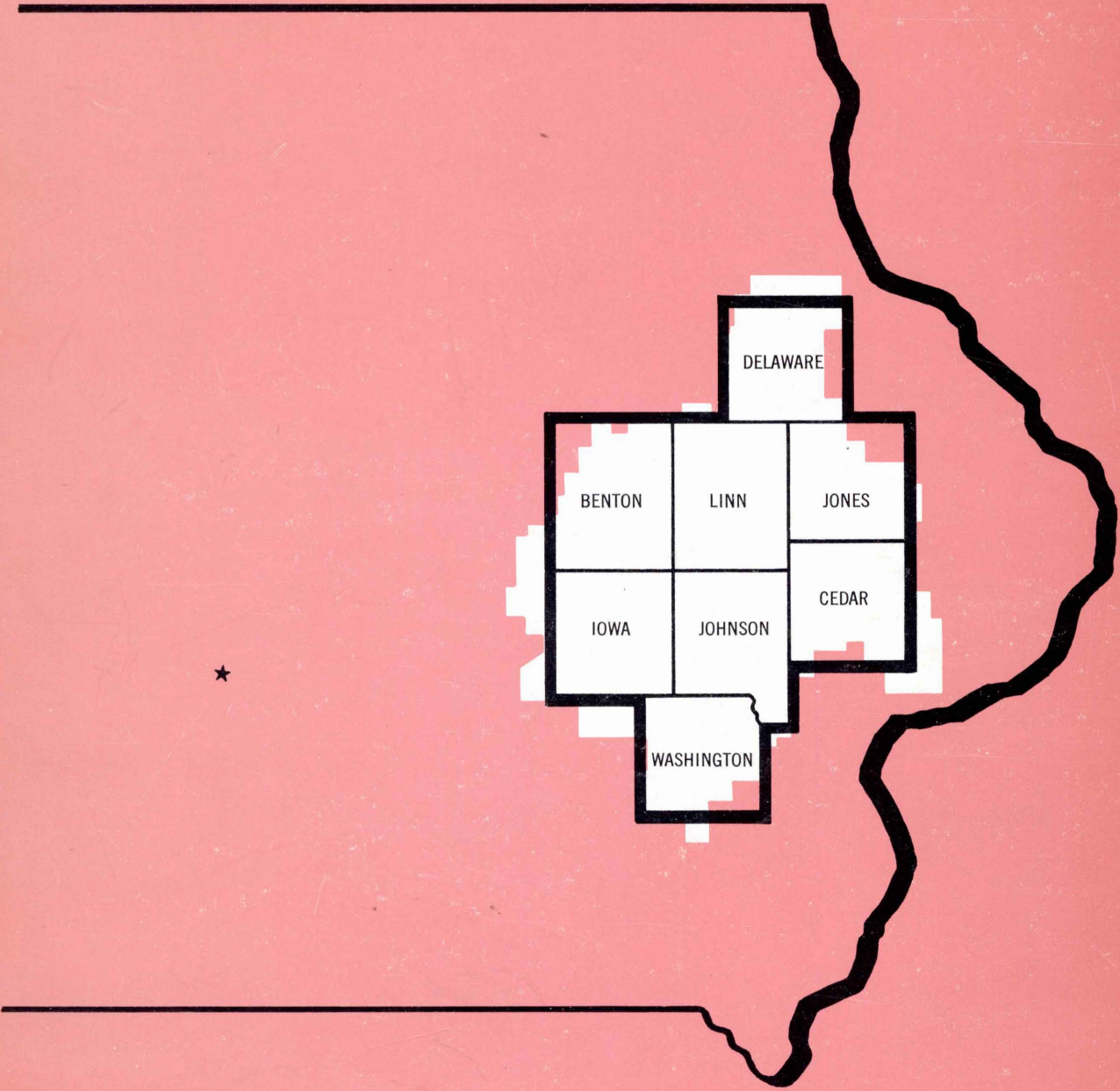


LIBRARY

Iowa Employment Security Commission  
1000 East Grand Avenue  
Des Moines, Iowa 50319



# A PROPOSAL FOR VOCATIONAL EDUCATION

374  
IOW



CEDAR RAPIDS COMMUNITY SCHOOL DISTRICT  
Cedar Rapids, Iowa

October 30, 1964

TO: Arnold W. Salisbury, Ph.D., Superintendent

FROM: Ira J. Semler, Ph.D., Director of Research

RE: Second year follow-up study of the 1962 graduates of the Cedar Rapids Community School District in institutions of higher education.

ABSTRACT

This study was carried out with the cooperation of the Cedar Rapids guidance and counseling staff and the support of the Linn County Superintendent of Schools and is part of the continuing follow-up of the 1962 graduates (see report of first year follow-up). A three page questionnaire was mailed during March and April, 1964, to 812 of these graduates. Three mailings were used and the following abstract is based on the statistics computed from the returned questionnaires of graduates enrolled in colleges and universities.

1. 67.9% (551) of the questionnaires mailed to the 812 graduates were returned. 63.0% (347) of these returns were from graduates who were enrolled in higher education.

2. 3 out of 4 (77.2%) of the 1962 graduates who entered higher education following graduation were completing their second academic (sophomore) year at the time the study was conducted. There was little difference between high schools in college persistence (Jefferson - 74.4%; Washington - 78.2%).

3. The major reasons for dropping out of college were in order:

- a. Finances
- b. Interests Changed
- c. Grades
- d. Marriage

Inspection of the returned questionnaires indicated that many of those who dropped out intend to return at some future time.

4. 5.1% (28 out of 551) of the 1962 graduates waited one year before entering college.

5. The most popular colleges and universities (percent of 344) were in order:

- a. State University of Iowa (30.2%)
- b. Iowa State University (14.0%)
- c. State College of Iowa ( 9.3%)
- d. Coe College ( 4.1%)

In addition, many other American colleges and universities (42.4%) are being attended by the 1962 graduates. A listing of these is to be found in the appendices of the main report.

6. In addition, the vocational aims of the graduates now attending college are listed in the appendices of the main report.



LIBRARY  
Iowa Employment Security Commission  
1000 East Grand Avenue  
Des Moines, Iowa 50319

A P R O P O S A L F O R V O C A T I O N A L E D U C A T I O N

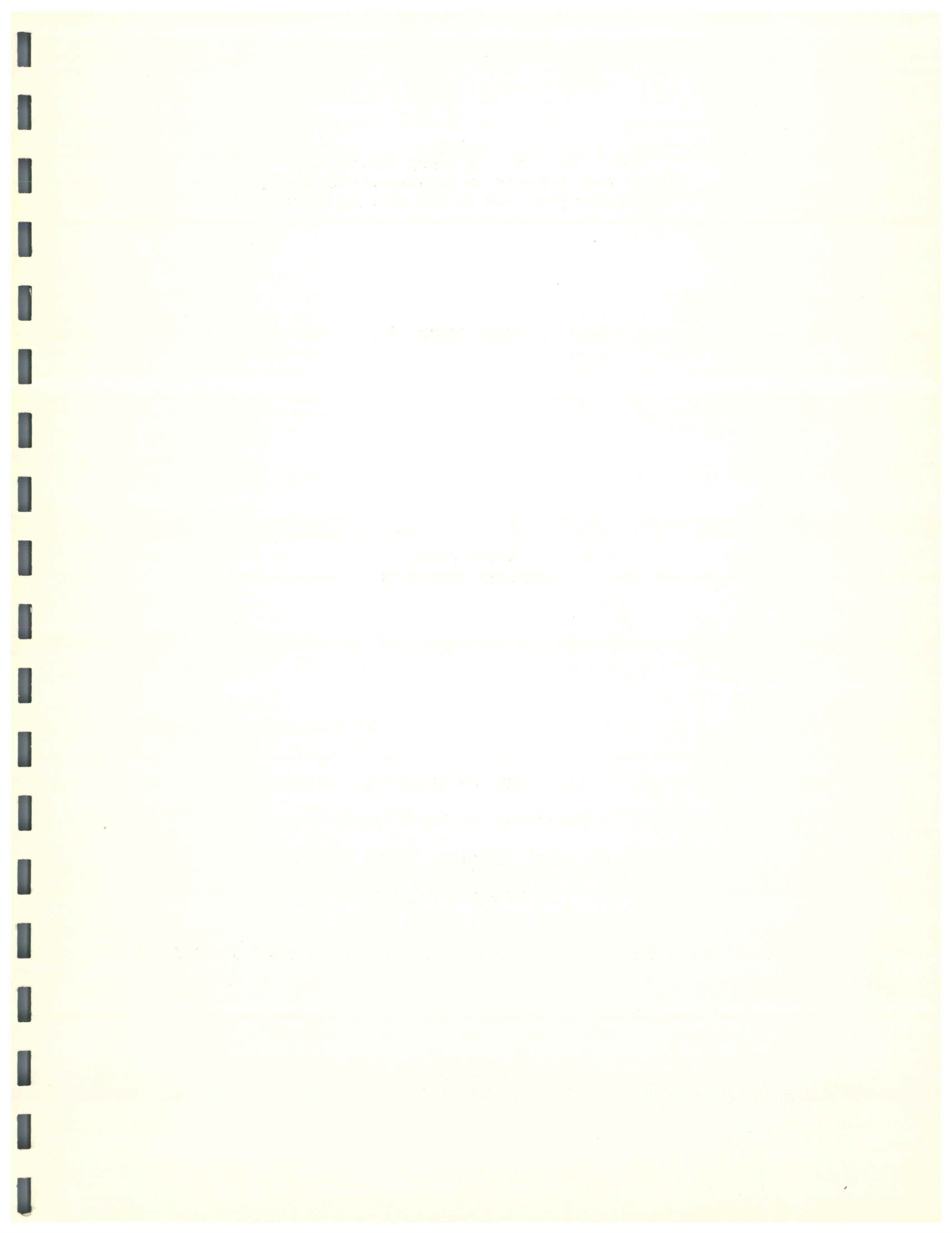
FOR THE COUNTIES OF  
BENTON, CEDAR, DELAWARE, IOWA, JOHNSON  
JONES, LINN, AND WASHINGTON  
STATE OF IOWA

E. ROBERT STEPHENS  
Coordinator

July, 1965

Copies of this report are available from  
County Superintendent of Schools, Linn County  
Courthouse, Cedar Rapids, Iowa 52401  
\$5.00







COUNTY BOARDS OF EDUCATION  
OF  
BENTON, CEDAR, DELAWARE, IOWA, JOHNSON,  
JONES, LINN, AND WASHINGTON COUNTIES

June 1, 1965

SUBJECT: A Proposal For Vocational Education

TO: State Board of Public Instruction

Submitted herewith is a proposal for the establishment of a vocational school to serve the youth and adults of the eight county school systems of Benton, Cedar, Delaware, Iowa, Johnson, Jones, Linn, and Washington Counties.

This proposal, submitted with reference to legislation enacted by the Sixty-first General Assembly of the State of Iowa, SF 550, as amended, has been prepared with a view to giving evidence that the criteria for an area vocational school as set forth in said legislation have been satisfied.

Local school administrators and the county boards of education of the eight counties have by resolution endorsed the proposal as outlined herein.

This proposal is respectfully submitted for consideration by the State Board of Public Instruction.



Ira E. Larson  
Chairman, Steering Committee  
Area X

IEL:ec



EVIDENCE OF AGREEMENT

The County Boards of Education of Benton, Cedar, Delaware, Iowa, Johnson, Jones, Linn, and Washington Counties, State of Iowa, met in Cedar Rapids, Iowa, January 28, 1965, and authorized the preparation of a proposal for a vocational school to serve the youth and adults of the county school systems of said counties.

The same County Boards of Education, in joint session on June 1, 1965, approved the proposal as presented, and directed that said proposal be submitted to the State Board of Public Instruction for its consideration under the provisions of SF 550, as amended.

In Witness Whereof, we hereunto affix our signatures this 1st day of June, 1965.

<u>County</u>	<u>Board Representative</u>	<u>Board Secretary</u>
<u>Benton</u>	<u>Earl Cox</u>	<u>Floyd L. Ellison</u>
<u>Cedar</u>	<u>Paul J. Peyer</u>	<u>Lester M. Gill</u>
<u>Delaware</u>	<u>Vernon J. Herrmann</u>	<u>Donald B. Feltz</u>
<u>Iowa</u>	<u>Harland Muller</u>	<u>J. E. Meloy</u>
<u>Johnson</u>	<u>Ray E. Smalley</u>	<u>M. R. Field</u>
<u>Jones</u>	<u>Walter R. Zeman</u>	<u>Bill Jarman</u>
<u>Linn</u>	<u>William S. Armstrong</u>	<u>Ira E. Larson</u>
<u>Washington</u>	<u>Walter E. Lume</u>	<u>Dwight R. Bode</u>



## ACKNOWLEDGMENTS

The preparation of A PROPOSAL FOR VOCATIONAL EDUCATION for Benton, Cedar, Delaware, Iowa, Johnson, Jones, Linn and Washington Counties in a brief four-month period required the cooperation and assistance of many individuals in the eight-county area.

The county boards of education authorized preparation of the proposal. A steering committee consisting of one representative from each county board and the superintendent of each of the eight counties gave attention to the day-to-day decisions which needed to be made during the preparation of the proposal. Local and county school administrators assisted in gathering data for the thirty surveys and studies comprising this proposal.

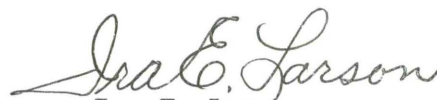
Major contributions to specific chapters of the proposal were made by personnel of various service bureaus at the State University of Iowa, and by individual graduate students at that institution, as follows: Paul Friesma, Research Associate, Institute of Public Affairs; Burdette Hanson, Research Associate, Iowa Center for Research in School Administration; Larry Jones, Graduate Student; and individuals of other service bureaus. Alvin Albertus, Guidance Consultant for Linn County, assisted in the preparation of questionnaires and other survey instruments.

Jean Strong, free-lance writer, provided a series of seven articles for the news media of the eight-county area summarizing the data and findings of the proposal.

The individuals and groups named above have given significant help in the preparation of this proposal.

Special commendation should be given to E. Robert Stephens, Research Associate, Iowa Center for Research in School Administration, who served as coordinator for the preparation of A PROPOSAL FOR VOCATIONAL EDUCATION. His services to the eight counties as coordinator for this project have given clear evidence of his deep personal interest in vocational education and of his concern for the early development of vocational educational opportunities for youth and adults in Area X and, indeed, in the entire State of Iowa.

The eight counties are indebted to the secretarial staff at the office of the Linn County Superintendent of Schools for the preparation, often under severe time limitations, of the materials for the proposal.



Ira E. Larson  
Chairman, Steering Committee

June 1, 1965

COUNTY BOARDS OF EDUCATION  
EIGHT-COUNTY AREA

BENTON

EARL COX, PRESIDENT  
DR. M. C. LARSON  
DR. W. G. MARTIN  
LYLE MCCLINTOCK  
HENRY SIEK

JOHNSON

WILLIS MUSSER, PRESIDENT  
RAY SMALLEY  
VERLE SMITH  
ROBERT STEVENSON  
MERLE STOCKMAN

CEDAR

HERSCHAL FITZER, PRESIDENT  
WILBUR LITTLE  
PAUL PELZER  
BEN PENNINGROTH  
GLEN WALLACE

JONES

DALE NEWMAN, PRESIDENT  
LES BALSTER  
KENNETH HOWIE  
HARRO INGWERSEN  
MRS. ELEANOR WALTERS

DELAWARE

VERNE HERMANN, PRESIDENT  
DR. JOHN COMPTON  
JAMES CRAMER  
HOWARD KIRKWOOD  
GEORGE SHEARER

LINN

MRS. MARIAN H. SAVAGE, PRESIDENT  
DR. WILLIAM S. ARMSTRONG  
VIRGIL HEINS  
ERNEST KOSEK  
GEORGE E. MICHEL

IOWA

HARLAND MULLER, PRESIDENT  
WILBUR BOWEN  
DALE MAYBERRY  
DR. LARRY MILLER  
GLENN REED

WASHINGTON

RALPH KLEESE, PRESIDENT  
BILL BEENBLOSSOM  
GEORGE HAVEL  
DALE JONES  
MAX LEWIS

STEERING COMMITTEE  
EIGHT-COUNTY VOCATIONAL EDUCATION PROJECT

---

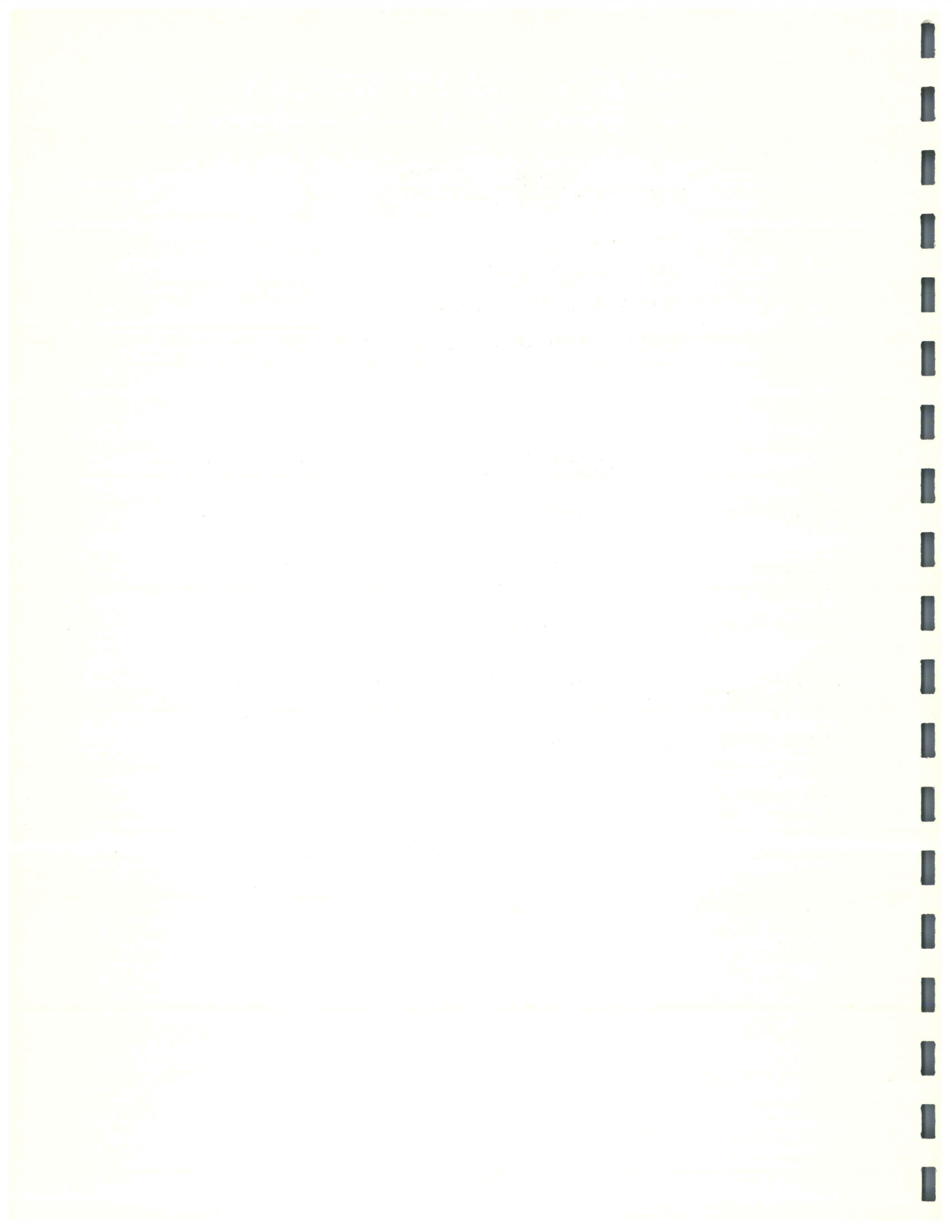
IRA E. LARSON, Chairman, Linn County

PAUL JARMAN, Vice Chairman, Jones County

MARSHALL FIELD, Secretary, Johnson County

	<u>County Board Representative</u>	<u>County Superintendent of Schools</u>
Benton County	EARL COX	FLOYD ELLSON
Cedar County	PAUL PELZER	LESTER N. GILL
Delaware County	VERNE HERMANN	DON POTTER
Iowa County	HARLAND MULLER	F. E. MELOY
Johnson County	WILLIS MUSSER	MARSHALL FIELD
Jones County	DALE NEWMAN	PAUL JARMAN
Linn County	DR. WILLIAM S. ARMSTRONG	IRA E. LARSON
Washington County	MAX LEWIS	DWIGHT BODE





---

---

FOREWORD

"In a state where we pride ourselves on our functional literacy and our standards of education, I think it is time we faced up to the fact that we are defaulting miserably on the responsibility of supplying a big proportion of our young people with the kind of educational opportunity that they want and need and to which they are entitled.

So far as the state's development is concerned, it would be the ultimate irony if we attained the flowering of the valley, industrially, that we have so long hoped for -- only to find that our own sons and daughters could not handle the jobs available for lack of the skills required in modern industry."

--From an Address by The Honorable Harold E. Hughes, Governor of Iowa,  
Third Annual Economic Development Conference,  
Ames, Iowa, December 8, 1964.

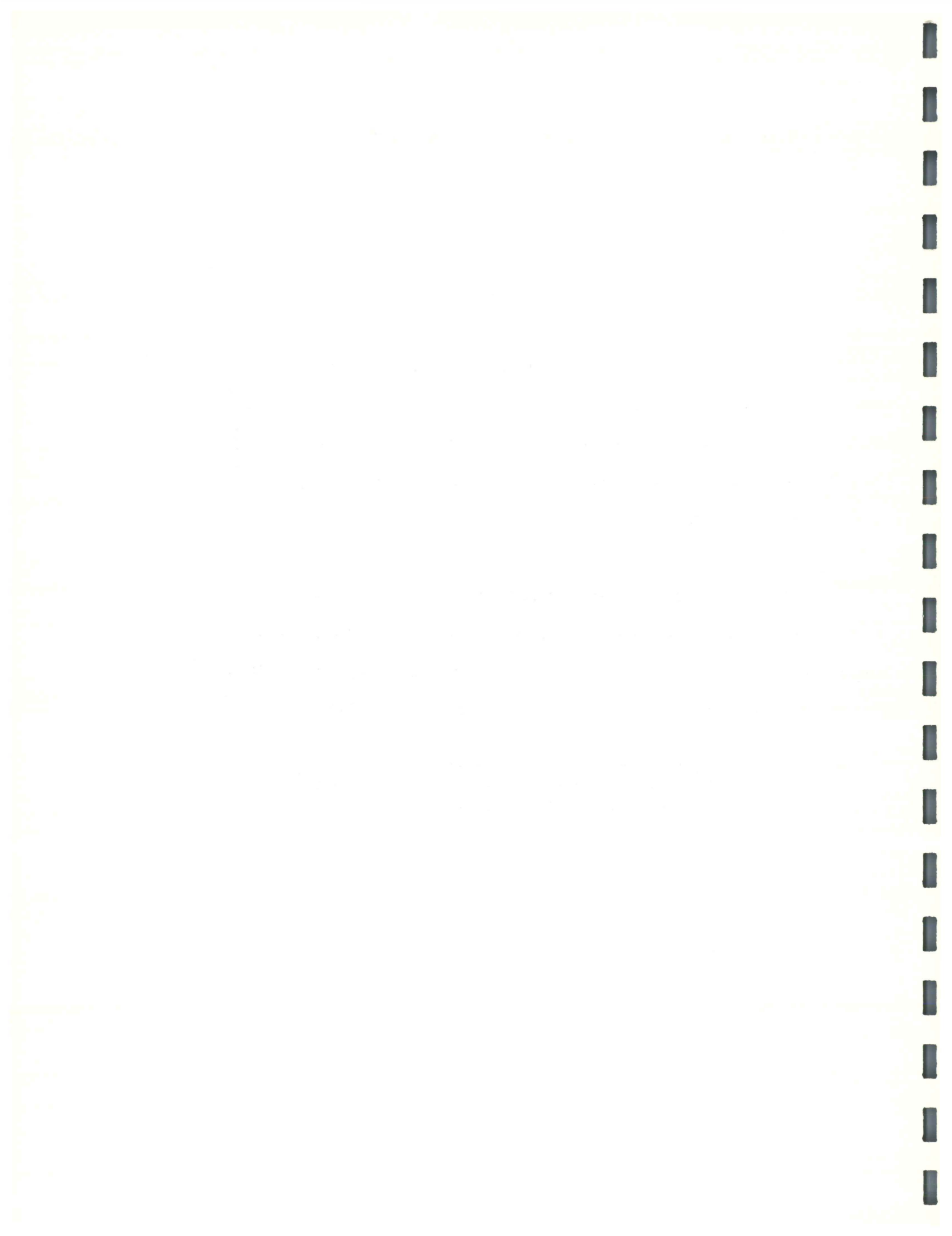




TABLE OF CONTENTS

	<u>Page</u>
Letter of Transmittal	iii
Acknowledgments	v
Membership of County Boards of Education	vi
Membership of Steering Committee	vii
Foreword	ix
List of Tables and Plates	xvi to xxi

PART A  
INTRODUCTION

Chapter I Background of the Proposal

Manpower Needs of the Nation and the Need for Vocational Education	I-1
National Interest in Vocational Education	I-2
State Interest in Vocational Education	I-3
Development of Plans In Area X	I-4
The Governor's Recommendations for Vocational Education	I-4
Organizing Area X For Action	I-5

PART B  
AREA X -- THE EIGHT-COUNTY AREA

Chapter II General Overview of Area X

Area In Square Miles	II-1
Assessed Valuations	II-1
Population	II-1
School Enrollments	II-2
Civilian Labor Force	II-2
Road Network	II-2
Summary	II-3

Chapter III Population Characteristics

Summary of Selected Population Characteristics	III-1
Historical Growth	III-6
Population Projections	
Statistical Method Employed	III-8
Findings	III-9

Chapter IV Labor Market Survey

Page

Introduction	IV-1
Major Occupation Groupings of the Employed, 1940, 1950, 1960, Projected 1970	
Occupational Data - Male and Female	IV-2
Occupational Data - Males	IV-2
Occupational Data - Females	IV-3
Major Occupational Groupings of the Unemployed	
Unemployed - Male	IV-15
Unemployed - Female	IV-15
Unemployed - Male and Female	IV-15
Major Occupational Data, 1940, 1950, and 1960	
Iowa and Eight Counties - Proportional and Percentage Changes By Sex	
Percentage Changes - State and Eight-County	IV-19
Percentage Changes By Sex	IV-19
Proportional Changes - State and Area	IV-20
Major Industry Data, Employment 1940, 1950, 1960, Projected 1970	
Major Industry Data - Male and Female - Six County and Two- County Area	IV-24
Major Industry Data - Male - Six-County and Two-County Area	IV-24
Major Industry Data - Female - Six-County and Two-County Area	IV-24
Major Industry Data - Male and Female - Eight-County Area	IV-25
Major Industry Data, 1940, 1950, 1960, and Projected 1970	
Eight-County Total Proportional and Percentage Changes	
Percentage Changes - Male	IV-43
Percentage Changes - Female	IV-43
Summary and Conclusions	
Data Considered	IV-51
Assumptions	IV-51
Findings	IV 51-53

Chapter V Financial Resources

Assessed Valuation	V-1
Financing Ability	V-1
Valuation Per Pupil	V-1
Bonding Capacity	V-2
Tax Levies	V-2
Summary	V-2

Chapter VI Public, Private, and Parochial High School  
Enrollments in Area X

Number of High Schools and Enrollments	VI-1
Size of High School Enrollments	VI-1

Chapter VII Elementary and Secondary School Enrollment Trends

	<u>Page</u>
Present Student Resources	VII-1
Ten-Year Enrollment Trends	VII-2
Comparison of Iowa and Area X Enrollment Trends	VII-2

PART C

PRESENT VOCATIONAL EDUCATION OPPORTUNITIES  
IN AREA X

Chapter VIII High School Programs

High School Vocational Education Survey	VIII-1
Limitations of the Survey	VIII-1
Findings	VIII-2
Conclusions	VIII-3

Chapter IX Post High School Programs

Public Vocational School	IX-1
Private Vocational Schools and Non-Degree Programs	IX-1
Four-Year Institutions	IX-1
Summary	IX-2

Chapter X Adult Education Programs

Survey of Adult Education Programs	X-1
Conclusion	X-2

PART D

A PROPOSAL FOR VOCATIONAL EDUCATION FOR AREA X

Chapter XI Potential Enrollment

Introduction	XI-1
Projected Student Base	
Statistical Methods Employed	XI-1
Findings	XI-2
Student Plans and Vocational Interests	XI-3
Potential Enrollments	
Projection I - Assumptions	XI-9
Projection I - Potential Enrollment	XI-9
Projections II and III - Assumptions	XI 11-12
Projections II and III - Potential Enrollment	XI-12



Chapter XII	Proposed Curriculum	<u>Page</u>
	Major Considerations	
	Principles of Vocational and Technical Curricula Development	XII 1-2
	Labor-Market Information About Area X, the State and the Nation	XII-3
	Survey of Eleventh and Twelfth Grade Students' Preferences For Vocational Training Opportunities	XII-3
	Cedar Rapids Area Vocational School Program	XII-4
	Summary	XII-5
	Illustrated Course Offerings	
	A typical One-Year Vocational Program - Machine Tool Operation	XII-6
	A Typical Two-Year Technical Program - Electronics Technology	XII-7
Chapter XIII	Administration and Financing	
	Administration	
	Area Board of Directors	XIII-1
	Administrative Staff	XIII-1
	Instructional Staff	XIII-3
	The Advisory Committee	XIII 3-4
	Financing the Area X Vocational School	
	Sources of Funds	XIII-5
	Instruction Costs	XIII-5
	Capital Costs	XIII-6
	Operating Costs	XIII-6
Chapter XIV	Site Selection	
	Guiding Philosophy	XIV-1
	Action of Area X Steering Committee	XIV-1
	Additional Criteria	XIV-1
Chapter XV	Evidence of Local Interest and Support	
	Introduction	XV-1
	Survey of Community Interest and Support	XV-1
	Results of the Survey	XV-2
	Informing the Public About the Study	XV-3
	Summary	XV-4
Chapter XVI	Transition From A Locally-Administered To An Area-Administered Vocational School	
	Cedar Rapids Area Vocational School	XVI-1
	Steps In The Transition	XVI-1
	A Joint Commitment	XVI-2

PART E  
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

---

	<u>Page</u>
Chapter XVII      Summary	XVII-1 to XVII-6

APPENDIX A

Cover Letter for Survey of Public High School Vocational Programs	A-1
Form - Survey of Public High School Vocational Programs	A-2, 3 & 4
Cover Letter, Student Vocational Interest Survey	A-5
Form - Area Vocational School Survey of Student Vocational Interest	A-6
Cover Letter, Evidence of Public Support of Vocational Education Effort in eight-county area	A-7
Resolution	A-8
Adult Education Program Survey	A-9

APPENDIX B

Description of Post-High School Programs of Private Vocational Schools of Area X	B 1-36
---	--------

APPENDIX C

Follow-Up Study of 1962 Graduates of the Cedar Rapids Community School District	C-1
Comparison Statistics From First Year Follow-Up of 1963 Graduates with the First Year Follow-Up of the 1962 Graduates	C-2
Second Year Follow-up Study of the 1962 Graduates of the Cedar Rapids Community School District in Institutions of Higher Education	C-3

LIST OF TABLES AND PLATES

		<u>Page</u>
Plate I-1	Occupational Trends and Educational Requirements	I-7
Plate I-2	Proposed Sixteen Area Education Districts, 1961 Study	I-8
Plate I-3	Area X With Addition of Delaware and Washington Counties	I-9
Plate I-4	Eight County School Systems of Area X	I-11
Table II-1	Comparison of Selected Geographic, Economic, and Educational Data of Area X	II-4
Table II-2	Totals of Selected Geographic, Economic and Educational Data for Area X and Comparison With Totals for Iowa	II-5
Plate II-1	Network of State and Federal Highways Serving Area X	II-7
Plate II-2	Recommended State Primary System, Iowa State Highway Commission	II-9
Table III-1	Area and Population of Eight-County Area, Urban and Rural: 1960 and 1960	III-1
Table III-2	Education Characteristics of the Population, For Eight-County Area: 1960	III-2
Table III-3	Age By Sex For Eight-County Area: 1960	III-3
Table III-4	Income, 1959, Of Families For Eight-County Area: 1960	III-4
Table III-5	Social Characteristics of the Population For Eight-County Area: 1960	III-5
Plate III-1	Population Growth of Eight-County Area and of State, With Per Cent of State Population In the Eight-County Area, 1900-1960	III-7
Table III-6	Projected Increase or Decrease In the Population By County, 1960 to 1980	III-9
Table III-7	Projected Population By Age Groups, 1960-1980, Benton County	III-10
Table III-8	Projected Population By Age Groups, 1960-1980, Cedar County	III-11
Table III-9	Projected Population By Age Groups, 1960-1980, Delaware County	III-12
Table III-10	Projected Population By Age Groups, 1960-1980, Iowa County	III-13
Table III-11	Projected Population By Age Groups, 1960-1980, Johnson County	III-14
Table III-12	Projected Population By Age Groups, 1960-1980, Jones County	III-15
Table III-13	Projected Population By Age Groups, 1960-1980, Linn County	III-16
Table III-14	Projected Population By Age Groups, 1960-1980, Washington County	III-17

APPENDIX III-A

Table III A-1	Summary of Population Characteristics For Counties-1960	III-18
Table III A-2	Area and Population of Counties, Urban and Rural: 1960 and 1950	III-19
Table III A-3	Education Characteristics of the Population For Counties: 1960	III 20-21



Table III A-4	Age By Sex For Counties: 1960	III 22-27
Table III A-5	Income In 1959 of Families and Persons For Counties:1960	III 28-29
Table III A-6	Social Characteristics of the Population, For Counties	III-30

APPENDIX IV-A

Class of Worker - Agriculture and Non-Agricultural Employment, 1960	54
---	----

APPENDIX IV-B

1960 Linn County Employed Labor Market	55-67
--	-------

Table IV-1	Occupation Group - Male and Female, 1940, 1950, 1960, Projected 1970	IV-4
Table IV-2	Occupation Group - Male and Female, Totals, 1940, 1950, 1960, Projected 1970	IV-5
Table IV-3	Occupation Group - Male - 1940, 1950, 1960, Projected 1970	IV-6
Table IV-4	Occupation Group - Male, Totals, 1940, 1950, 1960, Projected 1970	IV-7
Table IV-5	Occupation Group - Female, 1940, 1950, 1960, Projected 1970	IV-8
Table IV-6	Occupation Group - Female, Totals, 1940, 1950, 1960, Projected 1970	IV-9
Plate IV-1	Occupation Group Data, Eight-County Total, Male and Female	IV-10 & 11
Plate IV-1	Occupation Group Data, Eight-County Total, Male	IV-12 & 13
Plate IV-1	Occupation Group Data, Eight-County Total, Female	IV-14
Table IV-7	Major Occupation Group of Unemployed - 1950, 1960 Male Experienced Unemployed	IV-16
Table IV-8	Major Occupation Group of Unemployed - 1950, 1960 Female Experienced Unemployed	IV-17
Table IV-9	Major Occupation Group of Unemployed - 1950, 1960 Male and Female Experienced Unemployed	IV-18
Table IV-10	Major Occupational Classifications - Iowa and Eight-County Experienced Civilian Labor Force Percentage Changes, 1940-1960	IV-21
Table IV-11	Major Occupational Classifications - Iowa and Eight-County Experienced Civilian Labor Force, Percentage Change By Sex, 1940-1960	IV-22
Table IV-12	Major Occupational Classifications - Iowa and Eight-County Experienced Civilian Labor Force, Proportional Change, 1940-1960	IV-23
Table IV-13	Employment By Major Industrial Groups - Male and Female, 1940, 1950, 1960	IV-26
Table IV-14	Employment By Major Industrial Groups - Male - 1940, 1950, 1960	IV-27
Table IV-15	Employment By Major Industrial Groups - Female - 1940, 1950, 1960	IV-28

Table IV-16	Employment By Major Industrial Groups - Male and Female - 1940, 1950, 1960, Projected 1970, Eight-County Area	IV-29
Table IV-17	Employment By Major Industrial Groups - Male - 1940, 1950, 1960, Projected 1970 - Eight-County Area	IV-30
Table IV-18	Employment By Major Industrial Groups - Female - 1940, 1950, 1960, Projected 1970 - Eighty-County Area	IV-31
Plate IV-2	Employment By Major Industrial Groups, Eight-County Total - Male and Female (In Thousands)	IV 32 to 34
Plate IV-2	Employment By Major Industrial Groups, Eight-County Total - Male (In Thousands)	IV 35 to 38
Plate IV-2	Employment By Major Industrial Groups, Eight-County Total - Female (In Thousands)	IV 39 to 42
Table IV-19	Major Industry Group, Employment - Male & Female - Percentage Distributions and Proportional Changes 1940-1970 Projected, Eight-County Area	IV-44
Table IV-20	Major Industry Group, Employment - Male - Percentage Distributions and Proportional Changes 1940-1970 Projected, Eight-County Area	IV-45
Table IV-21	Major Industry Group, Employment - Female - Percentage Distributions and Proportional Changes 1940-1970 Projected, Eight-County Area	IV-46
Table IV-22	Major Industrial Classifications, Eight-County Area, Percentage Changes, 1940-1970	IV-47
Table IV-23	Employment, Class of Worker, 1960, Eight-County Area	IV-48
Table IV-24	Employment, Class of Worker, 1960, Six-County Area	IV-49
Table IV-25	Employment, Class of Worker, 1960, Two-County Area	IV-50
Table V-1	A Comparison of Selected Financial Data For Area X	V-3
Table V-2	Assessed Valuations By County School Systems For Area X, Total and Per Pupil	V-4
Table V-3	Bonding Limits and Present Bonded Indebtedness By County School Systems For Area X	V-5
Table V-4	Average Tax Levies For 1964, Payable 1965, By County School Systems For Area X	V-6
Table VI-1	Summary Number and Type of High Schools, High School Enrollments, and Twelfth Grade Enrollments in Area X	VI-3
Table VI-2	Number, Name, and Type of High Schools, High School Enrollments, and Twelfth Grade Enrollments in Area X, By County, September, 1964	VI 4-6
Table VI-3	Classification of High Schools of Area X By Size of Enrollment, 1964-65	VI-7
Table VII-1	Public, Private, and Parochial School Enrollments In Area X, 1964-65	VII-1
Plate VII-1	Total Public, Private, and Parochial School Enrollments In Area X, 1955-56 to 1964-65	VII-3
Table VII-2	Student Enrollment - Eight-County Area - 1955-1956	VII-4
Table VII-3	Student Enrollment - Eight-County Area - 1956-1957	VII-5
Table VII-4	Student Enrollment - Eight-County Area - 1957-1958	VII-6
Table VII-5	Student Enrollment - Eight-County Area - 1958-1959	VII-7



Table VII-6	Student Enrollment - Eight-County Area - 1959-1960	VII-8
Table VII-7	Student Enrollment - Eight-County Area - 1960-1961	VII-9
Table VII-8	Student Enrollment - Eight-County Area - 1961-1962	VII-10
Table VII-9	Student Enrollment - Eight-County Area - 1962-1963	VII-11
Table VII-10	Student Enrollment - Eight-County Area - 1963-1964	VII-12
Table VII-11	Student Enrollment - Eight-County Area - 1964-1965	VII-13
Table VII-12	Comparison of Enrollment Trends, The State of Iowa and Area X - 1955-1956 to 1964-1965	VII-15
Table VIII-1	High School Vocational Education Survey of Course Offerings and Enrollments, County Totals	VIII 4 to 5
Table VIII-2	High School Vocational Education Survey of Course Offerings and Enrollments, Benton County	VIII 6 to 7
Table VIII-3	High School Vocational Education Survey of Course Offerings and Enrollments, Cedar County	VIII 8 to 9
Table VIII-4	High School Vocational Education Survey of Course Offerings and Enrollments, Delaware County	VIII 10 to 11
Table VIII-5	High School Vocational Education Survey of Course Offerings and Enrollments, Iowa County	VIII 12 to 13
Table VIII-6	High School Vocational Education Survey of Course Offerings and Enrollments, Johnson County	VIII 14 to 15
Table VIII-7	High School Vocational Education Survey of Course Offerings and Enrollments, Jones County	VIII 16 to 17
Table VIII-8	High School Vocational Education Survey of Course Offerings and Enrollments, Linn County	VIII 18 to 21
Table VIII-9	High School Vocational Education Survey of Course Offerings and Enrollments, Washington County	VIII 22 to 23
Plate IX-1	Location of Post-High School Educational Institutions	IX-3
Table IX-1	Schools In Area X Providing Post-High School Educational Opportunities	IX 4 to 5
Plate IX-2	Floor Plan of Cedar Rapids Area Vocational School	IX-6
Table X-1	Summary of Adult Education Courses and Enrollments in Area X, 1964-65	X-1
Table XI-1	Number and Per Cent of Eleventh Grade Students Planning To Secure Additional Educational Training, By County, 1964-65	XI-4
Plate XI-1	Per Cent of Eleventh Grade Students Planning To Secure Additional Educational Training, 1964-65	XI-5
Table XI-2	Number and Per Cent of Twelfth Grade Students Planning To Secure Additional Educational Training, By County, 1964-65	XI-6

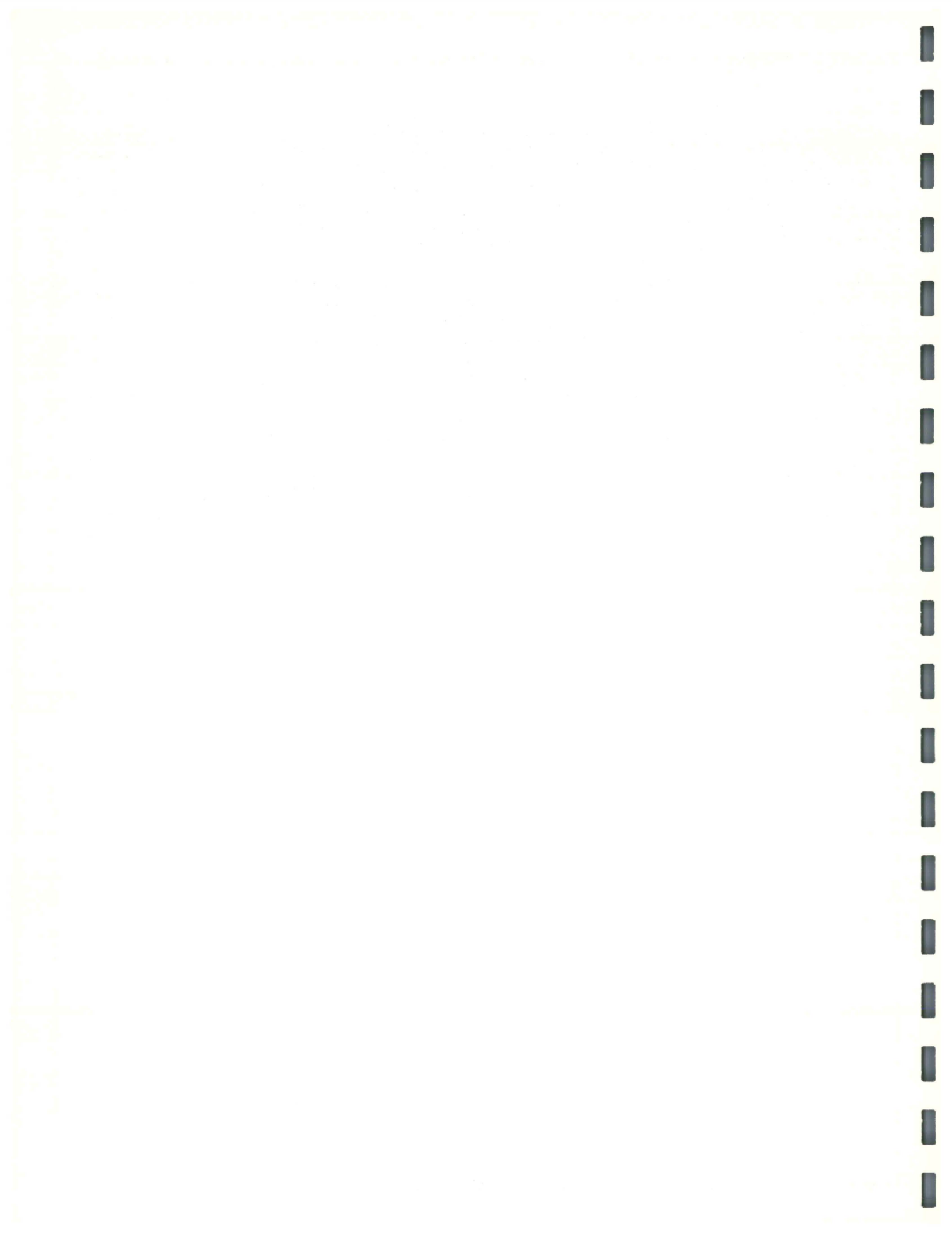
Plate XI-2	Per Cent of Twelfth Grade Students Planning to Secure Additional Educational Training	XI-7
Table XI-3	Projection I - Potential Student Enrollment	XI-11
Table XI-4	Projections II and III - Potential Student Enrollment	XI-13
Table XI-5	Total Student Enrollment, Eight-County Area; Past, Present, Future, By Grade	XI-15
Table XI-6	Benton County, Student Enrollment; Past, Present, Future, By Grade	XI-16
Table XI-7	Cedar County, Student Enrollment; Past, Present, Future, By Grade	XI-17
Table XI-8	Delaware County, Student Enrollment; Past, Present, Future, By Grade	XI-18
Table XI-9	Iowa County, Student Enrollment; Past, Present, Future, By Grade	XI-19
Table XI-10	Johnson County, Student Enrollment; Past, Present, Future, By Grade	XI-20
Table XI-11	Jones County, Student Enrollment; Past, Present, Future, By Grade	XI-21
Table XI-12	Linn County, Student Enrollment; Past, Present, Future, By Grade	XI-22
Table XI-13	Washington County, Student Enrollment; Past, Present, Future, By Grade	XI-23
Table XI-14	Total Student Enrollment, Eight-County Area; Past, Present, Future, By Grade Groups	XI-25
Table XI-15	Benton County, Student Enrollment; Past, Present, Future, By Grade Groups	XI-26
Table XI-16	Cedar County, Student Enrollment; Past, Present, Future, By Grade Groups	XI-27
Table XI-17	Delaware County, Student Enrollment; Past, Present, Future, By Grade Groups	XI-28
Table XI-18	Iowa County, Student Enrollment; Past, Present, Future, By Grade Groups	XI-29
Table XI-19	Johnson County, Student Enrollment; Past, Present, Future, By Grade Groups	XI-30
Table XI-20	Jones County, Student Enrollment; Past, Present, Future, By Grade Groups	XI-31
Table XI-21	Linn County, Student Enrollment; Past, Present, Future, By Grade Groups	XI-32
Table XI-22	Washington County, Student Enrollment; Past, Present, Future, By Grade Groups	XI-33
Table XI-23	School Age Population Projection - 1970	XI-34
Table XI-24	School Age Population Projection - 1975	XI-35

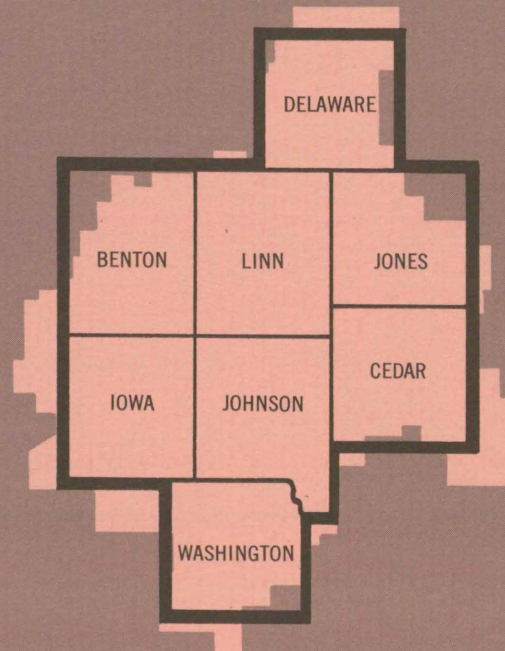
#### APPENDIX XI-A

Table XI A-1	Projected Student Enrollment, Eight-County Area, 1965-66	XI-37
Table XI A-2	Projected Student Enrollment, Eight-County Area, 1966-67	XI-38
Table XI A-3	Projected Student Enrollment, Eight-County Area, 1967-68	XI-39



Table XI A-4	Projected Student Enrollment, Eight-County Area, 1968-69	XI-40
Table XI A-5	Projected Student Enrollment, Eight-County Area, 1969-70	XI-41
Table XI A-6	Projected Student Enrollment, Eight-County Area, 1970-71	XI-42
Table XI A-7	Projected Student Enrollment, Eight-County Area, 1971-72	XI-43
Table XI A-8	Projected Student Enrollment, Eight-County Area, 1972-73	XI-44
Table XI A-9	Projected Student Enrollment, Eight-County Area, 1973-74	XI-45
Table XI A-10	Projected Student Enrollment, Eight-County Area, 1974-75	XI-46
Table XII-1	Preference of Eleventh and Twelfth Grade Students of Area X For Vocational Training Opportunities	XII-4
Plate XIII-1	Proposed Director Districts for Area X	XIII-2
Table XIII-1	Summary of Finances Available From Various Sources For Enrollments of Varying Size	XIII-7
Plate XIV-1	Location For Area X Vocational School As Recommended By Steering Committee	XIV-3
Table XV-1	Summary of Types of Organizations, By County, Passing Resolutions Endorsing the Establishment of an Area Vocational School	XV-3
Table XV-2	List of Community Organizations, By County, Which Passed and Filed Resolutions Endorsing an Area X Vocational School	XV 5 to 8

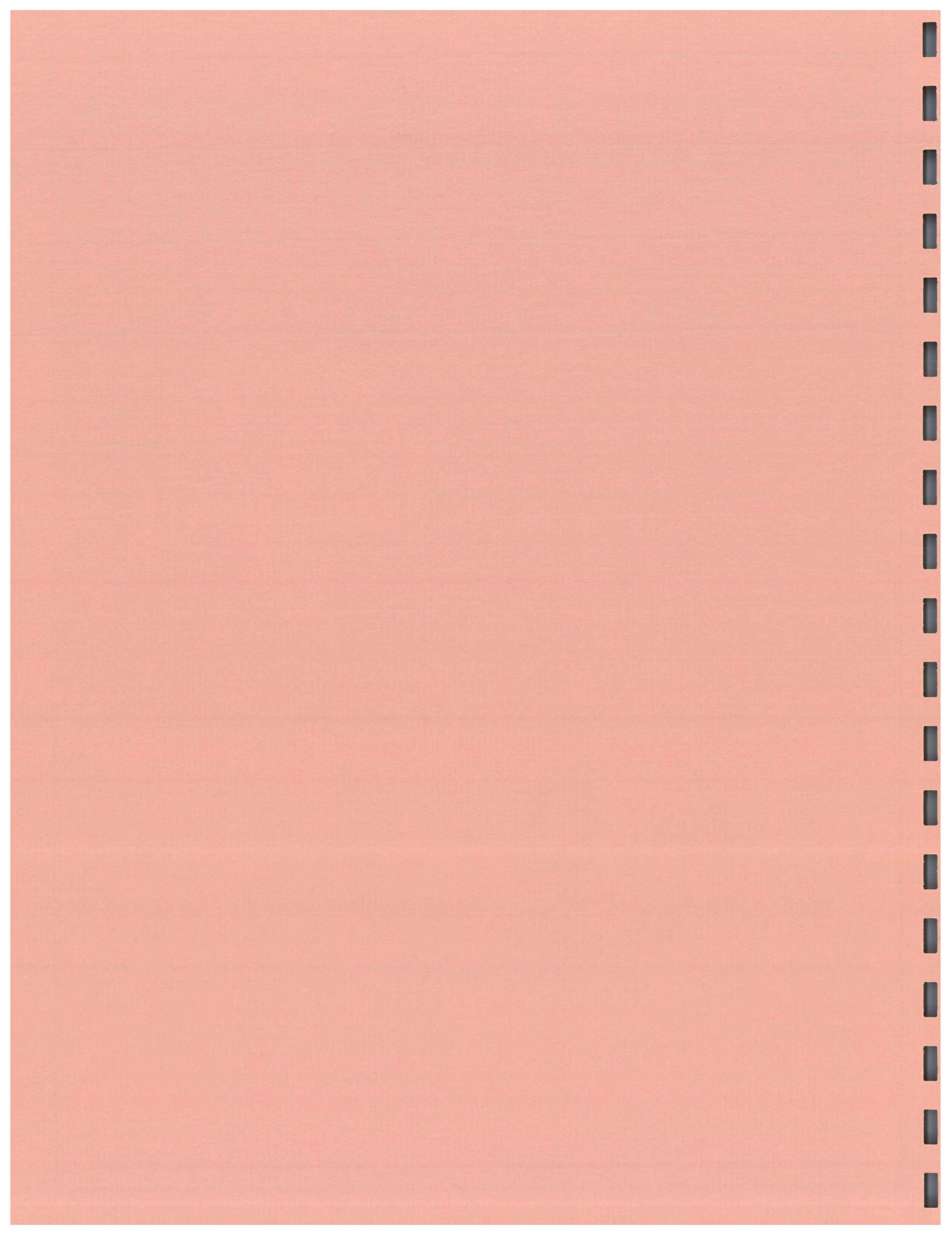




# PART **A**

... INTRODUCTION







CHAPTER I  
BACKGROUND OF THE PROPOSAL

MANPOWER NEEDS OF THE NATION AND THE NEED FOR  
VOCATIONAL EDUCATION

There is almost universal agreement that changing manpower needs demand a significant expansion of vocational education programs in this country. The world of work in the 1960's is far different from that of a generation ago. For example, a recent report of the United States Department of Labor shows: (1)

1. By the late 1960's, the United States labor force will be twenty per cent greater than it was in the 1950's; and it will include a higher percentage of young persons (18 to 25) than ever before in our history.
2. There are now more workers in non-manual than in manual labor classifications. The United States is the first nation in history to achieve this status.
3. In the 1960's, professional, semi-professional, and technical workers will increase in number by over forty per cent; clerical and sales workers, by twenty-six per cent. In contrast, jobs requiring unskilled workers will actually decrease in number.

Norman C. Harris, Professor of Technical Education, University of Michigan, has developed extensive studies which show the trends that are taking place in the make-up of this country's major occupational groups. According to Harris, the distribution of the labor force in the United States in 1975 as compared to 1940 will be as follows:(2)

<u>Major Occupational Group</u>	<u>Per Cent</u>	
	1940	1975
Professional, technical & kindred workers	8.0	14.2
Managers, officials, and proprietors, except farm	8.1	9.6
Clerical and sales workers	16.7	22.9
Skilled and semi-skilled workers	29.7	29.3
Farmers, farm managers, foreman, and laborers	18.5	4.6
Service workers	11.9	14.4
Unskilled workers, except farm and mine	7.0	4.4

- (1) U. S. Department of Labor, Manpower: Challenge of the 1960's, Washington, D. C., Government Printing Office, 1961.
- (2) Harris, Norman C., Technical Education in the Junior College, American Association of Junior Colleges, Washington, D. C., 1964, p. 26.

Studies by Harris and others indicate that the manpower needs of this country are changing at a rapid pace. The explosion of knowledge, automation, and technological changes are remaking the economy of the United States. Both the scope and rapidity of these changes are bringing about what some have called the Second Industrial Revolution. The implications of this revolution for education are profound. Harris, as shown in Plate I-1, relates the changes brought about by the Industrial Revolution to the occupational trends and educational requirements. Most of the observers of the American scene are in agreement that it is imperative that this country's educational systems respond to the new and changing demands being made upon them.

#### NATIONAL INTEREST IN VOCATIONAL EDUCATION

Numerous national organizations have long called for an expansion of vocational education opportunities. Typical of these pronouncements are those of the National Society for the Study of Education which devoted its most recent yearbook entirely to the study of vocational education. Barlow (3) keynotes the yearbook with these statements calling for an expansion of vocational education opportunities:

"The challenges of the present and their implications for the future call for increased attention to vocational education beyond the high school. Particularly critical are programs of one or two year's duration for students who are preparing to enter the labor force and programs for out-of-school youth and adults."

"The challenges to vocational education have created a nation-wide interest in it and in its total role in society. Vocational education is a means, in the judgment of many persons, of meeting an important need of American society."

"A platform for vocational education in the future will be constructed upon the strength of renewed commitments to the American ideal of education for all. Vocational education must figure prominently in the attainment of this goal. The end product is not solely the responsibility of vocational educators. Successful vocational education programs, to contribute maximally to the social and economic stability of the nation, must evolve from many relevant sources."

The three most recent occupants of the White House have also expressed a keen interest in furthering vocational education programs. Presidents Eisenhower, Kennedy, and Johnson have repeatedly urged the general public, the several states, and Congress to expand vocational education opportunities for the youth and adults of this country. This is clearly evidenced by their calling of several national conferences for the study of education and by their sponsorship of legislation designed to stimulate vocational and technical training and re-training programs.

(3) National Society for the Study of Education, Vocational Education, Sixty-Fourth Yearbook, Part I, University of Chicago Press, 1965, pp. 17-18.



## STATE INTEREST IN VOCATIONAL EDUCATION

In Iowa, two studies directed by the legislature have brought to the State an increasing awareness of the need for vocational education, especially for post-high school age youth. The Fifty-eighth General Assembly, by Senate File 521, authorized in 1959 a study of the resources and needs for higher education in Iowa. (4) Dr. Raymond C. Gibson, Professor of Higher Education, Indiana University, directed the study. In his report, Dr. Gibson recommended that "the State Legislature authorize the establishment of regional community colleges as the best means of relating education beyond high school to the manpower problem in Iowa." (5)

The Fifty-ninth General Assembly in 1961 directed, by House Resolution 6, that the Department of Public Instruction prepare a state-wide plan for the development of public area community colleges, "such plan to include all areas of the state, taking into consideration the program now offered by the existing junior colleges of the state." (6)

The Resolution also directed, "that as a part of such study the Department of Public Instruction shall study the availability of vocational and technical education in Iowa high schools, and from this study recommend to the General Assembly and local school authorities ways and means to provide the necessary vocational and technical training for Iowa youth and adults at this level of education, such study to be concerned primarily with the availability of and plans for vocational and technical education in the fields of trades and industries and businesses both at the high school and the adult education level." (7)

The Department of Public Instruction developed a new concept for the legal framework of public education in Iowa when it recommended in its report that area education districts be established to provide services to local school districts more economically and efficiently than by our present county school systems, and to provide for a state-wide system of community colleges which would make available opportunities for vocational and technical training to all people of the state. Dr. Raymond J. Young, of the Center For the Study of Higher Education, University of Michigan, described the report of the Department of Public Instruction as the best forward looking state study he had reviewed. Dr. Young commented, "With such a plan, Iowa could be one of the most forward states in the Nation in providing post-high school education to its youth and adults instead of being one that is so far behind progress in some other states."

The report proposed a division of the State of Iowa into sixteen area education districts as shown in Plate I-2. Area X in the Department's recommendation included the county school systems of Benton, Cedar, Iowa, Johnson, Jones, and Linn Counties.

- (4) Raymond C. Gibson, "Resources & Needs For Higher Education in Iowa, 1960-1970: A Summary Report (State House, Des Moines; Iowa Legislative Research Bureau, undated).
- (5) Ibid, p. 41
- (6) Education Beyond High School Age - The Community College, Department of Public Instruction, State of Iowa, 1962. p 2.
- (7) Ibid, p. 2.



Criteria for the establishment of the area districts, as stated in the report, are as follows: (8)

1. Recognition of the existing cultural, social, and economic "community characteristics" in an area or region.
2. The capability of establishing a single administrative structure for its public area community college with its attendance center or centers located so as to be within one-hour's driving time of the majority of the students to be served.
3. A minimum area assessed taxable valuation of \$150,000,000.
4. A minimum area school enrollment of 5,000 public, private, and parochial pupils in grades nine through twelve.

#### DEVELOPMENT OF PLANS IN AREA X

In November, 1964, school administrators of the six counties included in Area X met to discuss the desirability of developing, for the six counties, comparable study materials which might serve as helpful information for legislators, school administrators, and the general public of the area in considering all types of school legislation, but especially legislation pertaining to vocational education. School administrators in Delaware County (Area VIII) and Washington County (Area XV), learning of the effort to develop comparable study data in Area X, asked to be included in the planning. Accordingly, studies of enrollment data, assessed valuations, census data, and school tax data were prepared and summarized for Area X and for Delaware and Washington Counties. These eight counties (Benton, Cedar, Delaware, Iowa, Johnson, Jones, Linn, and Washington) will be referred to hereafter in this proposal as Area X. Area X, with Delaware and Washington Counties added, is shown in Plate I-3. The eight county school systems of Area X are shown in Plate I-4.

#### THE GOVERNOR'S RECOMMENDATIONS FOR VOCATIONAL EDUCATION

The Honorable Harold E. Hughes, Governor of the State of Iowa, in an address at the Third Annual Economic Development Conference at Ames, December 8, 1964, recommended:

- . . . that a long-range plan be formulated for a dozen or more multi-county areas, each to be served by a vocational-technical training center;
- . . . that four of these area schools be authorized for construction in the next biennium;
- . . . that the area school be located within roughly one hour's driving time of the majority of people to be served;
- . . . that there be a minimum of 5,000 public, private, and parochial high school students in the area.



## ORGANIZING AREA X FOR ACTION

Noting the similarities of the criteria established in the Department of Public Instruction Study under House Resolution 6 and those stated by Governor Harold E. Hughes, the eight county boards of education in Area X, believing that the Governor's views reflected the opinions of the great majority of Iowans, and believing that his views would have a significant influence on the development of legislation pertaining to vocational education, met on January 28, 1965, to consider the possibility of developing a comprehensive area study, and a proposal for an area vocational facility in Area X. Discussions concerning the proposal were based on an eventual merger of the eight county school systems specifically to form a vocational education district. This effort was agreed upon by a unanimous vote of the eight county boards of education. Agreement was also reached to share the costs for the study in direct relationship to the assessed valuations of the eight county school systems.

A steering committee consisting of the eight county superintendents and one county board member from each county was appointed at the meeting held January 28, 1965. The steering committee, in a subsequent meeting held February 2, 1965, elected officers and employed a coordinator for the eight-county project. Meetings of the Area X Steering Committee and of numerous sub-committees were held later to prepare portions of the study.

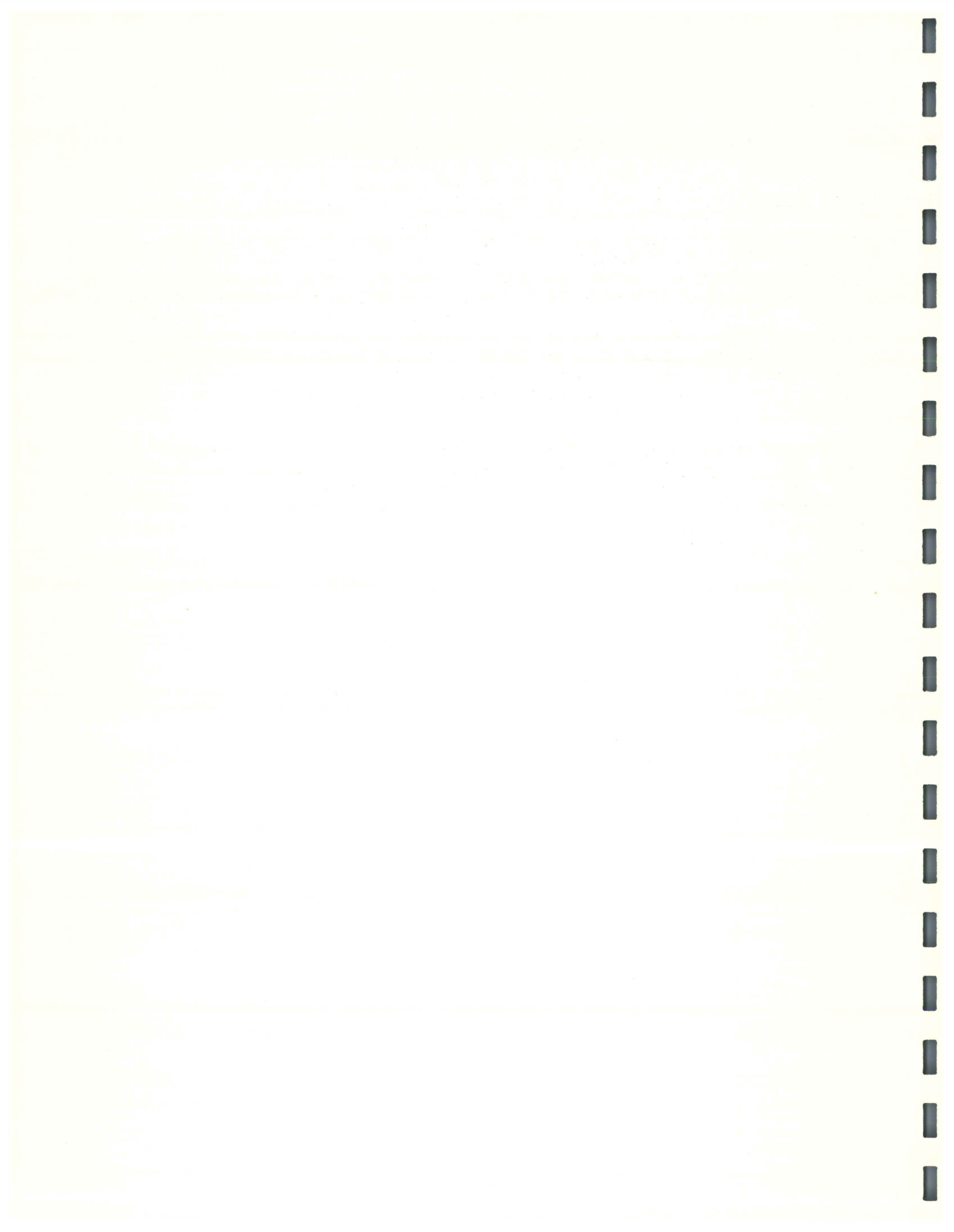


PLATE I-1

**OCCUPATIONAL TRENDS AND EDUCATIONAL REQUIREMENTS**  
(U.S. Labor Force—1930 and 1970)

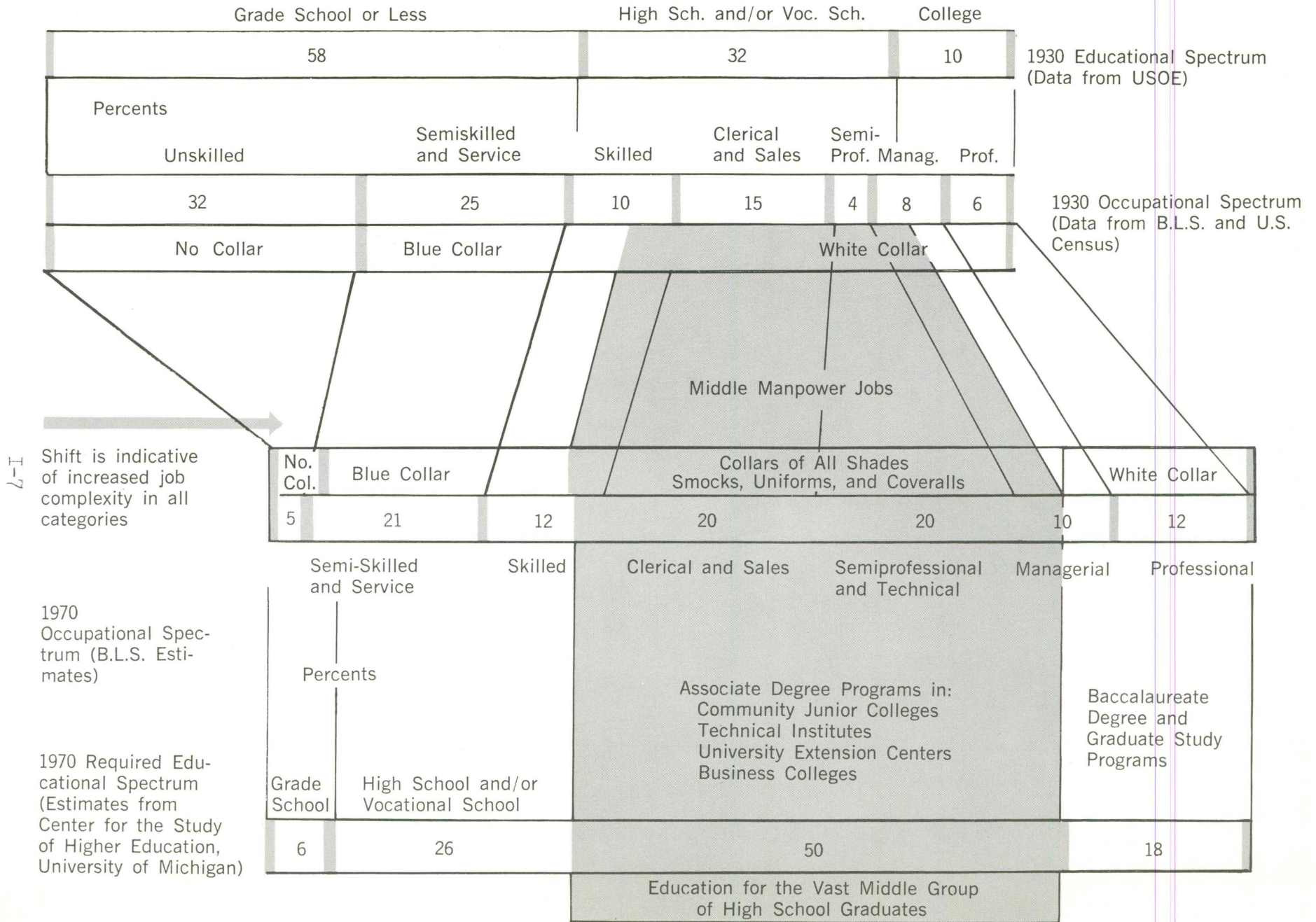
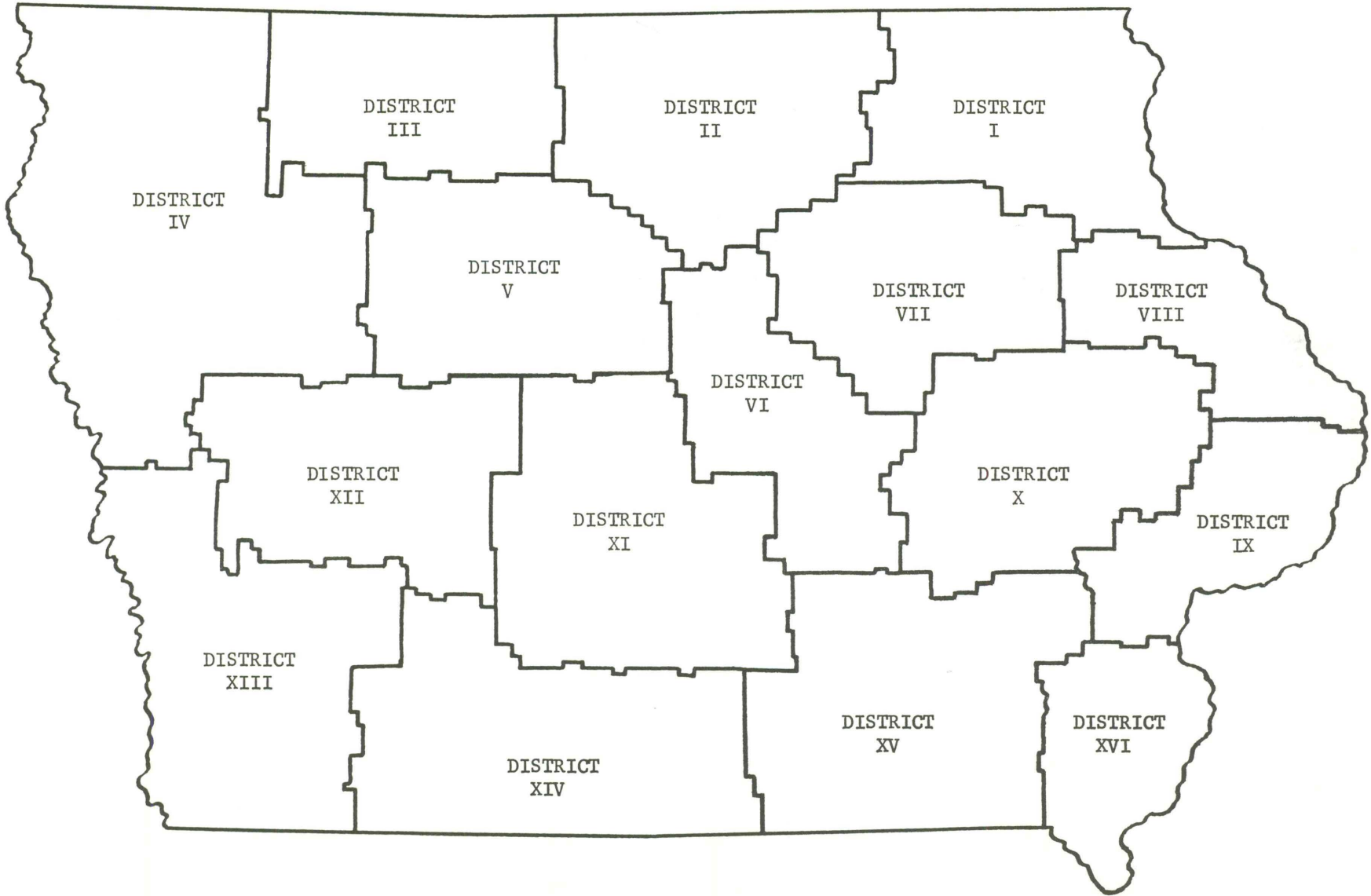


