City of Corunna
Master Land Use Plan

2000 - 2020

DRAFT 1/8/01

City of Corunna

MASTER LAND USE PLAN

2000 - 2020

Prepared by the Corunna Planning Commission
with assistance from
Capital Consultants
ROWE Incorporated

This document is an update to the City of Corunna Master Land Use Plan adopted February 16, 1994
That plan was prepared with the assistance of Wade-Trim Inc. Planning Consultants.

City of Corunna

MASTER LAND USE PLAN
2000 - 2020

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Plan Adoption History

Adopted by the City of Corunna Planning Commission at a regular meeting on _____

Public hearing on update held on _____

Attested copy of plan update certified to the City of Corunna Council and the Shiawassee County Register of Deeds

This Plan is dedicated to the memory of Jack Gerhold, Chairman and long time member of the City of Corunna Planning Commission

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Existing Land Use Survey and Analysis

The basic and essential data necessary for any planning study is an inventory and analysis of updated information on existing land uses within a community. It provides the key to better understanding of the present land uses, the relationships between various land uses and their immediate environs, predominant land usage and the desirable and undesirable land use conditions and potentials.

The pattern of land development is influenced by a number of factors, such as the location within the region, environmental conditions, economic impacts, market demands and political activities. Land use patterns, therefore, may be defined as those uses which result from the actions of people as permitted by natural, legal and environmental conditions.

An adequate knowledge of current land uses furnishes a base by which decisions can be made concerning proposals for new land development. The Existing Land Use Map and Table which are included in this chapter will serve as a ready reference for City officials in their consideration of everyday problems in land use management and public improvement proposals for the City.

In addition to being an essential element to planning and development, knowledge of existing land uses in the City also has legal significance. In the course of exercising it's regulatory power in zoning, the City must, as generally required by law, give reasonable consideration to the character of each district and it's suitability for particular uses. Thus the land use inventory for the City furthers this objective.

Survey Methodology

The original land use inventory was conducted by Wade-Trim staff in August and September 1991 using field inspections augmented by aerial photo interpretation of 1"=200 aerials. The update was performed by field inspections by Planning Commission members.

In both instances the information was put on base maps. The 1991 survey appears to have used a base map that only identified platted lots, so that the area for various land uses in areas not platted appears to be estimates based information of the aerial photographs. The result was that if there was a residence on an unplatted 10 acre lot and that residence and any lawn and out buildings only took up 2 acres of the lot, the survey would only map the two acres. For the Land Use Plan update, the Planning Commission had a digital base map with tax parcels prepared by the Land Information Access Association and Capital Consultants. Generally land uses were classified by parcel, so in the example above, the entire ten acre parcel would be classified as residential. The result is that the comparison between the two surveys may be misleading because any difference in land use may be the result of the difference in land use mapping methodology rather than an actual change in that particular land use in the City.

The land uses were categorized in 1991 using a system based on the Michigan Land Use/Land Cover classification system. The 1999 survey used the same

classification, with the exception that parks and county property, which were part of the larger classification of public/semi-public, are now mapped separately.

Land Use Classification

The following classifications were used to categorize the various land uses in the City. The 1991 survey referenced these land uses with the equivalent land use coding under the MDNR's Michigan Resource Information System (MIRIS), but because the land use categories have been modified, these are no longer applicable.

Single Family Residential

This category includes one-family detached dwelling units, trailers/mobile homes outside of designated mobile home parks, and accessory buildings such as garages that are related to these units. It also includes farmsteads and related agricultural buildings located near the principal dwelling.

Two Family Residential

This category includes two-family duplex dwelling units and accessory buildings such as garages that are related to these units.

Multiple Family Residential

The Multiple Family Residential classification includes locations having multi-family apartment structures or row, townhouse units of three or less stories or four or more stories. Included are rental and condominium units, in complexes or single structures, with related lawns, parking areas, and any small recreation facility associated with the residential use.

Commercial

This category covers the spectrum of shopping services offered to the community. Included are land areas consisting of relatively compact groups of stores satisfying day-to-day shopping needs such as food, hardware, personal service, and other convenience-type establishments. Shopping, which benefits by location on a major thoroughfare permitting good access is also included; examples include eating and drinking establishments, automotive dealers, and gasoline service stations. Another type of shopping defined in this category is a commercial area containing a single structure or group of structures having a large amount of floor space and offering major products or services less frequently needed but which a customer usually comparison shops before buying. Commercial uses of this type typically would include general merchandise, apparel and accessories, and furniture and appliances

Office

Office uses are uses which include business, financial, medical, professional, and

repair service establishments.

Industrial

Included in this category are warehouses, processing facilities, and manufacturing and non-manufacturing uses which are primarily industrial in nature. It may include land areas with or without buildings where raw or semi-finished materials are fabricated or those using or storing raw materials for primary production. Typical uses include warehouses, lumber yards, junk yards, fabrication establishments, collision shops, or industrial printing concerns.

Public and Semi-Public

This category pertains to land area and facilities that are publicly operated and available to be used by all people in the City, excluding County owned property. Also included are land uses and facilities which are privately owned or operated, and are used by the public or a limited number of persons which do not have profit as their principal intent.

Examples of public uses include public schools and government buildings. Semi-public use examples are public utilities, private clubs, private hospitals, and churches.

County

This category includes property owned by Shiawassee County, including the County Courthouse and the Surbeck Building. Property housing county offices but owned by a private individual is listed as office.

Parks and Recreation

This land use classification identifies all of the private and public park land and other recreation land in the City.

Agricultural

This agricultural land may be broadly defined as land used primarily for production of farm commodities. It encompasses cultivated crop land; confined feeding operations and pasture for cattle; and land used for orchards and growing nursery stock.

Vacant or Other

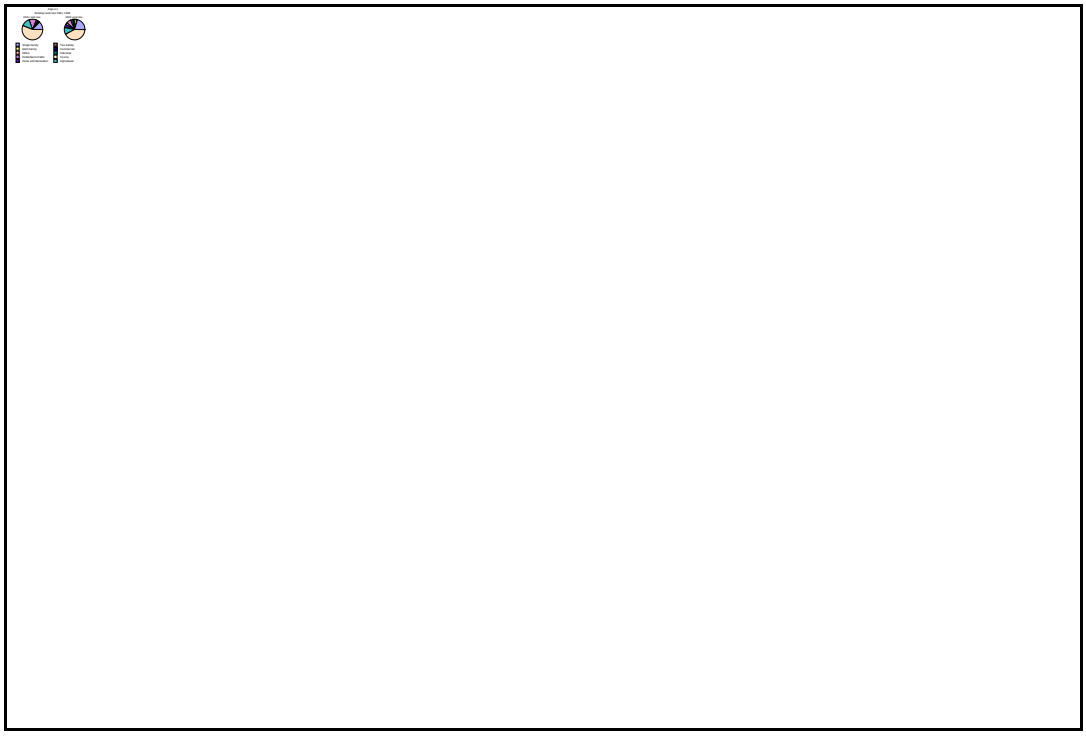
This classification includes not only vacant and unused parcels, but also all dedicated rights-of-way including freeways, thoroughfares, collectors, and local roads. Also included are land lying fallow, areas dominated by native shrubs and low woody plants, and woodlands.

This category identifies parcels whose primary purpose is to serve as an off-street parking lot. It does not include off-street parking that is an accessory use on a parcel, such as the parking lot in front of K-Mart.

Map 1 entitled Existing Land Use, shows the major land use categories previously described, as mapped in 1991, while Map 2 shows the same land uses as mapped in 1999. Table I indicates the distribution of uses on an acreage basis for 1991 and 1999. A discussion on the land use pattern is presented below.

Table 1
Existing Land Use
City of Corunna
1991, 1999

	1991		1999	
Land Use	Acres	%	Acres	%
Single Family Residential	270.1	13.2	418.5	21.4
Two Family Residential	3.2	0.2	3.9	0.2
Multiple Family Residential	17.8	0.9	79.2	3.9
Commercial	34.7	1.7	60.9	3.0
Office	2.7	0.1	6.0	0.3
Industrial	53.9	2.6	65.4	3.2
Public/Semi-Public (a)	240.4	11.7	144.9	7.1
County (a)			63.2	3.1
Parks and Recreation (a)			106.2	5.2
Agricultural	279.1	13.6	210.7	10.3
Vacant and Other (b)	1152.2	56.1	849.1	41.3
Parking Lots (b)			1.1	<0.1
Total	2054.1	100.0	2054.1	100.0



Map - 1 1991 Existing Land Use

Map - 2 1999 Existing Land Use

Socioeconomic Conditions

This section of the Master Land Use Plan involves the review of population, housing and employment characteristics including identifiable trends. This information is evaluated to determine the current and future impact of these factors on the future development of the City.

The information evaluated in this section comes, for the most part from past US Census. As of this writing, the 2000 census is being conducted. The preliminary counts are expected in mid 2001, with detailed data to be released in 2002 and 2003. When this information becomes available, this section of the plan should be updated.

Population Growth

The City of Corunna had a 1990 census population of 3,091 making it the third largest city in Shiawassee County after Owosso and Durand. It experienced a 3.6 % loss in population between 1980 and 1990 compared with a 2% drop for the county as a whole.

