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Agricultural Economics Report No. 66

December 1968

ENROLLMENT PROJECTIONS IN NORTH DAKOTA INSTITUTIONS OF HIGHER EDUCATION

Rex W. Cox, Elmer C. Vangsness

Department of Agricultural Economics Agricultural Experiment Station North Dakota State University Fargo, North Dakota

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Acknowledgment

A grant of funds from the North Dakota State Board of Higher Education gave support to this study. Special appreciation is extended to Dr. Richard Davison, Research Director, Office of Higher Education, for his assistance in the study and to the administrative officials at the various institutions for their cooperation and interest in the study.

> Department of Agricultural Economics North Dakota State University Fargo, North Dakota

In Cooperation With North Dakota State Board of Higher Education

December, 1968

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ENROLLMENT PROJECTIONS IN NORTH DAKOTA INSTITUTIONS OF HIGHER EDUCATION

Rex W. Cox and Elmer C. Vangsness*

I. Introduction.

- A. Basic Data Utilized.
 - U. S. Department of Commerce, Bureau of the Census, "Revised Projections of the Population of States, 1970 to 1985," Series P-25, No. 375, October 3, 1967.
 - a. Estimates and projections of the number of persons in the 18-21 age group (commonly assumed to be the college age group) for 1965, 1970, 1975, and 1985.
 - b. Based on the above data and those obtained from the Bureau of the Census Population Reports for 1950 and 1960, estimates were made of the number of persons in the 18-21 age group in North Dakota for all years, 1950-1985 inclusive (Table 1 and Figure 1).
 - 2. Biennial Reports of the North Dakota Superintendent of Public Instruction.
 - a. From data in these reports a four-year moving total of high school graduates from public and private secondary schools was determined as a means of obtaining that potential number in the 18-21 age group qualified for college entrance. For 1967, the moving total included graduates of 1964-1967 inclusive (Table 1).
 - b. For the period, 1957-1967, the moving totals thus determined were expressed as a percent of the number in the 18-21 age group. The proportion was 89.39 percent in 1967. The proportions for 1968-1985 were projected assuming a maximum of 93 percent in 1985 (Table 1).
 - c. The proportions were then applied to the previously projected number in the 18-21 age group to obtain a projection of a four-year moving total of high school graduates, 1968-1985 (Table 1).
 - 3. The number of undergraduate and graduate students at each of the 12 public and 3 private institutions of higher learning in North Dakota was obtained directly from the respective institutions and from the office of the North Dakota State Board of Higher Education. The fall enrollments at the various institutions with three exceptions are summarized by residence, 1958-1968 (Table 2). The projections that appear later are for full-time fall enrollments, except as otherwise noted.

^{*}Rex W. Cox is Professor, Department of Agricultural Economics, North Dakota State University. Elmer C. Vangsness is Resource Economist, Extension Division, North Dakota State University.

B. In making the projections of enrollment at a number of institutions a trend line was fitted to the proportion that resident enrollment was of the four-year moving total of high school graduates, 1958-1967. The extension of the trend line provided the basis for projecting this proportion for the years subsequent to 1967. The proportions thus estimated were then applied to the projected fouryear moving total of high school graduates as a means of obtaining projections of future resident fall enrollments. Utilization was made of the actual 1968 data in making the projections for Minot and Valley City State Colleges, 1969-1985. The projected total enrollment at the various institutions was based on the relationship between the resident and total enrollment that existed during the past few years.

Consultation with the presidents, registrars, or other officials at the various institutions provided information on which many of the projections were based. With an additional year or two when more enrollment data become available and when various policies become more definite, projections which have been made can be revised. Information from each additional year aids greatly in making projections.

In the tables which follow, data are presented which give both past enrollments, 1958-1967, and projected enrollments, 1968 and subsequent years. In some cases the projected enrollments extend to 1985. Most of the projections, as recorded in these tables, were made before the 1968 actual enrollments were available. The comparison of the projected and actual enrollment for 1968, however, will be presented towards the latter part of the report.

In addition, a graphic presentation of the actual enrollment in 1968 and projected enrollment in 1978 (or earlier) will be made for each of the fifteen institutions.

C. For North Dakota State University and the University of North Dakota, projections were made for both the undergraduate and graduate fall enrollments, 1968-1985. Projections of the undergraduate enrollments at the state colleges located at Dickinson, Mayville, Minot, and Valley City were also extended to 1985.

Projections at some of the other institutions did not extend beyond 1975 or 1980 because available data and information regarding policy were not sufficient to warrant estimates beyond these dates.

Not many changes can be expected subsequent to 1978. The moving total of high school graduates reaches a maximum in 1978. Consequently, increases in enrollment will be more or less dependent on the increase in the proportions of graduates who will attend college.

			ng Total Of
	10 01 1	High Scl	hool Graduates
	18-21 Age		Percent
	Group		Of 18-21
Year	Number*	Number**	Age Group***
1957	34,500	27,169	78.75
1958	33,900	27,934	82.40
1959	33,800	28,997	85.79
1960	33,400	30,219	90.48
1961	34,600	31,849	92.05
1962	36,300	33,111	91.21
1963	38,400	34,232	89.15
1964	40,900	35,617	87.08
1965	43,000	37,700	87.67
1966	44,200	39,508	89.38
1967	45,300	40,495	89.39
	Es	timated	
1968	46,200	41,487	89.80
1969	47,200	42,598	90.25
1970	48,000	43,512	90.65
1971	49,000	44,565	90.95
1972	49,750	45,397	91.25
1973	50,600	46,375	91.65
1974	51,400	47,185	91.80
1975	52,000	47,840	92.00
1976	52,300	48,221	92.20
1977	52,500	48,484	92.35
1978	52,500	48,536	92.45
1979	52,400	48,496	92.55
1980	52,000	48,178	92.65
1981	51,500	47,766	92.75
1982	50,250	46,657	92.85
1983	48,750	45,289	92.90
1984	47,250	43,919	92.95
1985	46,000	42,780	93.00

TABLE 1. NUMBERS OF PERSONS IN THE 18-21 AGE GROUP AND FOUR-YEAR MOVING TOTAL OF NUMBER OF HIGH SCHOOL GRADUATES, NORTH DAKOTA, 1957-1985

*From census 1950, 1960, 1965, 1970, 1975, 1980, 1985. Estimates made for other years (See Figure 1).

**Determined from reports of the North Dakota Superintendent of Public Instruction, 1957-1967. Estimates made for other years based on proportions in last column.

***Actual percentage for 1957-1967. Estimates made for other years, assuming a maximum of 93 percent in 1985.

, 1958-1968
IN NORTH DAKOTA,
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TABLE

	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
North Dakota State University											
Total	3,250	3,320	3,419	3,581		3,988	4,470	5,006	5,479	5,863	6,228
Resident	2,640	2,678	2,732	2,875	3,101	3,195	3,580	4,007	4,381	4,716	5,081
Percent	81.2	80.7	79.9	80.3	∞	80.1	80.1	80.0	80.0	80.4	81.6
Nonresident	610	642	687	706	709	798	890	666	1,098	1,147	1, 147
Undergraduate	3,102	3,035	3,109	3,299	3,526	3,666	4,040	4,477	4,964	5,222	5,618
Resident	2,537	2,479	2,518	2,680	•	2,973	3,282	3,641	4,026	4,270	
Percent	81.8	81.7	81.0	81.2	82.3	81.1	81.2	81.3	81.1	81.8	
Nonresident	565	556	591	619	625	693	758	836	838	952	
Graduate	148	285	310	282	284	322	430	529	515	643	610
Resident	103	199	214	195	200	222	298	366	355	448	
Percent	69.6	69.8	69.0	69.1	70.4	68.9	69.3	69.2	68.9	69.7	
Nonresident	45	86	96	87	84	100	132	163	160	195	1. gan at
University of											
north Jakota			7007	706 7	776 7	170 7		2010	716 9	050 9	000 2
Total	3, / 60	3,84U	4,084	4,394	4,/44	4,9/L	070,0	CT0,0	9,014	0,930	,
Resident	2,779	2,900	3,155	3,208	3,716	3,831	4,130	4,579	4,805	4,981 0	, / J J J J J J J J J J J J J J J J J J
Percent	73.9	75.5	77.3	73.0	78.3	77.1	76.1	79.0	76.1	71.9	
Nonresident	981	940	929	1,186	1,028	1, 140	1,398	1,436	1,509	1,949	1,643
Undergraduate	3,478	3,499	3,779	4,014	4,231	4,434	4,808	5,315	5,447	6,069	6,283
Resident	2,640	2,720	2,989	3,012	3,406	3,536	3,730	4,183	4,319	4,547	
Percent	75.9	77.7	79.1	75.0	80.5	79.7	77.6	78.7	79.3	74.9	
Nonresident	838	779	790	I,002	835	848	1,068	1,132	1,128	1,522	1,115
Graduate	272	341	305	380	456	537	673	656	831	861	
Resident	139	180	166	191	253	295	353	352	450	434	
Percent	51.1	52.8	54.4	50.3	55.5	54.9	52.5	53.7	54.2	50.4	
Nonresident	133	161	139	189	203	242	320	304	381	427	
				1 COI	continued -						

continued

TABLE 2. FALL ENROLLMENT AT INSTITUTIONS	LLMENT A7	ITITZNI 1		F HIGHER	OF HIGHER LEARNING IN NORTH DAKOTA, 1958-1968 (continued)	G IN NOR	TH DAKOT.	A, 1958-	1968 (coi	ntinued)	
	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
University of North Dakota Fllandale Branch	176	000	173	182	1 0 7	106	050	311	38.7 1	, o,	687
Resident	207	184	146	162	154	171	212	235	340	393	415
Percent	84.8	88.0	84.4	89.0	79.0	87.2	84.8	75.6	77.6	81.6	86.1
Nonresident	37	25	27	20	41	25	38	76	98	16	67
University of North Dakota											
Williston Branch Resident	24	36	55	94	132	141	156	163	225	315	326
Percent Nonresident				Not f	Not Available	d)					
Dickinson State											
College	543	562	647	843	879	912	1, 123	1,333	1,353	1,525	1,639
Resident	514	522	602	786	827	865	1,021	1,185	1,218	1,332	1,477
Percent	94.7	92.9	93.0	93.2	94.1	94.8	6 .06	88.9	0.06	87.3	90.1
Nonresident	29	40	45	57	52	47	102	148	135	193	162
Mayville State College	532	582	588	607	676	721	749	850	800	810	880
Resident	480	538	546	563	630	661	686	761	711	732	778
Percent	90.2	92.4	92.9	92.8	93.2	91.7	91.6	89.5	88.9	90.4	89.4
Nonresident	52	4 4	42	74	46	60	63	89	89	78	102
Minot State											
College* Decident	1,349 1,300	1,447	1,326 1,368	L,379 1 316	1,520	L, 634	1, 740	1,879	2,020	2,130	2,347
Percent	97.0	96.9	95.6	95.4	94.1	94.2	94.5	94.1	94.5	95.3	96.0
Nonresident	40	45	58	63	90	95	102	117	114	101	98

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	2. FALL ENROLLMENT AT INSTITUTIONS	MENT AT	UTITZNI	TIONS OF	HIGHER	LEARNINC	J IN. NORT	OF HIGHER LEARNING IN NORTH DAKOTA, 1958-1968 (continued)	1958-	1968 (coi	itinued)	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	te											engant 10
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		783	818	804	830	917	975	1,147	1,252	1,190	1,256	1,264
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		751	792	787	798	894	940	1,103	1,218	1,164	1,230	1,243
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		95.9		97.9	96.1	97.5	96.4	96.2	97.3	97.8	97.9	98.3
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		32	26	17	32	23	35	77	34	26	26	21
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	ite											
	, aou											
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		1,019	1,049	1,086	1,231	1,374	1,471	1,828	2,147	2,222	2,355	2,528
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		723	757	775	891	1,024	1,108	1,396	1,650	1,711	1,891	2,081
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		71.0	72.2	71.4	72.4	74.5	75.3	,76.4	76.9	77.0	80.2	82.3
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		296	300	311	340	350	363	432	497	509	466	447
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	100											
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	i))											
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		201	180	189	220	227	217	232	360	326	300	345
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					186	182	184	189	282	271	266	314
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					84.5	80.2	84.8	81.5	78.3	83.1	88.7	91.0
454 476 529 545 574 719 862 900 851 434 462 510 537 560 703 838 869 823 95.6 97.1 96.4 98.5 97.6 97.2 96.6 96.7 20 14 19 8 14 16 24 31 28 35 107 147 127 153 200 300 375 487					34	45	33	43	78	55	34	31
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434 462 510 537 560 703 838 869 823 95.6 97.1 96.4 98.5 97.6 97.2 96.6 96.7 20 14 19 8 14 16 24 31 28 35 107 147 127 153 200 300 375 487			454	476	529	545	574	719	862	900	851	923
95.6 97.1 96.4 98.5 97.6 97.2 96.6 96.7 20 14 19 8 14 16 24 31 28 35 107 147 127 153 200 300 375 487			434	462	510	537	560	703	838	869	823	899
20 14 19 8 14 16 24 31 28 35 107 147 127 153 200 300 375 487			92.6	97.1	96.4	98.5	97.6	97.8	97.2	96.6	96.7	91.0
35 107 147 127 153 200 300 375 487			20	14	19	Ø	14	16	24	31	28	24
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			Ω Ω	T0/	74 /	121	ECT	200	300	c/۶	184	L U U

