hills and wooded areas than other parts of the Chicago region, and the two large forest preserves add significant open space beyond the Village's parks.

The Village also includes many wetlands and marshes, often alongside trails in newer developments, which present more well-preserved environmental features than other similar suburban communities. Further, the Village offers unique outdoor recreational activities accommodated by this setting, such as bird watching, horseback riding, and nature trails for hiking.

## Green Infrastructure

As the Village continues to grow, future development will be able to draw upon the community's rural character to market Pingree Grove, just as D.R. Horton has done in the past when marketing the Cambridge Lakes subdivision. Highlighted in the Green Infrastructure component of the Tyler Creek Watershed Plan, stream corridors, their related wetlands, and natural areas should be leveraged to better connect the Village neighborhoods while promoting community interest in preserving the natural environment. Discussed in the Land Use Plan, areas of green infrastructure should be preserved when developing growth areas. This will ensure protection of the Village's most important assets while encouraging unique design of residential and commercial areas to incorporate natural resources. Important green infrastructure that should be preserved includes:

- Scattered remnant oak woodlands;
- Tyler Creek, Eakin Creek, and related tributaries; and,
- Wetlands.



## Farmtown Heritage & Agricultural Tourism

Pingree Grove's most defining feature is its natural setting and farming community aesthetic, which yields common sightings of wildlife and farm stands. Residents repeatedly cited one of the main reasons they chose Pingree Grove was the rare opportunity to purchase modern housing in this appealing country-style backdrop. The Village has a long and successful agritourism tradition, primarily credited to Goebbert's Pumpkin Patch, which offers on-site amenities like the Farmer's Wife Café, summer Farm Stand, Kettle Corn and Corn Roasting sales, and the Fall Harvest Market, among other attractions and special events. This community identity extends beyond Goebbert's, including unique local destinations like the Noble Carrot, community gardens, and full-service landscaping nurseries.

Moving forward, the Village should work to maintain and enhance agritourism in Pingree Grove. Building on these features can help bring new residents and visitors to the community. The Village should have an active hand in supporting businesses like Goebbert's while attracting additional agritourism where applicable. The establishment of a seasonal farmer's market can also help promote the Village's agricultural roots while also acting as a community event. Businesses like the Noble Carrot provide unique retail destinations that also serve consumer needs. The Village should explore potential incentives and programs, such as a grant for sustainable food practices, which would encourage and attract agritourism businesses to the community.

It is important to note that the Land Use Plan does not include existing agricultural areas as a future land use, this is because it reflects projected demand for future residential and commercial development. The Land Use Plan does not advocate for the development of agricultural areas until other opportunities for infill development have been realized.



## Signature Landmarks & Architectural Features

Pingree Grove features signature landmarks and defining architectural features despite being a newer community. Memorable physical elements add to the community's urban design and a concept called "imageability," a person's ability to recall something defining about a place with which they connected; for instance, the elevated tracks in the Chicago Loop or the frequent use of white marble throughout Washington, D.C. are iconic examples.

In Pingree Grove there are both new and old features that begin to create this identity, such as the columns on the Wester Boulevard bridge, the Gazebo pier near the Cambridge Lakes Community Center, and the monument in Centennial Park, as well as more subtle elements like the pumpkin-topped grain silo, the flagship Free Little Library designed as a red farmhouse, and the historic St. Peter's Lutheran church in the Heritage District.

The Village should work to identify important landmarks and architecture features that should be preserved and enhanced to promote Pingree Grove. This should include efforts to better integrate specific features into marketing and placemaking in the community.

## CP Railroad Bridge Mural

The CP Railroad bridge over IL Route 47 provides an opportunity for a gateway mural or sign that would serve as a landmark and placemaking element. While the bridge functions well from a traffic management perspective, it fails to contribute to Village character. The installation of a mural at this location, painted directly onto the truss or hung in front would alert passing motorists that they are passing through a unique and welcoming community.



The Square on Old Frankfort Way is a positive example of a neighborhood-scale, mixed use development in downtown Frankfort.

## The Village's Centennial History

Pingree Grove is benefited by a 19th Century history that continues even today, which distinguishes the community from other suburban areas built from scratch since the 1950s. Although outreach participants expressed efforts could be improved, it is clear the community has a commitment to promoting and celebrating its local history. Pingree Grove's Heritage District provides unique community character, tying the Village directly to the Chicago region's famous railroad history. The old depot, historic buildings, and church found in the Heritage District offer an architectural legacy that ties modern Pingree Grove back to its origins adding to the community's character today, in addition to presenting the Village with a valuable opportunity to further promote itself.

As development and growth occur, the Village should preserve important historic assets and buildings that demonstrate the community's cultural heritage. The Village should consider the establishment of a historic preservation commission or committee charged with identifying and protecting buildings of important heritage. The majority of historic structures lie within the Heritage District, though additional rural structures may be included given the Village's tie to agriculture.

Another option is the establishment of a specific historic district in conjunction with the existing Heritage District that would protect buildings of a historic nature. The Village should explore the requirements of establishing a historic district. Whether through a historic district or separate means, the Village should also establish design guidelines or architectural review standards for historic sites, particularly in the Heritage district. This will enable local government to have a stronger hand in preserving important buildings and maintaining the character of district cultural amenities.

## Community Events

The Village has an active Village Events Committee that takes the primary lead for Village-sponsored events. Special events and festivals are a critical part of creating a community identity and can become an annual tradition that brings visitors to the Village, acting as a homecoming for extended families that grew up in the community. Pingree Grove hosts several seasonal festivals and annual traditions, such as the Independence Day Celebration, Fall Festival, and Tree Lighting Celebration, as well as other activities like the Garage Sale and Touch-a-Truck day.

Pingree Grove also has other events administered by various community stakeholders, like the Canadian Pacific Holiday Train and events at Cambridge Lakes, hosted by the Homeowner's Association. Participants have expressed interest in the Village developing more programming including more distinctive and unique celebrations that help establish Pingree Grove.

Key to providing additional community events will be the establishment of spaces for gathering that can accommodate a large number of residents and visitors. The only substantial spaces currently in Pingree Grove is the Cambridge Lakes Community Center; however, the limited nature of the facility emphasizes the demand for long-term options that serves the community as a whole. The Village should work to create new spaces for community gatherings and activities and organize annual and seasonal events that promote Pingree Grove locally and in the larger region. The Village's Events Committee could also play a key role in ensuring new events and programs are identified to take full advantage of existing and future community event spaces.

One such location for community events would be the land lease the Village recently entered into with the Forest Preserve District of Kane County. Similarly, new park spaces developed north of IL Route 72 may provide gathering spaces. As development occurs, the Village should ensure that dedicated parkland includes enough space to host larger events and activities. A community park or space could be located adjacent to any school expansions north of IL Route 72, which would benefit organization of community events. The adaptive reuse community center discussed in **Chapter 7: Community Facilities** would help by providing indoor space for activities and programs.

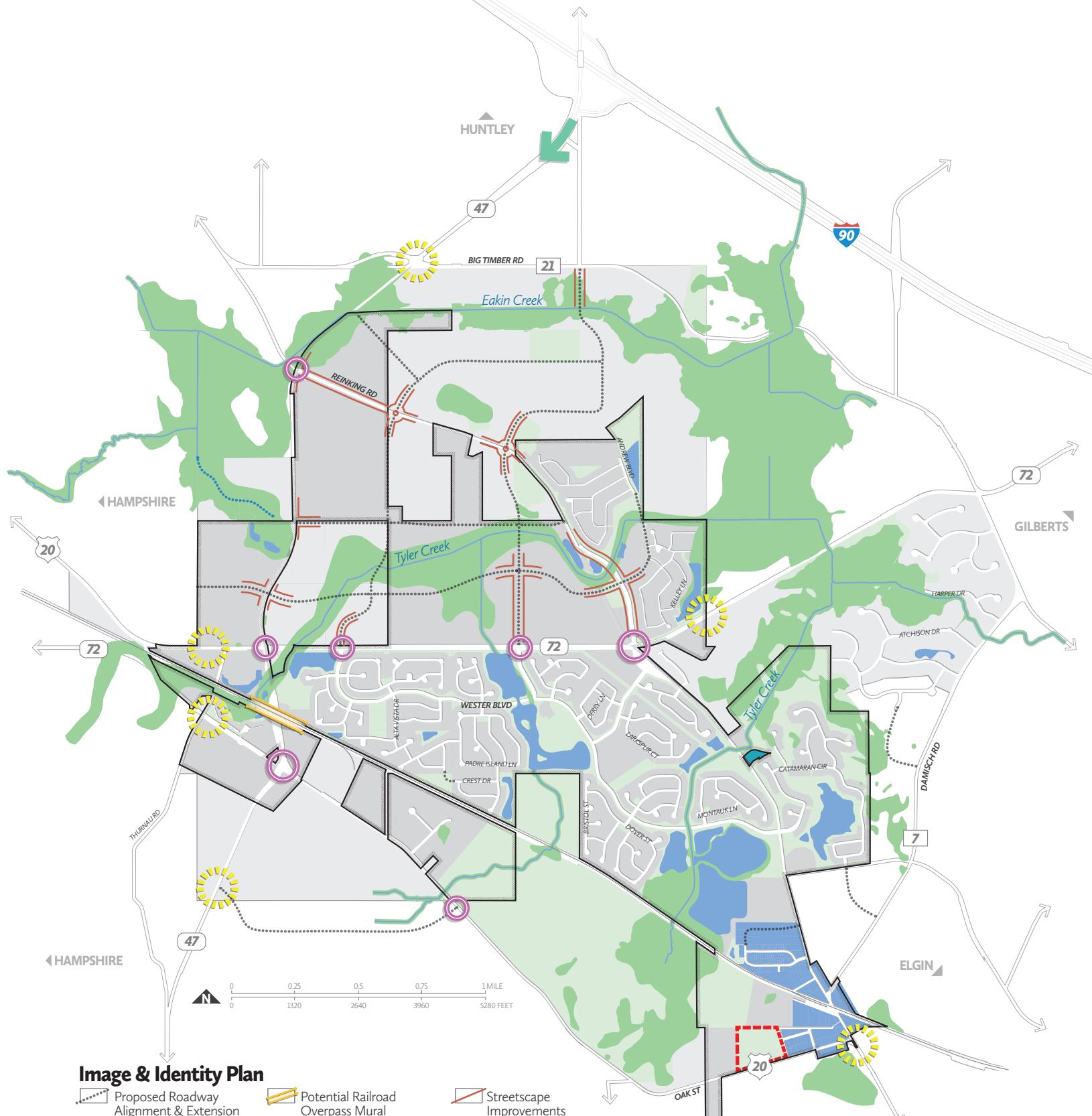


## Kane County Historical Resources, Museums & Tourism

Today Pingree Grove lacks facilities to share its local history with the Chicago region more broadly. There are approximately 70 structures in Kane County on the National Register of Historic Places, but no buildings in Pingree Grove; further, the Village has not been active in local landmarking and other related efforts.