Table 2
Population Comparison
City of Corunna
1980 - 1990

Government Unit	1980	1990	Number Change	Percent Change
City of Corunna	3,206	3,091	-115	-3.6
Shiawassee County	71,140	69,770	-1,370	-2.0

Data from 1990 U.S. Census, General Population Characteristic

Household Size

Changes in household size (the average number of persons per household) has a direct effect on the impact that changes in population have in the demand for additional dwellings. In most of the United States, household size has been decreasing, with the result that even communities with little or no population growth have experienced new home construction.

In Corunna, the average household size dropped from 2.78 in 1980 to 2.59 in 1990. In the 1994 plan projected that household size in 2000 would be 2.32, and 2.12 in 2010.

This drop in household size has been primarily the result of three trends: a drop in the number of children per household, the increase in divorce, and the aging of the

population. The affect of the increase in the divorce rate is to create two households out of what was at one time only one, while the aging population means that the children in a former household have moved out and formed their own households.

Table 3
Persons Per Household Trends and Projections
City of Corunna
1980 - 2010

			Change 1980-1990		Projections (b)	
Category	**1980 (a)**	**1990 (a)**	**Number**	**%**	**2000**	**2010**
Persons Per Household	2.78	2.54	-0.24	-8.6	2.32	2.12

(a) Data from 1990 U.S. Census, General Population Characteristic
(b) Projections by Wade-Trim/Associates, Inc

Population Projections

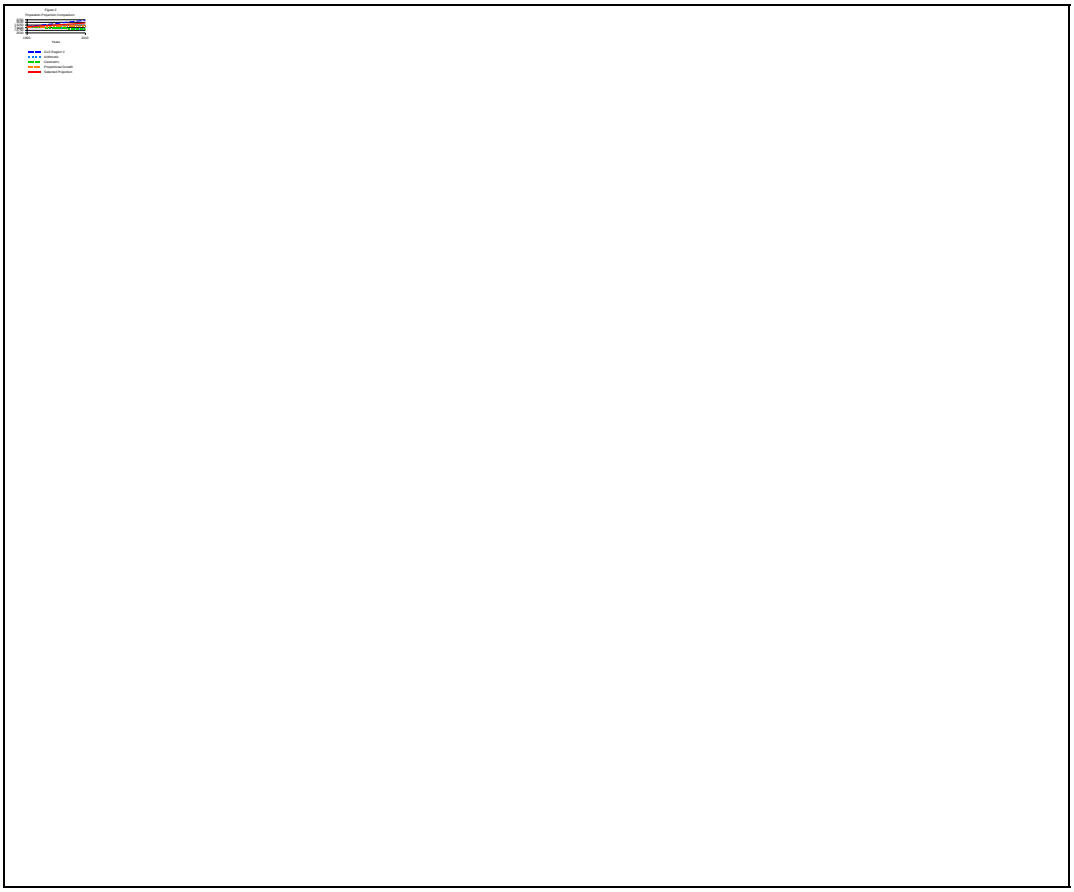
Making population projections for a small community is problematic because the

decisions of a few people can have a significant impact on the future population of a municipality. If a property owner decides to hang on to a parcel and not develop it, that affects growth in one way. If the property owner proposes a mobile home park or apartment complex on that site, it can affect it another way. The local and regional economy also has an impact that cannot be predicted with assurance over any length of time.

The 1994 plan identified 4 projections as a range of possible changes in the City's population over the period 1990 - 2010. These projections should be reviewed, based on the results of the 2000 census, when that information becomes available. The 1994 plan is based on a 2010 population of 3,450 people.

Table 4 Year 2010 Projections City of Corunna				
	Year 2010 Population Projections			
1990 Population (a)	GLS Region V (b)	Arithmetic (c)	Geometric (d)	Proportional Growth (e)
3,091	3,721	2,861	2,872	3,153

(a) Data from 1990 U.S. Census, General Population Characteristic
(b) Data from GLS Region V PDC, 1985-2010 Population Allocation Study
(c) Represents extension of population trend between 1980 and 1990 on a numeric basis, performed by Wade-Trim
(d) Represents extension of population trend between 1980 and 1990 on a percentage basis, performed by Wade-Trim
(e) Represents population increase assuming Corunna grows at the same rate as Shiawassee County as a whole, future County population projections taken from State Demographers office, analysis performed by City Planning Commission



Age-Sex Composition

A comparison of the 1990 age-sex composition of the City of Corunna with the 1980 data shows only relative minor changes, with a small decrease in the percentage of the population composed of children and teenagers, and adults over 65 while the age groups between 19 and 64 increased slightly. The City population continues to include a high proportion of elderly (14.4%).

Table 5
Age-Sex Composition
City of Corunna
1990 (a)

	Male		Female		Total	
Age-Cohort	**Number (a)**	**Percent (b)**	**Number (a)**	**Percent (b)**	**Number (a)**	**Percent (b)**
Under 5	119	8.1	99	6.1	218	7.1
5-9	67	4.6	158	9.7	225	7.3
10-14	167	11.4	74	4.5	241	7.8
15-19	144	9.8	107	6.6	251	8.1
20-24	120	8.2	117	7.2	237	7.7
25-34	265	18.1	270	16.6	535	17.3
35-44	192	13.1	213	13.1	405	13.1
45-54	145	9.9	133	8.2	278	9.0
55-59	44	3.0	53	3.3	97	3.1

60-64	61	4.2	99	6.1	160	5.2
65+	138	9.4	306	18.8	444	14.4
Total	1462	(c)	1629	(c)	3091	(c)

(a) Data from 1990 U.S. Census, General Population Characteristic
(b) Analysis by Corunna Planning Commission
(c) May not equal 100% due to rounding of numbers

Housing Characteristics

Data in Table 6 describes the type of structures which existed in the City as of April, 1990. Overall the housing stock is characterized by single-family homes. In 1990, 67.1% of the homes in the City were of the one-family variety. The number of single-family homes is expected to increase as a new subdivision south of Crestview in the southeast quadrant of the City is developed and lots become available.

Nearly 15% of the housing units in the City in 1990 were multi-family units in structures containing 10 or more units. This number has increased with the development of River Walk Apartments on Corunna Avenue on the west border of the City. Additional multi-family development is also being proposed along Walnut Street.

Mobile homes or trailers made up 1.6% of the available year-round housing units in 1990.

Table 6
Year-Round Housing Units
City of Corunna
1990(a)

Unit Type	Number	Percent
1, detached or attached	773	67.1
2 - 9 units	192	16.7
10 or more units	169	14.6
Mobile home or trailer	18	1.6
Total	**1,152**	**100.0**

(a) Data from the 1990 U.S. Census, General Population Characteristics

Occupancy characteristics are presented in Table 7. All but one of the 1,152 housing units are available for year-round living. Almost all of the units (96.8%) are occupied with the bulk of these (58.9%) being owner-occupied and a smaller percentage, (41.1%) being renter occupied These figures correspond roughly with the percentage of single-family homes in the City in 1990, indicating that almost all of the single-family homes in the City of Corunna are owner occupied. With the development of River Walk Apartments, the percentage of renter-occupied dwellings

is expected to be greater in the 2000 census.

Table 7
Occupancy Characteristics
City of Corunna
1980 - 1990

Category	Number		% of Total Housing Units	
Year	1980 (a)	1990 (b)	1980	1990
Year-Round Housing Units	1,116	1,152	99.9	99.9
Occupied Housing Units	1,064	1,115	95.3	96.8
Owner Occupied	686	657	61.5	57.0
Renter-Occupied	378	458	33.9	29.4
Vacant Housing Units	52	37	4.7	3.2
Vacant for Sale	5	-0-	0.4	-0-
Vacant for Rent	28	25	2.5	2.2
Other (b)	19	?	1.7	?
Vacant Seasonal and Migratory	1	1	0.1	0.1
Total Housing Units	1,117	1,152	100.0	100.0

(a) Data from the 1980 U.S. Census, General Population Characteristics
(b) Data from the 1990 U.S. Census, General Population Characteristics

Data in Table 8 show the median value of housing in the City for the years 1980 and 1990 for owner occupied and renter occupied units. Values are expressed in 1990 dollars. The cost of owner-occupied units decreased in real terms by 15.8% ($7,944) over this ten year period. Contract rent prices also decreased over that period falling from $297 to $278. This trend was attributed to the population decrease in the community and surrounding area. Anecdotal data would indicate that housing values have increase significantly since 1990. The 2000 census will identify the extent of the increase.

