



# ORANGE VILLAGE, THE YEARS AHEAD

*"...a Community for all generations"*

ALLISON LIFFMAN PHOTOGRAPHY

## 2018 Master Plan for Land Use

Kathy Mulcahy, Mayor  
Prepared with the professional planning assistance of CT Consultants  
MAY 2018

*(THIS PAGE IS INTENTIONALLY LEFT BLANK)*

## TABLE OF CONTENTS

### *PART I - 2018 Master Plan for Land Use*

	<u>Page No.</u>
I. INTRODUCTION .....	1
Purpose	
The Update	
Supplemental Planning Studies	
II. EXECUTIVE SUMMARY .....	2
III. REGIONAL PERSPECTIVE .....	3
IV. EXISTING CONDITIONS & CURRENT TRENDS .....	4
Land Use & Development	
Demographic & Housing Profile	
Development Capacity	
Community Facilities	
V. OUR REFLECTIONS.....	15
What Orange Is Now	
What Orange Will Be	
Recent Initiatives	
Our Challenges	
Our Opportunities	
VI. COMMUNITY GOALS .....	19
VII. POLICIES AND STRATEGIES.....	20
Residential	
Commercial	
Community Facilities & Image	
Transportation & Traffic	
Environmental	
Community Development	
APPENDIX A - Description of Environmental Features .....	26
APPENDIX B - Description of Infrastructure .....	28

### *PART II - Supplemental Planning Studies*

## I. INTRODUCTION

### Purpose

The intent of this Master Plan for Land Use, Orange Village, The Years Ahead, is to articulate the long-range development goals and policies of Orange Village. The Plan is comprehensive, yet flexible, and is not intended to be static. The Village recognizes the need for a policy guide that looks to the future and conveys the type of community Orange Village desires to be. This document will help to advise the Village in public decision-making, public investment priorities, and guide the **public's response to** private development proposals. Conversely, this plan will also provide guidance to private stakeholders as they contemplate an investment in Orange.

This Master Plan does not, however, represent a blanket endorsement of any **proposed development or use without Orange's approval of a detailed development plan** for the area. **The plan represents the Village's desires and aspirations** but is not a regulatory document.

### The Update

This document represents an update of the previous Comprehensive Plan for Land Use, which was prepared in 2007. Since that time, new data and development considerations have emerged that may alter the **community's** aspirations for the future. Most notably, two projects currently in progress - Pinecrest and Chagrin Highlands South - mark significant new development in Orange.

Since planning is an on-going dynamic activity, the purpose of a plan update is to reflect on these recent changes to assure that any implications are addressed, and **the Village's vision and means to get there are consistent with current aspirations.**

As Orange strives to achieve the goals and policies herein, the Village recognizes that unforeseen changes may occur. Therefore, this master plan should continue to be reviewed and updated at least every ten (10) years to remain a viable guide for public decision making, private investment, and to “keep a finger on the pulse” of the community.

### Supplemental Planning Studies

**Even as this document articulates Orange Village's policies and goals regarding land use and future development,** other in-depth studies have been undertaken with regard to specific functional areas. These relevant past studies are incorporated in Part II Supplemental Planning Studies. These policies and analyses also contribute to the information and recommendations contained in this document.

## II. EXECUTIVE SUMMARY

Orange is a medium sized village with 3,288 residents (2015) in a 3.8 square mile land area. The Village is located in the southeast portion of Cuyahoga County with convenient regional access via I-271, I-480 and Route 422. The Village embraces its access and proximity to the urban center with its variety of cultural, social, and service offerings while still retaining its small town feel and charm. With its mix of housing choices, Orange is a “**...Community for all generations.**”

The 2017 Master Plan for Land Use, Orange Village, the Years Ahead sets forth the vision for Orange as the Village looks to the future. Not surprisingly, this vision reflects the continuing aspirations to maintain **the Village’s two core principles**:

- Retain the traditional pattern of development that has been established over the last several decades - large lot single family development in the center - the heart - of Orange, with higher density residential and commercial development around the periphery, essentially adjacent to similar developments in the adjacent communities; and,
- Provide the highest level of services possible that our residents have enjoyed and expect.

In 2014, respondents to the Orange Community Survey overwhelmingly expressed: positive feelings (96%) about living in the Village; acknowledged that, overall, the level of services is good to excellent (95%); and were in favor of the installation of recreation trails (87%).

Consistent with these core principles and the prevailing development pattern, Orange Village will strive to maximize development of the commercial areas in order to continue providing the high level of public services residents have enjoyed and expect without increasing the tax burden on residential properties. The recent rezoning and current development of Pinecrest and the pending development of Chagrin Highlands are consistent with these principles.

To achieve these objectives, Section VII sets forth a variety of policies and strategies to further advance and maintain the **Village’s core principles** and the quality of life Orange residents expect.



### III. REGIONAL PERSPECTIVE

Orange Village, part of the Cleveland-Akron metropolitan area, is located in the southeastern part of Cuyahoga County approximately 15 miles from downtown Cleveland. The Village and adjacent communities of Beachwood, Solon, Pepper Pike, Woodmere, Warrensville Heights, and Moreland Hills, make up a part of the eastern portion of Cuyahoga County which contains some of the more affluent suburbs of Cleveland. This places Orange Village in the center of a trade area with a strong economic position and a significant concentration of disposable income.

Orange Village is primarily a single-family residential bedroom community. Because of the close proximity of Interstate 271, Interstate 480, and US Route 422, residents are within convenient distances to a wide range of work locations within the metropolitan area.

The economic base in Orange Village has historically been limited to a few hotels, restaurants, and retail facilities east of I-271 on Chagrin Boulevard and on Orange Place from Chagrin south to Harvard. In addition, there are two small retail centers with a gas station and a Pet Spa along Miles Road, west of Brainard Road, at the southern border of the Village.

However, the new commercial expansion of two key sites at the I-271 and Harvard Road interchange-Pincrest and Chagrin Highlands South- will greatly broaden **the Village's** regional economic draw.