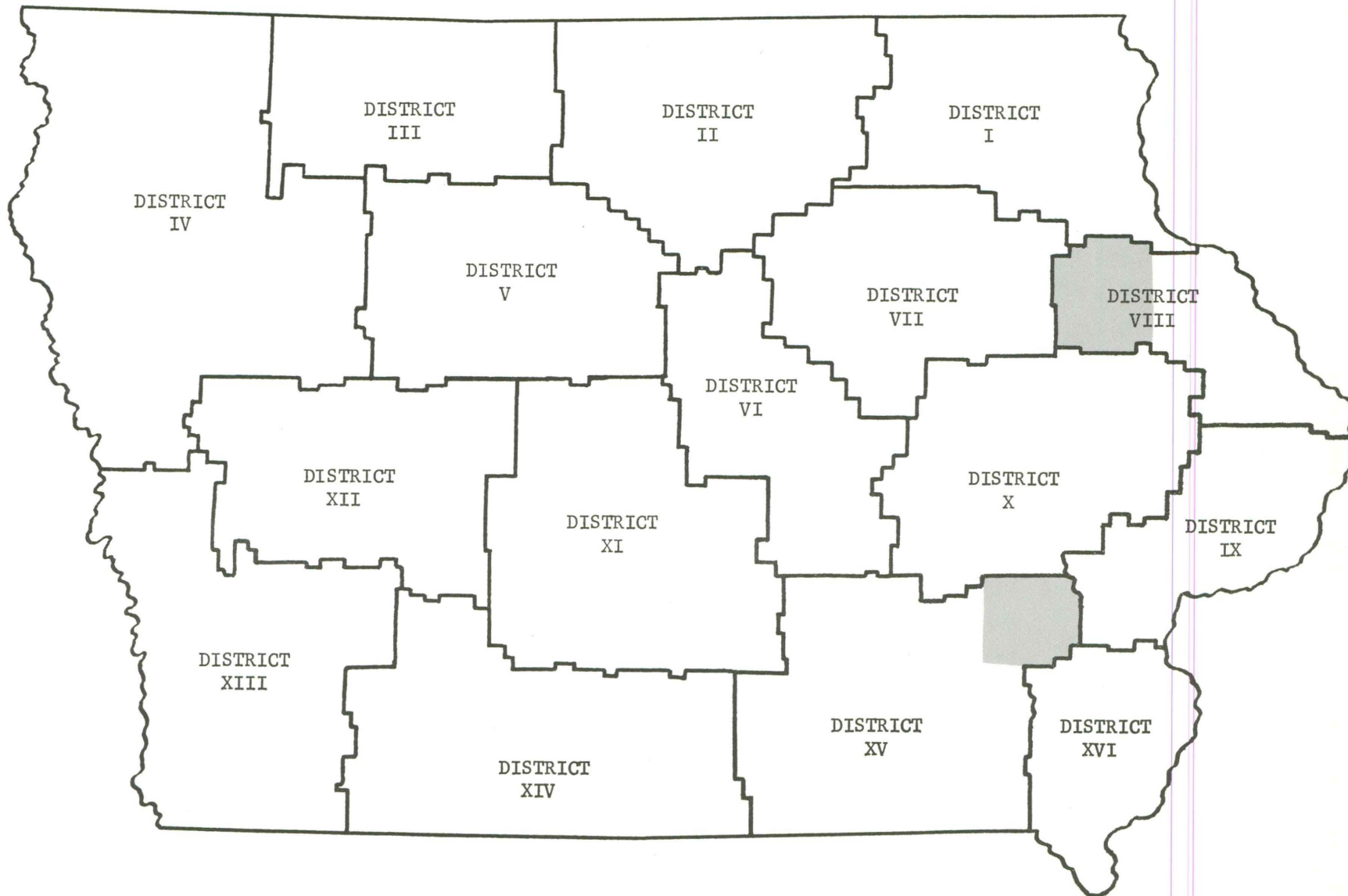


PLATE I-2  
PROPOSED SIXTEEN AREA EDUCATION DISTRICTS  
1961 STUDY-DEPARTMENT OF PUBLIC INSTRUCTION

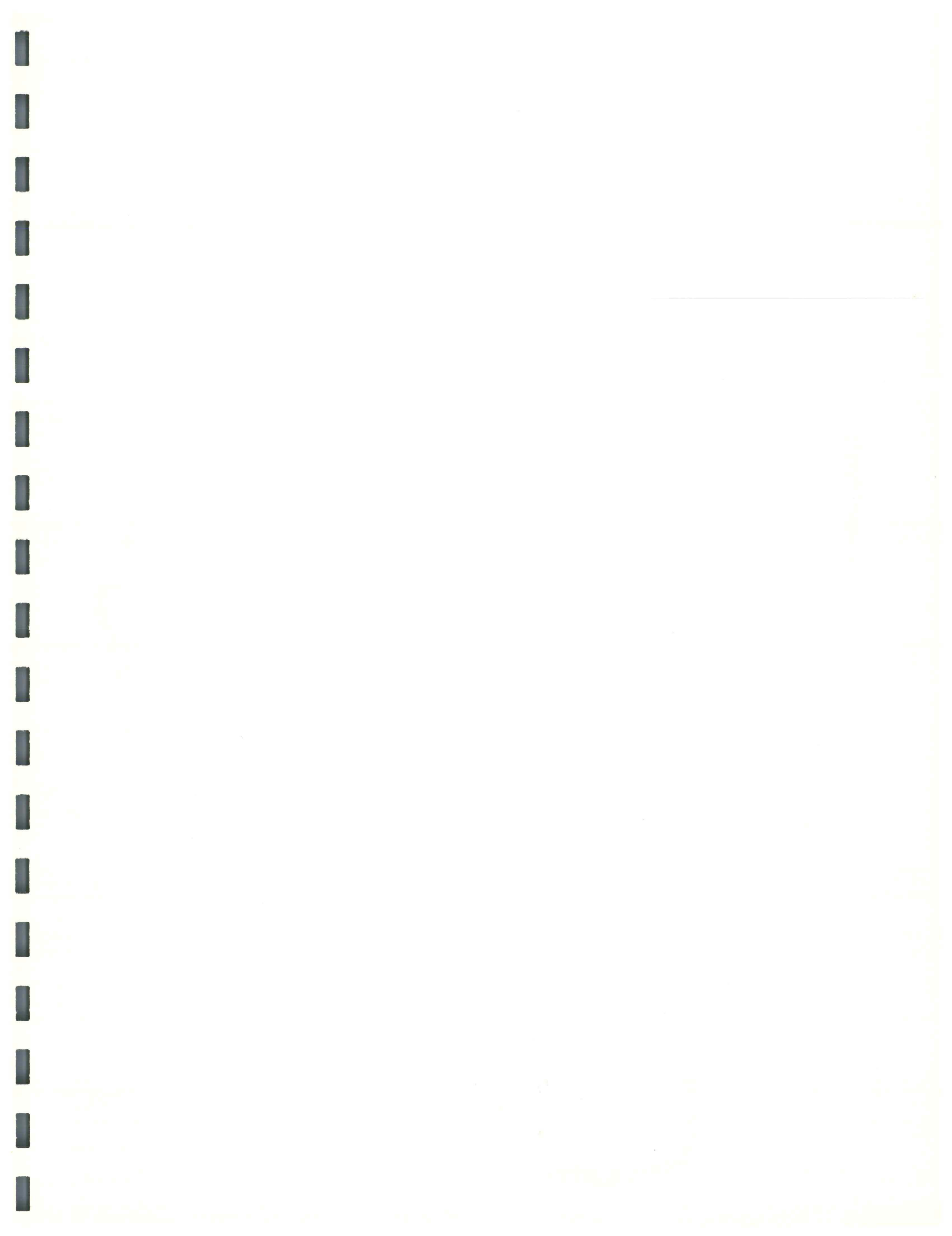


I-8

PLATE I-3  
AREA X WITH ADDITION  
OF DELAWARE AND WASHINGTON COUNTIES



I-6





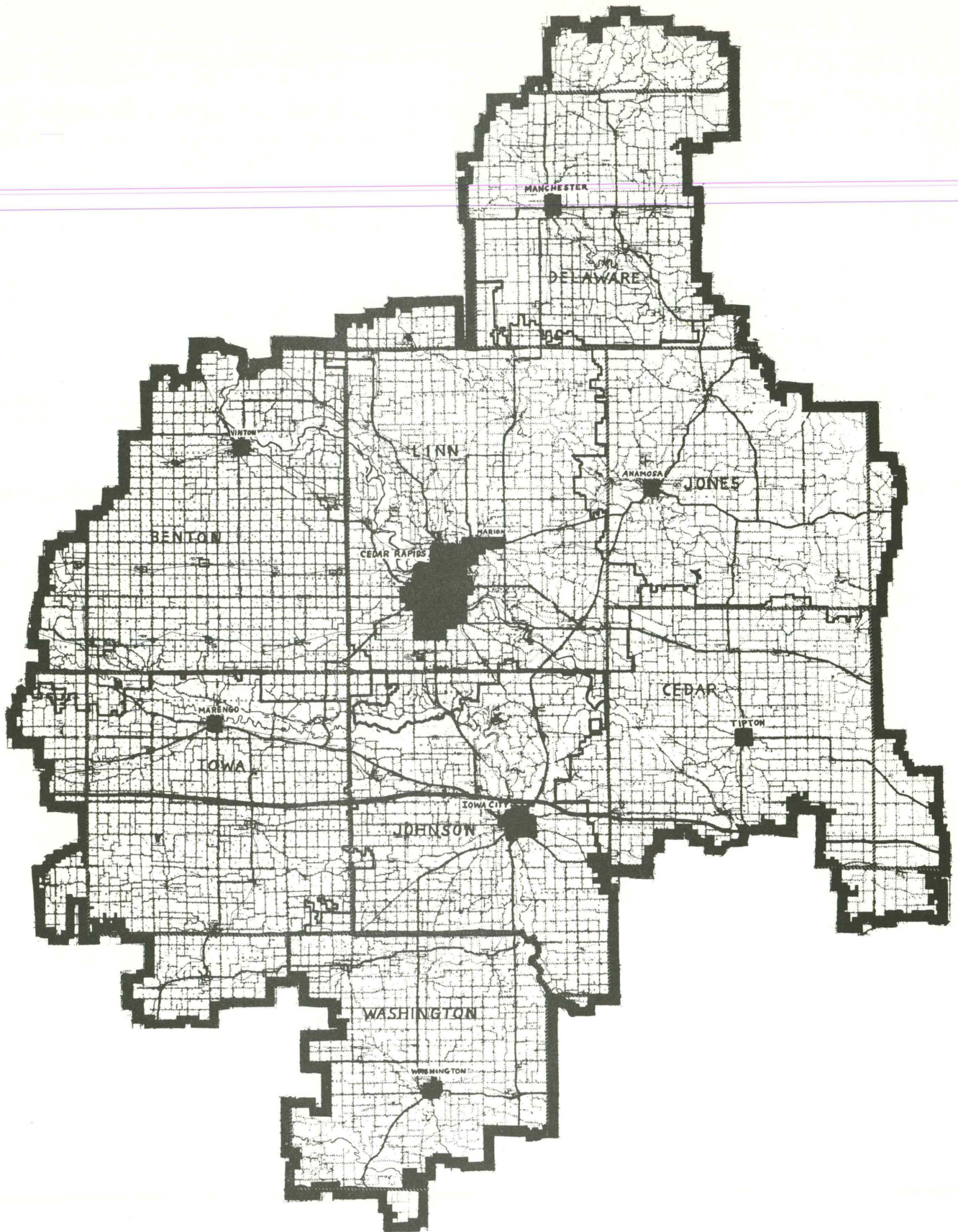
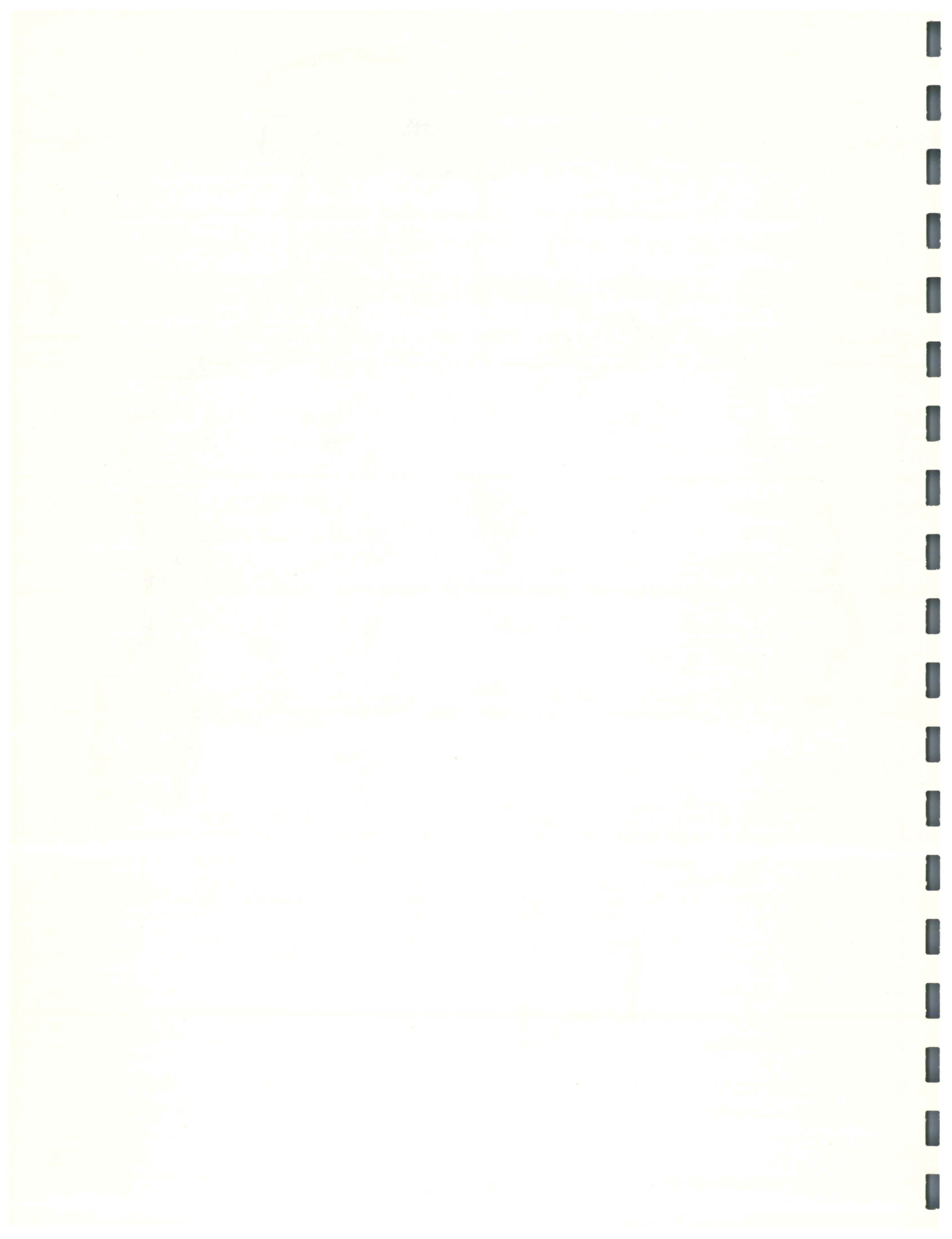
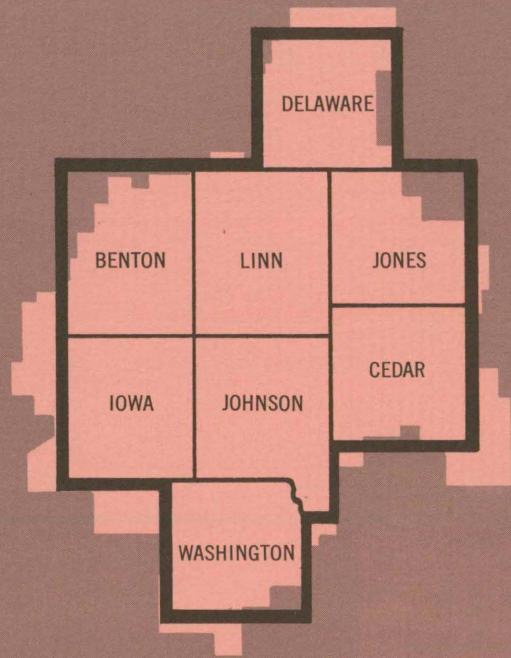


PLATE I — 4

EIGHT COUNTY SCHOOL  
SYSTEMS OF AREA X



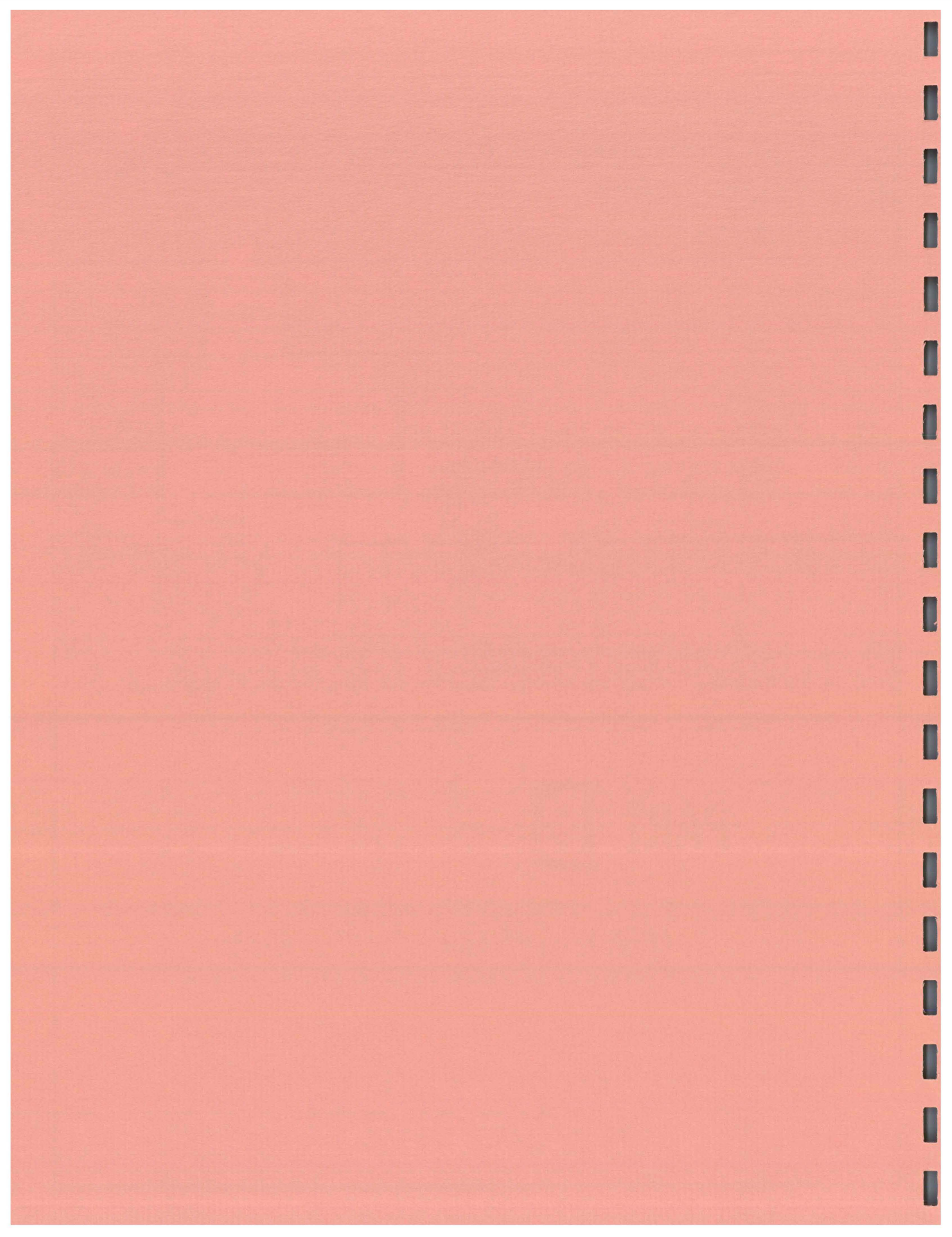




# PART **B**

... AREA X - THE EIGHT-COUNTY AREA





## CHAPTER II

### GENERAL OVERVIEW OF AREA X

---

It is the purpose of this chapter to present a general overview of the area included in the eight county school systems of Area X. This will be done by identifying and comparing selected geographic, economic, and educational data. A more detailed presentation of the data included herein is to be found in succeeding chapters in the report.

A comparison of the selected geographic, economic, and educational data is shown in Table II-1. The summary statements which follow are based on an examination of the data. The totals of selected data for Area X and a comparison of these totals with totals for Iowa are shown in Table II-2.

#### AREA IN SQUARE MILES

Total land area of the eight county school systems in Area X is 4,983 square miles, or 8.9 per cent of the total land area of the State of Iowa. Linn County, with 822 square miles, or 16.5 per cent of the total of Area X, has the largest land area of the eight county school systems. The smallest is Washington County with 466 square miles, or 9.4 per cent of the total.

#### ASSESSED VALUATIONS

Total assessed valuation of the eight county school systems in Area X in 1964 was \$623,259,178. Linn County with a total assessed valuation of approximately \$277 million represents 44.4 per cent of the total assessed valuation of the area. Johnson County ranks second in assessed valuation with approximately \$76 million, or 12.2 per cent of the total.

#### POPULATION

Total population of the eight counties in Area X in 1960 was 306,753, or 11.1 per cent of the 2,757,537 residents of Iowa as established by the 1960 census. Again, Linn County ranked first among the eight counties with a total population of 136,899, or 44.6 per cent of the total for Area X. Johnson County, with a population of 53,663, ranked second. Iowa County, third largest in land area, ranked eighth in population.



## SCHOOL ENROLLMENTS

Total enrollment in public, private, and parochial schools in the eight county school systems in Area X was 78,699 in September, 1964. This figure represents 9.1 per cent of the total public, private and parochial school enrollment in grades K-12 for the State of Iowa on the same date.

## CIVILIAN LABOR FORCE

In 1960 the civilian labor force in the eight counties of Area X was 119,743 or 11.4 per cent of the total civilian labor force of 1,052,632 in the State of Iowa as reported by the 1960 census.

## ROAD NETWORK

As shown in Plate II-1, the eight county school systems comprising Area X are served by an extensive road network of state and federal highways. Major highways are as follows:

- East-West - - Interstate 80, U. S. 6, 20, 30, and 151;  
Iowa 64 and 92
- North-South - U. S. 218;  
Iowa 1, 13, 38, 149, 150

A number of major projects for the eight counties in Area X are included in the Iowa Highway Commission's five-year road improvement program. Chief among these, which have possible implications for the location of an area vocational facility, are the following:

- . . . Construction of a four-lane expressway between Cedar Rapids and Iowa City;
- . . . Cedar Valley Expressway for north-south traffic through Cedar Rapids;
- . . . By-passes in the Cedar Rapids metropolitan areas for highways 30, 13, and 150; and
- . . . Extension of the highway linking Tipton and Solon.

Other planned highway improvement and widening projects have been announced by the Iowa Highway Commission and the several county boards of supervisors.

The road network serving Area X, an area which extends for a distance of 110 miles from north to south, and 72 miles from east to west, tends to converge on the Cedar Rapids-Marion area. The Iowa Highway Commission's long-range plans, as shown in Plate II-2, will provide additional major arteries radiating from this metropolitan center.



## SUMMARY

The eight county school systems in Area X, representing 8.9 per cent of the land area of Iowa, account for:

- . . . 11.3 per cent of the assessed valuation of the state in 1964
- . . . 11.1 per cent of the population of Iowa in 1960
- . . . 9.1 per cent of the enrollment in public, private, and parochial schools of Iowa in 1964
- . . . 10.6 per cent of the public, private, and parochial high school (9-12) students in Iowa in 1964
- . . . 11.4 per cent of the civilian labor force in Iowa in 1960.

TABLE II-1

COMPARISON OF SELECTED GEOGRAPHIC, ECONOMIC AND  
EDUCATIONAL DATA OF AREA X

	Benton	Cedar	Delaware	Iowa	Johnson	Jones	Linn	Wash- ington
Area (Square Miles) of County School Systems	703	625	577	680	545	565	822	466
Rank in Area X	2	4	5	3	7	6	1	8
Per Cent of Area X Total	14.1	12.5	11.6	13.7	10.9	11.3	16.5	9.4
Assessed Valuations (Millions) 1964	57.6	50.7	36.3	44.6	76.2	39.8	276.9	40.6
Rank in Area X	3	4	8	5	2	7	1	6
Per Cent of Area X Total	9.3	8.2	5.8	7.2	12.2	6.4	44.4	6.5
Population, 1960	23,422	17,791	18,483	16,396	53,663	20,693	136,899	19,406
Rank in Area X	3	7	6	8	2	4	1	5
Per Cent of Area X Total	7.6	5.8	6.0	5.4	17.5	6.8	44.6	6.3
School Enrollment- Public, Private, & Parochial, September, 1964	5,991	5,073	4,049	4,327	11,533	5,305	38,316	4,104
Rank in Area X	3	5	8	6	2	4	1	7
Per Cent of Area X Total	7.6	6.4	5.1	5.5	14.8	6.7	48.7	5.2
High School Enroll- ment - Public, Pri- vate & Parochial, September, 1964	1,731	1,532	1,278	1,337	2,934	1,508	9,856	1,263
Rank in Area X	3	4	7	6	2	5	1	8
Per Cent of Area X Total	8.1	7.1	6.0	6.2	13.7	7.0	46.0	5.9

TABLE II-2

TOTALS OF SELECTED GEOGRAPHIC, ECONOMIC, AND EDUCATIONAL  
DATA FOR AREA X AND COMPARISON WITH TOTALS FOR IOWA

	Total Area X	Total State of Iowa	Per Cent Area X to Iowa
Area (Square Miles) of County School Systems	4,983	56,290	8.9
Rank in Area X	-----	-----	-----
Per Cent of Area X Total	100	-----	-----
Assessed Valuations (Millions) 1964	623.2	5,499.0	11.3
Rank in Area X	-----	(1963)	-----
Per Cent of Area X Total	100	-----	-----
Population, 1960	306,753	2,757,537	11.1
Rank in Area X	-----	-----	-----
Per Cent of Area X Total	100	-----	-----
School Enrollment - Public, Private, and Parochial, September, 1964	78,699	722,834	9.1
Rank in Area X	-----	-----	-----
Per Cent of Area X Total	100	-----	-----
High School Enrollment - Public, Private, and Parochial, September, 1964	21,439	201,389	10.6
Rank in Area X	-----	-----	-----
Per Cent of Area X Total	100	-----	-----







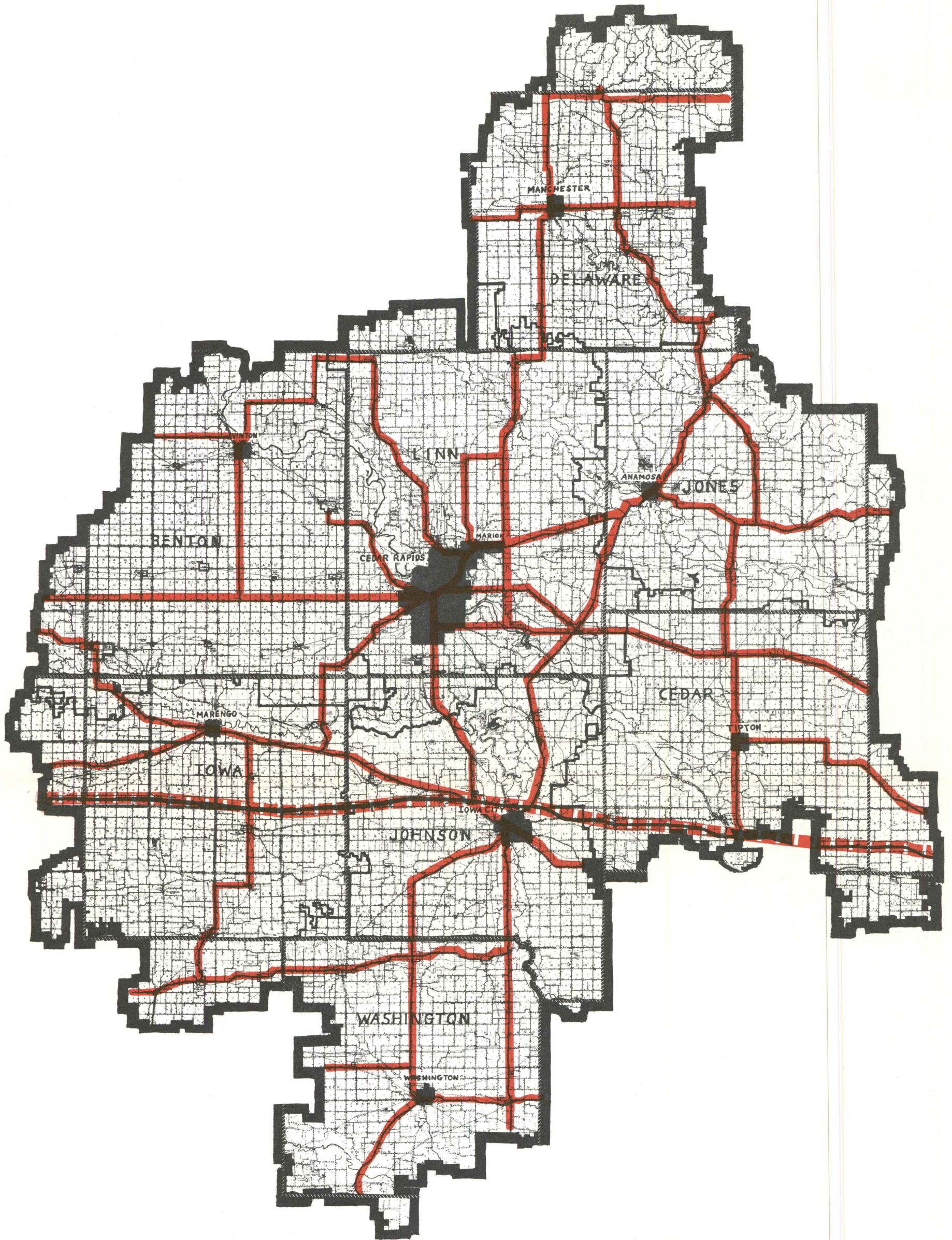
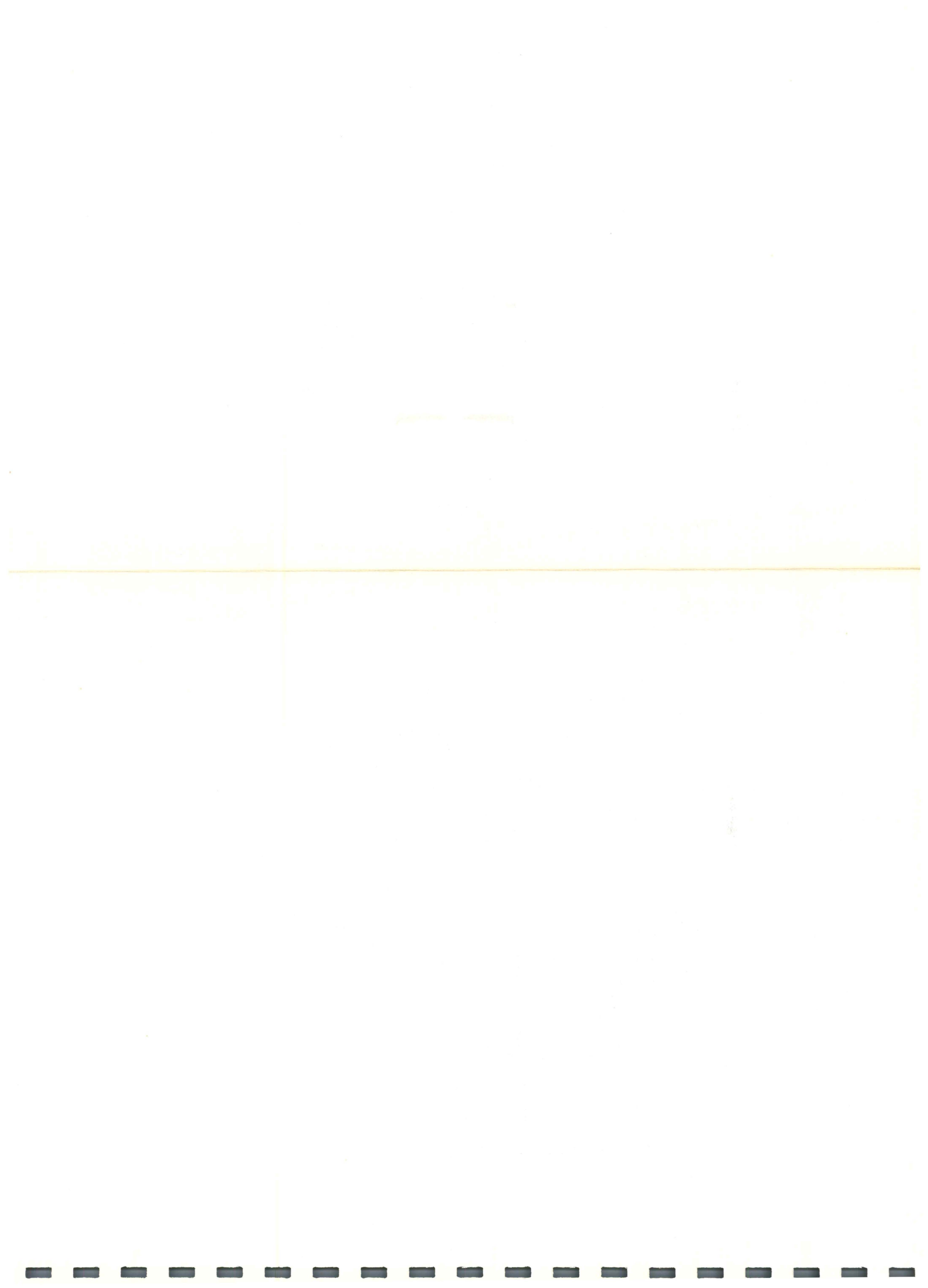


PLATE II — 1

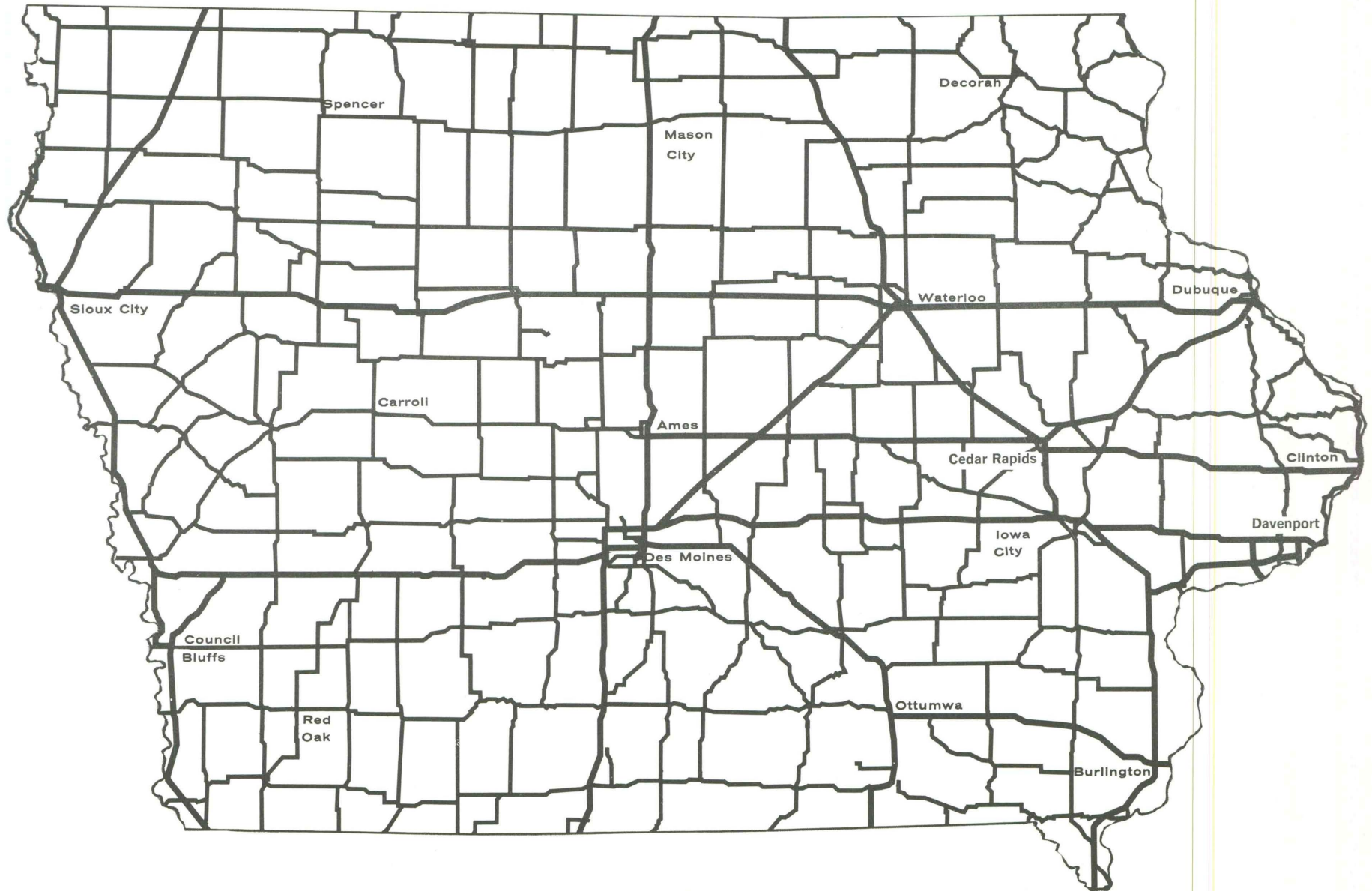
NETWORK OF STATE AND  
FEDERAL HIGHWAYS SERVING AREA X







6 — II



Source: Iowa Highway Needs, 1960-1980, A Report To The Iowa Highway Study Committee



CHAPTER III

POPULATION CHARACTERISTICS

This chapter will present basic population data for the eight-county area. In addition, it will present population projections for each of the eight counties through 1980.

The data which will be presented are based upon United States Bureau of the Census published statistics, usually using 1960 census figures.

SUMMARY OF SELECTED POPULATION CHARACTERISTICS

Selected population characteristics have been summed for the entire eight-county area in Table III-1 through Table III-5. The tables present selected social and economic characteristics such as the following: area and population, education characteristics of the population; age by sex; family income; and, sound characteristics of the population. Corresponding data for each individual county is to be found in the appendix accompanying this chapter.

TABLE III-1

AREA AND POPULATION OF EIGHT-COUNTY AREA, URBAN AND RURAL:  
1960 and 1950 (1)

Land area in square miles, 1960	4,939
1960 Population	
<u>Total</u> Number	306,753
Per square mile	62.1
<u>Urban</u> Total	170,045
Urbanized areas	105,118
Other urban territory	64,927
<u>Rural</u> Total	136,708
Places of 1,000 to 2,500	16,439
Other Rural Territory	120,269
1950 Population	
<u>Total</u>	262,123
Urban	122,107
Rural	130,016

1. Computed from U. S. Bureau of the Census, U. S. Census of Population - 1960. Number of Inhabitants, Iowa. Final Report - PC (1)-17A. Table 6. "Area and Population of Counties, Urban and Rural: 1960 and 1950."



TABLE III-2

EDUCATION CHARACTERISTICS OF THE POPULATION, FOR EIGHT-COUNTY AREA: 1960 (1)

School Enrollment, 5 to 34 years old	81,328
Kindergarten	6,434
Public	5,869
Elementary (1 to 8 years)	47,707
Public	40,426
High School (1 to 4 years)	15,516
Public	13,606
College	11,671
Number Enrolled in School, By Age	
5 and 6 years old	10,528
7 to 13 years old	41,230
14 and 15 years old	8,328
16 and 17 years old	7,565
18 and 19 years old	5,040
20 and 21 years old	3,473
22 to 24 years old	2,414
25 to 34 years old	2,750
Years of School Completed	
<u>Male, 25 years old and over</u>	80,998
No school years completed	316
Elementary: 1 to 4 years	2,174
5 and 6 years	3,753
7 years	4,964
8 years	19,304
High School: 1 to 3 years	12,559
4 years	21,606
College: 1 to 3 years	6,992
4 years or more	9,330
<u>Female, 25 years old and over</u>	85,547
No school years completed	225
Elementary: 1 to 4 years	1,408
5 and 6 years	2,954
7 years	3,432
8 years	17,496
High School: 1 to 3 years	12,894
4 years	29,215
College: 1 to 3 years	10,844
4 years or more	6,079

1. Computed from U. S. Bureau of the Census. U. S. Census of Population-1960. General Social and Economic Characteristics, Iowa. Final Report PC (1) - 17C. Table 83. "Education, Employment Status and Selected Labor Force Characteristics of the Population, for Counties- 1960."

TABLE III-3

## AGE BY SEX FOR EIGHT-COUNTY AREA: 1960 (1)

	Total	Male	Female
Under 5 years	36,037	18,597	17,440
5 to 9 years	32,082	16,226	15,856
10 to 14 years	27,207	13,986	13,221
15 to 19 years	22,904	11,226	11,678
20 to 24 years	22,973	11,247	11,726
25 to 29 years	19,886	10,188	9,698
30 to 34 years	19,071	9,595	9,476
35 to 39 years	18,841	9,398	9,443
40 to 44 years	17,676	8,821	8,855
45 to 49 years	16,652	8,297	8,355
50 to 54 years	14,814	7,430	7,384
55 to 59 years	13,715	6,750	6,965
60 to 64 years	12,430	6,005	6,425
65 to 69 years	11,218	5,289	5,929
70 to 74 years	8,993	4,033	4,960
75 to 79 years	6,359	2,785	3,574
80 to 84 years	3,605	1,509	2,096
85 and over	2,290	866	1,424
Under 18	108,449	55,494	52,955
65 and over	32,465	14,482	17,983

1. Computed from U. S. Bureau of the Census. U. S. Census of Population - 1960.  
General Population Characteristics, Iowa. Final Report PC (1) - 17B. Table 27.  
 "Age By Color and Sex, for Counties: 1960."

TABLE III-4

INCOME, 1959 OF FAMILIES FOR EIGHT-COUNTY AREA: 1960 (1)

Family Income	
All families	77,786
Under \$1,000	4,813
\$1,000 - 1,999	5,842
\$2,000 - 2,999	6,549
\$3,000 - 3,999	7,903
\$4,000 - 4,999	9,421
\$5,000 - 5,999	10,192
\$6,000 - 6,999	8,648
\$7,000 - 7,999	6,649
\$8,000 - 8,999	4,985
\$9,000 - 9,999	3,352
\$10,000 - 14,999	6,520
\$15,000 - 24,999	2,072
\$25,000 and over	840

1. Computed from U. S. Bureau of the Census. U. S. Census of Population: 1960. General Social and Economic Characteristics, Iowa. Final Report PC (1) - 17C. Table 86, "Income in 1959 of Families and Persons, and Weeks Worked in 1959, For Counties - 1960."



TABLE III-5

SOCIAL CHARACTERISTICS OF THE POPULATION FOR EIGHT COUNTY AREA:  
1960 (1)

<u>Nativity and Parentage</u>	
Native	301,140
Native Parentage	268,387
White	266,564
Non-white	1,823
Foreign or mixed parentage	32,753
White	32,693
Non-white	60
Foreign Born	5,613
White	5,429
Non-white	184
<u>State of Birth</u>	
Total Native Population	301,140
Born in State of Residence	246,929
Born in Different State	47,699
Born in U. S. outlying area, at sea, etc.	449
State of Birth Not Reported	6,063
<u>Residence in 1955</u>	
Population 5 years old and over, 1960	270,711
Same house as in 1960	139,507
Different house in U. S.	125,870
Same county	72,680
Different county	53,190
Same state	134,856
Different state	18,334
Abroad	1,887
Moved, Residence in 1955 not reported	3,447
<u>Year Moved Into Present Home</u>	
Total	306,753
1959-1960	77,611
1958	31,552
1957	24,353
1954-1956	49,899
1950-1953	38,456
1940-1949	42,929
1939 or earlier	22,695
Always lived in this house	19,249

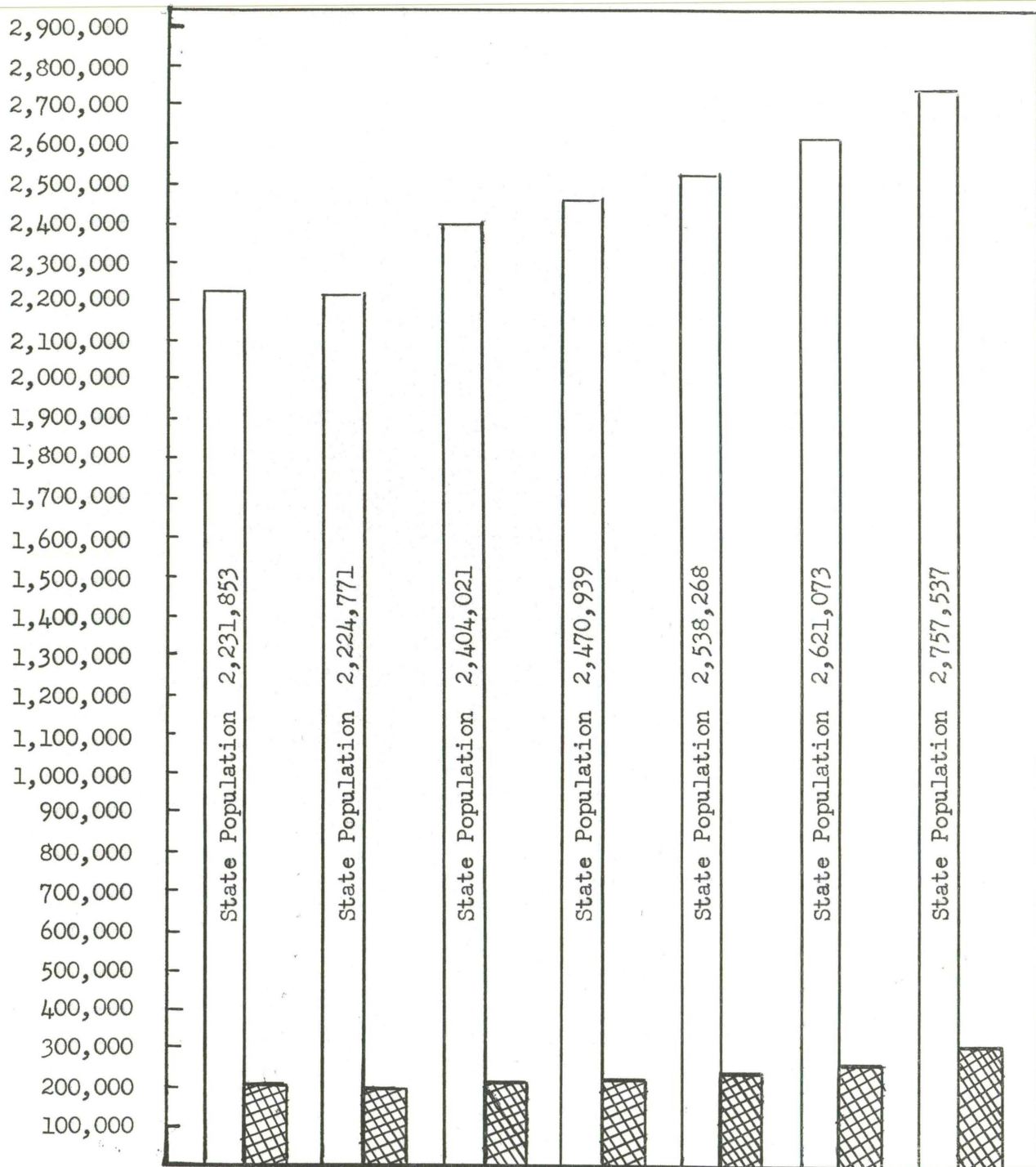
1. Computed from U. S. Bureau of the Census. U. S. Census of Population - 1960. General Social and Economic Characteristics, Iowa. Final Report PC (1) - 17C. Table 82, "Social Characteristics of the Population, For Counties: 1960."

## HISTORICAL GROWTH

The historical growth of the population of the eight-county area in relation to the population growth of the State of Iowa is presented in Plate III-1. The population of Area X increased from 206,158 in 1900 to 306,753 in 1960, a gain of 100,595, or 48.9 per cent. The state population increased from 2,231,853 to 2,757,537 during the same period, a gain of 525,684, or 23.5 per cent, or approximately one-half the percentage gain experienced by the eight counties.

In 1900, the population of Area X represented 9.2 per cent of the population of the state. In 1960, the eight counties represented 11.1 per cent of the state population.

PLATE III-1  
 POPULATION GROWTH OF EIGHT-COUNTY AREA AND  
 OF STATE, WITH PER CENT OF STATE POPULATION  
 IN THE EIGHT-COUNTY AREA, 1900-1960



Year . . . . .	1900	1910	1920	1930	1940	1950	1960
Area X Pop. . . . .	206,158	202,827	217,917	226,705	237,604	262,123	306,753
State Pop. (Millions)	2.2	2.2	2.4	2.5	2.5	2.6	2.7
Area X Per Cent of State Pop.	9.2	9.1	9.1	9.2	9.4	10.0	11.1

Source: Census of Population Reports, U. S. Bureau of the Census



## POPULATION PROJECTIONS

Population projections for each of the individual counties for the period 1960 to 1980 are presented in Table III-7 through Table III-14.

### Statistical Method Employed:

The projections were prepared by Jon A. Doerflinger of Iowa State University. They were reported in the unpublished manuscript "Education in Iowa: A Description and Analysis Emphasizing Economic Variables, (1) which was the report of the Research Committee on Economics of Education, Iowa State University, Ames, Iowa. They are used here with the permission of that institution.

These county projections are derived by the Hamilton-Perry method of population projection. The limitations of population projections should be clearly understood. Professor Doerflinger described these limitations.

"A word of caution is necessary lest the figures be accepted too literally. The projections are based upon changes in the age composition experienced in the recent past (ten years back) and then projected to the near future. The method takes into account changes in fertility which result from changes in the age structure of the county population. Naturally, the farther one projects, the greater is the probability of error. Thus, the figures for 1970 can be used with greater confidence than those of 1980. The formal assumption upon which the Hamilton-Perry method is based are as follows:

- (1) There are no changes in the relevant definitions of the population or in the boundaries of the area whose population is being projected.
- (2) Age specific rates of mortality and migration do not change between the past decade (say 1950-1960) and the next decade (say 1960-1970).
- (3) The effect of errors of enumeration for the past two censuses (say 1950 and 1960) will be the same in taking the next (1970) census.

As can be seen, any sharp change in mortality or migration will tend to invalidate the projections.

Two other cautions are in order. First, those counties where the college population forms a large proportion of the total population may be subject to errors of two kind: one, the error in overestimating the fertility of women because of the number of

1. Jon A. Doerflinger, "County Projections of Population to 1980" in Education in Iowa: A Description and Analysis Emphasizing Economic Variables. Report of Research Committee on Economics of Education, Preliminary Report. Iowa State University, Ames, Iowa. February, 1964.

unmarried college girls and, two, the error caused by rapid fluctuations in college populations . . . second, the results of individual counties are not additive. Estimates of groups of counties must be computed from their cumulative base populations."

Within the eight-county area Johnson County would seem to be the only one which would be affected to a large degree because of a large college population.

Findings

As shown in Table III-6, seven of the eight counties will experience a gain in population between 1960 and 1980. The one exception is Washington County which is projected to show a 7.5 per cent loss in population during the twenty-year period. Linn and Johnson counties will experience the greatest population gains of the eight counties in number and per cent.

TABLE III-6  
PROJECTED INCREASE OR DECREASE IN POPULATION BY COUNTY  
1960 to 1980

County	Population Increase or Decrease 1960 to 1980	Per Cent of Increase or Decrease 1960 to 1980
Benton	+ 779	+ 3.3
Cedar	+ 1,587	+ 8.9
Delaware	+ 504	+ 2.7
Iowa	+ 1,004	+ 6.1
Johnson	+ 36,848	+ 68.7
Jones	+ 2,642	+ 12.8
Linn	+ 124,916	+ 91.3
Washington	- 1,456	- 7.5



TABLE III-7

Projected Population by Age Groups, 1960-1980  
Benton County

Ages	1960	1965	1970	1975	1980
0-4	2560	2514	2877	2884	3047
5-9	2591	2438	2394	2549	2746
S.T.0-9	5151	4952	5071	5433	5793
S.T.10-14	2327	2357	2427	2178	2538
15-19	1676	1852	2123	1931	1962
20-24	1115	1489	1376	1886	1435
S.T.15-24	2791	3341	3499	3817	3397
25-29	1219	1090	1302	1346	1649
30-34	1336	1160	1066	1239	1316
35-39	1405	1301	1101	1038	1176
40-44	1443	1341	1266	1051	1010
S.T.25-44	5403	4892	4735	4674	5151
45-49	1441	1370	1277	1202	1001
50-54	1208	1366	1296	1211	1137
55-59	1115	1094	1292	1174	1145
60-64	1063	1024	980	1186	1051
S.T.45-64	4827	4854	4845	4773	4334
65-69	1029	956	933	882	1081
70-74	826	828	850	751	784
75+	1068	1208	1148	1273	1123
S.T.65+	2923	2992	2931	2906	2988
75-79	544	601	627	618	569
80-84	320	326	376	375	387
85-90	151	176	107	206	123
90-95	45	78	32	56	37
95-100	7	23	5	16	6
100-105	1	4	1	2	1
105-110	0	0	0	0	0
S.T.85+	204	281	145	280	167
Total	23422	23388	23508	23781	24201

Source: Iowa State University Extension Service  
III-10



TABLE III-8

Projected Population by Age Groups, 1960-1980  
Cedar County

Ages	1960	1965	1970	1975	1980
0-4	1918	1923	2085	2287	2485
5-9	1860	1763	1767	1916	2102
S.T.0-9	3778	3686	3352	4203	4587
S.T.10-14	1786	1691	1933	1606	2101
15-19	1228	1494	1522	1616	1446
20-24	850	1123	1201	1392	1300
S.T.15-24	2078	2617	2723	3008	2746
25-29	853	855	1018	1208	1262
30-34	1052	824	860	984	1215
35-39	1045	1008	796	824	950
40-44	1097	1016	963	774	787
S.T.25-44	4047	3703	3837	3790	4214
45-49	1127	1062	986	932	751
50-54	958	1058	1027	926	902
55-59	872	898	990	963	866
60-64	876	792	839	898	899
S.T.45-64	3833	3810	3842	3719	3418
65-69	756	770	711	738	807
70-74	654	618	664	581	636
75+	859	960	888	984	869
S.T.65+	2269	2348	2263	2303	2312
75-79	456	474	480	480	451
80-84	261	270	293	284	297
85-90	104	144	84	160	89
90-95	32	54	26	44	27
95-100	5	16	4	14	4
100-105	1	2	1	2	1
105-110	0	0	0	0	0
S.T.85+	142	216	115	220	121
Total	17791	17855	18250	18629	19378

TABLE III-9

Projected Population by Age Groups, 1960-1980  
Delaware County

Ages	1960	1965	1970	1975	1980
0-4	2378	2290	2359	2528	2727
5-9	2197	2058	1982	2042	2188
S.T. 0-9	4575	4348	4341	4570	4915
S.T. 10-14	1903	1832	2207	1742	2189
15-19	1369	1464	1666	1698	1503
20-24	872	1182	1026	1439	1190
S.T. 15-24	2241	2646	2692	3137	2693
25-29	941	841	996	990	1212
30-34	1026	900	810	952	953
35-39	1102	968	859	764	909
40-44	1045	1054	909	822	718
S.T. 25-44	4114	3763	3574	3528	3792
45-49	947	980	1007	853	785
50-54	905	899	916	956	797
55-59	850	824	851	834	905
60-64	817	770	744	770	753
S.T. 45-64	3519	3473	3518	3413	3240
65-69	717	730	689	665	690
70-74	610	602	644	579	586
75+	804	896	869	964	882
S.T. 65+	2131	2228	2202	2206	2158
75-79	423	440	488	464	469
80-84	231	252	270	291	285
85-89	111	128	81	150	93
90-95	33	57	25	44	29
95-100	5	17	4	13	5
100-105	1	2	1	2	1
105-110	0	0	0	0	0
S.T. 85+	150	204	111	209	128
Total	18483	18380	18534	18598	18987

Source: Iowa State University Extension Service

TABLE III-10

Projected Population by Age Groups, 1960-1980  
Iowa County

Ages	1960	1965	1970	1975	1980
0-4	1781	1774	1906	2074	2193
5-9	1716	1623	1617	1737	1890
S.T. 0-9	3497	3397	3523	3811	4083
S.T. 10-14	1630	1566	1750	1476	1873
15-19	1157	1352	1416	1452	1334
20-24	849	1036	1074	1268	1153
S.T. 15-24	2006	2388	2490	2720	2487
25-29	857	822	916	1039	1121
30-34	887	808	794	864	1004
35-39	962	849	760	760	812
40-44	985	946	811	747	726
S.T. 25-44	3691	3425	3281	3410	3663
45-49	1053	967	929	796	734
50-54	912	1004	949	886	781
55-59	832	839	954	873	842
60-64	743	759	766	870	797
S.T. 45-64	3540	3569	3598	3425	3154
65-69	713	641	686	661	787
70-74	522	583	539	561	556
75+	797	830	798	850	797
S.T. 65+	2032	2054	2023	2072	2140
75-79	416	387	453	400	436
80-84	252	242	252	263	260
85-90	94	136	68	138	73
90-95	29	48	21	36	23
95-100	5	15	3	11	4
100-105	1	2	1	2	1
105-110	0	0	0	0	0
S.T. 85+	129	201	93	187	101
Total	16396	16399	16665	16914	17400

Source: Iowa State University Extension Service



Table III-11

Projected Population by Age Groups, 1960-1980  
Johnson County

Ages	1960	1965	1970	1975	1980
0-4	6406	7306	8841	10993	12918
5-9	4768	4862	5545	6710	8343
S.T.0-9	11174	12168	14386	17703	21261
S.T.10-14	3776	6579	4961	7651	6847
15-19	5112	7946	8390	10439	9757
20-24	7617	5768	12115	9468	15917
S.T.15-24	12729	13714	20505	19907	25674
25-29	4722	5393	6425	8578	10545
30-34	3186	3556	3169	4838	5040
35-39	2722	2891	2390	2876	3252
40-44	2530	2649	2596	2326	2582
S.T.25-44	13160	14489	14580	18618	21419
45-49	2315	2474	2576	2538	2262
50-54	2197	2270	2417	2526	2480
55-59	2052	2125	2224	2338	2475
60-64	1825	1936	2053	2098	2259
S.T.45-64	8389	8805	9270	9500	9476
65-69	1584	1662	1819	1869	1971
70-74	1255	1280	1498	1470	1685
75+	1596	1860	1845	2200	2178
S.T.65+	4435	4802	5162	5539	5834
75-79	765	943	977	1126	1122
80-84	480	470	631	600	753
85-90	258	266	174	350	222
90-95	78	134	53	92	68
95-100	13	40	9	28	11
100-105	2	6	1	4	2
105-110	0	1	0	0	0
S.T.85+	351	447	237	474	303
Total	53663	60557	68864	78918	90511

TABLE III-12

Projected Population by Age Groups, 1960-1980  
Jones County

Ages	1960	1965	1970	1975	1980
0-4	2217	2209	2384	2609	2822
5-9	2292	2185	2177	2349	2572
S.T.0-9	4509	4394	4561	4958	5394
S.T.10-14	2063	2210	2160	2100	2323
15-19	1569	1892	2129	1980	2022
20-24	1322	1502	1720	2039	1801
S.T.15-24	2891	3394	3849	4019	3823
25-29	1224	1184	1436	1541	1949
30-34	1233	1100	1047	1290	1362
35-39	1196	1194	975	1014	1144
40-44	1222	1146	1156	934	982
S.T.25-44	4875	4624	4614	4779	5437
45-49	1141	1174	1096	1110	893
50-54	1012	1110	1126	1066	1065
55-59	982	909	1078	1012	1035
60-64	845	894	806	981	897
S.T.45-64	3980	4087	4106	4169	3890
65-69	821	740	805	706	884
70-74	648	676	634	664	605
75+	906	1000	981	1034	979
S.T.65+	2375	2416	2420	2404	2468
75-79	480	477	532	466	522
80-84	253	292	306	324	299
85-90	127	142	105	170	116
90-95	39	66	32	56	35
95-100	6	20	5	16	6
100-105	1	3	1	2	1
105-110	0	0	0	0	0
S.T.85+	173	231	143	244	158
Total	20693	21125	21710	22429	23335

Source: Iowa State University Extension Service III-15



TABLE III-13  
 Projected Population by Age Groups, 1960-1980  
 Linn County

Ages	1960	1965	1970	1975	1980
0-4	16713	19254	23801	30360	38426
5-9	14598	16160	18617	23014	29356
S.T. 0-9	31311	35414	42418	53374	67782
S.T. 10-14	11823	15680	18215	19996	25940
15-19	9429	13956	16761	21502	21375
20-24	9446	11302	16090	20090	24789
S.T. 15-24	18875	25258	32851	41592	46164
25-29	9127	10453	13175	17806	23420
30-34	9264	9630	11460	13902	19521
35-39	9272	9565	10134	11832	14629
40-44	8180	9403	9866	10277	12205
S.T. 25-44	35843	39051	44635	53817	69775
45-49	7581	8096	9534	9764	10420
50-54	6590	7306	8011	9189	9662
55-59	6077	6172	7032	7503	8844
60-64	5304	5532	5754	6402	6995
S.T. 45-64	25552	27106	30331	32858	35921
65-69	4729	4638	4988	5031	5772
70-74	3718	3904	3971	4118	4308
75+	5048	5712	5737	6307	6153
S.T. 65+	13495	14254	14696	15456	16233
75-79	2680	2780	3078	2970	3247
80-84	1462	1640	1843	1884	1968
85-90	666	822	600	1026	689
90-95	202	348	182	317	209
95-100	33	104	29	94	34
100-105	5	16	5	14	6
105-110	0	2	0	2	0
S.T. 85+	906	1292	816	1453	938
Total	136899	156763	183146	217093	261815

Source: Iowa State University Extension Service  
 III-16



TABLE III-14

Projected Population by Age Groups, 1960-1980  
Washington County

Ages	1960	1965	1970	1975	1980
0-4	2064	1942	1986	2079	2129
5-9	2060	1866	1755	1795	1879
S.T.0-9	4124	3808	3741	3874	4008
S.T.10-14	1899	1836	1843	1564	1773
15-19	1364	1492	1613	1448	1374
20-24	902	1161	1086	1373	1054
S.T.15-24	2266	2653	2699	2821	2428
25-29	943	864	958	1040	1133
30-34	1087	885	826	899	994
35-39	1137	1033	827	785	840
40-44	1174	1049	979	763	744
S.T.25-44	4341	3831	3590	3487	3711
45-49	1047	1121	961	935	699
50-54	1032	982	1068	902	891
55-59	935	974	917	1008	842
60-64	957	874	917	856	949
S.T.45-64	3971	3951	3863	3701	3381
65-69	869	862	812	826	796
70-74	760	737	767	688	735
75+	1176	1240	1152	1236	1118
S.T.65+	2805	2839	2731	2750	2649
75-79	595	566	605	571	565
80-84	346	362	372	368	375
85-90	174	192	129	206	131
90-95	52	90	39	68	40
95-100	8	26	6	20	6
100-105	1	4	1	3	1
105-110	0	0	0	0	0
S.T.85+	235	312	175	297	178
Total	19406	18918	18467	18197	17950

Source: Iowa State University Extension Service

TABLE III A-1

SUMMARY OF POPULATION CHARACTERISTICS FOR COUNTIES - 1960<sup>1</sup>

Population	Benton	Cedar	Iowa	John- son	Jones	Linn	Dela- ware	Washing- ton
Number	23,442	17,791	16,396	53,663	20,693	136,899	18,483	19,406
Per Cent Increase 1950 to 1960	3.4	5.2	3.5	17.3	6.7	31.2	4.2	-0.8
Per Cent Non-white	0.1	. . .	. . .	1.0	0.4	1.0	. . .	0.1
Per Cent under 18 years old	37.0	36.3	36.1	31.2	36.8	35.5	40.5	36.1
Per Cent 18 to 61	50.5	50.9	51.5	60.5	51.8	54.7	48.0	49.4
Per Cent 65 years and over	12.5	12.8	12.4	8.3	11.5	9.9	11.5	14.5
Fertility ratio <sup>2</sup>	526	530	528	466	547	521	662	535
<u>14 Years Old and Over</u>								
Male - Per Cent married	72.0	71.1	70.9	59.6	64.6	73.2	67.0	71.5
Female - Per Cent married	70.0	70.8	69.4	58.7	68.1	67.0	68.6	66.1
18 years old and over - Per Cent married	49.0	49.4	49.3	50.1	52.7	47.5	50.1	47.6
<u>Households</u>								
Number	7,215	5,504	4,950	15,071	5,874	42,223	5,174	6,035
Per Cent Increase, 1950 to 1960	4.7	5.0	5.7	27.0	7.5	31.9	3.1	. . .
Population per household	3.21	3.21	3.28	3.15	3.34	3.18	3.54	3.17
<u>Population in Group Quarters</u>								
Number	296	107	140	6,241	1,052	2,571	172	266
Per Cent of total	1.3	0.6	0.9	11.6	5.1	1.9	0.9	1.4

1. Compilation from U. S. Bureau of the Census. U. S. Census of Population-1960. General Population Characteristics, Iowa. Final Report PC(1) - 17 B. Table 13. "Summary of Population Characteristics for the State, by size of place, and for SMSA's, urbanized areas, urban places, and counties: 1960."
2. Children under 5 years old per 1,000 women 15 to 49 years old.



TABLE III A-2

1

## AREA AND POPULATION OF COUNTIES, URBAN AND RURAL: 1960 and 1950

	Benton	Cedar	Iowa	John- son	Jones	Linn	Delaware	Washington
Land Area in Square Miles, 1960	718	858	584	617	585	713	573	568
<u>1960 Population</u>								
Total: Number	23,422	17,791	16,396	53,663	20,693	136,899	18,483	19,406
Per square mile	32.6	30.4	28.1	87.0	35.4	192.0	32.3	34.2
Urban: Total	7704	2862	. . .	33,443	7806	107,711	4482	6037
Per Cent of Total Population	32.9	16.1	. . .	62.3	37.7	78.7	24.2	31.1
Urbanized Areas	. . .	. . .	. . .	. . .	. . .	105,118	. . .	. . .
Other Urban Territory	7704	2862	. . .	33,443	7806	2593	4482	6037
Rural: Total	15,718	14,929	16,396	20,220	12,887	29,188	14,001	13,369
Places of 1000 to 2500	. . .	3327	4587	2357	298	3550	. . .	2320
Other Rural Territory	15,718	11,602	11,809	17,863	12,589	25,638	14,001	11,049
<u>1950 Population</u>								
Total	22,656	16,910	15,835	45,756	19,401	104,274	17,734	19,557
Urban	7363	2633	. . .	27,212	6798	78,212	3987	5902
Rural	15,293	14,277	15,835	18,544	12,603	26,062	13,747	13,655
Per Cent Increase, 1950 to 1960								
Total	3.4	5.2	3.5	17.3	6.7	31.3	4.2	-0.8
Urban	4.6	8.7	. . .	22.9	14.8	37.7	12.4	2.3
Rural	2.8	4.6	3.5	9.0	2.3	12.0	1.8	-2.1

1. Compiled from U. S. Bureau of the Census. U. S. Census of Population: 1960. Number of Inhabitants, Iowa. Final Report PC(1) - 17A. Table 6. "Area and Population for Counties, Urban and Rural: 1960 and 1950."



TABLE III A-3

1

## EDUCATION CHARACTERISTICS OF THE POPULATION FOR COUNTIES: 1960

School Enrollment	Benton	Cedar	Iowa	John- son	Jones	Linn	Delaware	Washington
Total Enrolled, 5 to 34 years old	6,009	4,409	4,002	19,047	5,167	33,141	4,709	4,834
Kindergarten	570	363	307	945	461	3,017	383	388
Public	546	355	299	909	399	2,631	352	378
Elementary (1 to 8 years)	3,963	2,948	2,663	6,818	3,524	21,282	3,271	3,238
Public	3,683	2,901	2,432	5,847	2,872	17,762	2,103	2,826
High School (1 to 4 years)	1,434	1,036	996	2,150	1,127	6,586	1,020	1,167
Public	1,408	1,024	947	1,654	941	5,732	791	1,109
College	42	62	36	9,144	55	2,256	35	41
<u>Number Enrolled in School by Age</u>								
5 and 6 years old	879	502	540	1,518	741	4,978	669	701
7 to 13 years old	3,437	2,655	2,321	5,798	3,035	18,420	2,860	2,704
14 and 15 years old	753	581	529	1,192	600	3,472	582	619
16 and 17 years old	684	535	428	1,083	613	3,123	478	621
18 and 19 years old	180	68	133	2,737	129	1,588	81	124
20 and 21 years old	13	7	20	2,610	20	772	11	20
22 to 24 years old	17	35	19	1,978	16	328	12	9
25 to 34 years old	46	26	12	2,141	13	460	16	36
<u>Per Cent Enrolled in School, By Age</u>								
5 and 6 years old	82.6	74.0	75.4	74.2	78.6	82.2	75.3	79.0
7 to 13 years old	99.3	98.6	98.1	98.6	98.8	98.6	99.1	98.0
14 and 15 years old	95.8	97.0	97.4	96.5	95.7	96.7	93.3	95.7
16 and 17 years old	86.8	89.6	87.3	84.7	83.4	85.9	78.7	88.3
18 and 19 years old	37.8	20.8	37.4	82.4	23.2	41.9	23.5	38.5
20 and 21 years old	2.9	2.6	5.3	72.6	3.9	19.6	2.8	5.4
22 to 24 years old	2.4	6.2	3.6	51.2	2.1	5.8	2.1	1.9
25 to 34 years old	1.8	1.5	0.7	27.1	0.5	2.5	0.8	1.8
<u>Years of School Completed</u>								
<u>Males: 25 years old and over</u>	6,428	4,972	4,559	13,072	5,774	36,010	4,898	5,285
No School years completed	38	4	29	32	12	163	22	16
Elementary: 1 to 4 years	237	166	93	269	161	946	171	131
5 and 6 years	367	259	269	536	291	1,499	259	273

Table III A-3 Continued

School Enrollment	Benton	Cedar	Iowa	John- son	Jones	Linn	Delaware	Washington
7 years	395	402	368	679	424	1,854	446	396
8 years	2,000	1,420	1,633	2,412	1,862	6,804	1,691	1,482
High School								
1 to 3 years	1,025	683	472	1,515	825	6,697	644	698
4 years	1,625	1,404	1,200	2,725	1,556	10,312	1,202	1,582
College								
1 to 3 years	417	349	241	1,486	383	3,486	261	369
4 years or more	324	285	254	3,418	260	4,249	202	338
Median School Years Completed	9.5	10.0	8.9	12.4	9.5	12.0	8.9	10.5
<u>Females: 25 years old and over</u>	6,688	5,172	4,678	12,960	5,477	38,793	4,875	5,904
No School years completed	12	. . .	15	10	12	141	12	23
Elementary: 1 to 4 years	121	106	59	191	58	731	55	87
5 and 6 years	267	235	186	302	193	1,340	204	227
7 years	352	298	226	415	239	1,351	232	319
8 years	1,703	1,367	1,428	2,120	1,432	6,332	1,499	1,615
High School								
1 to 3 years	1,026	697	575	1,573	712	7,000	559	752
4 years	2,231	1,670	1,523	3,974	1,961	14,358	1,629	1,869
College								
1 to 3 years	781	636	522	2,127	698	4,782	564	734
4 years or more	195	163	144	2,248	172	2,758	121	278
Median School Years Completed	11.6	11.5	11.2	12.5	12.0	12.2	11.3	11.7

1. Compiled from 1960 U. S. Census of Population. Table 83, "Education, Employment Status and Selected Labor Force Characteristics of the Population, for Counties: 1960."



TABLE III A-4

1

## AGE BY SEX FOR COUNTIES: 1960

	Benton			Cedar			Iowa		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages	23,422	11,667	11,755	17,791	8,895	8,896	16,396	8,174	8,222
Under 1 year	507	263	244	370	194	176	356	185	171
1 year	496	238	258	387	191	196	358	190	168
2 years	524	288	236	392	196	196	368	193	175
3 years	492	277	215	375	165	210	328	172	156
4 years	541	295	246	394	193	201	371	202	169
5 years	522	259	263	361	184	177	334	171	163
6 years	522	252	270	352	183	169	337	162	175
7 years	515	251	264	382	175	207	341	172	169
8 years	558	272	286	389	210	179	356	184	172
9 years	474	231	243	376	198	178	348	170	178
10 years	457	233	224	402	200	202	335	166	169
11 years	469	241	228	327	180	147	338	153	185
12 years	505	256	249	394	202	192	371	195	176
13 years	502	266	236	388	201	187	323	165	158
14 years	394	207	187	275	144	131	263	120	143
15 years	411	196	215	297	154	143	264	153	111
16 years	421	223	198	301	162	139	266	135	131
17 years	350	182	168	303	168	135	263	124	139
18 years	287	153	134	170	95	75	221	108	113
19 years	207	99	108	157	73	84	143	80	63
20 years	214	114	100	150	76	74	162	95	67
21 and over years	14,054	6,871	7,183	10,849	5,351	5,498	9,950	4,879	5,071
Under 5 years	2,560	1,361	1,199	1,918	939	979	1,781	942	839
5 to 9 years	2,591	1,265	1,326	1,860	950	910	1,716	859	857
10 to 14 years	2,327	1,203	1,124	1,786	927	859	1,630	799	831
15 to 19 years	1,676	853	823	1,228	652	576	1,157	600	557
20 to 24 years	1,115	550	565	850	400	450	849	422	427
25 to 29 years	1,219	573	646	853	427	426	857	434	423
30 to 34 years	1,336	644	692	1,052	510	542	887	429	458
35 to 39 years	1,405	682	723	1,045	517	528	962	467	495
40 to 44 years	1,443	736	707	1,097	553	544	985	489	496
45 to 49 years	1,441	730	711	1,127	573	554	1,053	533	520
50 to 54 years	1,208	605	603	958	511	447	912	485	427
55 to 59 years	1,115	578	537	872	454	418	832	411	421
60 to 64 years	1,063	521	542	876	425	451	743	372	371
65 to 69 years	1,029	491	538	756	368	388	713	337	376



Table III A-4 Continued

	Benton			Cedar			Iowa		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
70 to 74 years	826	388	438	654	283	371	522	247	275
75 to 79 years	544	261	283	456	214	242	416	191	225
80 to 84 years	320	141	179	261	134	127	252	107	145
85 and over years	204	85	119	142	58	84	129	50	79
Under 18 years	8,660	4,430	4,230	6,465	3,300	3,165	5,920	3,012	2,908
65 and over years	2,923	1,366	1,557	2,269	1,057	1,212	2,032	932	1,100
Median age	30.8	30.2	31.4	31.9	31.5	32.3	31.2	30.4	31.9

TABLE III A-4 (cont'd)  
AGE BY SEX FOR COUNTIES: 1960

	Johnson			Jones			Linn		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages	53,663	27,053	26,610	20,693	10,790	9,903	136,899	66,812	70,087
Under 1 year	1,515	757	758	437	240	197	3,471	1,797	1,674
1 year	1,350	748	602	417	215	202	3,416	1,735	1,681
2 years	1,282	666	616	472	235	237	3,409	1,762	1,647
3 years	1,157	586	571	465	233	232	3,212	1,708	1,504
4 years	1,102	553	549	426	222	204	3,205	1,642	1,563
5 years	1,049	559	490	455	240	215	3,048	1,583	1,465
6 years	1,008	530	478	463	223	240	3,027	1,515	1,512
7 years	927	475	452	461	232	229	2,940	1,459	1,481
8 years	920	436	484	459	245	214	2,814	1,435	1,379
9 years	864	458	406	454	224	230	2,769	1,378	1,391
10 years	820	433	387	438	233	205	2,602	1,346	1,256
11 years	807	404	403	433	228	205	2,503	1,296	1,207
12 years	741	373	368	428	204	224	2,564	1,336	1,228
13 years	794	393	401	425	224	201	2,468	1,280	1,188
14 years	614	326	288	339	152	187	1,686	852	834
15 years	589	293	296	305	157	148	1,858	925	933
16 years	586	294	292	358	179	179	1,760	893	867
17 years	640	301	339	374	205	169	1,787	887	900
18 years	1,559	722	837	280	155	125	2,081	925	1,156
19 years	1,738	802	936	252	167	85	1,943	769	1,174
20 years	1,732	863	869	243	155	88	1,895	777	1,118
21 and over years	31,869	16,081	15,788	12,309	6,422	5,887	82,441	39,512	42,929
Under 5 years	6,406	3,310	3,096	2,217	1,145	1,072	16,713	8,644	8,069
5 to 9 years	4,768	2,458	2,310	2,292	1,164	1,128	14,598	7,370	7,228
10 to 14 years	3,776	1,929	1,847	2,063	1,041	1,022	11,823	6,110	5,713
15 to 19 years	5,112	2,412	2,700	1,569	863	706	9,429	4,399	5,030
20 to 24 years	7,617	3,992	3,625	1,322	846	476	9,446	4,147	5,299
25 to 29 years	4,722	2,602	2,120	1,224	693	531	9,127	4,539	4,588
30 to 34 years	3,186	1,667	1,519	1,233	645	588	9,264	4,659	4,605
35 to 39 years	2,722	1,406	1,316	1,196	602	594	9,272	4,646	4,626
40 to 44 years	2,530	1,239	1,291	1,222	626	596	8,180	3,057	4,123
45 to 49 years	2,315	1,130	1,185	1,141	579	562	7,581	3,743	3,838
50 to 54 years	2,197	1,061	1,136	1,012	548	464	6,590	3,256	3,334
55 to 59 years	2,052	995	1,057	982	508	474	6,077	2,931	3,146
60 to 64 years	1,825	903	922	845	414	431	5,304	2,493	2,811
65 to 69 years	1,584	733	851	821	396	425	4,729	2,187	2,542
70 to 74 years	1,255	564	691	648	294	354	3,718	1,621	2,097
75 to 79 years	756	330	435	480	235	245	2,680	1,119	1,561

Table III A-4, Age By Sex For Counties: 1960(Continued)

	Johnson			Jones			Linn		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
80 to 84 years	480	208	272	253	111	142	1,462	560	902
85 and over years	351	114	237	173	80	93	906	331	575
Under 18 years	16,765	8,585	8,180	7,609	3,891	3,718	48,539	24,829	23,710
65 and over years	4,435	1,949	2,486	2,375	1,116	1,259	13,495	5,818	7,677
Median Age	24.4	24.3	24.6	28.6	27.4	30.1	28.5	28.0	29.0



TABLE III A-4 (cont'd)  
AGE BY SEX FOR COUNTIES: 1960 (cont'd)

	Delaware			Washington		
	Total	Male	Female	Total	Male	Female
All ages	18,483	9,365	9,118	19,406	9,492	9,914
Under 1 year	438	225	213	401	193	208
1 year	493	236	257	391	203	188
2 years	478	243	235	434	233	201
3 years	473	243	230	397	195	202
4 years	496	255	241	441	230	211
5 years	435	227	208	390	207	183
6 years	447	228	219	460	238	222
7 years	460	240	220	387	191	196
8 years	415	205	210	440	218	222
9 years	440	211	229	383	195	188
10 years	398	221	177	412	223	189
11 years	393	208	185	359	194	165
12 years	404	210	194	432	221	211
13 years	384	199	185	382	182	200
14 years	324	174	150	314	145	169
15 years	358	191	167	298	155	143
16 years	328	173	155	325	179	146
17 years	314	166	148	367	190	177
18 years	204	111	93	222	113	109
19 years	165	83	82	152	86	66
20 years	171	97	74	180	93	87
21 and over years	10,465	5,219	5,246	11,839	5,608	6,231
Under 5 years	2,378	1,202	1,176	2,064	1,054	1,010
5 to 9 years	2,197	1,111	1,086	2,060	1,049	1,011
10 to 14 years	1,903	1,012	891	1,899	965	934
15 to 19 years	1,369	724	645	1,364	723	641
20 to 24 years	872	440	432	902	450	452
25 to 29 years	941	475	466	943	445	498
30 to 34 years	1,026	506	520	1,087	535	552
35 to 39 years	1,102	547	555	1,137	531	606
40 to 44 years	1,045	534	511	1,174	587	587
45 to 49 years	947	483	464	1,047	526	521
50 to 54 years	905	454	451	1,032	510	522
55 to 59 years	850	426	424	935	447	488
60 to 64 years	817	419	398	957	458	499
65 to 69 years	717	366	351	869	411	458
70 to 74 years	610	295	315	760	341	419
75 to 79 years	423	197	226	595	238	357

Age By Sex for Counties: 1960 TABLE III A-4 (Cont'd)

	Delaware			Washington		
	Total	Male	Female	Total	Male	Female
80 to 84 years	231	109	122	346	139	207
85 and over years	150	65	85	235	83	152
Under 18 years	7,478	3,855	3,623	7,013	3,592	3,421
65 and over years	2,131	1,032	1,099	2,805	1,212	1,593
Median Age	27.8	27.0	28.5	32.2	30.6	33.7

1. Compiled from U. S. Bureau of the Census, U. S. Census of Population: 1960. General Social and Economic Characteristics, Iowa. Final Reports PC (1)-17C. Table 27. "Age by Color and Sex, for Counties: 1960."



