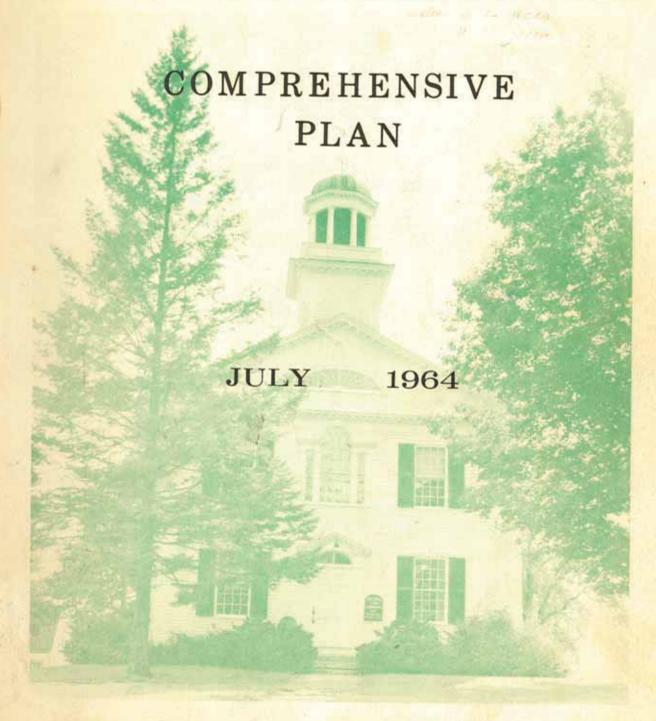
# CONNECTICUT



Prepared by: STELLING, LORD-WOOD and VAN SUETENDAEL

Prepared for: TOLLAND PLANNING and ZONING COMMISSION

CITY AND REGIONAL PLANNING - SITE PLANNING - URBAN RENEWAL - MUNICIPAL FACILITIES

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July 1964

Planning and Zoning Commission Town of Tolland Town Hall Tolland, Connecticut

Members of the Planning and Zoning Commission:

We take pleasure in submitting herewith our final report describing the Comprehensive Planning Program undertaken for the Town of Tolland.

This report contains data and materials to supplement the maps and plans also prepared as part of this program.

It has been a pleasure to work with the Commission and other Town officials, and we hope that the material contained in these plans and studies will form a substantial foundation upon which the Town of Tolland may develop to its fullest extent.

Very truly yours,

STELLING, LORD-WOOD AND VAN SUETENDAEL

Richard D. Cosgrove

RDC: bp

#### ACKNOWLEDGMENTS

This planning study has depended heavily upon the cooperation and assistance of many individuals and groups without which it would be much less effective, and to whom the consultants wish to express their sincere appreciation. While it is impossible to list every individual who has provided information or assistance, we should list here those who have continually and regularly made themselves available and to whom is due so much credit for this study:

#### Planning Commission

Walter Beaton, Chairman Robert Mc Hutchison Leon J. Chorches Gerald Lojzim Samuel Einstein

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Carmelo J. Zanghi, 1st Selectman Frank Kalas John Burokas Frank Merrill (former 1st Selectmen)

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Letter of Transmittal

Acknowledgements

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BASIC STUDIES
SECTION

TOLLAND REPORT

#### A. AREA OF INFLUENCE

The Town of Tolland located 20 miles east of Hartford on the Wilbur Cross Highway was incorporated in 1715. Originally purchased from Indians in the area around 1713, the number of families settled grew to 28 by 1720.

Growth was slow, but steady and during the early part of the 19th Century, Tolland Village was the center of trade for Tolland County. There were not only stores, shops and factories, but a prosperous bank, the home office of a flourishing insurance company and a well known academy. The first newspaper published in the County came off the printing press of Clapp and Robbins in 1830. And Henry Underwood, the pioneer belt manufacturer in the United States started his business in 1845.

In 1807 the first stage coaches from Hartford to Boston passed through Tolland. With the mail route becoming a great thoroughfare by 1822, Tolland Street was the original place for holding agricultural fairs in the county.

As the nineteenth century reached the half-way mark, two important developments took place which were to have serious consequences in Tolland. Because of the superior water power afforded by Snipsic Lake, business interest began to center at Rockville instead of Tolland, and with the construction of the railroad to Springfield from Hartford, the principal mail route from New York to Cities in the northeast was turned from Tolland.

The withdrawal of business capital investment caused a decrease in population from 1698 in 1830 to 1169 in 1880. The rural residential charm which characterizes Tolland today, became very much in evidence at this time. As reported in a magazine in 1888 " of the many villages scattered throughout New England, few boast of such elevated location, beautiful and well kept streets, romantic beauty and absence of disfiguring dwellings as Tolland."

#### A. Area of Influence (continued)

There are many buildings located on the Tolland Green which illustrate the development of architecture from Colonial days to the present. As indicated in a report prepared by the Tolland Historic Study Committee in 1964" fortunately they have all retained their original beauty, have been expertly restored and need only to be preserved".

The Tolland Public Library built in 1822 as the Tolland County Courthouse is prized by Connecticut historians. It is one of only five buildings in the State cited as important examples of early civic architecture. The Savings Bank of Tolland was chartered in 1841. The original bank building, recently remodeled and enlarged, stands on the same site on which it was built in 1829.

It wasn't until after World War II that Tolland and many of its neighboring communities had any sizeable increase in population. This growth, which is presently continuing, was due in part to the expansion of the limited access highway system and the single family housing boom. Tolland offered vacant land suitable for residential development with a direct express highway connection for commuters to the Hartford Labor Market Area.

For the purpose of this study an area of influence has been determined for the Town of Tolland, consisting of communities that have mutual boundaries with Tolland. They are Coventry, Ellington, Mansfield, Rockville, Stafford, Vernon and Willington. (See Figure #1) The substantial rate of population growth mentioned previously can be seen in the following table:

## TOLLAND, CONN.

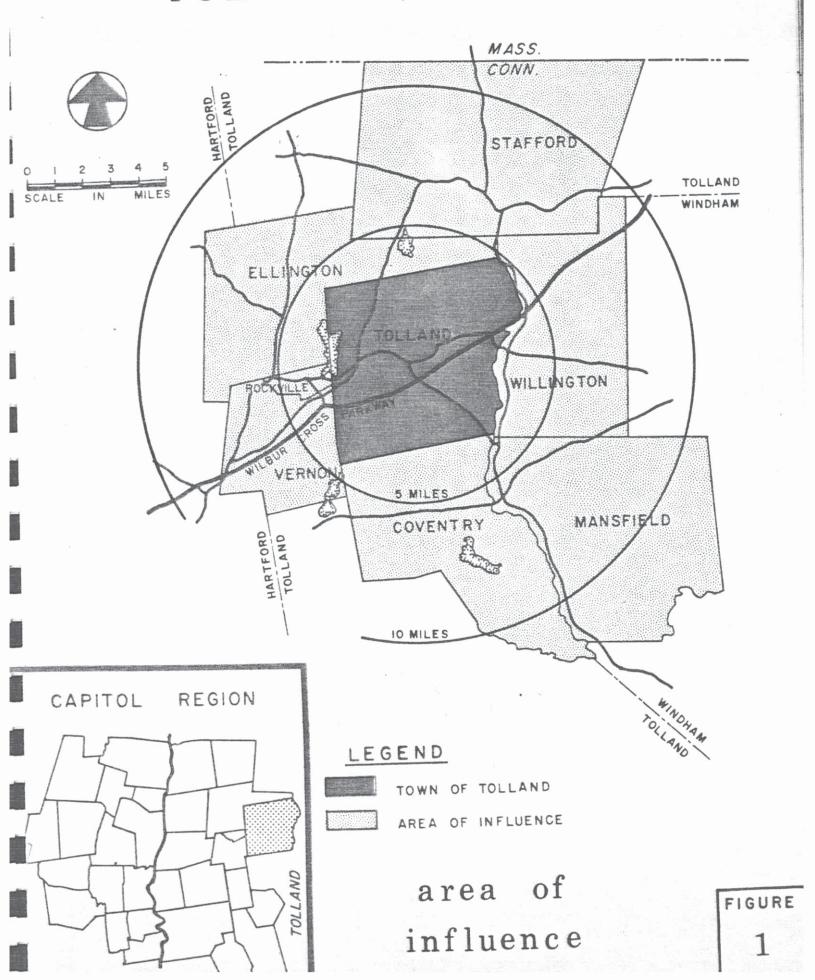


TABLE I Population of Area of Influence Towns 1930 - 1960

TOWN	1930	1950	1960	% Increase 1930-1950	% Increase 1950-1960
Coventry Ellington Mansfield Rockville Stafford Springs Tolland Vernon Willington	1,554 2,253 3,349 7,445 5,949 1,064 8,703 1,213	4,043 3,099 10,008 * 8,016 6,471 1,659 10,115 1,462	6,356 5,580 14,638 * 9,478 7.476 2,950 16,961 2,005	160. 2 37. 5 198. 8 7. 7 8. 8 55. 9 16. 2 20. 5	57. 2 80. 1 46. 3 18. 2 15. 5 77. 8 67. 7 37. 1
Total	31,530	44,873	65,444	42.3	45.8
State Total	1,606,903	2,007,280	2, 535, 234	24.9	26.3

Source: U. S. Census of Population

An analysis of the above table with relation to the Area's land area will indicate an average population density of 244.2 persons per square mile. This compares with a state average of 517.5 ( U.S. Census of 1960 ). It is interesting to note that Willington and Tolland had the lowest averages with 58.8 and 73.0, respectively.

Connecticut State Department of Health Estimated Population Projections for 1964, illustrate the continuing growth felt by the Area Communities. From 1960 - 1964 the area grew by some 8,400 persons or a rate of growth of 15%. Tolland during this period went from a population of 2,950 in 1960 to 4, 100 in 1964 or a rate of growth of 39%.

Residents of University of Connecticut included

#### A. Area of Influence (continued)

This is an area that is sparsely settled with Stafford Springs and Rock-ville being the only urban centers. Forest covers most of the Area of Influence with agriculture only locally important. A north-south line running through Ellington and Vernon separates the Towns west of the line that lie in the Connecticut River Valley from those east of the line that are part of the Eastern Highlands.

The Wilbur Cross Highway which runs through the Area of Influence in a generally east-west direction exerts a major influence upon the future development of the area. It is the only major limited access highway in this general region of Connecticut and provides a direct link between Hartford and Boston via the Massachusetts Turnpike.

Tolland as well as Rockville, Ellington and Vernon are members of the Capitol Region Planning Agency consisting of 30 municipalities in the Greater Hartford Area (See figure #1). This agency is charged with the responsibility of developing a plan to guide the Regions future growth. In 1963 the Agency approved, in principle, the concept of the Linear Plan. Basically this plan provides for the clustering of intense development in the Connecticut River Valley. Tolland's neighbors in the Region voted for the Linear Plan, with Tolland's representatives favoring development along the lines expressed by existing zoning practices.

