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BOONE, IOWA

a comprehensive plan

ANDERSON ENGINEERING COMPANY • DES MOINES, IOWA
City and County Planners Consultants

FINAL PLANNING REPORT

**for
City of Boone, Iowa**

March, 1962

Prepared under contract for and financed in part
by the Iowa Development Commission under the
provisions of Chapter 280, Laws of the 58th General
Assembly of Iowa, as amended.

**By: Anderson Engineering Company
City and County Planning and Zoning -
Civil Engineering, Site Planning and
Land Subdivision Planning.
Des Moines, Iowa**

March, 1962

Urban Planning Grant Project No. Iowa P-1.
The preparation of this document was financed in part
through an urban planning grant from the Housing and
Home Finance Agency, under the provisions of Section
701 of the Housing Act of 1954, as amended.

**By: Anderson Engineering Company
City and County Planning and Zoning -
Civil Engineering, Site Planning and
Land Subdivision Planning.
Des Moines, Iowa**

CITY OF BOONE, IOWA

CITY COUNCIL

1962

Shelley M. Lee - Mayor
Floyd A. Hutchinson
Lester M. Carlson
Russell W. Sandy

George M. Otto
Henry L. Wallace
Basal C. Gorey
Herbert L. Peterson

1961

Earl R. Senholz - Mayor
Lee J. Caffrey Jr.
Floyd A. Hutchinson
Paul H. Coyner

William G. Heitkamp
Basal C. Gorey
Herbert L. Peterson
Wesley Myers

CITY PLANNING COMMISSION

Roland L. Jons - Chairman

Jack L. Mickle - Secretary
Joe W. Bohlen
Roger L. Smith

Roger B. Clymer
Mary Garvey
Ralph W. Tibbils

March, 1962

Prepared by

Anderson Engineering Company
Planning Consultants, Des Moines, Iowa

Donald A. Anderson - Consultant
Max W. Krumrey - Chief Planner
William R. Fudge - Assistant Planner

Sidney J. Dillon - Geographer
Kay K. Koebrick - Analyst
Bernice Peterson - Typist

CITY OF BOSTON

CITY COMMISSION

1963

George M. O'Brien
Henry L. Williams
David C. Young
Robert L. Johnson

Shelley M. Lee - Mayor
Floyd A. Hutchinson
Lester M. Carlson
Russell W. Sandy

1961

William G. Hollenberg
Paul G. Barry
Harold J. Peterson
Wayne Wright

Earl H. Sordahl - Mayor
Lee J. Callahan Jr.
Floyd A. Hutchinson
Paul H. Coyner

CITY PLANNING COMMISSION

Robert D. Elymer
Mary Garvey
Ralph W. Tabbala

Donald J. Jones - Chairman

Jack L. Minkley - Secretary
Jo W. Bohlen
Roger L. Smith

March 1963

Prepared by

Anderson & Associates, Inc.
Planning Consultants, Inc.

Sidney J. Fisher - Chairman
Kaplan, Friedman & Associates
Robert Johnson - 1961

Donald A. Anderson - Consultant
Max W. Hironaka - Chief Planner
William B. Fudge - Assistant Planner

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planning consultants

CITY AND COUNTY PLANNING — ZONING
TRAFFIC — LAND SUBDIVISION — SITE PLANNING

1535 LINDEN STREET

DES MOINES 14, IOWA

CHerry 3-0569

March 30, 1962

Honorable Mayor and City Council
City Planning Commission
City of Boone
Boone, Iowa

Gentlemen:

In accordance with the contract between this firm and the Iowa Development Commission, dated August 15, 1960, we hereby submit the Final Report on the Comprehensive Plan for the City of Boone. A Preliminary Report was previously submitted for review and recommendations. The City Planning Commission held a public hearing on the Preliminary Report on February 27, 1962 and has subsequently recommended to the City Council that the Comprehensive Plan be adopted subject to some changes in the text. To our knowledge, all necessary changes have been made in the Final Report submitted herewith.

Contained in this report are reproductions of the important maps and charts prepared in connection with this study. Some of the maps have not been reproduced herein, but are included in the original copies in color that will be delivered to the City upon completion of the work.

The officials, employees and citizens of the City of Boone have been most helpful in the preparation of this material and we wish to express our appreciation for their cooperation. We have enjoyed working with the people of Boone during the course of this study.

Yours very truly,

ANDERSON ENGINEERING COMPANY

Donald A. Anderson

Donald A. Anderson

Anderson Engineering Company
 Planning
 1232 Linden Street
 Des Moines, Iowa 50319
 Telephone 581-1111

March 20, 1967

Honorable Mayor and City Council
 City Planning Commission
 City of Boone
 Boone, Iowa

Gentlemen:

In accordance with the contract between this firm and the Iowa Development Commission, dated August 16, 1960, we hereby submit the Final Report on the Comprehensive Plan for the City of Boone. A Preliminary Report was previously submitted for review and recommendations. The City Planning Commission held a public hearing on the Preliminary Report on February 17, 1963 and has subsequently recommended to the City Council that the Comprehensive Plan be adopted subject to some changes in the text. To our knowledge, all necessary changes have been made in the Final Report submitted herewith.

Contained in this report are reproductions of the important maps and charts prepared in connection with this study. Some of the maps have not been reproduced herein, but are included in the original copies in color that will be delivered to the City upon completion of the work.

The officials, employees and citizens of the City of Boone have been most helpful in the preparation of this material and we wish to express our appreciation for their cooperation. We have enjoyed working with the people of Boone during the course of this study.

Yours very truly,

ANDERSON ENGINEERING COMPANY

Donald A. Anderson
 Donald A. Anderson

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SUBDIVISION ORDINANCE

SEPARATE PUBLICATION

ZONING ORDINANCE

SEPARATE PUBLICATION

ZONING MAP

ENVELOPE IN BACK OF
ZONING ORDINANCE

BOONE, IOWA

SECTION 1

HISTORICAL INFORMATION

The history of the City of Boone actually begins with the establishment and settlement of Boone County during the 1840's, a period in which much of the State of Iowa was settled by the white man. This period of settlement and building of the State is a colorful period in our history and deserves some review as a prelude to the Comprehensive Plan.

