TOLLAND COMPREHENSIVE

PLAN OF DEVELOPMENT - 1980

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TABLE OF CONTENTS

TABLE OF CONTENTS (cont'd)

TABLE OF CONTENTS (cont'd)

HOUSING NEEDS
SUMMARY AND CONCLUSIONS

The population of Tolland rose from 2,950 to 7,857, or 166.3 percent, 1960-1970. The average annual growth rate was 10.3 percent. The percentage increase was the highest among the eleven towns in Tolland County, while the absolute rise in the number of people was third largest. Population growth since at least April 1970, has decreased because of Connecticut's economic condition. Tolland's population is estimated to have risen to 8,496 or 8.1 percent, April 1970 to December 1971. The annual growth rate is 4.6 percent. The town's growth is still high relative to that of neighboring towns. The population is projected to rise by 5,243, or 66.7 percent, to 13,100, 1970-1980.

The number of households rose from 810 to 2,051, 1960-1970, and the annual growth rate was 9.7 percent. The number of households has risen to 2,224, April 1970 to December 1971, and the annual growth rate is 4.8 percent. The most significant observance in the 1970 Census household data is that the number of persons per household increased from 3.61 to 3.82, 1960-1970. Tolland is the only town in the County to have experienced this increase. The data for the other ten towns indicates that in all cases where data was available, the number of persons per household decreased, 1960-1970. Tolland experienced a very significant increase in four-, five-, and six- or more-person households.

The number of households in Tolland is projected to rise from 2,051 to 3,447, or 68.1 percent, 1970-1980. The annual growth rate would be 5.3 percent.

The number of housing units rose by 1,204, from 905 units to 2,109 units, 133.0 percent, 1960-1970. The percentage increase was the highest in Tolland County, while the rise in number of units was third largest. Owner units rose by 1,172, while renter units rose by only 69 units. This type of housing growth contrasts

sharply to that in the Hartford SMSA where multi-family units have dominated residential construction since at least 1965.

The number of units is estimated to have risen by 179, to 2,288, 8.5 percent, April 1970 to December 1971. The annual growth rate is 4.8 percent and significantly below the 8.8 percent experienced 1960-1970. This current data also indicates that there has been a significant increase in multi-family units. Eighty-four of the 179 units are multi-family units.

There was a very significant increase in the size of units, 1960-1970. The percentage of total dwelling units with seven or more rooms increased from 23.3 to 30.2; six-room units rose from 20.6 to 28.4; and five-room units rose from 29.7 to 32.0. There was a decrease in the percentage of units with four or fewer rooms from 26.4 to 9.4.

The value of owner-occupied units, in constant 1970 dollars, experienced a decline in the number of units valued from $5,000 to $14,999, and a very significant rise in the number of units valued from $17,500 and up, 1960-1970. The most significant rise occurred in owner units valued from $20,000 to $24,999, and $25,000 to $34,999.

The significant rise in the number of rental units, in constant 1970 dollars, was experienced among those units at monthly rents of $120 to $149, and $150 to $199.

The overall age of Tolland's housing units is relatively new because of the i33.0 percent increase in housing units, 1960-1970. Units built 1960-1970 account for 57.5 percent of all units; 18.6 percent were built 1950-1960; 5.9 percent were built 1940-1949; and 18.0 percent were built before 1940.

The number of vacant units decreased by 37 units, or 38.9 percent, 1960-1970. This decrease occurred in all categories. There were in 1970 15 vacant-for-sale units, one vacant-for-rent unit, 29 other-vacant year-round units, and 15 vacant seasonal and migratory units. Among the 15 vacant-for-sale units, 12 are priced at $20,000 and over; ten units have seven or more rooms; only one unit lacks complete plumbing facilities; five units have been vacant two to six months; seven units were vacant six months to one year; and two units have been vacant more than one year. Vacant-for-sale units are only a partial indicator of this market because most for-sale owner units remain occupied until sold.

1970 Housing Needs

1. Tolland's 1970 housing market is not functioning properly because the actual vacancy rate is below the frictional vacancy rate essential to accommodate growth and mobility. The total vacancy rate for year-round available housing units is 0.8 percent or 16 units, significantly below the frictional vacancy rate of 2.7 percent or 55 units. The frictional vacancy rate for owner units is 2.6 percent or 50 units, and the actual vacancy rate is 0.8 percent or 15 units. The frictional vacancy rate for rental units is 3.7 percent or five units, and the actual vacancy rate is 0.7 percent or one unit. The 1970 Tolland housing market, therefore, lacks the minimum flexibility for smooth functioning. Growth is restrained, mobility obstructed, choice of dwelling units limited, and conditions exist to inflate housing values. If the town chooses to correct these obstructions actions could be taken to encourage development and raise the vacancy rate.

2. There were in 1970, 95 households in substandard units without sufficient income to afford standard units with not more than 1.00 person per room.

Substandard housing units are defined by the U. S. Census as units lacking one or more plumbing facilities plus dilapidated units with all plumbing facilities. The term substandard is used as a measure of the structural quality of the housing stock.

The size and tenure of these 95 households are estimated at 22 one-person households (15 owners and seven renters); 19 two-person households (17 owners and two renters); 16 three-person households (15 owners and one renter); 13 four-person households (ten owners and three renters); 11 five-person households (ten owners and one renter); and 14 six- or more-person households (13 owners and one renter).

The estimated income levels of these 95 households consist of: 38 with incomes of below $6,000; 28 with incomes of $6,000 to $6,999; 13 with incomes $7,000 to $7,999; six with $8,000 to $8,999; three with $9,000 to $9,999; six with $10,000 to $11,999; and one with $12,000 to $14,999.

3. There were in 1970, 82 households in standard overcrowded conditions without sufficient income to obtain standard units with not more than 1.00 person per room. The U. S. Census defines overcrowded conditions as 1.01 or more persons per room.

The 82 households consisted of, by size and tenure: one four-person household (owner); seven five-person households (three owners and four renters); and 74 six- or more-person households (69 owners and five renters).

The standard units occupied by these households consist of by size and type: two one- and two-room units (two owner units); one three-room unit (one owner unit); 12 four-room units (seven owner units and five renter units); 43 five-room units (41 owner units and two renter units); and 24 six- or more-room units (22 owner units and two renter units).

The estimated income levels of these 82 households include: 56 with $9,000 to $11,999; 24 with incomes below $9,000 and two with $12,000 to $14,999.

4. There were 41 households 62 years and over in 1970 in substandard units. There were no households 62 years and over in standard overcrowded conditions. It is not possible to determine the number of households with sufficient income to afford standard units but who choose not to.

   There is a need for housing for households 62 years and over. The construction of such units could result in the availability of units with four-, five- and six- or more-rooms because there are 498 one- and two-person households occupying such units.

1980 Housing Needs

1. Only households with 1980 incomes of $19,000 or more, in actual dollars, will be able to afford 1980 new median-priced single-family dwelling units. Thirty-two percent of Tolland's 1980 households will be in this income level.

2. Households with incomes below $15,000 will find it difficult, if not impossible, to afford and obtain single-family dwelling units. Fifty-six percent or 1,921 of Tolland's 1980 households will have 1980 incomes below $15,000: 1,747 primary families and 184 primary individuals. Households of more than four persons with incomes below $15,000 will be able to afford only multi-family dwelling units. These households will tend to be in overcrowded conditions because multi-family units are usually not larger than two-bedrooms.

3. There will be a significant need for housing for households 62 years and over. There were in 1970 only six one-room units, five two-room units and 18 three-room units. There will be in 1980, 193 primary individuals of which a high percentage will be 62 years and over. Only nine of these individuals will be able to afford new multi-family dwelling units. Unless steps are taken there will be in 1980 a severe shortage of small size units at costs that households 62 years and over could afford.

Table . Estimating Net Migration by Age Cohort, for Tolland, 1960-1970

Age of Cohort: April 1960 (or birth if later)	April 1970	Census Population 1960 (1)	Births[1] (2)	Estimated Deaths[2] (3)	Expected Population 1970 (4)	Census population 1970 (5)	Net Migration: (5)-(4) = (6)	Net Migration: Percent (7)
Total, all ages	Total, all ages	2950	NA	NA	4006	7557	3851	NA
…n April 1, 1965 to 1970	Under 5 years	NA	788	26	762	1010	248	6.4
…n April 1, 1960 to 1965	5 to 9	NA	553	14	539	1197	658	17.1
…der 5 years	10 to 14	421	NA	3	418	970	552	14.3
…5 to 9 years	15 to 19	329	NA	3	326	487	161	4.2
…to 14 years	20 to 24	278	NA	3	275	290	15	.4
…5 to 19	25 to 29	155	NA	3	152	732	580	15.1
…0 to 24	30 to 34	137	NA	2	135	829	694	18.0
…5 to 29	35 to 39	214	NA	3	211	636	425	11.0
…0 to 34	40 to 44	236	NA	8	228	466	238	6.2
…to 39	45 to 49	234	NA	4	230	322	92	2.4
…to 44	50 to 54	176	NA	10	166	237	71	1.8
…to 49	55 to 59	173	NA	8	165	203	38	1.0
…to 54	60 to 64	119	NA	22	97	167	70	1.2
…to 59	65 to 69	143	NA	13	130	109	-21	-.5
…to 64	70 to 74	119	NA	30	89	81	-8	-.2
…to 69	75 to 79	86	NA	39	47	64	17	.5
…-74	80 to 84	65	NA	53	12	39	27	.7
…years and over	85 years and over	65	NA	41	24	18	-6	-.2

1 Ct. Department of Health, Connecticut Vital Statistics, 1960-1969. Estimated … 1/1/70-3/31/70.

2 [illegible] "[illegible]

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...to 44	50 to 54	176	NA	10	166	237	71	1.8
...to 49	55 to 59	173	NA	8	165	203	38	1.0
...to 54	60 to 64	119	NA	22	97	167	70	1.2
...to 59	65 to 69	143	NA	13	130	109	-21	-.5
...to 64	70 to 74	119	NA	30	89	81	-8	-.2
...to 69	75 to 79	86	NA	39	47	64	17	.5
...to 74	80 to 84	65	NA	53	12	39	27	.7
...years and over	85 years and over	65	NA	41	24	18	-6	-.2

State Department of Health Connecticut Vital Statistics 1960-1969. Est. [illegible] 1/1/70-3/31/70.