However, Kane County features a number of sites and communities that have successfully leveraged their community histories and agricultural identities as tourism assets within the large, diverse Chicago region. Examples include the Garfield Farm Museum in Campton Hills, the Elgin Area Historical Society Museum, and the Aurora Historical Museum, which was originally the William A. Tanner House and operates today as both a historic home tour and traditional museum.

The Village of Pingree Grove features a number of existing, successful agritourism-based businesses, and its local history should be similarly celebrated. In cooperation with any historic preservation, the Village should explore the possibility of developing a historical museum or cultural center celebrating the history of the community and immediate region. This analysis should consider the feasibility, sustainability, and potential locations for such a development. Should a historic preservation commission be established, that body should be responsible for this task.



### Image & Identity Plan

- Proposed Roadway Alignment & Extension
- Potential Railroad Overpass Mural
- Wayfinding from I-90
- Potential Gateway Locations
- Intersection Improvements
- Streetscape Improvements
- Green Infrastructure
- Heritage District
- Park Lease Site
- Potential Future Community Center

\* Proposed roadway alignments and extensions are intended to illustrate best practice and do not have any impact on existing entitlements and development agreements.





# IMPLEMENTATION

# 9

The Comprehensive Plan provides policies and recommendations for actions the Village and its partners should undertake over the next 15 to 20 years. For the Pingree Grove vision to be realized, the Village must take a proactive role with support and participation from a wide range of stakeholders including elected and appointed officials, Village staff, other public agencies, home owners associations, the local business community, property owners, developers, and residents.

While adoption of the Comprehensive Plan represents the end of an initial 12-month planning process, it also represents the first step in the much longer journey of guiding change within the community and implementing the recommendations of the plan. This chapter presents an implementation strategy that the Village should use to implement key recommendations included in the Comprehensive Plan, establishing the “next steps” to be taken by the Village as it continues the process of community planning and investment.

## USE PLAN ON A DAY-TO-DAY BASIS

The Comprehensive Plan is Pingree Grove's official policy guide for land use and development. It is essential that the Plan be used on a regular basis by Village staff, boards and commissions to review and evaluate all proposals for improvement and development within the community, prioritize public expenditures, and encourage private sector investment. Specifically, agencies and service providers should reference the Plan when assessing investment in new facilities, infrastructure, or programming. The Plan should be referred to for guidance in making regulatory recommendations and actions that impact development.

To further educate the community about the Plan, the Village should:

- Make copies of the Plan available online for free, provide hard copies at Village Hall for purchase, and have a copy on file at the public library for reference;
- Provide assistance to the public in explaining the Plan and its relationship to private and public development projects and other proposals, as appropriate;
- Provide a Comprehensive Plan orientation for newly elected or appointed officials; and,
- Maintain a list of current possible amendments, issues, or needs which may be a subject of change, addition, or deletion from the Comprehensive Plan.

## PROMOTE COOPERATION & PARTICIPATION

In carrying out the administrative actions and spearheading of public improvement projects called for in the Comprehensive Plan, the Village of Pingree Grove should foster a spirit of cooperation and collaboration needed to successfully implement the Plan. The Plan must be based on strong partnerships between the Village and other stakeholders. The Village's partners should include:

- Other governmental and service districts, such as the Community Unit School District 300, Pingree Grove & Countryside Fire Protection District, Ella Johnson Public Library District, Pingree Grove Police Department, Chicago Metropolitan Agency for Planning (CMAP), adjacent municipalities, Illinois Department of Transportation (IDOT), etc.;
- Private and not-for-profit service providers, such as Cambridge Lakes Charter School (CLCS), or private education entities, who are not directly under the purview of local government but provide critical community-based services and amenities;
- The development community, which should be encouraged to undertake improvements and new construction that conform to the Plan and enhance the overall quality and character of the community; and,

- The Pingree Grove community. All residents and neighborhood groups should be encouraged to participate in the on-going planning process, and all should be given the opportunity to voice their opinions on improvement and development decisions within the Village.

## Continued Partnerships with Neighboring Communities

The Village has formal boundary agreements with each of the communities it borders. Collectively, these agreements establish which areas could potentially be annexed by the Village in the future. With boundary and service agreements in place, the Village should continue to work with neighboring communities to coordinate growth and development along its borders. For example, the land use and development recommendations along the Big Timber Road corridor mirror the employment-related land use recommendations contained within the Village of Huntley's Comprehensive Plan. Land use and development recommendations for the Reinking Road corridor also seek to leverage planned development (Pingree Creek) in adjacent Elgin.

## AMENDING DEVELOPMENT REGULATIONS

While the Comprehensive Plan articulates a vision for the Pingree Grove community, the Village's development regulations are the primary tool that can be used to implement the Plan. Revised development regulations including an updated zoning ordinance will expedite implementation of plan recommendations that represent desired policy of Village residents and leadership.

The Village's zoning districts have served the community well, but may be placed under new pressure as the community continues to grow and develop in different ways. The Village's code provides for at least six residential districts (seven including the Heritage District) and they largely capture conditions on the ground today, reflecting rural-style residences and low- to moderate-density housing. However, the code only includes two districts for any potential commercial or industrial use, and those zones can be used very broadly. Additionally, although Pingree Grove's "downtown district" is differentiated through the HD zoning regulations, they may not perform effectively over time to implement the Village's goals for that neighborhood. Finally, the zoning code includes a broad accommodation for planned unit development and master planned, mixed use communities.

Following adoption of the Comprehensive Plan, the Village should consider updating its Zoning Regulations and Subdivision Regulations (Titles 11 and 12 respectively within the Village Code) and related codes, to ensure that regulations reflect current Village policy and the desires of the Pingree Grove community.

### Aligning Potential Amendments

Amendments to development regulations and design standards should consider complementary programs and incentives that can be used to achieve the community's vision for economic development, enhancing neighborhood character, leveraging green infrastructure, and other aspects of the Plan.

Recommendations of the Comprehensive Plan that development regulations can address include, but are not limited to:

- Managed growth on the periphery of the community;
- The appropriate scale, design character, and configuration of development along the IL Route 47 corridor;
- Enhancements to landscaping and screening and the integration of green infrastructure as new development occurs;
- Encouragement of mixed use and single family attached development in the Heritage District; and,
- Facilitating the development of community facilities, parks, and open space to best meet the recreation needs of Pingree Grove residents.

## Residential Density

The Village's current code permits a variety of housing types, and although it mainly captures a spectrum of low-density, single family detached properties, the code also accommodates a range of single family attached and multi-family uses, such as townhouse, duplexes, condominiums, and apartments. The densest single family district permits approximately five houses per acre (lot size of 8,500 square feet) and the Village should consider recent housing trends that have proposed lots as small as 4,000 to 6,000 square feet. There is significant existing demand for smaller lot (less than 8,000 square feet), single family development in the region as documented in CMAP's *Homes for a Changing Region* report (Phase 3: Implementing Balanced Housing Plans at the Local Level, Year Seven: Carpentersville, East Dundee, Elgin, and West Dundee (Spring 2014)). As the Village seeks to attract a wider range of ages, incomes, and young families, market demand will increase for starter homes beyond what is permitted in the R-3, R-4, and R-5 districts.

## Commercial & Industrial Business Districts

The Village currently has only two districts to capture the diverse commercial and industrial activity in the community and that approach may be outmoded in future years. Current zoning may be too generalized and will not contribute to the establishment of defined business districts. For example, the C-1 District permits a wide range of auto uses, including sales, repair, and general service businesses; and agriculture implement, truck, and boat sales are included as special uses. Further, the I-1 District permits virtually every office, entertainment, and retail use alongside manufacturing and industrial uses. The Village should evaluate its desire to create specific, consistent commercial-industrial areas and add new zoning districts to distinguish between land uses and business types in a logical, orderly fashion.

## The Heritage District

Specific zoning was created for the Heritage District in 2004. The HD Heritage District essentially addresses nonconforming uses and structures, and states the Village's intent is to permit only single family residential dwellings. In accordance with the Land Use Plan, the Heritage District should be encouraged to develop as a unique town center within Pingree Grove that features a mix of traditional single family, single family attached, and neighborhood scale commercial and mixed use development.

The HD district should be updated to accommodate these uses and include bulk standards and design guidelines that will ensure new development is of a desirable scale and character that complements existing development.

## Planned Unit Development

The Village's zoning ordinance includes a chapter that addresses Planned Unit Developments (PUDs). The majority of the community has been developed and is regulated through some use of PUD zoning, which is further conditioned with a standard zoning classification. For example, the Cambridge Lakes PUD is zoned R-1/R-5/C-1 PUD. Planned district zoning can be a very effective tool and provide both the developer and the Village greater flexibility in site design.

The Village should evaluate its use of PUD zoning with the recent Cambridge Lakes project and revise PUD requirements and procedures as needed in advance of new, large-scale projects. For example, the desire for conservation design practices should be elevated within the PUD language to ensure that proposed developments provide for low impact development and BMPs.

## Watershed Conservation

As noted in **Chapter 7: Water Resources**, the Village should update its regulations and policies for development and property improvement to ensure proper conservation of the Tyler Creek Watershed.

Updates to development regulations to be considered should include:

- Requiring de-channelization of local waterways;
- Integrating conservation design practices for land planning and stormwater management design;
- Requiring detailed floodplain mapping as part of a development application; and,
- Establishing a natural areas overlay district.

## CAPITAL IMPROVEMENTS PLAN

The Village's Capital Improvements Plan (CIP) establishes schedules, priorities, and estimated costs for public improvement projects over a five-year period. Through this process, all projects are reviewed, priorities are assigned, cost estimates are prepared, and potential funding sources are identified. The Village should update its CIP to support implementation of Comprehensive Plan recommendations that may require Village capital investment.

A CIP typically schedules the implementation of a range of specific projects related to a community's Comprehensive Plan, particularly the restoration and upgrading of existing utilities and infrastructure. The CIP should also consider investments related to infrastructure and open space in new growth areas, flood mitigation and stormwater management, and public streetscaping.

Some of the recommendations of the Comprehensive Plan that can be included through capital improvement planning include:

- Strategic infrastructure development to serve key development opportunities including the IL Route 47 corridor;
- Regular maintenance of streets, trails, and other transportation systems;
- Investments in streetscaping and gateways on key corridors, such as U.S. Route 20, IL Route 47, IL Route 72, and Reinking Road, that would enhance the image of the community;
- Installation of green infrastructure components along rights-of-way and Village-owned properties;
- Relocation and development of new Village Hall and Building Department facilities; and,
- Realignment and intersection improvements along Reinking Road that would enhance vehicular flow as well as pedestrian and bike safety and mobility in conjunction with realignment of IDOT-maintained U.S. Route 20.

