



In order to anticipate development events Hadley Township may experience in the future, it is important to look at trends that have occurred in the past. During the planning process, the planning commission evaluates the community's characteristics such as population, housing, workforce, income, local market potential, development patterns, natural resources and other pertinent factors. This information is a basic ingredient in planning for the future. Historical and current population trends can be used in various ways to illustrate problem areas of development, identify opportunities for growth and improvement, and provide an indication of probable future needs. Once a database of existing conditions is compiled, the community can first evaluate the data, then use the findings to help set goals for the future development of the community.

POPULATION AND HOUSING

POPULATION

For the purpose of evaluating likely future population outcomes, it is useful to compare the Township's population trends with those of adjacent communities. Since 1970, Hadley Township has more than doubled its population—from 2,011 in 1970 to 4,655 in 2000. As shown in Table A2-1 on the following page, in the last decade alone the Township's population has increased by 21.5%. For most communities in Lapeer County, the decade between 1980 and 1990 was one of minimal growth; in fact, several communities actually lost population, including the City of Davison, the Village of Metamora, and Elba Township. The major exceptions were Brandon Township in Oakland County and the City of Lapeer: each grew by around 25% during that decade.

The decade between 1990 and 2000 saw growth rates picking up again in most communities, especially in Metamora Township, the Village of Goodrich, and Oxford Township. Of the communities adjacent to Hadley, Brandon Township has grown the most over the past thirty years—over 200% since 1970—followed by Groveland and Atlas Townships, which both had overall growth rates similar to Hadley’s 135%. Lapeer County has grown proportionally more than Oakland County, and much more than Genesee County. These differences reflect both the expansion of Metro Detroit further and further into outlying areas and the major loss of population in the Cities of Flint and Detroit since the 1970’s.

Table A2-1
Population
Hadley Township & Adjacent Communities, 1970-2000

Community	1970	1980	1990	% Change, 1980-90	2000	% Change, 1990-2000	% Change, 1970-2000
Atlas Twp	3,089	4,891	5,551	13.5%	7,257	30.7%	134.9%
Brandon Twp	4,813	9,525	12,051	26.5%	14,765	22.5%	206.8%
Davison	5,259	6,087	5,693	-6.5%	5,536	-2.8%	5.3%
Davison Twp	8,260	13,708	14,671	7.0%	17,722	20.8%	114.6%
Elba Twp	5,651	4,604	4,536	-1.5%	5,462	20.4%	-3.3%
Goodrich	771	795	916	15.2%	1,353	47.7%	75.5%
Groveland Twp	2,570	4,114	4,705	14.4%	6,150	30.7%	139.3%
Hadley Twp	2,011	3,331	3,830	15.0%	4,655	21.5%	131.5%
Lapeer Twp	2,574	4,261	4,519	6.1%	5,078	12.4%	97.3%
Lapeer City	6,270	6,225	7,759	24.6%	9,072	16.9%	44.7%
Metamora Twp*	1,988	2,668	3,094	16.0%	4,184	35.2%	110.5%
Metamora Village	468	552	450	-18.5%	507	12.7%	8.3%
Ortonville	983	1,190	1,252	5.2%	1,535	22.6%	56.2%
Oxford Township	8,489	10,569	11,933	12.9%	16,025	34.3%	88.8%
Oxford	2,536	2,746	2,929	6.7%	3,540	20.9%	39.6%
Genesee County	444,341	450,449	430,459	-4.4%	436,141	1.3%	-1.8%
Lapeer County	52,317	70,038	74,768	6.8%	87,904	17.6%	68.0%
Oakland County	907,871	1,011,793	1,083,592	7.1%	1,194,156	10.2%	31.5%

Source: U.S. Census, 1970-2000

*Unless otherwise noted, Metamora Township population includes Village of Metamora population.

Table A2-2 on the following page illustrates Hadley Township’s share of Lapeer County’s growth. In 2000, Hadley Township comprised 5.32% of the County’s population, and the Township’s growth during the decade contributed 6.3% to the County’s total growth. Hadley Township’s share of the County population has increased slightly since 1940, when it contributed 3.4% of the total. Over the last sixty years, the Township has usually contributed more than its proportional share to the County’s growth; this was especially true between 1980 and 1990.