The area now known as Boone County was originally the home of the Sac and Fox Indian tribes who roamed its prairies and hills living off the wild game that abounded on land and in its streams. One historical account describes the Des Moines River as being crystal clear during this early period.

Preliminary steps toward settlement by the white man were taken when the United States government signed a treaty with the Indians in 1842 in which the Indians relinquished title to the lands. The terms of the treaty stated that the Indians were to move West of the Missouri River by October 11, 1845. On this date, the treaty expired opening the land to settlement by the white man.

Boone County was named in honor of Captain Nathan Boone, Commander of Company H, First Regiment, United States Dragoons. Nathan Boone, the youngest son of explorer Daniel Boone, was in an expedition that camped in the area now known as Boone County while traveling to Minnesota to sign a treaty with Indians in the southern part of that State.

The first white settler in the area now Boone County was Charles W. Gaston, who built a log cabin in January of 1846 located on the west side of the Des Moines River just north of the south County line. Boone County was established by Act of the State Legislature on February 24, 1847. The County operated from its establishment until July 9, 1851 without a County seat. On that date in 1851, the site of the County seat was set and the name Boonesboro picked.

The original town of Boonesboro is now the west part of Boone in the vicinity of the County Court House building. The first cabin was constructed in Boonesboro by Wesley C. Hull in 1851. The first mercantile house was constructed by J. A. McFarland in December of 1854.

The first courthouse building was constructed in 1857 and Boonesboro was incorporated on June 4, 1865.

About this time, the Chicago and Northwestern Railroad was preparing to extend its facilities through Boone County and decided to lay out a town of its own one and one-half miles east of Boonesboro. A Mr. John J. Blair handled the establishment of the new town which became known as Boone. Thus it was called until it was incorporated on May 7, 1866 at which time the name Montana was officially given to the new town. The name was later changed on August 30, 1871 from Montana to the present name, Boone.

On September 9, 1876, the original town of Boone was enlarged by annexation and on March 21, 1887, Boonesboro and Boone merged into one town. On March 7, 1892, Boone again annexed land extending its limits to nearly the area now included in the City of Boone.

At the time the original Town of Boone was laid out, there was one house standing within the area which was constructed by a Mr. Keeler in 1856. During the year 1865, more than 100 buildings were constructed in Boone. One of these was constructed by Mr. Andrew Downing who made one of the first lot purchases in Boone. Since the railroad was not yet in operation through Boone County, Mr. Downing hauled lumber and other materials from Nevada, Iowa to construct a building in which he opened the first general store on September 1, 1865.

The first school building was built by David Lutz in 1865 to begin educating the children of the many settlers coming to Boone. The first bank was constructed on the corner of Eighth and Story Streets. In 1867 the railroad built its first roundhouse which was later torn down in 1914.

Boone enjoyed a rapid growth up to 1920 when it reached a population of 12,451. Since 1920, the population has fluctuated because of loss of employment in some industries, primarily railroad maintenance and coal mining, and gain in employment in other industries.

SECTION 2

THE COMPREHENSIVE PLAN

With the rapid pace of development in present day America, the keen competition between cities or geographical areas to attract industry and numerous other factors affecting cities, it is necessary for urban areas to plan their future growth and development through Comprehensive Planning.

Comprehensive Planning concerns the study and analysis of the total composition of the City, including the physical, social and economic factors affecting

its development.

The Comprehensive Plan then becomes not a single plan but a composite of a number of plans and studies. Each such plan or study concerns a specific phase of the total make-up of the City with all of the plans and studies interlocking where necessary to provide for proper development of the City as a whole as economically and efficiently as possible. The principal plans and studies contained in the Comprehensive Plan are as follows:

- Land Use Plan
- Major Thoroughfares Plan
- Community Facilities Plan
- Central Business District Plan
- Economic Base Study
- Population Study
- Capital Improvements Program
- Zoning Ordinance
- Subdivision Ordinance.

Recommendations made in the plans and studies listed above must be based upon examination of existing and past conditions and trends if they are to have any validity for the future. This means that preparation of the plans must be preceded by collection, compilation and evaluation of all available information showing the conditions and trends that will affect the future growth of the Community. Much of this information must be plotted on maps and charts. The information so compiled and plotted forms the foundation upon which the Plans listed above and the recommendations thereon are based.

In a growing community such as Boone, it can be expected that the City will eventually have to extend its corporate limits outward taking in some of the now unincorporated area that surrounds the City. The City has annexed a few residential areas to the southeast in recent years and it can be expected that other areas will be annexed as the City grows. For this reason, the planning has been carried beyond the corporate limits of the City to include all of the surrounding area that conceivably could affect the future development of the City or become part of the City at some future date. Both the collection of data and the preparation of plans were carried beyond the corporate limits sufficiently far that extension of the Plans into areas not covered should not be necessary in the foreseeable future.

The Comprehensive Plan must be adopted by the City Council to give it legal status as the official future Plan of the City. After the Plan has been adopted, it is made effective legally through the Zoning Ordinance and Subdivision Ordinance. The Capital Improvements Program provides the financial program for realizing the public improvement portion of the Plan. Suggested Zoning and Subdivision Ordinances have been published under separate cover as a part of this report.

Cities and their future needs are dynamic and ever changing with the result

that this Comprehensive Plan, including the Ordinances, must be studied periodically to determine what, if any, changes may be necessary in the physical Plans and population projection. Many unforeseen factors can require changes in the Plans as the City grows and develops in the future. The Capital Improvements Program must be reviewed each year adjusting priorities where necessary and finally evolving the City's Capital Budget for the coming year. By using the Comprehensive Plan in making decisions on day to day problems, the City can most effectively work towards an orderly growth providing necessary facilities for the future population and will have realized the maximum benefit from the preparation of this Plan.

SECTION 3

BASE MAP

Before any of the data gathered in the research phase of the program can be plotted and evaluated, it is necessary to have base maps at an appropriate scale and covering a sufficiently large area to permit planning of the entire area that affects the growth and development of the City. This requires a map that includes some of the unincorporated territory surrounding the existing corporate limits. In the case of many cities, some development has already started to take place in this area indicating the trend of future growth.

