



Shawnee Hills

Comprehensive Land Use Plan

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Prepared by
Delaware County Regional Planning Commission
Delaware County, Ohio

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Executive Summary

The original subdivision plats known as the “Shawnee Hills Additions” collectively totaled over 3,600 lots. They were platted in the 1920s in an effort to create a resort fishing community on the O’Shaughnessy Reservoir of the Scioto River. Lots were small, typically 35’ by 70’, exclusive of the road easement. Many of the platted streets were initially constructed to access the lots, but no utilities were installed because no public water or sewer was available.



Lacking major utilities, village growth initially was slow, standing in 2001 at about 419 residents, 200 homes, and 30 businesses. Meanwhile, Delaware County grew at an astounding 64.3% from 1990-2000, the fastest growing county in Ohio for that '90s. The county's growth continued in the decade 2000-2010, posting an additional 58% increase in population. That same decade brought an agreement with Columbus that paved the way for sewer in the Village. Its strategic location in the south of the county, adjacent to the city of Dublin, led to a 2010 population of 681. This represented a 63% increase in population for the decade.

The constraints of the 1920s plat offer challenges as well as opportunities. There are 2,199 platted lots in the village, yet the sewer system, designed to correct septic overflows to the O’Shaughnessy Reservoir, a Columbus drinking water supply, cannot serve each platted lot individually. An allocation plan (ordinance) treats “vested” non-conforming lots of record as conditional uses if they cannot meet current lot size requirements. Every landowner in the village has viable use of his property and sewer service, though not every lot can be granted a tap.

Because the original plat is a dense grid, many desirable elements of Traditional Neighborhood Design (TND) exist. These include grid streets, shallow setbacks, street trees, small lots at urban densities, and walkable neighborhoods with a commercial core. Generally, street improvements that incorporate improved drainage are recommended.

There are opportunities for several new commercial uses along Dublin Road. New commercial uses could be approved under the new Select Planned Commercial District, which gives flexibility to the design plan. Access management controls (limiting all new curb cuts to side streets, not Dublin Road; creating stacking and turning lanes as needed, etc.)

are important to prevent congestion and to enhance safety on this rolling state highway that is the Main Street of the Village.

The intersection of Dublin Road and Glick Road has been identified as a major source of congestion, having a direct impact on the economic opportunities of the area. The solution is made difficult by the numerous entities sharing responsibility for the intersection (The City of Dublin, the Village of Shawnee Hills and ODOT). Dublin is proceeding to engineer a solution; a project that the Village should monitor and support. At some point, the Village may have to flatten some of the tops of the hills on Dublin Road to improve safe sight distance. This would be a village project, even though Dublin Road is a state route.

A Dublin Road streetscape plan, with walkways, signage, and lighting, has been recommended and is in the implementation phase. Previous communications with the residents indicates a strong preference for traditional parking in the front of new commercial uses along Dublin Road to reduce noise and conflict with neighboring residences to the rear.

If developed according to the plan, the village could someday have approximately 478 homes. Based upon the U.S. 2010 Census of 681 plus potential new population (184 new homes @ 3 persons/household), the village would have a future population of approximately 1,233 within the current corporate limits. The current count of 30 businesses could be augmented with 11 additional commercial building sites, some of which might have more than one business. There may be some limited opportunities for annexation, which could increase the future population and commercial/office growth and still be serviced by the village.

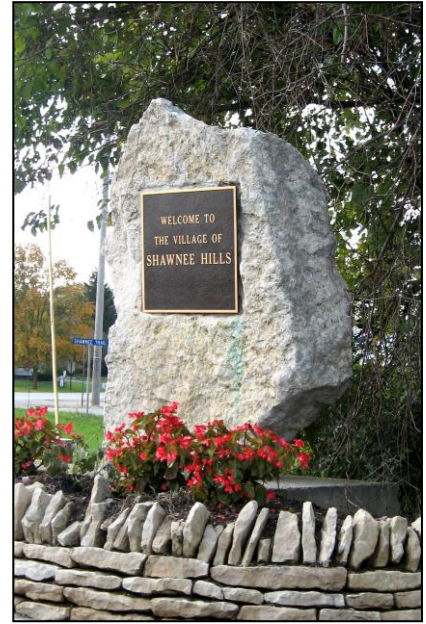
CHAPTER 1

Introduction

“Make no small plans...aim high in hope and work.”

- Daniel Hudson Burnham, Father of the American City Planning Movement

The Shawnee Hills Additions, which collectively totaled over 3600 lots, were platted in the 1920s as a resort fishing community on the O’Shaughnessy Reservoir of the Scioto River. Lots were small, typically 35 feet by 70 feet, exclusive of road easement. Many of the platted streets were initially constructed to access the lots, but no utilities were installed because no public water or sewer was available.



Early development consisted of seasonal fishing cottages utilizing private wells and outhouses or on-site septic systems.

Portions of Shawnee Hills Additions 1, 2, 3, and 4 were incorporated into the Village of Shawnee Hills in 1942. There had been little development of permanent housing at that point. Initial building regulations were adopted in 1951. These regulations (32½ feet as minimum frontage, 5 feet side yard and minimum dwelling square footage of 528 square feet) were crafted to accommodate the existing platted lots of record. Zoning was adopted in 1952, repeating the dimensional standards set in 1951.

By 1960, the population was 394. In 1967, the village amended zoning to increase the minimum dwelling size to 1,050 square feet. In 1971, zoning was again amended to establish a minimum lot of 14,700 square feet (six contiguous 35’ by 70’ platted lots, exclusive of road easement). Without water and sewer, public health regulations served as de facto minimum lot criteria for decades due to the necessity of on-site well and septic systems. When Del-Co Water company provided public water in the 1980s, development became more feasible. The lack of sanitary sewer remained the limiting factor.

In 1991 the Ohio Environmental Protection Agency notified the village of septic system failures that potentially threatened water quality in the O’Shaughnessy Reservoir. By 2000, the village had amassed sufficient loans and grants to design and construct a limited central sewer system. Construction began in the winter of 2001. Realizing that sanitary sewer service would bring with it many collateral development issues, Shawnee Hills Village Council decided to revisit its 1997 Comprehensive Plan, contracting with the DCRPC as consultant. That plan was adopted in 2002. After a decade of growth in which 95 homes were built, village council sought to update its plan. In 2011, work began, again using a Long Range Planning Committee to discuss changes and additions.



The Shawnee Hills Comprehensive Plan:

- ❖ sets goals and objectives for growth the next ten years;
- ❖ recommends a site-specific land use of each parcel;
- ❖ recommends amendments to zoning and development policies;
- ❖ recommends standards and layout for one and two way streets;
- ❖ recommends an allocation plan for sanitary sewer capacity.

Digital information in the Planning Process

The Delaware County Auditor has developed a Geographic Information System (GIS) for the primary purpose of accurately mapping tax parcels. DALIS stands for Delaware Area Land Information System. It is a very accurate, computer mapping system which offers both tabular and graphic real estate data about each of more than 90,000 tax parcels. This mapping system includes a property line layer, topography, soil maps, digital aerial photos and structure layers.

Maps may be created with accuracy to a scale of 1" = 100'. Users may view each parcel individually at any scale. This allows the DCRPC to make a Comprehensive Land Use Plan that is site-specific. The DALIS mapping is used as the base map for the 2011 Shawnee Hills Comprehensive Plan. The software used is ArcInfo and ArcView, by ESRI.

CHAPTER 2

Population and Development Trends

Shawnee Hills' population was relatively stable for 40 years, until sewer service brought the prospect of additional housing opportunities. The addition of 262 people between 2000 and 2010 represents a 63% increase.

Figure 2.1 Shawnee Hills Population 1960-2010

Year	1960	1970	1980	1990	2000	2010
Population	394	428	430	423	419	681

Source: U.S. Census Bureau.

Figure 2.2 Shawnee Hills Village, Ohio 2010 Census

Subject	All ages		18 years and over	
	Number	Percent	Number	Percent
Race				
Total population	681	100.0	517	100.0
One race	672	98.7	515	99.6
White	630	92.5	486	94
Black or African American	17	2.5	12	2.3
Asian	22	3.2	16	3.1
Two or more races	9	1.3	2	0.4
Some other race	2	0.3	0	0.0
Hispanic or Latino and Race				
Total population	681	100.0	517	100.0
Hispanic or Latino (of any race)	13	1.9	8	1.5
Not Hispanic or Latino	668	98.1	509	98.5
One race	659	96.8	507	98.1
White	618	90.7	478	92.5
Black or African American	17	2.5	12	2.3
Asian	22	3.2	16	3.1
Two or more races	9	1.3	2	0.4
Some other race	1	0.1	0	0

Source: U.S. Census Bureau, Census 2010 Redistricting Data (Public Law 94-171) Summary File, Matrices P1, P2, P3, P4, and H1.

Further, the Census shows that the White population grew 58%, from 399 to 630; the African-American population grew 89%, from 9 to 17, and the Latino population grew 63%, from 8 to 13. The largest percentage of growth came

from those identifying themselves as Asian, a group which grew 267%, or from a population of 6 in 2000 to 22 in 2010.

Regional Population

To put Central Ohio and Shawnee Hills' growth rate into general perspective, consider the state and national annual growth rates in Figure 2.3. This figure also indicates population changes in townships and municipalities surrounding Berlin Township to indicate a true comparison of growth rates from 1990 to 2000, with additional estimates for 2010.

Figure 2.3 Regional/Local Growth Rates

Nation/State/Region	1990 population	2000 population	Rate 1990-2000	2010 population	Rate 2000-2010
Delaware County	66,929	109,989	64.34%	174,214	58.39%
Franklin County	961,437	1,068,978	11.19%	1,163,414	8.83%
Central Ohio	1,377,419	1,581,066	14.78%	1,801,709	13.96%
Ohio	10,847,115	11,353,140	4.67%	11,536,504	1.62%
USA	248,709,873	281,421,906	13.15%	308,745,538	9.71%
Area Townships					
Berkshire Township	1,713	1,946	13.60%	2,428	24.77%
Berlin Township	1,978	3,315	67.59%	6,496	96.08%
Concord Township	3,363	4,088	21.55%	9,294	127.35%
Genoa Township	4,053	11,293	178.63%	23,090	104.46%
Liberty Township	3,790	9,182	142.27%	14,581	58.80%
Orange Township	3,789	12,464	228.95%	23,766	90.68%
Area Municipalities					
Shawnee Hills	423	419	-1%	681	62.53%
Columbus	632,910	711,470	12.41%	787,033	10.62%
Delaware	20,030	25,243	26.03%	34,753	37.67%
Galena	361	305	-15.51%	653	114.10%
Powell	2,154	6,247	190.02%	11,500	84.09%
Sunbury	2,046	2,630	28.54%	4,389	66.88%
Westerville (Del, Fra)	30,269	35,318	16.68%	36,120	2.27%

(Source, U.S. Bureau of Census)

While Ohio experienced a growth rate at one third that of the national average, the Central Ohio regional growth rate was much more comparable to the national trend. Delaware County, as the fastest growing county in Ohio, had a growth rate of 64.34% in the 1990s and 58.39% in the first decade of the 2000s. Population in the City of Delaware grew by 26.03% from 1990 to 2000 and 37.67% from 2000 to 2010, partially as a result of annexations. In examining the varied growth rates in the area, it is clear that growth pressures are mostly obvious in the south and west.

The Delaware County growth rate has continued to increase as people push north from Franklin County into the “country” for larger lots with more rural character or small-town feel. While Franklin County is losing population to out-migration, Delaware County is growing by in-migration.

Delaware County is growing largely by domestic in-migration with 38,964 new residents moving into the county from 2000 to 2008. Births minus deaths represented 12,771 additional residents in this same time span. By contrast, Franklin County experienced an outward migration of (-)40,851 from 2000-2008. Delaware County received a larger number of people through domestic migration, suggesting that some migration came from other Central Ohio counties. Figure 2.4 illustrates these trends.

Figure 2.4 Central Ohio Growth Rates

Area	2000/2010 Census	Percentage/Numerical Change in Population	Births/Deaths (2000-2009)	International Migration	Domestic Migration
Delaware County	109,989/174,214	58.39%/64,225	+21,349/-6,764	517	40,565
Franklin County	1,068,978/1,163,414	8.80%/94,436	+162,077/-77,106	39,376	-36,253
Central Ohio	1,581,066/1,801,709	13.96%/220,643	+235,080/-116,390	40,830	32,559
Ohio	11,353,140/11,536,504	1.62%/183,364	+1,389,016/-999,895	120,452	-368,203
USA	281,421,906/308,745,538	9.71%/27,323,632	+38,358,804/-22,483,225	8,944,170	--

(Data Source Population Division, U.S. Census Bureau)

Delaware County's growth should be thoroughly reviewed as an indicator of future growth pressures in Shawnee Hills. Figure 2.5 indicates the significant rate of growth within Delaware County compared to other counties. The growth rate for the period 2000-2010 was 58% which ranked Delaware County 22nd nationally.

Figure 2.5 Area Counties in Context with Nation's Fastest-Growing Counties: April 1, 2000 to April 1, 2010

County	State	Percent Increase	Numerical Increase	April 2010 Population	National Rank By Percentage Growth
Delaware	Ohio	58.4%	64,225	174,214	22
Franklin	Ohio	8.8%	94,436	1,163,414	NR
Warren	Ohio	34.3%	54,310	212,693	NR
Kendall	Illinois	110.35%	60,192	114,736	1
Pinal	Arizona	109.08%	196,043	375,770	2
Flagler	Florida	92.04%	45,864	95,696	3
Lincoln	S. Dakota	85.77%	20,697	44,828	4
Loudoun	Virginia	84.15%	142,712	312,311	5

NR = not ranked in the top 100. (Source, U.S. Census Bureau, 2008)

Future Population Projections

The Delaware County Regional Planning Commission makes population projections based upon a "housing unit method" formula. The formula works as follows:

- 1.) Last Census used as a base year.
- 2.) Number of residents per dwelling unit for each jurisdiction is calculated based upon the last census information.
- 3.) Number and type of dwelling unit is tracked by month for all jurisdictions.
- 4.) A time lag factor anticipates the occupancy date of new housing after building permit issuance.

- 5.) New population is projected for each jurisdiction based on the number of building permits issued times the number of residents per dwelling unit type, after the lag factor.
- 6.) New population added to last census data to create projected population.

From 1980-99, the village added only 14 new single-family homes. The lack of sanitary sewer limited building and growth in Shawnee Hills for many years, limiting population increases. After construction of central sewers in 2001, with its prime location next to Dublin, on the banks of the Scioto River, Shawnee Hills was poised to grow. During the decade, Shawnee Hills posted 196 new residential building permits.

Chapter 10 notes that in 2011, the Comprehensive Plan identifies 294 occupied homes and 184 new house parcels for a total of 478 homes. Based on that figure, the future population could be 1,290 residents. The 2000 Census was of 419 people and 208 residential units.

If the Lucy Depp subdivision and other unincorporated areas in the sewer service area were to annex, they could add another 247 homes, which would be another 740 people. The maximum population for Shawnee Hills plus Lucy Depp at build-out could be 2,030.

Past growth patterns for Shawnee Hills are not accurate predictors of the growth that may occur in the near future. However, the village's location suggests continued growth with development pressures begin to pick up.

Population Projections using Building Permits

Building permit figures tell more than the Census regarding growth in the township. Figure 2.6 is provided to show the growth of all the jurisdictions of the County. The beginning of the decade saw significant growth in all communities with sewer, but this growth tapered off beginning in 2006.

Figure 2.6 Building Permits issued per Delaware County Township/Municipality (1997 to 2010)

Townships	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Berkshire	16	17	34	16	16	13	15	18	28	29	37	17	46	23
Berlin	54	98	117	128	182	156	123	97	84	66	40	30	20	35
Brown	9	10	8	17	10	14	11	8	4	3	2	3	5	2
Concord	43	96	103	235	355	294	410	235	167	134	80	67	40	64
Delaware	12	25	11	31	49	46	50	26	19	13	1	3	1	4
Genoa	342	622	507	651	667	716	643	443	305	183	148	72	69	82
Harlem	30	23	27	16	18	26	29	34	20	14	19	17	5	5
Kingston	19	24	37	30	37	34	35	18	14	13	12	1	4	3
Liberty	231	262	322	276	198	238	175	179	168	102	75	69	30	49
Marlboro	0	1	1	1	10	4	4	0	2	4	2	0	1	0
Orange	352	378	637	410	532	558	601	762	420	216	228	142	129	122
Oxford	6	4	9	10	11	11	8	7	4	6	5	1	0	0
Porter	16	17	11	12	9	11	18	15	8	11	6	3	1	5
Radnor	9	13	11	12	5	15	16	15	16	6	3	3	0	0

Scioto	20	27	37	21	9	18	20	15	25	15	5	10	4	3
Thompson	4	4	4	2	11	8	6	4	4	6	7	0	0	2
Trenton	17	13	12	10	11	12	11	11	14	7	7	3	2	3
Troy	13	12	6	7	14	24	10	16	9	7	6	3	1	2
Sub Total	1,193	1,646	1,894	1,885	2,114	2,198	2,185	1,903	1,311	835	683	444	358	404

Incorporated Areas

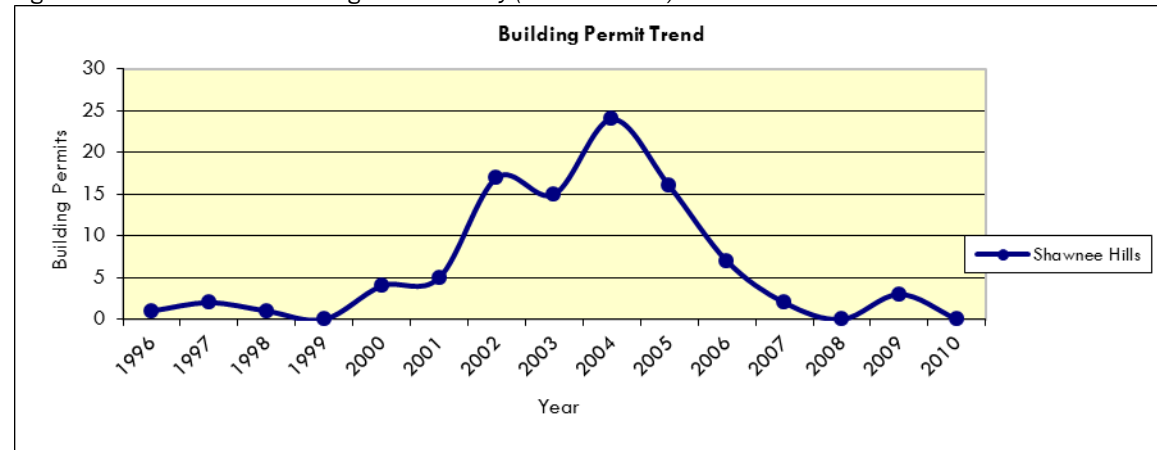
Delaware	248	355	790	318	368	313	510	446	324	220	199	108	102	108
Galena	0	2	2	1	0	1	1	25	35	13	4	3	4	1
Sunbury	30	33	19	47	75	72	54	3	0	18	20	31	37	34
Shawnee Hills	2	1	0	4	5	17	15	24	16	7	2	0	3	2
Powell	163	217	141	103	105	127	370	339	216	146	137	36	34	34
Ashley	2	0	0	1	0	3	3	2	1	1	0	1	0	0
Ostrander	1	0	1	0	0	1	1	0	16	15	7	6	0	7
Dublin	-	-	4	9	1	3	4	2	0	2	1	2	1	0
Westerville	-	-	-	140	122	58	17	38	161	81	61	29	37	60
Columbus	546	184	774	146	97	236	251	246	295	254	225	43	46	273
Sub Total	992	792	1,731	769	773	831	1,226	1,125	1,064	757	656	259	264	519
County Total	2,185	2,438	3,625	2,654	2,917	3,029	3,411	3,028	2,375	1,592	1,339	703	622	923

*Data available through December, 2010

(Source Delaware County Building Dept. and Municipalities, 2011)

Figure 2.7 shows the history of new building permits over the last fifteen years.

