

DOCUMENT RESUME

ED 297 840

JC 880 406

AUTHOR Steinberg, Marian N.
 TITLE Demographic Study and Projection: Faculty and Professional Staff, State Technical Colleges.
 INSTITUTION Connecticut State Board of Trustees for State Technical Colleges, Hartford.
 PUB DATE 88
 NOTE 74p.
 PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC03 Plus Postage.
 DESCRIPTORS *Administrators; *College Faculty; *Employment Projections; School Personnel; State Surveys; *Teacher Characteristics; *Teacher Retirement; *Technical Institutes; Two Year Colleges
 IDENTIFIERS *Connecticut

ABSTRACT

This four-part report on the characteristics of faculty, administrators, and other professional staff employed in the Connecticut State Technical College (CSTC) system analyzes age distributions, years of service, salary, sick and vacation day accrual, retirement status, and staffing changes anticipated over the next five years. Part I provides an analysis of current age patterns among faculty and professional staff, including a systemwide overview of age distributions; a comparison of age distributions among administrators, faculty/librarians, and counselors/professional non-faculty members; and distributions by college. Part II examines five additional variables which, along with age, affect retirement: (1) years of service with the CSTC system; (2) total years of state service, including years with the CSTC system; (3) salary; (4) sick day accruals; and (5) vacation accruals. Part III focuses on the potential for retirements among the non-classified staff who are currently satisfying the criteria for "normal" retirement and those who qualify for early retirement. This section calculates the cost for accrued sick and vacation time, and examines the impact on the system, its component campuses, and individual academic departments. The final section examines the pattern of individuals becoming eligible for retirement in the 5-year period from 1988-89 through 1992-93. Recommendations are included. (EJV)

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DEMOGRAPHIC STUDY AND PROJECTION
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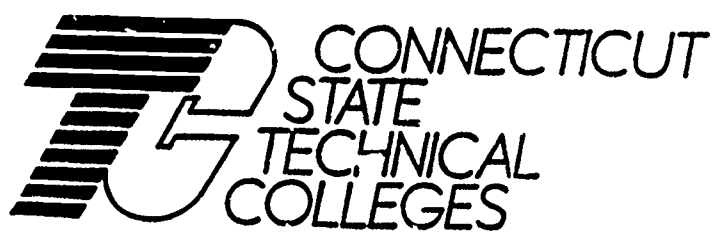
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Prepared by:

Dr. Marian N. Steinberg
Director, System Research and Planning
State Technical Colleges
- 1988



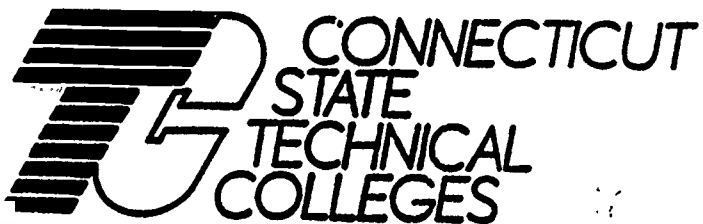
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DEMOGRAPHIC STUDY AND PROJECTION
FACULTY AND PROFESSIONAL STAFF
STATE TECHNICAL COLLEGES

PART I - AGE DISTRIBUTION

Prepared by:

Dr. Marian N. Steinberg
Director, System Research and Planning
State Technical Colleges
January 29, 1988



DEMOGRAPHIC STUDY AND PROJECTION
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PART I - AGE DISTRIBUTION

January 29, 1988

Introduction

This paper provides an analysis of the current age patterns of faculty and professional staff within the State Technical Colleges. It is the first step in the construction of a model to project the effect of retirements on the system. The data were taken from the STC personnel system in November 1987, and represent a snapshot of three groups, based upon our EEO6 codes: "executive/administrative/managerial" (EEO6 Code=1), "faculty/librarian" (EEO6 Code=2), and "professional non-faculty/counselors" (EEO6 Code=3). Individuals were classified according to their unit, with information provided on a number of variables, including the number of years with STC, sick days accrued, vacation days accrued, annual salary, and other variables which will be needed in order to project future changes.

A. SYSTEM-WIDE OVERVIEW

This section examines the distribution of staff on a system-wide basis. Examination and comparison of staff age for the individual units follows in section B.

A1. Administrators

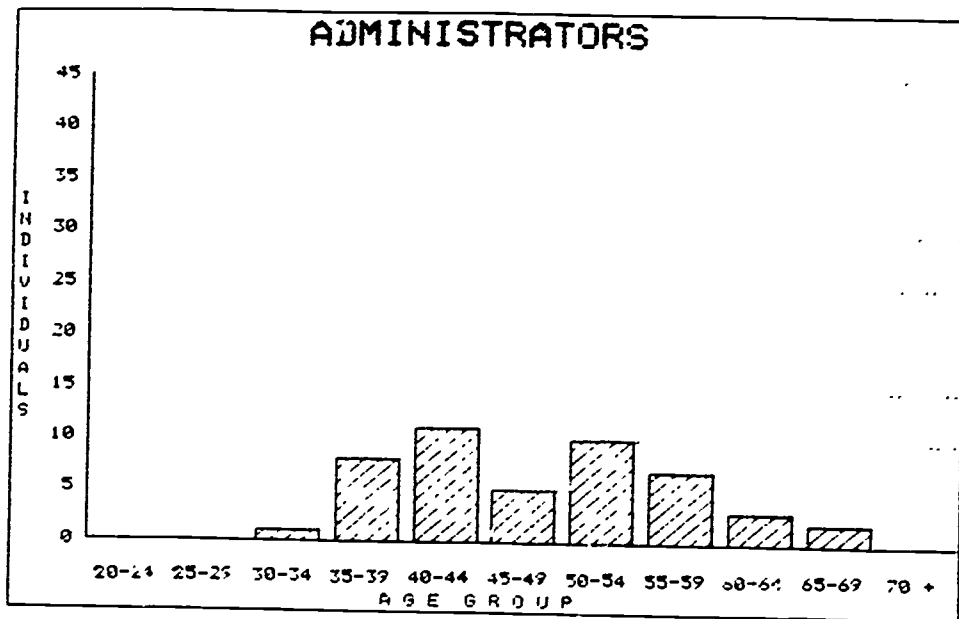
This group, which includes executives, administrators and managers, is referred to in this paper as "administrators". Table 1 shows the distribution of administrators by age group. System-wide no administrator was younger than 34 nor older than 67, with an average age of 48. Twenty-five percent are 42 or younger. Half are 45 years or younger. One-quarter are over 55. About ten percent are over 60.

Table 1. Age Distribution of Administrators (EE06 Code=1)
STC System

Age	Frequency	Percent	Cumulative Percent
34	1	2.1	2.1
36	1	2.1	4.3
37	3	6.4	10.6
38	1	2.1	12.8
39	3	6.4	19.1
41	1	2.1	21.3
42	2	4.3	25.5
43	5	10.6	36.2
44	3	6.4	42.6
45	4	8.5	51.1
48	1	2.1	53.2
50	1	2.1	55.3
51	3	6.4	61.7
52	1	2.1	63.8
53	4	8.5	72.3
54	1	2.1	74.5
55	1	2.1	76.6
56	3	6.4	83.0
57	1	2.1	85.1
58	1	2.1	87.2
59	1	2.1	89.4
61	1	2.1	91.5
62	1	2.1	93.6
64	1	2.1	95.7
65	1	2.1	97.9
67	<u>1</u>	<u>2.1</u>	100.0
TOTAL	47	100.0	

Figure 1 looks at the distribution of administrators using five-year age groups. The distribution is bi-modal, that is, there are two peak age groups: the 40-44 year olds, which represent the largest group, accounting for just under 24 percent of all administrators, and the 50-54 group, which represents slightly more than 21 percent of this class. The figure indicates that in the next ten years we can expect the proportion of administrators over age 60 to increase, assuming that present staff remain on board.

Figure 1. Administrators - Grouped Age
STC System



A2. Faculty and Librarians

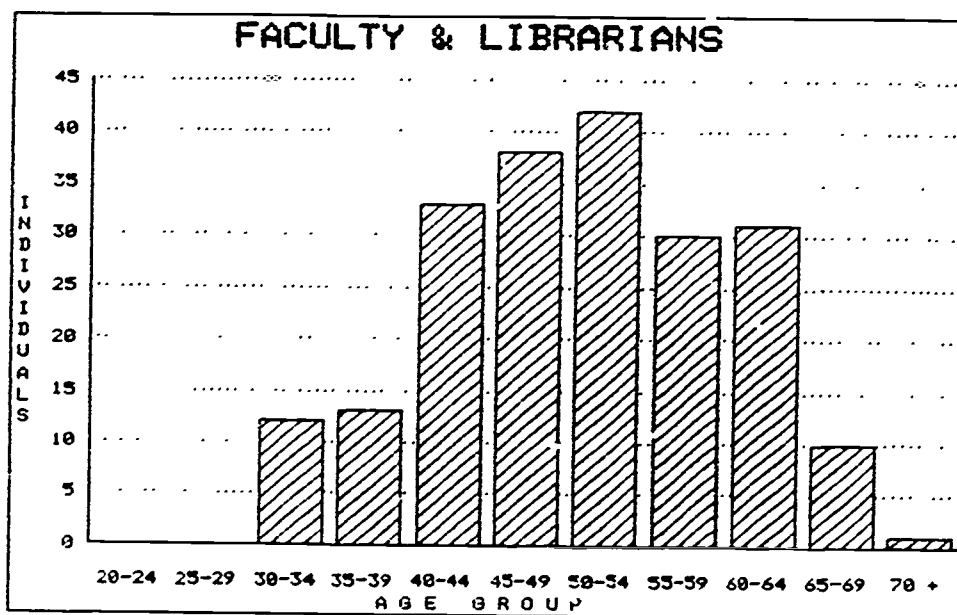
Table 2 shows the distribution of faculty and librarians by age group. System-wide the minimum age was 32 and the maximum 70, with an average age of 50.6. Twenty-five percent are 44 or younger. Half are 51 years or younger. One-quarter are 58 or over. Over one-third are 55 or older; 20 percent are 60 or older.

Table 2. Age Distribution of Fac/Lib (EE06 Code=2);
STC System

Age	Frequency	Percent	Cumulative Percent
32	3	1.4	1.4
33	3	1.4	2.9
34	6	2.9	5.7
35	2	1.0	6.7
36	2	1.0	7.6
37	1	.5	8.1
38	3	1.4	9.5
39	5	2.4	11.9
40	5	2.4	14.3
41	4	1.9	16.2
42	7	3.3	19.5
43	11	5.2	24.8
44	6	2.9	27.6
45	9	4.3	31.9
46	6	2.9	34.8
47	11	5.2	40.0
48	4	1.9	41.9
49	8	3.8	45.7
50	5	2.4	48.1
51	8	3.8	51.9
52	11	5.2	57.1
53	9	4.3	61.4
54	9	4.3	65.7
55	6	2.9	68.6
56	4	1.9	70.5
57	6	2.9	73.3
58	8	3.8	77.1
59	6	2.9	80.0
60	11	5.2	85.2
61	4	1.9	87.1
62	6	2.9	90.0
63	1	.5	90.5
64	9	4.3	94.8
65	4	1.9	96.7
66	3	1.4	98.1
67	2	1.0	99.0
69	1	.5	99.5
70	1	.5	100.0
TOTAL	210	100.0	

Figure 2 shows that the age distribution of faculty and librarians more or less follows a "normal" curve. The largest proportion are in the 50-54 age group (20 percent). Each of the other mid-age groups (40-44, 45-49, 55-59 and 60-64) account for 14-18 percent of individuals within this group. Should all these individuals remain with the system, we can therefore expect to see the proportion of staff above age 60 increase very slightly, but remain stable for the next 20 years.

Figure 2. Age Distribution - Fac/Lib - Grouped Age Classes
STC System



A3. Professional Non-Faculty and Counselor

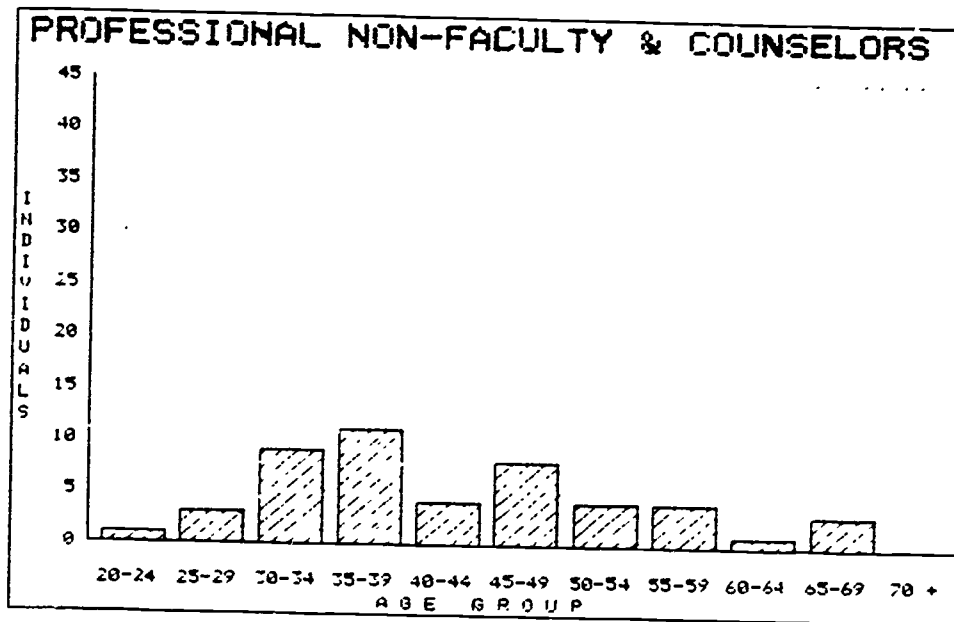
Table 3 shows the distribution of staff in this category. The youngest member of the professional staff is 24, the oldest 66, and the average age is 42. One-quarter are age 34 or below. Half are 39 or below. One-quarter are age 49 or above, and less than 9 percent are above age 60.

Table 3. Age Distribution - Prof Non-Fac and Counselors
STC System

Age	Frequency	Percent	Cumulative Percent
24	1	2.1	2.1
26	1	2.1	4.2
27	1	2.1	6.3
29	1	2.1	8.3
31	4	8.3	16.7
32	2	4.2	20.8
33	1	2.1	22.9
34	2	4.2	27.1
35	2	4.2	31.3
36	1	2.1	33.3
37	2	4.2	37.5
38	2	4.2	41.7
39	4	8.3	50.0
41	2	4.2	54.2
43	2	4.2	58.3
45	2	4.2	62.5
46	2	4.2	66.7
47	1	2.1	68.8
48	2	4.2	72.9
49	1	2.1	75.0
51	2	4.2	79.2
53	1	2.1	81.3
54	1	2.1	83.3
56	3	6.3	89.6
58	1	2.1	91.7
64	1	2.1	93.8
65	2	4.2	97.9
66	1	2.1	100.0
TOTAL	48	100.0	

Figure 3 clearly shows the relative youth of the professional staff. The largest group are 35-39 (23 percent), followed by those aged 30-34 (19 percent). No age group of 50 or above comprises as much as 10 percent of the individuals in this category. Should all these individuals remain with the system, we can expect an increase in the proportion age 60 or above for the foreseeable future, with the exception of the next five years, when there could be a slight decline.

Figure 3: Age Distribution - Professionals by Age Group
STC System



A4. Comparison of Three Groups - STC System

Figure 4 compares the distribution of age groups for the three categories of staff discussed above. The distribution of administrators and faculty/librarians is somewhat similar, although the profile of the latter is flatter (more similar across age groups) than for the former. It is very clear, however, that the third category of employees, professional non-faculty and counselors, is considerably different. This group is clearly younger, both in terms of the bulk of individuals being less than 50, with most clustered between 30 and 39, and because they are the only group with members under the age of 30.

Figure 4a. Comparison by Age for Three Groups
STC System

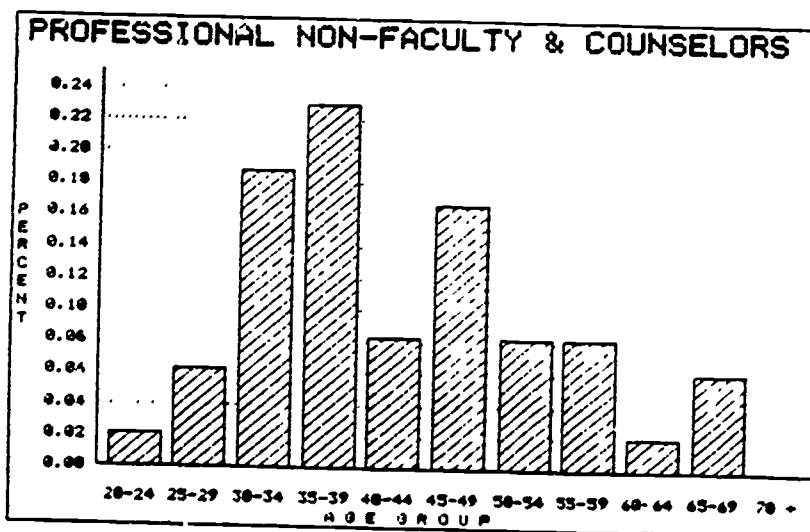
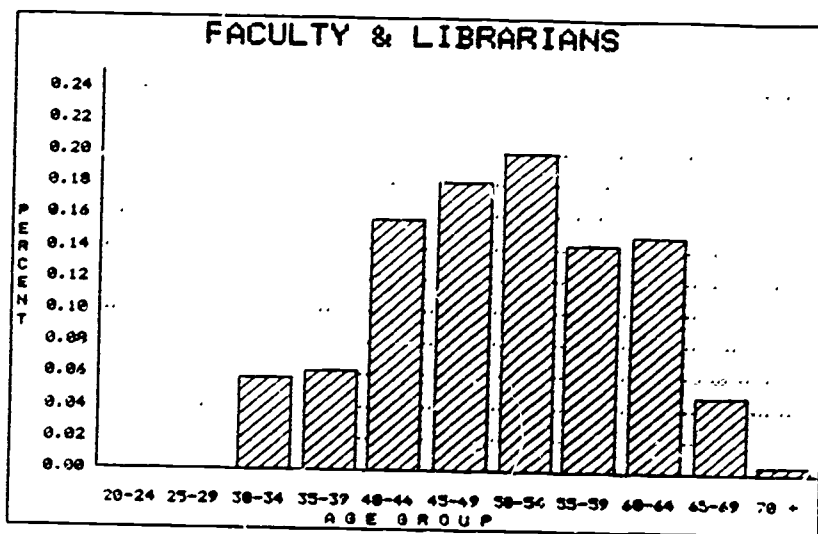
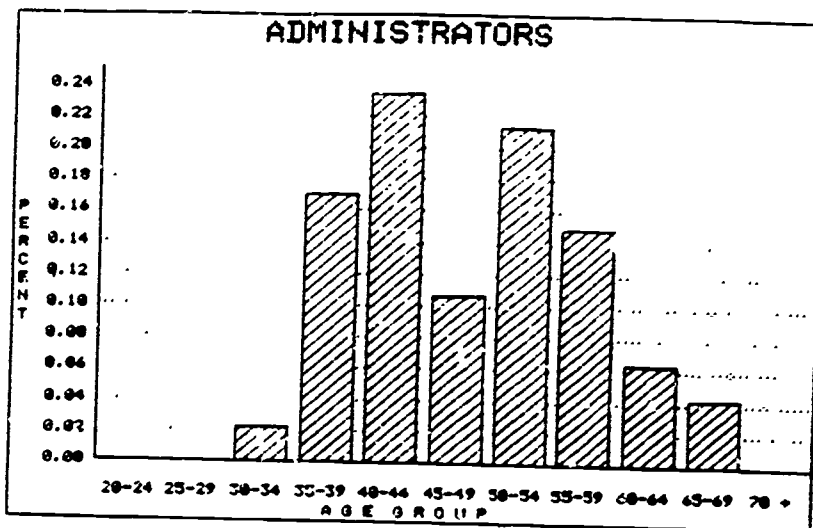
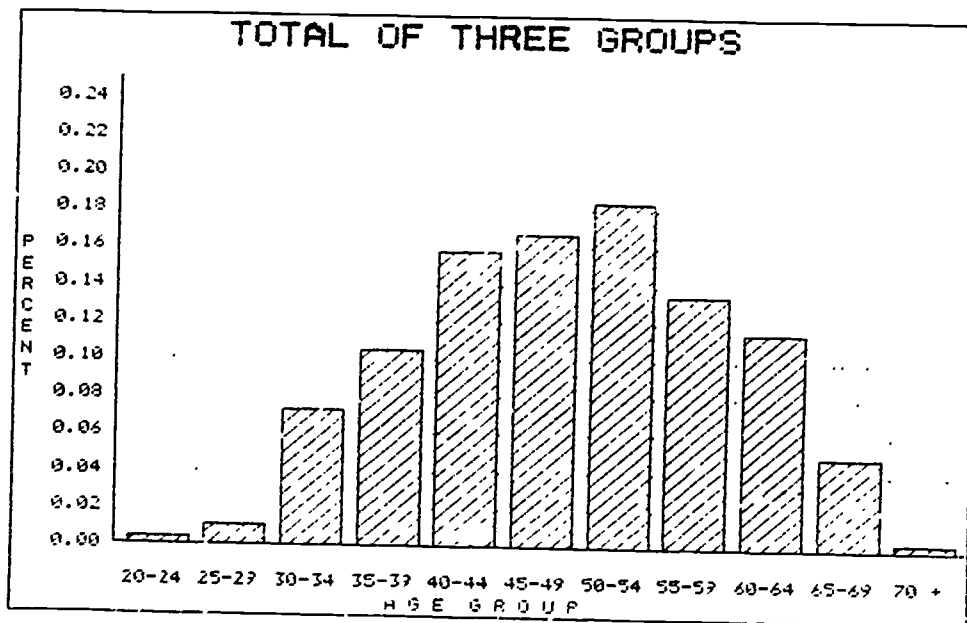


Figure 4b aggregates all three groups and looks at their distribution by age. Again we have a "normal"-shaped curve, with a peak in the 50-54 age group (just over 18 percent of total individuals). Less than one percent of all staff are under the age of 30, while, at the other extreme, approximately one-third are 55 or over.