Table 8
Housing Value Trends
City of Corunna
1980 - 1990

				Change from 1980 (c)		Change from 1980 Adjusted (a)	
Category	1980 (a)	1980 Adjusted (b)	1990 (a)	Number	Percent	Number	Percent
Median Value of Owner-Occupied Units	$31,800	$50,244	$42,300	$10,500	33.0	($7,944)	(15.8)

Median Value (Gross Rent) of Renter-Occupied Units	$188.00	$297.04	$278.00	90.00	47.9	($19.04)	(6.4)

(a) !980 and 1990 U.S. Census data
(b) Analysis by Wade-Trim/Associates, Inc. The 1980 values were adjusted by a factor of 1.58 to reflect the increase in the Consumer Price Index and to represent 1990 dollars. (CPI of 246.8 for 1980 and 391.4 for 1990; 1967 = 100)
(c) Analysis by the Corunna Planning Commission

Income

Data in Table 9 compare per capita, median family, and median household income between Shiawassee County and the City of Corunna, for the years 1979 and 1989. The results show that the average income of the residents of the City of Corunna is consistently lower than the County average and that the gap increased between 1979 and 1989. In 1979 the County's per capita income was 6.6% greater than the City's. By 1989, the difference had increased to 20%. In 1979, the County's median income was 2.5% greater than the City's. By 1989 it was 13.2%. In 1979 the Median household income was 10% greater than the City, and in 1989 it was 22.2%.

This pattern can in part be explained by the larger percentage of elderly in the City who generally have a lower household and family income then a household with one or two adults working. The increased gap in the County and City averages may be as a result in the improvement in the economy in the late 80's, with working families experiencing a greater increase in income than those households on a fixed retirement income.

The 1994 plan suggested that part of the disparity may have resulted from the loss of jobs in the finance, insurance and real estate sectors during the 70's. However, the 1990 census showed that by 1989 the proportion of residents with jobs in those sectors had been restored to 1969 levels, yet the disparities increased.

Table 9
Per Capita, Median Family and
Median Household Income Comparison
1980 - 1990

	1980(a)				1990(b)			
			Difference				Difference	
Income Category	City of Corunna (a)	Shiawas-see County (a)	Number	Percent	City of Corunna (a)	Shiawas-see County (a)	Number	Percent
Per Capita	$6,519	$6,948	($429)	(6.6)	$10,203	$12,244	($2,041)	(20.08)
Median Family	$21,204	$21,737	($533)	(2.5)	$30,521	$34,557	($4,036)	(13.2)
Median Household	$17,923	$19,722	$1,799)	(10.0)	$24,784	$30,283	($5,499)	(22.2)

(a) Data from the 1980 U.S. Census, General, Social and Economic Characteristics

(b) Data from the 1990 U.S. Census, General, Social and Economic Characteristics

Employment Characteristics

Table 10 shows that in 1989 there were 1261 residents of the City of Corunna employed, a modest increase over 1979 in total employment despite the fact that the City experienced a 3.6 drop in total population.

Between 1969 and 1989, manufacturing decreased employing 39.1% of the City's residents who were working to 26.9%. However, it continues to be the largest single employment sector. Professional, health, education and related services employed 26.3% of the residents who were employed, compared with 19.4% in 1969. The increase in 134 jobs represented the largest numerical increase. The highest percentage increase was in business, personal and entertainment services, which experienced an increase from 11 to 88 employees, a 700% increase.

Table 10
Employment by Selected Industry
1970 - 1990

Industry	1970 (a)		1980 (b)		1990 (c)		Change 1970 - 1990	
	#	%	#	%	#	%	#	%
Agriculture, Forestry & Fisheries	8 (d)	0.8	11	0.9	14	1.1	6	.8
Construction	51	5.0	43	3.6	37	2.9	(14)	(27.5)
Manufacturing	399	39.1	447	37.1	339	26.9	(60)	(15.0)
Transportation, Communication, Utilities & Sanitary Services	57	5.6	92	7.6	46	3.6	(11)	(19.3)
Wholesale & Retail Trade	206	20.2	210	17.4	254	20.1	48	23.3
Finance, Insurance & Real Estate	58	5.7	20	1.7	59	4.7	1	1.7
Business, Personal & Entertainment Services	11 (d)	1.1	83	6.9	88	7.0	77	700.0

Professional, Health, Education & Related Services	198	19.4	237	19.7	332	26.3	134	67.6
Public Administration	27	2.6	56	4.6	52	4.1	25	92.3
Mining	5	0.5	7	0.6	0	0	(7)	(100)
Total (e)	1,020	100.0	1206	100.0	1261	100	241	23.6

(a) Data from the 1970 U.S. Census, General, Social and Economic Characteristics.
(b) Data from the 1980 U.S. Census, General, Social and Economic Characteristics.
(c) Data from the 1990 U.S. Census, General, Social and Economic Characteristics.
(d) Wade-Trim estimate based on 1970 “other” total of 24 persons.

Natural Features

Introduction

Land development is a complicated process. The private real estate market cannot handle all allocation decisions. Special attention must also be given to environmentally sensitive areas.

Environmentally sensitive areas can be defined as land areas whose destruction or disturbance will immediately effect the life of the community by either: 1) creating hazards such as flooding; or 2) destroying important resources such as wetlands and woodlots; or 3) wasting important productive lands and renewable resources.[1]

The purpose of this chapter, therefore is two-fold. First, it determines the land most suitable for development, which would require the least development costs and provide the maximum amenities without having adverse effects on existing natural systems. Secondly, it will help identify lands most suitable for recreation-conservation. The applicable natural features of the City of Corunna are presented below.

Significant Site Features

Significant site features are those characteristics which serve to "shape the community," in some instances discouraging development, and in others attracting particular land use activities.

Topography

The topography of the City of Corunna is generally characterized as flat, with little change in elevation from one point in the City to another. The contour lines from the United States Geological Survey (USGS) 7.5 minute quadrangle base maps, which show elevation contours in 10 foot increments, identify elevations ranging from 740 feet above sea level in the north to 750 feet above sea level in the south. However, the elevations in the southern one-fourth of Corunna show terrain becoming steeper with high points of 814 feet above sea level in the southwest corner of the City. (see Map 2)

[1] For a complete discussion of the importance of protecting environmentally sensitive areas see Performance Controls for Sensitive Lands, Planning Advisory Service Reports 307 and 308, June 1975

Inset Natural Features Map

Woodlands

The aerial photography of the City of Corunna show the existence of numerous woodlots throughout the community (see Map 2). These likely second and third-growth woodlands are valuable as wildlife habitat and aesthetic enjoyment. Woodlands also moderate certain climatic conditions, such as flooding and high winds, by protecting watersheds from siltation and soil erosion caused by storm water runoff or wind. Woodlands can also improve air quality by absorbing certain air pollutants, as well as buffer excessive noise generators. To the extent feasible, these woodlands should be exempt from future land development. In the City of Corunna, many of these are low land woodlands and are closely associated with wetlands.

Hydrology

Surface drainage in the City of Corunna is accomplished by a system of improved storm drains and natural watercourses, including the Shiawassee River and the Caledonia, Wheeler and Escott Drains.

The Federal Emergency Management Administration (FEMA), administers the National Flood Insurance Program (NFIP), which identifies communities with flooding potential and encourages these communities to participate in the program. As part of the program FEMA, in cooperation with the Surface Water Division of the Michigan Department of Environmental Quality, identify the “100 year flood plain” for that community. The “100 year flood plain” represents the areas along a river, stream, drain or lake which is expected to have a 1% chance of flooding in any given year. In some communities, FEMA also identifies the “500 year flood plain” which represents areas that have a 0.2% chance of flooding in any given year, and the “Floodway” which identifies that portion of the river channel and land along either bank which actually carries a flood down stream.

FEMA has prepared a flood plain map for the City of Corunna with the 100 and 500 year flood plains on them, along with a floodway map. Under FEMA regulations, Corunna may not allow construction within the 100 year flood plain below the estimated elevation of the 100 year flood, although buildings may be built in the 100 year flood plain if the first floor, and any areas designed for living quarters, are built above the 100 year flood plain elevation. No construction is allowed in the floodway.

Insert Flood Plain Map

Map 3 shows that a considerable amount of land is within the 100 year flood plain in the City. Some has already been developed, including the site of the Corunna High School, Walnut Acres Apartments, a portion of the Riverwalk Apartments site (but none of the apartments) and several residences north and south of the Shiawassee River east of Shiawassee Street. However, large portions of the flood plain remains undeveloped. Portions of the floodplain may be appropriate for designation as recreation/conservation areas for the purpose of protecting neighboring development against flood hazards.

Wetlands

In 1979 the Goemaere-Anderson Wetland Protection Act was enacted by the State of Michigan. This legislation was passed to protect wetlands by restricting their use to certain activities (fishing, boating, farming, among others) while allowing other activities only after permit approval by the State of Michigan. Permits are approved only upon a review of an environmental assessment filed by the petitioner and upon a finding that the activity is in the public interest. In 1994, the act was incorporated into the Natural Resources and Environmental Protection Act.

Under the provisions of the Act, a wetland is defined as “land characterized by the presence of water at a frequency and duration sufficient to support, and under normal circumstances does support, wetland vegetation or aquatic life and is commonly referred to as a bog, swamp or marsh.” The operative words are wetland vegetation. Therefore, the Act excludes those areas that are flooded in the spring but rarely have water in them at any other time of the year and, as a result, do not support aquatic plants or animals.

Once a wetland is designated as such, the next question concerns jurisdiction. In Michigan, there are federal and local wetland regulations, as well as the state provisions. The Michigan Department of Environmental Quality’s authority is determined by using one of three tests. The acreage is within its jurisdiction if it:

- Has a permanent surface water connection, or is in otherwise direct physical contact with an inland lake or pond, river, stream or a Great Lake;

- Is a seasonal or intermittent stream (need not have year-round water and may be as small as 1 foot wide by 3 feet deep) or surface water connection to an inland lake or pond, river, stream or a Great Lake, or if it;

- Is greater than five acres in size and in a county of more than 100,000 population.

The U.S. Fish and Wildlife Service of the U.S. Department of the Interior has conducted a wetlands inventory of the City of Corunna using stereoscopic analysis of high altitude aerial photographs. This inventory is shown on Map 4.

Insert Wetlands Map

Soils

The U.S. Soil Conservation Service has conducted a soil survey of Shiawassee County. This investigation classified the soil types for undeveloped portions of the City of Corunna.

Of the several types of soils classified as sensitive, the common characteristics which they share is a high water table.

While the wetness characteristics could offer constraints for residential, commercial and industrial development, the soils offer only moderate limitations for picnic, playground, trail and other similar types of recreational development. Sensitive soil areas within the City of Corunna are shown on Map 5.