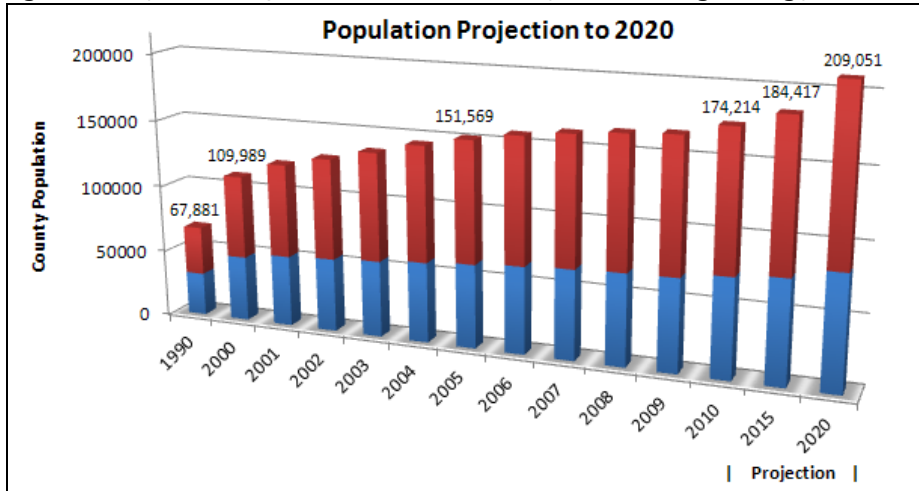
Figure 2.7 Shawnee Hills Building Permit History (1996 to 2010)



(Source DCRPC, 2011)

Figure 2.8 demonstrates the projected population for Delaware County in five-year increments to 2020, based on the building permit projection method.

Figure 2.8 Population Projections for Delaware County to 2020 using building permit data



(Source DCRPC, 2011)

Population Summary

Delaware County continues to be the fastest growing county in Ohio by percentage of growth. It was the 22nd fastest-growing county in America from 2000-2010 (58%). The growth rate in Shawnee Hills has mirrored that of the county as centralized sewer service became available in the village. The transition from a rural village to a suburbanizing community has presented new challenges. Centralized sanitary sewer has led to growth and indicates that building and development will continue when the economy improves. How well the village plans for the future growth in the next 5 to 10 years will be a critical factor in shaping the Shawnee Hills identity.

Development Trends

Development Indicators

Typically in new-growth areas, the subdivision platting process has served as an indicator of future growth. For Shawnee Hills, however, growth has generally been confined to areas within the village which was platted in the 1920s. This section will briefly describe the development of the overall county and then discuss development indicators in the village.

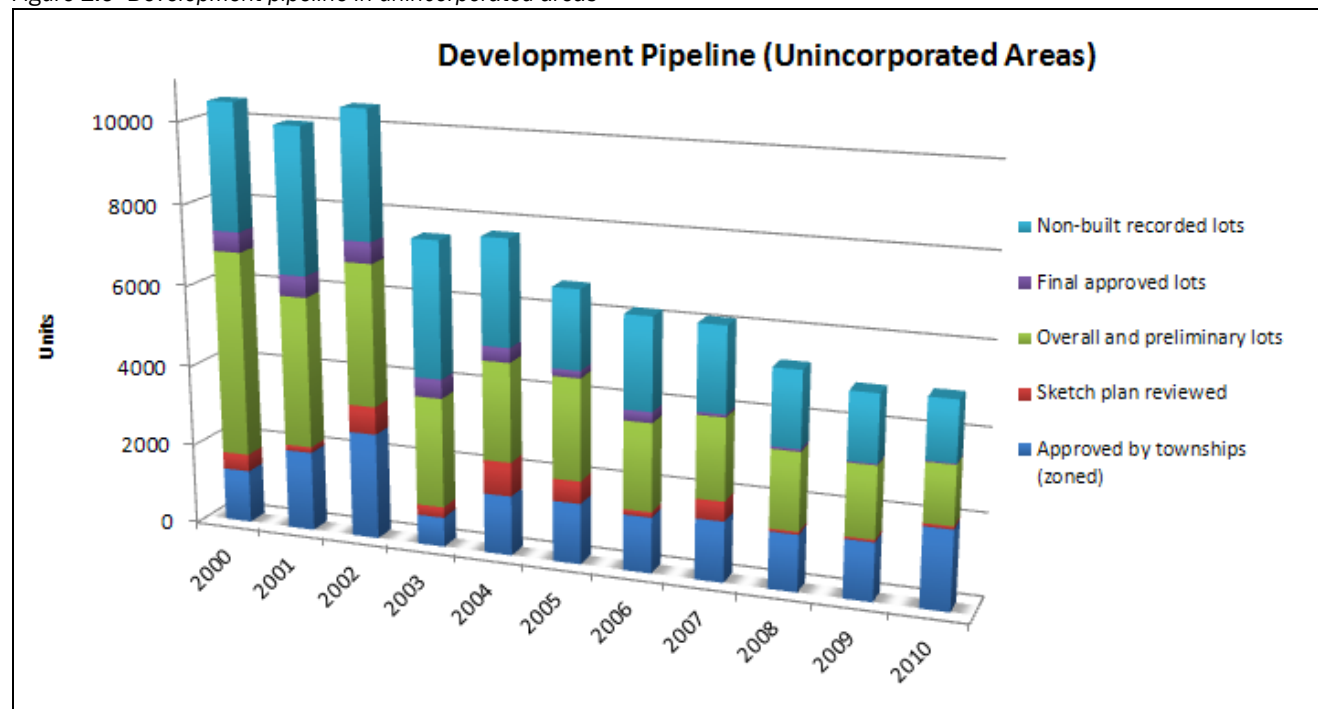


Much has been said about the growth rate of Delaware County over the last two decades. The county grew by 64.3% from 1990-2000, ranking it as the 15th fastest-growing county in the country by percentage of growth. For the period of 2000-2010, the growth was 58.4%, as the county was the 22nd fastest-growing by the same measure.

For the jurisdictions of Delaware County there are some observed trends that merit concern. Significant zoning and subdivision activity has led to a potential oversupply in subdivision lots available for development. This trend is best

represented in the following table, which is based on the development activity of the unincorporated areas of the county, which is where much of the growth has been. It represents the number of lots in the various stages of the development process at the end of each year. The key is to notice that the overall number of lots in the pipeline has been decreasing since 2003 as those lots have been absorbed by the building process. Although those numbers have decreased dramatically, DCRPC staff estimates that there is still a 14-year supply of lots in the development process, based on the fact that building permit numbers have also reduced dramatically.

Figure 2.9 Development pipeline in unincorporated areas



(Source DCRPC, 2011)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Zoning approved	1,312	1,977	2,625	734	1,474	1,496	1,371	1,486	1,386	1,423	1,941
Sketch plan reviewed	424	143	686	262	836	550	131	479	71	64	76
Preliminary approved	5,086	3,735	3,508	2,703	2,429	2,490	2,143	1,998	1,889	1,736	1,417
Final plat approved	504	527	526	471	360	182	265	74	63	38	30
Non-built, recorded lots	3,136	3,608	3,147	3,349	2,592	1,925	2,248	2,066	1,835	1,619	1,452
Total in Pipeline	10,462	9,990	10,492	7,519	7,691	6,643	6,158	6,103	5,244	4,880	5,528

Only one new platted subdivision has occurred recently in Shawnee Hills. Roger Yeoman annexed a portion of the Shaw Nee Hills North addition to the village in 2000 and re-platted 155 non conforming lots to yield 36 new lots called Shawnee Woods under the same general street configuration. Since that time, 31 new houses have been built in the subdivision – one third of the homes built in the village since 2000.

Summary of Development Indicators in Delaware County and Shawnee Hills

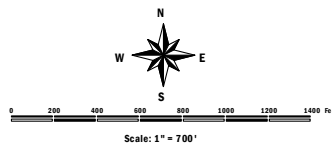
Delaware County continues to be a potential hotbed of new development in areas with water and sewer service and proximity to Franklin County. Shawnee Hills has already shown this with its growth after initially receiving sanitary sewer service in 2001. It is reasonable to assume that when the economy recovers, the Shawnee Hills area will continue to see development pressure.



Aerial Photo

Shawnee Hills, Delaware County, Ohio

Prepared by: Delaware County Regional Planning Commission
(740-833-2260) www.dcrpc.org
GIS Base Data from the Delaware County Auditor's DALIS Project
(9/20/2011)



CHAPTER 4

Issues, Opportunities, and Citizen Participation



Citizen Participation in the Decision-Making Process

The Comprehensive Plan typically looks 5-10 years into the future, with the understanding that unforeseen circumstances may change the citizens' vision. A citizen participation element is the backbone of the process; it provides legitimacy to the resulting plan.

Citizen participation should be representative of the population and land ownership of the village, more broad-based than just elected and appointed officials, long-term and open to continuing debate, and influential in the recommendations made to appointed and elected officials.

Summary of the 2002 Visioning Process

During the 2002 Comprehensive Planning process, Shawnee Hills took steps to open the discussion to the community. The local newspaper outlined the planning process and invited all to attend meetings, legal advertisements were posted for public meetings, and a long-range Planning Committee (LRPC) was created, comprised of members of Council, the Planning Commission, and interested citizens to update the comprehensive plan.

At the beginning of the process, on April 25, 2000, a public meeting was held. Numerous items were discussed, as summarized below:

It's Our Village:

Located next to the busy growing suburb of Dublin, in rapidly growing Concord Township, Shawnee Hills had experienced very limited growth because of lack of sanitary sewer service. The Village was preparing to contract with Columbus for sewage treatment. Was the Village ready for the potential growth that would ensue as a result of the availability of sanitary sewer?

We have internal stresses:

Several hundred lots-of-record would be potentially developable with the provision of sanitary sewer. Is our zoning outdated? Do we have a common vision of what we want our Village to look like as it develops? Is there a "look" we want to maintain? Does current zoning adequately express the look for commercial development setbacks and signs?

What are the services we should be providing? How would zoning decisions affect our taxes? Do we need a street cross section detail for future development?

We have external stresses:

How are non-conforming lots of record treated that annex into the Village to obtain services? Do they lose any vested rights because of their annexation and need to comply with village zoning? Has the Village discussed this with Concord Township and the city of Dublin to avoid conflicts? Establish growth boundaries? Can the Village adopt impact fees?

Considerations for the future:

Retain legal counsel with significant experience, and willingness to respond quickly. Adopt subdivision regulations. Retain consulting engineer or private consulting engineer. Review new subdivision improvement plans and drainage. Review how street reconstruction will respond to streetscape, drainage and sidewalk needs. Retain a landscape architect with demonstrated competence in rendered elevations for commercial development. Create a streetscape detail for commercial development.

The LRPC and guests met at the Shawnee Hills Civic Center on, June 23, 2000, at which time they carried out a strategic planning exercise to identify the Village's Strengths, Weaknesses, Opportunities, and Threats. The result was the list of issues that follows.

Review of the 2011 Visioning Process

During the 2011 Comprehensive Planning update, a small group met regularly to update the background information and ensure that changes were reflected in the document. That group allowed interested citizens to score whether the issues were still relevant via survey and 18 were received and tabulated. The following items are listed by score, where 1 is "Strongly Agree" and 5 is "Strongly Disagree."

"I feel the following represent Strengths"

- Local commercial district serves the immediate area, not dominated by big box retailers. (1.5)
- Public water, gas, cable TV, electric utilities in place. (1.6)
- Homey village charm (narrow streets, vegetation, mix of old and new, variety of architecture). (1.7)
- Lush, mature vegetation. (1.7)
- Government is close to the people, responsive. (1.8)
- Central location, close to jobs yet isolated (by the lake) from the zoo hustle and bustle. (1.9)
- The lake offers boating, fishing, water view, adds value to surrounding lots. (1.9)
- Zoning in place. (2.1)
- Subdivision regulations in place. (2.2)
- Three park areas plus access to the lake were dedicated to the Village in the 1920s. (2.2)
- There is land available for new commercial development along Rt. 745 (2.4)
- Small community is tight-knit, may increase the likelihood of public involvement. (2.4)
- Mayor, LRPC and Council have the vision and knowledge to make the planning process work. (2.4)
- Vision for a "rural" community established in [previous] comprehensive plan. (2.4)
- Fully-platted with 2199 lots, so the configuration in the old village is known. (2.5)

Analysis: Respondents were generally in agreement with most of the items on the list. There was some disagreement on the issue of whether "rural" was a positive feature or an excuse to not execute with quality. There were also some comments generated based on the phrase "access to the lake" which needs to be addressed.

“I feel the following represent Weaknesses”

Most village-owned park reserves are still undeveloped. (1.7)

Hills on Dublin Road create blind spots, make unsafe intersections. (2.1)

Location means more traffic using Rt. 745 and Glick Road (2.2)

Some rights of way to the reservoir have been vacated; limited reservoir access unless you live on it. (2.2)

Most streets are too narrow for cars to safely pass. (2.5)

Zoning has not always been adequately enforced. (2.9)

Analysis: The highest-scoring weakness suggests that residents would like to see either the current village-owned parks developed, or parks in new locations developed. Narrow streets do not appear to be a major concern.

“I feel the following represent Opportunities”

Major developments at village entrances could set a positive tone for the new Shawnee Hills. (2.0)

Create vision for commercial corridor. (2.1)

First annexation could provide a signature of what the “new” Shawnee Hills should look like. (2.1)

Sewer service to commercial area will attract new commercial tax base. (2.2)

With sewer available, the village may complete its development. (2.2)

Re-evaluate the 2002 vision, and goals - do we want to be “rural”? (2.5)

Do we want to develop as platted? If so, need strict architectural standards to make it work. (2.5)

Analysis: The most important opportunities appear to be developments at village entrances and a vision for the commercial corridor. Many of these items have been largely addressed in the Main Street vision.

“I feel the following represent Threats”

Mom and Pop stores selling out; national retailers moving in. Need to retain the village character. (1.6)

Construction on every platted lot would mean defoliation of many old trees and shrubs, need for major street improvements, expansion of village services (fire, police, road maintenance, recreation).

Potential development on every platted lot would result in one of the densest neighborhoods in Delaware County, without adequate light and air or recreation for the residents. (1.9)

Heavy demand for new services might require additional revenue sources. (2.3)

Newly annexed areas with previously platted lots of record may also demand vesting of non-conforming lots. (2.5)

Analysis: National retailers and the related loss of village character are seen as threats. There is also continued concern that if the village developed all the platted lots, it could result in a tremendous demand for services (although this has been addressed in the square footage requirement for building permits).

Finally, respondents were asked for any other comments or issues that were not otherwise reflected in the survey. These are summarized below:

- Permits should not be required for the removal of dead trees.
- Actions by Columbus are degrading land along the reservoir.
- Designate public parking areas.
- Better pedestrian access to Glick Road Park and businesses.
- Relocate and improve children's playground.
- Need additional public park/recreation areas.
- Improve intersection of Glick and Dublin Roads
- Finish streetscape along Dublin Road.
- Bike path from Dublin Road to zoo.
- Nicer street signs along Dublin Road.
- Clean up dense brush along Dublin Road.
- Enforce zoning regulations regarding debris in front yards.
- Sewer dollars are unfairly assigned – businesses should pay more and Dublin should account for remainder.
- Lights in commercial areas impact neighboring properties.
- Provide tax incentives to attract businesses and raise tax revenue.

Conclusion

Through this process, the initial concerns of the citizens who gathered at the meetings in 2000 and combined with the surveys of those who responded in 2011 to develop a list of concerns that will inform the final recommendations within this Comprehensive Plan.

CHAPTER 5

Existing Conditions – Land Use

Land Use Update

Shawnee Hills is a small village with current land area of approximately 285 acres or .455 square miles. There is some opportunity for annexation to expand to the north and west, but the village has limited resources and services to extend. Housing has been the primary land use for the last 90 years but there is a fairly vibrant retail commercial corridor along Dublin Road.



The following table indicates the acreage of each standardized land use category within the County Auditor's DALIS system, as well as each land use's percentage of the overall acreage. The number of structures within each land use is also listed, based on how those structures are categorized in the county's system.

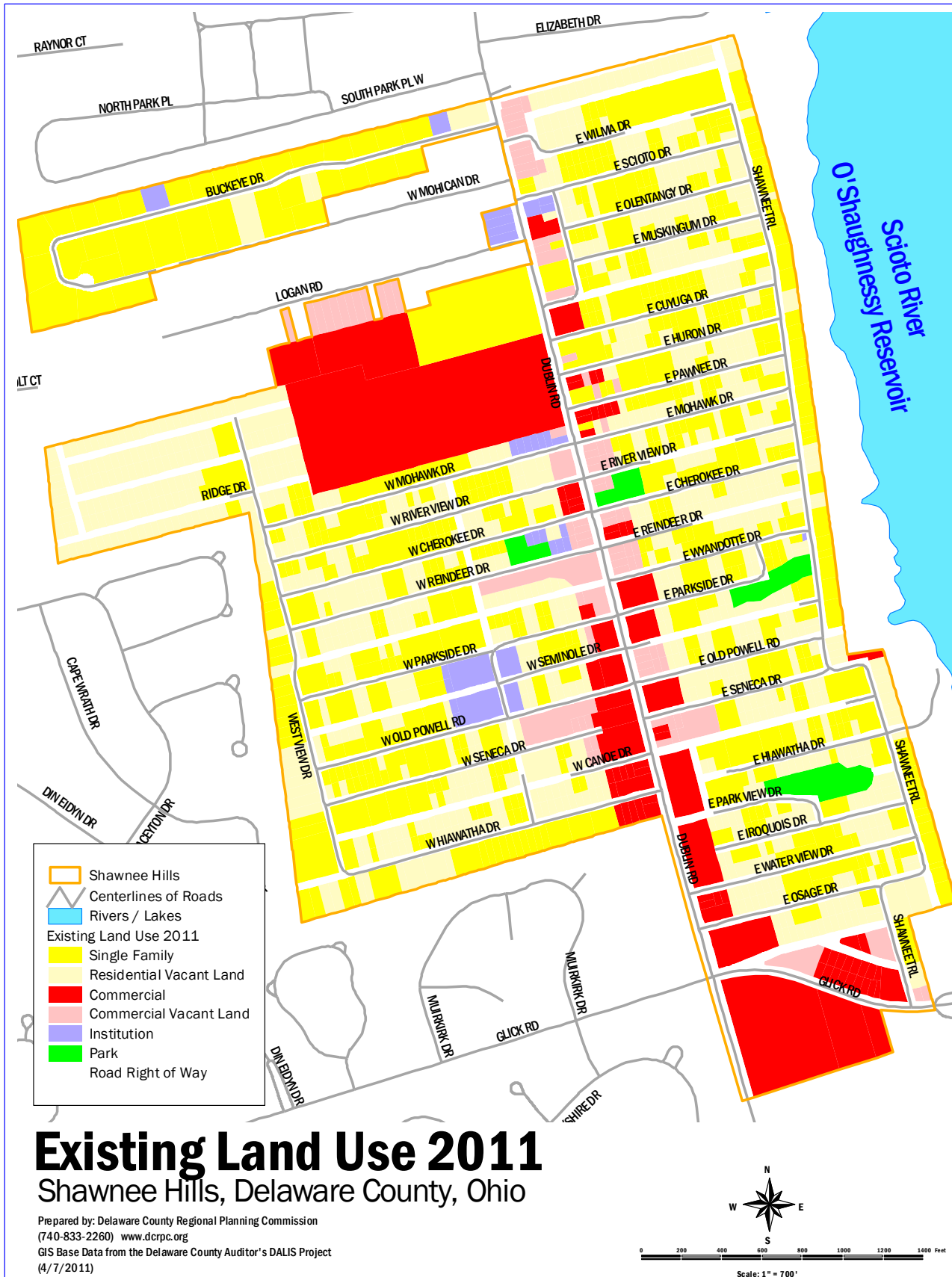
Figure 5.1 Existing Structures and Land Use Acreage

	Number of Structures*	Number of Structures**	Acreage	% Total Acreage
Single Family	294	388	95.38	33%
Multi family	0	0	0	0%
Commercial	41	47	40.05	14%
Industrial	0	0	0	0%
Institutions	3	4	4.47	2%
Agriculture	0	0	0	0%
Highway R.O.W	-	-	58.74	21%
Parks/open space	2	1	3.63	1%
Vacant residential	0	21	71.40	25%
Vacant commercial	0	1	11.52	4%
Totals	340	462	285.19	100 %

*Number of Structures based on DALIS master address point layer (Occupied) dated 4/2011.

