

The Willoughby Hills Comprehensive Land Use Plan Team

included the following:

Citizens Advisory Committee

Chris Biro	Adin Moore
Anthony Camino	Bruce Moze
Frank Cihula	Michael Neundorfer
Romeo Ciofani	Morton O'Ryan
Mike Coleman	David Raynor
Linda Cover	Georgette Rolan
Joyce Grady	Charlotte Schryer
Billie Kamis	Eugene Skerkoski
Chuck Kenzig	Madeleine Smith
Donna Klements	JoAnn Stusek
Michon Koch	Shirley Vincenty
John Lillich	Thomas Woodman
Clara Maurus	William Young
Ed McKenna	Joe Zawatski

D.B. Hartt, Inc., Planning and Development Consultants

David Hartt, President
Kristin Hopkins, AICP Principal Planner

On December 4, 2002, the CAC formally transmitted this report to the Willoughby Hills Planning and Zoning Commission for their consideration.

On March 20, 2003, the Willoughby Hills Planning and Zoning Commission recommended approval of this Comprehensive Plan after reviewing and making minor refinements to this report at its meetings on February 20 and March 6, 2003.

On June 12, 2003, the Willoughby Hills City Council accepted this Comprehensive Land Use Plan, adopted as Ordinance 2003-21.



planning and development consultants

The Crittenden Building
1382 West Ninth St. • Suite 420
Cleveland, Ohio 44113-1231
216.696.0400 • Fax 216.696.3464
www.DBHartt.com

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Chapter 1: Introduction

Willoughby Hills adopted its first zoning ordinance in 1954, based on the township zoning in effect at the time. In the 1970's, the voters adopted a City Charter, and one of the charter's requirements was for the City to adopt a comprehensive plan, with updates to occur at intervals not to exceed 5 years. The City adopted its first Comprehensive Land Use Plan in 1972. Since then, there have been three formal updates, two with assistance from the County Planning Commission (1979 and 1990), and one with assistance from a private consultant (1994).

The 1979 and 1990 updates underscored the community's desire not to make broad sweeping changes that would change the character of the City, since residents were generally pleased with development in Willoughby Hills. Yet the Plan updates stated that the City's development regulations needed to be revised to better achieve the goals of the citizens and to ensure that the character of the City was maintained. However, the zoning code has never been revised to be consistent with the Land Use Plan, meaning the previous plans have never been implemented.

Recently, there has been much interest in the conservation of the natural environment, especially along the Chagrin River valley and the Euclid Creek corridor. The Chagrin River watershed has been the center of collaboration between many communities to help mitigate the effects of water runoff and flooding downstream near Lake Erie. The Euclid Creek has been the focus of studies due to pollution and malfunctioning/insufficient septic wastewater systems.

Despite environmental issues, development in Willoughby Hills continues. Historically in Willoughby Hills, re-zonings have been achieved through judicial means. These judicial decisions have been the outcome of a reactive approach to planning and zoning not a proactive one. This comprehensive planning process is intended to yield a more proactive approach to growth and development.

Purpose of the Plan

This Comprehensive Land Use Plan seeks to establish a vision for the future of Willoughby Hills to ensure that anticipated growth is properly managed while being responsive to current needs. Guidelines contained in this document are intended to aid the City in making decisions regarding land use, economic development, conservation of open space, recreation needs, and utility extensions. It also includes prioritized strategies and implementation measures to carry out the objectives identified in the Plan.

This Plan establishes policies that are based on an analysis of current trends, development pressures and existing development patterns. The goals and land use policies contained in this Plan have been reviewed and debated in a number of public forums, and therefore represent the consensus of a range of community interests. The Plan provides specific detailed action steps that offer suggestions on ways to actually implement the policies.

Many of the policies in the Plan involve changes to the zoning code that can be undertaken in a relatively short time. Others are long-range policies, some of which will take considerably more

effort to achieve. And yet other policies, especially those dealing with redevelopment, are very far reaching and will need to occur in incremental steps.

The adoption of this plan establishes guidelines to aid the City in making future land use decisions. **No laws or ordinances are changed by this Plan.** The most important tool the City has to carry out the policies of this Plan is the Willoughby Hills Planning and Zoning Code. This Plan includes specific **recommendations** for updating and modifying the existing zoning and subdivision regulations, but **in order to actually adopt the recommended changes, a formal zoning amendment process will need to be undertaken as a separate and distinct action.**

The Plan's policies are primarily influenced by the City's current development patterns and its context within the regional market. As a result of these influences, the Plan addresses the following:

1. Economic Development – Ways in which the City can maintain a balanced tax base.
2. Remedial or ongoing mechanisms to ensure sustained marketability of the City's existing land uses (both residential and non-residential) with respect to:
 - ▶ Property maintenance.
 - ▶ Avoiding or eliminating obsolescence.
 - ▶ Suitable infrastructure.
 - ▶ Community facilities.
 - ▶ City services.
3. The range of housing options offered in order to be responsive to demographic patterns and owner preferences with respect to:
 - ▶ Alternative types of residential development (conservation, senior, townhouse, etc.).
 - ▶ Marketability of existing or new housing stock.
 - ▶ Quality and value.
4. Ways in which the City can spur redevelopment and strengthen its commercial areas over time.
5. Ways in which the City can increase its financial capability to realistically carry out and enable the development/redevelopment objectives.

The Planning Process

In December 2001, City Council, based on a recommendation from the Planning & Zoning Commission, retained D.B. Hartt, Inc., (D.B. Hartt), a land use planning consultant firm, to aid in the preparation of the City's Comprehensive Plan.

In order to ensure that the goals and policies for the future development of the City reflect the desires of the overall community, the Planning & Zoning Commission determined that the formation of an ad hoc committee was the best method to ensure substantial public input. The City administration, with the assistance of D.B. Hartt, created a Citizens Advisory Committee (CAC).

The CAC was comprised of the Mayor, two members of Council (one also a member of the Planning & Zoning Commission), the Planning & Zoning Commission in its entirety, one member of the BZA, a member of the recreation commission, and initially 18 additional citizen representatives. The additional citizen members were deliberately selected to represent a wide range of City perspectives such as environmental, school, parks and recreation, business, and developer/homebuilder. The purpose of the diverse representation was to ensure that most (if not all) views that could be raised at public meetings would be represented on the Committee. In addition, D.B. Hartt was responsible for facilitating the CAC meetings and providing professional planning expertise and guidance to the committee.

At the start of the planning process, each CAC member was interviewed in an informal manner in order for the consultant to gain a better understanding of the issues to be addressed in the Comprehensive Plan.

Through a series of regularly scheduled meetings that were open to the public, the Committee:

- Reviewed a summary of the interviews;
- Selected issues to be addressed by the Plan;
- Brainstormed strategies to realistically address the issues;
- Formulated detailed policy recommendations; and
- Designed implementation measures to carry out policy recommendations.