Climate

There are no unusual climatic conditions that would severely impede outdoor recreational activities. The weather is of the humid continental character modified by the Great Lakes. Temperature data obtained from the National Weather Service in Lansing reveal a mean annual temperature of 47.2^{o} and average July temperature of 66.8^{o} . Uniform precipitation occurs at a rate of 28.8 inches per year. Average snowfall in the area is 41.4 inches annually. Variations in the weather pattern afford local residents an opportunity to enjoy seasonal recreational activities.

Insert Sensitive Soils Map

Market Assessment

Introduction

The following text will assess the market potential for commercial and industrial properties within the City through the application of nationally recognized planning and design standards. An analysis will also be made with respect to office and housing needs. This data will be used to determine the minimum amount of urban land which can reasonably be expected by the community at the end of the planning period (2020).

Housing Requirements

Housing needs are based on three components. First, the future population must be projected. Secondly, the number of housing units must be calculated given the characteristics of the future population (persons per household and vacancy rate). Lastly, an accounting of the existing structures which are expected to become substandard and replaced during the planning period must be made.

The Socioeconomic Profile chapter predicted the City's Year 2020 population will be 3,450. Data in Table 11 indicate the number of housing units required to house this population. In total, 525 year-round housing units will be required, or a 31.3 % increase from the 1990 census.

One issue related to housing is the mix of housing types that will be required for the population by the year 2010. With the increasing average age of the population and the decreasing household size that is expected over the next 20 years, a decrease in the percentage of single-family detached dwellings and an increase in all other types of housing can be expected.

Table 11
Housing Unit Requirements
1990 and 2010

			Change 1990 - 2010	
Category	1990(a)	2010	Number	Percent
Total Population	3,091	3,450(b)	359	11.6
Persons Per Household	2.54	2.12(b)	(0.42)	(16.5)
Total Occupied Units	1,115	1,627(c)	512	45.9
Vacancy Rate	3.2	3.0(b)	(0.2)	(6.6)
Total Year Round Housing Units	1,152	1,677	525	31.3

(a) Data from 1990 U.S. Census, General Population Characteristics
(b) Projections by Corunna Planning Commission
(c) Calculated based on projected population/projected persons per household

Industrial Needs

Data in Tables 12, 13 and 14 summarize three methodologies commonly used in estimating future industrial land area needs. They are population, land use and employment density ratios.

The greater accuracy is achieved through the application of employment density ratios. If employment by industry can be estimated, a worker density factor can be applied, resulting in a total acreage requirement. Estimating employment levels is, however, beyond the scope of this plan. Industrial land area needs are more readily estimated using land or population ratios.

Population ratios represent acreage requirements as a proportion of the total population. Data in Table 13 indicates that 12 acres of industrial land are required for every 1,000 people. Based on a population projection of 3,450 persons in the year 2010, the City of Corunna would need 41.4 acres of industrial land.

Estimating industrial land use can be accomplished by employing land use ratios. By surveying the amount of land devoted to industrial uses in other communities, an average can be calculated and used as a standard for planning purposes. The American Planning Association has complied this information. It is presented in Table 14. Using this standard, eight percent of the City's land area should be utilized for industrial development. This equates to approximately 165 acres.

Presently, only 65.4 acres of the City land is used for industrial purposes. We recommend additional acreage needs be devoted to light industrial purposes. Light industrial uses are, in the main, confined within enclosed structures. Compliance with reasonable performance standards should also be required in an effort to reduce adverse impacts on adjoining property. Typical light industrial uses include parts assembly, packaging and warehousing establishments, testing laboratories, as well as certain commercial uses, such as tennis clubs and ice rinks. We recommend a total of 293 acres be utilized for industrial purposes. While this is substantially more then the acreage recommended by applying the guidelines from Table 13 and 14, in view of the City of Corunna's central location in the region and the state, it would appear to be prudent to maintain adequate additional industrial acreage.

Table 12
Employment/Density Ratios For Estimating Industrial Land Use (a)

Industry	Average Number of Employees Per Net Site Acre

Industrial Industries (includes electrical equipment and supply, printing and publishing, apparel and textile products, transportation equipment and similar uses)	30
Intermediate Extensive Industries (includes lumber and wood products, furniture and fixtures, food and kindred products, transportation equipment and similar uses)	14
Extensive Industries (includes tobacco products, petroleum and coal products, wholesale trade and similar uses)	8

(a) Urban Land Institute, Industrial Development Handbook, 1975

Table 13
Population Ratios For Estimating Industrial Land Use (a)

Category	Ratio
Total gross land requirement for all industry	12 acres/1,000 population
Land requirements for light industry	2 acres/1,000 population
Land requirements for heavy industry	10 acres/1,000 population

(a) Joseph DeChiara and Lee Koppleman, Planning Design Criteria, 1969

Table 14
Land Use Ratios For Estimating Industrial Land Use (a)

Community Size	Percent Industrial Land Average
Small Cities and Towns (under 42,000 people)	8%
Large Cities (over 200,000 people)	12%

(a) American Planning Association, PAS Memo: Land Use Ratios, May 1983

Commercial Needs

Commercial development is a very important ingredient of a community's economic base. Commercial establishments provide goods and services to consumers, promote economic stability, and generally enhance the quality of life for area residents. However, if commercial districts are not suitably located, and carefully planned, they can be a disruptive element and ultimately detract from the community.

There are three primary types of shopping environments. These include the neighborhood center, community center and regional center. The standards associated with each center are presented in Table 15. The City of Corunna, based upon it's 2010 projected population of 3,450, and the geographic size, could support one neighborhood center. The City's CBD presently supplies the services typical of a neighborhood center development, and the City's present population is insufficient to support a second development of this size.

Not all commercial uses are sited within preplanned shopping centers or established downtown districts. Special attention must also be given to uses that are free standing, independent structures, or which are part of "strip centers". Most of these uses are considered highway oriented businesses, since most of their trade results from exposure and accessibility to passing motorists.

Table 15
Typical Shopping Center Standards(a)

CENTER TYPE	SITE SIZE	COMPOSITION	POPULATION BASE	SERVICE AREA
Neighborhood Center	3-5 acres	Supermarket as the principal tenant with other stores providing convenience goods or services. Typical GLA* of 30,000 to 100,000 sq. ft.	Trade area population of 2,500 to 4,000 people	Neighborhood, 6 minute drive time 1 to 1 ½ mile radius
Community Center	10 acres	Junior department store or variety store as the major tenant, in addition to the supermarket and several merchandise stores. Typical GLA* of 100,000 to 300,000 sq. ft.	Trade area population of 40,000 to 150,000 people	3 mile radius
Regional Center	30-50 acres	Built around a full line department store with a minimum GLA* of 100,000 sq. ft. Typical GLA* of 300,000 to 1,000,000 sq. ft.	150,000 or more people	10-15 mile radius

(a) Urban Land Institute, Shopping Center Development Handbook, 1977
*GLA = Gross Leasable Area

Data in Table 16 presents market based standards for many of these uses such as liquor stores, restaurants, real estate offices, service stations, and hardware stores. The majority of the City's current commercial development is concentrated along M-21 and Shiawassee Street (M-71). Due to the traffic volume along M-21 this area would appear to be the logical area for future construction activity.

Table 16
Recommended Store or Service Use Standards

Store or Service Use	Population Base	Market Penetration	Rental Revenue Potential	Typical Building Size (Sq. Ft.)
Food Stores	4,000	low	low	2,000
Drug Stores	9,000	high	medium	5,400
Liquor Stores	3,100	high	high	2,000
Restaurants and Taverns	varies	low	high	3,300

Laundries (coin-operated)	12,400(a)	high	low	1,600
Dry Cleaners	3,000	high	low	1,300
Beauty Shops	2,100	high	medium	1,200
Barber Shops	3,300	high	medium	750
Television Repair	5,300	medium	low	1,400
Real Estate Offices	n/a	high	high	1,000
Branch Banks	4,500	low	high	4,000
Accounting Offices	n/a	n/a	n/a	n/a
Nurseries	16,200	high	medium	1,300
Travel Agencies	varies	high	high	800
Women's Apparel Stores	6,000	low	medium	2,500
Sporting Goods Stores	18,000	medium	medium	n/a
Books and Stationary	6,500	low	medium	2,000
Furniture and Home Furnishings Stores	6,200	low	medium	10,200
Camera Stores	55,100	medium	medium	2,000
Automotive Service Stations	2,800	low	high	varies
Hardware, Paint and Building Supply Stores	8,700	medium	medium	5,700
Convention Hotels	(b)	varies	n/a	varies
Bowling Alleys and Billiard Parlors	(c)	(c)	(c)	(c)
Doctors Offices	1,000	low	high	1,000
Legal Offices	6,000	low	high	800
Stock Brokerage Offices	15,000	low	high	800

*Data from Darley/Gobar Associates, Economic, Real Estate, and Marketing Consultants as published in House and Home Magazine, 1973
(a) Figure is very approximate, depending on whether residents have their own machine
(b) Not applicable; does not depend on residential population
(c) Current figures not available - popularity is declining rapidly
n/a - Not Available

NOTE: Population base refers to the number of actual customers each store or service requires for its support. Market penetration is each one's relative ability to withstand competition; a store with low penetration needs a greater number of residents in the area than one with the same population base and high penetration. Assumes a 3:1 site to building size ratio to determine total land area need.

Office Needs

Commercial development is an important aspect of the growth of any community, in terms of offering adequate commercial services to residents as well as providing a reasonable tax base and increased employment opportunities. The size of the potential market will ultimately determine the extent of the City's commercial base. Some commercial uses are designed to serve a relatively small, local market, and depend almost exclusively upon the population residing within the community. Other

uses, such as office developments, demand a much larger market extending well beyond the City's boundary.

The Office land use classification is intended to facilitate planned locations for office facilities in the City. This is the preferred method of accomplishing the potential need for office space instead of permitting such use throughout various areas of the City.

Infrastructure Analysis

Transportation

The transportation network of a community is an integral part of planning and must be evaluated in connection with the present and future land uses in the community. In the City of Corunna specifically, on-going changes along major corridors enhance the need for analysis of their potential impact on traffic flow and future land use.

The following is an update of a transportation analysis completed by Wade-Trim in 1994 to identify and assess the City of Corunna's transportation infrastructure.