TABLE III A-5<sup>1</sup>

INCOME IN 1959 OF FAMILIES AND PERSONS FOR COUNTIES: 1960

Family Income	Benton	Cedar	Iowa	John- son	Jones	Linn	Dela- ware	Washing- ton
All Families	6,082	4,803	4,288	12,245	5,100	35,707	4,480	5,081
Under 1,000	542	576	474	604	590	1,156	483	388
1,000 to 2,000	625	542	370	864	495	1,675	685	586
2,000 to 2,999	676	519	470	1,052	513	2,024	674	621
3,000 to 3,999	758	597	616	1,413	638	2,450	641	790
4,000 to 4,999	790	659	604	1,684	679	3,735	602	668
5,000 to 5,999	736	653	506	1,638	600	5,039	417	603
6,000 to 6,999	559	403	350	1,283	416	4,944	249	444
7,000 to 7,999	444	243	269	873	339	3,964	273	244
8,000 to 8,999	311	203	219	652	227	3,034	168	171
9,000 to 9,999	163	88	148	498	141	2,091	84	139
10,000 to 14,999	340	214	155	1,136	298	3,969	135	273
15,000 to 24,999	96	83	95	423	115	1,082	53	125
25,000 and over	42	23	12	125	49	544	16	29
Median Income, Families	4,557	4,254	4,354	5,309	4,462	6,359	3,621	4,233
Unrelated Individuals	1,292	1,619	1,173	1,044	1,277	1,674	1,183	1,045
Families and Un- related Individuals	3,869	3,801	3,812	3,137	3,832	5,482	3,147	3,632
Husband-Wife Family, Head an Earner, 2 Child- ren under 18	916	600	581	1,773	635	5,580	491	719
Median Income	5,035	4,763	4,536	5,544	5,315	6,646	4,272	4,777
Income of Persons								
Male, Total	8,045	6,223	5,694	19,682	7,592	45,531	6,209	6,569
Total With Income	7,395	5,569	5,219	18,314	6,214	42,649	5,558	6,081
1 to 499 or less	753	632	659	1,620	571	2,496	611	647
500 to 999	634	400	368	2,162	514	2,416	632	591
1,000 to 1,499	533	483	310	1,991	454	2,179	510	443
1,500 to 1,999	478	408	342	1,370	333	1,629	434	439
2,000 to 2,499	491	395	453	1,351	422	1,724	450	448
2,500 to 2,999	458	329	267	1,000	342	1,515	390	452
3,000 to 3,499	510	432	482	1,222	534	1,827	457	502
3,500 to 3,999	443	340	437	913	397	2,013	338	420
4,000 to 4,499	629	417	458	1,001	605	3,155	488	446
4,500 to 4,999	412	359	301	832	488	3,450	281	305
5,000 to 5,999	780	541	404	1,484	574	7,003	362	527
6,000 to 6,999	368	277	238	991	286	4,877	196	295
7,000 to 7,999	596	323	350	1,210	386	5,425	284	290
10,000 and Over	310	233	150	1,167	308	2,940	125	276
Median Income	3,344	3,159	3,218	2,832	3,441	4,844	2,682	3,020
Female, Total	8,293	6,279	5,838	19,645	6,868	49,920	6,117	7,128
Total With Income	4,105	2,755	2,848	12,580	3,303	29,685	2,537	3,839
1 to 499 or less	1,401	873	920	3,479	976	6,264	757	1,181
500 to 999	871	568	675	2,139	663	5,481	653	927
1,000 to 1,499	475	335	326	1,387	490	3,419	317	493
1,500 to 1,999	281	245	213	882	246	2,457	206	291



Table III A-5 Continued

Family Income	Benton	Cedar	Iowa	John- son	Jones	Linn	Delaware	Washington
2,000 to 2,499	240	154	164	1,096	271	2,487	175	259
2,500 to 2,999	158	108	139	886	122	2,151	128	197
3,000 to 3,499	262	138	138	801	236	2,274	121	151
3,500 to 3,999	150	96	118	511	100	1,643	65	119
4,000 to 4,499	94	93	77	512	70	1,259	48	87
4,500 to 4,999	34	63	40	227	44	769	12	50
5,000 to 5,999	61	62	16	279	42	739	22	55
6,000 to 6,999	46	9	11	195	22	364	25	21
7,000 to 9,999	28	8	7	134	12	309	8	8
10,000 and over	4	3	4	52	9	69	• • •	• • •
Median Income	874	944	873	1,242	1,013	1,453	892	898

1. Compiled from U.S. Bureau of the Census of Population: 1960.

1. General Social and Economic Characteristics, Iowa. Final Report PC (1) - 17C  
Table 86. "Income in 1959 of Families and Persons, and Weeks Worked in 1959,  
For Counties: 1960."

TABLE III A-6

1

## SOCIAL CHARACTERISTICS OF THE POPULATION, FOR COUNTIES

	Benton	Cedar	Iowa	John- son	Jones	Linn	Delaware	Washington
<u>Nativity and Parentage</u>								
Native	22,993	17,500	16,145	52,562	20,393	134,041	18,256	19,250
Native Parentage	19,927	14,889	14,255	47,637	17,909	119,434	16,194	18,142
White	19,897	14,878	14,251	47,290	17,830	118,128	16,182	18,108
Nonwhite	30	11	4	347	79	1,306	12	34
Foreign or Mixed Parentage	3,066	2,611	1,890	4,925	2,484	14,607	2,062	1,108
White	3,066	2,607	1,890	4,885	2,484	14,591	2,062	1,108
Nonwhite	..	..	..	147	..	37	..	..
Foreign Born	429	291	251	1,101	300	2,858	227	156
White	429	291	251	954	300	2,821	227	156
Nonwhite	..	..	..	147	..	37	..	..
<u>State of Birth</u>								
Total Native Population	22,993	17,500	16,145	52,562	20,393	134,041	18,256	19,250
Born in State of Residence	20,409	15,515	14,660	39,890	17,943	105,187	16,767	16,558
Born in Different State	2,300	1,858	1,300	11,767	1,602	24,904	1,414	2,554
Born in U.S. Outlying area, at sea, etc.	15	4	19	157	13	208	11	22
State of Birth not reported	269	123	166	748	835	3,742	64	116
<u>Residence in 1955</u>								
Population 5 years old and over, 1960	20,862	15,873	14,615	47,257	18,476	120,185	16,101	17,342
Same house as in 1960	12,792	9,651	9,901	19,021	10,913	56,367	10,147	10,715
Different House in U. S.	7,948	6,118	4,567	26,857	7,014	60,970	5,867	6,529
Same County	5,152	3,695	2,917	10,570	4,206	38,083	3,644	4,413
Different County	2,796	2,423	1,650	16,287	2,808	22,887	2,223	2,116
Same State	2,189	1,840	1,318	10,094	2,353	13,697	1,806	1,559
Different State	607	583	332	6,193	455	9,190	417	557
Abroad	38	43	30	856	25	786	59	50
Moved, Residence in 1955 not reported	84	61	117	523	524	2,062	28	48
<u>Year Moved Into Present Home</u>								
Total	23,442	17,791	16,396	53,663	20,693	136,899	18,483	19,406
1959 to 1960	4,566	3,497	2,666	18,864	4,572	35,992	3,464	3,990
1958	2,226	1,752	1,295	5,940	2,011	15,100	1,645	1,583
1957	1,688	1,273	1,000	4,679	1,469	11,628	1,381	1,235
1954-1956	3,600	2,635	2,218	7,391	3,282	24,951	3,193	2,629
1950-1953	3,208	2,628	2,042	5,208	2,880	17,152	2,566	2,781
1940-1949	4,173	3,089	2,967	5,729	3,174	16,761	3,453	3,583
1939 or earlier	2,303	1,626	2,019	3,096	1,641	8,726	1,472	1,812
Always lived in this house	1,658	1,291	2,189	2,756	1,664	6,589	1,309	1,793

1. Compiled from U.S. Bureau of the Census. U.S. Census of Population-1960. General Social and Economic Characteristics, Iowa. Final Report PC(1)-17c Table 82. "Social Characteristics of the Population, for Counties".



## CHAPTER IV

### LABOR MARKET SURVEY

#### INTRODUCTION

The purpose of this study is to offer pertinent labor market information and trends for the eight county area from 1940 through 1970. The counties concerned will be separated into three classes: (1) six county total (Iowa, Johnson, Cedar, Jones, Linn, and Benton); (2) two county total (Delaware and Washington); and (3) a composite of all eight. Specifically, information will be presented by occupation, major un-employed groups, industry, class of work, and sex.

All occupational projections through 1970 were derived using a least squares method. It is emphasized that these projections assume that the trends of the last two decades will continue through this decade and into the next. While there are no reasons to assume they will not continue into the future, this type of statistical analysis can only predict the future on the basis of what has gone before. In a few instances data for 1940 was not available, and no projections through 1970 were attempted.

Much of the information for 1940, 1950, and 1960 was interpolated from the Bureau of Census Reports of the U. S. Department of Commerce which are based on reports of the experienced civilian work force. The experienced civilian work force consists of the experienced employed and experienced unemployed workers, excluding those persons in military service. A person is classified as experienced employed if at least fourteen years of age and either at work or temporarily absent from his job during the census taking week. The experienced unemployed are classified as such if, though unemployed and are looking for work during the census taking week, they have had previous work experience. Since unemployment in the eight county area is not a major problem, the difference between these two concepts -- experienced employed and experienced unemployed -- is not of major significance.



## MAJOR OCCUPATION GROUPINGS OF THE EMPLOYED

1940, 1950, 1960, PROJECTED 1970

### Occupation Data - Male and Female

When viewing the occupational data for employed males and females (Tables IV-1 and IV-2), it is interesting to note that while total employment is rising in the eight-county area, significant decreases are found in the farmers and farm managers, private household, and farm laborers and farm foremen categories. During the same periods significant increases in employment are apparent in the professional and technical, clerical and sales, craftsmen and foremen, operatives, service, and managers, officials and proprietors categories. \* Also, a small decrease is noted in the laborers category.

When we examine the two county area (Delaware and Washington), a much smaller increase in total employment is found. Between 1940 and 1970, a 2,000 worker increase is projected. However, between 1950 and 1960, a net loss of 27 workers occurred. Despite this loss, sharp increases are credited to such categories as clerical and sales, craftsmen and foremen, operatives, and service workers. Sharp decreases are located in farmers and farm managers, farm laborers and farm foremen, and private household categories. Smaller decreases exist in the laborers, and managers, officials and proprietors categories.

The six-county area reveals significant and steady increases in total employment for each of the decades under study. Particularly sharp increases occur in the following categories: professional and technical, clerical and sales, craftsmen and foremen, operatives and service workers. Sharp decreases are found in the farmer and farm managers, private household, and farm laborers and farm foremen categories. Less significant increases are located in the managers, officials and proprietors category, and less significant decreases are noted in the laborers category.

### Occupational Data - Males

Tables IV-3 and IV-4 provide an occupational analysis of these eight counties for employed males. Between 1940 and 1970, the male labor force should increase by over 20,000 and the most striking increases are taking place in the professional and technical, clerical and sales, craftsmen and foremen, operatives, and service workers categories. Also, striking decreases are occurring in the farmers and farm managers, and farm laborers and farm foremen categories. Less significant increases are taking place in the managers, officials and proprietors category, and less significant decreases are situated in the private household, and laborers categories.

\*Specific professions and jobs included under these major occupational groups are enumerated in Appendix IV-B.

The two-county area (Delaware and Washington) shows a total decrease in employed males of almost 800 between 1940 and 1960, and this trend is projected to continue through 1970. Sizeable decreases are found in such categories as farmers and farm managers, farm laborers and farm foremen, and laborers. In fact, with the exception of craftsmen and foremen and operatives categories, no major increases in employment are found or projected.

Major increases in male employment for the six-county area are characteristic of the professional and technical, clerical and sales, craftsmen and foremen, operatives, and service categories. Equally significant decreases in male employment are found in the farmers and farm managers, and farm laborers and farm foremen categories. Less significant increases are situated in the managers, officials and proprietors category, and less significant decreases are located in the private household and laborers categories.

#### Occupational Data - Females

Tables IV-5 and IV-6 provide an occupational analysis of these eight counties for employed females. Whether viewed from a two, six, or eight-county basis, the female work force is on the move. Very substantial gains have been made in such categories as professional and technical, clerical and sales, operatives, and service workers. Gains made by female workers as farmers and farm managers, and farm laborers and farm foremen can be explained by the fact that the wife is taking over the operation of the farm while her husband seeks employment in the town or city.

Less significant gains have been made by female workers in such categories as managers, officials and proprietors, and craftsmen and foremen. Small losses have occurred in the private household, and laborers categories. Between 1940 and 1960, the employed female populations, whether viewed on the basis of a two, six, or eight-county area, have more than doubled. Between 1960 and 1970 it is projected that the employed female work force for the eight counties will increase by an additional 10,000 workers.

The major changes in the male and female occupation groups are depicted in graph form on Plate 1, I through XI. XII through XXI depict the occupational group data for males. XII through XXVII describe the occupational group data for females.



TABLE IV-1

OCCUPATION GROUP- MALE AND FEMALE  
1940, 1950, 1960, PROJECTED 1970

	<u>Six-County Area</u>				<u>Two-County Area</u>			
	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>
TOTAL EMPLOYED	71,668	89,176	105,667	122,827	12,885	14,103	14,076	14,881
Professional, Technical, and Kindred Workers	6,276	8,487	14,075	17,411	838	829	973	1,015
Farmers and Farm Managers	14,925	14,274	11,499	10,139	4,442	4,324	3,737	3,462
Managers, Officials and Proprietors (Exc. Farm)	6,176	7,239	7,565	8,382	997	979	905	869
Clerical, Kindred, and Sales Workers	10,662	15,642	20,915	25,991	1,176	1,618	1,836	2,203
7-11 Craftsmen, Foreman, And Kindred Workers	6,729	10,419	11,968	14,944	727	1,179	1,194	1,501
Operatives and Kindred Workers	7,193	11,327	15,954	20,251	937	1,049	1,694	1,984
Private Household Workers	2,658	1,577	2,203	1,691	502	276	372	253
Service Workers, Except Private Household	4,670	7,401	10,214	12,972	500	619	1,018	1,231
Farm Laborers and Farm Foremen	7,724	7,096	3,559	1,960	2,175	2,472	1,756	1,716
Laborers, Except Farm and Mine	4,174	4,273	3,965	3,928	477	464	375	337
Occupation Not Reported	481	1,441	3,750	- - -	114	294	216	- - -



TABLE IV-2  
 OCCUPATION GROUP - MALE AND FEMALE  
 1940, 1950, 1960, PROJECTED 1970

	<u>Eight-County Area</u>			
	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>
TOTAL EMPLOYED	84,553	103,279	119,743	137,708
Professional, Technical, and Kindred Workers	7,114	9,316	15,048	18,426
Farmers and Farm Managers	19,367	18,598	15,236	13,601
Managers, Officials and Proprietors (Exc. Farm)	7,173	8,218	8,470	9,251
Clerical, Kindred, and Sales Workers	11,838	17,260	22,751	28,194
Craftsmen, Foremen, and Kindred Workers	7,456	11,598	13,162	16,445
Operatives and Kindred Workers	8,130	12,376	17,648	22,235
Private Household Workers	3,160	1,853	2,575	1,944
Service Workers, Except Private Household	5,170	8,020	1,232	14,203
Farm Laborers and Farm Foremen	9,899	9,568	5,315	3,676
Laborers, Except Farm and Mine	4,651	4,737	4,340	4,265
Occupation Not Reported	595	1,735	3,966	- - -

TABLE IV-3

OCCUPATION GROUP - MALE  
1940, 1950, 1960, PROJECTED 1970

	<u>Six-County Area</u>				<u>Two-County Area</u>			
	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>
TOTAL EMPLOYED	56,225	65,112	70,779	78,586	10,756	10,964	9,986	9,798
Professional, Technical, and Kindred Workers	3,140	4,750	8,351	10,624	371	380	489	531
Farmers and Farm Managers	14,675	14,073	11,107	9,716	4,363	4,267	3,539	3,232
Managers, Officials, and Proprietors (Exc. Farm)	5,632	6,305	6,691	7,268	902	865	770	714
Clerical, Kindred, and Sales Workers	6,031	7,138	8,482	9,667	725	842	838	914
Craftsmen, Foremen, and Kindred Workers	6,616	10,093	11,646	14,481	717	1,149	1,151	1,440
Operatives and Kindred Workers	6,018	9,291	11,617	14,573	752	851	1,304	1,521
Private Household Workers	53	52	32	25	14	9	8	4
Service Workers, Except Private Household	2,301	3,448	4,148	5,146	229	247	324	362
Farm Laborers and Farm Foremen	7,497	5,226	2,688	327	2,159	1,741	1,079	580
Laborers, Except Farm and Mine	3,968	4,070	3,799	3,776	465	446	367	328
Occupation Not Reported	294	666	2,218	- - -	59	167	117	- - -

TABLE IV-4

OCCUPATIONAL GROUP - MALE  
1940, 1950, 1960, PROJECTED 1970

	<u>Eight-County Area</u>			
	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>
TOTAL EMPLOYED	66,981	76,076	80,765	88,384
Professional, Technical and Kindred Workers	3,511	5,130	8,840	11,155
Farmers and Farm Managers	19,038	18,340	14,646	12,948
Managers, Officials and Proprietors (Exc. Farm)	6,534	7,170	7,461	7,982
Clerical, Kindred, and Sales Workers	6,756	7,980	9,320	10,581
Craftsmen, Foremen, and Kindred Workers	7,333	11,242	12,797	15,921
Operatives and Kindred Workers	6,770	10,142	12,921	16,094
Private Household Workers	67	61	40	29
Service Workers, Except Private Household	2,530	3,695	4,472	5,508
Farm Laborers and Farm Foremen	9,656	6,967	3,767	907
Laborers, Except Farm and Mine	4,433	4,516	4,166	4,104
Occupation Not Reported	353	833	2,335	- - -



TABLE IV-5

OCCUPATION GROUP - FEMALE  
1940, 1950, 1960, PROJECTED 1970

	<u>Six-County Area</u>				<u>Two-County Area</u>			
	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>
TOTAL EMPLOYED	15,443	24,064	34,888	44,241	2,129	3,139	4,090	5,083
Professional, Technical, and Kindred Workers	3,136	3,737	5,724	6,787	467	449	484	484
Farmers and Farm Managers	250	201	392	423	79	57	198	230
Managers, Officials, and Proprietors *Exc. Farm)	544	934	874	1,114	95	114	135	155
Clerical, Kindred, and Sales Workers	4,631	8,504	12,433	16,324	451	776	998	1,289
8-VI Craftsmen, Foremen, and Kindred Workers	113	326	322	463	10	30	43	61
Operatives and Kindred Workers	1,175	2,036	4,337	5,678	185	198	390	463
Private Household Workers	2,605	1,525	2,171	1,666	488	267	364	249
Service Workers, Except Private Household	2,369	3,953	6,066	7,826	271	372	694	869
Farm Laborers and Farm Foremen	227	1,870	871	2,968	16	731	677	1,136
Laborers, Except Farm and Mine	206	203	166	152	12	18	8	9
Occupation Not Reported	187	775	1,532	- - -	55	127	99	- - -

TABLE IV-6

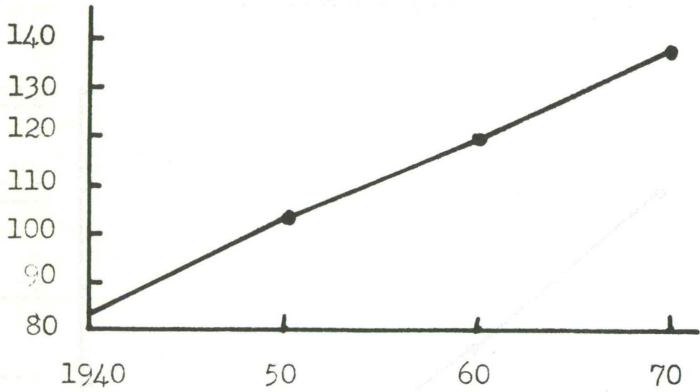
OCCUPATION GROUP- FEMALE  
1940, 1950, 1960, PROJECTED 1970

	<u>Eight-County Area</u>			
	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>
TOTAL EMPLOYED	17,572	27,203	38,978	49,324
Professional, Technical, and Kindred Workers	3,603	4,186	6,208	7,271
Farmers and Farm Managers	329	258	590	653
Managers, Officials and Proprietors (Exc. Farm)	639	1,048	1,009	1,269
Clerical, Kindred, and Sales Workers	5,082	9,280	13,431	17,613
Craftsmen, Foremen, and Kindred Workers	123	356	365	524
Operatives and Kindred Workers	1,360	2,234	4,727	6,141
Private Household Workers	3,093	1,792	2,535	1,915
Service Workers, Except Private Household	2,640	4,325	6,760	8,695
Farm Laborers and Farm Foremen	243	2,601	1,548	2,769
Laborers, Except Farm and Mine	218	221	174	161
Occupation Not Reported	242	902	1,631	- - -

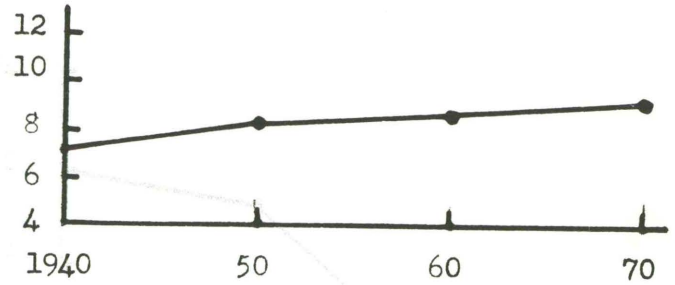
PLATE IV-1

OCCUPATIONAL GROUP DATA  
EIGHT-COUNTY TOTAL - MALE & FEMALE  
( In Thousands )

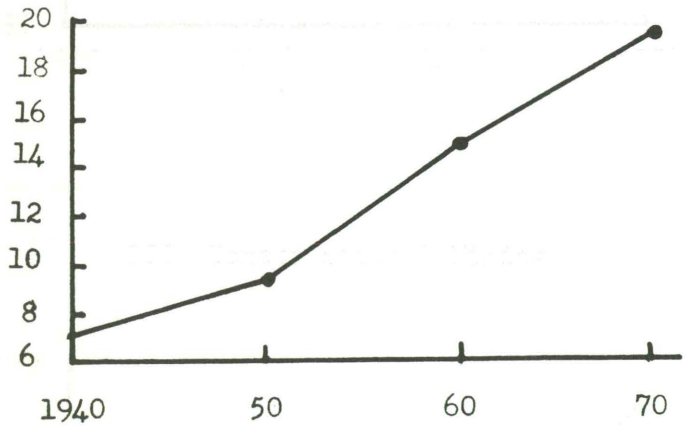
I Total Employed



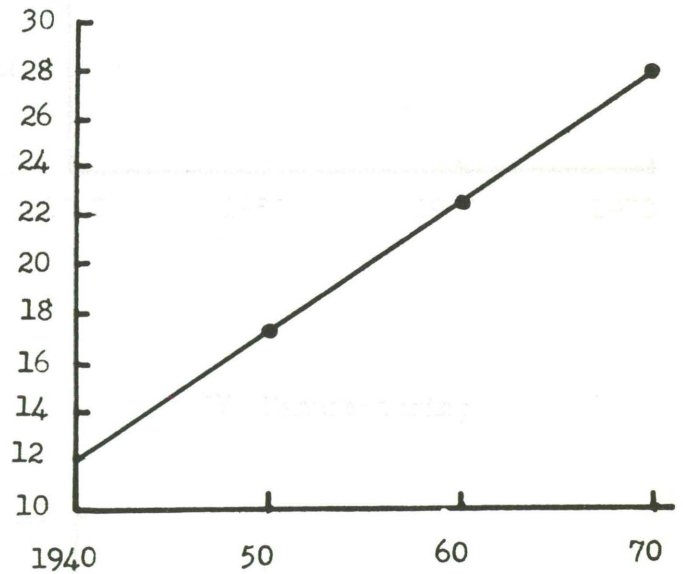
IV Managers, Officials & Proprietors



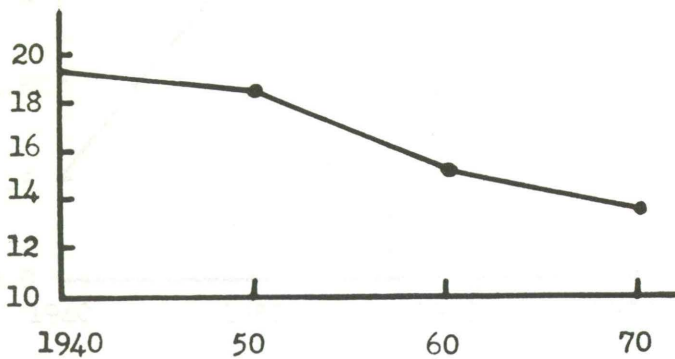
II Professional, Technical & Kindred



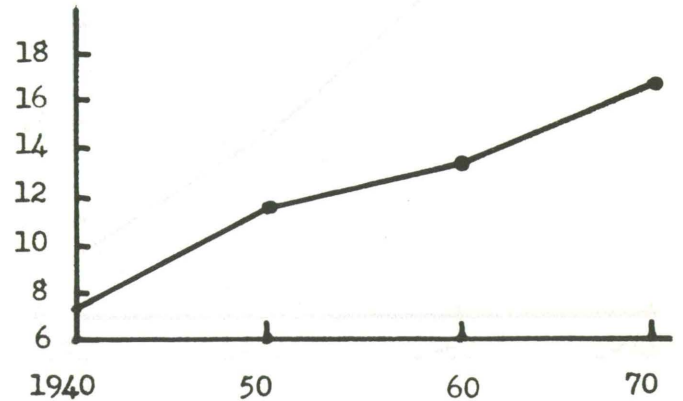
V Clerical, Sales & Kindred



III Farm & Farm Managers



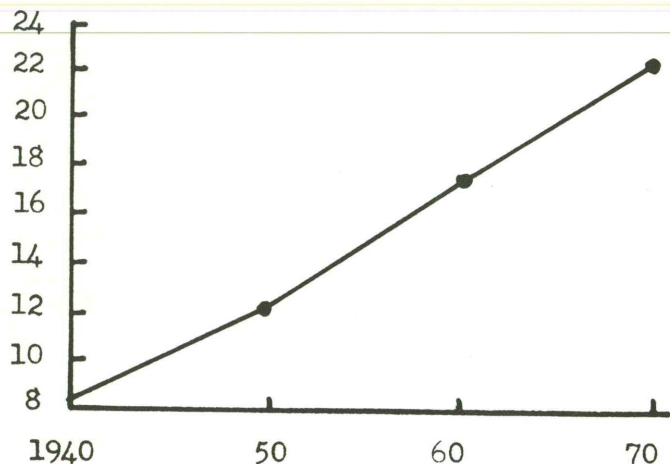
VI Crafts, Foremen, & Kindred



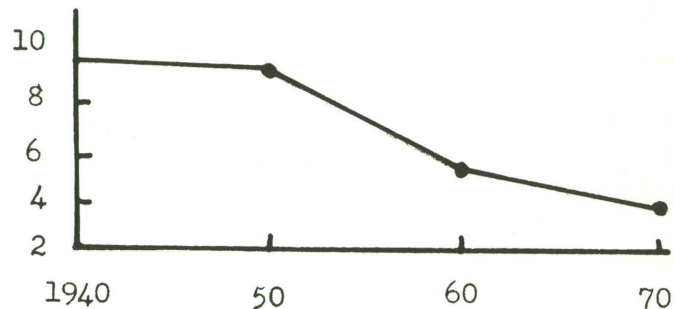


OCCUPATIONAL GROUP DATA  
EIGHT-COUNTY TOTAL - MALE & FEMALE  
(In Thousands)

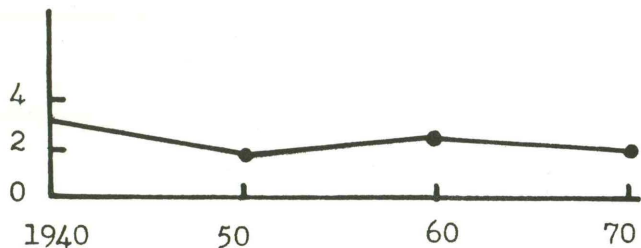
VII Operatives & Kindred



X Farm Laborers & Foremen



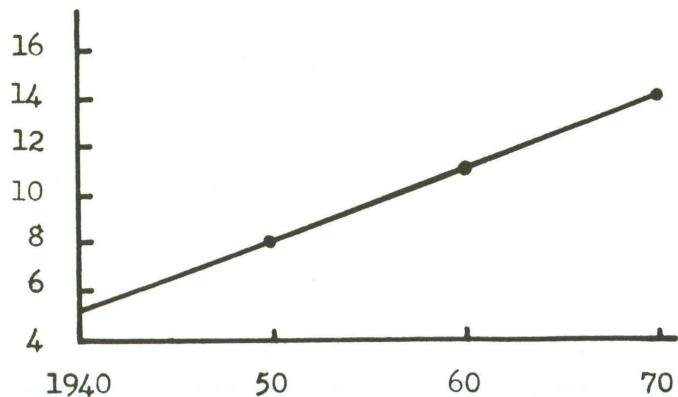
VIII Private Household



XI Laborers, Except Farm and Mine

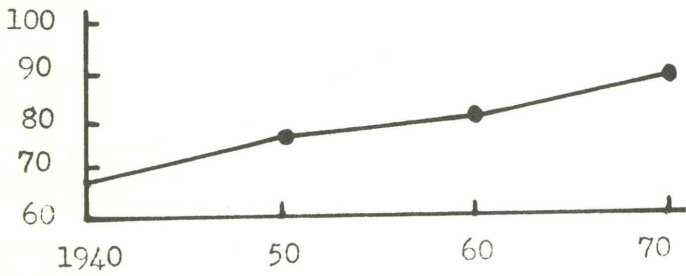


IX Service Workers, Except Private Household

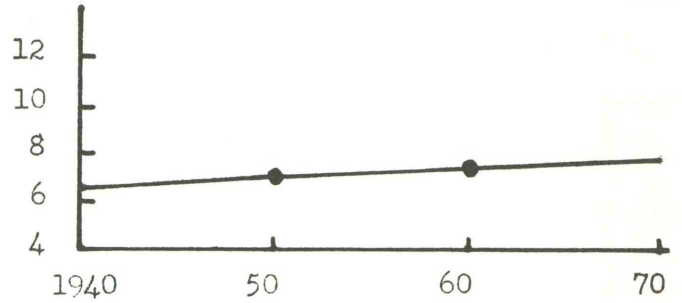


OCCUPATIONAL GROUP DATA  
EIGHT-COUNTY TOTAL - MALE  
(In Thousands)

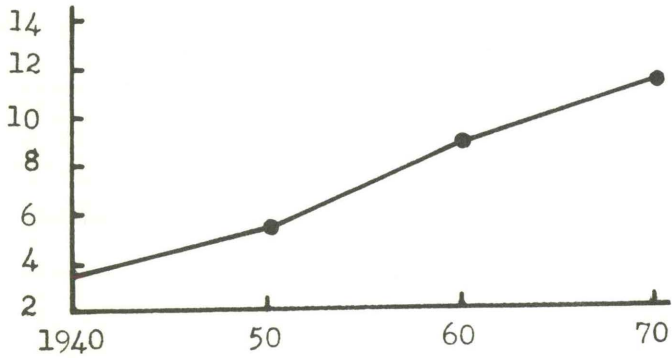
XII Total Employed



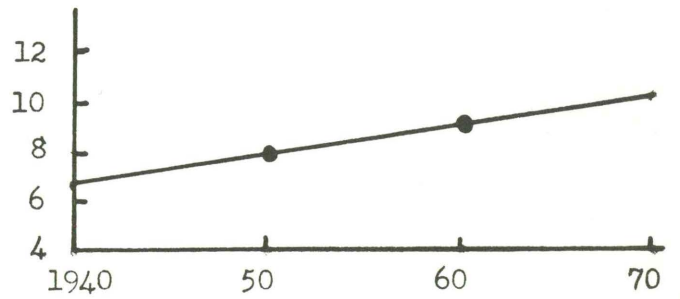
XV Managers, officials & Proprietors



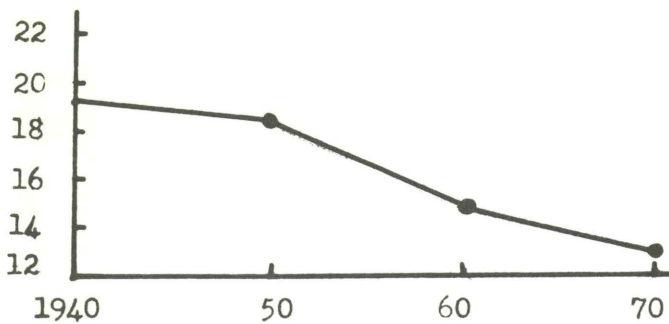
XIII Professional, Technical & Kindred



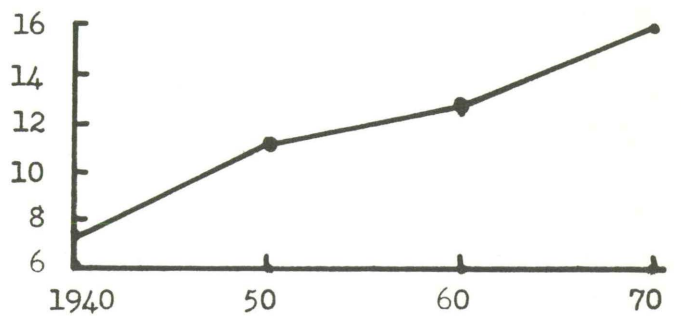
XVI Clerical, Sales & Kindred



XIV Farm & Farm Managers

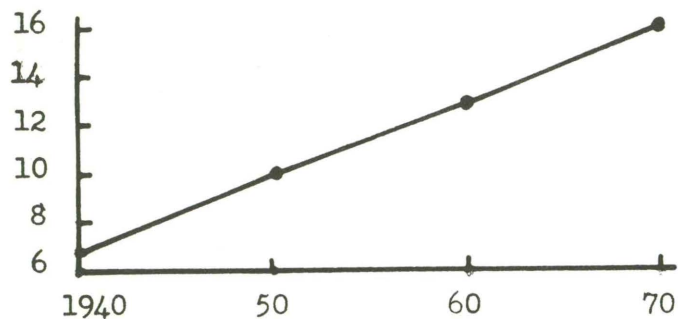


XVII Craftsmen, Foremen & Kindred

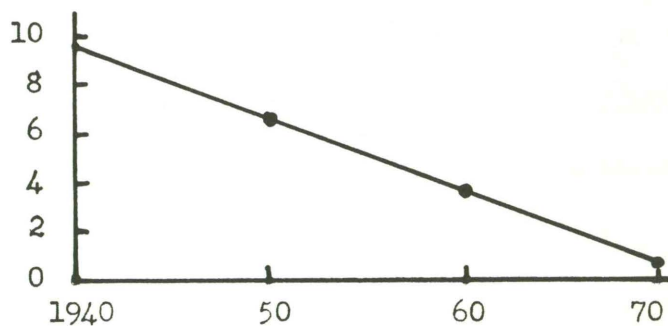


OCCUPATIONAL GROUP DATA  
EIGHT-COUNTY TOTAL - MALE

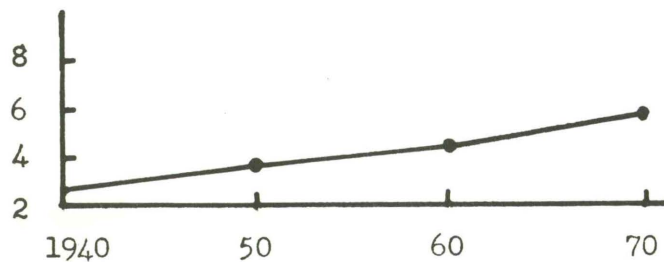
XVIII Operatives  
& Kindred



XX Farm Laborers & Foremen



XIX Service Workers, Except  
Private Household



XXI Laborers, Except  
Farm & Mine

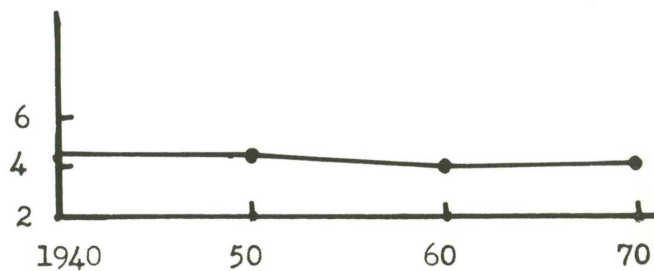
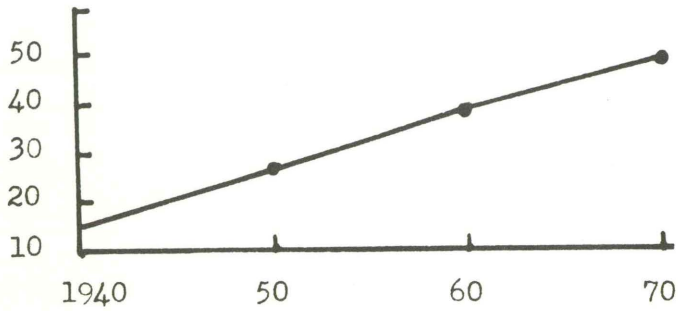


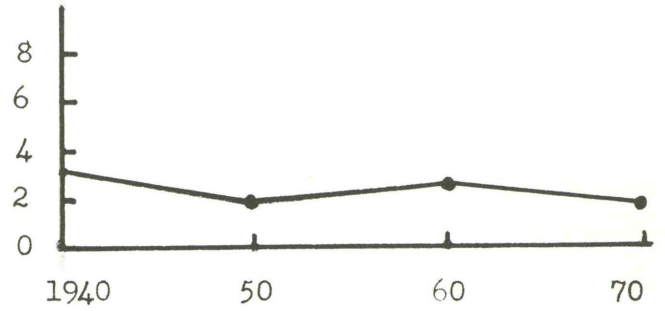


PLATE IV-1 (con't)  
 OCCUPATIONAL GROUP DATA  
 EIGHT-COUNTY TOTAL - FEMALE  
 (In Thousands)

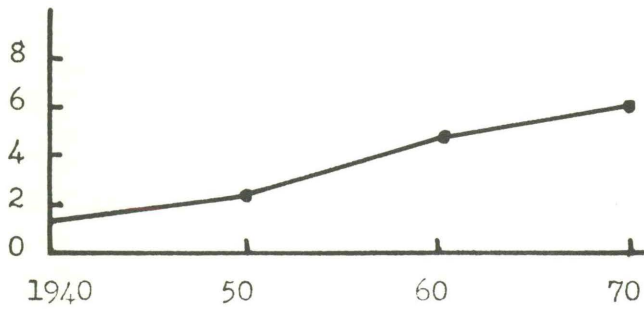
XXII Total Employed



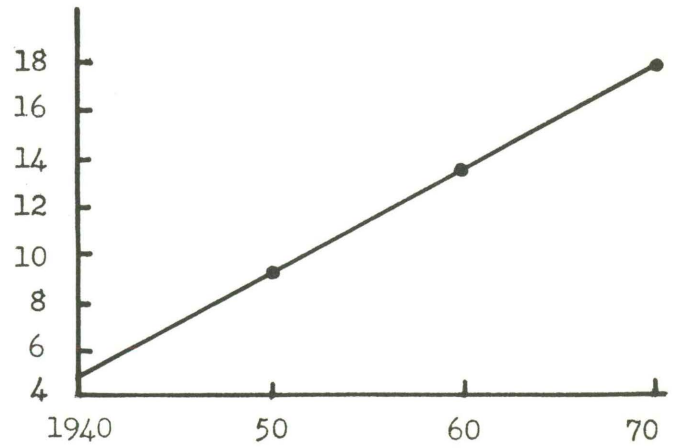
XXV Private Household Workers



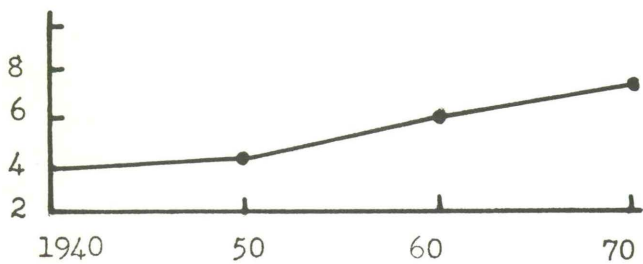
XXIII Operatives & Kindred



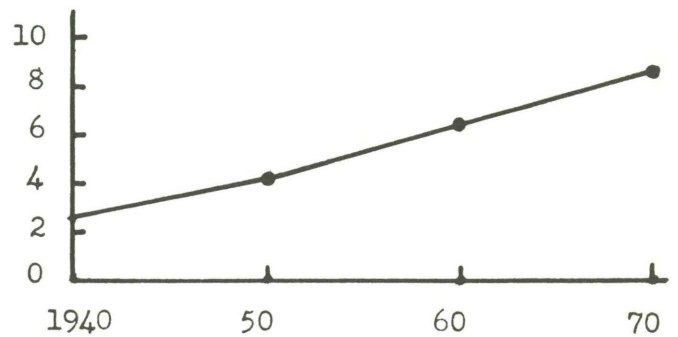
XXVI Clerical, Sales & Kindred



XXIV Professional, Technical & Kindred



XXVII Service Workers Except Private Household



## MAJOR OCCUPATION GROUPINGS OF THE UNEMPLOYED

1950 AND 1960

Closely related to the data on the employed work force is that pertaining to the experienced by unemployed occupation groupings. This information is presented in Tables IV-7, IV-8, and IV-9 by sex and number of counties, i.e., two, six, and eight-county areas.

### Unemployed - Male

Between 1950 and 1960, unemployment among the experienced male worker has almost doubled whether viewed on a two, six, or eight-county basis. While the total per cent of unemployment stands at a low 2.15 per cent of the employed work force, unemployment appears to be the highest for laborers (7.01 per cent), operatives (3.82 per cent), farm laborers and foremen (3.72 per cent), and craftsmen and foreman (3.13 per cent).

### Unemployed - Female

During this same period unemployment among the experienced female worker has increased by almost fifty per cent whether viewed in terms of two, six, or eight-county area. For the female unemployment is highest in the operatives (6.90 per cent), and craftsmen and foremen (3.29 per cent) categories. However, the over-all per cent of female unemployment stands at 2.24 per cent which is slightly higher than the figure for male unemployment (2.15 per cent).

### Unemployed Total - Male and Female

When the data is reviewed in toto, the per cent of unemployed, experienced male and female workers stands at 2.18 per cent for 1960 as compared with 1.29 per cent for 1950. The great bulk of this unemployment can be found in the following categories: laborers (6.73 per cent), operatives (4.64 per cent), craftsmen and foremen (3.14 per cent), farm laborers and foremen (2.86 per cent), private household workers (2.64 per cent), and service workers (2.39 per cent). Unemployment rates of less than two per cent are found in sales and clerical categories and less than one per cent in professional and technical, farmers and farm managers, and managers, officials and proprietors categories.

What does this information on major occupation grouping of the unemployed suggest? Obviously, unskilled or semi-skilled workers stand out as the eight-county area's hardcore unemployed. Less obvious is the fact that certain skill areas in the trades are no longer in demand. Unfortunately, this data does not provide information on under-employment. In other words, are any of these job categories suffering from a situation wherein far more workers are engaged in an occupation than are required to produce the current output? This is undoubtedly true in the farm categories.

TABLE IV-7

MAJOR OCCUPATION GROUP OF UNEMPLOYED - 1950, 1960  
MALE EXPERIENCED UNEMPLOYED

<u>EXPERIENCED UNEMPLOYED</u>	Six-County Area Male		Two-County Area Male		Eight-County Area Male		Eight-County Area Male % Of Employed	
	1950	1960	1950	1960	1950	1960	1950	1960
Total Unemployed	757	1494	124	242	881	1736	1.16	2.15
Professional, Technical, and Kindred Workers	23	35	2	- - -	25	35	.49	.40
Farmers and Farm Managers	9	40	7	- - -	16	40	.09	.27
Managers, Officials and Proprietors (Exc. Farm)	24	17	5	4	29	21	.40	.28
Clerical and Kindred Workers	20	49	1	7	21	56	.62	1.29
Sales Workers	35	70	3	4	38	74	.83	1.49
Craftsmen, Foremen, and Kindred Workers	106	307	27	94	133	401	1.18	3.13
Operatives and Kindred Workers	85	414	12	79	97	493	.96	3.82
Private Household Workers	3	- - -	- - -	- - -	3	- - -	4.92	- - -
Service Workers, Except Private Household	61	93	1	4	62	97	1.68	2.17
Farm Laborers and Farm Foremen	41	117	12	23	53	140	.76	3.72
Laborers, Except Farm and Mine	128	265	16	27	144	292	3.19	7.01
Occupation Not Reported	222	87	38	- - -	260	87	31.21	3.73



TABLE IV-8

MAJOR OCCUPATION GROUP OF UNEMPLOYED - 1950, 1960  
 FEMALE EXPERIENCED UNEMPLOYED

EXPERIENCED UNEMPLOYED	Six-County Area Female		Two-County Area Female		Eight-County Area Female		Eight-County Area Female % Of Employed	
	1950	1960	1950	1960	1950	1960	1950	1960
	Total Unemployed	407	714	42	159	449	873	1.65
Professional, Technical, and Kindred Workers	15	39	3	7	18	46	.43	.74
Farmers and Farm Managers	1	--	1	--	2	--	.78	--
Managers, Officials and Proprietors (Exc. Farm)	10	--	--	--	10	--	--	--
Clerical and Kindred Workers	47	101	2	--	49	101	.74	.97
Sales Workers	38	68	1	9	39	77	1.45	2.52
Craftsmen, Foremen, and Kindred Workers	6	12	--	--	6	12	1.69	3.29
Operatives and Kindred Workers	60	242	7	84	67	326	3.00	6.90
Private Household Workers	32	48	4	20	36	68	2.01	2.68
Service Workers, Except Private Household	74	145	4	27	78	172	1.80	2.54
Farm Laborers and Farm Foremen	2	4	1	8	3	12	.12	.78
Laborers, Except Farm and Mine	7	--	--	--	7	--	3.17	--
Occupation Not Reported	115	55	19	4	134	59	14.86	3.62

TABLE IV-9

MAJOR OCCUPATION GROUP OF UNEMPLOYED - 1950, 1960  
 MALE AND FEMALE EXPERIENCED UNEMPLOYED

EXPERIENCED UNEMPLOYED	Six-County Area		Two-County Area		Eight-County Area		Eight-County Area	
	Male & Female		Male & Female		Male & Female		Male & Female	
	1950	1960	1950	1960	1950	1960	1950	1960
Total Unemployed	1164	2208	1166	401	1330	2609	1.29	2.18
Professional, Technical, and Kindred Workers	38	74	5	7	43	81	.46	.54
Farmers and Farm Managers	10	40	8	- - -	18	40	.10	.26
Managers, Officials and Proprietors (Exc. Farm)	34	17	5	4	39	21	.47	.25
Clerical and Kindred Workers	67	150	3	7	70	157	.70	1.07
Sales Workers	73	138	4	13	77	151	1.06	1.88
Craftsmen, Foremen, and Kindred Workers	112	319	27	94	139	413	1.20	3.14
Operatives and Kindred Workers	145	656	19	163	164	819	1.33	4.64
Private Household Workers	35	48	4	20	39	68	2.10	2.64
Service Workers, Except Private Household	135	238	5	31	140	269	1.75	2.39
Farm Laborers and Farm Foremen	43	121	13	31	56	152	.59	2.86
Laborers, Except Farm and Mine	135	265	16	27	151	292	3.19	6.73
Occupation Not Reported	337	142	57	4	394	146	22.71	3.68



## MAJOR OCCUPATIONAL DATA, 1940, 1950, and 1960

### IOWA AND EIGHT COUNTIES - PROPORTIONAL AND PERCENTAGE CHANGES BY SEX

Tables IV-10, IV-11, and IV-12 give comparative state and eight-county information on each of the eleven major occupational classifications. Table IV-10 provides a percentage comparison for 1940 - 1950, 1950 - 1960, and 1940 - 1960. During this twenty year period significant changes have occurred at both the state and eight county level.

#### Percentage Changes - State and Eight-County

While Iowa's total employed labor force increased by over 15 per cent, the eight-county area increased by 41.6 per cent. Very significant increases occurred in the professional and technical (up 111.5 per cent), clerical and sales (up 92.2 per cent), operatives (up 117.1 per cent), service workers (up 117.3 per cent), and craftsmen and foremen (up 76.5 per cent) categories. During the same period significant decreases occurred in the farmers and farm managers (down 21.3 per cent), and farm laborers and foremen (down 46.3 per cent) categories. In all classifications the eight-county area percentage increases were greater than those for the state. Also, in all classifications the percentage decreases for the eight-county area were less than those recorded for the state.

#### Percentage Changes by Sex

Percentage comparisons by sex between the state and the eight-county area for the employed experienced work force are provided in Table IV-11. While the male work force for the state increased by a meager 0.17 per cent during the twenty year period between 1940 and 1960, the county increase for male workers was 20.6 per cent. The percentage increases in female workers at the state and area level has been nothing short of amazing -- 78.30 per cent increase for the state and 121.8 per cent increase for the eight-county area.

At the eight-county level an experienced employed male work force has shown major increases in the following categories: 151.8 per cent for professional and technical, 74.5 per cent for craftsmen and foremen, 90.9 per cent for operatives, and 76.8 per cent for service workers. Experienced employed female workers have shown major increases in the following categories: 72.3 per cent for professional and technical, 79.3 per cent for farmers and farm managers, 57.9 per cent for managers, officials and proprietors, 164.3 per cent for clerical and sales workers, 196.7 per cent for craftsmen and foremen, 247.6 per cent for operatives, 156.1 per cent for service workers, and 57.4 per cent for farm laborers and foremen. The cause for the tremendous percentage increase in female farmers as previously mentioned is under-employment. Also, a word of caution. Percentage increases should only be interpreted with reference to the absolute numerical increases.



Proportional Changes - State and Area

Table IV-12 pictures proportional changes by major occupational classifications between Iowa and the eight counties for 1940 - 1960. Both state and area figures highlight the proportional upward shifts in professional and technical, clerical, operatives and service workers categories and the proportional downward shifts in farmers and farm managers, farm laborers and foremen and laborers categories. Iowa and the eight-county area are moving further away from an agricultural oriented economy to an industrial economy, and the occupational classifications are reflecting this shift.

TABLE IV-10

MAJOR OCCUPATIONAL CLASSIFICATIONS  
IOWA AND EIGHT-COUNTY EXPERIENCED CIVILIAN LABOR FORCE  
PERCENTAGE CHANGES, 1940 - 1960

	<u>1940-1950</u>		<u>1950-1960</u>		<u>1940-1960</u>	
	<u>State</u>	<u>Eight-County</u>	<u>State</u>	<u>Eight-County</u>	<u>State</u>	<u>Eight-County</u>
TOTAL	+12.4%	+22.1%	+2.96%	+15.9%	+15.35%	+41.6%
Professional, Technical and Kindred Workers	+20.29	+31.0	+29.65	+61.5	+55.96	+111.5%
Farmers and Farm Managers	-3.87	-4.0	-20.51	-18.11	-23.59	-21.3
Managers, Officials and Proprietors (Exc. Farm)	+10.05	+14.6	-5.18	+3.1	+4.35	+18.1
Clerical and Kindred Workers	+46.37	+45.8	+27.19	+47.5	+86.17	+92.2
Sales Workers	+22.01		+6.69	+10.2	+30.17	
Craftsmen, Foremen, Kindred Workers	+37.05	+55.6	+3.41	+13.5	+41.72	+76.5
Operatives and Kindred Workers	+33.29	+52.2	+17.59	+42.6	+56.73	+117.1
Service Workers (Exc. Private Household)	+48.32	+55.1	+32.92	+40.0	+97.14	+117.3
Private Household Workers	-48.92	-41.4	+31.74	+39.0	-32.71	-18.5
Farm Laborers and Foremen	-21.70	-3.4	-42.11	-44.5	-54.67	-46.3
Laborers (Exc. Farm and Mine)	-7.59	+1.8	-13.34	-8.4	-19.92	-6.7
Occupation Not Reported	+73.79	+191.6	+34.65	+128.6	+134.00	+566.6

TABLE IV-11

MAJOR OCCUPATIONAL CLASSIFICATIONS  
IOWA AND EIGHT-COUNTY EXPERIENCED CIVILIAN LABOR FORCE  
PERCENTAGE CHANGE BY SEX, 1940 - 1960

	1940 -- 1950				1950 - 1960				1940 - 1960			
	State		8- County		State		8- County		State		8- County	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
TOTAL	+5.32%	+40.14%	+13.6%	+54.8%	-4.89%	+27.24%	+6.2%	+43.3%	+0.17%	+78.30%	+20.6%	+121.8%
Professional, Technical and Kindred Workers	+32.84	+8.89%	+46.1%	+16.2	+35.08	+23.63	+72.3	+48.3	+79.44	+34.63	+151.8	+72.3
Farmers and Farm Managers	-3.33	-19.55	-3.7	-21.6	-21.94	+97.77	-20.2	+128.7	-24.54	+59.11	-23.1	+79.3
Managers, Officials, and Proprietors (Exc. Farm)	+7.21	+35.89	+9.7	+64.0	-5.98	+0.58	+4.1	-3.7	+0.80	+36.69	+15.7	+57.9
Clerical and Kindred Workers	+19.06	+67.95			+3.91	+40.23	+28.5	+57.3	+23.71	+135.53		
			+18.1	+82.6							+38.0	+164.3
Sales Workers	+7.36	+62.04			+4.45	+10.75	+8.2	+13.8	+12.14	+79.47		
Craftsmen, Foremen, Kindred Workers	+35.22	+155.87	+53.3	+189.4	+3.47	+1.31	+13.8	+2.5	+39.91	+159.23	+74.5	+196.7
Operatives and Kindred Workers	+24.24	+85.87	+49.8	+64.3	+15.77	+24.70	+27.4	+111.6	+43.95	+131.78	+90.9	+247.6
Private Household Workers	-18.37	-49.62	-9.0	-42.1	-38.92	+34.34	-34.4	+41.5	-50.14	-32.32	-40.3	-18.1
Service Workers (Exc. Private Households)	+46.12	+50.18	+46.0	+63.8	+6.41	+54.78	+21.0	+56.3	+55.48	+132.44	+76.8	+156.1
Farm Laborers, and Foremen	+36.16	+774.51	-27.9	+970.4	-43.83	-35.16	-45.9	-40.5	-64.14	+467.05	-61.0	+537.0
Laborers, (Exc. Farm & Mine)	-8.54	+18.91	+1.9	+1.4	-12.57	-29.72	-7.8	-21.3	-20.04	-16.43	-6.0	-20.2
Occupation Not Reported	+53.81	+114.78	+136.0	+272.7	+39.05	+28.18	+180.3	+80.8	+113.88	+175.31	+561.5	+574.0



TABLE IV-12

MAJOR OCCUPATIONAL CLASSIFICATIONS  
IOWA AND EIGHT-COUNTY EXPERIENCED CIVILIAN LABOR FORCE  
PROPORTIONAL CHANGES, 1940 - 1960

	<u>1940</u>		<u>1950</u>		<u>1960</u>	
	<u>State</u>	<u>Eight- County</u>	<u>State</u>	<u>Eight- County</u>	<u>State</u>	<u>Eight- County</u>
TOTAL	100%	100%	100%	100%	100%	100%
Professional Technical and Kindred Workers	7.04	8.4	7.56	9.0	9.52	12.6
Farmers and Farm Managers	22.79	22.9	19.55	18.0	15.10	12.7
Managers, Officials and Proprietors (Exc. Farm)	8.38	8.5	8.23	7.9	7.58	7.1
Clerical and Kindred Workers	7.41		9.68	9.7	11.96	12.3
Sales Workers	6.33	14.0	6.89	7.0	7.14	6.7
Craftsmen, Foremen and Kindred Workers	9.24	8.8	11.31	11.2	11.36	11.0
Operatives and Kindred Workers	10.87	9.6	12.93	12.0	14.77	14.7
Private Household Workers	3.58	3.8	1.63	1.8	2.09	2.2
Service Workers (Exc. Private Household)	5.01	6.1	6.63	7.8	8.55	9.4
Farm Laborers and Foremen	11.63	11.7	8.13	9.3	4.57	4.4
Laborers, (Exc. Farm and Mine)	6.22	5.5	5.13	4.6	4.32	3.6
Occupation Not Reported	1.50	.7	2.33	1.7	3.04	3.3

## MAJOR INDUSTRY DATA

EMPLOYMENT 1940, 1950, 1960, PROJECTED 1970

### Major Industry Data - Male and Female - Six-County and Two-County Area

Tables in this section deal with those employed in the eight-county area by major industrial classification. Table IV-13 shows that the only major decrease in employment has been in agriculture; particularly in the six-county region. The agricultural employment loss between 1940 and 1960 was 6,500 for the six-county area and 1,000 for the two county area. Entertainment also shows an employment drop, but its total employment is insignificant. Very sharp increases are noted in the manufacturing category. For the six county area, employment increased nearly three-fold (9,000 to 26,000) over this twenty year period while employment doubled in the two county area. The largest gain within manufacturing was in machinery production (from near 1,500 to 15,000) which probably was the result of substantial increases in the electrical machinery industry from Linn County (Collins Radio). Professional services in both county areas also reflects large increases, particularly in the government education category. Also, slight increases are seen in the areas of finance, insurance, real estate, and personal services. All other industrial categories remained fairly stable over this period of time.

Employment increases more than off-set the decline in agriculture and both the six-and two-county areas experienced sizeable growth, (an increase of 34,000 for the larger and an increase of 2,000 for the smaller county area).

### Major Industry Data - Male - Six-County and Two-County Area

Males employed in the industrial groups within the study area reflect generally the same picture as that for total employment (see Table IV-14). Between 1940 and 1960 male employment increased in the six-county area by 14,000 but experienced a loss of almost 1,000 persons in the two-county area. As expected, male agricultural workers decrease in both county areas - 8,000 for the six-county area and 2,000 for the two-county area. Only in entertainment was there any significant drop in male employment, and again this amounted to about 165 persons. In all other industries the employed male work force rose. Manufacturing showed the sharpest increase. By 1960 the employment rate was more than double the 1940 figure. The largest category within manufacturing reflecting the sharpest male employment increase was machinery. In addition, other manufacturing sub-categories, with the exception of apparel, experienced very pronounced gains. Surprisingly, all other industrial major groups remained fairly stable over this two-decade period.

### Major Industry Data - Female - Six-County and Two-County Area

In Table IV-15 employed female participation within the industrial groups is charted. While males are decreasing in agricultural employment between 1940 and 1960,



females have increased in numbers -- by about 800 in each of the county areas. It should be noted, however, that the largest portion of these employment gains were realized between 1940 and 1950 and have since tended to level off. Within the six-county area, female employment demonstrated its sharpest gains in manufacturing where employment increased by 5,000. In transportation, communication, wholesale trade, food products, eating establishments, other retail trade, business and repair service, female employment approximately doubled. In all other categories, employment remained fairly stable.

Female employment increased in the two areas by about 22,000, showing either an excellent rate of growth or a stable employment picture. This is in sharp contrast to male employment which experienced varying degrees of growth, relative stability, and some employment decreases.

#### Major Industry Data - Male and Female - Eight-County

Table IV-16 is a composite of the two county areas giving total employment by major industry groups with projections to 1970. The decrease in farm employment will continue and it is projected that 17,986 will be employed by 1970. All other industrial groups (except personal services) are expected to grow in total employment. Most notable is manufacturing which can be expected to employ over 35,000 workers by 1970. The bulk of those employed in manufacturing will be located in machinery production (20,000) while food products will employ nearly 7,500. Retail trade is another major industry which will employ a significantly larger number of people (14,000) by 1970. The total number employed in all industries is expected to be nearly 140,000 by 1970 for the eight-county area.

Of those employed in agriculture in 1970, approximately 14,000 will be males and 3,500 will be females (Tables IV-17 and IV-18). Also, construction will be predominantly male (7,000 males to 342 females). In manufacturing males will outnumber females three to one (27,000 to 9,000).

Females will outnumber male employees in eating establishment work (3,000 to 1,000), and they will be found in equal number with males in the finance, insurance, and real estate categories. Personal services will continue to employ mainly female workers. In all other industrial groups, male workers will be found in proportionately greater numbers than females.

Of the total employment in 1970, (140,000) about 90,000 will be males and 50,000 will be females. The increase in male employment from 1960 to 1970 should be a plus 10,000 and for females a plus 11,000.

These eight-county changes in employment by significant major industrial groups are depicted in graph form for ease of study. Plate IV-2, I through X, depict the employment of males and females by significant major industry. XI through XXV describe the employment of males in the eight counties. XXVI through XL detail the female employment by major industry.



TABLE IV-13

EMPLOYMENT BY  
MAJOR INDUSTRIAL GROUPS - MALE AND FEMALE  
1940, 1950, 1960

Industry	Six-County Area			Two-County Area		
	1940	1950	1960	1940	1950	1960
TOTAL EMPLOYED	71,668	89,176	105,667	12,888	14,103	14,076
Agric. Forest, & Fishing	22,947	21,709	15,570	6,668	6,915	5,576
Construction: Mining	3,392	4,970	5,264	494	785	800
Manufacturing	8,896	15,934	25,960	701	724	1,427
Machinery	1,454	5,513	14,549*	19	49	314
Transportation	68	459	294	1	11	12
Other Durable Goods	794	1,739	2,049	72	221	360
Food and Kindred	4,615	5,919	6,010	111	189	412
Textile Mill Products	138	148	201	1	4	9
Apparel & Other Fab. Tex.	236	181	27	3	8	8
Other Non Durable (Inc. Not Specialty Man)	1,546	1,975	2,830	393	242	312
Transportation, Communication, and Other Utilities	**	5,473	5,274	**	625	606
Wholesale Trade	2,544	3,060	3,027	265	387	357
Food & Dairy Prod. Stores	2,040	2,283	2,407	302	347	341
Eating & Drinking Places	1,707	2,783	3,299	250	341	345
Other Retail Trade	6,278	8,565	10,215	843	1,211	1,485
Finance Insurance & Real Estate	1,877	2,400	3,359	193	211	262
Business & Repair Service	1,569	2,222	1,784	266	377	264
Personal Services	**	4,322	5,030	**	545	719
Entertainment & Recreation Services	**	759	704	**	156	43
Other Professional & Related Occupations						
Educational: Government	1,783	5,070	8,239	263	469	589
Educational: Private	N/A	879	1,630	N/A	68	98
Other Prof. & Related Services	7,341	4,879	8,085	858	392	718
Public Administration	N/A	2,179	2,617	N/A	300	281
Ind. Not Reported	1,068	1,689	3,203	223	360	165

\*Increase due largely to electrical machinery from Linn County (Probably Collins).

\*\*Data Not Available.

TABLE IV-14

EMPLOYMENT BY  
MAJOR INDUSTRIAL GROUPS - MALE  
1940, 1950, 1960

Industry	Six-County Area			Two-County Area		
	1940	1950	1960	1940	1950	1960
TOTAL EMPLOYED	56,225	65,112	70,779	10,756	10,964	9,986
Agriculture, Forest & Fishing	22,433	19,590	14,198	6,568	6,103	4,694
Construction: Mining	3,341	4,802	5,062	492	765	766
Manufacturing	7,460	13,040	19,392	518	530	981
Machinery	1,347	4,750	10,433	18	49	242
Transportation	61	429	283	1	11	12
Other Durable Goods	750	1,518	1,551	68	141	109
Food and Kindred	3,903	4,717	4,994	190	171	335
Textile Mill Products	82	90	109	- - -	- - -	- - -
Apparel, & Other Fab. Tex.	34	39	21	1	1	4
Other Non Durable (Inc. Not S. Man)	1,283	1,497	2,001	240	157	179
Transportation, Communication, and Other Utilities	*	4,627	3,865	*	509	534
Wholesale Trade	2,221	2,553	2,507	249	344	296
Food and Dairy Prod. Stores	1,544	1,458	1,450	229	223	206
Eating & Drinking Places	725	1,067	1,053	106	104	90
Other Retail Trade	4,581	5,404	6,464	777	908	1,091
Finance, Insurance & Real Estate	1,281	1,428	831	157	156	152
Business, and Repair Services	1,433	1,943	1,501	256	353	227
Personal Services	*	1,387	1,255	*	148	164
Entertainment and Recreation Services	*	535	294	*	45	12
Educational: Government	N/A	2,325	4,019	N/A	136	188
Educational: Private	N/A	325	520	N/A	8	8
Other Prof. & Related Services	3,148**	2,066	3,033	330	200	273
Public Admin.	N/A	1,728	1,918	N/A	216	209
Ind. Not Reported	754	834	1,817	157	216	85
Government	1,523			205		

\* N/A - Data Not Available

\*\* Includes Hospital Employees.



TABLE IV-15

EMPLOYMENT BY  
MAJOR INDUSTRIAL GROUPS - FEMALE  
1940, 1950, 1960

Industry	Six-County Area			Two-County Area		
	1940	1950	1960	1950	1950	1960
TOTAL EMPLOYED	15,443	24,064	34,888	2,129	3,139	4,090
Agric. Forest & Fishing	514	2,119	1,372	100	802	882
Construction & Mining	51	168	202	2	20	34
Manufacturing	1,436	2,894	6,568	183	194	446
Machinery	107	763	4,116	1	- - -	72
Transportation	7	30	11	- - -	- - -	- - -
Other Durable Goods	44	221	498	4	80	151
Food and Kindred	712	1,202	1,016	21	18	77
Textile Mill Products	56	58	92	1	4	9
Apparel & Other Fab. Tex	202	142	6	3	7	4
Other Non Durable (Inc, Not S. Man)	308	478	829	153	85	133
Transportation, Communication, & Other Utilities	*	846	909	*	116	72
Wholesale Trade	323	507	520	16	43	61
Food & Dairy Prod. Stores	496	825	957	73	124	135
Eating & Drinking Places	982	1,716	2,246	144	237	255
Other Retail Trade	1,697	3,161	3,751	166	303	394
Finance, Insurance & Real Estate	596	972	1,528	36	55	110
Business & Repair Service	136	279	283	10	24	37
Personal Services	*	2,935	3,775	*	397	555
Entertainment & Rec. Service	*	224	310	*	11	21
Educational: Government	* N/A	2,745	4,220	* N/A	333	401
Private	* N/A	554	1,110	* N/A	60	90
Other Professional & Related Services	** 4,193	2,813	5,052	** 528	192	445
Public Adm.	N/A	451	699		84	72
Ind. Not Reported	323	855	1,386	66	144	80
Government	260			58		
* N/A - Data Not Available						
** Includes Hospital Employees.						