In addition to the Citizens Advisory Committee meetings, the Committee and D.B.Hartt jointly presented the Preliminary Plan to City residents at a formal public meeting in July 2002. Once the preliminary policies were fine-tuned, a second public meeting was conducted in November 2002. Comments from these public meetings were discussed with the Citizens Advisory Committee and appropriate modifications to the Plan's policies and implementation strategies were made.

The policies contained in this Plan are based on current conditions and assumptions of future activities. However, unexpected development in surrounding communities, advances in technology, changes in utility service or other infrastructure improvements, and other unforeseen changes, are factors that can alter the appropriateness of policies in this Plan. Therefore, as with any document that establishes guidelines for the future, the policies contained in this report should be periodically reevaluated to ensure their relevancy. The City Charter requires this review at least every five years.

Chapter 2: Context For The Plan

This chapter provides an overview and analysis of historic development, trends and existing conditions, including comparisons of Willoughby Hills to surrounding communities in Lake, Cuyahoga and Geauga Counties, and other key considerations. This analysis is necessary in order to understand the factors that influence and limit the development potential of areas within the City. This analysis also provides the foundation on which goals and objectives are formulated and policies and strategies established. The more noteworthy statistics are highlighted below while the complete set of data in tabular format is included in the Appendix.

Historical Context

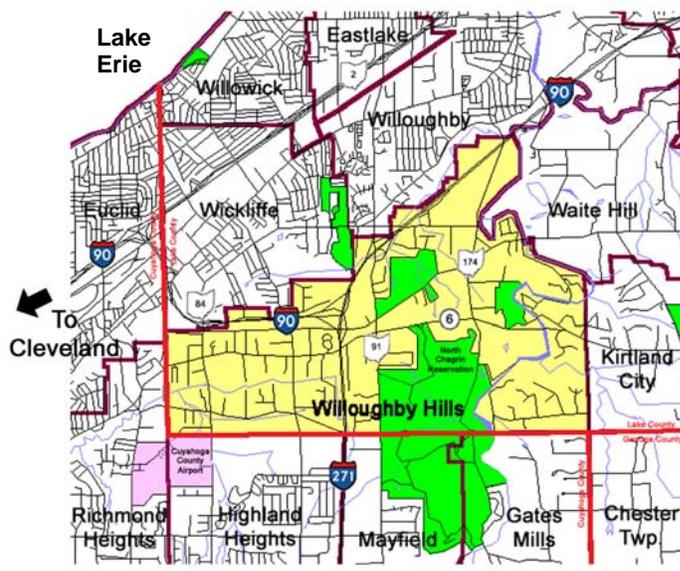
Chagrin Township was formed in 1815 and encompassed the land bordered by Lake Erie, Mentor Township, Kirtland Township, Mayfield Township, and Euclid Township. In 1834, Chagrin Township became Willoughby Township in honor of Dr. W. Willoughby. At that time, Willoughby Township included the modern incorporations of Willoughby, Wickliffe, Willowick, Waite Hill, Lakeline, Timberlake, Eastlake and Willoughby Hills. Willoughby Hills was the last area of Willoughby Township to incorporate. Facing annexation by surrounding communities such as Willoughby and Wickliffe, residents decided to incorporate as a village in 1954. With the 1970 census, when its official population reached the required 5,000 persons the village of Willoughby Hills became a city.¹

Regional Context

Willoughby Hills encompasses almost 11 square miles and is located in the southwest corner of Lake County. Downtown Cleveland is about a 20-minute drive on Interstate 90, and Cleveland Hopkins International Airport is about a 30-minute drive along Interstate 271/480. Willoughby Hills is adjacent to a number of communities including:

- Chester Township,
- Euclid,
- Gates Mills,
- Highland Heights,
- Kirtland,
- Mayfield,
- Richmond Heights,
- Waite Hill,
- Wickliffe, and
- Willoughby.

**Map 1
Regional Map**



¹ History derived from information supplied by the Willoughby Hills Historical Society, courtesy of Frank Cihula, 2002.

Willoughby Hills is bisected and bordered by two major highways: Interstate 90 and Interstate 271. Entrance/exit ramps to I-90 are located at S.O.M. Center Road in the northern section of the City and at Bishop Road, adjacent to the north boundary of Willoughby Hills, in the western section of the City. There are no entrance/exit ramps to I-271 within the City. Local access to Willoughby Hills and the other major highway routes through the City include the following state routes:

- ▶ U.S. Route 6 (Chardon Road) – East/West access from Richmond Heights to Kirtland
- ▶ State Route 84 (Bishop Road) – North/South access from Wickliffe to Highland Heights, and
- ▶ State Route 91 (S.O.M. Center) – North/South access from Willoughby to Mayfield Village.

Natural Features

Willoughby Hills is comprised of approximately 7,000 acres, which includes about 1,050 acres of parkland. The City is characterized by large residential lots and rolling hills. There are two unique topographic environments: east of S.O.M. Center Road (State Route 91) the terrain is fairly steep with deep river valleys; and to the west of S.O.M. Center, the landscape has a more gentle roll.

Willoughby Hills drains into two separate watersheds: the Chagrin River watershed and the Euclid Creek watershed. The Chagrin River flows through the eastern portion of the City. Faced with increasing water flows due to development upstream, the Chagrin River has been the center of attention of the cities in the watershed. The western portion of the City lies in what is known as the Euclid Creek watershed. The Euclid Creek watershed has gained attention recently due to pollution caused primarily by failing septic systems.

On the east side of the City, the river valley is defined by steep wooded hillsides. Due to these steep inclines, the City drafted and adopted hillside regulations that subjects development on land with areas designated as “protected hillsides” to a more detailed review. The Protected Hillside Area Map (See Map 2) illustrates land that is comprised of slopes greater than 30%, or considered by the City Engineer (with a team of experts) to have unstable soil conditions, or both.

