1999 EXISTING LAND USE INVENTORY

Eastern Suffolk County



Prepared by

Suffolk County Department of Planning

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1999 EXISTING LAND USE INVENTORY - EASTERN SUFFOLK COUNTY

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MAPS

The GIS maps that accompany this report are identified below.

Existing Land Use Map Series - 1" = 2,000'

Town of Riverhead

Town of Southold

Town of Shelter Island

Town of Southampton

Town of East Hampton

INTRODUCTION

Previous Land Use Studies

Existing land use maps and tabulations of land use acreage data on a town-wide basis for the five towns of eastern Suffolk County (Riverhead, Southold, Shelter Island, Southampton and East Hampton) are available that reflect conditions in 1962 (Suffolk County Dept. of Planning 1962), 1966 (Nassau-Suffolk Regional Planning Board 1968) and 1981 (Long Island Regional Planning Board 1982). These studies, conducted on a County-wide basis, are useful in that they provide a general picture of the location and interrelationships of major land use types at different times in the past. However, each of these studies differs with respect to the methodology employed to classify categories of land use, the scale of the base maps used, the level of effort and techniques employed in verifying land use, the extent to which mapped land uses have been generalized, and how acreage figures were generated. Therefore, comparison of the results of these inventories to determine accurate trends is invalid.

The need for up-to-date, accurate land use data collected at a large scale was recognized in the Brown Tide Comprehensive Assessment and Management Program (BTCAMP) (Suffolk County Dept. of Health Services 1992). The land use inventory conducted in 1988 for the Peconic River/Flanders Bay watershed was prepared at tax map scale and field verified. The Department of Health Services Geographic Information System (GIS) was employed to plot the existing land use map for the study area showing 13 categories of land use and to generate acreage figures. The map, however, reflected generalized land use patterns, since digitized tax map coverages showing parcel boundaries were not available at that time. The recommendation was made in BTCAMP to conduct an in-depth analysis of existing land use, population and land available for development for the entire watershed of the Peconic Estuary System using GIS technology to plot maps and generate acreage data at tax map scale. The establishment of the Peconic Estuary Program (PEP) provided the vehicle and focus for implementing this recommendation.

As a result of the work performed under the PEP, the Suffolk County Department of Planning completed a land use inventory and analysis for the watershed of the Estuary that included 52% of the land area of the five east end towns (all of the Town of Shelter Island, 67% of the Town of Southold, 66% of the Town of East Hampton, 51% of the Town of Riverhead, and 36% of the Town of Southampton). The methodology employed and the GIS data and map products produced are described in the report *Peconic Estuary Program Existing Land Use Inventory* (1997). The decision was later made by the Suffolk County Department of Planning to assign staff on an as available basis to complete the land use inventory and analysis in a similar fashion for the entire land area within the jurisdiction of the five east end towns.

Study Objectives

The objectives of this inventory are as follows:

- # Establish an accurate GIS existing land use data base at tax map scale (i.e., large scale) for eastern Suffolk County. This data base should be prepared using a consistent approach so that the results are comparable among the various municipal jurisdictions involved.
- # Prepare GIS existing land use maps in digital and print formats for each township.
- # Quantify existing land use acreage by general category and municipal jurisdiction.

METHODOLOGY

Data Management and Scale

The Suffolk County Planning Department's GIS was employed to link land use data with parcels shown on the Suffolk County Real Property Tax Map. [The Department's GIS consists of the following:

- ESRI's ArcInfo 8.0, ArcView 3.2 and MapInfo 5.0 GIS software
- Dell Poweredge 6300 dual processor Windows NT server with 1 gigabyte of RAM and 50 gigabytes of storage
- HP 1055cm color inkjet plotter
- Calcomp 9500 digitizer
- Four Windows NT workstations, each with 128K RAM and 8 gigabytes storage

Backup copies of all hard copy maps are archived in a plotter output format (GRA and HPGL) on a DLT tape format. To access digital maps on a PC running ArcView requires 64 megabytes of RAM and 8 gigabytes of storage.] Land use data were collected at tax map scale. Although the scale of the Suffolk County Real Property Tax Maps for the eastern towns vary, it is typically 1'' = 300'. The existing land use display maps that accompany this report have been greatly reduced, i.e., the scale of these maps (1'' = 2000') is an order of magnitude smaller than that of the tax maps. However, tax map parcel boundaries were not altered in any way by GIS manipulation. This preserved the sanctity of the parcel line work and land use data base. The extent to which small parcels can be visually distinguished depends on the scale selected for GIS map plotting.

Land Use Classification System

Use of town tax assessor code data expedited the attainment of land use inventory objectives. These data sets were available in electronic format and keyed to Suffolk County tax map parcels. They provided a starting point for the land use inventory work.

Tax assessor codes are assigned to parcels for the purpose of raising revenue through real property taxation. There are literally scores of codes assigned to ratable property. To facilitate interpretation, the land use methodology grouped these codes under the following 13 general land use categories that are commonly used for regional planning purposes: low density residential (≤ 1 d.u./acre), medium density residential (>1 to <5 d.u./acre), high density residential (≥ 5 d.u./acre), commercial, industrial, institutional, recreation and open space, agriculture, vacant, transportation, utilities, waste handling and management, and surface waters. Table 1 shows the general land use categories and the property type classification and ownership codes assigned to each category. The groupings in this table do not necessarily reflect the divisions in the assessor's manual (New York State Division of Equalization and Assessment 1991). The 13 general land use categories are more suitable for characterizing community layout and function, determining land available for development, estimating future population levels and preparing master plans. Each and every parcel on the tax map was assigned to one (and only one) of the general categories.