TABLE IV-16

EMPLOYMENT BY  
 MAJOR INDUSTRY GROUP - MALE AND FEMALE  
 1940, 1950, 1960, PROJECTED 1970  
 EIGHT-COUNTY AREA

	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>
TOTAL EMPLOYED	84,553	103,279	119,743	137,708
Agriculture, Forest & Fishing	29,615	28,614	21,146	17,986
Construction & Mining	3,886	5,755	6,064	7,412
Manufacturing	9,597	16,658	27,387	35,669
Machinery	1,473	5,562	14,863	20,688
Transportation	69	470	306	519
Other Durable Goods	866	1,960	2,409	3,288
Food & Kindred	4,826	6,108	6,422	7,381
Textile Mill Products	139	152	210	238
Apparel & Other Fabricated Textiles	240	189	35	0
Other Non Durable (Inc. Not Spec. Mfg.)	1,984	2,217	3,142	3,605
Transportation, Communication & Other Utilities		6,098	5,880	*
Wholesale Trade	2,809	3,447	3,384	3,788
Food & Dairy Product Stores	2,342	2,630	2,748	2,979
Eating & Drinking Places	1,957	3,124	3,644	4,595
Other Retail Trade	7,221	9,776	11,700	14,044
Finance, Insurance & Real Estate	2,070	2,611	3,621	4,318
Business & Repair Service	1,835	2,599	2,048	2,373
Personal Services		4,867	5,749	*
Entertainment & Recreation Services		815	747	*
Hospitals				
Educational: Government*	N/A **	5,539	8,828	*
Private *	N/A	947	1,728	
Other Professional & Related Services	8,199	5,271	8,803	
Public Administration	N/A	2,479	2,898	
Industries Not Reported	1,300	2,049	3,368	
Government	2,046			
* No Projection Possible				
** Data Not Available				

TABLE IV-17

EMPLOYMENT BY  
 MAJOR INDUSTRY GROUP - MALE  
 1940, 1950, 1960, PROJECTED 1970  
 EIGHT-COUNTY AREA

	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>
<b>TOTAL EMPLOYED</b>	66,981	76,076	80,765	88,384
Agriculture, Forest & Fishing	29,001	25,693	18,892	14,417
Construction & Mining	3,833	5,567	5,828	7,070
Manufacturing	7,978	13,570	20,373	26,367
Machinery	1,365	4,799	10,675	14,922
Transportation	62	440	295	499
Other Durable Goods	818	1,659	1,760	2,354
Food and Kindred	4,093	4,888	5,329	6,006
Textile Mill Products	82	90	109	121
Apparel & Other Fab. Tex.	35	40	25	23
Other Non Durable (Inc. Not Spec. Mfg.)	1,523	1,654	2,180	2,442
Transportation, Communication, and Other Utilities	**	5,136	4,899	*
Wholesale Trade	2,470	2,897	2,803	3,056
Food & Dairy Prod. Stores	1,773	1,681	1,656	1,586
Eating & Drinking Places	831	1,171	1,143	1,360
Other Retail Trade	5,358	6,312	7,555	8,605
Finance, Insurance & Real Estate	1,438	1,584	1,983	2,213
Business & Repair Service	1,689	2,296	1,728	1,943
Personal Services	**	1,535	1,419	*
Entertainment & Rec. Services	**	580	416	
Educational: Government	N/A	2,461	4,207	
Private	N/A	333	528	
Other Professional & Related Services	3,478	2,266	3,306	
Public Admin.	N/A	1,944	2,127	
Industries Not Reported	911	1,050	1,902	
Government	1,728			
*No Projection Possible				
** No Data Available				



TABLE IV-18

EMPLOYMENT BY  
 MAJOR INDUSTRY GROUP - FEMALE  
 1940, 1950, 1960, PROJECTED 1970  
 EIGHT-COUNTY AREA

	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>
TOTAL EMPLOYED	17,572	27,203	38,978	49,324
Agriculture, Forest & Fishing	614	2,921	2,254	3,569
Construction & Mining	53	188	236	342
Manufacturing	1,619	3,088	7,014	9,302
Machinery	108	763	4,188	5,766
Transportation	7	30	11	20
Other Durable Goods	48	301	649	934
Food and Kindred	733	1,220	1,093	1,375
Textile Mill Products	57	62	101	117
Apparel & Other Fab. Textiles	205	149	10	- - -
Other Non Durable (Inc. Not Special Man.)	461	563	962	1,163
Transportation, Communication, & Other Utilities	*	962	981	**
Wholesale Trade	339	550	581	732
Food & Dairy Products Stores	569	949	1,092	1,393
Eating & Drinking Places	1,126	1,953	2,501	3,235
Other Retail Trade	1,863	3,464	4,145	5,439
Finance, Insurance & Real Estate	632	1,027	1,638	2,105
Business & Repair Services	146	303	320	430
Personal Services	*	3,332	4,330	**
Entertainment & Recreational Services	*	235	331	**
Educational: Government	N/A	3,078	4,621	
Private	N/A	614	1,200	
Other Prof. & Related Services	4,721	3,005	5,497	
Public Administration	N/A	535	771	
Industries Not Reported	389	999	1,466	
Government	318			

\* N/A Data Not Available

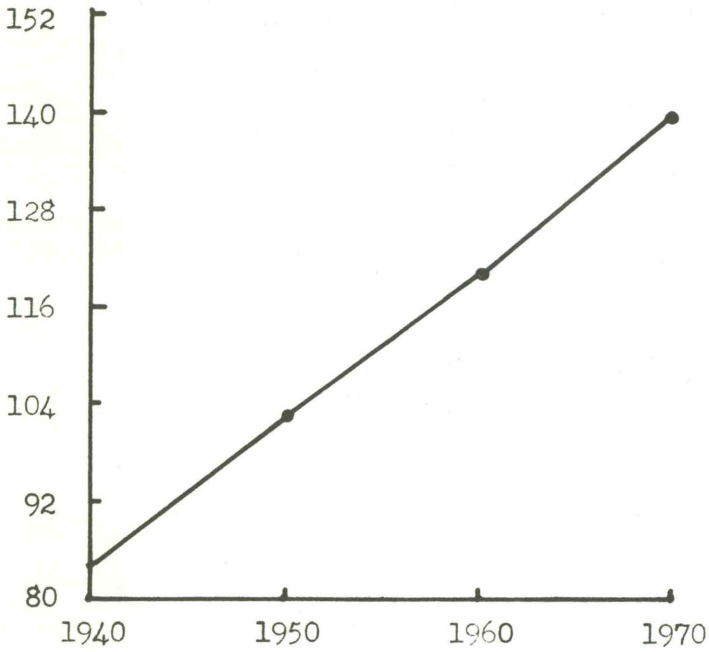
\*\* No Projection Possible



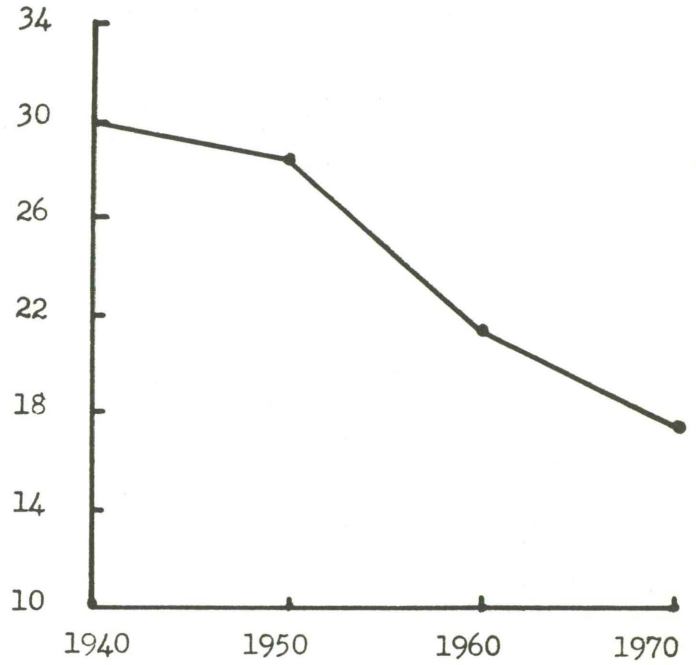
PLATE IV-2

EMPLOYMENT BY MAJOR INDUSTRIAL GROUPS  
EIGHT COUNTY TOTAL - MALE & FEMALE  
( In Thousands )

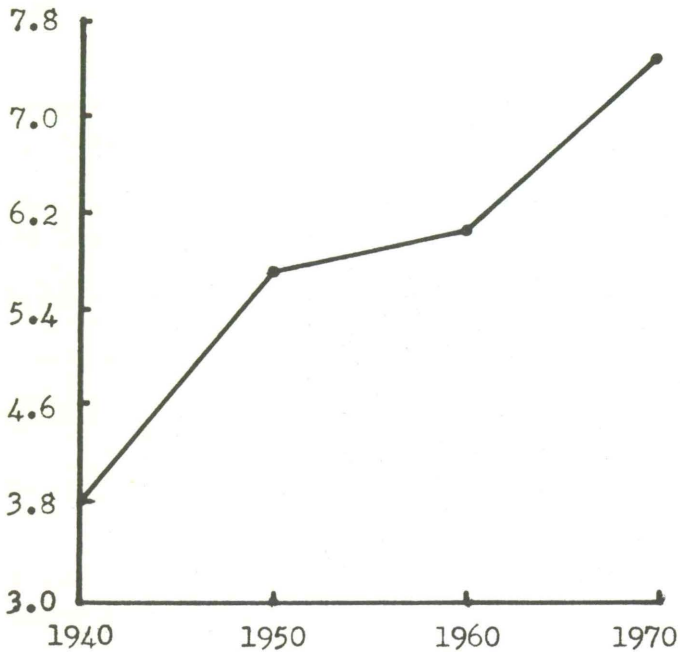
I Total Employed



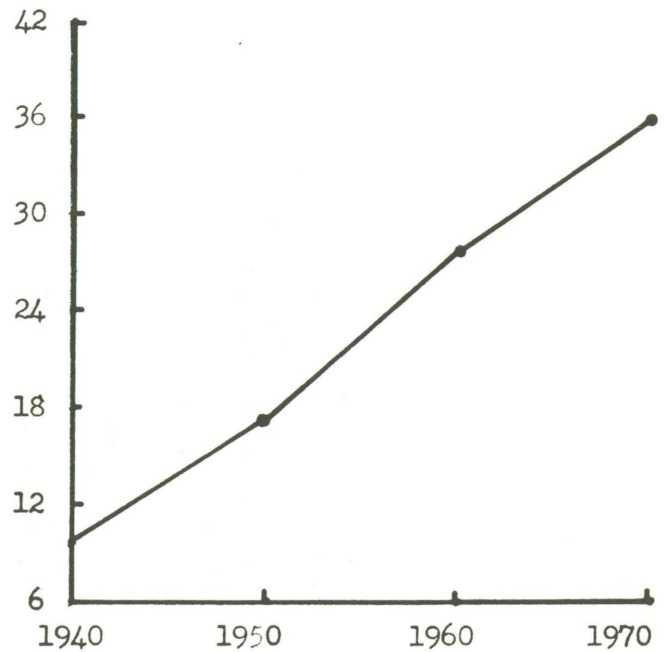
II Agriculture, Forest & Fish



III Construction & Mining

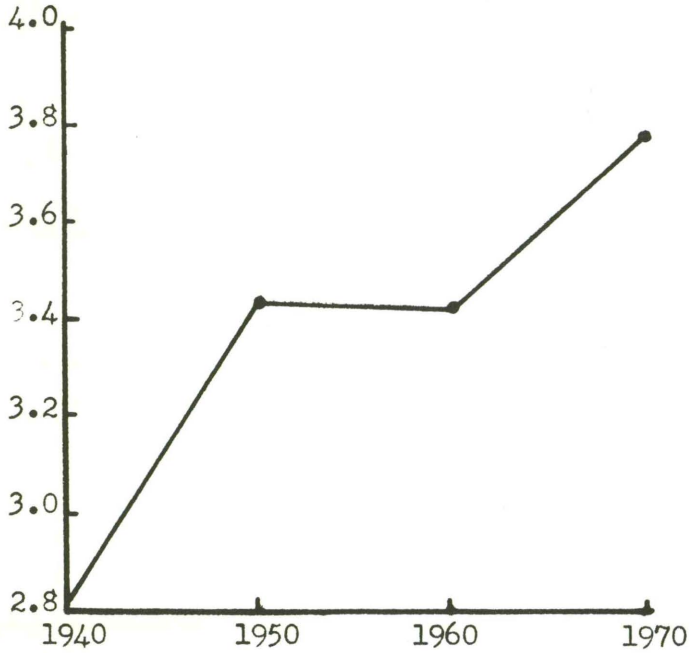


IV Manufacturing

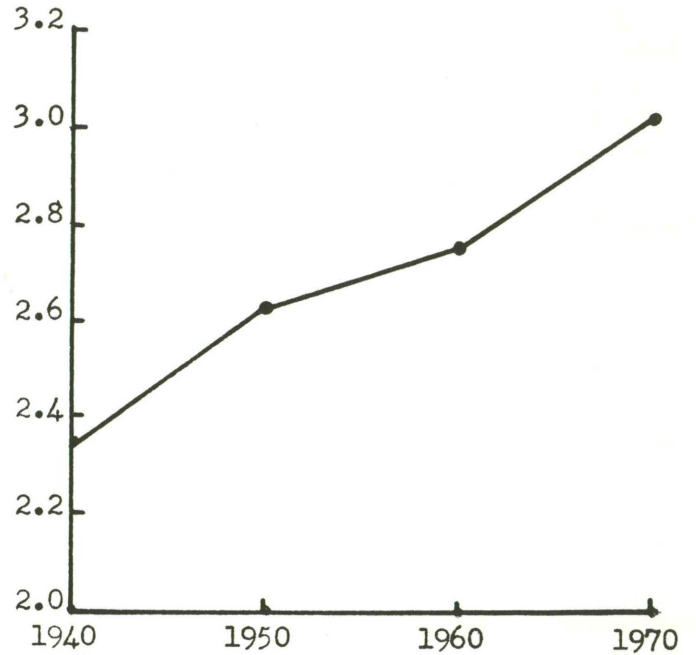


EMPLOYMENT BY MAJOR INDUSTRIAL GROUPS  
EIGHT COUNTY TOTAL - MALE & FEMALE  
( In Thousands )

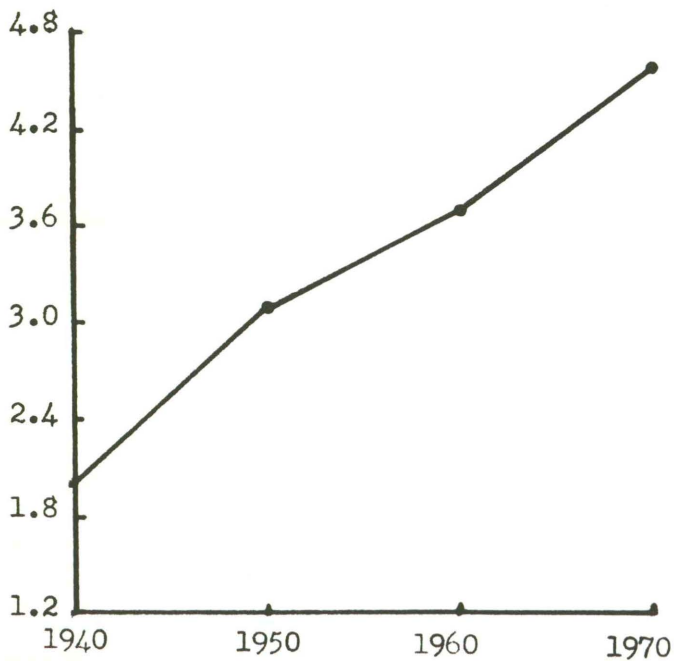
V Wholesale Trade



VI Food & Dairy Products Stores



VII Eating & Drinking Places



VIII Other Retail Trade

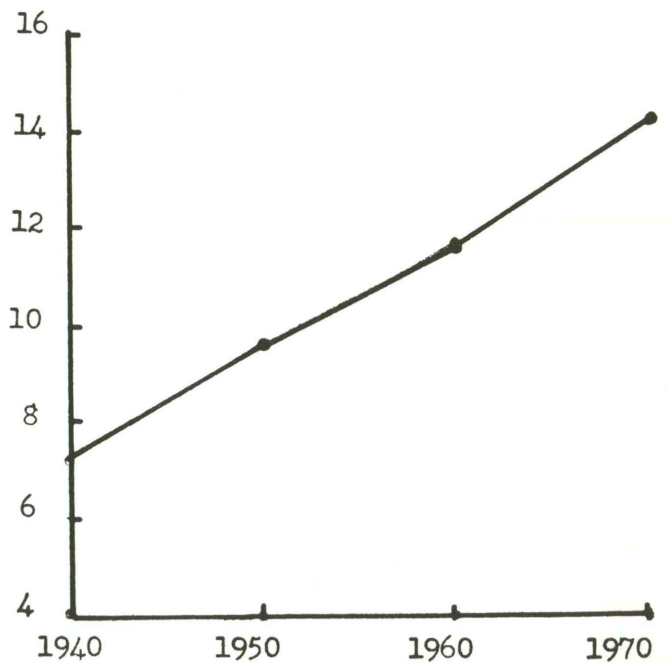
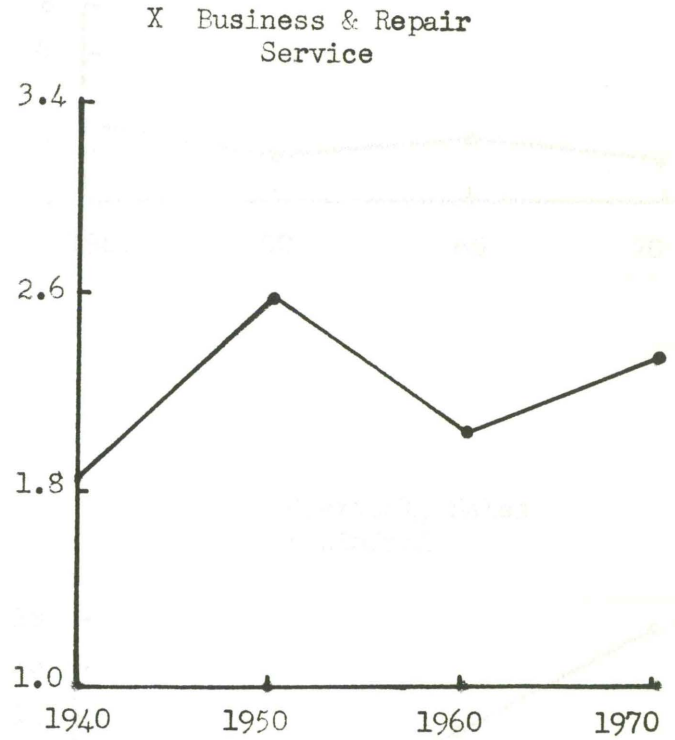
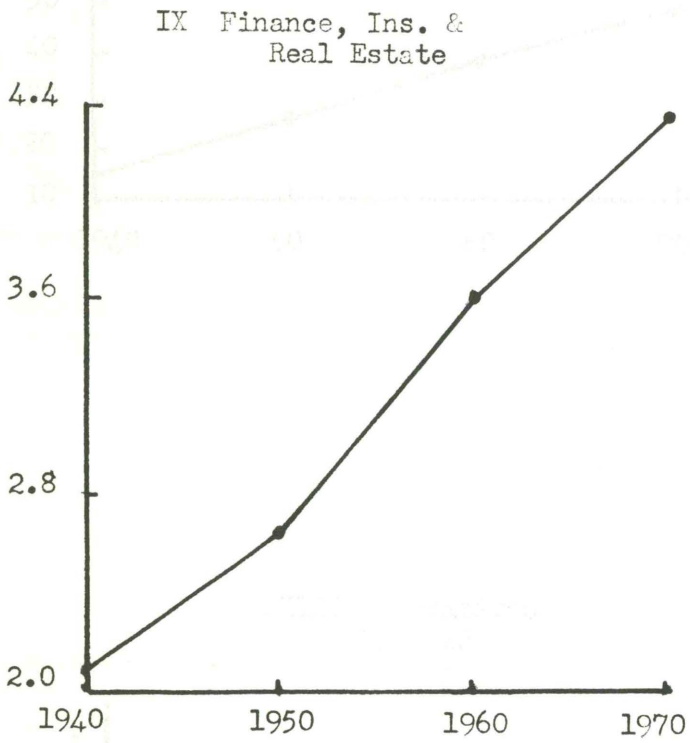


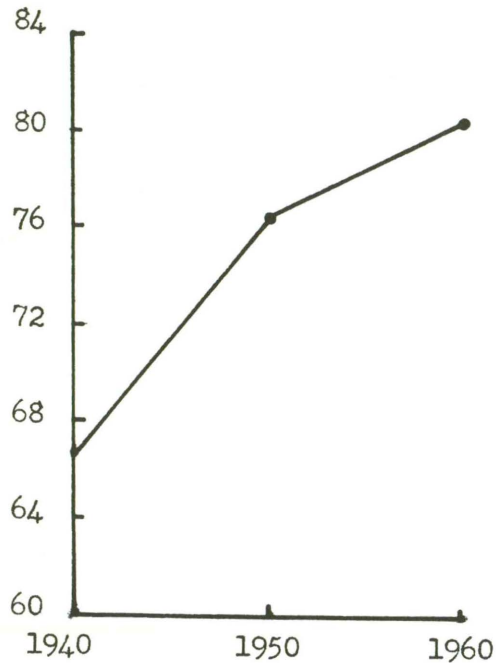
PLATE IV-2 (con't)  
EMPLOYMENT BY MAJOR INDUSTRIAL GROUPS  
EIGHT COUNTY TOTAL - MALE & FEMALE  
( In Thousands )



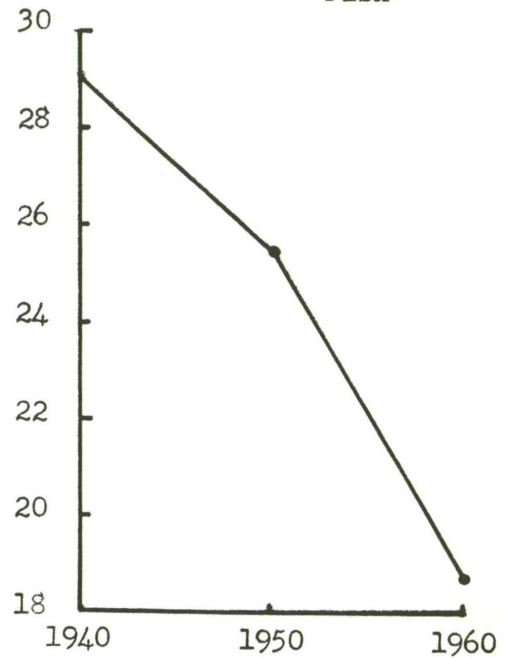


EMPLOYMENT BY MAJOR INDUSTRIAL GROUPS  
EIGHT COUNTY TOTAL - MALE  
( In Thousands )

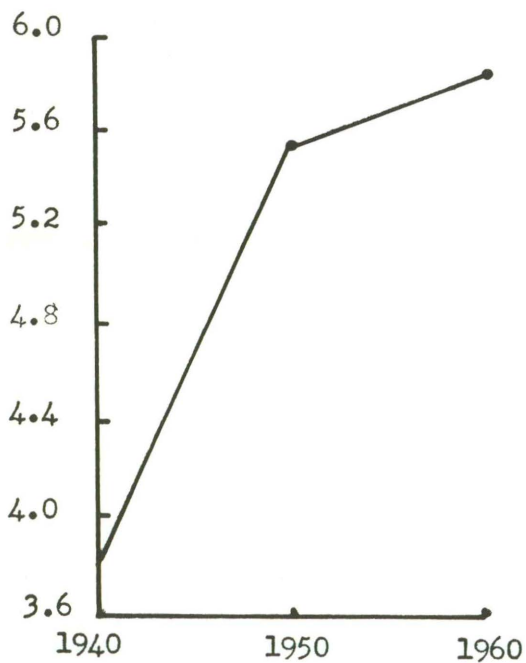
XI Total Employed



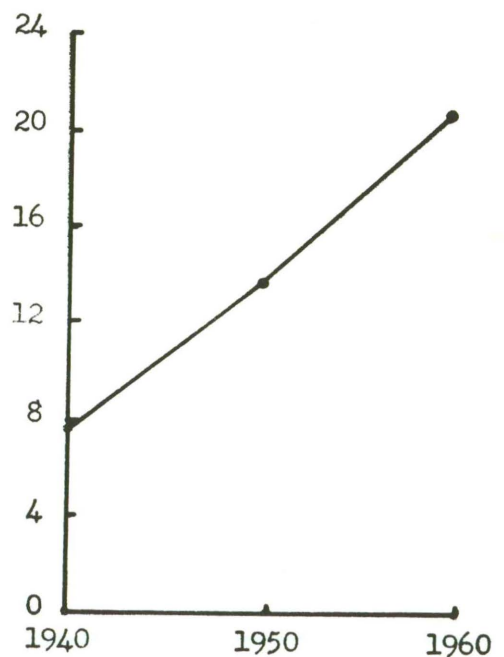
XII Agriculture, Forest, & Fish



XIII Construction & Mining

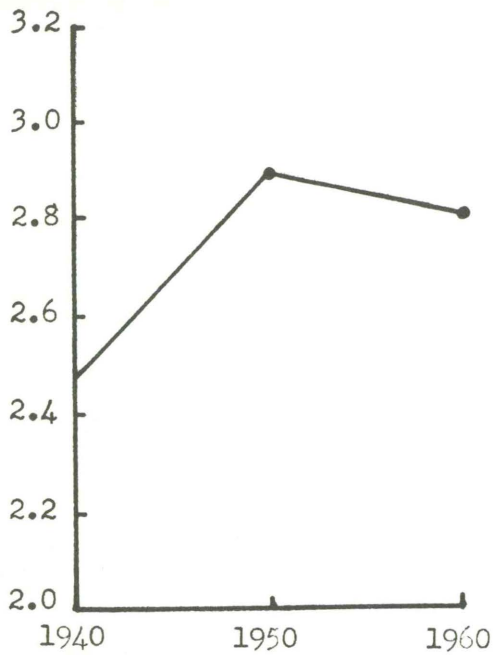


XIV Manufacturing

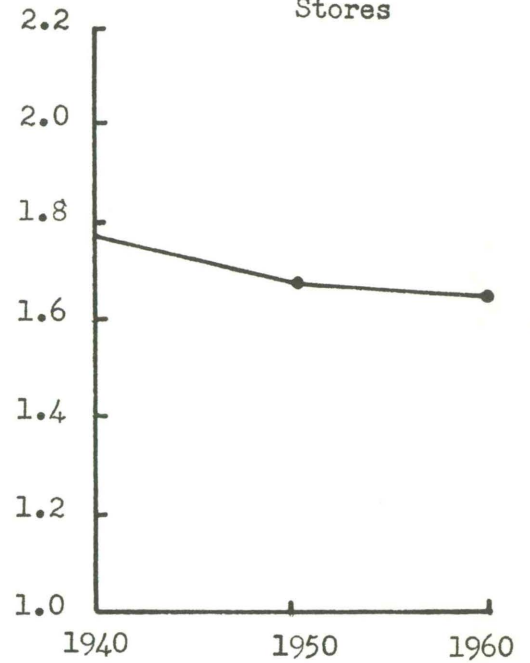


EMPLOYMENT BY MAJOR INDUSTRIAL GROUPS  
EIGHT COUNTY TOTAL - MALE  
( In Thousands )

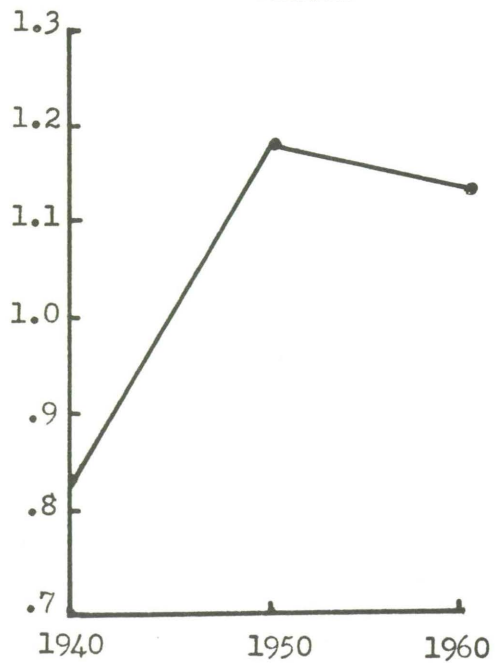
XV Wholesale Trade



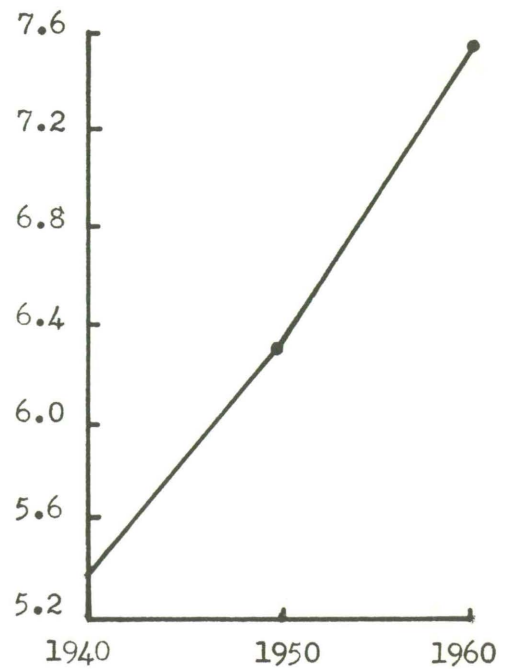
XVI Food & Dairy Prod. Stores



XVII Eating & Drinking Places

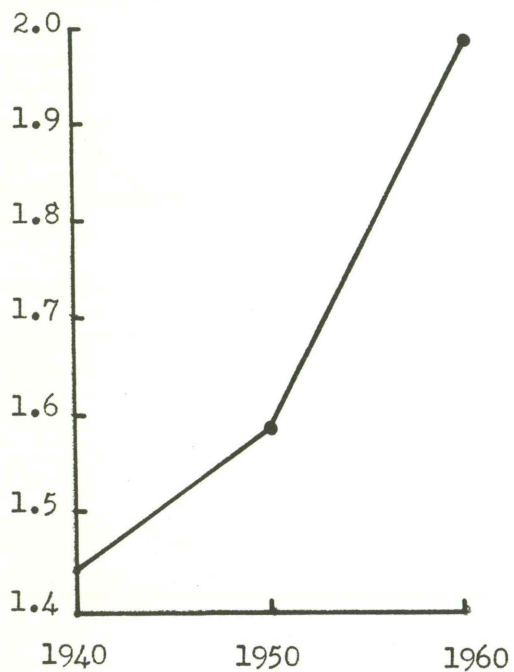


XVIII Other Retail Trade

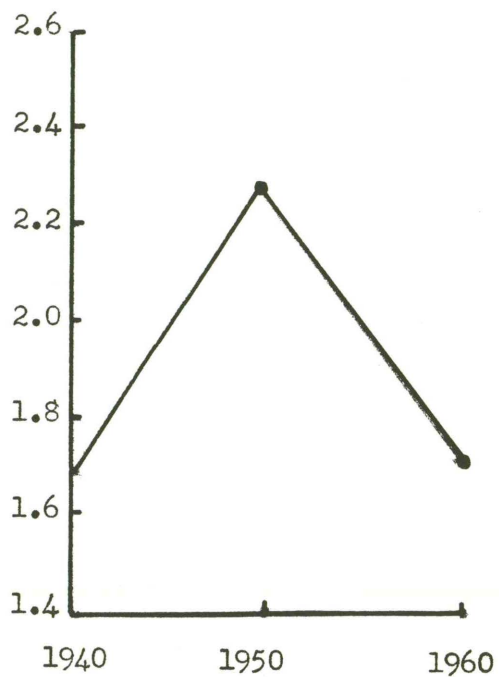


EMPLOYMENT BY MAJOR INDUSTRIAL GROUPS  
EIGHT COUNTY TOTAL - MALE  
( In Thousands )

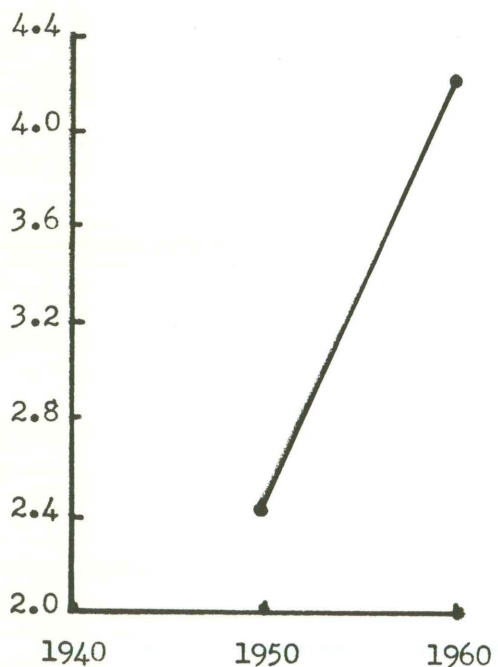
XIX Finance, Ins., &  
Real Estate



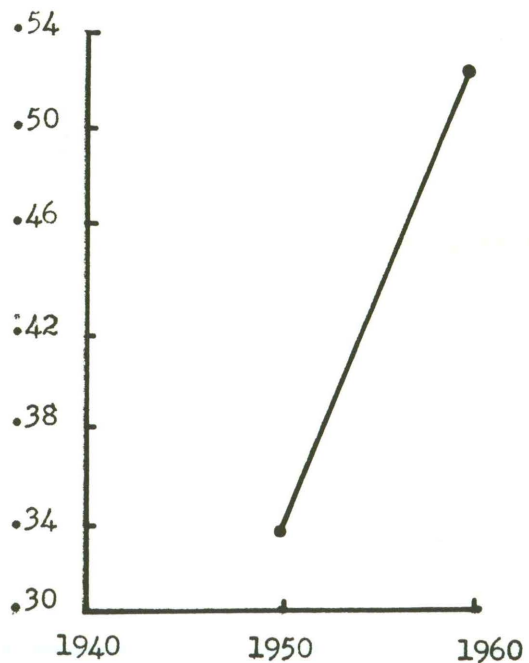
XX Business & Repair Service



XXI Educational Gov.



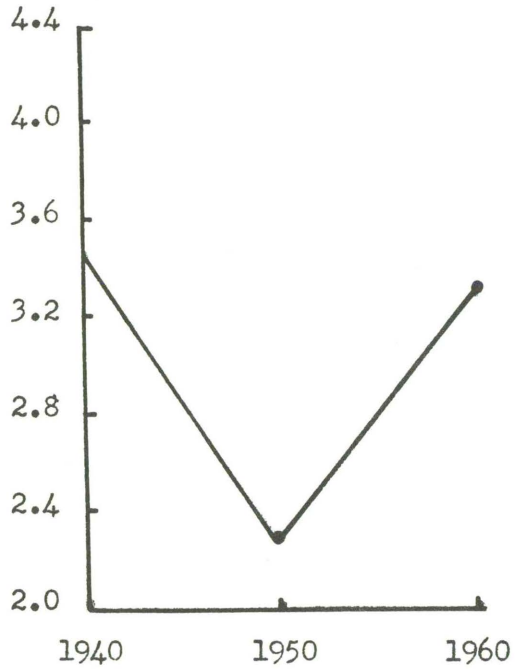
XXII Educational - Priv.



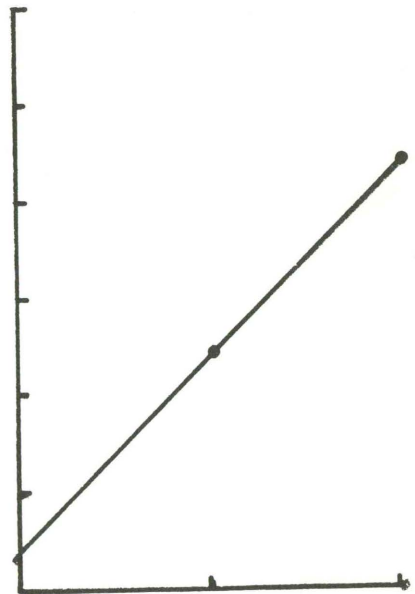


EMPLOYMENT BY MAJOR INDUSTRIAL GROUPS  
EIGHT COUNTY TOTAL - MALE  
( In Thousands )

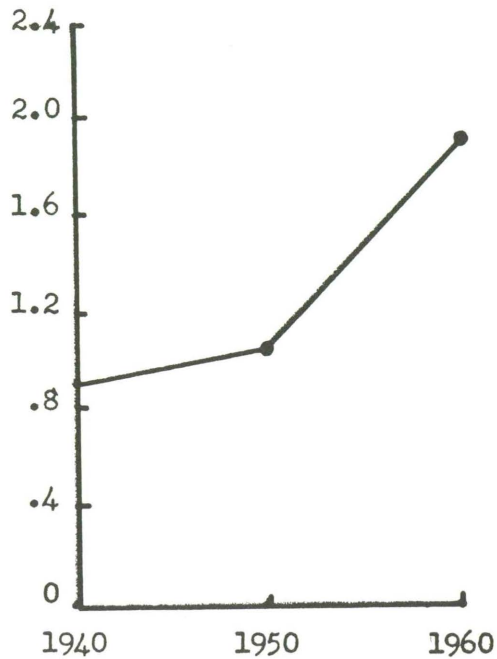
XXIII Other Prof. & Related  
Serv.



XXIV Public Administration

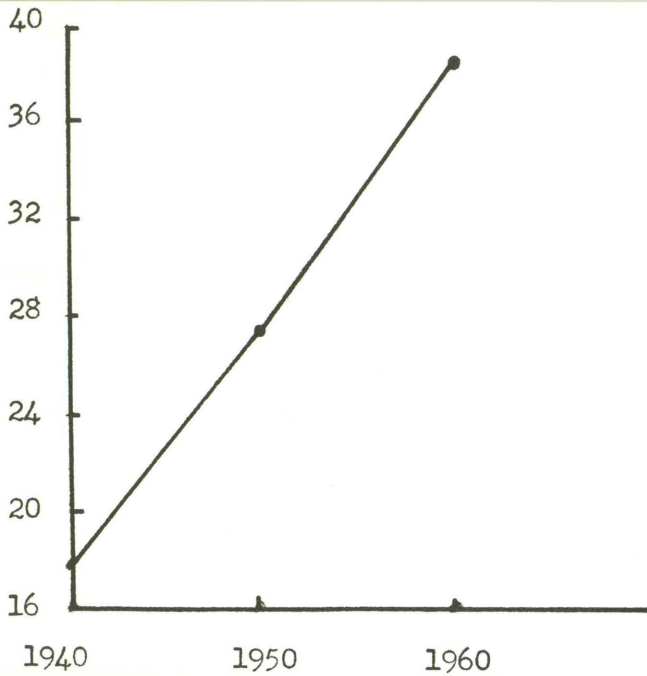


XXV Ind. not Reported

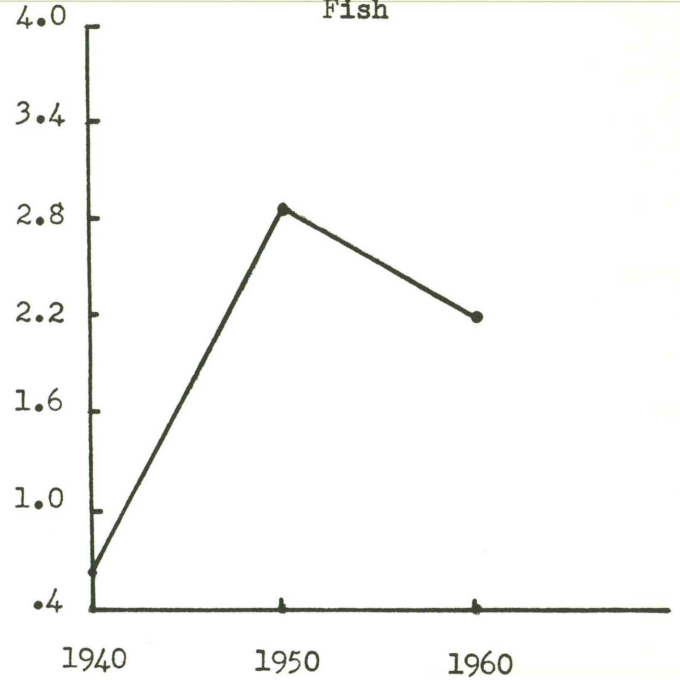


EMPLOYMENT BY MAJOR INDUSTRIAL GROUPS  
EIGHT COUNTY TOTAL - FEMALE  
( In Thousands )

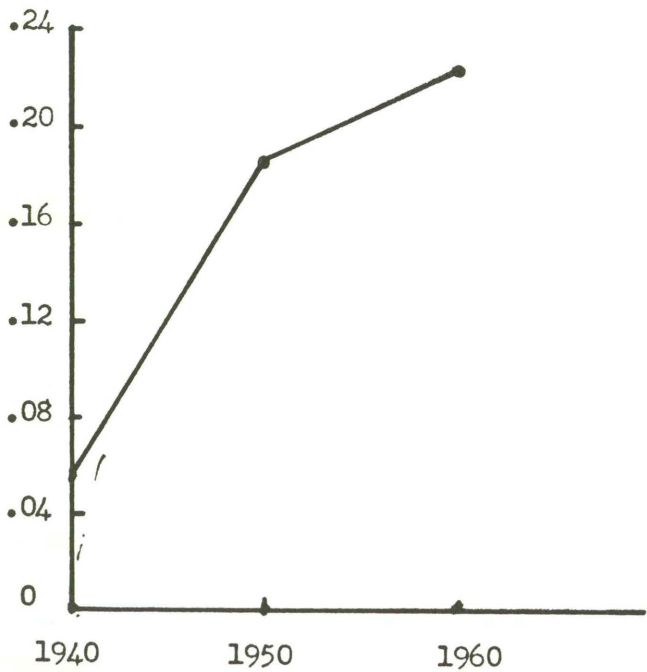
XXVI Total Employed



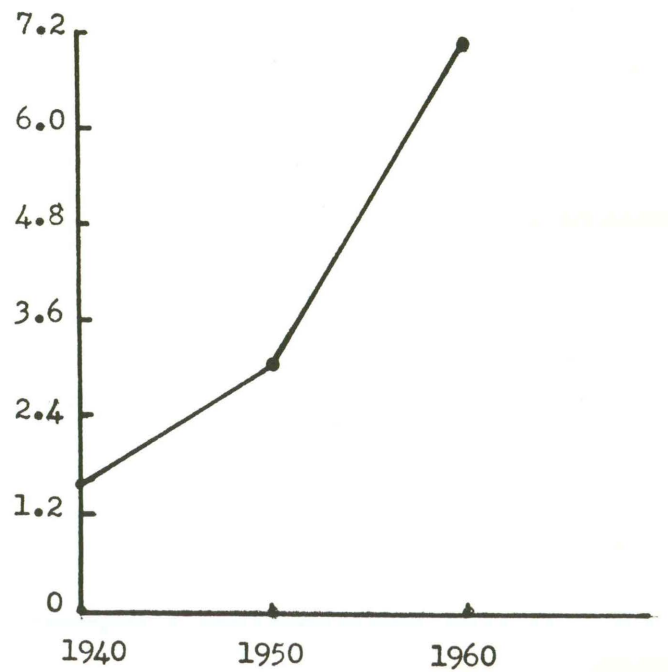
XXVII Agriculture, Forest, Fish



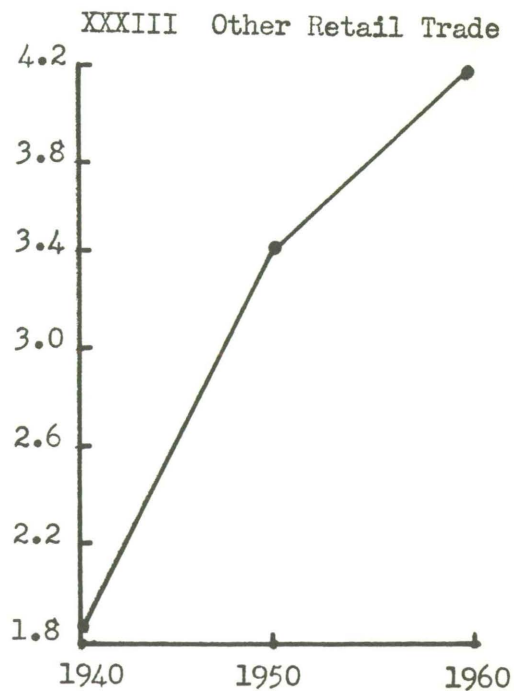
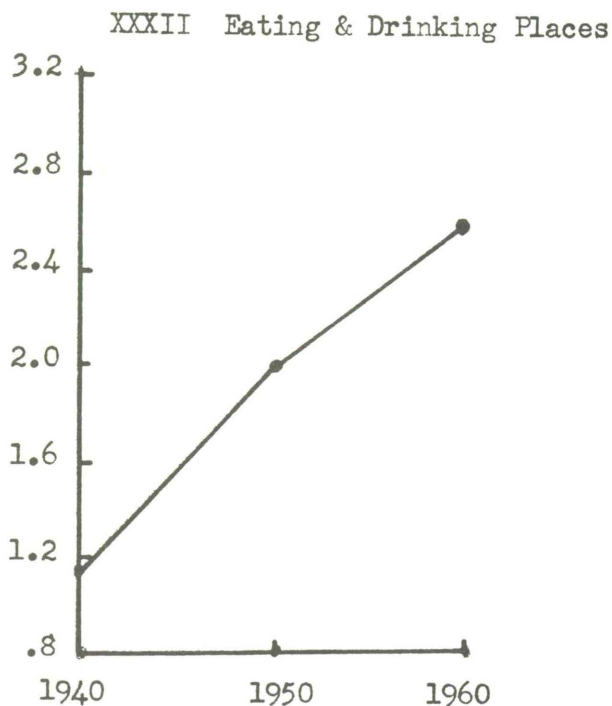
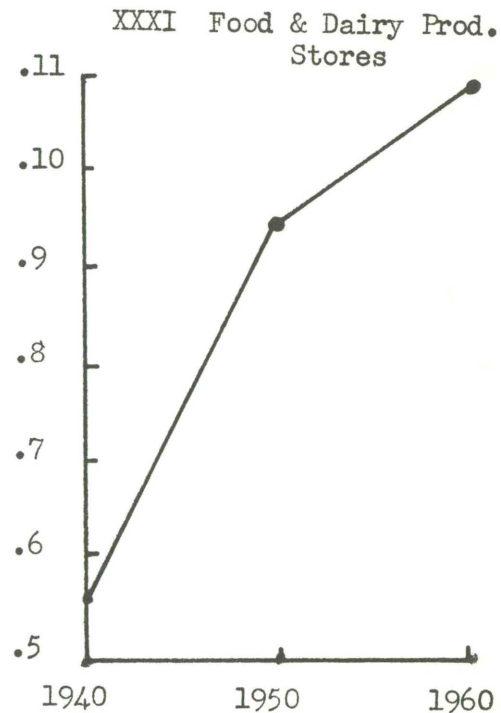
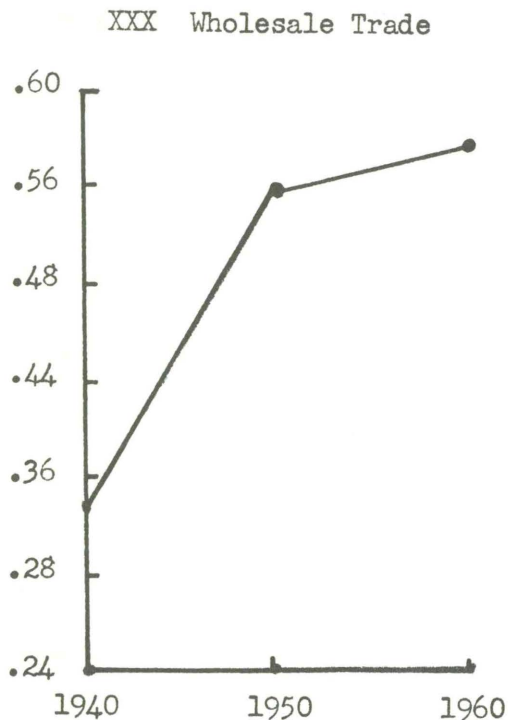
XXVIII Construction & Mining



XXIX Manufacturing



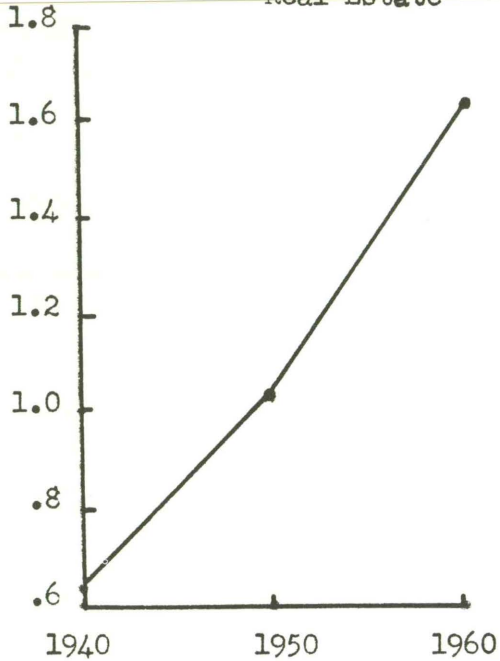
EMPLOYMENT BY MAJOR INDUSTRIAL GROUPS  
EIGHT COUNTY TOTAL - FEMALE  
( In Thousands )



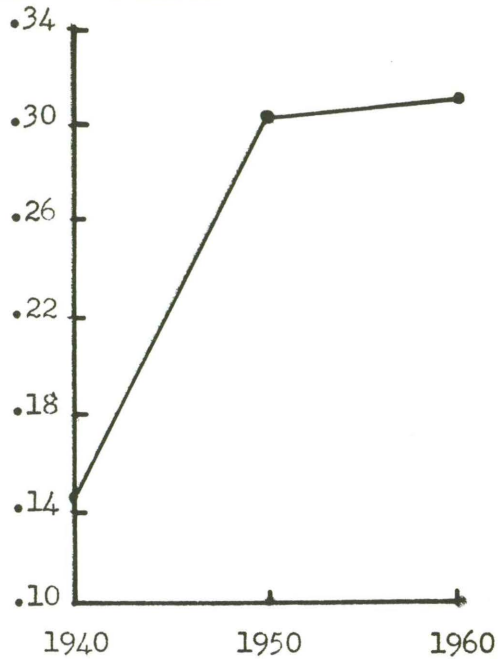


EMPLOYMENT BY MAJOR INDUSTRIAL GROUPS  
EIGHT COUNTY TOTAL - FEMALE  
( In Thousands )

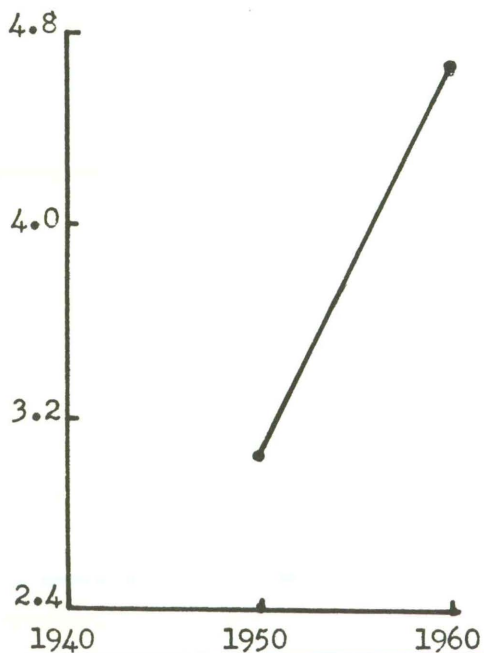
XXXIV Finance, Ins., &  
Real Estate



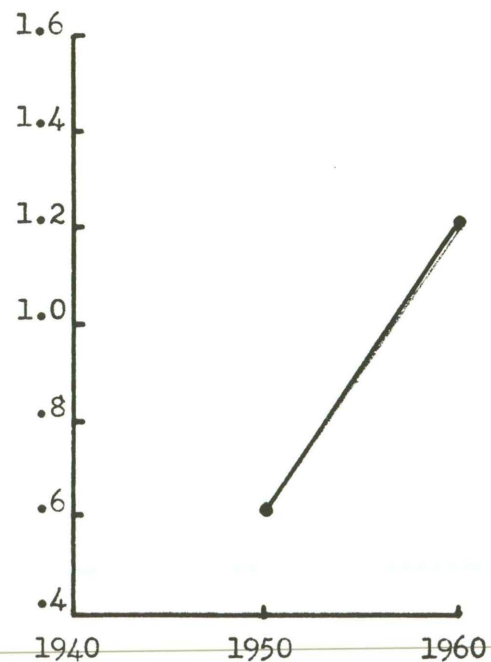
XXXV Business & Repair Service



XXXVI Educational - Gov.

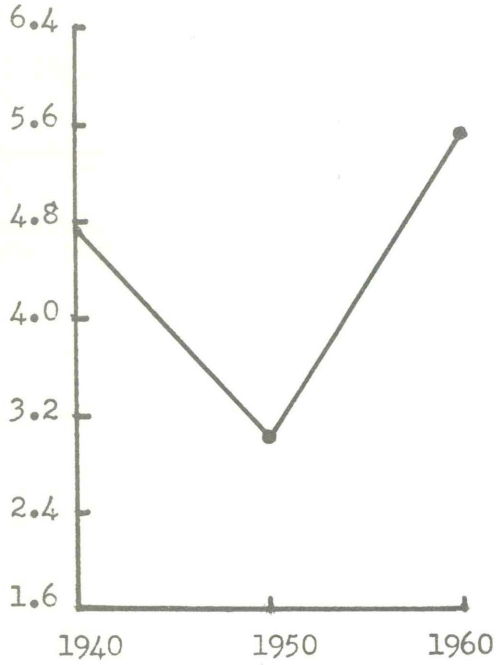


XXXVII Educational - Priv.

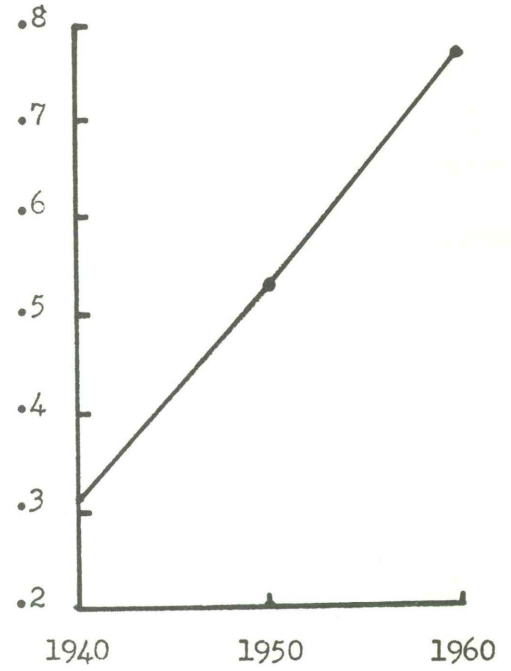


EMPLOYMENT BY MAJOR INDUSTRIAL GROUPS  
EIGHT COUNTY TOTAL - FEMALE  
( In Thousands )

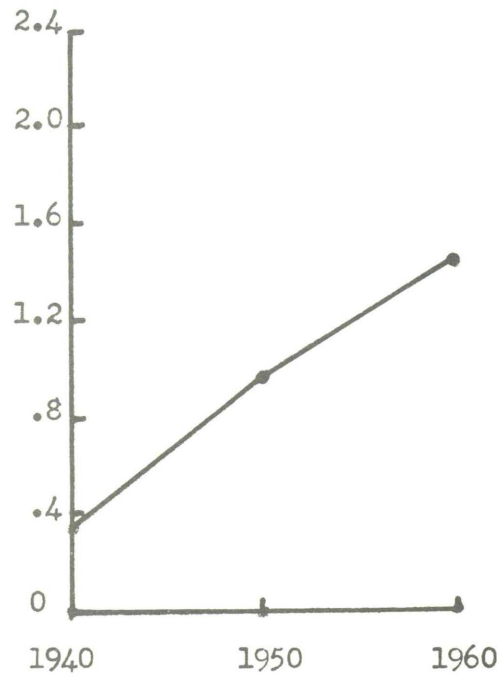
XXXVIII Other Prof. & Related Serv.



XXXIX Public Administration



XL Ind. not Reported



## MAJOR INDUSTRY DATA, 1940, 1950, 1960, AND PROJECTED 1970

### EIGHT-COUNTY TOTAL PROPORTIONAL AND PERCENTAGE CHANGES

In this section we will depict the numerical changes in the industrial groups by **proportional** and percentage changes. Tables IV-19, IV-20, IV-21 point out the industrial classifications by percentages. This type of table provides a more graphic display of the proportional changes of the industrial groups and their relative importance to the entire employment picture. Proportional changes should only be interpreted with reference to absolute numerical changes.

In 1940 agriculture was by far the most important industrial group, employing 35 per cent of the workers. However, by 1970 agriculture will account for only 13 per cent of the work force but will rank second in importance. Manufacturing will grow in importance. By 1970, it will employ nearly 26 per cent of the experienced civilian work force and be the most predominant industry.

Other significant growth industries in addition to manufacturing include retail trade, education, government, and professional and related services. Most other industries will remain stable experiencing normal growth resulting from general economic activity.

#### Percentage Changes - Male

In viewing the percentage changes of the industry group in regard to male employees, it is observed that by 1970, 30 per cent of the males will be employed in manufacturing and 16 per cent in agriculture, and 6 per cent in transportation, communication and utilities. A rank ordering of these industries is found in Table IV-21.

#### Percentage Changes - Female

Most females will work in manufacturing industries with retail trade, personal services, and agriculture following in order of importance. Other industries, in rank order for female participation, are listed in Table IV-20.

Another aspect of the changing industrial character of the eight-county region can be seen from inspecting Table IV-22. Significant increases are found in the categories of manufacturing, eating establishments, finance, real estate and insurance, and other retail trade. The most notable growth is in machinery production which, of course, employs the greatest number of manufacturing workers. Moderate growth was realized in other industries while farming and personal services show declines.



TABLE IV-19

MAJOR INDUSTRY GROUP  
 EMPLOYMENT - MALE AND FEMALE - PERCENTAGE DISTRIBUTIONS  
 AND PROPORTIONAL CHANGES 1940 - 1970 PROJECTED  
 EIGHT-COUNTY AREA

Industry	1940	1950	1960	1970	Rank Order In 1970
TOTAL EMPLOYMENT	100%	100%	100%	100%	
Agriculture, Forest & Fishing	35.0	27.7	17.6	13.0	2
Construction & Mining	4.6	5.6	5.0	5.3	6
Manufacturing	11.3	16.1	22.8	25.9	1
Transportation, Communication, and Other Utilities	6.1	5.9	4.9	4.6	7
Wholesale Trade	3.3	3.3	2.8	2.7	12
Food & Dairy Product Stores	2.8	2.5	2.2	2.1	14
Eating & Drinking Places	2.3	3.0	3.0	3.3	9
Other Retail Trade	8.5	9.5	9.7	10.1	3
Finance, Insurance & Real Estate	2.4	2.5	3.2	3.1	10
Business & Repair Services	2.2	2.5	1.7	1.7	16
Personal Services	7.1	4.7	4.8	3.8	8
Entertainment & Recreation Services	0.07	.8	.6	.6	17
Educational: Government	N/A	5.4	7.3	9.0	4
Educational: Private	N/A	.9	1.4	1.8	15
Other Professional & Related Services	9.6	5.1	7.3	8.6	5
Public Administration	2.4	2.4	2.4	2.4	13
Industries Not Reported	1.5	2.0	2.8	3.0	11

N/A - Data Not Available

\* Estimated Percentages Based Upon Data From Last Two Decades.

TABLE IV-20

MAJOR INDUSTRY GROUP  
EMPLOYMENT - MALE - PERCENTAGE DISTRIBUTIONS  
AND PROPORTIONAL CHANGES 1940 - 1970 PROJECTED  
EIGHT-COUNTY AREA

TOTAL Industry	1940	1950	1960	1970	Rank Order In 1970 Excluding Non Projected Group
TOTAL EMPLOYMENT	100%	100%	100%	100%	
Agriculture, Forest & Fishing	43.2	33.7	23.3	16.3	2
Construction & Mining	5.7	7.3	7.2	7.9	4
Manufacturing	11.9	17.8	25.2	29.8	1
Transportation, Communication & Other Utilities	6.8	6.7	6.0	5.8	5
Wholesale Trade	3.6	3.6	3.4	3.4	6
Food & Dairy Prod. Stores	2.6	2.2	2.0	1.7	9
Eating & Drinking Places	1.2	1.5	1.4	1.5	11
Other Retail Trade	7.9	8.2	9.3	9.7	3
Finance, Insurance & Real Estate	2.1	2.0	2.4	2.5	7
Business & Repair Service	2.5	3.0	2.1	2.1	8
Personal Services	2.1	2.0	1.7	1.6	10
Entertainment & Recreation Service	.6	.7	.5	.4	12
Educational: Government	N/A	3.2	5.2	*	
Educational: Private	N/A	.4	.6		
Other Professional & Related Serv.	5.1	2.9	4.0	17.3	
Public Administration	2.5	2.5	2.6		
Industries Not Reported	1.3	1.3	2.3		
N/A - Data Not Available					
* Computed as the Remaining Percentage.					

TABLE IV-21

MAJOR INDUSTRY GROUP  
 EMPLOYMENT - FEMALE - PERCENTAGE DISTRIBUTIONS  
 AND PROPORTIONAL CHANGES 1940 - 1970 PROJECTED  
 EIGHT-COUNTY AREA

Industry	1940	1950	1960	1970	Rank Order In 1970 Excluding Non Projected Group
TOTAL EMPLOYMENT	100%	100%	100%	100%	
Agriculture, Forest & Fishing	3.4	10.7	5.7	7.2	4
Construction & Mining	.3	.6	.6	.6	12
Manufacturing	9.2	11.3	17.9	18.8	1
Transportation, Communication & Other Utilities	2.9	3.5	2.5	2.6	8
Wholesale Trade	1.9	2.0	2.0	1.4	9
Food & Dairy Prod. Stores	3.2	3.4	2.8	2.8	7
Eating & Drinking Places	6.4	7.1	6.4	6.5	5
Other Retail Trade	10.6	12.7	10.6	11.0	2
Finance, Insurance & Real Estate	3.5	3.7	4.2	4.2	6
Business & Repair Service	.8	1.1	.8	.8	11
Personal Services	25.9	12.2	11.1	7.7	3
Entertainment & Recreation Serv.	.5	.8	.8	.9	10
Educational: Government	N/A	11.3	11.8	*	
Educational: Private	N/A	2.2	3.0		
Other Professional & Related Serv.	26.8	11.0	14.1	35.5	
Public Administration	1.8	1.9	1.9		
Industries Not Reported	2.2	3.6	3.7		

N/A - Data Not Available

\* Computed As the Remaining Percentage.



TABLE IV-22  
 MAJOR INDUSTRIAL CLASSIFICATIONS  
 EIGHT-COUNTY AREA - PERCENTAGE CHANGES  
 1940 - 1960

	1940 - 1950	1950 - 1960	1940 - 1960
Agriculture, Forest & Fishing	-3.3	-26.1	-28.6
Construction & Mining	+48.1	+5.4	+56.0
Manufacturing	+73.6	+64.4	+185.4
Machinery	+277.6	+167.2	+909.0
Transportation	+581.2	-34.9	+343.5
Other Durable Goods	+126.3	+22.9	+178.2
Food and Kindred	+26.6	+5.1	+33.1
Textile Mill Products	+9.4	+38.2	+51.2
Apparel & Other	-21.3	-81.5	-85.4
Other Non Durable	+11.7	+41.7	+58.4
Transportation, Communications & Other Utilities	+18.8	-3.6	+14.6
Wholesale Trade	+22.7	-1.8	+20.5
Food & Dairy Prod. Stores	+12.3	+4.5	+17.3
Eating and Drinking Places	+59.6	+16.6	+86.2
Other Retail	+35.4	+19.7	+62.0
Finance, Insurance & Real Estate	+26.1	+38.7	+74.9
Business & Repair Services	+41.6	-21.2	+11.6
Personal Services	-18.6	+18.1	-3.9
Entertainment & Recreation Services	+44.5	-8.4	+32.4
Educational: Government	*	+59.4	*
Educational: Private	*	+82.5	*
Other Professional & Related Services	*	+67.0	*
Public Administration	*	+16.9	*
Industries Not Reported	*		
*Data Not Available			

TABLE IV-23  
 EMPLOYMENT  
 CLASS OF WORKER  
 1960  
 EIGHT-COUNTY AREA

	Employment In Agriculture			Employed In Non-Agricultural Industries		
	Total	Male	Female	Total	Male	Female
	TOTAL	21,127	18,873	2,254	98,616	61,892
Private Wage & Salary Worker	3,061	2,853	208	71,794	45,161	26,633
Government Worker	29	29	- - -	16,306	8,794	7,512
Self Employed	15,410	14,813	597	9,330	7,858	1,472
Unpaid Family Worker	2,627	1,178	1,449	1,186	79	1,107

TABLE IV-24

EMPLOYMENT  
CLASS OF WORKER  
1960  
SIX-COUNTY AREA

	Employed In Agriculture			Employed In Non-Agricultural Industries		
	Total	Male	Female	Total	Male	Female
TOTAL	1,557	14,185	1,372	90,110	56,594	33,516
Private Wage & Salary Worker	2,306	2,125	181	66,270	41,777	24,493
Government Worker	29	29	- - -	15,020	8,165	6,855
Self Employed	1,673	11,277	396	17,897	6,599	1,298
Unpaid Family Worker	1,549	754	795	923	53	870



TABLE IV-25

EMPLOYMENT  
CLASS OF WORKER  
1960  
TWO-COUNTY AREA

	Employed In Agriculture			Employment In Non-Agricultural Industries		
	Total	Male	Female	Total	Male	Female
TOTAL	5,570	4,688	882	8,506	5,298	3,208
Private Wage & Salary Worker	755	728	27	5,524	3,384	2,140
Government Worker	---	---	---	1,433	1,259	174
Unpaid Family Worker	1,408	754	654	263	26	237

## SUMMARY AND CONCLUSIONS

### Data Considered

The information in this labor market study is presented in three classes: (1) eight county area - Iowa, Johnson, Cedar, Jones, Linn, Delaware, Washington, and Benton; (2) six county area - Iowa, Johnson, Cedar, Jones, Linn and Benton; (3) two county area - Delaware and Washington. An appendix provides detailed data on the most populous county, Linn.

The data yields major labor market information for 1940, 1950, 1960 and projected 1970. First, major occupations for the experienced employed were analyzed and treated for the changes which have occurred during the twenty year period between 1940 and 1960 and interpreted with a projection to 1970. Then, the information was detailed by sex for the three county classes. Next, major occupational groupings of the unemployed were reviewed in much the same manner as those for the employed. Third, the occupational information for the eight county area was contrasted with state data to ascertain comparative occupational employment growth rates. In step four, the major industries within the areas were studied to determine employment distribution by sex. Finally, major industry employment was studied in relation to proportional and percentage changes. In Appendix IV-A the class of worker, agricultural and non-agricultural for 1960 was summarized. In Appendix IV-B, a detailed occupation analysis of Linn County by sex was made. This is an important appendix and should be carefully studied.

### Assumptions

While the methods employed to treat this data are widely used, it is important that certain qualifications be understood. The projections are valid insofar as the economic growth experienced between 1940 and 1960 continues into the future. While some changes from these projections will occur, it is unlikely that they will be significant. However, if widespread recession or accelerated growth is experienced, the over-all projections will, of course, be high or low, whatever the trend may be.

### Findings

The analysis of this part of the study yields the following findings for the eight county area:

1. Total employment for the area is increasing at a rapid pace. Nearly 140,000 persons should be employed by 1970.
2. Occupations showing the most significant increases are: professions and technical; clerical and sales; operatives; and service workers.
3. Occupations showing largest declines are: farm and farm managers, farm laborers and foremen.



4. Occupations remaining fairly stable are: managers, officials and proprietors; private household workers; and laborers (except farm).
5. Male employees are increasing sharply in the following occupations: professional and technical; operatives, and craftsmen.
6. Male employees are showing modest increases in the following occupations: managers, officials and proprietors; clerical and sales; service workers.
7. The employment of male laborers is remaining relatively stable.
8. Male jobs in farming are declining at a rapid rate.
9. Female employment is rising in all occupations except private household work and shows its smallest rise in clerical and sales jobs. However, in toto, this latter category remains a significant employment outlet for women.
10. Unemployed in the eight-county area is relatively low (2.18 per cent in 1960).
11. Unemployed is highest among the unskilled and among females.
12. Farm unemployment is relatively low, but hidden in this factor is under-employment and the continuing reduction of the number of farm units.

The following findings relate to occupational changes and comparisons between the eight-county area and the state:

1. In those occupations reflecting increases, the eight-county increases have exceeded those of the state.
2. In those occupations reflecting decreases, the state decreases have exceeded those of the eight-county area.

The following relates to industrial groups:

1. Manufacturing has experienced the greatest employment growth and this trend will continue through 1970 - employing 25.9 per cent of the work force.
2. Agriculture will still be the second most important industry in the area in 1970 - employing 13 per cent of the work force.
3. Professional services will continue to grow and employ nearly 25 per cent of the work force by 1970.



4. Service industries will grow in importance.
5. Males will make up 64 per cent of the employed work force in 1970 (females 36 per cent).
6. Females will be added to the work force (both proportionately and in absolute numbers) faster than males.

Again, it is urged that Appendix B, which provides detailed information on the 1960 Linn County employed labor market, be studied in some detail.

APPENDIX IV-A

CLASS OF WORKER  
AGRICULTURE AND NON-AGRICULTURAL  
EMPLOYMENT 1960

Within the eight-county area, workers in non-agricultural employment were nearly five times as great as those employed (71,794) in non-agriculture, 98,616 - 21,127 (Table IV-23). Most of those were employed (71,794) in non-agriculture worked for wages and salaries in private industry. Government employed 16,306 workers in the non-agriculture sector while the self-employed numbered nearly 10,000. A little over 1,000 persons were unpaid family workers. In agriculture most workers (15,410) were self-employed. Those working for wages and salary and unpaid family employees were nearly the same in number.

Male workers were found to be distributed in a three-to-one ratio between non-farm and farm work - 61,892 and 18,873, respectively. The bulk of the non-farm male employees worked for private industry (45,000) as opposed to about 8,000 males distributed between government jobs and self-employment. Only 79 were unpaid family workers.

In agriculture most male employees were self-employed, (14,813) with only 29 holding government position. Some 2,800 worked on a private salary basis and nearly 1,200 were unpaid family workers.

Female employment in agriculture was only a little over 2,000 and most were unpaid family workers - working wives on the family farm. Only 600 women were self-employed farmers and 200 worked for salaries in farming. Of those females who were in non-agricultural work (36,724) most worked for private industry (26,000) while government jobs were of next importance (2,500). About 1,500 were self-employed and roughly 1,000 were unpaid family workers.

Tables IV-24 and IV-25 give data on class of worker breakdown for the two-county and six-county areas.

APPENDIX IV-B

DETAILED OCCUPATION ANALYSIS OF LINN COUNTY BY SEX  
1960

<u>Detailed Occupation</u>	<u>Male</u>	<u>Female</u>
PROFESSIONAL, TECHNICAL, AND KINDRED WORKERS	4,297	2,430
Accountants and Auditors	376	94
Actors	• • •	• • •
Airplane Pilots and Navigators	4	• • •
Architects	18	4
Artists and Art Teachers	53	36
Athletes	• • •	• • •
Authors	16	4
Chiropractors	12	• • •
Clergymen	185	13
College Presidents, Prof'rs, & Instr's (N.E.C.)	74	26
Dancers and Dancing Teachers	4	12
Dentists	105	• • •
Designers	74	12
Dietitians and Nutritionists	• • •	4
Draftsmen	281	8
Editors and Reporters	58	28
Engineers, Technical	1,154	5
Aeronautical	4	• • •
Chemical	• • •	• • •
Civil	92	• • •
Electrical	474	• • •
Industrial	210	5
Mechanical	243	• • •
Metallurgical, and Metallurgists	8	• • •
Mining	• • •	• • •
Sales	63	• • •
Not elsewhere classified	60	• • •
Entertainers (N.E.C.)	4	• • •
Farm and Home Management Advisors	• • •	• • •
Foresters and Conservationists	4	• • •
Funeral Directors and Embalmers	8	• • •
Lawyers and Judges	177	• • •
Librarians	• • •	82
Musicians and Music Teachers	84	134



<u>Detailed Occupation</u>	<u>Male</u>	<u>Female</u>
Natural Scientists	44	. . .
Agricultural Scientists	8	. . .
Biological Scientists	. . .	. . .
Chemists	20	. . .
Geologists and Geophysicists	4	. . .
Mathmaticians	. . .	. . .
Physicists	8	. . .
Miscellaneous Natural Scientist	4	. . .
Nurses, Professional	12	450
Nurses, Student Professional	. . .	220
Optometrists	19	. . .
Osteopaths	. . .	4
Personnel and Labor Relations Workers	84	19
Pharmacists	38	8
Photographers	31	8
Physicians and Surgeons	143	12
Public Relations Men and Publicity Writers	5	4
Radio Operators	28	12
Recreation and Group Workers	16	8
Religious Workers	. . .	12
Social and Welfare Workers, except group	. . .	26
Social Scientists	16	16
Economists	12	4
Psychologists	. . .	4
Statisticians and Actuaries	4	8
Miscellaneous Social Scientists	. . .	. . .
Sports Instructors and Officials	46	29
Surveyors	48	8
Teachers: Elementary Schools	107	660
Secondary Schools	220	217
Teachers (N.E.C.)	8	42
Technicians: Medical and Dental	21	117
Electrical and Electronic	300	4
Other Enginee'g & Physical Sciences	170	24
Technicians (N.E.C.)	39	16
Therapists and Healers (N.E.C.)	8	24
Veterinarians	19	. . .
Professional, Technical & Kindred Workers (N.E.C.)	184	28
FARMERS AND FARM MANAGERS	2,035	143
Farmers (Owners and Tenants)	2,024	143
Farm Managers	11	. . .
Managers, Officials, & Propr's, Exc. Farm	3,815	472
Buyers and Department Heads, Stores	233	59
Buyers and Shippers, Farm Products	12	. . .
Conductors, Railroad	68	. . .
Credit Men	40	12
Floormen and Floor Managers, Store	8	8
Inspectors, Public Administration	68	4

<u>Detailed Occupation</u>	<u>Male</u>	<u>Female</u>
Federal Public Administration and Postal Service	48	( 4
State Public Administration	8	. . .
Local Public Administration	12	. . .
Managers and Superintendents, Building	4	. . .
Officers, Pilots, Pursers, and Engineers, Ship	. . .	. . .
Officials & Administrators (N.E.C.) Public Admin.	69	12
Federal Public Administration and Postal Service	12	. . .
State Public Administration	12	4
Local Public Administration	45	8
MANAGERS, OFF'S & PROPR'S, EXC. FARM--CON.		
Officials, Lodge, Society, Union, Etc.	34	. . .
Postmasters	13	8
Purchasing Agents and Buyers (N.E.C.)	151	8
Managers, Off'ls, and Propr's (N.E.C.)--Salaried	1,937	230
Construction	103	4
Manufacturing	664	51
Transportation	85	. . .
Communications, & Utilities & Sanitary Services	94	. . .
Wholesale Trade	152	11
Retail Trade	421	77
Food and Dairy products stores	72	. . .
Eating and Drinking Places	32	. . .
Gen. Merchandise & Ltd. Price Variety Stores	44	35
Apparel and Accessories Stores	16	15
Furniture, Housefurnishings, & Equip. Stores	24	. . .
Motor Vehicles and Accessories Retailing	64	. . .
Gasoline Service Stations	48	. . .
Hardware, Farm Equip. & Bldg. Material, Ret.	73	. . .
Other Retail Trade	48	27
Banking and Other Finance	127	16
Insurance and Real Estate	115	8
Business Services	31	8
Automobile Repair Services and Garages	12	. . .
Miscellaneous Repair Services	4	. . .
Personal Services	29	3
All other Industries (incl. not reported)	100	52
Mgrs., Off'ls & Propr's (N.E.C.)--Self-Employed	1,178	131
Construction	185	8
Manufacturing	83	. . .
Transportation	24	9
Communications, & Utilities & Sanitary Services	. . .	. . .
Wholesale Trade	88	. . .



<u>Detailed Occupation</u>	<u>Male</u>	<u>Female</u>
Retail Trade	612	87
Food and Dairy Products Store	105	24
Eating and Drinking Places	130	47
Gen. Merchandise & Ltd. Price Variety Stores	12	.. .
Apparel and Accessories Stores	31	4
Furniture, Housefurnishings, & Equip. Stores	41	.. .
Motor Vehicles and Accessories Retailing	35	.. .
Gasoline Service Stations	129	.. .
Hardware, Farm Equip. & Bldgs. Material, Ret.	54	4
Other Retail Trade	75	8
Banking and Other Finance	24	.. .
Insurance and Real Estate	16	.. .
Business Services	35	4
Automobile Repair Services and Garages	24	.. .
Miscellaneous Repair Services	4	.. .
Personal Services	32	16
All Other Industries (incl. not reported)	51	7
CLERICAL AND KINDRED WORKERS	2,621	6,054
Agents (N.F.C.)	53	16
Attendants and Assistants, Library	4	16
Attendants, Physician's and Dentist's Office	5	76
Baggagemen, Transportation	4	.. .
Bank Tellers	40	67
Bookkeepers	125	791
Cashiers	33	436
Collectors, Bill and Account	16	8
Dispatchers and Starters, Vehicle	48	.. .
Express Messengers and Railway Mail Clerks	8	.. .
File Clerks	5	121
Insurance Adjusters, Examiners and Investigators	47	.. .
Mail Carriers	140	4
Messengers and Office Boys	16	19
Office Machine Operators	108	286
Payroll and Timekeeping Clerks	39	40
Postal Clerks	107	24
Receptionists	4	186
Secretaries	12	1,311
Shipping and Receiving Clerks	210	20
Stenographers	.. .	291
Stock Clerks and Storekeepers	371	109
Telegraph Messengers	8	.. .
Telegraph Operators	27	11
Telephone Operators	8	305
Ticket, Station, and Express Agents	73	17
Typists	16	459
Clerical and Kindred Workers (N.E.C.)	1,094	1,441



<u>Detailed Occupation</u>	<u>Male</u>	<u>Female</u>
SALES WORKERS	2,692	1,670
Advertising Agents and Salesmen	38	13
Auctioneers	4	• • •
Demonstrators	4	44
Hucksters and Peddlers	11	46
Insurance Agents, Brokers, and Underwriters	363	8
Newsboys	212	4
Real Estate Agents and Brokers	159	28
Stock and Bond Salesmen	28	3
Salesmen and Sales Clerks (N.E.C.)	1,873	1,524
Manufacturing	374	39
Wholesale Trade	442	17
Retail Trade	945	1,428
Other Industries (incl. not reported)	112	40
CRAFTSMEN, FOREMEN AND KINDRED WORKERS	7,543	239
Bakers	85	15
Blacksmiths	8	• • •
Boilermakers	4	• • •
Bookbinders	4	20
Brickmasons, Stonemasons, and Tile Setters	80	• • •
Cabinetmakers	17	• • •
Carpenters	684	• • •
Cement and Concrete Finishers	29	• • •
Compositors and Typesetters	123	32
Cranemen, Derrickmen, and Hoistmen	71	• • •
Decorators and Window Dressers	20	24
Electricians	263	• • •
Electrotypers and Stereotypers	4	• • •
Engravers, except Photoengravers	12	• • •
Excavating, Grading, and Road Machinery Operators	103	• • •
Foremen (N.E.C.)	1,201	44
Construction	48	• • •
Manufacturing	904	40
Metal Industries	43	• • •
Machinery, including Electrical	447	20
Transportation Equipment	16	• • •
Other durable good	37	8
Textiles, Textile Products, and Apparel	• • •	• • •
Other Nondurable Goods (incl. not spec. mfg.)	361	12
Railroads and Railway Express Service	37	• • •
Transportation, except Railroad	17	• • •
Communications, and Utilities and Sanitary Serv.	36	• • •
Other Industries (Incl. not reported)	159	4

<u>Detailed Occupation</u>	<u>Male</u>	<u>Female</u>
Forgemen and Hammermen	4	• • •
Furriers	13	• • • 8
Glaziers	12	• • •
Heat Treaters, Annealers, and Temperers	32	• • •
Inspectors, Scalers, and Graders, Log and Lumber	• • •	• • •
Inspectors (N.E.C.)	52	• • • 3
Construction	12	• • •
Railroads and Railway Express Service	28	• • •
Trans., Exc. R. R., Commun. & Other Pub. Util.	• • •	• • •
Other Industries (Incl. not reported)	12	• • • 3
Jewelers, Watchmakers, Goldsmiths, & Silversmiths	32	• • •
Job Setters, Metal	46	• • •
Linemen & Servicemen, Telegraph, T 'phone & Power	215	• • • 4
Locomotive Engineers	101	• • •
Locomotive Firemen	44	• • •
Loom Fixers	• • •	• • •
Machinists	706	• • • 4
Mechanics and Repairmen	1,784	• • • 53
Air Conditioning, Heating, and Refrigeration	44	• • •
Airplane	4	• • •
Automobile	475	• • •
Office Machine	24	• • •
Radio and Television	67	• • • 4
Railroad and Car Shop	16	• • •
Not Elsewhere Classified	1,154	• • • 49
Millers, Grain, Flour, Feed, etc.	44	• • •
Millwrights	47	• • •
Molders, Metal	37	• • •
Motion Picture Projectionists	12	• • •
Opticians, and Lens Grinders and Polishers	13	• • •
Painters, Construction and Maintenance	304	• • • 4
Paperhangers	• • •	• • • 4
Pattern and Model Makers, Except Paper	20	• • •
Photoengravers and Lithographers	17	• • • 7
Piano and Organ Tuners and Repairmen	16	• • •
Plasterers	37	• • •
Plumbers and Pipe Fitters	172	• • •
Pressmen and Plate Printers, Printing	61	• • • 5
Rollers and Roll Hands, Metal	• • •	• • •
Roofers and Slaters	39	• • •
Shoemakers and Repairers, Except Factory	27	• • • 4
Stationary Engineers	305	• • •
Stone Cutters and Stone Carvers	• • •	• • •
Structural Metal Workers	87	• • •
Tailors	13	• • • 8
Tinsmiths, Coppersmiths, and Sheet Metal Workers	229	• • •
Toolmakers, and Die Makers and Setters	217	• • •
Upholsterers	21	• • •

<u>Detailed Occupation</u>	<u>Male</u>	<u>Female</u>
Craftsmen and Kindred Workers (N.E.C.)	76	• • •
Former Members of the Armed Forces	• • •	• • •
<hr/>		
OPERATIVES AND KINDRED WORKERS	7,247	3,035
Apprentices	80	• • •
Auto Mechanics	4	• • •
Bricklayers and Masons	• • •	• • •
Carpenters	8	• • •
Electricians	16	• • •
Machinists and Toolmakers	• • •	• • •
Mechanics, Exc. Auto	• • •	• • •
Plumbers and Pipe Fitters	12	• • •
Building Trades (N.E.C.)	• • •	• • •
Metalworking Trades (N.E.C.)	12	• • •
Printing Trades	12	• • •
Other Specified Trades	8	• • •
Trade Not Specified	8	• • •
Asbestos and Insulation Workers	12	• • •
Assemblers	542	1,100
Attendants, Auto Service and Parking	317	13
Blasters and Powdermen	• • •	• • •
Boatmen, Canalmen, and Lock Keepers	• • •	• • •
Brakemen, Railroad	76	• • •
Bus Drivers	56	8
Chainmen, Rodmen and Axmen, Surveying	4	• • •
Checkers, Examiners, and Inspectors, Mfg.	305	322
Conductors, Bus and Street Railway	• • •	• • •
Deliverymen and Routemen	400	8
Dressmakers and Seamstresses, Exc. Factory	• • •	98
Dyers	• • •	• • •
Filers, Grinders, and Polishers, Metal	105	8
Fruit, Nut, & Veg. Graders & Packers, Exc. Factory	• • •	• • •
Furnacemen, Smeltermen, and Pourers	8	• • •
Graders and Sorters, Mfg.	16	8
Heaters, Metal	• • •	• • •
Knitters, Loopers, and Toppers, Textile	4	• • •
Laundry and Dry Cleaning Operatives	36	233
Meat Cutters, Exc. Slaughter and Packing House	106	4
Milliners	• • •	• • •
Mine Operatives and Laborers (N.E.C.)	16	• • •
Coal Mining	• • •	• • •
Crude Petroleum and Natural Gas Extraction	4	• • •
Mining and Quarrying, Exc. Fuel	12	• • •
Motormen, Mine, Factory, Logging Camp, Etc.	• • •	• • •
Motormen, Street, Subway, and Elevated Railway	• • •	• • •



<u>Detailed Occupation</u>	<u>Male</u>	<u>Female</u>
Oilers and Greasers, Exc. Auto	44	.. .
Packers and Wrappers (N.E.C.)	210	273
Painters, Exc. Construction and Maintenance	155	8
Photographic Process Workers	8	22
Power Station Operators	16	.. .
Sailors and Deck Hands	.. .	.. .
Sawyers	17	.. .
Sewers and Stitchers, Mfg.	5	31
Spinners, Textile	.. .	.. .
Stationary Firemen	75	.. .
Switchmen, Railroad	118	.. .
Taxicab Drivers and Chauffeurs	106	.. .
Truck and Tractor Drivers	1,012	16
Weavers, Textile	4	.. .
Welders and Flame-Cutters	629	36
Operatives and Kindred Workers (N.E.C.)	2,765	847
Manufacturing	2,492	813
Durable Goods	1,184	477
Sawmills, Planing Mills, & Misc. Wood Prod.	.. .	.. .
Sawmills, Planing Mills, and Mill Work	.. .	.. .
Miscellaneous Wood Products	.. .	.. .
Furniture and Fixtures	40	16
Stone, Clay, and Glass Products	23	4
Glass and Glass Products	8	.. .
Cement, & Concr., Gypsum, & Plaster Prod.	15	.. .
Structural Clay Products	.. .	.. .
Pottery and Related Products	.. .	4
Misc. Nonmetallic Mineral & Stone Products	.. .	.. .
Metal Industries	74	11
Primary Metal Industries	7	4
Blast Furnaces, Steel Works, and Rolling and Finishing Mills	.. .	.. .
Other Primary Iron and Steel Industries	3	.. .
Primary Nonferrous Industries	4	4
Fabr'd Metal Ind. (Incl. not Spec. Metal)	67	7
Cutlery, Hand Tools & Other Hardware	.. .	.. .
Fabricated Structural Metal Products	16	.. .
Misc. Fabricated Metal Products	51	7
Not Specified Metal Industries	.. .	.. .
Machinery, Exc. Electrical	509	11
Farm Machinery and Equipment	57	.. .
Office, Computing, and Accounting Machines	.. .	.. .
Miscellaneous Machinery	452	11
Electrical Machinery, Equipment, & Supplies	474	387
Transportation Equipment	32	8
Motor Vehicles & Motor Vehicle Equipment	32	8
Aircraft and Parts	.. .	.. .
Ship and Boat Building and Repairing	.. .	.. .
Railroad & Misc. Transportation Equipment	.. .	.. .