**Map 2
Protected Hillsides**

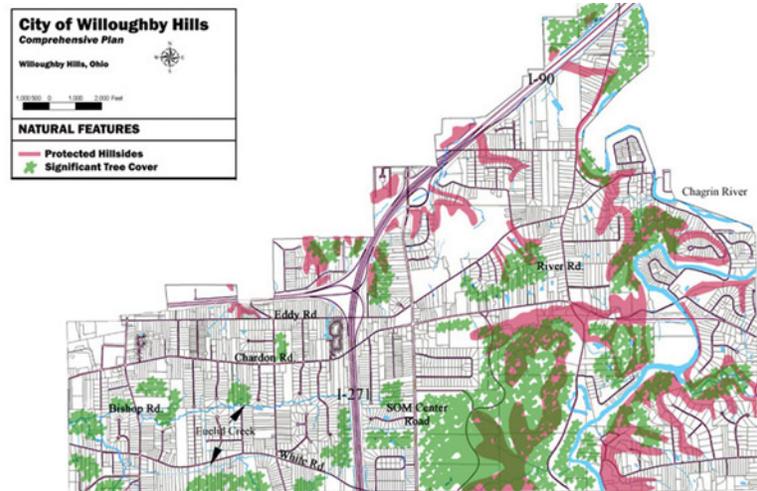
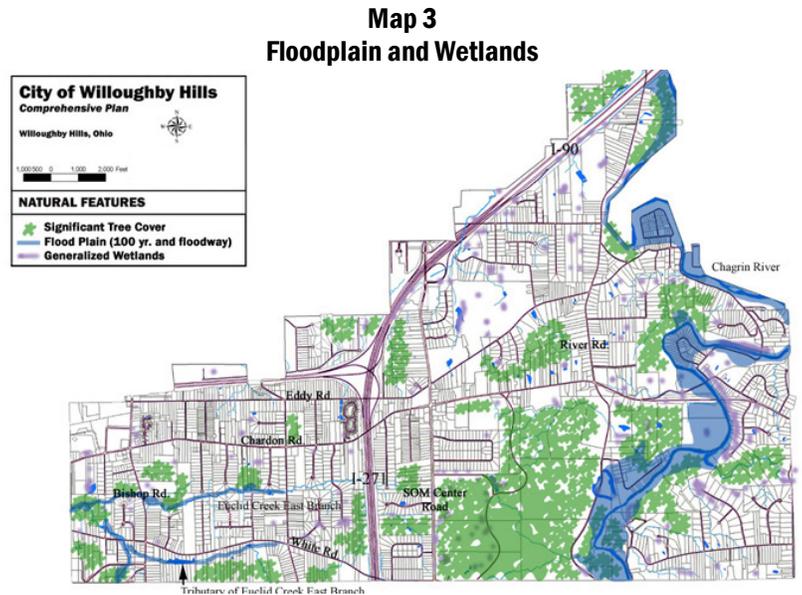


Figure 1: Chagrin River

Vacant land that is in the floodplain and/or wetlands equals approximately 321 acres or four percent of the land in the City. Land within the floodplain becomes more prone to flooding as development intensity increases upstream, and less emphasis is placed on on-site detention. Floodplains are important because they serve a vital function by reducing the height and speed of floodwaters. It is important for this reason to retain these floodplains in their natural environment as much as possible to permit natural flooding and pooling when water levels reach high limits.

The majority of land along the Chagrin River is noted on the FEMA² maps as being in the floodplain. Selected lands throughout the Euclid Creek Corridor's tributaries are prone to flooding as well, but these lands are small in comparison to the flood lands of the Chagrin River. The primary wetlands that exist are shallow marshy lands, shrub/scrub wetlands, and wet meadows. These wetlands, though few and far between as shown on Map 3, are nevertheless important to the overall hydrology and flood control of the area.



Riparian corridors, also known as stream corridor greenways, provide a variety of environmental benefits that impact water quality, habitat, and human health and well-being. Riparian corridors are linear stretches of land along waterways. Conservation of the Chagrin River and Euclid Creek riparian corridors is therefore important for a number of reasons.

Healthy riparian corridors, which include wetlands, native vegetation, and tree cover, help to improve and protect the quality of water in rivers and streams. Vegetated riparian areas filter pollutants, such as nutrients, metals and other toxic substances, from surface runoff before it enters the waterways. Vegetation along streams also prevents erosion of stream banks, controlling sediment levels in streams. Riparian corridors provide important habitat for many plants and animals. Canopy cover helps to shade streams, which enables aquatic life to prosper, while other animals make their homes in the vegetation along stream banks. Finally, a healthy riparian corridor also provides natural beauty and recreational opportunities such as hiking, canoeing, photography, and bird watching; settings that are difficult to recreate.

² Federal Emergency Management Agency

Several entry points into Willoughby Hills are noteworthy for their scenic value:

Rural Landscapes and Views of the River Valley

Chardon Road and River Road provide scenic vistas of the rural landscape when entering the river valley. Traveling along Chardon Road, on the east side of the City, provides views of the Chagrin River valley including a historic bridge traversing the River just north of Chardon Road. River Road offers many scenic vistas of the Chagrin River, the most prominent being in northern Willoughby Hills as the road winds along the edge of the riverbank high above the River, especially where the road curves and the traveler’s line of sight over the foliage reveals breathtaking views of the river valley. The other vista view is available to the southbound traveler just south of Chardon Road overlooking the valley with the Cleveland Metroparks to the right and privately owned land to the left.



Figure 2: Chagrin River from Historic Bridge

Wooded Steep Slopes

Wooded steep slopes can also be observed along these two major roads. While emerging from the river valley westbound on Chardon Road, a traveler experiences views of the natural wooded slopes of Willoughby Hills. The other location to experience the wooded slopes (along a major road) is on River Road south of Chardon Road while in the river valley and while emerging from the river valley. Many of the observable wooded steep slopes exist in the Cleveland Metroparks’ “North Chagrin Reservation” which encompasses nearly 900 acres in the south central portion of Willoughby Hills and is open to the public.