The Linear Plan as it relates to Tolland delegates large areas of land in sections where the topography itself may rule out intense development to Open Space and most of the remaining area to low density residential. Only minor, with reference to regional goals, industrial and commercial activities are forecast.

The CRPA, in conjunction, with the Connecticut Highway Department made a coordinated attempt to study the total transportation requirements of the Region. This study called "HAMETS" projected a major highway network indicating existing highways, planned additions and assumed additions to the system. One assumed addition has a great effect upon Tolland and its Area of Influence. Namely, the outer suburban belt which would cross Coventry, Tolland and Vernon. In Tolland this might provide more con-

#### A. Area of Influence (continued)

venient access to the Industrial Area located on the Vernon Town Line. Any definite location, however, remains to be determined in the future since the assumed additions are projected for the year 2000.

Additional items relating to Economic Factors, Population and Utilities that relate to the Area of Influence will be found in later sections of the Basic Studies Section of the Report.

#### B. PHYSICAL ENVIRONMENT

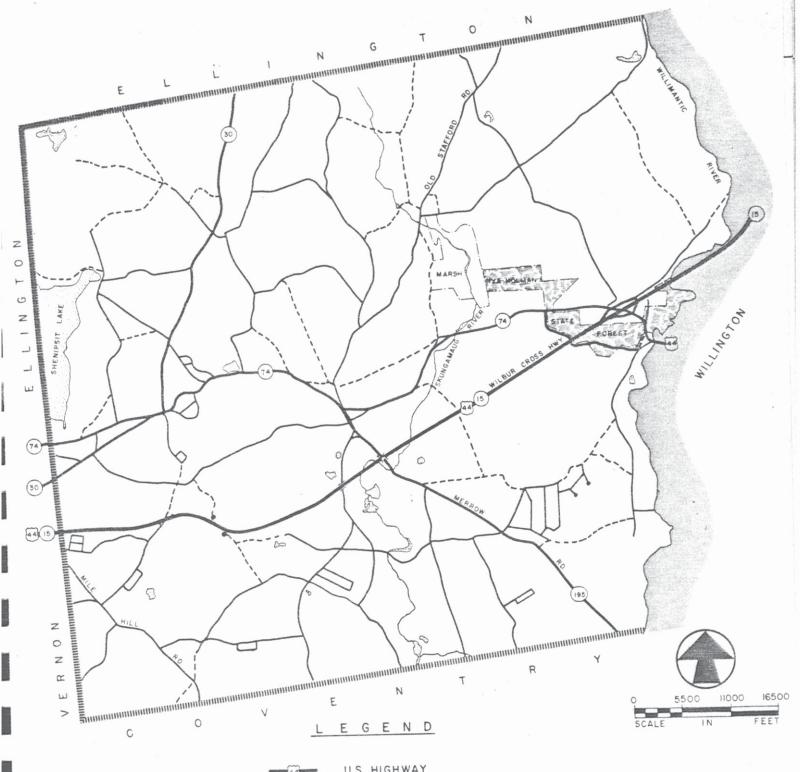
Tolland, which lies within the Eastern Uplands Area of the State, is approximately rectangular in shape and occupies an area of 41.0 square miles. (See figure #2) The topography is rugged and high elevations are found along the ridge running northward through the central section of the Town. The Kendall Hill area contains the highest altitude with a reading of 971 leet.

The Willimantic River and its tributary, the Skunkamaug River, both running North to South, dissect and drain the area. On the western boundary is Shenipsit Lake which covers an area of 550 acres of which more than half is located in Tolland.

Within the Town are many tracts of land either owned or leased by the State of Connecticut. The largest State owned tract is the Nye-Holman State Forest which consists of 301 acres devoted to fishing, hiking and shooting activities. The remaining tracts of land are under the control of the State Board of Fisheries and Game.

The Board is primarily concerned with the Tolland Marsh where hunting is permitted at the discretion of the land owner and the Charter Marsh which is managed by the State as a game refuge.

# TOLLAND, CONN.





U.S. HIGHWAY

STATE HIGHWAY

IMPROVED TOWN ROAD

UNIMPROVED TOWN ROAD

FIGURE

#### B. Physical Environment (continued)

Both the Willimantic and Skunkamaug Rivers have permanent and temporary easements along their banks. Both rivers were stocked annually until 1964 and Trout fishing was considered by the Board to be from good to excellent. At present the Willimantic River is considered to be polluted and stocking has ceased. Stocking will continue in the Skunkamaug as long as the waters are kept pure and unpolluted.

The long-range plans of the Board of Fisheries and Game call for the preservation of the Marsh Lands as a game preserve, and if possible, additional marsh land acquisition is planned.

Of the total Town area of 26,240 acres 13.2% is occupied by developed land, land in reserve and land in agricultural use. This item is further detailed under the section on Existing Land Uses. The remaining 87.8% which is vacant is broken down into 75.9% suitable for development and 11.9% unsuitable for development. This is illustrated in the following table.

TABLE II

SUITABILITY OF VACANT LAND FOR URBAN DEVELOPMENT

( As Determined By Slope Conditions )

ITEM Total Vacant Land	Acres 23,060	% Vacant Land 100	% Total Land 87.8
Vacant Suitable 0 - 5% slope 5 - 10% slope 10 - 20% slope	19,920	86.4	75.9
	8,920	38.7	34.0
	7,500	32.5	28.5
	3,500	15.2	13.4
Vacant Unsuitable	3,140	13.6	11.9
20% plus slope	1,680	7.3	6.4
Unsuitable*	1,460	6.3	5.5

Source: Interpretation of U. S. G. S. Topographic Mapping (1963)

\* Unsuitable land includes all land subject to flooding, swamps and areas
of peats, muck or surface bedrock.

#### B. Physical Environment (continued)

To supplement Table II which is primarily concerned with data on slopes, the United States Department of Agriculture, Soil Conservation Service, has information available on soil associations consisting of combinations of different soils. The critical factors in the General Soil Map for Tolland include the drainage of the soil and its permeability. An examination of the characteristics of any association will indicate where problems might likely occur in excavation, road construction and septic seepage.

Analysis of the Tolland General Soil Map adds support to the findings summarized in Table II with minor exceptions. It is the combination of both slope and soil conditions which are the essential determining factors in the review of vacant land as to its suitability for urban development.

The general case in the analysis of the soil map was to find poor soil conditions where either steep slopes or wetlands were encountered.

Large vacant areas remaining that are most suited for urban development are generally found in the eastern part of Tolland and may be described as follows:

- a) The land located between Buff Cap Road and the Willimantic River.
- b) The land located within the triangle formed by the Wilbur Cross Highway, Merrow Road and the Willimantic River.
- c) The land north and west of Route 30, and east of the former trolley right-of-way located northwest of Lake Shenipsit.

#### C. EXISTING LAND USES

Many responses to a Planning Questionnaire distributed throughout the Town indicated that the presence of a "rural atmosphere" provided

#### C. Existing Land Uses (continued)

the stimulus for Tolland's attraction to new comers. This is borne out by field studies of the acreage devoted to each category of existing land use. Less than 6% of the total acreage as listed in the Tabulation of Existing Land Use, Table III, and itemized in categories II - VIII is under intensive development.

TABLE III

TABULATION OF EXISTING LAND USE

	Category	Area In Acres	% of Total
II III IV V VI VIII IX X XI XII	Residential - Medium Density Residential - Low Density Commercial Industrial - Intensive Industrial - Open Utilities and Transportation Institutional & Gov't - Intensive Institutional & Gov't - Open Recreational - Intensive Agricultural Undeveloped Lands	450 700 20 15 80 45 40 125 1,085 620 23,060	1.7 2.7 0.1 0.1 0.3 0.2 0.2 0.5 4.1 2.3
	Total Land	26,240	100%

Source: Field Study 1963

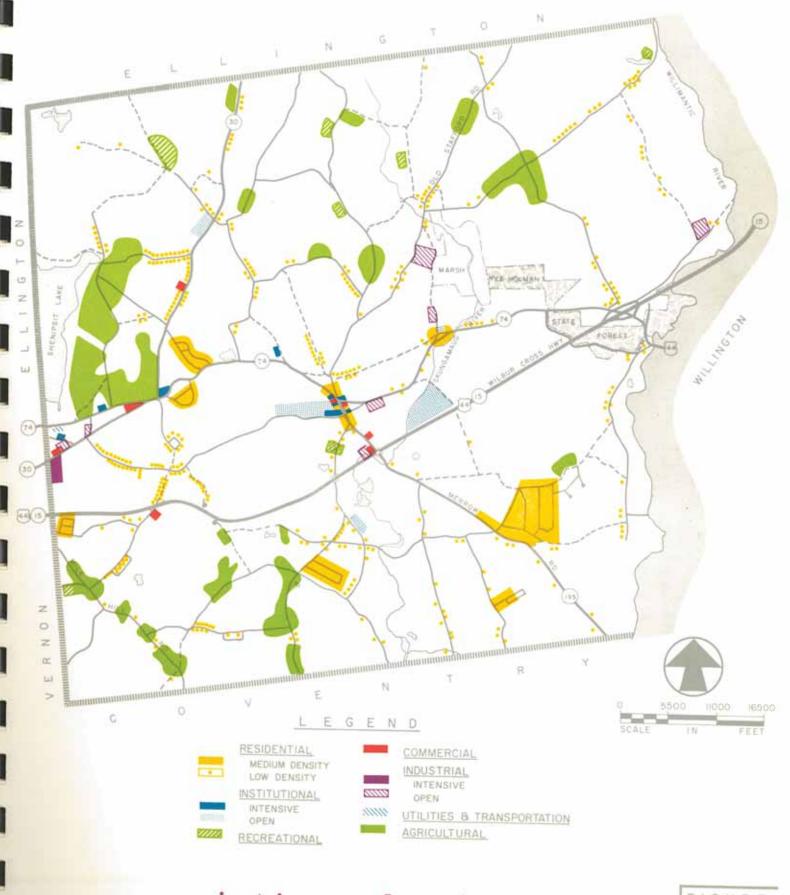
To permit the compilation of land use conditions on a state-wide basis the Connecticut Land Use Program Categories have been used to describe the various types of development. Category I - Residential High Density consists of areas containing two-family residences, multifamily apartments, etc. which are not found in Tolland. Category II - Residential Medium Density consists of areas containing subdivisions

#### C. Existing Land Uses (continued)

or continuous development on two sides of a street represented by the Country Hills subdivision off Anthony Road and the Tolland Green section. Category III - Residential Low Density consists of scattered residential development which is true of most areas in Tolland along streets and highways. Category IV - Commercial consists of retail trade, service trade, wholesale trade, commercial recreation, financial services, etc. This is best characterized by the Tolland Service Center, Earleen Grove and the Tolland Savings Bank. Category V -Industrial Intensive consists of the manufacture, fabrication, assembly, etc. of products. The Burroughs Corporation Plant illustrates this category. Category VI - Industrial Open consists of areas devoted to mining, storage junk yards and jumps which is represented by the Town Dump and a few automobile junk yards. Category VII - Utilities and Transportation consists of public and semi-public facilities for providing community material needs and services. This covers the Connecticut Light and Power Company office and the Tolland Acqueduct Company Land. Category VIII - Institutional and Government - Intensive consists of Government office and service structures illustrated by the Town Hall and the 2 Elementary Schools. Category IX - Institutional and Government - Open consists of sizeable open areas related to uses listed under Category VIII and would be represented by the school recreation areas and cemeteries. Category X - Recreation -Intensive consists of parks, playgrounds, etc. which is illustrated by the Nye-Holman State Forest and sportsman's clubs. Category XI -Agricultural consists of cropland, livestock, etc., which is represented by the farms scattered throughout Tolland. Category XII - Undeveloped Lands has been outlined under the Physical Environment section of this report.