Table A2-2
**Hadley Township Population and Growth
as a Percent of Lapeer County, 1940-2000**

Year	Hadley Township Population	Lapeer County Population	Hadley Share of County Population	Hadley Share of County Growth
1940	1,097	32,116	3.4%	n/a
1950	1,021	35,794	2.9%	-2.1%
1960	1,304	41,926	3.1%	4.6%
1970	2,011	52,317	3.8%	6.8%
1980	3,331	70,038	4.8%	7.4%
1990	3,830	74,768	5.1%	10.5%
2000	4,655	87,904	5.3%	6.3%

Source: U.S. Census, 1940-2000

HOUSEHOLDS

As discussed previously, Hadley Township’s population increased by 21.5% between 1990 and 2000. The number of households in the community increased by 28.4%, a rate slightly higher than the population increase (see Table A2-3). This is consistent with the national trend, which reflects a rising number of households relative to population increases due to decreasing household size. In keeping with this trend, the Township’s average household size has decreased over the last two decades. In 1980 Hadley Township had an average household size of 3.49 persons. Household size decreased to 3.11 in 1990, and in 2000 it dropped again to 2.95 persons. Average household size in Hadley Township was larger than that for Lapeer County for all three Census counts (See Table A2-4).

Table A2-3
**Total Households
Hadley Township and Ajaent Communities, 1990 and 2000**

Community	1990 Households	2000 Households	% Change, 1990-2000
Atlas Twp	1,758	2,442	38.9%
Brandon Twp	3,987	5,012	25.7%
Davison	2,503	2,496	-0.3%
Davison Twp	5,846	7,455	27.5%
Elba Twp	1,544	1,940	25.6%
Goodrich	310	494	59.4%
Groveland Twp	1,534	2,106	37.3%
Hadley Twp	1,225	1,573	28.4%
Lapeer Twp	1,451	1,765	21.6%
Lapeer City	2,844	3,443	21.1%
Metamora Twp	1,196	1,533	28.2%
Metamora Village	153	188	22.9%
Ortonville	452	537	18.8%
Oxford Township	4,233	5,787	36.7%
Oxford	1,151	1,402	21.8%
Genesee County	161,296	169,825	5.3%
Lapeer County	24,659	30,729	24.6%
Oakland County	410,488	471,115	14.8%

Source: U.S. Census, 1990, 2000

Table A2-4
Average Household Size, 1980-2000

	1980	1990	2000
Hadley Township	3.49	3.11	2.95
Lapeer County	3.23	2.97	2.8

Source: U.S. Census, 1980-2000

HOUSING UNITS

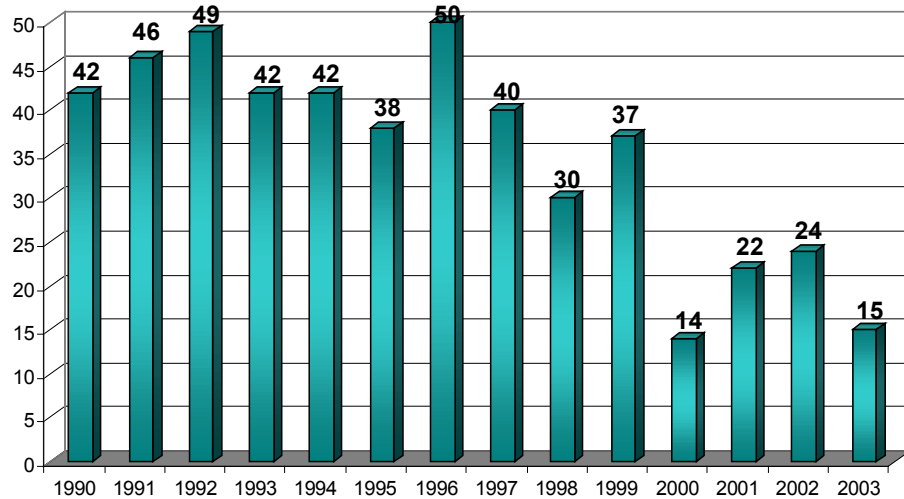
As demonstrated in Table A2-5 below, the number of housing units in Hadley Township increased by about 26% during the last decade – consistent with the 28.4% increase in households reflected in Table A2-3. These figures indicate that Hadley Township is growing at a slightly faster rate than Lapeer County as a whole.

