

CITY OF DUNNELLON  
TECHNICAL MEMORANDUM FOR:  
FUTURE LAND USE ELEMENT

August, 1989

Revised March 1991  
Revised October 14, 1991

"Preparation of this document was aided through financial assistance received from the State Of Florida under the Local Government Comprehensive Planning Assistance Program authorized by Chapter 86-167, Laws of Florida and administered by the Florida Department of Community Affairs."

Henigar & Ray, Inc.  
640 E. Highway 44  
Crystal River, Florida 32629

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## DUNNELLON FUTURE LAND USE ELEMENT

### INTRODUCTION

The purpose of the Future Land Use Element is to identify and analyze existing land use patterns, population projections and the natural features of the land in Dunnellon in order to determine future land patterns for the City. This technical memorandum contains information on existing land use, natural features of the land, availability of facilities and services, suitability of vacant land to accommodate the needs of the projected population and redevelopment and reduction of inconsistent uses and blighted areas. The information will serve as a guide in the development of goals, objectives and policies for the implementation of future land use, as well as meet the requirements of 9J-5.006, F.A.C.

### GENERAL SETTING

Dunnellon is located in southern Marion County, which falls within the district of the Withlacoochee Regional Planning Council. Dunnellon's southerly border is the unincorporated area of Citrus County; the Withlacoochee River serves as a natural border between the two. The City's other boundaries are adjacent to unincorporated areas of Marion County. The City's westerly border is approximately 4 miles from Levy County. The closest incorporated municipality to Dunnellon is Inglis, which is located in Levy County approximately 14 miles west of Dunnellon's westerly border.

EXISTING CONDITIONS

Land Use Patterns

Dunnellon City limits comprise approximately 3,028 acres. Of this total, approximately 354 acres, or 11.7 percent, are water or wetlands. Approximately 2,217 acres, or 73 percent, are committed land, in the form of existing residential, agricultural, commercial, industrial, public (educational, institutional and governmental), or recreational use. Residential land use is a predominant land use within the City, accounting for approximately 62.2 percent of the total developed area. Agricultural land use also predominates, with approximately 1,369 acres, or 51.2 percent of the total developable area. Approximately 457 acres, or 17.1 percent of the upland land area, is undeveloped. The summation of agricultural and vacant lands calculate to approximately 1,826 acres of developable land, or 68.3 percent of the total upland area potentially available for future development. A summary of existing land uses is provided in Table 1. Figures 1 and 2 depict the existing land uses within City limits.

Adjacent Land Uses

Figures 1 and 2 also depict the general land use patterns adjacent to existing City limits. Lands adjacent to City limits include improved pasture along the eastern and western borders, and improved pasture, forests and single family residential development on the north border. South of the Withlacoochee River, which is

TABLE 1  
EXISTING LAND USE  
1989

Land Use Category	Acres	Percentage of Developed Land
<b>Residential:</b>		
Up to 1 du/acre	59	6.9
Single-Family Conventional (2-6 du/acre)	407	48.0
Mobile (2-6 du/acre)	47	5.5
Multi-Family (7-21 du/acre)	16	1.8
Commercial	159	18.8
Industrial	12	1.5
Public	38	4.5
Recreational	110	13.0
<b>Total Developed Land</b>	<b>848</b>	<b>100.0</b>
Vacant Land	457	
Agricultural Land	1,369	
<b>Total Developable Land</b>	<b>2,674</b>	
Water and Wetlands	354	
<b>GRAND TOTAL</b>	<b>3,028</b>	

Note: Numbers have been rounded upward.

Source: Henigar & Ray, Inc., 1991.

TABLE 1a  
EXISTING AND FUTURE LAND USE  
DENSITY/INTENSITY OF USE

Land Use	Density	Maximum Lot Coverage	Maximum Building Height
Residential, Low Density	≤ 1 du/acre	35%	40 ft.
Residential, Medium Density	≤ 5 du/acre	40%	40 ft.
Residential, High Density	5.1-12 du/acre	35%	50 ft.
Residential/ Office	4 du/acre	40%	50 ft.
Industrial	n/a	50% 50%	60 ft. (light) 150 ft. (heavy)
Commercial	n/a	50%	50 ft.
Water Oriented Commercial	n/a	40%	50 ft.
Tourist Oriented Commercial	n/a	40%	40 ft.
Public	n/a	50%	50 ft.
Conservation	n/a	n/a	n/a
Recreation	n/a	35%	50 ft.
Agricultural	1 du/5 acres	5%	50 ft.
Vacant	n/a	n/a	n/a
Wetlands	n/a	n/a	n/a
Water Bodies	n/a	n/a	n/a

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(C) Inconsistent Land Uses

At this time, there are no land uses considered to be inconsistent with the City's character. However, future land use designations should ensure residential neighborhoods are adequately buffered from other uses which may be unsightly, or produce noise or air pollution. Further, future land uses in the historical district should be compatible with the character of the area.

Historical Resources

(O) In 1987, the City of Dunnellon was the subject of an Historic Preservation Plan Element funded through grant assistance from the Bureau of Historic Preservation, Florida Department of State, the City of Dunnellon and the Greater Dunnellon Historical Society. This plan (located as an appendix to the Housing Element) provides a survey of the City's historic resources and recommendations for structures to be designated within an historic district, as well as formulates goals, objectives and policies to be followed for the preservation of archaeological, historical and architectural resources. One of the goals of the plan was nomination of the historic district to the National Register of Historic Places. This was accomplished in December of 1988. The boundaries of the Dunnellon Historic District are depicted in Figure 1.