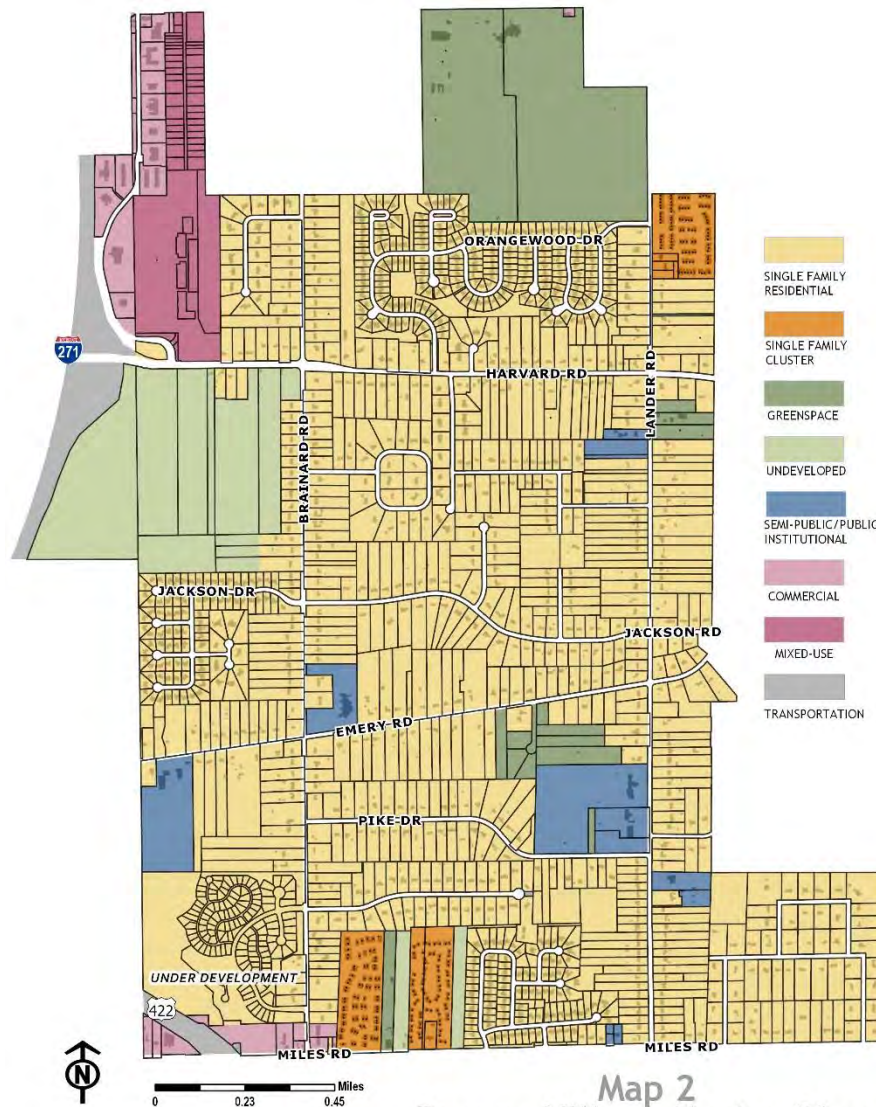


## IV. EXISTING CONDITIONS & CURRENT TRENDS

### Land Use & Development

Orange Village encompasses 2,430 acres (3.8 square miles) and is, approximately, rectangular in shape. Over the years, Orange has consistently retained the center of the community for low density, large lot (1 ½ acres) residential development with the higher density residential and non-residential development around the periphery.

The development patterns both within and immediately adjacent to Orange are essentially set by current zoning and the existing development (including Pinecrest). The exception could be the impact on Orange from the potential redevelopment of the Beech Brook property on Lander Road (at the Orange Village boundary) for possible commercial and/or mixed-use development.



**Residential Uses:** Single-Family Residential is the predominant land use in Orange Village. Residences on lots generally in excess of one (1) acre are located throughout the Village along arterial, collector, and local streets. In addition, the Village has three Single Family Residential Cluster or Attached developments where attached and detached units may be in the same development.



These developments are located in areas served by central water and sanitary sewer systems. All three **“higher density” residential** developments are located on the Village periphery with Landerwood Glen located off of Lander Road in the northwest corner, and Stonebrooke and Villas of Orange located in the southwest off of Miles Road.

The Lakes of Orange, currently in development, will add 150 single family homes to the Village near Brainard Road and Miles Road intersection.

**Institutional Uses:** Semi-Public/Institutional uses are comprised exclusively of five houses of worship located within Orange Village. They are Bethlehem Baptist Church/School on Emery Road, North Solon Baptist Church on Miles Road, New Song Church on Lander Road, Chinese Christian Church on Emory, and Temple Emanu El at Brainard and Emery Roads.

The Public/Insitutional uses **include the Village’s 64 acre site** on Lander Road which includes the Village Hall, Fire Department, Police Department and the Village Service department.



**Greenspace and Recreation Uses:** Adjacent to Village Hall is the public Orange Community Park with recretational facilities, an Amiptheater, playground, and over 60 acres of woodlands. The

remaining Greenspace in the Village is the privately owned Beechmont Country Club. The 167-acre country club is located on Chagrin Boulevard and is a strongly supported facility with a positive impact in Orange.

**Commercial Uses:** Commercial uses are primarily located along Chagrin Boulevard and Orange Place in northwest Orange Village. This area includes a concentration



of highway services (restaurants, service stations and hotels) and the University Hospital Chagrin Highland's medical building, among other commercial uses.

This northwest commercial area is undergoing an expansion with the Mixed Use Pinecrest development. In 2013, the voters approved the rezoning of 80+ acres on the former residential lots on either side of the former Pinecrest Road. Pinecrest is the only major land use change in existing or expected land use patterns since 1998, and its location in the peripheral northwest corner remains compatible with the traditional development pattern established in the Village.

At the Harvard Road/Orange Place intersection, Pinecrest is touted by many in commercial real estate as the single most attractive commercial development opportunity in Cuyahoga County based on its location alongside I-271, coupled with the surrounding demographics. Now under construction, Pinecrest, when completed, will include more than 1,185,000 sq. ft. of building floor area including 368,000 sq. ft. of retail and restaurants, 87 apartments, offices, a hotel, a movie complex and other entertainment facilities.



To reflect the regional prominence of the site, the Village required that the initial retail occupancy would include more than sixty-five (65%) percent of the floor area being occupied by tenants that are not currently within 20 miles of the site. In addition to the economic benefits and taxbase expansion, Pinecrest will create strong identity within Orange and will be a focal point for community activities. The number of additional dwelling units in the northern residential portion of Pinecrest - 24 acres - remains under study.

The interchange at I-271 and Harvard Road also provides direct access to the 630 acre Chagrin Highlands development area shared by Beachwood, Warrensville Heights, Highland Hills, and Orange Village. Of the 130 Chagrin Highlands acres in Orange, approximately 78 acres are in the Chagrin Highlands South development on the east side of I-271 south of Harvard Road. A master plan for Chagrin Highlands South was approved in November of 2016 and includes two restaurants, a hotel, and the potential for 450,000 sq. ft. of office development. Like the Pinecrest property to the north, this land is positioned to become a major component of the future Village tax base when developed.

**Industrial Uses:** No land is presently developed or allocated for Industrial use. While this fact is worth noting, it is not unusual for bedroom suburbs located on the outer rim of a large metropolitan area.

**Undeveloped Land:** Orange Village has approximately 332 acres of vacant land - both residential and commercial - which comprises 14% of the total land area of the Village. However, this figure includes those sites where development is already committed including the Chagrin Highlands South commercial development, the Lakes of Orange, and residential development at the north end of Pinecrest. When these parcels are excluded, the amount of undeveloped vacant land is reduced to 88 acres - 3.6% of all land in Orange. The estimated development capacity of this vacant land is explained in Section IV.

## Demographic & Housing Profile

**Population:** The population in Orange has remained relatively stable since 2000 (U.S. Census). The current population estimate, from the US Census 2015 American Community Survey, is 3,288, which is down

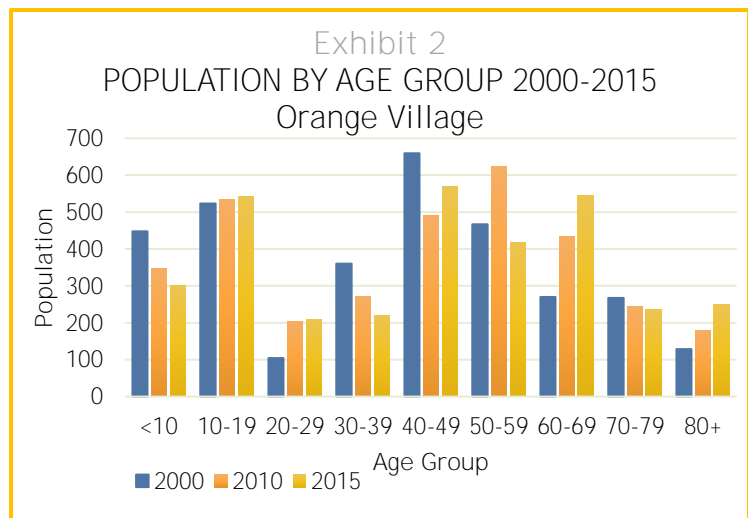
only slightly since 2010 (U.S. Census); a difference of only 35 people. Orange has also experienced a slower decrease in population than in the County (Exhibit 1).

Orange has an aging population, which is consistent with national trends. Between 2000 and 2015 the median age of an Orange Village resident increased from 42 to 46. The **“baby boom” generation** of the 1950's and 1960's is growing older, resulting in a larger portion of the population in the middle age ranges. The population shift by age groups is summarized in Exhibit 2.

**In 2000, 20% of Orange's population** was aged 60 or older (Exhibit 3). However, in 2010 those 60 and over jumped to 26% of the population; further increasing to 31% based on the 2015 Census estimates. Conversely, and not surprisingly, the population

Exhibit 1 POPULATION TRENDS			
	2000 Actual	2010 Actual	2015 Estimated
Orange Village % Change	3,236	3,323 3%	3,288 (-1%)
Cuyahoga County % Change	1,393,978	1,280,109 (-8%)	1,249,352 (-2%)

Source: U.S. Census 2000, 2010; American Community Survey 2015



Source: U.S. Census 2000, 2010; American Community Survey 2015

Exhibit 3 ORANGE VILLAGE AGE DISTRIBUTION			
Age	2000 Actual	2010 Actual	2015 Estimated
Under 20 %	980 30%	879 26%	842 26%
60 and older %	666 20%	856 26%	1,029 31%

Source: U.S. Census 2000, 2010; American Community Survey 2015

under 20 decreased from 30% in 2000 to 26% in 2010 and remained the same in 2015.

