

IOWA STATE BOARD OF REGENTS

**PROPOSED CHARACTERISTICS AND LOCATION
OF A NEW STATE INSTITUTION OF HIGHER
EDUCATION IN WESTERN IOWA**

Volume II

Location Of A New Institution And Cost Considerations

CRESAP, McCORMICK and PAGET

in collaboration with

THE PERKINS & WILL PARTNERSHIP, ARCHITECTS

IOWA STATE BOARD OF REGENTS

PROPOSED CHARACTERISTICS AND LOCATION
OF A NEW STATE INSTITUTION OF HIGHER
EDUCATION IN WESTERN IOWA

Volume II

Location Of A New Institution And Cost Considerations

This report is confidential and intended solely for the
information and benefit of the immediate recipient hereof.

IOWA STATE BOARD OF REGENTS
PROPOSED CHARACTERISTICS AND LOCATION
OF A NEW STATE INSTITUTION OF HIGHER
EDUCATION IN WESTERN IOWA

Volume II
Location Of A New Institution And Cost Considerations

TABLE OF CONTENTS

<u>Chapter</u>		<u>Page</u>
I	INTRODUCTION	
	Objective And Scope Of The Location Study	1
	Approach	2
	Organization Of This Volume	2
II	AN OVERVIEW OF THE IOWA ECONOMY	
	The Iowa Economy	4
	The Western Iowa Economy	6
	Summary And Conclusions	11
III	GENERAL LOCATION AND SITE CRITERIA, AND SELECTION OF GENERAL LOCATION	
	Criteria For General Location And Site Selection	13
	General Location Selection	18
IV	SITE SELECTION	
	Site Selection Requirements	41
	Overall Selection Approach	42
	Community Response	43
	Phase I Evaluation	44
	Phase I Conclusions	52
	Phase I Recommendations	53
	Board Of Regents Action	54

<u>Chapter</u>		<u>Page</u>
V	PROJECTED OPERATING COSTS	
	Operating Cost Estimates	55
	Cost Estimates	56
	Operating Cost Projections	62
VI	EVALUATION OF PRIME SITES, SITE RECOMMENDATIONS, AND CAPITAL COSTS	
	Evaluation Of Prime Sites	66
	Site Recommendations	73
	Capital Costs Of The New Institution	74
VII	OTHER CONSIDERATIONS	
	Impact Upon Existing Institutions	77
	Faculty Recruitment Problems	81
	APPENDIXES	
	A - Selected Economic Profile Of 38 Western Iowa Counties, 1960	
	B - Changes In Effective Buying Income, 38 Western Iowa Counties, 1961-67	
	C - Location And Site Criteria For The New Institution Of Higher Education In Western Iowa	
	D - Requested Community Profile For Phase I Site Selection	

TABLE OF EXHIBITS

<u>Exhibit</u>		<u>Page</u>
II-1	Counties Exceeding State Total Of 36.8 Per Cent Employed In White Collar Occupations	7
II-2	Counties Exceeding State Percentage of 18.6 Per Cent Of Employment In Manufacturing	8
II-3	Counties Exceeding State Median Family Income	10
III-1	Iowa Colleges And Universities	19
III-2	20-Year Projection Of 18-21-Year-Old Students By County	21
III-3	20-Year Projection Of 18-21-Year-Old Students	23
III-4	20-Year Projection Of 18-21-Year-Old Students	24
III-5	20-Year Projection Of 18-21-Year-Old Students	25
III-6	Mean Geographic Location Of Students Within The State Of Iowa	26
III-7	Mean Geographic Locations Of Students Within Western And Eastern Iowa	28
III-8	Mean Geographic Locations Of Students Within Northwestern And Southwestern Iowa	29
III-9	Migration Analysis Of 1965 High School Graduates	30
III-10	Regional Distribution Of Iowa Student Out-Migration Per Thousand Population	32
III-11	Proposed Major Highway System For Iowa	35
III-12	Alternative General Locations	37
III-13	Selected General Location	40

<u>Exhibit</u>		<u>Page</u>
IV-1	Community Response	45
IV-2	Community Analysis	48
V-1	Educational And General Expenditures For Selected Institutional Groups	58
V-2	Proposed Western Iowa Institution Projection Of Education And General Expense	63
VI-1	Community Bonding Capacity	69
VI-2	School District Bonding Capacity	70
VI-3	Location Comparison Chart	71

I - INTRODUCTION

INTRODUCTION

The overall study presented in three volumes concerns recommending a profile of a new Western Iowa institution, projecting its enrollments, evaluating and recommending a site for the campus, and outlining considerations such as cost and selected factors which the establishment of the new school would entail.

Volume I has discussed the background and current situation of higher education in Iowa, the population and other factors affecting enrollments, and the recommended profile of the new institution and its probable size.

Volume II (this volume) arrives at a recommended location and site, projected operating and capital costs, and the anticipated effect of the new school on existing institutions.

Volume III, prepared by The Perkins and Will Partnership, presents detailed site evaluations and recommended campus plans, together with development and capital costs.

OBJECTIVE AND SCOPE OF THE LOCATION STUDY

- Broadly defined, the objective of this phase of the study was to develop criteria to be used in evaluating general locations for the institution in Western Iowa, selecting alternative general locations, and recommending specific locations and sites.
- This portion of the study also included:
 - A projection of operating costs, based on the approved profile of the new institution
 - An estimate of capital costs, developed by The Perkins and Will Partnership
 - The impact of the proposed school upon existing institutions and problems of faculty recruitment.

APPROACH

- As background, significant features of the Iowa economy were analyzed.
- Criteria for location and site selection were developed for approval by the Board of Regents.
- On the basis of the criteria, general locations were selected and one location was recommended.
- Communities within the general location approved by the Board of Regents were evaluated and specific sites analyzed in collaboration with The Perkins and Will Partnership.
- One site was recommended as first choice.

ORGANIZATION OF
THIS VOLUME

- Following this introductory chapter are six additional chapters and four appendixes:
 - II - An Overview Of The Iowa Economy, which presents significant economic data regarding the State, with special emphasis upon the economy of Western Iowa, as background to the study.
 - III - General Location And Site Criteria, And Selection Of General Location, which presents the bases for selection of criteria, the criteria selected and approved by the Board of Regents, the application of these criteria in Western Iowa, and the recommendation of alternative general locations.
 - IV - Site Selection, which outlines the architectural and engineering as well as community considerations, the approach to the communities in the general location, evaluation of the communities, and recommendation of three communities as potential locations for the new institution.
 - V - Projected Operating Costs, which develops operating cost estimates based upon the profile of the proposed institution.

- VI - Evaluation Of Prime Sites, Site Recommendations, And Capital Costs, which summarizes the architectural and engineering evaluations conducted by The Perkins and Will Partnership, recommends a specific site, and presents capital cost estimates of the campus at the recommended site.
- VII - Other Considerations, which discusses the impact the proposed school could have on existing institutions and problems of faculty recruitment.
- Appendix A - Selected Economic Profile Of 38 Western Iowa Counties, 1960.
- Appendix B - Changes In Effective Buying Income, 38 Western Iowa Counties, 1961-67.
- Appendix C - Location And Site Criteria For The New Institution Of Higher Education In Western Iowa.
- Appendix D - Requested Community Profile For Phase I Of Site Selection.

II - AN OVERVIEW OF THE IOWA ECONOMY

This chapter discusses certain economic factors which are significant as background to the study of a Western Iowa institution. Special emphasis is given to the economy of Western Iowa.

THE IOWA
ECONOMY

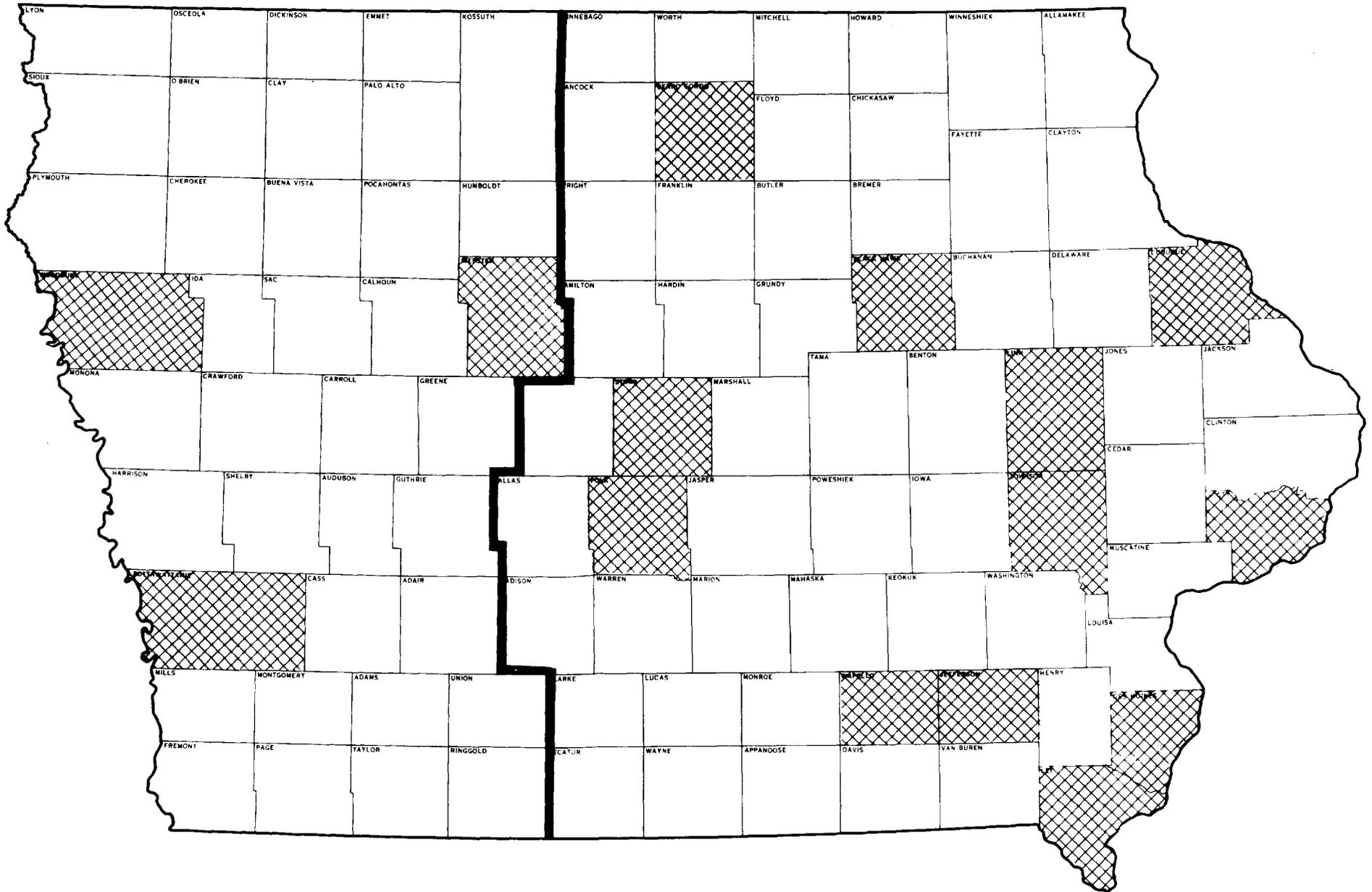
- Iowa is undergoing a substantial shift in its employment mix.
 - Manufacturing and service industries are showing growth.
 - As elsewhere in the United States, agricultural employment is decreasing.
- These two trends - the declining importance of agriculture in the State's economy and growth in the industrial and service sector - are tending to balance.
 - Iowa does not have a major unemployment problem, although underemployment does exist.
 - Iowa's farmers continue to be relatively prosperous as mechanization grows and production per farm worker increases.
- Job opportunities for Iowa's youth, however, are far from ideal, as evidenced by the continuing out-migration of workers to other states.
 - From 1950 to 1965, estimated net out-migration was 387,000.
 - A high proportion of this out-migration has occurred in the productive 20-to-50-year age group, so that the older population has increased to higher than normal levels.
- The agricultural decline has also resulted in population shifts within the State, as workers move to areas offering greater employment opportunities.
 - In 1950, 47.7 per cent of the total population lived in urban areas (defined as places of 2,500 or more); in 1960, urban population represented 53.0 per cent.

- o It is generally accepted that the rural-urban shift has continued during the present decade.
- The large urban centers of the State accounted for the major portion of the urban increase.
- Personal income, regarded as an excellent indicator of the health of the economy, has grown at a lesser rate than in the United States.
 - From 1950 to 1965, total personal income in Iowa grew at an annual rate of 4.2 per cent.
 - o During the 1950-65 period, total personal income in the United States grew at an annual rate of 5.7 per cent.
 - Per capita personal income, though growing at an annual rate of 3.9 per cent from 1950 to 1965, lagged behind the national growth rate.
 - o However, in recent years the gap between Iowa's per capita income and that of the United States has been narrowing, with the State approaching the national average in 1965.
- In summary, Iowa's rate of economic growth has been less than the national average since 1950.
 - Growth in the volume of economic activity as measured by changes in population, employment and total personal income, did not match the national average.
 - However, per capita income, adjusted for inflationary changes, has increased, with corresponding improvement in the economic welfare of the State's residents.
 - The slower growth in volume of economic activity can be attributed to the great changes in agriculture and the shifting of economic emphasis which is an inevitable result of a movement toward a balanced economic base.
 - There is general optimism concerning Iowa's economic future, measured in terms of personal and family income growth, as the State continues the transition to the manufacturing and service industries.

THE WESTERN
IOWA ECONOMY

- It is difficult to secure economic and social data for regions within a state in the years between the regular 10-year United States Census of population.
 - Economic and social changes during a decade are costly to measure in county or regional units.
 - Available data tend to be based on estimates which incorporate assumptions not easy to test.
 - However, even within these limitations, certain conclusions can be drawn about the economy of Western Iowa.
- The 38 counties that make up Western Iowa, as defined for this study, fall below the State average in available indicators commonly accepted as measures of economic strength (see Appendix A).
- While overall population of the State increased approximately 5 per cent from 1950 to 1960, population in Western Iowa dropped by 3.3 per cent.
 - Estimates indicate that the population is continuing to drop, with a 2.3 per cent decrease from 1960 to 1965.
 - Recent projections foresee a continuing population decrease in the 38 counties for at least the next 15 years.
- The dominance of agriculture in Western Iowa is shown in Exhibits II-1 and II-2.
 - In 1960, 18.6 per cent of Iowa's labor force was employed in manufacturing.
 - o Manufacturing employment in only two Western Iowa counties, Woodbury and Webster, exceeded the State average.
 - o Seventeen of the 61 counties in the eastern part of the State had manufacturing employment over the State average.

COUNTIES EXCEEDING STATE TOTAL OF
 36.8 PER CENT EMPLOYED IN WHITE COLLAR OCCUPATIONS
 1960



- In 1960, 36.8 per cent of Iowa's employed persons were in professional, managerial (except farm), clerical and sales occupations - a category generally called "white-collar" employees.
 - o The number of white-collar employees exceeded the State average in three of Western Iowa's counties - Webster, Woodbury and Pottawattamie.
 - o In Eastern Iowa, 12 counties exceeded the State average in white-collar workers.
- The 1960 census reported Iowa median family income at \$5,069.
 - Exhibit II-3 shows that only three of Western Iowa's 38 counties exceeded the State's median family income, whereas 16 of the 61 Eastern Iowa counties exceeded this figure.
- Other family income statistics also show the economic disparity between the eastern and western parts of the State.
 - In 1960, 25.3 per cent of Iowa families had incomes under \$3,000.
 - o Of the 38 Western counties, 35 reported a higher percentage of families in this category than the State average.
 - o Of the 61 Eastern counties, 45 - a distinctly lower proportion - had more low-income families than the State average.
 - The census reported 10.7 per cent of Iowa families with incomes over \$10,000.
 - o Two of Western Iowa's 38 counties exceeded the State average.
 - o Thirteen of Eastern Iowa's 61 counties exceeded the State average.
- Widely accepted annual estimates of effective buying income (roughly equivalent to per capita income), prepared by Sales Management magazine, give some additional insight into the economic differences between the western and eastern regions of the State, as the following

table shows (Appendix B gives the figures by individual county).

EFFECTIVE BUYING INCOME(a)

	<u>1961</u> <u>Per Capita</u>	<u>1967</u> <u>Per Capita</u>	<u>Per Cent</u> <u>Increase</u> <u>1961-67</u>
Iowa Total	\$1,806	\$2,779	54.0%
Eastern Iowa	1,883	2,825	50.0
Western Iowa	1,613	2,557	58.5

(a) Survey of Buying Power, June 1962 and June 1968,
Sales Management.

- Per capita buying income for 1961 in Western Iowa was significantly below both the Statewide figure and the average for 61 Eastern Iowa counties, and in 1967 was still low.
- However, during the six-year period Western Iowa's per capita buying income has increased slightly more than Eastern Iowa and the State as a whole.
 - o This greater increase, coupled with an estimated decrease in Western Iowa's population, could reflect the beginning of a change in Western Iowa's economic picture - due in part to the official emphasis upon economic development in this region.

SUMMARY AND
CONCLUSIONS

- While this brief overview of the Iowa economy should be kept in mind as general background, broad economic considerations were not included in the design of general location criteria, since it was felt that the selection of a specific area within Western Iowa could not be adequately justified on an economic basis.
 - Economic comparisons between small geographic units, such as a county or several counties, would be based upon inadequate statistical information.

AN OVERVIEW OF THE IOWA ECONOMY (Cont'd)

- Including economic factors among the criteria used to select a location is of questionable value.

- o While the economic effects of a new school undoubtedly would be felt in the community in which it is established, there is no guarantee that an entire region, such as Western Iowa, would directly benefit from it.
- o However, programs specifically designed for Western Iowa, complementing the new school's Statewide mission, certainly would benefit the entire region.
- o Since the 38 Western Iowa counties have lagged in economic development compared with the rest of the State, a new institution of higher education could well engage in regional studies to assist Western Iowa in its transition from agricultural dependence to a more balanced economic base.

research

III - GENERAL LOCATION AND SITE CRITERIA,
AND SELECTION OF GENERAL LOCATION

CRITERIA FOR GENERAL LOCATION
AND SITE SELECTION (Cont'd)

SELECTION
OF CRITERIA

- Considerable experience in campus location and selection has been generated in recent years by the great expansion of facilities for higher education within the United States.
 - The approach to developing criteria which would be appropriate to the State of Iowa was to make maximum use of this experience.
 - While it was recognized that the selection criteria developed by other states would not be directly applicable to the conditions and situations within Iowa, it was felt that they could serve as a valuable guide in selecting and developing appropriate criteria.
 - The general experience of the following 10 states in establishing new public institutions of higher education was reviewed:
 - California
 - Georgia
 - Illinois
 - Indiana
 - Kentucky
 - Minnesota
 - Missouri
 - New York
 - Ohio
 - Pennsylvania.

DEFINITION
OF CRITERIA

- Appendix C to this volume contains the criteria for location and site selection, presented in five main sections:
 - Basic principles and considerations
 - Definition of terms
 - Objectives of general location and site selection criteria
 - General location criteria
 - Site criteria.

CRITERIA FOR GENERAL LOCATION AND SITE SELECTION (Cont'd)

Basic Principles And Considerations

- This section sets forth 10 concepts which are considered fundamental to the overall selection process, and which revolve around the following matters:
 - Fundamental role of the institution
 - Location in relation to desirable resources
 - Source of students
 - Faculty recruitment considerations
 - Relationship with nearby communities
 - Relationship with similar institutions.
- These matters and the concepts embodying them were regarded as underlying premises to the development of the selection criteria, and constitute an integral part both of the general location and of the site criteria.

Definition Of Terms

- The meaning of six important terms used in the selection criteria is set forth:
 - General location
 - General campus
 - Urban site
 - Suburban site
 - Campus core
 - Community.

Objectives Of General Location And Site Selection Criteria

- This section explains the overall purpose of the general location and the site criteria, as successive steps in the process of determining an optimum location for the new school.
 - General location criteria provide a basis for evaluating general geographic areas in which the institution may best be located to fulfill its desired role and scope.

CRITERIA FOR GENERAL LOCATION
AND SITE SELECTION (Cont'd)

- Site criteria provide a basis for evaluating specific tracts of land within the general location for the campus of the institution.

General Location Criteria

- The criteria for the general location are defined under four subject headings:
 - Western Iowa boundaries - the 38 counties regarded, for the purposes of this study, as Western Iowa
 - Central location - the mathematical formula for determining the geographic center of concentrations of students to be served
 - Population (community) centers - the kinds of established communities to be considered as possible locations
 - Transportation - the transportation considerations to be weighed in a choice of location.
- In a review of these criteria, two topics may merit additional discussion:
 - The basis for defining the boundaries of Western Iowa
 - The meaning of "college-void area."
- The legislation authorizing this study for a new institution of higher education in Western Iowa failed to define Western Iowa.
 - The only official or State-sponsored definition of Western Iowa was established under the Iowa Development Commission, which authorized an economic analysis of an area identified as Western Iowa, and consisting of the 38 counties defined in the general location criteria.
 - The definition established by the Development Commission has thus been used as representing the boundaries of Western Iowa.