Figure 4b. Age Distribution - Total of Three Groups
STC System



B. AGE DISTRIBUTION BY UNIT

B1. Administrators

Table 5a shows the distribution of administrators by age group for each of the six units. The number of administrators varies from a low of 6 to a high of 9.

Table 5a. Administrators by Age Group and Unit

AGE	GNHSTC	HSTC	NSTC	TVSTC	WSTC	CO	TOTAL
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	1	0	1
35-39	2	3	0	1	1	1	8
40-44	2	1	0	2	4	2	11
45-49	0	0	1	3	0	1	5
50-54	3	2	3	1	1	0	10
55-59	0	1	2	1	1	2	7
60-64	0	0	2	1	0	0	3
65-69	0	1	0	0	1	0	2
70 +	0	0	0	0	0	0	0
TOTAL	7	8	8	9	9	6	47

Data on minimum, maximum and average age is shown in Table 5b. The minimum age for administrators ranges from 34 at WSTC to 45 at NSTC. The maximum varies from a low of 54 at Greater New Haven to a high of 67 at Hartford. The average age for administrators ranges from 45.9 (GNHSTC) to 55.1 (NSTC).

Table 5b. Summary Statistics I
Age of Administrators

	MINIMUM	MAXIMUM	AVERAGE
C.O.	36	56	46.3
GNHSTC	37	54	45.9
HSTC	37	67	47.5
NSTC	45	64	55.1
TVSTC	39	61	48.3
WSTC	34	65	46.4
SYSTEM	34	67	48.4

Table 5c divides each of the college's administrative staffs into quartiles, by age. System-wide, 25 percent of the administrators are 42 years or younger; 50 percent are 45 or younger, and 25 percent are 55 or older. At the bottom end of the age spectrum, 25 percent of administrators are under 39 years old at Greater New Haven. By comparison, a quarter of Norwalk's administrators are 51.5 or younger, with the other three colleges falling in between. The median age (half the individuals younger, half older) varies from a low of 43 at Waterbury to a high of 54 at Norwalk. Looking at the oldest quartile, by age, for each of the colleges, Greater New Haven again is the youngest, with 25 percent of their administrators age 53 or above, and Norwalk is the oldest, with a quarter of this group aged 60.8 and above.

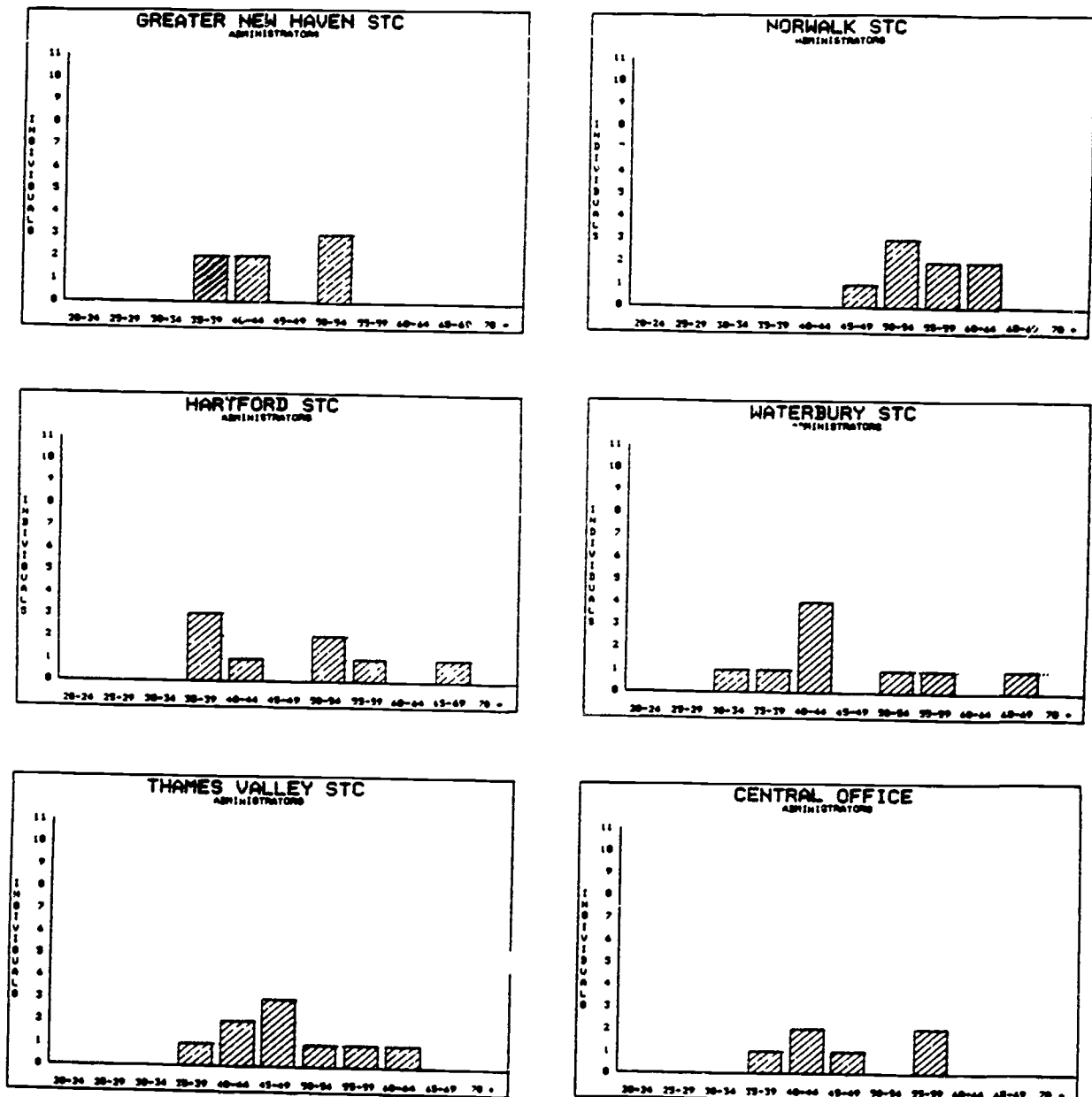
Table 5c. Summary Statistics II
Age of Administrators

	NUMBER OF CASES	BOTTOM 25 PCT	BOTTOM 50 PCT	TOP 25 PCT	PERCENT 55 OR OVER	PERCENT OVER AGE 60
C.O.	6	40.5	44.0	56.0	33.3%	0.0%
HSTC	8	37.5	46.0	54.5	25.0%	12.5%
GNHSTC	7	39.0	44.0	53.0	0.0%	0.0%
NSTC	8	51.5	54.5	60.8	50.0%	25.0%
TVSTC	9	43.5	45.0	55.0	22.2%	11.1%
WSTC	9	39.5	43.0	55.0	22.2%	11.1%
SYSTEM	47	42.0	45.0	55.0	25.5%	10.6%

Another measure of age distribution is the proportion age 55 and above, and age 60 and above (Table 5c), those who currently are, or shortly will be, eligible to retire. System-wide, about one-quarter of all administrators are 55 or over. This varies from none at Greater New Haven (the next lowest being 22.2 percent for TVSTC and WSTC) to half of all administrators at Norwalk. Excluding GNHSTC and CO, neither of which has any administrators age 60 or above, the next lowest proportion is 11.1 percent at WSTC. Norwalk again comes in at the high end, with one-quarter of their administrators in the 60-plus range.

Figure 5 presents this information graphically, clearly indicating that Norwalk has the oldest set of administrators, (no individual below the age of 45), while Greater New Haven has the youngest set of administrators, with none older than 54. The most diverse set of administrators is housed at Waterbury (spanning eight age groups), followed by Hartford (7), Thames Valley (6), Central Office (5), and, finally, Greater New Haven and Norwalk, each of which span four age groups.

Figure 5. Distribution by Age Group and Unit



B2. Faculty and Librarians

The State Technical Colleges employ 210 individuals as faculty and librarians, with an average of 42 faculty/librarians at each of the five colleges (Table 6a). The college with the smallest number of employees in this category (33) is Greater New Haven, and the largest is Hartford State, with 47 individuals.

Table 6a. Distribution of Faculty and Librarians by Age Group and Unit

AGE	GNHSTC	HSTC	NSTC	TVSTC	WSTC	CO	TOTAL
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	2	3	1	3	3	0	12
35-39	6	1	1	5	0	0	13
40-44	11	5	2	7	8	0	33
45-49	3	11	9	8	7	0	38
50-54	6	9	7	9	11	0	42
55-59	2	8	9	4	7	0	30
60-64	1	9	11	4	6	0	31
65-69	2	1	4	1	2	0	10
70 +	0	0	1	0	0	0	1
TOTAL	33	47	45	41	44	0	210

Table 6b provides summary statistics for faculty and librarians at the five colleges. Among the colleges, the minimum age for faculty/librarians ranges from 32 at Hartford State to 34 at Thames Valley. The maximum age among this group ranges from 65 at WSTC and TVST to 70 at Norwalk State. The average age for faculty and librarians 50.6, varying from a low of 46.1 at Greater New Haven to a high of 55 at Norwalk State.

Table 6b. Summary Statistics I - Faculty/Librarians

	MINIMUM	MAXIMUM	AVERAGE
C.O.	N/A	N/A	N/A
GNHSTC	32	67	46.1
HSTC	32	69	51.4
NSTC	34	70	55.0
TVSTC	34	65	48.1
WSTC	33	65	50.8
SYSTEM	32	70	50.6

Table 6c divides each of the college's faculty and librarians into quartiles by age. System-wide, 25 percent of the faculty/librarians are 44 years or younger; 50 percent are 51 or younger, and 25 percent are 58 or older. At the bottom end of the age spectrum, 25 percent of faculty and librarians are under 39.5 years old at Greater New Haven. By comparison, a quarter of Norwalk's faculty and librarians are 48 years old or younger, with the other three colleges falling in between. The median age (half the individuals younger, half older) varies from a low of 44 at Greater New Haven to a high of 55 at Norwalk. Looking at the top quarter, by age, for each of the colleges, Greater New Haven again is the youngest, with only 25 percent of their faculty/librarians age 52.5 or above, and Norwalk is the oldest, with a quarter of this group aged 62 and above.

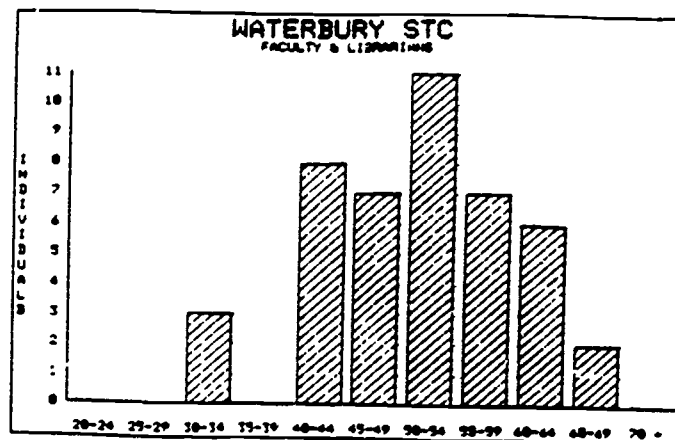
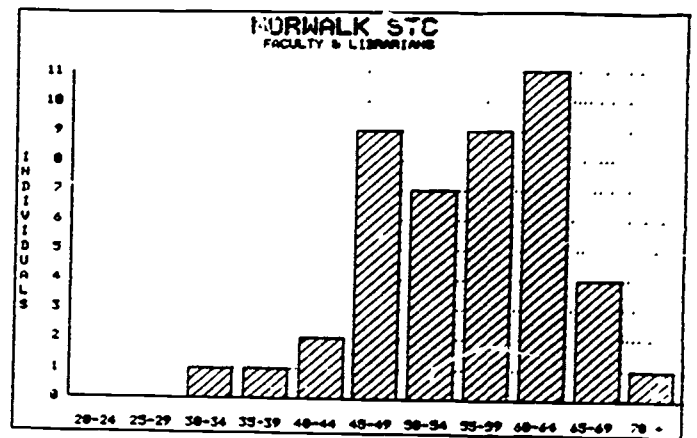
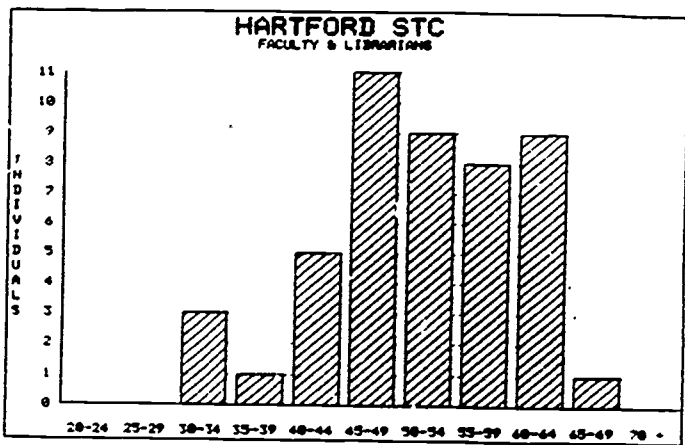
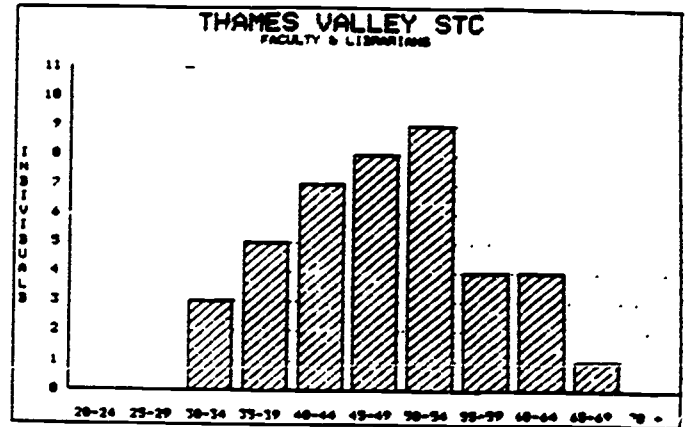
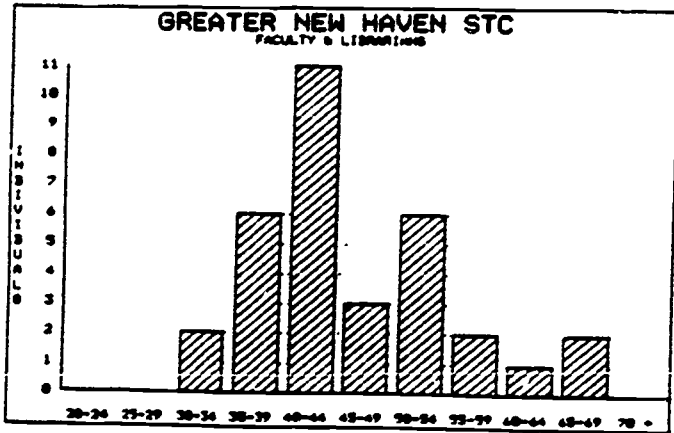
Table 6c. Summary Statistics II - Faculty/Librarians by Age

	NUMBER OF CASES	BOTTOM 25 PCT	BOTTOM 50 PCT	TOP 25 PCT	PERCENT 55 OR OVER	PERCENT OVER AGE 60
C.O.	N/A	N/A	N/A	N/A	N/A	N/A
GNHSTC	33	39.5	44.0	52.5	15.2%	9.1%
HSTC	47	45.0	51.0	59.0	38.3%	21.3%
NSTC	45	48.0	55.0	62.0	55.6%	35.6%
TVSTC	41	41.0	47.0	53.5	22.0%	12.2%
WSTC	44	44.3	51.0	57.8	34.1%	18.2%
SYSTEM	210	43.8	51.0	58.0	34.3%	20.0%

Another measure of age distribution is the proportion age 55 and above, and age 60 and above (Table 6c), presumably those who currently are, or shortly will be, eligible to retire. System-wide, one-third of all faculty/librarians are 55 or over. This varies from a low of 15.2 percent at Greater New Haven to more than half of all faculty/librarians at Norwalk. Those in the age bracket 60-plus comprise only 9.1 percent at Greater New Haven, but over one-third at Norwalk.

Figure 6 graphically displays the distribution by age of faculty/librarians at the five colleges. It is clear that Greater New Haven's staff is far younger than the other colleges, and Norwalk's skewed heavily towards the oldest age groups. Thames Valley currently has a relatively small proportion of their faculty/librarians in the oldest age groups, but this will change dramatically in the next 5-15 years.

Figure 6. Distribution by Age Group and Unit



B3. Professional Non-Faculty and Counselors
(Professionals)

This category includes 48 individuals, system-wide, varying from a low of 6 at Waterbury to a high of 10 at Norwalk and Thames Valley (Table 7a). The number of professionals is approximately equal to the number of administrators, and represents only one-quarter as many individuals as within the faculty/librarian category.