ANALYSIS OF NATURAL FEATURES

SLOPE

Flat Site (less than 5% slope)

- excellent for construction of shopping center, office buildings, schools, high density residential development, play fields, etc.
- the grouping of buildings, landscaped areas and earthwork is required to create interest, space, scale, character, etc.

Sloping Site (5% to 15% slope)

- good for residential development with smaller scale buildings designed to fit the site and take advantage of views;
- hillside creates interest and an excellent setting for development of detached single-family homes (subdivisions, clustered development and open space residential developments);
- sloping site provides an opportunity to design apartment structures into hillside.

Steep Site (15% slope or more)

- poor for all types of development;
- substantially increases construction costs and risk of erosion;
- should be in forest cover and used for open space purposes.

SOILS*

Terrace Over Sands and Gravels

- excessively to well drained areas suitable for development of most residential and commercial uses; and favorable for installation of on-site sewage disposal systems. Percolation rate may allow sewage efficient to pollute water if water resources are nearby.
- moderately well drained areas (seasonal high water table) require substantial site improvements (drainage and filling) for successful operation of on-site sewage disposal systems and appropriate drainage to prevent wet basements.
- poorly-drained areas not desireable for developments unless substantial investments are made in drainage, filling and installation of central sewer system.

Upland Over Friable to Firm Glacial Till

- well drained areas suitable for development of most residential and commercial uses and favorable for installation of on-site sewage disposal system.
- moderately well drained areas (seasonal high water table) require substantial site improvements (drainage and filling) for successful operation of on-site sewage disposal systems and appropriate drainage to prevent wet basements.
- very stony areas add difficulty in excavation and earth moving.
- poorly drained areas are not desireable for development unless substantial investments are made in drainage, filling, and installation of central sewer system.

Upland Over Compact Glacial Till (Hardpan)

- well drained areas suitable for development of most residential and commercial uses. Satisfactory operation of on-site sewage disposal system is difficult because of the hardpan.
- moderately well drained areas require sanitary sewer system and appropriate drainage to prevent wet basements. During wet periods the water table is a problem in construction of buildings with basements.
- poorly drained areas are not desireable for development unless substantial investments are made in drainage, filling and installation of central sewer system.

* For more detailed information, refer to "Natural Soil Groups For Connecticut", prepared by Soil Conservation Service and U. S. Department of Agriculture

Upland - Rocky and Shallow Bedrock

- creates problems in excavation for foundations and utilities.
- solid foundation base may be of particular advantage for commercial developments.
- occasional pockets of deeper soils can be utilized for individual home sites served by on-site sewage disposal systems.

Flood Plain

- the hazard of flooding severely limits use of this area for residential, commercial and industrial developments.

Marsh and Swamp

- poor foundation conditions especially for multiple-dwellings and commercial structures.
- development of these areas is very costly and requires complete alteration (removal of organic materials, filling, drainage, etc.).
- use of these areas is possible with appropriate site modifications which could take place when the locational value of site increases.
- good planning could utilize small amounts of these areas in providing local parks and shallow lagoons for amenity, natural preserve, etc. Substantial site preparation in terms of drainage and grading is required for park and playground development.

MAJOR PHYSICAL FEATURES

River Valley

- Willimantic River is major feature of this area.
- the valley walls create a sense of enclosure and limit the view.
- relatively level terraces along the base of the valley are suitable for most types of development.
- an aquifer with daily yields sufficient to serve intensive residential, industrial and commercial developments.
- flood plain.

Upland - Plain

- relatively level plain with nodes overlooking ravines and the Willimantic River.
- forest cover.

Stream Valley

- the Skungamaug River and wetlands characterize this area.
- sparsely vegatated,
- the wooded valley walls create a sense of peace and limit the view.
- flood plain.
- majority of the area is not suitable for development and should be used for open space purposes: nature preserves, parklands, etc.

Upland - Rolling Terrain

- change in elevation creates interest and provides setting for single-family homes, townhouses and garden apartments.
- forest cover.
- shallow bedrock.
- views overlooking ravines, Skungamaug River, Shenipsit Lake.

Lake

- Shenipsit Lake major feature of this area.
- eastern shoreline is characterized by slope used for agricultural purposes, while the northern section is wooded rolling terrain.
- sloping area over hardpan could create pollution problem if new developments are served by on-site sewage disposal systems.

Ravines

- area distinguished by forest cover and springs.
- space is defined and views are contained by the steep sides.
- views are directed toward valley below.
- area not suitable for development because of the steep sides and narrow base.

SUMMARY

Development Principles

- New development should reflect the area's natural features and existing conditions.

- Level areas are potential sites for the development of commercial, office, entertainment, high density residential, and recreation uses. Grouping of buildings, landscaped areas and earthwork should be used to create interest, space, etc., on flat sites.

- Rolling terrain creates setting for medium density subdivision developments as well as opportunities for construction of town-houses and garden apartments.

- Shallow bedrock creates problems that requires residence on large lots (2 acres or more) with flexibility to locate buildings where local soil conditions are suitable for septic tanks or more intensive uses that compensate for the increased site improvement costs.

- Sites abutting or overlooking areas of scenic value and accessible to commercial, community and recreation facilities are prime locations for intensive residential developments.

- Buildings should be designed and located with the idea of maintaining the area's existing vegetation.

- Site planning should take advantage of sloping terrain and views.

- Buffer zones should be established when new development is not consistent with the bulk, mass and architectural style of existing buildings.

- Construction of shopping, community and recreation facilities should be coordinated with new housing development.

- Commercial, community, recreation and other public facilities should be grouped together wherever they can benefit from economies of scale of site preparation, construction and proximity to supporting population.

- Neighborhood shopping, community facilities, recreation facilities, open space system, circulation networks (pedestrian and vehicle), etc., should be designed to create framework that structures and that makes communities out of what could be mere random development.

- A variety of housing types for all income levels should be included in the development program.

- Public access should be maintained to large bodies of water and other natural features with recreation potential.

- Planned Unit Development, cluster single home provisions, and other zoning insentives should be adopted to encourage new developments that are more sensitive to natural features and designed to improve

physical, social and economic conditions of the community. i.e., more intensive uses might be permited adjacent to stream-belts or land overlooking farms if the natural landscape, cropland, pasture etc. is maintained; and under appropriate circumstances, mixed uses and variety of housing types might be permited along the shoreline and uplands overlooking some lakes, ponds, etc. so that a larger segment of the population has an opportunity to take advantage of setting and recreation potential.

Conservation Principles

- Setback requirement of not less than 150' on each side of stream/swale network should be established to maintain the area's natural drainage system and possibly used for recreation purposes, landscaped areas (transition zone) between different types of urban development, etc.

- Slopes 15% grade or more should be in forest cover to contain erosion and used for open space purposes.

- Building coverage and height should be limited in areas with forest cover to maintain its wooded appearance.

- All forest, woodlands and free-standing trees above 4" caliper should be surveyed and subject to preservation regulations.

- Wetlands and areas with poorly drained soils are not suitable for most urban developments and should be used for open space purposes, i.e., flood detention reservoirs, wildlife habitats, parkland, buffers, etc.

- Areas of major physiographic value (escarpment) or a complete landscape unit (valley floor consisting of stream, narrow base and steep sides) should be preserved and used for open space purposes.

- Development should be limited to open space uses adjacent to reservoir and setback requirements should be increased from 150' to 200' or more along streams that contribute to public water supply.

- Sites and buildings of historic significants should be identified and preserved.

- Flood prone areas that have a 1 in 50 chance of being inundated should be excepted from all development except agreed open space and recreation.

- Current state health regulation prohibiting development on soils unsuitable for septic tanks should be enforced. On other soils density of development using septic tanks should be regulated in relation to soil permeability and with reference to surface and ground water supplies.

CRITERIA FOR DETERMINING BUILDABLE LAND AREA*

Favorable (1 d.u./ 3/4 a.-)

- upland soils over friable to firm glacial till with slope less than 5%.
- well drained terrace soils over sands and gravels with slope less than 5%.

Moderate Limitations (1 d.u./a.+)

- moderately well drained soils over friable to firm glacial till; successful operation of absorption fields requires substantial site improvements (land fill and drainage). Sanitary sewer system highly desireable.
- 5-15% slope. Increase problems in design and site selection for absorption fields.
- excessively drained terrace soils over sand and gravel; minimum setback of 150' between stream and absorption fields to prevent pollution of streams, well water, etc.

Severe Limitations (1 d.u./2 a.+)

- rocky and shallow to bedrock; large lots required (two or more acres/ dwelling unit); occasional pockets of deeper soils can be utilized for individual home sites served by subsurface sewage disposal systems.
- moderately well drained soils over hardpan; successful operation of absorption fields very difficult because of the hardpan and seasonal high water table; substantial site improvements required (land fill and drainage); sanitary sewer systems highly desireable.

* For additional information refer to "Natural Soils Groups for Connecticut," prepared by the Soil Conservation Service and U. S. Dept. of Agriculture.

- excessively drained terrace soils over sands and gravels in drainage area of a public water supply; minimum setback of 150' between streams and absorption fields required to help prevent pollution.

Prohibited

- poorly, very poorly drained.
- flood prone area.
- 15% slope or more.
- stream belt area.
- moderately well drained (seasonal high water table) over hardpan in drainage area for public water supply; development could be permitted if area is served by a sanitary sewer system.

Assume:

- that Town will not be served by a central sewer system; and
- that detached single-family homes will continue to be dominate housing type.

Table No. . Buildable Land, 1972

Category (development suitability)	Acres	% of Vacant Land	% of Total Land
Favorable	1,876	9.2	7.1
Moderate limitations	8,497	41.4	32.4
5-15% slope	(6,328)	(30.9)	(24.1)
seasonal highwater table	(2,150)	(10.5)	(8.2)
excessively drained	(19)	(0.1)	(0.1)
Severe limitations	3,841	18.7	14.7
rocky and shallow bedrock	(2,322)	(11.3)	(8.9)
seasonal high water table over hardpan	(1,486)	(7.2)	(5.7)
excessively well drained related to public water supply	(33)	(0.2)	(0.1)
Prohibited	6,291	30.7	24.0
poorly, very poorly drained	(2,841)	(13.9)	(10.8)
flood prone areas	(419)	(2.0)	(1.6)
15% slope or more	(2,230)	(10.9)	(8.5)
seasonal high water table over hardpan related to public water supply	(600)	(2.9)	(2.3)
marsh and swamp	(201)	(1.0)	(0.8)
Total vacant land	20,505	100.0	78.2
Land in use *	5,114		19.4
Water bodies	621		2.4
TOTAL	26,240		100.0

* Does not include land presently used for agricultural purposes.