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TABLE 2. FALL ENROLLMENT AT INSTITUTIONS OF HIGHER LEARNING IN NORTH DAKOTA, 1958-1968 (continued)	LLMENT AT	UTTZNI	TIONS OF	HIGHER	LEARNING	IN NORT	H DAKOTA	, 1958-1	.968 (cor	ttinued)	
	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
Jamestown											
College**	515	544	525	441	418	429	470	508	588	607	612
Resident	451	482	459	382	342	337	340	341	382	375	380
Percent	87.6	88.6	87.4	86.6	81.8	78.6	72.3	67.1	65.0	61.8	62.1
Nonresident	· 64	62	99	59	76	92	130	167	206	232	232
Mary College*** Resident Percent Nonresident	27	28	73	84	92	114	143	182	183	169	192
Assumption College					42	60	98	116	101	109	67
Resident					19	25	57	69	46	52	49
Percent					45.2	41.2	58.2	59.5	45.5	48.5	50.5
Nonresident		1			23	35	41	47	55	57	48

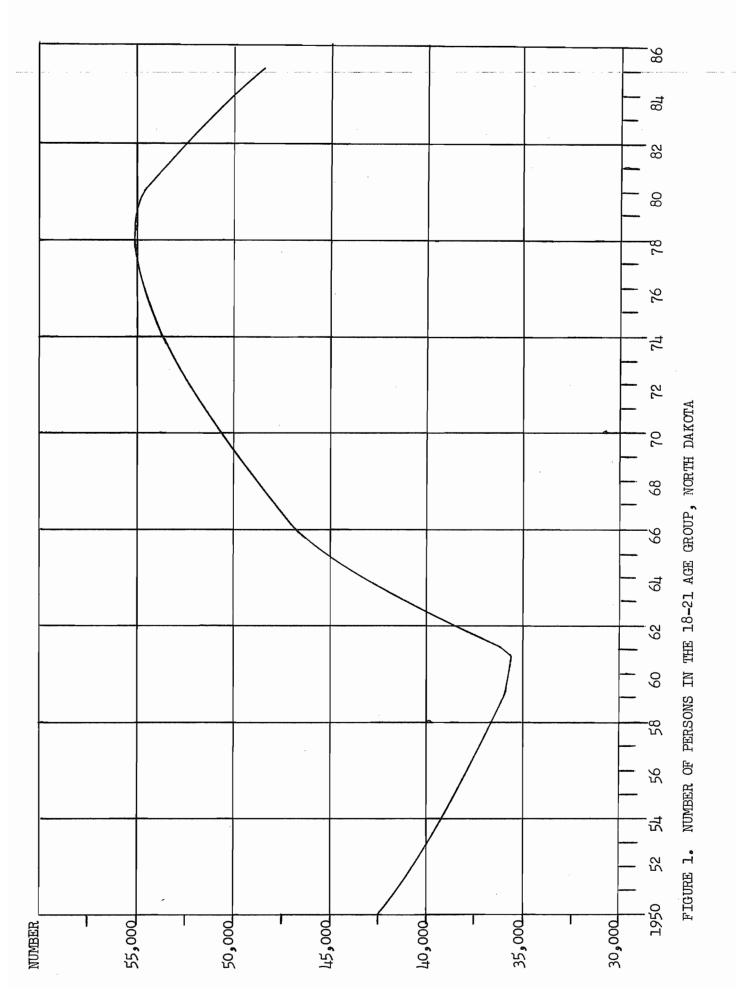
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. -1 - . *Excludes graduate students.

**Includes both full time and part time enrollment. The fall enrollment in 1968 of 612 students included 580 full time and 32 part time students.

***Full time equivalent.



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Many factors or variables influence changes in enrollment from year to year. Policies which affect the enrollment at one institution influence enrollment at other institutions. For example, Ellendale, which is now a branch of the University of North Dakota, will change from a four-year college to a two-year college, with the exception of the three-year curriculum in Industrial Arts. This change likely will cause enrollment at Valley City and perhaps Mayville to increase. Also, there will be transfers from Ellendale to the University of North Dakota, and perhaps to North Dakota State University.

Since the college at Bottineau has become a branch of North Dakota State University, policies set by the latter will influence the enrollment at Bottineau, which in turn may influence enrollment at other institutions.

It is well known that intensive recruitment policies of any one institution have their effect on enrollment at other locations, particularly recruitment of students residing in North Dakota.

Relative tuition rates of resident and nonresident students are in part responsible for an increase or a decrease in nonresidents attending North Dakota institutions and North Dakota residents attending colleges in other states. If the resident and nonresident rates were somewhat close, the Wahpeton School of Science would attract more students from Breckenridge, Minnesota, and vicinity who now travel each day to Moorhead State College and back.

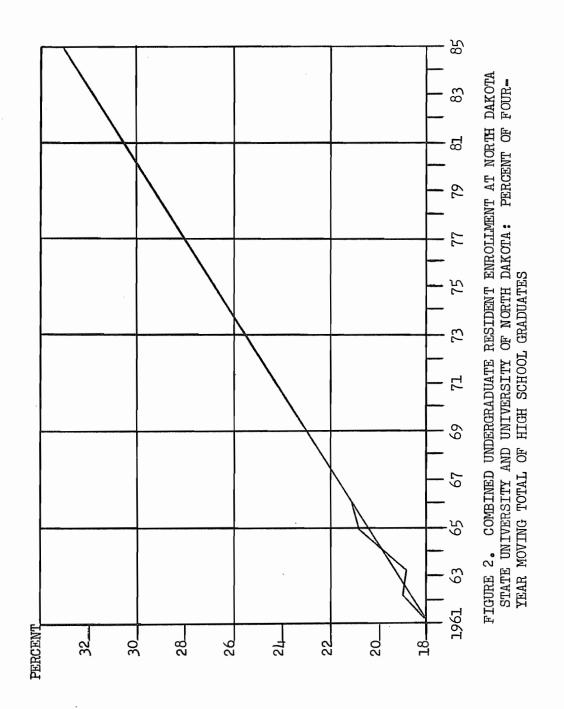
The enrollment at North Dakota State School of Science, particularly the Trade and Technical divisions, will be influenced by the increase in technical training at Bismarck and Lake Region Junior colleges, and probably at Williston.

II. Enrollment at State Supported Institutions.

A. North Dakota State University and University of North Dakota.

1. Undergraduate enrollment. The proportions that the combined resident undergraduate enrollments at North Dakota State University and University of North Dakota were of the moving total of high school graduates, 1958-1967, are shown in Table 3.

A trend line was determined for the proportions, 1961-1967 (Figure 2). The equation of trend was $y = 19.911 + .625X - .003X^2$. The equation provides for some slight leveling off of the annual increases during the latter part of the period, 1968-1985. The projected proportions and combined resident undergraduate enrollement which reached a total of 12,444 in 1975 and 13,569 in 1985 are given in Table 4.



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	Moving Total Of High School	Enrol	lment
Year	Graduates	Number	Percent
1958	27,934	5,177	18.53
1959	28,997	5,199	17.93
1960	30,219	5,507	18.22
1961	31,849	5,692	17.87
1962	33,111	6,307	19.05
1963	34,232	6,509	19.01
1964	35,617	7,012	19.69
1965	37,700	7,824	20.75
1966	39,508	8,345	21.12
1967	40,495	8,817	21.77

TABLE 3. PROPORTIONS THAT COMBINED RESIDENT UNDERGRADUATE ENROLLMENTS AT NORTH DAKOTA STATE UNIVERSITY AND UNIVERSITY OF NORTH DAKOTA WERE OF THE MOVING TOTAL OF HIGH SCHOOL GRADUATES, 1958-1967

> During the past few years, North Dakota State University and University of North Dakota have accounted for about 48.5 and 51.5 percent, respectively, of the combined resident undergraduate enrollment. These proportions were applied to the projected combined resident enrollment to obtain a distribution between the two universities (Table 4).

It has been previously determined that resident undergraduate enrollment was about 80 percent and 75 percent of the total undergraduate enrollment at North Dakota State University and University of North Dakota, respectively. These proportions were used to obtain estimates of the total undergraduate enrollment at the two universities (Table 5).

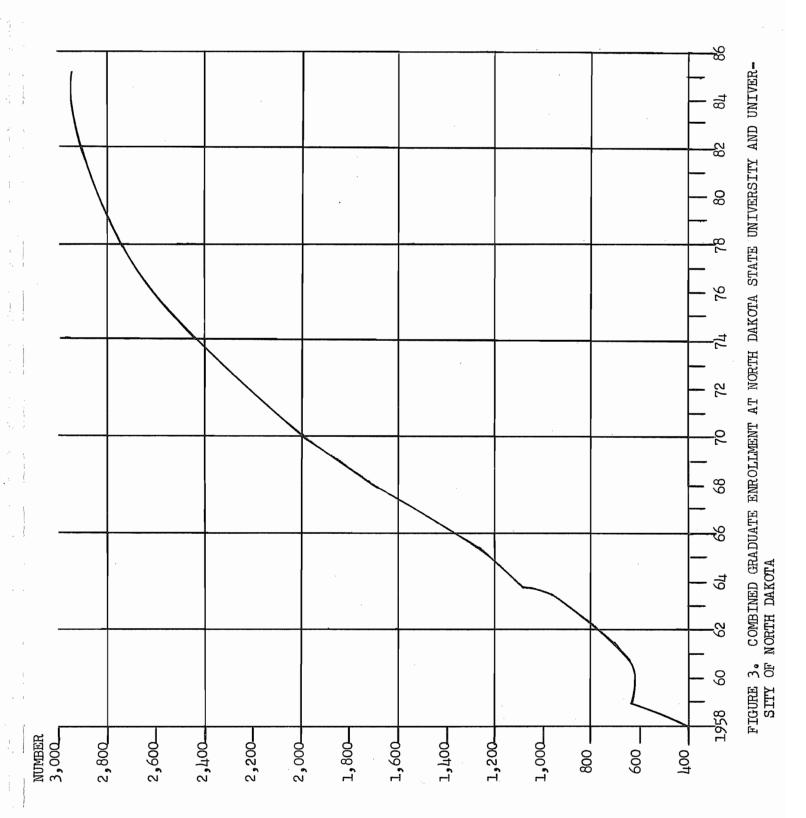
2. Graduate enrollment at North Dakota State University and University of North Dakota. The combined fall graduate enrollments at the two universities were estimated for the period, 1968-1985, by the use of the curve in Figure 3. It was assumed that the enrollment would continue to increase fairly rapidly during the first part of the period and then level off reaching a total of slightly less than 3,000 by 1985. The actual enrollments, 1958-1967, the changes from year to year, and the estimated enrollments, 1968-1985, are presented in Table 6. Two procedures were used to estimate the distributions between the two universities.

		·			
		Proportion Combined		Projecte	ed.
		Resident Enrollments		Resident	
	Moving Total	at NDSU and UND Will		Undergradu	late
	of High School	Be of Moving Total of		Enrol1me	
Year	Graduates	High School Graduates	Total	NDSU	UND
				(48.5%)	(51.5%)
1968	41,487	22.36	9,276	4,499	4,777
1969	42,598	22.96	9,781	4,744	5,037
1970	43,512	23.55	10,247	4,970	5,277
1971	44,565	24.14	10,758	5,218	5,540
1972	45 , 397	24.72	11,222	5,443	5,779
1973	46,375	25.30	11,733	5,691	6,042
1974	47,185	25.86	12,202	5,918	6,284
1975	47,840	26.43	12,644	6,132	6,512
1976	48,221	26.98	13,010	6,310	6,700
1977	48,484	27.53	13,348	6,474	6,874
1978	48,536	28.07	13,624	6,608	7,016
1979	48,496	28.61	13,875	6,729	7,146
1980	48,178	29.14	14,039	6,809	7,230
1981	47,766	29.67	14,172	6,873	7,299
1982	46,657	30.19	14,086	6,832	7,254
1983	45,289	30.71	13,908	6,745	7,163
1984	43,919	31.21	13,707	6,648	7,059
1985	42,780	31.72	13,570	6,581	6,989

TABLE 4. PROJECTED FALL RESIDENT UNDERGRADUATE ENROLLMENT, NORTH DAKOTA STATE UNIVERSITY AND UNIVERSITY OF NORTH DAKOTA, 1968-1985

- a. The proportions that the graduate enrollments at each were of the combined total graduate enrollments for 1958-1967 also are included in Table 6. These proportions averaged 41.8 percent for North Dakota State University and 58.2 percent for University of North Dakota during 1965-1967. The proportions 42 percent and 58 percent were applied to the estimated combined enrollments to obtain estimates of the fall graduate enrollments in each of the two universities, 1968-1985.
- b. The second procedure involves estimates of resident and nonresident graduate students. On the basis of informative data received from the office of admissions and records at the two universities, the resident graduate enrollments approximated 70 and 50 percents of the total graduate enrollment at North Dakota State University and the University of North Dakota, respectively (Table 7).