Table A2-5
**Total Housing Units
 Hadley Township and Adjacent Communities, 1990 and 2000**

Community	1990 THU	2000 THU	% Change, 1990-2000
Atlas Twp	1,812	2,554	40.9%
Brandon Twp	4,172	5,290	26.8%
Davison	2,612	2,652	1.5%
Davison Twp	6,080	7,853	29.2%
Elba Twp	1,708	2,121	24.2%
Goodrich	330	494	49.7%
Groveland Twp	1,576	2,199	39.5%
Hadley Twp	1,304	1,646	26.2%
Lapeer Twp	1,510	1,831	21.3%
Lapeer City	3,070	3,658	19.2%
Metamora Twp	1,283	1,634	27.4%
Metamora Village	156	188	20.5%
Ortonville	478	537	12.3%
Oxford Township	4,376	6,151	40.6%
Oxford	1,192	1,402	17.6%
Genesee County	170,808	183,630	7.5%
Lapeer County	26,445	32,732	23.8%
Oakland County	432,684	492,006	13.7%

Source: U.S. Census, 1990 and 2000

Figure A2-1
Residential Building Permits Issued, 1990-2002
Hadley Township



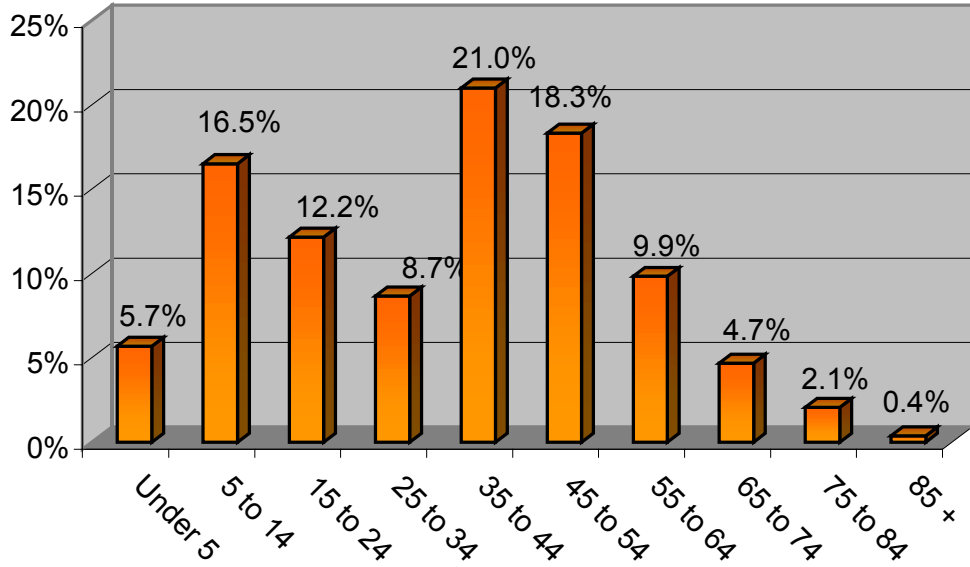
Source: Construction Code Authority

Over the past fourteen years, Hadley Township has experienced steady rates of construction of new, site-built single family homes (see Figure A2-1 above). The average number of residential building permits per year is thirty-five. In 2000 there was a significant decrease in the number of building permits issued, with a recovery from that low in 2001 and 2002, and a recurring decline in 2003.

AGE

In addition to total population, housing units, and household size, it is also important to examine the overall age groupings of a community's population. The overall age grouping provides figures for the number of school-age children, the size of the workforce (i.e. 18-64 age groups), and size of the retirement-age population. This data can be used for school enrollment projections, planning for recreation facilities for children and active adults, special services for the elderly, and other governmental services. Figure A2-2 illustrates the age distribution of Hadley Township's residents in 2000.

Figure A2-2
Age Distribution, 2000
Hadley Township



These demographics indicate that there is a large percentage (around 30%) of adults in the “parenting” years—ages 25 to 44—and a large proportion of school-aged children. Children age fourteen and younger make up around 22% of Hadley Township’s residents. It is important for the community to plan for the needs of people of all ages, but it may prove particularly beneficial to emphasize programs and facilities for families and children. Currently, the senior population of Hadley Township is relatively small (less than 10%), but over the next several years many of the people in the 55 to 64 age group and even some in the 45 to 54 age group may enter retirement. In general, the American population is aging, so communities may want to be mindful of the senior population when planning for the future.