**Number of Structures based on DALIS Structures (building outlines) layer dated 12/2010.

On the next page, the 2010 Existing Land Use map shows the generalized extent of each land use, by parcel, based upon current aerial photos and data from the County Auditor's DALIS system. DCRPC staff adjusted the land use category of some parcels to reflect structures that were located on more than one parcel.



Results of the Land Use Analysis

Shawnee Hills is a predominantly single-family residential community, built in accordance with the original plat's layout of streets. Based on current information, there are 294 single-family homes in Shawnee Hills, 41 commercial uses, and 3 institutional uses.



Homes and views of the river



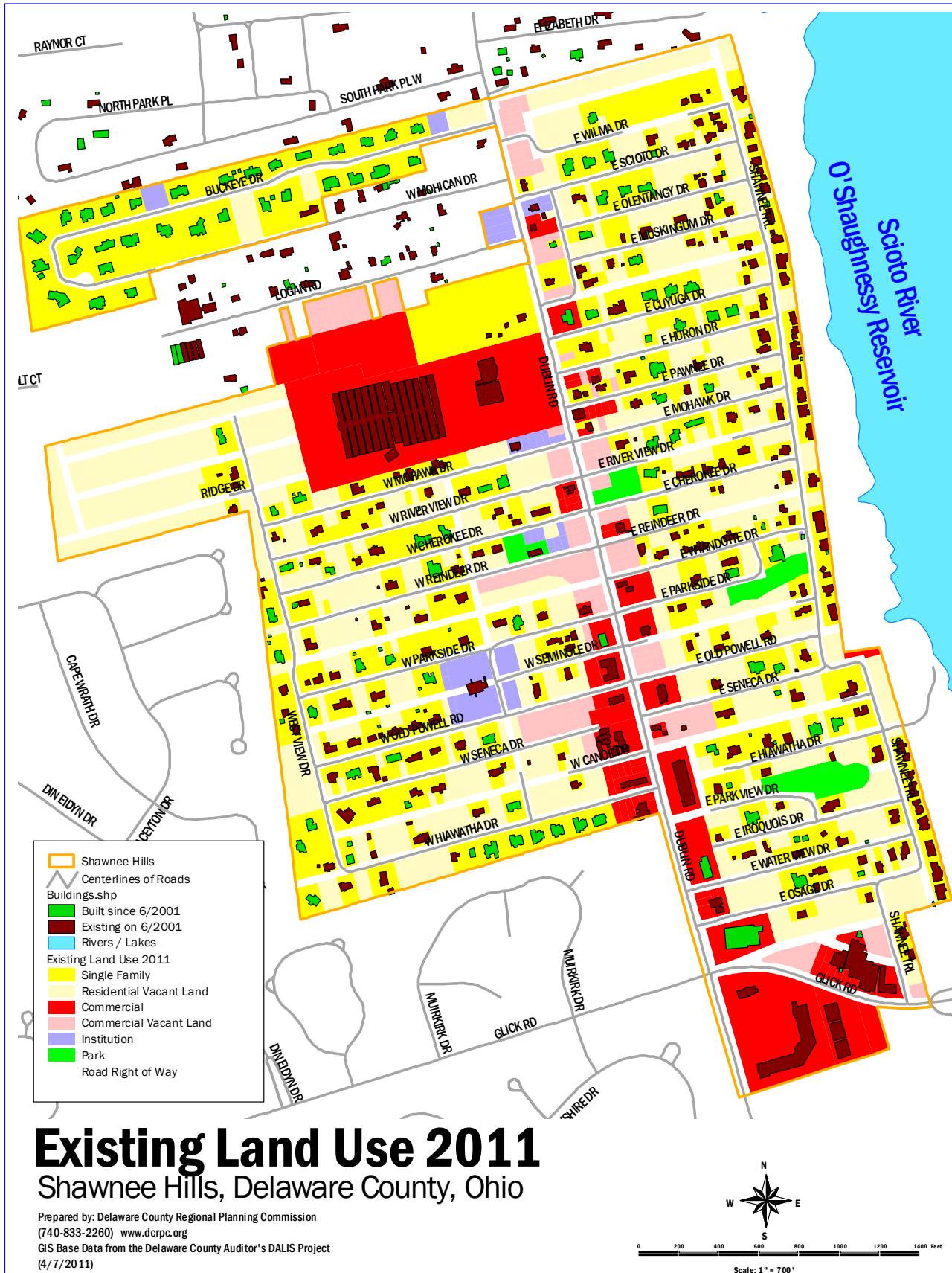
Existing Commercial Structures

Commercial uses line portions of Dublin and Glick Roads. These uses are mostly locally-owned businesses, with small footprints that fit within the small blocks of the originally platted streets. A small shopping center at the southeast corner of Glick and Dublin Roads provides fast food and stores. There are a number of homes fronting on Dublin Road which are zoned commercial and could be converted to commercial uses.



Existing Commercial Structures

Much of the land remains vacant, with 25% of the overall municipal area undeveloped but zoned for residential use while 4% is a commercial use with no structures. Those lots that have developed have done so by combining lots into larger building sites so as to accommodate septic systems and the current requirement for a 14,700 square foot lot. Some of these small parcels that are considered yard areas may be statistically counted as vacant property on the previous map. The following map combines the structure information with the Land Use Map. Structures in place during the previous Comprehensive Plan are indicated with the color red and all structures added since that plan are noted in green.



Existing Conditions – Natural Resources and Conservation

Shawnee Hills was planned and platted on the west bank of the Scioto River. The river was dammed in the 1920s to provide flood protection and water supply for the city of Columbus. The reservoir is the most prominent natural resource in the village.



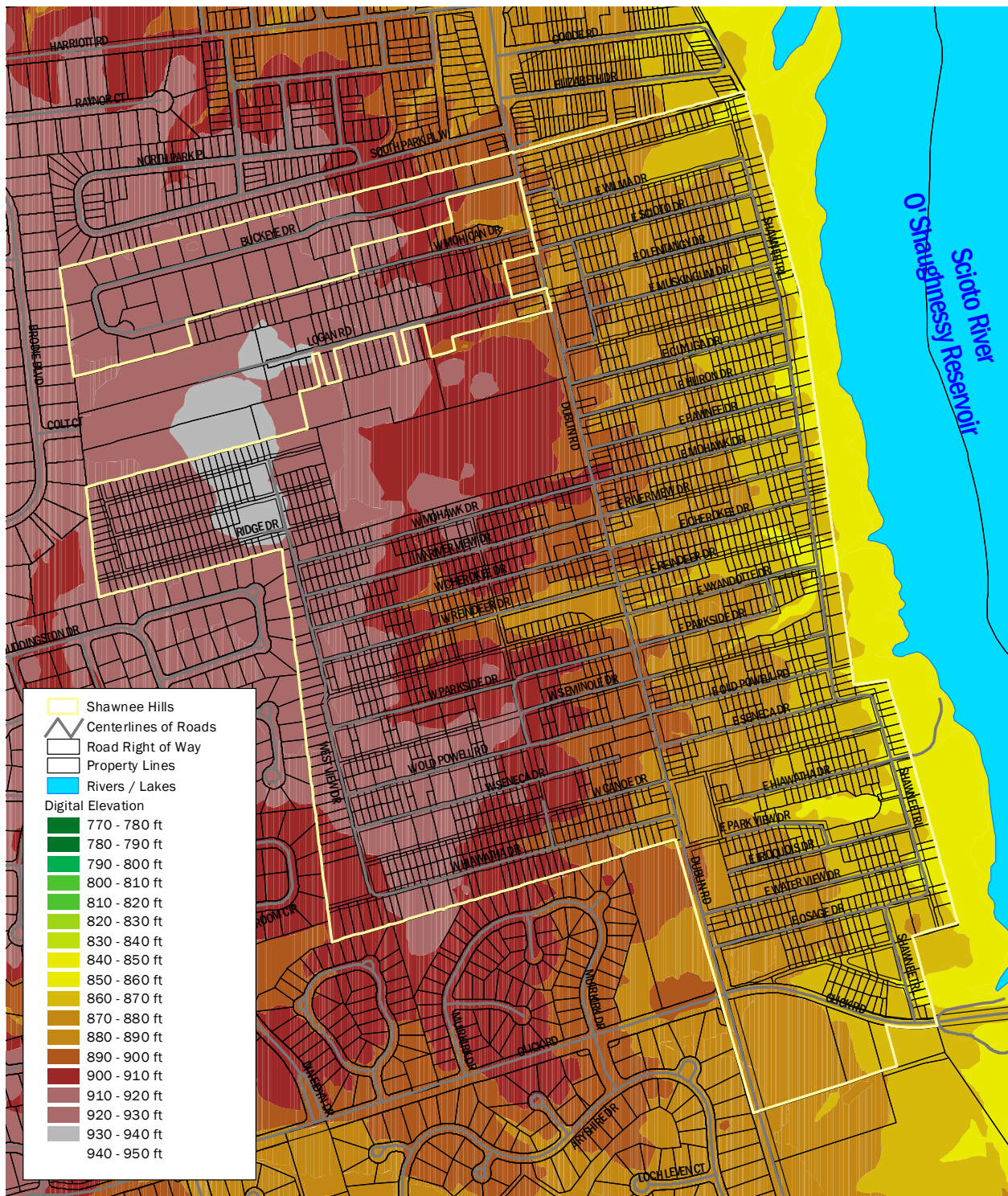
Topography

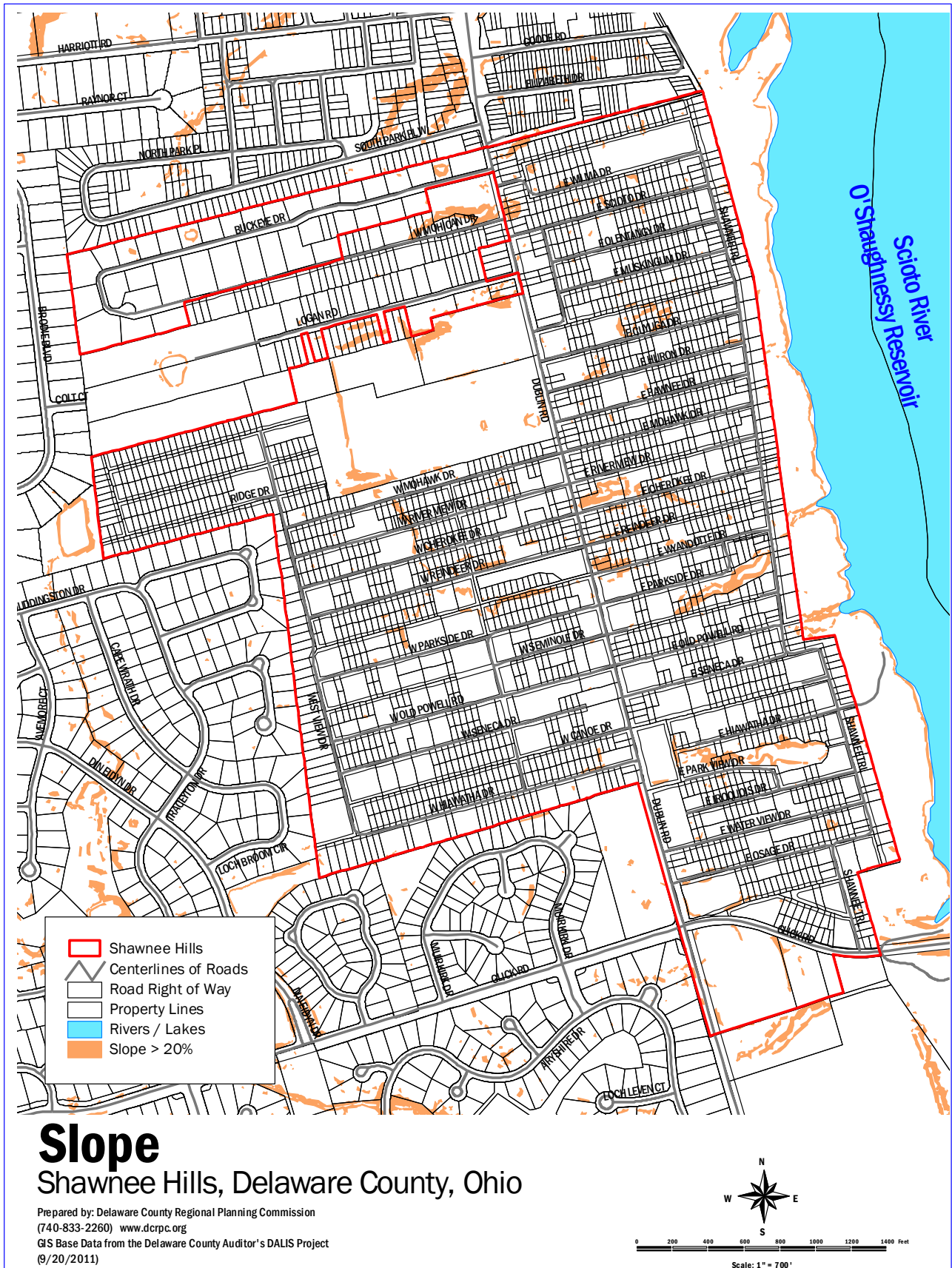
Shawnee Hills consists of a series of undulating hills that generally slope to the south and east. The highest elevation is 936 feet mean sea level, located at the northern end of West View Drive west of Strader's garden center. The lowest elevation is 854 feet mean sea level, located along the O'Shaughnessy Reservoir.

The hilly nature of the village has permitted storm water to sheet drain to the reservoir even though the village lacks a fully constructed storm water drainage system. As the village continues to develop, it is important to maintain the natural drainage ravines. The original plat was a grid subdivision that overlaid the undulating topography; as sewer is extended into the neighborhoods, great care must be taken not to destroy the natural drainage in the development of old lots of record. (See Digital Elevation Map)

Slopes Greater than 20%

There are very few areas with slopes greater than 20% in the village. These areas lay along drainage ravines and should be preserved. In general, slopes greater than 20% should be preserved as natural landforms and to prevent erosion and slippage. (See Slope Map)

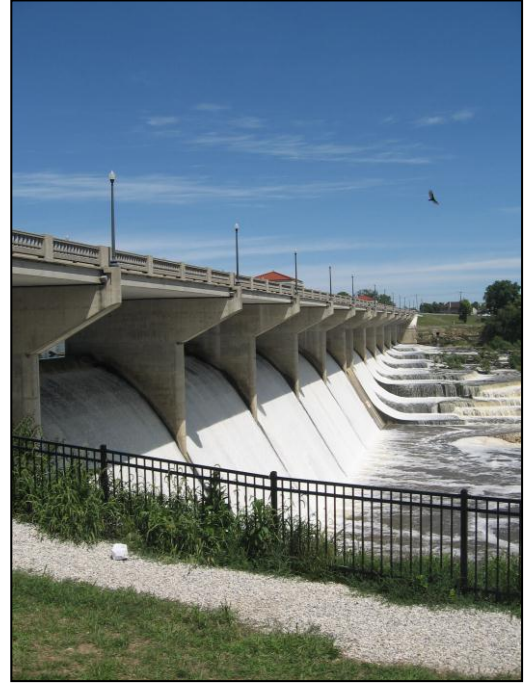




Floodplains, bodies of water

Since the O'Shaughnessy dam regulates the elevation of the Scioto River, the 100-year flood plain is also regulated. Normal pool elevation above the dam is approximately 850 feet mean sea level. The 100-year floodplain appears to be approximately 854 feet MSL, which means that it barely touches the corporate limits, but does not threaten any structures. Normal pool elevation below the dam is 802 feet.

The National Flood Insurance Program discourages development in the 100-year floodplain and prohibits development in the 100-year floodway. These areas are mapped by the Federal Emergency Management Agency (FEMA). The floodplain map gives a general location of the floodplains. For specific information see the FEMA maps at the Delaware County Code Compliance Office, 50 Channing Street, Delaware Ohio. (See Critical Resource Map)



In Shawnee Hills, the 100-year floodplains are all outside of the village limits on land owned by the city of Columbus and should be protected.

Wetlands

Wetlands are generally defined as soils that support a predominance of wetland (hydrophytic) vegetation, and/or are under water at least two weeks per year. The more specific definition to wetlands under the jurisdiction of the U.S. Army Corps of Engineers is found in the Corps of Engineers Wetlands Delineation manual Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Miss. (See Critical Resource Map)

There do not appear to be any large (one acre or more) wetlands in the village of Shawnee Hills. There may be smaller potential jurisdictional wetlands located in ravines and along watercourses.

Jurisdictional wetlands are regulated by the Clean Water Act of 1972, Section 404. They consist of:

- 1.) hydric soils; 2.) hydrophytic vegetation; and 3.) wetland hydrology (supporting more than 50% wetland vegetation, are poorly drained, and are periodically inundated or saturated).

Jurisdictional wetlands serve many of the same functions as floodplains, and their wetland vegetation serves to trap, filter and break down surface runoff pollutants. Wetlands can be enhanced to be an attractive and functional part of the storm water detention system in developments.

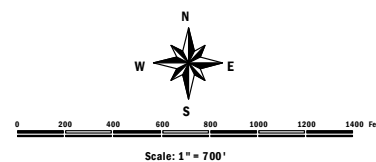
The wetlands map shows the location of potential wetlands from OCAP satellite imaging. These locations are raster data, meaning they have square edges in their computer images. They may indicate the locations of potential jurisdictional wetlands.