Figure #3 graphically illustrates the areas devoted to each category of existing land use. Of particular interest in addition to the lack of extensive commercial and industrial development is the scatterization of residential development. With the lack of public water and sewers, except for minor areas of Tolland, as outlined under the Utilities Section of the Report, and the division of Town by the Wilbur Cross Highway, residential growth seems to have occurred not as a result of the extension of previous areas but haphazardly where topography and financial opportunities presented themselves.

# TOLLAND, CONN.



existing land use

FIGURE

#### D. POPULATION

Tolland's population from the time of the American Revolution to the end of World War II remained within the range of 1000 - 1700. It reached peak totals during the years of early industrialization in New England. With the growth of assembly line production techniques near the end of the 19th Century industries in Tolland were forced to close and the population fell.

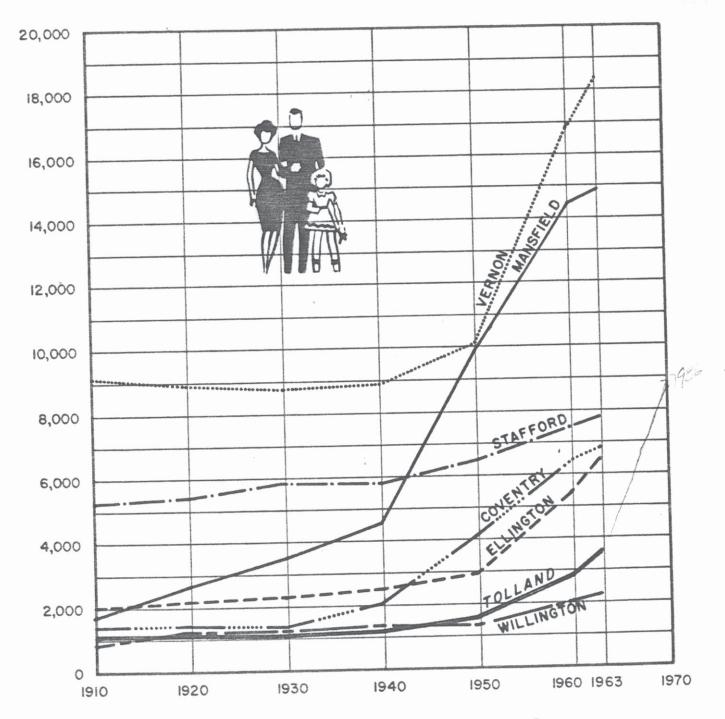
From the end of World War II to the present the population of Tolland has increased at a high percentage rate. In the decade between 1950 and 1960 population increased from 1659 to 2950 or a percentage increase of 77.8%. It is interesting to note that Tolland County had the largest proportionate growth in population in New England during the 1950's. The Census Bureau figures report that the county's population grew by 53.7%. (see figure #4)

Population growth is the result of two factors:

- a.  $\frac{\text{Natural increase}}{\text{deaths}}$  ( the excess of births over
- b. <u>Migration</u> ( the movement of people either in or out of the community )

The following table indicates that 68.6% of Tolland's increase in population from 1950 to 1960 was due to net migration:

# TOLLAND, CONN.



population trends

TOLLAND AND AREA OF INFLUENCE 1910 - 1963

FIGURE

## D. Population (continued)

TABLE IV

#### POPULATION DATA

## TOLLAND AND AREA OF INFLUENCE

TOWN	1960 Pop.		% change 1950-60	Increase	Net	Increas Natural	Net Migration
Coventry Ellington Mansfield* Stafford Tolland Vernon Willington Total State	6, 356 5, 580 14, 638 7, 476 2, 950 16, 961 2, 005 65, 444	4,043 3,099 10,008 6,471 1,659 10,115 1,462 44,873	15. 5 77. 8 67. 7 37. 1 45. 8	1,145 858 1,318 892 405 2,381 215 7,214	1, 168 1, 623 3, 312 113 886 4, 465 328 11, 895	49.5 34.6 28.5 88.8 31.4 34.8 39.6 43.9	50.5 65.4 71.5 11.2 68.6 65.2 60.4 56.1

\* Includes University of Connecticut
Source: University of Connecticut Agricultural Experiment Station Population Report

One major factor, the general overall healthy economic climate in the Metropolitan Hartford area is responsible for this substantial population growth. Contributing factors, most responsible for Tolland's high percentage of increase due to migration, have been the availability of vacant land suitable for development, and the convenient access to the Hartford Labor Market Area. This can be illustrated by the large scale subdivision development that recently has occurred in the Merrow Road vicinity. Approximately 200 homes have been occupied in this area since the 1960 U. S. Census was taken. This has been largely responsible for the increase of 1150 persons to a total of 4100 in 1964.

#### D. Population (continued)

The Population Distribution Map (see figure #5) indicates that there are some 8 concentrations of housing containing approximately 30% of the total town population. The remaining 70% is scattered throughout Tolland. The afore-mentioned housing areas are outlined in detail under the Housing Section of this report.

TABLE V

POPULATION BY AGE & SEX GROUPS - 1960

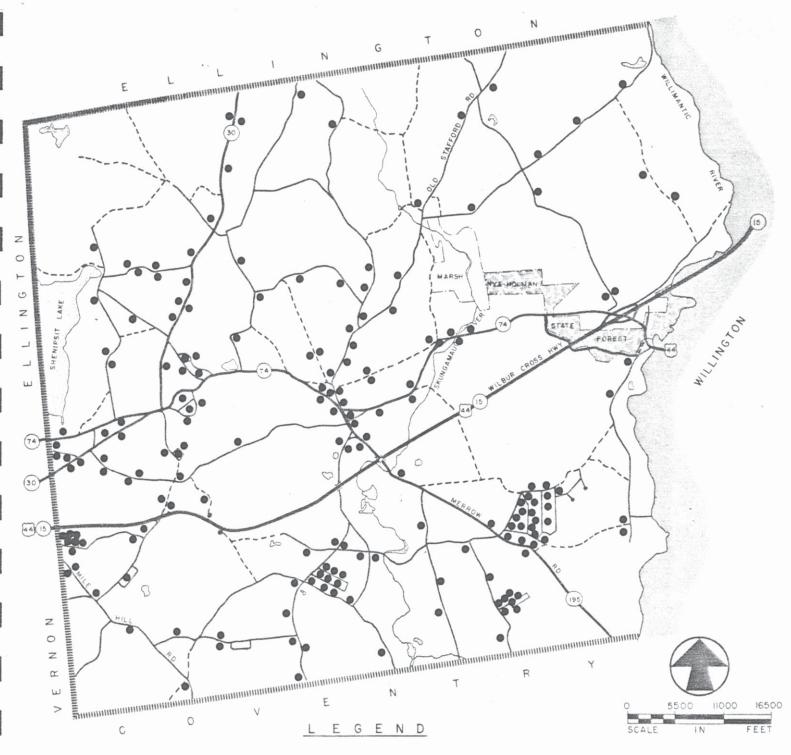
FOR

CONNECTICUT, CAPITOL REGION AND TOLLAND

	Con	Connecticut Capitol Regio		itol Region	Tolland	
	Male	Female	Male	Female	Male	Female
Children						
0-14	381,300	365,900	75,500	73,000	524	504
%	30.6	28.4	30.6	28.4	35.2	34.6
Student - Young						
Worker		;				
15-24	149,600	155,900	28, 200	31, 100	139	153
%	12.0	12.0	11,4		93	10.6
Prime Workers						
25-44	345, 400	359,900	70,400	71,900	434	426
%	27.8	27.9	28.5	27.9	28.8	29.2
Mature Workers						
45-64	260,600	273,900	52,600	55,500	291	263
%	20.9	21.2	21.3		19.5	18.0
Retired						
65 and over	107,200	135,400	20,200	26,100	109	107
%	8.7	10.5	8.2	10.1	7.2	7.6
Total	1,244,200	1,291,000	247,,000	257,600	1,497	1,453
%	100	100	100	100	100	100

Source: U.S. Census

## TOLLAND, CONN.



EACH DOT REPRESENTS 20 PERSONS

FIGURE

#### D. Population (continued)

According to the 1960 census data Tolland's population was divided 50.4% male and 49.6% female, with 93% being native born white, 7% foreign born and 0.6% nonwhite. The previous table, Table #5 shows the percentage breakdown in age groups of these totals in comparison with the State of Connecticut and the Capitol Region:

An analysis of the afore-mentioned table and a knowledge of housing conditions in Tolland explains the reason why Tolland has a higher percentage of the population in the children category and a lower percentage in the retired category than either the State or the Capitol Region. Tolland's overall population increase has been in the numbers of young families who have purchased homes in new subdivisions.

Future population projections will be examined under the Comprehensive Planning Section of this Report.

#### E. HOUSING

The 1960 United States Census indicated that Tolland had a total of 905 dwelling units, an increase of over 90% above the 1950 total of 528. Evidence of this substantial increase is found in the following table:

#### TABLE VI

IEAR MOVED	TIVIO DITIOOTOTO	
	No. of Units	%
March 1960 - 1963	250	24
1958 - March 1960	183	17
1954 - 1957	261	25
1940 - 1953	233	22
1939 or earlier	133	. 12
TOTAL	1,060	100

CAR MOVED INTO STRUCTURE

Source: U.S. Census of 1960 and field survey

#### E. Housing (continued)

From the aforementioned table you find that 66% of the residents moved into their homes in the period between 1954 - 1963. Almost all of the homes moved into were new ones recognizing the fact that only 31 homes were vacant and available in 1960. A review of home building construction in the area, utilizing the building permit records, shows that for the same period of time the number of permits granted approximately averages 50 a year. However, in 1962 the number was considerably above the average and stood at 137.