There are structures within the City which were not within the study area of the Historic Preservation Plan; it is estimated that some, such as the railroad depot, are historically significant. The historical society has recently entered into an agreement with CSX, Inc. to purchase the Depot. Fund raiser projects are held periodically to raise funds for purchase. After purchase, the site will be renovated for use as a museum after coordination with any recommendations of the state Division of Historical Resources. However, upon review of any proposal before the City for renovation or redevelopment of any existing structure over 50 years old located outside the historical district, the City should consider the possibility of historic significance, as well as potential affects on the historical character of the community.

There are various federal regulations and laws which apply to properties listed in the National Register of Historic Places. The following information concerning eligibility for federal tax provisions for federally listed places was obtained from the Bureau of Historic Preservation. The Tax Reform Act of 1986 provides for a 20 percent investment tax credit with a full adjustment to basis for rehabilitation of historic commercial, industrial and rental residential buildings. The older commercial buildings are combined into a single 10 percent investment tax credit for commercial or industrial buildings built before 1936. The Tax Treatment Extension Act of 1980 provides Federal tax deductions for

charitable contributions for conservation purposes of partial interest in historically important land areas or structures.

Figure 1a depicts the location of all known historical resources within the city. This figure also depicts the general location of the only known archeological site within the city, 8MR95.

Further information concerning these provisions can be obtained through the Internal Revenue Service or referring to 36 Code of Federal Register (CFR) 67.

Section 106 of the National Historic Preservation Act of 1966 requires that Federal agencies allow for the Advisory Council on Historic Preservation to have an opportunity to comment on all projects affecting historic properties listed in the National Register. Further information is provided in 36 CFR 800.

#### Redevelopment Needs

No areas within the City, including the central business district, have been identified as blight areas requiring renewal programs. However, as discussed in the Housing Element, approximately 2 percent of the City's housing stock is in substandard condition. Coordination with the City's Plan for Historic Preservation, the Bureau of Historic Preservation and the Historic Preservation Advisory Council and any federal laws related to listed properties

is necessary for establishing a rehabilitation program. The City recently (November 1990) submitted an application to the state's Community Development Block Grant (CDBG) program to receive funding assistance for the rehabilitation of 27 substandard housing units. Although many of the units are located within the historical district, the application does not include rehabilitation of any houses over 40 years of age. Policies in the Historical Plan recommend the City amend the zoning code to provide for review of proposals for rehabilitation or demolition of historical buildings.

Since there may be a number of property owners within the City interested in taking advantage of the federal tax provisions available under the National Register of Historic Places, the City should encourage rehabilitation of substandard structures by the private sector. This includes making information available to residential and commercial property owners seeking to rehabilitate properties with information regarding federal regulations, grants and loan programs for housing within the Historic District.

#### **NATURAL RESOURCES**

As discussed in the Conservation Element, Dunnellon contains valuable natural resources such as the Rainbow River and Withlacoochee River, both Outstanding Florida Waters. There are several floodplain and forested wetlands associated with these rivers. Recommendations for development in those environmentally

sensitive areas, including setbacks, buffering, and density limitations, are provided in the Conservation Element and the Rainbow River Watershed Management Plan. (The Rainbow River Watershed Management Plan was a joint effort of the City and Marion County, and provides analysis on the issues affecting water quality of the river. The plan was key to the nomination of the river into the Southwest Florida Water Management District (SWFWMD) Surface Water Improvement and Management Plan, and is being utilized by the District in development of programs to protect water quality of the river.) Therefore, the Rainbow River Watershed Management Plan and City Plan policies will be consistent with requirements of the Southwest Florida Water Management District for water quality management.

Additionally, the level of service (LOS) for stormwater management for the Rainbow River, which is an Outstanding Florida Water, requires an additional 50% treatment, in accordance with Department of Environmental Regulation Rule Chapter 17-25.025(9), FAC. Existing development along the Rainbow River will be required to connect to sanitary sewer within 90 days of availability. All new development shall be required to connect to central sewer. Development in the agricultural land use district shall not be required to utilize central sewer unless development is clustered at densities required to have central sewer in accordance with FDHRS standards.

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Dunnellon is not within, or adjacent to, any Areas of Critical State Concern. Further, there are no estuarine systems, harbors or marine habitats. There is a freshwater beach owned by the City on the north banks of the Rainbow River. This beach is depicted in Figure 1. Rivers, ponds and wetlands are depicted in Figures 3 and 4.

### Soils

Data obtained from the USDA Soil Conservation Service (SCS) Soil Survey for Marion County indicates certain portions of Dunnellon's developed and undeveloped lands have soils with moderate or severe limitations for septic tank absorption fields. Figures 5 and 6 depict the areas characterized by these ratings. Soils with this rating have severe limitations that are so unfavorable or difficult to overcome that special design, significant increases in construction costs and increased maintenance are required. These ratings are based upon soil properties, site features, and observed performance of the soil. According to the SCS, flooding, permeability, and a high water table can contribute to unsatisfactory performance of septic tank absorption fields, which in turn can contribute to groundwater pollution and danger to public health.

Soils rated as severe predominantly occur in association with the wetlands and floodplains of the Rainbow and Withlacoochee Rivers.