CRITERIA FOR GENERAL LOCATION
AND SITE SELECTION (Cont'd)

- The term "college-void area" is used to describe a general geographic area in which there are no institutions, public or private, similar to the proposed institution.
 - "Similar" takes into consideration such factors as curriculum, capacity, tuition and admission standards.

Site Criteria

- The criteria for selecting the specific tract of land for the campus site are defined under 11 topics:
 - Environment and appeal
 - Present and potential land use
 - Topography
 - Community development
 - Availability
 - Costs
 - Community support
 - Educational base
 - Part-time employment opportunities
 - Student population
 - Development characteristics.

Approval Of Criteria

- The general location and site selection criteria as presented in Appendix C were approved by the State Board of Regents in May 1968.

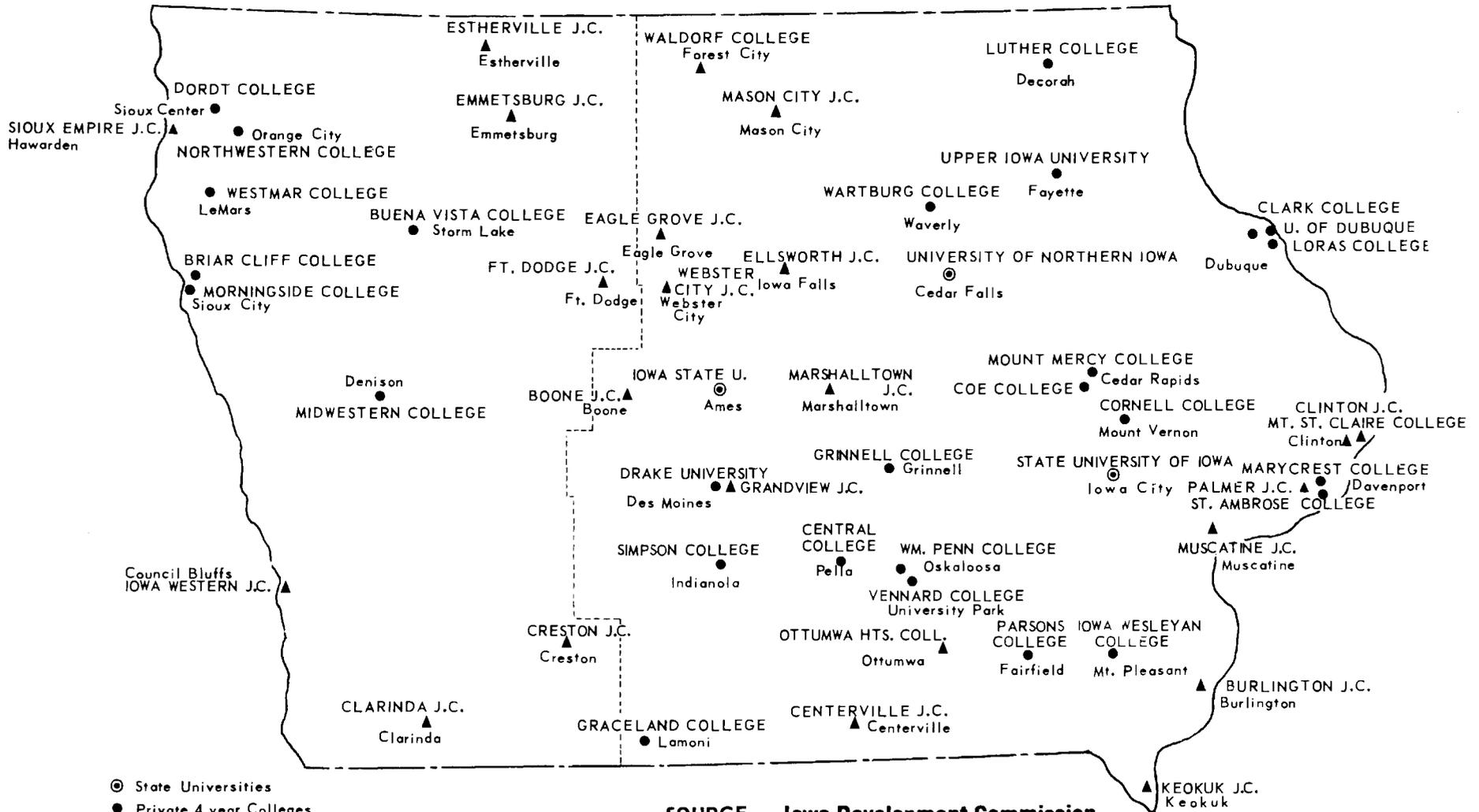
GENERAL LOCATION SELECTION

This section first analyzes Western Iowa in terms of the criteria for a general location; second, presents conclusions and recommendations resulting from the analysis; and third, discusses the selection of a general location by the State Board of Regents.

COLLEGE-VOID AREA ANALYSIS

- The role and scope of the new institution of higher education as proposed by Heald and Hobson may be summarized in terms of the following major characteristics.
 - The institution is to serve Statewide needs.
 - It is to be a four-year undergraduate institution.
 - It is to offer a liberal arts curriculum with specialized educational opportunities.
 - The admissions policy is to be flexible.
- On the basis of these characteristics, existing institutions having a similar role and scope in higher education were identified.
 - Those colleges located in Western Iowa which currently offer the same broad four-year liberal arts educational opportunities are considered to be the following:
 - Briar Cliff
 - Buena Vista
 - Dordt
 - Midwestern
 - Morningside
 - Northwestern
 - Westmar.
- The location of these schools, as well as of all other institutions of higher education in Iowa, is shown in Exhibit III-1.

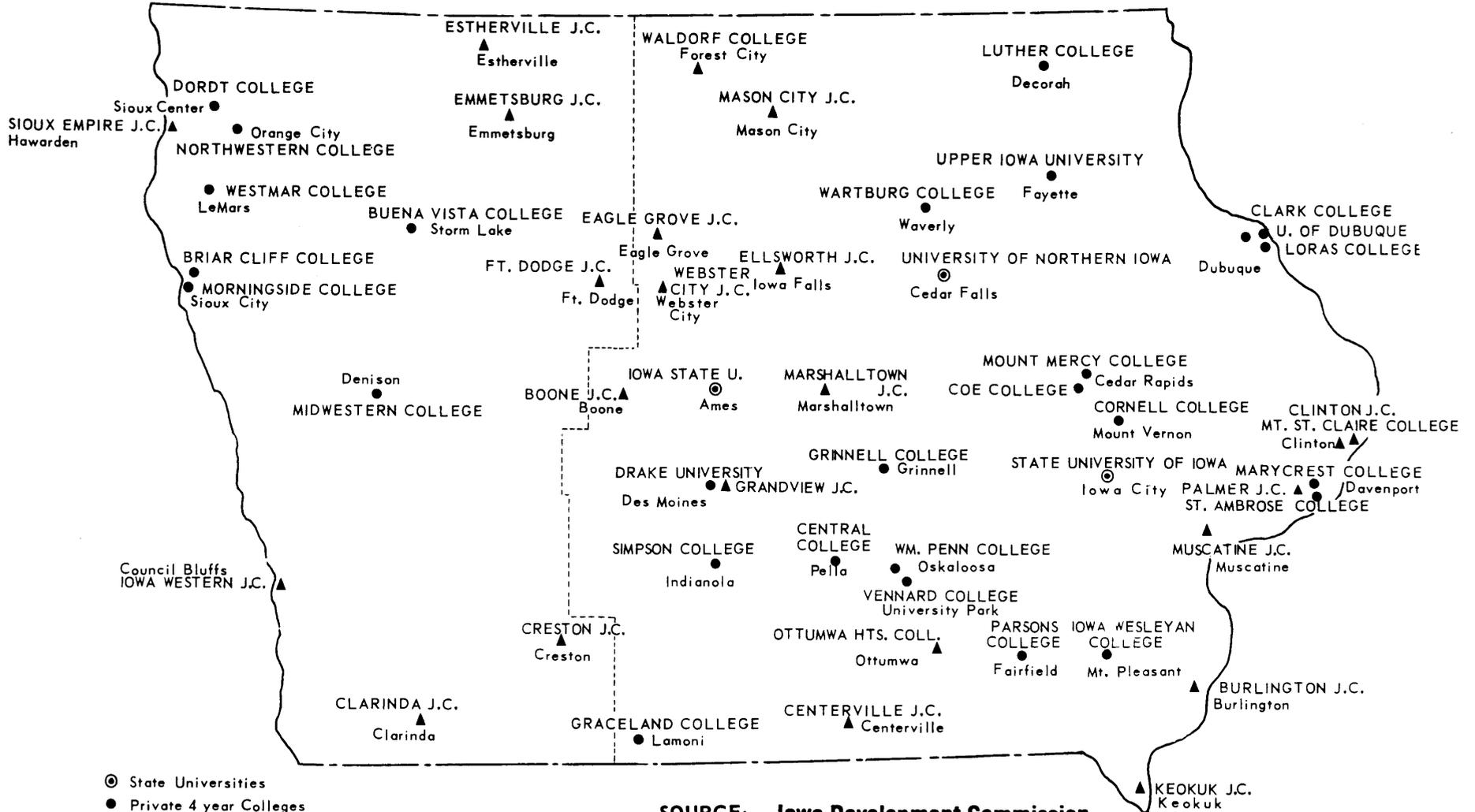
IOWA COLLEGES AND UNIVERSITIES



- ⊙ State Universities
- Private 4 year Colleges and Universities
- ▲ Junior Colleges (2 years)

SOURCE: Iowa Development Commission
Des Moines, Iowa 1968

IOWA COLLEGES AND UNIVERSITIES



- ⊙ State Universities
- Private 4 year Colleges and Universities
- ▲ Junior Colleges (2 years)

SOURCE: Iowa Development Commission
Des Moines, Iowa 1968

GENERAL LOCATION SELECTION (Cont'd)

- This exhibit brings out two significant points.
 - o All of the four-year institutions located in Western Iowa are in the northern part.
 - o Four junior colleges are located in the northern part; three are located in the south.

ANALYSIS OF STUDENT LOCATIONS

College-Going Population

- The methodology used to prepare basic demographic data and convert them to projections of potential students is described in detail in Volume I of this report; the results of the 20-year projection of undergraduate students (18-21 year olds) by county are shown in Exhibit III-2.
 - Exhibits III-3 through III-5 present a graphic summary analysis by geographic region of these detailed projections:
 - o Exhibit III-3 - State of Iowa
 - o Exhibit III-4 - Eastern Iowa
 - o Exhibit III-5 - Western Iowa.

Location Model

- With these undergraduate student projections as inputs to site selection criteria, geographic centers of student concentrations were identified.
 - The results of this analysis are presented in the following series of exhibits; in all of them, the identified location represents the full 20-year period.
 - o Exhibit III-6 presents the mean geographic location of students within the entire State of Iowa - in Marshall County, well within the Eastern region.

20-YEAR PROJECTION OF 18-21 YEAR OLD STUDENTS BY COUNTY

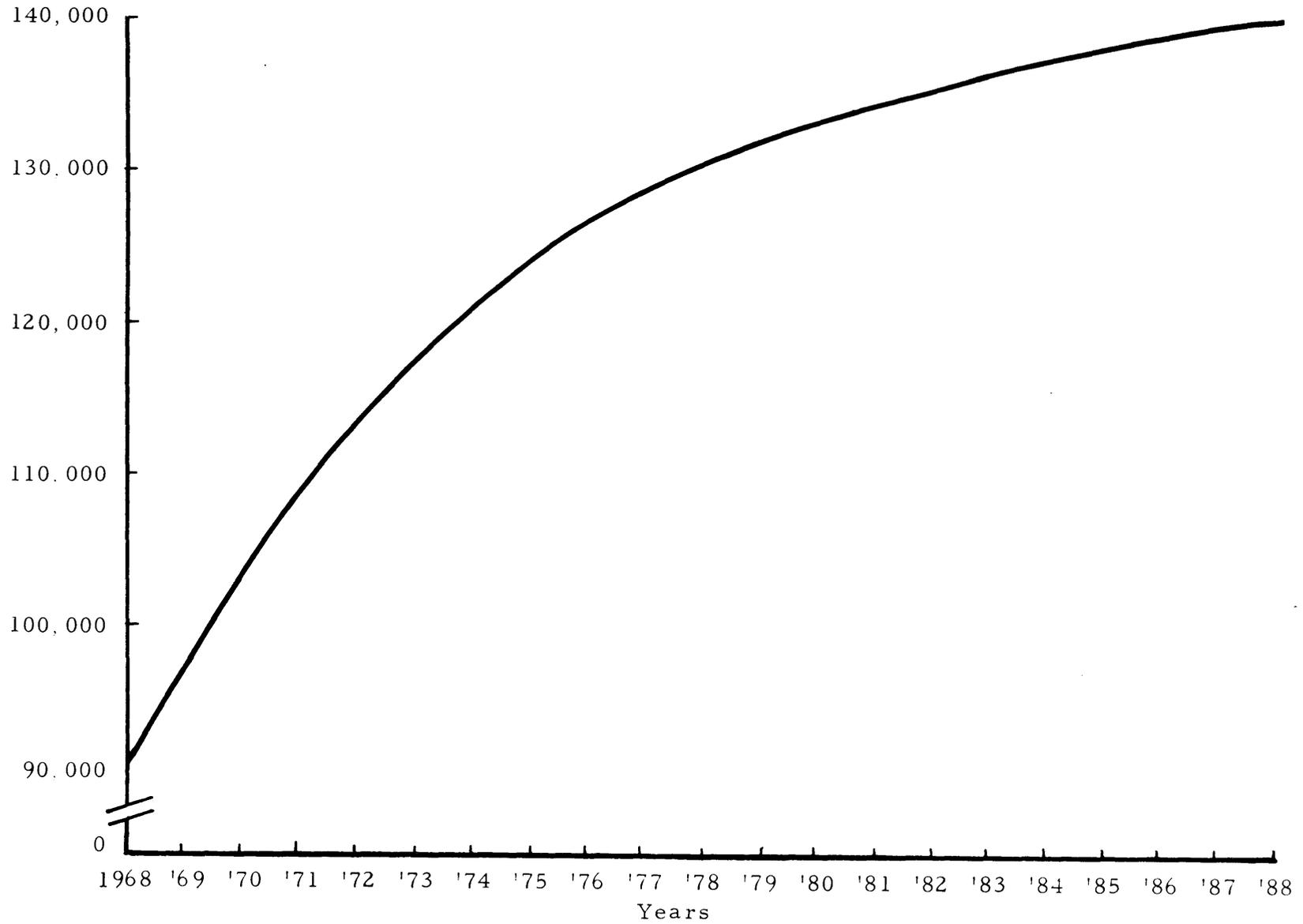
County	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1983	1988
Adair	261	287	321	254	268	278	300	317	242	249	255	230	337
Adams	272	195	220	172	181	187	198	206	151	154	155	124	175
Allamakee	357	502	558	472	496	513	567	609	503	528	533	502	659
Appanoose	341	361	389	279	288	298	339	375	275	297	300	286	403
Audubon	291	324	365	308	326	337	360	376	300	307	310	251	340
Benton	713	771	847	778	807	836	895	938	831	852	861	826	1,041
Black Hawk	4,997	5,215	5,542	6,666	6,975	7,225	7,249	7,163	8,075	8,166	8,258	8,906	8,143
Boone	841	893	966	903	943	978	1,021	1,049	943	970	980	932	1,118
Bremer	755	802	865	951	1,029	1,066	1,086	1,087	1,120	1,173	1,184	1,194	1,205
Buchanan	738	786	850	760	784	812	881	932	822	857	867	912	1,174
Buena Vista	654	700	762	722	757	785	826	853	777	802	810	722	850
Butler	525	560	607	541	556	576	618	648	564	581	586	536	688
Calhoun	439	476	523	441	458	474	503	525	425	433	438	382	497
Carroll	723	786	865	761	800	828	906	969	830	875	885	894	1,118
Cass	498	530	572	529	549	568	592	605	536	543	549	548	649
Cedar	583	608	648	613	621	643	686	717	671	671	699	646	740
Cerro Gordo	1,573	1,708	1,882	1,901	2,000	2,072	2,162	2,219	2,112	2,152	2,177	2,085	2,413
Cherokee	540	587	650	600	624	647	671	684	592	590	597	546	677
Chickasaw	458	587	528	453	470	486	532	569	484	511	516	534	687
Clarke	200	216	235	187	194	201	215	226	173	179	181	158	211
Clay	538	594	662	604	625	647	684	708	610	709	615	547	690
Clayton	635	681	740	640	661	684	748	979	681	712	720	706	895
Clinton	1,723	1,850	2,018	2,003	2,059	2,132	2,293	2,414	2,335	2,398	2,425	2,513	2,964
Crawford	529	570	623	511	529	547	594	631	508	526	531	565	729
Dallas	724	765	824	754	769	796	854	896	805	829	837	837	1,035
Davis	251	266	287	233	239	248	274	295	241	254	257	220	296
Decatur	281	303	330	276	307	318	326	330	253	272	274	233	272
Delaware	562	615	683	608	635	657	727	784	683	716	723	747	954
Des Moines	1,431	1,510	1,620	1,661	1,708	1,769	1,825	1,851	1,811	1,825	1,845	2,070	2,284
Dickinson	341	373	414	346	359	371	400	421	339	345	349	316	438
Dubuque	2,944	3,149	3,424	3,911	4,247	4,398	4,527	4,584	4,920	5,188	5,245	6,166	5,912
Emmet	488	529	582	536	563	583	612	630	554	565	572	532	667
Fayette	874	944	1,036	956	1,005	1,041	1,108	1,155	1,023	1,062	1,073	1,071	1,282
Floyd	245	680	730	657	671	695	736	764	671	687	694	699	840
Franklin	442	473	516	454	469	485	506	518	436	439	444	399	504
Fremont	258	271	290	216	216	224	250	271	204	214	216	190	263
Greene	392	425	469	386	403	417	444	462	366	374	379	361	487
Grundy	433	457	491	455	463	479	506	525	473	481	486	471	582
Guthrie	346	378	420	327	341	353	379	397	298	305	309	284	403
Hamilton	632	665	712	651	672	695	742	776	699	726	734	670	798
Hancock	410	450	499	414	428	444	482	512	411	423	426	384	517
Hardin	650	716	799	737	788	816	857	881	766	790	798	781	943
Harrison	457	501	556	417	434	450	500	541	399	418	422	380	565
Henry	567	587	620	607	638	561	672	673	629	652	658	676	728
Howard	345	377	418	332	344	356	398	434	339	356	359	359	512