The proportions that the combined resident graduate enrollments were of the total graduate enrollments, 1958-1967, are given in Table 8, column 3. The corresponding proportions for the



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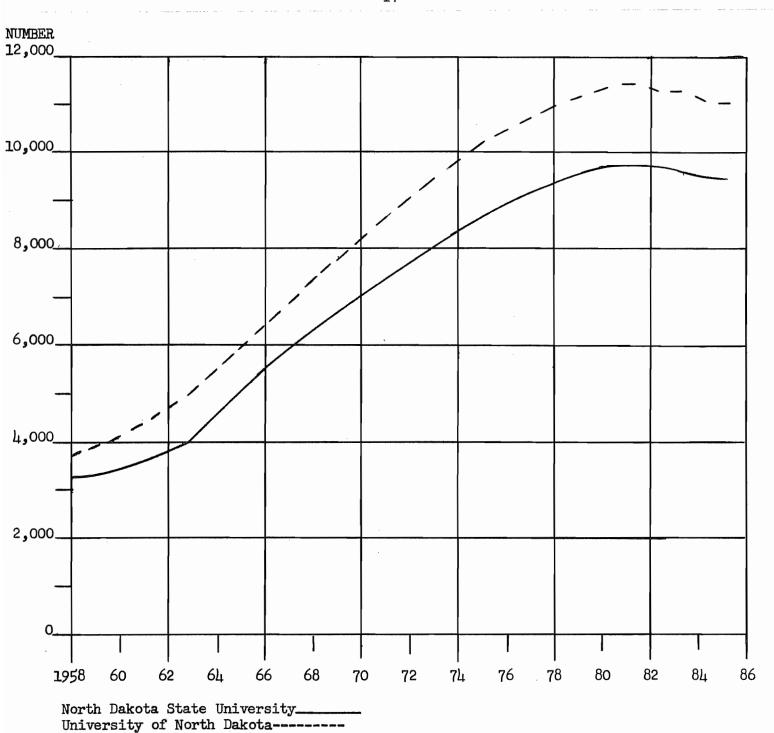


FIGURE 4. FALL ENROLLMENT, NORTH DAKOTA STATE UNIVERSITY AND UNIVERSITY OF NORTH DAKOTA: ACTUAL 1958-67, PROJECTED 1968-85

- 14 -

	NDS	U	UND		NDSU & UND
Year	Resident	Total	Resident	Total	Total
1968	4,499	5,623	4,777	6 260	. 11 000
1969	4,744	5,930	5,037	6,369 6,716	11,992 12,646
1970	4,970	6,213	5,277	7,036	13,249
1971	5,218	6,523	5,540	7,386	13,909
1972	5,443	6,804	5,779	7,705	14,509
1973	5,691	7,114	6,042	8,056	15,170
1974	5,918	7,398	6,284	8,378	15,776
1975	6,132	7,665	6,512	8,682	16,347
1976	6,310	7,888	6,700	8,933	16,821
1977	6,474	8,093	6,874	9,165	17,258
1978	6,608	8,260	7,016	9,354	17,614
1979	6,729	8,411	7,146	9,528	17,939
1980	6,809	8,511	7,230	9,640	18,151
1981	6,873	8,591	7,299	9,732	18,323
1982	6,832	8,540	7,254	9,672	18,212
1983	6,745	8,431	7,163	9,550	17,981
1984	6,648	8,310	7,059	9,412	17,722
1985	6,581	8,226	6,989	9,318	17,544

TABLE 5. PROJECTED TOTAL FALL UNDERGRADUATE ENROLLMENT, NORTH DAKOTA STATE UNIVERSITY AND UNIVERSITY OF NORTH DAKOTA, 1968-1985

nonresident graduate enrollment are listed in column 9. The proportions of 59 percent and 41 percent were applied to the estimated total graduate enrollment (column 1) to obtain estimates of the resident and nonresident graduate enrollment, 1968-1985, columns 2 and 8. These proportions approximate the respective averages of the years, 1965-1967.

The data in columns 5 and 7 give the proportions that resident graduate enrollment at North Dakota State University and University of North Dakota were of the total resident graduate enrollments, 1958-1967. Based on the proportions for the past three years, the proportions of 48 percent and 52 percent were applied to the estimated total graduate enrollment to provide estimates of the resident enrollment at the two universities, 1968-1985, columns 4 and 6.

The corresponding proportions for nonresident graduate enrollment, 1958-1967, are presented in columns 11 and 13. The proportions 30 percent and 70 percent were applied to the estimated total nonresident graduate enrollments, 1968-1985 to obtain estimates of nonresident enrollments at North Dakota State University and University of North Dakota, columns 10 and 12.

	Combined	Changes		Enrol		
	Total	From Year	NDS			ND
Year	Enrollment	to Year	Number	Percent	Number	Percent
1958	420		148	35.2	272	64.8
1959	626		285	45.5	341	54.5
1960	615		310	50.4	305	49.6
1961	662		282	42.6	380	57.4
1962	740		284	38.4	456	61.6
1963	859		322	37.5	537	62.5
1964	1,103		430	39.0	673	61.0
1965	1,185		529	44.6	656	55.4
1966	1,346		515	38.3	831	61.7
1967	1,504		643	42.8	861	57.2
1968	1,670	166	701	42.0	969	58.0
1969	1,820	150	764	11	1,056	"
1970	1,960	140	823	11	1,137	"
1971	2,090	130	879	11	1,211	"
1972	2,210	120	928	11	1,282	"
1973	2,320	110	974	11	1,346	11
1974	2,420	100	1,016	11	1,404	
1975	2,510	90	1,054	11	1,456	**
197 6	2,590	80	1,088	11	1,502	11
1977	2,660	70	1,117	11	1,543	11
1978	2,720	60	1,142	11	1,578	"
1979	2,770	50	1,163	11	1,607	11
1980	2,810	40	1,180	11	1,630	11
1981	2,845	35	1,195	11	1,650	11
1982	2,875	30	1,208	17	1,667	11
1983	2,900	25	1,218	11	1,682	"
1984	2,920	20	1,226	11	1,694	"
1985	2,935	15	1,233	11	1,702	11
				· · ·	-	

TABLE 6. FALL GRADUATE ENROLLMENT, NORTH DAKOTA STATE UNIVERSITY AND UNIVERSITY OF NORTH DAKOTA, ACTUAL 1958-1967, ESTIMATED 1968-1985 (METHOD 1)

TA,	
DAKO	
NORTH	
OF	
NORTH DAKOTA STATE UNIVERSITY AND UNIVERSITY OF NORTH DAKOTA	
AND	
UNIVERS ITY	
STATE	
DAKOTA	
NORTH	
ENROLIMENT,	
GRADUATE	
FALL	67
TABLE 7.	1958-1967

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	Ŭ	Combined Enrollmen	ollment		NDSU			UND	
Year	Total	Resident	Nonresident	Total	Resident	Nonresident	Total	Resident	Nonresident
1958	420		178	148	103	45	272	139	133
1959	626		247	285	199	86	341	180	161
1960	615		235	310	214	96	305	166	139
1961	662		276	282	195	87	380	191	189
1962	740		287	284	200	84	456	253	203
1963	859		342	322	222	100	537	295	242
1964	1,103		452	430	298	132	673	353	320
1965	1,185		467	529	366	163	656	352	304
1966	1,346	805	541	515	355	160	831	450	381
1967	1,504		622	643	448	195	861	434	427

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The resident graduate enrollment approximates 70 percent and 50 percent of the total graduate enrollment at North Dakota State University and University of North Dakota, respectively. These proportions were obtained from the registrars and actual data for 1967.

Resident	Resident	Resident					Ē	1		Nonresident	ident				
Total NDSU UND	otal NDSU UND	UND NDSUN	DSU UND	DND			T	Ŭ,	Total		NDSU	QND	р		
Enroll- Num- Per- Num- Per- Num- Per- Num-	Per- Num- Per- Num- Per-	Num- Per- Num- Per-	Per- Num- Per-	Num- Per-	Per-		-unn		Per-	Num-	Per-	Num-	Per-	Total	1
ment ber cent ber cent ber cent ber	cent ber cent ber cent	ber cent ber cent	cent ber cent	ber cent	cent		ber		cent	ber	cent	ber	cent	NDSU	QND
(1) (2) (3) (4) (5) (6) (7) (8)	(3) (4) (5) (6) (7)	(4) (5) (6) (7)	(5) (6) (7)	(6) (7)	(1)		(8)		(6)	(10)	(11)	(12)	(13)	(14)	(15)
242 57.6 103 42.6 139 57.4	57.6 103 42.6 139 57.4	.6 103 42.6 139 57.4	42.6 139 57.4	139 57.4	57.4		17	8	42.4	45	25.3	133	74.7	148	272
379 60.5 199 52.5 180 47.5	60.5 199 52.5 180 47.5	.5 199 52.5 180 47.5	52.5 180 47.5	180 47.5	47.5		24	5	39.5	86	34.8	161	65.2	285	341
380 61.8 214 56.3 166 43.7	61.8 214 56.3 166 43.7	.8 214 56.3 166 43.7	56.3 166 43.7	166 43.7	43.7		23	5	38.2	96	40.9	139	59.1	310	305
386 58.3 195 50.5 191 49.5	58.3 195 50.5 191 49.5	.3 195 50.5 191 49.5	50.5 191 49.5	191 49.5	49.5		2.	76	41.7	87	31.5	189	68.5	282	380
453 61.2 200 44.2 253 55.8	61.2 200 44.2 253 55.8	.2 200 44.2 253 55.8	44.2 253 55.8	253 55.8	55.8		2	87	38.8	84	29.3	203	70.7	284	4.56
517 60.2 222 42.9 295 57.1	60.2 222 42.9 295 57.1	.2 222 42.9 295 57.1	42.9 295 57.1	295 57.1	57.1		ŝ	42	39.8	100	29.2	242	70.8	322	537
103 651 59.0 298 45.8 353 54.2	59.0 298 45.8 353 54.2	.0 298 45.8 353 54.2	45.8 353 54.2	353 54.2	54.2		4	52	41.0	132	29.2	320	70.8	430	673
185 718 60.6 366 51.0 352 49.0	60.6 366 51.0 352 49.0	.6 366 51.0 352 49.0	51.0 352 49.0	352 49.0	49.0		7	+67	39.4	163	34.9	304	65.1	529	656
59.8 355 44.1 450 55.9	59.8 355 44.1 450 55.9	.8 355 44.1 450 55.9	44.1 450 55.9	450 55.9	55.9		- •	541	40.2	160	29.6	381	70.4	515	831
504 882 58.6 448 50.8 434 49.2	58.6 448 50.8 434 49.2	.6 448 50.8 434 49.2	50.8 434 49.2	434 49.2	49.2			622	41.4	195	31.4	427	68.6	643	861
Average 1965-1967 59.6 48.6 51.3	59.6 48.6	48.6			51.3	51.3			40.3		31.9		68.0		
985 (59) 473 (48) 512 (52)	(59) 473 (48) 512 (52)	473 (48) 512 (52)	(48) 512 (52)	512 (52)	(22)		-	685	(41)	206	(30)	479	(20)	679	991
1.074 " 516 " 558 "	" 516 " 558 "	" 516 " 558 "	" 558 "	558 "	=		•	746	=	224	=	522	;=	740	1,080
1,156 " 555 " 601 "	" 555 " 601 "	" 555 " 601 "	" 109 "	=	=	-		804		241	=	563	=	796	1,164
1,233 " 591 " 642 "	" 591 " 642 "	" 591 " 642 "	" 64.2 "	=	=	-		857	=	257		600	=	848	1,242
1,304 " 626 " 678 "	" 626 " 678 "	" 626 " 678 "	" 678 "	=	=	=		906	=	272	=	634		898	1,312
1,369 " 657 " 712 "	" 657 " 712 "	" 657 " 712 "	" 712 "	=	=	=		951	=	285	=	666	=	942	1,378
1,428 " 685 " 743 "	" 685 " 743 "	" 685 " 743 "	" 743 "	=	=	=		992	=	298	=	694	=	983	1,437
" 770 " 1,	" 711 " 770 " 1,	" 711 " 770 " 1,	" 770 " 1,	" 1,	" 1,	" 1,	Ļ,	029	=	309	=	720	=	1,020	1,490

TABLE 8. FALL RESIDENT AND NONRESIDENT GRADUATE ENROLLMENT, NORTH DAKOTA STATE UNIVERSITY AND UNIVERSITY OF NORTH DAKOTA, ACTUAL 1958-1967, PROJECTED, 1968-1985