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Fortunately, much of the other areas of existing development characterized by severe soils, such as the US 41 corridor, are connected to central sewer facilities. In order to protect the water quality of the Rainbow River and Withlacoochee River, it is recommended that density restrictions and minimum setbacks from the water be established along the rivers. For areas of severe soil suitability ratings, it is recommended that central sewer service be required. This concept is further supported by Senate Bill 1433, passed in 1988, requiring Marion County to fund and provide sewer services to waterfront lots on the Rainbow River by the year 1998. To assist the County in meeting this legislative mandate, the City should require that all new development along the rivers of medium or high density utilize central sewer. The City shall require all new development (other than the agricultural designation) to utilize central sewer. Existing developments shall be required to hook up to central sewer within 90 days of availability.

Waterwells and Cones of Influence

In order to protect current and future supplies of potable water from the potential impacts of future land uses, a cone of influence can be defined. The cone of influence refers to the land area surrounding a well on which a present or future land use has the potential to negatively impact the aquifer, because of the physical drawdown in the water table resulting from a pumping well.

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The designation of the cone of influence depends upon the natural characteristics of the aquifer and the amount of pumpage. The radius of the protection area is also a function of the method chosen to calculate the cone of influence. Calculation of the cone of influence is not within the scope of this plan. However, there are various guidelines to be used in lieu of such calculations. One alternative is the G-1 rule proposed by DER. The intent of the rule is to protect surrounding water wells from contamination associated with existing and proposed sanitary landfills, sewage and industrial wastewater, stormwater and underground storage tanks. The G-1 rule provides for two concentric zones of protection around public well fields; the first is a 200 foot radius from the wellhead, and the outer zone is based upon a formula for a five year travel time (the point at which it would take five years for water on the land's surface to reach a well system. The G-1 rule would prohibit new installation of wastewater treatment plants, landfills, underground facilities and any other type of development using underground pipes within the 200 foot radius. Existing systems in both zones would require monitoring of some type, depending on the type of facility.

The 200 foot radii has also been determined to be a reasonable protection by the Florida Department of Environmental Regulation. Chapter 17-555.312, FAC currently requires that public drinking water supply wells that serve water systems having total sewage flows greater than 2,000 gallons per day shall be placed no closer than 200 feet from on-site sewage disposal systems (septic tanks) other than land application of reclaimed water areas. Public drinking water supply wells serving water systems having total sewage flows of less than or equal to 2,000 gallons per day shall be placed no closer than 100 feet from on-site sewage disposal systems (septic tanks) other than land application of reclaimed water areas. Public drinking water supply wells shall not be placed within setback distances established by Chapter 17-610, FAC (Reuse of reclaimed water). Public drinking water supply wells shall be located no closer than 100 feet from other sanitary hazards as defined in Rule 17-550.200, FAC. (defined as a physical condition which involves or affects any part of a drinking water system or the raw water source, and that creates an imminent or potentially dangerous serious risk to the health of any person who consumes from that system.

Further, DER Chapter 17-761.500 (4), FAC provides the following standards for siting of underground storage tank systems:

"No new storage tank system shall be installed within 50 feet of any existing potable water supply well. This prohibition shall not apply to the replacement of an existing storage tank system with a system of the same capacity or less within the same excavation, provided that the replacement storage tank system is installed with secondary containment."

DER Chapter 17-733.020, FAC, Criteria for the Siting of a Multi-purpose Hazardous Waste Facility, does not provide minimum radii from potable water wells. Further, no radii standards are provided under DER 17-730, Hazardous Waste. However, stringent standards for operation and permitting of such facilities is provided, and the City should ensure all hazardous waste generators and handlers meet DER standards through permitting and reporting requirements.

The City understands the importance of protecting its groundwater resources. However, there is no evidence at this time that a protection radii of greater than 200 feet is required for the City's wellfields. The City shall seek assistance from the Southwest Florida Water Management District towards obtaining grant money to determine its actual cones of influence for each wells. However, at this time, the City shall adopt the 200 foot radii, as this shall provide four times the protection currently required under the state's underground storage tank rule. Further, the City will work closely with the Marion County Storage Tank Program to

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ensure strict enforcement of DER rules relating to double tank line, secondary containment and other issues discussed in the Infrastructure Element.

As described in the Conservation Element, the cone of influence for Dunnellon's potable water wells has been determined to be a 200 foot radius from the wellheads. As noted in the Conservation Element, waterwells must be protected from potential sources of contamination, such as leaking gas tanks, sewage treatment plants, underground storage facilities and landfills. Therefore, designations of future land use shall consider the potential for contamination of potable water wells. At a minimum, a 200-foot radius protection zone should be established prohibiting development surrounding the wellfield. Further discussion of this subject is provided in the Conservation Element.

#### Floodplain

FEMA completed a flood insurance study on August 4, 1984 to aid in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This study resulted in the preparation of Flood Insurance Rate Maps for the Dunnellon area. These maps identify flood hazard boundaries for purposes of setting flood insurance rates and providing assistance to communities in developing sound floodplain management measures.

According to the study, the most severe flooding usually occurs as a result of flooding of the Rainbow and Withlacoochee Rivers as a result of storm events such as summer thunderstorms and hurricanes. Areas of 100-year flood, as identified by FEMA, are depicted in Figures 7 and 8.