County	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1983	1988
Humboldt	362	406	459	405	431	444	474	496	413	423	427	381	506
Ida	313	307	338	281	289	299	320	336	269	273	276	228	309
Iowa	525	552	590	557	569	590	632	662	616	639	645	632	732
Jackson	655	705	770	773	799	828	907	970	958	1,002	1,013	1,111	1,298
Jaepser	1,126	1,200	1,301	1,319	1,358	1,406	1,480	528	1,492	1,517	1,533	1,412	1,644
Jefferson	541	563	600	631	681	705	702	688	673	699	706	762	756
Johnson	2,720	2,677	2,690	4,674	5,104	5,287	4,836	4,313	6,447	6,517	6,587	7,483	4,138
Jones	761	796	850	907	939	972	978	966	970	965	975	1,002	1,058
Keokuk	414	450	495	414	432	447	480	505	407	420	424	405	526
Kossuth	775	832	907	759	782	809	881	938	771	800	809	733	975
Lee	1,365	1,445	1,559	1,510	1,549	1,604	1,677	1,722	1,606	1,627	1,644	1,679	1,933
Linn	5,444	5,654	5,985	7,843	8,064	8,352	8,438	8,395	10,419	10,437	10,553	13,204	12,013
Louisa	291	312	341	286	295	306	327	342	278	284	286	299	372
Lucas	257	279	309	256	268	277	297	313	251	259	261	249	333
Lyon	439	477	524	450	471	487	527	558	465	485	490	405	530
Madison	317	344	378	407	318	330	361	387	307	320	324	287	395
Mahaska	679	724	786	719	752	778	812	832	727	746	755	696	845
Marion	755	803	867	827	872	904	947	973	894	931	941	958	1,076
Marshall	1,146	1,231	1,342	1,370	1,411	1,462	1,516	1,547	1,500	1,499	1,515	1,581	1,811
Mills	421	439	465	398	405	420	440	453	380	389	393	383	505
Mitchell	421	457	504	439	462	478	521	556	472	498	503	478	609
Monona	330	370	419	319	341	353	377	393	283	291	293	252	362
Monroe	247	274	306	234	244	253	284	309	232	243	246	229	332
Montgomery	651	399	427	354	356	368	395	417	342	349	353	297	396
Muscatine	1,085	1,130	1,200	1,190	1,218	1,262	1,344	1,403	1,376	1,432	1,447	1,605	1,805
O'Brien	544	588	645	572	594	614	662	698	601	621	627	542	680
Osceola	282	312	349	298	316	326	355	378	311	325	328	269	364
Page	525	557	599	519	530	559	583	598	498	512	517	476	583
Palo Alto	402	451	511	405	427	443	486	522	397	412	416	356	515
Plymouth	777	839	921	860	911	943	994	1,028	917	951	962	891	1,058
Pocahontas	374	415	467	363	381	395	435	468	354	369	373	319	456
Polk	9,768	10,190	10,826	12,961	13,369	13,846	14,021	13,980	15,857	15,920	16,097	17,060	16,537
Pottawattamie	3,010	3,191	3,440	3,729	3,836	3,973	4,188	4,335	4,554	4,658	4,709	5,381	5,848
Poweshiek	657	705	769	782	871	902	919	922	870	934	944	871	924
Ringold	189	206	225	162	166	104	191	207	146	152	154	120	181
Sac	474	517	571	480	498	516	559	601	481	496	501	435	593
Scott	4,525	4,692	4,961	5,788	5,911	6,122	6,268	6,313	7,082	7,136	7,213	8,336	8,227
Shelby	451	500	562	480	511	529	586	633	525	557	563	491	645
Sioux	805	903	1,021	922	1,001	1,036	1,097	1,139	958	1,000	1,011	941	1,151
Story	2,437	2,389	2,394	3,675	4,025	4,166	3,853	3,476	4,727	4,872	4,920	5,329	3,168
Tama	596	651	722	628	652	675	736	783	659	682	690	648	840
Taylor	230	248	270	196	202	209	231	240	178	186	188	150	219
Union	343	372	409	333	348	361	391	416	330	344	348	335	439
Van Buren	260	274	292	232	240	250	271	287	228	244	246	271	355
Wapello	1,299	1,405	1,544	1,384	1,440	1,491	1,567	1,618	1,381	1,401	1,417	1,297	1,623
Warren	783	823	880	960	1,005	1,041	1,088	1,118	1,179	1,227	1,240	1,447	1,517
Washington	572	614	787	590	623	644	686	716	618	637	644	626	784
Wayne	204	223	247	185	196	203	223	239	174	185	186	158	224
Webster	1,501	1,628	1,793	1,801	1,883	1,951	2,050	2,117	2,022	2,060	2,082	2,123	2,492
Winnebago	378	415	463	405	440	456	486	507	422	449	454	415	522
Winneshiak	712	762	829	850	930	963	1,002	1,024	998	1,068	1,080	993	1,041
Woodbury	3,543	3,782	4,104	3,258	4,481	4,641	4,727	4,740	4,598	4,652	4,704	4,644	4,983
Worth	292	311	339	277	285	296	316	330	261	268	271	222	303
Wright	561	611	677	604	631	654	698	732	626	644	650	529	673

20-YEAR PROJECTION OF
18-21-YEAR-OLD STUDENTS

State Of Iowa

Number Of
Students



20-YEAR PROJECTION OF
18-21-YEAR-OLD STUDENTS

Eastern Iowa

Number Of
Students

110,000

100,000

90,000

80,000

70,000

60,000

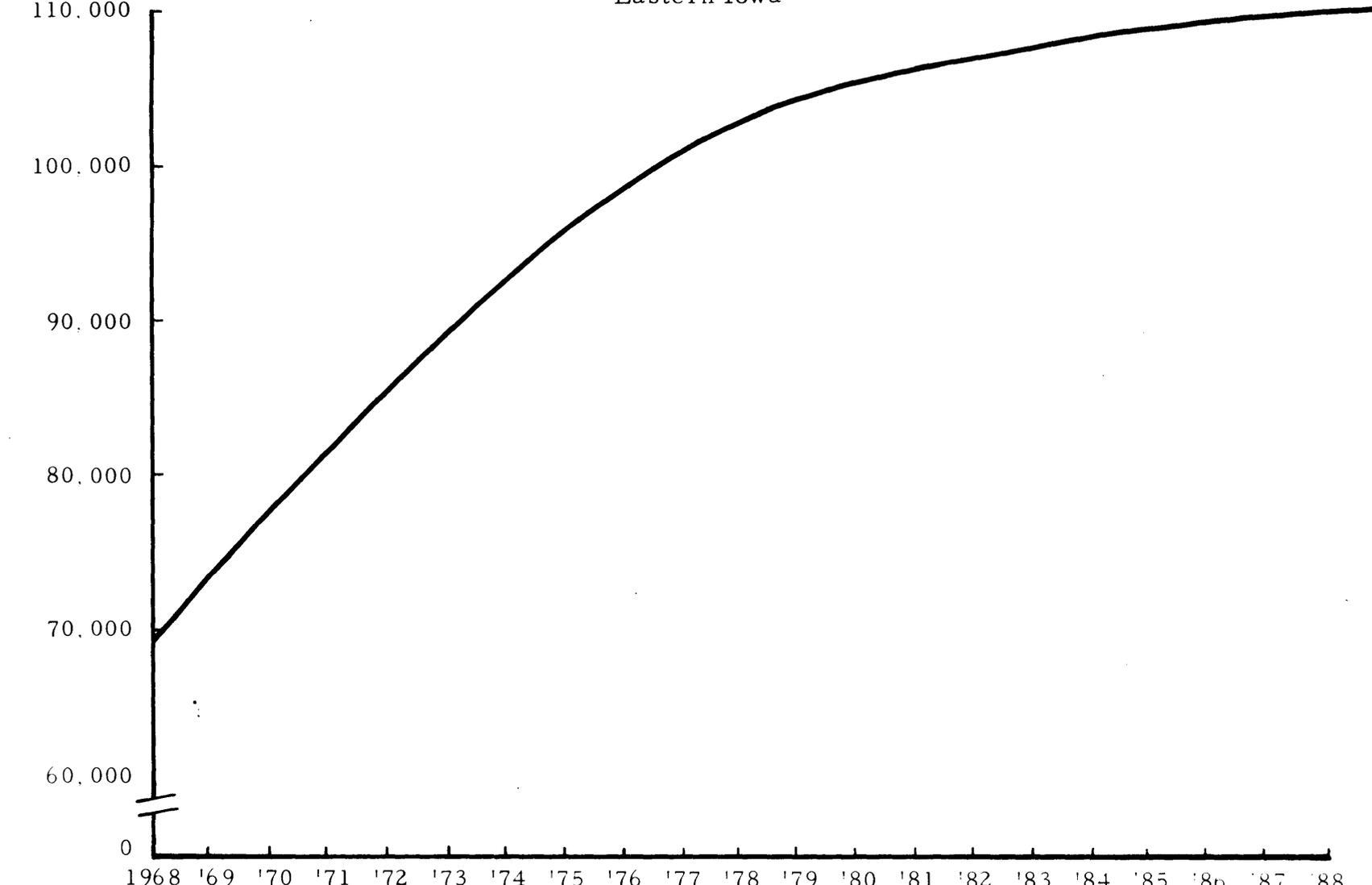
0

1968 '69 '70 '71 '72 '73 '74 '75 '76 '77 '78 '79 '80 '81 '82 '83 '84 '85 '86 '87 '88

Years

-24-

EXHIBIT II-4



20-YEAR PROJECTION OF
18-21-YEAR-OLD STUDENTS

Number Of
Students

Western Iowa

35,000

30,000

25,000

20,000

15,000

10,000

0

Western Iowa (Total)

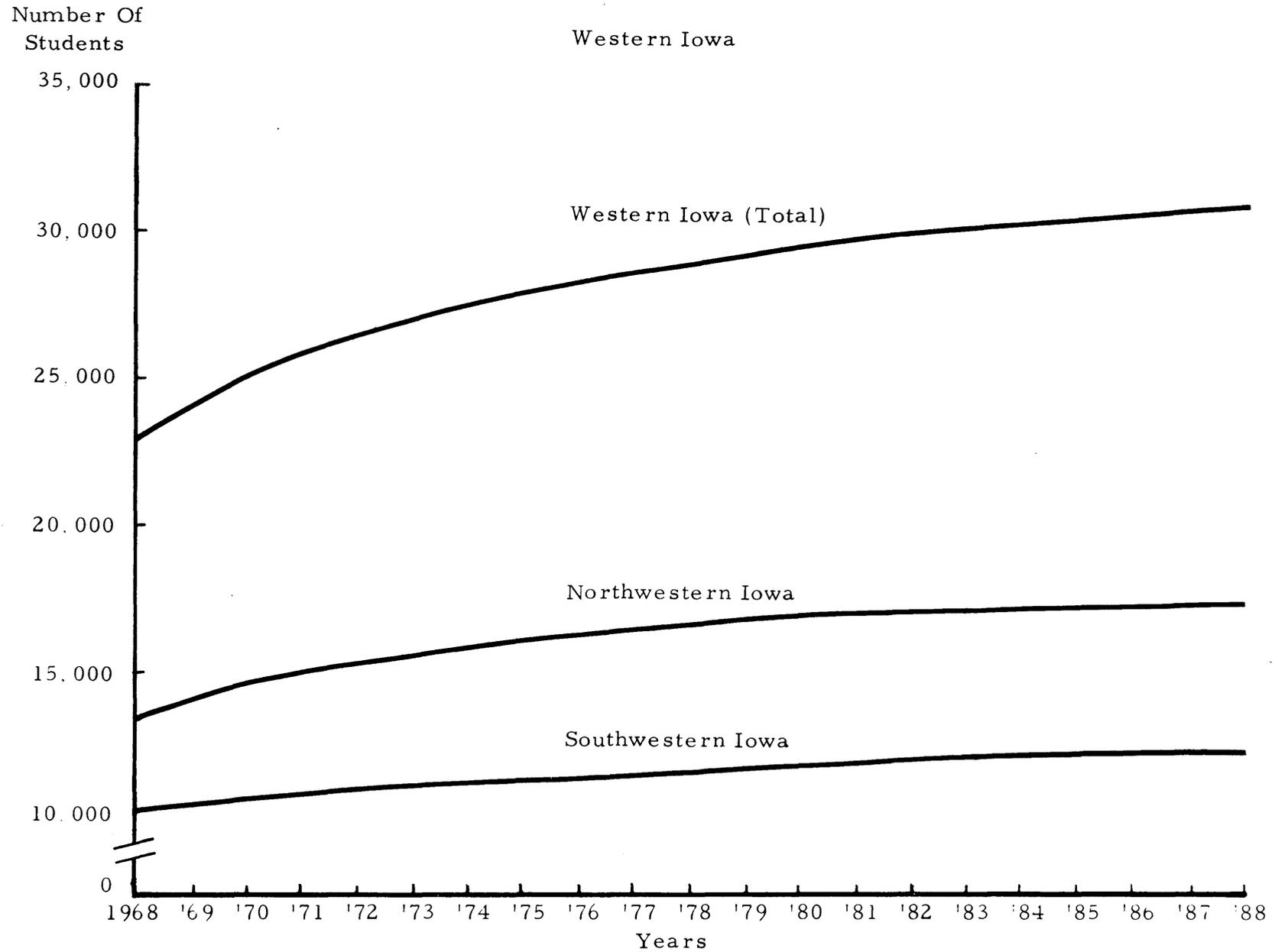
Northwestern Iowa

Southwestern Iowa

1968 '69 '70 '71 '72 '73 '74 '75 '76 '77 '78 '79 '80 '81 '82 '83 '84 '85 '86 '87 '88

Years

-25-



- o Exhibit III-7 presents the mean geographic location of students within the area defined as Western Iowa and also for the remaining portion of the State - Crawford County in the West, with the center of the Eastern region in Benton County.
- o Exhibit III-8 presents the mean geographic location of students in the northern and southern parts of Western Iowa - Buena Vista County in the north, and Pottawattamie County in the south.

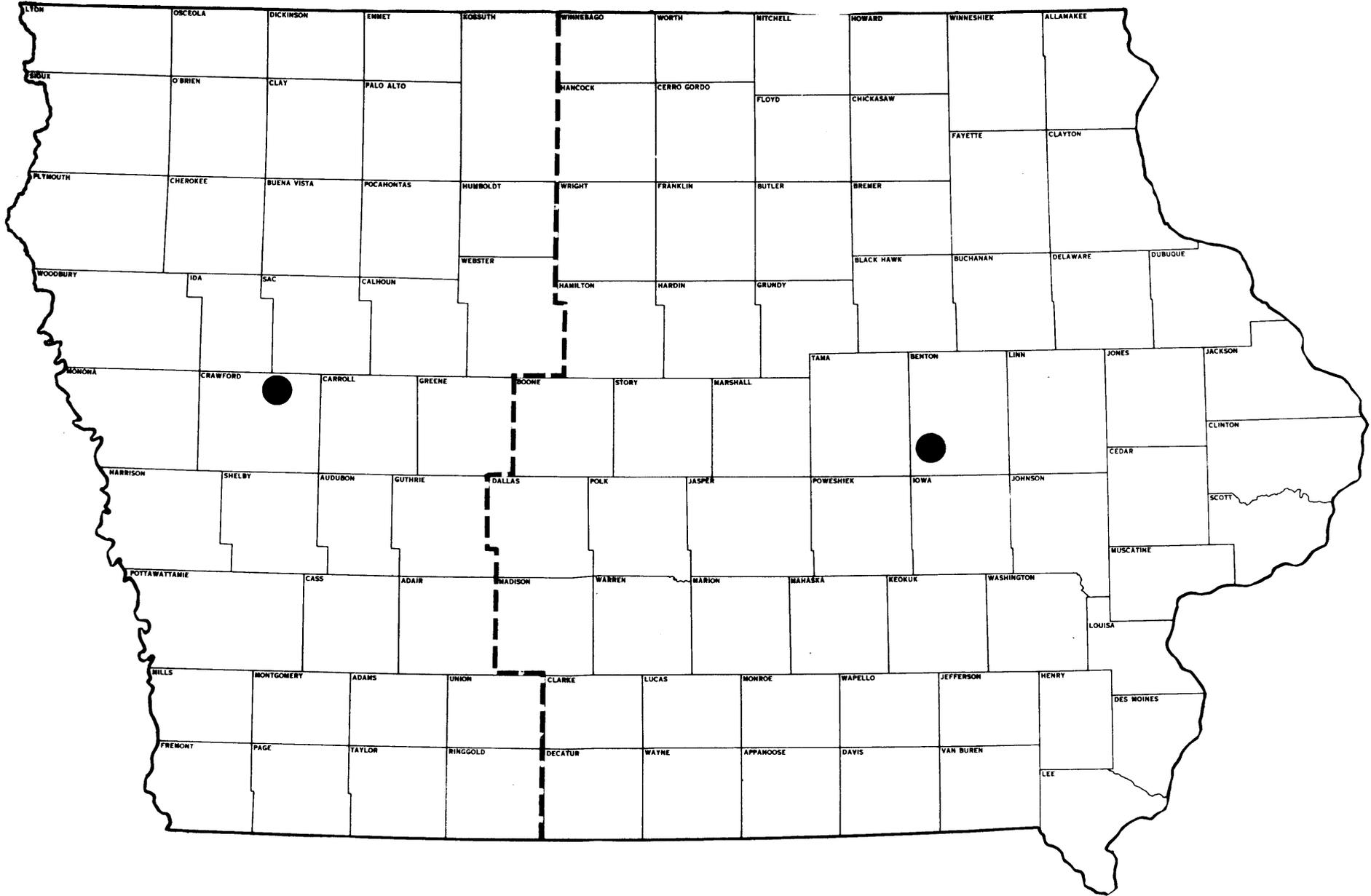
STUDENT
MIGRATION
PATTERNS

- A summary analysis of migration patterns of high school graduates for the year 1965 is presented in Exhibit III-9.

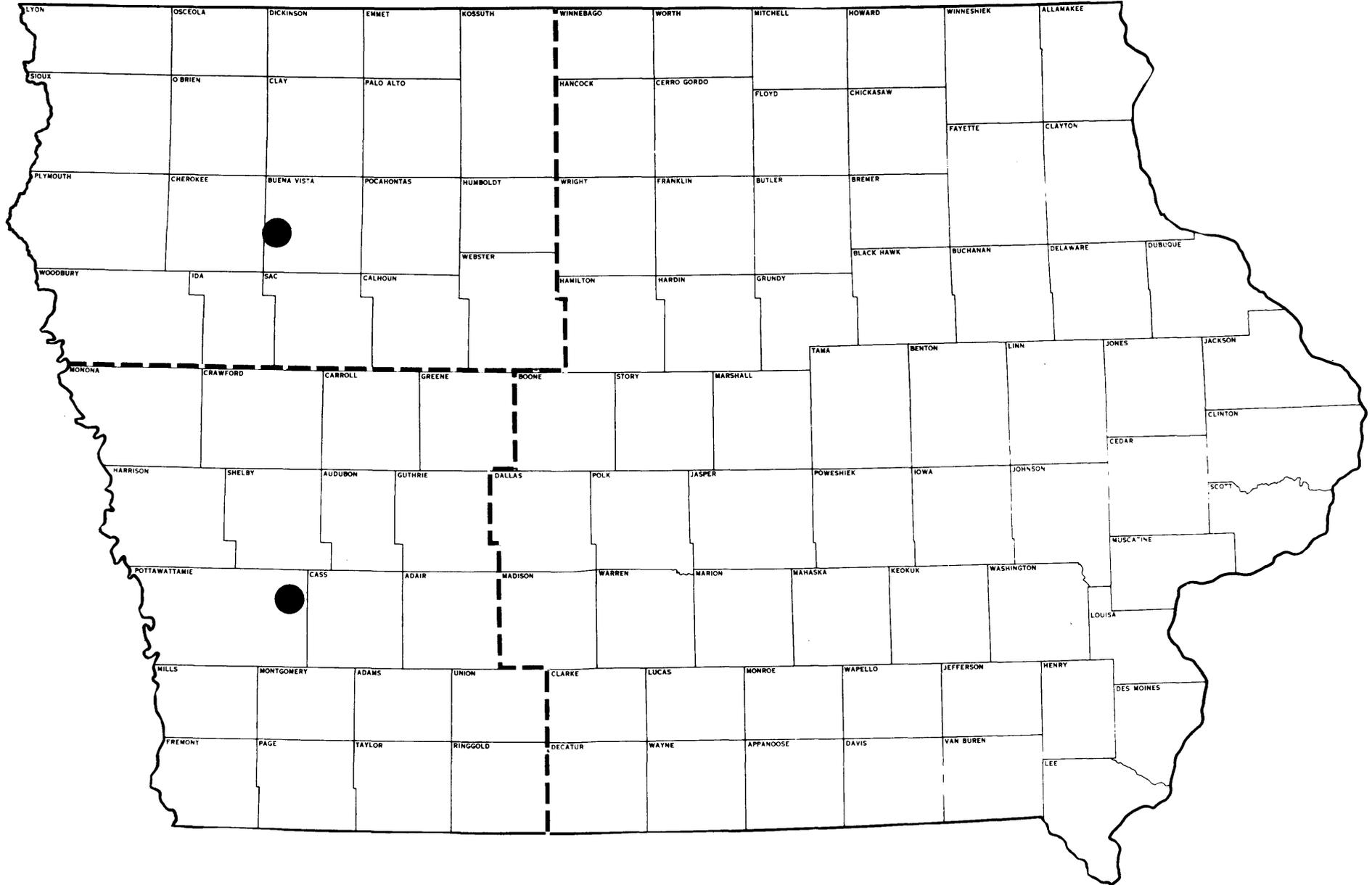
- Significant facts represented by these data may be summarized as follows.

- o Western Iowa is approximately equal to the remainder of the State in the percentage of high school graduates who go to college.
- o However, the percentage of graduates who leave Iowa for their education is higher in Western Iowa than for the eastern portion of the State.
- o Within Western Iowa, a smaller percentage of graduates in the southern region attend college in comparison with the graduates of the northern region.
- o Also, a greater percentage of graduates in the southern region leave the State for their college education in comparison with graduates of the northern region.

MEAN GEOGRAPHIC LOCATIONS OF STUDENTS WITHIN WESTERN AND EASTERN IOWA



MEAN GEOGRAPHIC LOCATIONS OF STUDENTS WITHIN NORTHWESTERN AND SOUTHWESTERN IOWA



MIGRATION ANALYSIS OF 1965
HIGH SCHOOL GRADUATES(a)

<u>Region</u>	<u>Total Graduates Surveyed</u>	<u>Per Cent Attending College</u>	<u>Per Cent Attending In-State</u>	<u>Per Cent Attending Out-Of-State</u>
Total State	40, 927	45.4%	77.5%	22.5%
Eastern Iowa	29, 087	45.7	81.5	18.5
Western Iowa	11, 840	44.6	67.4	32.6
Northwestern Iowa	6, 431	47.9	72.9	27.1
Southwestern Iowa	5, 409	40.6	59.7	40.3

(a)Source: Graduate Follow-Up, 1965 High School Graduates,
 Data on Schools, 1966 Edition, Department of
 Public Instruction.