Table No. . Holding Capacity

Category (development suitability)	Acres	Lot Size Required (acres)	Estimated Capacity (D.U.)	Average Family Size	Estimated Population
Vacant land:					
favorable	1,876 (1,463)*	3/4	1,950	3.4	6,630
moderate limitation	8,497 (6,627)	1	6,627	3.4	22,530
severe limitation	3,841 (2,995)	2	1,497	3.4	5,090
prohibited**	6,291	-	-	-	-
Land in use****	5,114	-	2,224***	3.4	7,560
Water bodies**	621	-	-	-	-
Total	26,240		12,298		41,810

Assume:

- that the Town will not be served by a central sewer system; and
- that detached single-family homes will continue to be the dominant housing type.

* Reduced:
- 20% to account for streets, utilities, wastage, etc.; and
- 2% to accommodate new commercial uses, community facilities and industrial development.

** Not suitable for development.

*** Estimate of households, 1972.

**** Does not include land presently used for agricultural purposes.

TOLLAND COMMUNITY FACILITIES INVENTORY

RECREATION/OPEN SPACE

I. Schools

	Indoor Facilities	Area (acres)	Outdoor Facilities
1.	Hicks Memorial School	)	. open playfield
2.	Meadowbrook School	) 35.5	. 1 soccer field . 2 little league ball fields
3.	Tolland Middle School	)	. baseball field
4.	Tolland High School	45	. 2 baseball fields . 2 soccer fields . 1 track

Subtotal -- 80.5 Acres

II. Town-Owned Recreation Areas

	Location	Area (acres)	Activities/Facilities
1. Crandall's Park	Cider Mill Road Town center	65	. half of park is intensively developed . swimming . picnicking, hiking . baseball field . basketball court . 3 tennis courts
2. Tolland Community Building Association	Cider Mill Road Town Center	7.5	

Subtotal -- 72.5 Acres

III. State-Owned Recreation Areas

	Location	Area (acres)	Activities/Facilities
1. Nye-Holman Forest	northeast section of Town	873	. archery . hiking, hunting
	Subtotal --	873	Acres

IV. Privately-Owned Recreation Areas

1. Dell-Aire Campground	Shenipsit Lake Road/ Grahaber Road	60	. camping, swimming, snowmobiling
2. Sol Lavitt's	South River Road	10	. 4 Little League baseball fields
3. Lake Shenipsit	west side of Town		. boating, fishing, snowmobiling
4. Grange Building	Town Green		
	Subtotal --	70	Acres

Total All Open Space -- 1,096 Acres

Recreation/Open Space

General Information

- One of Town's biggest problems is ballfields - not enough.

- Town has never enforced State's provision that 1 acre in 10 acres of a subdivision can be open space.

- Recent discussion in Town re formation of private land trust to acquire land suitable for open space.

- Some feeling that Town needs open space plan. Questions arise re removal of tax base, assessment practices, etc.

TOLLAND COMMUNITY FACILITIES INVENTORY

SCHOOLS

Complete attached sheet by adding information where missing (capacities, site sizes, recreational facilities).

General Information

. Board of Education rough enrollment projections:

1. 4648 students - 1982. Based on population projection for town of 13,100 by 1980.

2. 3300 students - 1980. Based on number of projected births only.

3. 4419 students - 1980. Based on past trends.

4. Tolland would need 44 added classes at 25 students/classroom to meet #1 projection.

. Board has several rough school distribution concepts:

1. Continue with present centralized educational park concept. More land in area necessary.

2. Develop a second educational park at high school. Move middle school to high school.

3. Develop a K-2, K-3 neighborhood school program.

. Superintendent needs ± 2000 sq. ft. of administrative offices space.

. Three portable classrooms are needed for next September.

TOLLAND SCHOOL SYSTEM (April, 1972)

NAME OF SCHOOL	LOCATION	GRADES SERVED	APPROX. PRES. ENROLLMENT	APPROX. CAPACITY	SITE SIZE	RECREATIONAL FACILITIES	SPECIAL PROGRAMS/ FEATURES	COMMENTS
Hicks Memorial School	Town Green	3-4	450	Full	)	open playfield	Wisconsin/ GE (independently guided ed.) will begin soon.	All rooms occupied.
Meadowbrook School	SE of Town Green	K-2	740	Full	)35.5)acres	1 soccer field 2 Little League ball fields	British Primary System - 11 classes	All rooms occupied.
Tolland Middle School	SE of Town Green	5-8 ?	875	± 800	)	No gym 1 baseball field		Need minimum of 8 additional regular classrooms. Need gym, industrial arts, home economics and science facilities. Study committee to be appointed in May. Addition to M.S. to be studied.
Tolland High School	Cathole Rd.	9-12	600	800	45 acres	2 baseball fields 2 soccer fields 1 track		Needs auditorium and more classrooms. Currently conflicts exist between use of gym for drama, music and recreational purposes. Gym used by Recreation Commission extensively.
		Total	2741					
		(Includes vo./ag. students attending school elsewhere)						

TOLLAND SCHOOL ENROLLMENT TRENDS AND PROJECTIONS

(Data from Superintendent of Schools)

ENROLLMENT TREND 1967-68 TO 1970-71

Year	Total School Enrollment
1967-68	1,588
1970-71	2,519
Four-Year Increase	931
% Increase	59%

ENROLLMENT PROJECTION 1970-71 TO 1973-74

Year	Total School Enrollment
1970-71	2,519
1973-74	2,903
Four-Year Increase	384
% Increase	15%

EDUCATIONAL PLANNING

1. Recent Enrollment Experience
    * Count pre-school and school-age children
    * Past births and enumerations compare to resulting enrollments
    * Study recent migration

2. Development Plans
    * Zoning
    * Master Plan
    * Circulation and access

3. Educational Policies
    * Entry age
    * Bussing
    * Program

4. Enrolment Projections
    * Study recent enrollment trends
    * Project new development, migration, birth rates

5. Existing Plant
    * Condition
    * Adequacy
    * Expandability
    * Space needs

6. Fiscal Capacity

    * Future Grand Lists

b
l * State Aid
a
c * Bond Proceeds (school)
k
    * Revaluation

r * Municipal operating costs
e
d * Bonded indebtedness

7. Site Selection

    * Type school

    * Size site

    * Access

    * Service area and population

    * Site development potential

    * Utilities available

TOLLAND COMMUNITY FACILITIES INVENTORY

LIBRARY

1. Public or privately-owned libraries

   . name - Tolland Public Library *

   . location - Town Green, adjacent to Savings Bank of Tolland

   . floor area - approximately 2800 sq. ft.

   . number of books (approx.) - ± 14,000

   . meeting space - small area in main room

   . age - circa 1822

   . condition - aged, recent crack in second floor limits use of upstairs for books

   . special features, collections - several books on history of Tolland; County Courtroom upstairs - partially in tact.

   . site size - about 55 x 47 = 2585 sq. ft.

2. School libraries

	Volumes	Capacity
Meadowbrook	3180	5,000
Hicks	3327	3,327
Middle School	2300	10,000
High School	4131	± 6,000

* Owned by Tolland Library Association, not the Town. Building is one of several like it in the State and has been recommended by historians for preservation.

OLD TOLLAND HOUSES

1 - School House, District # 8
2 - Howard West House - 150 years old
3 - Cummings House (Chapman)
4 - Kenneth Bahler House - 18th Century
5 - Gladden House
6 - White School House, District # 5, now Fire House
7 - Clarence Campbell House
8 - Webber House
9 - Palmer House - 18th Century
10 - Barstow House - " "
11 - Patapas House (Johnson)
12 - Pulpit Rock
13 - Gottier House
14 - Neff House (Emory)
15 - Neff House (Ellery Jr.)
16 - Leslie Whitman House (Inn w/ toll gate
17 - Slater House - 1720
18 - Buff Cap School House, District # 13
19 - School House, District # 9
20 - Allen Mather House
21 - Holman House (owned by State)
22 - Wesley Chapel (Methodist)
23 - Murphy House (Edgerton)
24 - King House (E. Dimock)
25 - School House, Districts # 7 & # 9
26 - Cross House (Rhodes)
27 - Levay House (Snow)
28 - Lemek House (Hatch)
29 - Baker House (Rose)
30 - Louie Zanghi House (Joslyn)
31 - S. Tinkham House (S. Tracy)
32 - Regan House (Loomis)
33 - MacArthur House (Parish)
34 - Anderson Mill
35 - Barnard House (19th century brick)
36 - J. Auperin House
37 - Barrows House
38 - Donkeyville Mill
39 - Szemreylo House (Mike & Stanley)
40 - Pivovarczuk House (Old blacksmith shop)
41 - School House, District # 2 (Henry Szemreylo)
42 - Reiske House (Noah Grant Home)
43 - Bert Ursin House (Little, old cemetery in back)
44 - Cedar Swamp School House, District # 3, (Page House)
45 - Settlers' Rock
46 - Stuart Benson House, 17th century?
47 - Stuart Danforth House, 17th century?
48 - Usher House
49 - Balukas House
50 - Peck House

51 - Beaton House (Chapman)
52 - Silk Mill, later Clough's Machine Shop
53 - Scacha House
54 - McNally House
55 - Waldo House
56 - Osborne House (old Clough House)
57 - Wilson House
58 - Benton Homestead (1720)
59 - Held House (Gottlieb)
60 - Dam, Flume, Raceway, Stone Bridge.
61 - Animal Pound
62 - Lees House (Wm. Webster)
63 - East Cemetery (1762)
64 - North Cemetery (1762)
65 - South Cemetery (1720) First Burial
66 - Underwood Belt Factory
67 - Duane Mathews House
68 - Tolland Green including houses surrounding it.
69 - ANCIENT STONE ARCHED BRIDGE
70 - BURGANDY HILLS QUARRY

TOLLAND COMMUNITY FACILITIES INVENTORY

TOWN OFFICES/TOWN HALL/TOWN YARD

1. Town Offices -- Selectmen, Building Inspector, Sanitorium and Road Foreman housed here.
   - location - Town Green
   - area of site
   - floor area
   - age, condition of building - Present space is okay and adequate for purpose.