The City of Boone had a series of maps at varying scales that were good maps but did not extend into the environs of the City to any degree, and did not reflect some very recent changes in the corporate limits of the City. These maps were helpful in the preparation of a new base map and for use in collecting data for the study.

Two new base maps were prepared for the needs of the studies and Plans to be made during the planning program. One was a map of the City of Boone and the surrounding unincorporated area for a distance of approximately one mile beyond the corporate limits. This map, drawn at a scale of 1 inch equals 400 feet, shows street and alley lines, railroads, rivers, streams and lakes and section lines. Of greatest importance, it does not show lot lines or dimensions. Thus it becomes somewhat of a skeleton map that permits greater clarity of the information that is put on the map for the various studies. This map was used for plotting existing conditions such as existing land useage and for preparation of the Comprehensive Plan.

The second base map prepared for the studies was drawn at a scale of 1 inch equals 200 feet. This map covers only the area presently in the City of Boone and is intended primarily for a final Zoning District Map. The map shows all platted lot lines, numbers and dimensions and subdivision names as well as street and

alley lines and other necessary information.

Both of the above maps were drawn on tracing cloth so that they can be printed as often as necessary. If kept current with changes in street and property lines and the corporate limits, these maps will be of great value to the City Administration in the future.

A third base map of the City at a scale of 1 inch equals 800 feet has been made by photographic reduction of the 1 to 400 scale map for preparation of the maps contained in this report. This is a small map measuring 33 inches by 42 inches that can be printed.

A special map of the Central Business District was prepared for making studies of the downtown area. This map was drawn at a scale of 1 inch equals 50 feet giving a suitably large map for the detailed studies. The map shows only street and alley lines and the outline of all buildings in the area covered by the map.

The tracings on all of the base maps described herein become the property of the City on conclusion of these studies and can be printed for use in future work of the City.

SECTION 4

LOCATION AND TRANSPORTATION

Location

Map 1 shows the relative location of Boone and Boone County to other communities and major cities in Central Iowa. The map also shows the highway and railroad network serving the central part of the State. Boone is served by U.S. Highway 30 running east and west through the center of the County. Work will soon begin on a project relocating most of this highway through Boone County as a part of the general improvement of the highway through the State. The relocated highway passes Boone immediately to the south with access into the City provided. Iowa highway 60 runs north and south through Boone County three miles east of the City of Boone. U.S. Highway 169 also runs north and south through Boone County nine miles west of the City of Boone. This highway will connect with Interstate Highway 80 thirty-five miles south of the City of Boone.

Boone is located approximately in the center of the State along the east side of the Des Moines River. It is near the center of Boone County and is approximately forty miles northwest of the City of Des Moines. Boone is the county seat of Boone County.

The preparation of this map was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act of 1954, as amended.