State and Federal Highways

The City of Corunna is bisected diagonally by M-71, a state highway linking I-69, near Durand, with M-21 in Owosso. Within the City of Corunna, M-71 follows East McNeil Street, Shiawassee Street, and Corunna Avenue at various locations.

M-21 skirts the northern portion of the City of Corunna and serves as a link between Flint, Lapeer and Port Huron to the east with Owosso, St. Johns, Ionia and eventually Grand Rapids to the west. Prior to the opening of the interstate highway system, this route served as one of the primary east-west corridors across Michigan. It continues to serve a significant amount of truck traffic servicing the Mid-Michigan area.

From the intersection of Shiawassee Street eastward, M-21 is mainly a 2-lane highway, however, it widens to four lanes plus a center turn lane just east of Shiawassee Street and continues this configuration along the City of Corunna's northwest boundary and on in to the City of Owosso, where it loses the center turn lane.

Local Street System

The street system within the City of Corunna is primarily a traditional grid pattern of intersecting north-south and east-west streets. The further removed one is from the central business district and surrounding neighborhoods, the less likely this grid pattern continues. To the north of downtown, the Shiawassee River acts as an inhibitor to travel. Likewise, to the south the two sets of railroad tracks also serve to break-up the continuity in the City's street system.

At this point, Corunna has very few streets which do not follow parallel routes to the grid and has only a few dead ends or cul-de-sacs, mostly located in the southern half of the City.

The majority of City streets are constructed of asphalt (with or without curb/gutter), but a number of streets within the central portions of Corunna are of concrete construction. Additionally, there are several unpaved streets remaining in the City at the following locations:

Table 17
Unpaved Streets Sections in Corunna

Street	From	To
Dutcher	M-71 (Mc Neil)	East King
South Comstock	Ann Arbor Railroad Tracks	City Limits
South McDonnell	M-71 (Mc Neil)	Ann Arbor Railroad Tracks
South Mizner	West Mc Neil	West Lyman
West Pine	Cherry	Horse Shoe
North Bacchus	West Mack	Dead End

Source: Wade-Trim Associates survey.

Map 6, the Transportation Analysis shows the findings of Wade-Trim Associates review of Corunna's transportation system, update in 2000 by the City Planning Commission. The map, aside from indicating types of pavement, also shows streets considered to be deteriorating. Please note that this is a general assessment and does not reduce the analysis into serious versus minor deterioration.

Signalization

There are currently three traffic signals in operation within Corunna. These are located at the intersection of Shiawassee and Corunna Avenues in the downtown area and at M-21 and Shiawassee Avenue, on the north end of the City. Map 6 indicates both of these locations.

Bridge

The Shiawassee Street Bridge opened in 1961 and is the only direct crossing of the Shiawassee River within the Corunna City limits. Increasing traffic, on North Shiawassee Street, is adding demands on this structure. These increasing demands come from two primary sources 1) trucks; and, 2) shoppers.

> Trucks - Increasingly, trucks who do not wish to make the turn for M-71 in downtown Corunna, or who use North Shiawassee as a faster route, are utilizing this bridge to get to M-21 from I-69. Additionally, the new commercial developments along M-21 create the need for additional truck traffic across this bridge, whereas they may have traveled M-71 into downtown Owosso before.
>
> Shoppers - Aside from additional truck delivery and pick-up for the new retail stores along M-21, these new stores are also increasing shopping trips to the M-21 Corridor from surrounding communities. Many of those newly created shopping trips will follow North Shiawassee Street over the bridge to M-21.

As a result of the increased inadequacy of the existing structure to handle the increased demand, the City and MDOT have scheduled the bridge for replacement in 2001.

Traffic Volumes

The state of Michigan yearly counts traffic volumes along its state and federal highways. Furthermore, counts are sometimes taken for intersecting streets and roadways.

Within Corunna, counts are available for M-71 (East McNeil, parts of Shiawassee, and West Corunna), and for M-21. In addition, some of the intersecting streets to these state routes are counted near the intersection.

Table 18
24-Hour Traffic Volumes in Corunna: 1991(a)

Streets or Route	Count Location	1991
North Shiawassee Street	North of M-21	4,012
North Shiawassee Street	South of M-21	10,536
South Shiawassee Street (M-71)	South of Corunna Ave	14,326
South Shiawassee Street (M-71)	North of McNeil Street	10,730
South Shiawassee Street (State Rd) East	South of McNeil Street	4,139
McNeil Street (M-71)	East of Shiawassee Street	7,991
M-21	East of Escott Road	10,093
M-21	East of Shiawassee Street	13,832
M-21	West of Shiawassee Street	20,860

(a) Source: Michigan Department of Transportation (MDOT)

As is evident from these figures, M-21 is the busiest route in Corunna, particularly west of Shiawassee Street. The continuing development along this section should serve to increase these figures further.

Changes in Traffic Pattern

Land use has a great affect on transportation systems. Within a dual community, like Corunna and Owosso, a major land use change in one can easily alter traffic patterns and volumes throughout the area.

Recently, several major traffic generators have located along the M-21 Corridor adjacent to Corunna. The siting of both Wal-Mart and Meijers in Caledonia Township combined with the K-Mart in the City of Corunna, along with other commercial uses along M-21, have created a significant retail node.

While many customers may have previously traveled to Genesee Valley Mall in Flint Township, or possibly Saginaw or Lansing for specialty and major purchases, these locally available options have tended to reduce the need and number of out-of-town shopping trips, while increasing local ones. Additionally, this retail node has impacted the traditional shopping patterns towards downtown.

It should also be noted that the M-21 Corridor continues to develop, additional truck and delivery service is required to and from them. All these trends, coupled with previously discussed changes in shopping and truck travel patterns utilizing North Shiawassee Street and the bridge instead of M-71, will continue to impact the City's transportation system.

Planned Transportation Changes

Over the period 2000 - 2002, several improvements are proposed to the City's street system. These include the reconstruction of M-71 from Parmenter Road to Woodworth Street, the 100 block of East Corunna Avenue and the 100 blocks of East and West Mack Street and the replacement of the Shiawassee Street bridge. The reconstruction of M-71 will include the restriping of the pavement to create a left turn lane along Shiawassee Street and a portion of McNeil Street, construction of curb and gutter along much of the street, and a reduction in parking spaces downtown. In addition, several of the improvements in the City's Capital Improvement Program, Table 19 include a street reconstruction component.

Rail Service

Corunna is currently served by the Grand Trunk Railroad, which bisects the City diagonally, much like M-71. Parallel to this track, is an Ann Arbor Railroad line. The Ann Arbor line is not utilized, and plans are in the works to eliminate service along the Grand Trunk line in Corunna as well. Loss of both rail services will make it more difficult to attract manufacturing businesses that need rail service. Another result of this impending loss of rail freight service is a potential for an increase in truck traffic serving the community to compensate for the previous rail.

Bus Service

Local - The Shiawassee Area Transportation Agency provides transportation services in the Owosso/Corunna area as well as in the Perry/Morrice and Durand/Vernon areas. The agency provides service on a reservation basis between the hours of 6:00 am and 6:00 pm, Monday through Friday. Service is not available on the weekends or holidays. The SATA vehicles are equipped to transport wheelchairs and they provide discount fares to senior citizens.

Intercity and Charter - Intercity bus service is available from nearby Owosso to cities in Michigan and Illinois, by Indian Trails Bus Line. There is also charter bus service available from Owosso.

Truck and Delivery

Six motor freight carries currently serve Corunna and Owosso. In 1990, according to MDOT statistics, approximately 390 commercial vehicles per day utilized M-21 through Corunna, and 160 utilized M-71 through the City. With impending loss of rail service, it is possible that not only the number of firms serving the area may increase, but the number of truck trips along these routes may increase as well.

MDOT's 1992 Truck Operations Map shows M-21, M-52, and I-69 as being part of the National Truck Network. The map also indicates that there are no special designated highways" or seasonal routes in Shiawassee County. M-71 between I-69 and Owosso (including through Corunna) is designated as "open to legal axle loads" and is an all season route. The same is true for M-21, M-52, and I-69.

Air Service

The Owosso Community Airport is located in Caledonia Township, between Corunna and Owosso. The airport consists of three runways of 3,800, 2,470, and 2,576 feet respectively. Plans call for the 3,800 foot Runway 10-28 to be lengthened by 500 feet, for a total of 4,300 feet. Additionally, Runway 18-36 is planned to be reduced from 2,575 feet to 2,450 feet. Runway 10-28 is constructed of an all-weather bituminous surface. The other two runways are turf, but Runway 18-36 is scheduled to be converted to a bituminous surface. Radar is not provided at the airport. Scheduled passenger service is currently unavailable from the Owosso Community Airport. However, charter and fixed based operations are provided by Flight One. Scheduled passenger service for residents of Corunna is available at either Bishop International, Capital City, or Tri-City airports, all of which are within one hour of Corunna.

Utilities

Much like the transportation network serving a community, the utility network is a primary consideration in land use planning for a community. Many times for example, a development will depend on access to water and/or sewer lines. Taking this into account, as part of the infrastructure analysis, WT/A also reviewed the utilities.

1. Water

The majority of Corunna is served by public water through linkage with the City of Owosso's water system. Map 7 shows areas not currently provided by public water, which include properties in and near M-21, and outlying properties along Walnut Street, Louise Street and Mc Neil Street.

Identified issues related to the current water system are primarily related to the need to reduce dead end lines, and to create a larger water loop in the system to allow for a greater equalization of water pressure throughout the system. In particular, future development of the system north towards M-21 should be looped.

The current City of Corunna Capital Improvement Program includes a long term (Year 2010 or later) to extend water main down McNeil Street 2,550' from Comstock St to Dutcher St. Included in the plan is the possibility of expanding it to include a connection of this new main with water mains on Mc Arthur or King to create a loop in the east side water distribution system.

2. Sanitary Sewer

Map 7 also depicts areas of Corunna served by public sewer. Similar to the water system, the majority of the City, particularly south of the Shiawassee River are connected, however, the M-21 corridor to the north is not. Additionally, Louise Street, portions of King Street, Dutcher Street, Parmenter Road, and several areas near the City's western boundary are not served by sanitary sewers. Sanitary sewers in Corunna are part of a mid-county sewer system that includes Caledonia Township, Owosso Township and the City of Owosso.

In forming this inter-governmental authority, Corunna purchased treatment capacity in the system’s treatment plant. Corunna’s current usage exceeds it’s authorized capacity, a situation that is manageable only because the other communities in the system have excess capacity. Part of the problem is caused by significant inflow and infiltration of rainwater into the sewer mains. The City is currently involved in a program to repair and replace dilapidated sewer mains to reduce the problem.