2. Town Hall
   - location - Town Green. --
   - area of site
   - floor area
   - age, condition of building

   Office space of town clerk, assessor, registrars, treasurer is inadequate. Bank building would be good location, some feel, because valuts and record storage space is good. Possible re-use of Town Hall for telephone communications center has been proposed.

3. Town Public Works Yard/Garage --
   - location - Old Stafford Rd., adjacent to church
   - area of site
   - floor area
   - age, condition of buildings

   Present is inadequate. New garage is proposed. School busses should be stored nearby. Space for police and ambulance desired by these outfits. Site on Old Post Road near Town Center is proposed. Existing location probably aesthetically undesireable, plus small, too close to area of high residential value, appeal.

4. Police Headquarters *
   - location -- Tolland Administration building, Town Green
   - area of site
   - floor area - 250 sq. ft.
   - age, condition of building - 1895, good

* Town is asking for a new full-time officer and cruiser next year. Would like to be in new Town garage.

TOLLAND COMMUNITY FACILITIES INVENTORY

FIRE

1. Location by street of all fire stations, communications centers

Communications Center - Tolland Street next to old jail.
Merrow Road Fire House - Rhodes Road & Route 195
Leonards Corners Fire House - Routes 30 & 74
Center Fire House - Town Garage, Dunn Hill and Bald Hill

2. Description of each station

. number of bays: Merrow Road -- -- two bays
Leonards Corners -- two bays
Center -- -- one bay

. equipment housed: Merrow Road -- -- pumper and rescue truck
Leonards Corners -- pumper and tanker
Center -- -- brush truck

. approximate age:
Merrow Road -- pumper, 1967, and rescue truck, 1970
Leonards Corners -- pumper, 1962, and tanker, 1965
Center -- brush truck, 1967
also -- brush truck, 1947, and brush truck, 1952

. size of site

3. Obtain copy of Fire Department's Ten-Year Plan

TOLLAND COMMUNITY FACILITIES INVENTORY

Ambulance Service

1. Location -- Town garage and storage area on Old Stafford Road near church. Have garage and vehicle.

2. Adequacy:

- Present facilities inadequate. Would like housing for ambulance in proposed Town Garage.
- Need adequate water supply
- Need adequate training area
- Need storage area for convalescent aids
- Need overnight facilities for crews
- Need paved area near building
- Need central location
- Need communications/alert system
- Prefer volunteer as opposed to paid professional system
- Present facilities cramped.

TOLLAND COMMUNITY FACILITIES INVENTORY

UTILITIES

1. Water

   . water lines - location, size: Town center area. About 85 homes served by Tolland Aqueduct Company.

   . larger community wells: Tolland Aqueduct, Rockville Water and Aqueduct Co., Woodland Summit, Tolland Summit, Country Hills, Heritage Woods, Valley View, Baxter Farms. All but Tolland Aqueduct are deep well supplies in rock. Tolland Aqueduct is shallow well supply.

   . watershed property, utility property: Shenipsit Lake area - see CRPA Regional Utilities Study, State Health Dept. Public H_2O Supplies Map.

2. Sewers

   . any? -- No

3. Natural gas transmission pipe lines

   . location, etc.

4. Electric transmission lines R.O.W.'s

   . location, etc.

TOLLAND COMMUNITY FACILITIES INVENTORY

REFUSE DISPOSAL AREA

1. Location -- Old Stafford Road, two miles from town center.

2. Size (acres)

   . average depth

   . area used up

   . area still usable

3. Nearby houses, wells, watercourses

4. Future planned use when filled

   . Adequate for about 2 years.

   . Is a current proposal to acquire a 139-acre site for joint recreational/ refuse disposal use.

   . Some interest in State's encouragement of regional crusher/shredder operations.

COMMERCIAL FACILITIES

(Planning Design Criteria, DeChiara, Koppelman, 1969)

		Neighborhood Centers*	Village Centers*
1.	Major function	Sale of convenience goods and personal services	Some functions of the Neighborhood Center plus sale of shopping goods (wearing apparel, appliances, etc.)
2.	Leading tenants	Supermarket and drugstore	Variety store and small department store
3.	Location	Intersection of collector streets a/c secondary roads	Intersections of major roads and/or expressways
4.	Radius of service area	1/2 mile	2 miles
5.	Minimum population to support center	4,000	35,000
6.	Site area (gross land area)	4-8 acres	10-30 acres
7.	Desirable maximum size of center as percentage of total area served	1.25% (1 acre/1,000 pop.)	1.00% (0.75 acres/1,000 pop.)
8.	Ranges of gross floor area	30,000-75,000 sq. ft.	100,000-250,000 sq. ft.
9.	Number of stores and shops	5-20	15-40
10.	Parking requirements**	200-600 spaces	1,000-3,000 spaces

Parking ratio: 4 to 1 (Parking area is four times gross floor area of building; 400 sq. ft. per parking space)

* "A group of commercial establishments, planned, developed, owned, and managed as a unit, with off-street parking provided on the property (in direct ratio to the building area) and related in size (gross floor area) and type of shops to the trade area that the unit serves -- generally in an outlying or suburban territory." Definition of the Community Builders Council, (CBC), Urban Land Institute (ULI).

The Community Builders Council, ULI, offers the following indicators for tvpes and sizes in Commercial Facilities (see Community Builders Handbook, Executive Edition, 1960, page 217).

Average gross leasable area	50,000 sq. ft.	150,000 sq. ft.
Ranges in GLA	30,000-100,000 sq. ft.	100,000-300,000 sq. ft.
Usual minimum site area	4 acres	10 acres
Minimum support	7,500 to 40,000 people	40,000 to 150,000 people

** The CBC recommends a parking ratio of 3 sq. ft. of parking area to 1 square foot of gross floor area be used for planning calculations only. For operations the parking index is more realistic (see Community Builders Handbook, Executive Edition, 1960, pages 300-305

TOLLAND COMMUNITY FACILITIES

General Standards

RECREATION

Source:
CRPA Open Space Plan, 1966

1. Municipal Open Space Standards recommended by CRPA:

	Category	Acreage (per 1000 pop.)	Size	Location
Neighborhood Open Space	children's play areas (tot-lots)	.5	5 - 20,000 square feet	one block to 1/4 mile radius
	playgrounds	2.0	4 - 8 acres	1/4-1/2 mile radius with elevation schools
	playfields	2.0	15-25 acres	1/2-1 mile radius with Jr. & Sr. High Schools; large parks
	neighborhood parks	2.5	5 - 10 acres	neighborhood
		7.0 acres/1000 pop.		
Town-wide Open Space	large parks natural areas special facilities	3.0) 2.5)) 2.5)	50-100 acres	located re density, historic value, topography, access
		8.0 acres/1000 pop.		

2. General Requirements for Recreation Facilities

Type of Activity	Space Req./ Unit of Pop.	Size	Min. Pop. to Support	Max. Service Radius
1. Young Childrens' Play Area	.5 A./1000	5-20,000 sq. ft.	250-1000	1/4 mi.
2. Childrens' Play Area	.5 A./1000	1-2 A.	2000-4000	1/4-1/2 mi.
3. Field Play Area for Children	1.5 A./1000	3-6 A.	2000-4000	1/4-1/2 mi.
4. Sports Field for Older Children and Adults	2.0 A./1000	6-9 A.	8000-12,000	1-1 1/2 mi.
5. Court Games	1/4 A./1000	1-2 A.	2000-4000	1/4-1/2 mi.
6. Swimming	1/2 A./1000	Residential (30'x40') 1/2A.	2000	1/4 mi.
		Competition (35'x60') 1 A.	4000	1/4-1/2 mi.
		25 Meter (42'x82') 2 A.	8000-12,000	1-1 1/2 mi.
7. Indoor Rec.	1/2 A./1000	5,000 sq. ft. Building 1/2 A.	2000	1/4 mi.
		10,000 sq. ft. Building 1 A.	4000	1/4-1/2 mi.
		20,000 sq. ft. Building 2 - 3 A.	8000-12,000	1-1 1/2 mi.
8. Major Boating Facilities	100 A./50,000	100 A.+	50,000	1/4-1/2 hr. to 85% of Pop.
9. Hiking, Camping, Horseback Riding, Nature Study	10 A./1000	500-1000 A.	50,000-100,000	1/4-1/2 hr. to 85% of Pop.
10. Golf	1-18 hole course/50,000	120 A.	50,000	1/4-1/2 hr. to 85% of Pop.

2. General Requirements for Recreation Facilities (cont'd)

Type of Activity	Space Req./ Unit of Pop.	Size	Min. Pop. To Support	Max. Service Radius
11. Picnicking	4 A./1000	Varies	Varies	Varies
12. Water Sports, Fishing. Rowing, Canoeing	1 pond or lake/25,000	20 A. of Water	25,000	1/4-1/2 hr. to 85% of Pop.
13. Zoos, Arboretums, Botanical Gardens	1 A./1000	100 A.	100,000	1/4-1/2 hr. to 85% of Pop.
14. Outdoor Theaters, Band Shells	1 A./25,000	5 A.	125,000	1/4-1/2 hr. to 85% of Pop.

TOLLAND COMMUNITY FACILITIES

General Standards

LIBRARY

Source:
Connecticut State Library Committee,
Minimum Standards for Principal
Public Libraries (Recommended)

1. Financial Support: $5.50 per capita by 1973

2. Size of Holdings:

Population of Service Area	Min. Volumes 1975
0 - 9,999	4 per capita
10,000 - 34,999	3.5 per capita

Libraries unable to meet above standards should : a) add or replace annually 1/2 volume per capita for 0 - 5,000 population; 1/3 volume per capita for 5,000 - 12,500 population; 1/4 volume per capita for 12,500 - 30,000 population; or b) spend at least $1.00 per capita or 20% of total budget, whichever is less, for annual acquisition of library materials.

3. Building Area:

Support Population	Building Area
0 - 10,000	1 sq. ft. per cap.
10,000 - 20,000	0.8 sq. ft. per cap.