Encroachment of floodplains can occur as a result of artificial fill associated with development activity. Encroachment increases the flood height of streams and reduces the flood-carrying capacity of the area in general, thereby increasing flood hazards beyond existing flood-prone areas. In order to ensure public health and safety and minimize flood hazard to public and private property, it is recommended that net encroachment within the 100-year floodplain be prohibited. Where no practical alternative to filling within the 100-year floodplain exists, compensatory storage for such fill should be provided through excavation of a volume of uplands equivalent to the loss of storage within the floodplain. In cases where development within the 100-year floodplain is allowed, such development shall be in accordance with dredge and fill requirements of the DER, U.S. Army Corps of Engineers, and Southwest Florida Water Management District, where applicable, and building construction shall comply with the requirements of the Federal Emergency Management Agency. Further, proposals for future development within the 100-year floodplain should include consideration of costs of redevelopment of infrastructure and



structures within flood-prone areas; water quality impacts; and wildlife habitat functions of floodplains. All plans for development within the 100 year floodplain shall be reviewed for potential negative impacts to water quality and wildlife habitat. Development approvals shall include provisions which condition the approval on minimization of such potential impacts.

### Minerals

Dunnellon falls within the Hardrock Phosphate District according to the US Geological Survey, The Industrial Minerals of Florida. Hardrock phosphate was discovered in Dunnellon in 1888; this discovery resulted in the birth of the City of Dunnellon. Hardrock phosphate is more difficult and costly to mine than other types of phosphate deposits; it has been largely replaced by mining of land pebble deposits. The mining of more economically available types of phosphate resulted in the end of mining of hardrock phosphate in Dunnellon by 1965. Residential development has occurred at several areas in the City where phosphate was once mined. Known sources of commercial valuable minerals for the Dunnellon area are depicted in Figure 9.

Recommendations for siting of future mining industries is provided in the Conservation Element.

## POPULATION PROJECTIONS

Population projections for Dunnellon were developed in 1987 through the use of the small-area population projections computer program developed by the Bureau of Economic and Business Research (BEBR) in Microcomputers and Economic Analysis: Spreadsheet Templates for Local Governments, 1987. The template calculates four projection techniques based upon the extrapolation of historical population trends of the town and its parent county. However, in July 1989, the population projections were recalculated, as the Department of Community Affairs has indicated it may not accept projections completed using the BEBR Template.

### Population Trends

Table 2 depicts the historical growth trends of Dunnellon and Marion County since 1973.

TABLE 2  
CITY AND COUNTY DATA: 1973-1988

Year	City Population	Annual % Age Change	County Population	Ratio City/County
1973	1,240		83,327	.015
1974	1,283	3.5	92,522	.014
1975	1,298	1.2	93,469	.014
1976	1,207	-7.0	98,362	.012
1977	1,209	0.2	101,148	.012
1978	1,257	4.0	102,722	.012
1979	1,307	4.0	106,852	.012
1980	1,427	9.2	122,488	.012
1981	1,451	1.7	129,320	.011
1982	1,492	2.8	135,087	.011
1983	1,488	-0.3	141,991	.010
1984	1,561	4.9	148,864	.010
1985	1,662	6.5	157,853	.011
1986	1,741	4.8	166,606	.010
1987	1,731	-0.6	174,614	.010
1988	1,748	1.0	182,329	.010
1989	1,799	2.9	190,742	.009
1990	2,238	24.4	194,833	.011

Source: Florida Estimates of Population, April 1, 1988, and Florida Statistical Abstract periods 1974-1988. Buereau of Economic and business Research, and City of Dunnellon, household count, billing register for solid waste pick-up, 1990.

Most recent estimates for the City's population are provided by BEBR, and indicate a 1990 population of 1,874 persons. This figure will be used as the base figure in calculating future populations.

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METHODOLOGY

Two methods were used to develop population projections: the ratio method and geometric extrapolation. A linear method was not used, since the population over time has shown no indication of linear growth.

The ratio method uses historical data to calculate the ratio of the City to County population each year, as shown in Table 2. The historical data indicate that the population of Dunnellon, as a portion of the county population, decreased consistently from 1973 to 1989; however, since 1989 the trend has reversed (see Table 2). The City's most current population count for 1990, 2,238, is based upon the following:

Household count, billing register for solid waste pick-up:	1,145
Vacant house count:	- 99
Net households:	<u>1,046</u>
Factor of persons per household:	X 2.14
Total population, 1990:	<u>2,238</u>

This figure represents a ratio to the Marion County population of .011 (2238/194,833), an increasing share of the county's residents. For the purpose of predicting a trend, however, the average ratio of city to county population was calculated for the ten year period from 1981 through 1990, producing a ratio of .010. As Pinellas, Hillsborough and Pasco Counties become more congested in the next twenty years, Marion County will feel increasing growth pressure.

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However, growth within the City of Dunnellon is not projected to occur at a larger rate than the county, as this ratio has remained fairly stable throughout the past ten years. Therefore, for the purpose of projecting a ratio of city to county population on which to base projections for the planning timeframe, the City is using a factor of .010. This ratio is multiplied by the county medium range projections to calculate the City's share of the county's population as presented in Table 3.

**TABLE 3  
RATIO METHOD PROJECTIONS FOR CITY TO COUNTY**

	1995	2000	2005	2010
County*	232,500	261,400	289,800	318,500
County X .010	2,325	2,614	2,898	3,185

\* Medium range projections for Marion County derived from Population Studies, BEBR, Bulletin #83, January, 1988.

A geometric extrapolation method was also used to calculate population projections for the City. The annual percentage change in population for the City was averaged over the time frame, and this figure was used to project future population. The results, using the annual average growth rate of 2.35 percent, based upon the formula  $(\log[Y-X/X + 1]/t) \exp - 1 \times 100$ , are as follows:

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TABLE 4  
Projection derived from Geometric Extrapolation Methods

YEAR	CITY PROJECTIONS
1995	2,514
2000	2,823
2005	3,170
2010	3,560

The two methods result in different numbers, with the ratio method showing an increase in population of 947 (3,185 minus 2,238) persons over twenty years. The geometric extrapolation method shows an increase in population of 1,322 (3,560 minus 2,238) persons over the next 20 years. Because the ratio method is based upon constant proportional growth for the City of Dunnellon as compared to Marion County, and the geometric extrapolation method shows an increasing proportion of city to county over the timeframe of the plan, the ratio projections have been chosen as more reasonably reflecting the future growth of Dunnellon.