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			al	UND	(15)	1,538	1,580	1,615	1,645	1,668	I,689	l,707	1,722	l,734	1,743
			Total	NDSU	(14)	1,052	1,080	1,105	1,125	1, 142	1,156	1,168	1,178	1,186	1,192
		D	Per-	cent	(13)	(20)	=	=	=	=	=	=	=	=	=
		UND	-mnN	ber	(12)	743	764	780	795	806	816	825	832	838	842
	ident	SU	Per-	cent	(11)	(30)	=	=	=		=	=	=	=	=
	Nonresident	NDSUN	-mnN	ber	(10)	319	327	335	341	346	350	354	357	359	361
		al	Per-	cent	(6)	(41)	=	=		=	=	=	=	=	=
		Total	Num-	ber	(8)	1,062	1,091	1,115	1,136	1,152	1,166	1,179	I,189	1,197	1,203
		D	Per-	cent	(2)	(22)	=		=	=	=	=	=	=	=
		UND	-mnN	ber	(9)	795	816	835	850	862	873	882	890	896	106
	ldent	NDS U	Per-	cent	(5)	(48)	=	=	=	=	=	=	=	=	=
	Resid	ΩN	Num-	ber	(†)	733	753	770	784	796	806	814	821	827	831
		al	Per-	cent	(3)	(65)	=	=	=	=	=	=	=	=	=
,		Total	Num-	ber	(2)	1,528	1,569	1,605	1,634	1,658	I,679	1,696	1,711	1,723	1,732
		Total	Enroll-	ment	(1)	2,590	2,660	2,720	2,770	2,810	2,845	2,875	2,900	2,920	2,935
				Year		1976	1977	1978	1979	1980	1981	1982	1983	1984	1985

TABLE 8. FALL RESIDENT AND NONRESIDENT GRADUATE ENROLLMENT, NORTH DAKOTA STATE UNIVERSITY AND UNIVERSITY OF NORTH DAKOTA, ACTUAL 1958-1967, PROJECTED, 1968-1985 (continued)

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		NDSU		×	UND	1
		Under-			Under-	
Year	Total	graduate	Graduate	Total	graduate	Graduate
1968	6,302	5,623	679	7,360	6,369	991
1969	6,670	5,930	740	7,796	6,716	1,080
1970	7,009	6,213	796	8,200	7,036	1,164
1971	7,371	6,523	848	8,628	7,386	1,242
1972	7,702	6,804	898	9,017	7,705	1,312
1973	8,056	7,114	942	9,434	8,056	1,378
1974	8,381	7,398	983	9,815	8,378	1,437
1975	8,685	7,665	1,020	10,172	8,682	1,490
1976	8,940	7,888	1,052	10,471	8,933	1,538
1977	9,173	8,093	1,080	10,745	9,175	1,580
1978	9,365	8,260	1,105	10,969	9,354	1,615
1979	9,536	8,411	1,125	11,173	9,528	1,645
1980	9,653	8,511	1,142	11,308	9,640	1,668
1981	9,747	8,591	1,156	11,421	9,732	1,689
1982	9,708	8,540	1,168	11,379	9,672	1,707
1983	9,609	8,431	1,178	11,272	9,550	1,722
1984	9,496	8,310	1,186	11,146	9,412	1,734
1985	9,418	8,226	1,192	11,061	9,318	1,743

TABLE 9. PROJECTED TOTAL FALL ENROLLMENT, NORTH DAKOTA STATE UNIVERSITY AND UNIVERSITY OF NORTH DAKOTA, 1968-1985*

*Graduate enrollment based on Method 2.

The estimated total graduate enrollment at each of the two universities is shown in columns 14 and 15.

Comparison of the results obtained by use of the two methods of estimation is given below for selected years.

	NDS	U	UN	D
Year	Method 1	Method 2	Method 1	Method 2
1970	823	796	1,137	1,164
1975	1,054	1,020	1,456	1,490
1980	1,180	1,142	1,630	1,668
1985	1,233	1,192	1,702	1,743

Considering the amount of error inherent in the assumptions involved in each of the two methods and the relatively small differences in the results, it is impossible to indicate which is the better procedure. The second method eventually will be preferred on logical grounds as time passes and each university maintains records giving the origins of their graduate students.

The projected total enrollments, both undergraduate and graduate, at the two universities are presented in Table 9. The total enrollment 1958-1985 is shown graphically in Figure 4.

B. University of North Dakota, Ellendale Branch.

Total enrollment was projected only to 1975 (Table 10). Within a couple of years, the institution will include only Freshmen and Sophomores with the exception of students enrolled in Industrial Arts. Enrollment in 1975 is expected to approximate 600 students. Administration officials at the University of North Dakota, Grand Forks, provided assistance in arriving at the projected enrollments.

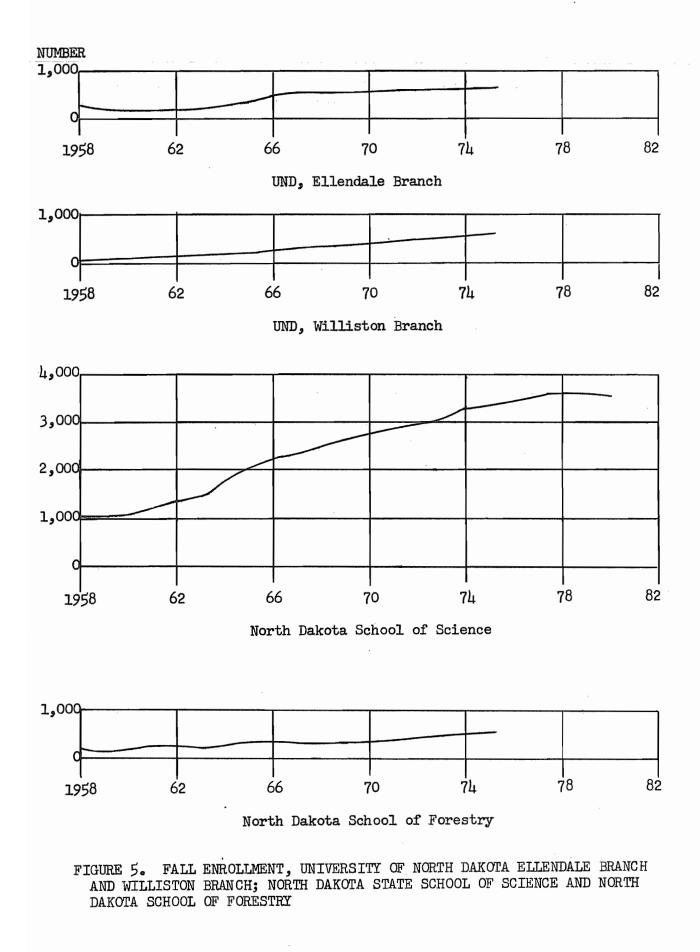
In arriving at these projections consideration was given not only to the changeover in policy but also to past persistence of the Freshmen class to continue in college; that is, consideration was given to the proportion that the number of Sophomores in a given year was of the number of Freshmen in the preceding year. It was also assumed that the Freshmen class would increase about 5 percent each year for the next few years.

The total enrollment 1958-1975 at the University of North Dakota branch is shown in Figure 5.

C. University of North Dakota, Williston Branch.

The full-time fall enrollment at University of North Dakota, Williston Branch increased from 15 students in 1957 to 315 students in 1967 (Table 11). If enrollment grows as anticipated, it should

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reach 500 students by 1975. Present information does not justify projecting enrollment beyond 1975. These estimates are based in part on information obtained from administrative officials at Williston and Grand Forks.

TABLE 10. ENROLLMENT AT UNIVERSITY OF NORTH DAKOTA, ELLENDALE BRANCH, 1958-197	TABLE 1	10.	ENROLLMENT	\mathbf{AT}	UNIVERSITY	\mathbf{OF}	NORTH	DAKOTA,	ELLENDALE	BRANCH,	1958-197
--	---------	-----	------------	---------------	------------	---------------	-------	---------	-----------	---------	----------

Year	Enrollment	Year	Enrollment
1958	244	1969	500
1959	209	1970	520
1960	173	1971	540
1961	182	1972	560
1962	195	1973	580
1963	196	1974	590
1964	250	1975	600
1965	311		
1966	438		
1967	494	· ·	
1968	482		

Data are not available to show the proportions of the enrollment originating in state or out of state.

TABLE 11.	FALL ENROLLMENT	AT THE	UNIVERSITY	OF	NORTH	DAKOTA,	WILLISTON
BRANCH,	1957-1975						

Year	Enrollment Actual	Year	Enrollment Estimated
1957	15	1968	350
1958	24	1969	375
1959	36	1970	400
1960	55	1971	420
1961	94	1972	440
1962	132	1973	460
1963	141	1974	480
1964	156	1975	500
1965	163		
1966	225		
1967	315		

	Moving					Enrol	Enrollment				
	Total of	cki	nson	Mayville	ille	Minot	ot	Valley (City	Four Co	Colleges
	High School	Num-	Per-	Num-	Per-	Num-	Per-	Num-	Per-	Num-	Per-
Year	Graduates	ber	cent	ber	cent	ber	cent	ber	cent	ber	cent
											9,4000 X
1958	27,934	514	1.84	480	1.72	1,309	4.69	751	2.53	3,054	10.94
1959	28,997	522	•	538	1.86	1,402	4.84	792	2.59	3,254	11.23
1960	30,219	602	•	546	1.81	1,268	4.20	787	2.64	3,203	10.60
1961	31,849	786	•	573	1.77	1,316	4.28	798	2.69	3,463	10.88
1962	33,111	827	•	630	1.90	1,430	4.47	894	2.74	3,781	11.42
1963	34,232	865	•	661	1.9 3	1,539	4.65	940	2.80	4,005	11.70
1964	35,617	1,021	•	686	1.93	1,740	4.83	1,103	2.85	4,550	12.78
1965	37,700	•	•	761	2.02	1,879	5.01	1,218	2.90	5,043	13.37
1966	39,500	1,218	•	711	1.80	1,942	5.19	1,164	2.95	5,035	12.75
1967	40,495	•	3.29	732	1.81	2,029	5.37	1,230	3.00	5,323	13.15
1968	41,487	•	٠	797	1.92	2,306	5.56	1,270	3.06	5,656	13.63
1969	42,598	•	•	822	1. 93	2,445	5.74	1,325	3.11	5,917	13.89
1970	43,512	1,627	3.74	848	1. 95	2,559	5.88	1,375	3.16	6,150	14.15
1971	44,560	•	•	873	1.96	2,683	6.02	1,431	3.21	6,425	14.42
1972	45,397	•	•	894	1.97	2,787	6.12	1,480	3.26	6,655	14.66
1973	46,375	1,915	4.13	918	1.98	2,885	6.22	1,540	3.32	6,919	14.92
1974	47,185	,99	•	939	I.99	2,975	6.30	1,590	3.37	7,143	15.14
1975	47,840	°.	•	962	2.01	3,043	6.36	1,636	3.42	7,363	15.39
1976	48,221	,15	4.46	974	2.02	3,086	6.40	1,673	3.47	7,533	15.62
1977	48,484	,20	-	984	2.03	3,122	6.44	1,707	3.52	7,679	15.84
1978	48,536	2	-	066	2.04	3,140	6.47	I,738	3.58	7,794	16.06
1979	48,496	,29	•	993	2.05	3,152	6.50	1,760	3.63	7,881	16.27

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NT IN NORTH DAKOTA STATE COLLEGES AND PERCENT ENROLLMENT IS OF FOUR-YEAR	GRADUATES, ACTUAL 1958-1967, PROJECTED 1968-1985 (continued)	
DAKOTA S'	ACTUAL	
IN NORTH I	GRADUATES,	
RESIDENT ENROLLMENT	MOVING TOTAL OF HIGH SCHOOL C	
TABLE 12.	T DNIVOM	

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.. . .

	r Colleges	Num- Per-	cent		92 16.73				
	Four	-mnN	ber		7,992				
	y City	Num- Per-	cent		3.73				
	Valle	Num-	ber	1,773	1,782	1,764	1,739	1,708	1,685
Enrollment	lot	Per-	cent	6.52	6.54	6.56	6.57	6.58	6.59
	Num-		3,141	3,124	3,060	2,975	2,890	2,819	
	ville	Per-	ber cent	2.07	2.08	2.09	2.10	2.11	2.12
	May	-unn	ber	266	966	975	951	927	607
	nson	Per-	cent	4.81	4.89	4.96	5.03	5.09	5.14
	Dickin	-muN	ber	2,317	2,336	2,314	2,278	2,235	2,199
Moving	Total of	High School	Graduates	48,178	47,766	46,657	45,289	43,919	42,780
			Year	1980	1981	1982	1983	1984	1985

The projected enrollments, 1968-1985, in columns 2, 4, 6, and 8 were determined by multiplying the four-year moving total of high school graduates by the projected proportions in columns 3, 5, 7, and 9.