A related issue is the capacity of the lift station at Ferry Street, which handles a significant portion of the city’s sewage. This facility can be overtaxed during rainstorms when the system experiences a sudden increase in flows due to infiltration of rainwater into the lines. This lift station also serves as a bottle neck and limits the ability of the system to expand in the southeast quadrant of the City.

The current City of Corunna Capital Improvement Program includes several projects to address the sewer system including reconstruction of sewer on E Oliver and W Williams (completed), King/Kingsley/Mc Arthur Streets (in process); Converse Alley and E Williams (mid term priority) and Park Lane and Comstock Street (long term priority) as outlined in Table 18. In addition, the Ferry Street Pump Station Upgrade is listed as a mid term priority.

3. Electric

Both Corunna and Owosso are provided electrical service by Consumers Energy, with offices located in Lansing.

4. Telephone

Telephone service to the City of Corunna and surrounding areas is provided by General Telephone (GTE). GTE Michigan operations are centered in Alma.

5. Internet

Residents and businesses in Shiawassee County have internet access through a local provider, ShiaNet, which is run through the Owosso/Corunna Chamber of Commerce, as well as other regional and national internet providers. ShiaNet went "on-line" on February 1, 1996 with193 charter members. It's goal was to create a community information network to allow the area schools, businesses, and residents to communicate with each other and the world using the internet at a reasonable cost.

The internet dial-up service was sold in September, 2000 to EarthLink, the nations second largest internet service provider. The Chamber used the revenue from the sale to form the ShiaNet Institute for Information Technology. The Institute's goals include "Providing leadership in the development of technology infrastructure for the Shiawassee community including making high speed and broad band internet connections available to Shiawassee County and provide hands on access as well as education and training on innovative technology."

Capital Improvement Program

In 1997 the City of Corunna adopted a Capital Improvement Program with the assistance of Capital Consultants. The program divides projects into three categories (short, mid and long term priorities). Two of the projects in the program have since been completed and one is in progress. Table 19 below outlines the program schedule.

Table 19
Capital Improvements Program Schedule

Short Term Priorities 1997 - 2000			
Item	Description	Estimated Cost	Status
Oliver Street Sanitary Sewer	Oliver Street from Shiawassee St to McDonnell (approx 700') - Replace existing sanitary sewer and leads - Replace existing 4" water main - Reconstruct street including curb and gutter - Reconstruct storm sewer	$301,925	Completed
W Williams Street Sanitary Sewer	W. Williams Street from Mizner to Woodworth (approx 750') - Replace existing sanitary sewer and leads - Reconstruct water main - Reconstruct street including curb and gutter - Reconstruct storm sewer	$336,375	Completed
King/Kingsley/ McArthur Streets	King/Kingsley/McArthur Streets	$1,178,150	In Progress
Shiawassee Street Bridge	Shiawassee Street Bridge Replacement	975,000	Planning
Mid Term Priorities 2000 - 2010			
Item	Description	Estimated Cost	Status

Shiawassee Street	Shiawassee Street from Corunna to M-21 (approx 6000') - Widen street, mill and overlay existing surface - Replace sidewalks - Replace 2,400' of storm sewer	$1,452,750	
Williams Street-East	Williams Street east of Comstock (approx 1,200') - Replace existing sanitary sewer and leads - Reconstruct water main - Possibly regrade and repave street - Possibly install curb and gutter along with storm sewer Possibly reconstruct or reline back lot sanitary sewer to McNeil residences	$534,300	
Alley Crossing Converse Street	Alley Crossing Converse Street from Norton Street to Corunna Ave (approx 715') - Reconstruct existing sanitary sewer and leads	$65,000	
Ferry Street Pump Station	Ferry Street Pump Station - Increase wetwell capacity - Install submersible pumps in new drywell	$400,000	
Long Term Priorities 2010 and Later			
Dutcher Street			
Sleesman Drive	Sleesman Drive Street Extension - Extend Sleesman Drive and all associated utilities a still undetermined length	TBD	
Park Lane	Park Lane Sewer Rehab (Approx 1,600') - Reconstruct existing sanitary sewer and leads - Reconstruct storm sewer (Approx 800')	$515,125	
Cherry/Pine/Fred Hein Drive	Cherry/Pine/Fred Hein Drive West of Shiawassee Street (Approx 5770') - Street Improvements - Storm sewer (450')	$404,300	
Comstock Street	Comstock Street South of Railroad (Approx 870') - Extend sanitary sewer - Improve storm drainage - Construct bituminous surfaced street	$193,050	
McNeil Water Main	McNeil Water Main from Comstock to Dutcher (approx 2,500') - Extend water main	$246,675	

Map __ - Transportation Analysis

Map __ - Proposed Traffic Improvements

Map __ - Water System

Map __ - Sewer Map

Goals, Objectives, and Policy Statements

Introduction

Before a community can actively plan for its future growth and development, it must first set certain goals and objectives that define the boundaries of its needs and aspirations and, thus, establish a basis for Future Land Use Plan formulation. These goals and objectives must reflect the type of community desired and the kind of lifestyle its citizens wish to follow, given realistic economic and social constraints.

The following text represents a recommended set of goals (the ultimate purposes or intent of the Plan), objectives (means of attaining community goals), and policy statements (specific statements which guide action), which are prepared to guide local decision-makers in reviewing future land use proposals.

Goals

The City of Corunna, in recognition of its role in an area of eventual growth, and as an area endowed with natural assets, adopts the following general community goals to guide future land development activities:

1. Provide for the orderly development and growth of a well-balanced community in which to live, work, and play.

1. Base the City's development on the needs of not only City residents, but on County and region-wide needs as well.

1. Concentrate future development into areas where utilities (water and sewer) and other community services may be economically provided.

1. Discourage the development of scattered land uses which results in inefficient land usage and ultimately increases costs of providing community services.

1. Preserve and promote the rights of the individual property owner while maintaining the small-town character of the City.

6. Balance public and private uses of property within the City.

Objectives and Policies

With the primary goals in mind, the following specific objectives and policy statements have been formulated to guide action oriented programs in the community.

Agriculture

Objective

Identify, classify, and provide all possible means of preserving those areas best suited for agricultural use.

Policies

1. Recognize agriculture as a desirable economic activity, important to the economic base of Corunna.

2. Minimize the expansion of urban utilities into agricultural areas.

3. Identify those agricultural lands which, by virtue of their unique relationship to areas designated for development, should be employed as a "holding zone" until the time conditions favor development.

Residential Development

Objective

To provide a variety of attractive living environments in planned residential areas for all income age groups.

Policies

1. Provide housing opportunities for citizens of all ages, sex, race, and ability.

2. Provide all possible means of encouraging the rehabilitation and conservation of the existing housing stock.

2. Require that suitable and adequate transition areas or buffers be established between residential, commercial, and industrial areas to maintain property values and physical attractiveness.

2. Provide for the development of a reasonable mix of housing types and densities tailored to current and future community needs in order to allow housing opportunities for all residents regardless of age, income, or physical ability.

2. Identify those areas which, by virtue of existing development and/or ability to be most economically served with public utilities and other essential services, are best suited for concentrated residential development.

Commercial and Office Development

Objective

Future commercial and office development should be compatible with proposed land use growth patterns and be designed to provide a full range of shopping/service needs.

Policies

1. Encourage the location of shopping facilities in areas that can safely and adequately handle commercial traffic.

1. Take special precautions to minimize the existing hazards where strip commercial development is presently permitted.

1. Require acceleration, deceleration and left turn lanes where traffic patterns require such lanes to safely and adequately handle such traffic.

4. Protect and promote the City's historic commercial district.

5. Provide regulations requiring the provision of greenbelts and other suitable and adequate landscaping in conjunction with commercial and office development.

Industrial

Objective

Encourage a variety of industrial development with attractive sites which will strengthen the tax base and provide a place of employment for area residents.

Policies

1. Concentrate industrial development in areas of the City which have sufficient facilities and services to support industrial activity, including adequate all weather roads and needed utilities.

2. Discourage random industrial development throughout the City.

3. Encourage the development of new types of industries and those that are economically associated with the existing industrial base.

3. Locate industrial areas where they have reasonable boundaries and are not subject to encroachment by incompatible uses.

3. Preserve and rehabilitate appropriate industrial areas by removing incompatible uses, consolidating land, and removing vacant and substandard buildings, as well as giving particular attention to landscaping, buffer strips, off-street parking, and other design matters.

3. Incorporate and utilize the concept of development of industrial land in

industrial parks or planned industrial districts with well designed points of entrance and exit, controlled site and building design, and adequate parking areas.

Public/Semi-Public Land Uses

Objective

Provide for public and semi-public use areas offering a variety of opportunities for human fulfillment in locations appropriate for their development and utilization.

Policies

1. Encourage the development of park and open space areas in conjunction with any future major residential development, including multiple-family projects.

2. Wherever feasible, develop pedestrian pathways and bicycle paths following drainage and utility corridors.

2. Encourage cooperation with federal, state, county, and local agencies in the preservation of open space as a natural resource.

2. Encourage the development of recreation opportunities in the City to provide for social interaction of various age groups.

2. Utilize recreation facilities to protect and preserve environmentally sensitive areas.

2. Establish programs designed to implement the Recreation Plan goals, objectives, and recommendations.

Future Land Use Plan

Introduction

The Future Land Use Plan is designed to serve as a guide for future development. If it is to serve the needs of the community and function effectively, it must incorporate several important characteristics.

1. The Plan Must Be Generalized

   The Plan, by its very nature, cannot be implemented immediately. Therefore, only generalized locations (not necessarily related to property lines) for various land uses are indicated on the Plan.

2. The Plan Should Embrace An Extended But Foreseeable Time Period

   The Plan depicts land uses and community development strategies through the Year 2020.

3. The Plan Should Be Comprehensive

   The Plan, if it is to serve its function as an important decision-making tool, must give adequate consideration to the sensitive relationships which exist between all major land use categories, including environmentally sensitive properties.

4. The Plan Should Acknowledge Regional Conditions and Trends

   The City of Corunna is an integral part of the Corunna-Owosso Region; therefore, the Plan should acknowledge the City's regional context. Through recognition of regional implications, the City's Future Land Use Plan will be more realistic and reasonable in terms of guiding the future utilization of land resources in the City.