## ENHANCE PUBLIC COMMUNICATION

The process undertaken to create the Comprehensive Plan was, in and of itself, an important step in educating the community about the relevance of planning and the Village's role in defining its future. Through the Comprehensive Plan Advisory Committee, a community vision workshop, resident questionnaire, and interactive web-based engagement, much positive momentum has been forged. To build on this foundation, the Village should ensure that the Plan's major recommendations and "vision" for the future are conveyed to the entire community.

The Village should also consider additional techniques for responding quickly to public questions and concerns regarding planning and development. For example, the Village might prepare a new informational brochure and online information on how to apply for zoning, building, subdivision, and other development related permits and approvals. It might also consider special newsletter and/or webpage features that focus on frequently raised questions and concerns regarding planning and development.

## Marketing & Branding

Prior to development of the Cambridge Lakes and Carillon subdivisions the Village of Pingree Grove had limited name recognition in the Chicago region. As D.R. Horton marketed and sold its housing products in these subdivisions, it also created a brand for the Village that drew upon the community's rural character. Now that Pingree Grove has been put on the map as a community of nearly 6,000, the time has come for the Village to establish a brand for itself that can be leveraged to attract commercial and industrial development.

The Village should work with local businesses and residents to develop a branding campaign to better market Pingree Grove's commercial and light industrial areas. the Village should consider utilizing an outside consultant with special expertise, as establishing an effective branding campaign requires unique knowledge of local and regional markets and effective communication strategies. Branding should be an initial step in economic development efforts as the branding components that emerge from the process should be used in all aspects of promoting the Village and its assets.

## Promotional Materials

New promotional materials should be produced that better market the Village and priority development projects to prospective businesses. Materials should include those that can be easily updated and produced in large quantity for mailings and conferences. These materials should also incorporate the Village's branding components to highlight the need for development that is consistent with the character of the community and the desires of local residents and businesses.

The Village's economic development staff should utilize promotional materials when reaching out to potential retail tenants and employers. Given the results of the market analysis, for example, potential targets should include national and regional health and personal care retailers, limited- and full-service restaurant chains, and full-service and specialty grocery store chains.

## Economic Development Website

The Village should consider the development of promotional materials in concert with an economic development website that contains similar design elements and information. Materials should be designed with flexibility in mind, allowing for content to be easily and inexpensively updated. A single point of contact should be listed on all promotional materials and correspondence.

The "HuntleyFirst" campaign is an example of a unified marketing approach that includes a website that clearly identifies potential development opportunities, available incentives, and market advantages.

## REGULAR UPDATES

It is important to emphasize that the Comprehensive Plan is not a static document. If community attitudes change or new issues arise which are beyond the scope of the current Plan, the Plan should be revised and updated accordingly. As was the impetus for this update to the Comprehensive Plan, a future update may also be warranted if significant development occurs over a short period of time.

Although a proposal to amend the Plan can be brought forth by petition at any time, the Village should regularly undertake a systematic review of the Plan. The Village should initiate review of the Plan at least every three to five years. Ideally, this review should coincide with the preparation of the Village's budget and Capital Improvement Plan. In this manner, recommendations or changes relating to capital improvements or other programs can be considered as part of the commitments for the upcoming fiscal year. Routine examination of the Plan will help ensure that the planning program remains relevant to community needs and aspirations.

## POTENTIAL FUNDING SOURCES

The following is a list of possible strategies, funding sources, and incentives that the Village could utilize to implement the Comprehensive Plan. These programs are organized by funding category, which includes:

- Economic Development;
- Transportation and Infrastructure;
- Parks and Open Space; and,
- Water Resources.

It should be noted that while the information regarding funding sources was deemed accurate at the time this Plan was written, the long-term availability of funds for these resources cannot be guaranteed. The Village should revise, update, and expand this list of potential funding sources as a component of any future Comprehensive Plan updates.

## Economic Development

### Tax Increment Finance (TIF)

The purpose of TIF funding is to incentivize and attract desired development within key commercial areas. TIF dollars can typically be used for infrastructure, streetscaping, public improvements, land assemblage, and offsetting the cost of development. TIF utilizes future property tax revenues generated within a designated area or district, to pay for improvements and further incentivize continued reinvestment.

As the Equalized Assessed Value (EAV) of properties within a TIF District increases, the incremental growth in property tax over the base year that the TIF was established, is reinvested in that area. Local officials may then issue bonds or undertake other financial obligation based on the growth in new revenue.

Over the life of a TIF district, existing taxing bodies receive the same level of tax revenue as in the base year. Provisions exist for schools to receive additional revenue. The maximum life of a TIF district in the State of Illinois is 23 years, although a district can be extended beyond that horizon through authorization from the State Legislature.

#### *Pingree Grove Business Park*

The Village of Pingree Grove has established one TIF district, known as the Bell-Harrison TIF District, which consists of properties located along the U.S. Route 20 at Bell Road. The Bell-Harrison TIF District was established in 2009 and will expire in 2032. This TIF District has been used to prepare the Pingree Grove Business Park for development including the installation of water, sewer, and roadway infrastructure. The approximately 60-acre TIF district may prove influential in facilitating light industrial and business development in Pingree Grove. As the Pingree Grove Business Park develops, the Village should evaluate the potential to establish additional TIF districts in other business park areas identified in the Land Use Plan.

### Special Service Area (SSA)

A Special Service Area (SSA) provides a means of funding improvements and programs within a designated area. In an SSA, a small percentage is added to the property tax of the properties within the defined service area. The revenue received from this targeted increase is channeled back into projects and programs benefiting those properties. An SSA can be rejected if 51% of the property owners and electors within a designated area object.

SSA funded projects can include such things as district marketing and advertising assistance, promotional activities and special events, streetscape and signage improvements, and property maintenance services. SSA's can also be used to fund various incentives and tools such as small business loan funds or façade improvement programs discussed previously.

SSA's are particularly useful in areas with a concentration of businesses and may have limited applicability within Pingree Grove until additional commercial development is attracted to the IL Route 47 corridor or Heritage District.

## Business Development District (BDD)

As authorized by Division 74.3 of the Municipal Code of the State of Illinois, a municipality may designate, after public hearings, an area as a Business Development District (BDD). A BDD would allow the Village to levy up to an additional 1% retailers occupation tax, 1% hotel tax, and 1% sales tax within a designated district. Similar to a TIF district, a BDD has a maximum life of 23 years. BDD legislation also permits municipalities to utilize tax revenue growth that has been generated by BDD properties to fund improvements in the district.

Business district designation empowers a municipality to carry out a business district development or redevelopment plan through the following actions:

- Acquire all development and redevelopment proposals
- Acquire, manage, convey, or otherwise dispose of real and personal property acquired pursuant to the provisions of a development or redevelopment plan
- Apply for and accept capital grants and loans from the federal government and the State of Illinois for business district development and redevelopment
- Borrow funds as it may be deemed necessary for the purpose of business district development and redevelopment, and in this connection, issue such obligation or revenue bonds as it shall be deemed necessary, subject to applicable statutory limitations
- Enter into contracts with any public or private agency or person

- Sell, lease, trade, or improve such real property as may be acquired in connection with business district development and redevelopment plans
- Expend such public funds as may be necessary for the planning, execution, and implementation of the business district plans
- Create a Business District Development and Redevelopment Commission to act as an agent for the municipality for the purposes of business district development and redevelopment

BDD funds can be used for infrastructure improvements, public improvements, site acquisition, and land assemblage and could be applicable in emerging business and industrial parks in the community. The Heritage District represents a potential target for the creation of a BDD to assist in repositioning properties for single family attached and mixed use development.

## Sales Tax Rebate

A sales tax rebate is a tool typically used by municipalities to incentivize businesses to locate to a site or area. The rebate is offered as a percentage of the annual sales tax revenue generated by the establishment and is often tied to benchmarks such that as sales volume increases, so too does the proportion of the rebate. Sales tax rebate percentages can range from 1% to 100% and are dependent on the goals and objectives of the local municipality. Sales tax rebates have proven effective in attracting new businesses and encouraging redevelopment and renovation. Non-home rule communities like Pingree Grove do not have the authority to issue bonds based on sales tax revenue.

## Tax Abatement

A property tax abatement is a versatile tool that can be applied to address a wide range of community issues. Property tax abatements are typically used as an incentive to attract business and revitalize the local economy. In the State of Illinois, municipalities and other taxing districts can abate any portion of the tax that they individually levy on a property. The period of tax abatement on a given property can be no longer than 10 years and the total combined sum of abated taxes for all taxing districts cannot exceed \$4 million over that period. A taxing district can administer the abatement by one of two methods: 1) lowering the tax rate; or 2) initiating a property tax freeze where the property is taxed based on a pre-development assessed value.

In some circumstances municipalities can also petition the County to lower a property's assessment. For example, a commercial property could be assessed at a percentage equivalent to that of a residential property. This is an effective means of lowering a property tax bill; however, it should be noted that this method impacts all taxing districts and not just the district making the request.

## Payment in Lieu of Taxes

Payment in Lieu of Taxes (PILOT) is a tool similar to tax abatement. The Village can use PILOT to reduce the property tax burden of desired businesses for a predetermined period. In this instance, the Village and a property owner will agree to the annual payment of a set fee in place of the property taxes. Payments are generally made in the form of a fixed sum, but they may also be paid as a percentage of the income generated by a property.

In addition, PILOT can be a means of reducing the fiscal impact on the Village of a nonprofit, institutional use, or other non-taxpaying entity locating to a key site. While such uses can be desirable as activity generators, they can also negatively impact municipal services because they do not pay taxes. Provisions can be made to offset that negative impact by allowing the Village to be compensated for at least a portion of the revenue that would otherwise be collected in the form of property tax.

## Transportation & Infrastructure

In 2012 the Moving Ahead for Progress in the 21st Century (MAP-21) program, a two-year transportation reauthorization bill, was established. MAP-21 replaces the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which expired in September 2009 and was extended nine times. The goal of MAP-21 is to modernize and reform the current transportation system to help create jobs and accelerate economic recovery. MAP-21 continues funding for numerous programs previously funded through SAFETEA-LU. Given the relative recent passage of MAP-21, it is still uncertain how changes in Federal policy will ultimately impact existing funding programs. The Village should continue to keep informed as to the status of these programs and any new funding sources that may be introduced in the near future as a result of MAP-21.

The following discussion summarizes grant programs covered under MAP-21 that could be utilized by the Village to make enhancements to local transportation infrastructure.

**NOTE:** *At the time of adoption of the Comprehensive Plan, Congress was in the process of adopting a new transportation bill that would replace MAP-21. While it is likely that several of the funding sources identified would continue to exist in some manner, the Village should revisit this section to ensure that potential funding sources are updated to reflect the latest federal and state policy.*

## Illinois Transportation Enhancement Program (ITEP)

The Illinois Department of Transportation administers the ITEP and has funded projects including bicycle and pedestrian facilities, streetscaping, landscaping, historic preservation, and projects that control or remove outdoor advertising. In the past, federal reimbursement has been available for up to 50% of the costs of right-of-way and easement acquisition and 80% of the cost for preliminary engineering, utility relocations, construction engineering, and construction costs.