		Enroll <u>ment</u>					
		Res	ident	Nonre	sident		
Year	Total	Total	Percent	Total	Percent		
1958	543	514	94.7	29	5.3		
1959	562	522	92.9	40	7.1		
1960	647	602	93.0	45	7.0		
1961	843	786	93.2	57	6.8		
1962	879	827	94.1	52	5.9		
1963	912	865	94.8	47	5.2		
1964	1,123	1,021	90.9	102	9.1		
1965	1,333	1,185	88.9	148	11.1		
1966	1,353	1,218	90.0	135	10.0		
1967	1,525	1,332	87.3	193	12.7		
1968	1,623	1,440	88.7	183	11.3		
1969	1,729	1,534	11	195			
1970	1,834	1,627	11	207			
1971	1,949	1,729	11	220	11		
1972	2,047	1,816	11	231			
1973	2,159	1,915	11	244	11		
1974	2,250	1,996	11	254	11		
L975	2,346	2,081	11	265	"		
L976	2,425	2,151	11	274	11		
1977	2,487	2,206	11	281	11		
1978	2,544	2,257	11	289	11		
1979	2,583	2,291	11	292	11		
1980	2,612	2,317	11	295	11		
1981	2,633	2,336	11	297	11		
L 9 82	2,609	2,314	11	295	11		
1983	2,568	2,278	11	290	11		
L 9 84	2,519	2,235	11	284	11		
1985	2,479	2,199	11	280	11		

TABLE 13. PROJECTED TOTAL ENROLLMENT AT DICKINSON STATE COLLEGE, 1958-1985

			Enrollment					
		Res	ident		Nonresident			
Year	Total	Total	Percent	Total	Percent			
1958	532	480	90.2	52	9.8			
1959	582	538	92.4	44	7.6			
1960	588	546	92.9	42	7.1			
1961	607	563	92.8	44	7.2			
1962	676	630	93.2	46	6.8			
1963	721	661	91.7	60	8.3			
1964	749	686	91.6	63	8.4			
1965	850	761	89.5	89	10.5			
1966	800	711	88.9	89	11.1			
1967	810	732	90.4	78	9.6			
1968	889	797	89.6	92	10.4			
1969	917	822	11	95	11			
1970	946	848	11	98	11			
1971	974	873	11	101	11			
1972	987	884	. 11	103	11			
1973	1,024	918	11	106	11			
1974	1,048	939	11	109	11			
1975	1,073	961	н ,	112	11			
1976	1,087	974	11	113	11			
1977	1,098	984	11	114	11			
1978	1,105	990	11	115	11			
1979	1,108	993	ŧ	115	11			
1980	1,113	997	11	116	"			
1981	1,109	994	11	115	11			
1982	1,088	975	11	113	11			
1983	1,061	951	11	110	11			
1984	1,035	927	11	108	**			
1985	1,012	907	11	105	11			

TABLE 14. PROJECTED TOTAL ENROLLMENT AT MAYVILLE STATE COLLEGE, 1958-1985

. •		· · · · · · · · · · · · · · · · · · ·	Enrol	lment	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		Resi	dent	Nonre	sident
Year	Total	Total	Percent	Total	Percen
1958	1,349	1,309	97.0	40	3.0
1959	1,447	1,402	96.9	45	3.1
1960	1,326	1,268	95.6	58	4.4
1961	1,379	1,316	95.3	63	4.6
1962	1,520	1,430	94.1	90	5.9
1963	1,634	1,539	94.2	95	5.8
1964	1,842	1,740	94.4	102	5.6
1965	1,996	1,879	94,1	117	5.9
1966	2,056	1,942	94.5	114	5.5
1967	2,130	2,029	95.3	101	4.7
1968	2,427	2,306	95.0	121	5.0
1969	2,574	2,445	11	129	11
1970	2,685	2,550	11	135	11
1971	2,824	2,683	11	141	11
1972	2,934	2,787	11	147	11
1973	3,037	2,885	11	152	11
1974	3,129	2,973	11	156	11
1975	3,203	3,043	11	160	11
1976	3,248	3,086	11	162	
1977	3,286	3,122	11	164	11
1978	3,305	3,140	11	165	11
1979	3,318	3,152	11	166	11
1980	3,306	3,141	11	165	11
1981	3,267	3,124	11	163	11
1982	3,222	3,061	11	161	11
1983	3,132	2,975	Ħ	157	11
1984	3,042	2,890	11	152	11
1 9 85	2,967	2,819	11	148	11

TABLE 15. PROJECTED TOTAL ENROLLMENT AT MINOT STATE COLLEGE, 1958-1985

		Enrollment						
			ident	Nonre	Nonresident			
Year	Total	Total	Percent	Total	Percent			
1958	783	751	95.9	32	4.1			
1959	818	792	96.8	26	3.2			
1960	804	787	97.9	17	2.1			
1961	830	798	96.1	32	3.9			
1962	917	894	97.5	23	2.5			
1963	975	940	96.4	35	3.6			
1964	1,147	1,103	96.2	44	3.8			
1965	1,252	1,218	97.3	34	2.7			
1966	1,190	1,164	97.8	26	2.2			
1967	1,256	1,230	97.9	26	2.1			
1968	1,296	1,270	98.0	26	2.0			
1969	1,352	1,325	11	27				
1970	1,403	1,375	**	28	11			
1971	1,460	1,431	11	29	"			
1972	1,510	1,480	, 11	30	11			
1973	1,571	1,540	11	31	11			
1974	1,622	1,590	11	32	11			
1975	1,669	1,636	11	33	11			
1976	1,707	1,673	11	34	11			
1977	1,742	1,707	"	35	11			
1978	1,773	1,738	**	35	11			
1979	1,796	1,760	"	36	"			
1980	1,809	1,773	**	36	11			
1981	1,818	1,782	"	36	11			
1982	1,800	1,764	"	36	"			
1983	1,774	1,739	11	35	11			
1984	1,742	1,708	11	34	11			
1985	1,719	1,685	**	34	11			

TABLE 16. PROJECTED TOTAL ENROLLMENT AT VALLEY CITY STATE COLLEGE, 1958-1985

, 1960-1967
SCIENCE,
OF
SCHOOL
STATE
NORTH DAKOTA
NORTH
AΤ
ENROLLMENT AT NORTH DAKOTA STATE SCHOOL OF SCIENCE,
17.
TABLE 17

					Enrollment by Divisions	Divisions	
		Total En	Enrollment	Junior College	ege & Business	Trade and	Technical
Year	Place of Residence	Number	Percent	Number	Percent	Number	Percent
1960		1.232	100.0	357	29.0	875	71.0
1961		1,339	100.0	360	26.9	979	73.1
1962		1,465	100.0	397	27.1	1,068	72.9
1963		1,567	100.0	410	26.8	1,157	73.2
1964		1,760	100.0	537	30.5	1,223	69.5
1961	North Dakota	1,650	100.0	561	34.0	1,089	66.0
	South Dakota	104	100.0	18	17.3	86	82.7
	Minnesota	339	100.0	139	41.0	200	59.0
	Montana	28	100.0	9	21.4	22	78.6
	Other locations	26	100.0	12	46.2	14	53.8
	All locations	2,147	100.0	736	34.3	1,411	65.7
1966	North Dakota	1,705	100.0	554	32.5	1,151	67.5
	South Dakota	116	100.0	27	23.3	89	76.7
	Minnesota	318	100.0	138	43.3	180	56.7
	Montana	32	100.0	5	6.3	30	93.7
	Other locations	56	100.0	17	30.4	39	69.6
	All locations	2,227	100.0	738	33.1	1,489	60.9
1967	North Dakota	1,891	100.0	662	35.0	1,229	65.0
	South Dakota	118	100.0	25	21.2	93	78.8
	Minnesota	276	100.0	119	43.1	157	56.9
	Montana	38	100.0	8	21.1	30	78.9
	Other locations	34 ·	100.0	10	29.4	24	70.6
	All locations	2,357	100.0	824	35.0	1,533	65.0

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D. State Colleges.

The resident fall enrollment in each of the four state colleges, Dickinson, Mayville, Minot, and Valley City, was expressed as a percent of the projected moving total of high school graduates in North Dakota, 1958-1967 (Table 2). Using the equations below, a trend line was fitted to the proportions for each college and the trend extended to 1985. The projected proportions were then applied to the projected moving totals of high school graduates as a means of obtaining estimates of the future resident enrollments in each of the four colleges (Table 12).

The equations derived in the determination of the respective trend lines are as follows:

			Iquatio				
Dickinson	Y	=	2.579	+	.0878X	-	.0006912X ²
Mayville Minot <u>l</u> /	Y	=	1.856	+	.0 0 6X		
			4.920				
Valley City <u>2</u> /	Y	=	2.795	+	.051		

In determining the trend line the origin was placed between 1962 and 1963 for Dickinson and Mayville. The X values therefore were:

1958	-9	1963	+1
1959	-7	1964	+3
1960	-5	1965	+5
1961	-3	1966	+7
1962	-1	1967	+9

Using the respective equations to derive the projected proportions for future selected years, the "X" values are:

1968+111975+251969+131980+351970+151985+45

The projected value of Y_c in 1975 for Dickinson State College (i.e., the proportion that resident enrollment is of the four-year moving total of high school graduates) is:

 $Y_c = 2.579 + .0879 (25) - .0006912 (625) = 4.35$

1/This equation represents the trend line for 1961-1968. This trend was extended in a curvilinear fashion to obtain the basis for the projected proportions for 1969-1985.

2/This equation represents the trend line for 1958-1968.

The projected proportions were applied to the estimated moving total of high school graduates to obtain projections of fall resident enrollment (Table 10).

Whenever the basic series consisted of an odd number of years, the origin was placed at the middle year and the X values were -5, -4, -3, -2, -1, 0, +1, +2, +3, +4, +5, etc.

The following proportions were used to obtain estimates of the total enrollment from estimates of resident enrollment in each of the colleges. These proportions are approximate averages for the three years, 1965-1967, and represent the proportion that resident enrollment was of the total enrollment.

Dickinson	88.7 percent
Mayville	89.6 percent
Minot	95.0 percent
Valley City	98.0 percent

The projected total enrollments are presented in Tables 12, 13, 14, 15, and 16 (See Figure 6).

E. North Dakota State School of Science, Wahpeton.

This institution is a unique North Dakota institution in that it is a statewide comprehensive college comprising four instructional divisions, Junior College, Business, Trade, and Technical. The combined enrollment in the Junior College and Business Divisions and that in Trade and Technical Divisions, 1960-1967, are shown in Table 17. For some of the years, it is possible to give the residence of students by division but data are not available for all years.

Enrollment in the combined division of Junior College and Business increased about 131 percent from 1960 to 1967 and that in the combined Trade and Technical Divisions, 75 percent. 3/

Enrollment in the Junior College and Business accounted for 35.0 percent of the total enrollment in 1967, compared with 27.1 percent in 1962. The corresponding proportions for the Trade and Technical Divisions were 65.0 percent in 1967 and 72.9 percent in 1962.

3/The total enrollment data for some of the years included in Table 18 do not correspond to those in Table 2. The differences, however, do not detract from the marked growth in enrollment.

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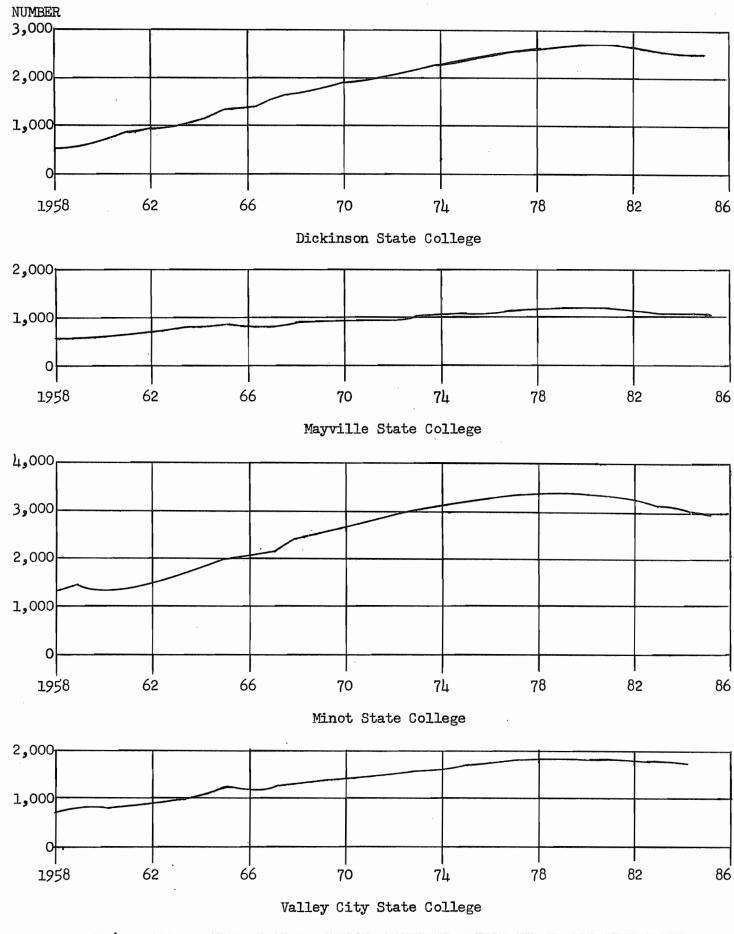


FIGURE 6. FALL ENROLLMENT AT DICKINSON, MAYVILLE, MINOT AND VALLEY CITY STATE COLLEGES

The student load of this institution averages 18-19 hours compared with about 16-17 hours in most colleges. Experience has shown that the heavier load at this institution is necessary in order to insure complete appropriate training for future work and/or transfer. Therefore, there always will be a greater student full-time equivalency than head count.

The college now is operating beyond normal expected building utilization and future growth will be limited by building limitations. This is particularly true for the Trade and Technical Divisions.

Another factor which may affect future enrollment at the North Dakota State School of Science is the institution and development of trade and technical curricula at other colleges, not only in North Dakota but also in other states.