The 1960 census also revealed the preponderance of single family occupancy in Tolland. A breakdown of housing occupancy characteristics is listed below:

TABLE VII
RESIDENTIAL STRUCTURES

Units in Structure	No. of structures	%
1	870	97
2	20	2
3 and 4	15	1
5 and 9	0	0
10 or more	0	0
TOTAL	905	100%

#### E. Housing (continued)

Another area of housing information is the condition and plumbing data from the 1960 U.S. Census of Housing. Three broad categories have been used to represent various levels of housing quality.

- 1. Sound housing is defined as that which has no defects, or only slight defects which are normally corrected during the course of regular maintenance.
- 2. Deteriorating housing needs more repair than would be provided in the course of regular maintenance.
- 3. Dilapidated housing does not provide safe and adequate shelter.

The following table provides a summary of the Housing conditions found in Tolland:

TABLE VIII

#### CONDITION AND PLUMBING

Category	No. of Units	%
Sound With all plumbing facilities Lacking only hot water	818 764 10	90
Lacking other plumbing facilities Deteriorating With all plumbing facilities Lacking only hot water Lacking other plumbing facilities	44 44 27 4	. 5
Dilapidated	43	5
TOTAL	905	100

Source: 1960 U.S. Census

The results of Table VIII are to be expected considering the recent construction of the greater percentage of homes and the preponderance.of new homes.

#### F. NEIGHBORHOODS

The minimum planning unit in a community is the neighborhood. It is the area within which residents may all share the common services, social activities and facilities required in the vicinity of the dwelling. Usually for planning purposes the extent of the neighborhood will be determined by the service area of an elementary school.

Due to the fact that Tolland has a low density of population and centrally located elementary schools, it is necessary to outline additional factors for the delineation of neighborhood boundaries. These factors which exhibit a certain degree of cohesion are topography, sociological history and physical development.

Of the eight neighborhoods listed below, six are essentially large subdivisions (approximately 30 homes constructed in depth) of recent construction. The remaining two, the Tolland Green and Skungamaug Village constitute the two largest areas of original home construction in Tolland.

TABLE IX
NEIGHBORHOOD ANALYSIS

	Neighborhood designation	No. of Units	Type	Age
I II IV V VI VII VIII	Anthony Road Baxter Farms Garnet Ridge Lakeview-Crestwood Loehr Road Lower Grant Hill Skungamaug Village Tolland Green	119 37 27 43 34 36 15	Single Family	Recent Recent Recent Recent Recent Recent Historical
	TOTAL Source: Field Survey 1962	342		

#### F. Neighborhoods (continued)

As indicated previously the aforementioned eight neighborhoods constitute, in dwelling units, approximately one-third of the overall Town total.

Table VIII in the Housing Section of the report indicated that 90% of the housing according to the U.S. Census for 1960 was sound in Tolland. This figure is even higher today in 1964 due to the extensive new development that has occurred. All eight neighborhoods listed in Table IX may be considered to have sound housing with adequate plumbing facilities.

The Tolland Green Area is the only neighborhood containing a school or a church. In addition to the two elementary schools and the Congregational Church, the Town Hall, library and post office are also located in this area. Future plans call for the construction of a Catholic church on the Green between Route 74 and the Old Stafford Road.

In 1964, the Historic District Study Committee made a report recommending the establishment of an Historic District for the Tolland Green Area in accordance with the State Legislation. The proposal to create the District was defeated by a vote of the property owners within the proposed district.

#### G. STREET AND HIGHWAY SYSTEM

The only means of transportation in Tolland is its streets and highways. Route 15 which bisects the Town in an east west direction provides the major influence. Other State Highways are Route 30, Route 31, Route 74 and Route 195.

There are 79.2 miles of roads in Tolland of which 55.2 are improved. State aid for roads in Tolland amounted to \$64,434. The following table compares the present situation with the years 1955 - 1956:

TABLE X

# CONNECTICUT TOWN AID GRANTS FOR TOLLAND ROADS

(1955 - 1956 ---- 1962 - 1963)

	Miles of Road			Dollars Allotted		
	Unimp'd	Improved	Total	Unimp'd	Improved	Total
1955-1956	31.0	45.6	76.6	\$17,267	\$33,555	\$50,822
1962-1963	24.0	55.2	79.2	\$18,489	\$45,945	\$64,434
	7.0	9.6	2.6	1,222	12,390	13,612

Source: Town Aid Section of C. H. D.

At the present time the decision to pave the unimproved miles of road is dependent upon the action of the Town Meeting. The above table would indicate that approximately 1 mile of roadway is improved every year with Town aid funds. The remaining 24.0 miles of unimproved roads are found mostly in the northern sections of Tolland where the rough terrain has limited extensive development.

The Connecticut State Highway Department provides data on both traffic flows and road ratings for State Highways. In Tolland this information is available for Routes 15, 30, 74 and 195. The following tables summerize this data:

#### TABLE XI

# TRAFFIC FLOWS ON STATE HIGHWAYS WITHIN THE TOWN OF TOLLAND (AS OF 1960)

Route	Location	Annual Average Daily Traffic
Rt. 15	Tolland	16,900
Rt. 30	Tolland	2,400
Rt. 74	From Vernon, Tolland Town Line to Westerly	2, 200
	Junction of Rt. 30	2,500
Rt. 7,4	From Easterly Junction of Rt. 30 - 2.08 miles	
	Northerly	1,300
Rt. 74	From 2.08 miles Northerly of Rt. 30 to Merrow	
D. 105	Road	600
Rt. 195	Merrow Road	900

Source: Connecticut State Highway Department

Score of 100 is perfect.

A more recent traffic count (1963) on Route 195 in the vicinity of its intersection with Route 32 in Willington indicates that traffic has doubled. The increase in home construction located on either side of the highway and the increase in University of Connecticut oriented traffic has been responsible for this condition. No additional counts have been taken on the other Routes.

## TABLE XII RATINGS OF TOWN ROADS

lue
7
5
3
6
5
5
5

December 31, 1958

G. Street and Highway Systems (continued)

Above ratings considers:

Surface 25 pts.

Maintenance
Cost 12 pts.
Accident Rate 30 pts.
Site Distance 20 pts.
Curviture 13 pts.

Source: Connecticut Highway Department (State)

An analysis of the traffic flow data and ratings of State Roads in Tolland indicates the following:

- Route 74 from the Vernon Town line to its intersection with Route 30 a distance of approximately 1 1/4 miles has both the highest traffic volume and the lowest rating of any road with the exception of the Wilbur Cross Highway (Route 15).
- Route 195 (Merrow Road) has the highest rating with next to the lowest volume. The traffic volume data was based upon a survey in 1960.

The division of Tolland by the Wilbur Cross Highway (Route 15) has serious implications considering that Tollands two fire stations and two elementary schools are located on the North side, while 40% of the population lives on the south side. At present there are three under or overpasses of Route 15. However, there is a distance of approximately 3 miles from the western boundary line of the Town to the first crossing. To alleviate this situation a firegate has been erected in the median strip of the Highway in the vicinity of Mountain Spring Road.

#### G. Street and Highway Systems (continued)

A bill has been submitted to the General assembly for the construction of either an overpass or an interchange at this point. To date no action has been taken. The "Hamets" proposal, mentioned in the Area of Influence Section of this Report, which suggests an outer suburban highway belt around Hartford, will have a great bearing upon the action to be taken on this matter.

Plans already in preparation by the Connecticut Highway Department include the widening of Route 15, the refinement of a number of curves and the necessary reconstruction of affected bridges. This is expected to take place some time after 1970.

Subdivision Regulations adopted in 1963 govern the construction of new roads both in their layout and design. The requirements are closely related to the Recommended Highway Design Standards for local roads constructed with Town Aid Funds for traffic volumes ranging from 500-1000 cars a day. (Connecticut Highway Department - Geometric Highway Design Standards.) The right-of-way required is 50 feet and the pavement width is 26 feet.

#### H. UTILITIES

### Water Supply and Sewage Disposal

Almost 95% of the water service in the Town of Tolland is supplied through the use of private wells. The remaining 5% is provided by both the Tolland Aqueduct Company and the Rockville Aqueduct Company.

The Tolland Aqueduct Company with a small reservoir, approximately 3/10 acre, located north of Route 74 in the Polk Hill Brook area, has 68 customers or a population of about 200. The system is gravity fed with a chlorination treatment. The total consumption is 17,100 GPD or 66 GPD/per capita.

#### H. Utilities (continued)

A recent inspection of the area (1963) by the Connecticut State Department of Health indicated that the safe yield capacity of the reservoir was 10,000 GPD. Since the safeyield is not wholly adequate, steps have been taken to develop a well supply to supplement the surface water course. The Tolland Aqueduct Company has engaged consultants to assist them in the design of an additional system. It has been proposed that the Torry Road area be considered and recently a pipe line was laid down the road.

The Rockville Aqueduct Company which has a large reservoir, Lake Shenipsit, until recently did not provide any service to Tolland. The introduction of industry to Tolland along the south side of Route 30 required water service and fire protection. With the Town of Tolland paying for the cost of construction, the Rockville Aqueduct Company will supply service to this area. The line extends approximately 1,600' along Route 30.

Sewage Disposal is carried out through the use of private septic tanks. With a small population and limited industrial development this method proved to be satisfactory in the past.

The introduction of large-scale subdivisions, in recent years, on minimum size lots has resulted in the creation of disposal problems. Many of these problems should be alleviated by the adoption of subdivision regulations in 1963 and adequate enforcement of local and state health codes.

However, it appears as if a more comprehensive overall, town-wide approach needs to be taken in regard to Sanitary Disposal and Water Supply. The town of Vernon faced with a similar situation is planning to undertake an engineering study paid for by Federal funds under Sec. 702 of the National Housing Legislation. This study will come up with a Master Plan for Sewage Disposal.

#### H. Utilities (continued)

#### Refuse Disposal

The Capital Region Planning Agency in February, 1963 published a report "Refuse Study" which outlined a series of proposals to solve the problems of sewage disposal on a regional level. It was proposed that Tolland join with 5 of its neighbors, East Windsor, Ellington, Rockville, South Windsor and Vernon in utilizing a regional incinerator to dispose of its refuse.

Tolland is presently using an open faced refuse dump located just off Old Stafford Road. The useful life of the dump according to the "Refuse Study" is 31 years based upon the capacity of the site and the proportionate population increase.

The Connecticut State Health Department recognizes only 2 approved methods of refuse disposal, incineration and sanitary landfill. The Department is seeking to have all types of open dump operations terminated.