An aging population has different needs than a younger one. Orange Village will need to continue to be responsive to meet the needs of aging residents by increasing emergency medical services and senior programs. The programs and facilities for seniors available at the Orange Senior Center, though located in Pepper Pike, represent the types of resources presently designed to meet these needs.

Consistent with regional trends, the average household size has consistently declined over the years. In 2015, the Village population lived in 1,370 housing units with 2.39 persons in each dwelling; a reduction from 2.62 persons per household in 2000.

Exhibit 4 NUMBER OF DWELLING UNITS IN ORANGE			
	2000 Actual	2010 Actual	2015 Estimated
Number of Dwelling Units	1,236	1,374	1,370
% Change From Prior Decade		11%	0%

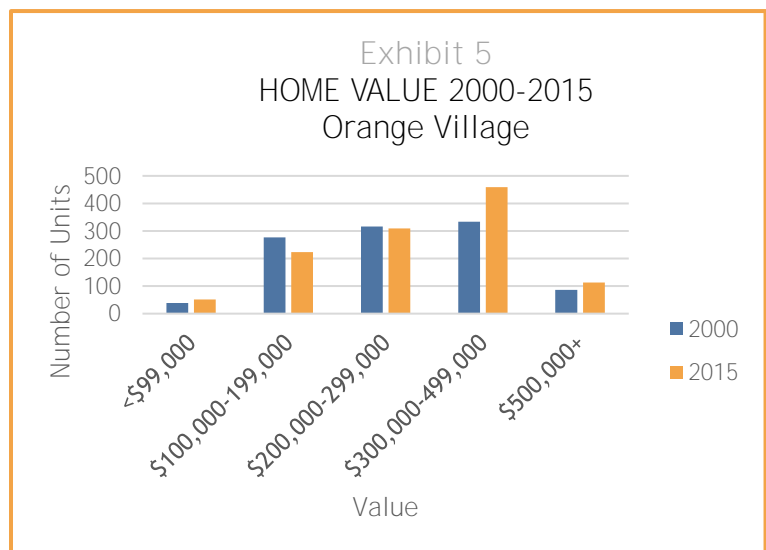
Source: U.S. Census 2000, 2010; American Community Survey 2015

These changes reflect a national trend toward an increasing number of single-person households, couples without minor children and single-parent families.

**Housing:** The number of housing units in the Village increased by 138 units (11%) from 2000 to 2010. While the construction of new homes was limited between 2010 and 2015, primarily because of the sluggish national economy, this trend is likely to change with new developments, such as Lakes of Orange and Pinecrest, which are expected to add a few hundred dwelling units in the next several years.

In 2000, more than 90% of the units in Orange were owner occupied and approximately 5% of the housing units were vacant (U.S. Census). Based on 2015 estimates, homeownership decreased slightly to 88% of occupied units and 3.9% of units were reported vacant. A vacancy rate of 3% - 5%, as in Orange Village, reflects the normal turnover of residences within a community.

The 2015 American Community Survey estimates the median home value (of owner occupied units) in Orange Village was \$298,800, which is 13% greater than the median value of \$264,400 in 2000 (U.S. Census).



Source: U.S. Census 2000, 2010; American Community Survey 2015

In 2015, 82% of the dwellings were single-family detached on traditional lots. In the next few years, with development of the residential portion of Pinecrest, this percentage could be reduced.

**Socio-Economic:** The median household income in Orange increased from \$89,660 in 1999 to \$94,792 in 2015 (ACS). By comparison, the 1999 Cuyahoga County median household income was \$39,168 and increased to \$44,190 in 2015.

Exhibit 6 MEDIAN HOUSEHOLD INCOME		
	1999 Estimated	2015 Estimated
Orange Village	\$89,660	\$94,792
Cuyahoga County	\$39,168	\$44,190
Source: American Community Survey 1999, 2015		

In 2015, 65% of Orange residents were employed; up from 48% employment in 2000 (US Census). Only 2.3% of the population over 16 were unemployed and 33% are retired or otherwise considered not in the labor force. Comparatively, Cuyahoga County reports a 6.7% of the working age population unemployed in 2015. Over 50% of all employed Village residents have a managerial or professional occupation.

Most Orange Village residents who are employed work in Cuyahoga County but outside of the Village. About 92% of residents who work commute to work in a private vehicle while less than 1% report the use of public transportation or walking. Approximately 7% work at home (American Community Survey 2015).

### Development Capacity

A Development Capacity Analysis estimates the amount of future development that could occur according to current trends, environmental constraints, and land use policies. With the development of Pinecrest, the population trends in Orange could change, with residential growth likely to accelerate.

To illustrate the amount of development which has occurred in the past decade, in 2007 vacant land was estimated at 370 acres (15%). As of early 2018 there are approximately 332 total vacant acres (14%). However, as presented earlier, much of this land is already committed to both commercial and residential projects. The committed commercial vacant land includes Chagrin Highlands South (78 acres) for which an overall non-residential development plan was approved in 2016. The residential includes the Lakes of Orange (90 acres), and residential development at the north end of Pinecrest (24 acres). Vacant land is further reduced by **excluding the, so called, “backlands” from the vacant inventory** since these lands are extremely difficult and, therefore, unlikely to be developed.

When accounting for this committed land as developed, the resulting undeveloped land is 88 acres (3.6% of total land in Orange) which includes 80 acres south of Harvard Road and west of Brainard Road, and 8 acres just south on Brainard Road.

In addition, the land analyzed includes the residential projects in development-



Lakes of Orange, under construction, and Pinecrest, redevelopment of previously residentially occupied land. Exhibit 7 summarizes the residential development **capacity at full “build-out” which estimates** 741 additional dwellings. This is based on the accumulated effect of development according to existing zoning; the policies reflected in this Plan; and development projects under construction or proposed. Since most of the additional units will not likely be traditional single family homes on large lots, an average of 1.75 people in each additional unit has been applied. Given this assumption the total Village population would increase the population by 1,297 to, approximately, 4,620 total residents (Exhibit 8). For comparison, the 2007 Plan forecasted a **“build-out” population** of 4,425.

Exhibit 7: POTENTIAL RESIDENTIAL DEVELOPMENT CAPACITY <sup>(a)</sup>				
			Potential Dwelling Units	
	Location	Acres	Existing Zoning	Proposed Policy or Approved Plan
1	Vacant Parcel - south of Harvard Rd and east of Chagrin Highlands	80	50	240
2	Pinecrest - Mixed Use Area		87 <sup>(b)</sup>	87 <sup>(b)</sup>
3	Pinecrest - North Residential Area	24	240 <sup>(b)</sup>	240 <sup>(b)</sup>
4	S. of Parcel Reference No. 1 above	8	5	24
5	Lakes of Orange (when full build-out occurs)	90	156	150 <sup>(c)</sup>
Total - New Dwelling Units			538	741
Existing Dwelling Units			1,374	1,374
TOTALS - Existing + New			1,912	2,115
Notes: <sup>(a)</sup> Based on the development of the vacant land under the existing zoning; development according to recommended policies -if different from the zoning-and projects under construction or proposed <sup>(b)</sup> Based on most recent Pinecrest information - 240 units in the north area which is currently vacant; 87 units in the “mixed-use core” which will be open in the Spring of 2018. <sup>(c)</sup> The potential number of lots is estimated to be less than initially approved based on subsequent Plan modifications over the years. None of these units are included in the total for “Existing Dwelling Units.”				