TOLLAND COMMUNITY FACILITIES

General Standards

FIRE PROTECTION

Sources:
Municipal Fire Administration, ICMA;
American Insurance Association
Grading Schedule

Fire Stations

1. Lot size -- large enough for
   - off-street parking all volunteers plus 2 shifts
   - drill yard
   - future expansion

2. Building size:
   - large enough for two pumpers plus ladder truck
   - 12' x 12' minimum door size; 14' x 14' desirable

3. Distribution:
   - towns usually have no more than 2 pumpers until population reaches 10,000
   - no point in high value district more than 3/4 mile away from engine, hose, or engine-ladder company; or more than one mile from company with ladder service
   - in closely built-up residential areas, distances are 1 1/2 and 2 miles respectively
   - in areas where buildings are scattered -- 3 miles

TOLLAND

General Standards

Water Supply/Distribution

- Regional per capita water consumption is 130 gallons per day. Varies widely.
- Tolland Aqueduct Co.'s Burbank Reservoir has estimated storage capacity of 0.25 million gallons; safe yield is estimated at 0.015 mgd. Company serves ± 250 people. Existing supply is 0.1 mgd.
- General Criteria (U. S. Dept. HEW)

Population Density	Equivalent Lot Size	Source Economic Justification
Over 2500 persons/sq. mi.	Less than 1 acre	Public H^2O supply justified
1000-2500 " " "	1 to 2 acres	Public H^2O normally justified
500 - 1000 " " "	2 to 4 acres	Public H^2O not normally justified
Less than 500 " " "	over 4 acres	Public H^2O rarely justified

General Standards

Sewerage

. Total domestic sewerage in industrialized communities can amount to 100 gallons per person per day.

. General Criteria

Population Density	Equivalent Lot Size	Service Economic Justification
Over 5000 persons/sq. mi.	Less than 1/2 acre	Public sewerage justified
2500-5000 " " "	1/2 to 1 acre	" " normally justified
1000-2500 " " "	1 to 2 acres	" " not " "
Less than 1000 " " "	Over 2 acres	" " rarely "

Standard	Minimum Lot Size Recommended Per Dwelling Unit	
	Suburban Areas(1) (To have public sewers within 15-30 years)	Rural Areas(2) (No public sewers)
Public Water Supply & On-Lot Sewage Disposal System	1/2 acre	3/4 acre
Private On-Lot Water Supply (Well) & On-Lot Sewage Disposal	3/4 acre	1 acre

(1) On-Lot sewage disposal system would more than likely be replaced by public sewers within 15 to 30 years.

(2) An acre may, under favorable conditions, accommodate a sub-surface sewage disposal system for up to 60 years, assuming the need for 3 replacement seepage fields, each with a usable life of 15 years.

TOLLAND COMMUNITY FACILITIES

General Standards

REFUSE DISPOSAL AREAS

Sources:
Conn. State Dept. of Health
Public Health Code
Reg. Sec. 19-13-B24a
Planning Design Criteria

1. Size Sanitary Fill:* Approx. 4 acres per 10,000 population served

2. Distance requirements:

   - Preferably 1000 feet from all residential or commercial structures and any wells. Any of preceding within 1000 feet must be approved.
   - 100-foot buffer zones between refuse deposits and adjacent properties should be maintained.
   - 50 feet of clean fill should be maintained between refuse deposits and watercourses piped or not.

3. Prevailing winds should be considered.

4. Future planned use of site should be established.

5. In addition, topography (slope) and soil characteristics are constraints on location of refuse disposal areas.

6. Use-up rate of refuse disposal sites varies with locality, i.e., amount of refuse generated daily, demolition in process, size and depth of site.

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* Difference between sanitary land fill and a dump -- dump permits periodic burning of all rubbish and rubbish is periodically plowed under; sanitary fill in Connecticut -- burning of brush and demolition materials only, and refuse is spread and covered with fill daily.

COMMERCIAL SPACE DEMAND - TOLLAND

* In determining how much commercial floor area is warranted to serve Tolland's future population, several factors are considered:

    1. Amount of existing commercial space.
    2. Amount of competing commercial space outside of Tolland within several minutes driving time.
    3. Projected population levels.

* It is generally accepted that populations in excess of 25,000 are required to support shopping centers which offer comparison shopping goods (wearing apparel, appliances, furniture, general merchandise).

* The type of commercial development which Tolland is most likely to attract and support in the next ten years is that which offers convenience-oriented goods and services (food, hardware, drugs, and package stores; barbershop, salon, restaurant; and professional and business office space). This is above and beyond any possible highway-related, larger shopping center which might draw at a regional level as does Vernon Circle.

* Following is one method which indicates approximate ranges of commercial space supportable by various population levels:

Projected Per Capita Convenience Goods Expenditures - Tolland [1,2]

Item	1970 Expenditures	1980 Expenditures
Food	$391	$431
Drugs	72	82
Hardware	14	14

Expenditures Required to Support One Sq. Ft. of Floor Area [2]

Item	Optimum Level of Expenditure/Sq. Ft.
Food	$125
Drugs	60
Hardware	45

Warranted Convenience Goods Retail Floor Area

Item	1970 Floor Area	1980 Floor Area
Food	24,400	45,200
Drugs	9,400	17,900
Hardware	2,400	4,100
	36,200 sq. ft.	67,200 sq. ft.

[1] Assume: Family of 3.6 average size in Tolland spends 14% of income on food, drugs, hardware (median income 1970 = $12,300; U. S. Census).

[2] Recent Central Region retail market studies

* To determine how much convenience goods retail floor area might be developed by 1980, subtract the amount of existing convenience goods floor area in each category today in Tolland, and subtract also a portion of existing convenience goods floor area located within a few minutes drive of Tolland town limits, from the 1980 Warranted Convenience Goods Retail Floor Area totals.

* Following are additional general criteria which indicate approximate ranges of commercial space supportable by various levels of population.

TOLLAND

PRELIMINARY EVALUATION OF COMMUNITY FACILITIES

Recreation/Open Space

RECREATION/ OPEN SPACE	CURRENT ACREAGE	STANDARD (Acres/1000 Pop.)	EVALUATION [Surplus(+), Deficiency(-)] 1972	1980
Neighborhood Open Space:				
. Children's Play Areas (pre-school) (Hicks School)	2	0.5	- 1.75 acres	- 4.5 acres
. Playgrounds (games and apparatus children 6-14 years)	?	2.0	- 16 acres?	- 26 acres?
. Playfields (ballfields, open fields - older children)	15-20 (primary schools) 25-30 (high school) 10-15 (Crandall's Park) 50-65 TOTAL	2.0	+ 35 to 50	+ 25 - 40
. Neighborhood Parks (passively used open space)	10? (Town Green) 5 (Community House Assoc.) 15 TOTAL	2.5	- 6	- 18
SUB-TOTAL	67 to 82	7.0	+ 11 to 26	- 10 to 25
Town-wide Open Space:				
. Large Parks	65 (Crandall's)	3.0	+ 40	- 26
. Natural Areas*	--	2.5	- 21	- 33
. Special Facilities	10 (Sol Lavitt's) 50 (Dell-Aire)? (Shenipsit)?	2.5	+ 40	+ 25
SUB-TOTAL	125	8.0	+ 54	- 20
TOTAL ALL OPEN SPACE	192 to 207	15.0	+ 66 to 81	- 4 to 11

* Nye-Holman State Forest in Tolland is a large natural area owned by the State. Its 873 acres offer more than enough town-wide open space to meet general needs in the distant future. The above standards, however, apply to land which ideally would be owned or controlled by the Town. These standards also specify different kinds of town open space deemed desirable. Nye-Holman Forest certainly should be considered valuable open space to help meet Town needs, but it must also be considered as a regional open space for use by the region's residents.

CRPA's Open Space Plan further details what it considers desirable future regional open space acreages in Tolland.

PRELIMINARY EVALUATION OF COMMUNITY FACILITIES

Schools

SCHOOL	PRESENT (1972) ENROLLMENT	CAPACITY (1)	PROJECTED 1980 ENROLLMENT (2)	1980 Surplus (+) or Deficiency (-)	SITE SIZE (1) (acres)	Current (3) Surplus (+) or Deficiency (-) (acres)	1980 Surplus (+) or Deficiency (-) (acres)
Meadowbrook K-2	740	740	1,064	- 324)			
Hicks Memorial 3-4	488	488	709	- 221)	35.5	- 15 (4)	- 23 (4)
Tolland Middle 5-8	875	800	1,102	- 302)			
Sub-Total	2,103	2,028	2,875	- 847			
Tolland High 9-12	578	800	1,067	- 267	45.0	+ 17	+ 14
TOTAL	2,681	2,828	3,942	-1,114			

(1) Data from Superintendent of Schools and Board of Education

(2) Based on NDG projections and Office of State Planning

(3) State of Conn. Dept. of Education Standards:
Elementary School: 10 acres plus 1 additional acre per 100 students
High School: 20 acres plus 1 additional acre per 100 students

(4) It is likely that this deficiency is not as great as it appears, because of the potentially more efficient use of space in the educational park area through careful scheduling by the three schools.

TOLLAND

PRELIMINARY EVALUATION OF COMMUNITY FACILITIES

Library

ITEM	CURRENT AMOUNT	STANDARD	EVALUATION [Surplus(+), Deficiency(-)	
			1972	1980
Tolland Public Library:				
. Books	14,000		-19,000	-30,000
. Building Area	2,800	0-10,000 pop:/sq. ft. p.c. 10-20,000 pop:0.8 sq. ft. p.c.	-5,600 sq. ft.	-7,600 sq. ft.
School Libraries' Books:				
. Meadowbrook	3,180			
. Hicks	3,327			
. Middle School	2,300			
. High School	4,131			
TOTAL BOOKS	26,938			

WORK PROGRAM FOR THE HISTORIC SECTION OF THE COMPREHENSIVE PLAN FOR TOLLAND

Introduction

The purpose of this section of the Plan is to establish policy and program for historic and cultural preservation.

Goals

1. Preserve sites identified with the history of the town, state and nation.
2. Preserve buildings of unique or characteristic architecture.
3. Preserve groups of buildings (Village Center) and street facades.

Physical Resources

1. Comprehensive Inventory
   a. research of old records
   b. site inspection
   c. photographing
   d. mapping
   e. other
2. Evaluation
   a. criteria - historic, architectural, setting, use, and cost considerations

Human Resources

1. Connecticut Historic Society

Implementation

1. Public
   a. zoning
   b. special commissions
   c. scenic easements
   d. renewal
   e. federal and state assistance programs
   f. tax incentives
   g. acquisition for public use
2. Private
   a. acquisition for private use
   b. revolving funds
   c. restrictive covenants
3. Coordination

TOLLAND

PRELIMINARY EVALUATION OF COMMUNITY FACILITIES

Water Supply/Distribution

- Regional per capita water consumption is 130 gallons per day. Varies widely.