ITEP funds may provide the opportunity to implement several of the recommendations in this Plan, including:

- Expanded bicycle trails, especially along IL Route 47, IL Route 72, and U.S. Route 20 and for connections to other regional trail systems;
- Streetscaping along emerging commercial corridors;
- Intersection enhancements that would improve bicycle and pedestrian safety, particularly along IL Route 47, IL Route 72, and U.S. Route 20; and,
- Realignment and improvements to the U.S. Route 20/Reinking Road intersection.

## Transportation Alternatives Program (TAP)

As part of the MAP-21 program, Congress created the Transportation Alternative Program (TAP), which provides funding for non-motorized transportation projects. Projects range from on-street bike facilities to multi-use paths and sidewalk infill programs to Safe Routes to School projects. TAP funds are administered by the Chicago Metropolitan Agency for Planning (CMAP) through a formal application process.

## Safe Routes to School (SRTS)

The SRTS program has provided funding for the planning, design, and construction of infrastructure related projects that will substantially improve the ability of students to walk and bike to school, including:

- Sidewalk improvements;
- Traffic calming and speed reduction improvements;
- Pedestrian and bicycle-crossing improvements;
- On-street bicycle facilities;
- Off-street bicycle and pedestrian facilities;
- Secure bicycle parking facilities; and,
- Traffic diversion improvements in the vicinity of schools.

## Congestion Mitigation & Air Quality Improvement Program (CMAQ)

CMAP has been the administrator of Congestion Mitigation & Air Quality Improvement (CMAQ) program funds for the northeastern Illinois region. CMAP has supported a wide range of projects through the CMAQ program including improvements to bicycle facilities, transit facilities, intersections, sidewalk improvements, and signal timing. Funds have also been used to make transportation improvements to eliminate traffic bottlenecks, limit diesel emissions, and to create promotional campaigns to enhance use of transit and bicycles.

## Surface Transportation Program (STP)

In the past, these funds have been allocated to coordinating regional councils to be used for roadway and roadway related items. Projects in this funding category have required a local sponsor and have been selected based on a ranking scale that takes into account the regional benefits provided by the project among other factors. STP funds have been used for a variety of project types including roadway rehabilitation, reconstruction, and restoration; widening and adding lanes; intersection improvements; traffic signal improvements; and green infrastructure funding.

## Parks & Open Space

### Illinois Department of Natural Resources

The Illinois Department of Natural Resources (IDNR) administers several grants-in-aid programs to help municipalities and other local agencies provide a number of public outdoor recreation areas and facilities. The programs operate on a cost reimbursement basis to a government or not-for-profit organization. Local governments can receive one grant per program per year, with no restriction on the number of local governments that can be funded for a given location. IDNR Grants are organized into three major categories: Open Space Land Acquisition and Development (OSLAD); Boat Access Area Development (BAAD); and the Illinois Trails Grants Program.

### Open Space Land Acquisition & Development (OSLAD)

The OSLAD program awards up to 50% of project costs up to a maximum of \$750,000 for acquisition and \$400,000 for development/renovation of recreational facilities such as playgrounds, outdoor nature interpretive areas, campgrounds and fishing piers, park roads and paths, and beaches. IDNR administers five grant programs to provide financial assistance for the acquisition, development, and maintenance of trails that are used for public recreation uses.

OSLAD funding could be used to implement several recommendations featured in this Plan, including the development of new open spaces in future growth areas, the improvement of existing parks and recreation facilities, and the expansion of Pingree Grove's trail network to make connections to local amenities and regional trail systems.

#### *Land & Water Conservation Fund (LWCF)*

The federal Land & Water Conservation Fund program (LWCF) is a program with similar objectives to the OSLAD Program that is also managed by the IDNR. LWCF grants are available to municipalities, counties, and school districts to be used for outdoor recreation projects. Projects require a 50% match. All funded projects are taken under perpetuity by the National Park Service and must only be used for outdoor recreational purposes.

#### *Illinois Bicycle Path Program*

The Illinois Bicycle Path Program is a grants program administered by IDNR that provides funding assistance up to 50% to acquire and develop land for public bicycle path purposes. Funded by a percentage of vehicle title fees, maximum grant awards are limited to \$200,000.

#### *Recreational Trails Program (RTP)*

The Recreational Trails Program is a federally funded grant program for trail-related land acquisition, development, or restoration. The grants are awarded based on the results of a competitive scoring process and the application's suitability under MAP-21. A minimum 20% match is required by the applicant. Grants are to be used for motorized or non-motorized trail development, renovation, and/or preservation. All projects must be maintained for 25 years. Eligible applicants include municipalities, counties, schools, non-profits, and for-profit businesses.

#### *ComEd Green Region Program*

Openlands has partnered with ComEd to administer the ComEd Green Region Program. Recognizing that open space is a crucial element of the quality of life, the ComEd program awards grants for municipal efforts to plan for, protect, and improve open land in ComEd's service area of northern Illinois. The grants, of up to \$10,000 each, support existing open space projects that focus on conservation, preservation and improvements to local parks and recreation resources. Grant recipients can use Green Region grants in combination with other funding sources to cover a portion of the expenses associated with developing and/or supporting their open space programs.

## Water Resources

To successfully implement and benefit from green infrastructure in accordance with the recommendations of the Comprehensive Plan, the Village will need to identify and allocate sufficient resources to plan, construct, monitor, and maintain these systems.

#### **Property Owner Association or Village Management**

For new development, it is anticipated that the capital costs for green infrastructure would be covered by the development as with any public improvements, and then either maintained by a property owner's association or turned over to the Village. Costs related to properly planned, designed, engineered and constructed green infrastructure elements such as permeable pavement, bioretention, and street trees should be offset by a reduction in inlets, pipes, and other hard infrastructure elements that would normally have to be installed.

The Village will need to set up a process to administrate and manage green infrastructure as part of Village operations. This could be done through contracting an outside service to inspect the green infrastructure elements and provide weed control, trimming, clean-up, and other required maintenance activities. As the significance of green infrastructure grows to a certain staffing threshold, it may become more practical for the Village to provide maintenance service in-house.

## Retrofitting Existing Development

For the retrofit of existing sites and neighborhoods with green infrastructure, the funding approach will depend upon whether the existing street pavement and drainage systems are Village responsibility or a homeowners association. If these areas are a homeowners association's responsibility, then funding dedicated towards long-term maintenance and replacement for these elements could be directed towards green infrastructure and implemented over time. For areas already under the Village's responsibility, the grant sources identified in this section may be able to provide the Village with assistance in the implementation and management of green infrastructure.

## Stormwater Utility

Regardless of ownership, a fiscal plan for the long-term expansion and management of green infrastructure is needed. Such a plan would include a range of costs and revenue sources that will change over time as the system grows, and as various resources become available. A stormwater utility fee should be considered as a financing mechanism that will help cover the cost of managing stormwater while incentivizing the installation of green infrastructure and in accordance with Village priorities.

A stormwater utility operates similarly to sanitary districts or fire protection districts, which are funded through service fees and administered separately from the general tax fund, ensuring stable and adequate funding for these public services.

Property owners pay a fee, typically based on the amount of impervious surface on a property, which can then be used to improve water resource management and implement best management practices. Property owners can reduce their fee by implementing green infrastructure improvements that reduce the amount of runoff entering the Village's stormwater system. This type of fee structure has worked effectively in other communities in the Chicago region.

As a non-home rule community, the Village of Pingree Grove would have to pass a referendum adopting the stormwater utility.

## Partner Organizations

There are a number of local/regional organizations and agencies that promote green infrastructure, and provide technical assistance, education, and potentially financial assistance with the development and long-term management of green infrastructure. One or several of these organizations may be able to provide assistance to the Village to maintain existing green infrastructure, expand the system, educate the public, and provide other resources. Once the Comprehensive Plan is adopted, the Village can begin a dialogue with some of these organizations and learn more specifically how they might be able to assist.

Additionally, the Village could seek to partner with other educational institutions to help monitor and expand the green infrastructure system within the Village.

Elgin Community College has a strong commitment to sustainability, and is in the process of retrofitting their existing facilities with green infrastructure, and may be a good resource to collaborate with in this regard.

The following list includes those groups that have existing programs and resources directed towards green infrastructure:

- The Conservation Foundation
- Chicago Wilderness
- CMAP
- Fox River Ecosystem Partnership
- Kane-DuPage Soil & Water Conservation District
- Illinois Sustainable Technology Center-University of Illinois
- Illinois EPA
- Wild Ones- Northern Kane County Chapter

## Green Infrastructure

### *Illinois Environmental Protection Agency Clean Water Initiative*

Stormwater projects are now eligible to receive funding through the Clean Water Initiative, which considers applications on a rolling basis. It allows local governments to access low-interest loans for a variety of wastewater, drinking water, and wet weather/stormwater management projects. This fund has recently received extra funding from repayments of existing loans that support the sale of "AAA" rated bonds and require no additional state funds.

### ***Illinois Green Infrastructure Grant Program (IGIG)***

This grant, administered by the Illinois Environmental Protection Agency (IEPA) is undergoing program changes. Continue to monitor this source in case more funding is made available in the future. In the past, this grant funded infiltration and retention enhancements, combined sewer upgrades, and small green infrastructure projects in municipalities across the State of Illinois.

### ***Nonpoint Source Pollution Grant Program***

Under Section 319(h) of the Clean Water Act, the IEPA administers funds for the Nonpoint Source Pollution Grant Program. Funds can be used for the implementation of watershed management plans including the development of information/education programs and for the installation of best management practices. The maximum federal funding available is 60 percent. The program period is two years unless otherwise approved. This is a reimbursement program.

### ***Park and Recreational Facility Construction (PARC) Grant Program***

Also administered by the IDNR, the Park and Recreational Facility Construction Grant Program covers capital improvements as well as land acquisition for preservation and protection of floodplains, wetlands and other natural areas. However, the priority of the program is the renovation or construction of indoor recreation facilities since they are not eligible under other IDNR grant programs.

The PARC program shall operate on a reimbursement basis providing up to the following maximum percentages for funding assistance--75% of approved project costs.

### ***Clean Water State Revolving Loan Fund (CWSRF)***

The Clean Water State Revolving Loan Fund allots money to states for projects benefitting water quality. The Green Project Reserve requires that all programs direct a portion (20%) of their capitalization grant toward projects that address green infrastructure, water efficiency, energy efficiency, or other environmentally innovative activities. The CWSRF program has assisted a range of borrowers including municipalities, communities of all sizes, farmers, homeowners, small businesses, and nonprofit organizations. CWSRF offers low-interest loans to eligible participants that can be used to fully finance a project and be repaid over a period of up to 20 years. IEPA administers this funding to grantees.