POPULATION PROJECTIONS

It is important to have a good estimate of the future population so that planning for infrastructure, municipal services, and administrative capabilities can be well managed and directed for the growth and development that occurs. Underestimating future population when planning renders the community unprepared; overestimating can lead to wasted resources. To properly plan for Hadley Township’s future, an accurate estimate of its population for the next twenty years is essential.

There are a variety of methods that can be used to project the Township’s future population. The constant proportion, growth rate, and increasing proportion methods are relatively easy to administer and can generate alternative projections based on historical trends and growth rates.

The growth rate method, shown below, assumes that the 2000-2010 growth rate will be the same as between 1990-2000 and the 2000-2020 growth rate will be the same as between 1980-2000.

Table A2-6
**Population Projections, Growth Rate Method
 Hadley Township**

2000 Population	1990-2000% Change	1980-2000 % Change	2010 Projection	2020 Projection
4,655	21.5%	39.7%	5,656	6,503

The constant proportion method assumes that the Township will maintain the same percentage of the County’s projected 2010 and 2020 population it contributed in 2000. The population projections for Lapeer County in 2010 and 2020 are from the Office of the State Demographer and are based on 1990 Census data. The County’s low growth rate in the decade between 1980 and 1990 may have resulted in the State Demographer underestimating population projections. In 2000, Hadley Township represented 5.32% of the County’s population. Projections for the Township using State of Michigan projections for the County are as follows:

Table A2-7
**Population Projections, Constant Proportion Method
 Hadley Township and Lapeer County**

	2000 Population	2010 Projection	2020 Projection
Lapeer County	87,904	101,100	111,500
Hadley Township	4,655	5,358	5,910

The increasing proportion method assumes that the rural areas and small Townships on the fringe of growth centers will expand over the next two decades as the growth centers approach their build-out. This method may be more accurate than the Constant Proportion Method in Hadley’s case, since the Township’s share of the County population has been increasing steadily over the last few decades. This method

requires that the forecaster apply a growth rate to the community. The data below assumes that Hadley Township will comprise 5.8% percent of the County population in 2010 and 6.4% percent in 2020. The results are as follows:

Table A2-8
**Population Projections, Increasing Proportion Method
 Hadley Township and Lapeer County**

	2000	2010	2020
Lapeer County	87,904	101,100	111,500
Increasing %	5.32%	5.57%	5.8%
Hadley Township	4,655	5,864	7,136

Table A2-9
Population Projection Summary

Method	2000 Census	2010 Projection	% Change, 2000-2010	2020 Projection	% Change, 2010-2020
Constant Proportion	4,655	5,358	15.1%	5,910	10.3%
Growth Rate	4,655	5,656	21.5%	6,503	15.0%
Increasing Proportion	4,655	5,864	26.0%	7,136	21.7%

Most of the above methods of projection rely upon estimates for a larger jurisdiction that may or may not be accurate. It is important for a community planning for its future not to underestimate its potential for growth. Underestimation can result in being unprepared. For that reason, the Master Plan will use the following assumptions of future Township population, which are relatively consistent with the numbers generated by the increasing proportion method, as the basis for the community's long range plans:

Table A2-10
Population Projections, Hadley Township

	2000	2010	2020
Hadley Township	4,655	5,800	6,400

EMPLOYMENT

As shown in Table A2-11 below, the largest number of Hadley Township residents is employed in “management and professional” occupations, followed closely by “production, transportation, and material moving” occupations. “Sales and office,” “service,” and “construction, extraction, and maintenance” each comprise the next most frequent groups of occupations of Hadley Township residents. The employment by industry distribution in Hadley Township is generally consistent with the distribution of employment in Lapeer County, although the Township exceeds the County in terms of production, transportation, and material moving occupations. Also consistent with the County data is the low percentage of Hadley Township residents employed in farming, fishing, and forestry occupations.