Table 1. Land Use Classification System for Suffolk County (p.1 of 5)

Low Density Residential (≤1 d.u./acre)* - attribute code 1 - symbol #83 - yellow**

- 210 One Family Year-Round Residence
- 220 Two Family Year-Round Residence
- 230 Three Family Year-Round Residence
- 240 Rural Residence with Acreage
- 250 Estate
- 260 Seasonal Residences
- 270 Mobile Home
- 312 Residential Land Including a Small Improvement (not used for living accommodations)
- 316 Waterfront Vacant Land Including a Small Improvement (not used for living accommodations)
- 439 Small Parking Garage
- 483 Converted Residence

Medium Density Residential (>1 to <5 d.u./acre)* -

attribute code 2 - symbol #84 - gold**

- 210 One Family Year-Round Residence
- 220 Two Family Year-Round Residence
- 230 Three Family Year-Round Residence
- 260 Seasonal Residences
- Mobile Home
- 312 Residential Land Including a Small Improvement (not used for living accommodations)
- 316 Waterfront Vacant Land Including a Small Improvement (not used for living accommodations)
- 439 Small Parking Garage
- 483 Converted Residence

High Density Residential (≥ 5 d.u./acre)* - attribute code 3 - symbol #92 - peru**

- 210 One Family Year-Round Residence
- 220 Two Family Year-Round Residence
- 230 Three Family Year-Round Residence
- 260 Seasonal Residences
- 270 Mobile Home
 - 271 Multiple Mobile Homes
- 280 Multiple Residences
- 312 Residential Land Including a Small Improvement (not used for living accommodations)
- 316 Waterfront Vacant Land Including a Small Improvement (not used for living accommodations)
- 410 Living Accommodations
 - 411 Apartments
 - 416 Mobile Home Parks (trailer parks, trailer courts)
- 439 Small Parking Garage
- 483 Converted Residence

The symbol # and color assigned to each land use category were selected from the shadeset of **Colornames in **ARC/INFO Ver 7.04.**

^{*}Parcels designated as residential require lot size calculation to determine residential density classification (low, medium or high density).

Table 1. Land Use Classification System for Suffolk County $(p.2 \ of \ 5)$

Commerc	ial -			474	Billiards
attri	bute co	de 4 - symbol #110 - red**	480	Multip	ole Use of Multi purposes
414	Hotel			481	Downtown Row Type (with
415	Motel				common wall)
417	Camps, Cottages, Bungalows			482	Downtown Row Type
418	_	Lodges, Boarding & Rooming			(detached)
		es, Tourists Homes, Fraternity &		484	One Story Small Structure
		ity Houses		485	One Story Small Structure -
420		g Establishments		105	Multi-occupant
.20	421	Restaurants		486	Minimart
	422	Diners & Luncheonettes	510		ainment Assembly
	423	Snack Bars, Drive-Ins, Ice	310	511	Legitimate Theaters
	123	Cream Bars		512	Motion Picture Theaters
	424	Night Clubs		513	Drive-in Theaters
	425	Bar		514	Auditoriums, Exhibition &
	426	Fast Food Franchises		314	Exhibition Halls
430		r Vehicle Services		515	Radio, T.V. & Motion Picture
430	431	Auto Dealers - Sales & Svc.		313	Studios
	432	Service & Gas Stations	520	Cmonto	
	433	Auto Body, Tire Shops, Other	520	•	Assembly Stadiums Amanas Amanias
	433	Related Auto Sales		521	Stadiums, Arenas, Armories, Field Houses
	434	Automatic Car Wash		500	
		Manual Car Wash	520	522	Racetracks
	435	Self-Service Car Wash	530		ement Facilities
	436			531	Fairgrounds
	437	Parking Garage		532	Amusement Parks
450	438	Parking Lot		533	Game Farms
450		Services Paginal Shaming Contage	5.40	534	Social Organizations
	451	Regional Shopping Centers	540		r Sports Facilities
	452	Area of Neighborhood		541	Bowling Centers
	452	Shopping Centers		542	Ice or Roller Skating Rinks
	453	Large Retail Outlets		543	YMCAs, YWCAs, etc.
	454	Large Retail Food Stores		544	Health Spas
	455	Dealerships - Sales & Services		545	Indoor Swimming Pools
		(other than auto with large		546	Other Indoor Sports
4.60	D 1	scale operation)	550		or Sports Activities
460		& Office Buildings		554	Outdoor Swimming Pools
	461	Standard Bank/Single		555	Riding Stables
		Occupant		556	Ice or Roller Skating Rinks
	462	Drive-in Branch Bank		557	Other Outdoor Sports
	463	Bank Complex w Office Bldg.	570	Marin	
	464	Office Building	583		t Complexes
	465	Professional Building	691	Profes	ssional Associations
470		ellaneous Services	**The	symbol	# and color assigned to each
	471	Funeral Homes	land use c	ategory	were selected from the shadeset
	472	Dog Kennels, Veterinary	of Colorn	ames in	ARC/INFO Ver 7.04.
		Clinics			
	473	Greenhouses (retail sales)			