#### I. EDUCATION

The rapid growth in Tollands population in the period from 1950 to the present is reflected in the increasing numbers of school children and the demands placed upon the Town's educational system and plant.

The following table indicates that in the past 5 years there has been an acceleration of the above situation. The total elementary school enrollment increased by 83% while High School enrollment increased 125%.

#### I. Education (continued)

#### TABLE XIII

#### TOLLAND SCHOOL ENROLLMENT

Year	El. School	High School	Source
1958-1959	465	111	Annual Town Report B.O.E. Estimate
1963-1964	850	250	

Elementary school education is presently being provided for by two schools located adjacent to one another in the Tolland Green - Old Post Road Area. The Hicks Memorial School consisting of the original building with three additions utilizes 18 regular classrooms. In 1963, the Meadowbrook School was opened with 20 regular classrooms. With the total enrollment at 850 for 1963 - 64 the Board of Education has estimated their capacity at 1,100 pupils.

At present Tolland is sending its High School Students to the Rockville High School on a tuition basis. Due to the increasing number of high school students, consideration has been given to the construction of a High School in Tolland.

The High School Building Committee in 1964 issued a report, approved at the Town Meeting, outlining the steps to be taken for the construction of a "convertible" high school. The High School would be built by September, 1965 for immediate use by grade school children. In September, 1967 secondary students would be transferred to the school. According to the report the convertible high school would meet the grade school needs until Tolland could afford to build another elementary school. It was estimated that by 1967 there would be 955 elementary and 329 secondary students.

# I. Education (continued)

Several sites for the new high school have been reviewed including the Tolland State Jail land. The State has consented to the use of some 50 acres of the land which is just north of Route 15 and bounded by the Skunkamaug River and Cathole Road. The property, according to the committee, is centrally located and large enough for a secondary school complex and athletic facilities such as baseball and football fields.

# J. ECONOMIC FACTORS

The economic environment of a community is composed of many factors such as municipal finance, retail trade, commercial and industrial activity etc.

# Municipal Finance

The effectiveness of municipal government can be judged, in part, by its ability to meet increasing demands for municipal services without undue or exceptional tax levies.

The tax rate, computed each year, is based upon the Taxable Grand List which is the net assessed valuation of real estate and personal property in a Town. The difference between the net and the total assessed valuation is reflected in the amount of tax exempt property. Certain classes of property such as non-profit organizations, schools, state owned, etc. are tax-exempt and in 1961 amounted to 10% of the Total Grand List.

The Taxable Grand List in 1963 was \$12,734,339 or approximately \$3,500 per capita. The following table shows a comparison between Tolland and communities in its area of influence in this respect:

GRAND LIST FOR TOLLAND AND AREA OF INFLUENCE (1962)

Mansfield 7,800 22,660,300 2,900		Population	Grand List	Per Capita
Tolland 3,400 10,553,644 3,140 Vernon 18,700 55,612,830 2,980 Willington 2,100 5,442,666 2,580	Ellington Mansfield * Stafford Tolland Vernon	6,700 14,500 7,800 3,400 18,700	23, 424, 322 20, 088, 589 22, 660, 300 10, 553, 644 55, 612, 830	3,480 1,440 * 2,900 3,140 2,980

Source: Annual Town Reports
\* includes University of Connecticut

At present, in 1964, the assessors in Tolland a

At present, in 1964, the assessors in Tolland are using 65% of property values as the basis for their figures, and the tax rate is 37 mills. The following table indicates how the Net Grand List has grown with the increase in Town population:

TABLE XV

#### TOWN NET GRAND LIST

Year	Population	% Increase 1950 - 1960	Net Grand List	% Increase 1950 - 1960
1950 1960 1961 * 1962 1963	1659 2950 3200 3400 3600	78%	3, 369, 547 6, 509, 207 9, 668, 248 10, 553, 644 12, 734, 339	97%

Source: Annual Reports \* Revaluation in 1960

Town Expenditures are divided between the Board of Education and the Board of Selectmen, with the Education expenditures representing approximately two-thirds of the total amount.

TABLE XVI

## TOLLAND TOWN EXPENDITURES

Total	Board of Selectmen	Board of Education
1959 1960 1961 1962 1963	91,639 100,701 110,924 161,314 171,761	203, 927 227, 517 254, 061 313, 471 385, 755

Source: Annual Reports

Of the \$313,471 spent by the Board of Education in 1962, \$114,027 was provided by State Grants.

The total bonded indebtedness for Tolland for 1962 was \$800,000. The complete sum was for 3 school bond issues. The borrowing capacity of the Town is limited to 5% of the total Grand List (excluding State and Federal property) for general purposes, plus an additional 5% for schools. In 1962 the Borrowing capacity was approximately \$1,100,000, leaving a balance of \$300,000 available.

## Retail Trade

Tolland has been characterized by the lack of retail trade. With a population of 2,950 in 1960 the estimated retail sales were only \$70,000 and the per capita retail sales was \$24. This compares with a state average of \$1,445 per capita and an area of influence average of \$654 per capita. There are 50 Towns in the State of Connecticut with a smaller population than Tolland that have higher retail sales. The following table compares Tolland with its area of influence.

#### TABLE XVII

# AREA OF INFLUENCE ESTIMATED RETAIL SALES & PER CAPITA RETAIL SALES - 1960

	Retail Sales \$000,000) 1960	Per Capita Retail Sales 1960
Coventry	2.0	315
Ellington	1.5	269
Mansfield	4.1 *	315 *
Stafford Springs	9.1	1,217
Tolland	0.07	24
Vernon (including Rockville)	22.6	1,332
Willington	0.6	299

<sup>\*</sup> Residents of University of Connecticut included

Retail stores include a number of gasoline stations and small country stores. In a planning questionnaire distributed in 1962 many replies expressed a desire to have the number and types of commercial activities increased. The new stores or services needed that received the greatest number of replies were as follows in the order they appeared:

Drug Store
Service Station
Grocery Store
Supermarket
Medical Building
Hardware Store
Cleaners
Clothing Store

Since the questionnaire was taken a number of additions have taken place with more planned for the future. Two gasoline stations and an ice-cream bar were constructed with plans for a grocery and drugstore.

Without the desired services available in Tolland, shoppers traded elsewhere for their needs. One of the questions in the Town Questionnaire dealt with shopping habits. When asked where they shopped for various goods the following answers were provided:

TABLE XVIII
SHOPPING LOCATIONS

Town	Groceries	Furniture	Clothing
Rockville	72%	36%	33%
Manchester	6%	30%	33%
Hartford	-	26%	26%
Tolland	6%	-	-
Vernon	7%	1%	-
Others	9%	7%	8%

# Industry

The first industry in Tolland in many years was recently attracted. The Burroughs Corporation's Todd Division constructed a plant valued at about one million dollars with equipment and inventory and will employ 165-175 persons initially.

The company will be Tolland's first industry since a belt factory ceased operations at the turn of the century. Other early industries included hoop and button factories.

The area on which the Burroughs plant is located is one of the few that meet the requirements of modern industry. The Capitol Region Planning Agency in 1961 made a study of areas in the Region suitable for industrial development in terms of present and future industrial potential. Based upon the following criteria only 135 acres were found in Tolland that provided at least 3 of the facilities under item 2:

- 1. "Flat and suitable vacant land" includes all farms and all other land not in use or not permanently reserved, excluding land with a slope greater than 5% or subject to flooding, swamps and areas of peat, muck or surface bedrock. As of April, 1960
- 2. Availability of the following five facilities for each suitable vacant parcel was considered: A: Interchanges with existing or immediately projected limited access highways, plus contemplated limited access highways within one mile of parcel. B: Existing and proposed State Highways within 1/2 mile of parcel. C: Railroad-directly accessible to parcel. D: Existing or immediately projected water supply system plus areas of high yield ground water serving parcel. E: Existing or immediately projected sanitary sewer facilities, plus areas of good drainage soils serving parcel.

The Burroughs Plant occupies approximately 15 acres of a 100 acre tract zoned for industry next to the Vernon Town line and south of Route 30. With Vernon adopting similar zoning provisions on their side of the Town line, consideration has been given to the development of an Industrial Park with the joint participation and cooperation of both towns.

In 1964 the Town Meeting authorized the creation of an Industrial Development Commission. The Commission, Tolland's first, was authorized for the purpose of attracting more industry to Town.

## K. OPEN SPACE AND RECREATION

Open space is fast diminishing in our metropolitan areas due to the present patterns of haphazard suburban development. Land left in its natural state -- the marshes, woods, fields and stream valleys is becoming increasingly scarce due to its rapid consumption. Tolland, located on the fringe of the Hartford Metropolitan Area and proud of its rural character, must consider the effects of this waste of a vital resource.

Open space is defined as any space the preservation or restriction of the use of which would:

- maintain or enhance the conservation of natural or scenic resources,
- 2) protect natural streams or water supply,
- 3) promote conservation of soils or wet lands,
- 4) enhance the value to the public of abutting or neighboring parks or forests,
- afford or enhance public recreation opportunities, and
- 6) preserve historic sites,

# K. Open Space and Recreation (continued)

Much open space can be justified on the basis of its making the community visually pleasing. The Tolland Green is pretty to look at and provides a setting for the public and private buildings surrounding it. A wooded ridge or pastured field incorporated in a developed scene are beyond value.

The provision of public recreational activities has received the greatest amount of attention. Outdoor recreation can occur anywhere from backyards to wooded hills; it can occur as organized activity on publicly owned land, or as casual individual activity on private land. One thing we shouldn't lose sight of is that recreation is more than organized play or supervised playgrounds. The youngster catching frogs and insects, the sports man in the field for ducks, the naturalist stalking herons, the trapper searching for muskrats all participate in a form of recreation that has equal value to that provided on the playground. A marsh, wet land or greenbelt supplies, active, passive, aesthetic and intellectual recreation.

Tolland is presently experiencing a period of rapid land development and without understanding the implications of this trend may lose valuable land which should be preserved. Tolland today has only a limited amount of land devoted to public recreation use. With the exception of the Nye Holman State Forest which contains about 300 acres, there is only the playground and playfields associated with the two centrally located elementary schools and the Community Club House Area on Cider Mill Road.

In the private sector there are more available activities. Two swimming areas exist, one in the Northeast sector of town and the other centrally located. Both are natural outdoor pools and have a large enough capacity to satisfy the present needs. There is also an Archery Range, Skeet Shooting Range and Girl Scout Camp on Sweetheart Lake.