Planning Time frame

Chapter 9J-5, F.A.C. requires each local government comprehensive plan include at least two planning periods: one for at least the first five-year period subsequent to the plan's adoption and one for at least an overall ten-year period. Since the planning time frames for Dunnellon must include the years 1996 and 2001, the projections have been interpolated to include those years.

Table 5  
RATIO METHOD PROJECTIONS, INCLUDING INTERPOLATION

YEAR	CITY PROJECTION
1995	2,325
1996	2,383
2000	2,614
2001	2,671
2005	2,898
2010	3,185

Source: HENIGAR & RAY, INC: 1991.

The population projections indicate an average increase of 70 persons annually, which would appear to be quite reasonable, since Dunnellon continues to improve its infrastructure (see Infrastructure Element) and other amenities of the City.

Seasonal Population Projections

Determination of municipalities seasonal population is recognized as a difficult task; minimal seasonable data are available from sources such as the U.S. Census and the Bureau of Economic and Business Research. Therefore, both existing and future projections of Dunnellon's seasonal population will be based upon the following data:

1. Homes held for seasonal, or migratory use from the 1980 U.S. Census.
2. Estimates of visitors to motels, hotels, RV parks, campgrounds and rooming houses, and occupancy rates.
3. Monthly data from the Dunnellon Public Works Department for utility hook-ups.
4. Average household size to determine number of persons per seasonal unit.

Data from the U.S. Bureau of Census indicates that there were 34 housing units identified for seasonal and migratory use in 1980. The existing average household size for Dunnellon has been estimated to be 2.14. (Methodology for estimating current household size was provided earlier in this document.) By multiplying the number of seasonal housing units by the average household size, a seasonal population of 73 results. These data were compared with data supplied by the Dunnellon Public Works Division for monthly utility bills for garbage pickup. (mandatory for all development) from July 1987 to June 1988. Table 6 lists the utility hook-up data. The month of July was chosen as the base month, while the month of April was chosen to represent peak seasonal month. There is a difference of 43 housing units for utility hook-ups between the base and peak months. Using the average household size of 2.14, 92 people are attributed to the seasonal population accommodated by dwelling units. Variation between this 1988 figure and the figure derived from the 1980 Census indicates an estimated increase in seasonal population of 26 percent.

Because the data provided by the Dunnellon Public Works Department provide the most recent estimates for seasonal and migrant use, it is used to calculate the total estimate of existing seasonal and migrant population for Dunnellon.

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TABLE 6

MONTHLY UTILITY BILLS FOR MANDATORY GARBAGE PICK-UP

<u>Month</u>	<u>Residential Accounts</u>
July 87	773
August 87	774
September 87	789
October 87	792
November 87	798
December 87	810
January 88	808
February 88	809
March 88	809
April 88	816
May 88	812
June 88	804

Source: Dunnellon Public Works Department, July 1988.

Data compiled from a survey completed by Henigar & Ray personnel in July 1988, indicate there are four hotels and motels which provide a total of 61 rooms for seasonal use. The average size of the group per room is 2.0 persons and an occupancy rate of 80 percent was estimated. Using these data it is calculated that approximately 122 visitors are accommodated by motels and hotels within the City limits.

Seasonal population estimates derived from the above techniques are 214 persons. Seasonal population in Dunnellon accounts for 12.2 percent of the total population in 1988, while seasonal population accounts for approximately 0.1 percent of Marion County's total that year.

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The overall increase in seasonal population for Dunnellon for the period between 1980 and 1987 is calculated to be 9.7 percent, or 1.4 percent yearly. This estimate assumes there has been no change in hotel occupancy rates. In comparison, the County of Marion has projected an increase of 5.8 percent yearly for its seasonal population. If the City's seasonal population continues to grow at the annual rate of 1.4 percent, it is estimated that the seasonal population of Dunnellon will be 288 in 1990. Table 7 depicts the seasonal projections based upon this methodology. Of course, this increase is based upon the assumption that the demand for residential dwellings for seasonal use will continue to increase at the same rate. Although there is no available means for predicting seasonal demand for dwelling units, it is suggested for projection purposes that existing demand for seasonal dwelling units does reflect the total seasonal demand. Furthermore, it is estimated if future residential housing supply cannot accommodate seasonal demand that this demand will be reflected in an increase in motel occupancy rates. Significant increase in demand which cannot be met by residential dwellings or existing motels and hotels may result in a demand for additional hotel, motel, fish camp or other seasonal accommodations if market conditions are favorable.

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TABLE 7

CITY OF DUNNELLO  
 PERMANENT AND SEASONAL POPULATION PROJECTIONS

	<u>Seasonal</u> <sup>1</sup>	<u>Permanent</u>	<u>Total</u>
1988	214	1,748	1,962
1990	220	2,238	2,458
1995	235	2,325	2,560
1996	239	2,383	2,622
2000	252	2,614	2,866
2001	256	2,671	2,927
2005	271	2,898	3,169
2010	290	3,185	3,475

Source: Henigar & Ray, February 1991.<sup>1</sup>

<sup>1</sup>Based upon annual growth rate of 1.4 percent.