### ***Illinois American Water Environmental Grant Program***

The Environmental Grant Program awards grants up to \$10,000 to support innovative, community-based environmental projects that improve, restore or protect the watersheds through partnerships. Qualifying projects include, but are not limited to watershed protection and cleanup activities, value of water education efforts, green business innovations, reforestation efforts, biodiversity projects, streamside buffer restoration projects, wellhead protection initiatives and hazardous waste collection efforts.

### ***Kane County Grand Victoria Riverboat Fund Program***

Kane County provides Grand Victoria Riverboat funds to non-profit organizations and units of local government for eligible projects that benefit Kane County residents. Capital projects are eligible for the Grand Victoria Riverboat Fund, including projects that involve the purchase or development of facilities or infrastructure, or other fixed assets such as equipment, vehicles, or computer software. Applicants may not receive more than \$100,000 in Grand Victoria Riverboat funds per project.

Eligible projects should address at least one of the following priorities:

- Education: Kane County seeks to promote or enhance educational and training programs and initiatives that address community and government improvement issues.
- Environment: Kane County encourages programs and projects that address a broad spectrum of environmental issues.
- Economic Development: Kane County supports initiatives that promote economic and community development.

While the Grand Victoria Riverboat Fund Program is applicable to any project that stands to benefit the broader county population, the inter-jurisdictional implications of water resource management projects like those recommended for Pingree Grove make them particularly applicable to this grant program.

## ACTION AGENDA

The following Action Agenda presents a summary specific strategies and related actions necessary to implement the recommendations of the Comprehensive Plan. In conjunction with the annual updates to the Capital Improvement Plan, the Village should utilize, and update regularly, the Action Agenda to reflect the most up-to-date implementation actions and priorities.

The Action Agenda consists of:

- A detailed description of the projects and activities to be undertaken;
- The priority of each project or activity;
- An indication of the public and private sector responsibilities for initiating and participating in each activity; and
- Potential funding sources and assistance programs that might be available for implementing each project or activity.

## Action Priorities

Each action item has been assigned a value of 'S', 'M', or 'L' which indicates the time frame within which that item should be achieved. These values are defined as follows:

- 'S' = Short Term (1-2 years)
- 'M' = Mid-Term (3-5 years)
- 'L' = Long Term (5+ years)

Those items which represent a long term policy stance or require immediate action with an on-going effort, such as the continued implementation of existing plans, have been assigned a value of 'On-Going'.

## Implementation Action Committee

If the Village does not undertake physical improvements and regulatory changes as recommended, the Comprehensive Plan will become a paper document, rather than the living, community guide it is intended to be. The Village should form an Implementation Action Committee to ensure the implementation of recommendations.

The Action Committee would consist largely of volunteers who meet at specific times throughout the year to identify opportunities for implementation of the Comprehensive Plan. Working in an advisory role, the committee would be able to provide Village staff with prioritized actions that adhere to the Plan's goals and objectives. Committee members should meet annually throughout the life of the plan, allowing recommended actions to be tailored to Village finances, economic development, and implementation progress.

**NOTE:** If a sufficient number of volunteers cannot be secured to form a new committee, the Village should consider assigning the duties of an Action Committee to the Planning and Zoning Commission or otherwise delegating among other existing officials and committees.

## Action Agenda & CIP Coordination

The Action Agenda presented in the following section should serve as a starting point for Village officials, staff, and the Action Committee as they seek to implement the plan. In establishing a formal Action Agenda, the Action Committee's first step should be a review of the Capital Improvement Plan (CIP) to gain an understanding of:

1. What Comprehensive Plan recommendations have the potential to be implemented within the time frame of the existing CIP; and,
2. What items can be recommended to the Village Board for inclusion in the next CIP update.

In addition to modifying the CIP process, it is important that the Village also integrate Comprehensive Plan recommendations into the annual budget process. In this manner, the Village can tie Village funds directly to the implementation of the Comprehensive Plan and advance the community vision in an incremental manner.

## Action Agenda

### RECOMMENDED IMPLEMENTATION ITEMS

The tables provided on the following pages present a summary of recommended actions included in the Comprehensive Plan.

These recommendations are intended to provide a framework for further discussion and to guide future policy decisions. Plan recommendations are non-binding and do not represent a commitment to action on behalf of the Village.

Though not regulatory in nature, as a policy document with such a comprehensive scope, the Comprehensive Plan should guide the creation or amendment of Village regulations as well as individual actions and investments.

## LAND USE PLAN

### GENERAL LAND USE STRATEGIES

Strategy	Recommended Action	Priority	Potential Partners	Potential Funding Sources
Encourage future development in accordance with the Land Use Plan	Update zoning of existing and growth areas to allow for a variety of residential, commercial, and light industrial uses in accordance with the Land Use Plan.	S	Residents & Stakeholders; Property Owners; Development Community	
	Review boundary agreements and negotiate with neighboring municipalities as needed to ensure agreements are not allowed to expire.	L	Adjacent Municipalities	

### RESIDENTIAL AREAS FRAMEWORK

Strategy	Recommended Action	Priority	Potential Partners	Potential Funding Sources
Encourage infill development	Consider altering existing Planned Unit Developments (PUD) to vary housing mix to better meet market demand and prioritize development within incomplete subdivisions.	S	Property Owners; Development Community	
	Revise development regulations to ensure that new infill development is of the same character and intensity of other nearby, previously built homes.	S	Property Owners; Development Community	
Diversify housing options	Adopt multi-family design guidelines to ensure new development complements established single family areas and provides quality housing stock.	M	Property Owners; Development Community; Outside Consultant	
	In accordance with the Land Use Plan, encourage the development of a range of housing options, including single family attached and multi-family developments with proximity and pedestrian access to community facilities and amenities, transit, and goods and services.	On-going	Property Owners; Development Community	• Kane County CDBG/ HOME Funds • Tax Abatement • Payment in Lieu of Taxes (PILOT) programs
Adopt and implement an affordable housing plan	Submit the Residential Areas Framework Plan Affordable Housing Plan section within the Comprehensive Plan to the Illinois Housing Development Authority within 60 days following adoption.	S	Illinois Housing Development Authority (IHDA)	
	Update zoning and development regulations to allow the creation of a mix of multi-family and single family attached housing stock.	S	IHDA	
	Established and implement strategies to reduce assessments and increase housing affordability, working with existing and future homeowners associations.	L	Homeowners Associations; Development Community	
Promote a mix of residential and neighborhood-scale commercial and mixed use within the Heritage District.	Update zoning within the Heritage District to permit non-single family residential development in accordance with the Land Use Plan.	S	Residents & Stakeholders; Property Owners; Development Community	
	Coordinate with the City of Elgin and Shodeen Homes to ensure the Pingree Creek development positively impacts the Heritage District.	S	City of Elgin; Shodeen Homes; Development Community	
	Target vacant or underutilized sites within the Heritage district for redevelopment.	M	Property Owners; Development Community	

## COMMERCIAL AREAS FRAMEWORK

Strategy	Recommended Action	Priority	Potential Partners	Potential Funding Sources
Encourage the establishment and expansion of commercial development along key corridors.	Update zoning to allow for corridor commercial, neighborhood commercial, and mixed use development along IL Route 47 in accordance with the Land Use Plan.	S	Property Owners; Development Community	
	Establish design guidelines to ensure that development is pedestrian-friendly, includes connections to adjacent subdivisions and commercial development, and respects the scale and character of surrounding residential areas.	M	Property Owners; Development Community; Outside Consultant	
	Prioritize the intersections of IL Route 47 with U.S. Route 20 and IL Route 72 for commercial development.	On-going	Property Owners; Development Community	
Encourage commercial development within the Heritage District.	Update zoning within the Heritage District to permit neighborhood commercial and mixed used development in accordance with the Land Use Plan.	S	Residents & Stakeholders; Property Owners; Development Community	• Tax Increment Financing (TIF) • Special Service Area (SSA) • Business Development District (BDD) • Sales Tax Rebate • PILOT Program • Tax Abatement
	Identify and protect historic and cultural assets located in the Heritage District from redevelopment.	S	Residents & Stakeholders; Property Owners	
	Promote parcel assembly, where applicable, to encourage modern commercial and mixed use development.	On-going	Residents & Stakeholders; Property Owners	
Support agribusiness within the community.	Within Village marketing materials, promote agribusinesses within Pingree Grove as a defining feature of the Village's community character.	M	Agribusiness Owners	
	Prioritize areas along major corridors for development to limit the premature conversion of productive farmland and agribusiness sites.	On-going	Agribusiness Owners	
Ensure adequate infrastructure is provided to areas targeted for business and industrial park development	Update zoning to allow for business park and light industrial development in accordance with the Land Use Plan.	S	Residents & Stakeholders; Property Owners; Development Community	• Tax Increment Financing (TIF)
	Establish design guidelines to facilitate the creation of industrial and business parks in a campus-like setting with consistent site design and branding efforts.	M	Property Owners; Development Community; Outside Consultant	
Facilitate economic development	Retain the services of an economic development professional, to promote the Village and bring new investment to Pingree Grove.	S	Outside Consultant	• Tax Increment Financing (TIF) • Special Service Area (SSA) • Business Development District (BDD)
	Adopt an economic development program, including supported tools and incentives designed to encourage investment and redevelopment.	S	Outside Consultant	
	Actively support the continuation of a reduced impact fee schedule and partner with Kane County to review and revise the process for collecting and administering impact fees.	S	Kane County	
	Launch a marketing campaign featuring both online and physical promotional presence, including regarding incentives and programs offered as well as benefits of locating a business in Pingree Grove.	M	Outside Consultant	
	Install gateway treatments and wayfinding at key entry points to business and industrial park areas along public rights-of-ways.	L	Outside Consultant	

# TRANSPORTATION & MOBILITY

## ROADWAYS

Strategy	Recommended Action	Priority	Potential Partners	Potential Funding Sources
Expand and develop new roadways to match future growth	Coordinate with the City of Elgin to pave and make necessary roadway improvements to Highland Avenue.	S	City of Elgin	<ul style="list-style-type: none"> <li>• Illinois Transit Enhancement Program (ITEP)</li> <li>• Transportation Alternatives Program (TAP)</li> <li>• Safe Routes to Schools (SRTS) Funds</li> <li>• Congestion Mitigation &amp; Air Quality Improvement Program (CMAQ)</li> <li>• Surface Transportation Program (STP)</li> </ul>
	Improve Reinking Road as a collector road with a boulevard treatment extending from key intersections and entrances to new subdivisions.	L	Development Community	
	Coordinate with IDOT to ensure that a sufficient right-of-way is provided by property owners adjacent to IL Route 47, IL Route 72, and U.S. Route 20 for potential widening of the roadway.	L	IDOT; Property Owners	
	Make necessary alterations to existing roads to enable greater traffic flow and reduce underutilized street facilities.	On-going	IDOT; Kane County DOT; Adjacent Municipalities	
Increase the safety and efficiency of transportation systems	Coordinate with IDOT and the City of Elgin to enact short term solutions to improve safety of the intersection, such as improved signage, turn or passing lanes, or rumble strips.	S	IDOT; City of Elgin; Development Community	<ul style="list-style-type: none"> <li>• Illinois Transit Enhancement Program (ITEP)</li> <li>• Transportation Alternatives Program (TAP)</li> <li>• Safe Routes to Schools (SRTS) Funds</li> <li>• Congestion Mitigation &amp; Air Quality Improvement Program (CMAQ)</li> <li>• Surface Transportation Program (STP)</li> </ul>
	Coordinate with IDOT to evaluate and optimize traffic signal timing after completion of improvements to IL Route 47.	L	IDOT	
	Partner with IDOT, Kane County DOT, and the City of Elgin to reconfigure the intersection of Reinking Road and U.S. Route 20.	L	IDOT; Kane County DOT; City of Elgin; Development Community	
	Introduce additional traffic signals along U.S. Route 20, IL Route 72, and Reinking Road to accommodate residential development as warranted.	L	Development Community	