Vegetation

Shawnee Hills is a thickly-forested village which is a point of pride with residents. The village has adopted tree harvesting and replanting ordinances. Sewer installation required the destruction of some trees, as did the development of the new homes over the last decade. Since many roadside trees had to be removed during the sewer construction and road improvements, Shawnee Hills may wish to consider a

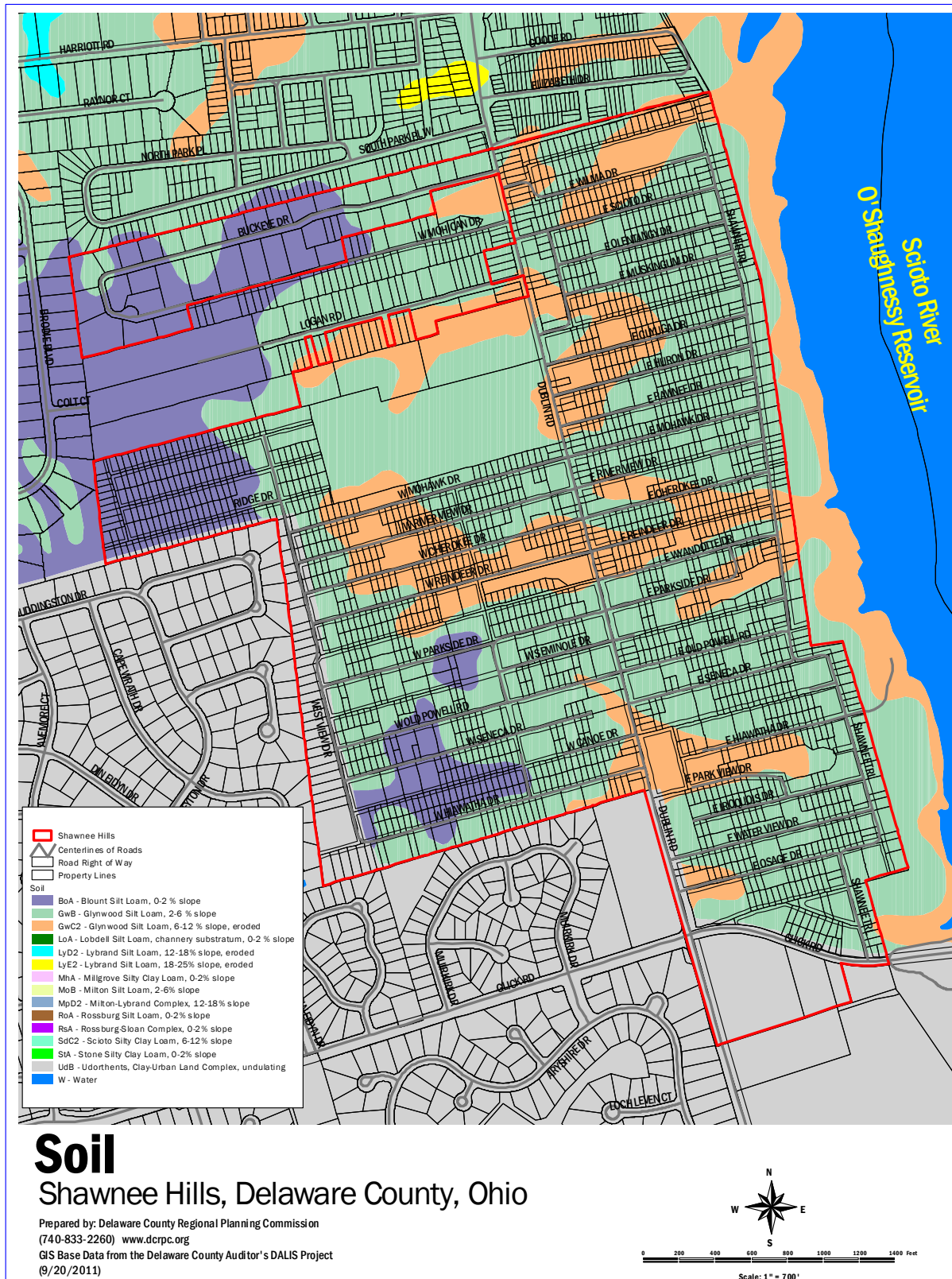


street tree planting project. The Critical Resource Map includes new data called “woodland.” This is a layer of information created by the consultant that creates the aerial photos and uses a technology that creates the shapes automatically. The map and aerial photos within this plan show the general extent of forest coverage in 2010. (See Critical Resource Map and aerial photo)



Soils and Bedrock

Columbus Limestone underlies Shawnee Hills. This formation extends along both sides of the Scioto River and may be an impediment to excavated basements. (See Soil Map)



Existing Conditions – Housing

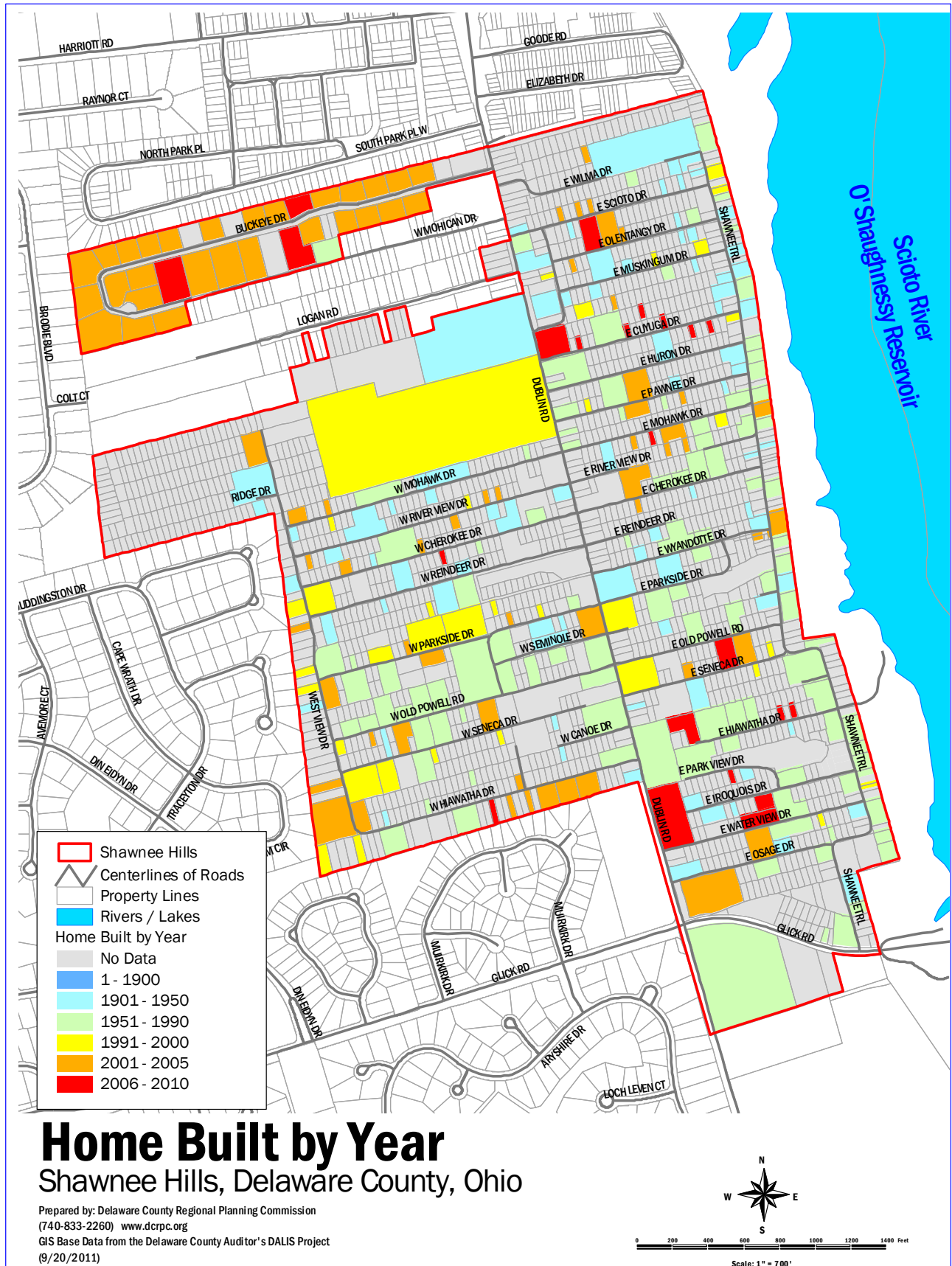
Many of the first homes in Shawnee Hills were fishing cottages that converted to permanent residences. Much of the housing stock is over 30 years old.

Existing housing stock

A house-to-house windshield (exterior view from a moving automobile) survey was conducted in July 2000. An exterior condition of each house was given based upon five criteria. The housing survey results showed that 195 homes, or 94% were either new and well-maintained, or needing normal repair. It is assumed, therefore, that the 95 homes built in the last decade would bring the total to approximately 290 homes that are well-maintained or needing normal repair. Based upon the survey and recent development, there is no significant problem with deteriorated housing stock in Shawnee Hills and recent development has only improved this fact.

It should also be noted that although the region has been hit with a high number of foreclosures, slow sales, and seemingly numerous vacant properties, the occupancy rate has not changed according to the Census. In 2000 and in 2010, the Shawnee Hills occupancy rate was 91%. That equates to 181 occupied residences out of a total of 199 in 2000 whereas in 2010, the Census found that of 295 units, 268 were occupied.





Housing needs - regional context

Shawnee Hills has not been a major provider of new housing stock in Delaware County for the years 1981 to 2010, ranked by building permits issued. The top seven communities have provided 85% of all the housing in Delaware County in the last 29 years.

Figure 5.2 Housing Providers in Delaware County, by Reported Building Permits 1981-2010

Rank, Name of Community	# building permits 1981-2010	% total permits issued 1981-2010
1. Orange Township	7320	17.5%
2. Genoa Township	7042	16.9%
3. Delaware city	6872	16.4%
4. Liberty Township	3829	9.2%
5. City of Columbus	3820	9.1%
6. City of Powell	3673	8.8%
7. Concord Township	2794	6.7%
8. Berlin Township	1661	4.0%
9. Harlem Township	672	1.6%
10. Berkshire Township	628	1.5%
11. Sunbury Village	615	1.5%
12. Scioto Township	550	1.3%
13. Kingston Township	499	1.2%
14. Delaware Township	391	0.9%
15. Porter Township	349	0.8%
16. Trenton Township	323	0.8%
17. Troy Township	316	0.8%
18. Brown Township	257	0.6%
19. Radnor Township	245	0.6%
20. Oxford Township	154	0.4%
21. Shawnee Hills	109	0.3%
22. Thompson Township	100	0.2%
23. Ostrander Village	87	0.2%
24. Galena Village	97	0.2%
25. Ashley Village	21	0.1%
26. Marlboro Township	35	0.1%
Total All Reporting Inc. and Unincorp. areas in Delaware County	42,459	100 %

Future Housing

Shawnee Hills' future housing mix and densities are largely dictated by the original plat of the Shaw Nee Hills Addition, and future sewer system capacity. Current zoning calls for a minimum building lot of 14,700 square feet. Due to "grandfathering" of some vested lots, there will be a variety of lot sizes created from the original plat. The housing mix in Shawnee Hills is entirely single-family due to the small size of platted lots.

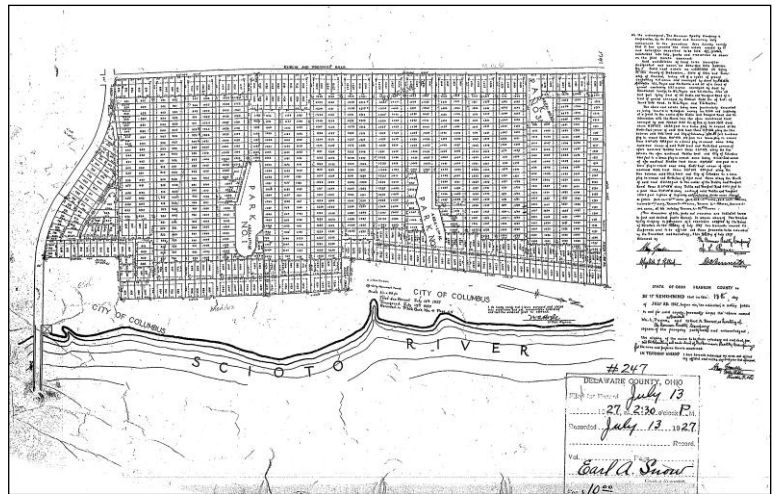
Other Housing Providers

Columbus and Delaware are the primary multi-family providers in the Delaware County housing market. They offer higher densities than available in smaller jurisdictions and townships. Shawnee Hills does not offer the range of urban services of the three larger cities in Delaware County (Delaware, Columbus and Westerville) and the three suburban townships (Orange, Genoa, and Liberty) which have the economic and service clout to provide multi-family housing.

Existing Conditions – Open Space and Recreation

The original plat of Shaw-Neer Hills Addition reserved three park areas. Today these remain undeveloped and are used as part of the surface drainage system. Every desirable community in America has a significant park and recreation system as one of its building blocks.

Open space is usually classified as either developed or undeveloped. Developed open space is designed for recreational uses, both active and passive, whereas undeveloped open space preserves a site's natural amenities.



Park Area National Recommendations

The National Recreation and Park Association (NRPA) has developed a set of standards for local improved open space. Although these standards have been promoted as goals, they are not universally accepted. Recreational needs vary from community to community, and desires for recreation vary also.

Figure 5.3 NRPA Recommended Standards for Local Developed Open Space

Component	Use	Service Area	Desirable Size	Acres / 1,000 Population	Desirable Site Characteristics
LOCAL / CLOSE-TO-HOME SPACE					
Mini-Park	Specialized facilities that serve a concentrated or limited population or specific group such as tots or senior citizens	Less than ¼ mile radius	1 acre or less	0.25 to 0.5 acres	Within neighborhoods and in close proximity to apartment complexes, townhouse developments, or housing for the elderly.
Neighborhood Park / Playground	Area for intense recreational activities, such as field games, craft, playground apparatus area, skating, picnicking, wading pools, etc.	¼ to ½ mile radius to serve a population up to 5,000 (a neighborhood).	15+ acres	1.0 to 2.0 acres	Suited for intense development. Easily accessible to neighborhood population – geographically centered with safe walking and bike access. May be developed as a school-park facility
Community Park	Area of diverse environmental quality. May include intense recreational facilities, such as athletic complexes, large swimming pools. May be area of natural quality for outdoor recreation, such as walking, viewing, sitting, picnicking or any combination of the above, depending on site suitability need.	Several neighborhoods. 1 to 2 mile radius	25 + acres	5.0 to 8.0 acres	May include natural features, such as water bodies, and areas suited for intense development. Easily accessible to neighborhood served.

TOTAL CLOSE-TO-HOME SPACE = 6.25-10.5 acres / 1,000 population

Source: National Recreation and Park Association, *Recreation, Park and Open Space Standards and Guidelines*, p. 56. ©1983 by the National Recreation and Park Association, 3101 Park Center Drive, Alexandria, Virginia 22302.

Undeveloped Open Space

The O'Shaughnessy Reservoir may satisfy some of the requirement for open space, but only for those lots that abut it. There is no improved public access to the reservoir within the village. (Recreational opportunities are discussed in the Community Facilities section.)

Undeveloped lots in the northwest corner of the village off Forest Drive would be large enough to create a village park with several recreational fields.



View west of Forest Drive



Current “Park” area between Hiawatha Drive and Iroquois Drive



Current “Park” area between Hiawatha Drive and Iroquois Drive

Future Recreational Needs

As Shawnee Hills grows it may wish to use the NRPA model to survey the service area population to determine demand for different activities. Demand is then converted to facilities needs and then to land requirements. The large amounts of open space along O’Shaughnessy Reservoir do not replace the potential need for neighborhood parks with athletic fields for organized sports, if the community desires facilities within the village.

Undeveloped Open Space- Neighborhood

Suggestion: The three dedicated park areas from the original plat could be developed as passive and active open space for village residents.

Recommendations at Build-Out

- **Overall active recreational area required** - NRPA recommends 6.25-10.5 acres /1000 population. In this case, the lower ratio can be used based on the existence of land along the O'Shaughnessy Reservoir along the village's eastern edge and other recreational opportunities nearby. Shawnee Hills would need six acres of park for a population of 1000, or ten acres of parks for a population of 1600.
- **Suggestions:**
 1. Establish three passive mini parks of one acre or less on the areas dedicated by the plat.
 2. Consider a new ten-acre village park for active recreation in the northwest corner of the village (Beech, Forest, Ridge, and Ironwood Drives have never been constructed). Acquire the lots and construct a new park. Consider the following facilities to be constructed over time as money is available:
 - tennis courts
 - baseball diamond
 - basketball courts
 - volleyball courts
 - picnic shelter
 3. Consider additional active recreational uses as the current village administration property is developed. Seek additional adjacent property to add to this space.
 4. Consider active recreation areas as part of open space requirements as development occurs in the future.



Village meeting hall and police department, looking west on Reindeer Drive

CHAPTER 6

The Community

Community facilities are important features of any jurisdiction. These facilities fulfill the needs of a population through education, entertainment, recreation, and activities that generate fulfillment. They tend to be those entities and features that create a sense of community that reaches beyond the boundaries of an individual's home or workplace. Some of these are specifically within the boundaries of Shawnee Hills, while some are beyond those boundaries but are close enough to identify with the village or by the village's residents.



Public Schools

The Village of Shawnee Hills lies within the Dublin City School District. According to the Dublin Superintendent's Office, Dublin City School District is nationally recognized as a leader in public education and considered one of the top school systems in Ohio. Dublin City Schools is the sixth largest school district in Franklin County. The district serves an area of approximately 47 square miles in and around the City of Dublin.

Current Facilities, Dublin City Schools

The Dublin City School District had total revenue of \$194.3 million for fiscal year ending June 30, 2010, including program and general revenues. Program revenues include charges for services and operating grants. General revenues include property taxes, grants and entitlements, payment of lieu of taxes and investment earnings. The specific schools which include Shawnee Hills in their service area are:

- Dublin Jerome High School located at 8300 Hyland-Croy Road, Dublin Ohio 43017. (614) 873-7377.
- Willard Grizzell Middle School located at 8705 Avery Road, Dublin Ohio 43017. (614) 718-8600.
- Eli Pinney Elementary School located at 9989 Concord Road, Dublin Ohio 43017. (614) 798-3570.

Enrollment Growth

The following tables show the current enrollment numbers as well as the trend over the last ten years and projections for the next ten years.

Figure 6.1 Enrollment for Dublin City Schools that serve the Village of Shawnee Hills

	<i>Elementary</i>	<i>Middle</i>	<i>High</i>	<i>Total</i>
Eli Pinney Elementary School	570			570
Willard Grizzell Middle School		640		640
Dublin Jerome High School			1,189	1,189
Total 2000-01 Enrollment	570	640	1,189	2,399

(Source: Dublin City School District, June 30, 2010)

Figure 6.2 Past Enrollment, Dublin City School District (School Year 2001-02 to School Year 2010-11)

Grade Level	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011
Elementary	5,551	5,576	5,473	5,671	5,816	5,924	6,063	6,142	6,352	6,426
Middle	2,702	2,828	2,905	2,982	3,017	2,978	3,117	3,121	3,134	3,265
High	3,331	3,449	3,557	3,603	3,758	3,949	4,015	4,164	4,157	4,266
Other										
Total	11,584	11,853	11,935	12,256	12,591	12,851	13,195	13,427	13,643	13,957

(Source: Dublin City School District, 2010)

Figure 6.3 Enrollment Projections, Dublin City School District (Year 2006-07 to Year 2016-17)

Grade Level	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-2017
Elementary	6,204	6,353	6,357	6,434	6,581	6,628	6,661	6,684	6,688	6,688
Middle	3,139	3,185	3,312	3,406	3,431	3,392	3,436	3,560	3,603	3,636
High	4,157	4,187	4,221	4,306	4,327	4,537	4,595	4,619	4,744	4,719
JVS	62	62	62	62	62	62	62	62	62	62
Total	13,562	13,787	13,952	14,208	14,401	14,619	14,754	14,925	15,097	15,105

(Source: Dublin City School District, 2010)

Funding for Schools

The cost of educating a student in the Dublin City School District increased from \$7,886 in 2000-01 to \$12,881 in 2010-11. However, Dublin City School District's revenue sources per pupil were \$8,050 in 2001-01 and \$10,860 in 2010-2011. As of the 2002 plan, 82.3% of revenues were generated locally compared to 73.8% in similar districts and 51.0% statewide. Other sources of revenue included 17.1% from the state and 0.6% from the federal government.

Dublin City School District is a wealthy district in terms of revenue sources and real estate valuation. The median household income was \$112,688 compared to \$104,703 in the Olentangy District, \$86,860 in overall Delaware County and \$46,838 statewide (*American Community Survey 3-year estimate 2007-2009*).

Effect of Land Use Planning on School Planning

The Dublin City School Superintendent's Office estimated a total Shawnee Hills student population of 385 students. The District states that due to the already growing population of Dublin City School District of around 350 per year, the introduction of these projected pupils over a gradual period would not pose a considerable impact on the District. There is also a possibility that these students are moving from somewhere else in the District or families without children are moving in these homes.

Daycare Centers

One daycare centers are located in Shawnee Hills. Although such centers are typically commercial, for-profit entities, they also serve as part of the educational segment of a community. The Oxford School (Muirfield/Tartan location) is located at 6055/6065 Glick Road in the Winners Office Park Condo development. The center offers morning and afternoon pre-school and pre-kindergarten, infant/toddler programs, before/after school care, and summer camp opportunities.

Historic Sites

There are no sites in Shawnee Hills listed on the National Register of Historic Places. However, the O'Shaughnessy Dam, completed in 1925, was listed on the Register in 1990. The dam is in the unincorporated area of Concord Township but is an identifying feature for the area.



O'Shaughnessy Reservoir

The City of Columbus owns approximately 425 acres of land around the O'Shaughnessy Reservoir. Much of this land is unmaintained in an effort to protect the water quality of the reservoir. However, there are several locations around the reservoir where public access is provided. These include two accesses north of the village at Twin Lakes Wildlife Reserve and off the eastern end of Harriott Drive. Other accesses are provided on either side of the dam and along Riverside Drive along the eastern edge of the water.



Columbus recently completed a series of projects along several area facilities, including the O'Shaughnessy, Hoover and Griggs reservoirs. The city spent \$4.5 million in Federal stimulus funds to renovate parking lots, remove storm drains and plant trees and shrubs at 16 sites near city reservoirs. The work is intended to reduce pollutants that run off the parking lots into waterways during rain events.