Projections of fall enrollment in the combined Junior College and Business Divisions and combined Trade and Technical Divisions have been made up to and including 1980. The procedure utilized was about the same as that used in projecting future enrollments at the universities and the four state colleges. Projections were first made of the proportions that resident enrollment will be of the four-year moving total of high school graduates (Table 18, columns 3 and 7). These proportions were then applied to the projected four-year moving totals of high school graduates (column 1) and results recorded in column 2 and column 6. These estimates of resident enrollment were then divided by the estimated proportions that resident enrollment will be of the total enrollment and results recorded in column 5 and column 9. For total enrollment, 1958-1980, see Figure 5.

For 1968 the procedure is illustrated below:

Junior College and Business

Resident Enrollment Column 2 = Column 1 times Column 3, i.e., 788 = 41,487 X 1.9

Total Enrollment Column 5 = Column 2 : Column 4, i.e., 979 = 788 : .805

Trade and Technical

Resident Enrollment
Column 6 = Column 1 times Column 7, i.e., 1,265 = 41,487
X 3.05
Column 9 = Column 6 + Column 8, i.e., 1,550 = 1,265 + .816

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AT
PROJECTED ENROLLMENT AT NORTH DAKOTA STATE SCHOOL OF SCIENCI
PROJECTED
18.
TABLE 1

Total	Number			0	13	2,147	2,227	2,357	2,529	2,642	2,772	2,914	2,981	3,117	3,244	3,363	3,407	3,511	3,544	3,539	3,518
All Divisions sident		Percent	of Totol	TPLOT	12	76.9	76.6	80.2	81.2	81.4	81.6	81.8	82.2	82.6	82.9	83.2	83.5	83.5	83.5	83.5	83.5
All Di Resident		Percent	of Col 1	T . TOO	11	4.4	4.3	4.7	4.95	5.05	5.20	5.35	5.40	5,55	5.70	5.85	5.90	6.05	6.10	. 6.10	6.10
			Num-		10	1,650	1,705	1,891	2,053	2,151	2,263	2,384	2,452	2,574	2,689	2,799	2,846	2,933	2,961	2,957	2,939
al Total	Number				6	1,411	1,489	1,533	1,550	1,588	1,645	1,712	I,763	1,824	1,880	I ,931	1,971	2,011	2,042	2,039	2,026
and Technical dent		Percent	of Totol	TDIGT	œ	77.2	77.3	80.2	81.6	81.8	82.0	82.0	82.4	82.6	82.8	83.0	83.2	83.2	83.2	83.2	83.2
Trade and Resident		Percent	of Col 1	•	7	2.9	2.9	3.0	3.05	3.05	3.10	3.15	3。20	3.25	3.30	3,35	3.40	3.45	3 . 5	3.5	3 . 5
T			Num-		9	1,089	1,151	1,229	1,265	1,299	1,349	1,404	1,453	1,507	1,557	1,603	1,6 40	1,673	1 ,699	1,697	1.686
Business Total	Number			1	Ŋ	736	738	824	979	1 , 054	1,127	1,202	1,218	1 , 293	1, 364	1, 432	1,436	1,500	1 ,502	1,500	1. 492
and		Percent	of Totol		4	9.	75.1	0		•		•	82.0		•						
Junior College Resident		Percent	of fol	•	ო	1.5	1.4	1.6	•	•	•	•	2.2	•	•	•	•		•		
Junio			Num-	ner Der	7	561	554	662	788	852	914	980	666	1,067	1,132	1,196	1,2 06	1,260	1,262	1,260	1,253
4-Year	Moving	Total	of H.S.	en gr	H	37,700	39,508	40,495	487	597	512	565	45,397	375	185	840	221	484	536	496	178
			V.C.V.	TEAT		1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980

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Total Resident Enrollment = Column 2 plus Column 6, i.e., 788 + 1,265 = 2,053

Total Enrollment = Column 5 plus Column 9, i.e., 979 + 1,550 = 2,529

F. North Dakota School of Forestry, Bottineau.

This institution as a branch of North Dakota State University will continue as a junior college. The projections of total enrollment were based on an annual increase of about 6 percent, 1968-1975, with the enrollment reaching 519 students in 1975 (Table 19). See Figure 5.

TABLE 19. ENROLLMENT AT NORTH DAKOTA STATE SCHOOL OF FORESTRY, BOTTINEAU

Year	Total	Resident	Nonresident
1958	201	176	25
1959	180	144	36
1960	189	157	32
1961	220	186	34
1962	227	182	45
1963	217	184	33
1964	232	189	43
1965	360	282	78
1966	326	271	55
1967	300	266	34
1968	321		
1969	366		
1970	388		
1971	411		
1972	436		
1972	462		
1974	49 0		
1974	519		

III. Locally Supported Institution.

A. Bismarck Junior College.

Burleigh and Morton counties supply more than two-thirds of the resident enrollment at Bismarck Junior College. Consequently, the projected future enrollment originating in these counties was determined first, then estimates made of the total resident enrollment, and finally the total combined resident and nonresident enrollment. For the period, 1960-1967, the four-year moving total of high school graduates in Burleigh and Morton counties (Table 20, column 2) was expressed as a percent (column 3) of the number of persons in the 18-21 age group (column 1) in these counties. The corresponding proportions for the period 1968-1980 were estimated assuming the proportions would reach a maximum of 97 percent in the latter part of this period (column 3). These projected proportions were then applied to the number in the 18-21 age group, previously determined, to obtain estimates of the four-year moving total of high school graduates in Burleigh and Morton counties, 1968-1980 (column 2).

Column 6 gives the proportion that the resident enrollment in 1960-1967 originating in Burleigh and Morton counties was of the moving total of high school graduates in these counties, and the proportions projected for the period 1968-1980, reaching a maximum of 23 percent during the latter part of the period. These projected proportions were then applied to the moving total of high school graduates to obtain projections of the resident enrollment originating in these counties (column 5).

The total resident enrollment at Bismarck Junior College and that originating in Burleigh and Morton counties for 1960-1967 are recorded in columns 4 and 5. The proportions that the latter was of the total are given in column 7. The proportions were projected for the period 1968-1980 and assumed to reach a maximum of 74 percent during the latter part of the period. In order to obtain projected total resident enrollment, the projected enrollment originating in Burleigh and Morton counties was divided by the projected proportions (or ratios) and the results recorded in column 4.

The resident enrollment at this college has approximated 97 percent of the total enrollment at Bismarck Junior College (column 8). The resident enrollment recorded in column 4 was divided by this figure or the ratio of .97 to obtain projections of the total enrollment (column 9). The total enrollment 1958-1975 is shown in Figure 7.

The above procedures in determining the respective projections for 1968 are illustrated in the following paragraphs.

The number in the 18-21 age group, 4,131 (column 1), was multiplied by 93 percent (column 3) to obtain the estimate, 3,842, the four-year moving total of high school graduates in Burleigh and Morton counties (column 2) in 1968.

This number, 3,842, was then multiplied by 16 percent (column 6) to obtain the enrollment of 614 originating in the two counties (column 5).

NUMBER 2,000, 1,000 С Bismarck Junior College 1,000 C Lake Region Junior College oo0, 1 Jamestown College 1,000 Mary College 1,000 Assumption College FIGURE 7. FALL ENROLLMENT AT BISMARCK AND LAKE REGION JUNIOR COLLEGES;

JAMESTOWN, MARY AND ASSUMPTION COLLEGES

- 38 -

Total	Enro11-	ment		6	number					476	529	545	574	719	862	006	851	930	1,018	1,109	1,157	1,200	•	1,339	•	•	•	•	•	•
	Percent	of Total	Enrollment	8						97.1	96.4	98.5	97.6	97.8	97.2	96.6	96.7	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
ıt		ton		7	percent	of total	resident	enrol1-	ment	69.9		•	69.9	71.0	64.8	٠	•	68.0	0.69		70.5	71.0	71.5	٠	72.5	•		74.0	٠	
Resident Enrollment	From	Burleigh and Morton	Counties	9	percent	of moving	total of	high school	graduates	13.4	14.9	14.5	17.4		17.2		•	16.0	17.0	18.0	18.5	19.0	19.5	20.5	21.5	22.0	22.5	23.0	23.0	23.0
Resi		Bu		Ŝ	number					323	375	384	391	499	543	567	587	614	682	754	792	832	872	936	1,002	1,047	1,087	1,128	1,149	1,167
	From	A11	Counties	4	number					462	510	537	560	703	838	869	823	903	988	•	1,123	1,171	1,226	1,300	1,383	1,434	1,478	1,524	1,552	1,577
n Counties	Total	i School	Graduates	£	cen	of 18-21	age group			85.6	85.4	85.8	86.4	87.4	90.3	92.5	92.6	93.0	93.5	94.0	94.5	95.0	95.5	96.0	96.5	97.0	97.0		97.0	0.79
and Morton	Moving	of High	Grad	2	number					2,412	2,580	2,703	2,864	3,038	3,290	3,520	3,692	3,842	4,015	4,191	4,284	4,377	4,470	4,566	4,662	4,760	4,833	4,905	4.978	5,048
Burleigh	18-21	Age	Group	1	number					2.822	2,985	3,150	3,313	3,476	3,643	3,804	3,907	4.131	4,294	4,458	4,533	4,607	4,671	4,756	4,832	4,907	4,982	5,057	5,132	2004
	•		Year							1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980

ENROLLMENT AT BISMARCK JUNIOR COLLEGE TABLE 20.

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ì

The latter figure of 614 (column 5) was divided by .68 (column 7) to obtain the total resident enrollment of 903 (column 4).

The resident enrollment of 903 was then divided by .97 (column 8) to obtain the projected total fall enrollment of 930 (column 9) students at Bismarck Junior College in 1968.

B. Lake Region Junior College.

Enrollment data obtained from this institution indicate that total enrollment about tripled within a five-year period increasing from 153 students in 1963 to 487 students in 1967 (Table 21).

Year	Enrollment	Year	Enrollment
1959	35	1963	153
1960	107	1964	200
1961	147	1965	300
1962	127	1966	375
		1967	487

TABLE 21. ENROLLMENT AT LAKE REGION JUNIOR COLLEGE, 1950-1967

The projected enrollment shown in Table 22 is based largely on a projected moving total of high school graduates in the three counties from which the institution drew about two-thirds of its student population in 1967. These counties are Benson, Nelson, and Ramsey.

The projected enrollments from these counties (column 3) were obtained by multiplying the four-year moving total of high school graduates (column 1) by the projected proportion that enrollment from these counties will be of the moving total of high school graduates (column 4). The results thusly obtained were then divided by the estimated proportion that enrollment from these counties (column 5) will be of the total enrollment and results recorded in column 2.

The procedure for 1968 is as follows:

Enrollment originating in the three counties

Column 3 = Column 1 times column 4, i.e., $363 = 1,908 \times 19.0$

Total Enrollment

Column 2 = Column 3 + Column 5, i.e., 525 = 363 + .6914

The projected total enrollment during the coming years may be lower than that which will prevail. It is quite possible that acceleration in vocational-technical training will increase the enrollment above that which has been projected (See Figure 7).

TABLE	22.	ENROLLMENT	AT	TAKE	REGTON	TINTOR	COTLECE
	~~ .		T T T			DUNTOR	

	Four-Year		E	Inrollment	
	Moving Total			From 3 C	ounties
	of High School	From A11			Percent of
	Graduates 3	Counties		Percent	of Total
<u>Year</u>	Counties*	Number	Number	Column	1 Enrollment
	1	2	3	4	5
1964	1,704	200	118	6.8	59.0
1965	1,776	300	160	9.0	53.3
1966	1,805	375	279	15.5	74.4
1967	1,855	487	334	18.0	68.6
1968	1,908	525	363	19.0	69.14
1969	1,955	564	401	20.5	71.09
1970	2,000	603	430	21.5	71.31
1971	2,045	642	460	22.5	71.65
1972	2,090	681	491	23.5	72.09
1973	2,130	720	522	24.5	72.50
1974	2,170	759	553	24.5	72.85
1975	2,210	800	585	24.5	73.12
For 19	68 -1 975 Column 3	= Column 1 X	Column 4,	e.g., 1968	363=1,908X19.0
		= Column 3 \div			525=363:.6914

*Benson, Nelson, and Ramsey.

IV. Enrollment at Private Institutions of Higher Learning.

A. Jamestown College.

During the five-year period, 1963-1967, the fall resident enrollment at Jamestown College averaged about .95 percent of the moving total of high school graduates in North Dakota. The proportion during the preceding five years, 1958-1962 was much higher (Table 23).

The resident enrollment expressed as a proportion of the total enrollment declined steadily over the ten-year period and averaged 63.4 percent during the last two years, 1966 and 1967.