## NON-AUTO MOBILITY

Strategy	Recommended Action	Priority	Potential Partners	Potential Funding Sources
Explore the potential of a new transit service	Partner with Metra to monitor ridership demand within the area and measure the benefit of service expansion to Pingree Grove.	L	Metra	<ul style="list-style-type: none"> <li>• Congestion Mitigation &amp; Air Quality Improvement Program (CMAQ)</li> <li>• Surface Transportation Program (STP)</li> </ul>
	Partner with Pace to evaluate the establishment of community-based transit and fixed route bus service in Pingree Grove.	L	Pace	
	Support the development of a Metra station located in or adjacent to the Heritage District, ensuring that the station allows ease of access for Village residents.	On-going	Metra; Development Community	
	Establish a long-term plan for prioritizing and developing additional trails and path extensions.	M	Development Community; HTPD	
Expand upon the existing network of community trails to establish cohesive non-motorized transportation network.	Install signalized pedestrian crossings at key intersections and review existing signalized intersections to identify locations in need of safety upgrades.	L	IDOT; Development Community	<ul style="list-style-type: none"> <li>• Illinois Transit Enhancement Program (ITEP)</li> <li>• Transportation Alternatives Program (TAP)</li> <li>• Safe Routes to Schools (SRTS) Funds</li> <li>• Congestion Mitigation &amp; Air Quality Improvement Program (CMAQ)</li> <li>• Surface Transportation Program (STP)</li> <li>• Illinois Bicycle Path Program</li> <li>• Recreational Trails Program (RTP)</li> </ul>
	Complete community trail infill projects to connect established trail segments with community assets in previously developed areas of the community.	L	Residents & Stakeholders; Development Community	
	As development occurs, require the construction of community trails that connect to existing trail segments and community assets.	On-going	IDOT; Development Community	

## COMMUNITY FACILITIES

### NEW & EXPANDED FACILITIES

Strategy	Recommended Action	Priority	Potential Partners	Potential Funding Sources
Construct new community facilities	Undertake a facility needs assessment and site selection process to document the costs and benefits associated with relocating the Village Hall/Building Department to an alternative location.	S	Outside Consultant	
	Conduct a market study to document the need for a healthcare facility in the future.	M	Outside Consultant	
	Establish a Village-owned community center open to all residents.	L	Residents & Stakeholders; Property Owners	
Prepare for required civic service expansions	Evaluate the use of incentives to encourage implementation of Best Management Practices (BMPs) and Low Impact Development (LID).	S	Development Community	<ul style="list-style-type: none"> <li>Illinois Environmental Protection Agency's Clean Water Initiative</li> <li>Illinois Green Infrastructure Grant Program (IGIG)</li> <li>Nonpoint Source Pollution Grant Program</li> <li>Clean Water State Revolving Loan Fund (CWSRF)</li> <li>Illinois American Water Environmental Grant Program</li> </ul>
	Create a long-term staffing plan for the Police Department to anticipate future budget and department needs and identify potential funding sources to accommodate additional staff and hours of operation.	M	Outside Consultant	
	Complete a detailed analysis to determine the pipe capacities and whether upgrades are needed to serve expected land use and density scenarios of full build-out.	M	Outside Consultant	
	Monitor water demand as development occurs to ensure necessary improvements and expansions can be made incrementally as demand rises.	On-going	Northwest Water Planning Alliance (NWPA)	

### COORDINATION

Strategy	Recommended Action	Priority	Potential Partners	Potential Funding Sources
Coordinate with local and regional service providers	Coordinate with Cambridge Lakes Charter School to identify techniques for managing school-related traffic, such as a shared-use student pick-up/drop-off and recreation area.	S	Cambridge Lakes Charter School (CLCS)	
	Partner with Ella Johnson Public Library to evaluate the potential for the establishment of a public library facility in the community.	S	Ella Johnson Public Library	
	Coordinate with IDOT, Kane County, and adjacent municipalities to ensure successful long-term management of the roadway system.	On-going	IDOT; Kane County DOT; Adjacent Municipalities	
	Work cooperatively with Community Unit School District 300 to ensure growing enrollment needs and necessary expansions can be accommodated.	On-going	Community Unity School District 300	
	Continue to maintain active communication and solicit review and comment from the Pingree Grove & Countryside Fire Protection District as significant development projects are proposed.	On-going	Pingree Grove & Countryside Fire Protection District	

### VILLAGE FINANCES

Strategy	Recommended Action	Priority	Potential Partners	Potential Funding Sources
Ensure financial stability	Coordinate the Village CIP with the recommendations of the Comprehensive Plan to maximize return-on-investment and strategically reinvest in Pingree Grove's Infrastructure.	S	Outside Consultant	<ul style="list-style-type: none"> <li>ICMA Senior Advisor Program</li> </ul>
	Develop a financial data model to assist in evaluating the fiscal impacts of proposed development and CIP items.	M	Outside Consultant; International City/County Management Association (ICMA); Government Finance Officers Association (GFAO)	

## PARKS, RECREATION & OPEN SPACE

### PARKS INVENTORY

Strategy	Recommended Action	Priority	Potential Partners	Potential Funding Sources
Incorporate green infrastructure into development	Require new development to preserve green infrastructure so as to create a consistent network of green space that connects and serves local neighborhoods.	On-going	Development Community; Tyler Creek Watershed Coalition (TCWC)	
	Work cooperatively with developers to ensure site design of new development incorporates green infrastructure and adheres to local conservation regulations.	On-going	Development Community	
Establish additional parkland	Identify grants and other funding sources to implement improvements to the parkland leased from the Kane County Forest Preserve District and establish a park and special event location.	S	Kane County Forest Preserve District (KCFPD)	<ul style="list-style-type: none"> <li>• Illinois Bicycle Path Program</li> <li>• Recreational Trails Program (RTP)</li> <li>• Open Space Land Acquisition &amp; Development (OSLAD)</li> <li>• Land &amp; Water Conservation Fund (LWCF)</li> <li>• Illinois Department of Natural Resource (IDNR) grants</li> <li>• ComEd Green Region Program</li> <li>• Park and Recreational Facility Construction (PARC) Grant Program</li> </ul>
	Coordinate with the Hampshire Township Park District to evaluate and potentially expand service boundaries to include the Village and its growth areas.	M	Hampshire Township Park District (HTPD)	
	Prepare a shared service agreement to manage duplication of services between the Hampshire Township Park District and local Homeowners Associations.	M	HTPD, Homeowners Associations	
	Identify new locations and create a long-term plan for the development of new parkland, taking into account proximity to other parks, presence of natural areas, and ease of access, amongst others factors	M	Residents & Stakeholders; Property Owners; HTPD	
	Coordinate with property owners and other stakeholders in the Heritage District to evaluate the potential relocation of Heritage Park to a new site on Public Street.	M	Residents & Stakeholders; Property Owners; HTPD	
	Locate new parks within or adjacent to areas of green infrastructure, including the area adjacent to the Tyler Creek floodplain to the north of IL Route 72.	On-going	Development Community; HTPD	

### OPEN SPACE & NATURAL AREAS

Strategy	Recommended Action	Priority	Potential Partners	Potential Funding Sources
Protect and leverage important natural resources and agricultural assets	Assist Kane County in its inventory of remnant oak woodlands and establish development controls to protect these areas and encourage their incorporation into the design of new development.	S	Development Community; KCFPD	<ul style="list-style-type: none"> <li>• Kane County Grand Victoria Riverboat Fund Program</li> </ul>
	Coordinate with the Kane County Forest Preserve District to identify opportunities to improve access to local forest preserves.	S	KCFPD	
	Evaluate and establish a natural areas overlay district ordinance, if desired by the community, that identifies all lands that the community wishes to protect or conserve from development impacts.	M	Outside Consultant	
	Develop a maintenance program for oak woodlands that includes prescribed burns every 4 to 6 years.	M	Development Community; KCFPD	
	Evaluate incentives that encourage farmstead preservation and adaptive reuse as a component of new development.	M	Kane County	

## WATER RESOURCES

### COORDINATION

Strategy	Recommended Action	Priority	Potential Partners	Potential Funding Sources
Take an active role in local and regional water conservation programs	Formally adopt the Tyler Creek Watershed Plan and become involved in conservation efforts.	S	Tyler Creek Watershed Coalition (TCWC); City of Elgin; Village of Gilberts	
	Become a member of the WaterSense Program.	S	Tyler Creek Watershed Coalition (TCWC); Northwest Water Planning Alliance (NWPA)	

### VILLAGE REGULATIONS

Strategy	Recommended Action	Priority	Potential Partners	Potential Funding Sources
Establish regulations and programs for water conservation	Update the Village's water ordinance and related regulations to match that of other Northwest Water Planning Alliance (NWPA) communities.	S	NWPA	<ul style="list-style-type: none"> <li>Illinois Environmental Protection Agency's Clean Water Initiative</li> <li>Illinois Green Infrastructure Grant Program (IGIG)</li> <li>Nonpoint Source Pollution Grant Program</li> <li>Park and Recreational Facility Construction (PARC) Grant Program</li> <li>Clean Water State Revolving Loan Fund (CWSRF)</li> <li>Illinois American Water Environmental Grant Program</li> <li>Kane County Grand Victoria Riverboat Fund Program</li> </ul>
	Develop a program for management of bioswales and other green infrastructure with a range of funding and support resources.	M		
	Establish a locally managed stream monitoring program to collect and evaluate basic water quality data.	M	Fox River Study Group (FRSG), TCWC; Adjacent Municipalities	
	Update and review the Tyler Creek Watershed model to provide a more accurate assessment of water quality given predicted land development scenarios.	M	FRSG, TCWC	
	Monitor and record water usage data reported annually or monthly to establish local trends and provide regionally applicable data.	On-going		
Update zoning and subdivision regulations regarding water usage	Require incorporation and de-channelization of the Tyler Creek and related tributaries into site design and planning of future development.	On-going	Development Community	
	Update development regulations to require or incentivize conservation design including the use of Low Impact Design (LID), Best Management Practices (BMPs), and the incorporation of natural resources into site design.	On-going		
	Require complete detailed floodplain map of all streams and drainage ways currently mapped as FEMA Flood Zone A, or that are unmapped, including a drainage area equal to or greater than one square mile.	On-going	Development Community; Federal Management Emergency Agency (FEMA)	