<u>Detailed Occupation</u>	<u>Male</u>	<u>Female</u>
Profess'1 & Photographic Equip., & Watches	. . .	16
Professional Equipment and Supplies	. . .	. . .
Photographic Equipment and Supplies	. . .	16
Watches, Clocks, & Clockwork-Oper. Devices	. . .	. . .
Miscellaneous Manufacturing Industries	32	24
<hr/>		
Nondurable Goods	1,308	332
Food and Kindred Products	1,076	247
Meat Products	545	177
Dairy Products	24	. . .
Canning & Pres. Fruits, Veg., & Sea Foods	8	. . .
Grain-Mill Products	391	28
Bakery Products	42	42
Confectionery and Related Products	. . .	. . .
Beverage Industries	28	. . .
Misc. Food Preparations & Kindred Products	35	. . .
Not Specified Food Industries	3	. . .
Operatives and Kindred Workers (N.E.C.) Con.		
Manufacturing--con.		
Nondurable Goods--Con.		
Tobacco Manufactures	. . .	. . .
Textile Mill Products	. . .	4
Knitting Mills	. . .	. . .
Dyeing & Fin. Text., Exc. Wool & Knit Gds.	. . .	. . .
Floor Covering, Exc. Hard Surface	. . .	. . .
Yarn, Thread, and Fabric Mills	. . .	4
Miscellaneous Textile Mill Products	. . .	. . .
Apparel & Other Fabricated Textile Products	. . .	. . .
Apparel and Accessories	. . .	. . .
Miscellaneous Fabricated Textile Products	. . .	. . .
Paper and Allied Products	206	52
Pulp, Paper, and Paperboard Mills	4	. . .
Paperboard Containers and Boxes	91	16
Miscellaneous Paper and Pulp Products	111	36
Printing, Publishing, and Allied Industries	10	25
Newspaper Publishing and Printing	. . .	. . .
Printing, Publishing, and Allied Industries, Exc. Newspapers	10	25
Chemicals and Allied Products	8	. . .
Synthetic Fibers	. . .	. . .
Drugs and Medicines	. . .	. . .
Paints, Varnishes, and Related Products	8	. . .
Miscellaneous Chemicals & Allied Products	. . .	. . .
Petroleum and Coal Products	. . .	. . .
Petroleum Refining	. . .	. . .
Miscellaneous Petroleum and Coal Products	. . .	. . .
Rubber and Misc. Plastic Products	8	4
Rubber Products	. . .	4
Misc. Plastic Products	8	. . .
Leather and Leather Products	. . .	. . .
Leather: Tanned, Curried, and Finished	. . .	. . .
Footwear, Exc. Rubber	. . .	. . .



<u>Detailed Occupation</u>	<u>Male</u>	<u>Female</u>
Leather Products, Exc. Footwear	• • •	• • •
Not Specified Manufacturing Industries	• • •	4
Nonmanufacturing Industries (Incl. Not Reported)	273	34
Construction	39	• • •
Railroads and Railway Express Service	28	• • •
Transportation, Exc. Railroad	• • •	4
Communications, and Utilities & Sanitary Serv.	33	• • •
Wholesale and Retail Trade	119	22
Business and Repair Services	34	• • •
Personal Services	• • •	4
Public Administration	4	• • •
All Other Industries (Incl. Not Reported)	16	4
PRIVATE HOUSEHOLD WORKERS	20	1,060
Baby Sitters, Private Household	4	528
Housekeepers, Private Household	• • •	87
Living In	• • •	50
Living Out	• • •	37
Laundresses, Private Household	• • •	30
Living In	• • •	• • •
Living Out	• • •	30
Private Household Workers (N.E.C.)	16	415
Living In	• • •	37
Living Out	16	378
SERVICE WORKERS, EXC. PRIVATE HOUSEHOLD	1,796	2,824
Attendants, Hospital and Other Institution	4	256
Attendants, Professional & Personal Serv. (N.E.C.)	8	31
Attendants, Recreation and Amusement	16	• • •
Barbers	125	12
Bartenders	49	11
Boarding and Lodging House Keepers	4	29
Bootblacks	• • •	• • •
Chambermaids and Maids, Exc. Private Household	• • •	89
Charwomen and Cleaners	70	133
Cooks, Exc. Private Household	93	380
Counter and Fountain Workers	4	132
Elevator Operators	61	47
Hairdressers and Cosmetologists	8	254
Housekeepers and Stewards, Exc. Private Household	12	100
Janitors and Sextons	498	90
Kitchen Workers (N.E.C.), Exc. Private Household	126	304
Midwives	• • •	• • •
Porters	4	• • •
Practical Nurses	• • •	109
Protective Service Workers	448	8
Firemen, Fire Protection	129	• • •
Guards, Watchmen, and Doorkeepers	180	• • •
Marshals and Constables	• • •	• • •
Policemen and Detectives	120	8
Government	104	8
Private	16	• • •



<u>Detailed Occupation</u>	<u>Male</u>	<u>Female</u>
Sheriffs and Bailiffs	7	.. .
Watchmen (Crossing) and Bridge Tenders	12	.. .
Ushers, Recreation and Amusement	.. .	4
Waiters	64	761
Service Workers, Exc. Private Household (N.E.C.)	202	74
<b>FARM LABORERS AND FOREMEN</b>	<b>533</b>	<b>237</b>
Farm Foremen	.. .	.. .
Farm Laborers, Wage Workers	376	33
Farm Laborers, Unpaid Family Workers	157	204
Farm Service Laborers, Self-Employed	.. .	.. .
<b>LABORERS, EXC. FARM AND MINE</b>	<b>2,305</b>	<b>132</b>
Carpenters, Helpers, Exc. Logging and Mining.	.. .	.. .
Fishermen and Oystermen	.. .	.. .
Garage Laborers, and Car Washers and Greasers	67	.. .
Gardeners, Exc. Farm, and Groundskeepers	123	.. .
Longshoremen and Stevedores	4	.. .
Lumbermen, Raftsmen, and Wood Choppers	8	.. .
Teamsters	.. .	.. .
Truck Drivers, Helpers	4	.. .
Warehousemen (N.E.C.)	86	4
<b>Laborers (N.E.C.)</b>	<b>2,013</b>	<b>128</b>
Manufacturing	923	87
Durable Goods	280	43
Sawmills, Planing Mills, & Misc. Wood Prod.	9	.. .
Sawmills, Planing Mills, and Mill Work	4	.. .
Miscellaneous Wood Products	5	.. .
Furniture and Fixtures	8	.. .
Stone, Clay, and Glass Products	27	.. .
Glass and Glass Products	.. .	.. .
Cement, & Concr., Gypsum, & Plaster Prod.	27	.. .
Structural Clay Products	.. .	.. .
Pottery and Related Products	.. .	.. .
Misc. Nonmetallic Mineral & Stone Prod.	.. .	.. .
Metal Industries	25	.. .
Primary Metal Industries	4	.. .
Blast Furnaces, Steel Works, and Rolling and Finishing Mills	.. .	.. .
Other Primary Iron and Steel Industries	4	.. .
Primary Nonferrous Industries	.. .	.. .
Fabr'd Metal Ind. (Incl. Not Spec. Metal)	21	.. .
Cutlery, Hand Tools, and Other Hardware	4	.. .
Fabricated Structural Metal Products	.. .	.. .
Misc. Fabricated Metal Products	17	.. .
Not Specified Metal Industries	.. .	.. .
Machinery, Exc. Electrical	112	.. .
Farm Machinery and Equipment	16	.. .
Office, Computing & Accounting Machines	.. .	.. .
Miscellaneous Machinery	96	.. .

<u>Detailed Occupation</u>	<u>Male</u>	<u>Female</u>
Electrical Machinery, Equip., & Supplies	87	39
Transportation Equipment	. . .	. . .
Motor Vehicles and Motor Vehicle Equip.	. . .	. . .
Aircraft and Parts	. . .	. . .
Ship and Boat Building and Repairing	. . .	. . .
Railroad & Misc. Transportation Equip.	. . .	. . .
Profess'l & Photographic Equip., & Watches	4	4
Professional Equipment and Supplies	. . .	. . .
Photographic Equipment and Supplies	4	4
Watches, Clocks, Clockwork-Oper. Devices	. . .	. . .
Miscellaneous Manufacturing Industries	8	. . .
 Nondurable Goods	643	44
Food and Kindred Products	607	37
Meat Products	215	24
Dairy Products	17	. . .
Canning & Pres. Fruits, Veg., & Sea Foods	. . .	. . .
Grain-Mill Products	333	9
Bakery Products	29	4
Confectionery and Related Products	. . .	. . .
Beverage Industries	4	. . .
Misc. Food Preparations & Kindred Products	9	. . .
Not Specified Food Industries	. . .	. . .
 Tobacco Manufactures	. . .	. . .
Textile Mill Products	. . .	. . .
Yarn, Thread, and Fabric Mills	. . .	. . .
Other Textile Mill Products	. . .	. . .
Apparel & Other Fabricated Textile Products	. . .	. . .
Paper and Allied Products	24	4
Pulp, Paper, and Paperboard Mills	. . .	. . .
Paperboard Containers and Boxes	16	. . .
Miscellaneous Paper and Pulp Products	8	4
Printing, Publishing, and Allied Industries.	4	. . .
 Chemicals and Allied Products	8	. . .
Synthetic Fibers	. . .	. . .
Drugs and Medicines	. . .	. . .
Paints, Varnishes, and Related Products	4	. . .
Miscellaneous Chemicals & Allied Products	4	. . .
Petroleum and Coal Products	. . .	. . .
Petroleum Refining	. . .	. . .
Miscellaneous Petroleum and Coal Products	. . .	. . .
Rubber and Misc. Plastic Products	. . .	3
Leather and Leather Products	. . .	. . .
Not Specified Manufacturing Industries	. . .	. . .
 Nonmanufacturing Industries (Incl. Not Rptd.)	1,090	41
Construction	405	8
Railroads and Railway Express Service	63	. . .
Transportation, Exc. Railroad	46	. . .
Communications, & Utilities & Sanitary Serv.	73	. . .
Wholesale and Retail Trade	387	13
Business and Repair Services	. . .	. . .

Detailed Occupation

Male

Female

Personal Services

36

16

Public Administration

12

. . .

All Other Industries (Incl. Not Reported)

68

4

Occupation Not Reported

1,430

1,064





## CHAPTER V

### FINANCIAL RESOURCES

---

It is the purpose of this chapter to examine the financial resources of the eight county school systems in Area X. A comparison of selected financial data is presented in Table V-1. A more detailed treatment of the data is to be found in Table V-2 through Table V-4. The summary statements which follow are based on an examination of the data.

#### ASSESSED VALUATION

Total assessed valuation of Area X, as determined in 1964, was \$623,259,178, an amount equal to 11.3 per cent of the assessed valuation of the State of Iowa. Linn County, with an assessed valuation of \$276,966,277, accounts for 44.4 per cent of the total of Area X. Delaware County's assessed valuation, lowest in Area X, is \$36,371,248, or 5.8 per cent of the Area X total.

#### FINANCING ABILITY

The requirements for financing an area vocational program have not been clearly defined at the time of preparing this proposal. Standards governing the operation, staffing, and equipping of an area vocational school, as well as needs not yet known for specific vocational programs, will all have a bearing on the costs of providing vocational education for Area X. It is of value, however, to note that the assessed valuation of Area X could yield tax revenues as follows:

. . . 1 mill of tax on \$623,259,178 would yield	\$ 623,259
. . . 2 mills of tax on \$623,259,178 would yield	\$1,246,518
. . . 3 mills of tax on \$623,259,178 would yield	\$1,869,777

#### VALUATION PER PUPIL

The assessed valuation per pupil in average daily attendance is considered by many to be a reasonably accurate measure of a school district's ability to finance education. Area X would have an assessed valuation of \$9,524 per child in average daily attendance. Benton, Cedar, Iowa, and Washington Counties have assessed valuations per child in average daily attendance exceeding \$10,000. Linn and Delaware County valuations exceed \$9,000 per child, and Johnson and Jones Counties are slightly below \$9,000 per child as shown in Table V-1.

## BONDING CAPACITY

Current bonded indebtedness of the eight county school systems is \$37,046,935. With a taxable valuation of \$623,259,178, and with monies and credits listings exceeding \$196 million, Area X would have a bonding capacity of nearly \$25 million remaining.

## TAX LEVIES

Average county school tax levies, in mills, for Area X for 1965 vary from a low of 42.7 mills in Washington County to a high of 59.6 in Linn County. Levies for local school districts within a given county will tend to show greater variation.

## SUMMARY

Area X would appear to have adequate financial resources to support a vocational education program. The assessed valuation of Area X, \$623 million, is more than four times the figure of \$150 million suggested in the criteria identified in Chapter I as a minimum assessed valuation needed for support of an area vocational school. Adequate bonding capacity remains in the area for contemplated building needs.



TABLE V-1

A COMPARISON OF SELECTED FINANCIAL  
DATA FOR AREA X

	Benton	Cedar	Delaware	Iowa	Johnson	Jones	Linn	Washington
Assessed Val. (In Millions)	57.679	50.781	36.371	44.638	76.266	39.862	276.966	40.694
Monies & Credits Inc. Bldg. and Loan (In Millions)	8.443	9.395	5.531	8.755	25.094	9.174	118.358	11.790
Resident ADA (1963-64)	5400	4734.6	3767	4224	8671	4493	30,126	4013
Assessed Val. per child in ADA	10,681	10,725	9,654	10,567	8,795	8,872	9,193	10,142
Remaining Bonding Capacity (In Millions)	3.334	2.483	2.396	1.334	3.331	2.165	8.126	1.550
Average County School Tax Levy In Mills(1965)	46.13	44.11	47.0	43.76	56.8	54.86	59.6	42.7

TABLE V-2

ASSESSED VALUATIONS BY COUNTY SCHOOL SYSTEMS FOR AREA X TOTAL AND PER PUPIL							
SCHOOL DISTRICT	1964 Real & Pers. Property Assessed Val. (1)	1964 School Census (5-21) (2)	Av. Val. per Census Child (3)	1963-64 ADA (Res.) (4)	Av. Val. per Res. Child in ADA (5)	No. Res. Pupils Enrolled 1963-64 (6)	Av. Val. per Res. Child Enrolled (7)
Benton	57,679,341	7,096	8,128	5,400.0	10,681	5,672	10,169
Cedar	50,781,499	5,848	8,683	4,734.6	10,725	5,288	9,603
Iowa	44,638,432	5,490	8,130	4,224.0	10,567	4,473	9,979
Johnson	76,266,426	13,197	5,552	8,671.9	8,795	9,693	7,868.19
Jones	39,862,085	6,168	6,462	4,493.0	8,872	4,880	8,168.46
Linn	276,966,277	43,606	6,351	30,126.7	9,193	34,050	8,134
TOTAL(6 Cos.)	546,194,060	81,405	6,709	57,657.2	9,473	64,056	8,529
Delaware	36,371,248	5,947	6,115	3,767.4	9,654	4,124	8,819
Washington	40,693,870	5,026	8,097	4,012.6	10,142	4,147	9,813
TOTAL(8Cos.)	623,259,178	92,378	6,747	65,437.2	9,524	72,327	8,617

BONDING LIMITS AND PRESENT BONDED INDEBTEDNESS BY COUNTY SCHOOL SYSTEMS FOR AREA X

SCHOOL DISTRICT	Area Square Miles (1)	1964 Real & Pers. Prop. Assessed Val. 60% * (2)	Valuation 100% (3)	1964 Monies & Credits Plus B & L (4)	Total Valuation (5)	Limit of Bonded Indebt. (6)	Bonded Indebt. 6-30-64 (7)	Bonds Voted After 6-30-64 (8)	Additional Bonding Capacity (9) **
Benton	702.8	57,679,341	96,132,235	8,442,970	104,575,205	5,228,760	1,895,000	-----	3,333,760
Cedar	624.8	50,781,499	84,635,831	9,395,359	94,031,190	4,701,559	2,219,000	-----	2,482,559
Iowa	679.7	44,638,432	74,397,386	8,755,103	83,152,489	4,157,624	2,418,000	406,000	1,333,624
Johnson	545.2	76,266,426	127,110,711	25,094,407	152,205,118	7,610,256	4,139,000	140,000	3,331,256
Jones	564.6	39,862,085	66,436,807	9,174,805	75,611,612	3,780,581	1,615,500	-----	2,165,081
Linn	821.6	276,966,277	461,610,454	118,358,341	579,968,795	28,998,436	20,358,400	514,000	8,126,036
TOTAL (6 Cos.)	3,938.7	546,194,060	910,323,433	179,220,985	1,089,544,418	54,477,220	32,644,900	1,060,000	20,772,316
Delaware	576.5	36,371,248	60,618,746	5,530,933	66,149,679	3,307,484	911,000	-----	2,396,484
Washington	465.9	40,693,870	67,823,116	11,789,961	79,613,077	3,980,654	2,431,035	-----	1,549,619
TOTAL (8 Cos.)	4,981.1	623,259,178	1,038,765,296	196,541,879	1,235,307,175	61,765,354	35,986,935	1,060,000	24,718,419
*Including tax free lands **Payments made on bonded indebtedness since 6-30-64 are not reflected in this column.									

5-A



TABLE V-4

AVERAGE TAX LEVIES FOR 1964, PAYABLE 1965  
BY COUNTY SCHOOL SYSTEMS FOR AREA X

SCHOOL DISTRICT	1964 Census (5-21)	1964 Real & Pers. Prop. Assessed Val. (Millions)	Gen'l. Fund Income From M & C, '64 Tax	1964 Property Tax Levy for Schools, Payable in 1965							
				General Fund		School-house Fund		Special Courses Fund		Total Levy	
	(1)	(2)	(3)	Dollars (4) (Millions)	Mills (5)	Dollars (6)	Mills (7)	Dollars (8)	Mills (9)	Dollars (10) (Millions)	Mills (11)
Benton	7,096	57.679	19,862	2,458	42.4	208,643	3.69	---	---	2,666	46.13
Cedar	5,848	50.781	23,484	2,028	39.9	209,344	4.12	4,531	.09	2,242	44.11
Iowa	5,490	44.638	22,332	1,760	39.4	192,500	4.31			1,953	43.76
Johnson	13,197	76.266	61,542	3,888	50.9	412,379	5.41	38,020	.498	4,338	56.80
Jones	6,168	39.862	22,076	1,983	49.7	176,555	4.42	27,800	.697	2,187	54.86
Linn	43,606	276.966	243,065	14,046	50.7	2,288,148	8.26	157,400	.568	16,491	59.6
TOTAL (6 Cos.)	81,405	546.194	392,361	26,163	47.8	3,487,569	6.38	227,751	.416	29,878	54.7
Delaware	5,947	36.371	6,880	1,540	42.3	134,975	3.71	37,082	1.019	1,712	47.0
Washington	5,026	40.694	28,034	1,534	37.7	205,713	5.05	---	---	1,739	42.7
TOTAL (8 Cos.)	92,378	623.259	427,275	29,236	46.9	3,828,257	6.14	264,833	.424	33,329	53.4

## CHAPTER VI

### PUBLIC, PRIVATE, AND PAROCHIAL HIGH SCHOOL ENROLLMENTS IN AREA X

---

#### NUMBER OF HIGH SCHOOLS AND ENROLLMENTS

Fifty-nine public and parochial high schools of Area X enrolled 21,439 students in September, 1964. Fifty of the fifty-nine high schools are public and nine are parochial. There are no private high schools in Area X. A summary of the number and type of high schools, high school enrollments, and twelfth grade enrollments by county is shown in Table VI-1.

Approximately 5,000 twelfth grade students are enrolled in the high schools of Area X. The number of twelfth grade students alone equals the number suggested as a minimum total high school enrollment for an area planning a vocational school.

A complete listing of the high schools by county is given in Table VI-2.

#### SIZE OF HIGH SCHOOL ENROLLMENTS

The existing high schools (grades 9-12) of Area X vary in size from an enrollment of six in the smallest high school to 3,212 in the largest. Only ten of the fifty-nine high schools enrolled 500 or more students for the 1964-65 school year. Twenty-four high schools enrolled fewer than 200 students, and seven of these schools enrolled fewer than 100 students. A classification of the high schools by size of enrollment is shown in Table VI-3.





TABLE VI-1 SUMMARY

NUMBER AND TYPE OF HIGH SCHOOLS, HIGH SCHOOL ENROLLMENTS, AND  
TWELFTH GRADE ENROLLMENTS IN AREA X

Counties	Type		High School Enrollment (9-12)1964-65		12th Grade Enrollment 1964-65	
	Public	Parochial	Public	Parochial	Public	Parochial
Benton	7	0	1731	0	437	0
Cedar	7	2	1460	70	363	13
Iowa	6	0	1337	0	342	0
Johnson	5	2	2252	682	559	165
Jones	5	1	1452	103	328	23
Linn	14	3	8579	1277	1991	278
Total (6 Cos.)	44	8	16811	2132	4020	479
Delaware	3	1	1184	94	278	0
Washington	3	0	1263	0	296	0
Total (2 Cos.)	6	1	2447	94	574	0
Grand Total (8 Cos.)	50	9	19258	2226	4594	479

TABLE VI-2

NUMBER, NAME, AND TYPE OF HIGH SCHOOLS, HIGH SCHOOL ENROLLMENTS, AND  
TWELFTH GRADE ENROLLMENTS IN AREA X BY COUNTY  
SEPTEMBER, 1964

High Schools	Type		High School Enrollment (9-12)		12th Grade Enrollment	
	Public	Parochial	Public	Parochial	Public	Parochial
<u>BENTON COUNTY</u>						
1. Belle Plaine Comm.	x		298		79	
2. Benton Comm.	x		470		119	
3. Garrison Cons.	x		74		19	
4. Norway Cons.	x		162		47	
5. Shellsburg Cons.	x		173		38	
6. Urbana Cons.	x		88		21	
7. Vinton Comm.	x		466		114	
Total for County	7	0	1731	0	437	0
<u>CEDAR COUNTY</u>						
1. Bennett Comm.	x		167		41	
2. Clarence Comm.	x		131		27	
3. Durant Comm.	x		201		52	
4. Lincoln Comm.	x		195		47	
5. Lowden Cons.	x		105		30	
6. Tipton Comm.	x		387		103	
7. West Branch Comm.	x		274		63	
8. Scattergood School		x		64		13
9. Tipton Christian Day School		x		6		0
Total for County	7	2	1460	70	363	13
<u>DELAWARE COUNTY</u>						
1. Edgewood-Colesburg	x		235		52	
2. Maquoketa Valley Comm.	x		305		70	
3. West Delaware Co. Comm.	x		644		156	
4. St. Patrick's Ryan		x		94		28
Total for County	3	1	1184	94	278	28

Table VI-2 Cont.

High Schools	Type		High School Enrollment (9-12)		12th Grade Enrollment	
	Public	Parochial	Public	Parochial	Public	Parochial
<u>IOWA COUNTY</u>						
1. Amana Twp.	x		96		22	
2. Deep River-Millersburg Comm.	x		102		27	
3. English Valley Comm.	x		255		71	
4. H.L.V. Comm.	x		238		57	
5. Iowa Valley Comm.	x		270		76	
6. Williamsburg Comm.	x		376		89	
Total for County	6	0	1337	0	342	0
<u>JOHNSON COUNTY</u>						
1. Clear Creek Comm.	x		177		47	
2. Iowa City Comm.	x		1475		365	
3. Lone Tree Comm.	x		215		52	
4. Solon Comm.	x		133		34	
5. University H. S.	x		252		61	
6. Regina H. S.	x	x		477		113
7. Ia. Mennonite-Kalona		x		205		52
Total for County	5	2	2252	682	559	165
<u>JONES COUNTY</u>						
1. Anamosa Comm.	x		539		117	
2. Midland Comm.	x		228		44	
3. Monticello Comm.	x		426		109	
4. Olin Consol.	x		156		27	
5. Oxford Junction Cons.	x		103		31	
6. Sacred Heart - Monticello		x		103		23
Total for County	5	1	1452	103	328	23



Table VI-2 Cont.

High Schools	Type		High School Enrollment (9-12)		12th Grade Enrollment	
	Public	Parochial	Public	Parochial	Public	Parochial
<u>LINN COUNTY</u>						
1. Alburnett Comm.	x		156		30	
2. Cedar Rapids, Jefferson	x		2489		601	
3. Cedar Rapids, Washington	x		3212		734	
4. Center Point Cons.	x		184		35	
5. Central City Comm.	x		255		60	
6. Coggon Comm.	x		177		44	
7. College Comm.	x		500		111	
8. Linn-Mar Comm.	x		299		63	
9. Lisbon Comm.	x		115		31	
10. Marion Ind.	x		562		138	
11. Mt. Vernon Comm.	x		304		61	
12. Springville Comm.	x		190		45	
13. Troy Mills Cons.	x		80		18	
14. Walker Cons.	x		100		20	
15. Cono Christian		x		16		5
16. La Salle H. S., Cedar Rapids		x		460		109
17. Regis H. S., Cedar Rapids		x		801		164
Totals for County	14	3	8579	1277	1991	278
<u>WASHINGTON COUNTY</u>						
1. Highland Comm.	x		222		42	
2. Mid-Prairie Comm.	x		339		74	
3. Washington Comm.	x		702		175	
Totals for County	3	0	1263	0	291	0

TABLE VI-3

CLASSIFICATION OF HIGH SCHOOLS OF AREA X BY SIZE  
OF ENROLLMENT, 1964-65

Enrollment	Benton	Cedar	Del- aware	Iowa	Johnson	Jones	Linn	Wash- ington	Totals
1 - 24		1					1		2
25 - 49									0
50 - 74	1	1							2
75 - 99	1		1	1			1		4
100 - 149		2		1	1	2	2		8
150 - 199	2	2			1	1	4		10
200 - 299	1	2	1	3	3	1	2	1	14
300 - 399		1	1	1			1	1	5
400 - 499	2				1	1	1		5
500 - 599						1	2		3
600 or more			1		1		3	1	6
Totals	7	9	4	6	7	6	17	3	59





CHAPTER VII

ELEMENTARY AND SECONDARY SCHOOL ENROLLMENT TRENDS

Education in Area X is big, whether measured by the number of children served, the personnel employed, the facilities used, or the money expended. This chapter considers the student resources of the eight county school systems of Area X, that is, the number of children served in the Area.

Elementary and secondary students of Area X are served by two types of school systems, the public schools operated by school districts, and the non-public schools which are most commonly church supported. For purposes of this presentation, enrollments in the two types of school systems have been combined. The totals do not include students enrolled in Special Education classes.

PRESENT STUDENT RESOURCES

In September, 1964, 78,699 students were enrolled in the elementary and secondary schools of Area X. Enrollments of the eight counties for the 1964-65 school year, as reported by the county superintendents, are shown in Table VII-1. Linn County schools enrolled 38,316 students, or 48.7 per cent of the total elementary and secondary enrollments in Area X. Linn and Johnson Counties together enrolled 63 per cent of the total. The remaining six counties had enrollments which ranged from slightly more than 4,000 to slightly less than 6,000.

TABLE VII-1  
PUBLIC, PRIVATE, AND PAROCHIAL SCHOOL  
ENROLLMENTS IN AREA X  
1964-65

County	Total Enrollment* 1964-65	Per Cent of Area X Enrollment
Benton	5,991	7.6
Cedar	5,073	6.4
Iowa	4,327	5.5
Johnson	11,533	14.8
Jones	5,305	6.7
Linn	38,316	48.7
Six County Sub-Total	70,546	89.7
Delaware	4,049	5.1
Washington	4,104	5.2
Two County Sub-Total	8,153	10.3
Grand Total	78,699	100

\*Exclusive of Special Education

## TEN-YEAR ENROLLMENT TRENDS

Enrollment trends for the ten-year period 1955-56 to 1964-65 by grade and by county are presented in Table VII-2 through Table VII-11. The ten-year enrollment trends for all of the eight county school systems are summarized in Plate VII-1.

An analysis of the data reveals that there has been a continuous increase in the number of elementary and secondary school students in Area X. There were approximately 60,000 students enrolled in grades K-12 in Area X in the 1955-56 school year. This figure increased by over 18,000 students during the ten-year period under study to a total of slightly less than 79,000 in September, 1964. The increase represents a growth of 26.9 per cent.

Most of the enrollment increase in Area X for the ten-year period may be attributed to increases in Linn and Johnson Counties. In fact, several of the remaining counties experienced a decrease in their total elementary and secondary school enrollments.

## COMPARISON OF IOWA AND AREA X ENROLLMENT TRENDS

A comparison of the enrollment trends for the State of Iowa and Area X for the same ten-year period indicates that Area X's growth is appreciably higher than that of the State as a whole.

As shown in Table VII-12, the total elementary and secondary school enrollments for the State of Iowa increased 20 per cent from 1955-56 to 1964-65. In comparison, the increase for Area X was 26.9 per cent. In only the first year of the ten-year period did the rate of increase for the state exceed that of Area X. In one other year, 1962-63, both had similar rates of increases in enrollments of 1.5 per cent. Area X exceeded the rate of increase for the state in each of the other eight years of the ten-year period for which enrollment trends have been compared.

Of significance is the fact that the rate of increase for Area X for the last five years appreciably exceeds that of the state as a whole. Area X experienced a 14.7 per cent increase in elementary and secondary school enrollments since the 1960-61 school year as compared to a 9.8 per cent increase for the State of Iowa.

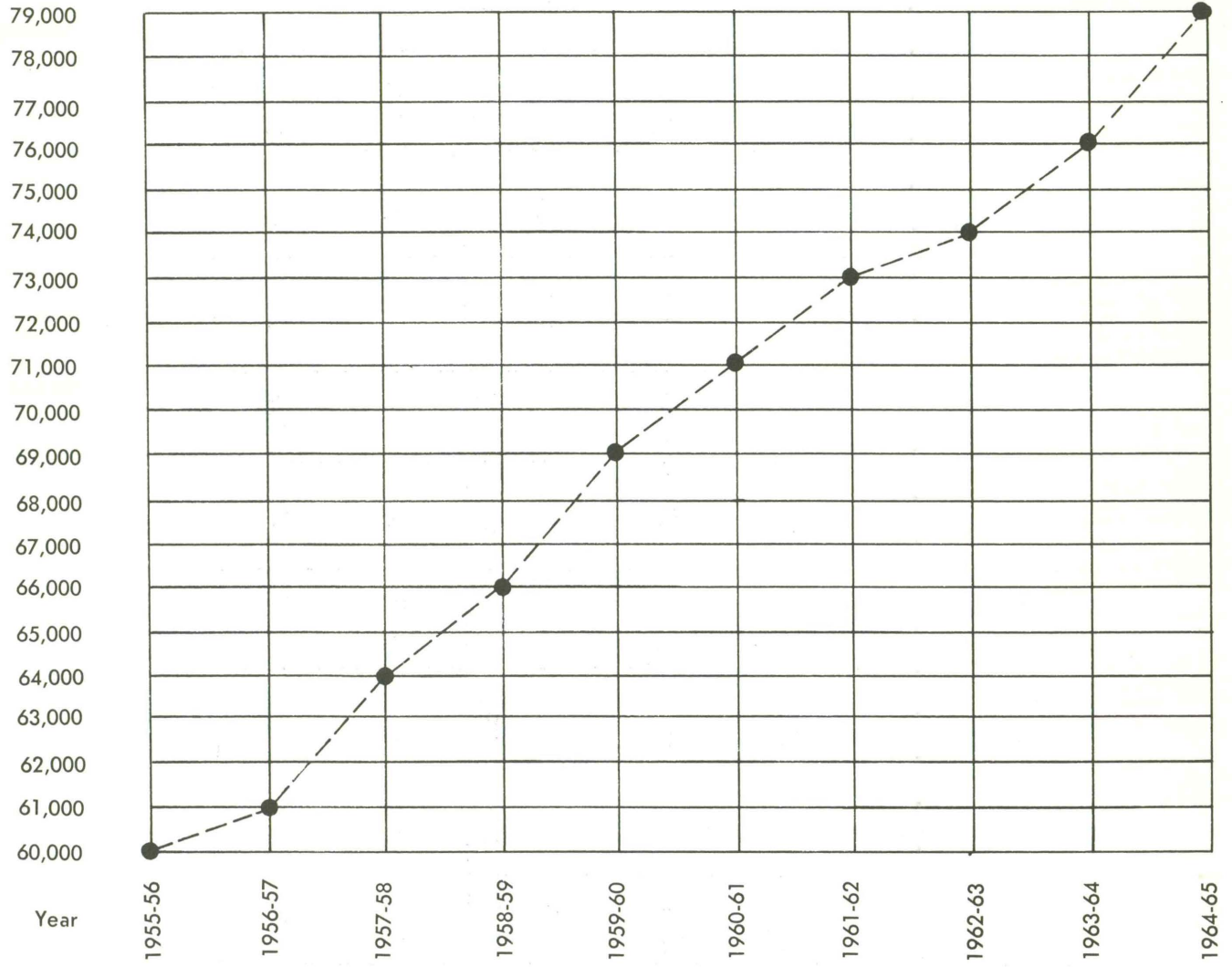
### \*Note:

Projected enrollments for the eight county school systems are presented in Chapter XI: Potential Enrollment For Vocational Education For Area X.



Total Public, Private and Parochial School Enrollments\* in Area X  
1955-56 to 1964-65

Enrollments  
to nearest  
thousands



\*Exclusive of Special Education



Student Enrollment - 8-County Area - 1955 - 1956 Table VII-2

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	520	547	546	550	446	413	417	406	393	370	355	337	335	
Cedar	355	433	378	427	320	311	318	315	299	300	231	256	237	
Iowa	262	397	324	329	284	237	232	249	244	242	230	223	188	
Johnson	668	1177	820	853	757	580	633	578	552	478	425	412	348	
Jones	250	669	491	431	393	337	301	377	386	307	282	242	257	
<b>Linn</b>	2557	2698	2566	2500	2096	1759	1804	3540	1984	1662	1489	1247	1152	
6-County Sub total	4612	5921	5125	5090	4296	3637	3705	5465	3858	3359	3012	2717	2517	53314
Delaware	295	361	321	269	236	231	232	253	258	231	221	193	175	
Washington	315	265	295	378	372	298	312	318	316	273	274	228	205	
2-County Sub total	610	626	616	647	608	529	544	571	574	504	495	421	380	7125
<b>Grand Total</b>	5222	6547	5741	5737	4904	4166	4249	6036	4432	3863	3507	3138	2897	60439

7-III

Student Enrollment - 8-County Area - 1956 - 1957 Table VII-3

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	497	470	466	476	486	392	353	374	363	377	343	336	311	
Cedar	420	385	447	380	424	335	308	299	308	283	299	223	236	
Iowa	327	410	345	331	359	291	259	263	265	247	240	232	209	
Johnson	742	1178	883	787	852	713	563	634	587	527	471	402	395	
Jones	312	592	464	484	415	391	338	304	360	267	298	266	228	
Linn	2955	2742	2620	2562	2428	2047	1753	1802	1805	1978	1570	1331	1192	
6-County Sub total	5253	5777	5225	5020	4964	4169	3574	3676	3688	3679	3221	2790	2571	53607
Delaware	321	340	307	322	257	235	230	224	238	276	214	210	172	
Washington	294	293	270	373	358	367	279	292	309	294	256	251	210	
2-County Sub-total	615	633	577	695	615	602	509	516	547	570	470	461	382	7192
Grand Total	5868	6410	5802	5715	5579	4771	4083	4192	4235	4249	3691	3251	2953	60799

S-VII-5

Student Enrollment - 8-County Area - 1957-1958 Table VII-4

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	508	501	455	455	455	474	387	340	376	402	369	319	310	
Cedar	415	467	386	423	395	415	333	309	299	306	296	280	218	
Iowa	242	513	339	350	341	362	308	259	269	257	251	233	227	
Johnson	770	1224	877	840	770	848	695	557	609	577	512	456	387	
Jones	329	639	454	469	476	408	407	336	300	358	347	282	245	
Linn	2933	3015	2699	2587	2500	2491	2081	1772	1802	1829	1869	1501	1285	
6-County Sub total	5197	6359	5210	5124	4937	4998	4211	3573	3655	3729	3644	3071	2672	56380
Delaware	337	359	304	282	309	263	211	228	227	255	257	200	200	
Washington	331	452	362	397	357	340	347	278	292	301	293	250	238	
2-County Sub total	668	811	666	679	666	603	558	506	519	556	550	450	438	7670
Grand Total	5865	7170	5876	5803	5603	5601	4769	4079	4174	4285	4194	3521	3110	64050

9-III



Student Enrollment - 8-County Area - 1958 - 1959 Table VII-5

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	448	520	501	452	440	460	470	387	342	400	387	354	306	
Cedar	384	427	471	387	433	398	408	330	315	289	292	276	263	
Iowa	350	429	368	338	337	335	364	315	260	286	265	252	222	
Johnson	889	1188	944	869	832	755	816	670	540	621	564	459	436	
Jones	328	591	443	425	452	450	403	405	323	276	345	325	252	
Linn	2926	3043	2944	2696	2553	2477	2450	2092	1748	1673	1632	1648	1305	
6-County Sub total	5325	6198	5671	5167	5047	4875	4911	4199	3528	3545	3485	3314	2784	58049
Delaware	342	380	296	285	274	307	253	211	219	242	246	236	187	
Washington	343	453	370	359	390	337	335	364	272	286	289	273	232	
2-County Sub total	685	833	666	644	664	644	588	575	491	528	535	509	419	7781
Grand Total	6010	7031	6337	5811	5711	5519	5499	4774	4019	4073	4020	3823	3203	65830

VII-7

Student Enrollment - 8-County Area - 1959 - 1960 Table VII-6

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	576	543	568	561	510	471	527	527	432	369	366	357	317	
Cedar	376	382	430	452	378	422	375	407	317	309	289	270	253	
Iowa	346	382	385	356	337	324	334	374	306	267	274	258	238	
Johnson	924	1276	964	939	856	800	732	818	643	555	580	531	441	
Jones	411	443	440	430	416	420	450	383	388	329	281	332	312	
Linn	3092	3158	2919	2904	2644	2530	2496	2462	2150	1722	1749	1563	1521	
6-County Sub total	5725	6184	5706	5642	5141	4967	4914	4971	4136	3551	3539	3311	3082	60869
Delaware	366	320	314	289	259	260	292	242	197	233	217	224	224	
Washington	409	397	372	353	346	373	336	336	344	255	267	274	256	
2-County Sub-total	775	717	686	642	605	633	628	578	541	488	484	498	480	7755
Grand Total	6500	6901	6392	6284	5746	5600	5542	5549	4677	4039	4023	3809	3562	68624

8-IIA

Student Enrollment - 8-County Area - 1960 - 1961 Table VII-7

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	480	530	466	481	476	446	418	471	470	408	348	360	329	
Cedar	376	399	379	417	445	372	413	362	411	322	309	271	250	
Iowa	421	380	344	376	366	348	334	341	372	327	274	269	250	
Johnson	923	1161	1002	923	926	792	785	720	780	657	548	565	505	
Jones	426	414	423	438	421	405	424	435	370	372	310	271	325	
Linn	3268	3224	3157	2962	2870	2692	2564	2572	2489	2119	1693	1646	1444	
6-County Sub total	5894	6108	5771	5597	5504	5055	4938	4901	4892	4205	3482	3382	3103	62832
Delaware	365	285	294	303	292	243	258	269	241	221	219	206	212	
Washington	426	385	362	348	359	339	364	345	325	353	261	266	274	
2-County Sub total	791	670	656	651	651	582	622	614	566	574	480	472	486	7815
Grand Total	6685	6778	6427	6248	6155	5637	5560	5515	5458	4779	3962	3854	3589	70647

6-11A



Student Enrollment - 8-County Area - 1961 - 1962 Table VII-8

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	523	491	511	464	477	462	438	387	429	488	417	343	356	
Cedar	414	399	403	372	412	452	359	409	355	395	302	288	264	
Iowa	374	433	336	347	354	351	336	341	317	377	300	245	248	
Johnson	1071	1112	1009	997	920	886	788	779	730	785	644	511	536	
Jones	392	454	415	427	412	411	409	420	437	375	356	301	257	
Linn	3278	3338	3208	3098	2870	2862	2695	2599	2577	2430	2048	1604	1520	
6-County Sub total	6052	6227	5882	5705	5445	5424	5025	4935	4845	4850	4067	3292	3181	64930
Delaware	424	350	318	348	335	332	272	304	317	319	259	231	204	
Washington	372	405	357	344	361	342	331	350	334	326	334	231	244	
2-County Sub total	796	755	675	692	696	674	603	654	651	645	593	462	448	8344
Grand Total	6848	6982	6557	6397	6141	6098	5628	5589	5496	5495	4660	3754	3629	73274

VII-10

Student Enrollment - 8-County Area - 1962 - 1963 Table VII-9

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	472	534	490	500	467	498	490	436	392	510	473	409	325	
Cedar	421	422	398	409	353	412	443	346	412	361	375	292	272	
Iowa	362	377	392	321	341	354	333	326	325	346	380	281	247	
Johnson	906	1067	913	928	928	852	851	769	747	698	763	624	493	
Jones	420	409	424	415	399	406	421	423	393	429	358	341	305	
Linn	3176	3357	3256	3131	2981	2871	2788	2701	2544	2519	2354	1912	1518	
6-County Sub total	5757	6166	5873	5704	5469	5393	5326	5001	4813	4863	4703	3859	3160	66087
Delaware	417	342	315	313	354	325	310	276	309	329	313	243	211	
Washington	353	356	327	347	325	346	317	320	334	350	316	312	208	
2-County Sub total	770	698	642	660	679	671	627	596	643	679	629	555	419	8268
Grand Total	6527	6864	6515	6364	6148	6064	5953	5597	5456	5542	5332	4414	3579	74355

VI-11

Student Enrollment - 8-County Area - 1963 - 1964 Table VII-10

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	454	496	529	465	504	465	485	458	430	441	472	457	380	
Cedar	379	434	415	387	395	347	407	438	355	417	350	364	269	
Iowa	349	332	365	378	329	344	352	340	333	353	330	362	273	
Johnson	866	1081	980	936	915	908	855	850	745	759	726	735	597	
Jones	416	443	406	416	431	388	403	436	319	392	418	362	324	
Linn	3176	3286	3313	3199	3078	3047	2835	2846	2696	2524	2482	2337	1917	
6-County Sub total	5640	6072	6008	5781	5652	5499	5337	5368	4878	4886	4778	4617	3760	68276
Delaware	410	328	315	297	296	331	307	302	256	316	324	295	224	
Washington	359	303	314	304	320	302	317	307	312	337	306	298	289	
2-County Sub total	769	631	629	601	616	633	624	609	568	653	630	593	513	8069
Grand Total	6409	6703	6637	6382	6268	6132	5961	5977	5446	5539	5408	5210	4273	76345

VII-12



Student Enrollment - 8-County Area - 1964 - 1965 Table VII-11

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	487	483	481	504	466	484	446	450	459	455	404	435	437	
Cedar	439	403	425	397	379	381	355	401	434	347	411	339	363	
Iowa	364	314	303	345	374	296	327	342	325	349	329	317	342	
Johnson	1069	1093	1004	964	917	914	882	862	861	791	756	688	732	
Jones	415	429	420	403	414	424	387	422	434	407	409	389	352	
Linn	3666	3293	3249	3297	3125	3074	3034	2890	2832	2686	2496	2405	2269	
6-County Sub total	6440	6015	5882	5910	5675	5573	5431	5367	5345	5035	4805	4573	4495	70546
Delaware	412	314	319	308	299	289	320	300	304	297	309	300	278	
Washington	345	318	291	310	310	317	310	330	310	328	335	304	296	
2-County Sub total	757	632	610	618	609	606	630	630	614	625	644	604	574	8153
Grand Total	7197	6647	6492	6528	6284	6179	6061	5997	5959	5660	5449	5177	5069	78699

VII-13

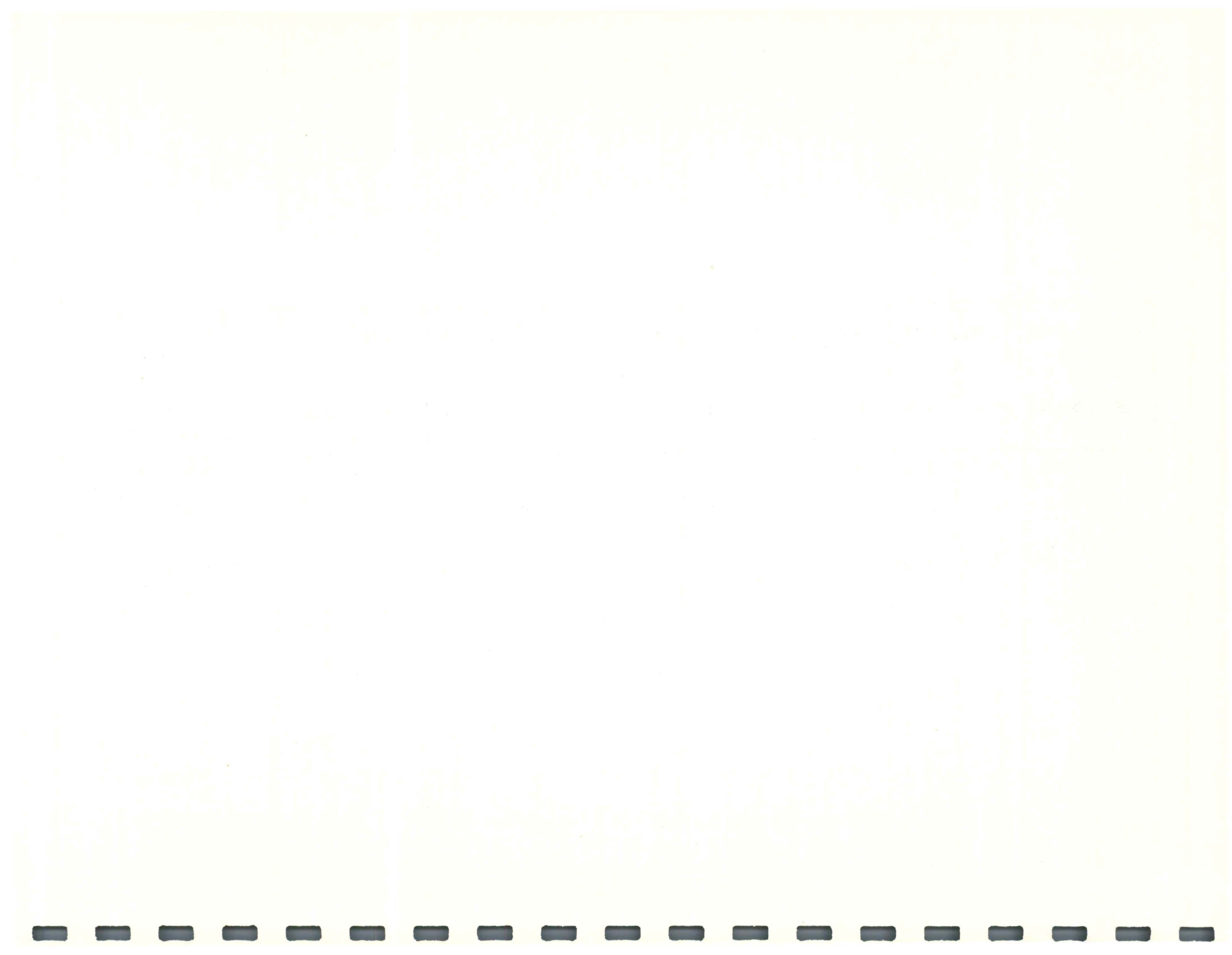


TABLE VII-12

COMPARISON OF ENROLLMENT TRENDS  
THE STATE OF IOWA AND AREA X  
1955-56 to 1964-65

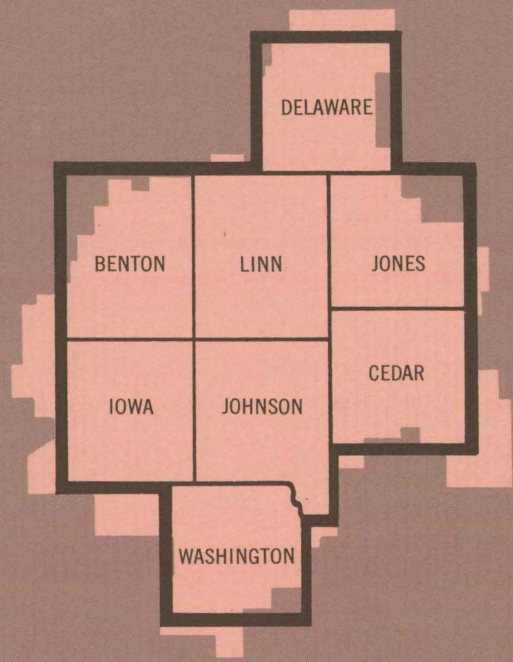
State of Iowa				Area X		
Year	Total Enrollment **	Increase From Previous Year	Per Cent of Increase	Total Enrollment *	Increase From Previous Year	Per Cent of Increase
1955-56	592862	*	*	60439	*	*
1956-57	610087	17225	2.9	60799	360	0.6
1957-58	623536	13449	2.2	64050	3251	5.4
1958-59	638990	15454	2.5	65830	1780	2.8
1959-60	658161	19171	3.0	68624	2794	4.2
1960-61	671865	13704	2.1	70647	2023	2.9
1961-62	686225	14360	2.1	73247	2600	3.7
1962-63	697065	10840	1.6	74355	1108	1.5
1963-64	709643	12578	1.8	76345	1990	2.7
1964-65	722834	13191	1.9	78699	2354	3.1
Total Increase in Enrollment		129972			18260	
Per Cent Increase 1955-1964			20.0			26.9
Per Cent Increase 1960-1964			9.8			14.7

\* Exclusive of Special Education

\*\* Source Date on Iowa Schools, 1965, Department of Public Instruction, January, 1965.



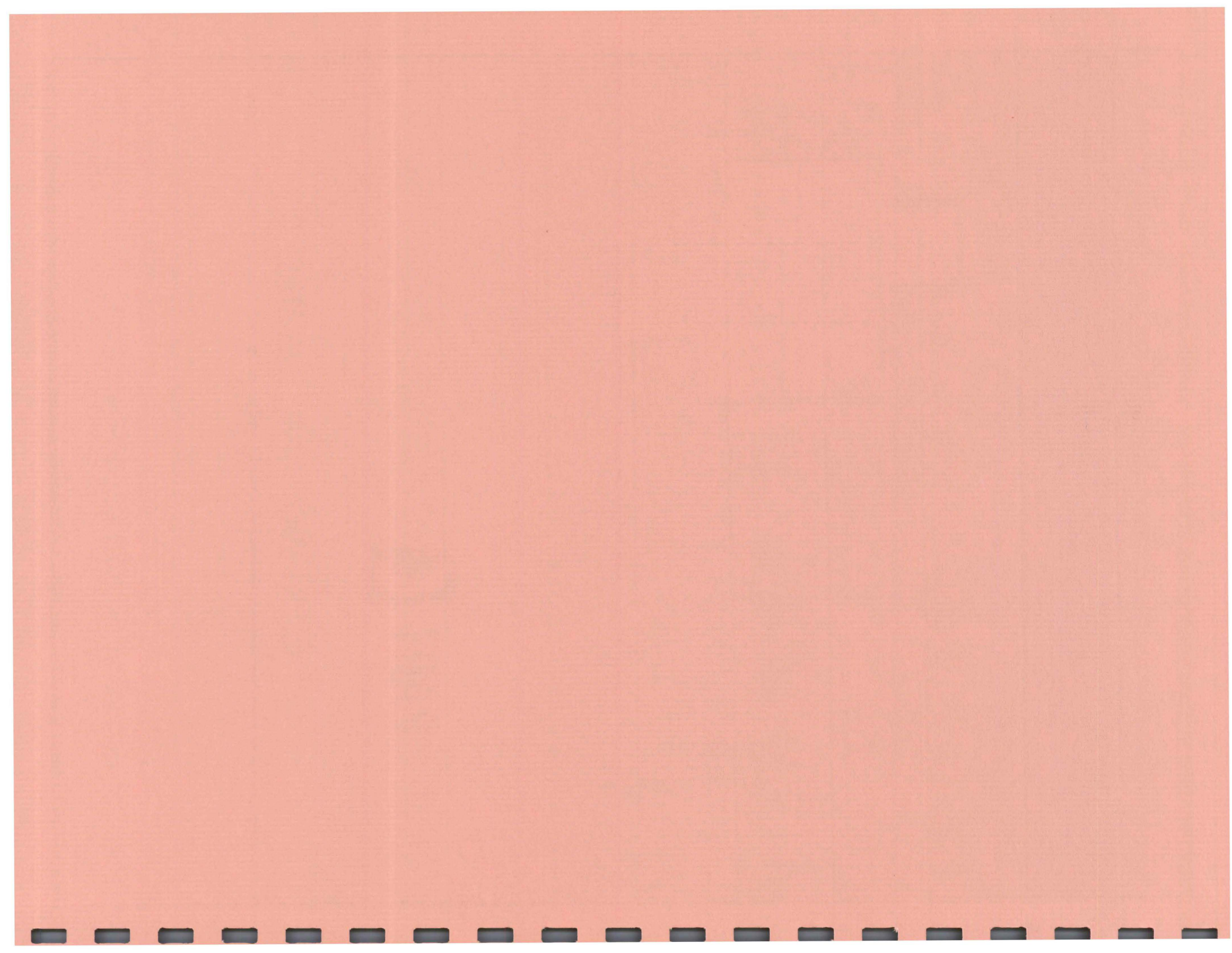




# PART **C**

... PRESENT VOCATIONAL EDUCATION  
OPPORTUNITIES IN AREA X







## CHAPTER VIII

### HIGH SCHOOL PROGRAMS

---

What vocational education programs are the high schools of Area X presently offering? Of equal importance, what is the extent of student participation in such programs? Answers to these two questions have direct implications for a proposal to establish a vocational education facility to serve the eight county school systems of Area X.

#### HIGH SCHOOL VOCATIONAL EDUCATION SURVEY

A survey of vocational education course offerings and enrollments was made in each of the forty-eight public high school districts located in Area X. The survey did not attempt to secure data from the parochial high schools located in the eight county school systems.

The survey was conducted through the use of a questionnaire submitted to the principals in each of the forty-eight public high school districts. The principals were asked to indicate those vocational course offerings which were available in their schools during the current school year and the number of students enrolled in each of the courses. A copy of the questionnaire, which is the same as that used by the Department of Public Instruction, is to be found in Appendix A. A 100 per cent return of the questionnaire was obtained.

#### LIMITATIONS OF THE SURVEY

Two major limitations are inherent in the use of a survey instrument similar to that used in this survey. One limitation relates to the philosophy of vocational education and the second is related to the procedure for reporting enrollments in vocational education programs:

1. There is some controversy as to what should or should not be considered a vocational course offering. Some would hold, for example, that a course in typing may be both a practical arts subject, and at the same time contribute to a student's broad general education. Should such a course, and a small number of other subjects which could conceivably serve a dual function for an individual student or students, be classified as a vocational education course offering? Recognition was given to this problem in designing the survey instrument. This limitation, however great or valid it might be, would not appear to obscure the major findings of the survey.

2. A second major limitation relates to the procedure used in the reporting of student enrollments in the several vocational course offerings. High school principals were asked to indicate the number of students enrolled in each of the courses listed in the questionnaire. They were not asked to indicate the total number of individual students enrolling in the vocational education program of the school. A student taking two or more vocational subjects will appear in the totals two or more times. Again, it would appear that this limitation, once recognized by the reader, will not obscure the major conclusions that may be drawn from the survey.

#### FINDINGS

The course offerings and enrollments in the vocational education programs of the forty-eight public high school districts for the 1964-65 school year, as reported by the high school principals, are shown in Table VIII-1 through Table VIII-9.

Following are several of the conclusions which would appear to be justified from an examination of the responses to the survey:

1. Fifty-one different vocational courses were offered in the forty-eight public high school districts located in Area X.
2. Fifteen of the courses listed in the questionnaire were not offered in any of the high schools of Area X.
3. There is a positive correlation between the size of the high school enrollment and the diversity of course offerings. The larger high schools offered more vocational courses than did the smaller schools.
4. There is a positive correlation between the size of the high school enrollment and the depth of vocational education programs. The larger high schools offered more advanced vocational courses than did the smaller schools.
5. Business education programs enjoyed the greatest popularity in terms of the number of schools offering courses in this field and in terms of the number of students enrolled. Nearly all schools offered a comprehensive program of typing, bookkeeping, office practice, and shorthand.
6. Woodworking and drafting also enjoyed wide popularity in terms of the number of schools making these courses available to their students and the number of students enrolled in these two basic industrial art courses.



7. Only a limited number of high schools offered "advanced" vocational or technical courses. This is particularly true with respect to: advanced woodworking, advanced metalworking, advanced drafting, advanced electronics, auto mechanics, and auto body repair.

#### CONCLUSIONS

The present vocational offerings in the majority of the forty-eight public high school districts of Area X are inadequate to meet the needs of the youth served by these schools. Most of the schools, if judged by their vocational offerings, could not be considered as comprehensive high schools.

Limited enrollments in many of the schools make the cost of an extensive vocational education program excessively high on a per pupil cost basis. As noted in Chapter VI, only nine of the forty-eight public high schools in Area X have enrollments of 500 or more students. Efforts to provide an adequate vocational education program in any but the larger high schools of Area X can be accomplished only at great cost.



COUNTY TOTALS

SCHOOL DISTRICTS

SUBJECTS	Benton	Cedar	Delaware	Iowa	Johnson	Jones	Linn	Washington	Totals
0140 Bkkpg I	213	201	135	133	206	150	550	153	1741
0141 Bkkpg II					37	49	1		87
0142 Acctg I									
0143 Acctg II									
0340 Comptometer									
0341 Calculator									
0342 Adding Mach									
0343 Bkkpg Mach									
0344 Duplicating Mach									
0345 Dictaphone									
0440 Key punch & Verif									
0441 Tab Operator									
0442 Computer Oper									
0443 Computer Progrmr									
0444 Systems Analyst									
0445 Install Spvsr									
0446 Install Mgmt									
0540 Office Practice	77	38	56	52	41		232	47	543
0543 Salesmanship						10	83		93
0640 Shorthand I	113	41	76	81	65	77	301	66	820
0641 Shorthand II	5					17	56	11	89
0642 Sec. Practice	12	21	16	34		15	97		195
0643 Speedwriting							159		159
0644 Steno Mach									
0740 Typing I	321	220	204	174	365	187	714	147	2332
0741 Typing II	41	12	34	32	158	34	79	36	426
4445 Vocational Math									
4446 Calculator Math	11								11
8140 Gen Ag I	6	15							21
8141 Gen Ag II	2	23							25
8142 Gen Ag III	12	10							22
8143 Gen Ag IV									
8240 Voc Ag I	6	18	44	22	25	37	45	34	231
8241 Voc Ag II	28	39	55	16	16	16	44	41	255
8242 Voc Ag III	12	43	29	21	12	31	10	25	183
8243 Voc Ag IV	21	23	38	13	15	22	31	6	169
8540 Woodwkg I	165	87	57	109	98	68	424	99	2007
8541 Woodwkg II	101	27	49	46	46	31	163	45	508
8542 Woodwkg III	25	10	27	17	39	7	60		185
8543 Woodwkg IV			10		9				19
8545 Metalwkg I	12	48	17	94	34	21	251	15	492
8546 Metalwkg II	17				21		46		84
8547 Metalwkg III					10		3		13
8548 Metalwkg IV									
8691 Gen. Ind. Arts I						44			44
8692 Gen. Ind. Arts II						24			24
8693 Gen. Ind. Arts III						13			13

TABLE VIII-1 AREA X  
 HIGH SCHOOL VOCATIONAL EDUCATION SURVEY  
 OF COURSE OFFERINGS AND ENROLLMENTS



COUNTY TOTALS

SCHOOL DISTRICTS

SUBJECTS		Benton	Cedar	Delaware	Iowa	Johnson	Jones	Linn	Washington	Totals
8550	Drafting I	83	68	44	32	81	43	463	21	835
8551	Drafting II	8		20	13	42	9	156	6	254
8552	Drafting III					10		56		66
8553	Drafting IV							24		24
8640	Graphic Arts I									
8641	Graphic Arts II									
8642	Graphic Arts III									
8643	Graphic Arts IV									
8650	Elect-Electronics I	15	28		12			90		145
8651	Elect-Electronics II				10			25		35
8652	Elect-Electronics III									
8653	Elect-Electronics IV									
8654	Plastics I									
8655	Plastics II									
8656	Power Mechanics I	14								14
8657	Power Mechanics II									
8658	Power Mechanics III									
8659	Power Mechanics IV									
8660	Crafts I		16				11	13		40
8661	Crafts II						11	9		20
8690	Other Ind. Arts		13		9	63		527	17	629
8840	Aircraft Mechanic									
8841	Auto Body Repair				13					13
8842	Auto Mechanics	9	18	45	82			74		228
8843	Aviat Mech Engine									
8844	Cabinet Making		12					4		16
8845	Carpentry									
8846	Coop Program				5	12				17
8847	Data Proc Equip R									
8848	Diesel Mechanic									
8849	Drafting								10	10
8850	Machine Shop				21			32		53
8851	Painting & Decor									
8852	Photography, Comm Art									
8853	Printing				1					1
8854	Printing, Offset									
8855	Sheet Metal				69					69
8856	Tailoring									
8857	Welding	9			69			20		98
8940	Other T & I - Upholstery				18					18
8690	Auto Mech. (not T & I)		13							13
8680	Individual Projects		11							11
8941	Basic Electricity				48					48

TABLE VIII-1 (Cont'd).



BENTON COUNTY

SCHOOL DISTRICTS

SUBJECTS		Belle Plaine	Benton Comm.	Norway	Shellsburg	Urbana	Vinton	Garrison	Total
0140	Bkkpg I	31	107	14	14	16	31		213
0141	Bkkpg II								
0142	Acctg I								
0143	Acctg II								
0340	Comptometer								
0341	Calculator								
0342	Adding Mach								
0343	Bkkpg Mach								
0344	Duplicating Mach								
0345	Dictaphone								
0440	Key punch & Verif								
0441	Tab Operator								
0442	Computer Oper								
0443	Computer Progrmr								
0444	Systems Analyst								
0445	Install Spvsr								
0446	Install Mgmt								
0540	Office Practice	13	38				19	7	77
0543	Salesmanship								
0640	Shorthand I	19	22	11	18	12	25	6	113
0641	Shorthand II			5					5
0642	Sec. Practice					3	9		12
0643	Speedwriting								
0644	Steno Mach								
0740	Typing I	49	143	40	18	22	31	18	321
0741	Typing II		12		22			7	41
4445	Vocational Math								
4446	Calculator Math		11						11
8140	Gen Ag I		6						6
8141	Gen Ag II		2						2
8142	Gen Ag III		12						12
8143	Gen Ag IV								
8240	Voc Ag I						6		6
8241	Voc Ag II	18					10		28
8242	Voc Ag III						12		12
8243	Voc Ag IV	12					9		21
8540	Woodwkg I	31	56		28	12	30	8	165
8541	Woodwkg II	10	42		16	7	20	6	101
8542	Woodwkg III		12				13		25
8543	Woodwkg IV								
8545	Metalwkg I		12						12
8546	Metalwkg II						17		17
8547	Metalwkg III								
8548	Metalwkg IV								

TABLE VIII-2 BENTON COUNTY  
HIGH SCHOOL VOCATIONAL EDUCATION SURVEY  
OF COURSE OFFERINGS AND ENROLLMENTS



SUBJECTS	Belle Plaine	Benton Comm.	Norway	Shellsburg	Urbana	Vinton	Garrison	Total
8550 Drafting I	14			15	9	45		83
8551 Drafting II	8							8
8552 Drafting III								
8553 Drafting IV								
8640 Graphic Arts I								
8641 Graphic Arts II								
8642 Graphic Arts III								
8643 Graphic Arts IV								
8650 Elect-Electronics I				15				15
8651 Elect-Electronics II								
8652 Elect-Electronics III								
8653 Elect-Electronics IV								
8654 Plastics I								
8655 Plastics II								
8656 Power Mechanics I						14		14
8657 Power Mechanics II								
8658 Power Mechanics III								
8659 Power Mechanics IV								
8660 Crafts I								
8661 Crafts II								
8690 Other Ind. Arts								
8840 Aircraft Mechanic								
8841 Auto Body Repair								
8842 Auto Mechanics					9			9
8843 Aviat Mech Engine								
8844 Cabinet Making								
8845 Carpentry								
8846 Coop Program								
8847 Data Proc Equip R								
8848 Diesel Mechanic								
8849 Drafting								
8850 Machine Shop								
8851 Painting & Decor								
8852 Photography, Comm Art								
8853 Printing								
8854 Printing, Offset								
8855 Sheet Metal								
8856 Tailoring								
8857 Welding					9			9
8940 Other T & I								

TABLE VIII-2 (Cont'd).



## CEDAR COUNTY

## SCHOOL DISTRICTS

SUBJECTS	Bennett	Clarence	Durant	Lincoln Comm.	Lowden	Tipton	West Branch	Total
0140 Bkkpg I	26	7	30	32	12	66	28	201
0141 Bkkpg II								
0142 Acctg I								
0143 Acctg II								
0340 Comptometer								
0341 Calculator								
0342 Adding Mach								
0343 Bkkpg Mach								
0344 Duplicating Mach								
0345 Dictaphone								
0440 Keypunch & Verif								
0441 Tab Operator								
0442 Computer Oper								
0443 Computer Progrmr								
0444 Systems Anaylst								
0445 Install Spvsr								
0446 Install Mgmt								
0540 Office Practice	10	4		7		17		38
0543 Salesmanship								
0640 Shorthand I		4	13	7		17		41
0641 Shorthand II								
0642 Sec. Practice			11				10	21
0643 Speedwriting								
0644 Steno Mach								
0740 Typing I	35	22	51	29	23	37	23	220
0741 Typing II			12					12
4445 Vocational Math								
4446 Calculator Math								
8140 Gen Ag I		10		5				15
8141 Gen Ag II		10		13				23
8142 Gen Ag III				10				10
8143 Gen Ag IV								
8240 Voc Ag I						11	7	18
8241 Voc Ag II	18					8	13	39
8242 Voc Ag III						28	15	43
8243 Voc Ag IV	11						12	23
8540 Woodwkg I		19	22	15		14	17	87
8541 Woodwkg II				11	16			27
8542 Woodwkg III					10			10
8543 Woodwkg IV								
8545 Metalwkg I		19	16			13		48
8546 Metalwkg II								
8547 Metalwkg III								
8548 Metalwkg IV								

TABLE VIII-3 CEDAR COUNTY  
HIGH SCHOOL VOCATIONAL EDUCATION SURVEY  
OF COURSE OFFERINGS AND ENROLLMENTS



## CEDAR COUNTY

## SCHOOL DISTRICTS

		Bennett	Clarence	Durant	Lincoln Comm.	Lowden	Tipton	West Branch	Total
SUBJECTS									
8550	Drafting I		6	18			13	31	68
8551	Drafting II								
8552	Drafting III								
8553	Drafting IV								
8640	Graphic Arts I								
8641	Graphic Arts II								
8642	Graphic Arts III								
8643	Graphic Arts IV								
8650	Elect-Electronics I		11				17		28
8651	Elect-Electronics II								
8652	Elect-Electronics III								
8653	Elect-Electronics IV								
8654	Plastics I								
8655	Plastics II								
8656	Power Mechanics I								
8657	Power Mechanics II								
8658	Power Mechanics III								
8659	Power Mechanics IV								
8660	Crafts I						16		16
8661	Crafts II								
8690	Other Ind. Arts	13							13
8840	Aircraft Mechanic								
8841	Auto Body Repair								
8842	Auto Mechanics						18		18
8843	Aviat Mech Engine								
8844	Cabinet Making			12					12
8845	Carpentry								
8846	Coop Program								
8847	Data Proc Equip R								
8848	Diesel Mechanic								
8849	Drafting								
8850	Machine Shop								
8851	Painting & Decor								
8852	Photography, Comm Art								
8853	Printing								
8854	Printing, Offset								
8855	Sheet Metal								
8856	Tailoring								
8857	Welding								
8940	Other T & I								
8690	Auto Mech (not T & I)						13		13
8680	Individual Projects						11		11

TABLE VIII-3 (Cont'd.)



DELAWARE COUNTY

SCHOOL DISTRICTS

SUBJECTS		Edgewood- Colesburg Comm.	Maquoketa Valley	West Delaware					Totals
0140	Bkkpg I	23	35	77					135
0141	Bkkpg II								
0142	Acctg I								
0143	Acctg II								
0340	Comptometer								
0341	Calculator								
0342	Adding Mach								
0343	Bkkpg Mach								
0344	Duplicating Mach								
0345	Dictaphone								
0440	Keypunch & Verif								
0441	Tab Operator								
0442	Computer Oper								
0443	Computer Progrmr								
0444	Systems Analyst								
0445	Install Spvsr								
0446	Install Mgmt								
0540	Office Practice	19	11	26					56
0543	Salesmanship								
0640	Shorthand I	17	17	42					76
0641	Shorthand II								
0642	Sec. Practice			16					16
0643	Speedwriting								
0644	Steno Mach								
0740	Typing I	20	81	103					204
0741	Typing II		34						34
4445	Vocational Math								
4446	Calculator Math								
8140	Gen Ag I								
8141	Gen Ag II								
8142	Gen Ag III								
8143	Gen Ag IV								
8240	Voc Ag I	12	11	21					44
8241	Voc Ag II	17	21	17					55
8242	Voc Ag III	15		14					29
8243	Voc Ag IV	11	16	11					38
8540	Woodwkg I	11	8	38					57
8541	Woodwkg II	13	4	32					49
8542	Woodwkg III	14	13						27
8543	Woodwkg IV	10							10
8545	Metalwkg I			17					17
8546	Metalwkg II								
8547	Metalwkg III								
8548	Metalwkg IV								

TABLE VIII-4 DELAWARE COUNTY  
HIGH SCHOOL VOCATIONAL EDUCATION SURVEY  
OF COURSE OFFERINGS AND ENROLLMENTS



DELAWARE COUNTY

SCHOOL DISTRICTS

SUBJECTS		Edgewood- Colesburg Comm.	Maquoketa Valley	West Delaware				Totals
8550	Drafting I		26	18				44
8551	Drafting II		9	11				20
8552	Drafting III							
8553	Drafting IV							
8640	Graphic Arts I							
8641	Graphic Arts II							
8642	Graphic Arts III							
8643	Graphic Arts IV							
8650	Elect-Electronics I							
8651	Elect-Electronics II							
8652	Elect-Electronics III							
8653	Elect-Electronics IV							
8654	Plastics I							
8655	Plastics II							
8656	Power Mechanics I							
8657	Power Mechanics II							
8658	Power Mechanics III							
8659	Power Mechanics IV							
8660	Crafts I							
8661	Crafts II							
8690	Other Ind. Arts							
8840	Aircraft Mechanic							
8841	Auto Body Repair							
8842	Auto Mechanics			45				45
8843	Aviat Mech Engine							
8844	Cabinet Making							
8845	Carpentry							
8846	Coop Program							
8847	Data Proc Equip R							
8848	Diesel Mechanic							
8849	Drafting							
8850	Machine Shop							
8851	Painting & Decor							
8852	Photography, Comm Art							
8853	Printing							
8854	Printing, Offset							
8855	Sheet Metal							
8856	Tailoring							
8857	Welding							
8940	Other T & I							

TABLE VIII-4 (Cont'd.)



IOWA COUNTY

SCHOOL DISTRICTS

SUBJECTS	Amana	Deep River - Millersburg Comm.	English Valley	HLV Comm.	Iowa Valley Comm.	Williamsburg	Total
0140 Bkkg I		16	27	27	36	27	133
0141 Bkkg II							
0142 Acctg I							
0143 Acctg II							
0340 Comptometer							
0341 Calculator							
0342 Adding Mach							
0343 Bkkg Mach							
0344 Duplicating Mach							
0345 Dictaphone							
0440 Key punch & Verif							
0441 Tab Operator							
0442 Computer Oper							
0443 Computer Progrmr							
0444 Systems Analyst							
0445 Install Spvsr							
0446 Install Mgmt							
0540 Office Practice	16	7	17	12			52
0543 Salesmanship							
0640 Shorthand I	16	5	19	10	15	16	81
0641 Shorthand II							
0642 Sec. Practice					10	24	34
0643 Speedwriting							
0644 Steno Mach							
0740 Typing I	24	28	23	42	33	24	174
0741 Typing II	22		10				32
4445 Vocational Math							
4446 Calculator Math							
8140 Gen Ag I							
8141 Gen Ag II							
8142 Gen Ag III							
8143 Gen Ag IV							
8240 Voc Ag I					12	10	22
8241 Voc Ag II					6	10	16
8242 Voc Ag III					5	16	21
8243 Voc Ag IV					4	9	13
8540 Woodwkg I	5	14	23	22	25	20	109
8541 Woodwkg II	5	9	16			16	46
8542 Woodwkg III						17	17
8543 Woodwkg IV							
8545 Metalwkg I	4			69	21		94
8546 Metalwkg II							
8547 Metalwkg III							
8548 Metalwkg IV							

TABLE VIII-5 IOWA COUNTY  
HIGH SCHOOL VOCATIONAL EDUCATION SURVEY  
OF COURSE OFFERINGS AND ENROLLMENTS



## IOWA COUNTY

\*Semester

## SCHOOL DISTRICTS

SUBJECTS		Amana	Deep River- Millersburg Comm.	English Valley	HLV Comm.	Iowa Valley Comm.	Williamsburg	Total
8550	Drafting I	10			22			32
8551	Drafting II			13				13
8552	Drafting III							
8553	Drafting IV							
8640	Graphic Arts I							
8641	Graphic Arts II							
8642	Graphic Arts III							
8643	Graphic Arts IV							
8650	Elect-Electronics I				12			12
8651	Elect-Electronics II				10			10
8652	Elect-Electronics III							
8653	Elect-Electronics IV							
8654	Plastics I							
8655	Plastics II							
8656	Power Mechanics I							
8657	Power Mechanics II							
8658	Power Mechanics III							
8659	Power Mechanics IV							
8660	Crafts I							
8661	Crafts II							
8690	Other Ind. Arts					9		9
8840	Aircraft Mechanic							
8841	Auto Body Repair			*13				13
8842	Auto Mechanic			*13	69			82
8843	Aviat Mech Engine							
8844	Cabinet Making							
8845	Carpentry							
8846	Coop Program	5						5
8847	Data Proc Equip R							
8848	Diesel Mechanic							
8849	Drafting							
8850	Machine Shop				21			21
8851	Painting & Decor							
8852	Photography, Comm Art							
8853	Printing	1						1
8854	Printing, Offset							
8855	Sheet Metal				69			69
8856	Tailoring							
8857	Welding				69			69
8940	Other T & I - Upholstery			18				18
8941	Basic Electricity				48			48

TABLE VIII-5 (Cont'd.)