Total of High Schoolof High Schoolof High Schoolof TotalYearGraduatesTotalTotalTotalGraduatesEnrollm12345195827,9345154511.6287.6195928,9975444821.6688.6196030,2195254591.5287.4196131,8494413821.2086.6196233,1114183421.0361.8196334,232429337.9878.6196435,617470340.9572.3196537,700508341.9567.1196639,508588382.9665.0196740,495607375.9361.8196841,487621394.9563.4196942,598662413.9762.4197043,5127074351.0061.5197144,5607394511.0161.6197245,3977654631.02260.5197346,3757964781.0360.0197447,1858254911.0459.5197547,8408515021.0559.0197648,2369035241.0857.0197848,5369035241.08 </th <th></th> <th></th> <th></th> <th></th> <th>Enrol1ment</th> <th></th>					Enrol1ment	
Four-Year Moving Total of High SchoolMoving Total of High School GraduatesPercest of Total of High SchoolYearGraduatesTotalTotalGraduatesPercest of Total Enrollm12345195827,9345154511.62 87.6 195928,9975444821.6688.6196030,2195254591.52 87.4 196131,8494413821.2086.6196233,1114183421.0361.8196334,232429337.9878.6196435,617470340.9572.3196537,700508341.9567.1196639,508588382.9665.0196740,495607375.9361.8196841,487621394.9563.4196942,598662413.9762.4197043,5127074351.0061.5197144,5607394511.0161.6197245,3977654631.0260.5197346,3757964781.0360.0197447,1858254911.0459.5197547,8408515021.0559.0197648,2218745111.0658.5					Reside	ent
Total of High Schoolof High Schoolof High Schoolof TotYearGraduatesTotalTotalTotalGraduatesEnrollmu12345195827,9345154511.6287.6195928,9975444821.6688.6196030,2195254591.5287.4196131,8494413821.2086.6196233,1114183421.0361.8196334,232429337.9878.6196435,617470340.9572.3196537,700508341.9567.1196639,508588382.9665.0196740,495607375.9361.8196841,487621394.9563.4196942,598662413.9762.4197043,5127074351.0061.5197144,5607394511.0161.6197245,3977654631.0260.5197346,3757964781.0360.0197447,1858254911.0459.5197547,8408515021.0559.0197648,2218745111.0658.5197748,4848955191.07 <th></th> <th></th> <th></th> <th></th> <th>Percent of</th> <th></th>					Percent of	
YearGraduatesTotalTotalGraduatesEnrollm12345195827,9345154511.6287.6195928,9975444821.6688.6196030,2195254591.5287.4196131,8494413821.2086.6196233,1114183421.0361.8196334,232429337.9878.6196435,617470340.9567.1196537,700508341.9567.1196639,508588382.9665.0196740,495607375.9361.8196841,487621394.9563.4197043,5127074351.0061.5197144,5607394511.0161.6197245,3977654631.0260.5197346,3757964781.0360.0197447,1858254911.0459.5197547,8408515021.0559.0197648,2218745111.0658.5197748,4848955191.0758.0197848,5369035241.0857.0197948,4969455291.0956.0					Moving Total	Percent
$\begin{array}{c c c c c c c c c c c c c c c c c c c $,		of High School	of Total
1958 $27,934$ 515 451 1.62 87.6 1959 $28,997$ 544 482 1.66 88.6 1960 $30,219$ 525 459 1.52 87.4 1961 $31,849$ 441 382 1.20 86.6 1962 $33,111$ 418 342 1.03 61.8 1963 $34,232$ 429 337 $.98$ 78.6 1964 $35,617$ 470 340 $.95$ 72.3 1965 $37,700$ 508 341 $.95$ 67.1 1966 $39,508$ 588 382 $.96$ 65.0 1967 $40,495$ 607 375 $.93$ 61.8 1968 $41,487$ 621 394 $.95$ 63.4 1969 $42,598$ 662 413 $.97$ 62.4 1970 $43,512$ 707 435 1.00 61.5 1971 $44,560$ 739 451 1.01 61.6 1972 $45,397$ 765 463 1.02 60.5 1973 $46,375$ 796 478 1.03 60.0 1974 $47,185$ 825 491 1.04 59.5 1975 $47,840$ 851 502 1.05 59.0 1976 $48,221$ 874 511 1.06 58.5 1977 $48,484$ 895 519 1.07 58.0 1979 $48,496$ 945 529	Year	Graduates	Total	Total	Graduates	Enrollment
1959 $28,997$ 544 482 1.66 88.6 1960 $30,219$ 525 459 1.52 87.4 1961 $31,849$ 441 382 1.20 86.6 1962 $33,111$ 418 342 1.03 61.8 1963 $34,232$ 429 337 $.98$ 78.6 1964 $35,617$ 470 340 $.95$ 72.3 1965 $37,700$ 508 341 $.95$ 67.1 1966 $39,508$ 588 382 $.96$ 65.0 1967 $40,495$ 607 375 $.93$ 61.8 1968 $41,487$ 621 394 $.95$ 63.4 1969 $42,598$ 662 413 $.97$ 62.4 1970 $43,512$ 707 435 1.00 61.5 1971 $44,560$ 739 451 1.01 61.6 1972 $45,397$ 765 463 1.02 60.5 1973 $46,375$ 796 478 1.03 60.0 1974 $47,185$ 825 491 1.04 59.5 1975 $47,840$ 851 502 1.05 59.0 1976 $48,221$ 874 511 1.06 58.5 1977 $48,484$ 895 519 1.07 58.0 1979 $48,496$ 945 529 1.09 56.0		1	2	3	4	5
1959 $28,997$ 544 482 1.66 88.6 1960 $30,219$ 525 459 1.52 87.4 1961 $31,849$ 441 382 1.20 86.6 1962 $33,111$ 418 342 1.03 61.8 1963 $34,232$ 429 337 $.98$ 78.6 1964 $35,617$ 470 340 $.95$ 72.3 1965 $37,700$ 508 341 $.95$ 67.1 1966 $39,508$ 588 382 $.96$ 65.0 1967 $40,495$ 607 375 $.93$ 61.8 1968 $41,487$ 621 394 $.95$ 63.4 1969 $42,598$ 662 413 $.97$ 62.4 1970 $43,512$ 707 435 1.00 61.5 1971 $44,560$ 739 451 1.01 61.6 1972 $45,397$ 765 463 1.02 60.5 1973 $46,375$ 796 478 1.03 60.0 1974 $47,185$ 825 491 1.04 59.5 1975 $47,840$ 851 502 1.05 59.0 1976 $48,221$ 874 511 1.06 58.5 1977 $48,484$ 895 519 1.07 58.0 1978 $48,536$ 903 524 1.08 57.0 1979 $48,496$ 945 529	1958	27,934	515	451	1.62	87.6
1960 $30,219$ 525 459 1.52 87.4 1961 $31,849$ 441 382 1.20 86.6 1962 $33,111$ 418 342 1.03 61.8 1963 $34,232$ 429 337 $.98$ 78.6 1964 $35,617$ 470 340 $.95$ 72.3 1965 $37,700$ 508 341 $.95$ 67.1 1966 $39,508$ 588 382 $.96$ 65.0 1967 $40,495$ 607 375 $.93$ 61.8 1968 $41,487$ 621 394 $.95$ 63.4 1969 $42,598$ 662 413 $.97$ 62.4 1970 $43,512$ 707 435 1.00 61.5 1971 $44,560$ 739 451 1.01 61.6 1972 $45,397$ 765 463 1.02 60.5 1973 $46,375$ 796 478 1.03 60.0 1974 $47,185$ 825 491 1.04 59.5 1975 $47,840$ 851 502 1.05 59.0 1976 $48,221$ 874 511 1.06 58.5 1977 $48,484$ 895 519 1.07 58.0 1978 $48,536$ 903 524 1.08 57.0 1979 $48,496$ 945 529 1.09 56.0	1959	28,997	544	482		
1961 $31,849$ 441 382 1.20 86.6 1962 $33,111$ 418 342 1.03 61.8 1963 $34,232$ 429 337 98 78.6 1964 $35,617$ 470 340 95 72.3 1965 $37,700$ 508 341 $.95$ 67.1 1966 $39,508$ 588 382 $.96$ 65.0 1967 $40,495$ 607 375 $.93$ 61.8 1968 $41,487$ 621 394 $.95$ 63.4 1969 $42,598$ 662 413 $.97$ 62.4 1970 $43,512$ 707 435 1.00 61.5 1971 $44,560$ 739 451 1.01 61.6 1972 $45,397$ 765 463 1.02 60.5 1973 $46,375$ 796 478 1.03 60.0 1974 $47,185$ 825 491 1.04 59.5 1975 $47,840$ 851 502 1.05 59.0 1976 $48,221$ 874 511 1.06 58.5 1977 $48,484$ 895 519 1.07 58.0 1978 $48,536$ 903 524 1.08 57.0 1979 $48,496$ 945 529 1.09 56.0	1960	30,219	525	459		
1962 $33,111$ 418 342 1.03 61.8 1963 $34,232$ 429 337 $.98$ 78.6 1964 $35,617$ 470 340 $.95$ 72.3 1965 $37,700$ 508 341 $.95$ 67.1 1966 $39,508$ 588 382 $.96$ 65.0 1967 $40,495$ 607 375 $.93$ 61.8 1968 $41,487$ 621 394 $.95$ 63.4 1969 $42,598$ 662 413 $.97$ 62.4 1970 $43,512$ 707 435 1.00 61.5 1971 $44,560$ 739 451 1.01 61.6 1972 $45,397$ 765 463 1.02 60.5 1973 $46,375$ 796 478 1.03 60.0 1974 $47,185$ 825 491 1.04 59.5 1975 $47,840$ 851 502 1.05 59.0 1976 $48,221$ 874 511 1.06 58.5 1977 $48,484$ 895 519 1.07 58.0 1978 $48,536$ 903 524 1.08 57.0 1979 $48,496$ 945 529 1.09 56.0	1961	31,849	441	382		
1963 $34,232$ 429 337 $.98$ 78.6 1964 $35,617$ 470 340 $.95$ 72.3 1965 $37,700$ 508 341 $.95$ 67.1 1966 $39,508$ 588 382 $.96$ 65.0 1967 $40,495$ 607 375 $.93$ 61.8 1968 $41,487$ 621 394 $.95$ 63.4 1969 $42,598$ 662 413 $.97$ 62.4 1970 $43,512$ 707 435 1.00 61.5 1971 $44,560$ 739 451 1.01 61.6 1972 $45,397$ 765 463 1.02 60.5 1973 $46,375$ 796 478 1.03 60.0 1974 $47,185$ 825 491 1.04 59.5 1975 $47,840$ 851 502 1.05 59.0 1976 $48,221$ 874 511 1.06 58.5 1977 $48,484$ 895 519 1.07 58.0 1978 $48,536$ 903 524 1.08 57.0 1979 $48,496$ 945 529 1.09 56.0	1962	33,111	418	342	1.03	
1964 $35,617$ 470 340 $.95$ 72.3 1965 $37,700$ 508 341 $.95$ 67.1 1966 $39,508$ 588 382 $.96$ 65.0 1967 $40,495$ 607 375 $.93$ 61.8 1968 $41,487$ 621 394 $.95$ 63.4 1969 $42,598$ 662 413 $.97$ 62.4 1970 $43,512$ 707 435 1.00 61.5 1971 $44,560$ 739 451 1.01 61.6 1972 $45,397$ 765 463 1.02 60.5 1973 $46,375$ 796 478 1.03 60.0 1974 $47,185$ 825 491 1.04 59.5 1975 $47,840$ 851 502 1.05 59.0 1976 $48,221$ 874 511 1.06 58.5 1977 $48,484$ 895 519 1.07 58.0 1978 $48,536$ 903 524 1.08 57.0 1979 $48,496$ 945 529 1.09 56.0	1963	34,232	429	337	.98	
1965 $37,700$ 508 341 $.95$ 67.1 1966 $39,508$ 588 382 $.96$ 65.0 1967 $40,495$ 607 375 $.93$ 61.8 1968 $41,487$ 621 394 $.95$ 63.4 1969 $42,598$ 662 413 $.97$ 62.4 1970 $43,512$ 707 435 1.00 61.5 1971 $44,560$ 739 451 1.01 61.6 1972 $45,397$ 765 463 1.02 60.5 1973 $46,375$ 796 478 1.03 60.0 1974 $47,185$ 825 491 1.04 59.5 1975 $47,840$ 851 502 1.05 59.0 1976 $48,221$ 874 511 1.06 58.5 1977 $48,484$ 895 519 1.07 58.0 1978 $48,536$ 903 524 1.08 57.0 1979 $48,496$ 945 529 1.09 56.0	L964	35,617	470	340		
196639,508588382.9665.0196740,495607375.9361.8196841,487621394.9563.4196942,598662413.9762.4197043,5127074351.0061.5197144,5607394511.0161.6197245,3977654631.0260.5197346,3757964781.0360.0197447,1858254911.0459.5197547,8408515021.0559.0197648,2218745111.0658.5197748,4848955191.0758.0197848,5369035241.0857.0197948,4969455291.0956.0	L965	37,700	508	341		
196740,495607375.9361.8196841,487621394.9563.4196942,598662413.9762.4197043,5127074351.0061.5197144,5607394511.0161.6197245,3977654631.0260.5197346,3757964781.0360.0197447,1858254911.0459.5197547,8408515021.0559.0197648,2218745111.0658.5197748,4848955191.0758.0197848,5369035241.0857.0197948,4969455291.0956.0	1966	39,508	588	382	.96	
L96942,598662413.9762.4L97043,5127074351.0061.5L97144,5607394511.0161.6L97245,3977654631.0260.5L97346,3757964781.0360.0L97447,1858254911.0459.5L97547,8408515021.0559.0L97648,2218745111.0658.5L97748,4848955191.0758.0L97848,5369035241.0857.0L97948,4969455291.0956.0	1967	40,495	607	375	.93	61.8
197043,5127074351.0061.5197144,5607394511.0161.6197245,3977654631.0260.5197346,3757964781.0360.0197447,1858254911.0459.5197547,8408515021.0559.0197648,2218745111.0658.5197748,4848955191.0758.0197848,5369035241.0857.0197948,4969455291.0956.0	1968	41,487	621	394	.95	63.4
197144,5607394511.0161.6197245,3977654631.0260.5197346,3757964781.0360.0197447,1858254911.0459.5197547,8408515021.0559.0197648,2218745111.0658.5197748,4848955191.0758.0197848,5369035241.0857.0197948,4969455291.0956.0	1969	42,598	662	413	.97	62.4
197245,3977654631.0260.5197346,3757964781.0360.0197447,1858254911.0459.5197547,8408515021.0559.0197648,2218745111.0658.5197748,4848955191.0758.0197848,5369035241.0857.0197948,4969455291.0956.0		43,512	707	435	1.00	61.5
197346,3757964781.0360.0197447,1858254911.0459.5197547,8408515021.0559.0197648,2218745111.0658.5197748,4848955191.0758.0197848,5369035241.0857.0197948,4969455291.0956.0		•			1.01	61.6
197447,1858254911.0459.5197547,8408515021.0559.0197648,2218745111.0658.5197748,4848955191.0758.0197848,5369035241.0857.0197948,4969455291.0956.0			765	463	1.02	60.5
.97547,8408515021.0559.0.97648,2218745111.0658.5.97748,4848955191.0758.0.97848,5369035241.0857.0.97948,4969455291.0956.0					1.03	60.0
197648,2218745111.0658.5197748,4848955191.0758.0197848,5369035241.0857.0197948,4969455291.0956.0			825	491	1.04	59.5
197748,4848955191.0758.0197848,5369035241.0857.0197948,4969455291.0956.0		•			1.05	59.0
197848,5369035241.0857.0197948,4969455291.0956.0					1.06	· 58.5
.979 48,496 945 529 1.09 56.0		•			1.07	58.0
		•				57.0
L980 48,178 964 530 1.10 55.0						
	1980	48,178	964	530	1.10	55.0