#### K. Open Space and Recreation (continued)

The results of a recent Town Planning Questionnaire indicate that there is a shortage of public recreational facilities in Tolland. The following are listed in the order of the greatest number of replies:

- 1) Childrens Playground
- 2) Swimming Facilities
- 3) Natural Park
- 4) Athletic Fields
- 5) Tennis
- 6) Golf

A recently formed Town Recreation Board (1964) has been making an inventory of existing recreational facilities and needs. The School Board has given approval to the Board to set up permanent backstops for tennis courts and an additional softball diamond on property adjacent to Old Post Road.

On the use of Town funds to acquire land for recreational purposes, 85% of the returns from the questionnaire indicated a favorable response.

To assist communities in the acquisition of land for the stated purposes, both the Federal and State Governments provide financial aid. The Federal program authorizes grants not to exceed 30 per cent for the purchase of open space or substantial rights in open space. The State provides grants up to 50 per cent of the non-federal share if the open space has regional implications.

# K. Open Space and Recreation (continued)

Other methods of controlling or preserving open space are zoning and subdivision powers. Large lot zoning is utilized in many communities in rough wooded areas where the natural landscape dominates the individual structures. In such areas, housing, if sufficiently scattered, would not unduly disturb the drainage characteristics or other desirable open space attributes of the land. Cluster zoning is another method to arrange housing by allowing greater flexibility in neighborhood design and substantially sized areas can be maintained for recreation or other open space uses.

The Tolland Subdivision Regulations stipulate that land for local parks or playgrounds can be retained as the community grows by requiring subdividers to provide open space within a development, when and in places deemed proper by the Planning and Zoning Commission, and all open spaces shall be shown on the subdivision plan.

# A. WHAT IS THE COMPREHENSIVE PLAN

The Comprehensive Plan is expressed in both maps and statements giving the policies, standards and programs intended to govern community physical development.

Plan Maps show relationships to be sought among the major features of the Town - its neighborhoods, business, industrial areas and its major streets. They also show the proposed distribution of public facilities, such as schools, and identify major land-reservations, such as parks.

Plan statements set forth official objectives and intentions on the standards to be used in developing schools, streets, and other public facilities, or in controlling land use, and the basic policies to be followed in establishing priorities, allocating costs and sharing responsibilities for specific improvements.

#### B. WHY DOES TOLLAND NEED A COMPREHENSIVE PLAN

A Comprehensive Plan is being prepared for the Town of Tolland for the three following basic reasons:

## 1. To Meet Events That Are Expected To Happen

Various studies prepared by State, Regional and Local Agencies indicate an increase in population within the next twenty years to at least double or perhaps triple the present Town figure. To meet this increase which is expected to happen, it will be necessary to plan in advance for the additional services to be provided. Recreational, Educational and Circulation needs will have to be met.

## 2. To Accomplish Things That You Want To Happen

The expected population increase will place an added load upon the municipal services provided by the Town. Unless there is a meaningful increase in the amount of new industrial or commercial development, the burden of providing for these services will rest primarily upon the residential property owners. An active program for the encouragement of industrial and commercial activity should be undertaken.

# 3. To Avoid Or Prevent Things You Don't Want To Happen

TOLLAND will grow, due to its location in the Hartford Metropolitan Area, regardless of whether or not comprehensive planning is considered. However, without planning you can anticipate uncontrolled growth. Unless adequate zoning and subdivision regulations, which implement the comprehensive plan, exist and are effectively enforced the result will be the misuse of land.

# C. OBJECTIVES OF THE COMPREHENSIVE PLAN

In order to develop a firm foundation on which Tolland can project its future growth, consideration must be given to the goals the Comprehensive Plan is attempting to achieve. The goals or planning objectives must be reasonable with relation to the Town's potential and must be based upon principles understood and accepted by its citizens. The two broad objectives which are suggested as the foundation for the Comprehensive Plan are:

- 1. Develop the identity of Tolland as a complete community, maintaining a desirable balance between residential, commercial and industrial growth.
- 2. Provide for maximum utilization of Town's assets without sacrificing its general character.

In addition to the above major objectives, the following supplemental goals are suggested as indicative of some of the means by which the Comprehensive Plan might achieve these broad objectives:

- 1. Special attention to elements likely to attract new industrial development.
- 2. Anticipate, well in advance, the needs of future growth in terms of public services and facilities and translate into a capital improvements program.
- 3. Provide for the orderly growth of land, with adequate protection for private property investment of all types through the use of zoning.
- 4. Provision of ample recreational, educational and cultural facilities for all age levels of the population.

#### D. FUTURE POPULATION

Future population projections are of great interest due to the relationship between population, land uses and zoning. The year 1980 has been selected as the target date for the Comprehensive Plan which provides a reasonable period of time to be covered by this program.

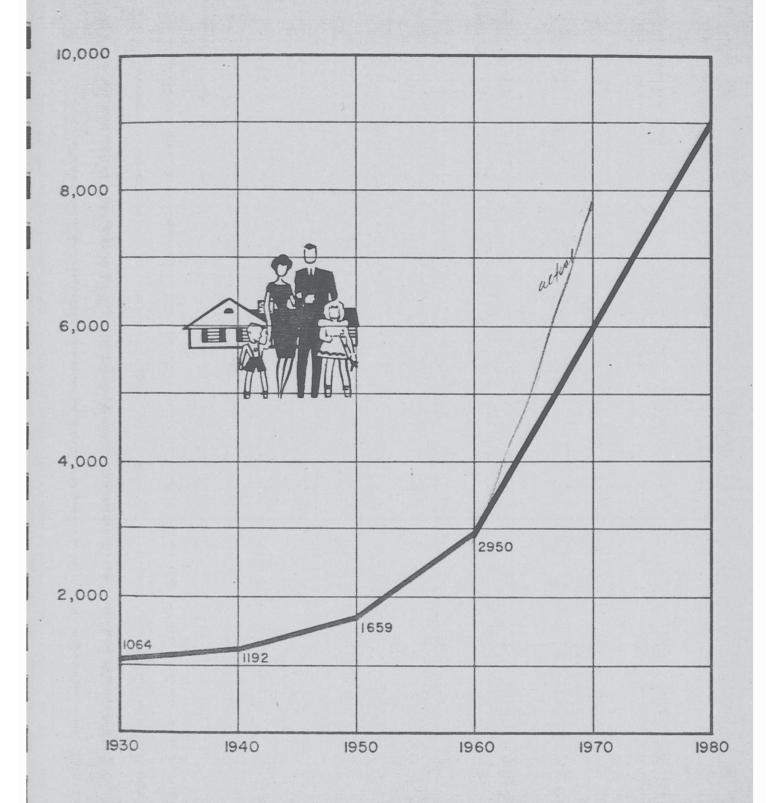
With the target date in mind, conclusions must be reached as to the extent of future growth in TOLLAND by that time. As indicated in the Basic Studies Report on Population, TOLLAND'S population remained reasonably constant until the end of World War II. Since then, however, there has been a substantial increase with almost 70% of the increase accountable to net migration. This is primarily the result of TOLLAND offering suitable land for residential development with convenient highway connections to the Hartford Labor Market Area.

The present population trends should continue with the only question being how high the rate of increase will be. From 1950 - 1960 the percent of change was 77.8%. This was almost 3 times as high as the State average and 1 1/2 times as high as the Area of Influence's average.

The Capitol Region Planning Agency in 1963 estimated, on the basis of a Linear pattern of regional development, a population of 8,000 by the year 1975. This estimate was based upon a continuing rate of increase equal to the rate between 1950 and 1960.

There are local factors to be considered in the evaluation of any population projection. Since the CRPA Study, TOLLAND has adopted subdivision regulations and stringent road specifications. As has been indicated in the Town Annual Report for 1963, the effect of these has been to slow down the rate of subdivision development. However, this condition will exist only as long as the communities neighboring TOLLAND do not have adequate controls to prevent uncontrolled growth.

# TOLLAND, CONN.



population projections

FIGURE

#### D. Future Population (continued)

It is therefore reasonable to expect a temporary decrease in the rate of increase until the surrounding Towns adopt the above mentioned standards. This would then result in a population projection of near 9,000 by the year 1980. (see fig. #6)

#### E. FUTURE LAND USE

#### Residential

The future land use plan delineates general areas considered suitable for development as various classes of land use, based upon the suitability of the land itself and the estimate of population growth. (see fig. #7)

A population growth of 4,900 people from 4,100 in 1964 to 9,000 in 1980 has been projected. An assumption is made that the average family size for new residential subdivisions will be higher than the present figure for existing areas. Therefore, using a figure of 4 persons per dwelling unit the total number of new dwelling units would be 1,200.

The present trend in residential development in TOLLAND is to construct homes on higher lot sizes than the minimum. With this in mind, an average lot size of just over one acre for the projected dwelling units would indicate a space requirement of 1,500 acres. If we consider the areas required for streets which would be approximately 10% of the amount, we can estimate a total of 1,700 acres for residential development.

New residential development in TOLLAND will occur as either the result of expansion of present areas or new development where the topography and soil conditions are most desirable. South of the Wilbur Cross Highway growth is anticipated as an expansion of the Anthony Road - Baxter Farms subdivisions in a northerly and easterly direction. North of the Wilbur Cross growth can be expected in the Buff Cap Hill Area and west of Route 30 due to the suitability of the land.

A major distinction between residential areas on the Comprehensive Plan Map has been in relationship to population densities. Low density residential development has been projected generally for areas in which either topography or soil conditions have made extensive development difficult. In addition certain advantages present themselves in the preservation of open space which were outlined previously in this Report.

Medium density development similar in character to most of the existing home development in TOLLAND is projected for areas where conditions are more conducive to construction. Areas of potential development are listed on previous page.

## Commercial

Commercial activity is important to TOLLAND for the following basic reasons:

- 1. It is essential for the well-being of the population.
- 2. It is an important land use.
- 3. It is a major generator of traffic flow.

As noted previously in the Basic Studies Section of the Report TOLLAND has been characterized by the absence of any substantial commercial activity. Rockville, Manchester and Hartford have supplied the services that provide for the well-being of the population. Very little land was devoted to commercial uses and therefore there wasn't much generation of traffic.

However, with the rapid growth of population over the past 10 years, a need exists today for the provision of local shopping facilities. A population of 4, 100 in 1964 is able to support a small shopping center dominated by food and local convenience stores in which the leading tenant is a supermarket or drugstore. The Comprehensive Plan projects a population of nearly 10,000 by the year 1980. With this projection in mind, commercial growth should include a variety store, several supermarkets plus a limited range of other shopping facilities.

The provision of these facilities is primarily an economic problem dependent upon the estimated purchasing power and demand within a community. From the planning standpoint the location and type of services provided are the major considerations. Under normal conditions shopping facilities should be concentrated for the convenience of the shopper. Furthermore, shopping centers, unlike scattered stores, can effectively provide buffer strips, adequate parking and protection from future uncontrolled spread of commerce.