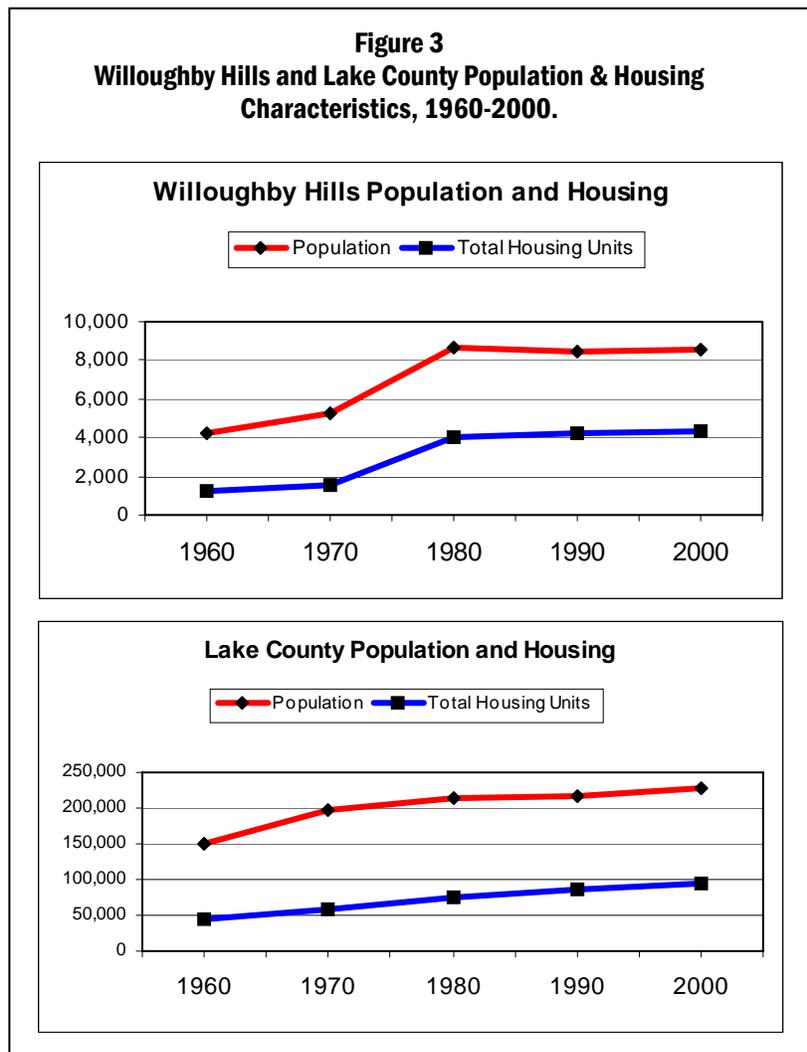
These views of the natural landscape provide memorable experiences to residents who travel along these various routes and therefore contribute to the character and image of Willoughby Hills.

Historic Development

The majority of the growth in Willoughby Hills occurred in the 1960's and 1970's. In the 1970's, the population in Willoughby Hills increased by more than 60% while the average growth rate in the region was around 20%, see Figure 3.

This large increase was due primarily to construction of a few high-rise apartment buildings. In 1970, only 25% of housing units in the City were multi-family units, which was similar to the percentage of multi-family units in Lake County. By the end of the 70's, over 1,300 apartment units were constructed, compared to less than 200 single-family homes³. By 1980, multi-family housing accounted for over 52% of all units in the City. These apartments were located in a few high-rise apartment complexes on land area that comprised less than 1% of the overall land area of the City, and all within a mile of a major highway interchange. The majority of the new single-family homes constructed during this time were constructed in the western portion of the City where flat land was readily available.

By 1990, the percentage of multi-family units had increased to 54% of the City's units, but by 2000, the percentage had dropped to 44%.



³ Lake County Planning Commission. *Willoughby Hills Master Plan 1979*. Page 2.

Population and Housing Characteristics

Since 1980, the number of dwelling units has slowly increased in the City: by 6.2% between 1980 and 1990, and by 1.3% between 1990 and 2000. (See Table 1) However, Willoughby Hills' growth rate for dwelling units during these two decades was considerably less than other communities within suburban Lake County and some eastern Cuyahoga County communities.

By 2000, there were 4,292 dwelling units within the City, reflecting an average increase of less than six units per year. The total number of residential building permits issued for Willoughby Hills between 1996 and September of 2001 was 67, or approximately 11 units per year.

Assuming that all units for which permits had been issued were constructed by the summer of 2002, it is estimated that there are currently 4,314 units in the City (see Table 2), which is less than a one percent increase from 2000.

Despite the continual increase in the number of dwelling units between 1980 and 2000, during this same time there was very little change in the City's population: total population decreased by 185 persons (2.1%) between 1980 and 1990, however increased by 168 (2.0%) between 1990 and 2000 (see Table 3).

**Table 1
Comparison of Dwelling Units
1980 - 2000**

	1980	1990	2000
Willoughby Hills City	3,989	4,235	4,292
% increase	--	6.2%	1.3%
Eastern Cuyahoga Co*	34,630	35,673	36,490
% increase	--	3.0%	2.3%
Lake Co	74,792	83,194	93,487
% increase	--	11.2%	12.4%
Geauga County	24,049	27,922	32,805
% increase	--	16.1%	17.5%

* Includes Euclid, Gates Mills, Highland Heights, Mayfield Village, and Richmond Heights.

Source: US Census Bureau.

**Table 2
Estimated Dwelling Units - 2002**

	2000 Census	Average # Permits per year	Units 2000- 2002	Total units 2002
Willoughby Hills	4,292	11	22	4,314

Source: Lake County Department of Building Standards.

**Table 3
Comparison of Population
1980 - 2000**

	1980	1990	2000
Willoughby Hills City	8,612	8,427	8,595
% increase		-2.1%	2.0%
Eastern Cuyahoga Co*	81,646	76,705	77,671
% increase		-6.1%	1.3%
Lake Co	212,801	215,499	227,511
% increase		1.3%	5.6%
Geauga County	74,474	81,129	90,895
% increase		8.9%	12.0%

* Includes Euclid, Gates Mills, Highland Heights, Mayfield Village, and Richmond Heights

Source: US Census Bureau.

The increase in the number of dwelling units without the same increase in population growth is a result of a national trend toward smaller family size as well as an increased number of single person households, and an ever-increasing elderly population. Table 4 indicates the trend to smaller household sizes over the last 40 years.

Table 4
Average Persons Per Household
1960-2000
Willoughby Hills

	Owner-Occupied	Renter-Occupied	Overall Average
1960	--	--	3.4
1970	--	--	3.3
1980	--	--	2.23
1990	3.00	1.35	2.10
2000	2.6	1.64	2.16

Source: 1960, 1970, 1980, 1990, 2000 U.S. Census.

It should be noted that, beginning with the 1990 Census, students living outside the City are not counted as residents of Willoughby Hills.

Another observation of Table 4 is the higher occupancy rate of owner-occupied housing units (2.6 persons per household) compared to renter-occupied households (1.6 persons per household); numbers that are significantly different than the overall average household size of 2.16.

Existing Development Patterns

A community is made up of various elements that define its physical form such as streets, edges, nodes, neighborhoods, and landmarks. The combination, concentration, or diversification of uses contributes to the visual form of the community. The major streets within a community generally set the tone for the feel and character of that community. The major streets in Willoughby Hills are built to maximize automobile circulation, which then minimizes the importance, or even presence, of the pedestrian. City streets do not have sidewalks and the City does not have pedestrian paths within the business districts.

S.O.M. Center Road (State Route 91) is a major north-south regional state route connecting Willoughby Hills to I-90 and S.R. 2 to the north, and to U.S. 322 in Mayfield Heights to the south. S.O.M. Center is used as an alternate route when the I-90/I-271 spur is congested. S.O.M. Center Road generally has residential frontage within the boundaries of the City, with the exception of the intersection at Chardon Road where an office/retail/governmental center exists. The city has fought and upheld the residential character of S.O.M. Center Road to keep it from becoming a major regional commercial center.