### GREEN INFRASTRUCTURE

Strategy	Recommended Action	Priority	Potential Partners	Potential Funding Sources
Introduce green infrastructure strategies throughout the Village	Pursue demonstration projects to further explore the potential for the Village to capitalize on Green Infrastructure practices.	M	Outside Consultant	<ul style="list-style-type: none"> <li>Illinois Environmental Protection Agency's Clean Water Initiative</li> <li>Illinois Green Infrastructure Grant Program (IGIG)</li> <li>Nonpoint Source Pollution Grant Program</li> <li>Park and Recreational Facility Construction (PARC) Grant Program</li> <li>Clean Water State Revolving Loan Fund (CWSRF)</li> <li>Illinois American Water Environmental Grant Program</li> <li>Kane County Grand Victoria Riverboat Fund Program</li> </ul>
	Develop and implement a long-term operations and management plan for Green Infrastructure throughout the Village.	L	Outside Consultant	

## IMAGE & IDENTITY

### REGIONAL IMAGE

Strategy	Recommended Action	Priority	Potential Partners	Potential Funding Sources
Develop a brand to market and enhance the Village's image	Undertake a marketing campaign to establish a clear Pingree Grove brand within the region.	M	Outside Consultant	<ul style="list-style-type: none"> <li>• Special Service Area (SSA)</li> <li>• Business Development District (BDD)</li> </ul>
	Develop promotional materials, unified placemaking elements, and an online presence to market Pingree Grove.	M	Outside Consultant	
Establish unique right-of-way treatments and gateway features	Install gateway treatments, including unified branding and landscaping and designs that create visual interest, at all major entrances to Pingree Grove.	L	Outside Consultant; IDOT; Kane County DOT	
	Install wayfinding signage for Pingree Grove along all major transportation corridors, specifically I-90 and IL Route 47.	L	IDOT; Kane County DOT	
	Install a mural on the CP Railroad as a unique gateway feature.	L	Canadian Pacific Railway Limited; IDOT	
	Apply boulevard treatments including landscaped median and parkways along Reinking Road and along cross-streets near major intersections with Reinking Road.	L	IDOT; Kane County DOT	

### LOCAL HERITAGE

Strategy	Recommended Action	Priority	Potential Partners	Potential Funding Sources
Preserve historic assets	Undertake a survey to identify potentially significant historic assets and buildings with cultural heritage.	S	Outside Consultant; Illinois Historic Preservation Agency (IHPA)	<ul style="list-style-type: none"> <li>• National Trust Preservation Funds</li> <li>• Illinois Historic Preservation Agency (IHPA) CLG Matching Grant</li> </ul>
	Establish design guidelines for the Heritage District to ensure that new development respects the established character of the area.	S	Outside Consultant	
	Explore the requirements of establishing a historic district within the Heritage District Consider and creating a historic preservation commission.	M	IHPA	

### COMMUNITY SPACE

Strategy	Recommended Action	Priority	Potential Partners	Potential Funding Sources
Establish spaces for community gatherings	Organize additional annual and seasonal events open to all Village residents and stakeholders.	On-going	Residents & Stakeholders	<ul style="list-style-type: none"> <li>• Open Space Land Acquisition &amp; Development (OSLAD)</li> <li>• Land &amp; Water Conservation Fund (LWCF)</li> <li>• Illinois Department of Natural Resource (IDNR) grants</li> <li>• ComEd Green Region Program</li> <li>• Park and Recreational Facility Construction (PARC) Grant Program</li> </ul>
	Pursue the development of new parks and facilities to accommodate community gathering and event spaces.	On-going	Residents & Stakeholders; Kane County Forest Preserve District (KCFPD); Hampshire Township Park District (HTPD); Development Community	

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# APPENDIX A

## GREEN INFRASTRUCTURE TOOLBOX

As described in **Chapter 7: Water Resources**, there are a wide range of conservation-based green building and site development practices that support the community's green infrastructure agenda. This appendix presents a summary of potential tools that can be applied in Pigree Grove to ensure quality water resource management. These tools include:

- Green Roofs
- Permeable Paving
- Street Trees
- Bioretention
- Naturalized Swales
- Naturalized Detention
- Cisterns
- Wastewater Discharge Reduction
- Onsite Wastewater Treatment

Each tool is described in terms of the benefits it provides, how it functions, and its estimated performance based on previous installations. Examples are also provided to demonstrate how each tool might be used.

## Green Roofs

### Green Roof Benefits

Vegetated roof system designed to capture, temporarily store, and evapotranspire rainwater on the top of roofs. Green roofs are generally planted with drought and wind tolerant vegetation. Green roofs can be designed as simple, lightweight systems primarily providing stormwater benefits or as more elaborate rooftop gardens providing outdoor space as well as stormwater benefits.

### How Green Roofs Work

Rather than allowing rainwater to immediately drain from a typical rooftop via downspouts, a green roof provides rainwater storage and rate attenuation in the soil medium and aggregate drainage area. As water slowly percolates through the soil layer, sedums and perennials can withdraw their required water intake and remove nutrients like phosphorus and nitrogen from the water. Water that isn't taken up by roots continues to the lower aggregate drainage area, where it is stored as it slowly discharges via perforated pipe to downspouts. To further improve phosphorus and nitrogen removal, annual removal of dead top growth of green roof vegetation should be performed. Nutrient and runoff reduction can also be improved through collection of excess storm runoff in cisterns or rain barrels and re-applying the runoff to the roof between storm events.

### Green Roof Applications



#### *Green Roofs for Stormwater Management*

Green roofs help to treat and reduce rainfall where it falls, putting less of a demand on downstream stormwater management.



#### *Extensive Green Roof*

Extensive Green Roofs can accommodate sedums for vegetation. The soil structure is about 3" thick.

## Permeable Paving

Permeable or perforated paving materials or pavers with spaces that allow for the infiltration of rainwater and transmission of water through an aggregate base to the subsoils. Runoff is temporarily stored in the base for infiltration into the subsoils and/or slow release to a bioswale or stormwater system. This reduces the volume of runoff, and also allows the water that does runoff to drop in temperature prior to lakes or streams to better protect the fish habitat.

### How Permeable Pavers Work

A permeable paving system allows rainwater to infiltrate beneath the top surface. Once below the surface, the water is temporarily stored in an open graded aggregate base. Some of this stored water will continue to infiltrate to native soils, depending on the soil type and conditions, and the remaining water will flow to a perforated pipe for eventual slow discharge into the storm system.

### Estimated Performance

The performance of a permeable paving system depends on its area, volume, drainage area, underlying soil permeability, and the design of the underdrain system. Properly sized permeable paving systems located in areas of permeable soils can be nearly 100% effective in reducing runoff rates and volumes and capture of urban runoff pollutants. Site-appropriate design details should be implemented to encourage denitrification and phosphorus removal for lower permeability soil applications.

### Permeable Paving Applications



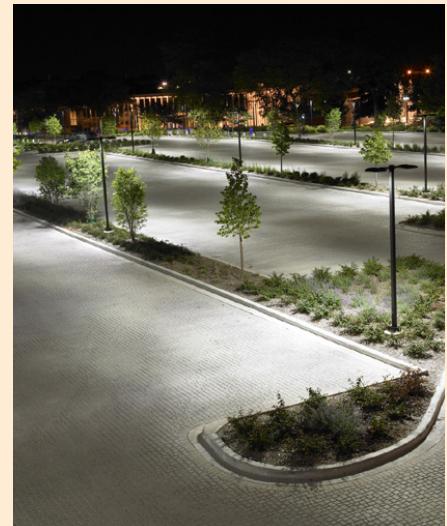
#### Permeable Paving Parking Lane

When it's not feasible to install permeable pavers on an entire street, using them in parking lanes can still capture significant runoff volumes.



#### Permeable Paving Street

In addition to stored runoff, permeable parking streets in residential or downtown areas will add character.



#### Permeable Paving Parking Lot

Permeable Paving Parking lots can provide significant volume for stormwater infiltration due to their large footprint.

## Street Trees

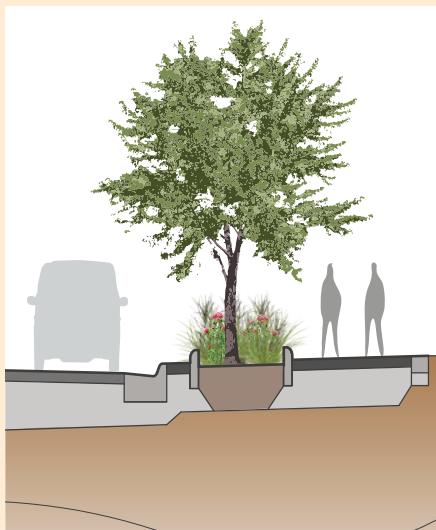
### Street Tree Benefits

Trees play a major role in stormwater management and overall community health. Broad tree canopies can intercept rain before it falls to the ground and allow for increased evapotranspiration, and elaborate root systems can draw up infiltrated water. Large canopies also create shade in otherwise paved locations. Trees also provide health benefits like increased air filtration and positive human responses to vegetation.

### How Street Trees Work

Trees can be planted along with many capital improvement projects within the parkway. In certain applications, such as limited right-of-way space, structural soils may be required to support trees. Structural soils are composed of small aggregate and clay soils. The rock provides structural support while the soil fills the void spaces and allows water to infiltrate and be stored, and root systems to thrive.

### Street Tree Applications



Combining street trees with lower native plants or other vegetation can help maximize water captured by root systems. Layered vegetation also creates a more natural atmosphere.



Street trees can be installed in predominantly paved areas as necessary by using structural soils.



Street trees can be installed while maintaining plenty of sidewalk and courtesy walk space as required.

# Bioretention

## Bioretention Benefits

A depression in the landscape that allows stormwater to be retained and filtered through soil for use by plants. During larger events, an underdrain will route water to storm sewer or other pathway. As with permeable paving, bioretention can reduce runoff volume, and also allows water that does runoff an opportunity to lower in temperature prior to discharge to a lake or stream.

## How Bioretention Works

Bioretention areas allow runoff from impervious surfaces into a depressional area with plants. Water can then filter through plant roots before slowly infiltrating to subgrade or entering the underdrain.

## Estimated Performance

The performance of bioretention systems depends on its area, volume, drainage area, underlying soil permeability, and the design of the underdrain system. Properly sized bioretention systems located in areas of permeable soils can be nearly 100% effective in reducing runoff rates and volumes and capture of urban runoff pollutants.