The Comprehensive Plan shows the central shopping area located at the intersection of Merrow Road (Rt. #195) and the Wilbur Cross Highway (Rt. #15). A circle drawn with a 2 mile radius from this intersection would enclose more than two-thirds of the Towns present population and perhaps more than three-quarters of the future projected population.

Additional areas are shown at the following locations:

1. The triangle formed by Route 74, Route 30 and the Town line, which is adjacent to the recently zoned Industrial land where the Burroughs Corporation Plant is located.

- 2. The intersection of Route 74 and the Wilbur Cross Highway which is suitable for limited uses such as motels, restaurants, etc.
- 3. The intersection of Mountain Spring Road and the Wilbur Cross Highway. An interchange has been recommended and is being considered by (see Basic Studies Report) the Connecticut Highway Department.

It is further suggested that limited commercial uses be permitted in the TOLLAND Green Area. Permitted uses might consist of a professional office building, a post office, bank, etc. The types and location of such permitted uses must be such as to be in harmony with the existing residential character of the neighborhood.

#### Industrial

The area in which the greatest industrial potential exists lies on the Vernon Town Line, South of Route #30 and North of the Wilbur Cross Highway. This 110 acre tract of open land lies within a half mile of an interchange on Route #15. In 1963 the Burroughs Corporation became the first plant to build on the site and they presently occupy 13.5 acres. Water and sewer extensions were constructed with enough capacity to serve future industrial plants in the area.

The possibility of complete development of the tract has been indicated by the Capitol Region Planning Agency in their recommendation of this section as the most suitable in TOLLAND for industrial purposes. Also consideration has been given towards inter-town cooperation with Vernon, since adjacent land in Vernon has been zoned for similar uses. Further study should be conducted into the feasibility of an industrial park and an interior road system.

Light industry is projected for this area which would permit the limited fabrication, alteration, assembly, storing and packaging of products.

One additional 100 acre tract of land on North River Road has been designated for General Industry. This area is within a half-mile of the interchange located at the intersection of Route #74 and the Wilbur Cross Highway. However, the potential of this tract is at present limited due to the lack of public utilities such as water and sewer.

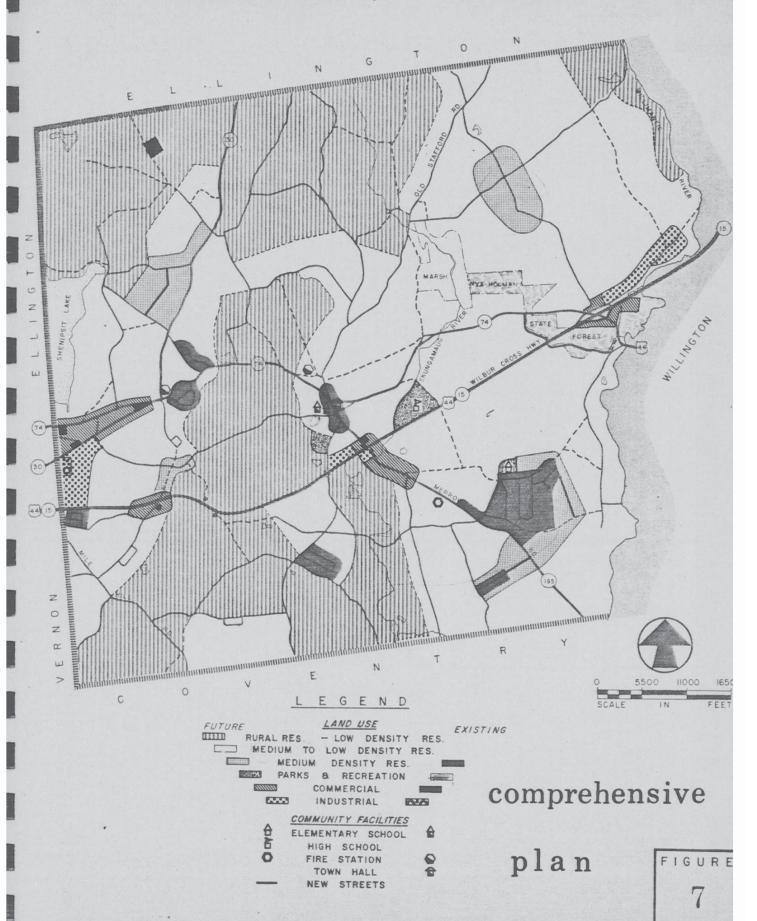
Two twenty-acre tracts located at or near the intersection of Merrow Road and the Wilbur Cross Highway are also marked for light industry. They would be of the type to attract a single, special client and would be compatible with the surrounding residential and commercial areas.

#### F. STREETS AND HIGHWAYS

A properly designed street and highway system must serve the positive functions of circulation and must take into account the effect of streets upon other land uses.

Functionally, circulation provides access not only for the residents but for all those who serve developed areas. Physically, the circulation pattern, linking residential structures to each other, residences to community facilities, centers of business and employment, results in the definition of land use areas of limited shapes and sizes because streets act as boundaries and barriers.

# TOLLAND, CONN.



# F. Streets And Highways (continued)

The major carriers of large volumes of comparatively long distance, fast moving traffic in TOLLAND are the State Highways. The most important of these, the Wilbur Cross Highway, is scheduled by the State Highway Department for widening and realignment, for its length through TOLLAND, sometime after 1970. The Department is also considering the redesign of the interchange at the intersection of Route #74 and the Wilbur Cross Highway.

The Planning & Zoning Commission has urged that the Highway Department construct an interchange on the Wilbur Cross Highway at the point of intersection of Mountain Spring Road. This construction is considered necessary due to the great distance between interchanges which acts as a barrier to cross-town traffic. The Comprehensive Plan has anticipated action on this proposal and has indicated commercial uses for adjacent areas.

At present there are some 20 miles of local roads that are unimproved in TOLLAND. Without any Master Plan for their improvement the determination as to which improvement is undertaken first is decided by action of the Town Meeting. It is desirable to make a comprehensive evaluation of the road systems as related to present and future development and to set up a schedule of priorities for work to be undertaken.

Within and around new areas to be developed with the Period of the Plan new streets will be necessary to achieve an adequate circulation pattern. As is stated in the Subdivision Regulations "The arrangement, type and location of streets shall conform to the Comprehensive Plan and shall be considered in relation to existing and planned streets, topography, public convenience and safety, and the uses of the land to be served by such streets".

# F. Streets and Highways (continued)

The Comprehensive Plan has indicated a number of new streets and extensions of existing streets to provide greater access to developed areas. An example of this would be an extension of the road system serving the Baxter Farms Area to Merrow Road.

All of the local roads fall into the classification of Residential Service Streets to Minor Traffic Streets. This is important in the consideration of major design factors including intersections, widths, grades, surfacing and drainage. The Town street specifications takes these factors into account and are considered to be satisfactory in their requirements as related to the demands of traffic.

## G. COMMUNITY FACILITIES

Tolland's anticipated growth in population, as projected, will require comparable expansion in services provided by the Town such as fire protection, schools, recreation, etc. The responsibility for planning for the detailed needs of these services lies within the jurisdiction of the appropriate local agency. However, the Planning & Zoning Commission should act as coordinator in reviewing these recommendations as a whole, relating them to each other and to the immediate limitations of time and budget, as well as the long-term requirements of the Comprehensive Plan. As indicated in the Connecticut State Statutes, it is mandatory for any municipal or legislative body to refer their proposals for municipal improvements to the Commission before taking action.

## 1. Education

Tolland's school needs within the time period of the Comprehensive Plan can be expressed simply in terms of the amount of new construction. To satisfy the immediate needs of both the elementary and high school programs, a Town Meeting in 1964 acted in favor of a "convertible high school" to be built by September, 1965. This school to contain between 24 and 30 classrooms, has been estimated to cost \$900,000.

Upon completion of the construction, grade school children would occupy some of the classrooms until TOLLAND was able to build a new elementary school. With the transfer of secondary school students from Rockville High School, estimated for 1967, the school would then become completely occupied by High School students.

The area suggested for the High School site is located on presently owned state property (see Comprehensive Plan fig. #7) which is situated centrally in TOLLAND, in respect to the school age population group having convenient access from Route #74. Also enough land, 50 acres, will be available to provide required athletic facilities. These facilities could also serve the community-wide recreational needs of Tolland which were expressed in the Planning Questionnaire. This subject will be discussed further under Recreation and Open Space Program. In Connecticut the minimum standard for secondary schools is 10 acres. This site which has excellent slope and soil conditions will more than meet the required minimum standards.

An elementary school, which will be necessary when the secondary students occupy the high school, is projected for the Anthony Road Area. The largest concentration of population in TOLLAND exists in this area, namely in the Anthony Road and Baxter Farms neighborhoods. More than 250 homes presently exist within one and one-half miles of the proposed location with an equal amount projected for the future.

Minimum standards for elementary schools require 5 acres plus an additional acre for each 100 pupils. Therefore, a school with 500 pupils should be located on a 10 acre site. The projected school site on Anthony Road should have more than 10 acres since it is intended to also function as a neighborhood recreational center as well as an educational plant. This site is characterized by good slope and soil conditions, with excellent access from Merrow Road.

Additional considerations involve the expansion of the Meadowbrook Elementary School by eight classrooms and the possibility of a school to be located in Crystal Lake Road area. The Meadowbrook school which contains some 20 classrooms was constructed with the capability of expansion. This procedure is feasible not only from a construction viewpoint, but also in terms of acreage requirements, since the Town owns sufficient land around the Central School Complex insuring that no reduction in the area devoted to play fields need occur.

A school on Crystal Lake Road might serve the entire western half of TOLLAND, due to the effect of the Kendall Hill Ridge line running North and South through TOLLAND. No large subdivision actively exists in this area at present, but there are indications that there will be an increase in growth in the immediate future. Before a substantial amount occurs the school situation should be re-evaluated with respect to the need for facilities in this area.

#### 2. Recreation and Open Space

The inventory of existing recreational facilities in TOLLAND indicates an overbalance in the direction of the private sector. The only Town recreational programs to date have been orientated to the needs of the educational system. However an analysis of the private facilities and their relationship to public facilities should be established.

Two interesting responses to the Town Planning Questionnaire, as reported in the Basic Studies Section of this Report, related to Recreation. Many replies listed the lack of recreational facilities as an inadequate feature of TOLLAND. And 85% replied that they were in favor of Town acquisition of land for recreational uses.

The Comprehensive Plan outlines two large recreational areas independent of the school system. Earleen Grove, a commercial recreational center, with a three acre pond for swimming, is supplemented by Crandalls Pond in the Tolland Green Area. The Town presently owns land across the street from the Pond on which a Community Club House stands. Crandalls Pond with its location next to the Town Center would indicate the desirability of purchase by the Town.