Chardon Road (US Route 6) is a major east-west state route that connects the City with Kirtland and Chardon to the east, and offers access to I-90 via Bishop Road to the west. Chardon Road is used as a commuter route when I-90 becomes congested. Similar to S.O.M. Center, Chardon Road is primarily comprised of residential frontage with the exception of the commercial and governmental center at S.O.M. Center, a regional retail center at the intersection with Bishop Road and a few scattered commercial businesses located at various intersections.

Bishop Road is a major route for commuters traveling to Richmond Heights or Highland Heights from I-90. Bishop Road is also highly traveled due to the industrial development in and around the Cuyahoga County Airport. Such companies as the United Parcel Service have major facilities in the communities south of Willoughby Hills and use Bishop Road as a major throughway to connect to the regional highway system. Bishop Road, with the exception of the northern portion near the regional retail center, has a highly residential feel. The portion of Bishop Road near I-90 is to be expanded to accommodate two lanes of traffic in each direction to accommodate the increased traffic generated by the commercial development.

Edges of a community are linear elements that often prohibit or separate one area from another in either a physical or visual way. Ideally, these edges exist at the perimeter of the City; however, when these edges exist within the community, they act as barriers and divisions between parts of the community. Edges include railroads, interstate highways, power transmission right-of-ways, and natural topographic features. The Chagrin River, I-90, I-271 and the hillsides all serve as major edges within Willoughby Hills.

A node is an area with a concentration of particular uses or a group of similar uses. Often a node can be referred to as a core. There are two primary nodes within the City, one acting as the commercial/retail center of the City and the other characterized by governmental and professional office use. These nodes, respectively, are the Bishop Road/Chardon Road commercial core (including the Shops at Willoughby Hills) and the S.O.M. Center/Chardon Road concentration of office/retail buildings, which are close to City Hall and churches.

A neighborhood is an area, larger than a node that has common identifying characteristics such as lot size, building style, age, types of street layout, or unique natural features. Willoughby Hills has a variety of distinct neighborhoods that are defined by their common lot arrangements. Neighborhoods within Willoughby Hills are easily recognizable on a map because, largely, the streets between neighborhoods do not interconnect. This lack of connectivity is something that Willoughby Hills residents value. The residents recognize that residential streets have less traffic as a result of cul-de-sac endings.

A landmark is an icon in the City to which people refer and relate; a place that is widely used when describing geographic location within a community. For example, a resident may refer to a street off Chardon Road on the west side near Richmond Heights as being located across the street from the “Shops of Willoughby Hills.” By describing a road as being across from, or near this landmark, it is widely known to Willoughby Hills’ residents where the road is generally located. Other major landmarks would include the North Chagrin Reservation, the Chagrin River, City Hall and the surrounding City parks, the Cuyahoga County Airport, and the I-90/S.O.M. Center interchange area, just to name a few. Additional landmarks could include places of worship, schools, and businesses with visibility to main roads.

At the present time, approximately 67% of the land in the City is developed. Table 5 on page 14 indicates that the zoning classification that includes the greatest amount of land is “R” Residential 1-acre zoning, which is also the largest zoning classification as a percentage of vacant land. The City is then further broken down into land devoted to commercial, office, highway, and government open space/park land.

The Existing Land Use Map (Map 4 on page 15) indicates vacant land within Willoughby Hills. Because of the manner in which Willoughby Hills has historically approached the rezoning of land, the R-Residential zone has been (more or less) a holding pattern for rezoning. It is because of this that there is little land available in any other zone than R-Residential. Many communities devote the majority of their land to residential uses because these are the least impactful uses. Willoughby Hills is 77% residentially zoned which means there are 5,341 acres zoned for this use. Of these 5,341 acres of residential land, 3,098 acres (58%) are developed.

The second largest category of land in the City is land devoted to public or semi-public open space/recreation (15%); of this, the Cleveland Metroparks owns 878 acres including the North Chagrin Reservation and Manakiki Golf Course. Five percent is devoted to interstate highway right-of-way for Interstate 90 and Interstate 271. Only a small percentage of the City (3%) is devoted to commercial uses.

Existing Zoning

There are currently five zoning districts within the City. Three districts are primarily residential zoning districts: R Residential District, M Multi-family District, and M-1 High Rise Apartment District. There are two commercial districts, B Commercial and E Research, which provide for retail, service, and office uses. There is no industrial district. The existing zoning district boundaries are shown on Map 5, page 15. A summary of each district follows on page 16, while more detailed outlines of each zoning district are included in Appendix D, pages 80-86.

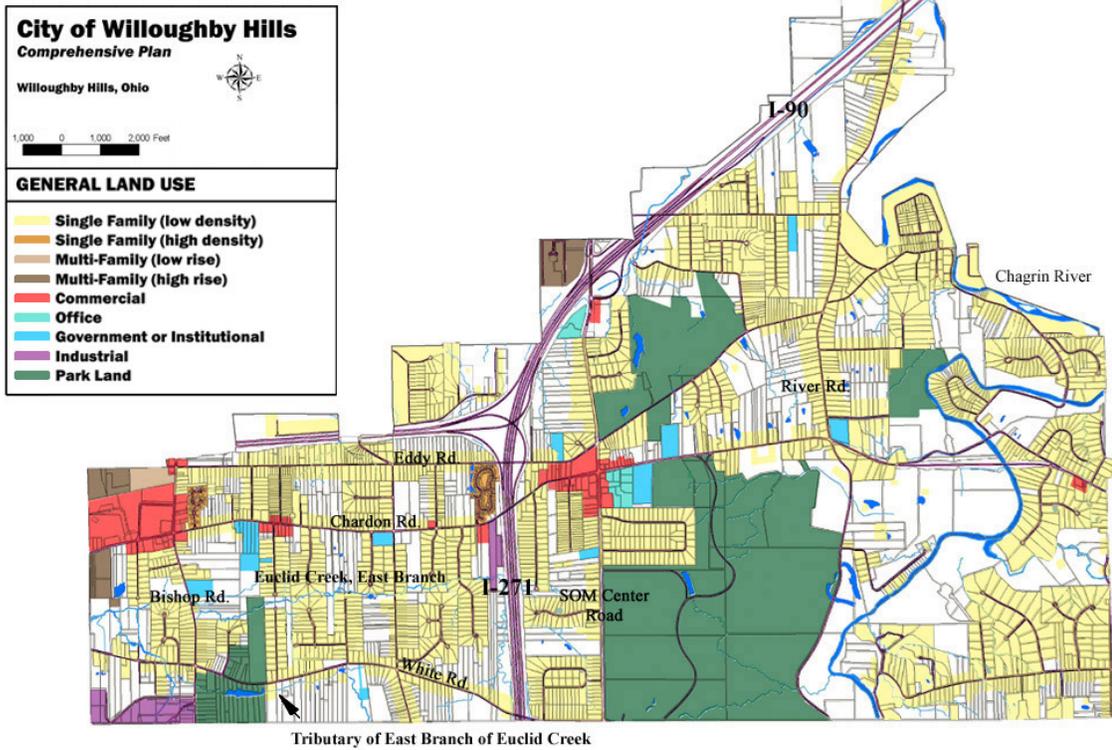
**Table 5
Summary Of Acres By Zoning District
Willoughby Hills**