Table 1. Land Use Classification System for Suffolk County (p.3 of 5)

attribute code 5 - symbol #127 - purple** 440 Storage, Warehouse & Distribution Facilities 441 Gasoline, Fuel, Oil, Liquid Petroleum Storage and/or Distribution 442 Bottled Gas, Natural Gas Facilities 443 Grain & Feed Elevators, Mixers, Sales Outlets 444 Lumber Yards, Sawmills 445 Storage, Warehouse & Distribution 610 Education 611 Libraries 612 Schools 613 Colleges & Universities 614 Special Schools & Institutions 615 Other Educational Facilities 620 Religious 630 Welfare 631 Orphanages 631 Orphanages 632 Benevolent & Moral	Industrial -			Institution			
Facilities 441 Gasoline, Fuel, Oil, Liquid Petroleum Storage and/or Distribution 442 Bottled Gas, Natural Gas Facilities	• • •						
441 Gasoline, Fuel, Oil, Liquid Petroleum Storage and/or Distribution 442 Bottled Gas, Natural Gas Facilities Facilities Grain & Feed Elevators, Mixers, Sales Outlets 612 Schools 613 Colleges & Universities 614 Special Schools & Institutions 615 Other Educational Facilities 620 Religious 630 Welfare 631 Orphanages	440			610			
Petroleum Storage and/or Distribution 442 Bottled Gas, Natural Gas Facilities Facilities Grain & Feed Elevators, Mixers, Sales Outlets 613 Colleges & Universities 614 Special Schools & Institutions 615 Other Educational Facilities 620 Religious 630 Welfare 631 Orphanages							
Distribution 442 Bottled Gas, Natural Gas Facilities Facilities 620 Religious 443 Grain & Feed Elevators, Mixers, Sales Outlets 630 Welfare 631 Orphanages		441	_				
442 Bottled Gas, Natural Gas Facilities 620 Religious 443 Grain & Feed Elevators, Mixers, Sales Outlets 630 Welfare 631 Orphanages			•			•	
Facilities 620 Religious 443 Grain & Feed Elevators, 630 Welfare Mixers, Sales Outlets 631 Orphanages		4.40					
443 Grain & Feed Elevators, 630 Welfare Mixers, Sales Outlets 631 Orphanages		442					
Mixers, Sales Outlets 631 Orphanages					_		
,		443		630			
444 Lumber Yards, Sawmills 632 Benevolent & Moral			,				
			•		632		
445 Coal Yards, Bins Associations							
446 Cold Storage Facilities 633 Homes for the Aged						•	
447 Trucking Terminals 640 Health			9	640			
448 Piers, Wharves, Docks & 641 Hospitals		448				-	
Related Facilities 642 All Other Health Facilities			Related Facilities		642	All Other Health Facilities	
Other Storage, Warehouse & 652 Office Building (Government)		449				•	
Distribution Facilities 653 Parking Lots (associated with	Distribution Facilities		653	Parkin	g Lots (associated with		
475 Junkyards government building)	475	Junky	ards				
710 Manufacturing & Processing 660 Protection	710	Manu	facturing & Processing	660	Protection		
720 Mining and Quarrying 661 Army, Navy, Air Force,	720	Minin	g and Quarrying		661	Army, Navy, Air Force,	
721 Sand & Gravel Marine & Coast Guard		721	Sand & Gravel			Marine & Coast Guard	
740 Industrial Product Pipelines (non-installations, Radar, etc.	740	Indus	trial Product Pipelines (non-			installations, Radar, etc.	
utility companies) 662 Police & Fire Protection,		utility	companies)		662	Police & Fire Protection,	
741 Gas Electrical Signal Equipment &		741	Gas			Electrical Signal Equipment &	
742 Water Other Facilities for Fire,		742	Water			Other Facilities for Fire,	
743 Brine Police, Civil Defense, etc.		743	Brine			Police, Civil Defense, etc.	
744 Petroleum Products 670 Correctional		744	Petroleum Products	670	Correc	etional	
749 Other 680 Cultural and Recreational		749	Other	680	Cultura	al and Recreational	
681 Cultural Facilities (museums,					681	Cultural Facilities (museums,	
art galleries)						· · · · · · · · · · · · · · · · · · ·	
693 Indian Reservations				693	Indian	Reservations	
694 Animal Welfare Shelters				694	Anima	l Welfare Shelters	

The symbol # and color assigned to each land use category were selected from the shadeset of **Colornames in **ARC/INFO Ver 7.04.**

Table 1. Land Use Classification System for Suffolk County (p.4 of 5)

Recreation & Open Space - attribute code 7 - symbol #70 - green**		Agricultu	re - e code 8 - symbol #69 - lawn green**		
190	Fish, Game & Wildlife Preserves	105 Agricultural Vacant Land (Produ			
552	Public Golf Courses	110	Livestock & Products		
553	Private Golf Country Clubs		Poultry & Poultry Products		
560	Improved Beaches		112 Dairy Products		
580	Camps, Camping Facilities and		113 Cattle, Calves, Hogs		
	Resorts		114 Sheep & Wool		
	581 Camps		115 Honey & Beeswax		
	582 Camping Facilities		Other Livestock: donkeys,		
590	Parks		goats		
	591 Playgrounds		117 Horse Farms		
	592 Athletic Fields	120	Field Crops		
	593 Picnic Grounds	120	129 Acquired Development Rights		
682	Nature Trails, Bike Paths, etc.	130	Truck Crops - Mucklands		
695	Cemeteries	140	Truck Crops - Not Mucklands		
920	Private Hunting & Fishing Clubs	150	Orchard Crops		
930	State Owned Forest Land	100	151 Apples, Pears, Peaches,		
750	932 State Owned Land Other Than		Cherries, etc.		
	Forest Preserve		152 Vineyards		
940	940 Reforested Land & Other Related		Other Fruits		
7.0	Conservation Purposes	160 170	Nursery & Greenhouse		
	941 State Owned Reforested Land	180	Specialty Farms		
	942 County Owned Reforested	100	182 Pheasants		
	Land	**The	symbol # and color assigned to each		
960	Public Parks		ategory were selected from the shadeset		
	961 State Owned Public Parks,		ames in ARC/INFO Ver 7.04.		
	Recreation Areas, and Other	01 0010111			
	Multiple Uses				
	962 County Owned Public Parks				
	and Recreation Areas				
	963 City/Town/Village Public				
	Parks and Recreation Areas				
970	Other Wild or Conservation Lands				
	Wetlands, Either Privately or				
	Governmentally Owned,				
	Subject to Specific				
	Restrictions as to Use				
980	Taxable State Owned Conservation				
	Easements				
990	Other Taxable State Land				
	Assessments				
	000 5				