SUITABILITY OF VACANT LAND

When evaluating the suitability of land in Dunnellon for future land use designations, consideration was given to a variety of factors. Among these variables were location within the urban area, physical qualities of the site, effect upon the natural environment and resources, adjacent land uses, ability of the transportation network to safely and effectively accommodate the resultant development traffic and its movements, and ability of the City to supply physical infrastructure and services.

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Projected land requirements for future uses have been coordinated with available undeveloped land as well as anticipated redevelopment of existing properties. The suggested land use designations are reflected on the Future Land Use Map. The assignment of a specific future land use to undeveloped land within the urban service area closely follows existing development patterns. Land was evaluated for suitability for various types of development in an effort to create a fair and orderly approach to growth management advantageous for both the City and the land owner. Consideration was given to location, adjacent land uses, available infrastructure, and roadway conditions. Future land use needs, by type of use and acreage, are listed in Table 8.

It should be noted that the acreage set aside for each land use category within the urban service area is slightly more than is actually projected as necessary. This is to account for and accommodate the variables that dictate real estate market demand, the objective being to provide a reasonable array of land for a particular development objective without severely limiting investor choice. It is felt that the issue of urban sprawl is addressed and consequently not encouraged by providing this additional acreage, as it represents a reasonable and manageable amount of land. While it may appear that there are approximately 1,900 acres within the City available for future development, there are limitations which have been recognized. Wetlands areas, which are recommended for

designations as conservation areas, will be limited to passive recreational uses, in accordance with recommendations of the Conservation Element and the Rainbow River Watershed Management Plan. The exact location of conservation lands on a site-by-site basis shall be determined through establishment of wetlands jurisdictional lines in accordance with methodology accepted by the ACOE, SWFWMD and DER.

Approximately 102 acres of land which appears vacant is actually owned by the Florida Barge Canal Authority. The Florida legislature voted on January 22, 1991 to accept the provisions of a federal bill which deauthorizes the cross Florida Barge Canal and turns the land over to the State of Florida. With some exceptions, most of the land will be leased, or transferred, to counties or cities for environmental and public use, such as parks. This land has been designated for public use on the Future Land Use map.

The Future Land Use map is also sensitive to the need for controlling urban sprawl and preserving the open spaces and rural character of the City's agricultural lands. Almost 80 percent of the existing agricultural land uses will be preserved in this comprehensive plan. It may be argued that cities such as Dunnellon should not contain agricultural lands; a city with 30 percent of its land in agriculture cannot be a city. However, the City recognizes that its unlikely future growth needs would require

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all agricultural lands by the year 2010. Further, the agricultural designation is compatible with the City's existing capabilities to provide essential services, including sewer and water.

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TABLE 8  
FUTURE LAND USE  
YEAR 2010

	Existing Acreage	Additional Acreage Needed	Total
Residential:			
Low Density (1 du or less/acre)	59	63	122
Medium Density (up to 5 du/acre)	407	260	667
High Density (5.1-12 du/acre)	16	18	34
Residential/Office	0	47	47
PUD	0	111	111
Industrial	12	-12	0
Commercial	159	25	184
Water Oriented Commercial	0	10	10
Tourist Oriented Commercial	0	1	1
Public	38	102	140
Conservation	0	168	168
Recreation	110	0	110
Agricultural	1369	-311	1058
Vacant	457	-267	190
Wetlands	168	-168	0
Water bodies	186	0	186
<b>TOTAL</b>	<b>3028</b>		<b>3028</b>

Source: Henigar & Ray, Inc. October 1991.

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The Planned Unit Development, or PUD, is a new category added to the Future Land Use Map. This category has been designed to reflect the goals of certain property owners in that area to provide retail and other commercial services to residents on the west side of the City as well as unincorporated Marion and Levy County. At this time, residents on the outskirts of western City limits must drive west ten or so miles to Inglis, or drive east into downtown Dunnellon, which contributes to traffic congestion in an area where level of service on a portion of US 41 is already backlogged. The City wishes to ensure planned growth in that area, maintaining agricultural uses until such time as central sewer and water is available and the market can support nonresidential activities. Therefore, the PUD category for the City shall have the following standards:

Agricultural Uses shall be allowed by right. Densities and intensities of use shall be limited to that allowed in the agricultural category. In order to develop at residential densities greater than that allowed under the agricultural use category, all of the following standards must be met:

- a. central water and central sewer facilities are required;
- b. the development must undergo the PUD review process, whereby:

1. all proposals shall provide a detailed site plan showing the intensity or density of development, location of residential and nonresidential uses, proposed traffic circulation and access management, conservation and open space areas, and other features of the site; all details of the site plan shall be reviewed as a whole by the Planning Commission for the entire parcel; once the site plan is approved by the Planning Commission, any changes to the site plan must go through site plan review and approval;

2. parcels must be at least five acres in size to be considered for a PUD;

3. all parcels must be environmentally sensitive to any wetlands on the site and provide upland buffers to ensure protection of water quality.

4. The land development regulations, adopted by May 1, 1992, shall include additional design standards for this category to ensure compatibility with adjacent land uses and ensure quality development.

### Housing Needs

The City needs a total of 468 additional housing units by the year 2010 to accommodate its permanent residents: 72 additional units by 1996, 142 additional units by 2001, and 254 additional units by 2010. To accommodate the housing needs of the City's future residents, approximately 294 additional acres of land have been designated on the Future Land Use Map for exclusive residential use.