5. The Plan Must Be Flexible

   The Plan may require periodic revisions to reflect significant changes in local, state, or national conditions which cannot be foreseen at this time. For example, within the past thirty years, several major innovations in land development have occurred. Included among these are: the initiation and expansion of the freeway system; modifications in shopping facilities (shopping centers, enclosed malls, free parking); relocation of employment centers from the cities to the suburbs; changes in housing preferences from the traditional single-family home to apartments, townhouses, condominium , and mobile homes; and the declining family size.

   It is, of course, impossible to predict the variety of changes which may occur over the next decade or two. Therefore, the Plan should be analyzed and

modified periodically to reflect changing conditions.

6. The Plan Must Be Updated Periodically

A comprehensive review of the Future Land Use Plan should be undertaken approximately every five years to provide for an adequate analysis of new conditions and trends. Should major rezonings which are in conflict with Plan recommendations be accomplished, the Plan should be reviewed and amended accordingly, to reflect the current community development goals and policies.

The Master Plan depicts the generalized desired development pattern for the City into the next century. It is designed to provide the necessary guidelines for making future land use, community facility, and capital improvement decisions.

Plan Recommendations

Nine land use classifications are proposed for the City of Corunna. The various land uses have been portrayed on Map 8 and in Table 19 for each classification. A discussion of each land use category is presented below.

Single-Family

This land use is intended for single-family residential development and two-family structures with the following objectives:

1. To protect the residential character of areas so designated by excluding activities and land uses which are not compatible such as, but not limited to, principal commercial and industrial uses;

1. To encourage a suitable environment for family life by permitting appropriate neighborhood facilities such as churches, schools, playgrounds, and open space;

3. To permit certain institutions and utility facilities considered necessary in, or compatible with, residential neighborhoods;

4. To preserve openness of the living space and to avoid overcrowding by requiring certain minimum yards and open spaces, and by restricting maximum coverages and the bulk of structures;

4. To provide for access of light and air to windows, and for privacy, as far as reasonable, by controls over the spacing and height of buildings and other structures;

4. To protect residential areas from unnecessary traffic and to restrict volume of traffic to the greatest degree possible; and

4. To encourage development within residential areas that is attractive, consistent with family needs, and conducive to constantly improved environmental quality.

Although a significant amount of the City is planned for single-family residential land use, there is no reason why single-family development needs to be dull and unimaginative. For example, designing single-family units in small groups or clusters reduces lot sizes and increases common open space. The land area gained through the decrease in lot size can be used collectively for a park area available to residents of that subdivision. This clustering option can be particularly useful in the northeastern portion of the City where wetlands and woodlands exist within planned residential areas.

Another concept which adds flavor to single-family neighborhoods is planned unit development. This incorporates a mixture of land uses such as single-family housing, multiple-family housing, and common open spaces. This would create a slightly higher density than proposed for low density residential and, at the same time, could establish an area with a variety of housing types.

Cluster subdivisions and planned unit developments are new concepts which should be encouraged in future single-family development, where density bonuses are given to developers as a means of preserving fragile or environmentally important lands.

Multiple-Family

Approximately 99 acres of land area have been allocated for multiple-family development. Permitted uses within this district would be group housing for the elderly, garden apartments, townhouses, multiplex and duplex units. Projects can either be condominium or rental development.

While a significant amount of land is classified as multiple-family, it should be noted that the single-family classification pyramids with the multiple-family land use. In this way, it is permissible to have single-family uses in a multiple-family area, but multiple-family land uses are not permitted in a single-family district.

Residential-Office

The inclusion, within the City of Corunna's boundaries, of two state highways (M-21 and M-71) and their associated traffic patterns, along with the intense commercialization of the M-21 corridor, have put pressure on some neighborhoods through which this traffic flows that is counter to the stated goal of promoting a small-town aesthetic. While increased traffic flow generally leads to a reduction of an area's desirability for single-family residential uses, giving into this pressure and allowing commercialization only hastens the deterioration of the neighborhood. In recognition of this fact, the City has established a Residential-Office transition zone that is geared primarily toward single-family residential uses, but also allows, after special review and consideration, those commercial and office uses that could exist within a residential neighborhood with it’s characteristic appearance and massing of

buildings. Guidelines have been developed to cover appearance, signage, landscaping, parking and hours of operation to ensure compatibility with the existing residential uses and character. In this way, vacant buildings might continue to provide useful service, while still maintaining and adding to the residential appearance of the neighborhood thereby not hastening the flight of the remaining residential uses.

The Plan recognizes that the corridor covered by this district can expect increasing traffic flows as a result of development along M-21 and improvements being made to M-71 and the Shiawassee Street Bridge. The Planning Commission must continue to monitor the impact of that traffic increase on the character of the corridor and modify the R-O district as necessary to ensure it's utility as a transitional district.

Commercial

Commercial development is an important aspect of the growth of any community, in terms of offering adequate commercial services to residents as well as providing a reasonable tax base and increased employment opportunities. The size of the potential market will ultimately determine the extent of the City's commercial base. Some commercial uses are designed to serve a relatively small, local market, and depend almost exclusively upon the population residing within the community. Other retail sales and office developments, however, demand a much larger market extending well beyond the City's boundary.

It is recommended to allot approximately 184 acres for various types of business development. A substantial proportion of this land is currently developed and/or zoned commercially.

The Future Land Use Plan envisions three distinct business district classifications, these are:

Central Business District
Service District
General Business District

The location of business uses is an important consideration in the plan because of its economic importance and effect on traffic and neighboring land uses. Under the envisioned breakdown of commercial uses into three distinct districts;

the CBD would include those commercial and office activities suitable to a small downtown area. Predominately these users, would involve commercial activities which do not require large individual parking lots or individual points of ingress/egress. It would be an area oriented heavily toward pedestrian usage.

The Business Service District would include these uses which might require small individual parking lots and individual points of ingress/egress, and is located primarily on both ends of M-71. Two sites that were a former gas station and Road Commission garage on the south end of the CBD have

been designated for the Business Service District in order to facilitate their redevelopment. It is not the plan's intent to extend this land use classification any further into the CBD due to the negative impact auto oriented developments can have on a pedestrian based downtown environment. Establishment of a Business Service District "node" at the intersection of M-71 and Parmenter Road and extending west to the site of the former Road Commission site is proposed. The remaining stretch of M-71 to State Street is intended to remain Residential-Office, and further encroachment of the commercial district is not proposed.

The General Business District would include those commercial uses that, due to their need for large parking areas, large land requirements, or objectionable character, are not suited to inclusion in the other two districts. While this district would include uses whose parking and transportation needs may be unsuitable for inclusion in the other commercial districts, care should still be given to minimizing points of ingress/egress and to providing adequate landscaping and greenbelts to soften their impact on surrounding land uses and improving their overall aesthetic appearance.

These proposals have been made on a basis which reflects future local population densities and acknowledges general regional trends and traffic patterns. Future commercial rezoning requests, which are not in conformance with the Future Land Use Plan, must be carefully analyzed in terms of their potential effect on the existing, vacant, commercially zoned properties. The indiscriminate rezoning of properties for commercial use will hinder the development of existing commercially zoned properties. The result will be a pattern of commercial development which does not adequately nerve the local and regional populations.

Industrial

The Future Land Use Plan allows adequate space within the City for industrial growth. This acreage is contiguous to the railroad tracks and/or major Class "A" roads, thereby minimizing infrastructure and maintenance costs. Due to this relationship, this district has been established to provide for those uses which are generally compatible with, or, which under the imposition of certain reasonable standards, may be safely and aesthetically located in close proximity to commercial or residential uses, or to allow certain uses to be segregated and their impacts mitigated.

Light industrial uses include operations which are, in the main, confined within enclosed structures. Compliance with reasonable performance standards is required in an effort to reduce adverse effects on neighboring properties. Typical light industrial may include the manufacturing of products for component arts, parts assembly, food packaging, warehousing, and tool and die shops. In addition, certain commercial uses are also allowed because their building size and architecture are similar with industrial uses. Examples include indoor tennis clubs, ice rinks, shooting galleries, bowling alleys, etc.

The formation of industrial parks should be encouraged. Industrial parks offer the

amenities and the assurance of sound development to industry; they also supply the addition of a sound economic structure for the community. The City of Corunna with its excellent transportation facilities, M-21 and M-71, airport and the railroad, provide the facilities that industries look for. The City also has the opportunity to create an airport industrial park. In addition to these important transportation facilities, industry today is continuing to look for areas in which their employees can live in close proximity to their work. With the amenities offered in the City of Corunna, such as rolling topography, a good choice in home development and recreational facilities, the City of Corunna is in good position to attract these industries.

The industrial developer will have his investment protected through zoning and covenants established by the industrial park in which he would locate. The types of industry that the City should seek to attract are not interested in the old ribbon roadside-type development with pockets of residential uses intermingled with industrial. They create traffic conflicts, stifle expansion opportunities, and make difficult or impossible the assembly of separate parcels into sufficiently large sites for industrial use.

The Master Plan also includes areas for heavy industrial uses. It is the intent of the plan to attempt to segregate these uses, where possible, and the City should develop stringent standards to minimize the impacts on surrounding land uses.

Recreation/Conservation

If the City of Corunna is to fulfill its increasing role as an optimum community environment with a full range of community services, it must actively encourage the preservation of environmentally sensitive and/or important lands.

The Future Land Use Plan incorporates an open space network - the Recreation/ Conservation classification. It is necessary for a City to have lands available, but it is also necessary to have land remain in its natural state untouched by any type of development. The value to the public of certain open areas of the City is represented in their natural, undeveloped, or unbuilt condition. It is recognized that the principal use of certain open areas is, and ought to be, the preservation, management, and utilization of the natural resource base possessed by these areas. In order that it’s value may be maintained and this use encouraged, this Plan has established a district designed to regulate the density and location of buildings and structures, and the use of parcels and lots, in order to protect and enhance the City. Such assets are the City's natural resources, natural amenities, natural habitats of wildlife, watershed and reservoir areas, public recreation areas, and the public health, safety, and welfare.

In so doing, the City may see a reduction of hardships and financial burdens imposed upon the City through the wanton destruction of resources, the improper and wasteful use of open land, wooded areas, and the periodic flooding and overflow of creeks and stream. While some limited development, principally residential would be allowed in the recreation/conservation district, it should be subject to special review to minimize its impact on the environment and to carefully study its appropriateness in the proposed location.