Urban Planning Grant: Project No. Iowa P-1

Prepared under the Contract for the Iowa Development Commission

by Anderson Engineering Company

Category	Count
completed	4
proposed	16



miles

0 5 10 15 20 25

Urban Planning Grant: Project No. Iowa P-1

by: Anderson Engineering Company
City Planning Consultants

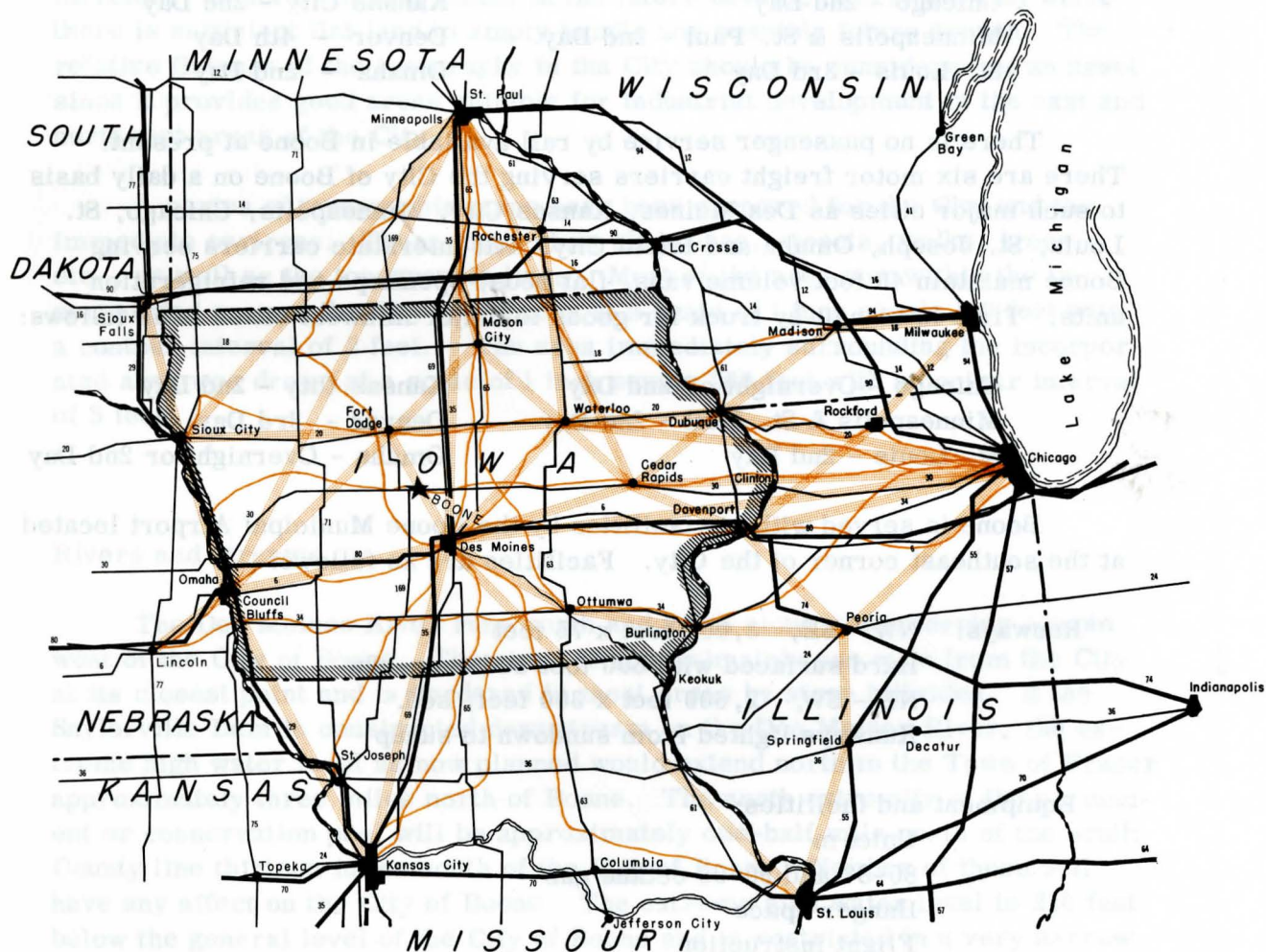
map 1

aneco

TRANSPORTATION

- state boundaries
- == interstate highways
- u. s. highways
- railroads
- air routes

miles
0 25 50 100 150 200 250



The preparation of this map was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act of 1954, as amended.

Urban Planning Grant: Project No. Iowa P-1

Prepared under the Contract for the Iowa Development Commission

by: Anderson Engineering Company
City Planning Consultants

map 2

aneco

Transportation

Of importance in a planning study is a review of the transportation facilities available to the City. This includes the movement of both passengers and goods. Map 1 shows the rail facilities throughout Central Iowa and Map 2 shows scheduled air connections throughout Iowa and between the principal cities of the midwest.

Boone is presently served by three railroads as follows:

Chicago & Northwestern - Division point
Fort Dodge, Des Moines & Southern - Home office
Chicago, Milwaukee, St. Paul & Pacific - Branch line.

Time in transit by rail for goods to major cities in the midwest is as follows:

Chicago - 2nd Day	Kansas City - 2nd Day
Minneapolis & St. Paul - 2nd Day	Denver - 4th Day
St. Louis - 3rd Day	Omaha - 2nd Day

There is no passenger service by rail available in Boone at present. There are six motor freight carriers serving the City of Boone on a daily basis to such major cities as Des Moines, Kansas City, Minneapolis, Chicago, St. Louis, St. Joseph, Omaha and Rapid City. All interstate carriers serving Boone maintain 40 foot volume vans, flat beds, open tops and refrigeration units. Time in transit by truck for goods to major midwest cities is as follows:

Chicago - Overnight or 2nd Day	Kansas City - 2nd Day
Minneapolis & St. Paul - 2nd Day	Denver - 3rd Day
St. Louis - 2nd Day	Omaha - Overnight or 2nd Day

Boone is served with air facilities by the Boone Municipal Airport located at the southeast corner of the City. Facilities are as follows:

Runways: NW - SE, 3,000 feet x 75 feet
Hard surfaced with 600 foot sod over-run
NE - SW, 2,600 feet x 300 feet, sod.
Runways lighted from sundown to sunup

Equipment and facilities:

Unicom
80-87 and 90-96 octane gas
Hanger space
Flight instruction

Service: Charter service
Rental planes available

Bus service to Boone is by Greyhound Bus Lines with seven busses daily.

SECTION 5

PHYSICAL FEATURES

Topography

Boone is situated immediately east of the Des Moines River valley on land that is relatively flat or gently rolling typical of most of the topography of Boone County. The steep hillsides of the Des Moines River valley and its tributary streams begin just west and south of the City of Boone. Topography, therefore, is not a limiting factor in the future development of the City since there is sufficient flat land to amply handle any possible future growth. The relative flatness of the topography in the City should be considered as an asset since it provides good areas suitable for industrial development in the east and northwest areas of the City.

A series of topographic maps have been prepared for the City and the immediate environs. These maps show all houses, streets, walks, trees, etc., as well as the topographic lines. Most of the area now within the incorporated area of the City was drawn at a scale of 1 inch equals 100 feet with a contour interval of 2 feet. The area immediately surrounding the incorporated area was drawn at a scale of 1 inch equals 200 feet with a contour interval of 5 feet.

Rivers and Streams

The Des Moines River runs north and south along a meandering course west of the City of Boone. The river is approximately one mile from the City at its closest point and is bordered in most areas by steep hillsides. If the Saylorville Dam is constructed downstream on the Des Moines River, the extreme high water level as now planned would extend north to the Town of Fraser approximately three miles north of Boone. The north extremity of the permanent or conservation pool will be approximately one-half mile north of the south County line thirteen miles south of the City of Boone. Neither of these will have any affect on the City of Boone. The extreme high water level is 220 feet below the general level of the City of Boone and is restricted in a very narrow valley.

Polecat Creek runs north and south through the western part of the City. At the south corporate limits the creek enters a fairly deep ravine decending to the Des Moines River some two miles south of the City. The recreational potential of this creek in connection with the construction of the new U. S. Highway 30 is described in the recreation section of this report.

Honey Creek runs north and south through the central part of the City and also enters a deep ravine south of the City. This creek joins with Polecat Creek one and one-half miles south of the City before entering the Des Moines River.

Big Creek runs more or less north and south along the east side of the City entering the Des Moines River a short distance south of Boone County. This creek runs through relatively flat land in the area of Boone.

Drainage

Drainage is good throughout the City of Boone with the three creeks mentioned under "Rivers and Streams" above serving this purpose. The western part of the City, generally west of Marion Street, drains into Polecat Creek while the central portion between Marion Street and the east corporate limits runs into Honey Creek. Big Creek takes the runoff from the industrial area east of the City.

Public Water System

The City of Boone has a municipally owned and operated water plant and distribution system. The source of supply is from eleven (11) gravel wells 45 to 60 feet deep on the Des Moines River. Five of these wells are located on an island in the river and have submersible pumps. Two are on the mainland with submersible pumps; two are on the mainland with top motors and two are on the mainland without motors. These wells pump through two supply mains, one 18" and one 21", to two surface reservoirs, one having a capacity of one million gallons and one having a capacity of two million gallons. Map 3, P. 15 shows existing water lines.