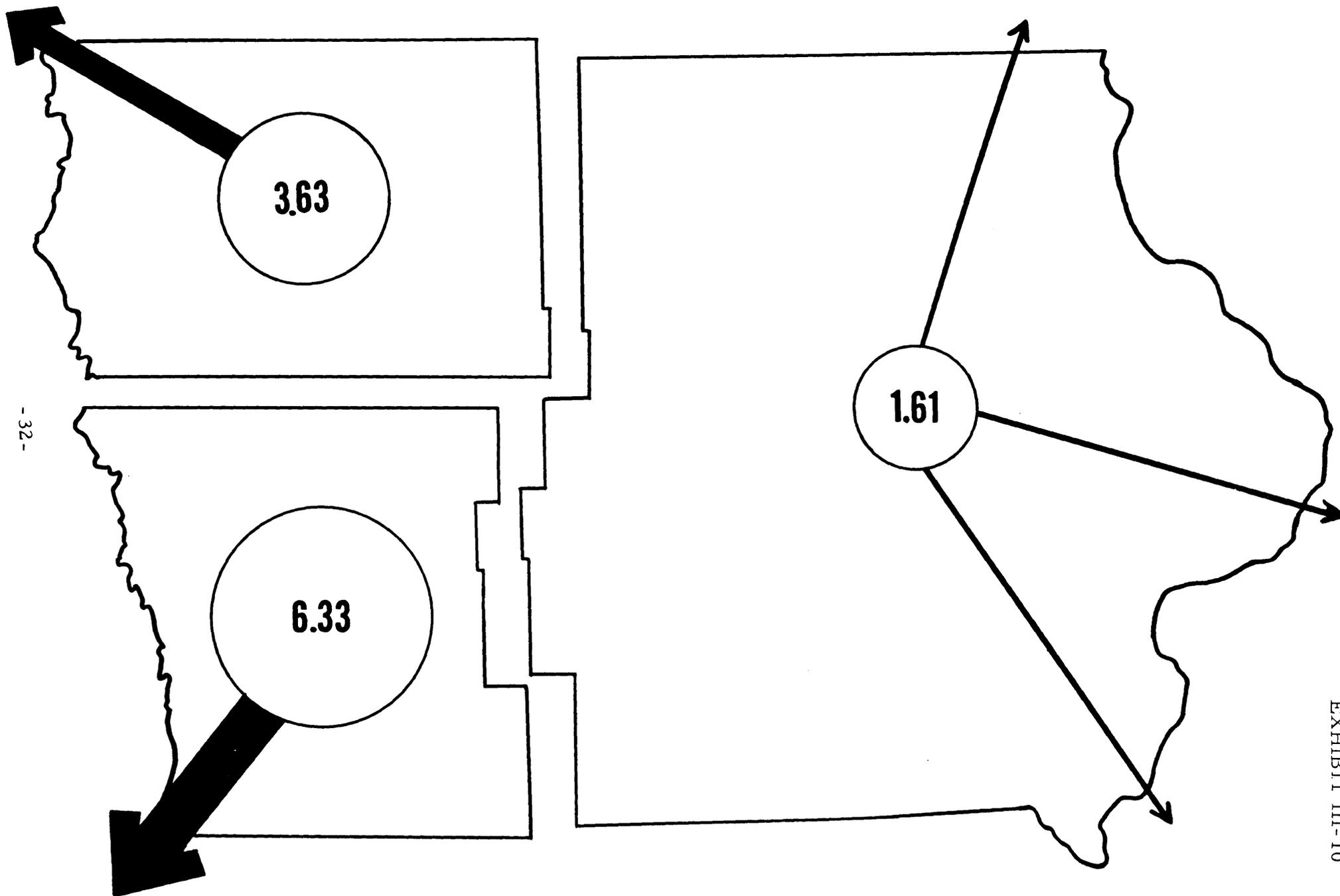
IOWA STUDENT
OUT-MIGRATION

- The following data summarize, by geographic region, the source of major migration of Iowa students to states bordering Iowa.

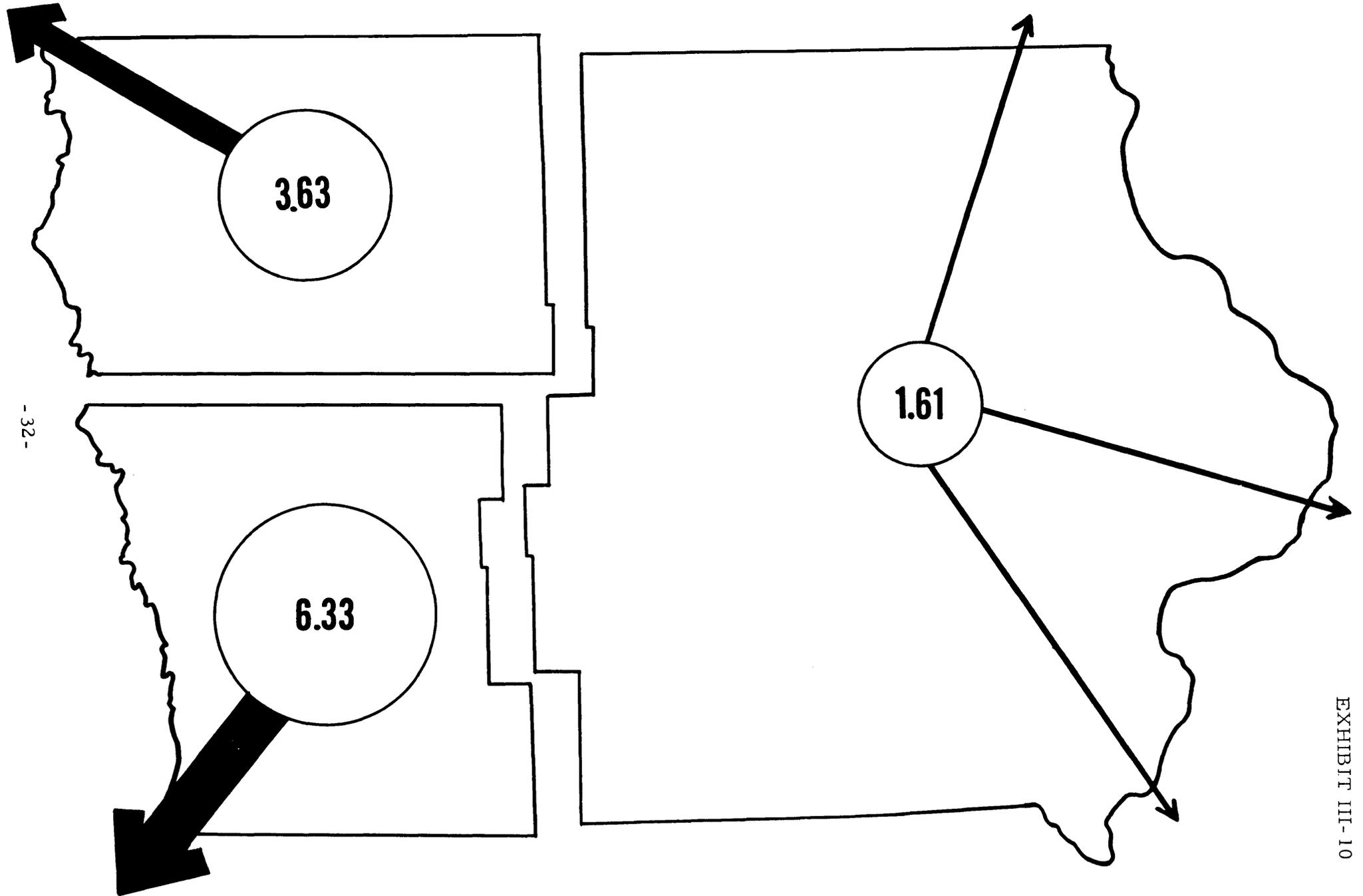
<u>State</u>	<u>Northwest Iowa</u>		<u>Southwest Iowa</u>		<u>Eastern Iowa</u>		<u>Total State</u>	
	<u>Students</u>	<u>Per Cent</u>	<u>Students</u>	<u>Per Cent</u>	<u>Students</u>	<u>Per Cent</u>	<u>Students</u>	<u>Per Cent</u>
South								
Dakota	781	73%	137	13%	144	14%	1,062	100%
Nebraska	617	29	1,134	53	381	18	2,132	100
Minnesota	514	41	33	3	713	56	1,260	100
Missouri	98	3	926	35	1,665	62	2,689	100

- The highest migration of students is to Nebraska and Missouri.
 - A significant source of Iowa students for these two states is Southwest Iowa.
- The relative magnitude of student out-migration by region is summarized in Exhibit III-10.

REGIONAL DISTRIBUTION OF IOWA STUDENT OUT-MIGRATION
PER THOUSAND POPULATION



REGIONAL DISTRIBUTION OF IOWA STUDENT OUT-MIGRATION
PER THOUSAND POPULATION



GENERAL LOCATION SELECTION (Cont'd)

POPULATION
CENTERS

- Population centers located in Western Iowa that generally possess the characteristics and basic support capabilities for a new educational institution are tabulated below, along with their county, general population and students located within a 50-mile radius of the community:

<u>Community</u>	<u>County</u>	<u>Population</u>	<u>Students Within 50-Mile Radius(a)</u>
Algona	Kossuth	5,977	5,670
Atlantic	Cass	6,890	10,483
Carroll	Carroll	8,481	11,866
Cherokee	Cherokee	7,724	13,190
Clarinda	Page	5,901	7,209
Council Bluffs	Pottawattamie	55,641	7,285
Creston	Union	8,119	4,706
Denison	Crawford	6,780	14,890
Estherville	Emmet	8,092	4,145
Fort Dodge	Webster	31,707	5,981
Glenwood	Mills	4,783	7,590
Harlan	Shelby	4,775	9,783
Jefferson	Greene	4,570	6,200
LeMars	Plymouth	7,847	8,900
Shenandoah	Page	6,567	6,899
Sioux City	Woodbury	89,159	8,768
Spencer	Clay	8,864	8,288
Storm Lake	Buena Vista	7,728	13,862
Red Oak	Montgomery	6,421	8,247

(a)Based on student projections for the year 1973; excludes students within 40 miles of an existing Regents' University.

TRANSPORTATION
SYSTEM

- The primary mode of transportation available to students traveling intra-State to Western Iowa is the highway system.

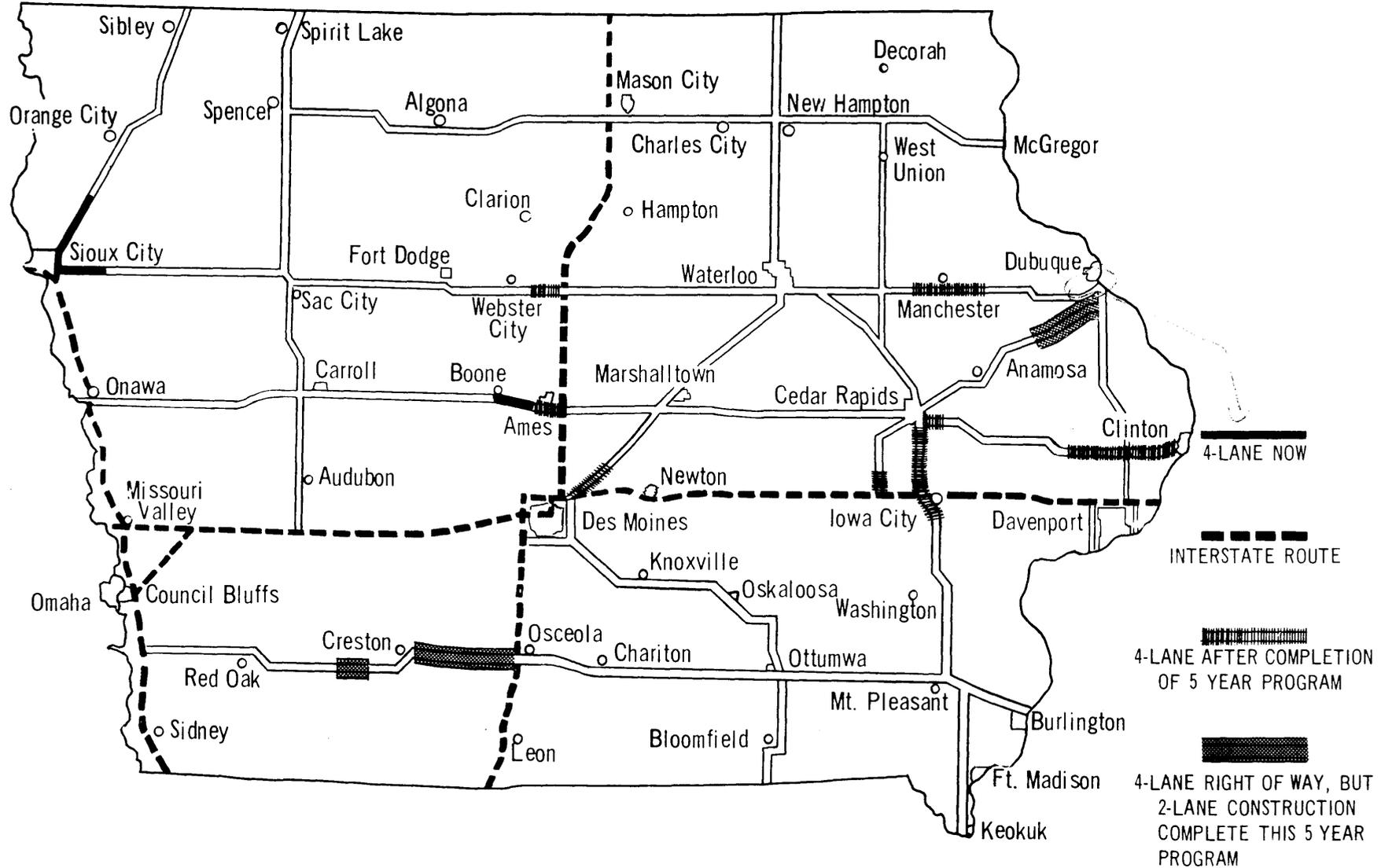
GENERAL LOCATION SELECTION (Cont'd)

- The proposed major highway system for the State of Iowa is shown in Exhibit III-11.
 - This system is primarily a north-south, east-west (right angle) transportation pattern.
 - There are three interstate routes within Iowa.
 - Interstate 35 runs north-south through the center of the State.
 - Interstate 80 runs east-west through the south central portion of the State.
 - Interstate 29 runs north-south along the western border.

CONCLUSIONS

- It is impossible to eliminate totally any competitive effects between a new institution of higher education and existing institutions; however, it is possible to locate the new institution in a way that will minimize the competitive impact.
- Within Western Iowa, educational opportunities generally similar to that of the new institution are found chiefly in the northern region.
- A significantly larger percentage of students in Southwest Iowa leave the State for college as compared with students in Northwest Iowa and the remainder of the State.
- The southern region of Western Iowa in total represents a college-void area as compared with Northwest Iowa.
- Generally, there is only one population center per county possessing support resources and characteristics adequate for the proposed institution of higher education.
- The primary method of transportation for students traveling intra-State is automobile and bus.
 - While the overall proposed major highway system does not significantly favor any general region, the interstate highways do favor the southern region of Western Iowa.

PROPOSED MAJOR HIGHWAY SYSTEM FOR IOWA



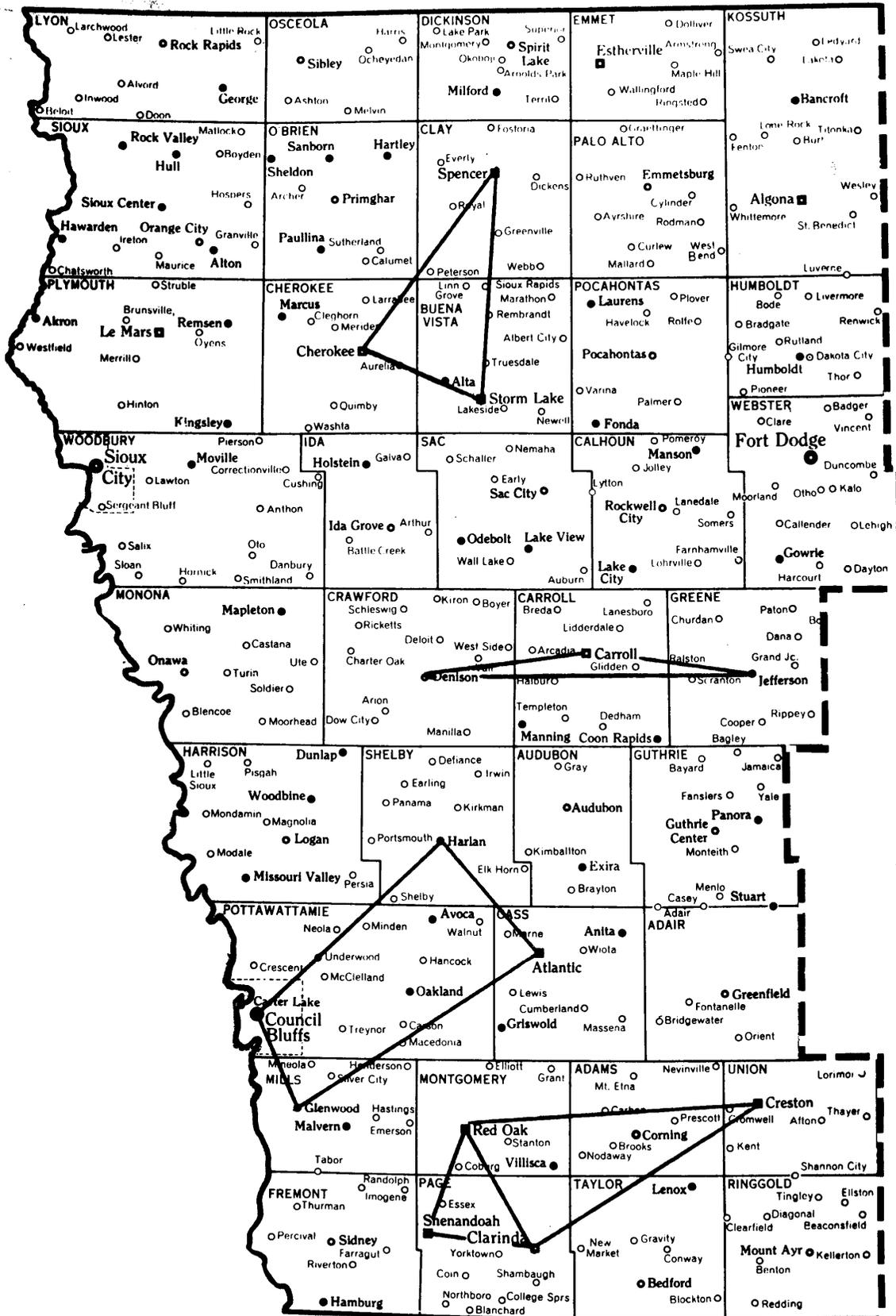
ALTERNATIVE
GENERAL
LOCATIONS

- Five potential general locations are identified in Exhibit III-12, four of them in Southwest Iowa and one in Northwest Iowa.
 - Each general location has been designed to incorporate at least three of the population centers identified as possessing the requirements for a new institution.
 - If the general location encompassing the community of Denison is selected, it is recommended that Midwestern College be considered as one possible site for the new institution.

RECOMMENDED
GENERAL LOCATION

- The recommended general location is that area defined by the four communities:
 - Atlantic
 - Council Bluffs
 - Glenwood
 - Harlan.
- This location offers the following advantages.
 - It is situated centrally in Southwest Iowa, which has been shown to be a college-void area.
 - It contains the mean geographic location (in Pottawattamie County) of the 20-year projections for students in Southwest Iowa.
 - It is situated close to major north-south and east-west highways and to a major airport.
 - It is near a major population and cultural center, represented by the Council Bluffs-Omaha area.

ALTERNATIVE GENERAL LOCATIONS



GENERAL LOCATION SELECTION (Cont'd)

- It is sufficiently distant from the majority of private institutions located in Western Iowa to minimize competitive effect.
- It is located within 50 miles of a major metropolitan area which may serve as a source of students during the formative years of the institution.
- Finally, this location would provide educational opportunity to major areas where student out-migration is relatively high.
 - o There is a relatively large emigration of students to the State of Missouri.
 - o A proposed policy of the State of Missouri to restrict the number of Iowa students in public colleges may reduce educational opportunities open to Iowa students.
- This location would have at least two disadvantages.
 - Its situation at the extreme western border of the State might make it more difficult for the institution to fulfill its Statewide role.
 - It is approximately 30-60 miles away from the mean geographic location of the 20-year projection of students in the whole of Western Iowa.