Table 7a. Distribution of Professionals
by Age and Unit

AGE	GNHSTC	HSTC	NSTC	TVSTC	WSTC	CO	TOTAL
20-24	1	0	0	0	0	0	1
25-29	0	1	1	1	0	0	3
30-34	1	1	2	1	2	2	9
35-39	2	3	3	2	1	0	11
40-44	1	1	0	0	1	1	4
45-49	1	0	2	2	0	3	8
50-54	0	0	1	2	0	1	4
55-59	0	1	0	2	1	0	4
60-64	0	0	1	0	0	0	1
65-69	0	0	0	0	1	2	3
70 +	0	0	0	0	0	0	0
TOTAL	6	7	10	10	6	9	48

Table 7b shows that, system-wide, the minimum age for professionals is 24, maximum is 66, with an average of 42.6. Minimum age varies from 24 (GNHSTC) to 31 (WSTC). Maximum varies from a low of 45 at Greater New Haven to a high of 66 at Central Office. The lowest average age for professionals is 35.7 at Greater New Haven, and the highest average age is 48.4 at Central Office.

Table 7b. Summary Statistics I - Professionals

	MINIMUM	MAXIMUM	AVERAGE
C.O.	31	66	48.4
GNHSTC	24	45	35.7
HSTC	26	56	38.6
NSTC	29	64	41.5
TVSTC	27	58	44.6
WSTC	31	65	43.8
SYSTEM	24	66	42.6

Dividing the professional staffs into quartiles, by age (Table 7c) we find that 25 percent of Greater New Haven's professionals are under the age of 29.3 years, while the age break for Thames Valley is 36.5 years. Median age varies from a low of 36.5 at Greater New Haven to a high of 48 at Central Office. Looking at the top quarter, by age, for each of the units, Greater New Haven again is the youngest, with 25 percent of their professionals age 42 or above, compared to Central Office, where 25 percent of all professionals are 59.5 years old or above.

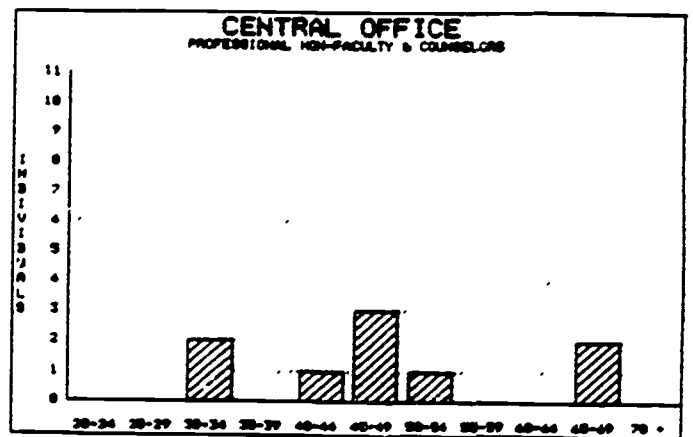
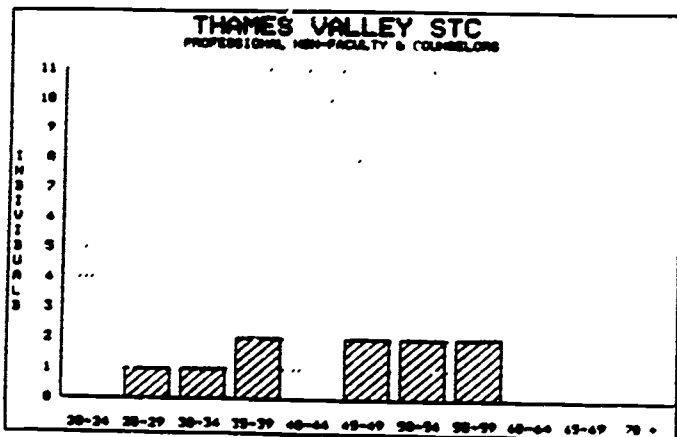
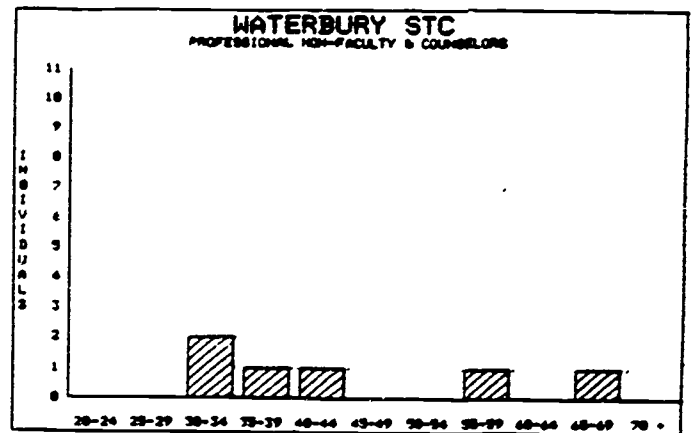
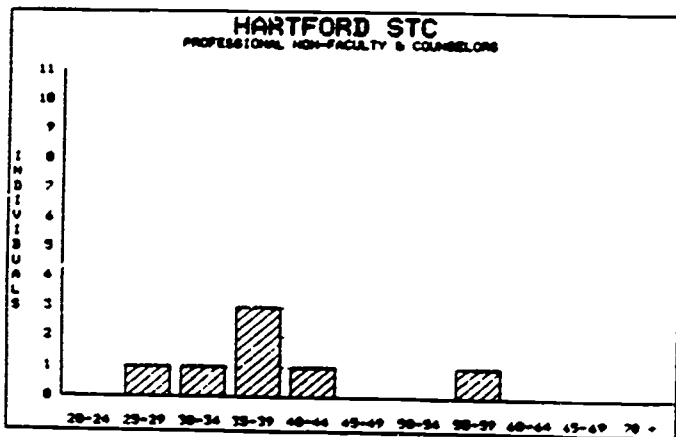
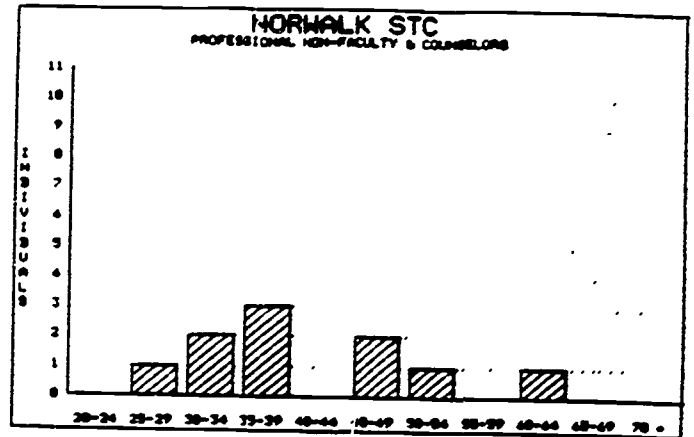
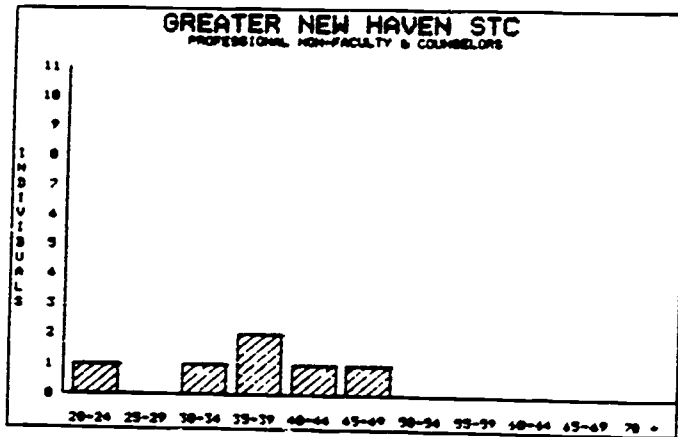
Table 7c. Summary Statistics II - Professionals

	NUMBER OF CASES	BOTTOM 25 PCT	BOTTOM 50 PCT	TOP 25 PCT	PERCENT 55 OR OVER	PERCENT OVER AGE 60
C.O.	9	38.5	48.0	59.5	22.2%	22.2%
GNHSTC	6	29.3	36.5	42.0	0.0%	0.0%
HSTC	7	32.0	39.0	43.0	14.3%	0.0%
NSTC	10	33.9	37.5	48.5	10.0%	10.0%
TVSTC	10	36.5	47.0	52.3	20.0%	0.0%
WSTC	6	31.0	40.0	58.3	33.3%	16.7%
SYSTEM	48	34.0	40.0	50.5	16.7%	8.3%

Looking at the proportion of professionals 55 years or older, and excluding Greater New Haven, which had none, the low was 10 percent at Norwalk to a high of one-third at Waterbury. In the 60-plus category, three units had no professionals (GNHSTC, HSTC, and TVSTC). The next lowest was 10 percent at Norwalk, with the highest 22.2 percent, at Central Office.

Figure 7 shows the distribution by age group of professional non-faculty and counselors at the six units. Again, Greater New Haven appears, overall, to be youngest, but none of the other units is, visually, the obvious contender for oldest. In fact, the small number of individuals involved means that the retirement or resignation of a single individual could significantly alter the age distribution of this class of employees.

Figure 7. Distribution by Age Group and Unit



Conclusions

This paper has examined the age distribution of staff in three categories--executive/administrative/managerial ("administrative"), faculty/librarians ("faculty"), and professional non-faculty/counselors ("professionals"). Among the most significant patterns noted are the following:

THREE GROUPS COMBINED

(Administrative, Faculty, Professionals)

1. System-wide, the three categories total to 305 individuals, with about two-thirds comprised of faculty, and the remaining third divided evenly between administrators and professionals.
2. System-wide, one-quarter of the personnel in these three categories are age 42 or below, half are 49 or younger, and one-quarter are age 56 or older.
3. System-wide, 30.2 percent are 55 or older.
4. System-wide, 16.7 percent are 60 or older.

ADMINISTRATORS

1. System-wide, the minimum age is 34, maximum 67, and average 48.4.
2. System-wide, the youngest quarter of administrators are 42 or less, half are 45 or less, and one-quarter are age 55 or older.
3. System-wide, 25.5 percent of administrators are 55 or older (12 individuals).
4. System-wide, 10.6 percent of administrators are 60 or older (5 individuals).
5. Norwalk has the oldest set of administrators, with a minimum age of 45, half over the age of 55, and one-quarter over the age of 60.
6. Greater New Haven has the youngest set of administrators, with a maximum age of 54, half under the age of 44, and none 55 or over.

FACULTY

1. System-wide, the minimum age is 32, maximum 70, and average 50.6.
2. System-wide, the youngest quarter of faculty are 44 or less, and just over half (51 percent) are 51 or less.
3. System-wide, approximately one-third (34.3 percent) of faculty are 55 or older (72 individuals).
4. System-wide, 20 percent of faculty are 60 or older (42 individuals).
5. Norwalk has the oldest set of faculty, with a minimum age of 34, half over the age of 55, and over one-third (35.6 percent) age 60 or over.
6. Greater New Haven has the youngest set of faculty with a maximum age of 67, half under the age of 44, 15.2 percent 55 or over, and 9.1 percent age 60 or over.

PROFESSIONALS

1. System-wide, the minimum age is 24, maximum 66, and average 42.6.
2. System-wide, the youngest quarter of professionals are 34 or less, half are 40 or less, and one-quarter are age 50.5 or older, making this the youngest group overall.
3. System-wide, 16.7 percent of professionals are 55 or older (8 individuals).
4. System-wide, 8.3 percent of professionals are 60 or older (4 individuals).
5. Central Office has the oldest set of professionals, with half 48 years or older, and nearly one-quarter (22.2 percent) 60 or over.
6. Greater New Haven has the youngest set of professionals, with a maximum age of 45, half under the age of 36, and none 55 or over.

DEMOGRAPHIC STUDY AND PROJECTION
FACULTY AND PROFESSIONAL STAFF
STATE TECHNICAL COLLEGES

PART II - ADDITIONAL DESCRIPTIVE VARIABLES

Prepared by:

Dr. Marian N. Steinberg
Director, System Research and Planning
State Technical Colleges
March 3, 1988



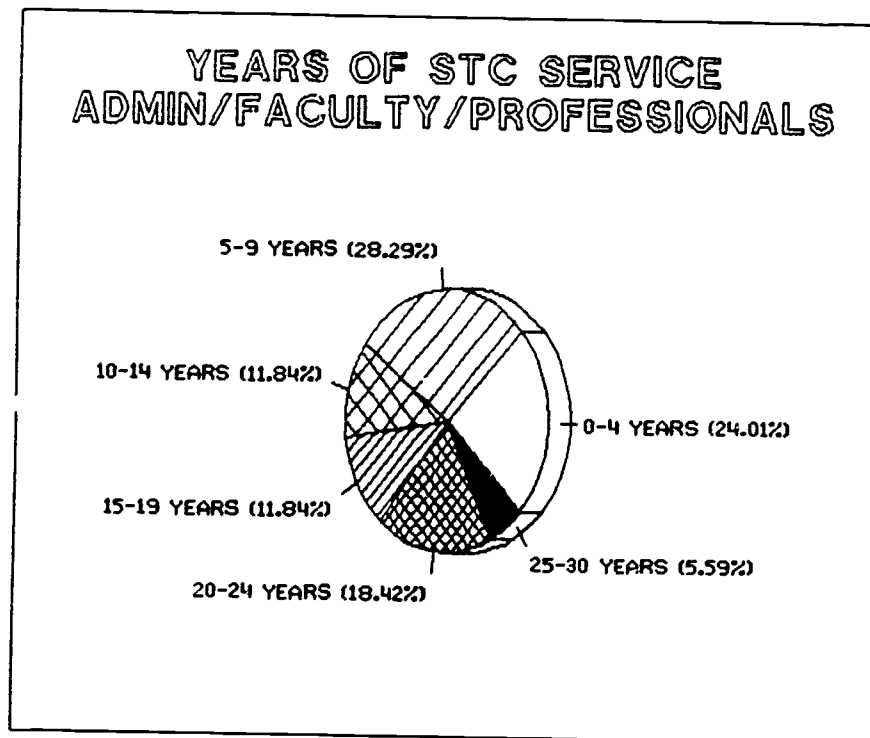
A. YEARS OF STC SERVICE

The majority of staff have 9 or fewer years with the system (Table 1). Nearly one-quarter, however, have 20 years or more. Figure 1 shows the distribution of staff in terms of years of service with the State Technical Colleges.

Table 1
YEARS OF STC SERVICE
ADMINISTRATORS/FACULTY/LIBRARIANS/PROFESSIONALS
SYSTEM-WIDE

NUMBER YEARS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
0-4	73	24.0%	24.0%
5-9	86	28.3%	52.3%
10-14	36	11.8%	64.1%
15-19	36	11.8%	76.0%
20-24	56	18.4%	94.4%
25-30	17	5.6%	100.0%
TOTAL	304	100.0%	

Figure 1



A. YEARS OF STC SERVICE

The majority of staff have 9 or fewer years with the system (Table 1). Nearly one-quarter, however, have 20 years or more. Figure 1 shows the distribution of staff in terms of years of service with the State Technical Colleges.

Table 1
YEARS OF STC SERVICE
ADMINISTRATORS/FACULTY/LIBRARIANS/PROFESSIONALS
SYSTEM-WIDE

NUMBER YEARS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
0-4	73	24.0%	24.0%
5-9	86	28.3%	52.3%
10-14	36	11.8%	64.1%
15-19	36	11.8%	76.0%
20-24	56	18.4%	94.4%
25-30	17	5.6%	100.0%
TOTAL	304	100.0%	

Figure 1

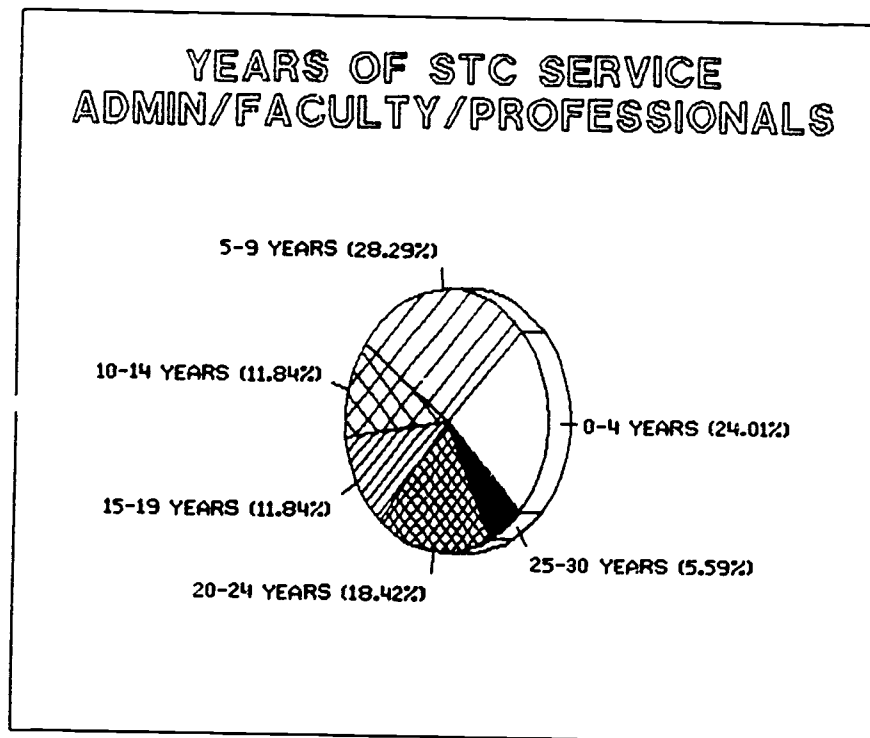


Table 2 provides summary statistics for all staff. The average number of years with the State Technical College system is 11.4, with half the staff having served 9 years or more. The lowest quarter have 5 years service or less, while the upper quarter have been employed by the State Technical Colleges for 19 years or more.

TABLE 2
SYSTEM-WIDE STATISTICS ON YEARS STC SERVICE
ADMINISTRATORS, FACULTY/LIBRARIANS

Average	11.4
25th Percentile	5
50th Percentile	9
75th Percentile	19
100th Percentile	30

Table 3 provides information on the system-wide distribution of longevity with the State Technical College system, with the same information presented graphically in Figure 2. Again there is a significant difference in the proportion of employees falling into the lowest category (0 to 4 years) across the three groups. Over 40 percent of professionals had served less than five years, quite similar to the 34 percent of administrators, but considerably higher than the 18 percent of faculty/librarians.

Figure 2 shows that the distribution in terms of years of service differs considerably among the three groups. For professionals, nearly all personnel have less than 15 years service. For administrators, over half their personnel have less than 10 years service. The pattern is nearly the reverse for faculty/librarians, half of whom have at least 15 years of service.