The water is then chlorinated and with the addition of flouride it is pumped into the distribution system for consumption and other use. The distribution system has connected to it two elevated steel tanks; one 375,000 gallons capacity and one 750,000 gallons capacity. The distribution system contains some 63 miles of pressure mains varying in size from 2" to 12". Connected to this distribution system are 566 fire hydrants.

Present water usage varies from 1-1/2 to 2-1/2 millions of gallons per day. The capacity of the water system is 4-1/2 million gallons per day. Thus the water plant and distribution system are very ample for the present and for the immediate future.

While the amount of 2" and 4" water mains are not large, such sizes should be increased in the future. It would be a good platting requirement for new additions to install a minimum of 6" water mains.

Sanitary Sewers

The City of Boone has approximately 46 miles of sanitary sewers varying in diameter from 6" to 24". Ninety-five percent of the population is presently served.

It appears that within the present City limits all future areas to be developed with the exception of that contained in lower Polecat Creek can be served by gravity lines into the existing system. Outfall sewers are sufficient to care for all reasonable uses in the foreseeable future. In future platting requirements, the minimum diameter of sanitary sewers should be eight inches. Map 3, Page 15 shows existing sewer lines.

Sewage Treatment

A modern municipal sewage treatment plant is operated by the City of Boone, having a present peak capacity of four million gallons per day. It has a present load of one and one-half million gallons per day. An acceptable effluent is returned to Honey Creek.

This plant was originally constructed in 1928 and was operated until 1958, when it was rebuilt into its present form. It now has mechanical bar screens, grit remover, flocculator, primary settling, trickling filters and final settling. The settled out sludge is not digested, but is filtered after which it is disposed of by application to farm lands nearby. In its rebuilt form, this plant should adequately serve the City of Boone for many years to come.

Garbage Collection

Garbage is collected in Boone by contract carriers two to three times a week, depending on the need and on weather conditions. It is disposed of by the open pit method outside the southwest corner of the City. Boone has rodent, fly and mosquito control.

Storm Water Sewers

In general, Boone is fairly well supplied with storm water main sewers and street drains. However, in some locations large former drain tile have been converted into storm water sewers and should be replaced with bell and spigot pipes of larger size. One such tile is the 26 inch that crosses Division Street just North of First Street. Another place is at, or near, Ringold and Fourth Streets, where drain tiles of 14, 24 and 34 inch come together.

Boone has the nucleus of a good storm water sewer system which should, with some enlargements, suffice for many years to come. Map 5, page 19 shows major drainage districts in the City.

Electric Power and Light Facilities

Ample electric power is available in Boone. The Company furnishing this power is the Iowa Electric Light and Power Company, an investor owned utility. Boone has the third largest power station of this Company located within its corporate limits. The installed capacity in the Boone power station is 34,000 ICW of steam generation. This is a base load plant interconnected with the Iowa Power grid connecting all the private utilities operating in Iowa. A 33,000 volt substation has been built in Boone's Industrial Park to serve the growing needs of the area. In addition, 7,200 volt 3-phase primary lines are on all roads servicing industrial areas. In capacity, any industrial requirement can be met.

Natural Gas

Boone is served by natural gas by the Iowa Electric Light & Power Company. This Company has available 8,000,000 cu. ft. per day of 1000 B. T. U. gas, firm supply, with interruptable supply for any foreseeable requirement.

Telephone Service

Boone is served directly by the Northwestern Bell Telephone Company. The phones and service given are the same as that given in Des Moines, Cedar Rapids, and other large Iowa Cities and is ample for any need that could arise.

EXISTING
PUBLIC
UTILITIES

Phone is not used by natural gas by the local electric utility. The company has available a 24-hour service. The gas is available for any emergency repair or replacement.

Telephone Service

Phone is not used directly by the Northwestern Bell Telephone Company. The phone and service lines are owned by the company that gives in Des Moines, Cedar Rapids, and other large Iowa cities and in range for any need that could arise.

Electricity

Electricity is not used by the local electric utility. The company has available a 24-hour service. The gas is available for any emergency repair or replacement.

Water Service

Water is not used by the local electric utility. The company has available a 24-hour service. The gas is available for any emergency repair or replacement.

Electricity is not used by the local electric utility. The company has available a 24-hour service. The gas is available for any emergency repair or replacement.

Gas Service

Gas is not used by the local electric utility. The company has available a 24-hour service. The gas is available for any emergency repair or replacement.



The preparation of this map was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act of 1954, as amended.

Urban Planning Grant Project No. (awd. P-1)

Prepared under the Contract for the Iowa Development Commission by Anderson Engineering Company City Planning Consultants

CITY OF BOONE, IOWA



0 400 800 1600 2400 3200 4000 4800 5600 feet

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planning consultants
DES MOINES IOWA