Transition Assessments for

Taxable State Owned Land

Transition Assessment for Exempt State Owned Land

993

994

Table 1. Land Use Classification System for Suffolk County (p.5 of 5)

Vacant -		da 0		818	Gas Transmission &
		de 9 - symbol #26 - white**	020	***	Distribution
310	Resid		820	Water	
	311	Residential Vacant Land		822	Water Supply
	313	Waterfront Vacant Lots	830		nunication
	314	Rural Vacant Lots ≤10 Acres		831	Telephone
320	Rural			832	Telegraph
	321	Abandoned Agricultural Land		833	Radio
	322	Residential Vac. Land >10 A.		834	TV other than Community
	323	Other Rural Vacant Lands			Antenna T.V.
330	Vacar	nt Land Located in Commercial		835	Community Antenna T.V.
	Areas			836	Telecommunications
340	Vacar	nt Land Located in Industrial	847	Pipeli	nes (used by utility companies)
	Areas		860	Specia	al Franchise Property
350	Urban	Renewal or Slum Clearance		861	Electric & Gas
910	Privat	e Wild & Forest Lands		862	Water
	911	Forest Land		866	Telephone
	912	Forest Land		867	Miscellaneous
				868	Pipelines
Transpor	tation -			869	Television
_		10 - symbol #33 - light grey**		00)	Tele vision
650		rnment	Waste Ha	ndling .	& Management -
	651	Highway Garage			- symbol #28 - dk. slate grey**
692		s, Streets, Highways &	850		Disposal
		vays, Express or Otherwise	050	851	Solid Wastes
		ling Adjoining Land		852	Landfills & Dumps
821		Control		853	Sewage Treatment & Water
840		portation		033	Pollution Control
040	841	Motor Vehicle		854	Air Pollution Control
	842	Ceiling Railroad		034	All Foliution Collifor
	843	Nonceiling Railroad	C C	Vatara	
	844	Air	Surface V		do 12 symbol #52 nolo
	846	Bridges, Tunnels & Subways	turquoise		de 13 - symbol #52 - pale
	040	Bridges, Tulliers & Subways	183		ic: oysterlands
T 14:1:4: a.a					water Vacant Land
Utilities -	oodo 1	1 - symbol #31 - It. slate grey**	845		
810		ic & Gas	972		(canal) Under Water, Either Privately or
810			912		•
	812	Electric Power Generation -	sk sk FDI		nmentally Owned
	012	Coal Burning Plant		•	# and color assigned to each
	813	Electric Power Generation -			were selected from the shadeset
	014	Oil Burning Plant	of Colorn	ames in	ARC/INFO Ver 7.04.
	814	Electric Power Generation -			
	015	Nuclear Plant			
	815	Electric Power Generation -			
	04 -	Gas Burning Plant			
	816	Gas Generation Plant			
	817	Electric Transmission &			
		Distribution			

Land Use Inventory Process

The following is a brief listing of the steps in the process used for conducting the inventory of existing land use.

- # Using the GIS, combine tax map parcel line work with the three digit, tax assessor property code data and prepare a coverage at tax map scale for each town showing 13 general land use category attributes based on grouped assessor code data and residential density criteria.
- # Prepare large scale plots of all tax map sections located within each township. These plots show the land use attribute code numbers for the 13 general land use categories listed in Table 1, one of which is assigned to each tax map parcel.
- Werify parcel attribute codes via field inspection, aerial photo interpretation, use of Real Property Tax Service Agency property data and owners list files, etc., and manually correct same where necessary on the tax map section plots.
- # Correct the GIS data base.
- # Merge the tax map section sheets and prepare preliminary, color-coded GIS existing land use maps for each township. Inspect and correct parcel line work and attribute codes, where needed.
- # Plot final, color-coded existing land use maps at desired scale.
- # Use the GIS to tabulate acreage figures by general land use category and municipal jurisdiction.

The steps in the process are conceptually simple. However, the level of effort required to prepare usable GIS coverages, verify and correct land use codes, and produce an accurate parcel-specific land use data base was quite substantial given the geographic extent of the area, the magnitude and complexity of the data bases involved, and the need to conduct extensive field verification.

Land Use Classification Conventions

Experience gained with the initial phases of the land use inventory and field check process resulted in the establishment of several conventions that were used to simplify and expedite the work, and help assure that land use code attributes were being assigned in a consistent manner by the several staff members involved. These conventions are summarized below.

- # When more than one use was found to occur on a single parcel, the primary use of that parcel was determined and assigned to that parcel. Primary use is based on the relative intensity of the use in comparison with that of the other use(s) in question, with consideration also given to the areal extent of the use on the parcel. Typical examples follow:
 - A 100-acre parcel is used for both residential and agricultural purposes. Crops are grown on about 80 acres, 15 acres are in woodlands, and a house is located on site. Even though the parcel accommodates three uses (including vacant), it is assigned a classification of agriculture, since most of the parcel is dedicated to this use.
 - A two-story structure is located on a 10,000 sq. ft. lot in the retail portion of a central business district. A hardware store occupies the first story of the building and the second floor is used for an apartment. While used for both commercial and residential uses, this

parcel is classified as commercial, given the relative intensity of the uses in question and the prevailing nature of neighboring retail uses.