Table A2-11
Employment by Occupation and Industry
Hadley Township and Lapeer County, 2000

Occupation	Hadley Township	% of Township Total	Lapeer County	% of County Total
Management, professional, and related occupations	634	26.8%	11,043	26.9%
Service occupations	311	13.1%	5,608	13.7%
Sales and office occupations	461	19.5%	8,581	20.9%
Farming, fishing, and forestry occupations	22	0.9%	165	0.4%
Construction, extraction, and maintenance occupations	394	16.6%	5,687	13.9%
Production, transportation, and material moving occupations	547	23.1%	9,928	24.2%
		100.0%		100.0%
Industry				
Agriculture, forestry, fishing and hunting, and mining	27	1.1%	610	1.5%
Construction	233	9.8%	3,767	9.2%
Manufacturing	645	27.2%	12,237	29.8%
Wholesale trade	70	3.0%	767	1.9%
Retail trade	266	11.2%	4,486	10.9%
Transportation and warehousing, and utilities	127	5.4%	1,433	3.5%
Information	75	3.2%	655	1.6%
Finance, insurance, real estate, and rental and leasing	77	3.3%	1,499	3.7%
Professional, scientific, management, administrative, and waste management services	180	7.6%	2,537	6.2%
Educational, health and social services	317	13.4%	7,209	17.6%
Arts, entertainment, recreation, accommodation and food services	97	4.15%	2,298	5.6%
Other services (except public administration)	173	7.3%	2,259	5.5%
Public administration	82	3.5%	1,255	3.1%
		100%		100%

Source: U.S. Census, 2000

Hadley Township residents' commuting patterns are generally in line with the County as a whole. According to the 2000 U.S. Census, the mean travel time to work for Hadley residents was 39.2 minutes, compared with a mean travel time of 35.3 minutes for Lapeer County. This relatively long commute time indicates that Hadley is an attractive enough place to live to warrant a long commute, but also that the majority of residents have not been able or have not wanted to find jobs within the Township itself.

Almost all Hadley Township residents (86.4%) drive alone to their place of work, just as 83.6% of Lapeer County residents do. The other significant means of transportation to and from work is carpooling, which accounts for 9.2% of the trips. In the County as a whole, the carpool rate is slightly higher: 11.3%. Currently 3.8% of Hadley Township residents work from home. Fifteen people (0.6%) reported that they walked to work. There are no opportunities for public transportation to places of employment for Hadley Township residents at this time.

EDUCATION

Table A2-12 below shows the educational attainment levels for Hadley Township and Lapeer County. As shown, the educational attainment of residents in Hadley Township is somewhat higher than that of the County. The percentage of Township residents with a Bachelor's Degree is higher than for the County as a whole. The percentage of Township residents with a Graduate or Professional Degree is slightly higher than for the County as a whole. The number of Hadley residents who do not have a high school diploma is lower than for the County as a whole.

Table A2-12
Educational Attainment
Hadley Township and Lapeer County, 2000

	Hadley Township*	% Hadley Township	Lapeer County*	% Lapeer County
Not A High School Graduate	303	10.1%	8,744	15.5%
Graduated From High School	900	30.1%	21,751	38.5%
Some College- No Degree	923	30.9%	14,560	25.8%
Associate Degree	363	12.1%	4,217	7.5%
Bachelor's Degree	347	11.6%	4,950	8.8%
Graduate or Professional Degree	155	5.2%	2,232	4.0%
Population 25 Years and Older*	2,810	100.0%	56,454	100.0%

Source: 2000 U.S. Census

*Census figures on educational attainment are based on population 25 years and over.

INCOME

Table A2-13 compares the per capita and median household incomes for Hadley Township and adjacent communities with incomes in each of the three nearby counties. The Township’s median household income is one of the highest among adjacent communities, exceeded only by Atlas Township. Groveland Township’s median household income is almost identical to Hadley’s. Hadley’s per capita income is higher than both the average for adjacent communities and for Lapeer and Genesee Counties.