## JOHNSON COUNTY

## SCHOOL DISTRICTS

SUBJECTS	Clear Creek	Iowa City	Lone Tree	Solon					Totals
0140 Bkpg I	42	130	16	18					206
0141 Bkpg II		37							37
0142 Acctg I									
0143 Acctg II									
0340 Comptometer									
0341 Calculator									
0342 Adding Mach									
0343 Bkpg Mach									
0344 Duplicating Mach									
0345 Dictaphone									
0440 Key punch & Verif									
0441 Tab Operator									
0442 Computer Oper									
0443 Computer Progrmr									
0444 Systems Analyst									
0445 Install Spvsr									
0446 Install Mgmt									
0540 Office Practice	7	29	5						41
0543 Salesmanship									
0640 Shorthand I	7	38	10	10					65
0641 Shorthand II									
0642 Sec. Practice									
0643 Speedwriting									
0644 Steno Mach									
0740 Typing I	20	262	47	36					365
0741 Typing II		150		8					158
4445 Vocational Math									
4446 Calculator Math									
8140 Gen Ag I									
8141 Gen Ag II									
8142 Gen Ag III									
8143 Gen Ag IV									
8240 Voc Ag I			15	10					25
8241 Voc Ag II			9	7					16
8242 Voc Ag III			7	5					12
8243 Voc Ag IV			9	6					15
8540 Woodwkg I		85		13					98
8541 Woodwkg II	8	37		1					46
8542 Woodwkg III	10	29							39
8543 Woodwkg IV	9								9
8545 Metalwkg I		34							34
8546 Metalwkg II		21							21
8547 Metalwkg III		10							10
8548 Metalwkg IV									

TABLE VIII-6 JOHNSON COUNTY  
HIGH SCHOOL VOCATIONAL EDUCATION SURVEY  
OF COURSE OFFERINGS AND ENROLLMENTS



JOHNSON COUNTY

SCHOOL DISTRICTS

SUBJECTS	Clear Creek	Iowa City	Lone Tree	Solon			Totals
8550 Drafting I	12	58		11			81
8551 Drafting II		42					42
8552 Drafting III		10					10
8553 Drafting IV							
8640 Graphic Arts I							
8641 Graphic Arts II							
8642 Graphic Arts III							
8643 Graphic Arts IV							
8650 Elect-Electronics I							
8651 Elect-Electronics II							
8652 Elect-Electronics III							
8653 Elect-Electronics IV							
8654 Plastics I							
8655 Plastics II							
8656 Power Mechanics I							
8657 Power Mechanics II							
8658 Power Mechanics III							
8659 Power Mechanics IV							
8660 Crafts I							
8661 Crafts II							
8690 Other Ind. Arts		30	33				63
8840 Aircraft Mechanic							
8841 Auto Body Repair							
8842 Auto Mechanics							
8843 Aviat Mech Engine							
8844 Cabinet Making							
8845 Carpentry							
8846 Coop Program							
8847 Data Proc Equip R							
8848 Diesel Mechanic							
8849 Drafting							
8850 Machine Shop							
8851 Painting & Decor							
8852 Photography, Comm Art							
8853 Printing							
8854 Printing, Offset							
8855 Sheet Metal							
8856 Tailoring							
8857 Welding							
8940 Other T & I							

TABLE VIII-6 (Cont'd.)



JONES COUNTY

SCHOOL DISTRICTS

SUBJECTS	Anamosa	Midland Comm.	Monticello	Olin	Oxford Junction			Totals
0140 Bkkpg I	30	33	43	25	19			150
0141 Bkkpg II	49							49
0142 Acctg I								
0143 Acctg II								
0340 Comptometer								
0341 Calculator								
0342 Adding Mach								
0343 Bkkpg Mach								
0344 Duplicating Mach								
0345 Dictaphone								
0440 Keypunch & Verif								
0441 Tab Operator								
0442 Computer Oper								
0443 Computer Progrmr								
0444 Systems Analyst								
0445 Install Spvsr								
0446 Install Mgmt								
0540 Office Practice								
0543 Salesmanship			10					10
0640 Shorthand I	31	12	24		10			77
0641 Shorthand II		17						17
0642 Sec. Practice	15							15
0643 Speedwriting								
0644 Steno Mach								
0740 Typing I	50	46	31	41	19			187
0741 Typing II		12		7	15			34
4445 Vocational Math								
4446 Calculator Math								
8140 Gen Ag I								
8141 Gen Ag II								
8142 Gen Ag III								
8143 Gen Ag IV								
8240 Voc Ag I	22		15					37
8341 Voc Ag II	7		9					16
8242 Voc Ag III	13		18					31
8243 Voc Ag IV	8		14					22
8540 Woodwkg I		28	18	22				68
8541 Woodwkg II		22		9				31
8542 Woodwkg III		7						7
8543 Woodwkg IV								
8545 Metalwkg I			13	8				21
8546 Metalwkg II								
8547 Metalwkg III								
8548 Metalwkg IV								
8691 Gen. Ind. Arts I	44							44
8692 Gen. Ind. Arts II	24							24
8693 Gen. Ind. Arts III	13							13

TABLE VIII-7 JONES COUNTY  
 HIGH SCHOOL VOCATIONAL EDUCATION SURVEY  
 OF COURSE OFFERINGS AND ENROLLMENTS  
 VIII-16



JONES COUNTY

SCHOOL DISTRICTS

SUBJECTS		Anamosa	Midland Comm.	Monticello	Olin	Oxford Junction	Totals
8550	Drafting I			21	22		43
8551	Drafting II				9		9
8552	Drafting III						
8553	Drafting IV						
8640	Graphic Arts I						
8641	Graphic Arts II						
8642	Graphic Arts III						
8643	Graphic Arts IV						
8650	Elect-Electronics I						
8651	Elect-Electronics II						
8652	Elect-Electronics III						
8653	Elect-Electronics IV						
8654	Plastics I						
8655	Plastics II						
8656	Power Mechanics I						
8657	Power Mechanics II						
8658	Power Mechanics III						
8659	Power Mechanics IV						
8660	Crafts I					11	11
8661	Crafts II					11	11
8690	Other Ind. Arts						
8840	Aircraft Mechanic						
8841	Auto Body Repair						
8842	Auto Mechanics						
8843	Aviat Mech Engine						
8844	Cabinet Making						
8845	Carpentry						
8846	Coop Program			12			12
8847	Data Proc Equip R						
8848	Diesel Mechanic						
8849	Drafting						
8850	Machine Shop						
8851	Painting & Decor						
8852	Photography, Comm Art						
8853	Printing						
8854	Printing, Offset						
8855	Sheet Metal						
8856	Tailoring						
8857	Welding						
8940	Other T & I						

TABLE VIII-7 (Cont'd.)



LINN COUNTY

SCHOOL DISTRICTS

SUBJECTS	SCHOOL DISTRICTS							
	Alburnett	Cedar Rapids	Center Point	Central City	Coggon	College Comm.	Linn-Mar	
0141 Bkkpg I	18	254	11	33	19	69	19	
0141 Bkkpg II								
0142 Acctg I								
0143 Acctg II								
0340 Comptometer								
0341 Calculator								
0342 Adding Mach								
0343 Bkkpg Mach								
0344 Duplicating Mach								
0345 Dictaphone								
0440 Key punch & Verif								
0441 Tab Operator								
0442 Computer Oper								
0443 Computer Progrmr								
0444 Systems Analyst								
0445 Install Spvsr								
0446 Install Mgmt								
0540 Office Practice	3	109	8	13	15	34	7	
0543 Salesmanship		83						
0640 Shorthand I	10	150	10	14	21	16	10	
0641 Shorthand II		46				9		
0642 Sec. Practice		70		9				
0643 Speedwriting		137	5			17		
0644 Steno Mach								
0740 Typing I	33	361	18	26	39	21	30	
0741 Typing II	7	46					12	
4445 Vocational Math								
4446 Calculator Math								
8140 Gen Ag I								
8141 Gen Ag II								
8142 Gen Ag III								
8143 Gen Ag IV								
8240 Voc Ag I	13			14	14			
8241 Voc Ag II	10			19	15			
8242 Voc Ag III				10				
8243 Voc Ag IV				9	14			
8540 Woodwkg I	22	243	11	15	9	47	16	
8541 Woodwkg II		75			15	39		
8542 Woodwkg III		31	9			12		
8543 Woodwkg IV								
8545 Metalwkg I		163	14		8	35	18	
8546 Metalwkg II		34				12		
8547 Metalwkg III		3						
8548 Metalwkg IV								

TABLE VIII-8 LINN COUNTY  
HIGH SCHOOL VOCATIONAL EDUCATION SURVEY  
OF COURSE OFFERINGS AND ENROLLMENTS



LINN COUNTY (Cont.)

SCHOOL DISTRICTS

SUBJECTS	Lisbon	Marion	Mt. Vernon	Springville	Troy Mills	Walker		Totals
0140 Bkkpg I		40	37	24	15	13		550
0141 Bkkpg II					1			1
0142 Acctg I								
0143 Acctg II								
0340 Comptometer								
0341 Calculator								
0342 Adding Mach								
0343 Bkkpg Mach								
0344 Duplicating Mach								
0345 Dictaphone								
0440 Key punch & Verif								
0441 Tab Operator								
0442 Computer Oper								
0443 Computer Progrmr								
0444 Systems Analyst								
0445 Install Spvsr								
0446 Install Mgmt								
0540 Office Practice	9	15	7	12				232
0543 Salesmanship								83
0640 Shorthand I	12	25	15	10	8			301
0641 Shorthand II					1			56
0642 Sec. Practice		11			7			97
0643 Speedwriting								159
0644 Steno Mach								
0740 Typing I	5	74	56	17	17	17		714
0741 Typing II					2	12		79
4445 Vocational Math								
4446 Calculator Math								
8140 Gen Ag I								
8141 Gen Ag II								
8142 Gen Ag III								
8143 Gen Ag IV								
8240 Voc Ag I	4							45
8241 Voc Ag II								44
8242 Voc Ag III								10
8243 Voc Ag IV	8							31
8540 Woodwkg I	18		12	21		10		424
8541 Woodwkg II			11	12		11		163
8542 Woodwkg III						8		60
8543 Woodwkg IV								
8545 Metalwkg I				13				251
8546 Metalwkg II								46
8547 Metalwkg III								3
8548 Metalwkg IV								

TABLE VIII-8 (Cont'd.)



LINN COUNTY

SCHOOL DISTRICTS

		Alburnett	Cedar Rapids	Center Point	Central City	Coggon	College Comm.	Linn-Mar
SUBJECTS								
8550	Drafting I		384	14		9		12
8551	Drafting II		106	9		15	17	
8552	Drafting III		50				6	
8553	Drafting IV		24					
8640	Graphic Arts I							
8641	Graphic Arts II							
8642	Graphic Arts III							
8643	Graphic Arts IV							
8650	Elect-Electronics I		85			5		
8651	Elect-Electronics II		25					
8652	Elect-Electronics III							
8653	Elect-Electronics IV							
8654	Plastics I							
8655	Plastics II							
8656	Power Mechanics I							
8657	Power Mechanics II							
8658	Power Mechanics III							
8659	Power Mechanics IV							
8660	Crafts I						13	
8661	Crafts II							
8690	Other Ind. Arts		352		9			32
8840	Aircraft Mechanic							
8841	Auto Body Repair							
8842	Auto Mechanics		60	14				
8843	Aviat Mech Engine							
8844	Cabinet Making							
8845	Carpentry							
8846	Coop Program							
8847	Data Proc Equip R							
8848	Diesel Mechanic							
8849	Drafting							
8850	Machine Shop		32					
8851	Painting & Decor							
8852	Photography, Comm Art							
8853	Printing							
8854	Printing, Offset							
8855	Sheet Metal							
8856	Tailoring							
8857	Welding			20				
8940	Other T & I							

TABLE VIII-8 (Cont'd.)



LINN COUNTY (Cont.)

SCHOOL DISTRICTS

SUBJECTS	Lisbon	Marion	Mt. Vernon	Springville	Troy Mills	Total
8550 Drafting I		39		5		463
8551 Drafting II		9				156
8552 Drafting III						56
8553 Drafting IV						24
8640 Graphic Arts I						
8641 Graphic Arts II						
8642 Graphic Arts III						
8643 Graphic Arts IV						
8650 Elect-Electronics I						90
8651 Elect-Electronics II						25
8652 Elect-Electronics III						
8653 Elect-Electronics IV						
8654 Plastics I						
8655 Plastics II						
8656 Power Mechanics I						
8657 Power Mechanics II						
8658 Power Mechanics III						
8659 Power Mechanics IV						
8660 Crafts I						13
8661 Crafts II						9
8690 Other Ind. Arts		134				527
8840 Aircraft Mechanic						
8841 Auto Body Repair						
8842 Auto Mechanics						74
8843 Aviat Mech Engine						
8844 Cabinet Making						4
8845 Carpentry						
8846 Coop Program						
8847 Data Proc Equip R						
8848 Diesel Mechanic						
8849 Drafting						
8850 Machine Shop						32
8851 Painting & Decor						
8852 Photography, Comm Art						
8853 Printing						
8854 Printing, Offset						
8855 Sheet Metal						
8856 Tailoring						
8857 Welding						20
8940 Other T & I						

TABLE VIII-8 (Cont'd.)



WASHINGTON COUNTY

SCHOOL DISTRICTS

Mid-Prairie  
Jr. & Sr. High  
Washington  
Comm. School  
Highland Comm.  
Jr. & Sr. High

Totals

SUBJECTS	Mid-Prairie Jr. & Sr. High	Washington Comm. School	Highland Comm. Jr. & Sr. High	Totals
0140 Bkpg I	35	78	40	153
0141 Bkpg II				
0142 Acctg I				
0143 Acctg II				
-0340 Comptometer				
0341 Calculator				
0342 Adding Mach				
0343 Bkpg Mach				
0344 Duplicating Mach				
0345 Dictaphone				
0440 Key punch & Verif				
0441 Tab Operator				
0442 Computer Oper				
0443 Computer Progrmr				
0444 Systems Analyst				
0445 Install Spvsr				
0446 Install Mgmt				
0540 Office Practice & Mach	16	15	16	47
0543 Salesmanship				
0640 Shorthand I	11	34	21	66
0641 Shorthand II		11		11
0642 Sec. Practice				
0643 Speedwriting				
0644 Steno Mach				
0740 Typing I	61	61	25	147
0741 Typing II		11	25	36
4445 Vocational Math				
4446 Calculator Math				
8140 Gen Ag I				
8141 Gen Ag II				
8142 Gen Ag III				
8143 Gen Ag IV				
8240 Voc Ag I	12			12
8241 Voc Ag II	15	26		41
8242 Voc Ag III	11	14		25
8243 Voc Ag IV	6			6
8540 Woodwkg I	45	44	10	99
8541 Woodwkg II	9	21	15	45
8542 Woodwkg III				
8543 Woodwkg IV				
8545 Metalwkg I	15			15
8546 Metalwkg II				
8547 Metalwkg III				
8548 Metalwkg IV				

TABLE VIII-9 WASHINGTON COUNTY  
HIGH SCHOOL VOCATIONAL EDUCATION SURVEY  
OF COURSE OFFERINGS AND ENROLLMENTS



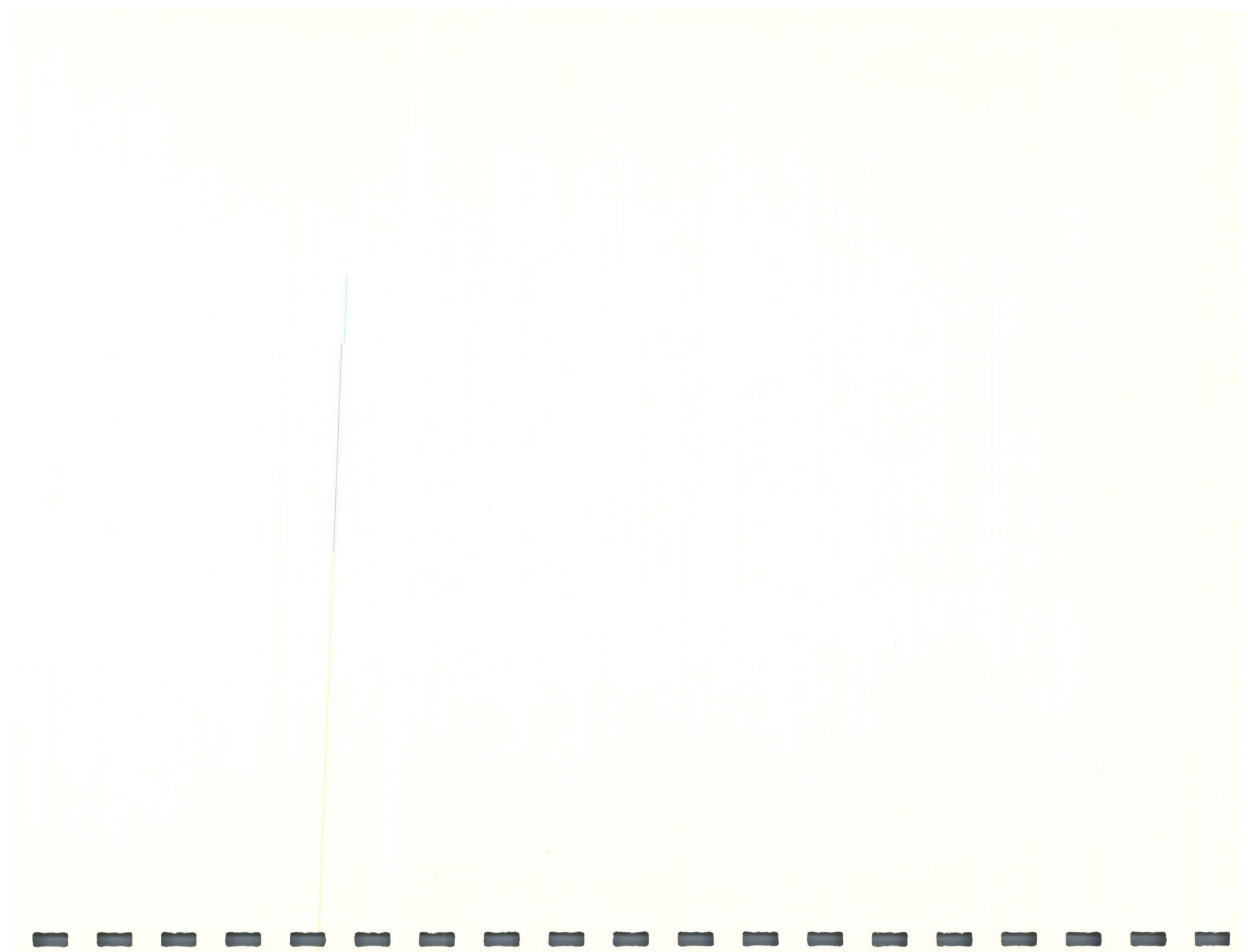
WASHINGTON COUNTY

SCHOOL DISTRICTS

Composite -  
All Districts  
of the County

SUBJECTS							
8550	Drafting I	21					
8551	Drafting II	6					
8552	Drafting III						
8553	Drafting IV						
8640	Graphic Arts I						
8641	Graphic Arts II						
8642	Graphic Arts III						
8643	Graphic Arts IV						
8650	Elect-Electronics I						
8651	Elect-Electronics II						
8652	Elect-Electronics III						
8653	Elect-Electronics IV						
8654	Plastics I						
8655	Plastics II						
8656	Power Mechanics I						
8657	Power Mechanics II						
8658	Power Mechanics III						
8659	Power Mechanics IV						
8660	Crafts I						
8661	Crafts II						
8690	Other Ind. Arts	17					
8840	Aircraft Mechanic						
8841	Auto Body Repair						
8842	Auto Mechanics						
8843	Aviat Mech Engine						
8844	Cabinet Making						
8845	Carpentry						
8846	Coop Program						
8847	Data Proc Equip R						
8848	Diesel Mechanic						
8849	Drafting	10					
8850	Machine Shop						
8851	Painting & Decor						
8852	Photography, Comm Art						
8853	Printing						
8854	Printing, Offset						
8855	Sheet Metal						
8856	Tailoring						
8857	Welding						
8940	Other T & I						

TABLE VIII-9 (Cont'd.)





## CHAPTER IX

### POST-HIGH SCHOOL PROGRAMS

---

Post-high school educational opportunities for students of Area X are offered by the following types of institutions located within the area:

- Public vocational school
- Private vocational schools
- Four-year colleges and university

A complete listing of the schools in the above classifications is to be found in Table IX-1. Location of these schools is shown in Plate IX-1.

#### PUBLIC VOCATIONAL SCHOOL

The only public vocational school in Area X is located in Cedar Rapids and is administered by the Cedar Rapids Community School District. Currently two programs are offered, and four more programs will be available to students in the late summer of 1965. The programs to be offered at that time are: data processing, machine tool operation, automotive, welding, mechanical technology, and electronic technology. The floor plan of the Cedar Rapids Area Vocational School is shown in Plate IX-2.

#### PRIVATE VOCATIONAL SCHOOLS AND NON-DEGREE PROGRAMS

Eleven private vocational schools in the eight-county area provide training in cosmetology, data processing, barbering, bookkeeping, secretarial work, practical nursing, and x-ray technician's work. The University of Iowa also provides training in a limited number of "non-degree" vocational programs.

#### FOUR-YEAR INSTITUTIONS

The University of Iowa and three four-year liberal arts colleges are located in Area X. Coe college and Mt. Mercy College of Cedar Rapids, and Cornell College of Mt. Vernon, offer degree programs in education and business, as well as pre-professional programs for medicine, dentistry, law, and engineering.

## SUMMARY

Although Area X is served by eleven private vocational schools, three four-year colleges, one university, and one public vocational school, there is still only limited opportunity in the area to obtain training which would prepare students for employment in industries of the area. Except for programs offered in the Cedar Rapids Area Vocational School, training for entry into local industries is available only at such distant locations as would preclude daily commuting by students.

Detailed descriptions of the schools in Area X currently providing post-high school vocational training opportunities are to be found in Appendix B. The descriptions, prepared by the Iowa Personnel and Guidance Association, include details of enrollment size, tuition costs, and length of each program offered by the schools.



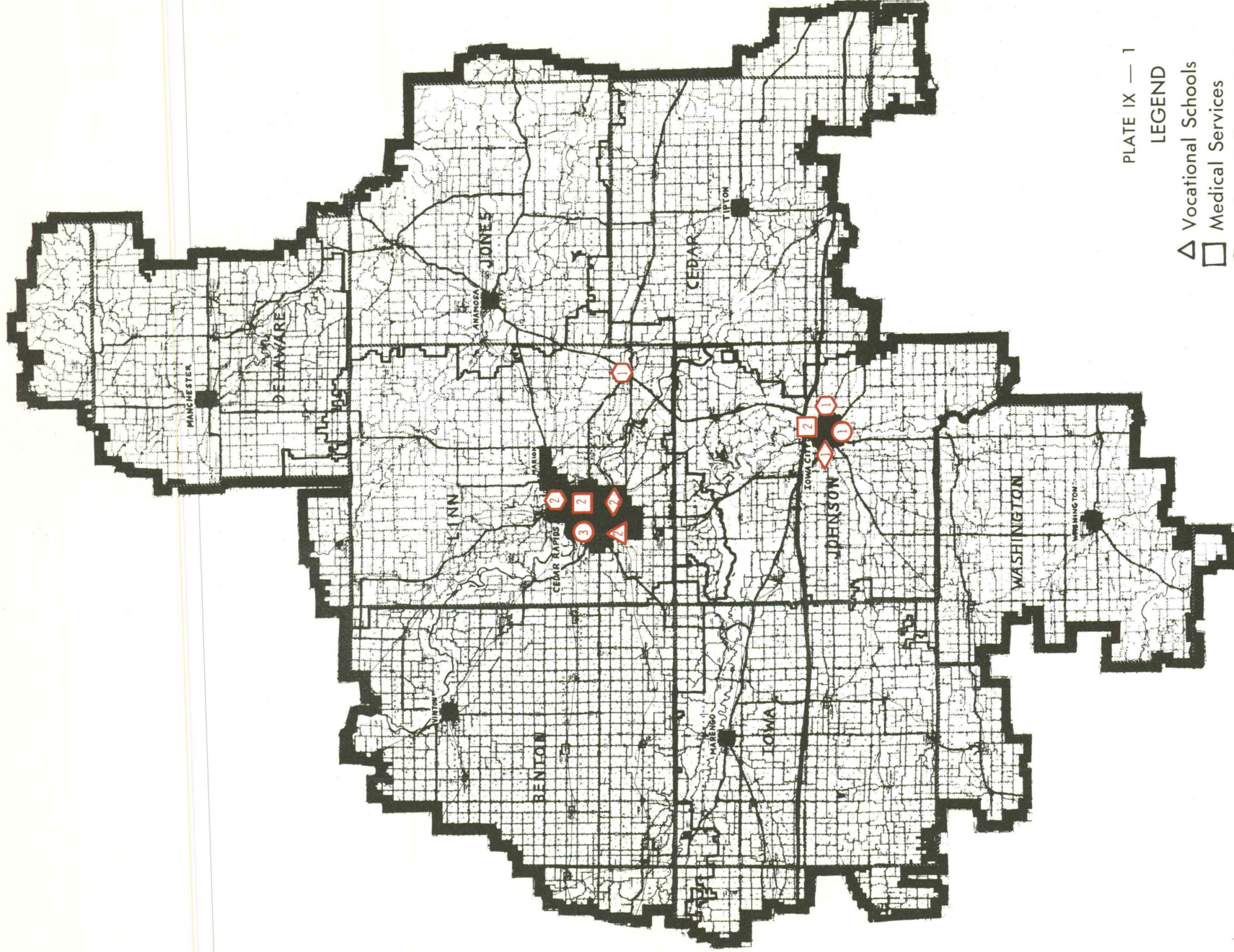


PLATE IX — 1

LEGEND

- △ Vocational Schools
- Medical Services
- Barber Colleges & Cosmetologist
- ◇ Business Colleges
- ⬡ Four Year Colleges

Number in symbol indicates schools of a given type



TABLE IX-1

SCHOOLS IN AREA X PROVIDING POST-HIGH SCHOOL  
EDUCATIONAL OPPORTUNITIES

Name & Address of Institution	Student Capacity	Tuition	Length of Course(s)	Placement Service
<u>Public Vocational School</u>				
Area Vocational Technical School, C. R. Community School District, Cedar Rapids (Data Processing, Electronics Technology, Machine Tool Opera- tion, Mechanical Technology, Auto Mechanics, Welding)	Varies	\$100-\$250 depending on course. To \$300 for non- residents of Cedar Rapids	One Semester to Two Years	No
<u>Private Vocational Schools</u>				
Cedar Rapids Barber College, Cedar Rapids	20	\$675 - includes tools, texts & uniforms	9 months	No
Cedar Rapids Business College, Cedar Rapids	100	\$600 to \$1,080 depending on course	40 to 72 wks. depending on course	Yes
Dickinson Secretarial School Cedar Rapids	Varies	\$35 to \$100 depending on course	12 weeks	Yes
Iowa City Commercial College Iowa City	210	\$450 to \$1,080 depending on course	43 to 104 wks. depending on course	Yes
University College of Cosmetology Iowa City	60	\$425	44 weeks	Yes
Young School of Beauty Cedar Rapids	150	\$285	44 weeks	Yes
Paris Academy of Beauty Cedar Rapids	160	\$250	45 weeks	Yes
Academy of Automation - Electronic Data Processing Cedar Rapids	24	\$125 to \$525 depend- ing on course	4 to 8 wks. depending on course	No
St. Luke's Methodist Hospital School of Nursing	200	\$1806 *	33 months	No
School of Practical Nursing	34	\$600	52 weeks	No
School of X-ray Cedar Rapids	8	None	2 years	No
Mercy Hospital School of Nursing	100	\$2600 *	27 months	No
School of X-ray Cedar Rapids	10	None	2 years	No

Table IX-1 Continued

Name & Address of Institution	Student Capacity	Tuition	Length of Course(s)	Placement Service
Mercy Hospital School of Nursing  School of X-ray Iowa City	110  8	\$2700 to \$3000 * \$50	27 months 2 years	No Yes
State University of Iowa School of Practical Nursing School of X-ray Iowa City	50 24	\$300 \$246	50 weeks 2 years	No
<u>Four-Year Colleges and Universities</u>				
Coe College Cedar Rapids	Only Vocational Programs Offered are Degree Programs			
Cornell College Mt. Vernon	Only Vocational Programs Offered are Degree Programs			
Mt. Mercy College Cedar Rapids	Only Vocational Programs Offered are Degree Programs			
State University of Iowa Iowa City	With a few exceptions, the only Vocational Programs Offered are Degree Programs			
* Approximate total cost for 3 years.				

HENDERSON BUILDING ~ 1203 ROCK FORD RD.  
CEDAR RAPIDS, IOWA

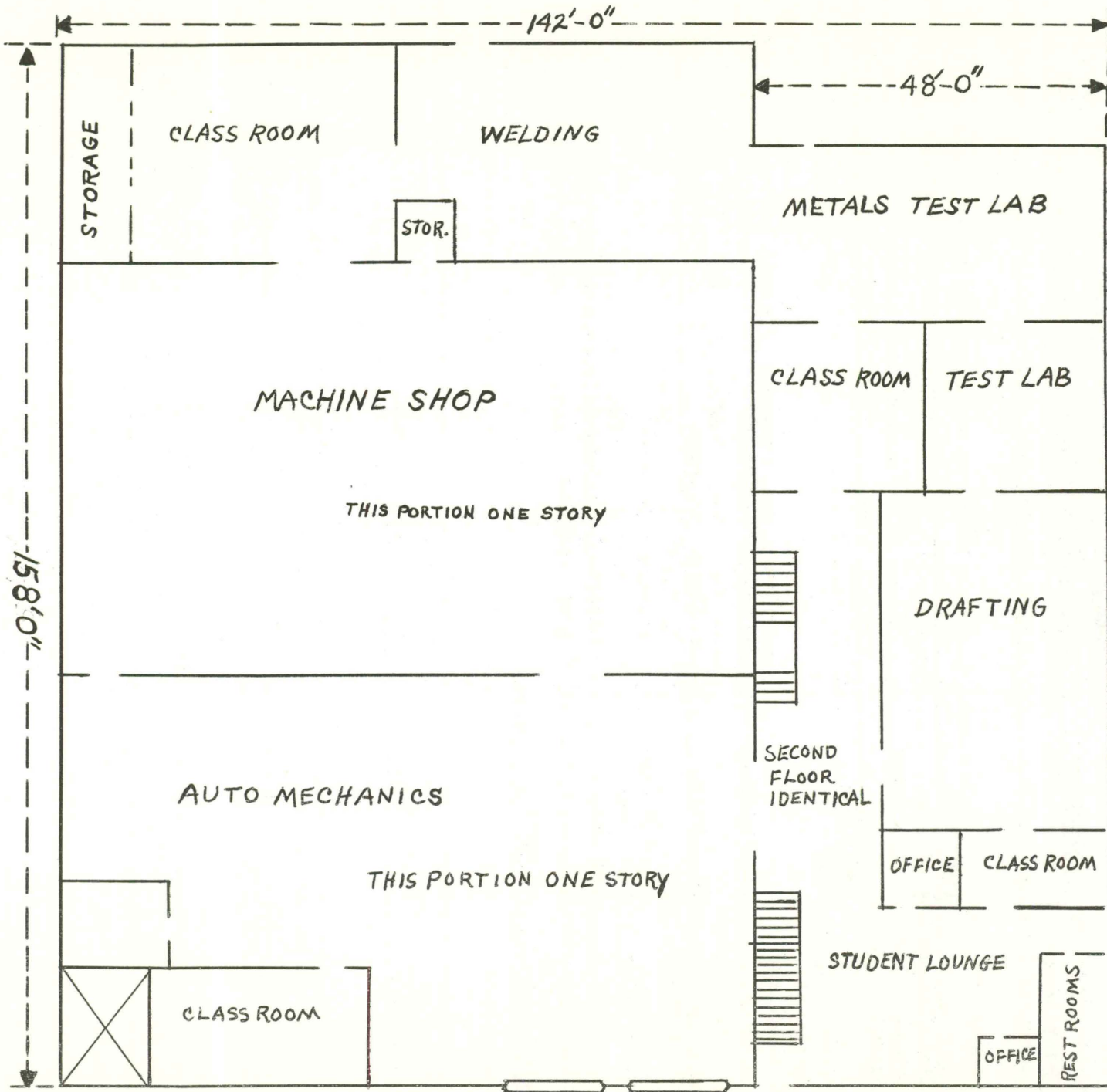


PLATE IX-2  
FLOOR PLAN OF CEDAR RAPIDS  
AREA VOCATIONAL SCHOOL



CHAPTER X

ADULT EDUCATION PROGRAMS

One of the primary functions of an area vocational school is to assist adults of the area to upgrade skills already acquired or to develop new salable skills. To what extent, then, do the schools of Area X provide adult education programs, and to what extent do adults participate in these programs? This chapter will present data regarding the adult education programs currently offered by the public schools of the eight counties.

SURVEY OF ADULT EDUCATION PROGRAMS

A survey of adult education programs in the forty-eight public high school districts of Area X was made to determine the number of adult education classes offered, and enrollments in these classes.

As shown in Table X-1, twenty-nine, or 60 per cent of the forty-eight public high school districts offered one or more adult education classes during the 1964-65 school year. The schools had a total offering of 215 courses and enrolled 5,351 adults. School districts located in Johnson and Linn Counties offered the most extensive programs in Area X and had the largest adult participation.

TABLE X-1

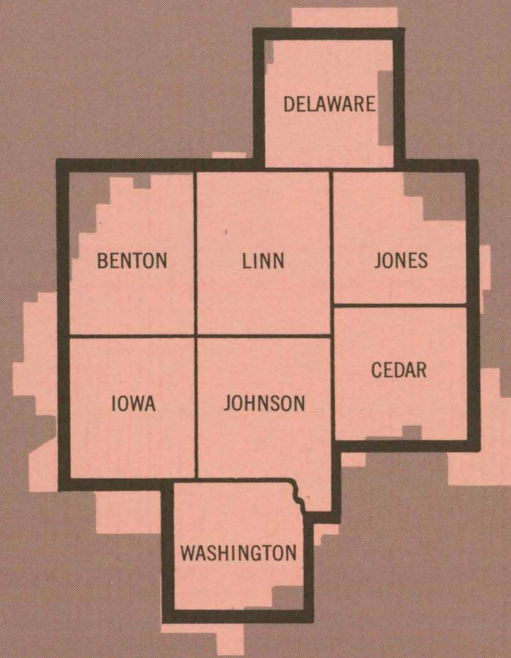
SUMMARY OF ADULT EDUCATION COURSES  
AND ENROLLMENTS IN AREA X  
1964-65

County	Number of School Districts	Number of School Districts Offering Adult Education Classes	Total Number of Courses	Total Enrollment
Benton	7	3	16	348
Cedar	7	5	21	590
Delaware	3	3	7	172
Iowa	6	2	18	375
Johnson	4	3	52	1809
Jones	5	3	6	337
Linn	13	8	87	1580
Washington	3	2	8	140
Total	48	29	215	5351

## CONCLUSION

The number of course offerings and enrollments in adult education programs of Area X are an indication that an extension of adult education opportunities through an area vocational school would have general support and acceptance by the adults of the area.

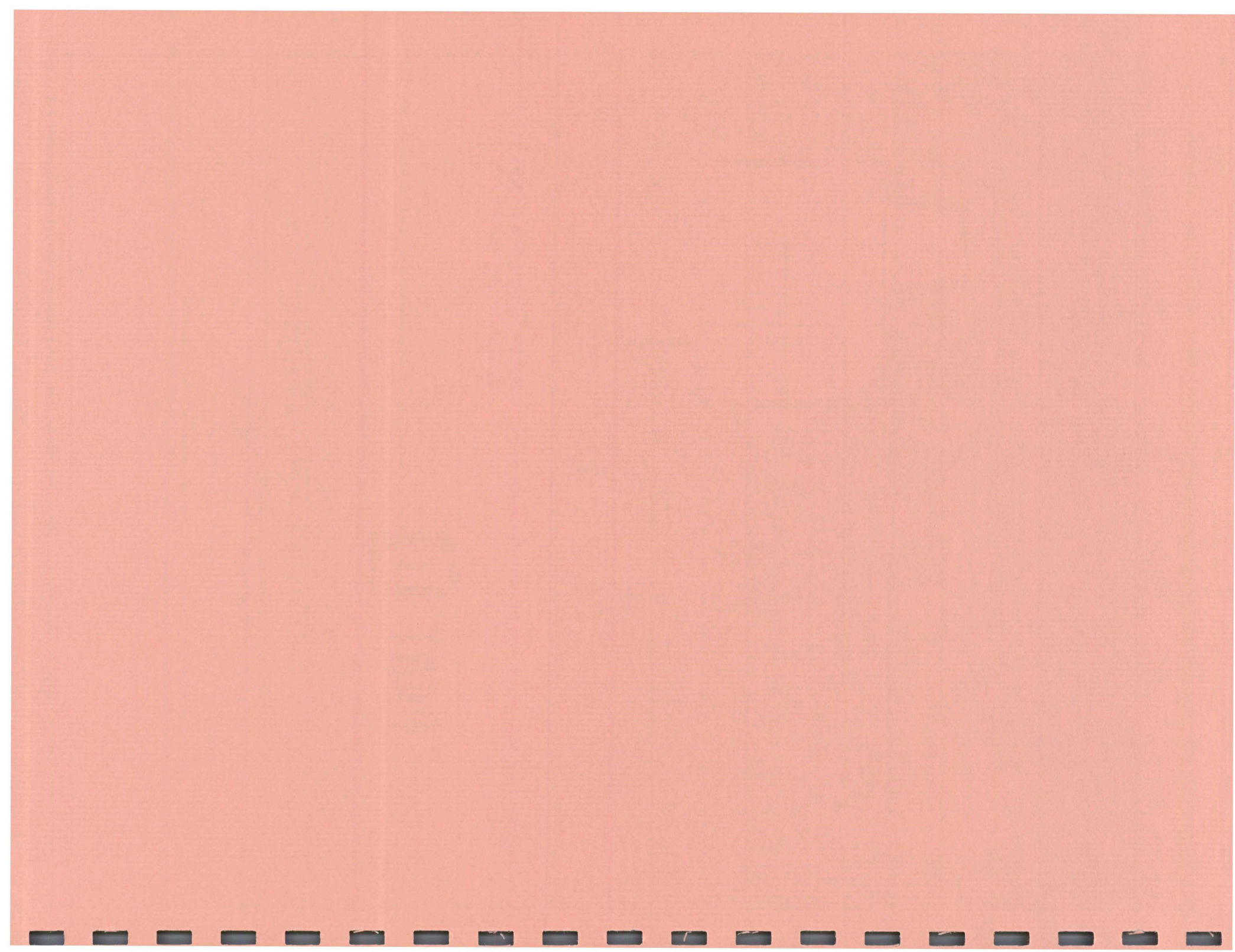




# PART **D**

... A PROPOSAL FOR VOCATIONAL  
EDUCATION FOR AREA X







## CHAPTER XI

### POTENTIAL ENROLLMENT

#### INTRODUCTION

The potential enrollment of an educational institution is directly dependent on the number of available students and the number of those students who wish to avail themselves of the institution's programs.

It is known that the greatest number of vocational school students come directly from high school and, although on a national basis significant numbers enter from the armed forces and from industry, data on high school graduates in a given area will provide the best basis for enrollment projections. Knowledge of the source and number of students alone is not enough to make enrollment projections. Some consideration of the educational and vocational needs, desires, and aspirations of the student must also be considered.

However difficult it is to measure the motivations, needs, and desires that influence a student's decision in choosing a given course of study or vocation, the information that can be obtained in this area provides an accurate base for projecting the needs for various educational - vocational programs.

In this chapter the potential enrollment of the Area X vocational school is estimated by examining the past, present, and projected enrollments of the public and private schools in the eight counties of Area X and by examining the results of a survey used to determine student educational plans and vocational training interests.

#### PROJECTED STUDENT BASE

##### Statistical Methods Employed

Pupil projections are a forecast of pupil populations and, as in all forecasts, they can only be based on available data, coupled with a knowledge of past history.

The historical enrollment figures, from which the projections in this proposal are made, were obtained from the county superintendents of the eight counties and include enrollment figures for both public and parochial schools.

Two different and separate kinds of pupil projections have been made. One of these projections uses the kindergarten trend line and the mean survival ratio method. The mean kindergarten trend line is computed by finding the ratio of enrollment in kindergarten from one year to the next and then finding the mean of those ratios. Kindergarten projections are then made by multiplying the previous year's kindergarten enrollment by the mean kindergarten trend ratio. All other grade projections are computed by multiplying the previous year's grade enrollment by the mean survival ratio.

Projections utilizing kindergarten trend line and mean survival ratio take into consideration the following facts:

1. Increases or decreases in the survival of grade enrollments from one year to the next could be a result of many factors, including school reorganization, declining population, dropout rate, student transfers, or a number of other factors that would cause a decrease or an increase in the survival of students from one grade to the next.
2. The average, or mean, of the survival rates for each consecutive grade may change during the period under study. The use of these two projection methods has the advantage of smoothing out any sharp fluctuations, either increases or decreases, that might occur in a given two-year period.

Projections made on the basis of the mean kindergarten trend line and mean survival ratio are usually considered accurate and reliable. The projections, however, are based on the assumption that what has happened during the past years under study will continue to happen in the same manner and at the same rate.

An additional projection of the student enrollments in Area X, completed by Iowa State University, Ames, Iowa, is also reported in this chapter. Iowa State's projection, although not comparable in all respects to the kindergarten trend line and mean survival ratio projections, is included to provide additional information and to serve as a check upon the other projections made.

## Findings

The first in the series of projections is concerned with a county by county and grade by grade projection for the years 1955 through 1974. These projections, presented in Table XI-5 through Table XI-22, were made using the kindergarten trend line and the mean survival ratio. The same information is to be found in an appendix accompanying this chapter. It will be noted that the totals for these projections and the totals for the projections for the various grade groupings are not the same, due to different statistical methods employed. Total twelfth grade enrollment, as shown in Table XI-5, is projected to peak at 5,221 in 1968-1969 and 5,222 in 1973-1974, and will remain at approximately 5,000 throughout the ten-year period, 1965-1974. Total eleventh grade enrollment, Table XI-5, is projected to peak at 5,517 in 1967-1968 and 5518 in 1972-1973.

The eight-county total for grades K-12 shows a projected increase from 78,699 students in 1964-1965 to 105,167 in 1974-1975, an increase of 33.6 per cent.

During the same period, enrollment in grades 9-12 is projected to increase from 21,355 students to 23,731, an increase of 11.1 per cent.



The Iowa State University projections are shown in Table XI-23 and Table XI-24. These projections are presented by county and by age groups for the years 1970 and 1975. In six of the eight counties of Area X the Iowa State University projections are more liberal, i.e., liberal in the sense that their projections forecast larger pupil populations than those based on the kindergarten trend line and the mean survival ratio method. Some of the difference can be attributed to the fact that all 5-year old and 19-year old children were reported in the projection, rather than just those enrolled in the schools.

#### STUDENT PLANS AND VOCATIONAL INTERESTS

In an effort to determine the post high school plans of students in the eight-county area and to gather information pertaining to their interests in vocational and technical training beyond high school, a questionnaire survey was conducted. The principal of each public high school in the eight-county area was asked to administer the questionnaire to his junior and senior high school students. A 100 per cent return was obtained in the survey administered to 3,974 juniors and 4,110 seniors.

The questionnaire and cover letter are presented in Appendix A, and the results of the survey are shown in tabular form in Plate XI-1 and Plate XI-2 and Table XI-1 and Table XI-2. Any variation of data in these tables as compared to Plate XI-1 and Plate XI-2 may be attributed to the fact that some students marked more than one response concerning post high school plans.

TABLE XI-1

NUMBER AND PER CENT OF ELEVENTH GRADE STUDENTS PLANNING  
TO SECURE ADDITIONAL EDUCATIONAL TRAINING, BY COUNTY  
1964-65

	Benton		Cedar		Delaware		Iowa		Johnson		Jones		Linn		Washington		Total	
	Num-ber	Per Cent	Num-ber	Per Cent	Num-ber	Per Cent	Num-ber	Per Cent	Num-ber	Per Cent	Num-ber	Per Cent	Num-ber	Per Cent	Num-ber	Per Cent	Num-ber	Per Cent
College	133	38.89	110	38.46	103	41.70	118	44.70	227	62.53	111	37.76	821	52.93	118	47.20	1741	48.40
Junior College	21	6.14	21	7.34	9	3.64	29	10.98	24	6.61	21	7.14	123	7.93	17	6.80	265	7.37
Business College	47	13.74	26	9.09	30	12.15	31	11.74	32	8.82	47	15.99	150	9.67	17	6.80	380	10.56
Vocational or Technical School	83	24.27	94	32.87	55	22.27	45	17.04	47	12.95	64	21.77	237	15.28	58	23.20	683	18.99
Cosmetology	28	8.19	20	6.99	21	8.50	19	7.20	12	3.31	25	8.50	97	6.25	20	8.00	242	6.73
Barber College	2	.58	1	.35	2	.81	7	2.65	2	.55	6	2.04	8	.52	3	1.20	31	.86
Nursing	13	3.80	3	1.05	7	2.84	3	1.14	4	1.10	2	.68	32	2.06	5	2.00	69	1.92
Military	4	1.17	5	1.75	11	4.45	2	.76	4	1.10	2	.68	10	.65	6	2.40	44	1.22
Other	11	3.22	6	2.10	9	3.64	10	3.79	11	3.03	16	5.44	73	4.71	6	2.40	142	3.95
Total	342	100.00	286	100.00	247	100.00	264	100.00	363	100.00	294	100.00	1551	100.00	250	100.00	3597	100.00



## Eleventh Grade Students View Future Educational Plans

3974 Eleventh Grade Students Completed the Questionnaire

... 3402 or 85.6 per cent plan to secure additional educational training

... 556 or 14.0 per cent do not plan to secure additional educational training beyond high school

... 16 or 0.4 per cent are undecided

PLATE XI — 1

Per Cent of Eleventh Grade Students Planning  
To Secure Additional Educational Training

1964-65

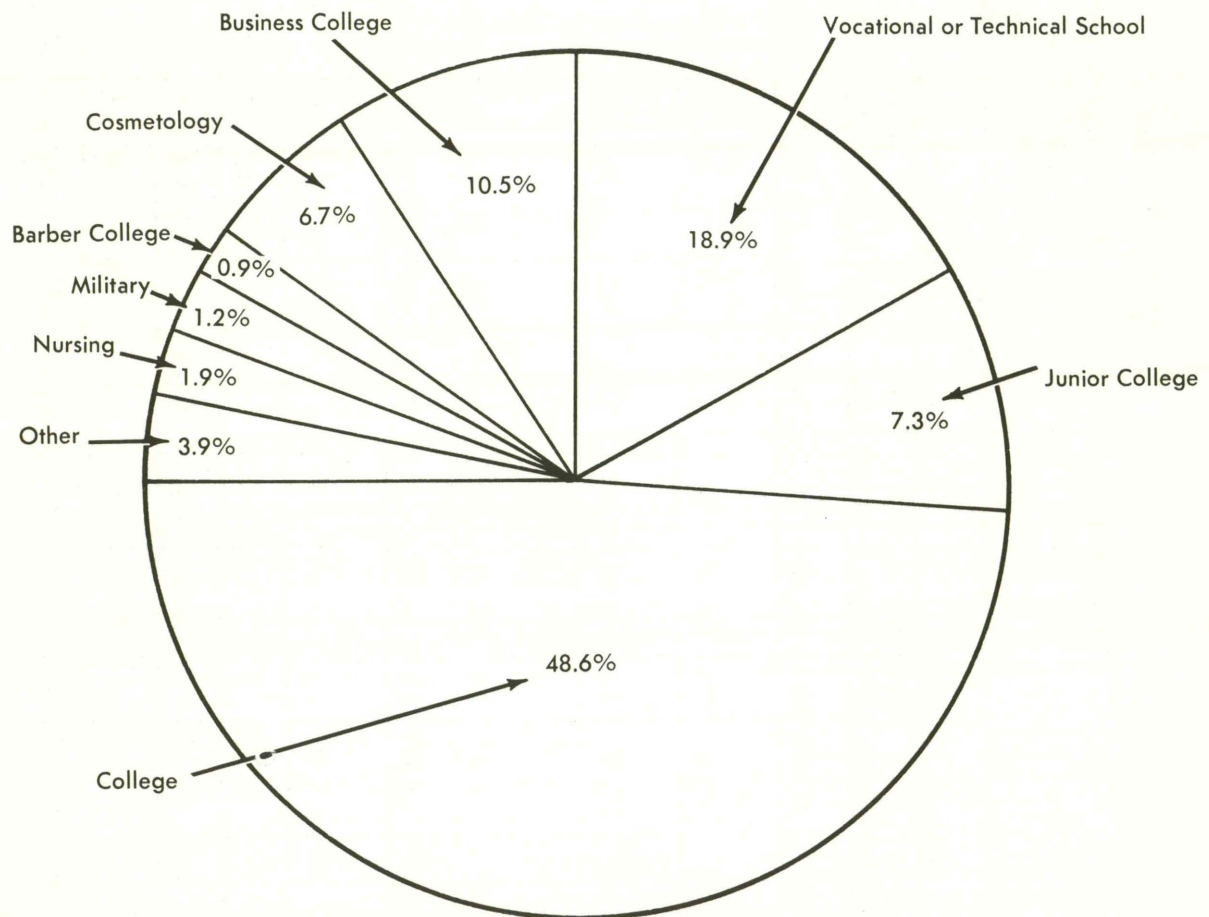


TABLE XI-2

NUMBER AND PER CENT OF TWELFTH GRADE STUDENTS PLANNING  
TO SECURE ADDITIONAL EDUCATIONAL TRAINING, BY COUNTY  
1964-65

	Benton		Cedar		Delaware		Iowa		Johnson		Jones		Linn		Washington		Total	
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent
College	145	42.90	149	53.02	91	45.27	145	57.31	249	65.87	99	42.13	858	52.54	107	46.52	1843	51.93
Junior College	25	7.40	30	10.68	11	5.47	9	3.56	19	5.03	11	4.68	161	9.86	29	12.61	295	8.31
Business College	46	13.61	14	4.98	16	7.96	22	8.70	39	10.32	29	12.34	118	7.23	26	11.31	310	8.73+
Vocational Technical School	65	19.23	56	19.93	44	21.89	34	13.44	41	10.85	55	23.40	250	15.31	37	16.09	582	16.40
Cosmetology	28	8.28	14	4.98	19	9.45	23	9.09	12	3.17	21	8.94	89	5.45	19	8.26	225	6.34
Barber College	2	.59	0	---	0	---	3	1.18	2	.53	0	---	11	.67	1	.43	19	.54
Nursing	8	2.37	2	.71	10	4.98	4	1.58	5	1.32	8	3.40	21	1.28	5	2.17	63	1.78
Military	4	1.18	8	2.85	10	4.98	5	1.98	4	1.06	7	2.98	30	1.84	1	.43	69	1.94
Other	15	4.44	8	2.85	0	---	8	3.16	7	1.85	5	2.13	95	5.82	5	2.18	143	4.03
Total	338	100.00	281	100.00	201	100.00	253	100.00	378	100.00	235	100.00	1633	100.00	230	100.00	3549	100.00

9-IX



## Twelfth Grade Students View Future Educational Plans

4110 Twelfth Grade Students Completed the Questionnaire

.... 3405 or 82.8 per cent plan to secure additional educational training

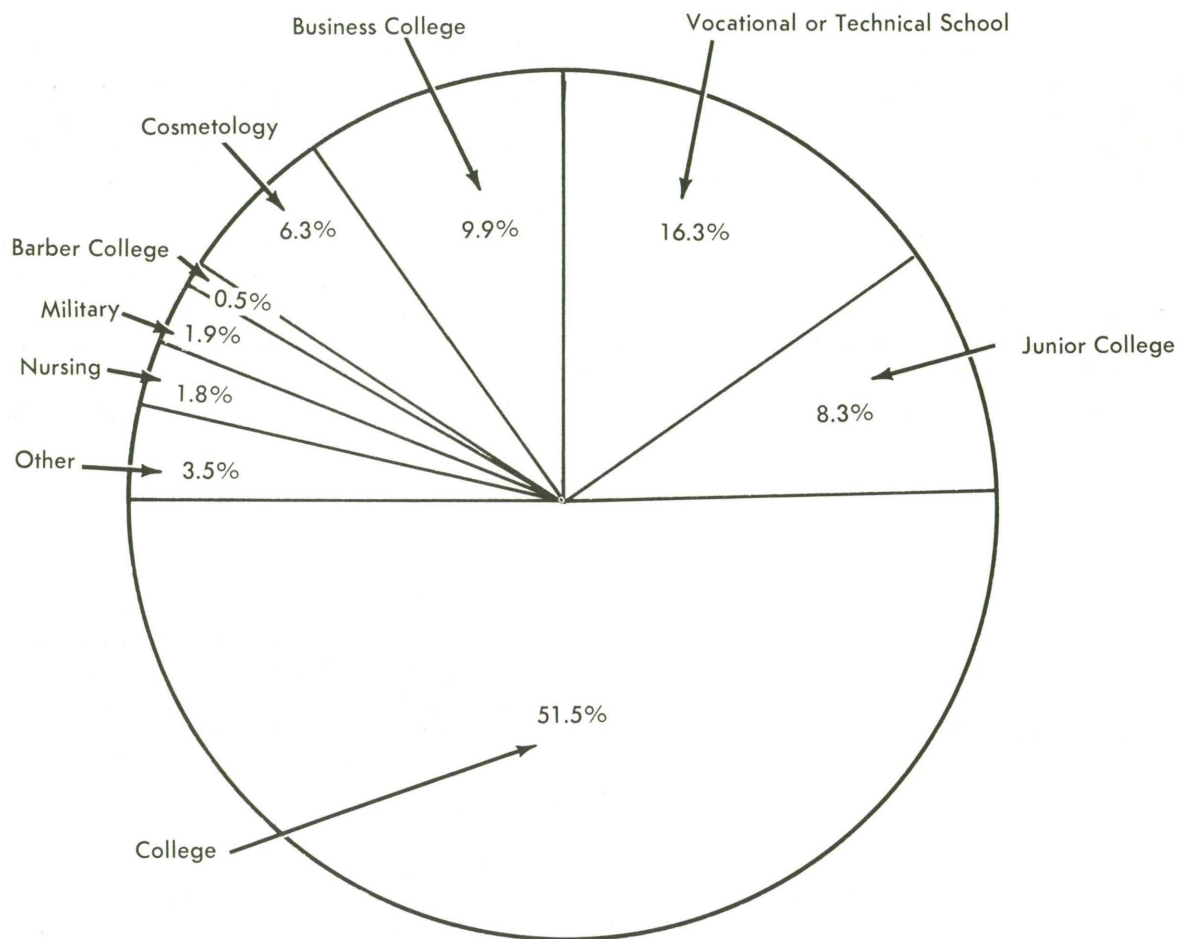
.... 691 or 16.8 per cent do not plan to secure additional educational training

.... 14 or 0.4 per cent are undecided

PLATE XI — 2

Per Cent of Twelfth Grade Students Planning  
To Secure Additional Educational Training

1964-65



In response to the first question, "Do you plan to pursue any type of education beyond high school?" 85.6 per cent of the juniors and 82.8 per cent of the seniors indicated an interest in continuing their formal education. In total, this accounted for 6,807 students, or 84.2 per cent of the 8,804 students surveyed.

Of the combined group, 1247 students, including 556 juniors and 691 seniors, indicated no desire to continue in school. This represented 15.3 per cent of the combined group. A small per cent, 0.4 per cent of the juniors and 0.3 per cent of the seniors, were undecided on plans for further education.

Among the juniors responding to the second question indicating their choice of institution for post high school training, 48.4 per cent indicated they would attend a four-year college, while 51.9 per cent of the seniors indicated the four-year college as their choice.

The second most popular institution was the vocational or technical school which 19.0 per cent of the juniors and 16.4 per cent of the seniors indicated as their first choice. Business college was the choice of 10.6 per cent of the juniors and 8.7 per cent of the seniors. Junior college was chosen by 7.4 per cent of the juniors and 8.3 of the seniors.

The remaining junior respondents gave these preferences: cosmetology, 6.70 per cent; nursing, 1.9 per cent; service, 1.2 per cent; barber school, 0.9 per cent; and other, 3.9 per cent. Other seniors responded in a similar pattern with 6.3 per cent choosing cosmetology; 1.8 per cent, nursing; 1.9 per cent, military service; 0.5 per cent, barber school; and 4.0 per cent, other.

It must be recognized that a student's statement of future plans is not necessarily a commitment to fulfillment of those plans. Implementation of student plans is dependent on a host of variables, i.e., financial, social, academic ability, and proximity of institutions. By the same token, it must be recognized that availability, proximity and visibility of vocational and educational programs and facilities will not only help implement the plans of some but will initiate educational and vocational plans for others.

#### POTENTIAL ENROLLMENTS

At the base of any enrollment projection is either some known fact or some probable future event. The accuracy and reliability of the projection is only as good as the base. Unfortunately, no known projection formula or past knowledge is available from which to base the projected enrollment of the Area X vocational school. It is possible, however, to make enrollment projections from a base of assumptions about events that are likely to occur, or have some probability of occurrence.

Because the accuracy of projections is dependent on the correctness of the assumptions, a matter that time alone can prove or disprove, three enrollment projections are presented in this chapter using assumptions based on available information.



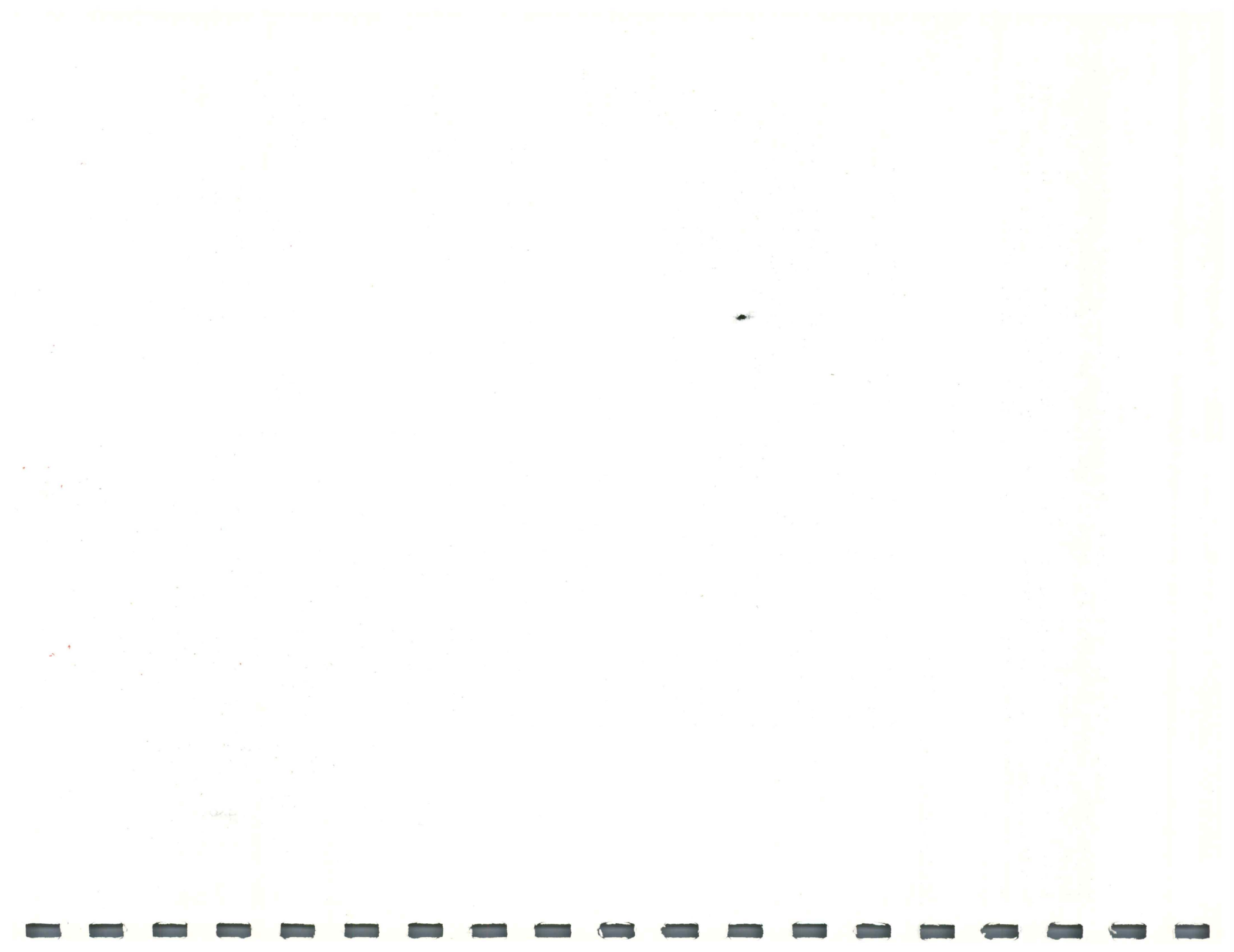
Common to the projections is the assumption that the student population base, 1954 to 1974, county by county and grade by grade, for the eight-county area is as determined by the kindergarten trend line and mean survival ratio method. The first projection is based on assumptions founded on information available from college-going trends for Iowa high school students. The second and third projections use information presented in this study concerning students in the eight counties of Area X.

#### Projection I - Assumptions

1. That the student population base, county by county and grade by grade, is as determined by the kindergarten trend line and mean survival ratio (Table XI-5 to Table XI-13).
2. That, according to "Data On Iowa Schools, 1965" published by the Iowa Department of Public Instruction, 57 per cent of Iowa high school graduates will continue their education beyond high school. It should be noted that the eight counties have a slightly higher four-year college attendance percentage than the State as a whole, and a lower-than-average community and junior college attendance percentage. This is undoubtedly a result of the proximity of four-year institutions in the eight-county area and a lack of junior colleges in the area. The State averages are used to avoid these influences and distortions.
3. That of those Iowa high school graduates continuing their education, 14 per cent will choose some program other than a four-year college or junior college.
4. That the proposed vocational school for Area X will provide the desired programs for those students not choosing the four-year college or junior college.
5. That the total projected enrollment in the vocational school for a given year can be determined by adding the projected enrollment of that year to the preceding year's projected enrollment.

#### Projection I - Potential Enrollment

As shown in Table XI-3, enrollment in the Area X vocational school would reach 826 in the school year 1973-1974, with a projected opening enrollment of 391 students. The average two-year projected enrollment during the nine-year period 1966-1975 would be 808 students. Although this first ten-year projection is based on the assumption of a constant 57 per cent college attendance rate, national averages and Iowa statistics indicate an increasing proportion of high school graduates are going on to some course work each year. If the per cent of high school graduates going on to college continues





to increase (the per cent of Iowa high school graduates going on to college in 1959 was 43.7%; 1960-46.9%; 1961-48.2%; 1962-49.8%; 1963-53.2%) the constant attendance assumption leads to an understatement of the projected enrollment.

TABLE XI-3

PROJECTION I - POTENTIAL STUDENT ENROLLMENT

Year	Projected 12th Grade Base For Area X	High School Graduates of Area X Continuing Education Based on State Average	Potential Enrollment of Area X High School Graduates in Area X Vocational School	Total Projected Enrollment For Area X Vocational School
65-66	4899	2792	391	391
66-67	4855	2767	387	778
67-68	4935	2813	394	781
68-69	5221	2975	416	810
69-70	5013	2857	400	816
70-71	5066	2888	404	804
71-72	5110	2913	408	812
72-73	5130	2924	409	817
73-74	5222	2976	417	826
74-75	5124	2921	409	826

Projections II and III - Assumptions

1. That the student population base, county by county and grade by grade, is as determined by the kindergarten trend line and mean survival ratio (Tables XI-5 to XI-13).
2. That 82 per cent of the seniors in the eight-county area will continue their education beyond high school.

Projections II and III - Assumptions -Contd.

3. That of those seniors in the eight-county area continuing their education, 40 per cent will chose programs other than those offered by a four-year college or junior college, and specifically, 17 per cent will go to a vocational-technical school.
4. That the proposed vocational school for Area X will provide the desired programs for those students not choosing the four-year college or junior college.
5. That the total projected enrollment in the vocational school for a given year can be determined by adding the projected enrollment of that year to the preceding year's projected enrollment.

Projections II and III - Potential Enrollment

With the second set of assumptions as the base, the projected enrollments for the vocational school are considerably higher. This is due to a higher per cent of students expressing a desire to continue their education beyond high school. If the first part of the third assumption above is followed, using all those students planning to continue their education in institutions other than four-year or junior colleges, the total enrollment could reach as high as 3,396 students at the close of the ten year period. If the second part of the third assumption is used, basing the projection on the per cent of the seniors in the survey that specifically indicated plans to continue their training in a vocational school, the projected enrollment would reach 1,443 students.