- A country estate is located on an 18-acre parcel, some of which is wooded, with the remainder used as pasture. This parcel is classified as low density residential, given the fact that it falls within the density criteria of $< 1 \, \text{d.u./acre.}$
- A road right-of-way parcel traverses a bay, but the improved portion of the parcel does not extend over the water. The entire parcel is classified as transportation.
- # Dedicated common areas on tax map parcels in condominium/townhouse projects were classified as recreation and open space, since such areas are not available for development in the future. Small, privately owned parcels that are the sites for residential structures in these projects were classified as high density residential.
- # Agricultural land that had reverted to old field habitat due to non-use was classified as vacant.

 Actively cultivated lands and those recently left fallow were classified as agriculture.
- # When structures on improved parcels are unoccupied, the parcels are not classified as vacant. They are classified according to the type of structure present, i.e., commercial, industrial, residential, etc.
- Whether a parcel is publicly owned or privately owned does not necessarily determine how that parcel is classified. For example, parcels classified as recreation and open space can be owned by property owners associations, private conservation groups, or private clubs, as well as public entities.
- # Privately owned, commercially oriented, intensive recreational activities, such as bowling alleys and sports complexes, are classified as commercial.
- # All publicly owned parks and conservation lands, whether actively or passively used, are classified as recreation and open space.
- # Parcels owned by the Suffolk County Water Authority were classified as utility, regardless of whether the parcels were improved or not.
- # The existing zoning designation of a parcel is not a factor in how that parcel is classified as to existing land use.
- # The number of residential structures on a parcel, as opposed to the number of dwelling units, was used in conjunction with parcel acreage to determine density, and hence, the classification of the parcel as low, medium or high density residential.
- # The context within which a parcel is located, i.e., the uses found on adjacent and nearby parcels, can often help in making judgments in the field as to how to classify that parcel.
- # Parcels that are adjacent to commercial uses in business districts and are used as parking lots in connection with these uses were classified as commercial. Parcels used for parking that are directly related to a nearby transportation use, e.g., ferry or railroad, were classified as transportation.

The tax map base shows property boundaries, and not geographical features, the extent of various "surface covers" or datums. Hence, the boundary of a parcel located on the shoreline may, or may not, coincide with the location of the land/sea interface. The apparent shoreline on the existing land use maps, i.e., the boundary between parcels classified as surface waters and adjacent parcels classified as one of the 12 upland land use categories, should not be interpreted as the water's edge or mean sea level, etc. Overlay of the tax map base on appropriate maps, such as USGS topographic maps, can indicate the extent to which the shorelines replicate each other.

A lake or pond located within a larger tax map parcel will not be shown on the existing land use map as surface waters. If the lake/pond is a separate parcel, i.e., the shoreline is a property boundary, then it will be classified and shown as surface waters on the map.

Existing Land Use Map Accuracy

The Existing Land Use maps series shows thousands of parcels, each assigned to a land use category. In evaluating the accuracy of these maps, one has to consider two types of potential error. The first type is judgment error, resulting in the assignment of the wrong classification category to a particular parcel. The second type is attribute error, where the wrong classification is assigned to a parcel in the GIS data base, and this error is not detected in review of preliminary maps. Given the extensive level of effort devoted to the land use inventory, the staff is confident that the incidence of both types of error is very low. Users of the Existing Land Use map series and the acreage tabulations by land use category that are derived from the GIS data base should be aware of the methodology employed, so that proper interpretations can be made.

Further explanation may help to reduce confusion with respect to the differences between preliminary maps showing uses determined by assessor codes and existing land use maps prepared by using the land use methodology described herein. Each municipality can assign assessor codes to parcels in different ways according to local practice. In almost all towns, it is evident that publicly owned parcels and other non-ratables often are not assigned any category. In addition, the assessor code data sets vary greatly by town in the extent and frequency of update. The use of this methodology and field verification assured comparability of inventory results across municipal boundaries and their accuracy and suitability for planning purposes.

Another comment is warranted with respect to the relative accuracy of the acreage numbers in this report. The GIS calculates parcel area from digitized tax maps, which depict approximate parcel boundary locations. Original parcel surveys and/or deeds must be used to determine actual parcel location and acreage for purposes other than general land use inventory that require very accurate parcel data.

Time Frame

The staff conducted the field verification of land use for the six towns in the PEP land use study area in a sequential fashion over an 18 month period beginning in 1994. On an as available basis, the staff conducted the land use inventory and analysis for that portion of eastern Suffolk not within the boundaries of the PEP from 1996 to 1999. During the process of GIS file correction and map preparation, changes in the use of major parcels within the PEP were noted after completion of field work. For all intents and purposes, the pattern of land uses as portrayed on the Existing Land Use map for each of the five east end towns should be considered as representative of 1999 conditions. This "snapshot" view of land use is, of course, static and will not reflect those incremental changes that have occurred as a result of more recent development activities.

RESULTS OF THE LAND USE INVENTORY

The results of the existing land use inventory are portrayed in map and numerical formats. The full color, GIS computer generated maps portray the distribution of 13 land use categories as of 1999 within each of the five east end towns. The GIS was utilized to generate land use acreage data from the tax map parcel/land use data base. These data are grouped by land use category and local government jurisdiction.

The land area of the five east end towns encompasses approximately 221,000 acres. There are over 111,000 real property tax map parcels within this study area. The total upland acreage and number of real property tax map parcels by town are shown in Table 2. The town totals shown in both Table 2 and Table 3 include incorporated villages within the geographic boundaries of each town.

Table 2. Total Upland Acreage and Number of Parcels in Towns of Eastern Suffolk County - 1999

			Shelter			
	Riverhead	Southold	Island	Southampton	East Hampton	Total
Upland Acreage Town-wide	43,297	34,767	7,247	88,963	46,996	221,270
Number of Parcels Town-wide	13,461	18,217	3,552	50,262	26,131	111,623

Table 3 is a summary of the upland acreage by land use category for each of the five east end towns. Approximately 57% of the east end acreage is in the following three land use categories: recreation and open space (24%); agriculture (16%); and vacant (17%). Nearly three-fourths of the recreation and open space acreage and the vacant property is situated on the south fork, and almost three-fourths of the agricultural acreage is located on the north fork. Residential development comprises 27% of the east end acreage. Commercial, industrial and institutional uses each account for 2% of the study area acreage. Eight percent of the study area has been assigned to the transportation category, which consists primarily of road and railroad right-of-ways.