Zoning District	-A- Total Acres in District	B % Developed	-C- Acres Vacant^a	-D- Flood Plain^b	-E- Total Developable Land^c	% of Total (Column A)
<i>Residential</i>						
R Residential	5,269	58%	2,233	311	1,922	36%
M Multi-Family	13	100%	0	0	0	0%
M-1 High Rise Apartment	59	83%	10	10	0	0%
Total Residential	5,341	58%	2,243	321	1,922	36%
<i>Commercial</i>						
B Commercial	199	91%	17 ^d	0	17	9%
E Research	14 ^e	79%	3	0	3	21%
Total Commercial	213	91%	20	0	20	9%
Total Interstate	350	100%				
<i>Parks/Recreation</i>						
Cleveland Metroparks ^f	878	100%				
Local Parks ^g	167	100%				
Total Parks/Recreation	1,045	100%				
TOTAL ACRES	6,949	67%	2,263	321	1,942	28%

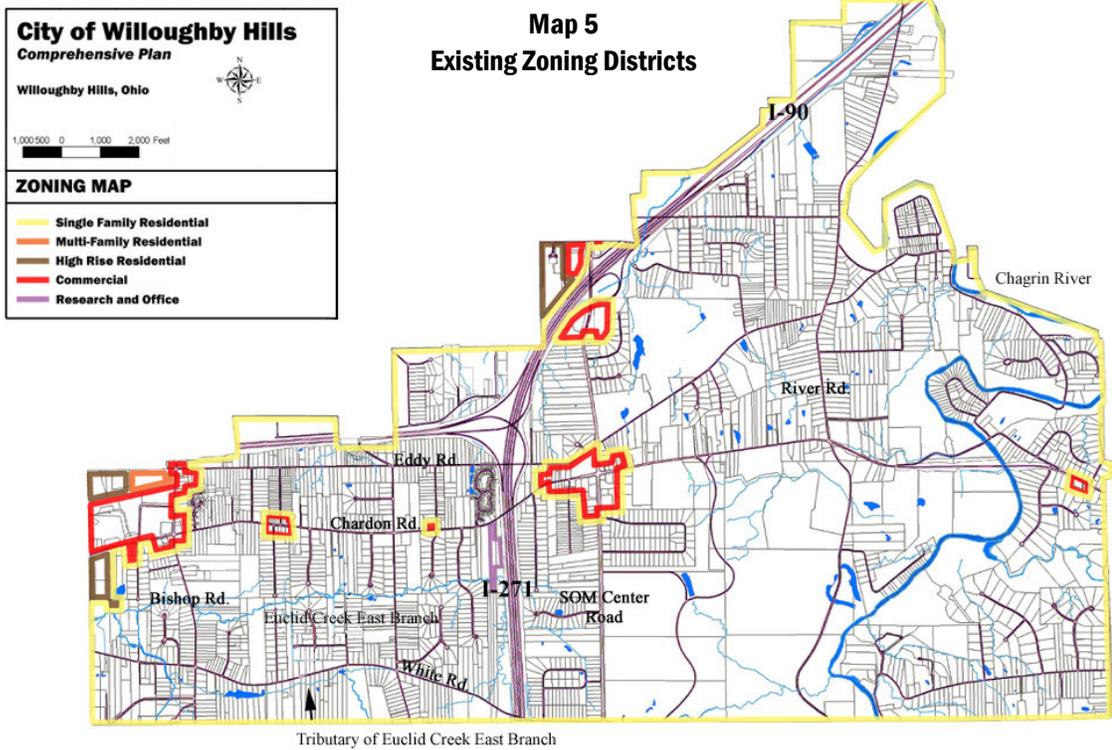
Notes to Table 5:

- ^a Calculated by D.B Hartt using 2000 aerial photos & base maps revised 2001 – includes hillsides and floodplains.
- ^b Only undeveloped land. Flood plain = undeveloped land in the floodway and 100 year flood plain.
- ^c Includes 368 acres in the protected hillside area. Hillside regulations regulate but do not prohibit development on steep slopes.
- ^d Includes pending litigation for M-1 use on 11.5 acres of commercially zoned land.
- ^e Includes 3 acres rezoned in spring 2002 to the E District from the R District.
- ^f Includes Manakiki Golf Course and North Chagrin Reservation.
- ^g Includes Airport Greens Golf Course, Hach-Otis Sanctuary, Roemisch Fields and Campbell Park.

Map 4 Existing Land Use



Map 5 Existing Zoning Districts



R Residential District

The intent of the “R” Residential district, with the 1-acre minimum lot size, is to preserve the rural character that Willoughby Hills offers its residents and to provide quality housing in a low-density environment. The R district is restricted to single-family development only (with the exception of governmental and institutional uses) and currently does not permit any alternative site standards for conservation developments.

M Multi-family District

The intent of the “M” Multi-family district is to provide for low rise, medium density development for persons who desire apartment style living in a low-rise environment. To blend this district into a low-density single-family environment, creativity becomes a crucial element. This district uses standards that are based on an entire development area, not conventional lots. Whether the development is on one, or 5 parcels, the standards apply to the perimeter of the development as a whole. The maximum density of a development in this district is fifteen units per acre.

M-1 High Rise Apartment District

The “M-1” High Rise district’s intent is to provide for high intensity development while still maintaining relative control over how such a development is achieved. The M-1 district requires a minimum project size and setbacks that will preserve the surrounding uses. The district requires buildings to be between 80 feet and 150 feet tall.

B Commercial District

“B” Commercial is the only true commercial district in Willoughby Hills. The intent of this district is to provide an environment where commercial businesses can locate in Willoughby Hills to provide services that the residents of the City and its neighboring communities will benefit from. The site development standards do not specify a minimum lot or project size for this district. Parking standards require that the parking area be equal to three times the ground floor area used for retail business or commerce.

E Research and Office District

The “E” Research district is only applied in one location, which is occupied by the Eaton Corporation. This district was designed to permit research and office uses such as laboratories, research and development and administrative support for the main or permitted business. This E District was expanded in spring of 2002, when the voters approved the rezoning of 2.7 acres from R to E.