SELECTED
GENERAL
LOCATIONS

- The preceding material in this chapter was presented to the State Board of Regents for their review and consideration in June 1968.
 - Approval of a general location by the Board of Regents was required before specific site evaluations were undertaken.
- The decision of the Board at the June meeting regarding a general location may be summarized as follows.

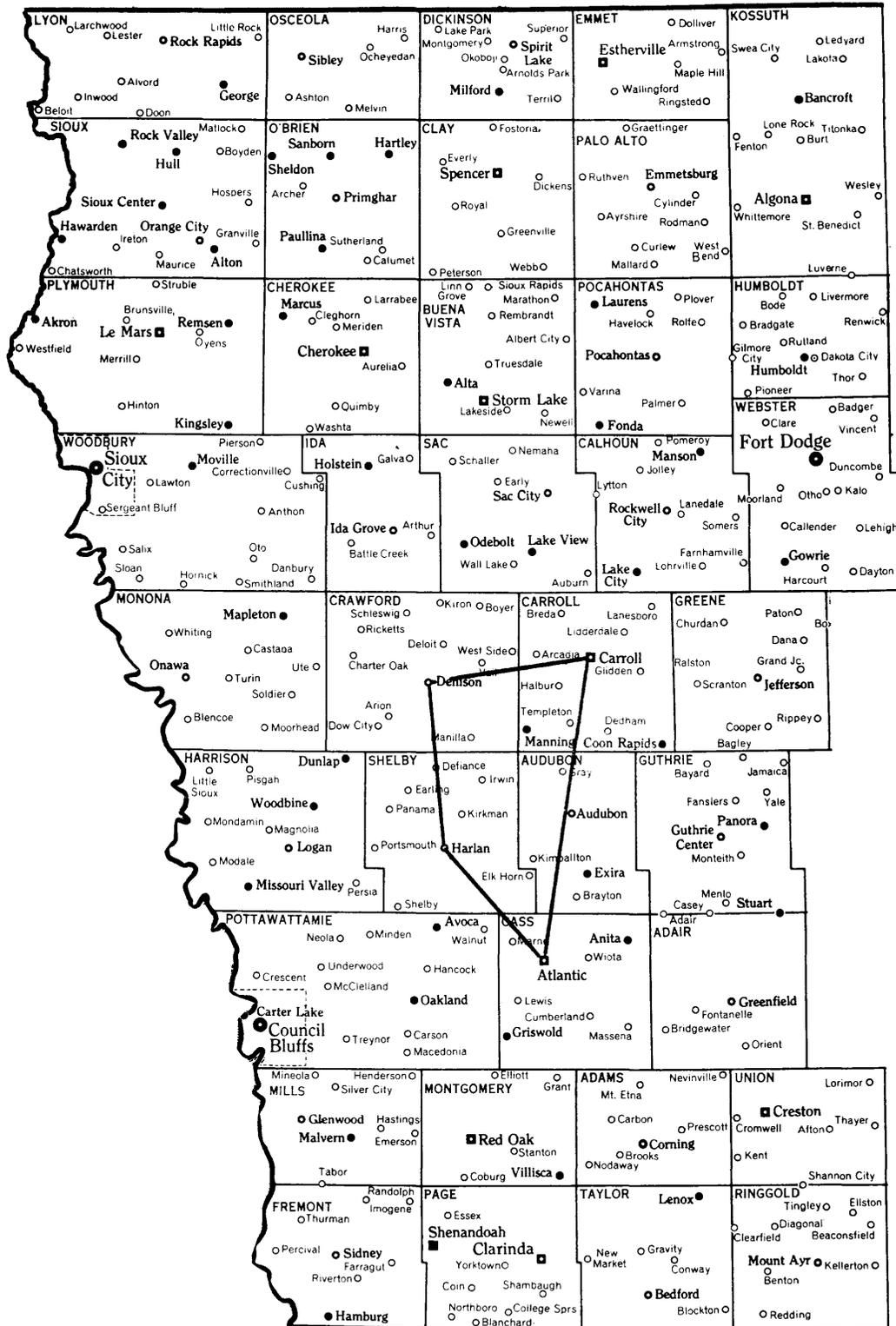
GENERAL LOCATION SELECTION (Cont'd)

- The Board chose not to select any of the five alternative general locations recommended by the consultant.

- Instead, the Board directed the consultant to use as the general location for the proposed institution the geographic area formed by the following four communities:
 - o Atlantic
 - o Carroll
 - o Denison
 - o Harlan.

- The Board-designated general location within Western Iowa is shown in Exhibit III-13.

SELECTED GENERAL LOCATION



IV - SITE SELECTION

This chapter presents the overall approach toward identifying and evaluating specific sites; the findings and conclusions regarding communities within the general location; and, finally, the recommendation of three alternative sites for the campus of the proposed institution.

SITE SELECTION REQUIREMENTS

- Broadly viewed, the criteria for selecting a specific site involve two basic areas of evaluation:
 - Architectural and engineering considerations
 - Community considerations.

- Architectural and engineering considerations include such factors as:
 - Environment and appeal
 - Present and potential land use
 - Topography
 - Site shape and size
 - Architectural development
 - Utility services
 - Development costs
 - Construction requirements
 - Zoning considerations.

- Community considerations include a comparative evaluation of such factors as:
 - Population
 - Medical and hospital facilities
 - Transportation
 - Housing
 - Educational facilities
 - Civic resources.

- The firm of Perkins and Will was jointly selected by the Board of Regents and Cresap, McCormick and Paget to perform the necessary architectural and engineering evaluations.

- While the results of the architectural and engineering analysis performed by Perkins and Will are reported in a later chapter, the detailed documentation of their work appears in a separate volume of this report.

OVERALL
SELECTION
APPROACH

Phases Of Evaluation

- The selection process involved two phases of community and site evaluation.
 - During Phase I, an analysis of all proposed communities and sites was jointly conducted by Perkins and Will and by Cresap, McCormick and Paget.
 - The purpose of this analysis was to eliminate communities and sites that were unsuitable in order to minimize the number of sites to be subjected to a total development analysis.
 - During Phase II, a complete architectural and engineering development evaluation was performed for those sites not eliminated in Phase I.

Identification Of Sites

- All communities located within the geographic boundaries of the general location designated by the Board of Regents were requested to sponsor sites for the institution.
 - This approach was adopted as one means to judge a community's willingness to accept the location of the new institution within its immediate locale.
 - It was requested that sites contain a minimum of 600 acres unless a community felt that a smaller site offered some outstanding features or advantages.
 - There was no limit to the number of sites a community could sponsor.

Community Profile

- Each community sponsoring a site was also requested to prepare a fact-file which presented a profile of the community and its resources.
 - General subject matter covered in the requested profile included the following:
 - Form of government, regulations and services
 - Population data
 - Community facilities
 - Medical and hospital resources
 - Civic organizations
 - Churches
 - Communications
 - Educational facilities
 - Transportation
 - Housing
 - Utilities
 - Taxes.
 - The specific format and detail of the requested profile information are presented in Appendix D.

COMMUNITY
RESPONSE

- Fifteen communities are located within the general location selected by the Regents:
 - Aspinwall
 - Atlantic
 - Audubon
 - Carroll
 - Defiance
 - Denison
 - Elk Horn
 - Gray
 - Halbur
 - Harlan
 - Irwin
 - Kimballton
 - Manilla
 - Manning
 - Templeton.
- The Mayor of each community was notified of the inclusion of his community within the area designated as the general location for a new institution of higher education in Western Iowa, and was provided with instructions for identifying sites and providing community profile information if interested.

- The results of the communities' responses, presented in detail in Exhibit IV-1, may be summarized as follows.
 - Six communities sponsored specific sites.
 - Two communities jointly sponsored a single site.
 - Two communities responded favorably but sponsored no specific sites; farmland in the immediate area of the communities was offered as abundantly available.
 - Two communities formally declined to sponsor sites.
 - Three communities did not respond.
- All sponsored sites were undeveloped tracts of land except for that sponsored by the community of Denison.
 - Denison sponsored Midwestern College, an existing four-year liberal arts school.
- The profile information furnished by each responding community is not included as part of this report.
 - Because of its bulk and the amount of statistical detail involved, it has been documented separately and placed on file in the office of the State Board of Regents at Des Moines, Iowa.

PHASE I
EVALUATION

Approach

- An interdisciplinary study team was formed to conduct the community-site evaluation task.
 - The team included architectural and engineering experts from Perkins and Will and community analysts from Cresap, McCormick and Paget.

COMMUNITY RESPONSE

<u>Community</u>	<u>Response Action</u>			<u>Remarks</u>
	<u>Number Of Sites Sponsored</u>	<u>Declined To Sponsor Site</u>	<u>Failed To Respond</u>	
Aspinwall		X		
Atlantic	4			
Audubon	2			
Carroll	6			
Defiance				Sponsored no specific site; proposed general farmland.
Denison	1			Sponsored Midwestern College.
Elk Horn	1			Sponsored site jointly with Kimballton.
Gray			X	
Halbur		X		
Harlan	3			
Irwin			X	
Kimballton	1			Sponsored site jointly with Elk Horn
Manilla			X	
Manning	2			
Templeton				Sponsored no specific site; proposed general farmland

SITE SELECTION (Cont'd)

- The profile information for each community and site was reviewed and studied by the team before it visited the community.
- The initial visit to a community was generally conducted by the full study team.
 - Community officials and representatives were interviewed.
 - The community and sites were traversed.
 - "Main street" interviews were conducted.
 - Data on physical, cultural and socioeconomic factors were collected.
 - Schools, housing, cultural and recreational facilities were visited.
- Subsequent visits to communities and sites were conducted as required by individual members of the team.

Community Profile Analysis

- Analysis of the communities was fundamentally a comparative evaluation; a community's resources and general support capabilities were appraised in relation to those of other communities also sponsoring sites.
 - The communities were not evaluated on the basis of absolute or predetermined criteria.
- Quantitative measures of appraisal were employed wherever possible.
 - However, because of subject matter involved, considerable subjective evaluation and judgment had to be employed throughout the study.
- Each category of a community's profile was evaluated in terms of one of the following:
 - Compares favorably: a significant or distinguishable advantage in comparison with other communities

- Compares equally: an equivalent and comparable capability
 - Compares unfavorably: Less than an equivalent or matching capability in comparison with other communities.
- The detailed results of the community resource and support analysis are presented in Exhibit IV-2, an overview of this analysis by major community profile topics may be summarized as follows.

Government

- The communities of Atlantic, Audubon, Carroll, Denison, Harlan and Manning were generally considered to be equal in such considerations as type of local government, per capita debt, community planning and zoning regulations, adequacy of police and fire protection.
- The communities of Defiance, Elk Horn, Kimballton and Templeton were generally considered to compare unfavorably; specifically inadequate were the relatively large per capita debt and the lack of community planning and zoning regulations.

Population

- The community of Carroll compared favorably, with its relatively large population and growth rate, to the other communities.
- The communities of Atlantic, Denison, Harlan were evaluated as comparing equally.
- Appraised as comparing unfavorably as a result of their relatively small population were the communities of Audubon, Defiance, Elk Horn, Kimballton, Manning and Templeton.

Community Facilities

- In terms of community resources, including banking assets, existing public accommodations, recreational and cultural activities and part-time employment opportunities, the communities of Atlantic, Carroll, Denison and Harlan were generally considered as offering equal capabilities.

COMMUNITY ANALYSIS

<u>Profile Topic</u>	<u>Atlantic</u>	<u>Audubon</u>	<u>Carroll</u>	<u>Defiance</u>	<u>Denison</u>	<u>Elk Horn</u>	<u>Harlan</u>	<u>Kimballton</u>	<u>Manning</u>	<u>Templeton</u>
Government										
A. Form	E	E	E	E	E	E	E	E	E	E
B. Financial Condition	E	E	E	U	E	U	E	E	U	U
C. Regulations	E	E	E	U	E	U	E	U	E	U
D. Law Enforcement	E	E	E	U	F	U	E	U	E	U
E. Fire Protection	E	E	E	U	E	E	E	E	E	E
Population										
A. Census	E	U	F	U	E	U	E	U	U	U
B. Educational Level	E	U	E	U	E	E	E	U	E	U
Community Facilities										
A. Financial	F	U	E	U	E	U	F	U	U	U
B. Accommodations	E	U	E	U	E	U	E	U	U	U
C. Recreation	E	E	E	U	E	U	E	U	E	U
D. Cultural Activities	E	E	E	U	F	U	E	U	U	U
E. Part-Time Employment	E	U	E	U	E	U	E	U	U	U
Medical And Hospital										
A. Hospitals	F	U	E	U	E	U	E	U	U	U
B. Doctors And Dentists	E	U	E	U	E	U	E	U	U	U
Civic Organizations										
A. Clubs, Organizations	E	E	E	U	E	U	E	U	E	U
B. Professional Societies	E	E	E	U	E	U	E	U	E	U
C. Community Fund	E	U	E	U	E	U	E	U	E	U
Churches	E	E	E	U	E	U	E	U	E	E
Communications										
A. Newspaper	E	E	E	E	E	E	E	E	E	E
B. Radio And TV	E	E	E	E	E	E	E	E	E	E
Education										
A. Public Schools	E	E	E	U	E	U	E	U	E	U
B. Private Schools	U	U	E	E	E	U	E	U	U	E
Transportation										
A. Rail Service	F	E	E	E	E	U	E	U	E	E
B. Air Service	E	E	E	E	F	E	E	E	E	E
C. Bus Service	E	U	E	U	E	U	E	U	E	E
D. Highways And Streets	E	E	E	U	E	U	E	E	E	E
Housing										
A. Type	E	U	E	U	E	U	E	U	U	U
B. Costs	E	E	E	E	E	E	E	E	E	E
C. Services	E	E	E	E	E	E	E	U	E	U
Taxes										
A. Individuals	E	U	E	U	F	U	E	U	U	U
B. General	E	U	E	U	E	U	E	U	E	U

LEGEND:

- F - Compares favorably
- E - Compares equally
- U - Compares unfavorably

SITE SELECTION (Cont'd)

- Audubon, Defiance, Elk Horn, Kimballton, Manning and Templeton were generally evaluated as comparing unfavorably.

Medical And Hospital

- The new, modern hospital facilities at Atlantic were appraised as favorable in relation to the other communities.
- The medical and hospital facilities at Carroll, Denison and Harlan were considered to be generally equal.
- The communities of Audubon, Defiance, Elk Horn, Kimballton, Manning and Templeton were generally considered unfavorable in comparison with the remaining communities.

Civic Organizations

- The communities of Atlantic, Audubon, Carroll, Denison, Harlan and Manning were generally evaluated as possessing equal resources in civic organizations.
- Appraised as comparatively unfavorable were the communities of Defiance, Elk Horn, Kimballton and Templeton.

Churches

- Atlantic, Audubon, Carroll, Denison, Harlan, Manning and Templeton were generally considered as being equivalent in the number of available religious denominations.
- Defiance, Elk Horn and Kimballton were evaluated as unfavorable, with relatively few religious denominations available within the community.

Communications

- All communities were appraised as equal in the newspaper, radio and television resources they could offer.

Education

- Educational resources (public and private schools) were appraised as primarily equal for the communities of Atlantic, Audubon, Carroll, Denison, Harlan and Manning.
- Because of the lack of public educational facilities within the immediate community, Defiance, Elk Horn, Kimballton and Templeton were evaluated as relatively unfavorable.

Transportation

- The communities of Atlantic, Audubon, Carroll, Defiance, Denison, Harlan, Manning and Templeton were evaluated as generally equal in availability of rail, air and bus services.
- The communities of Elk Horn and Kimballton were evaluated as unfavorable.

Housing

- In terms of quantity, availability and quality of housing, the communities of Atlantic, Carroll, Denison and Harlan were appraised as being generally equal; the communities of Audubon, Defiance, Elk Horn, Kimballton, Manning and Templeton were appraised as relatively unfavorable.
- All communities were considered to be equivalent in per unit construction costs.

Taxes

- The communities of Atlantic, Carroll, Denison and Harlan were generally considered to compare equally on such factors as total millage, total valuation of land and buildings for tax purposes and general tax balance and local tax revenue per capita.
- Audubon, Defiance, Elk Horn, Kimballton, Manning and Templeton were evaluated as comparing unfavorably.

Additional Community Considerations

- The sponsorship of Midwestern College as the site for a State institution of higher education offered special considerations, including:
 - o Financial condition of the school
 - o Method of acquisition
 - o Adequacy of existing facilities (evaluated by Perkins and Will).

- At the time of this study, the financial and ownership status of Midwestern College was in a state of transition.
 - o The community of Denison was negotiating for a \$4.5 million 30-year revenue bond issue for the proposed purpose of acquiring ownership of Midwestern College.

 - o During the term of the issue, all assets of the College would be transferred to the City of Denison; the revenue of the College would be used to pledge the bond issue.

 - o The College would be returned by lease agreement to its administration for operation as an institution of higher education.

- Essentially, the effects of the bond issue would change the financial condition of the College from one of large short-term encumbrances to that of longer-term debt.
 - o Such action would ease the impact of debt service on the institution.

- Under the provisions of the bond agreement, the State of Iowa could acquire the institution in either of two ways.
 - o Transfer of lease. Provisions were made in the Lease Agreement between the City of Denison and Midwestern College to transfer all or any part of the premises of Midwestern College to the State of Iowa; the City would continue to hold title to the property while the State would operate the school and would also assume the bond service responsibility.

- o Termination of bonds. The Indenture of Mortgage and Trust provided provisions for the call of the bonds (at a premium); the bonds could be terminated by the State, at which time the property would be returned to the College Board of Trustees, who could convey the property to the State Board of Regents.
- Detailed documentation, including financial statements, the Indenture Mortgage and Deed of Trust, and the Lease Agreement, are included with the community profile information of file at the State Board of Regents office at Des Moines, Iowa.

PHASE I

CONCLUSIONS

- The communities located within the designated General Location serve primarily as trade and service centers for the local agricultural community.
- The study area, consisting of portions of Audubon, Carroll, Cass, Crawford and Shelby Counties, is well situated geographically; is well served by regional facilities; and provides an adequate physical and cultural environment for the accommodation of the proposed institution.
- The people of the communities offering sites enthusiastically look to the establishment of the school in their area.
- The programs of many State and local agencies will affect and be affected by the proposed institution; interagency cooperation will be vital to the success of the school.
- The community facilities available to the proposed institution in the cities of Audubon, Defiance, Elk Horn, Kimballton, Manning and Templeton will require substantial off-campus investments to provide support facilities at the same level as those existing in other communities.
- The physical facilities and topography at Midwestern College, Denison, are best suited for an institution smaller than that projected; proper utilization of these facilities and site would require considerable investment if they were to be modified to accommodate the proposed institution.

- The communities of Atlantic, Carroll and Harlan, and a specific site offered by each, can adequately accommodate and support the proposed institution.
 - The differences between these communities and sites are so minute and subtle as to make a preferential ranking nearly impossible without the detailed information that will result from the final evaluations to be undertaken during Phase II.
 - The evaluation performed to this time suggests a tentative ranking as follows:
 - Atlantic and its prime site - first preference
 - Harlan and its prime site - second preference
 - Carroll and its prime site - third preference.

PHASE I

RECOMMENDATIONS

- On the basis of these findings, it was recommended that the Board of Regents:
 - Notify the communities of Defiance and Templeton that the available farmland in their areas is not recommended for final evaluation.
 - Notify the communities of Audubon, Elk Horn, Kimballton and Manning that their offered sites are not recommended for final evaluation.
 - Notify the authorities at Midwestern College and the community of Denison that their offered site is not recommended for final evaluation.
 - Notify the communities of Atlantic, Carroll and Harlan that their prime sites are recommended for final evaluation, and that they immediately secure options, firm prices and dates of occupancy.
 - Forward a copy of this information to each affected State and local agency, asking their review and comment in relation to their own programs by October 1, 1968.
 - Direct the Architect and Consultant to proceed with the Phase II evaluation of the prime sites at Atlantic, Carroll and Harlan.

BOARD OF
REGENTS
ACTION

- The results of the Phase I evaluation were presented to the State Board of Regents in August 1968.
- After review and discussion of the evaluation findings, the Board accepted all the Phase I recommendations outlined above.
- Phase II findings are reported in Chapter VI.

V - PROJECTED OPERATING COSTS

PROJECTED OPERATING COSTS

This chapter presents estimates of operating costs for the proposed Western Iowa institution, based upon the role, mission and projected enrollments developed from the consultants' recommendations as modified by the State Board of Regents during the study. These costs can be expected to be substantially the same regardless of the site selected.