## Bioretention Applications



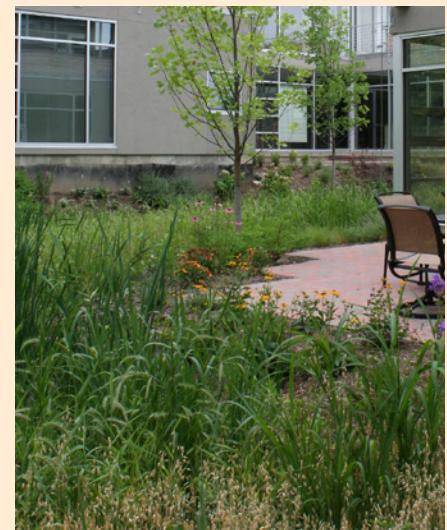
### *Parking Lot Islands*

Bioretention islands can capture runoff via curb cuts and filter water as it drains through soils. They also provide an opportunity to bring vegetation to beautify the area.



### *Medians and Boulevards*

Medians and boulevards can be vegetated and amended with engineered soils to capture runoff from properly sloped streets. Medians can also help to slow traffic on neighborhood streets.



### *Backyard Swales*

Rather than removing runoff as quickly as possible from private property, backyard swales can still provide a conveyance route for runoff, but include benefits such as creating potential for runoff infiltration and adding native plants to the landscape.

## Naturalized Swale

### Naturalized Swale Benefits

Similar to bioretention backyard swales, naturalizing a swale includes native plantings with extensive root structure to allow for water quality enhancement and a more diverse local ecosystem.

### How Naturalized Swales Work

These swales provide a flow path for runoff, but also serve as a filter for runoff by allowing for nutrient absorption before discharging to a downstream system. The plantings will slow water and also provide habitat for insects and small animals.

### Estimated Performance

Naturalized swales are primarily a conveyance feature that can also provide a water quality benefit. The performance of naturalized swales depends primarily on the velocity of the flow through the swale since settling is the primary pollutant removal mechanism.

### Design Considerations

Naturalized swales can be implemented in open spaces to encourage native plants and infiltration. They also provide a means of conveyance to move water downstream during larger rain events.



# Naturalized Detention

## Naturalized Detention Benefits

Used to temporarily store runoff and release it at a rate allowed by ordinances. Native wetland and prairie vegetation improves water quality and habitat benefits. Naturalized detention basins can be designed as either shallow marsh systems with little or no open water or as open water ponds with a wetland fringe and prairie side slopes.

## How Naturalized Detention Works

Naturalized detention areas use the same principle as traditional detention by holding runoff and allowing it to be released at an allowable rate. What makes naturalized detention different is its additional functions as water quality and natural habitat areas. Native plantings will filter pollutants from the runoff and also provide a habitat for many insects and small wildlife.

## Estimated Performance

The performance of detention basins depends on its area, volume, drainage area, the presence of a permanent pool, and the vegetation in the bottom (in the case of a dry bottom basin) and sides. Properly sized detention basins are extremely effective in reducing peak flows. However, very little volume reduction is achieved due to the typically large drainage area ratio. Naturalized basins with a permanent pool of water can also be relatively effective for pollutant removal relative to dry bottom basins.

## Wet and Dry Detention Basins

Most stormwater ordinances require runoff rate controls, typically accomplished with detention basins. While effective for controlling release rates, they provide no volume reduction and limited pollutant removal capacity. Naturalized wet basins provide a waterscape with a pollutant removing buffer of native plants. Dry basins may provide volume reduction as well as pollutant reduction.



## Cisterns

### Cistern Benefits

A vessel used to capture and temporarily store rainwater for various uses, including grey water reuse and irrigation.

### How Cisterns Work

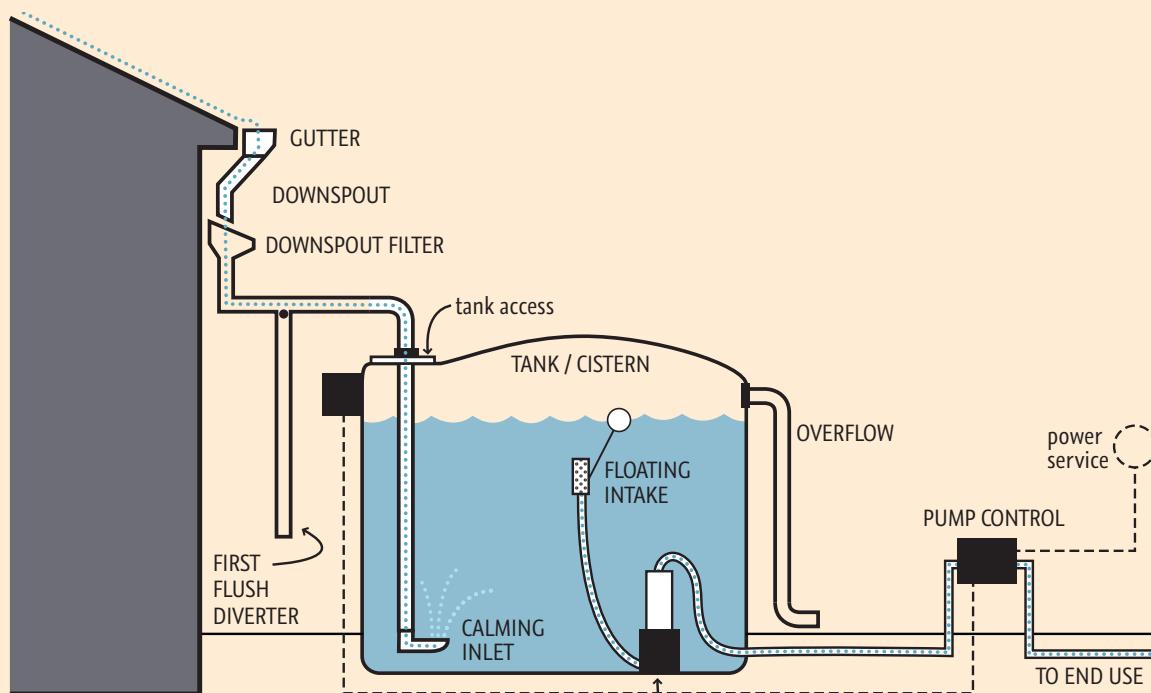
Cisterns capture water that would otherwise become runoff. The stored water is then typically pumped out to its reuse destination. If too much water becomes stored, the structure will allow water to overflow as runoff.

### Estimated Performance

Properly sized cisterns utilized as part of an automated irrigation system can virtually eliminate the need for potable water for irrigation. Further, annual runoff volumes can be reduced by amounts exceeding 40%. However, a cistern or rain barrel located at a residence that never uses the collected water will provide essentially no water conservation or runoff volume reduction benefits.



### Rainwater Harvesting and Reuse System: Above-ground Tank



## Wastewater Discharge Reduction

### Wastewater Discharge Reduction Benefits

Reused water can be drawn from either treated wastewater or a grey water system. Recycling water from these sources helps to reduce demand on the potable water supply (an aquifer, lake, or river) and water treatment facility, and can reduce water use costs for high demand users. Water reuse can also help to reduce the total wastewater discharge volume from a facility, thereby reducing chemical use and sludge generation.

### How Onsite Wastewater Discharge Reduction Works

Depending on the wastewater source, water can be siphoned from the treatment process at different points for reuse elsewhere. In a grey water system the recycled water will be taken from sources with low organic content, such as drains from showers and laundry equipment. The water can be reused in a variety of applications including industrial cooling water, irrigation, and dust control.

### Wastewater Discharge Reduction Applications



#### Cooling

Treated wastewater can be used for industrial applications, particularly in process piping for cooling water.

#### Irrigation

Irrigation of non-edible vegetation is an ideal use of treated wastewater.

# Onsite Wastewater Treatment

## Onsite Wastewater Treatment Benefits

Treating wastewater at its source has many benefits. It allows for a more targeted treatment process that is designed for the needs of the waste stream and reduces the loading on a downstream treatment plant. Onsite treatment can be more efficient than traditional centralized treatment, and offers the potential for a reusable byproduct. Onsite treatment of wastewater at industrial sites can help reduce sanitary piping and plant size. It also has the benefit of potential for reuse in other processes.

Wastewater from agricultural and food production is biodegradable and non-toxic but may be high in Biological Oxygen Demand and suspended solids. Wastewater from animal slaughterhouses may be contaminated with significant levels of antibiotics and pesticides that, if treated on site, can be kept out of a municipal waste stream.

## How Onsite Wastewater Treatment Works

Onsite treatment can take many forms, but typically makes use of a circulated water body, aeration and baffling, and plants for pollutant uptake and conversion.



*The Audubon Society's Corkscrew Swamp, Naples, FL*

## Treating Concentrated Wastes

For concentrated wastes, treatment may take the form of bio-reactors or anaerobic digesters. The biological digestion of concentrated, carbon rich effluent may provide a source of fuel and energy that offsets or even covers the cost of treatment. Treated water can be reused onsite as process water and help reduce the demand on municipal drinking water systems.

Residual solids produced by these processes may be higher quality than comparable residual left over from the treatment of municipal waste. Sludge generated from food wastes should be low in heavy metals and other contaminants that compromise the value of compost and fertilizer. This may allow for these waste residuals to be converted into a saleable product.

**Neptunes Harvest in Gloucester, Massachusetts.** Neptunes Harvest is a successful organic fertilizer product developed by Ocean Crest Seafood that composts fish wastes from the fishing industry.

**MillerCoors Ethanol Plant in Golden, Colorado.** MillerCoors produces 3 to 5 million gallons per year of ethanol from its brewing residual products.



*MillerCoors Ethanol Plant, Golden, CO*

## Treating Dilute Wastes

Onsite treatment of dilute wastes can be accomplished more simply near the source than if mixed with municipal wastewater. Wastewater such as contaminated runoff or vehicle wash water may require only minimal treatment before they can be safely reused for irrigation or process water. Treatment of dilute wastes may be efficiently accomplished through natural treatment methods including the retrofitting of stormwater ponds with enhanced ecological treatments.

**Tyson Lagoon Restorers in Berlin, Maryland.** Effluent from Tyson's poultry processing plant was frequently out of compliance with the Maryland EPA's regulatory requirements for discharge. Twelve restorers were installed on the nine million gallon lagoon, turning the lagoon into a thriving ecological environment and bringing Tyson into regulatory compliance for discharge into the Chincoteague Bay.

## Additional Previous Projects

**Omega Center for Sustainable Living in Rhinebeck, New York.** The Center was designed to meet the Living Building Challenge. The facility, integrated into public space within a campus building, treats up to 50,000 gallons per day of sewage from the nearby campus through an Eco-Machine and discharges treated effluent to groundwater.

**The Audubon Society's Corkscrew Swamp in Naples, Florida.** This site uses an Eco-Machine with solar aquatic cells and two wetlands to treat 10,000 gallons/day of wastewater from Corkscrew's visitor facilities.



*Omega Center for Sustainable Living, Rhinebeck, NY*



*Tyson Lagoon Restorers, Berlin, MD*



*Tyson Lagoon Restorers, Berlin, MD*