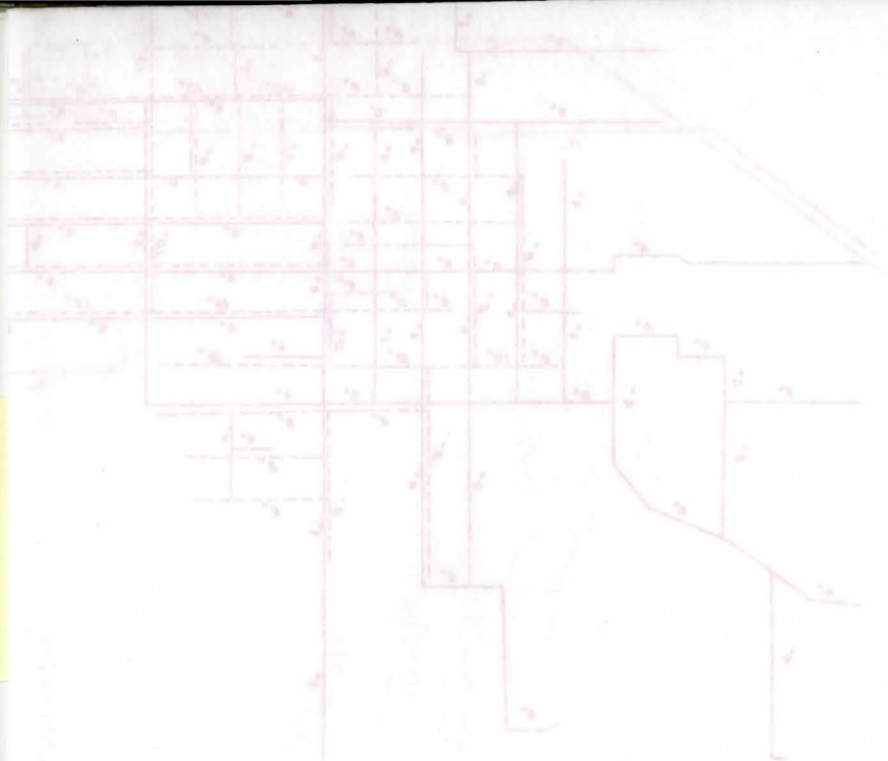
Legend

sewer lines 8"
water lines 8"

EXISTING
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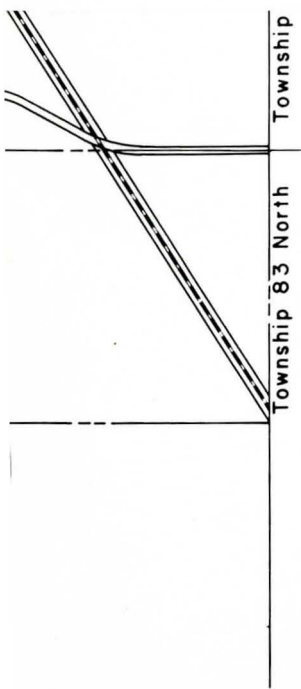
map 3