TABLE XI-4

## PROJECTIONS II AND III - POTENTIAL STUDENT ENROLLMENT

Year	Projected 12th Grade Base For Area X	High School Graduates of Area X Continuing Education Based on Survey	Area X High School Graduates Not Planning Four-Year or Junior College Attendance	Area X Vocational School Potential Enrollment Based on High School Graduates Not Planning Four-Year or Junior College Attendance	Area X High School Graduates Specifically Planning Attendance at a Vocational School	Area X Vocational School Potential Enrollment Based on High School Graduates Specifically Planning Attendance at a Vocational School
65-66	4899	4017	1607	1607	683	683
66-67	4855	3981	1592	3199	677	1360
67-68	4935	4047	1619	3211	688	1365
68-69	5221	4281	1712	3331	728	1416
69-70	5013	4111	1644	3356	699	1427
70-71	5066	4154	1662	3306	706	1405
71-72	5110	4190	1676	3338	712	1418
72-73	5130	4207	1683	3359	715	1427
73-74	5222	4282	1713	3396	728	1443
74-75	5124	4242	1681	3394	714	1442





\*

Total Student Enrollment - 8-County Area - Past, Present, Future Table XI-5

School Year Grades

School Year	K	1	2	3	4	5	6	7	8	9	10	11	12
55 - 56	5222	6547	5741	5737	4904	4166	4249	6036	4432	3863	3507	3138	2897
56 - 57	5868	6410	5802	5715	5579	4771	4083	4192	4235	4249	3691	3251	2953
57 - 58	5865	7170	5876	5803	5603	5601	4769	4079	4174	4285	4194	3521	3110
58 - 59	6010	7031	6337	5811	5711	5519	5499	4774	4019	4073	4020	3823	3203
59 - 60	6500	6901	6392	6284	5746	5600	5542	5549	4677	4039	4023	3809	3562
60 - 61	6685	6778	6427	6248	6155	5637	5560	5515	5458	4779	3962	3854	3589
61 - 62	6848	6982	6557	6397	6141	6098	5628	5589	5496	5495	4660	3754	3629
62 - 63	6527	6864	6515	6364	6148	6064	5953	5597	5456	5542	5332	4414	3579
63 - 64	6409	6703	6637	6382	6268	6132	5961	5977	5446	5539	5408	5210	4273
64 - 65	7197	6647	6492	6528	6284	6179	6061	5997	5959	5660	5449	5177	5069
65 - 66	7469	7956	6176	6407	6396	6203	6113	6061	5722	5987	5505	5162	4899
66 - 67	7751	8257	7392	6095	6278	6314	6137	6113	5783	5749	5823	5215	4885
67 - 68	8044	8569	7672	7295	5972	6197	6247	6137	5833	5810	5592	5517	4935
68 - 69	8348	8893	7962	7572	7148	5895	6131	6247	5856	5860	5651	5298	5221
69 - 70	8663	9229	8263	7858	7419	7056	5832	6131	5961	5883	5700	5354	5013
70 - 71	8990	9577	8575	8155	7699	7324	6981	5832	5850	5989	5722	5400	5066
71 - 72	9329	9939	8899	8463	7990	7600	7246	6981	5565	5877	5825	5421	5110
72 - 73	9681	10313	9235	8783	8292	7887	7519	7246	6661	5591	5716	5518	5130
73 - 74	10047	10702	9583	9114	8606	8185	7803	7519	6914	6692	5438	5415	5222
74 - 75	10426	11107	9944	9458	8930	8495	8098	7803	7175	6946	6509	5152	5124

\*Exclusive of Special Education

XI-15

\*

BENTON COUNTY - Table XI-6 Student Enrollment - Past, Present, Future

School Year	Grades												
	K	1	2	3	4	5	6	7	8	9	10	11	12
55 - 56	520	547	546	550	446	413	417	406	393	370	355	337	335
56 - 57	497	470	466	476	486	392	353	374	363	377	343	336	311
57 - 58	508	501	455	455	455	474	387	340	376	402	369	319	310
58 - 59	448	520	501	452	440	460	470	387	342	400	387	354	306
59 - 60	576	543	568	561	510	471	527	527	432	369	366	357	317
60 - 61	480	530	466	481	476	446	418	471	470	408	348	360	329
61 - 62	523	491	511	464	477	462	438	387	429	488	417	343	356
62 - 63	472	534	490	500	467	498	490	436	392	510	473	409	325
63 - 64	454	496	529	465	504	465	485	458	430	441	472	457	380
64 - 65	487	483	481	504	466	484	446	450	459	455	404	435	437
65 - 66	487	499	466	464	492	454	475	429	441	487	432	385	408
66 - 67	487	499	481	449	453	480	446	456	420	468	463	412	361
67 - 68	487	499	481	464	438	441	471	429	447	446	445	442	386
68 - 69	487	499	481	464	453	427	433	453	420	475	424	425	414
69 - 70	587	499	481	464	453	441	419	416	444	446	451	404	398
70 - 71	487	499	481	464	453	441	433	403	407	471	424	430	379
71 - 72	487	499	481	464	453	441	433	416	395	432	447	404	403
72 - 73	487	499	481	464	453	441	433	416	407	419	410	426	379
73 - 74	487	499	481	464	453	441	433	416	407	432	398	391	399
74 - 75	487	499	481	464	453	441	433	416	407	432	410	380	366

91-IX

\*Exclusive of Special Education



CEDAR COUNTY - Table XI-7 Student Enrollment - Past, Present, Future

School Year Grades

	K	1	2	3	4	5	6	7	8	9	10	11	12
55 - 56	355	433	378	427	320	311	318	315	299	300	231	256	237
56 - 57	420	385	447	380	424	335	308	299	308	283	299	223	236
57 - 58	415	467	386	423	395	415	333	309	299	306	296	280	218
58 - 59	384	427	471	387	433	398	408	330	315	289	292	276	263
59 - 60	376	382	430	452	378	422	375	407	317	309	289	270	253
60 - 61	376	399	379	417	445	372	413	362	411	322	309	271	250
61 - 62	414	399	403	372	412	452	359	409	355	395	302	288	264
62 - 63	421	422	398	409	353	412	443	346	412	361	375	292	272
63 - 64	379	434	415	387	395	347	407	438	355	417	350	364	269
64 - 65	439	403	425	397	379	381	355	401	434	347	411	339	363
65 - 66	451	461	403	415	392	377	374	348	399	427	340	389	320
66 - 67	463	473	461	394	410	390	370	366	346	393	419	322	368
67 - 68	475	486	473	451	389	407	383	362	364	341	385	397	304
68 - 69	488	499	486	462	445	387	399	375	360	358	334	365	375
69 - 70	501	512	499	475	456	442	380	391	373	354	351	316	345
70 - 71	515	526	512	488	469	453	434	372	389	367	347	332	299
71 - 72	529	541	526	501	482	466	445	425	370	383	360	329	314
72 - 73	543	555	541	514	495	479	457	436	423	364	376	341	311
73 - 74	558	570	555	529	508	492	470	448	434	416	357	356	322
74 - 75	573	586	570	543	523	505	483	460	446	427	408	338	336

XI-17

\*Exclusive of Special Education

DELAWARE COUNTY - Table XI-8 Student Enrollment\* - Past, Present, Future

School Year Grades

	K	1	2	3	4	5	6	7	8	9	10	11	12
55 - 56	295	361	321	269	236	231	232	253	258	231	221	193	175
56 - 57	321	340	307	322	257	235	230	224	238	276	214	210	172
57 - 58	337	359	304	282	309	263	211	228	227	255	257	200	200
58 - 59	342	380	296	285	274	307	253	211	219	242	246	236	187
59 - 60	366	320	314	289	259	260	292	242	197	233	217	224	224
60 - 61	365	285	294	303	292	243	258	269	241	221	219	206	212
61 - 62	424	350	318	348	335	332	272	304	317	319	259	231	204
62 - 63	417	342	315	313	354	325	310	276	309	329	313	243	211
63 - 64	410	328	315	297	296	331	307	302	256	316	324	295	224
64 - 65	412	314	319	308	299	289	320	300	304	297	309	300	278
65 - 66	428	385	286	315	303	296	281	319	299	335	289	292	281
66 - 67	444	400	351	282	310	300	288	280	318	330	326	273	273
67 - 68	461	415	365	346	278	307	292	287	279	351	321	308	256
68 - 69	479	431	379	360	341	275	298	291	286	308	342	304	288
69 - 70	497	448	393	374	355	337	267	297	290	315	300	323	285
70 - 71	516	465	409	388	369	351	328	266	296	320	307	284	302
71 - 72	536	483	424	403	382	365	341	327	265	326	311	290	266
72 - 73	557	502	441	418	397	378	355	340	326	292	317	294	272
73 - 74	578	521	458	435	412	393	368	354	338	359	284	300	275
74 - 75	600	541	476	452	429	408	382	357	352	373	350	268	281

XI-18

\*Exclusive of Special Education



\*  
IOWA COUNTY - Table XI-9 Student Enrollment - Past, Present, Future

XI-19

School Year	Grades	K	1	2	3	4	5	6	7	8	9	10	11	12
55 - 56		262	397	324	329	284	237	232	249	244	242	230	223	188
56 - 57		327	410	345	331	359	291	259	263	265	247	240	232	209
57 - 58		242	513	339	350	341	362	308	259	269	257	251	233	227
58 - 59		350	429	368	338	337	335	364	315	260	286	265	252	222
59 - 60		346	382	385	356	337	324	334	374	306	267	274	258	238
60 - 61		421	380	344	376	366	348	334	341	372	327	274	269	250
61 - 62		374	433	336	347	354	351	336	341	317	377	300	245	248
62 - 63		362	377	392	321	341	354	333	326	325	346	380	281	247
63 - 64		349	332	365	378	329	344	352	340	333	353	330	362	273
64 - 65		364	314	303	345	374	296	327	342	325	349	329	317	342
65 - 66		384	442	274	297	346	368	297	333	338	338	342	317	303
66 - 67		405	467	387	269	298	341	369	303	329	352	331	329	303
67 - 68		427	492	408	380	270	293	342	376	300	342	345	319	315
68 - 69		450	519	430	401	382	266	294	349	372	312	335	332	305
69 - 70		475	547	454	422	403	376	267	300	345	387	306	323	318
70 - 71		501	577	479	446	424	397	377	272	297	359	379	295	309
71 - 72		529	609	505	471	448	418	398	384	269	309	352	365	282
72 - 73		558	643	533	496	473	441	420	406	380	280	303	339	349
73 - 74		589	678	563	524	498	466	443	428	402	396	274	292	324
74 - 75		621	716	593	553	526	491	468	452	424	418	388	264	279

\*Exclusive of Special Education

\*

JOHNSON COUNTY - Table XI-10 Student Enrollment - Past, Present, Future

School Year	Grades												
	K	1	2	3	4	5	6	7	8	9	10	11	12
55 - 56	668	1177	820	853	757	580	633	578	552	478	425	412	348
56 - 57	742	1178	883	787	852	713	563	634	587	527	471	402	395
57 - 58	770	1224	877	840	770	848	695	557	609	577	512	456	387
58 - 59	889	1188	944	869	832	755	816	670	540	621	564	459	436
59 - 60	924	1276	964	939	856	800	732	818	643	555	580	531	441
60 - 61	923	1161	1002	923	926	792	785	720	780	657	548	565	505
61 - 62	1071	1112	1009	997	920	886	788	779	730	785	644	511	536
62 - 63	906	1067	913	928	928	852	851	769	747	698	763	624	493
63 - 64	866	1081	980	936	915	908	855	850	745	759	726	735	597
64 - 65	1069	1093	1004	964	917	914	882	862	861	791	756	688	732
65 - 66	1132	1461	898	979	946	882	892	873	844	865	777	717	661
66 - 67	1199	1547	1201	875	960	910	861	883	854	848	850	737	689
67 - 68	1270	1639	1271	1171	858	924	888	852	864	858	833	806	708
68 - 69	1345	1736	1347	1239	1149	826	902	879	834	868	843	790	775
69 - 70	1425	1838	1427	1313	1215	1106	806	893	860	838	852	799	759
70 - 71	1510	1948	1511	1391	1288	1169	1080	798	874	864	823	808	768
71 - 72	1600	2064	1601	1473	1365	1240	1141	1069	781	878	849	780	777
72 - 73	1695	2187	1697	1561	1445	1314	1210	1130	1046	785	862	805	750
73 - 74	1796	2317	1798	1655	1531	1391	1283	1198	1106	1051	771	817	774
74 - 75	1903	2455	1905	1753	1624	1473	1358	1271	1173	1111	1032	731	785

XI-20

\*Exclusive of Special Education



\*  
 JONES COUNTY - Table XI-11 Student Enrollment - Past, Present, Future

School Year Grades

XI-21

School Year	K	1	2	3	4	5	6	7	8	9	10	11	12
55 - 56	250	669	491	431	393	337	301	377	386	307	282	242	257
56 - 57	312	592	464	484	415	391	338	304	360	267	298	266	228
57 - 58	329	639	454	469	476	408	407	336	300	358	347	282	245
58 - 59	328	591	443	425	452	450	403	405	323	276	345	325	252
59 - 60	411	443	440	430	416	420	450	383	388	329	281	332	312
60 - 61	426	414	423	438	421	405	424	435	370	372	310	271	325
61 - 62	392	454	415	427	412	411	409	420	437	375	356	301	257
62 - 63	420	409	424	415	399	406	421	423	393	429	358	341	305
63 - 64	416	443	406	416	431	388	403	436	319	392	418	362	324
64 - 65	415	429	420	403	414	424	387	422	434	407	409	389	352
65 - 66	441	588	368	414	393	402	427	388	399	426	412	391	370
66 - 67	468	625	505	363	403	381	404	428	367	392	431	394	372
67 - 68	497	663	536	498	353	391	383	405	405	360	397	412	375
68 - 69	528	704	569	528	485	342	393	384	383	398	364	380	392
69 - 70	561	748	604	561	514	471	344	394	363	376	403	348	362
70 - 71	596	795	642	596	547	499	474	344	372	357	381	386	331
71 - 72	633	845	682	633	581	531	502	475	325	365	361	365	367
72 - 73	672	897	725	673	617	564	534	503	449	319	370	345	347
73 - 74	714	953	770	715	656	599	568	535	476	441	323	354	328
74 - 75	759	1012	818	759	697	637	603	569	506	468	447	309	337

\*Exclusive of Special Education

\*  
LINN COUNTY - Table XI-12 Student Enrollment - Past, Present, Future

School Year Grades

	K	1	2	3	4	5	6	7	8	9	10	11	12
55 - 56	2557	2698	2566	2500	2096	1759	1804	3540	1984	1662	1489	1247	1152
56 - 57	2955	2742	2620	2562	2428	2047	1753	1802	1805	1978	1570	1331	1192
57 - 58	2933	3015	2699	2587	2500	2491	2081	1772	1802	1829	1869	1501	1285
58 - 59	2926	3043	2944	2696	2553	2477	2450	2092	1748	1673	1632	1648	1305
59 - 60	3092	3158	2919	2904	2644	2530	2496	2462	2150	1722	1749	1563	1521
60 - 61	3268	3224	3157	2962	2870	2692	2564	2572	2489	2119	1693	1646	1444
61 - 62	3278	3338	3208	3098	2870	2862	2695	2599	2577	2430	2048	1604	1520
62 - 63	3176	3357	3256	3131	2981	2871	2788	2701	2544	2519	2354	1912	1518
63 - 64	3176	3286	3313	3199	3078	3047	2835	2846	2696	2524	2482	2337	1917
64 - 65	3666	3293	3249	3297	3125	3074	3034	2890	2832	2686	2496	2405	2269
65 - 66	3823	3816	3233	3220	3221	3132	3065	3069	2732	2785	2602	2349	2266
66 - 67	3986	3979	3746	3204	3146	3228	3123	3101	2901	2686	2698	2449	2213
68 - 68	4156	4149	3906	3713	3130	3153	3219	3159	2931	2853	2602	2540	2307
68 - 69	4334	4326	4073	3871	3628	3137	3144	3257	2986	2882	2764	2449	2393
69 - 70	4519	4511	4247	4037	3782	3636	3128	3181	3079	2936	2792	2602	2307
70 - 71	4712	4704	4429	4209	3944	3790	3626	3164	3007	3028	2844	2628	2451
71 - 72	4913	4905	4618	4390	4112	3953	3780	3668	2991	2957	2933	2677	2476
72 - 73	5123	5114	4816	4577	4289	4121	3942	3824	3467	2941	2864	2761	2522
73 - 74	5342	5333	5021	4773	4472	4298	4110	3988	3615	3409	2849	2696	2601
74 - 75	5570	5561	5236	4976	4663	4482	4286	4158	3770	3555	3302	2682	2540

\*Exclusive of Special Education

XI-22



WASHINGTON COUNTY - Table XI-13 Student Enrollment - Past, Present, Future \*

School Year Grades

	K	1	2	3	4	5	6	7	8	9	10	11	12
55 - 56	315	265	295	378	372	298	312	318	316	273	274	228	205
56 - 57	294	293	270	373	358	367	279	292	309	294	256	251	210
57 - 58	331	452	362	397	357	340	347	278	292	301	293	250	238
58 - 59	343	453	370	359	390	337	335	364	272	286	289	273	232
59 - 60	409	397	372	353	346	373	336	336	344	255	267	274	256
60 - 61	426	385	362	348	359	339	364	345	325	353	261	266	274
61 - 62	372	405	357	344	361	342	331	350	334	326	334	231	244
62 - 63	353	356	327	347	325	346	317	320	334	350	316	312	208
63 - 64	359	303	314	304	320	302	317	307	312	337	306	298	289
64 - 65	345	318	291	310	310	317	310	330	310	328	335	304	296
65 - 66	349	367	296	305	302	297	305	308	321	308	314	317	286
66 - 67	354	371	341	310	297	290	286	303	300	319	295	297	298
67 - 68	359	377	345	358	302	285	279	284	295	298	306	279	279
68 - 69	364	382	351	362	349	290	275	277	276	293	285	289	262
69 - 70	369	387	355	368	353	335	279	273	269	274	281	269	272
70 - 71	374	393	360	372	359	339	323	277	266	267	262	266	253
71 - 72	379	398	366	378	363	344	327	321	269	264	256	248	250
72 - 73	384	403	370	384	369	348	331	325	312	267	253	242	233
73 - 74	389	409	375	388	375	354	335	329	316	310	256	239	227
74 - 75	394	414	380	393	379	360	341	333	320	314	297	242	224

\*Exclusive of Special Education

XI-23





Total Student Enrollment - 8-County Area - Past, Present, Future Table XI-14

School Year Grades

School Year	K-3	4-6	K-6	7-9	10-12	7-12	K-8	9-12	K-12
55 - 56	23247	13319	36566	14331	99542	23873	47034	13405	60439
56 - 57	23795	14433	38228	12676	99895	22571	46655	14144	60799
57 - 58	24714	15973	40687	12538	10825	23363	48940	15110	64050
58 - 59	25189	16729	41918	12866	11046	23912	50711	15119	65830
59 - 60	26077	16888	42965	14265	11394	25659	53191	15433	68624
60 - 61	26138	17352	43490	15752	11405	27157	54463	16184	70647
61 - 62	26784	17867	44651	16580	12043	28623	55736	17538	73274
62 - 63	26270	18165	44435	16595	13325	29920	55488	18867	74355
63 - 64	26131	18361	44492	16962	14891	31853	55915	20430	76345
64 - 65	26864	18524	45388	17616	15695	33311	57344	21355	78699
65 - 66	28008	18712	46720	17770	15566	33336	58503	21553	80056
66 - 67	29495	18729	48224	17645	15923	33568	60120	21672	81792
67 - 68	31580	18416	49996	17780	16044	33824	61966	21854	83820
68 - 69	32775	19174	51949	17963	16170	34133	64052	22030	86082
69 - 70	34013	20307	54320	17975	16067	34042	66412	21950	88362
70 - 71	35297	22004	57301	17671	16188	33859	68983	22177	91160
71 - 72	36630	22836	59466	18423	16356	34779	72012	22233	94245
72 - 73	38012	23698	61710	19498	16364	35862	75617	21955	97572
73 - 74	39446	24594	64040	21125	16075	37200	78473	22767	101240
74 - 75	40935	25523	66458	21924	16785	38709	81436	23731	105167

\*Exclusive of Special Education

BENTON COUNTY - Table XI-15 Student Enrollment - Past, Present, Future \*

School Year	Grade Totals								
	K-3	4-6	K-6	7-9	10-12	7-12	K-8	9-12	K-12
55 - 56	2163	1276	3439	1169	1027	2196	4238	1397	5635
56 - 57	1909	1231	3140	1114	990	2104	3877	1367	5244
57 - 58	1919	1316	3235	1118	998	2116	3951	1400	5351
58 - 59	1921	1370	3291	1129	1047	2176	4020	1447	5467
59 - 60	2248	1508	3756	1328	1040	2368	4715	1409	6124
60 - 61	1957	1340	3297	1349	1037	2386	4238	1445	5683
61 - 62	1989	1377	3366	1304	1116	2420	4182	1604	5786
62 - 63	1996	1455	3451	1338	1207	2545	4279	1717	5996
63 - 64	1944	1454	3398	1329	1309	2638	4286	1750	6036
64 - 65	1955	1396	3351	1364	1276	2640	4260	1731	5991
65 - 66	1916	1421	3337	1357	1225	2582	4207	1712	5919
66 - 67	1916	1379	3295	1344	1236	2580	4171	1704	5875
67 - 68	1931	1350	3281	1322	1273	2595	4157	1719	5876
68 - 69	1931	1313	3244	1348	1263	2611	4117	1738	5855
69 - 70	1931	1313	3244	1306	1253	2559	4104	1699	5803
70 - 71	1931	1327	3258	1281	1233	2514	4068	1704	5772
71 - 72	1931	1327	3258	1243	1254	2497	4069	1686	5755
72 - 73	1931	1327	3258	1242	1215	2457	4081	1634	5715
73 - 74	1931	1327	3258	1255	1188	2443	4081	1620	5701
74 - 75	1931	1327	3258	1255	1156	2411	4081	1588	5669

\*Exclusive of Special Education

XI-26



\*  
CEDAR COUNTY - Table XI-16 Student Enrollment - Past, Present, Future

School Year	Grade Totals								
	K-3	4-6	K-6	7-9	10-12	7-12	K-8	9-12	K-12
55 - 56	1593	949	2542	914	724	1638	3156	1024	4180
56 - 57	1632	1067	2699	890	758	1648	3306	1041	4347
57 - 58	1691	1143	2834	914	794	1708	3442	1100	4542
58 - 59	1669	1239	2908	934	831	1765	3553	1120	4673
59 - 60	1640	1175	2815	1033	812	1845	3539	1121	4660
60 - 61	1571	1230	2801	1095	830	1925	3574	1152	4726
61 - 62	1588	1223	2811	1159	854	2013	3575	1249	4824
62 - 63	1650	1208	2858	1119	939	2058	3616	1300	4916
63 - 64	1615	1149	2764	1210	983	2193	3557	1400	4957
64 - 65	1664	1115	2779	1182	1113	2295	3614	1460	5074
65 - 66	1730	1143	2873	1174	1049	2223	3620	1476	5096
66 - 67	1791	1170	2961	1105	1109	2214	3673	1502	5175
67 - 68	1885	1179	3064	1067	1086	2153	3790	1427	5217
68 - 69	1935	1231	3166	1093	1074	2167	3901	1432	5333
69 - 70	1987	1278	3265	1118	1012	2130	4029	1366	5395
70 - 71	2041	1356	3397	1128	978	2106	4158	1345	5503
71 - 72	2097	1393	3490	1178	1003	2181	4285	1386	5671
72 - 73	2153	1431	3584	1223	1028	2251	4443	1392	5835
73 - 74	2212	1470	3682	1298	1035	2333	4564	1451	6015
74 - 75	2272	1511	3783	1333	1082	2415	4689	1509	6198

\*Exclusive of Special Education

\*  
DELAWARE COUNTY - Table XI-17 Student Enrollment - Past, Present, Future

School Year	Grade Totals								
	K-3	4-6	K-6	7-9	10-12	7-12	K-8	9-12	K-12
55 - 56	1246	699	1945	742	589	1331	2456	820	3276
56 - 57	1290	722	2012	738	596	1334	2474	872	3346
57 - 58	1282	783	2065	710	657	1367	2520	912	3432
58 - 59	1303	834	2137	672	669	1341	2567	911	3478
59 - 60	1289	811	2100	672	655	1337	2539	898	3437
60 - 61	1247	793	2040	731	637	1368	2550	858	3408
61 - 62	1440	939	2379	940	694	1634	3000	1013	4013
62 - 63	1387	989	2376	914	767	1681	2961	1096	4057
63 - 64	1350	934	2284	874	843	1717	2842	1159	4001
64 - 65	1353	908	2261	901	887	1788	2865	1184	4049
65 - 66	1414	880	2294	953	862	1815	2912	1197	4109
66 - 67	1477	898	2375	928	872	1800	2973	1202	4175
67 - 68	1587	877	2464	917	885	1802	3030	1236	4266
68 - 69	1649	914	2563	885	934	1819	3140	1242	4382
69 - 70	1712	959	2671	902	908	1810	3258	1223	4481
70 - 71	1778	1048	2826	882	893	1775	3388	1213	4601
71 - 72	1846	1088	2934	918	867	1785	3526	1193	4719
72 - 73	1918	1130	3048	958	883	1841	3714	1175	4889
73 - 74	1992	1173	3165	1051	859	1910	3857	1218	5075
74 - 75	2069	1219	3288	1092	899	1991	4007	1272	5279

\*Exclusive of Special Education

XI-28



\*  
IOWA COUNTY - Table XI-18 Student Enrollment - Past, Present, Future

School Year	Grade Totals								
	K-3	4-6	K-6	7-9	10-12	7-12	K-8	9-12	K-12
55 - 56	1312	753	2065	735	641	1376	2558	883	3441
56 - 57	1413	909	2322	775	681	1456	2850	928	3778
57 - 58	1444	1011	2455	785	711	1496	2983	968	3951
58 - 59	1485	1036	2521	861	739	1600	3096	1025	4121
59 - 60	1469	995	2464	947	770	1717	3144	1037	4181
60 - 61	1521	1048	2569	1040	793	1833	3282	1120	4402
61 - 62	1490	1041	2531	1035	793	1828	3189	1170	4359
62 - 63	1452	1028	2480	997	908	1905	3131	1254	4385
63 - 64	1424	1025	2449	1026	965	1991	3122	1318	4440
64 - 65	1326	997	2323	1016	988	2004	2990	1337	4327
65 - 66	1397	1011	2408	1009	962	1971	3079	1300	4379
66 - 67	1528	1008	2536	984	963	1947	3168	1315	4483
67 - 68	1707	905	2612	1018	979	1997	3288	1321	4609
68 - 69	1800	942	2742	1033	972	2005	3463	1284	4747
69 - 70	1898	1046	2944	1032	947	1979	3589	1334	4923
70 - 71	2003	1198	3201	928	983	1911	3770	1342	5112
71 - 72	2114	1264	3378	962	999	1961	4031	1308	5339
72 - 73	2230	1334	3564	1066	991	2057	4350	1271	5621
73 - 74	2354	1407	3761	1266	890	2116	4591	1286	5877
74 - 75	2483	1485	3968	1294	931	2225	4844	1349	6193

\*Exclusive of Special Education

\*  
JOHNSON COUNTY - Table XI-19 Student Enrollment - Past, Present, Future

School Year	Grade Totals								
	K-3	4-6	K-6	7-9	10-12	7-12	K-8	9-12	K-12
55 - 56	3518	1970	5488	1608	1185	2793	6618	1663	8281
56 - 57	3590	2128	5718	1748	1268	3016	6939	1795	8734
57 - 58	3711	2313	6024	1743	1355	3098	7190	1932	9122
58 - 59	3890	2403	6293	1831	1459	3290	7503	2080	9583
59 - 60	4103	2388	6491	2016	1552	3568	7952	2107	10059
60 - 61	4009	2503	6512	2157	1618	3775	8012	2275	10287
61 - 62	4189	2594	6783	2294	1691	3985	8292	2476	10768
62 - 63	3814	2631	6455	2214	1880	4094	7961	2578	10539
63 - 64	3863	2678	6541	2354	2058	4412	8136	2817	10953
64 - 65	4130	2713	6843	2514	2176	4690	8566	2967	11533
65 - 66	4470	2720	7190	2582	2155	4737	8907	3020	11927
66 - 67	4822	2731	7553	2585	2276	4861	9290	3124	12414
67 - 68	5351	2670	8021	2574	2347	4921	9737	3205	12942
68 - 69	5667	2877	8544	2581	2408	4989	10257	3276	13533
69 - 70	6003	3127	9130	2591	2410	5001	10883	3248	14131
70 - 71	6360	3537	9897	2536	2399	4935	11569	3263	14832
71 - 72	6738	3746	10484	2728	2406	5134	12334	3284	15618
72 - 73	7140	3969	11109	2961	2417	5378	13285	3202	16487
73 - 74	7566	4205	11771	3355	2362	5717	14075	3413	17488
74 - 75	8016	4455	12471	3555	2548	6103	14915	3659	18574

XI-30

\*Enrollment by Sex: Male 11,533; Female 11,533



\*

JONES COUNTY - Table XI-20 Student Enrollment - Past, Present, Future

XI-31

School Year	Grade Totals								
	K-3	4-6	K-6	7-9	10-12	7-12	K-8	9-12	K-12
55 - 56	1841	1031	2872	1070	781	1851	3635	1088	4723
56 - 57	1852	1144	2996	931	792	1723	3660	1059	4719
57 - 58	1891	1291	3182	994	874	1868	3818	1232	5050
58 - 59	1787	1305	3092	1004	922	1926	3820	1198	5018
59 - 60	1724	1286	3010	1100	925	2025	3781	1254	5035
60 - 61	1701	1250	2951	1177	906	2083	3756	1278	5034
61 - 62	1688	1232	2920	1232	914	2146	3777	1289	5066
62 - 63	1668	1226	2894	1245	1004	2249	3710	1433	5143
63 - 64	1681	1222	2903	1147	1104	2251	3658	1496	5154
64 - 65	1667	1225	2892	1263	1150	2413	3748	1557	5305
65 - 66	1811	1222	3033	1213	1173	2386	3820	1599	5419
66 - 67	1961	1188	3149	1187	1197	2384	3944	1589	5533
67 - 68	2194	1127	3321	1170	1184	2354	4131	1544	5675
68 - 69	2329	1220	3549	1165	1136	2301	4316	1534	5850
69 - 70	2474	1329	3803	1133	1113	2246	4560	1489	6049
70 - 71	2629	1520	4149	1073	1098	2171	4865	1455	6320
71 - 72	2793	1614	4407	1165	1093	2258	5207	1458	6665
72 - 73	2967	1715	4682	1271	1062	2333	5634	1381	7015
73 - 74	3152	1823	4975	1452	1005	2457	5986	1446	7432
74 - 75	3348	1937	5285	1543	1093	2636	6360	1561	7921

\*Exclusive of Special Education

\*  
LINN COUNTY - Table XI-21 Student Enrollment- Past, Present, Future

School Year	Grade Totals								
	K-3	4-6	K-6	7-9	10-12	7-12	K-8	9-12	K-12
55 - 56	10321	5659	15980	7790 7186	3888	11074	21504	5550	27054
56 - 57	10879	6228	17107	5585	4093	9678	20714	6071	26785
57 - 58	11234	7072	18306	5403	4655	10058	21880	6484	28364
58 - 59	11609	7480	19089	5513	4585	10098	22929	6258	29187
59 - 60	12073	7670	19743	6334	4833	11167	24355	6555	30910
60 - 61	12611	8126	20737	7180	4783	11963	25798	6902	32700
61 - 62	12922	8427	21349	7606	5172	12778	26525	7602	34127
62 - 63	12920	8640	21560	7764	5784	13548	26805	8303	35108
63 - 64	12974	8960	21934	8066	6736	14802	27476	9260	36736
64 - 65	13505	9233	22738	8408	7170	15578	28460	9856	38316
65 - 66	14092	9418	23510	8586	7217	15803	29311	10002	39313
66 - 67	14915	9497	24412	8688	7360	16048	30414	10046	40460
67 - 68	15924	9502	25426	8943	7449	16392	31516	10302	41818
68 - 69	16604	9909	26513	9125	7606	16731	32756	10488	43244
69 - 70	17314	10546	27860	9196	7701	16897	34120	10637	44757
70 - 71	18054	11360	29414	9199	7923	17122	35585	10951	46536
71 - 72	18826	11845	30671	9616	8086	17702	37330	11043	48373
72 - 73	19630	12352	31982	10232	8147	18379	39273	11088	50361
73 - 74	20469	12880	33349	11012	8146	19158	40952	11555	52507
74 - 75	21343	13431	34774	11483	8524	20007	42702	12079	54781

\*Exclusive of Special Education

XI-32



\*  
WASHINGTON COUNTY - Table XI-22 Student Enrollment - Past, Present, Future

School Year	Grade Totals								
	K-3	4-6	K-6	7-9	10-12	7-12	K-8	9-12	K-12
55 - 56	1253	982	2235	907	707	1614	2869	980	3849
56 - 57	1230	1004	2234	895	717	1612	2835	1011	3846
57 - 58	1542	1044	2586	871	781	1652	3156	1082	4238
58 - 59	1525	1062	2587	922	794	1716	3223	1080	4303
59 - 60	1531	1055	2586	935	797	1732	3266	1052	4318
60 - 61	1521	1062	2583	1023	801	1824	3253	1154	4407
61 - 62	1478	1034	2512	1010	809	1819	3196	1135	4331
62 - 63	1383	988	2371	1004	836	1840	3025	1186	4211
63 - 64	1280	939	2219	956	893	1849	2838	1230	4068
64 - 65	1264	937	2201	968	935	1903	2841	1263	4104
65 - 66	1317	904	2221	937	917	1854	2850	1225	4075
66 - 67	1376	873	2249	922	890	1812	2852	1209	4061
67 - 68	1439	866	2305	877	864	1741	2884	1162	4046
68 - 69	1459	914	2373	846	836	1682	2926	1129	4055
69 - 70	1479	967	2446	816	822	1638	2988	1096	4084
70 - 71	1499	1021	2520	810	781	1591	3063	1048	4111
71 - 72	1521	1034	2555	854	754	1608	3145	1018	4163
72 - 73	1541	1048	2589	904	728	1632	3226	995	4221
73 - 74	1561	1064	2625	955	722	1677	3270	1032	4302
74 - 75	1581	1080	2661	967	763	1730	3314	1077	4391

\*Exclusive of Special Education

TABLE XI-23

## School Age Population Projection - 1970

	Total Ages 5-14	Total Ages 15-19	Total
Benton	4821	2123	6944
Cedar	3700	1522	5222
Iowa	3367	1416	4783
Johnson	10506	8390	18896
Jones	4337	2129	6466
Linn	36832	16761	53593
6-County Sub Total	63563	32341	95904
Delaware	4189	1666	5855
Washington	3598	1613	5211
2-County Sub Total	7787	3279	11066
Grand Total	71350	35620	106970
Iowa State University of Science and Technology Cooperative Extension Service . . . . Ames, Iowa			MA-1351-12



TABLE XI-24

School Age Population - 1975

	Total Ages 5-14	Total Ages 15-19	Total
Benton	4727	1931	6658
Cedar	3522	1616	5138
Iowa	3213	1452	4665
Johnson	14361	10439	24800
Jones	4449	1980	6429
Linn	43010	21502	64512
6-County Sub Total	73282	38920	112202
Delaware	3784	1698	5482
Washington	3359	1448	4807
2-County Sub Total	7143	3146	10289
Grand Total	80425	42066	122491

Iowa State University of Science and Technology  
 Cooperative Extension Service . . . . . Ames, Iowa

MA-1351-12  
 Jan. 1964





\*  
Projected Student Enrollment - 8-County Area - 1965 - 1966 Table XI-A-1

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	487	499	466	464	492	454	475	429	441	487	432	385	408	
Cedar	451	461	403	415	392	377	374	348	399	427	340	389	320	
Iowa	384	442	274	297	346	368	297	333	338	338	342	317	303	
Johnson	1132	1461	898	979	946	882	892	873	844	865	777	717	661	
Jones	441	588	368	414	393	402	427	388	399	426	412	391	370	
Linn	3823	3816	3233	3220	3221	3132	3065	3069	2732	2785	2602	2349	2266	
<hr/>														
6-County Sub total	6718	7267	5642	5789	5790	5615	5530	5440	5153	5328	4905	4548	4328	72053
<hr/>														
Delaware	428	385	286	315	303	296	281	319	299	335	289	292	281	
Washington	349	367	296	305	302	297	305	308	321	308	314	317	286	
<hr/>														
2-County Sub - total	777	752	582	620	605	593	586	627	620	643	603	609	567	8184
<hr/>														
Grand Total	7595	8019	6224	6409	6395	6208	6116	6067	5773	5971	5508	5157	4895	80237

\*Exclusive of Special Education

\*  
Projected Student Enrollment - 8-County Area - 1966 - 1967      Table XI-A-2

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	487	499	481	449	453	480	446	456	420	468	463	412	361	
Cedar	463	473	461	394	410	390	370	366	346	393	419	322	368	
Iowa	405	467	387	269	298	341	369	303	329	352	331	329	303	
Johnson	1199	1547	1201	875	960	910	861	883	854	848	850	737	689	
Jones	468	625	505	363	403	381	404	428	367	392	431	394	372	
Linn	3986	3979	3746	3204	3146	3228	3123	3101	2901	2686	2698	2449	2213	
6-County Sub-total	7008	7590	6781	5554	5670	5730	5573	5537	5217	5139	5192	4643	4306	73940
Delaware	444	400	351	282	310	300	288	280	318	330	326	273	273	
Washington	354	371	341	310	297	290	286	303	300	319	295	297	298	
2-County Sub total	798	771	692	592	607	590	574	583	618	649	621	570	571	8236
Grand Total	7806	8361	7473	6146	6277	6320	6147	6120	5835	5788	5813	5213	4877	82176

\*Exclusive of Special Education

\*  
Projected Student Enrollment - 8-County Area - 1967 - 1968 Table XI-A-3

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	487	499	481	464	438	441	471	429	447	446	445	442	386	
Cedar	475	486	473	451	389	407	383	362	364	341	385	397	304	
Iowa	427	492	408	380	270	293	342	376	300	342	345	319	315	
Johnson	1270	1639	1271	1171	858	924	888	852	864	858	833	806	708	
Jones	497	663	536	498	353	391	383	405	405	360	397	412	375	
Linn	4156	4149	3906	3713	3130	3153	3219	3159	2931	2853	2602	2540	2307	
6-County Sub total	7312	7928	7075	6677	5438	5609	5686	5583	5311	5200	5007	4916	4395	76137
Delaware	461	415	365	346	278	307	292	287	279	351	321	308	256	
Washington	359	377	345	358	302	285	279	284	295	298	306	279	279	
2-County Sub total	820	792	710	704	580	592	571	571	574	649	627	587	535	8312
Grand Total	8132	8720	7785	7381	6018	6201	6257	6154	5885	5849	5634	5503	4930	84449

\*Exclusive of Special Education



\*  
 Projected Student Enrollment - 8-County Area - 1968 - 1969      Table XI-A-4

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	487	499	481	464	453	427	433	453	420	475	424	425	414	
Cedar	488	499	486	462	445	387	399	375	360	358	334	365	375	
Iowa	450	519	430	401	382	266	294	349	372	312	335	332	305	
Johnson	1345	1736	1347	1239	1149	826	902	879	834	868	843	790	775	
Jones	528	704	569	528	485	342	393	384	383	398	364	380	392	
Linn	4334	4326	4073	3871	3628	3137	3144	3257	2986	2882	2764	2449	2393	
6-County Sub total	7632	8283	7386	6965	6542	5385	5565	5697	5355	5293	5064	4741	4654	78562
Delaware	479	431	379	360	341	275	298	291	286	308	342	304	288	
Washington	364	382	351	362	349	290	275	277	276	293	285	289	262	
2-County Sub-total	843	813	730	722	690	565	573	568	562	601	627	593	550	8437
Grand Total	8475	9096	8116	7687	7232	5950	6138	6265	5917	5894	5691	5334	5204	86999

\*Exclusive of Special Education

07-IX

\*  
Projected Student Enrollment - 8-County Area - 1969 - 1970      Table XI-A-5

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	487	499	481	464	453	441	419	416	444	446	451	404	398	
Cedar	501	512	499	475	456	442	380	391	373	354	351	316	345	
Iowa	475	547	454	422	403	376	267	300	345	387	306	323	318	
Johnson	1425	1838	1427	1313	1215	1106	806	895	860	838	852	799	759	
Jones	561	748	604	561	514	471	344	394	363	376	403	348	362	
Linn	4519	4511	4247	4037	3782	3636	3128	3181	3079	2936	2792	2602	2307	
6-County Sub total	7968	8655	7712	7272	6823	6472	5344	5575	5464	5337	5155	4792	4489	81058
Delaware	497	448	393	374	355	337	267	297	290	315	300	323	285	
Washington	369	387	355	368	353	335	279	273	269	274	281	269	272	
2-County Sub total	866	835	748	742	708	672	546	570	559	589	581	592	557	8565
Grand Total	8834	9490	8460	8014	7531	7144	5890	6145	6023	5926	5736	5384	5046	89623

\*Exclusive of Special Education

\*  
 Projected-Student Enrollment - 8-County Area - 1970 - 1971 Table XI-A-6

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	487	499	481	464	453	441	433	403	407	471	424	430	379	Total
Cedar	515	526	512	488	469	453	434	372	389	367	347	332	299	
Iowa	501	577	479	446	424	397	377	272	297	359	379	295	309	
Johnson	1510	1948	1511	1391	1288	1169	1080	798	874	864	823	808	768	
Jones	596	795	642	596	547	499	474	344	372	357	381	386	331	
Linn	4712	4704	4429	<del>4209</del>	<del>3944</del>	3790	3626	3164	3007	3028	2844	2628	2451	
6-County Sub total	8321	9049	8054	7594	7125	6749	6424	5353	5346	5446	5198	4879	4537	84075
Delaware	516	465	409	388	369	351	328	266	296	320	307	284	302	
Washington	374	393	360	372	359	339	323	277	266	267	262	266	253	
2-County Sub total	890	858	769	760	728	690	651	543	562	587	569	550	555	8712
Grand Total	9211	9907	8823	8354	7853	7439	7075	5896	5908	6033	5767	5429	5092	92787

XI-42

\*Exclusive of Special Education



\*  
Projected Student Enrollment - 8-County Area - 1971 - 1972      Table XI-A-7

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	487	499	481	464	453	441	433	416	395	432	447	404	403	
Cedar	529	541	526	501	482	466	445	425	370	383	360	329	314	
Iowa	529	609	505	471	448	418	398	384	269	309	352	365	282	
Johnson	1600	2064	1601	1473	1365	1240	1141	1069	781	878	849	780	777	
Jones	633	845	682	633	581	531	502	475	325	365	361	365	367	
Linn	4913	4905	4618	4390	4112	3953	3780	3668	2991	2957	2933	2677	2476	
6-County Sub total	8691	9463	8413	7932	7441	7049	6699	6437	5131	5324	5302	4920	4619	87421
Delaware	536	483	424	403	382	365	341	327	265	326	311	290	266	
Washington	379	398	366	378	363	344	327	321	269	264	256	248	250	
2-County Sub total	915	881	790	781	745	709	668	648	534	590	567	538	516	8882
Grand Total	9606	10344	9203	8713	8186	7758	7367	7085	5665	5914	5869	5458	5135	96303

\*Exclusive of Special Education

IX-43

\*  
Projected Student Enrollment - 8-County Area - 1972 - 1973      Table XI-A-8

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	487	499	481	464	453	441	433	416	407	419	410	426	379	
Cedar	543	555	541	514	495	479	457	436	423	364	376	341	311	
Iowa	558	643	533	496	473	441	420	406	380	280	303	339	349	
Johnson	1695	2187	1697	1561	1445	1314	1210	1130	1046	785	862	805	750	
Jones	672	897	725	673	617	564	534	503	449	319	370	345	347	
Linn	5123	5114	4816	4577	4289	4121	3942	3824	3467	2941	2864	2761	2522	
6-County Sub total	9078	9895	8793	8285	7772	7360	6996	6715	6172	5108	5185	5017	4658	91007
Delaware	557	502	441	418	397	378	355	340	326	292	317	294	272	
Washington	384	403	370	384	369	348	331	325	312	267	253	242	233	
2-County Sub total	941	905	811	802	766	726	686	665	638	559	570	536	505	9110
Grand Total	10019	10800	9604	9087	8538	8086	7682	7380	6810	5667	5755	5553	5163	100144

\*Exclusive of Special Education

77-IX

\*  
Projected Student Enrollment - 8-County Area - 1973 - 1974 Table XI-A-9

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	487	499	481	464	453	441	433	416	407	432	398	391	399	
Cedar	558	570	555	529	508	492	470	448	434	416	357	356	322	
Iowa	589	678	563	524	498	466	443	428	402	396	274	292	324	
Johnson	1796	2317	1798	1655	1531	1391	1283	1198	1106	1051	771	817	774	
Jones	714	953	770	715	656	599	568	535	476	441	323	354	328	
Linn	5342	5333	5021	4773	4472	4298	4110	3988	3615	3409	2849	2696	2601	
6-County Sub total	9486	10350	9188	8660	8118	7687	7307	7013	6440	6145	4972	4906	4748	95020
Delaware	578	521	458	435	412	393	368	354	338	359	284	300	275	
Washington	389	409	375	388	375	354	335	329	316	310	256	239	227	
2-County Sub total	967	930	833	823	787	747	703	683	654	669	540	539	502	9377
Grand Total	10453	11280	10021	9483	8905	8434	8010	7696	7094	6814	5512	5445	5250	104397

\*Exclusive of Special Education



\*  
Projected Student Enrollment - 8-County Area - 1974 - 1975      Table XI-A-10

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Benton	487	499	481	464	453	441	433	416	407	432	410	380	366	
Cedar	573	586	570	543	523	505	483	460	446	427	408	338	336	
Iowa	621	716	593	553	526	491	468	452	424	418	388	264	279	
Johnson	1903	2455	1905	1753	1624	1473	1358	1271	1173	1111	1032	731	785	
Jones	759	1012	818	759	697	637	603	569	506	468	447	309	337	
Linn	5570	5561	5236	4976	4663	4482	4286	4158	3770	3555	3302	2682	2540	
6-County Sub total	9913	10829	9603	9048	8486	8029	7631	7326	6726	6411	5987	4704	4643	99336
Delaware	600	541	476	452	429	408	382	367	352	373	350	268	281	
Washington	394	414	380	393	379	360	341	333	320	314	297	242	224	
2-County Sub total	994	955	856	845	808	768	723	700	672	687	647	510	505	9670
Grand Total	10907	11784	10459	9893	9294	8797	8354	8026	7398	7098	6634	5214	5148	109006

\*Exclusive of Special Education

97-IX

## CHAPTER XII

### PROPOSED CURRICULUM

It is the purpose of this chapter to identify guidelines for determining programs for a vocational school to serve Area X. The considerations enumerated below are not intended to be exhaustive, but rather they are suggestive of the many aspects of program planning that will face the Area X Board of Directors, administration, and advisory committee as they seek to establish a functional program for the youth and adults of the eight-county area.

The last part of this chapter contains illustrations of two course offerings.

### MAJOR CONSIDERATIONS

Determination of the program of an Area X Vocational School should take into consideration the following factors: principles of vocational and technical curricula development; labor-market information about the eight-county area, the state, and the nation; high school students preferences for vocational training opportunities, and, the present and planned programs of the Cedar Rapids Area Vocational School. Each of these considerations will be discussed briefly.

#### Principles of Vocational and Technical Curricula Development

Numerous statements of principles to be used as guidelines in the development of vocational and technical curricula are available to those charged with this responsibility. Walsh and Selden recommend that the following principles govern the determination of curriculum offerings in the vocational program of a school: (1)

1. Vocational education should occur as close to the time of application as possible.
2. There must be sufficient concentration of work in each area to enable the student to develop sufficient competence to hold an entry job in a given occupation upon the completion of the curriculum.
3. A well-planned vocational program integrates vocational education and general education.
4. Some diversity of curriculum offerings is needed to provide for individual needs and to give flexibility to the program.

(1) Walsh, John Patrick and William Selden, Vocational Education, National Society for the Study of Education, Sixty-fourth Yearbook, Part I, University of Chicago Press, 1965, Chapter V, p. 92.



5. All aspects of an occupational area cannot be included in the curriculum. Those skills which form the core of the occupation and which are necessary for entry into the occupation should be taught.
6. Vocational instruction must be geared to the times, preparing the individual to enter the world of work of today and tomorrow.

Henninger recommends that one way to identify the principles upon which the technical curriculum should be based is to describe the results sought through technical education. Henninger states that technical curricula should: (2)

1. Be directed toward a specific occupational area which is sufficiently attractive to draw qualified students. Such an area normally will embrace a cluster, or group, of occupations related to the same basic industry or technology. Occupational competence is an essential objective of each curriculum.
2. Place emphasis upon a sound understanding and appreciation of the basic principles and established scientific facts specifically related to the selected subject field.
3. Place emphasis upon practical application of established mathematical, scientific, and technological principles, rather than upon their derivation or theoretical development.
4. Contain appropriate courses in communication and other general subject matter carefully selected to suit the objectives of the specific curriculum.
5. Be developed or offered only in accordance with established needs. Curricula should be offered only in specific occupational fields where demand, either present or potential, for graduates has definitely been established or identified.
6. Be developed in scope of content and in level of technical rigor to suit the capacity of the type of students whose enrollment is sought.
7. Be organized and presented in such a manner as to give the student a clear realization of the fact that although he is receiving a sound preparation in the essentials of his selected technology, his personal growth and advancement after graduation will depend upon his continuing effort to broaden his field of knowledge and understanding.

(2) Henninger, G. Ross, *The Technical Institute in America*, McGraw-Hill Book Company, New York, 1960, pp. 31-32.



## Labor-Market Information About Area X, the State, and the Nation

The vocational education program should consider not only present manpower requirements and labor supply but also probable future requirements and projected supply. Program planning for Area X should therefore begin with a study of the results of the basic survey of the labor market in Area X as reported in Chapter IV. The survey contains information about the occupational categories, levels of employment in the several categories, prognosis for changing requirements within the categories, prognosis for emerging occupational categories, and an analysis of employment trends.

A continuous analysis of labor-market trends and needs for the state and for the nation is also essential. Data pertaining to state and national trends is readily available in various publications of the Iowa Employment Security Commission and of the United States Department of Labor.

### Survey of Eleventh and Twelfth Grade Students' Preferences For Vocational Training Opportunities

Planning the curriculum of an area vocational school can be aided by surveying the preferences for vocational training opportunities of high school students in the area that the school will serve. The reliability of such a survey, if taken at face value, is questionable. However, when considered with other factors, a survey does provide some guidance for those charged with the responsibility for program planning.

A survey of eleventh and twelfth grade students was conducted in each of the public high schools in the eight-county area in an effort to determine student preferences for vocational training opportunities. A one hundred per cent return was obtained in the survey. A copy of the questionnaire is to be found in Appendix A. Only those students interested in vocational or technical training completed the questionnaire. Students were asked to indicate their first choice of training opportunities, as well as their second choice if they so desired.

Results of the survey are shown in Table XII-1. No attempt was made to separate first or second choices.

Preferences for training opportunities in office education ranked first, followed by data processing, automotive technology, auto body rebuilding, practical nursing, welding, and medical assistant training.

The validity of the survey is enhanced by a high degree of similarity in the preferences indicated by eleventh and twelfth grade students.

TABLE XII-1

PREFERENCE OF ELEVENTH AND TWELFTH GRADE STUDENTS OF AREA X  
FOR VOCATIONAL TRAINING OPPORTUNITIES  
1964-65

Program	Eleventh Grade	Twelfth Grade	Total	Rank in Order of Preference
Office Education	388	408	796	1
Data Processing	225	357	582	2
Automotive Technology	308	272	580	3
Auto Body Rebuilding	256	220	476	4
Practical Nursing	225	207	432	5
Welding	221	197	418	6
Medical Assistant	175	213	388	7
Dental Assistant	137	218	355	8
Heavy Equipment Operation	153	177	330	9
Electronic Technology	143	172	315	10
Mechanical Drafting	169	139	308	11
Mechanical Technology	142	129	271	12
Farm Equipment Mechanics	134	105	239	13
Machinist	116	107	223	14
Carpentry	116	89	205	15
Distribution and Marketing	76	105	181	16
Machine Shop	88	72	160	17
Advanced Program in Agriculture	79	72	152	18
Food Services	63	83	146	19
Chemical Technology	82	61	143	20
Printing	40	53	93	21
Air Conditioning and Refrigeration	35	35	70	22
Plastics	36	32	68	23
Civil Technology	47	19	66	24

Cedar Rapids Area Vocational School Program

The planning of the curriculum for the Area X vocational school should carefully consider the present and planned programs of the Cedar Rapids Area Vocational School. The need to provide a smooth transition from the latter's programs to an area school's programs is essential if students' interests and other obvious factors are to be given proper consideration.



The present program offerings of the Cedar Rapids Area Vocational School are as follows:

- Spring, 1965: (Actual)
  - 1. Data Processing
  - 2. Machine Tool Operation
- August, 1965: (Planned)
  - 1. Electronic Technology
  - 2. Drafting Design Technology
  - 3. Automotive
  - 4. Welding
- September, 1966: (Planned)
  - 1. Auto Body Rebuilding
  - 2. Graphic Arts
  - 3. Practical Nursing

### Summary

Determination of the curriculum offerings for the Area X Vocational School should take into consideration all of the following factors:

1. Principles of vocational and technical curricula development.
2. Labor-market information about the eight-county area, the state and the nation.
3. Survey of eleventh and twelfth grade students' preferences for vocational training opportunities.
4. The present and planned program of the Cedar Rapids Area Vocational School.
5. Facilities and qualified staff available.
6. Finances available.

No attempt is made in this proposal to establish long-range program priorities. However, it is strongly recommended that every reasonable effort be made to effect a smooth transition from the program of the Cedar Rapids Area Vocational School to the program of the Area X Vocational School.



## ILLUSTRATED COURSE OFFERINGS

Following are descriptions of a one-year vocational program in machine tool operation and of a two-year technical program in electronics technology. The samples are intended to be illustrations of specific vocational-technical programs. Similar descriptions would be developed for other programs.

### A TYPICAL ONE-YEAR VOCATIONAL PROGRAM

#### MACHINE TOOL OPERATION

The Machine Operators course is a full 40 weeks in length. The program is divided into two 20-week semesters. Students with special aptitudes may receive basic pre-apprentice training in areas such as tool and die making. Students will have the opportunity to develop their abilities in math and science as well as the metal working machines area.

#### MACHINE OPERATORS' CURRICULUM

The students will have the opportunity to learn the proper use of measuring and layout tools. They will be given a considerable amount of metallurgy, will learn the proper use of hand tools, and will have the opportunity to develop skills on the following metal working machines: The engine and turret lathe, drill press, milling machine, grinders, and several pieces of production equipment. They will also become familiar with heat treating, blueprint reading and sketching, shop mathematics, and shop science. The student will also have an opportunity to become familiar with the industrial environment and what industry expects of new employees. They will be encouraged to write and spell correctly, as well as developing an ability to discuss and read meaningful subject materials.

Each trainee will spend the following hours in the areas listed:

Engine & Turret Lathes - - - - -	250 hours
Milling Machines - - - - -	200 hours
Grinders (All Types) - - - - -	50 hours
Metal Cutting Saws (All types) - - - - -	100 hours
Metal Shaper & Planers - - - - -	25 hours
Layout & Measuring Tools - - - - -	30 hours
Drill Press & Boring Equipment - - - - -	100 hours
Heat Treatment & Metallurgy - - - - -	45 hours
Related Instruction, Math, Blueprint Reading, etc.- - - -	200 hours

## A TYPICAL TWO-YEAR TECHNICAL PROGRAM

### ELECTRONICS TECHNOLOGY

The Technicians Program is planned to provide two years of post-high school, terminal education. It was developed for the student who wishes to become an engineering aide or technician and for an industrial position that requires a high degree of "know why" as well as "know how". The technician or engineering aide occupies a position between a graduate engineer and a skilled craftsman. (For every engineer, 3 to 5 technicians are needed).

To complete this program, the student must successfully pass two full years of approximately 35 hours of classroom and laboratory time each week. In addition, the student must spend a considerable amount of time in outside preparation.

The entire program is planned to provide the theory and practice needed for immediate employment in industry. This program is open to any person 16 years of age who is a high school graduate or equivalent with the necessary interest and aptitude. All applicants will be tested by the Iowa Employment Office. Selection will be made upon the basis of interest, aptitude and test scores.

#### FIRST YEAR

<u>First Semester</u>	<u>Hours</u>	<u>Second Semester</u>	<u>Hours</u>
Technical Mathematics I	140	Technical Mathematics II	140
Industrial Processes	95	Applied Physics	95
Use of hand tools, machine shop, welding, sheet metal, test equipment			
Orientation and Introduction to Technical Writing	95	Technical Drafting	95
Electronics Theory I	140	Electronics Theory II	140
Electronics Laboratory I	186	Electronics Laboratory II	186

#### SECOND YEAR

<u>First Semester</u>	<u>Hours</u>	<u>Second Semester</u>	<u>Hours</u>
Economics & Human Relations	95	Technical Reporting	95
Special Electronics Measurements	43	Electronics Circuits	162
Circuit Tracing	128	Ultra-high Frequencies	
Circuit Design & Analysis	190	and Micro-waves	200
Theory of Transmitters	200	Industrial Electronics	200





CHAPTER XIII

ADMINISTRATION AND FINANCE

ADMINISTRATION

Area X Board of Directors

The legal basis for the election and organization of the board of directors of Area X, and the powers and duties of that board, are to be found in SF 550, Sixty-first General Assembly, State of Iowa, as amended.

The Area X Steering Committee recommends that the board of directors of Area X consist of nine members to be elected on the basis of one member from each of nine director districts. The county boards of education of Area X, believing that decisions of the State Board of Public Instruction concerning county school systems to be finally included in Area X will influence the determination of director district boundaries, agreed on June 1, 1965, to submit this proposal without any specific recommendation concerning said boundaries. See copy of resolution of eight county boards on page XIII-2.

Administrative Staff

The administrative staff recommended for the Area X vocational school is shown in the following organizational chart.

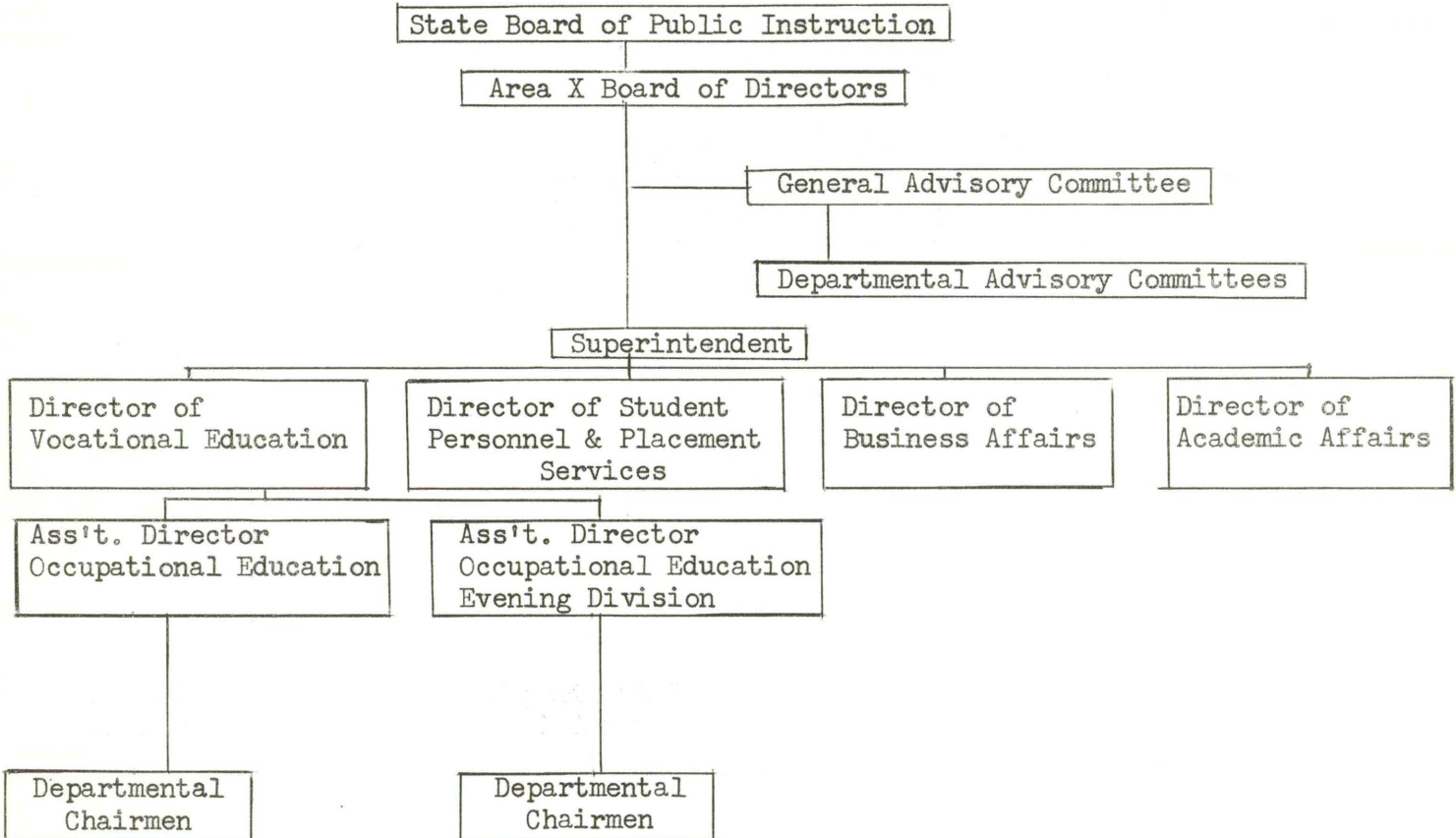


PLATE XIII-1

PROPOSED DIRECTOR DISTRICTS FOR AREA X

At a meeting of the County Boards of Education of Benton, Cedar, Delaware, Iowa, Johnson, Jones, Linn and Washington Counties held June 1, 1965, the following resolution was adopted:

"That no plan of director districts be included in the Proposal until the State Board of Public Instruction has defined the total area to be approved for the Area X Vocational School and each County Board has taken final action on the extent of their continued participation. Be it further resolved that a request be included in the Proposal for permission to submit a plan for director districts after the total area to be included in the school district has been definitely determined."

## Chapter XIII Administration and Finance (Continued)

### Instructional Staff

The following are cited by most authorities as essential attributes of the instructional personnel for a vocational-technical school:

1. A thorough knowledge of the principles and laws of science, applied science, and engineering science directly involved in, and indirectly related to, the occupational areas for which the vocational school program aims to prepare the students.
2. A thorough knowledge of the topics of mathematics by which the principles and laws of science are applied in these same occupational areas.
3. Proficiency in the manual skills and use of the tools and equipment by which products, structures, and processes are produced in industry within the technologies to which the program is related; this means personal experience through professional employment.
4. The linguistic skills essential to effective communication in the relevant occupational areas; this includes use of language as a tool in human relations as well as instruction.
5. Relationships with industry by which to anticipate changes in the relevant technologies which have significance for the vocational school program; these to be developed and maintained, for example, by continuous follow-up on graduates, participation in community technical projects, membership in vocational and technical societies, summer employment in technical pursuits, subscriptions to (and reading of) professional, vocational, and technical periodicals, etc.
6. Proficiency in appropriate areas of the social sciences as they pertain to practical human relations.

It is anticipated that instructional staff members will be available from the following sources:

1. High school or trade school faculties
2. Junior college faculties
3. College and university faculties
4. Industrial organizations
5. Private trade, and professional sources

### The Advisory Committee

Vocational education, more than any other type of education, needs close cooperation and communication with the community served. The Area X Steering Committee believes that advisory committees are an essential part of a truly sound and modern vocational program. The Steering Committee therefore adopted the following resolution



## Chapter XIII Administration and Finance (Continued)

for consideration by the Board of Directors to be elected to administer the vocational school in Area X:

### RESOLUTION

"The Board of Directors shall appoint an advisory committee or committees composed of members representing local trades, industries, and occupations. It shall be the duty of the advisory committee(s) to counsel with and advise the area board and school officials on the program of the school."

### Types and Functions of the Advisory Committees

The Steering Committee recommends that the following types of advisory committees be established:

1. General Advisory Committee:

This committee shall assist in the development and maintenance of the entire vocational program. Membership shall number twelve plus one additional member representing each of the departmental advisory committees.

2. Departmental Advisory Committees:

These committees shall serve a single department in the vocational school. Membership in each departmental advisory committee shall number six.

The plan of organization for the advisory groups showing the relationship between the general advisory committee and departmental advisory committees is shown in the Area X organizational chart.

### FINANCING THE AREA X VOCATIONAL SCHOOL

#### Source of Funds

Revenue for constructing, equipping, and operating the Area X vocational school will be derived from federal, state, and local sources.

Initially, there must be heavy reliance on federal and state sources of revenue for site acquisition, construction, equipping and staffing the area vocational school. Statutory and regulatory provisions will determine the eligibility of Area X for such funds.

Chapter XIII Administration and Finance (Continued)

Local sources of revenue, in accordance with SF 550, as amended, will permit the levying of three-fourths of one mill for operating costs. An additional three-fourths of one mill may be levied for capital improvements if approved by sixty per cent of the voters. Based on an assessed valuation of \$623,259,178, a levy of three-fourths of one mill will raise \$467,444. Additional revenue from local sources may be derived from tuition collected in accordance with the rules adopted by the State Board of Public Instruction.

Capital Costs

A review of current literature shows that approximately \$4,000 per student is required to construct and equip an adequate post-high school vocational education facility. Based on this estimate, the amount of finances required to construct and equip a facility for enrollments of various sizes is shown below.

Operating Costs

A review of current literature also shows that approximately \$800 per student is required to operate a post-high school vocational education program. Based on this estimate, the amount of finances required to operate a facility for enrollments of various sizes is shown below.

ESTIMATED CAPITAL AND OPERATING COSTS  
OF AREA X VOCATIONAL SCHOOL BASED  
ON VARIOUS ENROLLMENTS

	Enrollment Size					
	250	500	750	1000	1250	1500
Capital Costs (\$4,000 per student)	\$1,000,000	\$2,000,000	\$3,000,000	\$4,000,000	\$5,000,000	\$6,000,000
Operating Costs (\$800 per student)	200,000	400,000	600,000	800,000	1,000,000	1,200,000
Total	\$1,200,000	\$2,400,000	\$3,600,000	\$4,800,000	\$6,000,000	\$7,200,000





CHAPTER XIV  
SITE SELECTION

GUIDING PHILOSOPHY

In order to fulfill its primary function, a vocational school must be located near to the homes of the students it will serve. Thus, proximity and accessibility of the institution to the students' homes have served as the major criteria in the study of possible sites for the proposed vocational school.

In its study of site selection the Area X Steering Committee considered accessibility in terms of distance and travel time. The final criteria established defined accessibility as one hour's driving time for a majority of students in the eight county school systems. Related criteria considered by the Steering Committee were those pertaining to the density or sparsity of the population of Area X, and to the road network of the region.

ACTION OF AREA X STEERING COMMITTEE

The Area X Steering Committee in action taken on March 15, 1965, adopted the following resolution:

"The location of the vocational school for Area X should be reasonably near the junction of U. S. Highway 218 and U. S. Highway 30, south of the City of Cedar Rapids, Iowa."

Although it is recognized that legally the action of the Steering Committee can only serve as a recommendation to the Board of Directors to be elected to administer the vocational school in Area X, it does, nonetheless, indicate early study and agreement by the eight counties submitting this proposal.

The approximate location of the Area X vocational school, based on the above resolution, is shown in Plate XIV-1.

ADDITIONAL CRITERIA

Other criteria recognized by the Steering Committee as important in the selection of a specific site include the following:

- |                |              |
|----------------|--------------|
| 1. Acquisition | 4. Traffic   |
| 2. Expansion   | 5. Utilities |
| 3. Topography  | 6. Drainage  |
| 7. Zoning      |              |











## CHAPTER XV

### EVIDENCE OF LOCAL INTEREST AND SUPPORT

#### INTRODUCTION

The best indicator of local interest and support for a proposal to establish a vocational school to serve Area X would be a vote of the people in the eight county school systems. Under Iowa laws, no provision existed for an election of this type in a multi-county area at the time of development of this proposal. However, there are available other methods which may be used in setting up realistic bases for appraising local interest and support.

The eight county boards of education of Area X, in agreeing to undertake comprehensive study of the area as recorded in this report, gave evidence of their awareness of local needs for vocational education.

The vocational plans of high school students may also serve to indicate the need for vocational education and the evidence of interest in vocational education at the local level. A survey of the vocational plans of students in the 11th and 12th grades of the forty-eight public high school districts of Area X was conducted in March, 1965, and the results of that study are to be found in Chapter XI of this report.

Evidence of local interest and support might also come from articulate, organized groups in the area such as local school district boards of directors, other educational organizations, chambers of commerce, labor organizations, and service clubs. An effort was made, through the use of a resolution submitted to numerous groups in the several communities located in Area X, to determine the extent of interest and support of those groups for vocational education. A letter sent to the groups requested their endorsement of the proposal to establish an area vocational school.

#### SURVEY OF COMMUNITY INTEREST AND SUPPORT

The survey of community interest centered largely upon the use of the following resolution which was designed by a committee of school administrators and distributed by members of the committee to various community groups during the months of March and April, 1965:

#### RESOLUTION

WHEREAS, we are mindful of the growing need for skilled manpower in an increasingly industrialized Iowa, and

WHEREAS, we note the concentration of people and industry in the area encompassed by Benton, Cedar, Delaware, Iowa, Johnson, Jones, Linn, and Washington Counties, and

WHEREAS, we recognize the inadequacy of current vocational offerings in our schools in preparing youth and adults for existing job opportunities:

NOW, THEREFORE, be it known that we enthusiastically endorse the efforts being made to obtain for the eight-county area a vocational school to serve the youth and adults of the area by providing opportunities for training and retraining to develop vocational skills required in the area.

A copy of the complete resolution and the letter of request which accompanied that resolution are to be found in Appendix A. No well-organized method of distributing the resolution was developed. Rather, members of the committee distributed the resolution form at their own discretion to groups within local communities.

#### RESULTS OF THE SURVEY

Approximately two hundred organizations and community groups in the eight county school systems passed and filed the resolution in March and April, 1965, endorsing the efforts of the eight county boards of education to establish an area vocational school.

As shown in Table XV-1, the various organizations and community groups passing the resolution were arbitrarily classified into seven categories:

- (1) local school district boards of directors;
- (2) other educational groups;
- (3) city councils;
- (4) chambers of commerce and commercial or community organizations;
- (5) labor organizations;
- (6) service clubs;
- (7) miscellaneous organizations

It is significant to note that boards of directors in forty-five of the forty-eight public high school districts endorsed the resolution. Three labor organizations also registered their approval of the proposal. A complete list of all organizations which passed and filed the resolution is to be found in Table XV-2.

In summary, it may be stated that the total number and the diversity of types of organizations which passed the resolution in a relatively short period of two months are clear evidence of widespread interest in, and support of, efforts of the eight county boards of education to secure a vocational school for Area X.



TABLE XV-1

SUMMARY OF TYPES OF ORGANIZATIONS BY COUNTY  
PASSING RESOLUTIONS ENDORSING THE  
ESTABLISHMENT OF AN AREA VOCATIONAL SCHOOL

Type or Organization	Benton	Cedar	Del- aware	Iowa	John- son	Jones	Linn	Wash- ington	Total
Local School District Boards of Directors	6	9	3	5	4	3	12	3	45
Other Educational Groups, Including Advisory Committees, P. T. A.	1	7	0	4	3	1	11	1	28
City Councils	1	1	0	1	2	0	3	5	13
Chambers of Commerce, Commercial and Community Organi- zations	7	10	0	3	2	4	4	3	33
Labor Organizations			0	0			2		2
Service Clubs	9	4	0	4		10	5	5	37
Other	1	2	0	1	1	5	12	7	29
Total	25	33	3	18	12	23	49	24	187

INFORMING THE PUBLIC ABOUT THE STUDY

From its inception, the Steering Committee was cognizant of its responsibility to inform the public of the efforts being made to secure a vocational school for Area X. As a result, the committee in early March, 1965, employed a free-lance writer to report progress of the study to the thirty-eight news media in the eight counties. Included in this group are five daily and twenty-four weekly newspapers, seven radio stations, and two television stations. The first of a series of eight weekly news releases was issued on March 28, 1965. Outstanding coverage was given to the study by the great majority of news media in the eight counties by means of news stories and editorial comment.

## SUMMARY

Attempts to measure the extent of local interest and support in the establishment of a vocational school in Area X were handicapped by the fact that the most explicit indication of local interest, the vote of the people, could not be employed at the time of preparing this proposal.

However, other ways of measuring local interest and support do provide realistic bases for appraising the presence or absence of such interest and support.

The eight county boards of education, believing that the following techniques would give an indication of local interest in an area vocational school, initiated the following action:

1. Conducted a comprehensive economic, social, and educational survey of Area X.
2. Conducted a survey of the vocational plans of the eleventh and twelfth grade students of the forty-eight public high school districts.
3. Requested that interested community organizations pass a resolution endorsing efforts to establish a vocational school for Area X.
4. Issued to the news media serving the area a series of news releases which not only informed the public about the study but also generated interest in, and support of, an area vocational school.



TABLE XV-2

List of Community Organization, By County, Which  
Passed and Filed Resolutions Endorsing An Area X  
Vocational School

---

Community Organization and Location

---

Benton County	<p>A. H. Schueler, Post 217, American Legion, Atkins  American Association of University Women, Vinton  American Legion Auxiliary, George G. Luckey, Post 57, Vinton  American Legion Auxiliary, Unit No. 217, Atkins  American Legion Post 475, Garrison  Atkins Community Club, Atkins  Atkins Consolidated School, Atkins  Atkins Women's Club, Atkins  Board of Education of the Benton Community School District,      Van Horne, Blairstown, Keystone, and Newhall  Community Club, Shellsburg  Garrison Consolidated School, Garrison  Garrison School Citizens Committee, Garrison  George G. Lucky Post 57 American Legion, Vinton  Keystone Business Mens Club, Keystone  Lions Club, Garrison  Lions Club, Vinton  Newhall Commercial Club, Newhall  Norway Consolidated School, Norway  Official Board of the Garrison Methodist Church, Garrison  Urbana Consolidated School, Urbana  Vinton Chamber of Commerce, Vinton  Vinton Community School District, Vinton  Vinton Junior Chamber of Commerce, Vinton  Vinton Kiwanis Club, Vinton  Town Council, Urbana</p>
Cedar County	<p>Bennett Commercial Club, Bennett  Bennett Community School District Board of Education, Bennett  Bennett Education Association, Bennett  Bennett School Workers Club, Bennett  Cedar County Farm Bureau, Tipton  Chauncey Butler Post No. #514, West Branch  Clarence Commercial Club, Clarence  Clarence Community School District, Clarence  Durant Board of Education, Durant  Durant Business and Professional Women's Club, Durant  Durant Chamber of Commerce, Durant  Durant Junior Chamber of Commerce, Durant  Laetition Club (Iowa Federated Club), Stanwood  Lincoln Community Board of Education, Mechanicsville, Stanwood  Lions Club, Tipton  Lowden Consolidated School, Lowdan  Lowden Volunteer Fire Company, Lowden  Music Aids, Clarence</p>



Community Organization and Location

---

Cedar  
County  
(Cont.)

Parent-Teacher Organization, Durant  
Primary Mothers Club, Tipton  
Stanwood Lions Club, Stanwood  
Tipton Business and Professional Women's Club, Tipton  
Tipton Chamber of Commerce, Tipton  
Tipton Community School District, Tipton  
Tipton Rotary Club, Tipton  
Tipton Teachers Association, Tipton  
Town of Clarence, Clarence  
Trinity Lutheran Church, Lowden  
West Branch Board of Education, West Branch  
West Branch Commercial Club, West Branch  
West Branch Parent - Teacher Association, West Branch

---

Delaware  
County

Edgewood - Colesburg Community School District, Edgewood  
Maquoketa Valley Community School District, Delhi

---

Iowa  
County

Amana Parent-Teachers Association, Amana  
Amana Young Mens Bureau, Amana  
Board of Directors, Iowa Valley Community School District, Marengo  
Deep River-Millersburg Community School District, Millersburg  
and Deep River  
English Valleys Community School Board, North English  
HLV Board of Education, Victor  
Jowa Valley Parent - Teacher Association, Marengo  
Kiwanis Club of Marengo, Marengo  
Marengo Chamber of Commerce, Marengo  
Marengo Rotary, Marengo  
Millersburg Booster Club, Millersburg  
North English Community Club, North English  
North English Rotary Club, North English  
Parent - Teachers' Association, Deep River and Millersburg  
Parent - Teachers' Association, North English  
School Board of School Township of Amana, Middle Amana  
Victor City Council, Victor  
Victor Lion's Club, Victor

---

Johnson  
County

Clear Creek Parent Teacher Organization, Tiffin  
Clear Creek Community School Board of Education, Tiffin  
Iowa City Community School District, Iowa City  
Johnson County Metropolitan Planning Commission, Iowa City  
Lone Tree Chamber of Commerce, Lone Tree  
Lone Tree Community School, Lone Tree  
Solon Women's Club, Solon  
Solon Community School, Solon  
Solon Parent-Teachers Association, Solon  
Town Council, Solon  
Town Council of Tiffin, Tiffin

Community Organization and Location

---

Jones County Anamosa Chamber of Commerce, Anamosa  
Anamosa Junior Chamber of Commerce, Anamosa  
Anamosa Rotary Club, Anamosa  
Arthur McCullough Post #13 of the American Legion, Anamosa  
Blayne Minor Post #412, Olin  
Board of Education, Anamosa Community School, Anamosa  
Center Junction Men's Club, Center Junction  
Community Club (Monmouth), Monmouth  
Gale Edwards V.F.W. Post 4077, Anamosa  
Greater Monticello Committee, Monticello  
Lions Club, Anamosa  
Midland Board of Education, Wyoming  
Monticello Board of Education, Monticello  
Monticello Business and Professional Club, Monticello  
Monticello Junior Chamber of Commerce, Monticello  
Monticello Rotary Club, Monticello  
Olin Consolidated School, Olin  
Olin Lions Club, Olin  
Olin Parent - Teachers Organization, Olin  
Onslow Men's Community Club, Onslow  
Oxford Junction Board of Education, Oxford Junction  
Soros Federated Club, Olin  
Twentieth Century Club, Olin  
Wyoming Lion's Club, Wyoming  
Wyoming Post #259, Wyoming

---

Linn County Advisory Council for Adult Education, Cedar Rapids  
Alburnett Community School District, Alburnett  
Allis-Chalmers Manufacturing Company, Cedar Rapids  
Board of Education, Central City  
Board of Education, College Community School, Linn & Johnson Cos.  
Board of Education, Troy Mills  
Board of Education, Walker  
Cedar Rapids Community School District, Cedar Rapids  
Cedar Rapids Council PTA, Cedar Rapids  
Cedar Rapids Federation of Teachers, Cedar Rapids  
Cedar Rapids Labor Assembly, Cedar Rapids  
Cedar Rapids NAACP, Cedar Rapids  
Cedar Rapids Typographical Union #192, Cedar Rapids  
Center Point Consolidated School District, Center Point  
Central City Kiwanis Club, Central City  
Central City Parent-Teachers Association, Central City  
Coe College Chapter (AAUP) American Association of University  
Professors, Cedar Rapids  
Coggon Board of Education, Coggon  
Coggon Lion's Club, Coggon  
Council on Human Relations of the Cedar Rapids and Cedar  
Rapids-Marion Area  
Citizens Advisory for Cedar Rapids Public Schools, Cedar Rapids  
Cyclops Unit 109, Lisbon  
Independent Garage Owners of Cedar Rapids, Cedar Rapids



Community Organization and Location

---

Linn County (cont.) International Association of Machinists Lodge #831, Cedar Rapids  
League of Women Voters, Cedar Rapids - Marion  
Linn-Mar Board of Education, Marion  
Linn-Mar Parents and Teachers Association, Marion  
Lions Club of Alburnett, Alburnett  
Lisbon Community School, Lisbon  
Lisbon Town Council, Lisbon  
Marion Board of Education, Marion  
Marion Chamber of Commerce, Marion  
Marion City Council, Marion  
Marion Evening Lions Club, Marion  
Marion Kiwanis Club, Marion  
Marion P.T.A., Marion  
Mount Vernon Chamber of Commerce, Mount Vernon  
Mount Vernon Commercial Club, Mount Vernon  
Negro Civic Organization, Cedar Rapids  
Noon Lion's Club, Marion  
Parent - Teachers Organization, Troy Mills  
Personnel Managers' Committee, Chamber of Commerce, Cedar Rapids  
P.T.O., Coggon  
Springville Community Schools, Springville  
Square D Company, Cedar Rapids  
Town of Center Point, Center Point  
Vocational Advisory Committee, Cedar Rapids

---

Washington County Advance Ross Electronics Corporation, Washington  
Board of Directors, Mid-Prairie Community School, Wellman  
City of Washington, Washington  
Fortnightly Club, Washington  
CEB Chevrolet, Inc., Washington  
Highland Community PTA, Riverside - Ainsworth  
Highland Community School Board of Education, Riverside - Ainsworth  
Mace Motor Company, Washington  
McCleery Canning Company, Washington  
Riverside Community Club, Riverside  
Sacha Club, Ainsworth  
Town and Country Ploynouth, Washington  
Town of Aninsworth, Ainsworth  
Town Council, Brighton  
Town Council, Wellman  
Town of Riverside, Riverside  
VFW Auxillary, Washington  
Washington County Registered Nurses Association, Washington  
Washington County VFW Post 2808, Washington  
Washington Manufacturing Company, Inc., Washington  
Wellman Rotary Club, Wellman  
Y.M.C.A., Washington



## CHAPTER XVI

### TRANSITION FROM A LOCALLY-ADMINISTERED TO AN AREA-ADMINISTERED VOCATIONAL SCHOOL

An area vocational school administered by a local school district currently provides a limited offering of vocational education opportunities for students of Area X. During the 1964-65 school year the Cedar Rapids Community School District began development of an area vocational school utilizing federal grants available under the Manpower Training Act and other federal programs related to vocational education. No other area vocational schools are in operation in Area X, nor are others planned by local school districts at this time.

#### CEDAR RAPIDS AREA VOCATIONAL SCHOOL

Six vocational programs are either available in the existing school, or will be offered in the late summer of 1965. Expansion of current offerings within the limitations of local district financing are contemplated.

The vocational programs now offered, or to be offered by the summer of 1965, are as follows:

- Data Processing
- Machine Tool Operation
- Automotive
- Welding
- Mechanical Technology
- Electronic Technology

A building located at 1207 Rockford Road, Southwest, Cedar Rapids, Iowa, has been leased by the Cedar Rapids Community School District to house these programs. The lease, which extends for a five-year period from December 1, 1964, requires a monthly payment of \$1596.41 from federal and local district funds.

#### STEPS IN THE TRANSITION

If a vocational school for Area X were to become a reality, the following steps are anticipated for the transition from the locally-administered Cedar Rapids Area Vocational School to one that is administered by Area X:

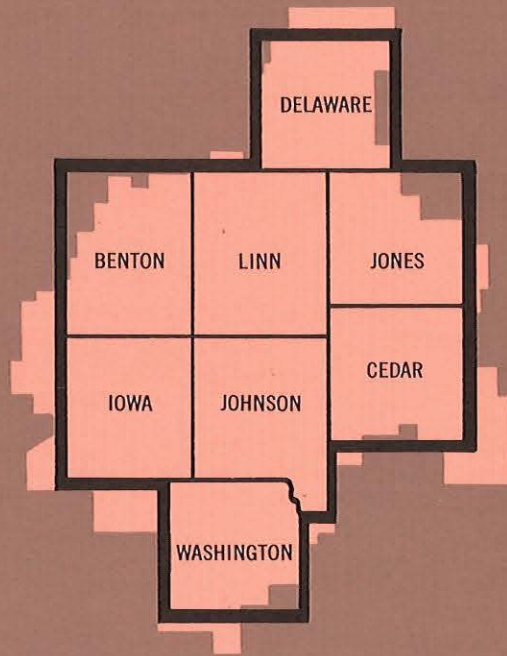
1. Election of an area board of directors.
2. Meeting of the area board of directors with the board of directors of the Cedar Rapids Community School District to discuss transfer of responsibility.
3. Employment by the area board of individuals employed in the Cedar Rapids vocational program.
4. Assumption of responsibility for the vocational school by the area board through a written agreement with the Cedar Rapids Community School District Board of Directors.
5. Reimbursement by the area board to the Cedar Rapids Community School District for a major portion of the latter's investment, from local tax sources, in equipment for the vocational school, and assumption of contractual obligations with the Federal Government for equipment provided for the program from federal sources.
6. Utilization of existing facilities by the area board until the completion of a new area vocational facility, and agreement for settlement of remaining lease obligations, if any, on the building currently occupied.
7. Discussion and settlement by mutual agreement of the two boards of various other issues related to the transition.

The Cedar Rapids Community School District Board of Directors and the Steering Committee of Area X have reviewed and approved the proposal for a step-by-step transfer of responsibility for the area vocational school as outlined above.

#### A JOINT COMMITMENT

An important consideration for the new area board, subscribed to by the Cedar Rapids Board of Directors and the Steering Committee of Area X, is that the existing programs be continued in the existing facility, without interruption, until such time as a new area vocational school is built and occupied.





\*

# PART **E**

... SUMMARY, CONCLUSIONS,  
AND RECOMMENDATIONS





## CHAPTER XVII

### SUMMARY

This proposal for vocational education is based on a study which was undertaken jointly by the county boards of education of Benton, Cedar, Delaware, Iowa, Johnson, Jones, Linn and Washington Counties, herein referred to as Area X.

The purpose of the study is to demonstrate the suitability of the eight-county area for a vocational education facility to serve youth and adults of Area X.

Suitability of Area X and, indeed, the suitability of any area of the State of Iowa for an area vocational school should, in the opinion of the sponsors of this proposal, be based on careful study and consideration of answers to the following questions:

1. What is the total population and what are the population trends of the area?
2. What is the total school population of the area? The high school population? The projected school enrollment?
3. What type of post-high school vocational education offerings are currently available in the area?
4. What are the financial resources of the area?
5. Is there evidence in the area of local initiative and community interest for the establishment and support of a vocational school?
6. Is there clear evidence of need for a vocational school in the area? What job opportunities are available?
7. What is the potential enrollment for a vocational school in the area?
8. What vocational training programs will be offered in the area school?
9. Where will the vocational school be located? How accessible is the location to students of the area?
10. What physical facilities exist in the area to house the vocational program? What additional facilities will be needed?
11. How will the area vocational school be administered?