O'Shaughnessy improvements include new parking areas, a rain garden, an amphitheater serving also to drain stormwater, new trees, and picnic tables, all accomplished on land outside the Village. Glick Park is the final result, serving as an amenity available to Shawnee Hills residents.



Libraries

There are no public libraries in Shawnee Hills. However, residents can obtain a library card at any of the Delaware County public libraries. The Delaware County District Library has its downtown library at 84 East Winter Street, Delaware, and branch libraries in the City of Powell at 460 S. Liberty Street, Ostrander at 75 North 4th Street, and a new Orange branch at 7171 Gooding Blvd. Prior to the opening of the Orange Branch, the District Library employed 30 people or 24 full-time equivalents. Its annual budget is approximately \$2 million, which is used for staff salaries and materials, maintenance, and operating expenses. In 2009, voters approved a 1-mill, 10-year levy that was used to expand library services, including building the new Orange branch. School districts that are in the service area include

Olentangy, Delaware City, Buckeye Valley, and the Delaware County portions of Elgin Local, Dublin, and Union. Currently, the District has over 145,000 volumes.

The Columbus Library System maintains a Dublin Library branch at 75 N. High Street (Dublin Road) in Dublin. Also close to Shawnee Hills is the Columbus System's Northwest Library at 2280 Hard Road.



Ohio Wildlife Center

The Ohio Wildlife Center (OWC) “is a leader in wildlife rehabilitation and conservation education.” The center treats nearly 5,000 animals in its wildlife hospital every year and reaches thousands of adults and children through education programs. The OWC is a private, non-profit organization with its education and administration office at 6131 Cook Road, north of the village. The Nature Education Center is open seasonally and hosts week-long summer day camps, group programs, and tours.

Columbus Zoo and Aquarium/Zoombezi Bay

In 1927, the Columbus Zoological Park opened with a small collection of donated animals. Located in Liberty Township and owned by the City of Columbus, the Columbus Zoo and Aquarium and Zoombezi Bay is a 588-acre complex that has significant impact on adjacent areas and serves as an economic driver for Delaware County and the central Ohio region. The zoo saw its highest year attendance (2.37 million) in 2010 with 74,000 zoo memberships sold and 23,000 Zoombezi Bay memberships.

Medical Facilities

There are no medical facilities located within Shawnee Hills. Grady Memorial (existing and future campuses) in Delaware, St. Ann's in Westerville on Cleveland Avenue, Dublin Methodist at 33/161 in Dublin are the closest full-service hospitals. There are also three “Close to Home” Nationwide Children's Hospital facilities in Dublin, one on Hospital Drive, Perimeter Drive, and Venture Drive.

Outpatient facilities serve southwestern Delaware County. Wedgewood Urgent Care, 10330 Sawmill Parkway, Suite 300; America's Urgent Care, 24 Hidden Ravines Drive; and Scioto Urgent Care, 6350 Frantz Road, Suite H in Dublin, are the closest urgent care facilities. These centers provide medical services that do not require an overnight stay.

Fire Protection

Fire Protection is provided by Concord Township (614-881-5997). The Fire Station is located at 7943 Dublin Road near the Home Road intersection, approximately 2.9 miles north of the intersection of Glick and Dublin Road. Concord Township Fire and rescue covers 22 square miles and provides an array of services for approximately 8,800 residents. The department employs a full-time Fire Chief, 19 full-time firefighters, and 16 part-time firefighters. All full-time

Shawnee Hills Comprehensive Plan

firefighters are also paramedics and many are rescue technicians with specialized training in rope rescue, water rescue, auto extrication, confined space, trench rescue, and structural collapse. Services and training include emergency medical services, fire protection, hazardous materials, water rescue, auto extrication, and fire prevention education.

The department owns two engines with 1,500 gallons per minute of pumping flow. The department also operates a 2007 Horton Medic, a 20-foot tandem axle trailer, a 1989 grass truck with 250-gallon tank, a 2008 Achilles inflatable boat, and a 2008 Ford Expedition chief vehicle. Typical response time to Shawnee Hills is three minutes. The department endorses the use of masonry construction on buildings with narrow separation.

Due to the narrow streets, it is difficult to turn into some streets and can be challenging for large fire-fighting equipment to reach some locations in the village. Wider turning radii at intersections would assist in turning into small lanes.

Current hydrant spacing is 1000' in Shawnee Hills. With the new growth and potentially more dense neighborhoods, it may be desirable to add new hydrants, and to increase the size of water lines so that all lines sizes are a minimum of 6" within the village and looped to the main 8" line on Dublin Road.

Police

Shawnee Hills is served by its own police department, which consists of a full-time chief, one full-time captain, two part-time officers, and 10 auxiliary. Police backup is provided by the Delaware County Sheriff's Office, (DCSO) which is headquartered in Delaware on S.R. 42. The last available geographic-specific data on Sherriff's Complaints showed that Shawnee Hills generated 121 Sherriff's calls in 2008, with Concord Township generating 2,568 and Liberty Township generating 4,838 complaints.

Other Facilities

The Timothy L. Fellure Municipal Building at West Reindeer Drive serves as the village administrative headquarters, clerk's office and police station. The site includes the Veterans' Memorial, dedicated by the Village in 2006 (*pictured right*). The civic center is located on West Mohawk Drive. The Village needs new, larger quarters for administration and public meetings. It would be appropriate to use the existing village hall for the police station. A new village hall for council and clerk should be located adjacent to the current building on the same property. A prominent public building would anchor the commercial district along Dublin Road.



CHAPTER 7

General Economic Conditions

Land development depends upon a sustained positive economy. Within the national economy there are regional economies moving forward or slumping due to local conditions. Delaware County is one of Ohio's most affluent counties, with the lowest unemployment rate even in the current economy. The Central Ohio and Delaware County economies drive Shawnee Hills' economy.



While the first decade of the century began with an economic downturn, productivity trended upward at a 2.6% annual rate over the next seven years. However, during the period 2007-2011, the credit crunch and housing crisis have led to a state, national and global downturn. (*Department of Commerce website and other sources*)

This Comprehensive Plan does not seek to present a full economic analysis of Delaware County or Shawnee Hills as trends are changing almost weekly and are covered daily in the media. It does seek to present some general data from a variety of sources.

The United States Economy in General

Although the news has been filled with bleak economic reports locally, state-wide and nationally, there are some indicators that represent improvement in some areas.

- Ohio was named first in the nation for major business expansions for 2008 by *Site Selection* magazine. In its March issue, the publication tallied the number of projects that each state recorded in the previous year, both in new developments and expansions of existing operation. Ohio's 503 projects bested Texas' 497 and Michigan's 296. This is the third year in a row the state has taken the top spot.
- Forbes.com and Moodys.com predicted that Columbus will boast the nation's 8th fastest home sales rate in 2008, and that home prices here will increase 3.49%.
- In early March 2009, Forbes.com named Columbus the "Number 1 Up-and-Coming Tech City."
- In a recent Stress Test report from the Associated Press, Delaware County ranked third best in the state. Holmes County and Geauga County came in only slightly better. The study used the figures of unemployment at 6.4% (up from 3.9% in October 2007), foreclosures at 1.52% (up from 1.45% in October 2007) and

bankruptcy at .91% (up from .63% in October 2007) to create the ranking. Scores were created where zero is perfect and one hundred is the worst possible. All three counties scored between 8 and 9.

- Columbus is the nation's third most stable housing market, according to Forbes and Moody's. Researchers considered the strength of the economy, plans for construction, low foreclosure rates, local credit markets, home sales rates, and the affordability and availability of housing.
- Median Household Income for the Columbus MSA is \$44,782, 57th nationally (San Francisco was 1st at \$63,027; Per Capita Income for Columbus \$23,020, 38th nationally (Naples, FL was 1st at \$31,195) *Source: Census Bureau, February 2009.*
- Median income in Delaware County is the state's highest at \$88,645. Fairfield is at \$58,019, Licking is at \$52,148 and Franklin is at \$51,246. *Source: 2008 American Community Survey, U.S. Census.*

The Local Economy

While the national economic news has been in an ongoing recession with unemployment numbers on the rise, the local economy generally has not experienced the full effects of the poor economy.

Employment

Delaware County has a broad-based economy. No one sector drives the economy, which protects the county from sharp up and down spikes. Delaware County's overall employment by sector very closely mirrors the state of Ohio's. Unlike some counties, which are largely single-industry driven (auto manufacturing, agriculture, etc.) Delaware County has a healthy mix of many diverse employment sectors.

Figure 7.1 Establishments, Employment and Wages by Sector, Delaware County, 2006 (Source: Ohio Dev. Dept.)

Industrial Sector	Number of Establishments	Average Employment	Total Wages
Private Sector	3,723	57,877	\$2,527,521,560
Goods-Producing	623	9,190	\$438,893,507
Natural Resources	20	346	\$11,479,427
Construction	447	3,125	\$134,614,888
Manufacturing	156	5,719	\$292,799,192
Service-Producing	3,100	48,687	\$2,088,628,053
Trade, Transportation and Utilities	881	14,185	\$441,567,455
Information	68	1,116	\$65,574,595
Financial Services	424	5,361	\$367,814,128
Professional and Business Services	762	11,247	\$837,370,926
Education and Health Services	293	5,324	\$192,414,087
Leisure and Hospitality	374	9,622	\$140,439,172
Other Services	287	1,806	\$42,948,511
Unclassified	13	26	\$499,179
Federal Government		287	\$12,139,379
State Government		130	\$55,972,036
Local Government		6,456	\$242,974,673

The Ohio Department of Development showed that during the period 2001-2006, all sectors except mining saw an increase both in the number of establishments and the number of employees. The areas with the greatest increases were Information (405% employment, 75% establishment), Business Services (154% employment, 79% establishment), and Leisure and Hospitality (117% employment, 75% establishment). Generally, the Service sector saw a 93% employee growth, the Goods sector saw a 13% growth and the Local Government sector saw a 62% growth in employees.

Figure 7.2 Top 20 Major Employers, Delaware County (Delaware County Auditor 2008)

Employer	Employment Sector	# Employees
JP Morgan Chase	Finance & Insurance	7,601
Olentangy Schools	K-12 School System	1,564
Delaware County	Government	1,082
Central Ohio Primary Care	Medical Group	935
Kroger's	Retail/Food	829
Kroger Great Lakes	Distribution Center	791
American Showa	Manufacturing	709
Ohio Wesleyan	Private Liberal Arts Univ.	612
Wal-Mart	Food & Retail	595
Ohio Health-Grady Hospital	Medical	577
Delaware City School	K-12 School System	538
Liebert	Power Supply	493
AHP	Diaper Manufacturer	460
Meijer	Food & Retail	445
Liebert-Emerson Network	Emerson Network	429
Advance Auto Parts	Auto Parts	404
CIGNA	Medical/Dental Insurance	400
Accel, Inc.	Distribution/Assembly	386
PPG Industries, Inc.	Manufacturing	338
Worthington Cylinder	Manufacturing	320

Shawnee Hills Economy – 2011

Most Shawnee Hills businesses service the local community. Many are family-owned.

Figure 7.3 Shawnee Hills Businesses, May 2011

Business Name	Business Type
Aspen Energy	Energy Procurement and Management
Baker's Village Garden Center	Retail landscaping
BCS Boats	Retail boat sales
Cedarbrook Garden Center	Retail landscaping
Copper Tree Homes	Custom Homes
Cuttin' Up Barber Shop	Hair salon
CVS Pharmacy	Retail drugs
E & Company	Hair Care
El Vaquero	Restaurant
Experienced Possessions	Used furniture
Hella's	Restaurant

Iacono's	Restaurant
Individual Fitness Solutions	Fitness salon
J & B Auto	Auto restoration
Jimmy V's	Restaurant
Largo's Tavern	Restaurant
The Oxford School	Day Care/Preschool
Patridge Survey	Survey
Rainbow Cleaners	Dry cleaner
ReMax Realty	Real Estate
Shawnee Cigar Company	Cigar Store
Shawnee Hills Bakery	Baked Goods
Shawnee Hills Pet Grooming	Pet Care
Shanghai Lily	Restaurant
Strader's Garden Center	Garden Center
Swan Cleaners	Dry Cleaner
Village Market	Retail
Village Pizzeria	Restaurant
Walgreen's	Retail/Pharmacy
Wendy's Restaurant	Fast Food

Economic Development Tools

Economic Development, or the process of actively seeking businesses to locate to the county, is typically performed on the county and municipal level. The following is a list of economic tools and development-related issues that the village should be aware of.

Enterprise Zones

Enterprise Zones are defined areas within the county that allow for tax abatements on industrial projects conducted within the zone. Real property abatements can be made for improvements on the real property as a result of the project. Personal property abatements can be taken on machinery, equipment, furniture, fixtures and inventory that is new or first-used in the State of Ohio. A three-member negotiation team reviews the project and negotiates a package specific to each project.

Delaware County has three active zones, the City of Delaware Enterprise Zone, the Orange Township Enterprise Zone and the Village of Sunbury Enterprise Zone. Tax abatement levels are abated up to an agreed-upon percentage for a certain number of years. This program also has a requirement of job creation associated with any abated project. If properly managed, this program has proven to be an engine of growth.

Broadband Fiber

Several efforts are underway to achieve a higher level of fiber infrastructure. In addition to an effort by the City of Delaware to connect businesses within the city (Delaware Area Super Highway - DASH) there is also a regional effort to connect entities such as Dublin, Westerville, Delaware, Delaware County, while also connecting businesses and governmental agencies within each (Central Ohio Broadband – COBB). Connect Ohio is a state-wide effort aimed at



determining where service is either non-existent or ineffective and what sorts of projects can be initiated to improve service. All efforts are aimed at increasing the economic viability of the area.

Port Authority

Port Authorities are political subdivisions created by statute for the purpose of enhancing and promoting transportation, economic development, housing, recreation, research, and other issues within the jurisdiction of the port authority. Such organizations can

acquire and sell property, issue bonds, loan monies for construction, operate property in connection with transportation, recreation, government operations, or cultural purposes, engage in activities on behalf of other political subdivisions, among many other functions. Where funding is concerned, it may issue revenue bonds, apply for grants and loans, and even levy a property tax not exceeding one mill for a maximum period of 5 years. In short, the Port Authority can accomplish much more in the way of economic development in a competitive fashion than a government entity which is limited by disclosure requirements.

Community Reinvestment Areas

Community Reinvestment Areas (CRAs) are designated zones in which tax abatements are allowable on real property improvements made as a result of an expansion or relocation project. These agreements are available for expanding or relocating businesses. Job creation is an additional requirement for participation in the Community Reinvestment Area program.

Only one CRA exists in Delaware County, located in the City of Delaware with the same boundaries as the Delaware Enterprise Zone. The available abatement rate can extend up to 100% on the real property improvements for a term of up to 15 years. The abatement rate and term is a unique negotiation for each project, considering such factors as job creation numbers and real and personal property investment levels.

Tax Increment Financing

Tax Increment Financing (TIF) is a program to finance public infrastructure by redirecting new real and personal property tax to a debt retirement fund. A portion of the real property tax on improvements to a site, up to 75% for 10 years, can be paid into a special fund, and that fund can be used to retire the debt on a public infrastructure improvement tied to the project. The value of the property tax exempted will be paid as a Service Payment-in-Lieu of Taxes (equal to the amount of exempted value), due at the same time property taxes are due, and will go into a special fund. This



special fund, set up by the County Auditor, will be used to retire the debt incurred from the public infrastructure improvements associated with the project.

A county negotiating committee meets with a potential business and discusses if the TIF program can be utilized for the proposed project. If so, the committee will work with the business to reach an agreed exemption level. The Delaware County Economic Development Office works with both the business and negotiating committee to facilitate the process.

Ohio Job Creation Tax Credit

The Ohio Department of Development administers this program in conjunction with local incentive program participation. This program allows a business to receive a tax credit or even a refund against its corporate franchise tax based upon the number of new jobs created with the project.

The requirements of the program are that at least 25 new, full-time jobs must be created within three years of the beginning of the project, and that the new employees must be paid a minimum of 150% of the federal minimum wage. The Job Creation Tax Credit is a direct credit against a business' corporate franchise tax. The basis of the credit lies in the state income tax withholding per new employee. The tax credit will be figured from the state income tax withheld for the new employees. A percentage of the withheld tax will be credited against the business' corporate franchise tax each year for the term of the agreement. This percentage rate can be up to 75% with a term of up to ten years.

The Delaware County Economic Development Office will work with businesses interested in this program and put them in contact with the Ohio Department of Development's representative.

Shawnee Hills Future Economic Development

In any jurisdiction, particularly a village, there is a need for a commercial tax base. The village should use its commercially-zoned land wisely to attract businesses that pay significant property tax and income tax.

Although industrial uses can be positive tax generators, it is undesirable to attract industry, since developable land is limited and there is no room to transition from industrial to residential uses within the current village limits and potential growth areas.



CHAPTER 8

Infrastructure

Streets

General Information

The original plat of the Shaw Nee Hills Addition contained grid streets laid out by easement over the platted lots, with a typical 35-foot wide right of way. Modern subdivision road right-of-way is 60 feet.



Many streets are only paved 12-14' wide, without curbs, sidewalks or defined drainage ditches. In many areas, mature trees overhang the narrow roads. All these attributes contribute to the sense of “rural character” cited by residents.

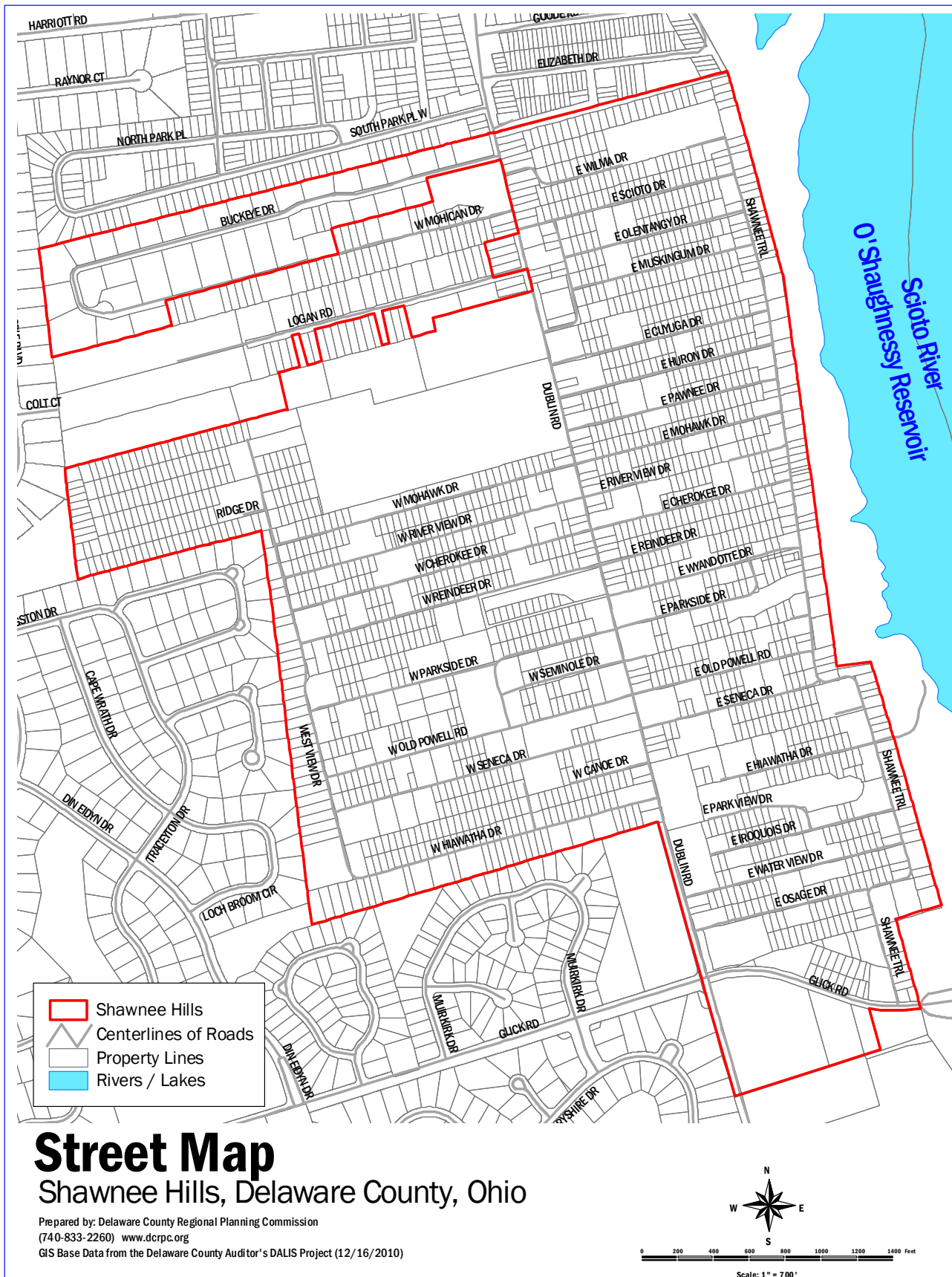
The Street Map catalogs which streets have been built, which are paved/gravel, and which have not been built.