aneco



THE DISTRICT OF COLUMBIA
PLANNING COMMISSION
REPORT ON THE
REVISION OF THE
ZONING MAP
FOR THE
DISTRICT OF COLUMBIA
1960

THE DISTRICT OF COLUMBIA
PLANNING COMMISSION
REPORT ON THE
REVISION OF THE
ZONING MAP
FOR THE
DISTRICT OF COLUMBIA
1960



EXISTING
POPULATION
DISTRIBUTION

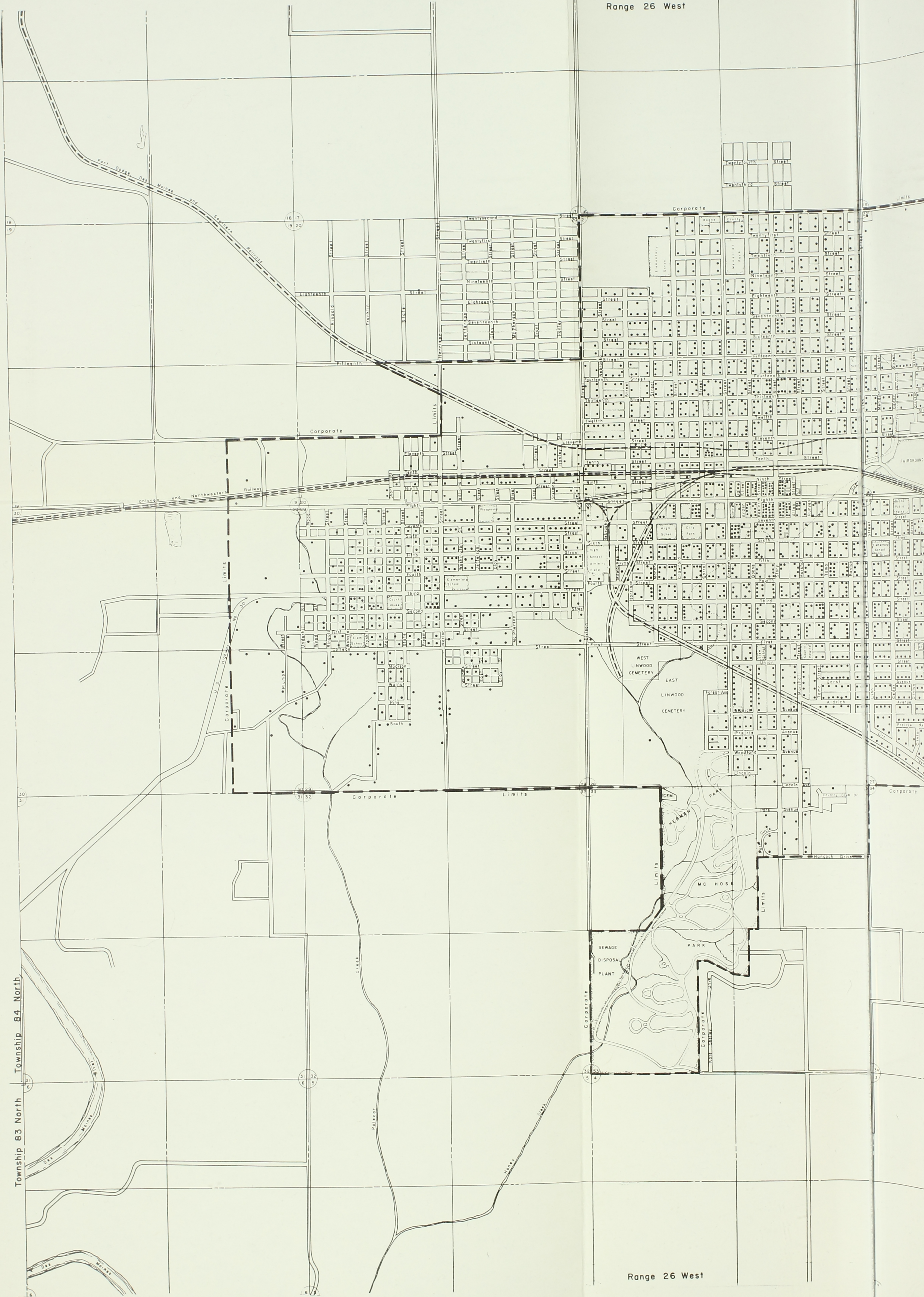
map 4

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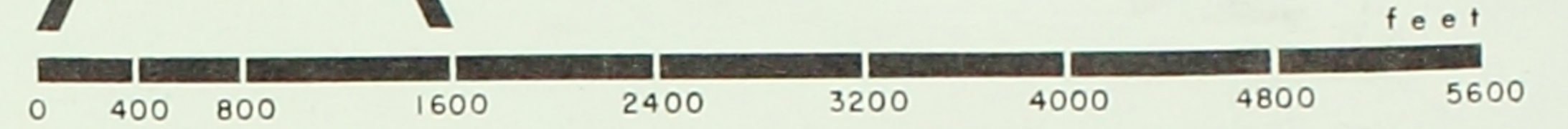
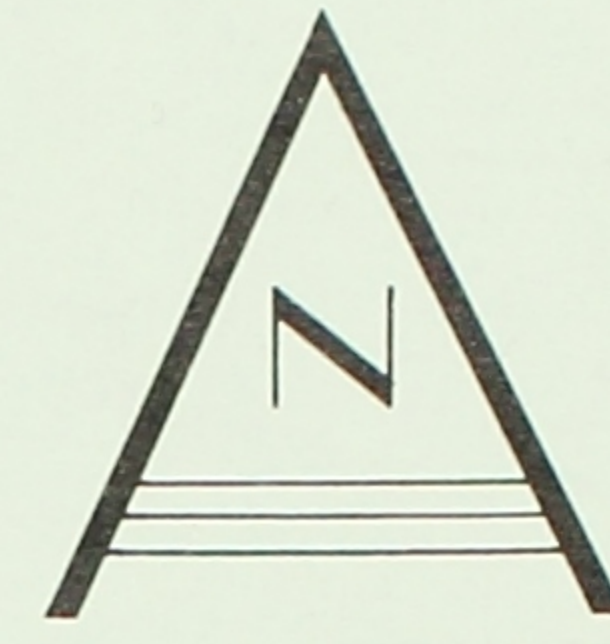
Range 26 West

Township 83 North Township 84 North

Range 26 West



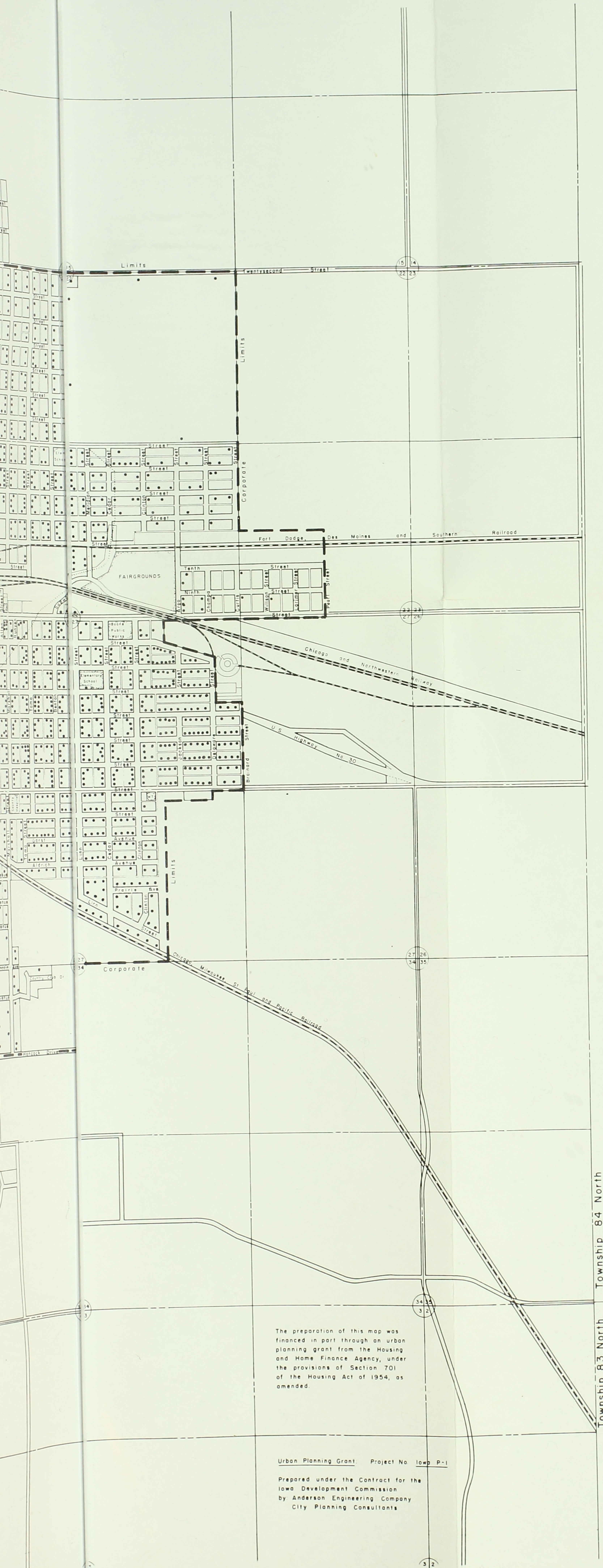
CITY OF BOONE, IOWA



anderson engineering company
planning consultants
DES MOINES IOWA

Legend

one dot represents five persons



The preparation of this map was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act of 1954, as amended.

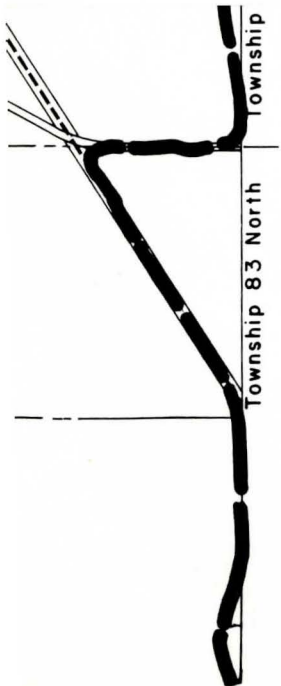
Urban Planning Grant Project No. Iowa P-1

Prepared under the Contract for the Iowa Development Commission by Anderson Engineering Company City Planning Consultants

EXISTING POPULATION DISTRIBUTION

map 4

aneco



FUTURE PUBLIC UTILITIES

map 5

aneco

Range 26 West

Township 83 North	Township 84 North
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WATERSHED

A stylized map of the New York City grid, showing a section of the city with streets labeled from Tenth to Fourteenth. The word 'WATERSHED' is written diagonally across the map, from the bottom left to the top right. The map is composed of a grid of squares, each representing a city block. The streets are labeled on the left and right sides of the grid. The word 'WATERSHED' is written in a large, bold, sans-serif font, with the letters slightly overlapping the grid lines.