Other Zoning Issues

Historically, the City of Willoughby Hills has taken a reactive approach to planning and zoning. The majority of land rezoned in the recent past had been done through court order or use variance. The City has had limited success defending its zoning ordinance in court. The underlying argument in law cases dealing with the rezoning of land is that the City did not have a land use plan that supported their zoning and showed that there had been care and thought put toward the creation of their zoning map.

The City has site plan review yet, without more detailed development standards, such as landscaping requirements, the plan review process does not offer the level of review authority desired.

Most modern commercial development occurs at 10,000 square feet of development per acre of land. With conventional parking standards, approximately 20,000 square feet per acre is used for parking, and that permits landscaping to be between 20% and 30% of the site area. The current requirement is to have a parking lot three times the square footage of the ground floor used for retail. By conventional standards, this leaves only 3,560 square feet of landscaping which, at a maximum, is approximately 8% of the acre of land used for the commercial use.

The City Charter requires that all re-zonings of land and changes in zoning that result in a change of the uses permitted in a district must go before the general public in a referendum election. The referendum requirement lengthens the time it takes to obtain a zoning change for development purposes. The Eaton Corporation development on Chardon Road is the third successful rezoning by referendum in Willoughby Hills. This land was rezoned in the spring of 2002.

Utilities

Willoughby Hills is serviced in its entirety with electricity, telephone, and water. The central sewer service area is not as broad. Within the last few years the City of Willoughby Hills has been charged with the need to install sanitary sewers on the west side of S.O.M. Center Road, south of Chardon Road, since the existing septic systems are failing and can not be replaced or upgraded in compliance with the Lake County Health Department's regulations. The parcels affected by this sewer mandate are typically parcels that are sub-standard lots platted before the adoption of the Zoning Code in 1954, though some do comply with the minimum lot size requirements.

Residential Development Capacity

In 2000, there were 4,292 dwelling units in Willoughby Hills and a population of 8,595. According to the City’s Building Department, there were 19 building permits issued for the construction of single-family dwelling units between the beginning of 2000 and September 2001. This number includes new construction only; permits issued for additions are not included. When combined with the 2000 census, and assuming all units were constructed, the number of dwelling units in the City in early 2002 was approximately 4,311. An additional 272 multi-family units are anticipated in a multi-family development located north of I-90 and west of S.O.M. Center Road.⁴

The development potential of the City is largely determined by the zoning on the vacant land. In the spring of 2002, there were approximately 2,240 vacant acres of residentially zoned land in the City. (See Table 5 on page 14 for a breakdown by zoning district.) Of this total, approximately 311 acres were considered wetlands and/or in a 100-year floodplain.

To estimate the residential development capacity of the City, the residentially zoned vacant land was converted to dwelling units by multiplying the vacant land by the effective density that results from the minimum lot size requirements in each district⁵.

As noted above, approximately 311 acres of the vacant land were in a floodplain and zoned with a minimum lot size of one acre. For the purpose of this evaluation, high and low projections were generated. The low projection does not include any vacant land in the wetlands/floodplain in the calculations. This projection yields (as Table 6 illustrates) an additional 1,636 units for a total of 6,219 at build out according to current zoning.

The high projection includes all of the vacant land in the R District, including acres in wetlands/floodplain. One-acre lots are large enough that the floodplain could conceivably be counted as developable land as it may be possible to design around the topography to ensure that the dwelling is out of the floodplain. Should this be the case, the City could expect a maximum of about 264 additional units for a build-out range of 6,219 to 6,483 units.

**Table 6
Residential Development Capacity**

1.	2000 Dwelling Units	4,292
2.	Building Permits Issued: 2000-Sept 2001 ^a	19
3.	Anticipated MF units from current project	272
4.	Estimated Units (subtotal lines 1,2,3)	4,583
		Low High
5.	Potential New Dwelling Units ^b	1,636 – 1,900
6.	Total Dwelling Units at Build-Out^c (% increase from line 4)	6,219 - 6,483 36% - 41%

Notes to Table 6:

- ^a Assumed complete by Summer 2002
- ^b Calculated by multiplying vacant land by estimated effective density based on each district’s minimum lot size. See Appendix B, Tables 10 and 11.
- ^c The sum of lines 4 and 5.

⁴ Rezoning on this parcel from Commercial was applied for in the early 1990’s but the project was never pursued. A new low-rise apartment development is pending based on court order.
⁵ The effective density takes into consideration factors for the area within a subdivision that is devoted to roads and the fact that not all lots in a subdivision are the minimum lot size.

Should all the vacant land in Willoughby Hills be developed by current standards, as calculated in Table 6 on the previous page, the increase in the existing number of dwelling units between 2002 and at build-out is 36% to 41%. While it is not likely that every acre of vacant land will ultimately be developed, the above analysis generates a useful benchmark against which the current zoning and proposed land use policies should be judged.

The U.S. Census Bureau reported that the population of Willoughby Hills was 8,595 in 2000. A more detailed analysis of occupancy indicated that owner-occupied units averaged about 2.6 people per household, while renter-occupied units typically averaged only 1.6 people per household. Since the single-family houses in Willoughby Hills are predominately owner-occupied, it is assumed that the 2.6 persons per household is a good indicator of the average occupancy of the existing single-family homes. With all the available developable land being in the R-Residential district, the 2.6 persons per household factor was applied to the additional single-family units at build-out to project the City's ultimate population to be between 13,330 and 14,020 persons.⁶

Economic Development Considerations

Typically, economic development is considered the primary way to reduce the increasing tax burden on community residents. Office development generates more real estate tax revenue per acre than retail or industrial development because offices have more floor area per acre than either industrial or retail uses. Retail development typically generates the second highest amount of real estate tax revenue per acre. As a category, residential development generates the lowest real estate tax revenue. In addition to real estate taxes, commercial and industrial uses pay personal property tax on machinery and equipment, tools, supplies and inventory.

Another aspect of land use is the level of services required compared to the amount of taxes paid. Service costs are generated by education needs, police and fire protection, and street maintenance, with the greatest share devoted to education. While safety protection and maintenance costs are generated by residents as well as commercial and industrial uses, only residents generate education costs. Therefore, not only do commercial and industrial uses pay more in taxes; they also require fewer services. This means that taxes paid by nonresidential uses subsidize the cost of education and thereby help to reduce the tax burden of residents.

On the other hand, compared to residential development, commercial and industrial developments generate more traffic, create more pollution, and have a higher proportion of impervious surface, which contributes to increased storm water run-off. Volumetrically, water runoff in the Chagrin River Watershed and the Euclid Creek Watershed is already a problem. As runoff increases, the City will ultimately need to allocate more funds to mitigate the effect of water runoff into the rivers and their tributaries. To a certain extent this can be solved with regulatory requirements on commercial and industrial development for storm water detention, but complete mitigation of the issue may not be realistic. In addition, large-scale office development is typically located in areas with high visibility to the highway network. Therefore, in determining whether or not expanded

⁶ This projection assumes that there is no change in the current zoning, as all vacant land currently exists in the R district. This number will change depending on changes in permitted density or rezoning of land to a more intense use. See also Appendix B, Table B-11, page 73.

economic development should be permitted, it is necessary for the City to weigh the tax benefits and the added convenience of having stores and offices nearby against the potential negative impacts outlined above.