Exhibit 8 ESTIMATED POPULATION AT “FULL BUILD-OUT”					
	2000 Actual	2010 Actual	2015 Estimated	Additional	Projected Build-out
Dwelling Units	1,236	1,374	1,370	741 <sup>(1)</sup>	2,115
% Increase (from prior column)	23%	11%			54% <sup>(2)</sup>
People/Dwelling Unit	2.62	2.38	--	1.75 <sup>(3)</sup>	2.15
Population	3,236	3,323	3,270	1,297	4,620
% Increase	15%	2.7%			39% <sup>(2)</sup>
Source: U.S. Census 2000, 2010; American Community Survey 2015 Notes: <sup>(1)</sup> See Exhibit 7 <sup>(2)</sup> Percentage increase from 2010. <sup>(3)</sup> Estimated based on the occupancy trends in the region for the type of dwelling units being built or proposed which typically will have less people per dwelling unit than a single family home.					

## Community Facilities

**Orange Senior Center:** The Orange Senior Center is located in the neighboring community of Pepper Pike and serves the needs of over 4,500 senior residents (60 and over) from Orange Village, Pepper Pike, Woodmere, Moreland Hills, and Hunting Valley which in 2015 represented 31% of the residents in these communities.

The Orange Senior Center building provides a great room, snack area, handicapped accessible restrooms, a gift shop area, arts and crafts room, office space, and a computer room to serve the needs of the elderly within the community.

**Because Orange is a community with a significant population that is “aging in place,” the Village should continue to seek ways to expand services to meet the needs of these residents.**

**Park Facilities:** A 64-acre community park, which includes the Village Hall facility, is located on Lander Road. This park is listed on the Cuyahoga County Green Space Plan. There is the potential to expand facilities in the park and connect the park with local and regional trail systems. Potential improvements are illustrated in the Orange Community Park Plan.



Open space, parks, and recreation areas are valuable assets that contribute to community identity and protect environmental resources. A comprehensive system of open space linkages and active and passive recreation should be developed in a manner that serves and enhances the community. The community park system should link existing parks and other natural areas. The Orange Community Park Plan makes several additional recommendations for the enhancement of local parks and open space as community amenities. **A new playground “for the next generation of Village children” was completed in July, 2017. The Village is continuously looking to up-grade and add to the park’s amenities.**



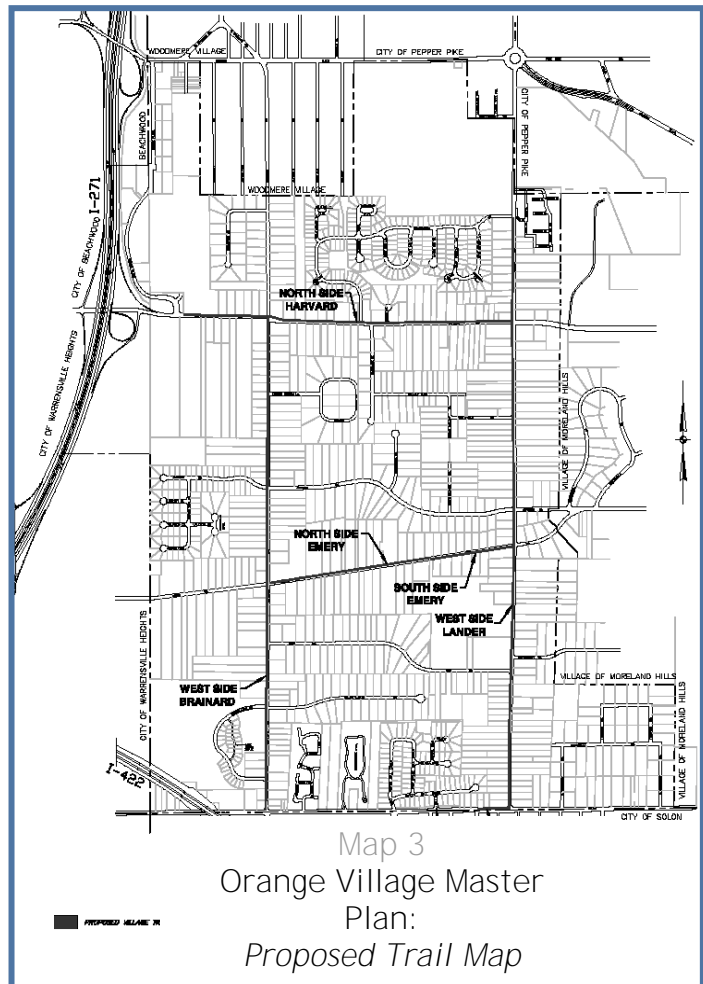
In 2003 an Orange Village Open Space Preservation Guide was adopted, which set forth a detailed set of goals, policies and strategies for the expansion and preservation of open space in the Village. The major goal statements can be found in the recommendation section of this document; the complete set of policies and

strategies are contained in the 2003 Open Space Preservation Guide.

Every new dwelling is assessed a \$750 one time impact fee to support capital improvements to the recreational facilities in the Orange Village Community Park.

**Recreational Trail:** A new recreational trail throughout Orange is scheduled for construction in 2018. The trail will be constructed on: the north side of Harvard; west side of Brainard; west side of Lander; north side of Miles and the north side of Emery (Map 3). The Pinecrest developers committed \$5,000,000 to build the new trail as part of their development agreement with the Village.

**Street Network:** Orange Village's thoroughfare system is composed of freeways/interstate highways, major arterials, collector streets, and local streets (Map 4). Freeways and interstate highways within the immediate locality of Orange are I-271, I-480 and US 422. Streets which provide full access to I-271, I-480, and US 422 are Chagrin Boulevard, Harvard Road, Miles Road, and Emery Road. Harper Road, in Solon, also provides convenient access to Route 422 and the regional highway system.



Arterial streets have the basic function of circulating traffic between large or intensively developed areas. Orange currently has a well-established arterial street system consisting of Chagrin Boulevard, Harvard Road, Emery Road, Miles Road, Brainard Road and Lander Road.

Collector streets serve abutting properties and distribute traffic between local streets and arterial streets. Collector streets within Orange Village include Jackson Road, Orange Place and Orangewood Drive.

Local streets have the primary function of providing access to abutting property. **They may also serve as easements for utilities.** Orange's local street pattern has expanded as newer residential developments have occurred. Many of the Village's

local streets have a rural cross section with small berms and roadside ditches. Newer developments, particularly those with higher densities, have a more urban cross section with curbs and enclosed storm sewers.

In general, the Village's grid type street system functions effectively in moving traffic around and through the Village. Orange Place is designed as a collector street connecting Chagrin Boulevard and Harvard Road to facilitate the transport of commercial and office traffic to and from the Chagrin Highlands.

In November 2015, a 10 year 3.7 mill renewal levy was approved by more than 85% of the voters for permanent improvements to the Village infrastructure. In addition to the repair and reconstruction of roads, this levy is also available for storm water and drainage improvements.



In 1996, prior to the completion of the Harvard Road/ I-271 interchange, approximately 3,900 vehicles per day drove between Brainard Road and the western border of the Village. In 2004, after the completion of the interchange, the average daily traffic (Exhibit 9) between the new I-271 interchange and Orange Place increased by 30% compared to 2000 volumes; between Orange Place and Brainard Road the increase was 32% for the same period. Between 2004 and 2015, the traffic counts between the I-271 ramp and Orange Place increased an additional 33%, while the volumes east of Orange Place only increased by 2%.

These traffic volumes are expected to increase with the new commercial and residential development. The Orange Place/Harvard Road intersection is being reconfigured to better accommodate the increased traffic expected from Pinecrest and Chagrin Highlands South. As the Village looks ahead, it is increasingly important that any future improvements on surrounding roadways are consistent with, and reinforce, the objectives in this plan to the maximum extent practicable. For example, traffic calming techniques, such as the use of different pavement



materials and brick patterns on streets, median islands, and narrowing of lanes, should continue to be used whenever possible to reduce traffic speed and increase safety in residential areas. These types of techniques reinforce to motorists that they are driving through residential areas. As new developments occur, the Village will make every effort to concentrate new access points to existing arterials and in locations that minimize adverse impact on those locations that are earmarked to remain low density residential.

Additionally, traffic flows and volumes within Orange Village continue to be impacted by the congestion on Chagrin Boulevard which is a key regional arterial. Improvements to Chagrin Boulevard - like the recently completed improved signalization by tying the signals **into Beachwood's "intelligent trans-system"** - remain essential to addressing some of the current traffic issues facing Orange Village. However, the Village only supports improvements to Chagrin Boulevard that currently include companion components that adequately manage north-bound traffic on Lander Road to Lander Circle.