Approximately 63 additional acres have been designated for one dwelling unit or less. At an average of 1 dwelling unit per acre, approximately 63 housing units could be realized in this area. Approximately 260 acres have been designated for densities of up to 5 dwelling units per acre; at an average density of 3 dwelling units per acre, approximately 780 dwellings could be realized. Approximately 18 acres have been designated for densities of 5.1-12 dwelling units per acre. At an average density of 9 dwelling units per acre, approximately 162 units could be realized. No additional land has been designated for mobile home parks (Over 276 spaces are now provided within the City. At a household size of 2.14, these areas can accommodate 314 persons, which is 30 percent of the existing population). However, mobile homes shall be allowed in all residential categories. Provisions incorporated into the land development regulations shall create zones within these categories that control minimum floor area, structural and architectural

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design, foundations, buffer and screening requirements or other building requirements to discourage mobile home placement in existing or proposed residential neighborhoods whose desired character would be disrupted upon the introduction of incompatible structures. Such regulations shall not be so restrictive as to prohibit mobile homes from locating in any particular residential future land use category or from accommodating an equitable share of sites for residential development.

Based upon the above scenario, it is estimated approximately 1,005 units would be accommodated by the year 2010. As noted previously there is a need for approximately 468 additional units by the year 2010. This is approximately 537 more units than would be needed based upon permanent population projections. However, it is assumed that this surplus would accommodate seasonal populations, as well as allow a range of market choices for residential development.

Projection trends indicate an additional 18 acres of multi-family dwelling units will be necessary. This area is located east of US 41 and north of Pennsylvania Avenue, west of the large lake. This land is currently being considered for senior apartment housing using FMHA funds.



Commercial

Most commercial development is concentrated along US 41, CR 484, and CR 40, with scattered establishments in the west side residential areas and Historic District. There are approximately 159 acres of land in commercial use, which represents approximately 19 percent of the developed land within the corporate limits. This represents a ratio of 1 acre for every 14 persons, which may seem high but not when it is considered that Dunnellon serves as the regional shopping area for the surrounding residential developments of Rainbow Lakes Estates, Village of Rainbow Springs, Citrus Springs, Rio Vista, and Rainbow Acres. As discussed in the Traffic Circulation Element, these nearby developments have the capacity at buildout to accommodate 59,714 dwelling units. This calculates to over 127,000 persons requiring services and city amenities not currently provided within these subdivisions. Assuming that the existing commercial areas adequately serve the current population, and using the 1 acre per 14 persons ratio for future population, an additional 68 acres of commercial would be required. Combining the additional acreages for Commercial (25), Water Oriented Commercial (10), Tourist Oriented Commercial (1), and Residential/Office (47) results in a commercial potential of an additional 83 acres. Because the Residential/Office designation does not allow 100% office use, the actual total commercial land available for Dunnellon during the planning timeframe is within reasonable range of the projected 68 acres in additional need.



When designating areas for future commercial use, the land in the existing commercial corridors was given priority, thus encouraging infill and compatible localized development. This includes those areas that are currently zoned for commercial use and have the obvious locational advantage. This also includes those areas in the historic district that would be suitable for restoration and specialty commercial usage, with an emphasis placed on structural design guidelines and parking requirements.

The Future Land Use Map reflects several major changes in the types of commercial land use designation. The area currently zoned as light industrial (the Florida Mining and Materials site, approximately 12 acres) has been changed to commercial. The reasoning for this lies in the scarcity of larger parcels of undeveloped highway frontage within the City Limits, and the obvious locational advantage this site, which can realistically be expected to follow the dictates of market trends and the demands for prime commercial real estate.

An additional two acres has been designated as commercial along the north side of CR 40 across from the Vogt Springs Development, to accommodate neighborhood uses such as a convenience store and specialty retail ventures. It should be noted that the installation of gasoline pumps in this area is specifically not recommended, due to the proximity to the City water well and the resulting possibility of drinking water contamination.

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Two additional commercial districts have been designated within the City. The first district is designated "Water-oriented Commercial". Approximately ten acres have been designated in this district. Commercial uses which are water-related or water-dependent, are given priority in this district, including recreation, marinas, and fish camps. This district is located at the confluence of the Rainbow and Withlacoochee Rivers.

The other new commercial district is tourist-oriented commercial. This area is a small (.7 acres) parcel located between traditional commercial along Pennsylvania Avenue and the Rainbow River. The purpose of this district is to recognize the historically commercial use of this parcel, while limiting certain intense uses which are allowed in the other commercial district. Tourist-oriented commercial allows sleeping and living quarters for visitors and tourists, but the area is not considered a business zone. Certain offices may be permitted, but such uses as convenience stores or docks with fueling facilities are prohibited.

It is recommended that a new commercial predevelopment review process consider traffic impacts, and that appropriate transportation improvement measures be provided to insure an acceptable level of service. This aspect of future land use designation and its impacts is discussed further in the Traffic Circulation Element.

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### Industrial

Land used for industrial purposes represents the smallest percentage use of developed land within the City at 1.6 percent or 12 acres. Approximately 38 percent of the labor force population (those 15 years and older) are under retirement age, while over 46 percent are of retirement age or older. This small population is unable to supply enough of a labor force for any large industrial operation, consequently the demand for this land use is not expected to increase significantly. As was indicated in the commercial land use section, the Future Land Use Map reflects changes in the industrial designation. The existing industrial parcel will be designated for commercial use on the Future Land Use Map, to reflect market demand for shopping centers and services in that area. However, in recognition that future markets may dictate industrial uses, such uses have been included in the plan to provide the guidance needed to ensure compatibility with adjacent land uses, etc.