Traffic Generation

As noted above, retail and office uses generate much more traffic than residential uses. Using a standard of 10,000 square feet of retail floor area per acre of commercial land, one acre of retail in a stand alone environment can be expected to generate approximately 400 vehicle trips per day, while trip generation for one acre of offices (at 10,000 square feet per acre) would be about 125 vehicle trips per day.⁷ This compares to about 10 vehicle trips per day for a single-family home, which, in Willoughby Hills equates to 8.5 trips per acre per day figured on an effective density of .85 units per acre. On a per unit basis, alternative housing such as townhouses typically generates less traffic than single-family homes. However, on a per acre basis, residential condominiums, for example, generate about 23 trips per day based on 4 units per acre. This amount of traffic is still much less per acre than that generated by the nonresidential uses noted above. This is not to say that economic development is bad, because it is still important to realize the tax benefits of such development. The negative impacts of commercial and industrial development must be balanced with the positive impacts with respect to tax income.

Tax Structure and Income

One of the primary sources of revenue for communities is the property tax. Willoughby Hills's present property tax rate is 70.24 mills. Taxes are paid on the assessed value of property, which is 35% of the market value. Because of various reductions, the effective rate that is actually applied to land in Willoughby Hills is \$1,646 per \$100,000 of residential valuation and \$1,746 per \$100,000 of commercial/industrial valuation. Of the 13 taxing jurisdictions surveyed, Willoughby Hills had the 4th lowest rate. Richmond Heights' rate of \$2,108 per \$100,000 of residential valuation was the highest while the Highland Heights rate of \$1,451 per \$100,000 of residential valuation was the lowest.⁸

Taxes are figured on a percent of a full tax rate. The full rate is a unilateral rate that is applied to all uses, commercial, industrial, residential, and agricultural. When paying taxes, however, a taxpayer is not required to pay the full rate; they pay an adjusted lower rate that is determined by applying rollbacks and discounts to the full tax rate. This reduced amount is known as the "effective rate". These discounts can be applied equally to the commercial/industrial tax rate and the residential/agricultural tax rate⁹, or they can be applied to rollback the taxes more for one of the two classifications.

⁷ See Table B-12 in Appendix B, page 74, for a detailed list of trip generation figures from the Institute of Traffic Engineer's Trip Generation Manual, 6th Edition.

⁸ Due to overlapping taxing jurisdictions for schools and other public entities, some communities are divided into two or more jurisdictions. See detailed tax comparison tables in Appendix C, pages 76-77.

⁹ Commercial/Industrial and Residential/Agricultural are classifications imposed by the County taxation structure.

Typically, commercial taxpayers pay a higher effective tax rate on their real estate. Yet, in Willoughby Hills, commercial taxpayers pay a slightly lower **city** tax rate than residential taxpayers, see Table 7 below. In comparison, the effective **county** tax rate for residential/agricultural uses is 80% that of the commercial/industrial rate (\$378 compared to \$467 respectively for \$100,000 of property value), while the effective **school** tax rate for residences is about 2% below that of the commercial/industrial rate (\$38 compared to \$44 respectively for \$100,000 of property value).

**Table 7
Taxes Paid Per \$100,000 Valuation**

	Total		County		City		Schools		Other	
	\$	%	\$	%	\$	%	\$	%	\$	%
Residential	\$1,646	100%	\$378	23%	\$252	15%	\$977	60%	\$38	2%
Commercial/ Industrial	\$1,746	100%	\$467	27%	\$249	14%	\$986	56%	\$44	2%

Between 56% and 60% of property taxes paid by a property owner go towards supporting the public school system (see Table 7). Because Willoughby Hills is only one of seven municipalities in the Willoughby-Eastlake School District, the schools are not solely reliant on economic development within Willoughby Hills. Economic development within the City benefits the tax burden on the residents with respect to school taxes, but there is not a direct relationship; it depends on other factors throughout the district.

For tax year 2000, the percentage of the total assessed property value that is attributable to

**Table 8
Willoughby Hills 2000 Real Estate Tax Valuation
(in 000s)**

	Existing		At Build-out	
TOTAL Valuation	\$221,552		\$383,777	
Agriculture/ Residential	\$165,739	75%	\$323,204	84%
Commercial/ Industrial	\$55,813	25%	\$60,573	16%

Source: Lake County Auditor

residential land was 75% compared to 25% for commercial, industrial and public utilities, including the value of tangible personal property. This illustrates the higher benefit of commercial and industrial uses since these uses comprise less than 5% of land area, yet they contribute more than 25% of the tax base. However, as Table 8 indicates, at build-out the proportion of residential valuation will increase to 84% of the total valuation because there are over

2,000 acres of vacant residential land compared to 17 acres of vacant commercial land.

Chapter 3: Key Issues

At the onset of this plan the CAC was presented with the background data presented in Chapter 2. After discussions with the CAC, both in group form as well as private interviews, several key issues arose that started to shape the direction of the comprehensive plan. These key issues were then discussed and deliberated to formulate the goals and objectives and eventually the policies and implementation strategies.

A. Residential Development: To what extent should the existing residential environment be permitted to be altered to accommodate diversity?

1. Should a townhouse district be established to allow for higher density residential development (4-6 units per acre)?
 - a. As a transition between commercial and lower density?
 - b. In other locations?
2. Should residential conservation development be permitted at 1 unit per acre as an alternative to a standard 1-acre subdivision?
3. Should locations for senior housing be considered?

B. Economic Development: To what extent should it happen, and where should it be located?

1. Should there be additional industrial development along Curtis Wright Parkway near the airport?
2. Should commercial development be permitted limited opportunities to expand near existing commercial areas?

C. Community: What is missing and what can be added to make Willoughby Hills a stronger community?

1. What can be done to give Willoughby Hills a “city center”?
2. To what extent should pedestrian connections be emphasized compared to vehicular connections?
3. What part would a school play in the enhancement of community in Willoughby Hills?

D. Open Space and Natural Resources: How are the natural resources being protected?

1. What is being done to protect the rivers and streams in Willoughby Hills?
2. What is being done to protect the rural character with respect to hillsides?
3. Are septic systems an acceptable alternative to public sewers where the soil conditions are right?

E. Defensible Regulations: What is being done to be proactive in the land use and zoning of Willoughby Hills?