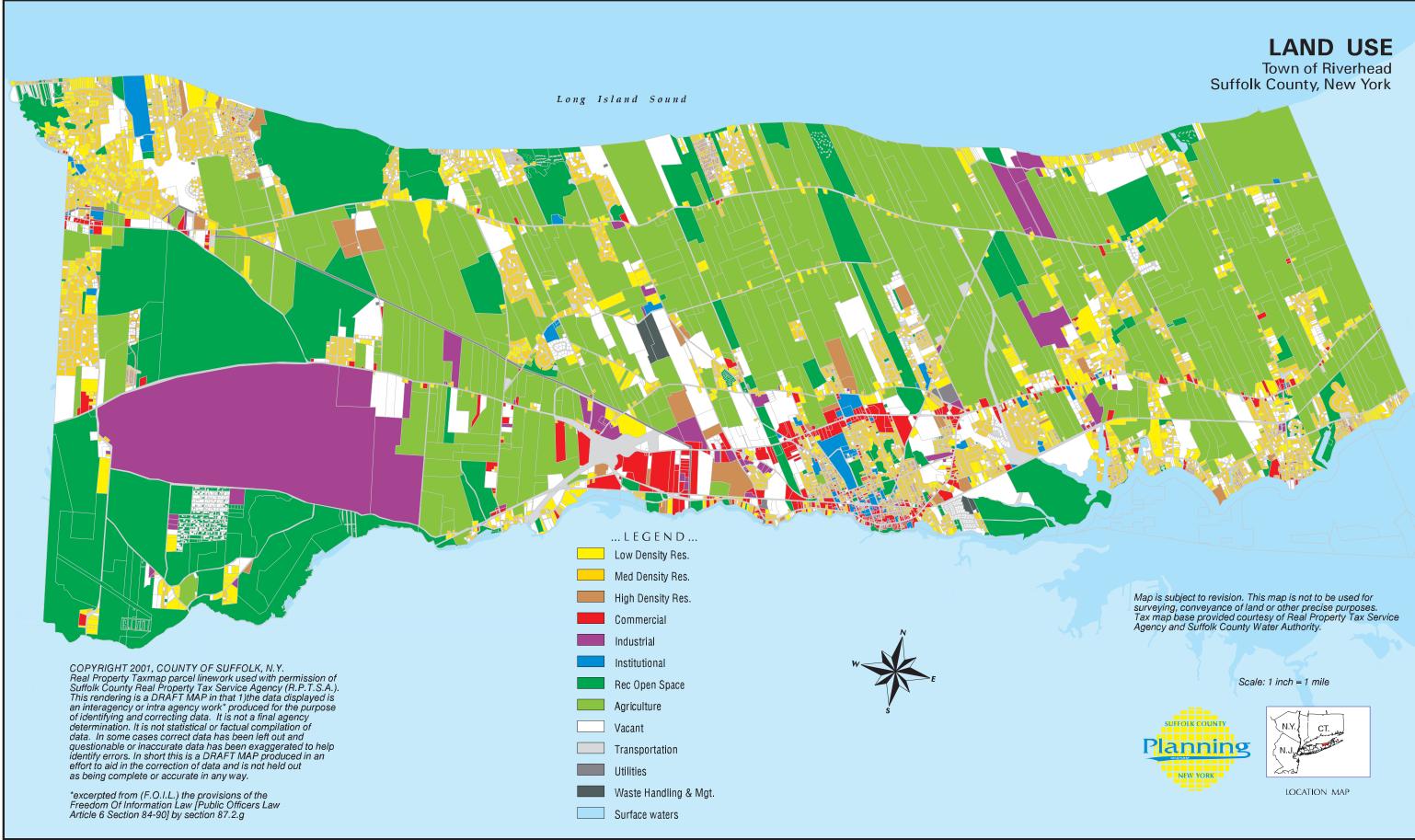
Table 3. Land Use Acreage by Town for Eastern Suffolk County - 1999

J ·	Riverhe	Southol	Shelter	Southampt	East Hampto		Percen
	ad		Island	on	n	Total	t
Low density residential	2,094	5,566	1,810	15,194	7,953	32,617	15%
Medium density residential	3,187	4,300	837	10,935	5,768	25,027	11%
High density residential	761	236	14	580	405	1,996	1%
Commercial	999	654	146	2,182	619	4,600	2%
Industrial	3,661	149	12	789	266	4,877	2%
Institutional	618	1,242	123	2,244	294	4,521	2%
Recreation & open space	8,510	4,105	2,617	24,041	14,872	54,145	24%
Agriculture	16,860	9,758	156	7,940	1,495	36,209	16%
Vacant	4,139	6,008	1,371	15,023	10,899	37,440	17%
Transportation	2,225	2,423	131	9,318	4,075	18,172	8%
Utilities	157	241	3	493	243	1,137	1%
Waste handling	86	85	27	224	107	529	0%
TOTAL	43,297	34,767	7,247	88,963	46,996	221,270	100%