OPERATING COST ESTIMATES

Background For Cost Estimation

- In the field of higher education, the methodology involved in estimating operating costs for a new school is in its infancy.
 - Because of the lack of firm guidelines in cost estimation, the figures presented should be considered only as a broad indication of projected costs for the new institution.
- Analysis of operating costs in the existing Regents' institutions, as a group, as a means of estimating costs for the new school, can be of minimal assistance only.
 - The new institution - proposed as a four-year liberal arts school - cannot be compared with the present Regents' schools and their large graduate and professional programs, with the possible exception of the University of Northern Iowa.
- Comparisons with other schools nationally can only be on the broadest basis, since cost studies have shown a wide disparity between seemingly similar institutions in such areas as cost per full-time equivalent student and cost per student clock-hour.
 - Colleges and universities differ significantly in the scope of instructional offerings, emphasis upon special programs, size of extension and public service offerings, etc.
- The most consistent finding regarding operating costs in American education is the wide diversity in expenditures when measured against a common unit indicator such as enrollment.

PROJECTED OPERATING COSTS (Cont'd)

Assumptions Used In Estimating Costs

- Since operating cost is related to the role and philosophy of the institution, several assumptions must be made about the Western Iowa school before cost figures can be derived.
 - The school will be a four-year liberal arts undergraduate institution, with its limited graduate programs confined primarily to advanced degrees for teachers.
 - Specific program details and organizational structure will be left to the discretion of the President, with the final approval of the Board of Regents.
 - Admissions policies will conform to the present rules and regulations that apply to existing Regents' schools.
 - The school will have little departmental or organized research.
 - Major organized activities, such as hospitals and laboratory schools, will not be offered by the school.
 - Extension services and public service activities, envisioned as an important aspect of the school's mission, will develop slowly in the early years.
 - Costs of auxiliary enterprises, such as residence halls, will be offset by income and are not included in cost estimates.

COST
ESTIMATES

General Operating Cost Percentages

- The major classifications of operating expense for institutions of higher education are classified as follows:
 - Administration and General
 - Instruction and Departmental Research
 - Organized Activities
 - Organized Research
 - Extension and Public Service
 - Library
 - Physical Plant.

PROJECTED OPERATING COSTS (Cont'd)

- While institutions vary in the amounts expended in these categories, several studies have shown that percentages are fairly consistent among similar types of schools (Exhibit V-1).
- The variation in percentages allocated to the expense categories shown in the exhibit reflects the differing functions of the public university and the private liberal arts college.
 - The public institution necessarily devotes a high percentage of its budget to organized research, extension and public service and organized activities such as hospitals in support of medical schools and laboratory schools.
 - The smaller private school, devoted to the liberal arts concept, spends a high proportion for instruction and devotes a relatively small amount on organized research and public service activities.
 - Library expense, at 5 per cent of total expenditures, is considered by the American Library Association to be the minimum acceptable after the establishment of the basic collection.

Some Models Of Iowa Institutions

- Analysis of the operations and role of Iowa's institutions of higher education indicates that the operating experience of the University of Northern Iowa (UNI) and Iowa's private liberal arts colleges are more nearly in line with the assumptions adopted for the Western Iowa institution.

EDUCATIONAL AND GENERAL EXPENDITURES
FOR SELECTED INSTITUTIONAL GROUPS

Expense Category	3 Regents' Schools 1964-65	22 Private Iowa Schools 1964-65	17 Private New York Colleges 1966-67	U. S. Public Colleges 1963-64	U. S. Private Colleges 1963-64
Administration and General	5.4%	31.9%	33.0%	8.3%	24.9%
Instruction and Department Research	32.4	46.5	49.0	33.8	50.1
Organized Activities	20.4	1.7	(a)	8.4	1.8
Organized Research	25.6	0.9	(a)	28.0	2.8
Extension and Public Service	8.1	1.0	(a)	10.2	0.6
Library	2.4	5.6	5.0	2.5	4.5
Physical Plant	<u>5.8</u>	<u>12.4</u>	<u>13.0</u>	<u>8.2</u>	<u>15.3</u>
Total	100.1%	100.0%	100.0%	99.4%	100.0%

(a)Not available - probably included under Administration and General Expense.

PROJECTED OPERATING COSTS (Cont'd)

- Major expense categories at UNI and the private group are compared below:

<u>Expense Category</u>	<u>University Of Northern Iowa 1966-67(a)</u>	<u>22 Private Iowa Schools 1964-65(b)</u>
Administration and General	14.2%	31.9%
Instruction and Departmental		
Research	57.8	46.5
Organized Activities	5.3	1.7
Organized Research	1.4	0.9
Extension and Public Service	1.6	1.0
Library	5.6	5.6
Physical Plant	<u>14.1</u>	<u>12.4</u>
Total	100.0%	100.0%

(a) Financial Report, State College of Iowa, 1966-67.

(b) From working papers, Proposal for Progress.

- In all but three of the major expense categories, UNI and the 22 private colleges showed a similar pattern of percentages.
 - UNI allocated a lower percentage to administration and general expense than the private schools.
 - The percentage expended on instruction and departmental research was higher at UNI than at the private schools.
 - Organized activities, primarily devoted to the operation of a laboratory school at UNI, showed a higher percentage than the private schools.
 - The differences can be attributed to a higher salary level, plus a higher student-faculty ratio than found at private institutions.

PROJECTED OPERATING COSTS (Cont'd)

Estimated Distribution Of Expense

- For planning purposes, it is suggested that the following percentage distribution of educational and general expenditures be utilized in estimating institutional costs in the fifth year of operation.

<u>Category</u>	<u>Percentage</u>
Administration and General	23%
Instruction and Departmental Research	50
Organized Activities	1
Organized Research	-
Extension and Public Service	5
Library	6
Physical Plant	15

- These percentages take into account the following expectations.
 - By the fifth year the institution will have reached a projected enrollment of 5,500 students, and operations should be stabilized.
 - Instructional cost will be the largest category of expense, and the amount devoted to it will approximate the mean of expenditures at UNI and Iowa's private colleges.
 - There will be no organized activities or organized research in the institution (or these will be minimal).
 - Extension and public service activities will be greater than normally engaged in by private institutions and UNI, but in the initial stages, not as large as currently offered by Iowa's public institutions or other public colleges in the U. S.
 - Library expense will approximate the accepted standards and the experience of existing schools, public and private, after the initial buildup of the collection.
 - Physical plant requirements will approach the commonly accepted standards.
 - A summer session will be offered in the first year of operation.

PROJECTED OPERATING COSTS (Cont'd)

- Cost of administration, which includes institutional and departmental administration, staff welfare, student services such as health services and counseling, and public information, will approximate the percentage experienced at UNI.

3% to higher

Cost Estimation - Rationale

- The key expense category is instruction and departmental expense.
- For planning purposes, it is assumed that the new school will have a student-faculty ratio of 15 to 1.
 - This ratio approaches the average for schools of the type recommended.
- Instructional expense is assumed to be equivalent to the average expense per faculty member of UNI for the year ended June 30, 1967.
 - Instructional expense totaled \$5,058,300 for 392 full-time equivalent faculty; average expense per faculty member, therefore, was \$12,904 after deduction for operation of the laboratory school.
- Since the fifth year enrollment of the new institution is projected to be 5,500, it is expected that a faculty of 367 would be required in order to achieve a 15 to 1 student-faculty ratio.
- Instructional expense in the fifth year of operation, therefore, can be expected to be in the vicinity of \$4.7 million.
- Since instructional expense has been estimated at 50 per cent of educational and general expense, total operating expense in the fifth year is estimated at \$9.4 million.
 - Expenditures for auxiliary enterprises are not included in this figure, since they would be offset by equivalent income.
 - Student aid expenditures are commonly not included in educational and general expense, and no estimate is included here.

OPERATING
COST PROJECTIONS

- In the early years of operation, as the institution develops its programs, the percentage allocated to the various expense categories will differ from those established for the fifth year.
 - No expenditures for organized activities are expected in the first two years of operation, after which a modest expenditure can be anticipated.
 - Operation of the physical plant can be expected to represent a higher percentage of total expenditures at the outset.
 - Although it is anticipated that the basic library collection will be in place before operations begin, a slightly higher percentage will be expended for the library in the first two years of operation.
 - Extension and public service activities will increase each year and should stabilize by the fifth year.
 - It is contemplated that after the second year of operation, there will be some kinds of organized activities, although they will account for a very small portion of the institution's budget.
- In line with the foregoing discussion, Exhibit V-2 presents cost estimates for the new institution, covering the first two biennia and at five-year intervals thereafter.
- All costs are expressed in terms of 1967 dollars, since the opening date of the institution is dependent upon approval of the legislature and the lead time required to construct the campus.
- For planning purposes, the projected operating costs are also presented in terms of escalated dollars in the specific year of operation.
 - It is here assumed that the first full year of operation will be 1973.
 - It is further assumed that operating costs can be expected to increase at a rate of 5 per cent annually.

PROPOSED WESTERN IOWA INSTITUTION
PROJECTION OF EDUCATION AND GENERAL EXPENSE

Expense Category	First Year Of Operation		Second Year Of Operation		First Biennium Total	Third Year Of Operation		Fourth Year Of Operation		Second Biennium Total	Fifth Year Of Operation		Tenth Year Of Operation		Fifteenth Year Of Operation		Twentieth Year Of Operation	
	Per Cent	Amount (\$000)	Per Cent	Amount (\$000)	Amount (\$000)	Per Cent	Amount (\$000)	Per Cent	Amount (\$000)	Amount (\$000)	Per Cent	Amount (\$000)	Per Cent	Amount (\$000)	Per Cent	Amount (\$000)	Per Cent	Amount (\$000)
Projected Enrollment		1,250		2,300			3,375		4,450		5,500		8,400		8,550		8,550	
Projected Faculty(a)		84		153		225		297		367		560		570		570		570
Administration and General	21%	\$ 455	21%	\$ 829	\$ -	22%	\$ 1,278	22%	\$ 1,685	\$ -	23%	\$ 2,162	23%	\$ 3,324	23%	\$ 3,383	23%	\$ 3,383
Instruction and Departmental Research(b)	50	1,084	50	1,974	-	50	2,903	50	3,832	-	50	4,700	50	7,226	50	7,355	50	7,355
Organized Activities	-	-	-	-	-	1	58	1	77	-	1	94	1	145	1	147	1	147
Organized Research	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Extension and Public Service	2	43	2	79	-	3	174	4	307	-	5	470	5	723	5	736	5	736
Library	7	152	7	276	-	6	348	6	460	-	6	564	6	866	6	883	6	883
Physical Plant	20	434	20	790	-	18	1,045	17	1,303	-	15	1,410	15	2,168	15	2,206	15	2,206
Total Education And General (in 1967 Dollars)	100%	\$2,168	100%	\$3,948	\$6,116	100%	\$5,806	100%	\$ 7,664	\$13,470	100%	\$9,400	100%	\$14,452	100%	\$14,710	100%	\$14,710
Adjusted Educational And General Expense(c)		\$2,906		\$5,556	\$8,462		\$8,579		\$12,483	\$21,062		\$15,311		\$30,047		\$39,062		\$49,808

(a)Based on 15 to 1 student-faculty ratio

(b)Based on average cost per faculty member of \$12,904.

(c)Based on anticipated change in value of the dollar at the rate of 5 per cent annually and the assumption that the school will begin operation in 1973.

PROJECTED OPERATING COSTS (Cont'd)

- o A 5 per cent annual increase is in line with estimates of the Post High School Study that operating expenditures should increase 5.9 per cent annually through 1970 and 4.7 per cent annually in the 1970-80 period.
- o Faculty salaries alone, which represent a high percentage of expense, are projected to increase 7 per cent annually by many planners in higher education.
- The 15- and 20-year projections of cost in terms of escalated dollars are subject to the possibility of countless modifications which are difficult to project with certainty so far in the future.
- As the exhibit shows, operating costs are estimated to rise from \$12.2 million in the first full year of operation to \$14.7 million by the 15th year, in terms of current dollars.
 - Enrollment is projected to stabilize in the 15th year, and costs will be comparable for the following five-year period.

Additional Costs In Planning Stages

- It is assumed that at least three years will be required to secure funds, plan the institution and construct the campus.
- During the minimum three-year planning period, certain costs can be expected.
 - In the first year, it has been recommended that the President be appointed, and it is expected that a staff will be selected for assistance in planning the school.
 - o It is estimated that the first year costs for the President and his staff, including the nucleus of the library staff, will be \$200,000.
 - In the second year the administrative and library staff will be increased and a small physical plant staff will be required to service the campus under construction.
 - o Second year costs are estimated at \$300,000.

PROJECTED OPERATING COSTS (Cont'd)

- The third year should see additions to the library and physical plant staff prior to the opening of the campus.
 - o Costs in this year should approximate \$400,000.
- The gathering of the basic library collection should begin in the first year of the three-year planning period prior to the opening of the institution.
 - The minimum 50,000 volumes required for the basic library should be purchased and cataloged prior to the opening of the institution.
 - The cost of the basic collection, is estimated at \$500,000, and is considered to be a capital expenditure if it is ordered prior to the opening of the institution.

VI - EVALUATION OF PRIME SITES, SITE
RECOMMENDATIONS, AND CAPITAL COSTS

Before the capital costs for the new institution could be developed, a closer study of the prime sites and their communities had to be made. This represented Phase II of the site study; the results of Phase I were reported in Chapter IV. There, the relative superiority of three communities - Atlantic, Carroll and Harlan - to other possible communities in the area was established.

FACTORS
CONSIDERED

- The evaluation performed in Phase II was primarily architectural and engineering related.
 - A complete development analysis of the prime sites at Atlantic, Carroll and Harlan was performed by Perkins and Will, and a scale model of each of the three sites was constructed.
 - As noted previously, all architectural and engineering work performed for this study is documented in a separate volume of this report.
- Further detailed analysis of community support capabilities was relatively minor during this phase, but certain factors were appraised in order to arrive at an overall assessment of the community as the location for a new State institution of higher education.
 - These factors included the following:
 - Overall support capabilities
 - Accessibility to intra-State transportation
 - Financial capabilities for expansion
 - Location in Western Iowa in relation to student concentrations, college-void area, the Regents' universities and private colleges
 - Community interest.

COMMUNITY
CONSIDERATIONS

Overall Support Capabilities

- The "overall support capability" of each community represents a summation of the detailed factors reviewed during the Phase I evaluation.
- Fundamentally, any specific capability or resource is generally available in each of the three communities.
 - However, while any judgment regarding the relative levels of total capability of the three communities is somewhat subjective, there is nevertheless a distinguishable difference.
- The communities of Atlantic and Carroll appear to have better support capabilities in total than does Harlan.
 - The difference may be correlated with the relatively larger population and economic resources in the two larger communities.

Intra-State Transportation

- Each of the three communities generally offers the same capability for transportation by bus, train and airplane.
 - Since students traveling intra-State generally travel by automobile or bus, accessibility to major intra-State highways is important.
 - Each of the three communities offers access to the highway system, but the communities of Atlantic and Harlan are better situated regarding the interstate highway system.
 - o Both communities are relatively close to "cross-State" I-80.

Financial Capabilities For Expansion

- Financial capability to expand-off-site facilities and services is represented by unused bonding capacity, both general community and community-related school district.

- An analysis of community bonding capacity, presented in Exhibit VI-1, shows that the unused capacity of both Atlantic and Carroll is approximately twice that of Harlan.
- The financial capacity of the three community-related school districts is shown in Exhibit VI-2.
 - The Harlan Community School District bond issue, pending at the time of this study will have a major impact on the district's facilities and remaining bonding capacity.

Geographic Location

- The relative geographic position of each of the three communities in relation to locations affecting the proposed institution is analyzed in Exhibit VI-3, which shows that:
 - The community of Carroll is located closest to the geographical center of students in Western Iowa.
 - The community of Atlantic is located closest to the geographical center of students in the college-void area of Western Iowa.
 - The community of Harlan is farthest distant from an existing Board of Regents' university.
 - The community of Atlantic is farthest distant from any existing private college.
 - Of the three communities, Carroll projects the largest number of potential students for 1973 within a 50-mile radius.
 - The community of Atlantic is nearest to the interstate highway system.

Community Interest

- All three of the communities expressed great interest in the location of the proposed institution within their immediate locale.
 - The community of Harlan exhibited perhaps the most favorable spirit and outlook toward the school.

COMMUNITY BONDING CAPACITY

	<u>Atlantic</u>	<u>Carroll</u>	<u>Harlan</u>
Bonding Limit			
January 1, 1969(a)	\$2,500,000	\$2,777,478	\$1,715,623
Outstanding Bonds			
January 1, 1969	<u>319,000</u>	<u>342,000</u>	<u>416,000</u>
Unused Bonding Capacity	\$2,181,000	\$2,435,478(b)	\$1,299,623

(a) Bonding limit figures are approximate.

(b) The City of Carroll is considering acquisition of a railroad right-of-way which would require a new bond issue of approximately \$150,000.

SCHOOL DISTRICT BONDING CAPACITY

	<u>Atlantic</u>	<u>Carroll</u>	<u>Harlan</u>
Bonding Limit January 1, 1969	\$5,151,963	\$6,400,000	\$4,500,000
Outstanding Bonds January 1, 1969	<u>1,006,000</u>	<u>540,000</u>	<u>826,000</u>
Unused Bonding Capacity	\$4,145,963	\$5,860,000	\$3,674,000(a)

(a) The Harlan Community School District is voting on a \$2,350,000 bond issue on November 14, 1968 for the purpose of building a new senior high school.

LOCATION COMPARISON CHART

<u>Factor</u>	<u>Atlantic</u>	<u>Carroll</u>	<u>Harlan</u>
Distance to geographical center of students in Western Iowa (miles)	54	23	35
Distance to geographical center of students in college-void area of Western Iowa (miles)	10	48	16
Distance to nearest Regents' university (miles)	85	65	91
Distance to nearest private four-year college (miles)	47	26	27
Potential students within 50-mile radius (1973)	10,483	11,866	9,783
Distance to nearest interstate highway (highway miles)	6	44	11

CONCLUSIONS
REGARDING
COMMUNITIES

- All three of the communities are agriculturally-oriented trade centers offering the same general variety of support capabilities.
 - While each of the communities could support the proposed institution, Atlantic and Carroll offer greater capability in terms of present resources than Harlan.
- The communities of Atlantic and Harlan are more favorably located for access to the interstate highway system than Carroll.
- The communities of Atlantic and Carroll possess larger bonding capacity for providing potentially needed civic and educational support facilities than does Harlan.
- The community of Atlantic is the most favorably situated within Western Iowa in relation to the identified college-void area of the State, and would thus offer the least competition with existing public and private institutions having the same role and scope.

ARCHITECTURAL
FINDINGS

- From the architects' point of view, as Volume III details, Atlantic would be the most desirable site.
 - Visual approaches to the site are very good.
 - The wooded slopes offer architectural advantages.
 - Site location provides excellent integration between campus and community.
 - Overall physical aspects of the site including size, shape, drainage, soil conditions, and buildable areas are superior.
- Of the two remaining sites, Harlan would probably be superior to Carroll.
 - On-site development problems at Carroll would be somewhat greater as a result of the need for special foundation requirements.

SITE RECOMMENDATIONS

On the basis both of the architectural-engineering evaluations and community factors, the following recommendations are made to the Iowa State Board of Regents.

- Notify the community of Atlantic that its offered site has been given first preference as the location for the proposed institution, and of the Board's intention to enter into an agreement with that community to secure the site provided the following conditions are satisfied:
 - The community indicates its intent to arrange for the off-site support facilities projected in this report.
 - The community presents by February 1969 firm options or similar guarantees to convey its prime site to the Board of Regents at the price indicated in Volume III.
 - The State legislature appropriate by September 1969 sufficient funds to allow the Board of Regents to purchase the site at the price indicated.
- Notify the communities of Harlan and Carroll that their offered sites have been given second and third preferences, respectively, as locations for the proposed institution and that the communities are requested to retain options (if currently held) on these sites until September 1969 so that they may be executed in appropriate order in the event that the Atlantic site cannot be acquired.
- Direct the selection of permanent staff and of management, educational and design consultants for the detailed planning of the proposed institution at the earliest time authorized by legislative actions.
- Establish a permanent working liaison group with the community of Atlantic, the Iowa Development Commission and Board of Regents staff in order to coordinate on-site and off-site development planning.
- Forward a copy of this report to each Federal, State and local agency which may be affected, informing them of the Board's interest in setting up the liaison group described above, and that this group and appropriate consultants will shortly call upon each agency for its assistance in the coordination of detailed plans for the construction of on-site and off-site facilities.

CAPITAL COSTS OF THE NEW INSTITUTION

Detailed projections of capital costs based upon the foregoing recommendation of Atlantic as the site of the new institution appear in Volume III of this report. Capital cost calculations for a campus at Harlan and at Carroll are also presented in Volume III.