Exhibit 9: HAYARD RD TRAFFIC COUNTS						
	1996	2000	2004	% Change (2000- 2004)	2015 <sup>(b)</sup>	% Change (2004- 2015)
Between I-271 Ramp and Orange Place	3,900 <sup>(a)</sup>	5,418	7,050	30%	9,409	33%
Between Orange Place and Brainard Rd		4,585	6,050	32%	6,164	2%
<sup>(a)</sup> Uncertain whether 1996 counts were east or west of Orange Place <sup>(b)</sup> Based on Traffic studies completed for Pinecrest and Phase I of the Chagrin Highland development south of Harvard Avenue. Source: Cuyahoga County Engineer (1996 and 2000) and NOACA (2004).						

A summary of the Environmental Features and the **Village's** Infrastructure that guide development in the Village are described in Appendices A and B.

## V. OUR REFLECTIONS

In addition to understanding existing conditions and trends, it is incumbent on a community - in any planning process - to reflect on other more qualitative influences that will guide future development. In formulating this Plan, the Planning and Zoning Commission reflected on several such influences:

### What Orange Is Now

- Orange has a semi-rural feel yet is conveniently located in a predominantly urban county. It has a diverse housing stock which enables Orange to be a **“community for all generations.”** Specifically, Orange provides a variety of housing for all generations for those who desire to live in the Chagrin Valley environment.



- Orange celebrates that it's **“tree canopy”** covers more than one-half (51.5%) of the Village land area; a higher coverage than most communities in the area (Source: Cuyahoga County Planning Commission).

- Orange has the charm of the past with conveniences of the future, diverse types of green spaces, efficient government and

offers an exceptional quality of life.

- The land use pattern has consistently preserved the core (center) of the Village as low density residential with the higher density and commercial **developments around the periphery. In the core area it's common that** residents purchase older, smaller homes and either substantially renovate these homes or build a replacement home on the property.

### What Orange Will Be

As Orange looks to the future, it envisions:

- Retaining the essential land use pattern and characteristics of the Village while celebrating the economic benefits of Pinecrest, which will provide an equally important community focus and gathering place.

- Being a community that promotes a high level of sustainability and landscape enhancements on both public and private property with welcoming entrances to the Village.
- Being vigilant and proactive to meet the changing needs of older homes and businesses alike, by recognizing **that all buildings have a “useful life-cycle”** and experience degrees of obsolescence over time, particularly, focusing on building relationships with the business community to assure that existing and future businesses are responsive to changing market trends, remain competitive in the market, increase property values, and operate in a **manner consistent with the community’s** aspirations.
- Providing diverse housing with nearby supporting services and easy access throughout the region.
- Continuing as **“...a community for all generations.”**

### Recent Initiatives

Over the last several years Orange has embraced a broad spectrum of specific initiatives intended to: enhance the quality of life for both residents and businesses; increase tax revenue to sustain the current high level of public services; and, to be responsive to the desires and concerns of residents. For example:

- **The “Orange Goes Green” Certification Program Manual (included in Part II)** was completed with the purposes of:
  - Expanding recycling opportunities;
  - Establishing solar energy regulations;
  - Promoting environmental conservation and opportunities for greater sustainability; and
  - **Advocating “Low impact design” to reduce environmental impacts.**
- In 2014, the Village conducted a Community Survey to monitor the **community’s** reaction - both positive and negative - to the level and type of public services being provided. The survey was mailed to all households with thirty-seven (37%) percent of all households responding resulting in statistical reliability of 93%.

This complete survey summary is part of the compendium of documents that are included as supplements (Part II) to this Plan. Briefly, some highlights from the Survey are that:

- 96% of respondents showed positive feelings about living in the Village **and expressed high regard for the quality of life “across the board;”**

- **95% say the Village’s overall service system** is good to excellent;
- 75% are receiving Village news from the newsletter and other direct mailings;
- 32% use the Village website, up from 14% in 2007; and
- 87% favor the installation of new recreation trails.

### Our Challenges

Yet, even with the exceptional services and quality of life in Orange several challenges remain. The Village needs to be mindful of these challenges and, as guided in part by this Plan, continuously strive to find possible solutions.

- **Increasing Traffic Volumes:** To manage the additional traffic volumes to minimize any unexpected shift of some traffic from the main to local residential streets.
- **Greenspace Management:** To ensure that financial resources remain available to maintain public parks and common green space areas.
- **Aging Buildings:** To monitor and, when needed, provide mechanisms that assure a high level of maintenance for all properties - both commercial and residential.
- **Sustainability:** To continue exploring ways to further reduce the carbon footprint.
- **Alternative Housing:** While Orange has townhomes and cluster homes, one of the reasons Orange is experiencing aging and reduced population is because there may not be sufficient **“alternative housing” opportunities for:**
  - **New residents to move into as a “starter home”** (in the range of \$300,000 to \$400,000); or,
  - Existing residents to move to (after, say, 30 years in the same house) when they become empty-nesters (or beyond) and seek to down-size while staying in Orange.

Therefore, a development strategy that provides for both of these groups so that residents are able to age in place as life-styles and needs change. This is important for the Village to appeal to all demographic groups and truly be ***“...a community for all generations.”***



## Our Opportunities

Conversely, the construction of Pinecrest and the pending development of Chagrin Highlands South will afford The Village with a variety of opportunities moving forward.

- **Increased Revenue:** The new economic development projects will increase the tax base and generate significant revenue for the Village to continue to provide the high level of services the residents expect.
- **Regional Draw:** The regional draw of the Pinecrest development will provide the opportunity to convey to others from outside the Village why Orange is a desirable place to live.
- **Connectivity:** The Village will capitalize on The Recreational Trail Plan, made possible through an assessment on the Pinecrest development to: (1) better connect Orange with neighboring communities and attractions, and (2) provide neighborhood connections within Orange which will enhance a greater sense of community.
- **Amenities:** Village residents and others will have the advantage of retail, office and residential opportunities nearby and the community amenities provided in Pinecrest.
- **Housing Choice:** Alternative housing types will be available for residents.
- **Streetscape Improvements:** Increased traffic provides the opportunity to implement landscape features **as a means to achieve “traffic calming”** when improvements to intersections may be otherwise needed.
- **Town Center:** Pinecrest will provide an invaluable social center for the community by creating a community gathering place.
- **Identity:** New developments can differentiate Orange Village and contribute to creating an identity that is unique and distinct from its neighbors.
- **Safety and Security:** The satellite safety services facility at the west end of town offers additional surveillance and comfort for our residents and visitors resulting in Orange Village being uniquely recognized for safety and security.

## VI. COMMUNITY GOALS

It is essential to evaluate and refine, as necessary, the goals previously established by Orange Village in order to put the proposed plan elements into the proper context as the Village looks ahead. To this end, the Village has established the following goals:

1. To essentially maintain the long-standing pattern of development which is lower density single family residential in the center of the Village with some condominium and non-residential development around the periphery. Higher density residential development will only be considered as a transition in those areas that are adjacent to existing or intended non-residential locations;
2. To support the enhancement of existing non-residential development areas to:
  - Provide the revenue needed to support public facilities and services;
  - Provide improvements that **reinforce the community's character; and**
  - Otherwise meet the quality of life and service needs of the residents.
3. To offer entry level housing opportunities for young families and appropriate alternatives for seniors.
4. To adhere to the Chagrin Highlands Vision for Orange Village;
5. To continue enhancing the appearance and image of the Village;
6. To protect the value of existing residential and commercial properties, which together enhance the quality of life for Village residents;
7. To maximize opportunities for green space preservation and the recreation trail connections among the various neighborhoods in Orange, the neighboring communities and parks;
8. To reduce potential traffic volumes on the more local (non-arterial) Village streets through improvements on major arterials;
9. To maximize the protection of groundwater resources since these resources are widely used for potable purposes; and
10. To pursue collaborative endeavors with other surrounding municipalities to improve quality of life, value, and the collective success for all - particularly focusing on economic development to the mutual benefit of all nearby communities.
11. Maintain storm water management to reduce dependence on sewers and **related structures; consider greater use of “low impact design” and rain gardens, etc.**