Table 3

YEARS OF STC SERVICE
ADMINISTRATORS
SYSTEM-WIDE

NUMBER YEARS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
0-4	16	34.0%	34.0%
5-9	17	36.2%	70.2%
10-14	6	12.8%	83.0%
15-19	1	2.1%	85.1%
20-24	6	12.8%	97.9%
25-30	1	2.1%	100.0%
TOTAL	47	100.0%	

YEARS OF STC SERVICE
FACULTY/LIBRARIANS
SYSTEM-WIDE

NUMBER YEARS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
0-4	38	18.1%	18.1%
5-9	54	25.7%	43.8%
10-14	19	9.0%	52.9%
15-19	34	16.2%	69.0%
20-24	49	23.3%	92.4%
25-30	16	7.6%	100.0%
TOTAL	210	100.0%	

YEARS OF STC SERVICE
PROFESSIONALS
SYSTEM-WIDE

NUMBER YEARS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
0-4	19	40.4%	40.4%
5-9	15	31.9%	72.3%
10-14	11	23.4%	95.7%
15-19	1	2.1%	97.9%
20-24	1	2.1%	100.0%
25-30	0	0.0%	100.0%
TOTAL	47	100.0%	

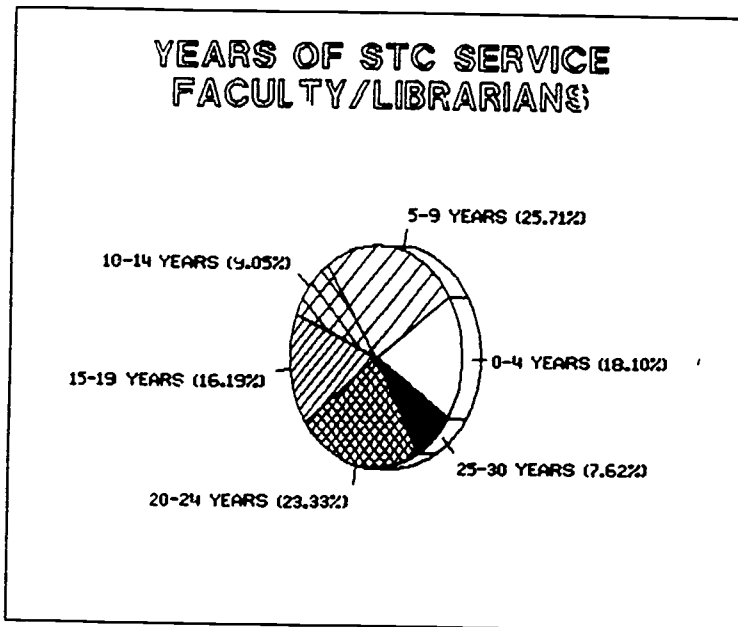
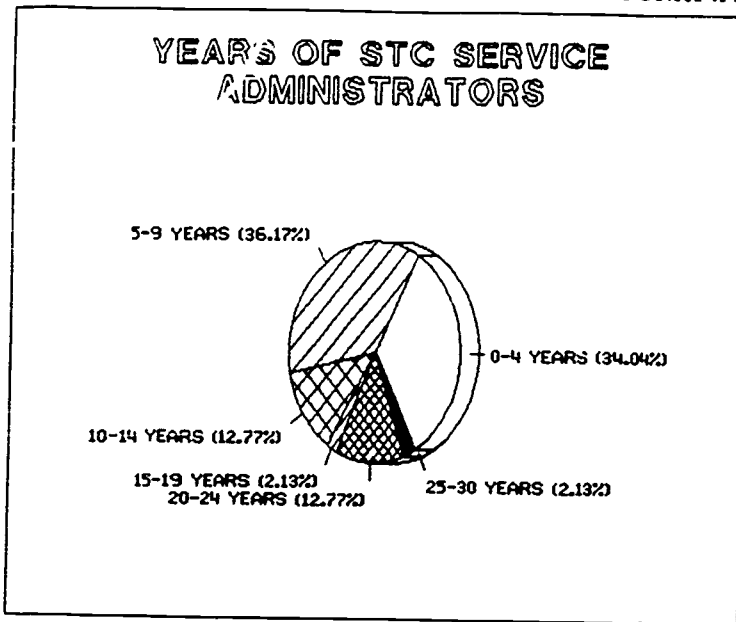


Figure 2

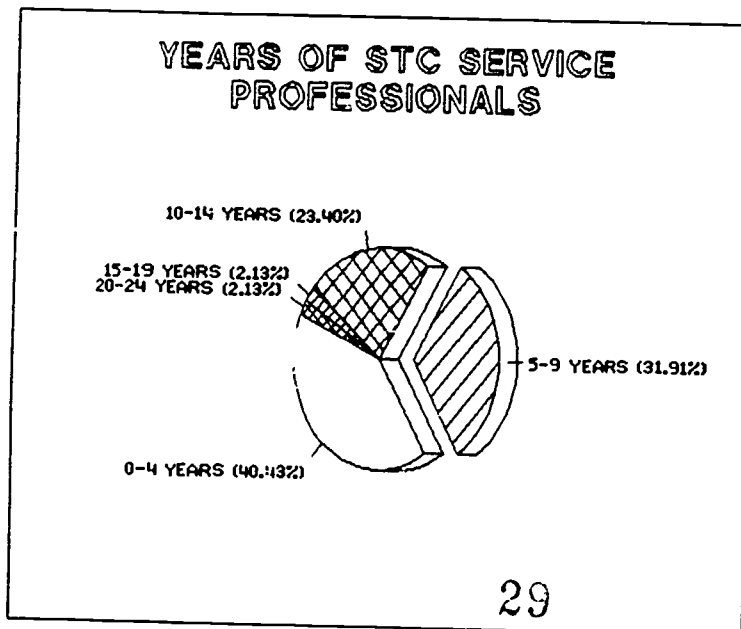


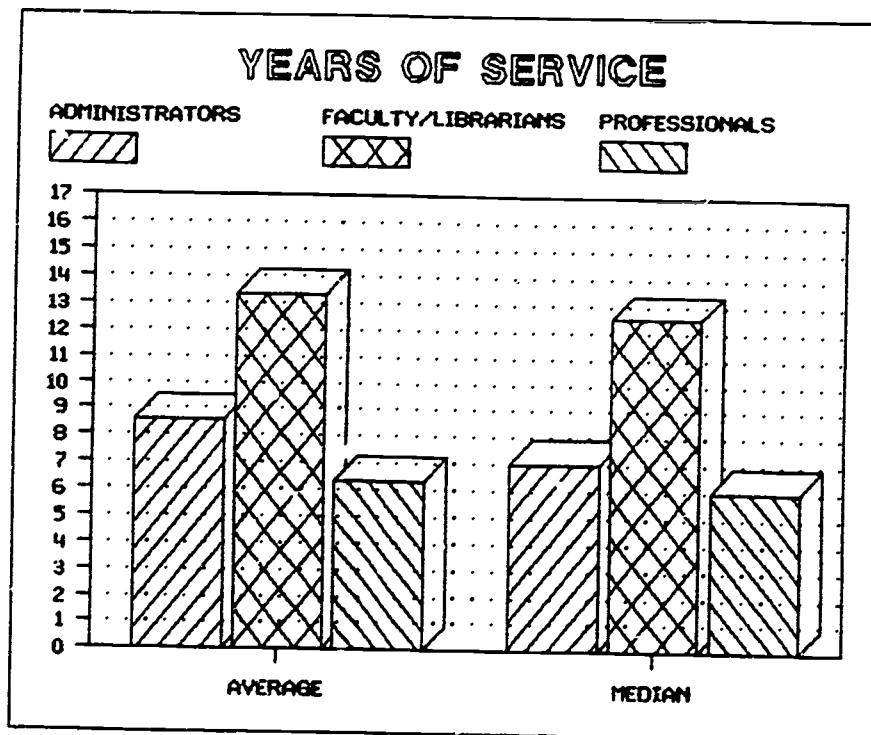
Table 4 [and Figure 3] examine years of service statistically. System-wide, professionals have the lowest average number of years service (6.3), well below the average of 11.4 for all employees. Administrators are also below average (8.6), though significantly higher than professionals. Faculty/librarians are above average (13.3). The maximum years of service with the State Technical College system goes from a low of 20 for professionals to a high of 30 for faculty/librarians, with administrators falling in between, at 25 years of service.

Table 4

SYSTEM-WIDE COMPARISON BY EEO6 CODE

	AVG	MEDIAN	PERCENTILE			
			25TH	50TH	75TH	100TH
ADMIN	8.6	7	4	7	12	25
FAC/LIB	13.3	13	6	13	21	30
PROF	6.3	6	3	6	10	20
TOTAL	11.4	9	5	9	19	30

Figure 3



B. LONGEVITY

Longevity takes into consideration STC service plus other prior State service. Table 5 and Figure 4 show that nearly half the staff have less than 10 years of total service. The remainder are almost evenly divided among those with at least 10, but less than 25 years of total service. Nearly 9 percent have at least 25 years of total service.

Table 5

LONGEVITY CODE ADMINISTRATORS/FACULTY/LIBRARIANS/PROFESSIONALS SYSTEM-WIDE			
NUMBER YEARS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
>10	143	47.0%	47.0%
10-14 (1/4)	38	12.5%	59.5%
15-19 (1/2)	45	14.8%	74.3%
20-24 (3/4)	51	16.8%	91.1%
25 + (100%)	27	8.9%	100.0%
TOTAL	304	100.0%	

Figure 4

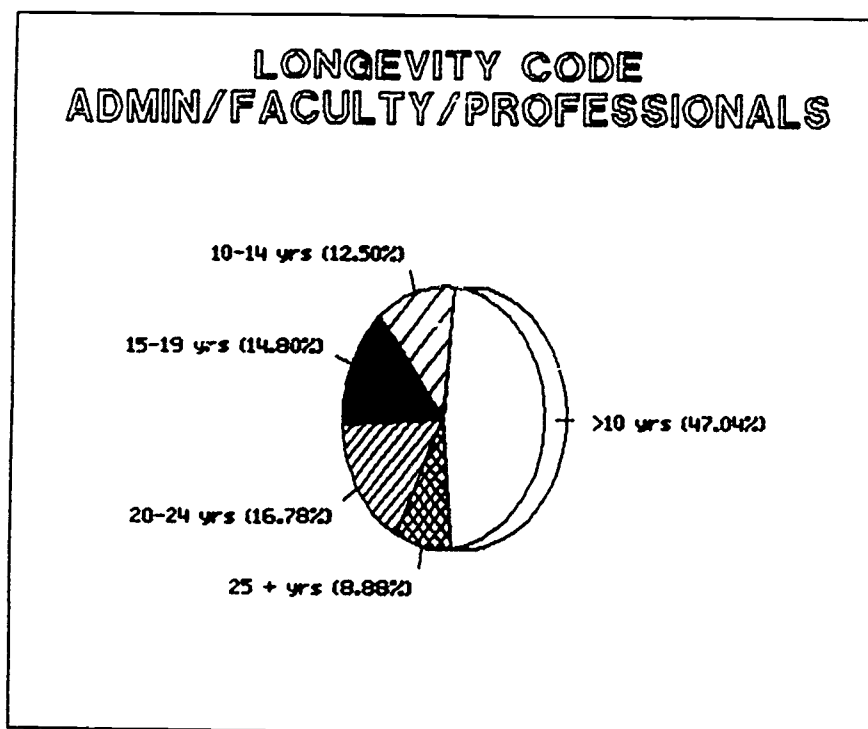


Table 6 and Figure 5 examine longevity by employee group. In all cases, the modal category is "less than 10 years", however, this represents from 42.4 percent (faculty/librarians) to 63.8 percent (professionals) of the three groups. Professionals have the least time in total State service: over 90 percent have worked less than 15 years. In contrast, nearly one-third of faculty/librarians had completed at least 20 years of total service.

Table 6

LONGEVITY CODE ADMINISTRATORS SYSTEM-WIDE				
NUMBER YEARS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT	
>10	24	51.1%	51.1%	
10-14 (1/4)	8	17.0%	68.1%	
15-19 (1)	8	17.0%	85.1%	
20-24 (3/4)	6	12.8%	97.9%	
25 + (100%)	1	2.1%	100.0%	
TOTAL	47	100.0%		

LONGEVITY CODE FACULTY/LIBRARIANS SYSTEM-WIDE				
NUMBER YEARS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT	
>10	89	42.4%	42.4%	
10-14 (1/4)	17	8.1%	50.5%	
15-19 (1/2)	35	16.7%	67.1%	
20-24 (3/4)	44	21.0%	88.1%	
25 + (100%)	25	11.9%	100.0%	
TOTAL	210	100.0%		

LONGEVITY CODE PROFESSIONALS SYSTEM-WIDE				
NUMBER YEARS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT	
>10	30	63.8%	63.8%	
10-14 (1/4)	13	27.7%	91.5%	
15-19 (1/2)	2	4.3%	95.7%	
20-24 (3/4)	1	2.1%	97.9%	
25 + (100%)	1	2.1%	100.0%	
TOTAL	47	100.0%		

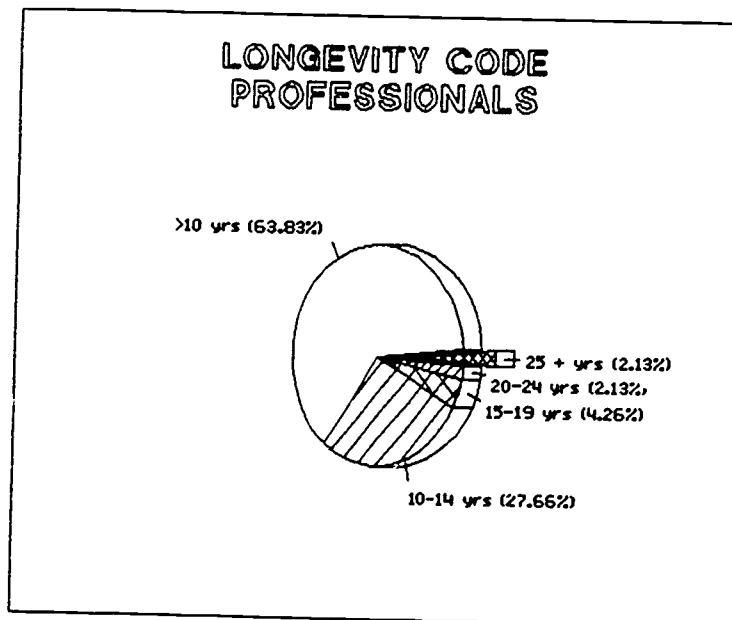
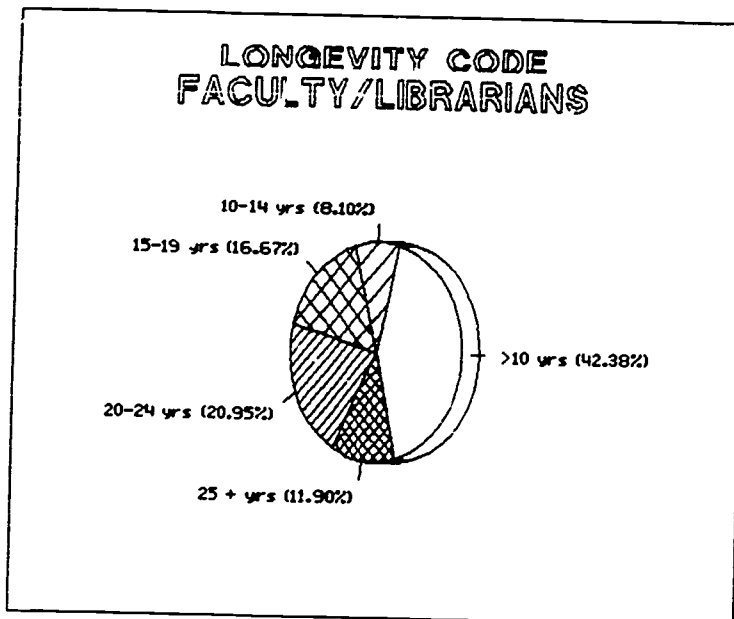
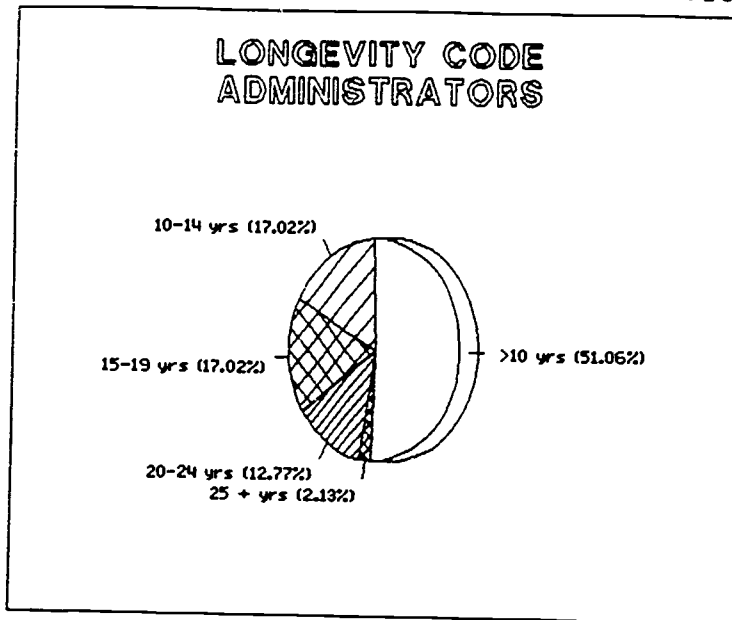


Figure 5

C. ANNUAL SALARY

The largest salary category (\$35,000-44,999) accounts for 45 percent of all staff (Table 7 and Figure 5). In addition, nearly another third have salaries within the \$25,000-34,999 range. Together, this means that more than three-quarters of these employees have salaries of at least \$25,000 but less than \$50,000. Only 3.3 percent are paid less than \$25,000; 14.1 percent are paid between \$45,000 and 54,999. This leaves 4.9 percent earning \$55,000 or more.

Table 7

ANNUAL SALARY ADMINISTRATORS/FACULTY/LIBRARIANS/PROFESSIONALS SYSTEM-WIDE			
ANNUAL SALARY	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
0-24,999	10	3.3%	3.3%
25,000-34,999	98	32.2%	35.5%
35,000-44,999	138	45.4%	80.9%
45,000-54,999	43	14.1%	95.1%
55,000-64,999	7	2.3%	97.4%
65,000-74,999	5	1.6%	99.0%
75,000-Highest	3	1.0%	100.0%
TOTAL	304	100.0%	

Figure 5

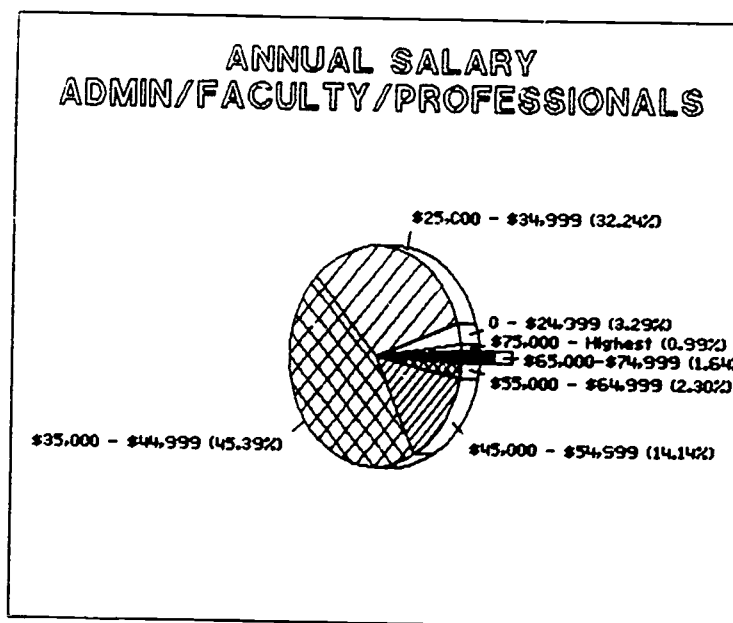


Table 8 provides summary statistics for all staff. The average salary is \$39,321, with half the staff making \$38,779 or more. The lowest quarter make \$33,778 or less, while the upper quarter of employees are paid \$43,863 or more.

Table 8

SYSTEM-WIDE STATISTICS - SALARY
ADMINISTRATORS, FACULTY/LIBRARIANS, PROFESSIONALS

Average	39,321
25th Percentile	33,778
50th Percentile	38,779
75th Percentile	43,863
100th Percentile	87,000

Table 9 provides information on salary system-wide, with the same information displayed graphically in Figure 6. In two groups (administrators and faculty/librarians) the modal category falls in the \$35,000-44,999 range, representing 44.7 percent of the administrators and 49.5 percent of faculty/librarians. The modal category for professionals is lower, \$25,000-34,999, representing 53.2 percent of this group.

It should be kept in mind in making these comparisons that faculty are paid on the basis of a 10 month year. About three-quarters of all faculty/librarians and professionals make at least \$25,000, but less than \$45,000. By comparison, about two-thirds of all administrators earn between \$35,000 and \$54,999.