In order to obtain a building permit, a lot must have frontage on an improved public street (i.e. pavement, water, sewer, electric, etc.) There are more than 10 miles of paved streets in the village.

Unimproved “paper” streets may be constructed to village standards in any of three ways:

- a.) by their contiguous lot owners, jointly, at their expense, dedicating all improvements to the village;
- b.) by the village, at its expense, if the project is a community-wide benefit;
- c.) by the village upon petition from the contiguous lot owners, with a neighborhood assessment to reimburse the village for the cost of street, drainage and utilities extensions.
- d.) A combination of a) and b) or b) and c).



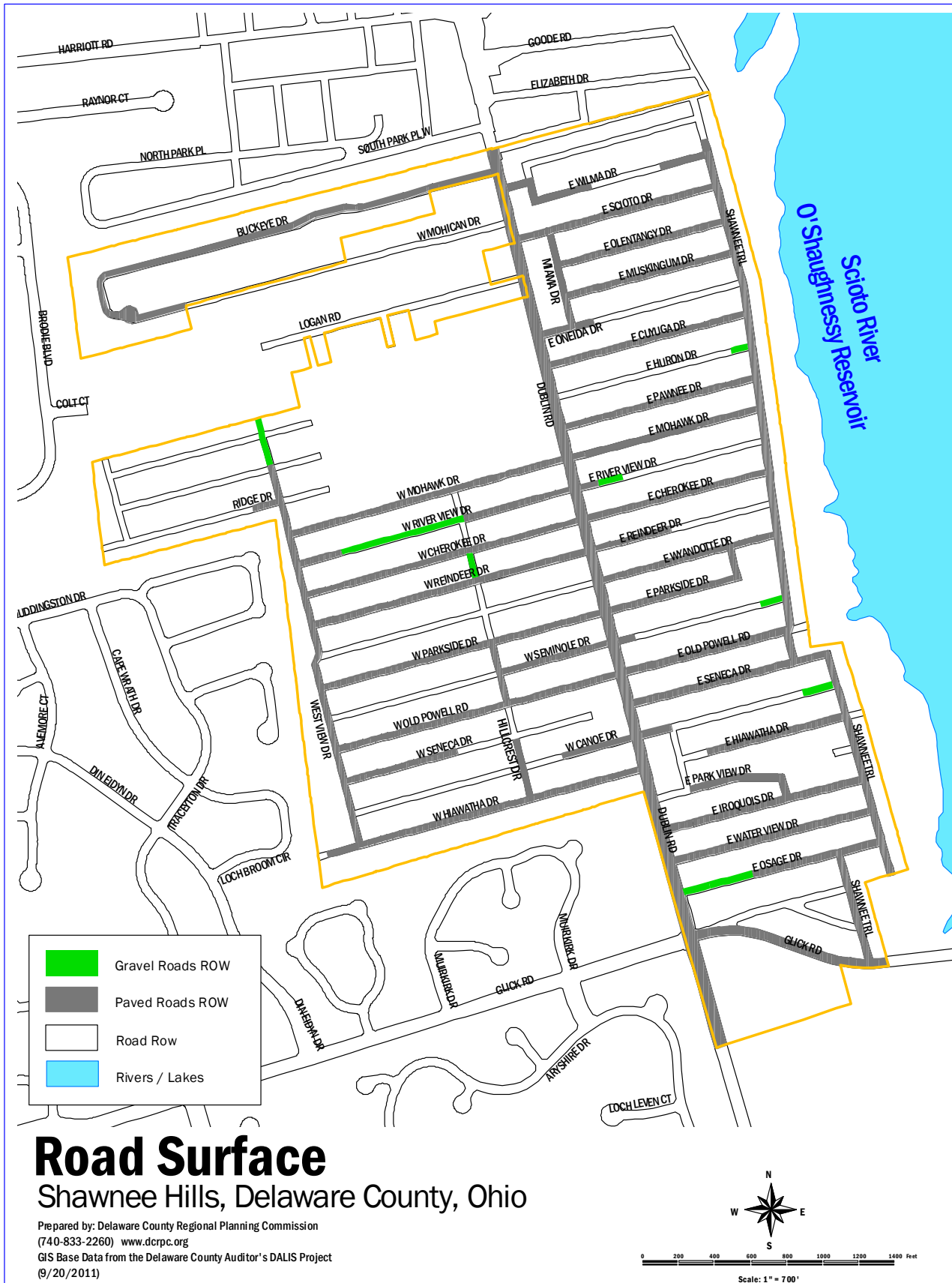
Many homes are built on back-to-back lots that span two blocks, with intervening paper streets acting as rear lot lines, invisible and forgotten. In such situations, paper streets may never need to be constructed, and may be used for bikeways or left as open space.

Existing Road Widths

Because of the 35-foot platted rights of way, local roads are narrow. The following are estimated averages since many roads are not a consistent width along their entire length.

Figure 8.1 Existing Pavement Widths

Road Name	Width
Buckeye Drive	20
E. Cherokee Drive	13
E. Cuyuga Drive	12
Dublin Road (SR 745)	20
E. Hiawatha Drive	10
E. Iroquois Drive	12
E. Mohawk Drive	10
E. Muskingum Drive	11 to 12
E. Old Powell Road	14 to 17
E. Olentangy Drive	10 to 12
E. Oneida Drive	12
E. Osage Drive	16 (unpaved)
E. Park View Drive	10
E. Parkside Drive	12
E. Pawnee Drive	10 to 12
E. Riverview	8 (unpaved)
E. Scioto Drive	15
E. Seneca Drive	12
E. Water View Drive	9 to 10
E. Wyandotte Drive	9 to 12
Glick Road	26
Shawnee Trail	12 to 16
W. Canoe Drive	11 to 12
W. Cherokee Drive	12
W. Hiawatha Drive	14 to 15
W. Mohawk Drive	15
W. Old Powell Road	12 to 14
W. Parkside Drive	12 to 13
W. Reindeer Drive	12 to 13
Ridge Drive	10
W. River View Drive	8 to 12
W. Seminole Drive	12 to 15
W. Seneca Drive	12 to 14
West View Drive	12
Hillcrest Drive	11 to 17
Miama Drive	14



The narrowness of roads is an attribute and a risk. Many residents like the narrow lanes, and feel that it contributes to the sense of village character. Conversely, many roads are too narrow for two cars to safely pass without moving onto the lawns. Fire-fighting vehicles cannot easily navigate many of the narrow roads. Without sidewalks, children have no place to walk or bicycle but in the street. Cut-through traffic trying to avoid the signal at the Glick and Dublin intersection jeopardizes these pedestrians and bicyclists. Without defined drainage ditches in much of the village, flooding has caused property damage and overtopped local streets.

Village streets and their rights of way need to:

1. Provide for safe access to the adjacent lots and local traffic.
2. Provide safe access for fire and police emergency response.
3. Provide safe ways for pedestrians and cyclists to share the road or right of way with cars.
4. Provide for storm water runoff.
5. Maintain an intimacy of village character.
6. Reduce cut-through traffic from Glick Road to State Route 257 to avoid the traffic signal.
7. Provide for limited guest parking.
8. Provided for anticipated growth while maintaining the quality of life.

Effect of Sewer Construction on Roads

As part of the sewer installation, the village expected trenching and repavement of a discreet portion of the street. After scoring trench lines on the pavement, work began. However, heavy construction equipment crumbled the pavement adjacent to the trenches. In most cases, the entire road was repaved, essentially improving the quality of the streets.



Pavement scored in preparation for sewer trenching, 2001

Due to unsafe sight distances entering Dublin Road, conflict with oversize emergency vehicles, and unsafe pedestrian/auto conflicts, streets need to be upgraded for safety. In the future, roads should be improved where needed, to allow use by automobiles and bikes.

Bikeways - The DCRPC recently published a complete draft of a Parks and Trails Plan which combines all the existing trails and future plans of the various jurisdictions. The information is updated with the aid of local communities and sent to MORPC for inclusion in the Bikeway Plan of the central Ohio area. Shawnee Hills recently added a sidewalk along Dublin Road from Glick Road to the Village Hall and Administration Building. The village should prioritize future paths, including extension of the Dublin Road path to the northern village limits and a connection along Glick Road from Walgreen's to the dam.



Maintenance

The Village maintains village roads. ODOT will continue to maintain Dublin Road (SR 745 for the foreseeable future even though it is within village limits).

Figure 8.3 Maintenance of State Routes within Villages and Cities

Item/Ohio Revised Code Section	Within Village Corporate Limits
Pavement - 5521.01, 5501.31	ODOT
Curb, drainage, mowing, etc. - 5521.01,5501.31	VILLAGE
Standard longitudinal markings - 5521.01,5501.31	ODOT
Auxiliary pavement markings - 5521.01, 5501.31	VILLAGE
Route Marker signs - 5511.01	ODOT
Regulatory and warning signs - 5521.01	ODOT
School flashers - 5521.01	ODOT
Traffic signals - 4511.11, 4511.65	VILLAGE-Village obtains permission from ODOT
Bridges - 5501.31, 5591.02, 5591.21	COUNTY
Speed limits - 4511.21	Statutory limits by ORC

Traffic Counts

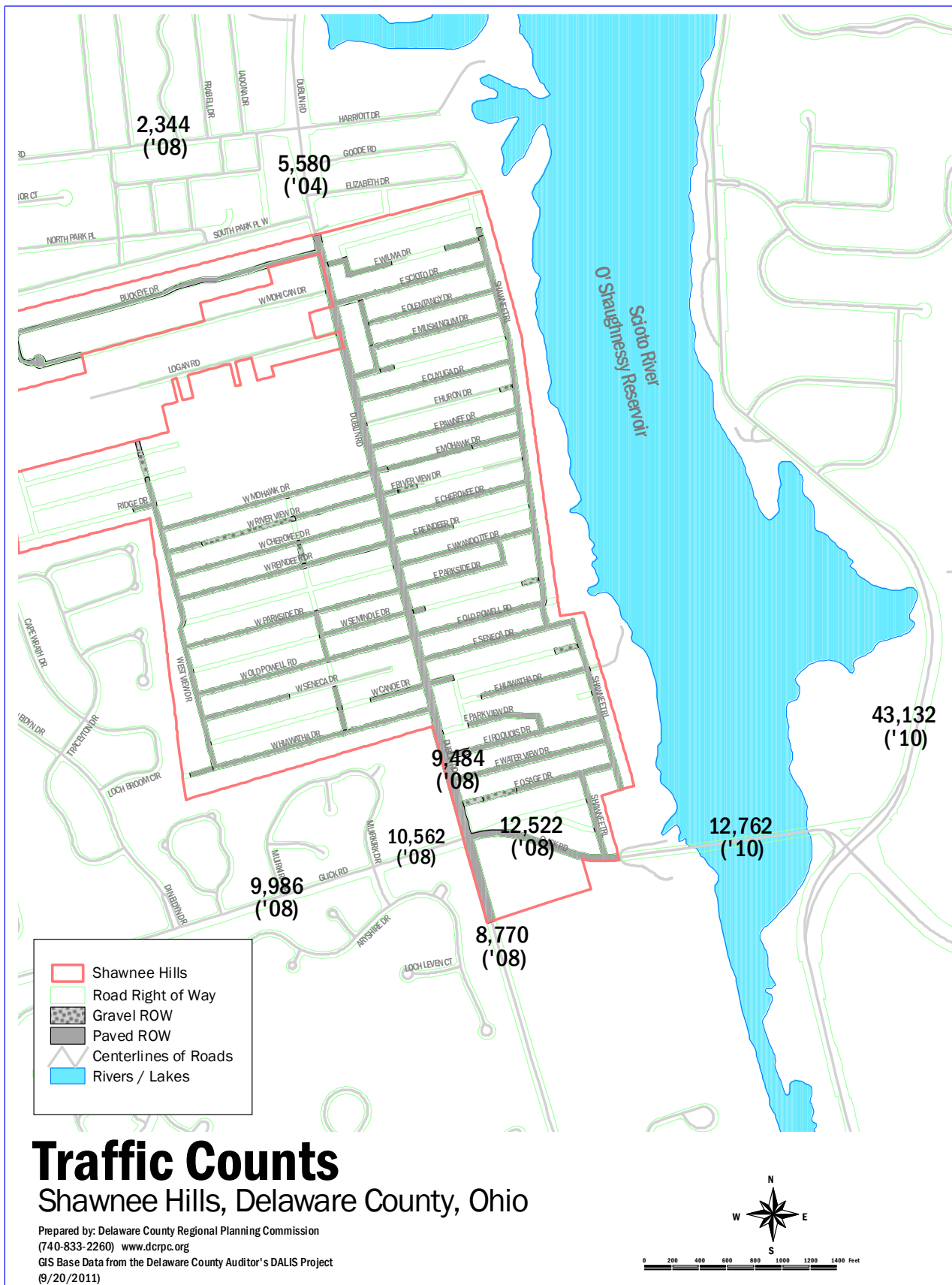
The Mid-Ohio Regional Planning Commission (MORPC) is the Metropolitan Planning Organization (MPO) for central Ohio. MPOs are Federally-designated organizations that act on behalf of local communities in certain transportation planning functions and as a funnel for Federal funds. MORPC maintains traffic counts (from various sources) in the central Ohio region. The Street Map on the following page shows the most recent data for area roads.

Glick Road and State Route 745 (Dublin Road) run through the village. Both are two-lane roads. Traffic counts on Glick Road registered 12,762 Average Daily Trips (ADT) over the dam in 2010. Glick Road west of Dublin Road was 10,562 ADT in 2008, with 12,522 east of Dublin Road, the most recent count. Dublin Road through the village registered 9,484 ADT in 2008.

A two-lane road with shoulders (38 feet of total pavement) can handle nearly 6,000 ADT with a Level of Service A, provided there is flat topography and good access management practices limit conflicting turning movements. Dublin

Road within Shawnee Hills has blind spots from rolling topography, and traffic counts already exceeding 6,000 average daily trips. As commercial development continues on Dublin Road through the village, more conflicting turning movements and increased traffic counts may require a protected third lane for safe left turns. ODOT has notified the village of a potential intersection improvement at Dublin (Route 745) and Glick Roads.

Shawnee Hills should insist that the Level of Service (LOS) C should be its lowest acceptable LOS. Development that generates more than 100 new trips per day should mitigate its fair share of the cost of road upgrades to maintain LOS C as necessary.



Functional classifications - The Delaware County Engineer's 1999 Design Standards identify road functional classifications.

Arterial streets have the primary purpose of carrying through traffic to and from residential, commercial, and industrial areas and the secondary purpose of providing access to abutting property. They are usually a continuous route carrying heavy loads and Average Daily Traffic (ADT) in excess of 3,500 vehicles. Arterial streets in Shawnee Hills: Glick Road and State Route 745.

Collector Streets have the primary purpose of intercepting traffic from intersecting local streets and handling this movement to the nearest major collector or arterial street. ADTs typically range from 1,500 to 3,500 vehicles, with AM peak hour traffic about 7-8% and PM peak hour of 10%. Collector Streets in Shawnee Hills are: none.

Local Streets represent the lowest category. Their primary function is to serve abutting land use. Typical ADTs range from 100 to 1,500 vehicles. Local streets are further classified as Loop, Through and Cul-de-sac. Example: all village streets.

Effect of Population Density on Roads

Population density has a direct correlation to ADT, as is demonstrated in table 9.4.

Figure 84 Dwelling Unit Density Per Acre and the Equivalent Population per Square Mile

# Units/acre x	#Persons/unit x	% Developable/ac x	Acres/ Square Mile =	Population/ Square Mile
.2	2.7	95 %	640	328
.5	2.7	90 %	640	778
1	2.7	90 %	640	1555
1.25	2.7	85 %	640	1836
1.5	2.7	85 %	640	2203
2	2.7	85 %	640	2938
3	2.7	80 %	640	4147
4	2.7	80 %	640	5530
5	2.7	80 %	640	6912
6	2.7	80 %	640	8294

The plat of the original village typically divided lots into 35' x 70' (exclusive of road easement). This would result in a net density of 14 units per acre if all the original platted lots were developed with single family homes. The resultant population density would be over 19,000 persons per square mile, the densest neighborhood in Delaware County. Such density would choke the narrow road network with 35' road right of way, and provide very unsafe traffic conditions.

The initial development of the Village did not anticipate modern traffic loads generated from development of all the platted lots. The narrow road right of way is itself a limiting factor to the number of homes and density of population. Since roads and utilities must confine themselves to the narrow rights of way, density of population must be regulated to preserve the public safety.

Access Management - The village should work with the Ohio Department of Transportation ODOT to utilize access management controls on Dublin Road. The village is responsible for curb cut permits within the corporate boundaries, so the village must adopt appropriate standards for access management on State Routes 745 and Glick Road.

Poor access management causes traffic congestion.

- Poor access management can reduce highway capacity to 20% of its design.
- Delay is as much as 74% greater on highways without access management.
- 60% of urban and 40% of rural crashes are driveway and intersection related.
- 15,000 access related crashes occur each day at an estimated annual cost of \$90 billion.

Access Management Principles

1. Regulate the location, spacing and design of drives.
 2. Space access points so they do not interact with each other.
 3. Provide adequate sight distance for driveways and intersections.
 4. Use appropriate curve radii, lane widths, and driveway angles.
 5. Provide turn lanes to separate conflict points for acceleration, deceleration, and storage lanes.
 6. Prohibit some turns in critical areas; relocate that activity to a less conflicted point.
 7. Restrict driveways to fewer than 30 per mile (every 350 lineal feet maximum).
 8. Use feeder roads to relocate critical movements and to handle short trips parallel to the main road.
 9. Locate driveways away from intersections to reduce conflicts (corner clearance).
 10. Use right in, right out drives to prevent unwanted left turns across traffic.
 11. Use zoning with access management to develop good site plans.
 12. Connect parking lots; share driveways.
 13. Use frontage roads to connect commercial traffic, and keep it parallel to the main road.
 14. Avoid disconnected street systems.
 15. Encourage internal access to out-parcels.
 16. Minimize the number of traffic signals.
 17. Use medians to separate traffic flows.
 18. Coordinate access permit review between ODOT, local zoning and building departments.
- ❖ Shawnee Hills should not issue any additional driveway permits on Dublin Road between the existing streets. Platted streets intersecting with state routes should be the access to both interior neighborhoods and businesses fronting on state routes. All platted streets abutting Dublin Road, and providing access to commercial lots should be constructed to a pavement width of 24-feet-wide to a distance of 150 feet from Dublin Road, or the depth of the commercial zoning district, whichever is greater.

- ❖ The responsibility to widen, or improve the state routes within the village is the village's. If access management controls are not used, and the village creates congestion and unsafe conditions, it will be up to the village to fix it.
- ❖ The Dublin Road hills cause unsafe sight distances for certain intersections. At some point, the village may have to shave the tops of some of the hills on S.R. 745 (Dublin Road) to improve safety.