- Significant capital cost factors for the recommended site at Atlantic are summarized in Exhibit VI-4.
 - Cost projections are based upon funding of the initial phase of construction in 1971, with first occupancy in 1973.
 - Campus development is based upon a 10-year plan, with all facilities being completed by 1983.
 - Estimates of increases in construction costs through 1981 are presented as an escalation factor which must be applied to the costs expressed in 1968 dollars in order to arrive at realistic cost projections.
 - Total costs for construction, including equipment and furnishings, for the new institution are projected to be \$192,003,000 through 1983.
- Of this total projected cost of \$192 million, approximately \$120 million will be incurred for the student union and housing for single and married students.
 - Under existing practice, this portion of the cost can be financed through bond issues.
- The remaining amount required to be funded by the General Assembly would be approximately \$71 million.
- In addition to on-site development expenditures, development costs of off-site utilities at Atlantic are estimated to total \$2,313,000 over a 10-year period.
- Land acquisition cost of the recommended Atlantic site is estimated at approximately \$500,000, in the opinion of two independent appraisers.
- Certain preliminary costs, covering educational consulting, program development and legal services (aside from the preliminary operating costs previously summarized in Chapter V), are estimated at \$150,000.

PROJECTED DEVELOPMENT EXPENDITURES BASED UPON 1973
OCCUPANCY AT RECOMMENDED SITE IN ATLANTIC, IOWA

*in thousands of
dollars?*

<u>Time Of Construction</u>	<u>Year Funded</u>	<u>Year Occupied</u>	<u>Development Cost</u> (In 1968 Dollars)	<u>Escalation Factor(a)</u>	<u>Projected Cost(b)</u>	<u>Fees(c)</u>	<u>Total Cost</u>
Initial construction	1971	1973	\$ 25,646	119.7	\$ 30,708	\$ 1,690	\$ 32,398
Year 1	1972	1974	5,439	128.7	6,980	384	7,364
Year 2	1973	1975	8,055	139.0	11,210	616	11,826
Year 3	1974	1976	10,746	148.7	15,980	875	16,855
Year 4	1975	1977	12,461	159.1	19,850	1,091	20,941
Year 5	1976	1978	17,671	168.6	29,800	1,639	31,439
Year 6	1977	1979	9,032	178.7	16,140	887	17,027
Year 7	1978	1980	5,864	190.3	11,190	615	11,805
Year 8	1979	1981	4,884	203.6	9,950	547	10,497
Year 9	1980	1982	3,465	217.8	7,550	415	7,965
Year 10	1981	1983	9,752	232.0	22,640	1,246	23,886
Total Expenditures			\$113,015		\$181,998	\$10,005	\$192,003

(a)Based upon projection of increases in construction costs presented more fully in Volume III.

(b)Development cost in 1968 dollars times Escalation Factor.

(c)5.5 per cent of projected cost.

VII - OTHER CONSIDERATIONS

- Impact Upon Existing Institutions
- Faculty Recruitment Problems

CAPITAL COSTS OF THE NEW INSTITUTION (Cont'd)

- A recapitulation of total projected costs for the proposed institution at Atlantic, assuming campus development through 1983, is as follows:

Campus development	\$192,003,000
Off-site utilities	2,313,000
Land acquisition	500,000
Preliminary costs	<u>150,000</u>
Total	\$194,966,000

- As Volume III points out, while there would be some variations in these cost figures for the other two communities, in terms of land acquisition, on-site development and supplementary facilities needed, the cost differences can be considered minimal.
- In addition to these development costs, the basic library collection of approximately 50,000 volumes is estimated to cost \$500,000.
 - The purchase of books prior to the opening of the institution can be considered as a capital cost while purchases after operations begin are classed as operating costs.

The effects that the establishment of a school in Western Iowa could have upon existing institutions are discussed in the first section of this chapter. The three major sectors of Iowa higher education - area schools, private colleges and Regents' universities - are considered separately.

APPROACH

- The impact of a new Western Iowa school upon existing institutions is impossible to measure or project quantitatively.
- As a means of at least gathering opinions on this matter, administrators of Iowa's colleges and universities were interviewed extensively to determine what they anticipated as the potential effects of the new institution upon their schools.
- The current outlook for the State's economy and for higher education was reviewed on the basis of studies and findings.

PRIVATE COLLEGES

- Iowa's private colleges generally look upon a new Western Iowa institution as a potential threat to their progress; some of them, to their very existence.
 - Certain schools, academically and financially strong, would not be affected at all.
 - Other schools, faced with all of the problems familiar to private education today, express the fear that a new public institution would add another heavy burden to their already weighty problems.
- The major impact of a new Western Iowa school will probably be upon the private institutions located in the western part of the State.
 - The primary effect would be on enrollments, with the Western Iowa schools fearing that students living in the region who might otherwise attend their institutions would, instead, be attracted by the new public college.

- With the exception of Midwestern College, the Western Iowa private colleges enroll a high percentage of Iowa residents, many of them coming from the immediate vicinity of the various schools.
- The private schools fear that the expected disparity in tuition rates will also siphon off students.
- There appears to be less concern that the new institution will attract faculty now teaching in the private schools.
 - o Private college administrators feel that their faculty joined the private sector of higher education by choice and would not be attracted to a public college.
- The Statewide attitude, as expressed by the Iowa Association of Private Colleges and Universities, is that a new public Western Iowa college will add to private higher education's problems, but is just one of many problems facing that sector.
 - The establishment and projected growth of the area schools is viewed as a greater threat to the private sector.

AREA
SCHOOLS

- The question of utilization of the State's finances is of primary concern to the area schools.
 - A new Western Iowa institution is looked upon as further diluting the State's educational funds when the area schools already feel they are underfinanced.
- Only in those schools in Western Iowa would enrollment be directly affected.
 - Opinions of Western Iowa area school superintendents vary.
 - o Some feel that the establishment of the institution in proximity to an area school would result in the eventual closing of the area school because of loss of enrollment.
 - o Others feel that the two types of public institutions can exist together, even in the same community, if their objectives and philosophies are each well defined.

- There apparently is little concern in the area schools about possible faculty losses to the new college, since the two types of schools are assumed to attract different types of teachers.

REGENTS' SCHOOLS

- The impact upon the Regents' institutions would be primarily in the area of finance.
- Broadly, administrators of the three Regents' schools are concerned about the State's ability to finance an additional institution.
- There is concern that the proportion of funds available to these institutions as a group will be somewhat fixed, with the result that each of the four will receive a smaller share for the support of their educational and public service mission than each of the present three.

SUMMARY AND CONCLUSIONS

- The potential financial implications of the new institution are probably the most important considerations affecting Iowa higher education.
 - The ability of Iowa to support growing expenditures for higher education has been the subject of a great deal of recent analysis and discussion.
 - The "Proposal for Progress" estimated that annual State appropriations for operating costs for public higher education would increase five-fold (\$50 million to \$254 million) from 1965 to 1981 and that total capital requirements in the public sector would be \$620 million in the 1965-1981 period.
 - In the private sector, the "Proposal for Progress" estimated that annual operating expenditures would increase from \$30.6 million in 1964-65 to \$141.3 million in 1980-81, while capital requirements in that period would total \$256.8 million.

- Opinions differ on Iowa's ability to support its projected higher educational needs and it is, therefore, understandable why the establishment of a new public institution is viewed with some concern.
- The recent proposals for State tuition grants to students in private colleges adds another dimension to the financing picture.
- Enrollment losses in existing schools, if they occurred, would be felt primarily by private schools and the area schools in Western Iowa.
 - There is no way to accurately predict the short-run and long-run effects upon enrollments at individual institutions.
 - In the previous analysis of enrollment projections, it has been indicated that in the long run, Statewide enrollment potentials are greater than the planned capacities of existing schools.
 - One of the criteria adopted for the evaluation of location was that the school should be located in a college-void area where its effects upon enrollments in existing schools would be minimized.
- The development of the philosophy and objectives of the new institution could have an important impact on existing schools.
 - Cooperative programs with private schools, especially in Western Iowa, could result in an overall strengthening of higher education.
 - Complementary programs with area schools, especially in Western Iowa, could result in a broader range of educational opportunity than now exists.
- The establishment and potential impact of a new public institution is just one part of the State's overall educational responsibilities in the next two decades.
 - Consideration should be given to the development of greater formal cooperation between the Board of Regents and the Department of Public Instruction in all areas relating to higher education.
 - Furthermore, the need to maintain educational diversity and thus include Iowa's private colleges in future planning is apparent.

FACULTY RECRUITMENT PROBLEMS

This section discusses factors relating to recruitment of faculty for the proposed institution.

- Competition for faculty exists in all of Iowa's colleges and universities; recent studies made for the Cooperative Study of Post High School Education indicate some of the major reasons why.
 - The Regents' institutions see competition not only from academic but from nonacademic sources, probably because of higher salaries available, as the major problem in faculty recruitment.
 - Iowa's private colleges list scarcity of qualified personnel, the noncompetitive salaries they can offer as compared with other institutions, poor location of their school, and lack of research opportunities.
 - The overall problem of competition for faculty is reflected in the relative lack of concern on the part of most of Iowa's private schools regarding the proposed institution's impact on their faculty.
 - The establishment of a new Western Iowa school is not viewed as a major threat in attracting present faculty away from Iowa's private colleges.
- The proposed institution would be subject to the same faculty recruitment problems as other schools, with certain aspects of its program possibly posing additional problems.
 - The recommended institutional emphasis upon undergraduate programs will require a faculty which seeks its satisfactions and rewards in teaching rather than in research.
 - While it is widely believed that many high quality teachers are attracted to research-oriented institutions, many people feel that this assumption is questionable.

FACULTY RECRUITMENT PROBLEMS (Cont'd)

- The location of the school, in the area selected by the Board of Regents, could result in faculty recruitment problems.
 - o Ready access to large urban centers, offering wider social and cultural attractions, is an important consideration to many prospective faculty.
 - o The availability and quality of educational facilities for faculty children in the local community is often a factor of considerable importance.
 - o The Post High School Study reported that five of 18 private schools responding indicated that "poor location of college" was a major problem in faculty recruitment.
- Alternatively, there are several positive factors the new institution can offer to prospective faculty.
 - It can offer opportunities to those who prefer teaching to research.
 - As a new institution, it can offer physical facilities not available at many schools.
 - The prestige of affiliation with the Regents' system would attract those who might reject opportunities in other states not having a system of public higher education of nationally recognized high quality.
- The school's philosophy and program, as established by the President and administrative staff, is the most important factor in recruitment of faculty.
 - The prospect of innovation and challenge, directed by exciting and knowledgeable leadership, can play a large part in attracting the quality of faculty the new school will require.

APPENDIXES

A - SELECTED ECONOMIC PROFILE OF
38 WESTERN IOWA COUNTIES, 1960

SELECTED ECONOMIC PROFILE OF 38 WESTERN IOWA COUNTIES

1960

County	Per Cent Employed In Manufacturing Industries	Per Cent Employed In White Collar Occupations	Median Family Income	Per Cent Family Incomes Under \$3,000	Per Cent Family Incomes Over \$10,000
Adair	3.4%	24.0%	\$3,313	45.4%(a)	5.0%
Adams	5.4	25.1	3,426	43.7(a)	5.5
Audubon	4.2	24.0	3,447	42.7(a)	6.4
Buena Vista	10.9	33.1	4,426	31.0(a)	7.2
Calhoun	7.9	32.5	4,244	33.2(a)	7.5
Carroll	7.7	31.0	4,380	26.9(a)	8.9
Cass	6.7	35.3	4,089	35.8(a)	7.5
Cherokee	7.4	32.9	4,083	35.0(a)	7.1
Clay	8.3	34.7	4,441	31.4(a)	9.1
Crawford	4.4	25.7	3,977	36.1(a)	10.1
Dickinson	11.5	31.9	3,978	35.5(a)	8.3
Emmet	14.8	36.0	4,635	29.8(a)	9.2
Fremont	7.7	27.1	3,762	37.1(a)	6.3
Greene	7.9	30.3	4,005	34.7(a)	8.2
Guthrie	5.7	27.9	3,491	43.4(a)	4.5
Harrison	6.8	31.7	3,990	37.1(a)	6.8
Humboldt	9.4	31.3	4,751	25.6(a)	10.3
Ida	5.7	26.1	3,910	35.3(a)	5.5
Kossuth	6.3	27.6	3,986	33.7(a)	7.4
Lyon	4.7	25.9	3,559	41.0(a)	5.6
Mills	11.4	29.0	4,190	35.2(a)	6.0
Monona	4.9	26.7	3,857	37.0(a)	5.3
Montgomery	12.0	35.6	4,150	36.1(a)	6.0
O'Brien	7.9	31.7	4,129	32.7(a)	8.3
Osceola	8.4	24.7	3,692	38.8(a)	5.6
Page	7.3	36.8	3,996	36.2(a)	6.2
Palo Alto	6.5	30.8	3,598	40.1(a)	4.9
Plymouth	8.1	26.0	4,164	34.1(a)	7.5
Pocahontas	5.8	27.7	4,220	33.6(a)	8.5
Pottawattamie	16.5	39.6(a)	5,591(a)	18.2	10.2
Ringgold	3.1	25.1	2,573	57.4(a)	3.7
Sac	12.4	26.5	4,136	32.1(a)	7.1
Shelby	4.0	26.4	3,933	38.5(a)	8.9
Sioux	9.7	27.0	3,994	34.8(a)	6.5
Taylor	3.2	26.2	2,867	52.4(a)	2.9
Union	6.8	35.7	3,861	39.2(a)	6.0
Webster	25.2(a)	38.0(a)	5,494(a)	18.7	11.3(a)
Woodbury	20.2(a)	44.0(a)	5,539(a)	19.6	12.3(a)
Entire State	18.6	36.8	5,069	25.3	10.7

(a)Exceeds State figure. Source: Bureau of the Census, 1960.

B - CHANGES IN EFFECTIVE BUYING INCOME,
38 WESTERN IOWA COUNTIES, 1961-67

CHANGES IN EFFECTIVE BUYING INCOME
(38 Western Iowa Counties, 1961-67)

<u>County</u>	<u>Per Capita Effective Buying Income</u>		<u>Per Cent increase 1961-67</u>
	<u>1961</u>	<u>1967</u>	
Adair	\$1,369	\$2,203	
Adams	1,321	2,148	
Audubon	1,434	2,352	
Buena Vista	1,642	2,663	
Calhoun	1,562	2,539	
Carroll	1,532	2,574	
Cass	1,712	2,673	
Cherokee	1,474	2,391	
Clay	1,688	2,656	
Crawford	1,513	2,556	
Dickinson	1,555	2,566	
Emmet	1,599	2,587	
Fremont	1,509	2,471	
Greene	1,544	2,503	
Guthrie	1,368	2,156	
Harrison	1,471	2,458	
Humboldt	1,715	2,724	
Ida	1,443	2,425	
Kossuth	1,318	2,211	
Lyon	1,254	2,114	
Mills	1,557	2,436	
Monona	1,428	2,463	
Montgomery	1,627	2,597	
O'Brien	1,470	2,507	
Osceola	1,357	2,189	
Page	1,691	2,756	
Palo Alto	1,204	2,000	
Plymouth	1,425	2,408	
Pocahontas	1,445	2,426	
Pottawattamie	1,802	2,686	
Ringgold	1,142	1,855	
Sac	1,511	2,552	
Shelby	1,361	2,298	
Sioux	1,290	2,228	
Taylor	1,238	1,882	
Union	1,532	2,412	
Webster	1,961	3,016	
Woodbury	1,987	2,998	
Average	1,613	2,557	58.5%
61 Eastern Iowa Counties	1,883	2,825	50.0
Entire State	1,806	2,779	53.9

Source: Sales Management, Annual Survey of Buying Power, 1962 and 1968.

C - LOCATION AND SITE CRITERIA FOR
THE NEW INSTITUTION OF HIGHER
EDUCATION IN WESTERN IOWA

LOCATION AND SITE SELECTION CRITERIA
FOR THE NEW INSTITUTION OF
HIGHER EDUCATION IN WESTERN IOWA

BASIC PRINCIPLES
AND CONSIDERATIONS

1. The primary role of the new institution of higher education is to support and fulfill Statewide educational needs, and, in this capacity, provide for any regional requirements of Western Iowa.
2. The institution's Statewide role emphasizes the necessity for it to be strategically located with respect to all forms of transportation so that the campus may be accessible to cultural, educational, and related intellectual resources.
3. Although the role of the new institution is that of a Statewide educational center, the primary source of students during its early formative years can reasonably be expected to be the geographic area in which it is located (50-to-75-mile radius). Until such time as the institution establishes a recognized identity, out-of-State and across-State student migration will be minor compared with regional enrollment sources.
4. It is generally desirable to locate new senior colleges in close proximity to established or emerging population centers. The advantages offered by such a location include ready access to public transportation, opportunities for part-time employment, possibilities of good off-campus living facilities, available housing for faculty and staff, and established community services.
5. The attraction of highly qualified faculty is influenced by the desirability of locally available resources and living conditions.
6. Regardless of the institution's internal facilities, it will be dependent upon the surrounding community for a part of its support requirements. The new institution and its surrounding community will be highly interdependent with respect to housing, traffic, commercial services, community facilities and community environment. A college of 3,000 FTE students can be expected to produce a college-related community of 4,000 to 6,000 persons.

7. Proper control and development of lands surrounding the campus are of direct and significant value to both the institution and the local community.

8. Both tangible and intangible qualities contribute to the evaluation of each site's potential. Tangible qualities are those that may be measured in quantitative terms, while intangible qualities are those that by their nature may be measured only on a qualitative (subjective) scale.

9. The new institution should be sufficiently separated from similar private/public institutions to eliminate undesirable overlapping of demands on the local community. Destructive competition with existing institutions is not desirable. Where such a conflict would appear to exist in the evaluation of a site, the appraisal should include such factors as the capacities of existing institutions, the cost involved in attending them, the selectivity of admissions exercised, and the appropriateness of the programs to the educational needs of the youth.

10. A fundamental principle of location and site evaluation is to identify the central geographic region that would attract and serve the largest number of students.

DEFINITION OF TERMS

1. General Location

The general geographic area in which the institution is to be located. (For the purposes of this study, the general location evaluation will involve specific counties or regional sections which are identified by two or more adjacent counties.)

2. General Campus

The total land area belonging to the institution.

3. Urban Site

A location in close proximity to an established metropolitan central business district. An urban site is generally characterized by concentrations of one or more of the following: dense commercial, residential, governmental, office or cultural uses.

4. Suburban Site

A location characterized by nearby uses of moderate or low intensity, and by a peripheral location with respect to a metropolitan central business district.

5. Campus Core

The principal concentration of physical facilities in which the majority of campus teaching, research, and cultural activities are located. The campus core normally includes academic, administrative, library, research and service space.

6. Community

The zone of physical, economic and social influence exerted on or by the institution, around the general campus.

OBJECTIVES OF
GENERAL LOCATION AND
SITE SELECTION CRITERIA

The objective of general location criteria is to provide a basis for identifying and evaluating geographic areas in which the institution may be located to fulfill its designated role and scope. This broad-gauged geographic evaluation is in contrast with site criteria, designed to establish a means of closely evaluating specific tracts of land proposed for the general campus. Site criteria must have sufficient flexibility to permit evaluation of each site to its own best advantage.

It is difficult if not impossible to establish universally accepted weights or emphasis for all of the various criteria; however, it is possible to establish general guidelines for applying these factors.