Chapter XVII Summary - Continued

Following is a consideration, in summary form, of each of the above questions as they relate to Area X. A more complete consideration of the criteria suggested by the above questions is to be found in the preceding chapters of this report:

1. What is the total population and what are the population trends of the area?

- . . . 306,753 residents in Area X in 1960
- . . . seven of the eight counties to experience a population growth between 1960 and 1980
- . . . the per cent of gain from 1960 to 1980 to vary from 91.3 per cent in Linn County to 3.3 per cent in Benton County
- . . . 48.9 per cent gain in population for Area X from 1900 to 1960
- . . . 9.2 per cent of state population in Area X in 1900
- . . . 11.1 per cent of state population in Area X in 1960
- . . . 62.1 residents per square mile in Area X in 1960

2. What is the total school population of the area? The high school population? The projected school population?

- . . . 60,439 students enrolled in grades K-12 in Area X in 1955-56
- . . . 78,699 students enrolled in grades K-12 in Area X in 1964-65, a gain of 26.9 per cent
- . . . 105,167 students to be enrolled in grades K-12 in Area X in 1974-75, a projected growth of 26,468 students or 33.6 per cent
- . . . 21,484 students enrolled in Area X public and parochial high schools in 1964-65
- . . . 5,073 twelfth grade students enrolled in Area X public and parochial high schools in 1964-65
- . . . 9.1 per cent of total public, private, and parochial school students of Iowa attend schools in Area X
- . . . 10.6 per cent of the public, private, and parochial high school students of Iowa attend schools in Area X
- . . . 26.9 per cent increase in enrollment for Area X schools from 1955 to 1964, compares with a 20.0 per cent increase for Iowa
- . . . 14.7 per cent increase in enrollment for Area X school from 1960 to 1964 compares with a 9.8 per cent increase for Iowa



Chapter XVII Summary - Continued

3. What type of post-high school vocational education offerings are currently available in the area?

- . . . eleven private vocational schools are located in Area X
- . . . three four-year colleges and one university in Area X offer limited non-degree vocational programs
- . . . one public vocational school, administered by a local school district, serves Area X
- . . . twenty-nine of the forty-eight public high schools of Area X offer limited adult education programs that are vocational in nature

4. What are the financial resources of the area?

- . . . \$623,259,178 assessed valuation in Area X in 1964
- . . . 11.3 per cent of the assessed valuation of Iowa is represented by Area X
- . . . \$623,259 could be raised in Area X by a tax levy of one mill
- . . . \$9,524 assessed valuation per child in average daily attendance in Area X public schools

5. Is there evidence of local initiative and community interest in the area for the establishment and support of a vocational school?

- . . . the eight county boards of education in January, 1965, voluntarily joined in development of this proposal
- . . . the eight counties of Area X, without directive or mandate, undertook a comprehensive survey of the area to determine the need and feasibility of a vocational school to serve the area
- . . . local and county school officials joined in efforts to conduct approximately thirty surveys and studies for this proposal
- . . . public information concerning the study was provided by a free-lance writer retained by the joint county boards of education
- . . . one hundred eighty-five community organizations voluntarily endorsed the proposal by submitting resolutions of support

Chapter XVII Summary - Continued

- . . . labor organizations, P.T.A.'s, chambers of commerce, local school boards, city councils, and other community organizations filed resolutions of support
6. Is there clear evidence of need for a vocational school in the area? What job opportunities are available?
- . . . opportunities for vocational training in high schools of Area X are severely limited
  - . . . post-high school vocational training opportunities are limited in number and scope
  - . . . total employment for the eight-county area is increasing at a rapid pace. Nearly 140,000 persons should be employed by 1970.
  - . . . occupations showing the most significant increases in the eight-county area are: professions and technical; clerical and sales; operatives; and service workers
  - . . . occupations showing largest declines in the eight-county area are: farm and farm managers, farm laborers and foremen
  - . . . occupations remaining fairly stable in the eight-county area are: managers, officials and proprietors; private household workers; and laborers (except farm)
  - . . . unemployed is highest among the unskilled and among females
  - . . . in those occupations reflecting increases, the eight-county increases have exceeded those of the state; in those occupations reflecting decreases, the state decreases have exceeded those of the eight-county area
  - . . . manufacturing has experienced the greatest employment growth and this trend will continue through 1970 - employing 25.9 per cent of the work force; agriculture will still be the second most important industry in the area in 1970 - employing 13 per cent of the work force; professional services will continue to grow and employ nearly 25 per cent of the work force by 1970; service industries will grow in importance; males will make up 64 per cent of the employed work force in 1970 (females 36 per cent); females will be added to the work force (both proportionately and in absolute numbers) faster than males

Chapter XVII Summary - Continued

7. What is the potential enrollment for a vocational school in the area?

- . . . three different projections of the potential enrollment in an Area X vocational school were made
- . . . on the basis of these projections, enrollments in an Area X vocational school for the 1966-67 school year would range from a low of 778 students to a high of 3,199

8. What vocational training programs will be offered in the area school?

- . . . the curriculum proposed for an Area X vocational school is based on the Area X labor-market survey
- . . . the proposed curriculum is based on the state and national labor-market trends
- . . . the proposed curriculum is based on preferences expressed by eleventh and twelfth grade students for vocational training opportunities
- . . . the proposed curriculum is based on the need for continuation of the present programs of the Cedar Rapids Area Vocational School and a smooth transition of that school to area administration
- . . . the proposed curriculum is based on other factors including finances, facilities, and availability of qualified instructional staff

9. Where will the vocational school be located? How accessible is the location to students in the area?

- . . . the Area X Steering Committee recommends that the location of the area vocational school be south of the City of Cedar Rapids in the vicinity of the junction of U. S. Highways 218 and 30



Chapter XVII Summary - Continued

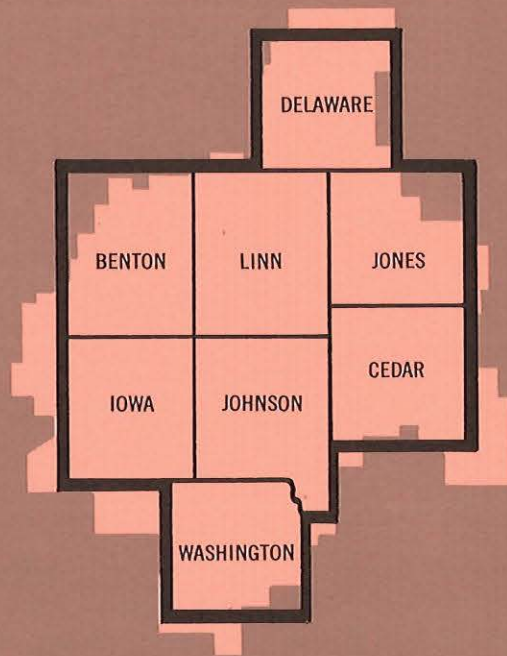
- . . . the eight-county school systems comprising Area X are served by an extensive system of state and federal highways
- . . . the proposed location of the Area X vocational school is within one hour's driving time of the majority of the people to be served

10. What physical facilities exist in the area to house the vocational program? What additional facilities will be needed?

- . . . the Area X Steering Committee recommends the continued use of the Cedar Rapids Area Vocational School until availability of a new facility
- . . . the present facility of the Cedar Rapids Area Vocational School will provide space for six vocational programs. Additional offerings will necessitate expansion of facilities

11. How will the area vocational school be administered?

- . . . statutory and regulatory provisions will determine the administrative structure for the Area X vocational school
- . . . the Area X Steering Committee recommends that an area advisory committee be established to provide guidance to the legally constituted administrative body

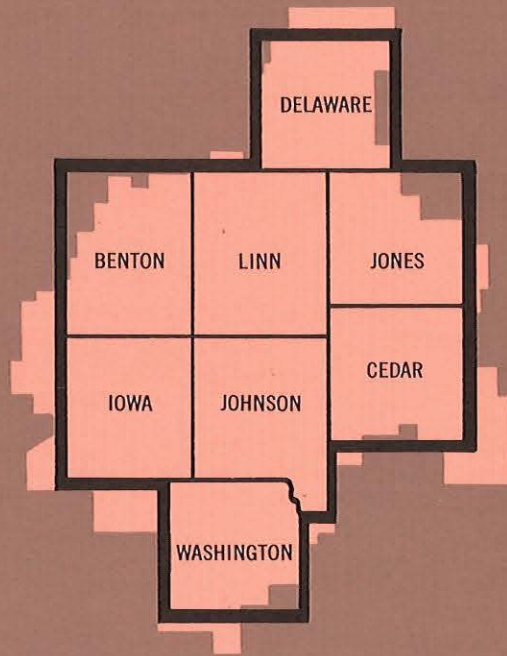


# PART **F**

... APPENDIX







# PART **E**

. . . SUMMARY, CONCLUSIONS,  
AND RECOMMENDATIONS



## CHAPTER XVII

### SUMMARY

This proposal for vocational education is based on a study which was undertaken jointly by the county boards of education of Benton, Cedar, Delaware, Iowa, Johnson, Jones, Linn and Washington Counties, herein referred to as Area X.

The purpose of the study is to demonstrate the suitability of the eight-county area for a vocational education facility to serve youth and adults of Area X.

Suitability of Area X and, indeed, the suitability of any area of the State of Iowa for an area vocational school should, in the opinion of the sponsors of this proposal, be based on careful study and consideration of answers to the following questions:

1. What is the total population and what are the population trends of the area?
2. What is the total school population of the area? The high school population? The projected school enrollment?
3. What type of post-high school vocational education offerings are currently available in the area?
4. What are the financial resources of the area?
5. Is there evidence in the area of local initiative and community interest for the establishment and support of a vocational school?
6. Is there clear evidence of need for a vocational school in the area? What job opportunities are available?
7. What is the potential enrollment for a vocational school in the area?
8. What vocational training programs will be offered in the area school?
9. Where will the vocational school be located? How accessible is the location to students of the area?
10. What physical facilities exist in the area to house the vocational program? What additional facilities will be needed?
11. How will the area vocational school be administered?



Chapter XVII Summary - Continued

Following is a consideration, in summary form, of each of the above questions as they relate to Area X. A more complete consideration of the criteria suggested by the above questions is to be found in the preceding chapters of this report:

1. What is the total population and what are the population trends of the area?

- . . . 306,753 residents in Area X in 1960
- . . . seven of the eight counties to experience a population growth between 1960 and 1980
- . . . the per cent of gain from 1960 to 1980 to vary from 91.3 per cent in Linn County to 3.3 per cent in Benton County
- . . . 48.9 per cent gain in population for Area X from 1900 to 1960
- . . . 9.2 per cent of state population in Area X in 1900
- . . . 11.1 per cent of state population in Area X in 1960
- . . . 62.1 residents per square mile in Area X in 1960

2. What is the total school population of the area? The high school population? The projected school population?

- . . . 60,439 students enrolled in grades K-12 in Area X in 1955-56
- . . . 78,699 students enrolled in grades K-12 in Area X in 1964-65, a gain of 26.9 per cent
- . . . 105,167 students to be enrolled in grades K-12 in Area X in 1974-75, a projected growth of 26,468 students or 33.6 per cent
- . . . 21,484 students enrolled in Area X public and parochial high schools in 1964-65
- . . . 5,073 twelfth grade students enrolled in Area X public and parochial high schools in 1964-65
- . . . 9.1 per cent of total public, private, and parochial school students of Iowa attend schools in Area X
- . . . 10.6 per cent of the public, private, and parochial high school students of Iowa attend schools in Area X
- . . . 26.9 per cent increase in enrollment for Area X schools from 1955 to 1964, compares with a 20.0 per cent increase for Iowa
- . . . 14.7 per cent increase in enrollment for Area X school from 1960 to 1964 compares with a 9.8 per cent increase for Iowa

Chapter XVII Summary - Continued

3. What type of post-high school vocational education offerings are currently available in the area?

- . . . eleven private vocational schools are located in Area X
- . . . three four-year colleges and one university in Area X offer limited non-degree vocational programs
- . . . one public vocational school, administered by a local school district, serves Area X
- . . . twenty-nine of the forty-eight public high schools of Area X offer limited adult education programs that are vocational in nature

4. What are the financial resources of the area?

- . . . \$623,259,178 assessed valuation in Area X in 1964
- . . . 11.3 per cent of the assessed valuation of Iowa is represented by Area X
- . . . \$623,259 could be raised in Area X by a tax levy of one mill
- . . . \$9,524 assessed valuation per child in average daily attendance in Area X public schools

5. Is there evidence of local initiative and community interest in the area for the establishment and support of a vocational school?

- . . . the eight county boards of education in January, 1965, voluntarily joined in development of this proposal
- . . . the eight counties of Area X, without directive or mandate, undertook a comprehensive survey of the area to determine the need and feasibility of a vocational school to serve the area
- . . . local and county school officials joined in efforts to conduct approximately thirty surveys and studies for this proposal
- . . . public information concerning the study was provided by a free-lance writer retained by the joint county boards of education
- . . . one hundred eighty-five community organizations voluntarily endorsed the proposal by submitting resolutions of support

Chapter XVII Summary - Continued

- . . . labor organizations, P.T.A.'s, chambers of commerce, local school boards, city councils, and other community organizations filed resolutions of support
6. Is there clear evidence of need for a vocational school in the area? What job opportunities are available?
- . . . opportunities for vocational training in high schools of Area X are severely limited
  - . . . post-high school vocational training opportunities are limited in number and scope
  - . . . total employment for the eight-county area is increasing at a rapid pace. Nearly 140,000 persons should be employed by 1970.
  - . . . occupations showing the most significant increases in the eight-county area are: professions and technical; clerical and sales; operatives; and service workers
  - . . . occupations showing largest declines in the eight-county area are: farm and farm managers, farm laborers and foremen
  - . . . occupations remaining fairly stable in the eight-county area are: managers, officials and proprietors; private household workers; and laborers (except farm)
  - . . . unemployed is highest among the unskilled and among females
  - . . . in those occupations reflecting increases, the eight-county increases have exceeded those of the state; in those occupations reflecting decreases, the state decreases have exceeded those of the eight-county area
  - . . . manufacturing has experienced the greatest employment growth and this trend will continue through 1970 - employing 25.9 per cent of the work force; agriculture will still be the second most important industry in the area in 1970 - employing 13 per cent of the work force; professional services will continue to grow and employ nearly 25 per cent of the work force by 1970; service industries will grow in importance; males will make up 64 per cent of the employed work force in 1970 (females 36 per cent); females will be added to the work force (both proportionately and in absolute numbers) faster than males



Chapter XVII Summary - Continued

7. What is the potential enrollment for a vocational school in the area?

- . . . three different projections of the potential enrollment in an Area X vocational school were made
- . . . on the basis of these projections, enrollments in an Area X vocational school for the 1966-67 school year would range from a low of 778 students to a high of 3,199

8. What vocational training programs will be offered in the area school?

- . . . the curriculum proposed for an Area X vocational school is based on the Area X labor-market survey
- . . . the proposed curriculum is based on the state and national labor-market trends
- . . . the proposed curriculum is based on preferences expressed by eleventh and twelfth grade students for vocational training opportunities
- . . . the proposed curriculum is based on the need for continuation of the present programs of the Cedar Rapids Area Vocational School and a smooth transition of that school to area administration
- . . . the proposed curriculum is based on other factors including finances, facilities, and availability of qualified instructional staff

9. Where will the vocational school be located? How accessible is the location to students in the area?

- . . . the Area X Steering Committee recommends that the location of the area vocational school be south of the City of Cedar Rapids in the vicinity of the junction of U. S. Highways 218 and 30

Chapter XVII Summary - Continued

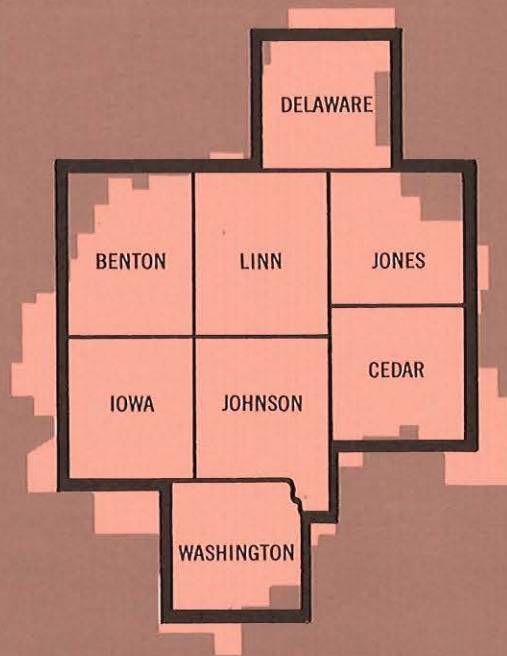
- . . . the eight-county school systems comprising Area X are served by an extensive system of state and federal highways
- . . . the proposed location of the Area X vocational school is within one hour's driving time of the majority of the people to be served

10. What physical facilities exist in the area to house the vocational program? What additional facilities will be needed?

- . . . the Area X Steering Committee recommends the continued use of the Cedar Rapids Area Vocational School until availability of a new facility
- . . . the present facility of the Cedar Rapids Area Vocational School will provide space for six vocational programs. Additional offerings will necessitate expansion of facilities

11. How will the area vocational school be administered?

- . . . statutory and regulatory provisions will determine the administrative structure for the Area X vocational school
- . . . the Area X Steering Committee recommends that an area advisory committee be established to provide guidance to the legally constituted administrative body



**PART** **F**

... APPENDIX





School District Name \_\_\_\_\_

County \_\_\_\_\_

Address \_\_\_\_\_

See Accompanying Letter of Instructions

Course Title and Number	Total Pupils Enrolled	Course Title and Number	Total Pupils Enrolled
0140 - Bkkpg I		1340 - English 9	
0141 - Bkkpg II		1341 - English 10	
0142 - Acctg. I		1342 - English 11	
0143 - Acctg. II		1343 - English 12	
0240 - Bus. Law		1344 - Bus. English	
0340 - Comtometer		1390 - Remedial Eng.	
0341 - Calculator		1430 - Penmanship	
0342 - Adding Machine		1540 - Radio Production	
0343 - Bkkpg Machine		1541 - Radio Direction	
0344 - Duplicating Mach.		1550 - TV Production	
0345 - Dictaphone		1551 - TV Direction	
0440 - Keypunch & Verif.		1640 - American Lit.	
0441 - Tab Operator		1641 - English Lit.	
0442 - Computer Oper.		1642 - World Lit.	
0443 - Computer Progrmr.		1650 - Library Arts	
0444 - Systems Analyst		1690 - Remedial Read.	
0445 - Install. Spvrs.		1740 - Speech I	
0446 - Install. Mgmt.		1741 - Speech II	
0540 - Office Practice		1742 - Speech III	
0541 - Gen'l Business		1743 - Speech IV	
0542 - Bus. Arithmetic		1744 - Debate	
0543 - Salesmanship		1745 - Forensics	
0640 - Shorthand I		1840 - Word Study 9-12	
0641 - Shorthand II		1940 - Other Commun.	
0642 - Sec. Practice		2140 - Art I	
0643 - Speedwriting		2141 - Art II	
0644 - Steno. Mach.		2142 - Art III	
0740 - Typing I		2143 - Art IV	
0741 - Typing II		2144 - Art Crafts	
0742 - Personal Typing		2145 - Art, Other	
0940 - Other Bus. Ed.		2240 - Mixed Chorus	
1140 - Creative Writing		2241 - Glee Club	
1141 - Advanced Grammar		2242 - Senior Band	
1142 - Advanced Compos.		2243 - Orchestra	
1150 - Journalism I		2244 - Music Apprec.	
1151 - Journalism II		2245 - Music Theory	
1240 - Dramatics I		2246 - Priv. Lessons 9-12	
1241 - Dramatics II		2247 - Music, Other	
1242 - Dramatics III		3140 - French I	
1243 - Dramatics IV		3141 - French II	

SURVEY OF HIGH SCHOOL COURSE OFFERINGS

BENTON, CEDAR, DELAWARE, IOWA, JOHNSON, JONES, LINN, WASHINGTON

February 15, 1965

SUBJECT: High School Course Offerings

TO: Superintendents and/or Principals of Eight-County Area

Enclosed you will find the forms for listing the number of students involved in the various course offerings in your school.

As you recall, we suggested to you that these forms would be coming to you and would need to be returned as soon as possible. Would you please fill out the forms and return them at your earliest convenience.

Thank you very much for your assistance in this important matter.

Alvin D. Albertus  
High School Course Offerings  
Survey Committee

ADA:ec

Encl.

Return Questionnaire to:

Local County Superintendent



Course Title and Number	Total Pupils Enrolled	Course Title and Number	Total Pupils Enrolled
3142 - French III		6161 - Zoology II	
3143 - French IV		6240 - Chemistry I	
3240 - German I		6241 - Chemistry II	
3241 - German II		6340 - Gen'l Sci I	
3242 - German III		6341 - Gen'l Sci II	
3243 - German IV		6440 - Physics I	
3340 - Latin I		6441 - Physics II	
3341 - Latin II		6442 - PSSC Physics	
3342 - Latin III		6540 - Physical Sci	
3343 - Latin IV		6541 - Astronomy	
3440 - Russian I		6542 - Geology	
3441 - Russian II		6543 - Earth Science	
3442 - Russian III		6940 - Advanced Sci	
3443 - Russian IV		6941 - Other Science	
3540 - Spanish I		7140 - Economics	
3541 - Spanish II		7240 - Geog, Gr. 9-12	
3542 - Spanish III		7340 - American Hist	
3543 - Spanish IV		7341 - Western Civiliz	
3940 - Other Fn. Lang.		7342 - World History	
4140 - Algebra I		7343 - Ancient Hist	
4141 - Algebra II		7440 - Philosophy	
4142 - Alg. III (College)		7540 - American Gov	
4143 - Matrix Algebra		7541 - Civics	
4240 - Calculus I		7542 - Amer. Govt & Soc Prob	
4241 - Calculus II		7640 - Psychology I	
4340 - Computer Math		7641 - Psychology II	
4440 - Gen'l Math I		7740 - Soc St, Gr. 9	
4441 - Gen'l Math II		7741 - Social Prob	
4442 - Gen'l Math III		7840 - Sociology	
4443 - Gen'l Math IV		7940 - Safety Ed, Gr. 9-12	
4444 - Consumer Math		7941 - Driver Ed.	
4445 - Vocational Math		7950 - Other Soc. St.	
4446 - Calculator Math		8140 - Gen Ag I	
4490 - Remedial Math		8141 - Gen Ag II	
4540 - Plane Geometry		8142 - Gen Ag III	
4541 - Solid Geometry		8143 - Gen Ag IV	
4542 - Fused Geometry		8240 - Voc Ag I	
4543 - Analytic Geometry		8241 - Voc Ag II	
4640 - Prob. & Statistics		8242 - Voc Ag III	
4740 - Sr. Top. Adv. Math		8243 - Voc Ag IV	
4840 - Trigonometry		8340 - Gen Hmkg I	
4940 - Other Math		8341 - Gen Hmkg II	
5140 - Physiology		8342 - Gen Hmkg III	
5240 - Boys' PE, Gr. 9-12		8343 - Gen Hmkg IV	
5340 - Girls PE, Gr. 9-12		8440 - Voc Hmkg I	
5430 - Phys Ed, B&G, Gr. 7		8441 - Voc Hmkg II	
5440 - Phys Ed, B&G, Gr. 9-12		8442 - Voc Hmkg III	
5940 - Other Health & PE		8443 - Voc Hmkg IV	
6140 - Biology I		8540 - Woodwkg I	
6141 - Biology II		8541 - Woodwkg II	
6150 - Botany I		8542 - Woodwkg III	
6151 - Botany II		8543 - Woodwkg IV	
6160 - Zoology I			

Course Title and Number	Total Pupils Enrolled	Course Title and Number	Total Pupils Enrolled
8545 - Metalwkg I			
8546 - Metalwkg II			
8547 - Metalwkg III			
8548 - Metalwkg IV			
8550 - Drafting I			
8551 - Drafting II			
8552 - Drafting III			
8553 - Drafting IV			
8640 - Graphic Arts I			
8641 - Graphic Arts II			
8642 - Graphic Arts III			
8643 - Graphic Arts IV			
8650 - Elect-Electronics I			
8651 - Elect-Electronics II			
8652 - Elect-Electronics III			
8653 - Elect-Electronics IV			
8654 - Plastics I			
8655 - Plastics II			
8656 - Power Mechanics I			
8657 - Power Mechanics II			
8658 - Power Mechanics III			
8659 - Power Mechanics IV			
8660 - Crafts I			
8661 - Crafts II			
8690 - Other Ind. Arts			
8840 - Aircraft Mechanic			
8841 - Auto Body Repair			
8842 - Auto Mechanics			
8843 - Aviat. Mech. Engine			
8844 - Cabinetmaking			
8845 - Carpentry			
8846 - Coop. Program			
8847 - Data Proc. Equip. R			
8848 - Diesel Mechanic			
8849 - Drafting			
8850 - Machine Shop			
8851 - Painting & Decor.			
8852 - Photography, Comm. Art			
8853 - Printing			
8854 - Printing, Offset			
8855 - Sheet Metal			
8856 - Talling			
8857 - Welding			
8940 - Other T & I			

IEL:ec  
2-15-65

AREA VOCATIONAL SCHOOL SURVEY

BENTON, CEDAR, DELAWARE, IOWA, JONES, JOHNSON, LINN, WASHINGTON

March 12, 1965

SUBJECT: Student Vocational Interest Survey

TO: Superintendents and/or Principals of 8-County Area

Enclosed you will find the Area Vocational School Survey referred to at the Area X Superintendents' meeting in Cedar Rapids, March 10, 1965.

Would you please administer this questionnaire to all juniors and seniors in your high school as soon as possible? I believe the survey is self-explanatory. Make certain each student puts the name of the high school in the appropriate blank. Would you also make certain that each youngster circles the county in which he resides? These two pieces of information will be necessary in compiling the data to be used in support of the vocational school for this area.

Please return the completed questionnaires to me not later than Wednesday, March 24, 1965. I realize this is very short notice, however, it is necessary in order that we might compile the results and get them in final form for the total report by April 1st.

Thank you very much for your assistance in this important matter.

Alvin D. Albertus, Chairman  
Student Vocational Interest  
Survey Committee

ADA:ec

Encl.

Return Questionnaire to:

Alvin D. Albertus  
Guidance Consultant,  
Linn County Schools,  
Court House,  
Cedar Rapids, Iowa. 52401





Office of Superintendent of Schools  
March 10, 1965

SUBJECT: Evidence of Public Support of Vocational Education  
Effort in 8-County Area

TO:

You are probably aware that Benton, Cedar, Delaware, Iowa, Johnson, Jones, Linn, and Washington Counties have joined in an effort to prepare a proposal which might be submitted as evidence of the area's suitability for one of the four vocational schools which Gov. Hughes has recommended for Iowa in the next biennium. Numerous committees are currently at work preparing portions of the proposal. Efforts of these committees are directed to gathering data and information which will demonstrate that the criteria listed in House File 260, the vocational education bill, are satisfied. The eighth criterion listed in House File 260 reads, "An evaluation of local interest and attitude toward establishment of the planned area vocational school or community college".

We are contacting representatives of numerous community groups and suggesting to them that the 8-county effort to secure a vocational school for the area will be strengthened if resolutions such as that attached to this correspondence are filed by several groups in all communities in each of the eight counties. May we request that you ask your group to file one copy of the attached resolution without delay? We desire to have the proposal completed by April 1.

---

Mail to:

---

---

---

R E S O L U T I O N

WHEREAS, we are mindful of the growing need for skilled manpower in an increasingly industrialized Iowa, and,

WHEREAS, we note the concentration of people and industry in the area encompassed by Benton, Cedar, Delaware, Iowa, Johnson, Jones, Linn, and Washington Counties, and

WHEREAS, we recognize the inadequacy of current vocational offerings in our schools in preparing youth and adults for existing job opportunities:

NOW, THEREFORE, be it known that we enthusiastically endorse the efforts being made to obtain for the 8-county area a vocational school to serve the youth and adults of the area by providing opportunities for training and retraining to develop vocational skills required in the area.

Adopted by \_\_\_\_\_  
(Name of Organization)

of \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_,  
(Location)

1965.

\_\_\_\_\_  
Signature of Official



ADULT EDUCATION PROGRAM

1964 - 1965

---

Name of School District

---

Address

Number of different adult education classes (subjects) or activities offered. \_\_\_\_\_

Total number of adult participants \_\_\_\_\_

Please list the top 25 per cent of subjects or activities that you feel are of greatest value to the adults in your community.

Return this form to your County Superintendent at once, please.



CEDAR RAPIDS BUSINESS COLLEGE, Cedar Rapids, Iowa.  
H. H. Hunt, President. J. W. Hunt, Business Manager.

Course	Course Length	Total Tuition	Enrollment		Starting Dates
			Current	Capacity	
Advanced Acctg.	Wks-72	\$1,080.00	13	*	1st Mon. of Each Month
Commerce Acctg.	48	\$ 720.00	16	"	"
Stenographic	40	\$ 600.00	32	"	Every 3 Months
Jr. Secretarial	60	\$ 900.00	20	"	1st Mon. of Each Month

\* "Our maximum is 100 students. There is no maximum as to course."

OTHER COST INFORMATION, REFUNDS, FINANCIAL ASSISTANCE:

No fee is required with enrollment application.

No advance payment required. Students pay each 4 weeks in advance.

Other Charges:	Book Fee	Graduation Fee
Stenographic	\$ 70.00	\$3.00
Junior Secretarial	\$100.00	\$3.00
Executive Secretarial	\$110.00	\$3.00
Commerce Accounting	\$ 90.00	\$3.00
Advanced Accounting	\$120.00	\$3.00

"There is no objection to used books that are identical with those used in our courses. It is immaterial where they may be obtained. Books and supplies are carried in the college book room."

Refund Policy: "Students pay each four weeks in advance. We do not have a course price. Students completing in less than average time have paid for fewer 4-week periods."

Scholarship Assistance: "The school has no scholarships. The Amana Refrigeration, Amana Society, and the A. N. Palmer Chapter of the NSA has scholarships. These are full scholarships but are limited as to applicants."

Loan Information: "Local chapter of Business and Professional Women has loan fund available for students."

22% of full time students are employed at full or part time jobs.

ADMISSION:

High school diploma is required for admission. Non-high school graduates are admissable upon recommendation of high school counselor if of high school age or recommendation of State Vocational Rehabilitation Division, Veterans Administration.

Pre-admission Testing: None.

Married students are admitted to training. 5% of students are married.

Students who marry while in training are usually permitted to complete training

Age Requirements: No minimum; no maximum. "During the summer months we have teen-age typing classes. Other than this, diploma requirements take care of age requirement."

ADVISORY, PLACEMENT SERVICES CLAIMED:

Orientation: "The first day is spent in explanation of classes (subjects) and

IPGA/Bu-4/3-64                      Compiled by the Iowa Personnel and Guidance Association  
from information supplied by this institution upon request.



their value to the student."

Advisory Program; Tests are given each four weeks.

Procedure for advising students to terminate or to change programs;

"Students not meeting grade requirements are classified as;

- (1) Those who could meet requirements with tutoring.
- (2) Those who, with proper application, could meet requirements.
- (3) Those not capable of meeting requirements. Group 1 is tutored. Group 2 is given time to improve grades. Group 3 change program and objectives or withdraw.

Placement; J. W. Hunt, Business Manager, devotes 10% of his time to placement activities. "We are in contact with employers, both by phone and personal call. Positions are kept on file. Placement is no problem. Many firms have given standing orders for graduates prepared and willing to do a job."

CURRENT MEMBERSHIPS AND APPROVALS CLAIMED: (N-National; R-Regional; S-State; L-Local)

Membership; United Business School Association(N); Central Commercial Teachers Association(R); Iowa Association of Private Business Schools(S); Individual Memberships in National Office Management Association and Sales Executives, plus local service clubs(L).

Approvals; Veterans Administration(R); Vocational Rehabilitation Division(S)

#### OTHER INFORMATION:

Brochures and/or prospectus available from the registrar.

Revised every two years. Next revision available 1964.

Students progress reports are not routinely sent back to the students' high schools. Such reports are available upon request.

Students live; 20% at home; 80% other housing.

Tours of the school are arranged for high school students and for school counselors.

Presentations are made at Career Programs, etc.

Follow-up studies of students completing training are conducted.

DICKENSEN SECRETARIAL SCHOOL, 705 Dows Building, Cedar Rapids, Iowa.  
Miss Kathryn Anderson, Director.

(Survey sheet was filled in by Betty Burianek as Miss Anderson gave her the information orally. Approved by Miss Anderson.)

Course	Course Length*	Total Tuition	Enrollment		Starting Dates
			Current	Capacity	
Stenographic	Wks-12	\$100.00	Varies	Varies	Any time
Shorthand and Typing		\$ 90.00	"	"	"
Typing Alone		\$ 35.00	"	"	"
Shorthand		\$ 75.00	"	"	"

\* "You pay for the course, not the time."

OTHER COST INFORMATION, REFUNDS, FINANCIAL ASSISTANCE:

\$50.00 fee required with enrollment application, applied toward tuition. Not refunded if a student does not enroll. (Students start instruction right away.)

Other Charges: "They buy their own paper."

Refund Policy: No refund; no refund policy.

No scholarship assistance available.

No loan funds available.

75% (estimate) of full time students are employed at full or part time jobs.

ADMISSION:

High school diploma is not required for admission. No selection criteria used.

Pre-admission Testing: None.

Married students are admitted to training.

Students who marry while in training are usually permitted to complete training.

Age Requirements: No minimum; no maximum.

ADVISORY, PLACEMENT SERVICES CLAIMED:

Orientation: Located in downtown area--not needed for two-room school.

Advisory Program: Interview.

Procedure for advising student to terminate or change program: Interview.

Placement: Direct calls from employers; Iowa State Employment Service.

CURRENT MEMBERSHIP AND APPROVALS CLAIMED: (N-National; R-Regional; S-State; L-Local)

Membership: None.

Approvals: None. "Students come from such nearby town as Mount Vernon, etc."

OTHER INFORMATION:

Brochures and/or prospectus available from Director. No revision schedule.

Student progress reports not sent back to the students' high schools.

Tours are arranged for high school students and school counselors upon request.

Presentations made at Career Programs, etc.

No follow-up studies of students made. 100% students stay in own housing.

IPGA/Bu-5/3-64

Compiled by the Iowa Personnel and Guidance Association from information supplied by this institution upon request.

IOWA CITY COMMERCIAL COLLEGE, Iowa City, Iowa.  
 Frank H. McCabe, President and Owner.

Course	Course Length	Total Tuition	Enrollment		Starting Dates
			Current	Capacity	
Stenographic	Wks-43	\$ 450.00	30	50	January 13, Feb. 10
Secretarial	48	\$ 495.00	30	50	June 8, Sept. 8, '64
Exec. Secretarial	72	\$ 810.00	1	50	October 10, 1964
Higher Accounting	104	\$1,080.00	2	30	Open
Medical Secretarial	52	\$ 540.00	2	30	Open

OTHER COST INFORMATION, REFUNDS, FINANCIAL ASSISTANCE:

No fee is required with an enrollment application.  
 No advance payment required.  
 Other Charges; Not listed.  
 Refund Policy; Tuition payable each month in advance. A part of a month is not refundable. A few pay 6 or 9 months in advance.  
 No scholarship assistance available.  
 Loan Assistance; 2% of students receive loan assistance. The average amount is \$400.00 at 4% interest repaid in monthly payments after graduation.  
 40% of full time students are employed at either full or part time jobs.

ADMISSION:

High school diploma is required for admission. Non-high school graduates are admitted on a three months trial basis, and they comprise 10% of enrollment.  
 Pre-admission Testing; None.  
 Married students are admitted to training. 5% of students are married.  
 Students married while in training are usually permitted to complete their training.  
 Age Requirements; There is no minimum and no maximum.

ADVISORY, PLACEMENT SERVICES CLAIMED:

F. H. McCabe, Owner, devotes 25% of his time to placement activities.  
 Orientation; School reports it has an orientation program.  
 Advisory Program; Mr. McCabe "I do the interviewing and advising."  
 Procedure for advising students to terminate or change programs:  
 "Teachers and I (McCabe) discuss the individual and I talk with the student and we usually reach a decision without difficulty."  
 Placement; Owner spends 25% of his time in placement activities. "Contacts are made with Business Firms, University of Iowa, non-academic personnel (Miss McManus) for University Hospitals and University of Iowa, and former graduates---no problem---many positions available."

CURRENT MEMBERSHIPS AND APPROVALS CLAIMED: (N-National; R-Regional; S-State; L-Local)

Memberships: United Business Schools Association(N); Mid Western (R); Iowa Association of Business Schools(S).

IPGA/Bu-10/3-64

Compiled by the Iowa Personnel and Guidance Association from information supplied by this institution upon request.



Approvals: United Business Schools Association(N); Veterans Administration(N);  
Iowa Association of Business Schools(S); Vocational Rehabilitation(S).

OTHER INFORMATION:

Brochures and/or a prospectus is available from the owner, F. H. McCabe.

Revisions every 5 years; latest available December 15, 1963.

Student progress reports are not routinely sent back to the students' high school. Such reports are available on request.

Students live: 75% at home; 25% other housing.

Tours of the school are arranged for high school students and for school counselors.

Presentations are made at Career Programs, etc.

Follow-up studies of students completing training are conducted.

UNIVERSITY COLLEGE OF COSMETOLOGY, INC., 20 East College Street, Iowa City, Iowa.  
Mrs. Ann Salladay, Manager

Course	Course Length	Total Tuition*	Enrollment		Starting Dates
			Current	Capacity	
Cosmetology	44 wks	\$425.00*	55	30 & 30	June 1 & Sept. 14

\* Payable; \$25.00 at time of testing, \$100.00 first day of school, \$30.00 first of next 10 months. No interest charged.

OTHER COST INFORMATION, REFUNDS, FINANCIAL ASSISTANCE:

\$25.00 "testing fee" required with enrollment application; all of this is applied toward tuition.

No advance payment required.

Other Charges: Kit of equipment furnished the student.

Refund Policy: No refund of testing fee if student does not enroll. "If tuition is paid in full at the beginning the refund would be in agreement with the normal payment schedule."

2% of students receive scholarship assistance averaging "full tuition" per student.

No loan assistance available to students.

10% of full time students employed at full or part-time jobs.

ADMISSION:

High school diploma is required for admission. Non-graduates are not admissible. Pre-admission Testing: Entrance examination is taken at the school before admission.

Married students are admitted to training. 6% of students are married.

Students married while in training are usually permitted to complete training.

Age requirements: "High school graduation age" minimum; no maximum.

ADVISORY, PLACEMENT SERVICES CLAIMED: (Placement officer: Carl Swenson, Director)

Orientation program is "on first day of school we have registration and orientation".

Advisory program: "Testing program is designed to aid the student in finding a field in which they will be proficient and happy. Each student is assigned to a counselor when she enters school. The counselors advise students throughout their training period."

Procedure for advising students to terminate or to change programs: "All students are given a period of time to adjust to their new environment. During this time counselors are working with the new students and watching them very close. If the students progress is not satisfactory after this period of time and counseling they are dismissed."

Placement: "The school will help the student get the job she wants by arranging for interviews with the manager of the salon, by giving the students leads and recommendations".

CURRENT MEMBERSHIPS AND APPROVALS CLAIMED: (N-National; R-Regional; S-State;  
L-Local)

Memberships: N. H. C. A. (N), N. A. C. S. (N), N. H. C. A. of Iowa (S),  
N. H. C. A. of Iowa Unit 65 Iowa City (L).  
Approvals: Division of Vocational Rehabilitation (S).

OTHER INFORMATION:

Brochures and/or prospectus are available from "Director of Admission". These  
are revised "yearly - late summer (Aug.)". Next revision will be available  
August 1964.

Student reports are not routinely sent back to the high school.

School will make such reports available upon official request.

Students live: 40% at home; 35% other housing; 25% school-owned housing.

Tours of school are arranged for high school students and for school counselors.

Presentations are made at Career Programs, etc.

Follow-up studies of students completing training are conducted.



YOUNG SCHOOL OF BEAUTY, 116 3rd Street N. E., Cedar Rapids, Iowa.  
Mr. Robert Shekleton, Co-owner.

<u>Course</u>	<u>Course Length</u>	<u>Total Tuition*</u>	<u>Enrollment Current Capacity</u>	<u>Starting Dates</u>
Cosmetology	44 wks	\$285.00*	104 150	First Monday each month

\* \$265.00 due on entrance, or may pay \$60.00 on day of entrance, finance balance of \$205.00 - \$21.93 per month for 9 months, final month \$21.98.  
Includes finance charge.

OTHER COST INFORMATION, REFUNDS, FINANCIAL ASSISTANCE:

\$20.00 required with enrollment application; all of this is applied toward tuition.

No advance payment required.

Other Charges: Equipment kit included in tuition.

Refund Policy: No refund of application fee if student does not enroll.

"Tuition charge for a partial course in cosmetology is 75¢ per hour up to 340 hours. All unused tuition paid in advance of termination will be refunded".

No scholarship assistance available to students.

5% have loans averaging "individual requirement" with interest at 5% per year.

Normal repayment requirements: 5% of wages per week after graduation.

5% of full time students employed at full or part time jobs.

ADMISSION:

High school diploma is not required for admission. Non-graduates are admissible on the basis of "completed 10th grade or equivalent".

Pre-admission Testing: "Personal interview, character references."

Married students are admitted to training. 10% of students are married.

Students married while in training are usually permitted to complete training.

Age requirements: 17 minimum; 60 maximum.

ADVISORY, PLACEMENT SERVICES CLAIMED: (Placement officer: Duane Bernholtz, Mgr.; J. R. Shekleton, co-owner; Kathryn Young, co-owner.)

Orientation program is "explain and describe classrooms, equipment, procedure; rules and regulations and time schedule".

Advisory program: "Counseling with school counselor".

Procedure for advising students to terminate or to change programs: "After 3 months training the student & parent are advised if the school feels the student should terminate".

Placement: School reports "salon owners".

CURRENT MEMBERSHIPS AND APPROVALS CLAIMED: (N--National; R--Regional; S--State; L--Local)

Memberships: N.A.C. (N), N.H.C.A. (N); Iowa Hairdressers Assoc. (R), Accredited Iowa Schools Assoc. (S), N.H.C.A. (L), I.H.A. (L).

Approvals: American Cosmetology Schools (N), G. I. approved (N), American Cosmetology Schools (R), G. I. approved (R), Iowa State Dept. of Health (S), Accredited Iowa School Assoc. (S), Chamber of Commerce (L).

OTHER INFORMATION:

Brochures and/or prospectus are available from the school. These are revised "yearly". Latest revision available "just revised".

Student reports are not routinely sent back to the high school.

School will make such reports available upon official request.

Students live: 50% at home; 50% other housing; --% school-owned housing.

Tours of school are arranged for high school students and for school counselors.

Presentations are made at Career Programs, etc.

Follow-up studies of students completing training are conducted.

PARIS ACADEMY OF BEAUTY CULTURE, 315 $\frac{1}{2}$  2nd Ave. S. E., Cedar Rapids, Iowa 52401  
Inez M. Fisher, Mgr.

<u>Course</u>	<u>Course Length</u>	<u>Total Tuition*</u>	<u>Enrollment</u>		<u>Starting Dates</u>
			<u>Current</u>	<u>Capacity</u>	
Cosmetology	45 wks	\$250.00*	107	60	Jan. - June - Sept.

\* Method of payment not reported.

OTHER COST INFORMATION, REFUNDS, FINANCIAL ASSISTANCE:

\$100.00 required with enrollment application; all of this is applied toward tuition.

No advance payment required,

Other Charges: None reported for equipment.

Refund Policy: Enrollment fee is refunded if student does not enroll. School reports "\$115.00 of tuition used up first week, \$15.00 a month thereafter - any balance refunded".

No scholarship or loan assistance available to students.

2% of full time students employed at full of part time jobs.

ADMISSION:

High School diploma is required for admission. Non-graduates are not admissible.

Pre-admission Testing: None.

Married students are admitted to training. 5% of students are married.

Students married while in training are usually permitted to complete training.

Age Requirements: 17 minimum; no maximum.

ADVISORY, PLACEMENT SERVICES CLAIMED: (Placement officer: Dr. R. R. Lamb, Owner)

Orientation program said to be used but was not described.

Advisory program: "We have special classes for slower students and students must maintain an 85 grade average."

Procedure for advising students to terminate or to change programs: "Students warned - grades discussed, parents notified."

Placement: "Students are notified of openings available and we usually have a list from former graduates wanting additional operators."

CURRENT MEMBERSHIPS AND APPROVALS CLAIMED: (N-National; R-Regional; S-State; L-Local)

Memberships: N. H. C. A. (N), N. Schools Ass'n (N), N. H. C. A. of Iowa (S), Iowa School Alumni Ass'n (S), Local Affiliate of N. H. C. A. (L).

Approvals: State Board of Examiners (S), State Dept. of Health (S).

OTHER INFORMATION:

Brochures and/or prospectus are available from the school. These are revised "if program changed. Next revision available "approx. 2 yrs."

Student reports are not routinely sent back to the high school.

School will make such reports available upon official request.

IPGA/Co-19/3-64

Compiled by the Iowa Personnel and Guidance Association from information supplied by this institution upon request.



OTHER INFORMATION: (cont.)

Students live: 50% at home, 50% other housing, --% school-owned housing.  
Tours of school are arranged for high school students and school counselors.  
Presentations are made at Career Programs, etc.  
Follow-up studies of students completing training are not conducted but  
"advanced courses offered".

MERCY HOSPITAL SCHOOL OF NURSING, Cedar Rapids, Iowa  
Sister Mary Maureen, R.S.M. Director

Course	Course Length	Total Tuition	Enrollment		Starting Dates
			Current	Capacity	
Diploma Nursing (RN)	156 wks	*	75	100	September

\*Tuition facts are not available because the School of Nursing is going to change the time allocations in their program -- students will be granted a three-month vacation each summer.

OTHER COST INFORMATION, REFUNDS, FINANCIAL ASSISTANCE:

\$10.00 required with enrollment application; none of this is applied to charges nor is it refundable.

No advanced payment required.

Other charges: Information not available at this time.

Refund policy: Tuition refunded according to scale: 1-7 days, 75%; 8-15 days, 25%. No refund on fees other than tuition; maintenance paid in advance will be refunded.

1% of students receive scholarship assistance averaging \$100.00 per student.

24% have loans averaging \$500.00 with no interest. Repayment requirements:

60 days after graduation, \$50.00 per month.

No students are employed except during summer months.

ADMISSION:

High school diploma is required for admission. Non-graduates are not admissible. Pre-admission testing: NLN Pre-Nursing and Guidance Tests.

Married students are not admitted to training. Students may marry during last 6 months of training.

Age requirements: 17 minimum, 35 maximum.

ADVISORY, PLACEMENT SERVICES CLAIMED:

Orientation program is provided.

Advisory program: NLN Pre-Nursing and Guidance tests; faculty members act as counselors. Specially prepared counselor for referral cases.

Procedure for advising students to terminate or to change program: Students and parents warned ahead of time. Decision made by Promotion Committee.

Special counselor sometimes utilized.

Placement: Employment in Mercy Hospital provided for graduates.

CURRENT MEMBERSHIPS AND APPROVALS CLAIMED: (N-National, R-Regional, S-State, L-Local)

Memberships: National League for Nursing (N); Council of Catholic Schools of Nursing (N)

Approvals: NLN (N); Iowa State Board of Nursing (S)

IPGA / DN-9 / 3-64

Compiled by the Iowa Personnel and Guidance Association from information supplied by this institution upon request.

OTHER INFORMATION:

Brochures and/or prospectus are available from director.

Student progress reports are not routinely sent back to the high school.

School will make such reports available upon official request.

4% of students live at home, 96% live in school-owned housing.

Tours of school are arranged for high school students and counselors.

Presentations are made at Career Programs, etc.

Follow-up studies of students completing training are conducted.



MERCY HOSPITAL SCHOOL OF NURSING, 214 North Van Buren St., Iowa City, Iowa  
 Sister Mary Dolorita, R.X.M., Director of Nursing School

Course	Course Length	Total Tuition	Enrollment		Starting Date
			Current	Capacity	
Diploma Nursing (RN)	144	*	102	102	September

\*Tuition information not given

OTHER COST INFORMATION, REFUNDS, FINANCIAL ASSISTANCE:

\$10.00 required with enrollment application; none of this is applied to tuition nor is it refundable.

No advanced payment is required.

Other charges; Activity fee \$10.00 per year; Book fees estimated at \$125.00 for three years; graduation fee \$20.00; Health fee \$10.00 per year; Maintenance \$260.00 per semester.

Refund policy; "Room rent for the month is not refundable." Tuition refunds according to scale; Less than one week enrolled, 75% refunded; 2-3 wks, 50%; 4-5 wks, 25%; after 6th wk, no refunds given.

No scholarship assistance available through the hospital.

5% of students have loans averaging \$500.00. Interest rate not given. Repayment may take place in 3 years after graduation.

50% of students are employed full or part time.

ADMISSION:

High school diploma is required for admission. Non-graduates are not admissible.

Pre-admission testing; Carried out" . . . to evaluate the student's ability to succeed in program."

Married students may enroll; students who marry while in training may complete the program.

Age requirements: 17 minimum; 30 maximum.

ADVISORY, PLACEMENT SERVICES CLAIMED:

Orientation program; "First week of the program is orientation week. Students are introduced to the school and its academic and social activities. Before each rotation in the hospital areas a short period of orientation prepares the student."

Advisory program; no information given

Procedure for advising students to terminate or to change program; no information given.

Placement; No information given

CURRENT MEMBERSHIPS AND APPROVALS CLAIMED: (N-National, R-Regional, S-State, L-Local)

Memberships: Council of Member Agencies, National League for Nursing (N).  
 Conference for Catholic Schools of Nursing.

Approvals: National League for Nursing (N), Iowa State Board of Nursing (S)

IPGA / DN-12 / 3-64 Compiled by the Iowa Personnel and Guidance Association from information supplied by this institution upon request.

OTHER INFORMATION:

Brochures and/or prospectus are available from Sister Mary Dolorita, R.S.M., Director, Nursing School. These are revised every two years. Latest 1964 revision now available.

Student progress reports are not routinely sent back to the high school.

School will make such reports available upon official request.

.5% of students live at home; 99.5% live in school owned housing.

Tours of school are arranged for high school students and counselors.

Presentations are made at Career Programs, etc.

Follow-up studies of students completing training are not conducted.

STATE UNIVERSITY OF IOWA - COLLEGE OF NURSING, Iowa City, Iowa  
 Florence E. Sherbon, Acting Dean

Course	Course Length	Total Tuition	Enrollment		Starting Dates
			Current	Capacity	
Degree Nursing*	120 wks.	\$1160**	564	625	September

- \* The Basic Program at SUI leads to a Bachelor of Science in Nursing.
- \*\* This figure is the total of 8 semesters at \$145 per semester. Out-of-state students would pay \$2480 in tuition.

OTHER COST INFORMATION, REFUNDS, FINANCIAL ASSISTANCE:

No registration fee is required.  
 \$50.00 advanced fee payment required. This is refunded if the Director of Admissions is notified one month prior to the beginning of scheduled classes.  
 Other charges: The tuition covers all miscellaneous fees - books are the only other costs other than maintenance.  
 Refund policy: Refunds are processed through the Registrar's Office and information is not available from this survey.  
 Scholarships are available; however, information is not available because scholarships are processed by the University and not by the College of Nursing. Loan funds are available. No further information on this. It is not known how many students are employed full of part time.

ADMISSION:

High school diploma is required for admission.  
 Pre-admission testing: A.C.T.  
 4% of students are married.  
 Students married while in training are usually permitted to complete training.  
 Age requirements: No minimum, no maximum.

ADVISORY, PLACEMENT SERVICES CLAIMED:

Orientation program is basically the same that for all University freshmen.  
 Advisory program: "Each student is assigned to a faculty member who serves as consultant and advisor. Special problems referred by the Administrative Assistant or Dean to University Counselling Service or Student Health Service.  
 Procedure for advising students to terminate or to change programs: "Conference with faculty advisors when scholastic record or other professional reasons cause them to be ineligible to continue."  
 Placement: No services are formally provided - "Not necessary. If needed will provide or offer suggestions."

CURRENT MEMBERSHIPS AND APPROVALS CLAIMED: N-National, S-State, L-Local

Memberships: National League for Nursing (N), Iowa League for Nursing (S).  
 Approvals: National League for Nursing (N), Iowa Nurses' Association, Iowa League for Nursing (S).

IPGA / DN-18 / 3-64      Compiled by the Iowa Personnel and Guidance Association from information supplied by this institution upon request.



OTHER INFORMATION:

Brochures and/or prospectus are available from Dean of SUI. These are revised annually and latest revisions are now available.

Student progress reports are not routinely sent back to the high school.

School will make such reports available upon official request.

No information available on where students live while at the university.

Tours of school are arranged for high school students and school counselors.

Presentations are made at Career Programs, etc.

Follow-up studies of students completing training are conducted.

SAINT LUKE'S METHODIST HOSPITAL SCHOOL OF PRACTICAL NURSING, 1026 A Avenue  
N.E., Cedar Rapids, Iowa: S. Fishel, R.N., Director

Course	Course Length	Total Tuition	Enrollment		Starting Date
			Current	Capacity	
Practical Nursing (LPN)	52 wks	\$600.00*	34	34	September

\*Includes tuition, books, room and board, and use of uniforms.

OTHER COST INFORMATION, REFUNDS, FINANCIAL ASSISTANCE:

No registration fee is required.

\$50.00 advanced payment required if accepted. It is not refundable, but does apply on tuition.

Other charges: All charges are included in the \$600.00, shown above.

Refund policy: (The \$600.00 basic fee is payable on the first day of school.) If withdrawal takes place within two weeks \$500.00 is refunded; three weeks, \$400.00; four weeks \$300.00; 5 weeks, \$100.00. After six weeks there can be nothing refunded.

3% of the students have scholarships of \$100.00.

9% of the students have loans ranging from \$150.00 to \$250.00. There is no interest charged and repayment does not begin until the student has finished the course.

No students are employed.

ADMISSION:

High school diploma required for admission. Non-graduates may be admitted if G.E.D. test results " . . . indicate they would be accepted in college in lieu of a high school diploma."

Pre-admission testing: "George Washington University Series -- Reading and Arithmetic; Occupational Interest Inventory by Lee and Thorpe."

3% of the students are married.

Students married while in training are usually permitted to complete training.

Age requirements: 17 minimum, no maximum.

ADVISORY, PLACEMENT CLAIMED:

Orientation program: "First week in school is devoted to introducing students to various areas."

Advisory program: "Each instructor has weekly conferences if student encounters great difficulty in certain areas . . . then we send her for a professional evaluation. We would then probably use Mental Health Clinic or Family Service Agency."

Procedure for advising students to terminate or to change programs: Inadequate information.

Placement: No services have been necessary.

CURRENT MEMBERSHIPS AND APPROVALS CLAIMED: N-National, S-State, L-Local

Memberships: National League for Nursing, Department of Practical Nursing Programs (N).

Approvals: Iowa Board of Nursing (S)

IPGA/PN-4/3-64

Compiled by the Iowa Personnel and Guidance Association from information supplied by this institution upon request.

**OTHER INFORMATION:**

Brochures and/or prospectus are available from the Director of the school. These are revised every two years; the next revision will be in the Fall of 1965.

Student progress reports are not routinely sent back to the high school.

School will make such reports available upon official request.

97% of students live in school-owned housing; 3% of students live in other housing.

Tours of school are arranged for students and school counselors.

Presentations are made at Career Programs, etc.

Follow-up studies of students completing training are conducted.



STATE UNIVERSITY OF IOWA - COLLEGE OF NURSING, Iowa City, Iowa  
 Florence E. Sherbon, Acting Dean

Course	Course Length	Total Tuition	Enrollment		Starting Date
			Current	Capacity	
Practical Nurse (LPN)	50 wks.	\$300.00*	40	50	Feb. and Sept.

\*Includes most miscellaneous fees. Non-resident fees are \$350.00

OTHER COST INFORMATION, REFUND, FINANCIAL ASSISTANCE:

No registration fee required.

\$50.00 advanced payment required. This is refunded if the Director of Admissions is notified at least one month prior to the beginning of scheduled classes.

Other charges: All other charges, including maintenance expense is approximately \$750.00. Total cost for the 50 weeks program is approximately \$1,050.

Refund policy: Refunds are processed through the Registrar's Office, and information is not available from this survey.

Scholarships are available; however, information is not available because scholarships are processed by the University and not by the College of Nursing.

Loan funds are available. No information available.

It is not known how many students are employed full or part time.

ADMISSION:

High school diploma is required for admission except if the prospective student is over 25 years of age, has a 10th grade education, and successfully completes qualifying examinations.

Pre-admission testing: Otis, Math and G.E.D.

15% of students are married.

Students married while in training are usually permitted to complete training.

Age requirements: 18 minimum; 55 maximum.

ADVISORY, PLACEMENT SERVICES CLAIMED:

Orientation program is carried out; however, no information is available.

Advisory program: "Each student is assigned to a faculty member who serves as consultant and advisor. Special problems referred by the Administrative Assistant or Dean to University Counseling Service or Student Health Service."

Procedure for advising students to terminate or to change programs: "Conferences with faculty advisors when scholastic record or other professional reasons cause them to be ineligible to continue."

Placement: No services are formally provided - "Not necessary. If needed will provide or offer suggestions."

CURRENT MEMBERSHIPS AND APPROVALS CLAIMED: N-National, R-Regional, S-State

Memberships: National League for Nursing (N), Iowa League for Nursing (S).

Approvals: National League for Nursing (N), Iowa Nurses' Association, Iowa League for Nursing (S).

IPGA/PN-5/3-64

Compiled by the Iowa Personnel and Guidance Association from information supplied by this institution upon request.

OTHER INFORMATION:

Brochures and/or prospectus are available from Dean of SUI. These are revised annually and latest revisions are now available.

Student progress reports are not routinely sent back to the high school.

School will make such reports available upon request.

No information available on where students live while going through the LPN program.

Tours of school are arranged for high school students and school counselors.

Presentations are made at Career Programs, etc.

Follow-up studies of students completing training are not conducted.

ACADEMY OF AUTOMATION, 200 Guaranty Building, Cedar Rapids, Iowa  
Lee D. Behrens, Director

<u>Course</u>	<u>Course Length</u>	<u>Total Tuition*</u>	<u>Current</u>	<u>Capacity</u>	<u>Starting Dates</u>
Wiring of Basic Machines	8wks	\$525.00	12	12	'64;4/27;6/22;8/17; 9/14; 11/9
Computer Programming	8wks	\$425.00	12	12	'64;4/27;6/22;8/17; 9/14;11/9
Key Punch	4wks	\$125.00	2		Every Monday

\* In many cases, students combine the Wiring and Programming courses. If this is done, tuition is discounted \$125.00, making complete 16 weeks cost \$825.00

OTHER COST INFORMATION, REFUNDS, FINANCIAL ASSISTANCE:

\$20.00 required with enrollment application; all of this is applied toward tuition. No advance payment required.

Other Charges: No other charges by the school -- books and equipment supplied by school with exception of personal notebooks and pencils.

Refund Policy: In event the prospective student does not attend the Academy \$15.00 of enrollment application will be refunded. The \$5.00 is for processing and testing. If tuition is paid in full or in advance of pro-rated schedule of the course and student is dismissed because of unsatisfactory progress or withdraws due to personal illness, family illness, death in immediate family, or legitimate personal reasons at the discretion of school, the unused portion of tuition will be refunded within 30 days. If student dismissed due to infraction of rules or misconduct or negligence, there will be no refund and student is liable for entire tuition.

No scholarship assistance available.

Loans not available through school. Officials introduce students to a bank and help with getting loan but do not have personal responsibility between student and bank.

90% of students employed at either full or part-time jobs.

ADMISSION:

High school diploma is required for admission. Non-graduates are not admissible unless demonstrated to have equivalent of high school education.

Pre-admissions testing: School uses aptitude test which "has to be passed before we will accept a prospective student."

Married students are admitted to training. 40% of students are married.

Age requirement: 18 minimum, 35 maximum.

IPGA/PrV-1/3-64

Compiled by the Iowa Personnel and Guidance Association from information supplied by this institution upon request.



ADVISORY, PLACEMENT SERVICES CLAIMED: (Placement officer: Mary Moel)

Orientation program is first night of class. Rules and regulations are brought out and students are told what is required of them throughout the eight weeks.

Advisory program: Full description of data processing given to each student before entering. "This is if the student passes the entrance exam which is made up of basic logic questions."

Placement: School claims to have "personally contacted all data-processing departments in the Cedar Rapids area." Being a member of Chamber of Commerce, they have "written to the Chamber of Commerce in all major cities and they have given us names of departments in their area."

CURRENT MEMBERSHIPS AND APPROVAL CLAIMED: (N-National; R-Regional; S-State; L-Local)

Memberships; Chamber of Commerce (N); Iowa Athletic Club (S).

Approvals: Chamber of Commerce (N).

OTHER INFORMATION:

Brochures and/or prospectus are available from Academy of Automation.

These are revised usually every six months. Latest issue ( 10-63 ) available. Next revision unknown.

Student reports not routinely sent back to high school.

School will make such reports available upon official request.

About 40% of students live at home while 60% live in private housing not school-owned.

Tours of school are arranged for high school students and counselors.

Presentations are made at Career Programs, etc.

Follow-up studies of students completing training are conducted and these are available to school counselors.

MERCY HOSPITAL SCHOOL OF X-RAY TECHNOLOGY, Cedar Rapids, Iowa  
 W. K. Cooper, M. D.  
 Sister Anne Marie, R. T.

<u>Course</u>	<u>Course Length</u>	<u>Total Tuition</u>	<u>Enrollment</u>		<u>Starting Dates</u>
			<u>Current</u>	<u>Capacity</u>	
X-Ray Technology	2-year	None	9	10	August

OTHER COST INFORMATION, REFUNDS, FINANCIAL ASSISTANCE:

No fee required with enrollment application.

A \$25 advanced payment is required--this goes toward purchase of books.

Other Charges: Board, room, and uniform laundry is furnished. Uniforms are obtained through a reliable company by the student at a reasonable price. Books may be obtained through the school. The student should plan to have approximately \$125 available for these purposes.

Refund Policy: Advanced payment is partially refunded.

No scholarship assistance, however Board, Room, and uniform laundry is furnished.

A stipend of \$20 a month is allowed after six months if the student progresses satisfactorily.

100% of all students work since each student, including classwork, spends approximately 44 hours a week in the department. In addition, they are assigned to night call duty when they are capable of assuming such responsibility.

Once a month, when sufficient progress has been made, they are allowed a long weekend, i. e., three consecutive days off beginning on Friday.

ADMISSION:

High School diploma is required for admission. Non-graduates are not admissible. "Selected students should have an I. Q. rating above 108 on the California Capacity Questionnaire. High School grades must average B or above. Prerequisite includes credits in mathematics and physics."

Pre-admission testing: California Capacity Questionnaire; before acceptance a physical examination by a Staff Doctor is required. Application for internship in X-ray Technology should be made by filling the application form which may be obtained on request. This should be accompanied by a recent photo.

A personal interview should be arranged. Transcripts of high school or college credits are required, as well as scored in aptitude tests.

Married male students are admitted to training, married female students are not. 11% or 1 out of 9 at the present time are married.

Age requirements: 18 minimum; 30 maximum.

ADVISORY, PLACEMENT, SERVICES CLAIMED:

Orientation program for students is indicated. Previous to acceptance the prospective student is asked to give some time to observing the X-ray Technologist in performance of her duties.

Advisory program: "Testing and Evaluations" film critiques and written examinations are given periodically.

Placement Service: None indicated.

CURRENT MEMBERSHIPS AND APPROVALS CLAIMED; (N-National; R-Regional; S-State, L-Local)  
Memberships: Iowa Society of X-ray Technicians: (S); East District Division (L)  
Approvals: Commission on Technician Affairs of the American College of Radiology  
(N); Educational Committee of the A. M. A. (N).

OTHER INFORMATION:

Brochures and/or prospectus are available from Director of School. These are revised approximately every 5 years. Next revision expected in 1966.  
Student reports are not routinely sent back to the students' high school. Schools will make such reports available upon request.  
Students live; 11% at home; 11% other housing; 77% school-owned housing.  
Students have meals in the hospital cafeteria.  
Social and extra curricular activities; Use of gym.  
Two weeks vacation is allowed each student during year. One week is allowed for sick leave.  
A certificate is granted at the completion of course and the student is eligible to write the American Registry Examination.



MERCY SCHOOL OF X-RAY TECHNOLOGY, MERCY HOSPITAL, IOWA CITY, IOWA  
 George M. Wyatt, M. D., Department Head  
 James W. Walsh, Jr., R. T., Chief X-ray Technician

<u>Course</u>	<u>Course Length</u>	<u>Total Tuition</u>	<u>Enrollment Current</u>	<u>Capacity</u>	<u>Starting Dates</u>
X-ray Technology	2 yrs	*\$50.00	8**	8	Each July 1

\* Payable at the business office on acceptance to the school

\*\* Applicants must be female

OTHER COST INFORMATION, REFUNDS, FINANCIAL ASSISTANCE:

No fee required with enrollment application; Book fee \$15.00; Aptitued Test fee \$8.50; Uniforms, hose, shoes, etc., about \$50.00; Diploma fee \$10.00.

The hospital provides meals free of charge, but does not provide room, which may be secured near the hospital, nor laundry. Each student will be allowed \$50.00 a month to cover necessary expenses. "Since it is our desire not to exploit students and since each student is of some value to the department after the first twelve months, this stipend will be increased to \$75.00 a month for the next six months, and \$150.00 a month for the last six months."

Refund Policy: No policy on refunds, depends on personal circumstances. Although no scholarship assistance is available, the selected students stipend will come to \$2600 over the training period.

No loan funds available.

No students employed.

ADMISSION:

High school diploma is required for admission. Non-graduates are not admissable.

"Applicant should have some background of science, basically physics and chemistry and biological sciences."

Pre-Admission Testing: The Temple University "Confidential Psychological Aptitude Test Report for Nursing Applicants." Personal interview required.

Married students are not admitted to training.

Students married while in training are not usually permitted to complete training.

Age Requirements: Minimum - None (Must be high school graduate), Maximum - 35.

ADVISORY, PLACEMENT SERVICES CLAIMED: (Placement officers: George M. Wyatt, M. D. Radiologist  
 Ernst A. Hirschbiel, M. D. Radiologist  
 American Society of X-ray Technicians)

Orientation program is indicated for students.

Advisory program: Personal interviews with applicants.

Procedure for advising students to terminate or change programs;

"Students are placed through a thorough trial period the first six months of training, which determines their adaptability to this type of work."

IPGA/Xr-6/3-64

Compiled by the Iowa Personnel and Guidance Association  
 from information supplied by this institution upon request.

Placement: The school indicates a placement service provided. No fee is charged.

"Most of the placement is done through the American Society of X-ray Technicians with the immediate help of the radiologists."

CURRENT MEMBERSHIPS AND APPROVALS CLAIMED: (N-National; R-Regional; S-State; L-Local)

Memberships: Council on Medical Education (N), American Medical Association (N), American Society of X-Ray Technicians (N), Regional Conference of X-Ray Technicians (S), Southeast Iowa District Society of X-Ray Technicians (L)  
Approvals: Council on Medical Education (N), Hospital of the American Medical Association (N), American Registry of X-Ray Technicians (N), American College of Radiology (N), American Society of X-Ray Technicians (N).

OTHER INFORMATION:

Brochures and/or prospectus are available from James Walsh, R. T. These are revised when requirements change as directed by the organizations who approve this school.

Student reports are not routinely sent back to the high school. Such reports will be made available when requested.

Students live: 11% at home; 11% other housing; 77% school owned housing

Tours of school are arranged for high school students. Tours are arranged for school counselors if requested.

Follow-up studies of students completing training are conducted "while employed."

No printed forms of those studies indicated to be available.

Each student will be allowed two weeks vacation each year.

Presentations are made at career programs if requested.

ST. LUKE'S HOSPITAL SCHOOL OF X-RAY TECHNOLOGY, Cedar Rapids, Iowa  
H. M. Kalous, R. T., Crs, Msr, Technical Director

Course	Course Length	Total Tuition	Enrollment Current	Capacity	Starting Date
X-ray Technology	2-years	None	8	8	September 2

OTHER COST INFORMATION, REFUNDS, FINANCIAL ASSISTANCE:

No fee required with enrollment application.  
No advance payment required.  
Other Charges: Book fee: \$40.00; students buy their own uniforms; "The Hospital provides board and room and during the last 18 months of the training, the Hospital pays a stipend of \$20.00 per month."  
No refund policy since there is "no direct cost to students other than books."  
No scholarships indicated, but students receive the stipend mentioned above.  
No loans indicated.  
No students employed.

ADMISSION:

High School diploma is required for admission. Non-graduates are not admissible. "The applicant shall be a high school graduate in the upper half of his or her class. Courses in Physics, Chemistry, Algebra, Biology, General Science, English, and Spelling will provide helpful background knowledge. A transcript of the high school work is to accompany the application. The applicant is interviewed by the radiologist and the Hospital superintendent."  
Pre-admission Testing: Pre-entrance Tests of applicants' aptitude and general fixtures are given at Coe College. "To indicate general IQ-105."  
Married students are admitted to training. No enrolled students are presently married. Students who marry while in training are usually permitted to complete."  
Age Requirements: 18 minimum; 35 maximum.

ADVISORY, PLACEMENT SERVICES CLAIMED:

Advisory Program: None indicated.  
Orientation program is conducted for students.  
Procedure for advising students to terminate or change programs: "Have not had a failure or termination for past 11 years."  
Placement service: None indicated.

CURRENT MEMBERSHIPS AND APPROVALS CLAIMED: (N-National; R-Regional; S-State; L-Local)

Memberships: "Certifications by A. M. A.; A. H. A. ; N. A. S. R.; (N)

OTHER INFORMATION:

Brochures and/or prospectus are available from the "Technical Director." They are revised every 5 years. Next revision anticipated in 3 years.  
Student reports are not routinely sent back to the high school.  
School will make such reports available upon official request.  
All students live in school-owned housing.  
Tours of school are not arranged for high school students or counselors.  
Presentations are made at career programs, etc.  
Follow-up studies of students completing training are not conducted.

IPGA/Xr-11/3-64

Compiled by the Iowa Personnel and Guidance Association from information supplied by this institution upon request.



STATE UNIVERSITY OF IOWA, UNIVERSITY HOSPITAL, Department of Radiology, Iowa City, Iowa  
 Dr. R. F. Van Epps, M. D., Dept. Head  
 R. S. Macy, R. T. Chief Technician

Course	Course Length	Total Tuition*	Enrollment		Starting Dates
			Current	Capacity	
X-Ray Technology	2 years	\$146	24	24	September 1
		* \$198 for first 12 months.			
		* \$ 48 for second 12 months.			

OTHER COST INFORMATION, REFUNDS, FINANCIAL ASSISTANCE:

No fee required with enrollment application.  
 Advance payment; not reported.

OTHER CHARGES:

Book fee; \$25; Uniforms; Students will be requested to furnish all uniforms and hospital will launder women's uniforms and men's trousers free;  
 Room and Board; Students will furnish their own room and board for the first six months.  
 "Women's housing is at Westlawn, which is close to the hospital. It is supervised by the Office of Student Affairs. At present the charge is \$20 a month. Men may live either in off-campus housing or in South Quadrangle Dormitory, which also is close to the hospital. Meals can be purchased at a minimum cost in the hospital cafeteria.  
 Students will be paid \$70 per month for their room and board for the second six months. The second year the student will receive \$120 a month.  
 Refund policy indicated for first month.  
 Scholarships; None--Students receive stipend mentioned above.  
 Loans; None.  
 No students employed.

ADMISSION:

High school diploma is required for admission. Non-graduates are not admissible.  
 "A course in high school Physics is mandatory. Three letters of recommendation and a personal interview are required."  
 Age requirements; 18 minimum; 35 maximum.  
 Pre-admission Testing; A special aptitude test B326, for X-Ray technicians is required. Administered by Iowa State Employment Service.  
 Married students are admitted to training. 10% of students are married. Students who marry while in training are usually permitted to complete their training.

ADVISORY, PLACEMENT SERVICES CLAIMED:

Advisory Program; None.  
 No orientation program indicated.  
 Procedure for advising students to terminate or to change programs; Staff meetings--"A student not making satisfactory progress will be informed of his deficiencies and if not corrected, he will be dismissed from the course."  
 No placement service indicated.

CURRENT MEMBERSHIP AND APPROVALS CLAIMED: (N-National; S-State; L-Local; R-Regional)  
Memberships: American Society of X-Ray Technology (N) Iowa State Society of  
X-Ray Technician.  
Approvals: AMA (N), ARXT (N).

OTHER INFORMATION:

Brochures and/or prospectus are available from Department of Radiology State  
University of Iowa.

These are revised every two years. Next revision to be in 1965.

Student reports are not routinely sent back to the high school. School will  
make such reports available upon official request.

Students live: 90% at home; 10% at school.

Tours of school are not arranged for students or counselors.

Presentations are made at Career Programs, etc.

Follow-up studies of students completing training are not conducted.

CEDAR RAPIDS COMMUNITY SCHOOL DISTRICT  
Cedar Rapids, Iowa

January 13, 1964

TO: Arnold W. Salisbury, Ph.D., Superintendent  
FROM: Ira J. Semler, Ph.D., Director of Research  
RE: Follow-up study of 1962 graduates of the Cedar Rapids Community School District

ABSTRACT

Mr. Alvin Albertus, Linn County Guidance Consultant and Miss Helen Masha, and Miss Betty Burianek, counselors at Jefferson and Washington High Schools, respectively, initiated a follow-up study of the 1962 graduates in this school district at the request of the Cedar Rapids counselors. Postal card questionnaires were mailed three times from December, 1962, to March, 1963, in order to maximize the number of returns.

An abstract of the results based on the returned questionnaires follows:

1. 89% of the 821 questionnaires to the 1962 graduates were returned from the three mailings. 62.4% were returned from the first mailing.
2. A significantly greater proportion of returns from the first mailing was made by 1962 graduates who were in college at the time the study was conducted.
3. 48.5% of the 1962 graduates were in 4 year colleges or universities. A break-down by high school shows that 60.0% of Washington High School and 35.1% of Jefferson High School graduates were in college at this time. 1.8% were in Junior College.
4. 40.1% were still living (maintaining resident status) in Cedar Rapids 6 to 8 months after graduation. An additional 38% were living in Iowa but not in Cedar Rapids.
5. 5.9% were married.
6. 15.0% went on for additional technical or on-the-job training.
7. 7.1% were in military service.

The report which follows provides more detailed information about the follow-up study. The appendices, especially, provide a wealth of detail about the type of employment and vocational aims of the 1962 graduates who did not go on to college.



CEDAR RAPIDS COMMUNITY SCHOOL DISTRICT  
Cedar Rapids, Iowa

September 22, 1964

TO: Arnold W. Salisbury, Ph.D., Superintendent

FROM: Ira J. Semler, Ph.D., Director of Research

RE: Comparison of statistics from first year follow-up of 1963 graduates with the first year follow-up of the 1962 graduates.

ABTRACT

The first year follow-up of the 1963 graduates was carried out during March and April, 1964, with the cooperation of the Cedar Rapids counselors and the Office of the Linn County Superintendent of Schools.

The following compares certain statistics for the two graduating classes:

<u>Category</u>	<u>1962</u>	<u>1963</u>	
Questionnaires Returned - Total	89.0%	74.9%	
Jefferson	89.0%	69.8%	
Washington	89.5%	78.2%	
Living in Cedar Rapids (Maintaining Resident Status)	40.1%	90.0%	
Living in Iowa Other than Cedar Rapids	36.5%	5.2%	
Single	94.1%	91.7%	(0.2% No Reply)
Married	5.9%	7.8%	
Divorced	0	.3%	
College - Total	48.5%	55.2%	
Jefferson	35.1%	37.3%	
Washington	60.0%	65.5%	
Junior College	1.8%	1.2%	
Additional Training	15.0%	11.2%	
Service	7.1%	6.7%	
And a special note; Number Deceased	3	1	

The appendices in the final reports of the first year follow-up of the 1962 and 1963 graduates contains detailed information about choice of college or university, type of employment for those graduates not continuing their education or technical training, and vocational aims.

STATE LIBRARY OF IOWA



3 1723 02117 8066