The recently appointed Recreation Committee, in addition to studying the recreational needs of TOLLAND, has been considering the means of financing proposals to provide facilities. Advantage should be taken of the existing legislation and financial assistance, both State and Federal, as outlined in the Basic Studies under Open Space Program, for these purposes.

Provision should be made for the fullest utilization of school play areas in the Comprehensive Plan. The proposed site for the new Elementary School to be located in the Anthony Road Area could also serve as a Neighborhood Recreation Center. Open Space Financial Assistance may be utilized in the acquisition of the non-building portion of the site.

The proposed High School site would be a logical location for a Community Recreation Center. This area would provide services for all ages and interests with facilities available on a year round basis.

Space Standards for Municipal Public Recreation as related to a Town like TOLLAND with a population of 4, 100 (1964) are not often applicable. Generally most Standards indicate the desirability of having a minimum of 10 acres of land devoted to recreational use for each 1,000 population. However, this figure is inadequate in TOLLAND'S case, since the standard should be concerned with the minimum facilities to be provided rather than the acreage. Further study is indicated in this respect with consideration of the most requested recreational facilities as reported in the Planning Questionnaire.

Open Space Planning is to be implemented through the use of the Zoning and Subdivision Regulations. The existing subdivision regulations specify that "the Commission may require the dedication or reservation of open space areas on subdivision plans when the Commission deems such requirements to be proper and reasonable". Application of this clause with respect to the anticipated development projected in the Comprehensive Plan should provide needed areas of open space or potential recreational value. The major problem to be faced will not be the acquisition of the land but its maintenance.

The Zoning Map and Regulations have been revised to protect and preserve the rural charm that characterizes TOLLAND. Large areas of Town are to be designated for Rural Residence or low density residential use. These areas would be rural residential with the highest lot size requirements.

# 3. Other

A number of recent developments in the private and semi-public sector of community life in TOLLAND have confirmed the position of the Tolland Green as the Town Civic Center.

The United Congregational Church, built in 1838, has plans for a new structure to be located to the rear of the present building. Provision of off-street parking space for 50 cars would ease a current problem on the Green. The Norwich Diocesan Corporation which has purchased a six acre tract between Route #74 and Old Stafford Road will construct a Roman Catholic Church, the Towns second church in 126 years, in the near future.

The Tolland Savings Bank, had a recent facelifting, with an architectural treatment that placed the structure, one of the two non-conforming use buildings on the Green, in a compatible position with its surroundings. In addition, the Federal Post Office Department has been investigating sites in this area for a new building to replace the present post office located in a frame house on the Green.

Community facilities found in the area include the Town Hall, Fire Station, Library, State Jail and the Hicks Memorial and Meadowbrook Schools. Expansion of the Civic Sector, that they represent, is a logical development in the Tolland Green Area. Existing and new needs will require more space for the adequate functioning of local government. They might be satisfied by the construction of an addition to the present Town Hall or the construction of a new one on vacant land in the triangle to the rear. The use of Federal funds under "Sec. 702" financing should be considered for this project and others of a similar nature.

To provide fire protection for all sections of TOLLAND, the Fire Department has plans for a new station to be located on Merrow Road in the vicinity of the Anthony Road Area. This station would replace the one located in the Tolland Green Area. The result of this action would be to have two stations in operation. The existing Leonards Corner Firehouse serving the Northeastern section of TOLLAND and the Merrow Road Station serving the remainder.

## H. CAPITAL IMPROVEMENTS PROGRAMMING

The preparation of an annual capital improvements budget is one of the important functions the Planning and Zoning Commission can perform in its capacity as an advisory group to the Selectmen. The utilization of the capital budget is an important means by which the community can give direction to its growth and development along a desired course as outlined in the Comprehensive Plan.

It is suggested, therefore, as a means of implementing the Comprehensive Plan, that the Planning and Zoning Commission adopt the practice of developing a capital improvements program each year for submission to the Selectmen as an aid in preparing the Annual Budget.

In order to determine the Town's ability to support future growth through a capital expenditures program, it is desirable to compare the actual bonded debt limit over a period of years. While there is a certain amount of guesswork in such projections, there are also general relationships that are valid. In general, for example, the Grand List continues to rise, while annual payments of principal and interest reduce the bonded debt. As this gap increases, room is made for additional capital expenditures.

Generally the capital improvements budget as developed by the Town of TOLLAND will cover a five or six year period. It is essential that this budget and its financial details be reviewed annually, however, by the Planning and Zoning Commission in order to reflect the best estimates of changing current needs of the community.

The development of a capital improvements budget is a combined planning-financial operation which spells out how and when certain capital expenditures may be made for civic improvements. The capital budget is that part of the total Town budget which provides for non-recurring expenditures. The rest of the Town budget is principally an operating budget which provides for recurring expenses for the regular operation of municipal administration and services.

Financial planning, such as the capital improvements budget, is one of the positive and constructive ways by which a community can regulate its expenditures, maintain its credit rating, work toward a stable tax rate, maximize the tax-dollar returns, establish a balance between pay-as-you-go and borrowing, and get needed improvements completed.

The following objectives of a capital improvements budget are the principal elements of such a program:

To anticipate and schedule capital improvements over a period of years according to priority of need, consistent with the Town's fiscal policy and its ability to pay.

To forecast necessary borrowing, the probable impact of the capital improvement on the operating budget and tax rate of the town, and provide a stablizing influence on present investments.

To build and maintain a sound capital program as the basis for municipal growth.

A capital improvements program, as prepared by the Planning and Zoning Commission, has basically the following major characteristics:

It does not commit the Town or its officials, but merely provides factual information and an authoritative recommendation as a guide for the decision-making process of Town government.

It is prepared for the current year, and the following five-year period, which is considered practical for such forcasting and programming.

It covers capital improvements needs arranged in a suggested order of relative priority, based on the financial structure of the town and its comprehensive planning proposals.

It is sufficiently flexible to permit annual revisions to adjust to changes in project needs, financial conditions and community attitudes and desires.

A capital improvements project is generally defined as a physical betterment or an item of equipment having a substantial, useful life and a total cost in excess of \$10,000. For example, a capital project might be:

The construction, reconstruction, replacement, major repair or extension of a public building, highway, sidewalk, storm drain, sewerage system, bridge, playground, park, or similar public works, or for a facility, structure or utility appurtenant to any of them, whether financed in whole or in part by Town funds; or

An expenditure, similarly financed, for the purchases of land, and items of equipment, buildings or structures.

The capital budget program is usually prepared annually from a list of capital improvements, submitted by community officials, department heads, committees and other municipal agencies, to the Planning and Zoning Commission. All pertinent information is recorded on forms with explanation of when and why each project is needed.

A forecast of estimated receipts, expenditures, and other fiscal data is prepared from a historical summary of the community's previous financial transactions to accompany this list.

A recommended schedule of projects is then established, and financial requirements are analyzed and related to the forecast of the community's ability to pay. By a process of study and analysis of project schedules and financial forecastings, a capital budget program is then prepared for submission to the community and its legislative body for action.

It is recommended that the Planning and Zoning Commission prepare the annual capital budget. Since the procedure is a combination planning and finance operation, the Commission must coordinate its work with other Town departments.

Payments for capital projects become part of the annual budget and are chargeable to the tax rate, either in the form of a single appropriation, for a small project, or amortization and interest payments for large projects financed by borrowing. Some projects are also financed by special funds or reserve accounts into which special receipts are deposited for specific uses only.

The forecast should also include estimates for operating as well as capital expenses. Estimates of revenue other than local tax sources are also made. Subtracting revenues from expenses, the sums needed from local sources can be computed. Finally, estimates of valuations are prepared and the resulting tax rates computed, thus giving a picture of future tax loads. In this manner the financial effect of a capital budget program can be determined and adjusted to meet community needs and ability to pay.

# OUTLINE OF CAPITAL IMPROVEMENTS AS RELATED TO THE COMPREHENSIVE PLAN

	Total	Financial		Tim	ing	
Item	Est. Cost	Assistance	1	2	3	4
New High School	\$900,000	S. A.	x			
New Elementary School	\$500,000	S. A.		x		
Elementary School Addition	\$100,000	S. A.	X			
Recreational Land Acquisition	N.A.	FA., S.A.		X	X	
Recreational Land Development	N.A.				X	X
Sanitary and Storm Sewer Study	\$ 20,000	F.A.		X		
Mountain Spring Rd. Interchange	N.A.	S. A.				X
Town Hall Rehabilitation	N.A.	F.A.			X	)
Town Library Expansion	N.A.	F.A.			X	
Fire Station	\$ 20,000		x			

(1) 1964-68 (2) 69-73 (3) 73-77 (4) 78-

S.A. - State Aid F.A. - Federal Aid

N. A. - Not Available

The following two pages illustrate a typical project report form for each project, and a summary schedule of proposed projects to be submitted by each department. These would then be tabulated and consolidated by the Planning and Zoning Commission.

## Town of Tolland, Connecticut

#### CAPITAL BUDGET PROGRAM

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# PROPOSED CAPITAL PROJECT REPORT

	(To Accompany Schedule of Proposed Capital Project Improvements)
1.	Title and description of Project:
2.	Location:
3.	Need for Project (explain fully):
4.	Estimated cost:  a. Engineering & Surveys \$
	b. Acquisition of land c. Site development
	d. Construction  e. Equipment purchase  f. Other
	Total\$
5.	Method of financing: budget appropriation bond issue state aid federal aid assessment other
6.	Will Project be revenue-producing? Yes ( ) No ( )  If yes, estimate of annual revenue \$
7.	Estimated annual cost of operation and maintenance:  A. Salaries and wagesb. Expenses
8.	Estimated useful lifeyears.
9.	Will Project remove taxable property from list? Yes ( ) No ( )  "LandBuildings
0.	Remarks:
Sul	omittedDeptDate_

# TOWN OF TOLLAND, CONNECTICUT

CAPITAL	BUDGET	PROGRAM

PERIOD 1964 - 1969

# SCHEDULE OF PROPOSED PROJECTS

Submitted by	Dept.	Date	

	Estimated Total	Suggested Schedule Of Project Cost by Years							
Capital Project	Cost	1964	1965	1966	1967	1968	1969	Late	
								10.00	

## I. EFFECTUATION

The preceding sections of the report have outlined a program designed to direct the future growth and development of TOLLAND in an orderly and effective manner. However, unless the proposed regulations are adopted and enforced, the Comprehensive Plan will remain as a noble but unfruitful effort. This implies the need for enforcement by Town Officials, and understanding by the Townspeople.

Since the Comprehensive Plan is a flexible document, the Planning and Zoning Commission has the obligation and responsibility to maintain a continuing planning program. It is suggested that the Commission review and periodically update elements of the Plan.