Also included in the Recreation/Conservation areas is land currently used as cemetery property or proposed for future cemetery use. It’s inclusion in this category is due to it’s characteristic natural open space

Recreation/Conservation areas are of extreme importance to a growing community. Not only do they meet the increasing opportunities afforded by increasing leisure time and are a source of health and pleasure, but also serve as a reminder that man can never put his natural habitat back. Approximately 280 acres of the City's total land area dispersed through the community is devoted to this category.

Map __ - Future Land Use

Plan Implementation Resources

Introduction

The City of Corunna's Long-Range Development Plan is, itself, a comprehensive community policy statement. The Plan is comprised of a variety of both graphic and narrative policies intended to function as benchmarks and to provide basic guidelines for making reasonable, realistic community development decisions. The Plan is intended to be employed by City officials, by those making private sector investments, and by all City of Corunna citizens, interested in the future development of the community.

The completion of the Plan is but one part of the community planning process. Realization, or implementation of the goals, objectives, and recommendations of the Plan can only be achieved over an extended period of time and only through the cooperative efforts of both the public and private sectors. Implementation of the Plan may be realized by actively:

1. assuring community-wide knowledge, understanding, support, and approval of the Plan;

2. regulating the use and manner of development of property through up-to-date reasonable zoning controls, subdivision regulations, and building and housing codes;

3. providing a program of capital improvements and adequate, economical public services by using available governmental financing techniques to encourage desired land development or redevelopment; and

4. participating with the private sector in the process of co-development, whereby local government provides incentives, subsidy, or other inducements to assist the private sector in their development efforts.

Public Support of the Long-Range Plan

The necessity of citizen participation and understanding of the general planning process and the specific goals, objectives, and policies of the Plan are critical to the success of the City planning program. A well organized public relations program is needed to identify and marshal public support. Lack of citizen understanding and support could well have serious implications for the eventual implementation of planning proposals. Failure of the public to back needed bond issues and dissatisfaction concerning taxation, special assessments, zoning decisions, and development proposals are some of the results of public misunderstanding and rejection of long-range plans.

In order to organize public support most effectively, the City must emphasize the necessity of, and reasons for, instituting the planning program and encourage citizen participation in the planning process. Accordingly, the Municipal Planning Act, (Act 285 of 1931, as amended), under Section 8 states that the City Planning Commission shall hold a public hearing(s) prior to approval of the Master Plan to allow opportunity for public input and comment.
The validity of the Plan, as well as the right of the Planning Commission to review various development proposals to assure their compatibility with the City's expressed policies, requires that the Plan be officially adopted by the Commission. It is also desirable for the City Council to adopt a resolution stating their concurrence with the goals, objectives, and policies stated in the Plan.

Land Development Codes

Zoning Ordinance

Zoning regulations are adopted under the local police power granted by the State for the purpose of promoting community health, safety, and general welfare. Such regulations have been strongly supported by the Michigan courts, as well as by the U.S. Supreme Court. Zoning consists of dividing the community into districts, for the purpose of establishing density of population and regulating the use of land and buildings, their height and bulk, and the proportion of a lot that may be occupied by them. Regulations in different kinds of districts may be different; however, regulations within the same district must be consistent throughout the community.

The intent of zoning is to assure the orderly development of the community. Zoning is also employed as a means of protecting property values and other public and private investments. Because of the impact which zoning can have on the use of land and related services, it should be based on a comprehensive long-range community plan.

Zoning is an effective tool not only for the implementation of the Plan, but it also benefits individual property owners. It protects homes and investments against the potential harmful intrusion of business and industry into residential neighborhoods; requires the spacing of buildings far enough apart to assure adequate light and air; prevents the overcrowding of land; facilitates the economical provision of essential public facilities; and aids in conservation of essential natural resources.

There are a variety of zoning approaches and techniques which may be employed to help assure that the City of Corunna remains an attractive community in which to live and conduct business. These techniques acknowledge the critical role of both City officials and staff in enforcing the provisions of the local zoning ordinance. Two key tools available to City officials seeking to assure quality development are special approval use procedures, and performance guarantee provisions.

Some land uses are of such a nature that permission to locate them in a given district should not be granted outright, but should only be approved after assurances that the use will meet certain specified conditions. These types of land uses are called special approval, conditional, or special exception uses. The City may use this

flexible zoning process to permit uses of land by following special procedures, including a public hearing and site plan review, to ensure the compatibility of the use within the vicinity in which it is to be located. This technique is based upon discretionary review and approval of special land uses. The site development requirements and standards upon which these decisions are made must be specified in the Ordinance. However, additional reasonable conditions may be attached in conjunction with the approval of a special land use including provisions to conserve natural resources and measures designed to promote the use of land in an environmentally, socially, and economically desirable manner.

To ensure compliance with a zoning ordinance and any conditions imposed under the ordinance, a community may require that a performance guarantee, cash deposit, certified check, irrevocable bank letter of credit, or surety bond, acceptable to the City and covering the estimated cost of improvements on the parcel for which site plan approval is sought, be deposited with the Clerk. This performance guarantee protects the City by assuring the faithful completion of the improvements. The community must establish procedures under which rebate of cash deposits will be made, in reasonable proportion to the ratio of work completed on the required improvements, as work progresses.

A stable, knowledgeable Planning Commission is critical to the success of the zoning process. The Commissions responsibilities include long-range plan formulation and the drafting of appropriate, reasonable zoning ordinance regulations designed to implement plan goals and objectives. Adoption of the zoning ordinance by the legislative body then provides the legal basis for enforcement of zoning ordinance provisions. The ultimate effectiveness of the various ordinance requirements, however, is dependent upon the overall quality of ordinance administration and enforcement. If administrative procedures are lax, or if enforcement of regulations is handled in an inconsistent, sporadic manner, the result will be unsatisfactory at best. The Building Department is often responsible for carrying out zoning/development related functions including building inspections, ordinance administration, community/developer liaison, and so forth. Each of these functions requires a substantial investment of staff time. If sufficient time is not made available to carry out these critical tasks, they may only be accomplished in a cursory manner. Therefore, the City should provide for adequate department staff levels and/or consulting assistance to assure that these essential day-to-day functions will receive the professional attention required to assure quality development.

Subdivision Regulations

When a developer proposes to subdivide land, he is, in effect, planning a portion of the City. To assure that such a development is in harmony with Development Plan objectives, the subdivision or resubdivision of residential or nonresidential land must be guided by the City in accordance with the Michigan Land Division Act, Act 288, P.A. 1967, as amended (formerly known as the Subdivision Control Act).

Several direct benefits accrue from the regulation of subdivisions by a local unit of government. By requiring the subdivider to install adequate utilities and improved

streets, purchasers of the lots are not later burdened with unexpected added expenses. A subdivision without adequate physical improvements is detrimental not only to itself, but it also reduces the opportunity for reasonable development of adjacent parcels. In addition, long-range economy in government can be realized only when adequate improvements are provided by the subdivider.

As a part of its review of proposed subdivisions, the Planning Commission focuses on such features as the arrangement and width of streets, the grading and surfacing of streets; the width and depth of lots; the adequate provision of open space; and the location of easements for utility installations. The subdivision review process is one of the methods of implementing the goals, objectives, and policies of the community's long-range plan.

The City of Corunna adopted a subdivision control ordinance under the authority of the Land Division Act.

Capital Improvements Program

The term "capital improvements" is generally intended to embrace large-scale projects of a fixed nature, the implementation of which results in new or expanded public facilities and services. Such items as public building construction, park development, sewer installation, waterworks improvements, street construction, land acquisition, and the acquisition of certain large-scale pieces of equipment (graders, sweepers, trucks, etc.) are included in the Capital Improvements Budget.

Few communities are fortunate enough to have available at any given time sufficient revenues to satisfy all demands for new or improved public facilities and services. Consequently, most are faced with the necessity of determining the relative priority of specific projects and establishing a program schedule for their initiation and completion. The orderly programming of public improvements is to be accomplished in conjunction with a long-range plan.

In essence, the Capital Improvements Program is simply a schedule for implementing public capital improvements which acknowledges current and anticipated demands, and which recognizes present and potential financial resources available to the community. The Capital Improvements Program is a major planning tool for assuring that they proceed to completion in an efficient manner. The Capital Improvements Program is not intended to encourage the spending of additional public monies, but is simply a means by which an impartial evaluation of needs may be made. The program is a schedule established to expedite the implementation of authorized or contemplated projects.

Long-range programming of public improvements is based upon three fundamental considerations. First, the proposed projects must be selected on the basis of community need. Second, the program must be developed within the community's financial constraints and must be based upon a sound financial plan. Finally, program flexibility must be maintained through the annual review and approval of the capital budget. The strict observance of these conditions requires periodic analysis of various community development factors, as well as a thorough and continuing

evaluation of all proposed improvements and related expenditures. It is essential that in the process of preparing and developing the program, the Planning Commission be assigned a role in reviewing project proposals to assure conformity with the General Development Plan and to make recommendations regarding priority-special projects, and appropriate methods of financing.

Many sources of governmental assistance are available to aid local officials and private interests in meeting desired land use objectives or improvement needs. Federal, state, and local plan implementation resources which should be considered for use by the City are listed below in Table 20 by funding source.

Co-Development

Local government must also be cognizant of enhancing the financial feasibility of private development projects through "co-development." Co-development is simply the joint public and private investment for a common purpose.

Short Term Implementation Goals

The following are a list of goals for the Planning Commission to undertake over the next 3-5 years to implement and maintain this Plan

1. Continue to monitor traffic counts along M-71 and Shiawassee Street to determine impacts on adjacent land uses

2. Prepare recommended changes to the current zoning ordinance to promote development of shared access and aesthetically appropriate designs for development along M-21 and M-71.

3. Review the 2000 census for information, and identify and analyze relevant information as it relates to this plan.

4. Prepare a summary of this plan for distribution to the general public, and prepare public information material to the media to educate the community on the goals of the plan.

5. Require all Planning Commission and ZBA members to participate in regular training sessions to maintain the level of competence necessary for them to discharge their responsibilities as a member of the Planning Commission.

6. Meet on at least an annual basis with the City Council, Parks and Recreation Commission, ZBA, DDA, and the Caledonia Township Planning Commission to discuss issues of joint concern and coordinate their efforts to the benefit of the residents of the community.

7. Use the Plan in reviewing and making recommendations on rezoning requests and other matters requested by the City Council.