The overall salary range also differs among the three groups, with nearly all professionals earning below \$45,000, and faculty/librarians clustered above them, earning between \$25,000 and \$54,999. The broadest range comes with the administrators, nearly all of whom earn between \$35,000 and \$87,000.

Table 9

ANNUAL SALARY ADMINISTRATORS SYSTEM-WIDE			
ANNUAL SALARY	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
0-24,999	0	0.0%	0.0%
25,000-34,999	1	2.1%	2.1%
35,000-44,999	21	44.7%	46.8%
45,000-54,999	10	21.3%	68.1%
55,000-64,999	7	14.9%	83.0%
65,000-74,999	5	10.6%	93.6%
75,000-Highest	3	6.4%	100.0%
TOTAL	47	100.0%	

ANNUAL SALARY FACULTY/LIBRARIANS SYSTEM-WIDE			
ANNUAL SALARY	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
0-24,999	2	1.0%	1.0%
25,000-34,999	72	34.3%	35.2%
35,000-44,999	104	49.5%	84.8%
45,000-54,999	32	15.2%	100.0%
55,000-64,999	0	0.0%	100.0%
65,000-74,999	0	0.0%	100.0%
75,000-Highest	0	0.0%	100.0%
TOTAL	210	100.0%	

ANNUAL SALARY PROFESSIONALS SYSTEM-WIDE			
ANNUAL SALARY	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
0-24,999	8	17.0%	17.0%
25,000-34,999	25	53.2%	70.2%
35,000-44,999	13	27.7%	97.9%
45,000-54,999	1	2.1%	100.0%
55,000-64,999	0	0.0%	100.0%
65,000-74,999	0	0.0%	100.0%
75,000-Highest	0	0.0%	100.0%
TOTAL	47	100.0%	

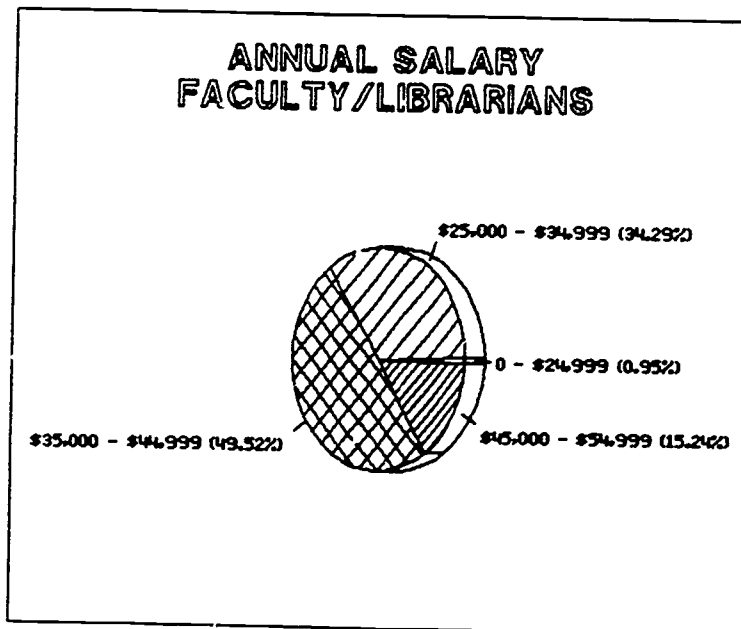
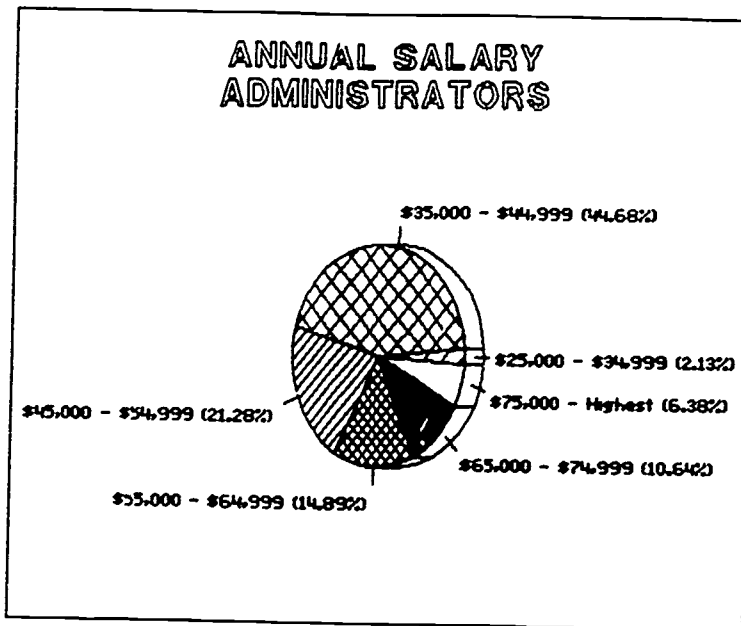


Figure 6

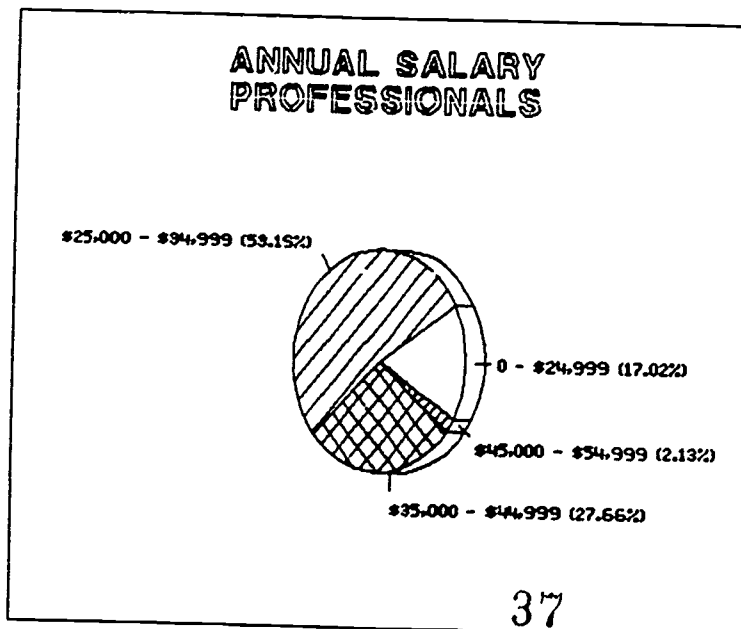
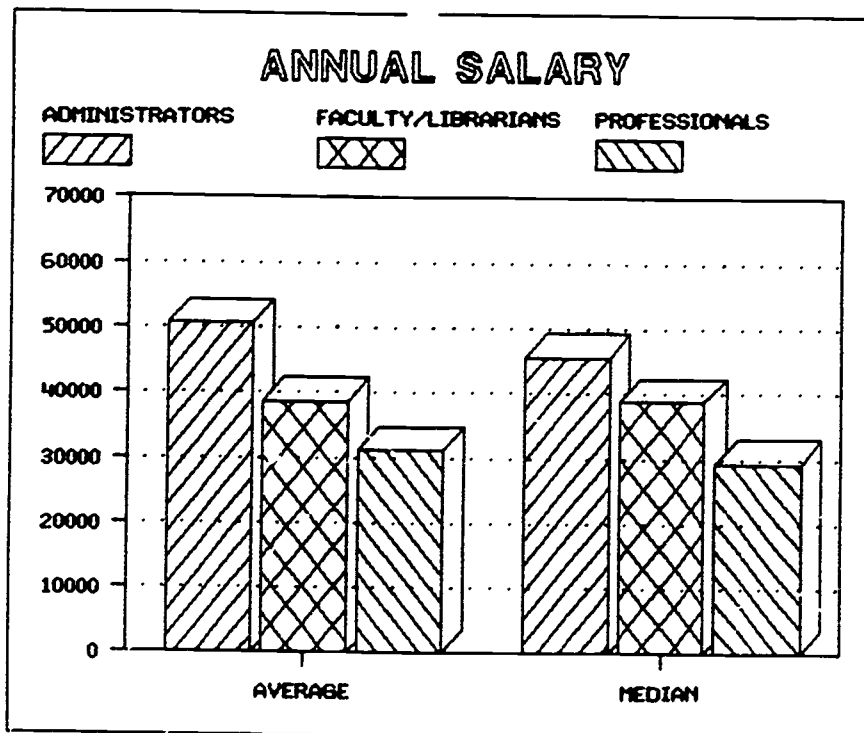


Table 10 and Figure 7 compare salary distribution for the three employee groups using standard statistics. The lowest average salary is for professionals (\$31,091), followed by faculty/librarians (\$38,608) and administrators (\$50,735). The bottom quarter of professionals earn under \$26,000, compared to \$34,000 for faculty/librarians and \$40,500 for administrators. This pattern remains stable for the top quarter of earners in the three groups.

Table 10
SYSTEM-WIDE COMPARISON BY EEO6 CODE

	AVG	MEDIAN	P E R C E N T I L E S			
			25TH	50TH	75TH	100TH
ADMIN	50,735	45,675	40,465	45,675	59,750	87,000
FAC/LIB	38,608	38,779	33,898	38,779	43,841	52,324
PROF	31,091	29,324	25,965	29,324	36,799	48,048
TOTAL	39,321	38,779	33,778	38,779	43,863	87,000

Figure 7



D. SICK DAYS ACCRUED

Table 11 and Figure 8 show the distribution of sick day accruals for all staff (administrators, faculty/librarians, and professionals) on a system-wide basis. The figure is an interesting U-shaped curve, indicating that most staff have either relatively low or high numbers of sick days, with few having sick day accruals in the mid-ranges. The average was 107.4 days. One quarter had 35 days or less, half had 80 days or less, and three-quarters had 195 days or less (Table 12).

Table 11

SICK DAYS ACCRUED ADMINISTRATORS/FACULTY/LIBRARIANS/PROFESSIONALS SYSTEM-WIDE			
NUMBER DAYS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
0-25	56	18.4%	18.4%
26-50	52	17.1%	35.5%
51-75	38	12.5%	48.0%
76-100	30	9.9%	57.9%
101-125	16	5.3%	63.2%
126-150	13	4.3%	67.4%
151-175	11	3.6%	71.1%
176-200	14	4.6%	75.7%
201-225	24	7.9%	83.6%
226 +	50	16.4%	100.0%
TOTAL	304	100.0%	

Figure 8

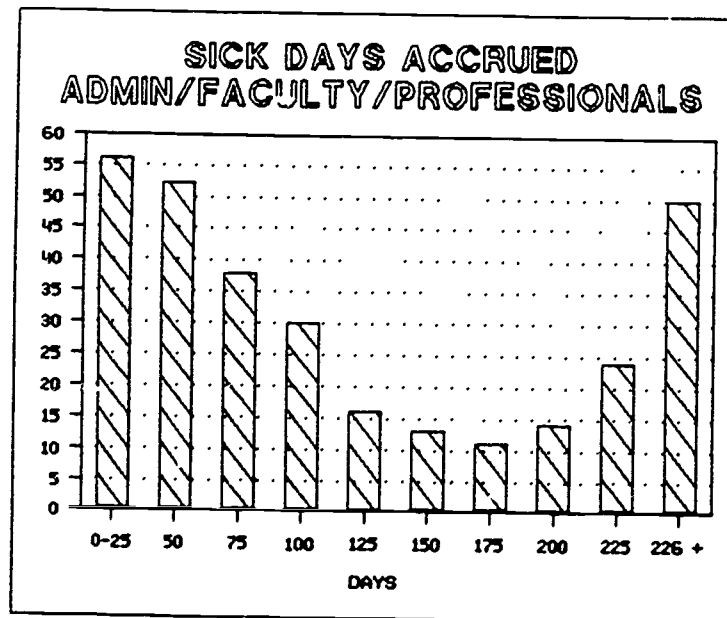


Table 13

SICK DAYS ACCRUED
ADMINISTRATORS
SYSTEM-WIDE

NUMBER DAYS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
0-25	14	29.8%	29.8%
26-50	5	10.6%	40.4%
51-75	7	14.9%	55.3%
76-100	8	17.0%	72.3%
101-125	1	2.1%	74.5%
126-150	3	6.4%	80.9%
151-175	1	2.1%	83.0%
176-200	2	4.3%	87.2%
201-225	2	4.3%	91.5%
226 +	4	8.5%	100.0%
TOTAL	47	100.0%	

SICK DAYS ACCRUED
FACULTY/LIBRARIANS
SYSTEM-WIDE

NUMBER DAYS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
0-25	20	9.5%	9.5%
26-50	34	16.2%	25.7%
51-75	20	11.4%	37.1%
76-100	21	10.0%	47.1%
101-125	13	6.2%	53.3%
126-150	10	4.8%	58.1%
151-175	10	4.8%	62.9%
176-200	12	5.7%	68.6%
201-225	22	10.5%	79.0%
226 +	44	21.0%	100.0%
TOTAL	210	100.0%	

SICK DAYS ACCRUED
PROFESSIONALS
SYSTEM-WIDE

NUMBER DAYS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
0-25	22	46.8%	46.8%
26-50	13	27.7%	74.5%
51-75	7	14.9%	89.4%
76-100	1	2.1%	91.5%
101-125	2	4.3%	95.7%
126-150	0	0.0%	95.7%
151-175	0	0.0%	95.7%
176-200	0	0.0%	95.7%
201-225	0	0.0%	95.7%
226 +	2	4.3%	100.0%
TOTAL	47	100.0%	

Table 13

SICK DAYS ACCRUED
ADMINISTRATORS
SYSTEM-WIDE

NUMBER DAYS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
0-25	14	29.8%	29.8%
26-50	5	10.6%	40.4%
51-75	7	14.9%	55.3%
76-100	8	17.0%	72.3%
101-125	1	2.1%	74.5%
126-150	3	6.4%	80.9%
151-175	1	2.1%	83.0%
176-200	2	4.3%	87.2%
201-225	2	4.3%	91.5%
226 +	4	8.5%	100.0%
TOTAL	47	100.0%	

SICK DAYS ACCRUED
FACULTY/LIBRARIANS
SYSTEM-WIDE

NUMBER DAYS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
0-25	20	9.5%	9.5%
26-50	34	16.2%	25.7%
51-75	20	11.4%	37.1%
76-100	21	10.0%	47.1%
101-125	13	6.2%	53.3%
126-150	10	4.8%	58.1%
151-175	10	4.8%	62.9%
176-200	12	5.7%	68.6%
201-225	22	10.5%	79.0%
226 +	44	21.0%	100.0%
TOTAL	210	100.0%	

SICK DAYS ACCRUED
PROFESSIONALS
SYSTEM-WIDE

NUMBER DAYS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
0-25	22	46.8%	46.8%
26-50	13	27.7%	74.5%
51-75	7	14.9%	89.4%
76-100	1	2.1%	91.5%
101-125	2	4.3%	95.7%
126-150	0	0.0%	95.7%
151-175	0	0.0%	95.7%
176-200	0	0.0%	95.7%
201-225	0	0.0%	95.7%
226 +	2	4.3%	100.0%
TOTAL	47	100.0%	

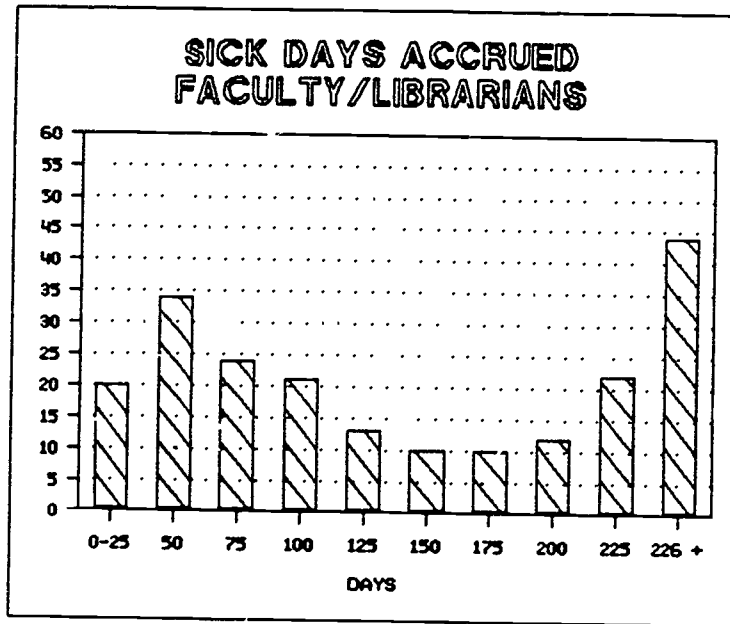
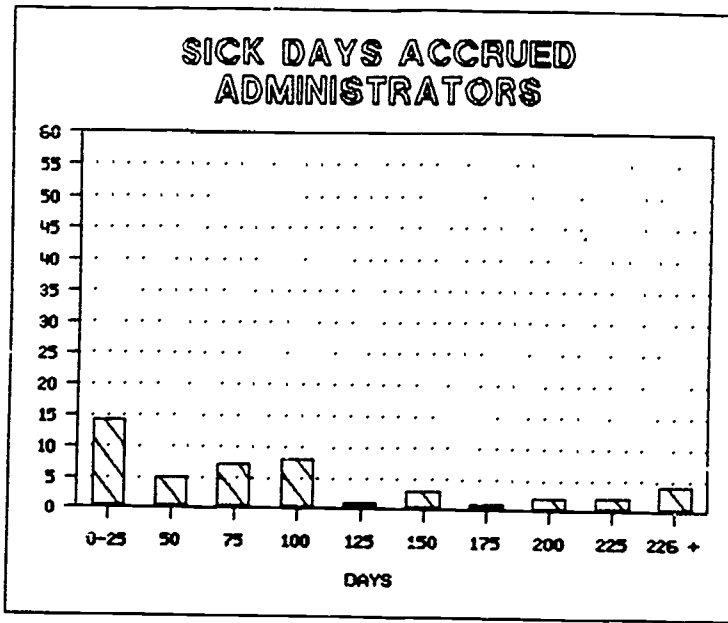
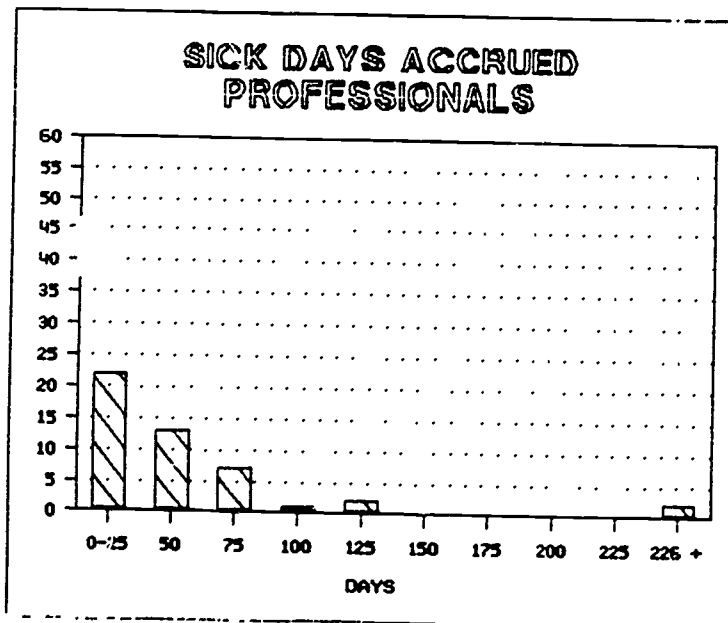


Figure 9



In the lowest category (0 to 25 days) there is a significant difference in distribution across the three employee groups. Over 45 percent of professionals had 25 days or less of sick time accrued, compared with about 30 percent of administrators and only 9.5 percent of faculty/librarians. This pattern is strongest among the professionals, nearly 90 percent of whom have 75 days or less of accrued sick time. Perhaps the simplest explanation of these differentials is that faculty's commitments to their students cannot be shifted as easily as that of professionals or administrators.