### Public

There are approximately 38 acres of developed land (4.5 percent) devoted to public or quasi-public usage including schools, public buildings, library, post office, sewer treatment plant and water wells, cemeteries, and local churches and their properties. The current ratio reflects one acre per 49 people, and appears to be adequate. To maintain this existing ratio, an additional 32 acres of public space would be needed.

Consideration should be given to the crowded conditions at City Hall, which may dictate the need for new facilities in the future. Location of a new City Hall should be centralized and easily accessed, as it provides many necessary services and also conveys an image of local government to residents and visitors. Relocation along US 41 or CR 484 as new development or redevelopment of an existing building, would be both visible and accessible.

Approximately 102 additional acres are designated for public use which comprise State of Florida Barge Canal lands, discussed earlier.

#### Agricultural

Land currently used for agricultural purposes consists predominantly of improved pasture; there is also a coniferous tree farm on CR 40. This category comprises the third largest land use category for developable land within the City Limits, with 1,369 acres. As noted earlier, approximately 1,058 acres shall remain in agricultural use, contributing to the rural character of the City, and providing an additional greenbelt adjacent to the urban area.

### Recreational

There are approximately 110 acres of land currently being used for recreational purposes. These areas include the City Beach Park at Palmetto Way (1.5 acres), the Dunnellon Boat Ramp (2.5 acres), the Rainbow River access at SR 484 bridge, and 105 acres of City recreational areas that includes the softball fields, restrooms, and concession building. A discussion of the facilities and their ability to serve the existing and future population is addressed in the Recreation/Open Space Element.

### Conservation

There are approximately 168 acres of wetlands and other environmentally sensitive areas along the Rainbow and Withlacoochee Rivers that are designated as conservation areas on the Future Land Use Map. No development densities are given for this district, as it shall be limited to uses that are compatible with maintaining the valuable functions and values that wetlands provide.

### Historical District

As discussed previously, structures within the City's historic district are subject to federal regulations. These regulations should be addressed prior to the City's approval of redevelopment or renovation of any structures within the District. Further, new development proposals within the District should be subject to site plan review which addresses the project's impacts on the existing historic character of the area.

### AVAILABILITY OF SERVICES

#### Sanitary Sewer

The City sewer treatment plant does not provide service outside of the corporate limits, nor does it serve all land areas within the City limits, as many residences have on-site septic systems. Analysis conducted in the Infrastructure Element has determined that the plant serves approximately 416 residences, (50% of the residences) with the remaining residents being served by on-site septic systems. It has been estimated that the current facility could not serve all of the existing population and future growth within the City Limits if they were required to hook into the system. While the City has scheduled expansion of service in the Five-year schedule of capital improvements, the City should ensure that new development contributes a proportionate share of the costs of providing sewer services to meet future growth needs.

### Solid Waste

There is no landfill site in Dunnellon due to the fact that most of the City is in the Rainbow River Watershed, which could possibly be contaminated by such a land use. The City does, however, provide solid waste collection services, with transportation to the county landfill. It has been suggested that the county adopt a level of service of 5.3 pounds of solid waste per person per day, at which rate the landfill will need an additional 75 acres by 2010. The City should promote recycling efforts to help reduce the rate at which the county landfill is being used and will have to be expanded.

### Drainage

As discussed in the Infrastructure Element, the existing drainage system has several deficiencies. The City has allocated funds in the five year schedule of capital improvements towards correcting drainage deficiencies. Additional drainage detention areas and grassed swales in areas where runoff is currently untreated prior to entering the rivers should be included during drainage improvements for older developments. Design criteria for new developments should include management of stormwater consistent with level of service standards. Stormwater management requirements of the Southwest Florida Water Management District (SWFWMD) and the Department of Environmental Regulation (DER) should be met for new development.



Potable Water

Dunnellon's water supply currently serves only part of the residents within the City limits, while also serving the Chatmire area outside the corporate boundary. As discussed in the Infrastructure Element, the future peak hourly demand can be met by the existing system through the year 2010. The City has applied for FmHA funding to assist in construction of a new well located outside the existing urbanized area. This well should provide water to the portion of the City on the east side of the Rainbow River, as well as decrease the reliance on wells no. 1 and no.2, which are located in an area of intense commercial development and have the potential to become contaminated. The City is also establishing the Dunnellon Heights Water Assessment District to fund water service to that subdivision.

Roadways

All major roadways within the City are currently operating at acceptable levels of service, with the exception of the northern 2-lane section of US 41. The surrounding area has and will continue to experience rapid growth as the various Development of Regional Impacts build out over the coming years. It is essential that the City coordinate with Marion County and the Withlacoochee Regional Planning Council to ensure that development outside the

City does not result in the City paying to accommodate that growth, particularly from a traffic standpoint.

#### CONCLUSION

The City has set a realistic and appropriate course for ensuring the needs of future residents are met. The Capital Improvement Element includes commitments to ensure roads, sewer, water, drainage, solid waste, and recreational needs can be accommodated throughout the planning time frame. At the same time, growth shall be accommodated while preserving valuable natural resources, such as the Rainbow and Withlacoochee Rivers, and historical resources. Over 30 percent of the City's agricultural lands have been maintained to provide open space and preserve the rural character of the area.

The City has also initiated a program for the elimination of its substandard housing units. Three new commercial districts have been created on the Future Land Use map, thus providing new opportunities for developers and varied services to residents. With the adoption of this plan, the City can look forward to twenty years of planned growth and prosperity.