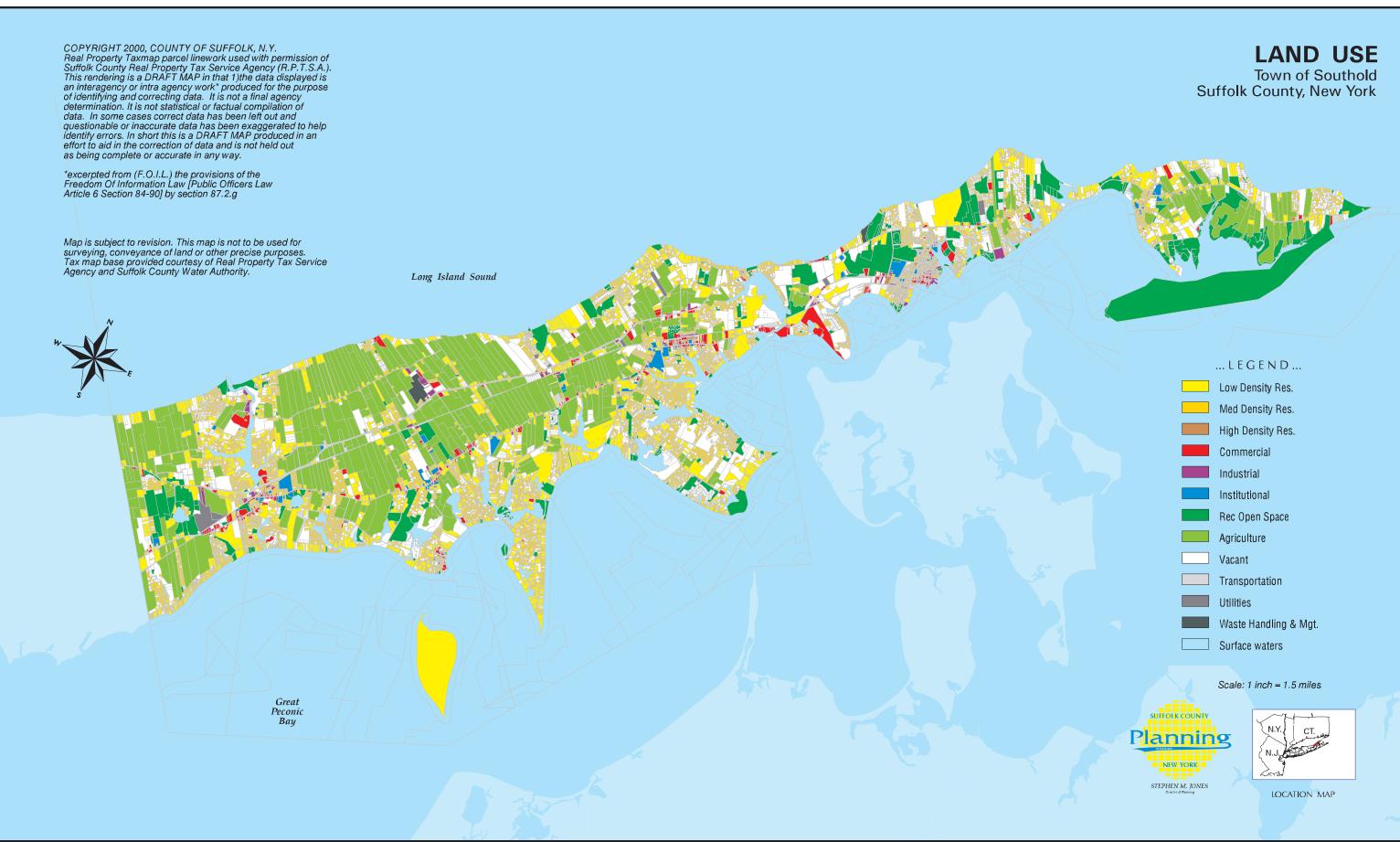
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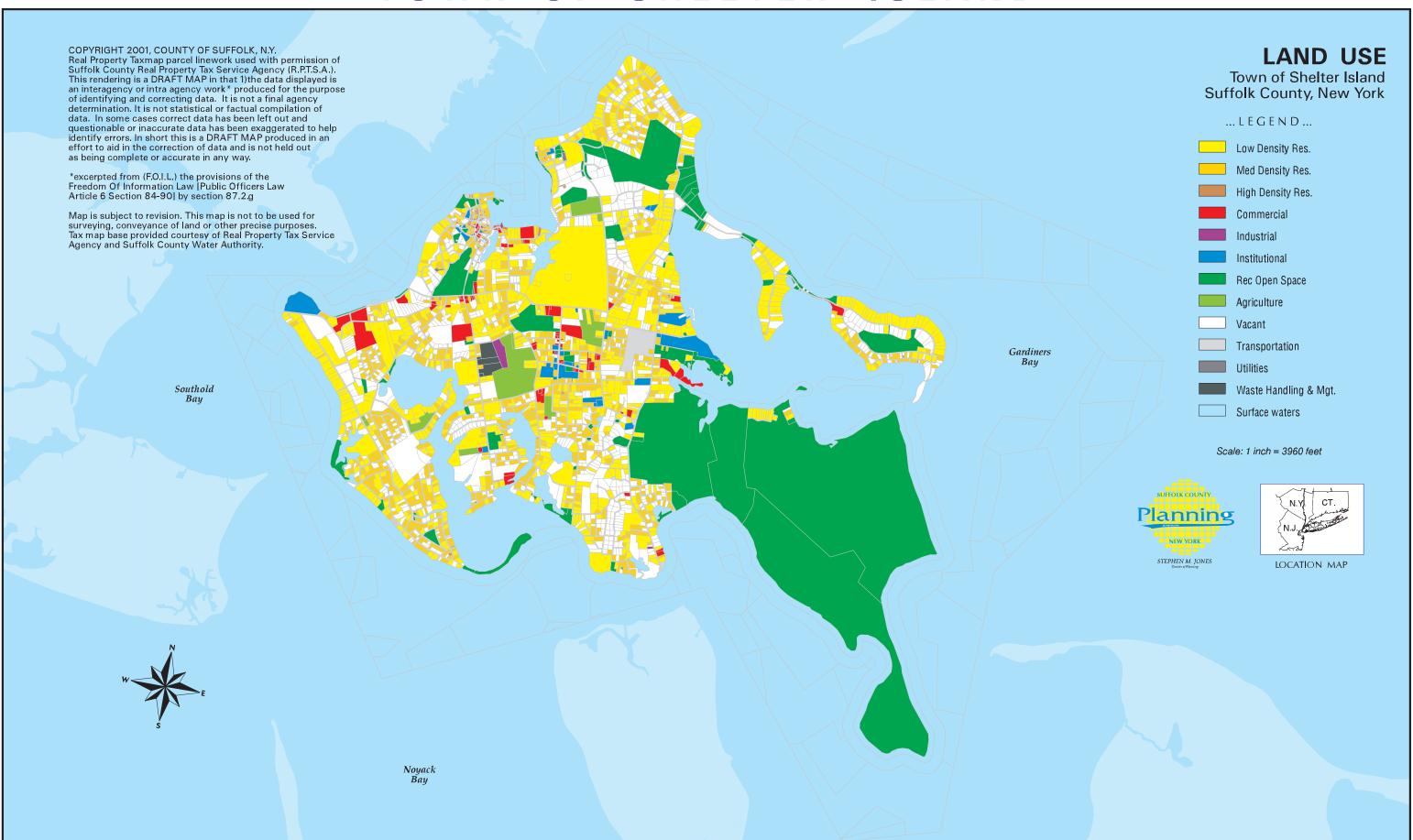
TOWN OF RIVERHEAD