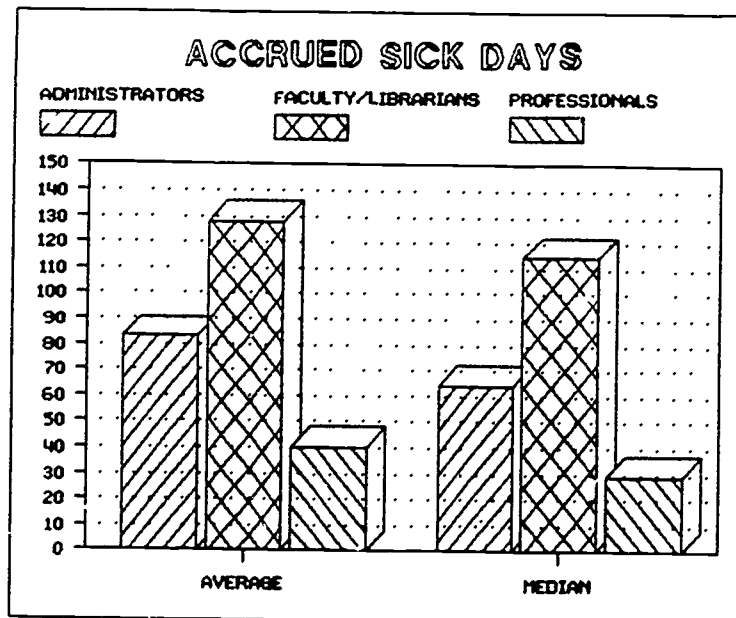
Table 14 and Figure 10 examine sick days statistically. System-wide, professionals have the lowest average number of sick days (40), well below the average of 107.4 for all employees. Administrators are also below average (83), though significantly higher than professionals. Faculty/librarians are somewhat above average (127.9).

Table 14

SYSTEM-WIDE COMPARISON BY EE06 CODE

	AVG	MEDIAN	P E R C E N T I L E S			
			25TH	50TH	75TH	100TH
ADMIN	83.0	64	24	64	129	240
FAC/LIB	127.9	115	50	111	217	240
PROF	40.1	29	11	29	52	240
TOTAL	107.4	80	35	79	194	240

Figure 10



All three groups have some members at maximum sick leave. One quarter of administrators have over 129 days, compared to 217 days for faculty/librarians, and 52 days for professionals.

E. VACATION

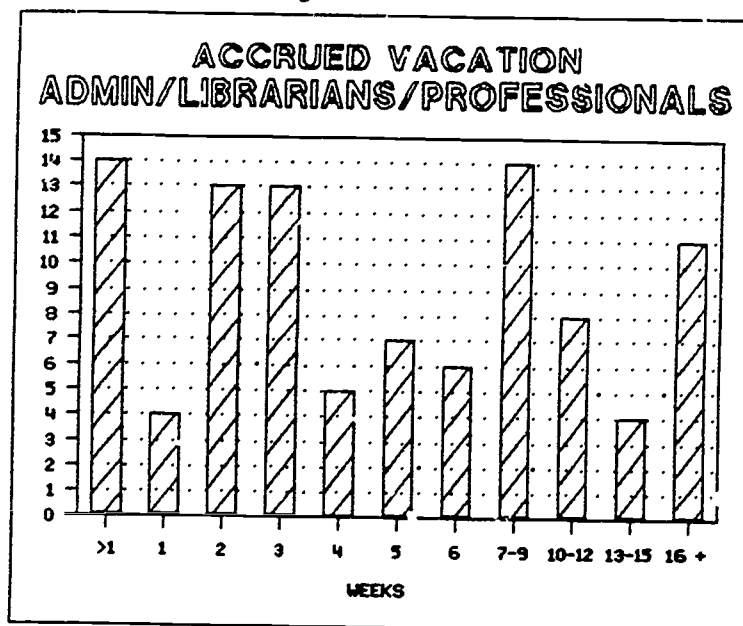
In the following discussion it is important to note that faculty, who are not eligible for vacation benefits, have been excluded. Table 15 shows that approximately half the remaining staff have accumulated four weeks or less of vacation. Figure 11 displays accrued vacation time in weeks, ranging from less than one week to 16 or more weeks (up to a maximum of 120 days, or 24 weeks). Before examining the graph, please note that the categories on the x-axis are not all the same width. The first seven categories ("under 1" through "6") each represent a single week. The next three ("7-9" through "13-15") each include a three-week spread, and the final category ("16+") represents over 19 weeks worth of accrued vacation time. With this in mind, it appears that while half the staff have 4 weeks or less vacation time accrued, another 14.1 percent have between 7 and 9 weeks accumulated. About 12 percent have between 10 and 15 weeks vacation, while the remaining 11 percent have from 16 to 24 weeks.

Table 15

ACCRUED VACATION ADMINISTRATORS/LIBRARIANS/PROFESSIONALS SYSTEM-WIDE			
NUMBER WEEKS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
>1	14	14.1%	14.1%
1	4	4.0%	18.2%
2	13	13.1%	31.3%
3	13	13.1%	44.4%
4	5	5.1%	49.5%
5	7	7.1%	56.6%
6	6	6.1%	62.6%
7-9	14	14.1%	76.8%
10-12	8	8.1%	84.8%
13-15	4	4.0%	88.9%
16 +	11	11.1%	100.0%
TOTAL	99	100.0%	

This excludes all 205 STC teaching faculty,
who are ineligible for vacation.

Figure 11



The average vacation accrual is 45.3 days, or 9 weeks. Half the staff have 36 days or more (7 weeks) vacation time accrued. The lowest quarter of employees has 17 days or less (3 1/2 weeks), while the upper quarter have 68 days or more (13 weeks).

Table 16 examines vacation day accruals statistically. The average number of vacation days overall is 45.3. Half the staff have 36 days or less. The bottom quarter have 17 days or less, while the top quarter have 68 days or more. Maximum number of vacation days accrued by any employee is 120, which is the maximum allowed.

Table 16

SYSTEM-WIDE STATISTICS - VACATION DAYS ACCRUED
ADMINISTRATORS, FACULTY/LIBRARIANS, PROFESSIONALS

Average	45.3
25th Percentile	17
50th Percentile	36
75th Percentile	68
100th Percentile	120

Table 17 and Figure 12 display vacation patterns by employee type. Analysis is not possible for the librarians, whose numbers are very small. There does appear to be somewhat of an inverse pattern in vacation accruals for administrators and professionals. Professionals tend to have much lower numbers of vacation days accrued than do administrators. This is borne out by Table 18, which shows that the average number of vacation days for professionals is 34.4, with half of all professionals having accumulated 23 days or less. In contrast, administrators average 55.3 vacation days, with half of their groups having 48 days or less. Also striking is that the upper quartile of administrators have 83 days or more, compared to only 48 days for professionals.

Table 17

ACCRUED VACATION
ADMINISTRATORS
SYSTEM-WIDE

NUMBER WEEKS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
>1	4	8.5%	9.5%
1	0	0.0%	8.5%
2	5	10.6%	19.1%
3	5	10.6%	29.8%
4	4	8.5%	38.3%
5	3	6.4%	44.7%
6	3	6.4%	51.1%
7-9	7	14.9%	66.0%
10-12	7	14.9%	80.9%
13-15	2	4.3%	85.1%
16 +	7	14.9%	100.0%
TOTAL	47	100.0%	

ACCRUED VACATION
LIBRARIANS ONLY
SYSTEM-WIDE

NUMBER WEEKS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
>1	1	20.0%	20.0%
1	0	0.0%	20.0%
2	0	0.0%	20.0%
3	1	20.0%	40.0%
4	0	0.0%	40.0%
5	0	0.0%	40.0%
6	0	0.0%	40.0%
7-9	2	40.0%	80.0%
10-12	1	20.0%	100.0%
13-15	0	0.0%	100.0%
16 +	0	0.0%	100.0%
TOTAL	5	100.0%	

ACCRUED VACATION
PROFESSIONALS
SYSTEM-WIDE

NUMBER WEEKS	NUMBER INDIVIDUALS	PERCENT	CUMULATIVE PERCENT
>1	9	19.1%	19.1%
1	4	8.5%	27.7%
2	8	17.0%	44.7%
3	7	14.9%	59.6%
4	1	2.1%	61.7%
5	4	8.5%	70.2%
6	3	6.4%	76.6%
7-9	5	10.6%	87.2%
10-12	1	2.1%	89.4%
13-15	2	4.3%	93.6%
16 +	3	6.4%	100.0%
TOTAL	47	100.0%	

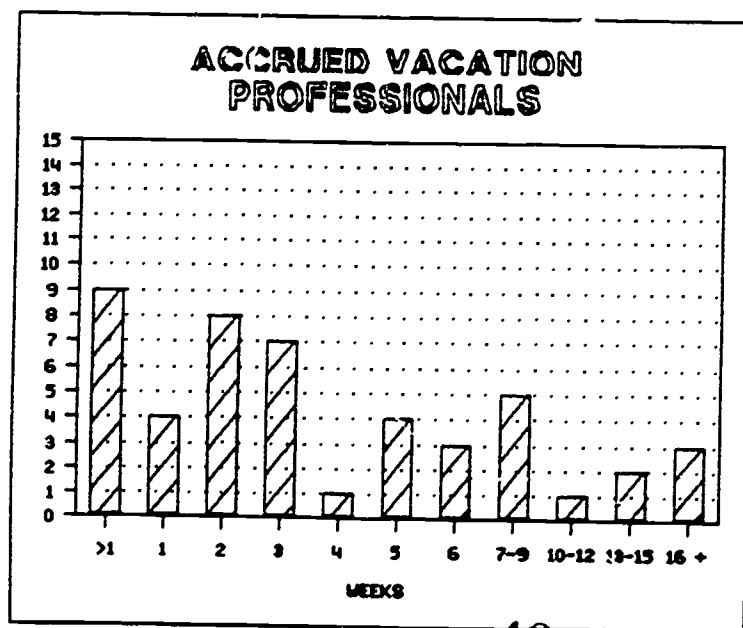
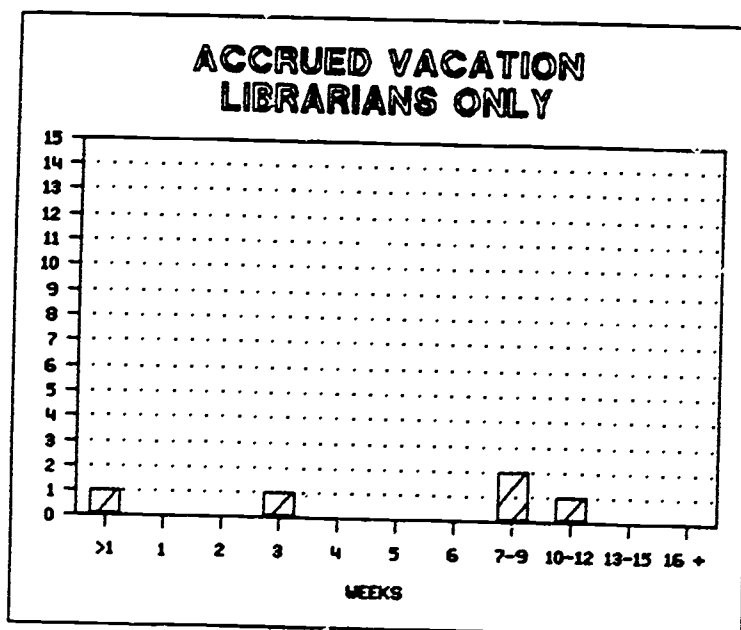
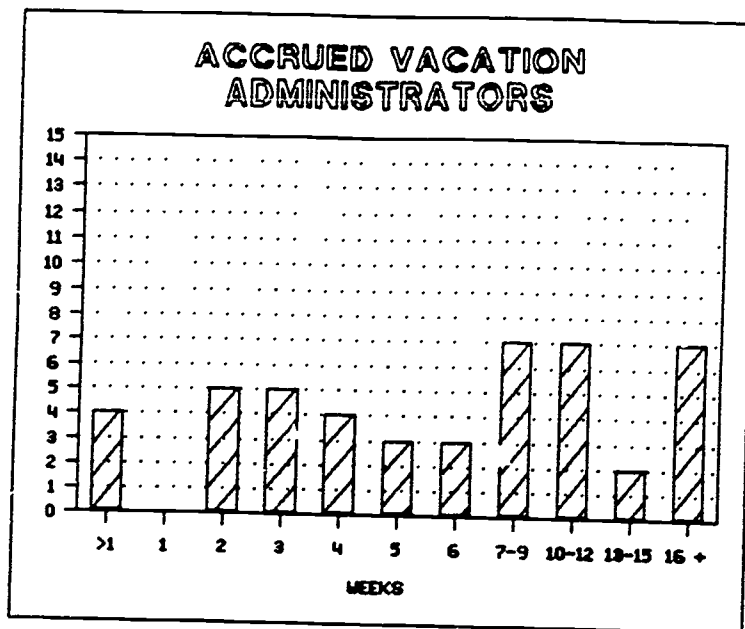


Figure 12

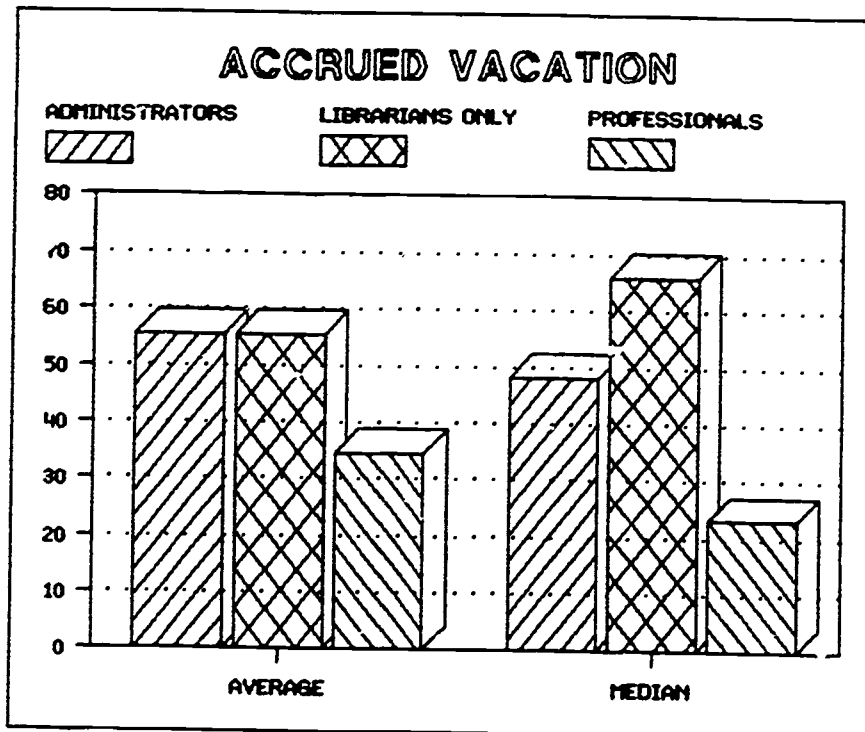
Table 18 provides a statistical comparison among the three employee groups in terms of vacation accruals. While all three groups are shown, the small number of individuals remaining in the faculty/librarian classification after faculty are deleted means that data for that group should, in fact, be ignored. Excluding faculty/librarians, then, professionals averaged only 34.4 vacation days accrued compared with administrators at 55.3 days. The lowest quarter of professionals accrued up to 13 days; the figure for administrators is 22 days. Looking at the top quarter in terms of vacation day accruals, professionals had 48 days or more, while administrators had accrued nearly twice as much vacation time (83 days).

Table 18

SYSTEM-WIDE COMPARISON BY EE06 CODE

	AVG	MEDIAN	PERCENTILES			
			25TH	50TH	75TH	100TH
ADMIN	55.3	48	22	48	83	120
FAC/LIB	55.4	66	11	66	94	120
PROF	34.4	23	13	23	48	120
TOTAL	45.3	36	17	36	68	120

Figure 13



F. RESULTS OF CORRELATION BETWEEN VARIABLES

Using SPSS/PC+ correlations were carried out between the variables described in this section and other variables used in the demographic study (unit, age, years STC service, sick time, vacation time, salary). With the exception of correlations with vacation time, where faculty were omitted, all 304 employees were included. The results are shown in Table 19 below.

Table 19
RESULTS OF CORRELATION ANALYSIS

	Years STC	LCODE Total State Svs.	Salary	Sick Time	Vac. Time
Long.Pay	S	S	M	S	M
Elig.Ret.	M	M		M	
Unit					
Age	M	M		M	M
YrsSTC	***	S	M	S	M
LCODE	***	***	M	S	M
Salary	***	***		M	M
Sick	***	***	***	***	S
Vac	***	***	***	***	***

KEY

*** duplicate entry
M moderate association
S strong association

Correlation measures the degree of association between two variables. Where a change in one perfectly predicts linear change in the other, the correlation coefficient is 1.0. If a unit increase in one variable perfectly predicts the amount of decrease in another variable, the correlation coefficient will be -1.0. Generally speaking, a correlation coefficient less than or equal to .30 indicates a weak relationship, a coefficient of .31 to .70 indicates a moderate relationship, and a coefficient of .71 to .99 indicates a strong relationship.

Not surprisingly, there is a strong relationship between years STC service, longevity pay, and total state service (LCODE). There is also a strong relationship between accrued sick time and the three longevity indicators. However, vacation time (excluding faculty) while only moderately related to the three longevity variables, is strongly related to sick day accruals. In other words, accumulation of sick days tends to increase along with years of service, but this pattern is less well defined for the relationship between accrual of vacation days and length of service. In addition, among non-faculty the number of sick days accrues is a very strong indicator of the number of vacation days accrued; individuals with little sick time tend to have little vacation time, and vice versa.

DEMOGRAPHIC STUDY AND PROJECTION
FACULTY AND PROFESSIONAL STAFF
STATE TECHNICAL COLLEGES

PART III - RETIREMENT STATUS

Prepared by:

Dr. Marian N. Steinberg
Director, System Research and Planning
State Technical Colleges
April 11, 1988



DEMOGRAPHIC STUDY AND PROJECTION
FACULTY AND PROFESSIONAL STAFF
STATE TECHNICAL COLLEGES

PART III - RETIREMENT STATUS

April 1988

Introduction

A major purpose of this study was to gain an understanding of the potential liability of the colleges and the system for costs associated with retirements. This portion of the Demographic Study therefore examines the potential for retirements among the non-classified staff. As described in Part II, retirees are divided into two groups: those currently satisfying the criteria for "normal" retirement, and a broader category which includes all those currently satisfying the minimum criteria for early retirement. This section defines these two categories, calculates the cost for accrued sick and vacation time, and examines the impact on the system, its component units, and individual academic departments.

A. "NORMAL" RETIREMENT PROVISIONS

Under a federal law which expires on December 31, 1993, faculty must retire by their 70th birthday, although exemptions are available. There is no mandatory retirement for other staff. In the absence of mandatory retirement for most staff, "normal" retirement refers to a set of conditions under which an individual either qualifies for full retirement, or reaches a "normal" retirement age, as defined by his or her retirement plan. The rules differ among the various plans, but generally contain two components--age and years of service (see Table 1).

B. EARLY RETIREMENT PROVISIONS

Early retirement refers to a set of minimum conditions under which an individual may, usually at a lower rate, be eligible for retirement. As is the case for "normal" retirement, the rules differ among the various plans (see Table 1).

Table 1. Criteria for Selecting Potential Retirees

I. NORMAL RETIREMENT

State Employee Retirement System (SERS)
Tier 1, Plan A,B,C or Tier 2.Age 65 and at least 10 years [of creditable]* State
service- or -

Age 55 and at least 25 years State service

State Teacher Retirement.