- Tolland Aqueduct Co.'s Burbank Reservoir has estimated storage capacity of 0.25 million gallons; safe yield is estimated at 0.015 mgd. Company serves ± 250 people. Existing supply is 0.1 mgd.

- General Criteria (U. S. Dept. HEW)

Population Density	Equivalent Lot Size	Source Economic Justification
Over 2500 persons/sq. mi.	Less than 1 acre	Public H^2O supply justified
1000-2500 " " "	1 to 2 acres	Public H^2O normally justified
500 - 1000 " " "	2 to 4 acres	Public H^2O not normally justified
Less than 500 " " "	over 4 acres	Public H^2O rarely justified

- Certain areas of Town likely to develop at above densities and thus would justify public water supplies in these locations.

- Projected demand in 1980 upon Tolland Aqueduct is 0.1 mgd. CRPA Regional Utilities Study recommends developing new groundwater supplies providing 0.4 mgd. by 1980.

TOLLAND

PRELIMINARY EVALUATION OF COMMUNITY FACILITIES

Sewerage

- Total domestic sewerage in industrialized communities can amount to 100 gallons per person per day.

- General Criteria

Population Density	Equivalent Lot Size	Service Economic Justification
Over 5000 persons/sq. mi.	Less than 1/2 acre	Public sewerage justified
2500-5000 " " "	1/2 to 1 acre	" " normally justified
1000-2500 " " "	1 to 2 acres	" " not " "
Less than 1000 " " "	Over 2 acres	" " rarely "

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Private On-Lot Water Supply (Well) & On-Lot Sewage Disposal	3/4 acre	1 acre

(1) On-Lot sewage disposal system would more than likely be replaced by public sewers within 15 to 30 years.

(2) An acre may, under favorable conditions, accommodate a sub-surface sewage disposal system for up to 60 years, assuming the need for 3 replacement seepage fields, each with a usable life of 15 years.

- 1980 and Year 2000 projected populations would not require municipal treatment plants. Ultimate population would.

- Western drainage area of Town could be sewered; southeastern quarter of Town likely to require sewers in future.

- As with water supply, population densities as well as drainage areas and soil conditions and other factors will influence sewer locations.

Data from CRPA Regional Utilities Study and U. S. Dept. H.E.W.

TOLLAND

PRELIMINARY EVALUATION OF COMMUNITY FACILITIES

Refuse Disposal

(1)Estimated Refuse Production (tons per day)

	1980	2000	Ultimate
Tolland	31	81	131

(1)Estimated Sanitary Landfill Volume Requirements
in Acre-Feet (one acre-foot is volume of one acre filled one foot deep)

	Present to 1980		Present to 2000		Ultimate Annual Need	
	With Incin.	Without Incin.	With Incin.	Without Incin.	With Incin.	Without Incin.
Tolland	183	87	949	451	93	44

Estimated that current refuse disposal area is good for about two years more.

(1) CRPA Regional Utilities Study

GOALS AND POLICIES

Tolland

Goals and policies of a plan are meant to be broad statements of community intent regarding future growth and development. Based upon this community expression, the details of a plan emerge pointing toward implementation of adopted goals.

A GOAL might be defined as an end-state to which the community aspires over a certain period of time.

A POLICY is defined as an agreed-upon general method for achieving a goal.

The logical extension of policies is the identification and development of specific PROGRAMS by which policies are carried out. These are suggested by the proposals and recommendations of the final plan itself.

Following are three very broad, over-riding goals which we feel address themselves to the question of Tolland's future quite directly. The specific goals and policies, which wollow the over-riding goals, together constitute a collection of impressions we have noted in discussions with the Advisory Committee and the results of the questionnaire.

Possible Over-riding Goals

* To achieve orderly and balanced growth which accommodates the Town's future needs within its means.

* To achieve fiscal stability through appropriate mixes of new development.

* To maintain a rural identity through preservation of Tolland's most valuable resource -- its natural environment.

GOALS AND POLICIES

Tolland

RESIDENTIAL DEVELOPMENT

Goal — to offer a range of housing types in order that all ages and income groups have the opportunity to live in Tolland.

to encourage the development of new homes in a manner which enables maximum conservation of natural and cultural resources valued by the Town.

Policies — Adopt planned unit development and cluster zoning to allow mixed types of residential development in forms which allow preservation of desired natural environment.

Relate location and densities of residential development to capacity of soils for subsurface sewage disposal, to accessibility pattern, to characteristics of existing community and to future public utilities.

COMMERCIAL DEVELOPMENT

Goal — to encourage new business and shopping growth responsive to the needs of the whole Town.

Policies — Encourage expanded business development containing convenience shopping goods, services and leisure time activities at the Town center, e.g., supermarket, drug store, restaurant, package store, small cinema/recreation center.

Provide for limited convenience shopping goods space to serve concentrations of residents at carefully planned neighborhood centers, e.g., small grocery store, drug store, laundramat.

INDUSTRIAL DEVELOPMENT

Goal — to attract limited new industrial growth to broaden the economic base and offer local employment opportunities to Town residents.

Policies — Provide for industrial growth convenient to highway access and future public utilities, where soil and topography permit, and where industrial conditions do not conflict with nearby activities and uses.

Establish programs and vehicles directed toward attracting desired new industrial growth, e.g., establish "economic development commission", town-owned industrial park, other land-and tax-related inducements.

AGRICULTURE

Goal — to preserve and expand agricultural activity in order to maintain the Town's attractive rural image and to provide jobs to residents.

Policy — Take full advantage of state-enabled assessment practices which encourage preservation of agricultural land.

OPEN SPACE/RECREATION

Goal — to preserve and extend those lands with unique natural character, wildlife refuge potential and water resource potential which enhance the Town's rural identity and offer recreational opportunity to Town and region residents.

Policies — Preserve in their natural state wetlands, ridges and steep hillsides through state enabling legislation, local zoning, and streambelt ordinances.

Develop parks and areas for active recreational activity to serve existing and projected concentrations of residential development, in conjunction with schools.

Adopt open space standards for new subdivision development.

Adopt planned unit development zoning to permit maximum preservation of desirable open space.

COMMUNITY FACILITIES

Goal — to provide the highest quality of education, public protection, and leisure time facilities within the means of the Town.

Policy — Provide community facilities such as schools, libraries and firehouses in logical relation to size of population and concentrations, access, and other community activities for maximum exposure and use.

UTILITIES

Goal — to provide public water supply and sewerage facilities when required to ensure public health and environmental well-being.

Policy — Provide public water supply and sewerage facilities where safety, economy and the natural environment dictate within a regional management context.

TRANSPORTATION/CIRCULATION

Goal	to provide a system of roads which permits safe and convenient access to jobs, shopping and housing.
Policy	Through a program of road improvements and maintenance, ensure public safety and convenience on State and town roads.

PLAN RECOMMENDATIONS

ANALYSIS

Needs endorsement of following guidelines to be incorporated into the final revised Plan of Development:

- Standards and general requirements for community facilities, recreation facilities, and commercial developments.
- Development and conservation principles.
- Goals and policies.
- Criteria for determining buildable land area.

DEVELOPMENT PROGRAM

Commercial

Needs — Additional retail floor space: food - 36,900 sq. ft.; drugs - 14,200 sq. ft., hardward - 3,500 sq. ft.

Program — Encourage the development of a shopping area (supermarket, drug store, post office, convenience shops, etc.) north of the town center and convenience center that can be expanded into a larger shopping area along the Willimantic River.

Housing

Needs

1. additional 1250 - 1500 homes
   a) 900-1000 new homes for families with incomes of $15,000 or more, single family (subdivision and clustered development) and some townhouses/garden apartments.
   b) 450-500 new dwellings to satisfy the needs of young married couples, families with children and senior adults earning less than $15,000 -- townhouses, garden apartments, apartments and some cluster single-family homes.

Programs

1. establishment of single-family residential areas based on general soil conditions.
2. adoption of provisions which outline conditions required to permit development of:

a) multi-residential dwelling; i.e., soil conditions, community water/sewer development plans, access, relationship to commercial development, community facilities, parkland, etc.

b) cluster single-family development, i.e., soils, open space (streambelt, ponds, etc.), land set aside and developed for recreation purposes, etc.

3. consider use of federal programs to help provide new small size units at cost that senior adults 62 years and over can afford, and to assist the increasing number of families that can not afford market housing.

Community Facilities

A. RECREATION

Needs additional 4.5 acres of young children's play area, and 26 acres of playgrounds with children's playfields.

Program
1. development of young children's play areas with new elementary school.
2. development of playgrounds and children's playfields at existing and proposed elementary school sites - 8 A. each.
3. adoption of provisions which require that land be set aside and development for recreation purposes (playgrounds, playfields, pools, clubhouses, etc.) in cluster single-family homes, apartments and planned residential developments.

B. OPEN SPACE

Needs 18 acres of neighborhood parkland; 26 acres of community parkland; 33 acres of natural area; and Conservation program to maintain natural drainage courses, to protect areas of vital importance in the preservation of significant ecological systems, and to retain areas of unique, scientific and historic interest, etc.

Program

1. development of neighborhood park (village green), 10 acres or more related to new shopping areas.
2. acquisition of the Tolland Marsh for wildlife habitate, water resources and nature studies.
3. adoption of streambelt concept proposed by the soil conservation service, subject to examination of special exception provisions which will permit development within channel encroachment lines proposed along major rivers and streams, i.e., development may be allowed in flood prone areas providing that the main floors of buildings are above flood levels, structures are built on stilts (where filling is to be avoided), buildings do not obstruct or impede passage of water and debris, etc.
4. implementation of zoning provisions which require that 10 percent or more of the land area proposed for residential development shall be set aside for open space purposes.

5. adoption of liberal assessment practices for open space, agriculture and wooded lands as permitted by State enabling laws.

C. EDUCATION

Needs additional seating capacity:

K-4	545
5-8	302
9-12	267

Program

1. Development of new elementary school near the shopping area proposed in the southeast section of town.
2. Expansion of middle school and/or more efficient use of space and careful scheduling of programs at the three schools in the educational park.
3. Increase of classrooms and development of auditorium at the high school.