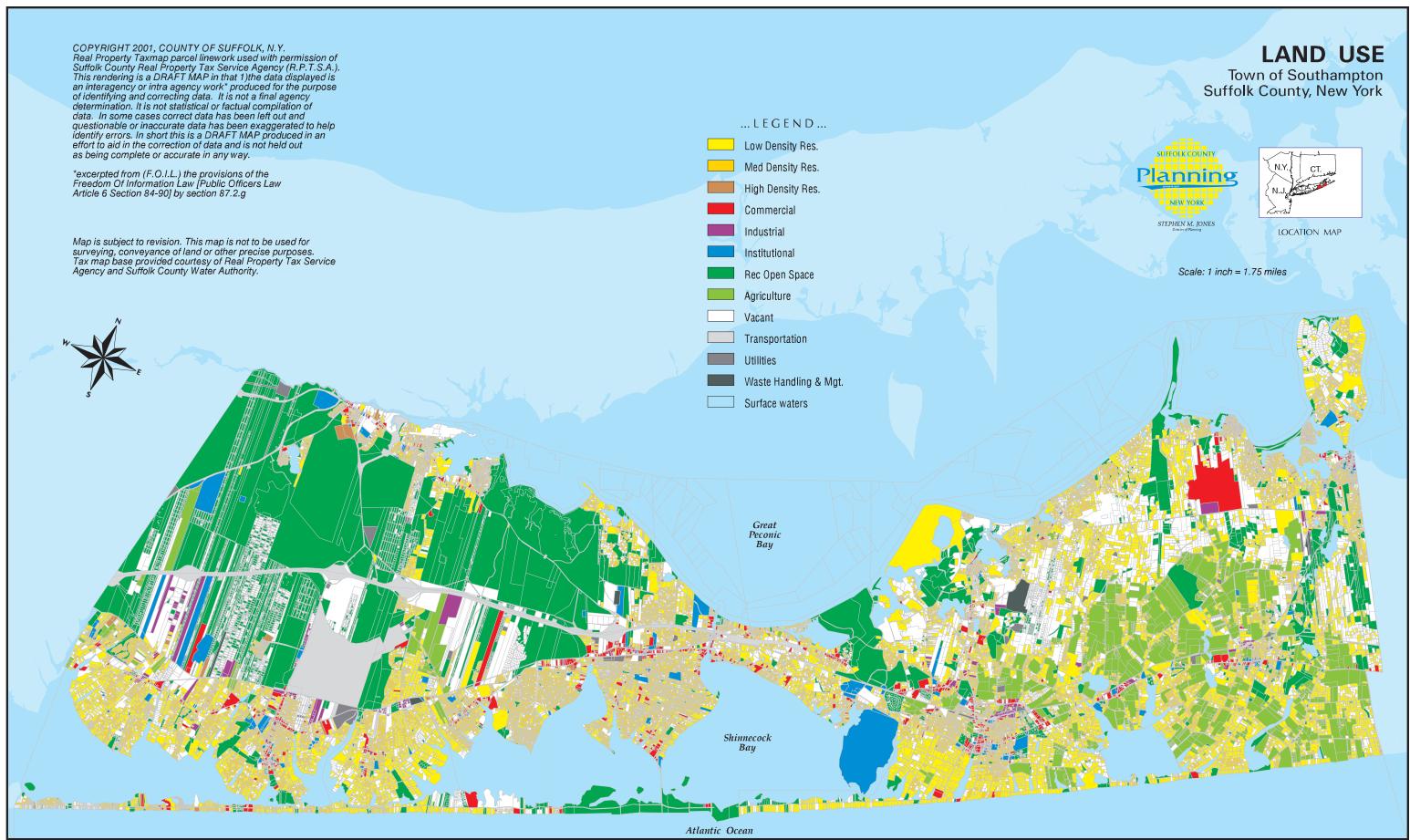
TOWN OF SOUTHOLD



TOWN OF SHELTER ISLAND



TOWN OF SOUTHAMPTON



TOWN OF EASTHAMPTON