TABLE 23. ENROLLMENT AT JAMESTOWN COLLEGE, 1958-1980

If the above proportions change as indicated in Table 1, the total enrollment at Jamestown College will approach 1,000 students in 1980. The changes in the proportion appear reasonable in view of the recruiting program for both resident and nonresident students (See Figure 7).

The projections for 1968 were determined as follows:

1. It was assumed that resident fall enrollment will be .95 percent (column 4) of 41,487 (column 1, i.e., the four-year moving total of high school graduates) or 394 students (column 3).

- 2. It was also assumed that resident fall enrollment will be 63.4 percent (column 5) of the total enrollment. The resident enrollment of 394 divided by .634 provides the projection of 621 students (column 2) in 1968.
- B. Mary College.

In addition to the full-time enrollment, a number of students attend Mary College on a part-time basis. The data in Table 24 represent the full-time equivalent enrollment which is expected to increase to 771 students by 1975.

TABLE	24.	ENROLIMENT	\mathbf{AT}	MARY	COLLEGE,	BISMARCK
-------	-----	------------	---------------	------	----------	----------

	Full-Time Equival	ent_Enrollment*	
Year	Number	Year	Number
1959	28	1968	192
1960	73	1969	234
1961	84	1970	285
1962	92	1971	348
1963	114	1972	425
1964	143	1973	518
1965	182	1974	632
1966	183	1975	771
1967	169		

*Arno Gustin, O.S.B., President of Mary College provided the estimates of full-time equivalent enrollment, 1968-1975.

C. Assumption College.

This college started in 1962 with 42 students. By 1967 the enrollment had increased to 109 students of which number 48.5 percent came from North Dakota (Table 25). The capacity at Assumption College is such at the present time that enrollment is limited to about 120 full-time students. Some additional part-time students can be accommodated. The projections on the following page are based on the limitation of 120 students (See Figure 7).

Year	Enrollment	Year	Enrollment
1962	42	10.00	110
		1968	112
1963	60	1969	115
1964	98	1970	117
1965	116	1971	120
1966	101	1972	120
1967	109	1973	120
		1974	120
		1975	120

TABLE 25. ENROLLMENT AT ASSUMPTION COLLEGE, RICHARDTON, NORTH DAKOTA

SUMMARY

The projections of fall enrollment at the various institutions of higher learning in North Dakota have been based largely on the projection of the number of high school graduates in North Dakota; an analysis of the relationship between enrollments and a four-year moving total of high school graduates; an extension of the trends of the proportions derived therefrom; and the application of the latter to the projected moving total of high school graduates. The projections thus derived have either been substantiated or revised in accordance with suggestions offered by the administrative officials at the different institutions.

A. Comparison of Projected and Actual Enrollments, 1968.

A comparison of the projections made for the fall enrollment in 1968 with the actual enrollments is presented in Table 26. This table does not include University of North Dakota, Ellendale Branch, because the projections made for years subsequent to 1968 are based in part on the actual enrollment in 1968 relative to enrollment during the preceding years. Mary College is also omitted because all past, current, and projected enrollments were furnished by the administrators of that college.

B. Projected Enrollment in 1978 (or 1975) Compared With Actual Enrollment in 1968.

In order to obtain an insight regarding enrollment changes that may be expected during the ensuing ten years, Table 27 has been prepared. This table gives the actual fall enrollment in 1968 and projected fall enrollment in 1978 for most of the institutions. For the other schools, the projections are for 1975. The changes are graphically illustrated in Figure 8. - 45 -

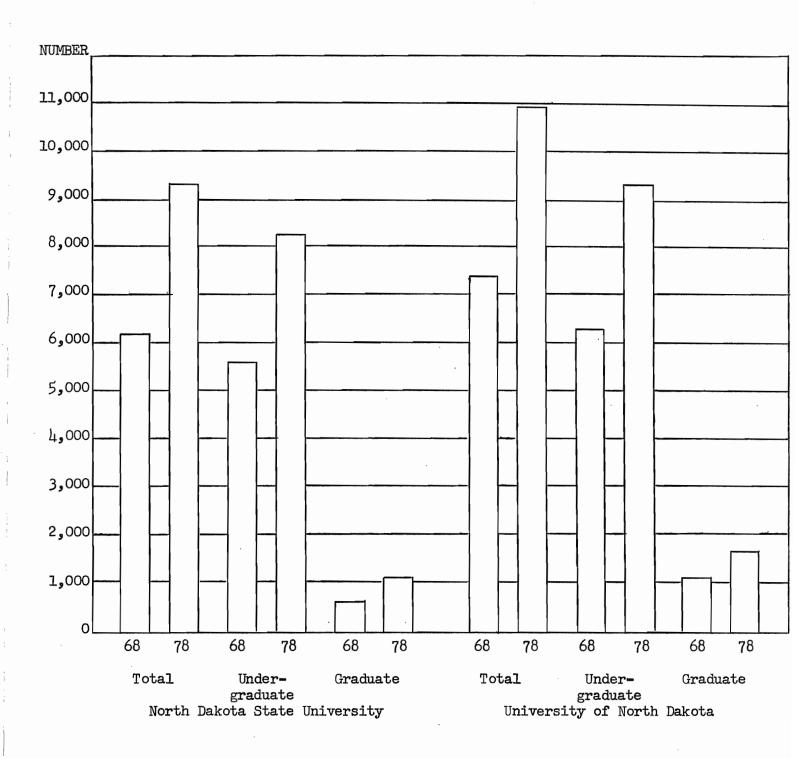
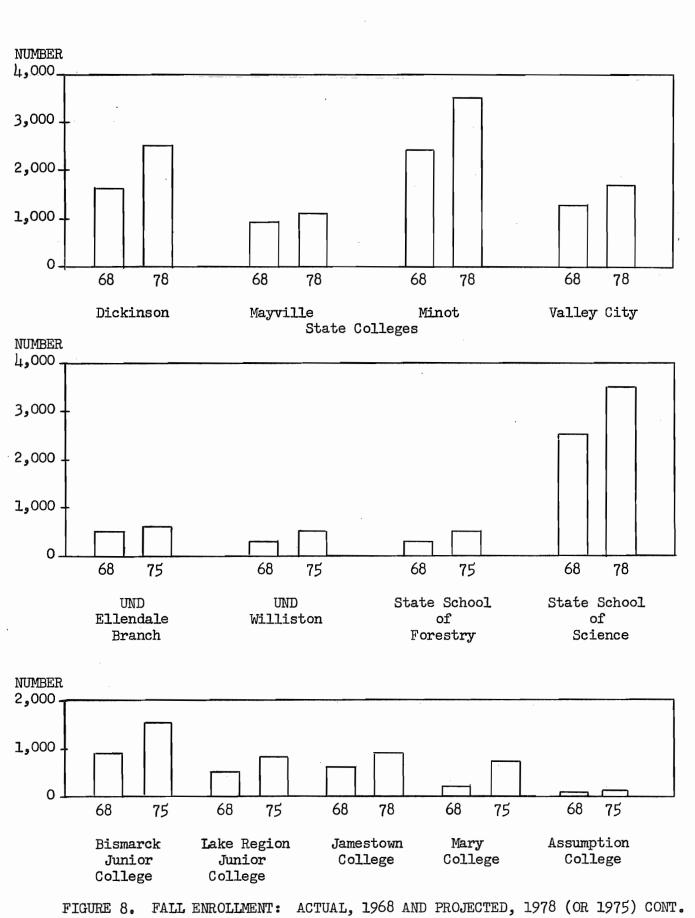


FIGURE 8. FALL ENROLLMENT: ACTUAL, 1968 AND PROJECTED, 1978



- 46 -

	Enrollm	nent	Projected As Percent
Institution	Projected	Actual	of Actual
North Dakota State University	6,302	6,228	101.2
Undergraduate	5,623	5,618	101.2
Graduate	679	610	111.3
University of North Dakota	7,360	7,398	99.5
Undergraduate	6,369	6,283	101.3
Graduate	991	1,115	88.9
University of North Dakota			
Williston Branch	350	326	107.4
Dickinson State College	1,625	1,639	99.1
Mayville State College	889	880	101.0
Minot State College	2,427	2,445	99.3
Valley City State College	1,296	1,264	102.5
North Dakota State School			
of Forestry	321	345	93.1
North Dakota State School			
of Science	2,529	2,528	100.0
Junior College and Business	979	940	104.1
Trade and Technical	1,550	1,588	97.6
Bismarck Junior College	930	923	100.8
Lake Region Junior College	525	531	99.9
Jamestown College	621	612	101.5

TABLE 26. PROJECTED AND ACTUAL FULL TIME FALL ENROLLMENT AT INSTITUTIONS OF HIGHER LEARNING, 1968

TABLE 27. FALL ENROLIMENT AT NORTH DAKOTA INSTITUTIONS OF HIGHER LEARNING, ACTUAL 1968, PROJECTED 1978	INSTITUTIONS OF HIGHER I	EARNING, ACTUAL 1968, P	ROJECTED 1978
	(1) Actual 1968	(2) Projected 1978	Percent Column 2 is of Column 1
State Supported Institutions North Dakota State University Undergraduate Graduate Total	5,618 610 6,228	8,260 <u>1,105</u> 9,365	147 181 150
University of North Dakota Undergraduate Graduate Total	6,283 <u>1,115</u> 7,398	9,354 <u>1,615</u> 10,969	149 145 148
Both Universities Undergraduate Graduate Total	11,901 <u>1,725</u> 13,626	17,614 <u>2,720</u> 20,334	148 158 149
University Branches Bottineau (NDSU) Ellendale (UND) Williston (UND) Total Total Both Universities and Branches	345 482 <u>326</u> <u>1,153</u>	519* 600* <u>500</u> * 21,953	150 124 153 141 149
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(continued)			
	(1) Actual 1968	(2) Projected 1978	Percent Column 2 is of Column 1
State Supported Institutions (continued)			
State Colleges Dickinson Mayville Minot	1,639 880 2,445	2,544 1,105 3,305	155 114 125
Valley City Total State School of Science Total State Supported	$\frac{1,264}{6,228}$ $\frac{2,528}{23,535}$	$\frac{1,773}{8,727}$ $\frac{3,544}{34,224}$	140 140 145
Locally Supported Institutions Bismarck Junior College Lake Region Junior College Total Total State and Locally Supported	923 <u>531</u> <u>1,454</u> 24,989	$\frac{1,562}{800*} \\ \frac{2,362}{36,586}$	169 151 162 147
Privately Supported Jamestown College Mary College Assumption College Total Total Total All Institutions	$\frac{612}{192} \\ \frac{916}{25,905}$	903 771* <u>120</u> * <u>38,380</u>	148 401 107 198 148

TABLE 27. FALL ENROLLMENT AT NORTH DAKOTA INSTITUTIONS OF HIGHER LEARNING, ACTUAL 1968, PROJECTED 1978

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*The total figure of 38,380 students projected for 1978 does not take into consideration increases in enrollment from 1975 to 1978 at Bottineau, Ellendale, Williston, Lake Region Junior College, Mary College, and Assumption College.

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