## VII. POLICIES & STRATEGIES

### Residential

The Village will substantially maintain the existing single-family residential character at the zoning densities that were in effect at the time this Updated Master Plan for Land Use was adopted. The only exceptions to this policy are as provided herein:

1. Limit nonresidential development to locations with existing commercial zoning except as otherwise specified in these policies.
2. Discourage the further development of the backlands (the rear portions of extra-large residential lots) which are predominantly in the U-1 Zoning District. **This policy is consistent with the “center of the Village” remaining low density residential with a generous amount of green space being preserved between residences. In the event such lands were assembled to permit additional units, it is the Village’s intention to retain the existing one and one-half (1 ½) acre single family zoning in these areas.**
3. Clearly define and defend borders between residential areas and nonresidential areas in order to ensure that commercial and retail uses do not creep into residential districts and that residences are satisfactorily buffered from non-residential uses. This can be facilitated by evaluating and, as necessary, amending the zoning code to require greater setbacks or more extensive landscaping, screening and other buffering techniques as a transition between non-residential uses and adjacent residential zoning districts.
4. Encourage development of a standard single family U-1 subdivision on the vacant land south of Harvard Road (between Chagrin Highlands and the properties fronting the west side of Brainard Road). While the Village continues to believe that a single family subdivision can be feasibly developed on this parcel, the Village will only consider development options on the property which are limited to the following uses and conditions:
  - Uses permitted in the S-1 District, which are limited to single family detached and single family attached dwellings, up to three (3) units per acre. This alternative use will only be considered when it is clearly demonstrated that they will be designed and arranged to minimize impact on adjacent property and avoid additional access onto Harvard Road. If S-1 development is considered it should be applied so that:
    - Lower densities on larger lots are placed on the more easterly portion of the property with smaller lots and higher density, generally not exceeding six (6) units on any one acre, on the western portion; and
    - Primary vehicular access will be from the southerly extension of Orange Place. If deemed necessary, additional access on Brainard

Road could be considered to distribute traffic volumes more evenly over multiple streets and minimize congestion and delays. Additional access on Harvard Road would only be considered when it is demonstrated that: access connections from the southerly extension of Orange Place (at the west end of the property) are not feasible; such access is needed to sustain the feasibility and marketability of lower density residential development; and, such additional access will not alter the lower density residential characteristics of Harvard and Brainard Roads.

- **Additional “transitional uses”** could also be considered, when adjacent to the western property line, and limited to such uses as: senior housing facilities (including congregate living, assisted living, and nursing care) or an extension of the uses and character compatible with the Chagrin Highlands development. These alternatives are only acceptable in the event that:
  - Access is provided via the extension of Orange Place into the expected Chagrin Highlands development and;
  - Buildings and parking are setback significantly from Harvard Road.
- Other unforeseen uses only when such developments provide a significant benefit to the community without negatively impacting the quality, character and values of the Village. This policy also has the benefit of:
  - Meeting the changing demographic needs of the community and the region; and
  - Increasing the Village tax base while resulting in a minimal increase in Village or School District services and demands.

There are two small, separately owned parcels that protrude into this land area which also have frontage on Harvard Road. The Village strongly believes that the ownership of these parcels should be consolidated with the surrounding property to ensure efficient and cohesive development in this location. If the land is consolidated then the policies in this item #4 will apply. However, if these parcels are not consolidated they will remain isolated and independently fronting on Harvard Road without any alternative access, and similar to the north side of Harvard the U-1 Zoning classification will remain.

5. Consider cluster residential development, at approximately two (2) to three (3) dwelling units per acre, on the substantially vacant land on the west side of Brainard Road between the Orange Tree Subdivision and the property referred to in No. 4, above. This level of development would be consistent with the existing or anticipated characteristics on these adjacent parcels.

However, the building setback for any new development should be at least equal to the prevailing setbacks of the existing homes on Brainard Road. If these were developed separately, the 4-unit policy would not necessarily apply.

6. Should the Beechmont Country Club ever consider moving from its current location, the area zoned as non-residential along Chagrin Boulevard (currently zoned U-6 Office Building District) would continue to apply. The maximum depth of such office development could be extended provided:
  - All of the office development continues to be oriented with access drives on Chagrin Boulevard. The number of drives permitted, the lanes provided for each drive, and turning movements would be designed to effectively manage traffic and circulation within the expanded non-residential area;
  - The extended depth serves the purpose of achieving a more cohesive and economically feasible development;
  - The overall depth of the office development does not exceed approximately 1,000 feet from Chagrin Boulevard (The depth of the current U-6 zoning is approximately 400 feet); and
  - The remaining residentially zoned portion of the Beechmont property will continue to be designated for residential development.
7. Pursue further steps to protect residential property values and the quality of life for Village residents. Enforce current property maintenance regulations, as necessary, to help guarantee that all residential properties will remain in satisfactory condition.

## Commercial

The Village aspires to fully develop existing commercial areas to maximize the **Village's primary source of revenue (real estate and income taxes) from its limited non-residential development**. Consistent with this principle the Village will:

1. Discourage the expansion of existing commercial areas. While Pinecrest has been recently approved, there is no additional land in the Village that is either desirable or suitable for non-residential development. Yet the Village will be vigilant to assure the existing commercial properties are well maintained and appropriately renovated, as needed, to remain competitive in the market.
2. Maintain the neighborhood quality, scale and character of all commercial areas; paying particular attention to commercial buffers and circulation that maximizes the preservation and marketability of the residential neighborhoods.
3. Provide, in the Chagrin Highlands South area, regional-scale office and



hospitality uses consistent with the Chagrin Highlands vision and ensure that such development adheres to a high standard of quality through architectural standards, attractive and functional site designs, and extensive landscaping.

### Community Facilities & Image

1. Continue to implement an entry feature and beautification program to properly announce the Village, enhance its image, and promote an appropriate sense of place by:
  - Utilizing unified themes in signage, landscaping and other decorative features, and considering the installation of other unified streetscape features, like banners, decorative street lighting, etc.
  - Recognizing the entry feature located east of I-271 on Harvard Road as of particularly desirable design and quality that should be the model for future entry features. Similar entry enhancements are a particular priority at the Miles-Brainard intersection.
  - Utilizing similar features (like those along Harvard east of Orange Place) as **“traffic calming” markers** to reduce traffic volumes and to slow traffic through the Village to the maximum extent possible.
2. Enhance facilities and programming services for the elderly through continuing collaboration with the Orange Senior Center.
3. Expand the facilities at the Community Park as recommended by the 2003 Orange Community Park Master Plan.
4. Promote greater utilization of the amphitheater.

### Transportation & Traffic

1. Perform periodic traffic studies to monitor the traffic-volume impact at the Harvard Road/I-271 interchange.
2. Collaborate with ODOT and adjacent communities to complete the widening of Chagrin Boulevard from I-271 to Lander Road. However, the Village only supports the widening if it includes companion components to adequately manage the traffic at Lander Circle and the traffic (south of the circle) traveling north bound toward the circle.
3. Provide adequate provisions for traffic safety and minimize future maintenance requirements by assuring:
  - All new streets are **built consistent with the Village Engineer’s** construction standards with careful consideration given to the need for access by emergency vehicles.
  - That loop streets serve new developments wherever possible to discourage through traffic in residential areas.

4. Utilize traffic calming techniques when significant increases in traffic volumes are anticipated, particularly:

- On major streets with residential frontage that is expected to continue;
- On local streets to reduce the potential for cut-through traffic.

Techniques to reduce speed could include: alternative paving or attractive median islands.

5. Evaluate, in cooperation with neighboring communities, the merits and feasibility of a new road connection through Chagrin Highlands from Harvard to Emery Road in Warrensville Heights which would more evenly distribute the expected increase in commercial traffic in the Harvard/I-271 vicinity.