GENERAL
LOCATION
CRITERIA

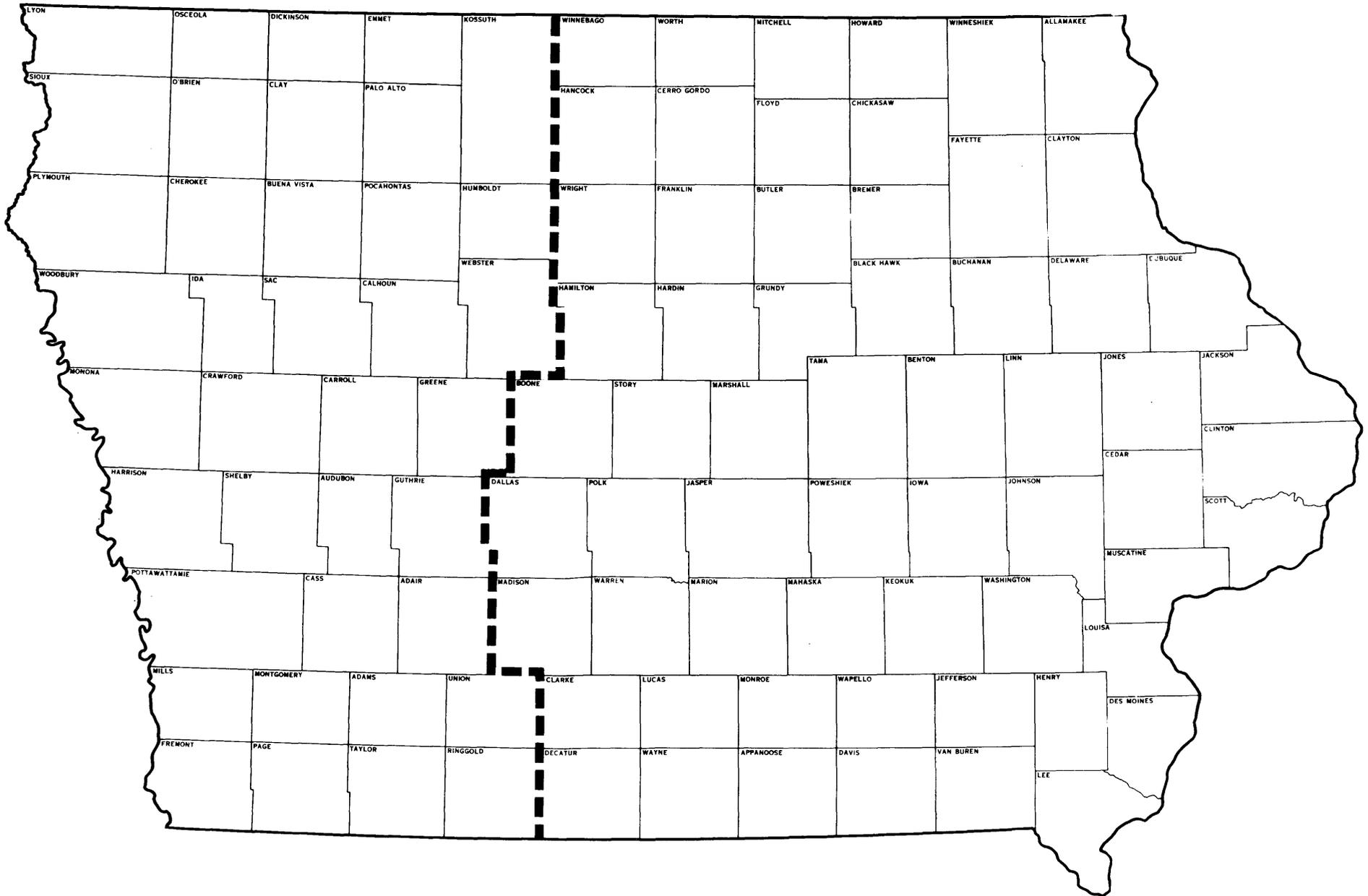
1. Western Iowa Boundaries

The Act passed by the General Assembly authorizing a new State institution of higher education requires the Board of Regents to locate this facility in Western Iowa. The definition of Western Iowa to be used for evaluating potential locations is delimited by the counties constituting this region. Exhibit C-1 lists alphabetically those counties included within this definition. Exhibit C-2 presents a county outline map of the State which identifies graphically the boundaries of Western Iowa.

ALPHABETICAL LISTING OF COUNTIES
DEFINED AS WESTERN IOWA

Adair	Lyon
Adams	Mills
Audubon	Monona
Buena Vista	Montgomery
Calhoun	O'Brien
Carroll	Osceola
Cass	Page
Cherokee	Palo Alto
Clay	Plymouth
Crawford	Pocahontas
Dickinson	Pottawattamie
Emmet	Ringgold
Fremont	Sac
Greene	Shelby
Guthrie	Sioux
Harrison	Taylor
Humboldt	Union
Ida	Woodbury
Kossuth	Webster

STATE COUNTY OUTLINE MAP
IDENTIFYING BOUNDARIES OF WESTERN IOWA



2. Central Location

The location of the institution with respect to the student population it is to serve is the one factor most universally accepted as being of primary importance among the various criteria. A geographic location that would attract the largest number of students generally requires that the college campus be located near the center of the population to be served by it. Exhibit C-3 presents the general mathematical model for identifying geographic centers of student concentrations.

Application of these criteria, however, does not imply merely the determination of the geographic mean for area selection. Location of similar existing public and private institutions serving the general area must be considered; identification of concentrations of students in college-void areas must be established; and the accessibility of a location must be evaluated.

3. Population Center

The general area of Western Iowa may be characterized as rural. Population centers are not densely situated and are relatively small. The interdependency of the new institution with the community near which it is located requires an established foundation of community-related resources on which to build. The general location of the institution should provide close proximity to an established population center with a record of general population expansion. Population centers are not to be construed as the center of a circular geographical area; thus border areas can be considered. In addition, the community's per capita income should compare favorably with that of the State average, and should also show an increasing trend.

4. Transportation

Ease of accessibility to the new institution is necessary to meet the general needs of students, faculty, and staff. The general location should be within reasonable commuting distance of major metropolitan, educational, recreational, and cultural centers. Access to major bus, rail, and air transportation centers should be considered a desirable factor in location selection.

SITE

CRITERIA

1. Environment And Appeal

Potential sites should be free of detracting disturbances, such as excessive noise, odor, blighted surroundings, traffic congestion, and heavy industrial applications. It is desirable that the institution be able to develop its physical facilities to reflect a unique culture matched by its campus site.

MODEL FOR IDENTIFICATION OF GEOGRAPHIC
CENTER OF STUDENT CONCENTRATIONS

$$\bar{X} = \bar{X}_x + \frac{W_1 (\bar{X}_x - X_1) + W_2 (\bar{X}_x - X_2) + W_3 (\bar{X}_x - X_3) + \dots + W_n (\bar{X}_x - X_n)}{W_1 + W_2 + W_3 + \dots + W_n}$$

$$\bar{Y} = \bar{Y}_y + \frac{W_1 (\bar{Y}_y - Y_1) + W_2 (\bar{Y}_y - Y_2) + W_3 (\bar{Y}_y - Y_3) + \dots + W_n (\bar{Y}_y - Y_n)}{W_1 + W_2 + W_3 + \dots + W_n}$$

Where:

\bar{X} = geographic mean location of students measured on an East-West coordinate axis

\bar{X}_x = known reference location on the East-West axis

X = location of student concentration on the East-West axis

W = number of students located at point X, Y

\bar{Y} = geographic mean location of students measured on a North-South coordinate axis

\bar{Y}_y = known reference location on the North-South axis

Y = location of student concentration on the North-South axis

NOTES: - Distance is measured in land miles.

- Students are assumed to be located at the center of the specific type of geographic areas analyzed - i. e., counties, school districts, etc.

An urban site may benefit from the relationship to elements of the man-made environment. A suburban site, on the other hand, may offer the beauties of undeveloped natural resources.

2. Present And Potential Land Use

Evaluation of proposed tracts of land must include analysis of existing and future land use plans in the site area. Review of city, county, regional, and State master plans are necessary to establish the impact of plans for such considerations as zoning, highways, parks, water resources and recreational areas.

3. Topography

The shape and topography of the land constituting the site should lend themselves to functional development. To provide for maximum flexibility in planning, the proposed site property should be in one parcel of land undivided by existing permanent or potential public thoroughfares or rights of way.

It is not essential that all of the land be flat. For aesthetic effect and for drainage, it is desirable to have some rise and fall to the land; however, there should be sufficient level land to support the campus core.

4. Community Development

The factors contributing to a desirable college environment do not stop at the campus' edge. Property at the periphery of the institution should be controlled so that it will be compatible with the needs of the college and its faculty, students and staff. To this end, it is important that methods of control of land use for surrounding areas be established at the outset, and necessary agreements be executed simultaneously with land acquisition.

5. Availability

The potential site should be free of permanent easements, encumbrances, encroachments or rights. Acquisition of the site's mineral and water rights should be available to the college. The time required for acquiring the land should be compatible with the projected development plans for meeting the desired campus opening date.

6. Costs

Site acquisition and development costs are interdependent. An analysis of total costs should include such items as site preparation; special foundation requirements; erosion and flood control facilities; access roads, utility extensions beyond those supplied by others; and significant site occupant relocation costs. Thus donated land may involve total costs in excess of alternative purchased land.

For either situation, it should be remembered that the gross cost of the site will be a small part of the ultimate total investment.

7. Community Support

Because of the interdependent relationship that must exist between the institution and the community where it is situated, the assurance of public support is highly desirable. Such support may be manifested in several ways - expressions of enthusiasm by local governments, chambers of commerce, civic groups, and individuals; assistance in the form of ordinance enactments for controlled planning; agreement for provision of services (utilities, fire, police); and offers of land at reduced or no cost.

8. Educational Base

The site community should represent one in which college education is a logical next step based upon an existing program of quality education in elementary and secondary schools, good facilities, and willingness to provide support for public/private education.

9. Part-Time Employment Opportunities

It is desirable that possibilities for part-time student employment exist within the immediate community or within a reasonable commuting distance from the college.

10. Student Population

In an area as geographically dispersed as that of Western Iowa, each proposed site must be evaluated in terms of the relationship between its location and estimated attendance. Generally, it should be centrally located in the college-void area of Western Iowa with a minimum overlapping of similar existing college-level institutions to provide a reasonable commuting area that will permit of the greatest number of potential college students. If assimilation of an existing institution into the State system is considered, that

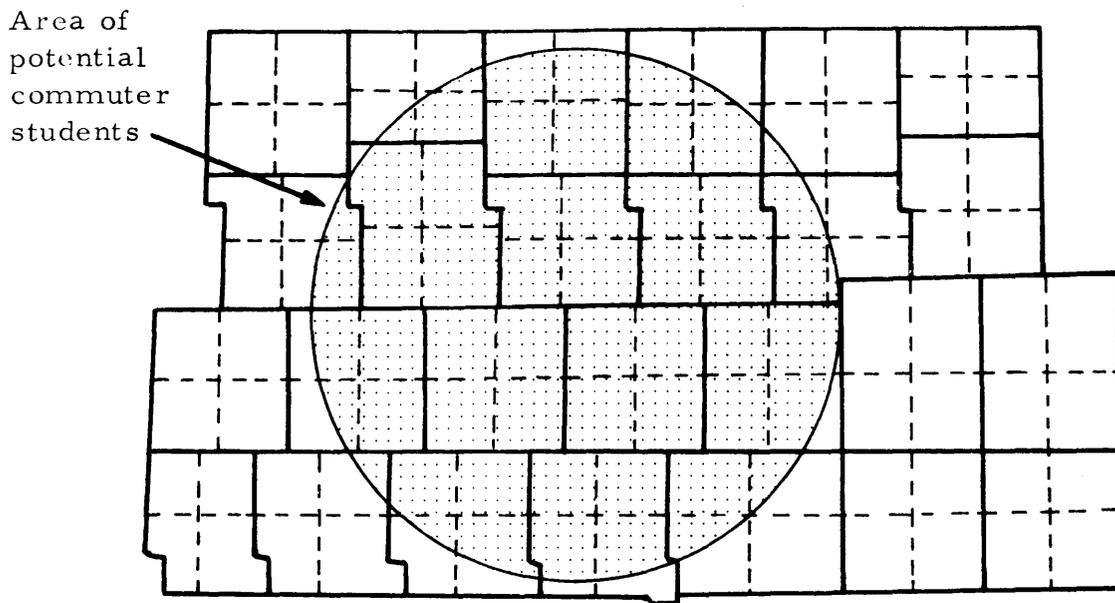
geographic area would be regarded as a college-void area for purposes of applying these criteria. On the basis of the existing road system in Western Iowa, a maximum distance of 50 miles can be accepted as being a reasonable definition for these criteria.

Exhibit C-4 presents a model that will be used to establish maximum projected commuter student attendance figures for a specific site.

11. Development Characteristics

Evaluation of a potential site must include an analysis of its characteristics that define the basic needs for development of the site area. Such an analysis should include determination of requirements, such as geology and soil limitations for supporting structures, drainage, grading, access roads, usable acreage, water, electric power, gas, sewers, storm drains, and remodeling of existing structures (if applicable).

MODEL FOR PROJECTING MAXIMUM
POTENTIAL STUDENTS WITHIN COMMUTING DISTANCE



PARAMETERS FOR
DEFINING COMMUTER
AREA AND STUDENTS

- The general commuting area is defined by a circle of a 50-mile radius around each proposed site.
- Each county is divided into four sectors. Total projected students from a county are assigned to each sector on the basis of proportion of general population in each sector to that of the county.
- Students within 40 miles of an existing Board of Regents' university are excluded from the area potential.
- County sectors intersected by a radius from a proposed site or from an existing university will be assumed to include all of the students within the sector.
- Potential commuter students are limited, for this analysis, to those residing in Iowa.

D - REQUESTED COMMUNITY PROFILE
FOR PHASE I SITE SELECTION

REQUESTED COMMUNITY PROFILE
FOR PHASE I SITE SELECTION

SECTION 1 - GOVERNMENT

A. Form

1. What is the type of local government?
2. What is the term of office for elected officials?

B. Financial Condition

1. What is the per capita debt?
2. What is the major source of revenue?
3. What is the salary of major city officials?

C. Regulations

1. Is there a Municipal Planning Commission established by city ordinance?
2. Is there a separate Municipal Zoning Commission?
3. Is a comprehensive planning and zoning study available?
 - a. If yes, what was the date of the study, and who performed the study?
 - b. If yes, when was the plan put into effect?
4. Is there a Municipal Building Code?

D. Law Enforcement

1. What is the number of full-time personnel?
2. What is the number of part-time personnel?
3. What is the annual budget (most recent year) for the police department?

4. How many radio-controlled cars are available?

E. Fire Protection

1. What is the number of full-time personnel?

2. What is the number of trained volunteer or part-time personnel?

3. What is the annual budget (most recent year) for the Fire Department?

4. What are the major pieces of equipment (by type and number in service)?

5. How many fire stations are manned?

SECTION 2 - POPULATION

A. Census

1. List the census figures for the following years:
 - a. 1940
 - b. 1950
 - c. 1960
 - d. Special since 1960, if applicable.
2. List the composition of the latest census population by sex and by age group as indicated:
 - a. Under 14
 - b. 14-17
 - c. 18-21
 - d. 22-35
 - e. 36-45
 - f. 46-55
 - g. 56-65
 - h. Over 65

B. Educational Level

What is the percentage of persons 25 years old and over within the community that have attained the following educational levels? (Persons should be counted only in their highest level.)

- Less than elementary
- Elementary
- High school
- College

SECTION 3 - COMMUNITY FACILITIES

A. Financial

1. List the following data for banks:
 - a. Number of banks
 - b. Deposits
 - c. Capital
 - d. Surplus
 - e. Assets.
2. List the following data for savings and loan associations:
 - a. Number of associations
 - b. Deposits
 - c. Capital
 - d. Surplus
 - e. Assets.
3. Are FHA loans available from local sources?

B. Accommodations

1. What is the total number of rooms available for public accommodation?
2. List the major establishments (hotels, motels) built within the last 10 years and the number of rooms.
3. List the leading restaurants and the capacity of each.

C. Recreation

List the recreational facilities available in the community.

D. Cultural Activities

1. Is there a legitimate theater in the community?
2. Is there a community playhouse group?
3. Is there a museum in the community? If so, what type?
4. List the following data for public libraries within the community:
 - a. Number of branches
 - b. Number of volumes
 - c. Number of bookmobiles.
5. Is there a symphony orchestra within the community?
6. List the major lecture series and discussion groups within the community.

E. Part-Time Employment

Provide the following data relevant to part-time employment opportunities currently existing within the community.

- Type of industry
- Number of jobs
- Nature of work

SECTION 4 - MEDICAL AND HOSPITAL

A. Hospitals

1. List the following data for hospitals within the community:
 - a. Name
 - b. Type (general, nursing, etc.)
 - c. Number of beds
 - d. Rating
 - e. Ownerships.
2. Is local ambulance service available?

B. Doctors And Dentists

1. List the number of doctors by type (general practitioner, surgeon, specialist, etc.) within the community.
2. How many dentists are in the community?

SECTION 5 - CIVIC ORGANIZATIONS

- A. List the civic clubs, community organizations, veterans' organizations, etc.
- B. List professional societies within the area.
- C. Is there a Community or United Fund? If yes, what per cent of quota was attained on the last three drives?

SECTION 6 - CHURCHES

List the churches by denomination within the community.

SECTION 7 - COMMUNICATIONS

- A. List the newspapers regularly available to the community and indicate whether they are evening, morning or weekly editions.
- B. List the radio and TV stations and their network affiliation received by the community.

SECTION 8 - EDUCATION

A. Public Schools

1. List the number of schools, the number of teachers, and the enrollment for the following:
 - a. Elementary
 - b. Junior high school
 - c. High school
 - d. Junior college
 - e. Vocational/technical
 - f. Trade.
2. What are the certification requirements of teachers?
3. List the range of teachers' salaries for the following types of schools.
 - a. Elementary
 - b. Junior high school
 - c. High school.
4. What is the estimated cost of education per pupil?
5. What is the school debt per capita?
6. Is all of the school district(s) served by school transportation?
7. What has been the building program in the last five years (facilities and cost)?
8. What is the estimated building program for the next five years (facilities and cost)?

9. What is the number of volumes in the school libraries?

B. Private Schools

List the name, number of teachers, and enrollment for the following types of private schools:

- Elementary
- Junior high school
- High school
- Junior college
- Vocational/technical
- Trade.

SECTION 9 - TRANSPORTATION

A. Rail Service

1. What railroads serve the community?
2. Is there daily passenger service? If yes, include a condensed schedule.

B. Air Service

1. What scheduled airline(s) serves the community?
2. Is passenger service available?
 - a. If yes, include a condensed schedule.
 - b. If no, where is the nearest service?

C. Bus Service

What intercity lines serve the community?

D. Highways And Streets

1. What percentage of streets is paved in the community?
2. Is there a current paving program?
3. What is the amount of outstanding bonds for streets?
4. Are new bonds contemplated? If so, estimated amount?

SECTION 10 - HOUSING

A. Type

1. What was the number of homes constructed in each of the last five years?
2. How many homes are currently for sale?
3. How many homes are currently for rent?
4. How many apartments, duplexes, etc. are currently for rent?

B. Costs

1. What is the average purchase price for the following categories of homes?
 - a. Two-bedroom old
 - b. Two-bedroom new
 - c. Three-bedroom old
 - d. Three-bedroom new
 - e. Four-bedroom old
 - f. Four-bedroom new
2. What is the average cost per square foot for new construction?
3. What is the average rental for the following categories of homes?
 - a. Two-bedroom old
 - b. Two-bedroom new
 - c. Three-bedroom old
 - d. Three-bedroom new
 - e. Four-bedroom old
 - f. Four-bedroom new

C. Services

1. What per cent of the community is served by:
 - a. Water
 - b. Natural gas
 - c. Sewers?
2. What percentage of the residential area is on paved roads?

SECTION 11 - UTILITIES

A. Power

1. List companies serving the area and designate whether they are private, REC, or municipal.
2. List the K. W. data:
 - a. Capacity
 - b. Average usage
 - c. Peak usage.
3. Submit a rate schedule.

B. Gas

1. List companies serving the area and designate their ownership.
2. Submit a rate schedule.

C. Water

1. List companies and source of supply.
2. List the following data:
 - a. Storage capacity
 - b. Pumping capacity
 - c. Average daily consumption
 - d. Peak consumption.
3. Submit a rate schedule.

D. Sewage

1. What type of treatment plant is used by the community?
2. List the following data relevant to sewage treatment:
 - a. Treatment plant capacity
 - b. Average load
 - c. Peak load
 - d. Where does it discharge?
3. What percentage of the community is served by the sewer system?

E. Telephone/Telegraph

1. What company provides telephone service?
2. Is there a local telegraph office within the community?

SECTION 12 - TAXES

A. Individuals

1. List the millage for the last five years for the following:
 - a. City
 - b. School
 - c. County
 - d. State
 - e. Total.
2. What is the per cent of assessment to actual value?
3. What is the bonded indebtedness for:
 - a. School
 - b. City?
4. Are new bond issues contemplated? If yes, indicate amount and purpose.
5. What is the total valuation of land and buildings for tax purposes within the corporate limits?

B. General

1. What is the tax balance (percentage comparison) between:
 - a. Residential
 - b. Commercial
 - c. Industrial?
2. What is the local tax revenue per capita?

SECTION 13 - PROPOSED SITES

GENERAL SITE REQUIREMENTS

Each proposed site should possess a minimum of 600 acres in one parcel of land undivided by existing permanent or potential public thoroughfares or rights of way.

REQUESTED SITE DATA

1. Submit the following exhibits for each site:
 - Plot drawing
 - Aerial photograph
 - Professional engineering evaluation of load-bearing characteristics of the soil.
2. What is the method for the State to acquire the land? (Include estimated price per acre if applicable.)
3. What is the availability of the site for acquisition?
4. What is the current zoning classification of the site?
5. What utilities are now available at the site?

SECTION 14 - ADDITIONAL INFORMATION

This section may be used to present additional information of any kind that a community wishes included in the evaluation of its potential as a location for the new institution of higher education.