D. LIBRARY

Needs 30,000 new books; 7,600 sq. ft. of building area.

Program

1. Establish a study committee to assess:
   a) possibility of rehabilitating and expanding existing library, relocating to bank on the green, or building new structure near the town center.
   b) examine the possibility of opening the school librarys during the evenings and establishing a summer program. In a town of Tolland's size, it is logical to enjoy multiple use of its resources. For this reason, we believe it is desirable to

make books within the school libraries available in the evenings and summer months to partially offset deficits that exist or are projected. Since school library books are oriented to one-age groups in general, they should only be considered a partial offset to deficits in the community library.

E. HISTORIC

Needs

1. Preservation of sites identified with the history of the Town, State and/or nation.
2. Preservation of buildings of unique or characteristic architecture.
3. Preservation of groups of buildings (Village Center) and street facades.

Program

1. Evaluation of buildings and areas of historic significance identified by the Tolland Historic Society.
2. Establishment of historic districts and regulations in the zoning ordinance.
3. Assessment of the possibility of establishing special commissions, scenic easements, tax incentives, acquisition programs for public use and other techniques that could help preserve the town's historic areas and buildings.

F. TOWN OFFICE/TOWN HALL/TOWN YARD

Needs
1. additional office space for the town clerk, assessor, registrars, and treasurer.
2. new Town Garage with space for police department and ambulance service.

Program
1. Establish study committee to examine the:
   a) feasibility of purchasing and converting bank on the green into a Town Hall, or desirability of constructing a new building that would replace both the Town Office and Town Hall; and,
   b) proposal to develop a new Town Public Works Yard/Garage at site on Old Post Road near the Town Center.

G. FIRE PROTECTION

Program
1. Implementation of the Tolland Fire Department Study Committee recommendations:
   a) phase out the Center Fire House.
   b) improve hydrant service.
   c) expanded department participation in the Mutual Aid System.
   d) expand Merrow Road Fire Station by one bay.
   e) repair or replace brush truck.
   f) purchase a new engine tank truck for the Merrow Road Fire Station.

g) build a new Fire Station (2 bays) in the New Road/Gehring Road area.

H. UTILITIES

1. Water

Needs — Identification of water resources and establishment of programs that protect the area's future surface and/or subsurface water supplies.

Program
1. Preparation of detailed study of potential around water supplies along the Willimantic River and Tolland Marsh as well as potential surface water supply along the Skungamaug River near the Coventry town line.
2. Once watershed areas for future water supply are identified, means for their protection and preservation should be established.

2. Sewer

Needs — Development of sanitary sewer systems are highly desirable in the Shenipsit Lake area to prevent pollution of a public water supply and to accommodate future industrial development, as well as in the south end sector to alleviate health problems created by absorption fields that are not operating properly.

Program
1. Determine political and economic feasibility of expanding area served by the Vernon Sewage Treatment Plant to include all of the Tolland Industrial Park and watershed area east of the Shenipsit Lake Reservoir.

2. Preparation of detailed study to determine feasibility of developing a small tertiary treatment plant along the Willimantic River near the Coventry town line. The initial service area might include the town center and Willimantic River watershed area south of I-84. The treatment plant, however, should be designed to facilitate future growth north of I-84. The possibility of using package treatment plant owned and operated by the Town that could be connected into the proposed sewer system might be an interim solution to the problem with absorption field at subdivision east of Anthony Road between Merrow Road and Rhodes Road.

Industrial

Needs — Expansion of industrial development to provide balanced growth, offer local employment opportunities, and generate additional tax revenue.

Program

1. Evaluation of potential industrial sites:
   a) Tolland Industrial Park and its surroundings.
   b) Land along I-84 near its interchange with Rtes. 74 and 44.
2. Examination of alternative roles of the Tolland Industrial Commission, i.e., developer, developer/builder, manager, and policy formulation.

3. Consider submission of application to the Connecticut Development Commission for participation in either the Section "202" Local Development Company Loan Program of the Federal Economic Development Administration, or the Section "502" Community Development Corporation Program of the Federal Small Business Administration, and for financial assistance offered under Section 8-163 through 8-169 of the General Statutes of the State of Connecticut.

4. Once a program is established, the services of a knowledgeable industrial broker or developer should be engaged for marketing.

ZONING

Needs Critical review of the existing zoning and subdivision regulations as well establishment and adoption of the following special regulations:

PLANNED UNIT DEVELOPMENT -- provisions which permit mixed uses (commercial, residential, community facilities, recreation facilities and open space), and variety of housing types (detached single-family homes, townhouses, garden apartments).

PLANNED BUSINESS DISTRICT -- provisions which allow development of designed neighborhood shopping areas consisting of convenience retail, commercial services, office (medical/dental), and entertainment (theater, commercial, recreation facilities) uses.

CLUSTER SINGLE-FAMILY DEVELOPMENTS -- provisions which permit the reduction of lot size, if area created by smaller lots is designated for open space and recreation uses.

STREAMBELT ZONE -- provisions which limit the development of areas defined by the Soil Conservation Service, i.e., water courses, flood plain, associated wetlands, etc.

APARTMENT DISTRICT -- provisions which allow development of multi-residential dwellings, subject to following considerations: access, future sewer/water development programs, and relationship to commercial facilities, parkland, etc.

HISTORIC DISTRICTS -- provisions designed to protect areas that are of historic significance such as the Town Green and its surroundings, Skungamaug Cemetery and its surroundings.

ALTERNATE SCHEDULE CONCEPT -- conditions which permit increase of density in residential districts, i.e., community water system, good soils, good soils and

community water system, tertiary treatment system, etc., as adopted by the Town of Marlborough.

PLANNED INDUSTRIAL DISTRICT -- provisions which provide guidelines for the development of planned industrial parks.

1980 TOLLAND EXPENDITURES AND IMPACT OF DEVELOPMENT(S) ON PROPERTY TAX

I. Purpose

The purpose of this paper is to estimate Tolland's 1980 expenditures to determine the fiscal impact on its citizens and to evaluate the impact of several alternative types or combinations of developments in helping to finance the Town's 1980 expenditures.

II. Tolland's 1980 Expenditures

Tolland's 1980 expenditures are estimated by function, based on annual per capita data, 1965 through 1971, put into constant 1970 dollars.* The data is put into per capita terms because it is essential in making the 1980 forecast. The reason for using constant 1970 dollars, or real dollars, is to determine the real 1980 expenditure increase. Inflation is therefore not considered.**

Per capita expenditures, in constant 1970 dollars, increased 53.8 percent, $234.87 to $361.20, 1965 to 1971. Total expenditures, in constant 1970 dollars, increased 131.5 percent, from $1,268,298.00 to $2,935,833.60, 1965 to 1971.

Per capita expenditures, in constant 1970 dollars, are estimated to rise 40.0 percent, to $505.15 by 1980. Total expenditures, in 1970 dollars, will therefore rise by 125.4 percent, to $6,617,465.00.

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* U. S. Department of Commerce, Survey of Current Business, August, 1971, "Alternative Measures of Price Change for GNP, 1965-71", p. 26. Inflators and deflators obtained from data on p. 26.

** Workers' salaries often rise with and cover inflation. We are interested in determining the real fiscal impact by excluding inflation. Obviously, fixed income households are adversely effected by inflation.

Table 1

Tolland Expenditures In Constant 1970 Dollars, 1965 to 1980

Year	Per Capita	Total
1965	$234.87	$1,268,298.00
1966	194.11	1,143,307.90
1967	267.77	1,708,372.60
1968	258.79	1,777,887.30
1969	321.83	2,368,668.80
1970	434.31	3,412,373.67
1971	361.20	2,935,833.60
1980	505.15	6,617,465.00

Actual Expenditures

Total expenditures in actual dollars increased 236.7 percent, from $937,400.25 to $3,156,809.66, 1965 to 1971. Per capita expenditures increased 123.7 percent, from $173.59 to $388.39.

Table 2

Tolland Per Capita Expenditures In Constant 1970 Dollars, 1965 - 1980

	1965	1966	1967	1968	1969	1970	1971	Projected 1980
Administration	8.42	7.17	6.86	7.84	8.05	8.57	8.82	10.90
Maintenance (Public Bldgs)	.27	.34	.28	.37	.30	.47	.75	.80
Health	3.21	1.26	1.44	1.38	1.40	3.07	1.48	1.90
Library	.76	.66	1.05	1.13	1.02	.89	1.09	1.70
Lighting	.14	.09	.16	.15	.14	.25	.26	.55
Highways	4.29	3.89	5.68	11.17	10.08	10.85	14.24	20.00
Fire	2.19	2.36	4.52	3.05	2.84	3.17	2.82	3.85
Police	2.38	.75	1.29	1.33	1.22	1.22	1.73	2.50
Sanitation	.43	.63	.72	.82	1.57	1.72	2.17	4.65
Welfare	.05	.12	.09	.23	.09	.09	.10	.25
Recreation	.22	.34	.74	1.01	2.42	1.62	2.26	3.50
Education	166.31	145.52	201.83	195.93	203.78	211.47	225.94	330.00
Equipment	1.76	1.26	1.66	1.47	1.65	1.27	1.38	1.00
Highway Vehicles, etc.	.05	.08	.02	.05	1.93	1.56	1.91	1.75
Other	.26	.66	3.10	0.00	0.00	0.00	.10	0.00
Miscellaneous	.16	.24	.50	.15	1.42	2.04	1.71	1.70
Interest:								
Interest - Schools, etc.	5.93	12.76	18.85	17.53	16.60	26.03	33.97	60.00
Tax Anticipation - Fiscal Year Notes	.34	.23	1.40	1.74	1.10	.98	.63	.60
Principal Payments:								
Payments(except FY Notes)	17.28	11.16	13.18	11.53	25.22	148.28	18.27	30.00
Fiscal Year Notes	0.00	0.00	0.00	0.00	3.66	3.18	2.86	1.70
Sinking Fund	.76	.66	.57	.59	.44	.64	.49	.55
Other	19.67	0.00	3.83	1.37	36.90	6.92	37.20	27.00
Intergovernmental Payments	0.00	0.00	0.00	0.00	0.00	.19	1.06	.25
GRAND TOTAL	234.87	194.11	267.77	258.79	321.83	434.31	361.20	505.15

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1 Does include all expenditure items such as turn aid roads.