## Environmental

Protect the quality of the natural environment within the Village by:

1. Ensuring the continued health and preservation of the watersheds, which are affected by storm water runoff from Orange Village, by consulting the Storm Water Management Program report and continued coordination with the Chagrin River Watershed Partners.
2. Reviewing the landscaping ordinances to:
  - Reduce the concentration of large areas of paving;
  - Utilize **“soft design” techniques (such as reduced curbing, distribution of storm water management in small areas; greater use of soft surfaces)** which are intended to reduce the concentration and improve the quality of water run-off; and
  - Develop a program that systematically achieves the reforestation of trees on both public and private property.
3. Maximizing opportunities for green space preservation by:
  - Adhering to storm water and riparian buffer plans and requirements;
  - Promoting the improvement of the Woodbran Facility; and
  - Promoting the application of the Orange Goes Green Certification Program standards for all building projects within the Village.

## Community Development

With the Pinecrest development and the possible full development of Chagrin Highlands South, the Village needs to take an on-going and pro-active role in community development. As time goes by these projects will see changes in tenants and the Village should not be reactive to these shifts but be an active

participant in assuring the sustained maintenance and quality intended and approved with the initial development. Therefore, the Village strives to have a designated manager of the process who directs the community development functions and also plays a more regional role by working with nearby communities in a collaborative effort to raise all municipalities in the area.

## APPENDIX A - Description of Environmental Features

### Soils

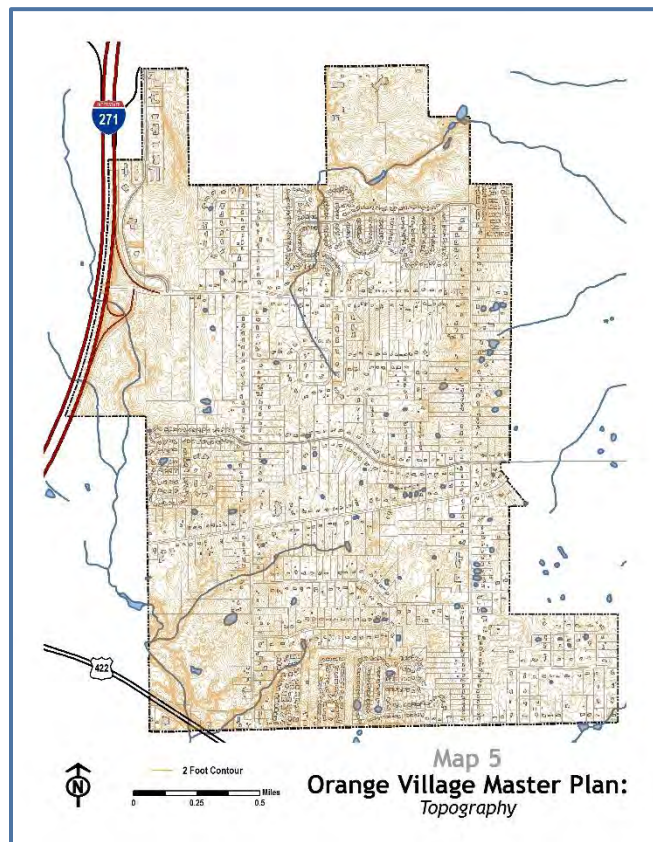
The Cuyahoga County Soil Survey identifies a variety of soil types in Orange Village. The primary soil type in the northern part of Orange is Mahoning Silt Loam, on 0% to 6% slopes, noted for its slow permeability rate and a perched high water table. Wadsworth Silt Loam, with 0% to 6% slopes, is poorly drained soil that dominates the southern portion of Orange. Storm water management and sanitary sewer improvements must be an intrinsic part of the site design and plan review process for development of the vacant parcels within Orange Village in order to mitigate or eliminate the problems associated with construction on these soil types.

### Topography

Lander Road is generally the **“ridge line” in Orange**. West of Lander the topography generally slopes downward to the west. From Lander Road to the east the slope is generally downward to the east. In the northwest part of the Village near Orange Place and Pinecrest Drive, there is a downward slope from the north to the south. Near Landerwood Glen in the northeast portion of Orange, the land slopes down from the west to the east.

### Groundwater Resources

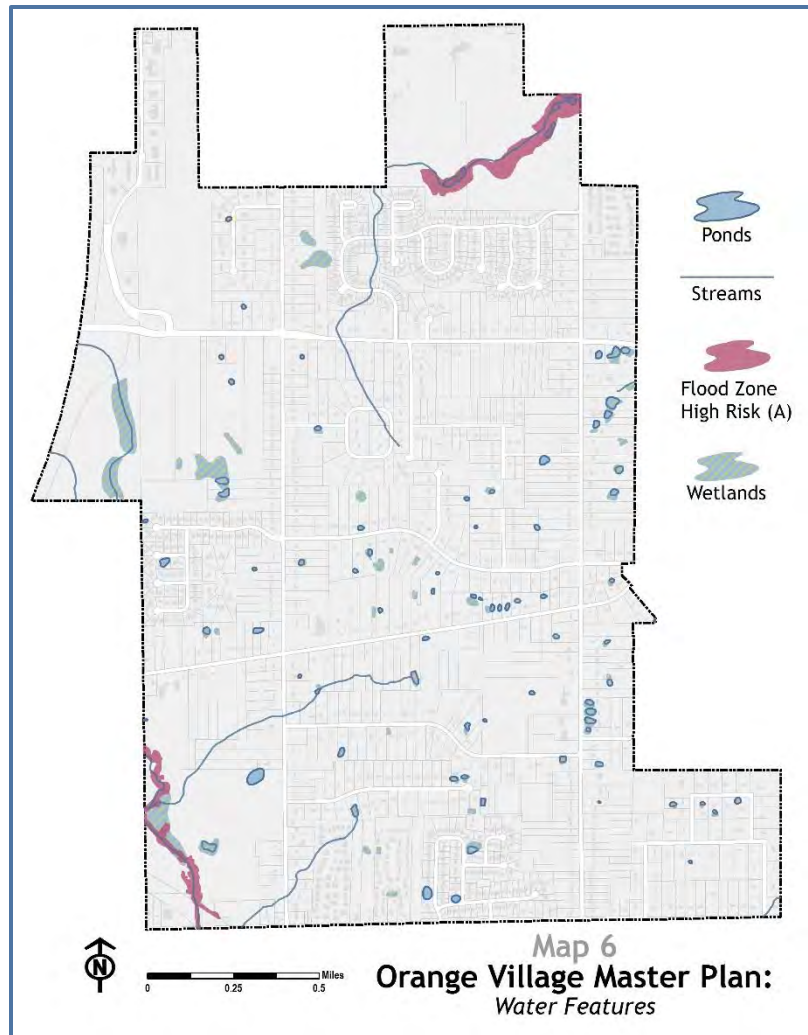
There are three different groundwater deposits within the Village limits. Groundwater from the most prevalent deposit is obtained from buried valley



sand and gravel deposits of limited thickness. Wells drilled here will yield an average of 10-25 gallons of water per minute. The second most prevalent one is groundwater obtained from Cuyahoga Group, Chagrin Ohio, or Bedford Shales. The yield for wells in this group will yield between 3 and 10 gallons a minute. The least prevalent deposit is groundwater from Sharon Sandstone. Water, at between 10-25 gallons per minute, may be obtained from relatively shallow wells of 50 feet or less.

### Floodplains

Two areas of Orange Village are within 100 year flood plains: Wiley Creek located in the northeast part of Orange; and, the upper tributary of Tinkers Creek located in the southwest portion of the Village (within the Lakes of Orange property). To prevent increased flooding in these areas careful planning and consideration of flood and storm water requirements are necessary when nearby construction occurs. Prior to any construction, the Village Stormwater Management Plan should be consulted.