Age 60 and at least 20 years public school service

- or -35 years of creditable service [, of which at least 25
years are in Connecticut public schools]TIAA-CREF/Alternate Retirement Plan.

Age 70 or above

2. EARLY RETIREMENT PROVISIONS

State Employee Retirement System (SERS)
Tier 1, Plan A,B,C.

Age 55 and at least 10 years of State service

State Teacher Retirement.

Age 60 and at least 10 years public school service

- or -Age 55 and at least 20 years State service [, 15 of
which are in Connecticut, including the last 5 years]- or -25 years of service [of which at least 20 years are in
Connecticut public schools, including the last 5 years]TIAA-CREF/Alternate Retirement Plan.

Age 55 or above

* brackets indicate data unavailable for analysis

C. METHODOLOGY

Data were taken from the computerized STC personnel system for individuals employed full-time in the General Fund in three categories: administrators, faculty/librarians, and professionals (see Part I) in Fall 1987. Analysis was performed with the assistance of SPSS/PC, a statistical software package, as well as the 2020 spreadsheet software.

In order to identify individuals eligible for retirement, the provisions described in Table 1 were adapted to meet the limitations of our data. For example, the database does not contain information on whether an employee is vested, nor does it allow us to tell how much, if any, of their service was within Connecticut public schools. Those criteria on which no information is available in the database were deleted, as indicated by the use of brackets.

The result is that the listing arrived at may include some employees who are not yet eligible for retirement, and therefore the results should not be used to identify individual employees currently eligible for retirement without consultation with Jane Toce, Assistant Director of Personnel Services.

D. DISCUSSION

Payments for accrued sick leave and vacation. Upon retirement, employees must be compensated for accrued sick leave and vacation. As discussed in Part II, since faculty generate only sick leave, payments due them at retirement are generally lower than those due other employees. In addition, faculty who work a 10-month year have their salary spread over a 12-month period. Their summer salary payments (called "differential pay"), represent deferred income.

Tables 2 and 3 look at what would have happened if all individuals eligible for "normal" or early retirement had left in November 1987 (see Part I). It is important to note that the figures exclude the impact of differential pay.

Overall, 75 individuals were eligible for either early or "normal" retirement. This includes 22 individuals eligible for "normal" retirement, and 53 individuals eligible for early retirement. The total cost to the State Technical College system for unused sick and vacation time is over \$800,000, of which about three-eighths is due to "normal" retirements, with the remaining five-eighths generated by early retirements.

Table 3 looks at the payments due for sick leave and vacation for two groups of employees -- faculty and non-faculty. The latter consist of librarians, professionals, and

Table 2.

AVERAGE PAYOUT FOR RETIREES

	(1) Faculty Only*	(2) Non-Faculty
"Normal" Retirement (N of Cases)	9,939 (18)	29,812 (4)
Early Retirement (N of Cases)	8,365 (40)	15,592 (13)
All Retirements (N of Cases)	8,853 (58)	18938 (17)

Table 3.

AVERAGE PAYOUT FOR RETIREES

	(1) Faculty Only*	(2) Non-Faculty
"Normal" Retirement (N of Cases)	9,939 (18)	29,812 (4)
Early Retirement (N of Cases)	8,365 (40)	15,592 (13)
All Retirements (N of Cases)	8,853 (58)	18938 (17)

-
1. Faculty Only, Excluding Librarians.
 2. Professionals, Administrators, and Librarians.
-

* NOTE: These figures DO NOT include the cost of DIFFERENTIAL PAY for employees working on a 10-month schedule who are paid over a 12-month period. Please see text for further details.

administrators. In both cases payments to "normal" retirees are higher than payments to those eligible for early retirement. The difference is relatively small for faculty (less than one-fifth higher) compared to that for non-faculty, where the average for "normal" retirees is nearly twice that for early retirees.

Similarly, Table 3 indicates that non-faculty are due up to three times as much for accrued leave as faculty. While this is true, the picture changes when the cost of differential pay is taken into account, since differential pay could amount to as much as 25 percent of a faculty member's annual salary, or approximately \$10,000, depending on how far into the year he or she retires.

When \$10,000 in differential pay is added to the reimbursement owed for accrued leave, it brings the cost for "normal" faculty retirees to just under \$20,000, or about two-thirds as much as non-faculty. Among early retirees, faculty could be owed as much as \$18,000, slightly more than their non-faculty counterparts.

Potential retirements by unit and employee group. As expected from the analysis of age distribution in Part I, there are significant differences in the numbers of potential retirees among the units. The differences are especially noticeable among those eligible for early retirement (Figure 1). Norwalk has the highest number of retirees in all categories, with a substantial lead in terms of potential early retirements. Hartford is a close second, and Greater New Haven, our youngest college, has the fewest potential retirees, and none yet eligible for early retirement.

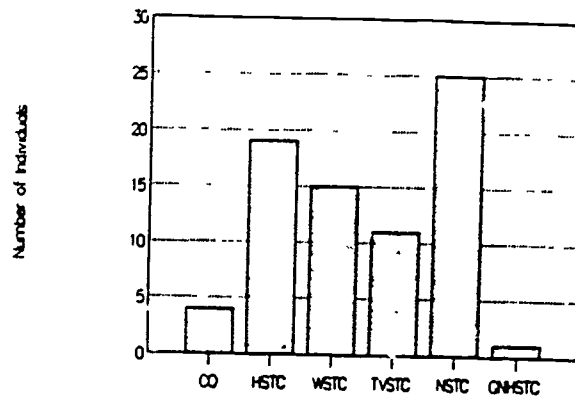
It should also be noted that there have been two retirements and one death among those listed above since this study was begun. Currently there are seven applications for retirements, two of which fit into the early retirement category. The cost to the system for these pending retirements is expected to be approximately \$70,000.

Figure 2 looks at the effect of potential faculty retirements on the individual colleges as well as the system as a whole. Overall, 28.3 percent of our faculty are currently eligible for retirement, with about twice as many eligible for early retirement as are eligible for "normal" retirement. Figure 2 also shows substantial differences in the patterns across colleges, from a low of 3 percent at Greater New Haven to a high of 45 percent at Norwalk. In all cases the proportion of individuals eligible for early retirement exceeds the proportion eligible for "normal" retirement, although the differences are relatively small at Thames Valley.

Figure 1

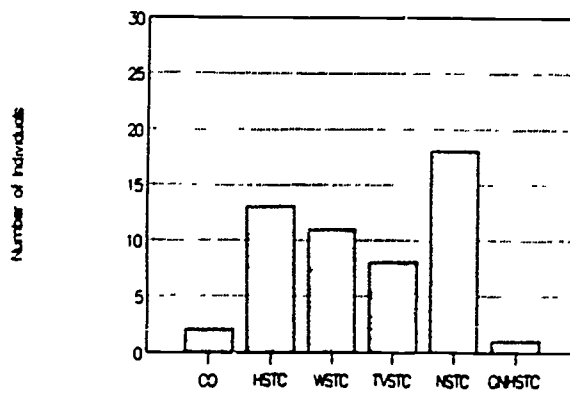
Total Potential Retirements

Prof, Fac / Lib, Admin



Potential Early Retirements

Prof, Fac / Lib, Admin



Potential "Normal" Retirements

Prof, Fac / Lib, Admin

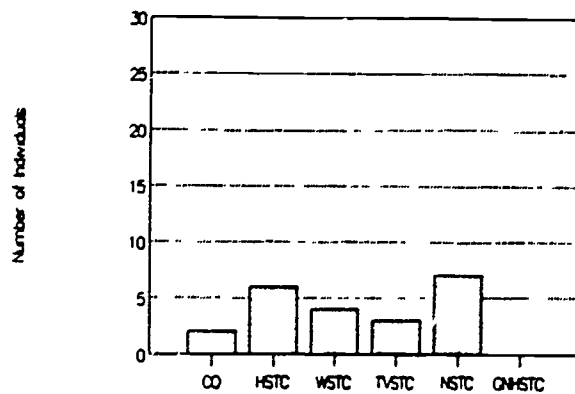
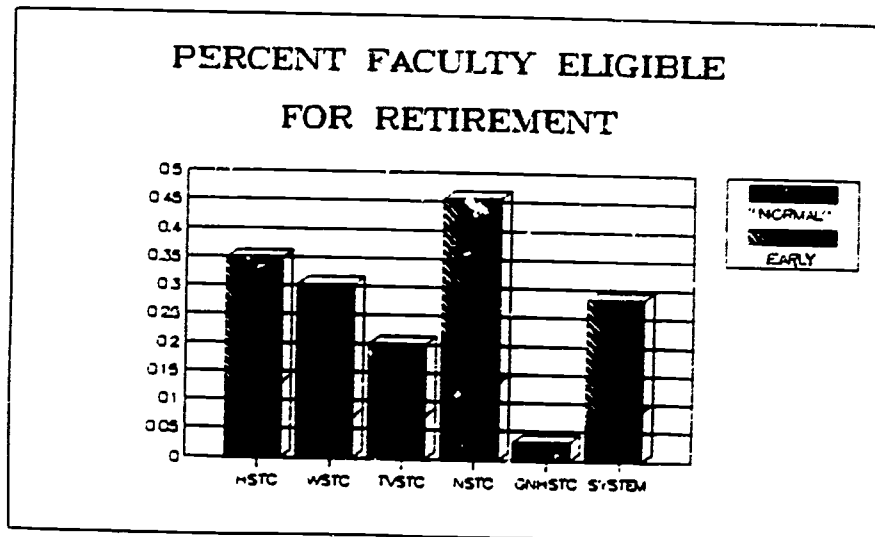
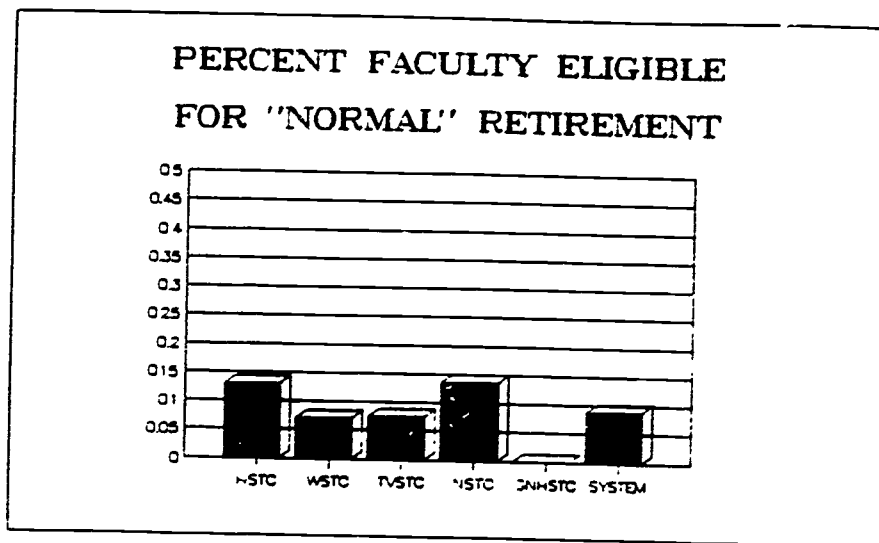
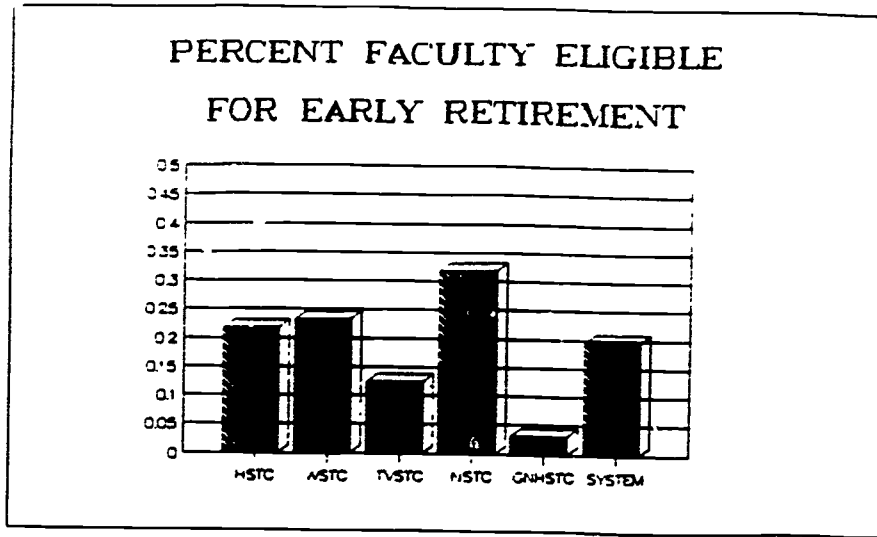


Figure 2



Finally, Figure 3 looks at the distribution of potential faculty retirees by department. While the system-wide average is 28 percent, six departments have at least half of their faculty eligible for retirement: industrial management technology, architectural engineering technology, architectural technology, chemical engineering technology, electro-mechanical technology, and math. The two technologies with the smallest proportion of their faculty eligible for retirement are data processing and civil engineering technology (each with 14.3 percent). As Table 4 indicates, in many cases the departments with a high percent of potential retirees are quite small. Nonetheless, even among the larger departments approximately one faculty member in four is eligible for retirement.

Figure 3.

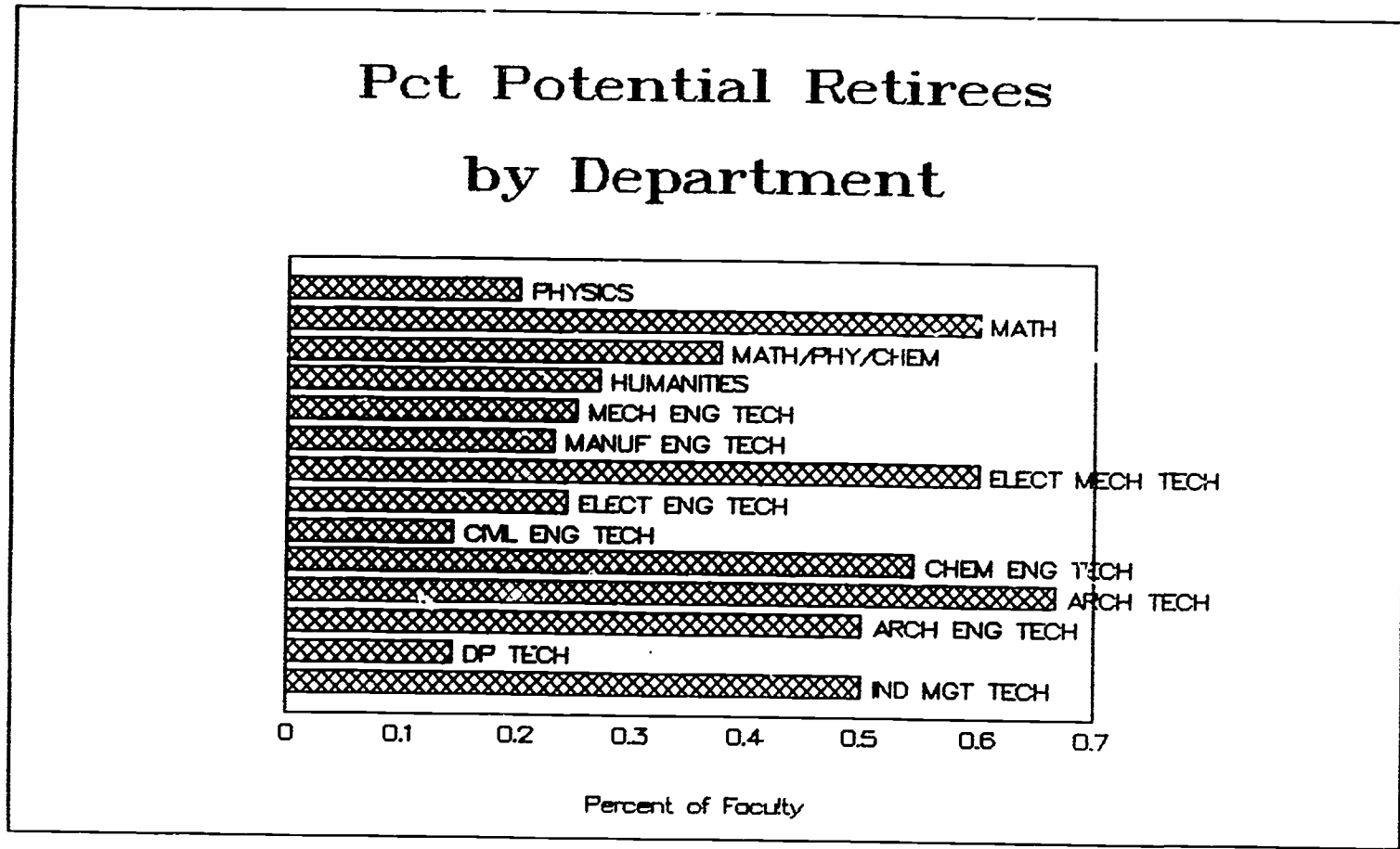


Table 4.

POTENTIAL RETIREES BY DEPARTMENT

Department:	Early	Normal	Total	PctDept	DeptSize
IND MGT TECH	1	0	1	50.0%	2
DP TECH	4	0	4	14.3%	28
ARCH ENG TECH	1	0	1	50.0%	2
ARCH TECH	1	1	2	66.7%	3
CHEM ENG TECH	4	2	6	54.5%	11
CIVIL ENG TECH	1	0	1	14.3%	7
ELECT ENG TECH	7	2	9	24.3%	37
ELECT MECH TECH	2	1	3	60.0%	5
MANUF ENG TECH	2	1	3	23.1%	13
MECH ENG TECH	3	2	5	25.0%	20
HUMANITIES	5	2	7	26.9%	26
MATH/PHY/CHEM	6	6	12	37.5%	32
MATH	3	0	3	60.0%	5
PHYSICS	1	0	1	20.0%	5
Total:	41	17	58		

Conclusions

1. System-wide, 75 individuals appear to be eligible for retirement, at a cost of over \$800,000 for accrued sick and vacation leave.
2. These 75 include two individuals who have since retired; they accounted for approximately \$35,000 of the \$800,000 in payouts.
3. System-wide, 22 individuals met the requirements for "normal" retirement, at a cost of nearly \$300,000. This includes one individual who has since retired, whose estimated payout was approximately \$24,000.
4. System-wide, 53 individuals met the requirements for early retirement, at a cost of over \$500,000. This includes one individual who has since retired, whose estimated payout was approximately \$9,000.
5. Potential cost per unit varies from a low of \$5,000 at Greater New Haven to a high of \$235,000 at Norwalk. The average cost per unit is approximately \$165,000.
6. If only "normal" retirements are considered, the cost per campus varies from \$30,000 to \$85,000 (excluding Greater New Haven, which has no individuals eligible for "normal" retirement). The average cost per unit, again excluding Greater New Haven, is approximately \$60,000.

DEMOGRAPHIC STUDY AND PROJECTION
FACULTY AND PROFESSIONAL STAFF

PART IV - FUTURE TRENDS

Prepared by:

Dr. Marian N. Steinberg
Director, System Research and Planning
August 1988



DEMOGRAPHIC STUDY AND PROJECTION
FACULTY AND PROFESSIONAL STAFF
STATE TECHNICAL COLLEGES

PART IV - FUTURE IMPACT

Introduction

The fourth and final section of the demographic study of State Technical College professionals, faculty/librarians, and administrators (hereafter referred to as "staff") focuses on the future. Lacking adequate historical data on retirements, and given the small size of working cohorts (such as academic departments), no attempt is made at this time to project retirements. Instead, this section examines the pattern of individuals becoming eligible for retirement in the five-year period 1988-89 through 1992-93.

Since minimum retirement provisions rely on the employee's age and time in service, each individual's age and years of service has been appropriately increased in order to determine new potential retirees for each of the next five years. These results are then examined to estimate the impact of changing patterns of potential retirements on the system, its units, and individual academic departments.