Table A2-13
Income
Hadley Township and Adjacent Communities, 2000

Community	2000 Median Household Income	2000 Per Capita Income
Atlas	\$73,720	\$27,960
Brandon Twp	\$66,458	\$25,011
Davison	\$37,482	\$24,449
Davison Twp.	\$45,417	\$23,595
Elba Twp	\$53,614	\$22,863
Goodrich	\$65,089	\$19,988
Groveland Twp.	\$72,188	\$28,574
Hadley Twp	\$72,381	\$26,859
Lapeer Twp	\$63,411	\$23,383
Lapeer City	\$35,526	\$16,608
Metamora Twp	\$61,250	\$29,255
Metamora Village	\$58,088	\$19,548
Ortonville	\$60,972	\$24,110
Oxford	\$53,885	\$24,811
Oxford Twp	\$63,494	\$26,601
Lapeer County	\$51,717	\$21,462
Genesee County	\$41,951	\$20,883
Oakland County	\$61,907	\$32,534
Surrounding Community Average (excludes County averages)	\$58,865	\$24,241

Source: U.S. Census, 2000

UNEMPLOYMENT AND LOW INCOME

According to the 2000 Census, 2,447 Hadley Township residents 16 years and over were in the labor force. The unemployment level for the Township was 3.2%, which is almost identical to the 3.6% unemployment rate for the County as a whole. The Census also reported that 1.3% of Hadley Township families were living below the poverty line. This is a significantly lower percentage than Lapeer County as a whole, which had a 3.8% family poverty rate. Unemployment rates may be currently higher than those recorded in 2000 due to the recent economic downturn.

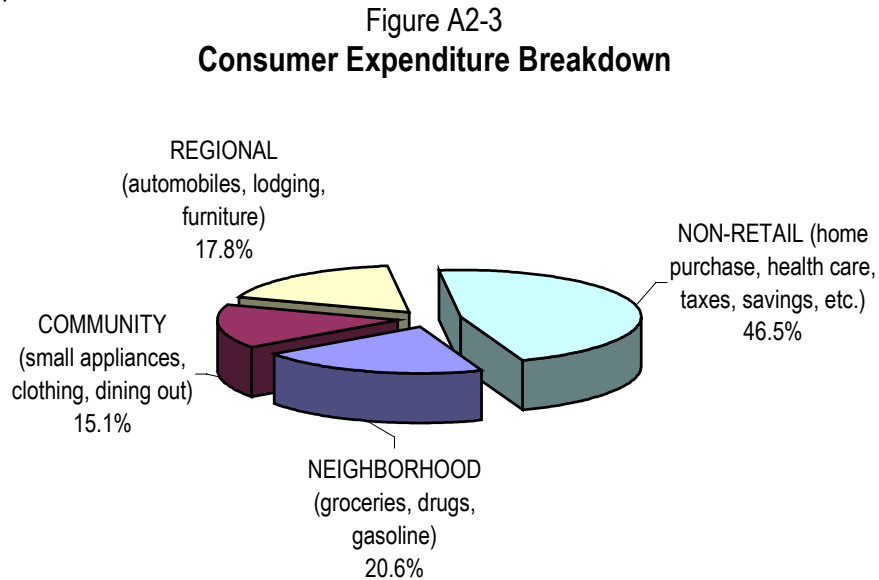
NONRESIDENTIAL LAND USE MARKET POTENTIAL

An important part of the existing conditions analysis is an examination of demand or market potential for non-residential land uses. A balanced supply of industrial, office and retail development is critical to a community for a number of reasons. If there are fewer acres available than the market can support, a community could lose potential tax base and employment opportunities, and decrease the quality of life for residents who need the goods, services, and jobs that such uses provide. If there is an overabundance of commercial, office and industrial land, marginal businesses may develop and/or building vacancy rates may increase creating the potential for blight.

RETAIL SPENDING

In order to determine how much commercial land Hadley Township can support, an analysis of income levels is necessary. As noted previously, the year 2000 median household income for Hadley Township was \$72,381. Based on this income level, the tables on the following page estimate Hadley Township's 2000 ("current") retail expenditures and projected retail expenditures. The number households and household income are multiplied to find the total yearly income for the Township. Then retail expenditures, based on spending data, are calculated.

A breakdown of how consumers spend their income is represented in Figure A2-3, below. Based on the Bureau of Labor and Statistics Consumer Expenditure Survey, these classifications are further refined by Birchler Arroyo Associates, Inc. by categorizing expenditure items into four main groups. These ratios are then applied to determine the portion of household incomes within the Township that can be expected to support commercial uses.



Sources: Bureau of Labor Statistics, Consumer Expenditure Survey 2000-2001, Average annual expenditures and characteristics for Midwestern Region.
Birchler Arroyo Associates, Inc. groups expenditures within 4 main categories.