Delaware County Thoroughfare Plan - A Thoroughfare Plan is a powerful tool for counties and townships to plan for future land use and traffic conditions. The Thoroughfare Plan is enabled by Ohio Revised Code Section 711.10:

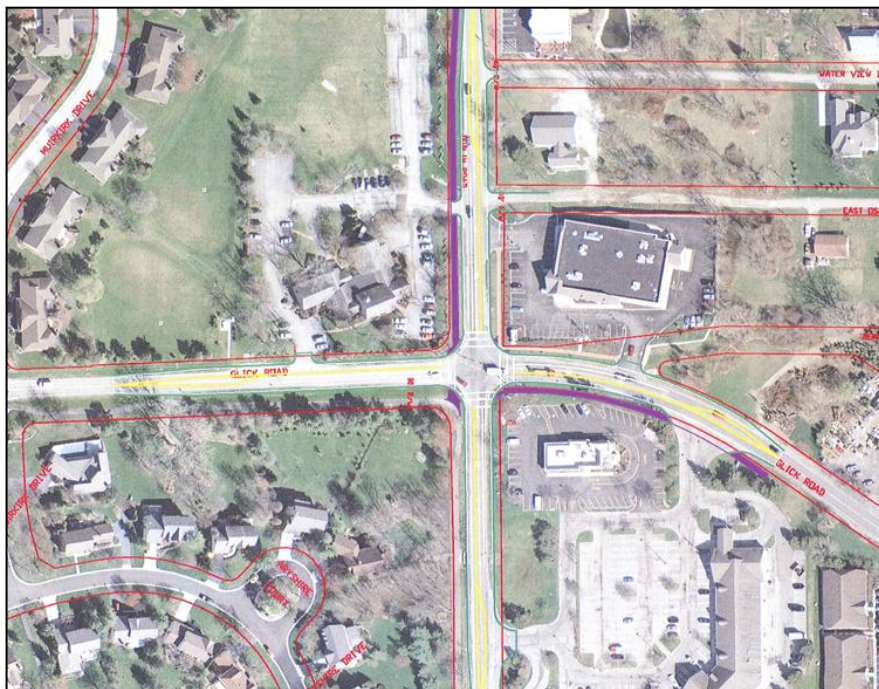
"Whenever a regional planning commission adopts a plan for the major streets or highways of the county or region, then no plat of a subdivision of land within the county or region, other than land within a municipal corporation... shall be recorded until it is approved by the regional planning commission."

The Delaware County Thoroughfare Plan was adopted in 1988 and updated in 2002. The plan makes recommendations to improve regional traffic flow.

Intersection of Dublin Road and Glick Road

As traffic has increased over the decades, the intersection of Dublin Road and Glick Road has become a growing problem. Congestion during rush hours and during special events such as the Memorial Tournament is recognized as an impediment to economic development in the Village.

The City of Dublin has initiated plans to improve the intersection. It has presented medium- as well as long-term proposals. The medium-term proposal shows turn lanes on all four legs of the intersection, extending approximately 250 feet, as well as multi-purpose trails on west side of the northern extension of Dublin Road and the south side of the eastern extension of Glick Road. A longer-term solution would require additional length of turn lanes and likely require more right-of-way. Dublin is waiting for recommendations from ODOT.



Road Recommendations

No new roads are proposed to be dedicated within Shawnee Hills. The plan makes the following suggestions for roads and rights of way.

- ❖ Generally, the village should not vacate platted rights of way unless there is an over-riding public interest.
- ❖ Require new (after adoption of this plan) commercial uses on Dublin Road to access via platted side streets. 24' of pavement should be provided on side streets within 150' of Dublin road, or to the driveway of the adjacent business.
- ❖ Adopt the road and walkway/bikeway standards (cross sections) for streets.
- ❖ Provide for traffic calming design (speed bumps, traffic islands, etc.) such that streets can share auto, pedestrian and bike travel at slow and safe speeds.
- ❖ Adopt a policy for construction of unconstructed streets that incorporates the following:
 - a.) Those streets and associated underground improvements that have not been constructed must be constructed either by their contiguous lot owners to village standards, or by the village, prior to issuance of a building permit on platted lots.
 - b.) The village may levy an assessment to the contiguous lot owners to reimburse the cost of street, drainage and utilities extensions. Such assessment may be triggered by petition of a majority of the lot owners on the street or by resolution by village council.
 - c.) Contiguous lot owners can construct the roads to village standards at their cost and dedicate them to the village.
- ❖ Adopt a 20-foot two-way street cross-section.



Utilities - Water

The Del-Co Water Company, a cooperatively owned private water company established in 1973, serves Shawnee Hills with potable water. As the county has grown, Del-Co has expanded its service to provide larger diameter water lines for residential and commercial service as well as fire suppression.

Supply

Del-Co draws surface water from the Olentangy River and from the Alum Creek

reservoir. The water is pumped to up-ground reservoirs on South Old State Road and State Route 315 prior to treatment. The Alum Creek Reservoir covers about 3,400 surface acres. Del-Co also has a groundwater supply from four wells each rated at 1,300 gallons per minute. An average of 38 inches of rainfall and snowmelt annually refills the watershed.



Del-Co Water Headquarters and Up-Ground Reservoirs on State Route 315, Liberty Township. The newest addition is the 1-billion-gallon reservoir at the bottom of the photo. Source: BBC&ME Engineering

The original plant on S.R. 315 was constructed in 1973 and is home to the Del-Co administrative offices. With a capacity of 19.2 million gallons per day, it serves the southwestern and south central parts of Delaware County. The raw water source for this plant is the Olentangy River. Named after one of the founders and first board president, the Ralph E. Scott Treatment Plant has a capacity of 6 million gallons per day and is located below the dam embankment to the Alum Creek Reservoir, which serves as the water source for the plant. This plant serves the south central and eastern side of Delaware County.

Also named after a founder, the Timothy F. McNamara Plant was constructed to meet the high summer peak demands in southern Delaware County. Its all-steel above-ground construction limits its use to summer months. The raw water source for this plant is Alum Creek just below the Alum Creek Reservoir. It has a capacity of 4 million gallons per day and is accessed from S. Old State Road. The Thomas Steward Plant is located in Knox County and serves the northeastern portions of Delaware County with a capacity of 4 million gallons per day.

A recently added billion-gallon up-ground reservoir is located along Liberty Road to bring total storage capacity to 1,660,000,000 gallons. The rapid growth of Delaware County strains water treatment capabilities during summer months. Del-Co regularly issues sprinkling regulations during dry summer periods. Certain addresses may water only every other day and there is typically no watering on Mondays.

With these new facilities, a total of 38 million gallons per day is the long-term pumping and treatment capacity of Del-Co. While they have planned for future growth, such as a potential up-ground reservoir in Thompson Township, Del-Co does not have unlimited supply options. Unlike Cleveland, which simply pumps more off-shore Lake Erie water to its treatment plants upon increased demand, long term solutions to water needs in Delaware County will require careful land use planning so that water needs do not outstrip ability to serve.

Water Lines in Shawnee Hills

The Water Lines map shows the location and diameter of water lines in the village. The map shows that the larger lines (7" – 8") are located along Dublin Road, West View Drive, Glick Road, Buckeye Drive, and Ridge Drive, which extends further west into Tartan Fields. The closest 9"-12" lines are located to the west along Concord Road. Development densities greater than one unit per acre typically require fire hydrants, which require a minimum 6-inch diameter line. Some of the water lines within the residential areas are 4-inch lines, which should be replaced with larger diameter lines for fire flow as the village continues to grow.

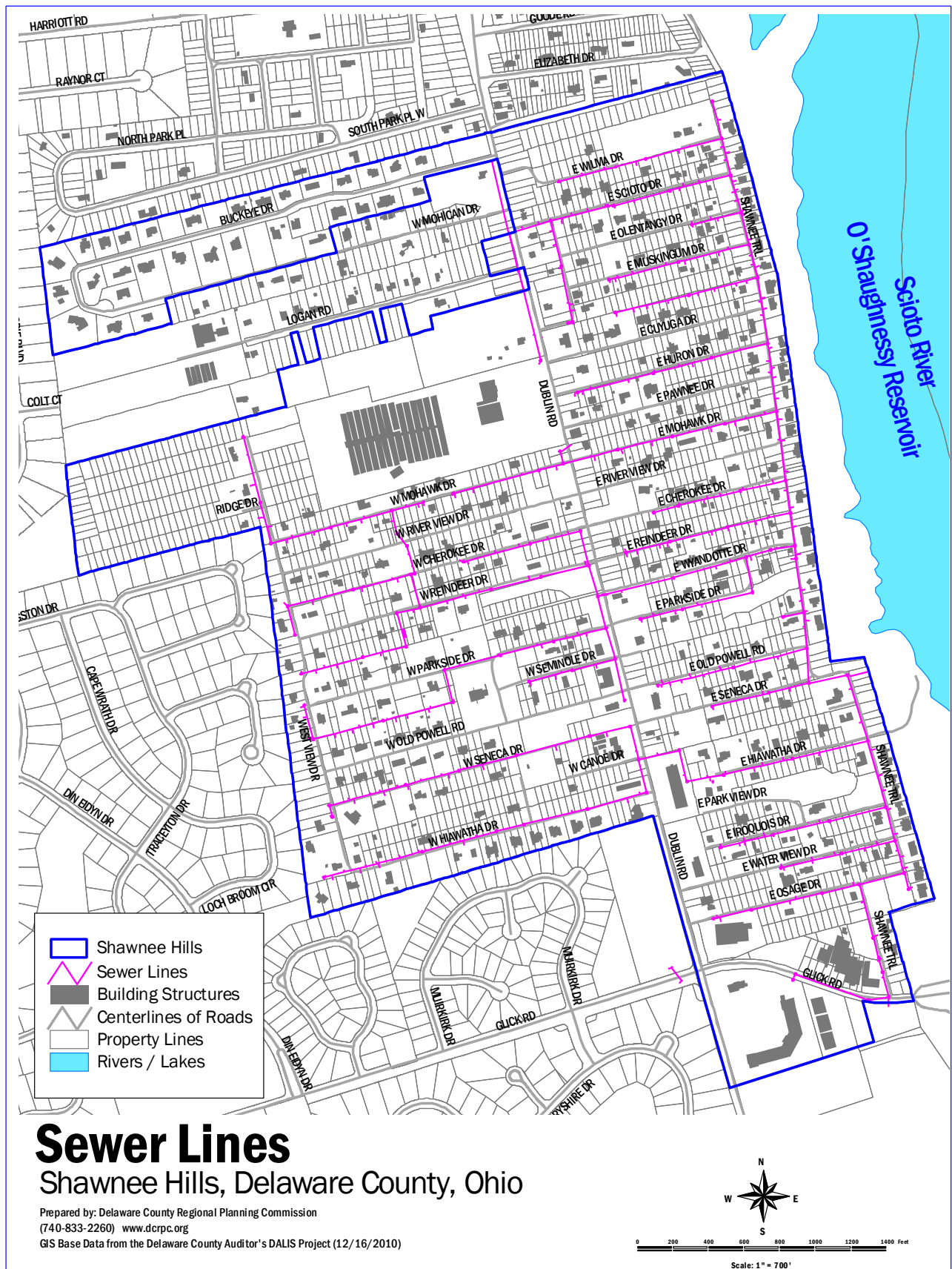
Utilities – Sanitary Sewer

Prior to 2001, Shawnee Hills used septic systems and leach fields for sewage disposal. Concern over potential pollution of the Scioto River from overflowing systems resulted in the village constructing its first centralized sanitary sewer system in 2001. The village contracted with the city of Columbus to accept sewage for treatment via a gravity system of local collector lines that drain to a lift station on Shawnee Trail.

The system is designed to alleviate the current sewage problems, and to provide for modest growth. By calculation of one Equivalent Dwelling Unit as 290 gallons per day (EDU), the sewer system can support 882 taps or equivalent dwelling units. The sewer system does not have the capacity to serve each of the numerous 30'x70' lots in the Village.

Facts About Sanitary Sewer Service in Shawnee Hills

- A. The Delaware County Sanitary Sewer Department does not provide any sewer service to Shawnee Hills, and none is currently planned.
- B. By agreement (between Columbus, Dublin and the Village of Shawnee Hills), sewage from the Village, and conceivably from lands in Concord Township (Lucy Depp and Shaw-Nee Hills plats) could be piped to a manhole into the sewer system. However, any unincorporated land needing sewer service must first be included in an incorporated area, or annexed if currently outside the Village.
- C. The 2001 Shawnee Hills sewer project was a remedial sewer system, intended to take all existing homes and businesses off septic systems and put them into sanitary sewers, with the immediate effect of reducing surface and groundwater pollution of the O'Shaughnessy reservoir.
- D. There is a stated capacity in the sewer system. Using a formula that divided the flow capacity by the average anticipated daily sewer flow per home yielded a total of 882 Equivalent Dwelling Units (EDUs) of service. (Commercial uses are calculated at different rates based on EDUs.)
- E. The Village had to determine a fair and consistent method to distribute sewer taps so that all landowners obtain sewer service. Zoning requires 14,700 square foot (6 platted lots) minimum lot size, but recognizes that all the individual lots are non-conforming lots. However, parcels fronting on unimproved (unbuilt) streets do not have full "vested" rights. Legal precedents were considered.
- F. In 2001, there were 208 residential structures (208 EDUs) and 36 businesses (100 EDUs) for a total of 308 EDUs. Currently, there are 294 Single-Family homes, 41 commercial structures, and 3 institutional uses.
- G. Based on the anticipated 882 EDUs in the system, there is no capacity concern for Shawnee Hills.



Utilities - Various

Electric

Ohio Edison provides electric service to Shawnee Hills. There is no anticipated shortage of power for future growth.

Gas

Shawnee Hills is served by Columbia Gas. There is no anticipated shortage of gas for future growth.

Telecommunications/cellular

Under current state and federal laws, placement of telecommunications towers can be regulated within the village. Cell towers are restricted to General Commercial zones with a setback equal to the height of the tower (Shawnee Hills Code #1325.04).

Storm Water Management

Shawnee Hills has continued to address stormwater issues through a Master Stormwater Plan. Various grants and projects have led to improvements as streets were being repaired as part of the installation of sewer, as well as afterward. Future improvements should be part of a capital improvement plan, which could qualify for grants or loans.

CHAPTER 9

Development Patterns

Community Choices

One of Shawnee Hills's goals is to retain the small town charm that is its character, even as it grows. With good planning, intimacy can be retained even after construction of new homes and businesses.

New Urbanism - Traditional Neighborhood Development (TND)

A growing trend in the planning and development field is Traditional Neighborhood Development. The New Urbanists are a school of architects and planners (*The New Urbanism, Toward an Architecture of Community*, Peter Katz, 1994, McGraw Hill) whose focus is to recreate the type of compact community prevalent before the introduction of the automobile. Because the original plat of Shaw Nee Hills Addition shows a grid-street pattern with interconnected streets and was created at a time when the automobile was not encouraging suburban-style development, it already includes many of the elements that these new developments strive to achieve.



Clark's Grove, a TND with a mixture of lot sizes, surrounding a school and park site.

The heart of the New Urbanism can be defined by 13 elements, according to town planners Andres Duany and Elizabeth Plater-Zyberk, two of the founders of the Congress for the New Urbanism. An authentic neighborhood contains most of these elements:

- The neighborhood has a discernible center. This is often a square or a green and sometimes a busy or memorable street corner. A transit stop would be located at this center.
- Most dwellings are within a five-minute walk of the center, an average of roughly 2,000 feet.
- There is a variety of dwelling types — houses, townhouses and apartments — so that younger and older people, singles and families, the poor and the wealthy may find places to live.
- At the edge of the neighborhood, there are shops and offices of sufficiently varied types to supply the weekly needs of a household.
- A small ancillary building is permitted within the backyard of each house. It may be used as a rental unit or place to work (e.g., office or craft workshop).
- An elementary school is close enough so that most children can walk from their home.
- There are small playgrounds accessible to every dwelling — not more than a tenth of a mile away.

- Streets form a connected network, which disperses traffic by providing a variety of pedestrian and vehicular routes to any destination.
- The streets are relatively narrow and shaded by rows of trees. This slows traffic, creating an environment suitable for pedestrians and bicycles.
- Buildings in the neighborhood center are placed close to the street, creating a well-defined outdoor room.
- Parking lots and garage doors rarely front the street. Parking is to the rear of buildings, accessed by alleys.
- Certain prominent sites at the termination of street vistas or in the neighborhood center are reserved for civic buildings. These provide sites for community meetings, education, and religious or cultural activities.
- The neighborhood is organized to be self-governing. A formal association debates and decides matters of maintenance, security, and physical change. Taxation is the responsibility of the larger community.

Some commercial developers are currently incorporating several but not all of these elements in their designs. “Lifestyle Centers” are being promoted as the next generation of the shopping mall. These centers typically include an open-air layout and a mix of specialty stores. One local example of the Lifestyle Center is Easton Town Center in Northeast Columbus. Easton began with large indoor and outdoor privately-owned retail areas and now has added townhouse residential development across the street. Such “hybrid”, retail-intense developments are often criticized because of their immense scale mixed with “artificial quaintness”.



Streetscape at Easton.

Many lack a true mixture of uses and ownership and lack public open space and institutional uses. However, many of the more “authentic” historic areas began as criticized speculative development.

Reasons that TND features are logical to be applied in Shawnee Hills:

- ❖ Original plat is a grid;
- ❖ Streets can be “calmed” so cars can safely share the road with bikes and pedestrians;
- ❖ The community is compact, ¼ mile walk from center to edge;
- ❖ Centralized open space is possible for a village square;
- ❖ Three park areas are already owned by the village;
- ❖ The entire eastern boundary of the village is waterfront, but access needs to be improved;
- ❖ Architectural standards could set a tone for the next wave of home construction;
- ❖ Undeveloped land could be developed by the village or active recreation;
- ❖ Commercial core can be expanded.
- ❖ Some areas are pedestrian-oriented, but “walkability” should be increased.



One of the original village plats.

What is needed to encourage traditional development in Shawnee Hills?

- ❖ The collective vision to do it;
- ❖ Architectural guidelines/code for building mass, architecture;
- ❖ Traffic “calming” street details, pedestrian orientation;
- ❖ Centralized public open space;
- ❖ Active recreation;
- ❖ Agreement on which elements should be encouraged.

Development Patterns, Cost of Services, Impact Analysis

Many growing communities struggle with the cost of providing new services, especially when their property tax base is primarily residential. Shawnee Hills has the potential opportunity to develop a significant commercial property tax base on Dublin Road. This commercial tax base could help pay for new services and support the school districts. Every community must determine what land use mix provides an appropriate balance of commercial versus residential property tax base. Single family residential development is typically found to not pay its fair share of its costs because of school costs for children.

In order to ascertain what land use mix might be optimal, it is necessary to analyze the fiscal impacts of development to determine the costs versus revenues to the community. Models for estimating the fiscal impact of new development were developed by Robert Burchell, David Listokin and William Dolphin in *The New Practitioner's Guide to Fiscal Impact Analysis*, (Center for Urban Policy Research, Rutgers University), and the *Development Assessment Handbook*, (Urban Land Institute). Burchell and Listokin define development impact analysis as follows:

“Development impact analysis is the process of estimating and reporting the effects of residential and nonresidential construction on a host political subdivision, usually a local community, school district, special district and/or county. The effects take several forms: physical, market, environmental, social, economic, fiscal, and traffic. Development impact assessment may be either prospective or retrospective; it may be short term or long term; it may be an in depth or abbreviated study.”

Burchell and Listokin have created different models to approximate development impacts. These models use multipliers from regional or national standards to gauge impacts. For example, a single-family home with four bedrooms in Central Ohio would be expected to generate 1.428 school age children. These may be further broken down to .9866 school age children in grades Kindergarten–Sixth; .2475 in Junior High School, and .1906 in High School.

Fiscal Impacts and Impact Fees

A fiscal impact analysis can be a useful tool to anticipate the costs versus revenues of a project before it is zoned or built. A fiscal impact analysis (cost of services needed versus revenues generated) may help determine one aspect of how the development might affect the general welfare of the Village.

The potential fiscal impacts of this plan may wish to be determined on a project basis for projects of large magnitude. Cities and villages may adopt impact fees that conform to the Supreme Court's ruling in Ohio if the impact fee bears a reasonable relationship between the city's interest in constructing new roads and the traffic generated by new developments, and there is a reasonable relationship between the fee imposed and the benefits accruing to the developer as a result of the construction of new roads.