A. METHODOLOGY

In order to determine which additional staff would meet minimum requirements for either "normal" or early retirement, data used in earlier portions of this study were modified. Two factors were adjusted: the individual's age and years of State Technical College service. Since the personnel system does not currently contain data on each individual's prior state service, it was necessary to use STC service to determine eligibility for retirement. This means that the data on newly eligible retirees is conservative, omitting some individuals who would qualify for retirement if we took into account their prior state service.

For the first year (1988-89) the new age was calculated as AGE + 1, and service was calculated as YRSTC + 1. An additional year was added for each of the next four years, so that in 1993-94 each individual's age was calculated as AGE + 5 (five years older than in 1987-88), while years of service became YRSTC + 5.

B. SHORT-TERM PROJECTIONS (1988-89)

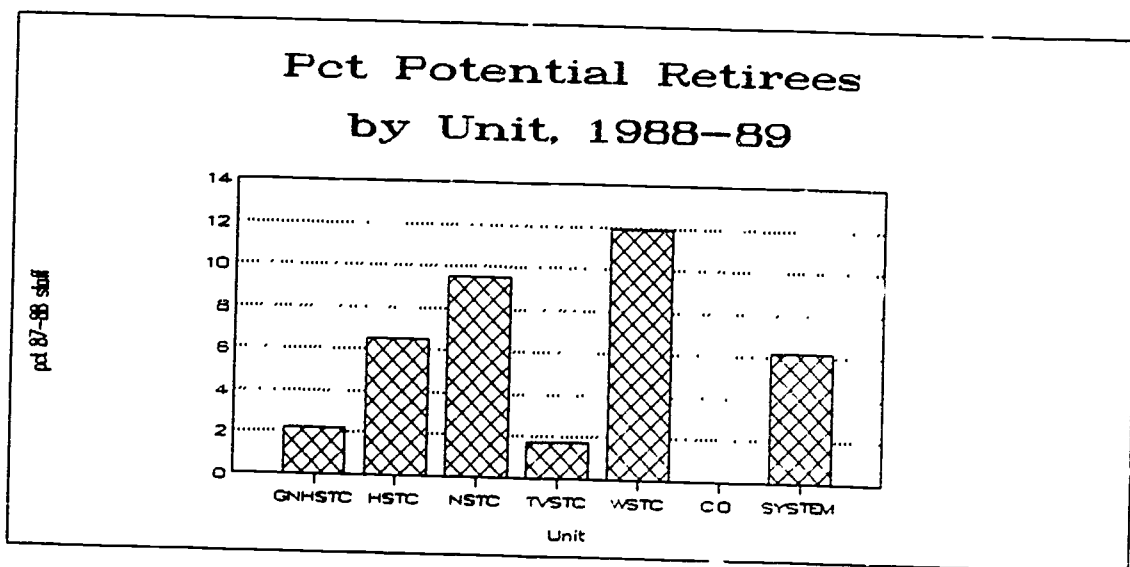
This section discusses employees becoming eligible for retirement in 1988-89, one year after the initial study. Table 1 shows that in 1988-89 an additional 19 employees (professionals, faculty/librarians, and administrators) will become eligible for retirement. This represents 6.2 percent of the 1987-88 staff, and adds to the 75 individuals (approximately one-quarter of the staff) who were eligible for retirement in 1987-88. As expected, however, the impact of these newly-eligible individuals differs considerably among the units (Figure 1).

TABLE 1. POTENTIAL RETIREES (EARLY AND "NORMAL")
FIRST ELIGIBLE IN 1988-89
- FACULTY AND STAFF -

	Number	Pct of 87-88 Staff
GNHSTC	1	2.2%
HSTC	4	6.5%
NSTC	6	9.5%
TVSTC	1	1.7%
WSTC	7	11.9%
C.O.	0	0.0%

SYSTEM TOTAL	19	6.2%

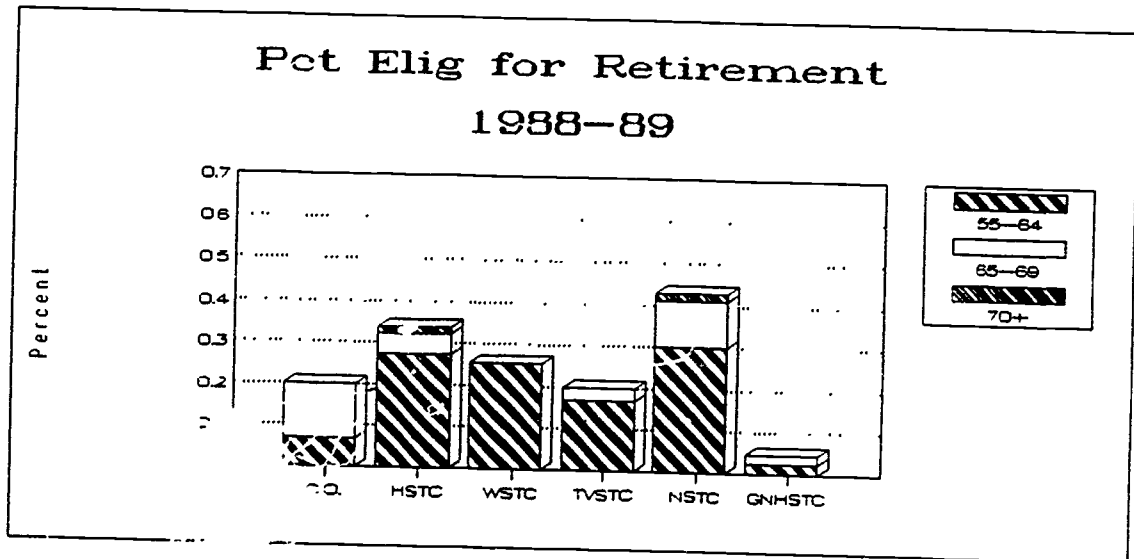
FIGURE 1..



On the low side, there were no newly eligible individuals at Central Office, 1.7 percent (1 person) at Thames Valley, and 2.2 percent (1 person) at Greater New Haven. On the high side, an additional 6.5 percent become eligible at Hartford State (4 people), 9.5 percent at Norwalk (6 people), with the highest proportion, 11.9 percent (7 people) at Waterbury.

Figure 2 shows the combined effect of those newly-eligible for retirement in 1988-89 and those eligible in 1987-88 by unit and age category. The 55 to 64 year age bracket contains the largest proportion of potential retirees (26.2 percent). A relatively small proportion are between 65 and 69 (4.9 percent), while only a small fraction are age 70 or above (0.7 percent).

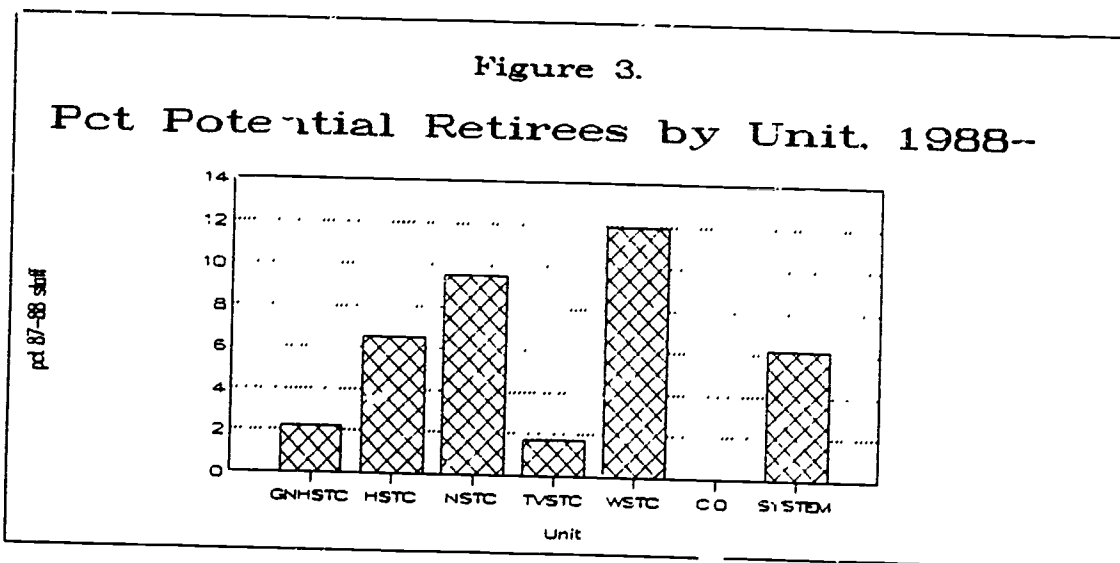
FIGURE 2.



Just over half (10 out of 19) of those who will be eligible for retirement by 1988-89 are teaching faculty (Table 2). Figure 3 provides a graphic view of the cumulative effect of potential faculty retirements by department. All told, nearly one-third of the total faculty present during 1987-88 could retire in 1988-89. Six of the departments could lose at least half of their faculty members to retirement.

Table 2.
POTENTIAL FACULTY RETIREES
BY DEPARTMENT 1987-88 AND 1988-89

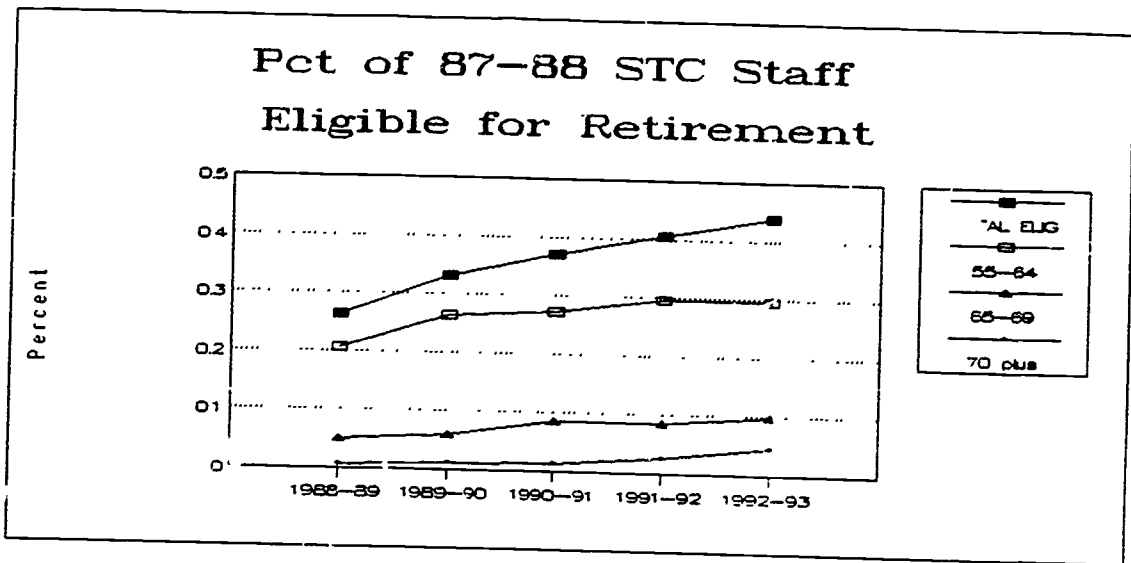
Department:	Elig First in Elig			Eligible Retirees as a Percent of 87-88 Department Size		
	87-88	88-89	Total	87-88	88-89	Total
117 ARCH ENG TECH	1		1	100.0%	0.0%	100.0%
118 ARCH TECH	2		2	50.0%	0.0%	50.0%
130 BIOMED ENG TECH			0	0.0%	0.0%	0.0%
107 CAD/D		1	1	0.0%	33.3%	33.3%
120 CHEM ENG TECH	6		6	60.0%	0.0%	60.0%
119 CHEM TECH			0	0.0%	0.0%	0.0%
122 CIVIL ENG TECH	1	1	2	14.3%	14.3%	28.6%
108 COMP SYST TECH		1	1	0.0%	25.0%	25.0%
104 DP TECH	4	2	6	14.3%	7.1%	21.4%
105 ELECT ENG TECH	9	1	10	26.5%	2.9%	29.4%
108 ELECT MECH TECH	3		3	50.0%	0.0%	50.0%
136 HUMANITIES	7	1	8	26.9%	3.8%	30.8%
101 IND MGT TECH	1		1	50.0%	0.0%	50.0%
129 MANUF ENG TECH	3	1	4	21.4%	7.1%	28.6%
138 MATH	3		3	75.0%	0.0%	75.0%
137 MATH/PHY/CHEM	12	1	13	40.0%	3.3%	43.3%
131 MECH ENG TECH	5	1	6	26.3%	5.3%	31.6%
132 NUCLEAR ENGR			0	0.0%	0.0%	0.0%
139 PHYSICS	1		1	20.0%	0.0%	20.0%
100 PRE-TECH			0	0.0%	0.0%	0.0%
Total:	58	10	68	28.4%	4.9%	33.3%



C. LONG-TERM IMPACT (1988-89 to 1992-93)

Figure 4 shows the cumulative rise in staff eligible for retirement, over the five year period 1988-89 through 1992-93 as a proportion of the 1987-88 staff. If no one retired or otherwise separated from the System, about one-quarter of the staff would be eligible for retirement by 1988-89. Five years later this would rise to nearly 45 percent.

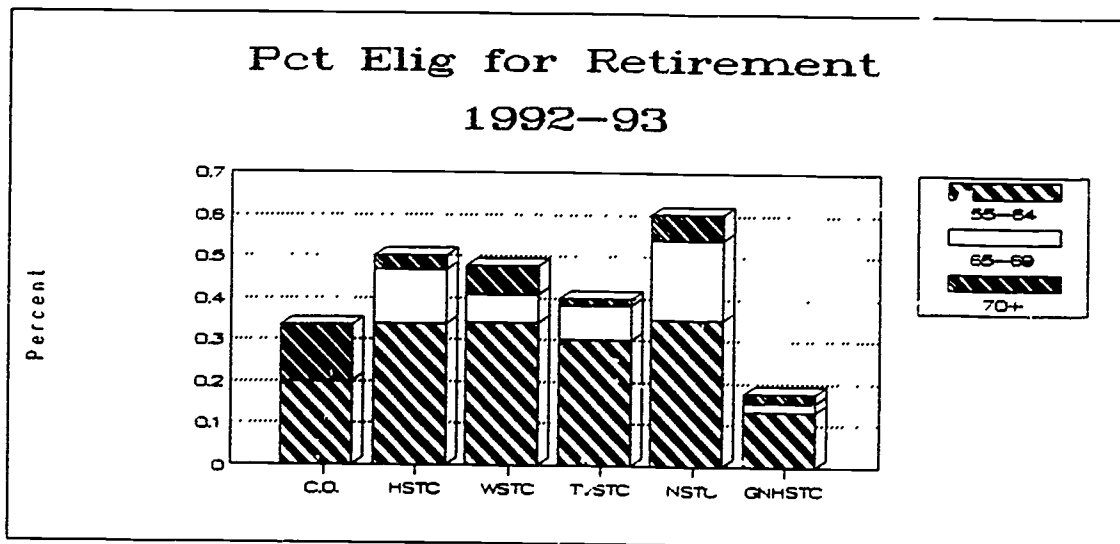
FIGURE 4.



Perhaps most interesting is the increase in the proportion of those eligible in the two older groups. Eligible employees between age 65 and 69 rises from 4.9 percent in 1988-89 to 9.8 percent in 1992-93. An even greater increase is seen in the 70 and over group: from 0.7 percent in 1988-89 to 4.6 percent five years later. Eligible employees age 55 through 64 doubles (20.7 percent to 43.9 percent) in the same five year period. This suggests that retirements will remain an issue for some time to come.

Figure 5 shows the cumulative effect of staff eligibility for retirement through the year 1992-93 by unit and employee age in 1992-93. Norwalk State leads the system, with approximately 60 percent of its staff eligible for retirement by that date. Hartford and Waterbury are each near 50 percent, although the age distribution varies somewhat in the two oldest categories. Thames Valley comes in at about 40 percent, followed by Central Office, at about 35 percent. The fact that a large proportion of the Central Office staff will be age 70 or above by that time suggests that they can expect a significant number of retirements before that date. Greater New Haven, our youngest campus, will have the smallest proportion of its staff eligible for retirement at that time, just under 20 percent.

FIGURE 5.



Of major importance is the impact of faculty retirements. Table 3 shows the number of potential retirees by department for the base year of 1987-88 and the following five years. The number of faculty becoming newly eligible for retirement reaches a peak in 1990-91, declining thereafter. In the base year there were 58 faculty (28 percent of total faculty) eligible for retirement. In the next three years (1988-89 through 1990-91) 35 more faculty become eligible. In the five years following the base year (1988-89 to 1992-93) a total of 49 faculty members become eligible for retirement. This will mean that approximately one-half of the faculty teaching in 1987-88 will be eligible for retirement within a five year period.

Table 3. Potential Retirees by Department

Department:	Base 87-88	+1 88-89	+2 89-90	+3 90-91	+4 91-92	+5 92-93	Grand Total	PctDept
117 ARCH ENG	1						1	1
118 ARCH TECH	2						2	50.0%
130 BIOMED ENG TECH							0	0.0%
107 CAD/D		1					1	33.3%
120 CHEM ENG	6		1	2			9	90.0%
119 CHEM TECH							0	0.0%
122 CIVIL ENG	1	1					3	42.9%
108 COMP SYST TECH		1	1	1			3	75.0%
104 DP TECH	4	2	1	2	1	1	11	39.3%
126 ELECT ENG	9	1		5	1	3	19	55.9%
128 ELECT MEC	3						3	50.0%
136 HUMANITIE	7	1	5				14	53.8%
101 IND MGT T	1						1	50.0%
129 MANUF ENG	3	1		1			5	35.7%
138 MATH	3						3	75.0%
137 MATH/PHY/	12	1		1	3		17	56.7%
131 MECH ENG	5	1	2	3	1		12	63.2%
132 NUCLEAR ENGR							0	0.0%
139 PHYSICS	1				1	1	3	60.0%
100 PRE-TECH								
Total:	58	10	10	15	7	7	107	

Table 4 looks at the cumulative effect of faculty becoming eligible for retirement between 1988-89 and 1992-93 as a percent of the 1987-88 faculty. In addition to the 58 faculty eligible to retire during the base year, 49 additional faculty members, or another 24 percent, will become eligible in the following five years. In other words, 107, or over half, of the 205 faculty employed in 1987-88 will be eligible for retirement by 1992-93.

Table 4. Retirement Eligibility
1988-89 through 1992-93
As a Percent of 1987-88 Dept Size

Department:	No. Elig	Pct Elig
117 ARCH ENG TECH	0	0.0%
118 ARCH TECH	0	0.0%
130 BIOMED ENG TECH	0	0.0%
107 CAD/D	1	33.3%
120 CHEM ENG TECH	3	30.0%
119 CHEM TECH	0	0.0%
122 CIVIL ENG TECH	2	28.6%
108 COMP SVST TECH	3	75.0%
104 DP TECH	7	25.0%
126 ELECT ENG TECH	10	29.4%
128 ELECT MECH TECH	0	0.0%
136 HUMANITIES	7	26.9%
101 IND MGT TECH	0	0.0%
129 MANUF ENG TECH	2	14.3%
138 MATH	0	0.0%
137 MATH/PHY/CHEM	5	16.7%
131 MECH ENG TECH	7	36.8%
132 NUCLEAR ENGR	0	0.0%
139 PHYSICS	2	40.0%
100 PRE-TECH	0	0.0%
TOTAL	49	24.0%

D. RECOMMENDATIONS

- Prepare and disseminate an annual, updated list of potential retirees to presidents and central office directors, as appropriate.
- Provide an analysis of potential retirees by unit and department.
- Provide estimates of costs associated with retirements on an annual basis.

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