Table A2-14
**Current Neighborhood, Community, and Regional Expenditures, 2000
 Hadley Township**

Total Year 2000 Income	Current ('00) Retail Expenditures	Current ('00) Neighborhood Expenditures	Current ('00) Community Expenditures	Current ('00) Regional Expenditures
\$113,855,313 ¹	\$62,620,422 ²	\$25,755,901 ³	\$18,879,325 ⁴	\$22,255,099 ⁵

1. \$72,381 (2000 household income) x 1,573 households (2000 Census population)
2. Assumes 55% of total income is spent on retail purchases (See Figure A2-3)
3. Assumes 20.6%% of total income is spent for Neighborhood Convenience goods (Consumer Expenditure Survey for Consumer Units in the Midwest).
4. Assumes 15.1% of total income is spent for Community Comparison goods (Consumer Expenditure Survey for Consumer Units in the Midwest).
5. Assumes 17.8%% of total income is spent for Regional goods (Consumer Expenditure Survey for Consumer Units in the Midwest).

Table A2-15
**Forecast Retail & Neighborhood Expenditures, 2010 & 2020
 Hadley Township**

Forecast 2010 Income	Forecast 2010 Retail Expenditures	Forecast 2010 Neighborhood Expenditures	Forecast 2020 Income	Forecast 2020 Retail Expenditures	Forecast 2020 Neighborhood Expenditures
\$202,937,961 ¹	\$111,615,878 ²	\$41,805,220 ^{2,3}	\$309,409,834 ⁴	\$170,175,408 ²	\$63,738,426 ^{2,3}

1. \$94,478 x 2,148 households (2010 population estimate divided by 2.7 people per household with household income adjusted for 2.7% inflation)
2. Assumes 55% of total income is spent on retail purchases (See Figure A2-3)
3. Assumes 20.6%% of total income is spent for Neighborhood Convenience goods (Consumer Expenditure Survey for Consumer Units in the Midwest).
4. \$123,320 X 2,509 households (2020 population estimate divided by 2.55 people per household with household income adjusted for 2.7% inflation)

COMMERCIAL DEVELOPMENT

Once the amount of retail spending within the community is determined, planners can estimate the quantity of retail space the community can support (in square feet) can be estimated. This can be determined by looking at two factors: retail spending and supporting population. There are three shopping center classifications used for analysis: neighborhood convenience, community comparison, and regional comparison.

According to the latest retail data published in the Dollars & Cents of Shopping Centers: 2002 (Urban Land Institute) the average annual sales per square foot of gross leasable area for neighborhood shopping centers is \$271.53. Community centers had average annual sales per square foot of \$229.84 and regional centers had an average of \$218.77. Using a base inflation projection, these sales per square foot amounts can be adjusted to the forecast year. Based on the previous retail spending analysis, Hadley Township could support the following square footages in commercial centers.

Table A2-17
Shopping Center Classifications
Commercial GLA based on 2020 Population

Type	Forecasted 2020 Sales per Square Foot	Forecasted 2020 Township Resident Expenditures	Expenditures made within Township ²	GLA Based on Hadley Township 2020 Retail Spending
Neighborhood (Convenience)	\$439 ¹	\$63,738,426	\$31,869,213 ²	72,658
Community (Minor Comparison)	\$371 ¹	\$46,720,885	\$11,680,221 ²	31,460
Regional (Major Comparison)	\$353 ¹	\$55,074,950	\$13,768,738 ²	38,962

1. ULI- 2002 data with 2.7% annual inflation for 2020 forecast.
2. Birchler Arroyo Associates, Inc. estimates that 50% of neighborhood item purchases and 25% of community and regional item purchases made by Township residents could take place within the Township.

As reflected in Table A2-17 above, with \$31,869,213 estimated available for convenience spending within the Township in 2020, Hadley Township could support 72,658 square feet of neighborhood retail. This would be roughly equivalent to a large grocery store and a few associated personal service and small retail shops. The Township could support 31,460 square feet of community comparison, which is equivalent to about one third of a Target store, and 38,962 square feet of regional comparison-shopping.