It has been generally held that road improvements immediately adjacent to the development can be attributable to the project as part of the subdivision and zoning process. If large-impact development proposals do not reasonably mitigate their impacts, they may impose an undue burden on the Village. In such cases the rezoning may be premature, or not in conformance with the Comprehensive Plan. Therefore, communities need to anticipate the impacts of each project as a consideration in the planning and zoning process to avoid unexpected increases in the local tax rate due to new development.

Sustainability

An emerging issue in planning is sustainable development. This refers to development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Advocates of sustainable development argue that environmental concerns need to be balanced with social needs and economics. It is suggested that the highest quality of life can be best obtained at the intersection of economics, environment, and equity. The reasons to support and encourage sustainability are broad and include:

- Improving health by ensuring that air, water, and soils are not polluted;
- Reducing costs, enhancing benefits, and encouraging economic development by using resources effectively;
- Respecting the natural habitats of animals; and
- Taking care of the environment that we depend on.

In general, sustainability covers a wide range of topics, from energy production to neighborhood design to environmental health and natural hazard mitigation, to name just a few. Local governments can directly impact or influence many of these sustainability concerns. In some cases, the easiest response is to remove the obstacles that are created (sometimes inadvertently) which discourage such practices. A second step would be to create incentives to reward the desired result. Finally, for the activist community, standards can be adopted which require certain types of adherence.

The Rocky Mountain Land Use Institute has established a development code framework that is a menu of possible standards and incentives that communities can use to encourage sustainability. They include requiring bicycle racks, incentives for “green” roofs, shared parking standards, allowing live-work units, adopting “complete streets” standards, encouraging farmers’ markets, preservation of historic buildings, establishing a list of low-water plants for residential and commercial landscaping, requiring a variety of unit sizes in multi-family buildings, requiring a percentage of homes in subdivisions be solar-oriented, encouraging creative practices for stormwater detention, etc.

Corridor Revitalization and Design Best Management Practices

Following recommendations from the 2002 Comprehensive Plan, the Village proceeded to develop guidelines that would provide for commercial corridor enhancements through incremental development over time. The referenced area included the Glick Road Commercial area, the Dublin Road Commercial area, and a Civic area. The following items are some of those general recommendations.

Glick Road Commercial District

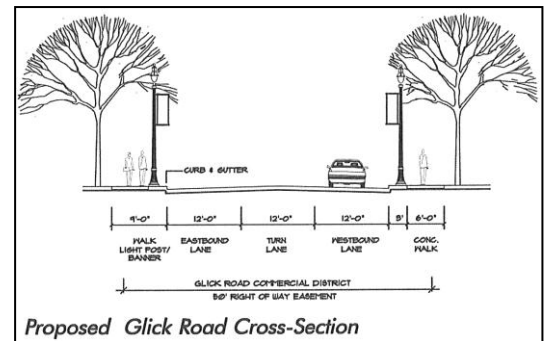
Curb and gutter, street trees, decorative lighting, and pedestrian walkways.

Glick Road/Dublin Road Intersection

At minimum, painted crosswalks, but paver crosswalks are desired.

Use of mast arm poles for signals, street names, and directional signage.

Walkways should connect Shawnee Hills to Dublin bikeway system.



Dublin Road Commercial area

Consider access roads behind buildings when access is limited due to hills or other factors.

Streets should be widened (24 feet) as they intersect Dublin Road.

Streetscape should include curb and gutter, street trees, street lighting and connecting walkways.

Landscape buffers and walls shall screen commercial areas from residential areas.

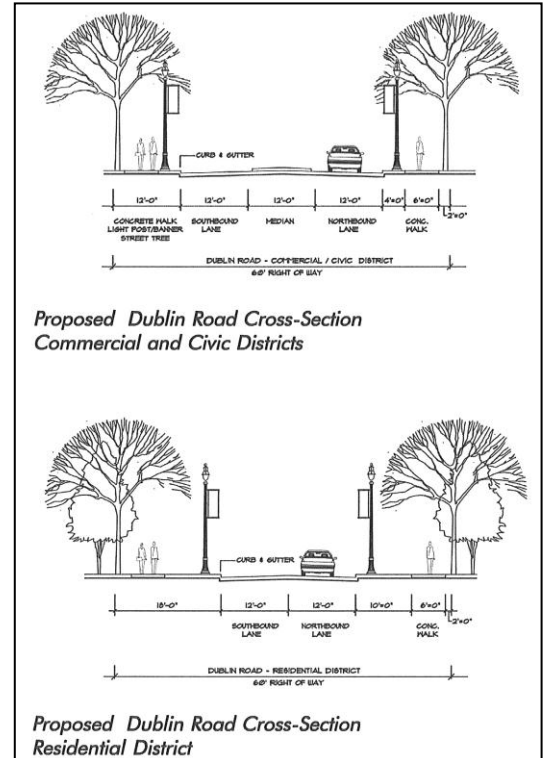
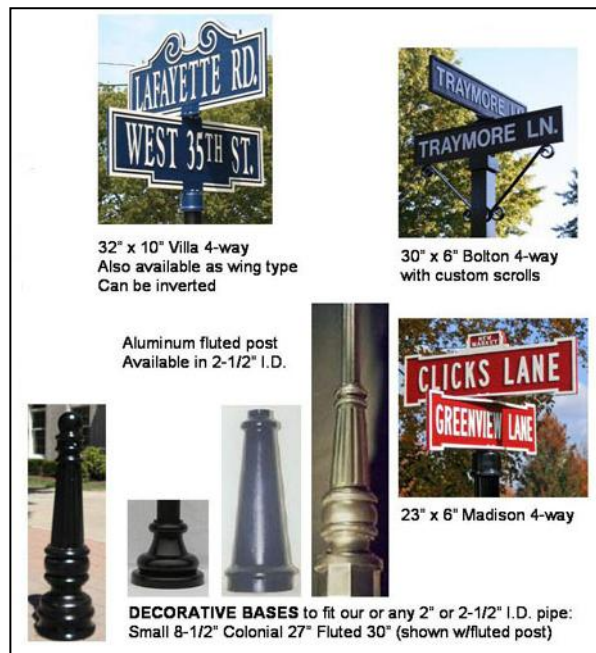
All major intersections should be articulated with striping or pavers.

On-street parking (or public parking areas) should be designated where practical.

Gateways and Identity

Five gateways are identified, each of which is identified as needing signage, perennial landscaping and annual color.

A system of street-name signage will add to the character and identity of the Village. Street names could include a village logo or other identification symbol to differentiate village streets from township and Dublin streets. (See below for samples)



Best Management Practices

Best Management Practices (BMPs) are visual examples that demonstrate the positive design principles in the public realm. Visuals are used because defining design elements in a text-only format can be limiting, restrictive, and can result in a bland sameness. The following general principles enhance the quality and reflect development goals within commercial and other non-residential areas.

Site Furnishings

Given the suburban environment's preference to the automobile, developments rarely feature the site furniture that helps create a vibrant commercial destination. They can also be integrated into elements that serve to screen parking lots and adjacent uses.

A consistency in furnishings can enhance the visual unity of the corridor. Such furnishings include lighting fixtures, trash receptacles, benches, and other usable structures. Furniture should be permanently installed, be vandal-resistant, have replaceable components, and be easily maintained. It should be of high quality design and "timeless" in style (figure, right).

Seating should be located at logical resting points and situated so they do not block the internal walkway system.



Buildings Form the Space of the Street

Buildings have the potential to create a shared public "room". The character and scale of these walls determine the character of the room. Continuous building frontage with active uses on a street creates a welcome space that supports pedestrian and economic activity. In typical suburban commercial developments where the building fronts on a vast expanse of paved parking, no such room is created.



Building indentations, penetrations, and facade treatments can be used to complement adjacent structures. These features also reduce the monotonous blank walls often seen on "big-box" developments. A series of doors, window, porches, and other projections in new construction can add value and character to a commercial development. Continuous 'strip' buildings should be discouraged.



Top: Parking is incorporated into the site and street furnishing are pedestrian-oriented.

Middle: Blank walls (left) should include architectural detail (right) although windows and doors are preferred.

Bottom: Façade treatment (left) are preferred over repetitive elements (right).



Building Height/Appearance

Streets have a more cohesive, pedestrian feel when contiguous buildings are of similar height. The maximum building height is generally 35 feet, or as otherwise limited by the available emergency equipment. Though this would allow building of two stories, most commercial development has been built with only a single story. Creating a pedestrian-oriented development would likely require a mix of uses, where retail would be located on the ground floor with offices or even specific types of residential above.



Roof Forms and Building Materials - roofs on new structures should generally be pitched or hipped. Building materials may be wood frame, brick, or stone. Roof material should have a shingle look, either as asphalt shingles, slate, tile or metal.



"In-line" stores or strip centers that are built with high-quality materials and architectural details.

Environmental Sustainability

Mixing uses can result in lower impact to the environment. "Green" buildings can cost less, improve worker productivity, enhance marketing efforts and help to create a district identity. Structures and parking should respond to the specific building site, be efficient in water and energy use, be constructed of sustainable materials, and create a healthy environment for the occupants. The Leadership in Energy and Environmental Design (LEED) *Reference Guide for New Construction and Major Renovation, Version 2.2*, is a valuable resource for guidance on green building techniques, practices and standards.

Parking and Access

Where there is safe access to Dublin Road, circulation streets should be created rather than individual entrance drives to parking lots. Secondary streets should also limit access and a coherent network of backage streets is created. Parking and access to parking should be located at limited locations along these secondary streets.



Parking lots should be screened and separated from the public right-of-way. Large expanses of surface parking should be broken up into smaller areas. These may be located beside or between buildings. Parking located directly in front of buildings should be minimized where possible. All lots should be landscaped and shading maximized.



When parking is located in a variety of places, buildings can be oriented toward the street and a more pedestrian-oriented streetscape.

Service

Service and delivery should be accommodated on side streets or from the rear of buildings. Dumpsters may be grouped for multiple users. All refuse collection areas should be screened from public rights-of-way (right).



Lighting

Building and site lighting should be designed to eliminate light trespass and minimize light pollution. The best lighting schemes will maximize uniformity and eliminate glare. Lighting for pedestrians is an important consideration and should be designed to maximize visibility and comfort. These considerations can decrease initial costs, have marked value in life-cycle costs and create a more attractive and comfortable nighttime environment.



Creating a hierarchy of lighting standards is another way to unify image and identity. Lighting used to illuminate parking areas, the street, or signage should be indirect and shielded, avoiding off-site spillage of light into other properties. Light fixtures should be designed as a cohesive part of the other site elements (above). This will include various lighting levels for vehicles, pedestrian circulation, signage and special accents.

Signage

The scale of signage should be designed with pedestrians in mind. Signs on awnings, in windows and projecting from the face of the building can help create an interesting pedestrian environment. Traffic signage should have a consistent look and placement, where possible.



Natural-colored materials should be used for the base of monument signs (above, right). Variation of signage themes based on sign type or location should be encouraged (right). Signs should be of high quality and 'timeless' in style to avoid becoming outdated. Signs should be limited to one per lot or one per multiple lots if devoted to one specific use or user. Graphics should be simple to encourage readability and increase identification. If a ground sign is to be used, the monument-style is mandated. No sign should interfere with the safe movement of pedestrians and vehicles.



Accessibility

Standard concrete walks should be 6 feet wide, where sufficient right-of-way exists. Along secondary streets, the walk should be located four feet from the back of curb. Handicap-accessible curb ramps should be used at all access drives, public streets, and private streets and shared easements that function as public streets.

All major intersections should include painted crosswalks to alert drivers to the pedestrian crossing. Change of pavement (i.e., brick and concrete) should be considered for pedestrian crossings at major intersections.

Landscaping

Landscaping should be designed to provide shade for pedestrians and generally create a comfortable pedestrian environment in commercial portions of the corridor. Impervious surfaces should also be shaded to mitigate heat island effects. Continuous trees are encouraged to augment the public landscape plan. There are many environmental, as well as psychological benefits to including a tree planting plan. Trees can enhance values, reduce traffic speeds, increase levels of comfort, and unify the look of an area. Correct placement and choice of species can eliminate ongoing maintenance issues.

Large shade trees should avoid conflicts with structures and reinforce the streetscape (assuming they do not conflict with emergency access and utility placement).

Small ornamental trees should be used as accent plants and frame views to special architectural features. Avoid placing ornamental trees in locations that would block the view from the street to the structure and impair visibility for auto operators.

Plant materials should be native to the area when possible.

Screen parking lots with a minimum 4' foot high continuous evergreen or deciduous hedge, low earth mounding, or stone wall. Hedge size at installation should be at least 30" in height. A creative combination of these elements is encouraged to avoid visual monotony.

Planting, mounding, and fencing should be incorporated at the rear of commercial areas that are adjacent to residential areas. Screened planting should be 75% opacity at installation during full foliage.

Guidance for minimum standard plant sizes at installation:

Shade Trees - 3" Caliper, 12'-14' height

Ornamental Trees - 8'-10' height

Evergreen and Deciduous Shrubs - 24" height

If landscaping is used as screening for trash receptacles, it should have a minimum opaqueness of 80% during full foliage. The height of a screen wall should be at least six feet.



A parking lot (left) is screened from the sidewalk and landscaping blends with the streetscape.

CHAPTER 10

Recommendations for Future Development

Natural Resources

Goals

1. Preserve woods and dense vegetation, and natural drainage and ponds.
2. Preserve and enhance scenic views of the reservoir.
3. Preserve a high degree of environmental quality.
4. Conserve surface and ground water quality around the O'Shaughnessy Reservoir.

Objectives

1. Encourage and build trails in park areas.
2. Retain wooded and grassed filter strips along ravines, and natural waterways to protect surface water.
3. Create an appropriate landscaping buffer detail between residential and non-residential land uses. Retain natural vegetation and use existing topography as buffers.
4. Retain platted and dedicated access to the reservoir.
5. Develop/redevelop commercial uses with adequate treatment and storage of stormwater. Encourage best management practices to reduce surface runoff, such as green roofs, rain gardens, and constructed wetlands.



Residential Development

Goals

1. Use the original layout of the “Shaw-Nee Hills Additions” as the general footprint of the community.
2. Recognize such vested rights as may exist to non-conforming lots of record on fully constructed streets.
3. Provide for a consistent policy that provides an economic use for every lot while safeguarding the public health safety and welfare of the community.
4. Relate residential density to the carrying capacity of infrastructure (sewer, water, fire protection, roads).
5. Retain a single-family housing mix, but permit a diversity of housing types/sizes.
6. Protect local real estate values.
7. Retain adequate light and air for all structures upon total development of the Village.

Objectives

1. Use the width of roads, the capacity of water and sewer systems, and adequate light and air to relate to maximum development potential. Avoid development of uses or densities that cannot be serviced by currently available or imminently planned infrastructure, unless such development mitigates its unplanned infrastructure impacts.
2. Use the estimated sewer capacity as a criterion in the fair and consistent distribution of taps so that all property owners may receive a sewer tap, based on the area requirement as defined in the Zoning Code.

Commercial Development/Community Character

Goals

1. Enhance the identity and character of the Village by maintaining or improving signage at the four Village entrances.
2. Encourage commercial development along the Glick and Dublin Road corridors to broaden the jobs and tax base.
3. Provide dense landscape and/or fence buffering between commercial and residential uses.

Objectives

1. Create “Main Street” architectural, signage, streetscape, lighting and landscape guidelines for new commercial development.
2. Encourage pitched roofs and natural materials to preserve and enhance the village character of the area.
3. Develop a standard street sign and pole standard and begin a process to replace all street signs.
4. Begin a process to locate street lights along Dublin Road at specific locations.
5. Develop a number of public on-street parking spaces in specific locations on side streets where there is adequate right-of-way and a recognized need.
6. Consider Select Commercial Planned Development (SCPD) zoning for new commercial uses to give greater site layout flexibility.
7. Reserve adequate sewer capacity to service commercial development, as the tax base is essential to improving village services.

Recreation

Goals

1. Provide passive and active recreational areas as the village grows.

Objectives

- 1.) Create passive recreation in dedicated park areas.
- 2.) Establish trails in park areas.
- 3.) Acquire new parkland in the Village for active recreation.

Utilities and Roads

Goals

1. Provide adequate roads for the density of population.
2. Provide storm water drainage.
3. Provide sanitary sewer service to every landowner to the extent of the sewer capacity.
4. Provide for appropriate fire and police protection.
5. Minimize road congestion.
6. Retain the narrow character of village roads where possible.
7. Improve the road network without destroying the village character.

8. Seek developer mitigation of their road impacts of their developments to extent permitted by Ohio law.

Objectives

- 1.) Continue the off-road multi-use path from Mohawk north to the village limits.
- 2.) Continue the off-road multi-use path on the north side of Glick Road from the Walgreen's property line to the east, connecting to the sidewalk along the O'Shaughnessy Dam.
- 3.) Work with other agencies to develop a striped crosswalk with warning signals at Glick Road at the entrance to Glick Park.
- 4.) As needed, upgrade major roads to 20 feet of paved surface, 4 feet of striped bikeway.
- 5.) Improve unimproved streets (unpaved, no utilities) upon the request of a majority of the lot owners on that street, by assessment upon all the lot owners. Alternatively require the lots owners to install improvements to village standards and dedicate them to the village.
- 6.) Provide defined roadside drainage as needed.
- 7.) Adopt access management techniques as detailed within this plan.
- 8.) Require new commercial parallel uses on Dublin Road to align their side access driveways with adjacent commercial uses wherever possible and a sufficient distance from Dublin Road.
- 9.) Improve corner turn radii on narrow streets to allow better access by fire trucks and other large equipment.
- 10.) Distribute sewer taps to conforming and non-conforming lots pursuant to the conditional use process established.
- 11.) Continue to work with the City of Dublin and ODOT to improve the intersection of Dublin Road and Glick Road.

Planning and Zoning

Goals

1. Determine and implement an appropriate land use mix.
2. Implement and maintain the land use plan.
3. Amend the zoning ordinance in conformance with the comprehensive plan.

Objectives

1. Adopt the comprehensive plan as the blueprint for growth. (Note: If needed, zoning must be amended to enforce specific provisions of the Comprehensive Plan).
2. Consider rezoning vacant commercial lots to Select Commercial Planned Development.
3. Develop policies for service provision that relate to the comprehensive plan.
4. Provide for 5-year updates and revisions to the plan.
5. Enforce zoning regulations.
6. (If a Traditional Neighborhood Development concept is desired) Hire an architectural/planning firm that specializes in New Urbanism.

Citizen Participation

Goals

1. Ensure significant and diverse citizen input into the planning process.

Objectives

- 1.) Use the Long Range Planning Committee as the primary citizen input to the Zoning Commission and Village Council in amending the Comprehensive Plan.
- 2.) Advertise open informational meetings to discuss and review the recommendations of the plan prior to public hearings.
- 3.) Encourage active citizen participation in future comprehensive plan updates.

Build-out Scenario of the Shawnee Hills Comprehensive Land Use Plan

The Shawnee Hills Comprehensive Land Use Plan is the sum of all the chapters and appendices. Goals and Objectives are intended to be read in conjunction with the Comprehensive Land Use Plan Map.

With the maximum build out according to this plan, population within the current village corporate limits would be approximately 1,290 based on approximately 294 occupied homes (master address point data April 2011) and approximately 184 potential new house parcels for a total of 478 homes. There are approximately 30 businesses within the Village, with a potential of 11 additional business building locations, some of which might include more than one business.

Table 10.1- Future Land Use Mix - Shawnee Hills Comprehensive Plan (without annexations)

	2011 acreage	% Total	Comprehensive Plan (total build-out acreage)	% Total
Residential	95.38	33%	156.279	55%
Commercial/office	40.05	14%	58.262	20%
Institutions	4.47	2%	4.333	2%
Street Right of Way	58.74	21%	57.503	20%
Parks/open space	3.63	1%	8.813	3%
Vacant residential	71.40	25%	NA	
Vacant commercial	11.52	4%	NA	
Totals	285.19	100%	257.447	100%

The character of the village will continue to reveal itself as the plan is implemented. The village should revisit its plan and its vision in five-to-ten years to consider whether changes need to be made.