Table 3

TOLLAND TOTAL EXPENDITURES, ACTUAL DOLLARS, 1965 - 1971

	1965	1966	1967	1968	1969	1970	1971
Administration	33,585.82	32,759.68	35,914.12	46,931.90	55,081.81	67,305.54	77,031.04
Maintenance (Public Bldgs)	1,054.98	1,515.77	1,475.17	2,191.03	2,077.29	3,701.71	6,575.84
Health	12,822.53	5,785.07	7,501.36	8,213.55	9,569.72	24,128.15	12,915.42
Library	3,000.00	3,000.00	5,500.00	6,750.00	7,000.00	7,000.00	9,500.00
Lighting	566.16	424.62	843.28	881.16	937.85	1,955.19	2,271.11
Highways	17,094.12	17,769.54	29,753.40	66,821.44	68.995.06	85,213.88	124.420.56
Fire	8,783.14	10,772.96	23,640.93	18,249.66	19,393.70	24,940.74	24,589.69
Police	9,507.01	3,436.79	6,784.96	7,961.95	8,283.25	9,569.12	15,081.26
Sanitation	1,707,45	2,893.25	3,750.34	4,849.68	10,736.75	13,543.42	18,936.64
Welfare	200.96	505.22	415.59	1,367.18	567.26	715.71	906.75
Recreation	890.53	1,509.18	3,886.57	6,056.88	16,562.18	12,691.83	19,733.07
Education	663,772.67	664,899.93	1,056,350.17	1,172,492.92	1,393,920.41	1,661,525.14	1,974,728.27
Equipment:							
Equipment	7,003.41	5,773.77	8,646.77	8,765.73	11,274.99	9,999.14	11,999.98
Highway Vehicles, etc.	222.60	341.25	119.27	246.56	13,196.17	12,245.34	16,652.59
Other	1,000.00	3,003.15	16,210.00				899.82
Miscellaneous	672.40	1,148.14	2,643.66	889.59	9,699.10	16,030.93	14,921.21
Interest:							
School	21,669.00	56,854.33	97,637.49	104,405.97	41,654.62	127,993.38	102,675.59
Tax Anticipation -							
Fiscal Year Notes	1,350.01	1,089.18	7,356.39	10,432.78	7,500.00	7,730.00	5,500.00
Other	2,000.00	1,500.00	1,000.00	500.00	71,914.72	76,516.50	194,205.60
Principal Payment:							
School	49,000.00	49,000.00	49,000.00	49,000.00	13,544.93	1,016,100.00	10,686.06
Fiscal Year Notes					25,000.00	25,000.00	25,000.00
Other	20,000.00	20,000.00	20,000.00	20,000.00	159,000.00	149,000.00	149,000.00
Other:							
Sinking Fund	3,000.00	3,000.00	3,000.00	3,502.00	3,000.00	5,000.00	4,315.00
High School Bldg. Committee	45,297.50			1,168.20	207,694.69		
Fire House & Site	25,699.96						
Catholic Rd. Acct.	7,500.00						
Crandall Property			20,032.20	7,020.44	5,920.44	42,375.64	36.455.20
Water & Sewer Ext.					23,454.00	6,033.76	
Kingfisher					15,372.92		
Industrial Park Land						4,500.00	4,000.00
DAM							13,751.00
School Bond Grant							270,795.96
Intergovernmental Payments						1,532.00	9,262.00
	937,400.25	886,981.83	1,401,461.67	1,584,698.60	2,201,351.86	3,412,347.12	3,156,809.66

III. Fiscal Impact of Tolland 1980 Expenditures

The 1980 Tolland expenditure level indicates there will be, in real terms, a 40 percent increase, 1970-1980. This means that 1980 receipts will have to rise 40 percent, in 1970 dollars, to support these expenditures.

Past receipt data indicates that generally the property tax is relied upon to produce 65.0 percent of the town revenues. (See Table) We assume the current means of raising town revenues will exist in 1980. Therefore, Property tax total receipts will have to rise by 123.6 percent, in 1970 dollars, to raise total receipts sufficiently to yield the 40.0 percent increase, 1970 to 1980.

Per capita or household property taxes will have to rise by 44.6 percent, in constant 1970 dollars, to yield sufficient property tax receipts to support the estimated 1980 expenditures. This means that a house valued at $25,000 in 1970 would have a property tax rise, in real terms, from $1,137.50 to $1,644.82, 1970 - 1980.

Table 4

Tolland Per Capita Receipts By Source, In Constant 1970 Dollars, 1971 and 1980

	1971		1980 Estimated		Change, 1971 to 1980	
	Receipts	Percent	Receipts	Percent	Receipts	Percent
Property tax, interest and fees	227.06	62.8	328.35	65.0	101.29	44.6
State Grants and reimbursement	122.21	33.8	164.17	32.5	41.96	34.3
Federal Grant	2.89	.8	.00	.0	- 2.89	--
Miscellaneous	9.04	2.5	12.63	2.5	3.59	39.7
TOTAL	361.20	100.0	505.15	100.0	143.95	40.0

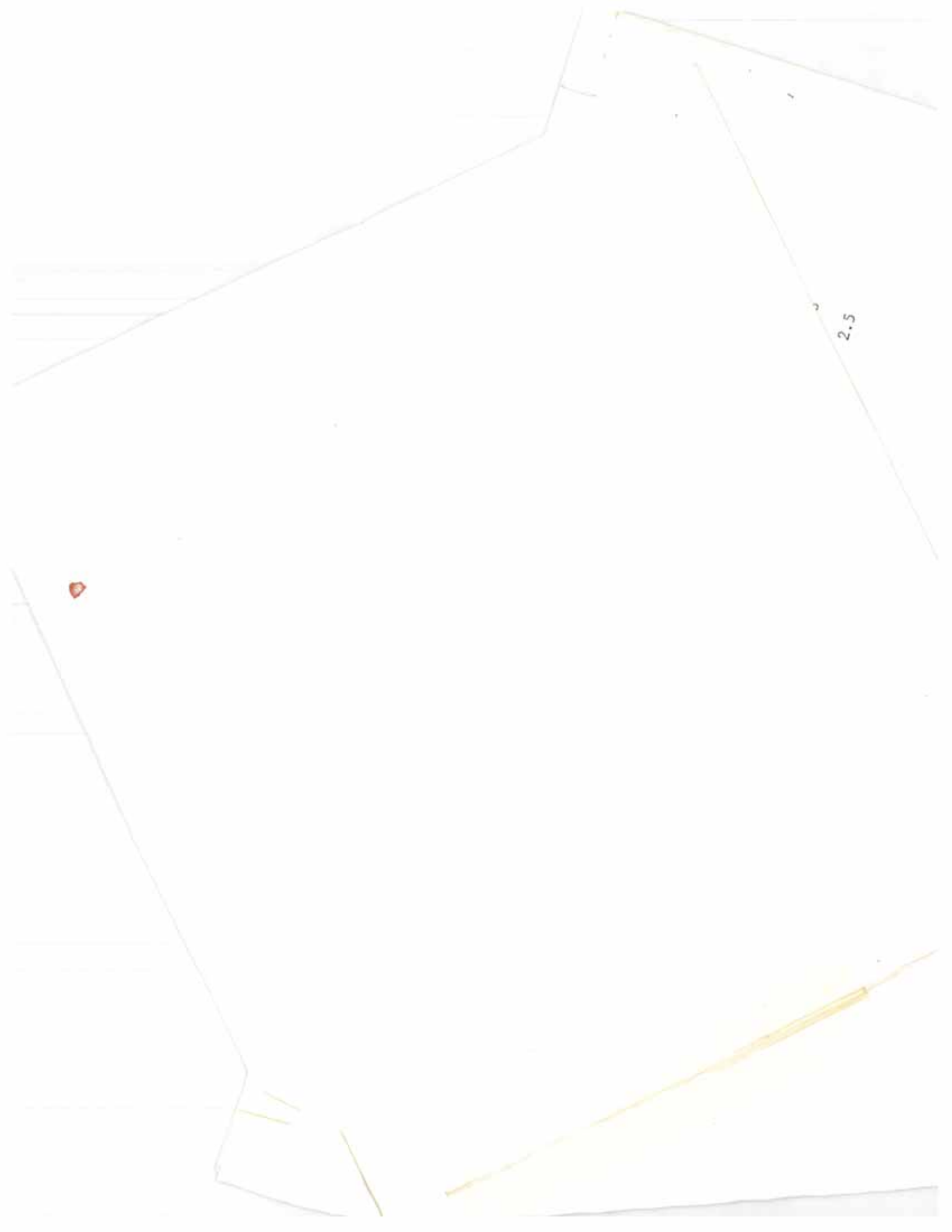
Table 5

Tolland Property Tax Rates and Grand Levy, 1965 to 1980

	Grand List	Tax Rate (in mills)	Grand Levy	Assessment Rates	Last Revalutaion
1965	17,788,106 (1964)	38	675,948	65	1960
1966	19,830,555 (1965)	47	932,036	65	1960
1967	21,428,985 (1966)	51	1,092,876	65	1960
1968	22,852,005 (1967)	56	1,279,712	65	1960
1969	24,692,720 (1968)	64	1,580,334	65	1960
1970	27,485,385 (1969)	70	1,923,976 e	65	1960
1971	28,908,900 (1970)	72	2,081,441 e	65	1960
	In 1970 dollars:				
1980	--	--	4,301,385	65	--

e Estimated

Source: Institute of Public Service, Grand Lists and Tax Rates of Connecticut Towns and Cities, The University of Connecticut.


2.5

IV. Impact of Alternative Types of Developments on the 1980 Property Tax, in 1970 Dollars

(1) Type of Development	(2) Value (in 1970 dollars)	(3) Grand List (3)=(2)x65%	(4) Gross Impact on 1980 Per Capita Property Tax (4)=(3)÷13,100	(5) Net Impact on 1980 Per Capita Property Tax [(5)=(4)-Per capita expenditures due to development]	(6) Percentage Change in 1980 Property Tax due to development [(6)=(5)÷328.35]	(7) Change in Property Tax Tax on $25,000 Value House (1970 Dollars) (7)=(1645)-[(1138)(1.000 +.446x(5)]
1.						

13,100 = 1980 estimated population
328.35 = 1980 per capita property tax
1446 = percentage change in per capita property tax is real term