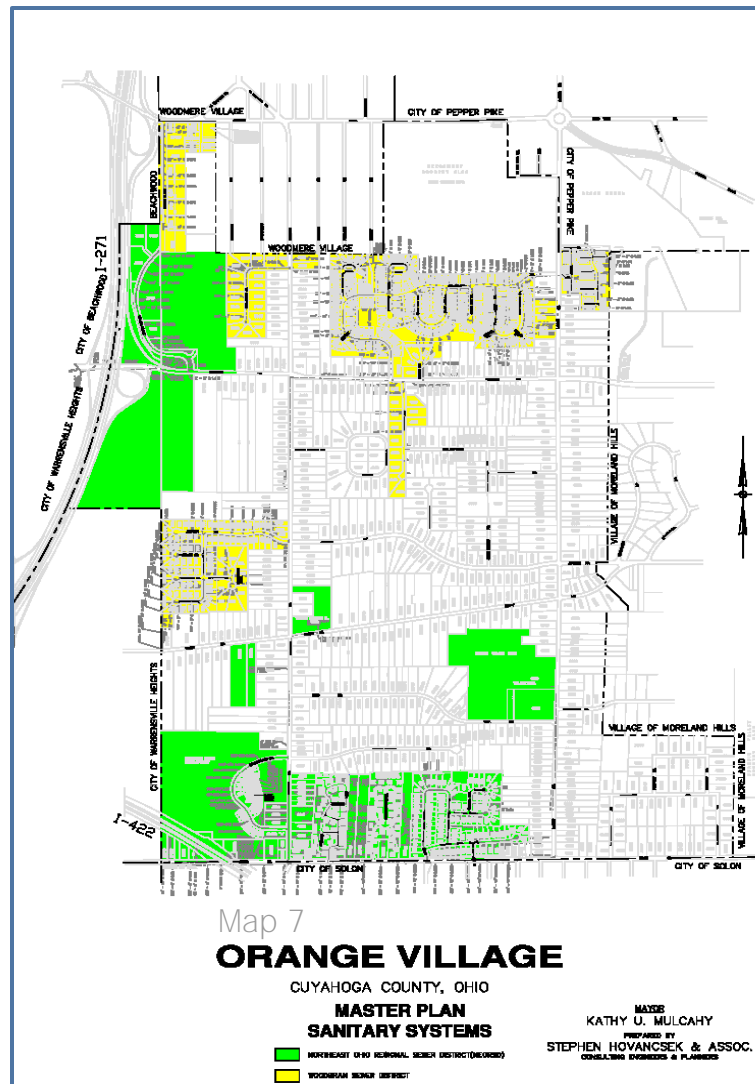


## APPENDIX B - Description of Infrastructure

### Sanitary Sewer

The majority of the land area in Orange Village is characterized by large lot (one-and-one-half-acres), single-family residential developments which are served by septic systems on individual lots (as monitored and administered by the Cuyahoga County Board of Health.) The remaining areas within Orange Village that are served by sanitary sewer service consist of newer residential developments that are primarily either cluster developments or homes on smaller lots. These include Stonebrooke Condominiums, Orange Hill, Orange Tree, Landerwood Glen Condominiums, Orangewood, Villas of Orange, Waterford Court, Cambridge Court, Oxford Court and the proposed Lakes of Orange development on Brainard Road.

The **Village's** Storm Water Management Program states that the existing developments served by home sewage treatment systems can safely remain as they are. However, new developments should be connected to sanitary sewer service wherever feasible. Where connecting to the sanitary sewer is not feasible, new development must meet the regulations of the Ohio EPA and the Cuyahoga County Board of Health.



Orange Village is presently served by two separate Sanitary Systems. The Northeast Ohio Regional Sewer District provides gravity service along Miles Road, a portion of Brainard Road (Miles Road to just south of Hidden Valley) and the southern portion of Orange Place Drive. The district also serves Village Hall and the related park as well as the neighboring Church to the south on Lander Road via a force main.

Orange Tree, Landerwood Glen, Waterford Court, Cambridge Court, Orangewood, Orange Place north, Oxford Court and Chagrin Boulevard are all serviced by the Woodbran Wastewater Treatment Plant located on Belmont Road in Woodmere Village to the north.

The Woodbran facility, constructed in 1961, over fifty-five years old, is operating very near or at its rated capacity. In addition to gravity lines, this treatment facility also relies on two area pump stations to carry flows to the plant for treatment: one of which is located in the Village of Orange and serves the Orange Tree subdivision. **The facility's owner is under a continuing directive from the Ohio EPA to meet established effluent standards.**

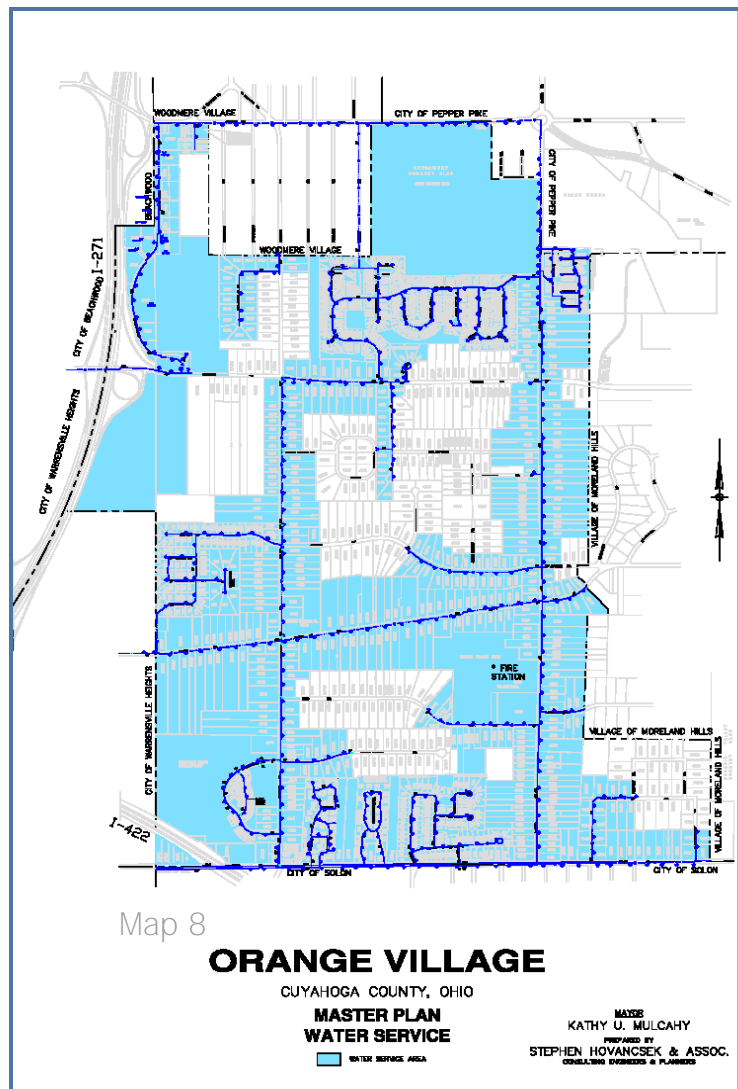
## Water

Cleveland Water has now **been extended to "cover"** much of the Village (See Map 8). Moreover, waterline stubs were recently extended so that fire hydrants are now within 2,000 feet of every home. This enables hydrant hook-ups in all locations so that water trucks are no longer needed to fight fires.

However, even with the above extensions, it is estimated that about half of Village residents will continue to use well water for domestic purposes. Therefore it continues to be an important community objective to preserve the **Village's ground water** resources.

## Storm Water

The Storm Water Management Program study and report sets forth storm water management policies and strategies to protect the local Chagrin River and Tinkers Creek watersheds. Currently, the Village storm water system consists of roadside swales and culverts, with some small sections of storm sewer pipe that drain into many unnamed creeks throughout the Village. Roadways that have been reconstructed, such as a portion



of Harvard, Lander and Emery, along with the streets in newer developments, have curbs and gutters and an enclosed storm sewer system. However, the outlets of these enclosed portions also discharge into the unnamed streams. These creeks flow through numerous ponds throughout the Village which are the headwaters of Tinkers and Wiley Creeks.

The storm water management document also identifies strategies for detection and elimination of illicit discharges and pollution as well as for ongoing monitoring and maintenance of the storm water system.

## PART II

### Supplemental Planning Studies

Orange Goes Green Initiative  
2014 Village of Orange Community Survey Results Report  
Orange Community Park Master Plan (October 2003) Update  
Orange Elderly-Friendly Communities Initiative Three Strategic Action  
Plan (final draft April 2006)  
Master Sanitary Sewer Plan, October, 1998 Update  
Chagrin Highlands Plan (1999) Replace with New  
Pinecrest - Approved Preliminary Development Plan  
Miles/Brainard Road Area Plan (1997)  
Chagrin Boulevard Corridor Study (2003)  
Orange Village Storm Water Management Plan (Updated Annually)