SUPPORTING POPULATION

As the table below illustrates, neighborhood retail centers are the smallest and serve the daily needs of nearby residents by providing basic goods and services such as groceries, hardware, dry cleaning, banking, etc. The typical size of a neighborhood center is 30,000 to 100,000 square feet (see table A2-18 below); Community shopping

centers range in size between 100,000 and 300,000 square feet. Regional shopping centers, including “big box” users and enclosed malls, range in size from 300,000 to 900,000 square feet and larger.

Table A2-18
**Shopping Center Classifications
 GLA Based on Supporting Population**

Type	Leading Tenant	General Range (Typical GLA)	Minimum Site
Neighborhood (Convenience)	Supermarket	30,000 - 100,000 sq. ft. (50,000 sq. ft.)	3 - 10 ac.
Community (Minor Comparison)	Junior Dept. or Discount Store	100,000 - 300,000 sq. ft. (150,000 sq. ft.)	10 - 30 ac.
Regional (Major Comparison)	1 or more Full Line Dept. Store	300,000 - 900,000 sq. ft. (400,000 sq. ft.)	30 - 60 ac.

Source: Shopping Center Development Handbook, 2nd Edition, Urban Land Institute

According to *Urban Planning and Design Criteria*, neighborhood commercial developments typically need approximately one acre per 12,500 square feet of space, community commercial developments typically need one acre per 15,000 square feet, and regional centers need approximately one acre per 13,300 square feet. Based on the summary table above, in order to provide for neighborhood convenience shopping within Hadley Township, approximately five and a half to six acres of land would be needed. The total amount of land area planned for retail might need to be larger than these numbers because limitations occur on total buildable area due to wetlands, steep slopes, woodland preservation, on-site utilities and the like. Also, the Township may experience some mix of comparison goods stores in a neighborhood center, since residents need the products but cannot support an entire community commercial center. For example, a neighborhood center with a grocery store anchor might attract a carpet and flooring store as one of its tenants.

INDUSTRIAL DEVELOPMENT

The demand for industrial development is related to many factors including materials, skills of the labor pool, transportation systems, energy cost and availability, and public policy. Industrial developers examine the availability of utilities, affordable housing for the work force, suitable characteristics of the land, and good transportation access.

There are two common methods of forecasting future industrial needs for an area: 1) based on total population, and 2) based on total land area. According to *Urban Planning and Design Criteria*, a typical planning standard for industry is 12 acres per 1,000 population. Based on an estimated 2020 population of 6,400 for Hadley Township, approximately 77 acres of industrial land can be supported within the community. The total land area method estimates that within a rural community industrial land typically consumes 2-5 percent of total land area. Two percent of the

estimated 23,040 acres of land area within the community equals roughly 460 acres. This percentage approach cannot be related to a particular point in time; therefore, it is more closely associated with a “rural build-out” scenario.

Given Hadley’s rural character, a range between the total population and the total land area methodologies may be a more appropriate estimate for forecasting the Township’s need for industrial land. Most of this demand will likely be filled by such uses as local contractors who need a storage yard and building to repair equipment, or small independent shops, fabricators, and auto repair facilities.

OFFICE DEVELOPMENT

There are two types of office buildings: single-tenant and multi-tenant. Single tenant buildings can be found at almost any location satisfactory to the tenant, who may often be the building owner. Multi-tenant office buildings, which are often built on the speculation that tenants will be found, are much more tied to market factors. Multi-tenant office developers look at access, proximity to professional and clerical labor, parking, transit opportunities, proximity to professional and personal services and the overall “image” of the community.

Around 45% of the employed residents of Hadley Township work in professions that typically operate within an office setting (i.e. managerial, technical, sales, etc.). The Census reported that the median travel time for employed residents to their workplaces was 39.2 minutes. Assuming that this commuting pattern occurs evenly among all office professions, we can estimate that nearly all of the 1,095 office professionals work outside Hadley Township.

The Urban Land Institute estimates that approximately 202 square feet of office space is needed per employee. Based on this projection and the estimate of office employees of businesses close to Hadley Township, approximately 221,190 square feet of office space could be supported by the office employees living in the Township. However, it is not reasonable to expect that multi-tenant office buildings would be marketable at present, nor that a significant portion of Hadley residents would suddenly find their office jobs relocated to the Township. Small professional office, medical office, and combination office/industrial buildings are likely to be more viable within the community over the next 15-20 years. Sites for future office development can play an important role as transitional uses between residential areas and retail or industrial uses.