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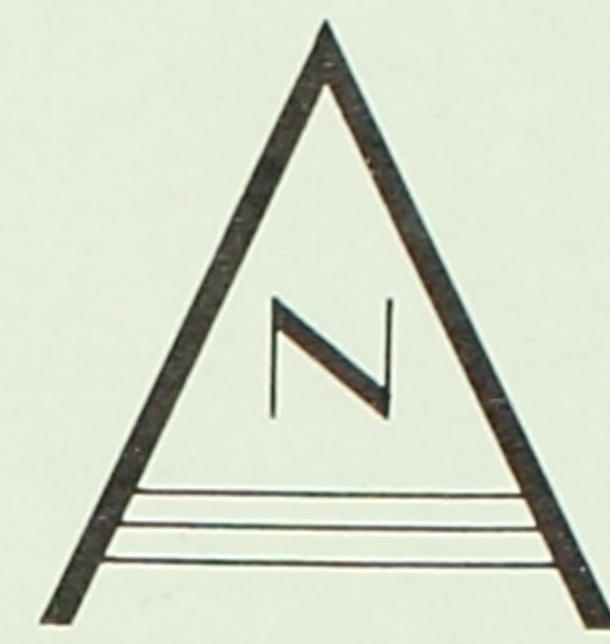
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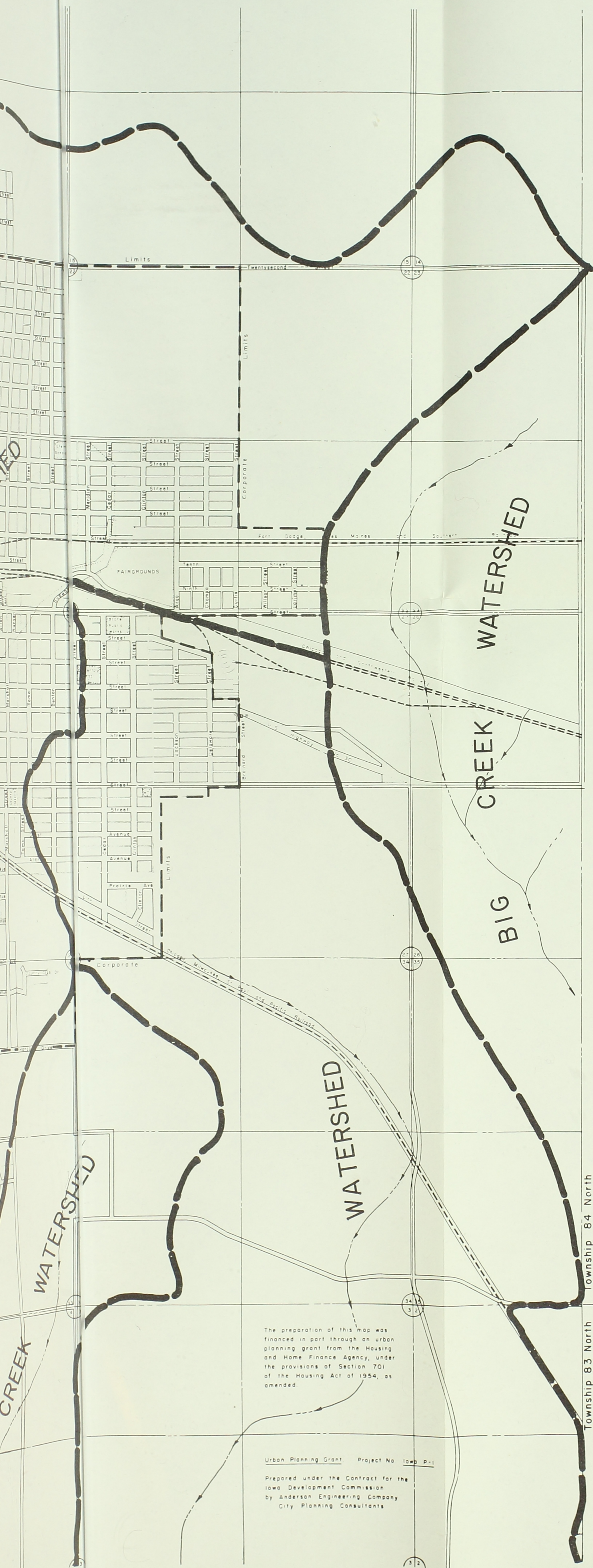
WATERSTICD

CITY OF BOONE, IOWA



0 400 800 1600 2400 3200 4000 4800 5600 feet

anderson engineering company
planning consultants
DES MOINES IOWA



The preparation of this map was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act of 1954, as amended.

Urban Planning Grant Project No. 1066 P-1
Prepared under the Contract for the Iowa Development Commission by Anderson Engineering Company City Planning Consultants

FUTURE
PUBLIC
UTILITIES

map 5

aneco

Chart 1 shows that the City of Boone grew steadily and rapidly from its beginning until 1920. During this time the railroad yards were a main factor in the economy of the City. From 1920 to 1930, Boone lost population dropping from 12,451 to 11,886. During the decade 1930 to 1940 the City gained population reaching 12,373 or slightly under the 1920 level. From 1940 to 1950 Boone lost population again dropping to 12,164. The 1960 census shows that Boone has recovered from the 1940-1950 loss with a gain of 304 to the highest level in its history of 12,468. This, however, is only 17 persons more than the 1920 level.

During the period 1920 to 1960, the economy of the City of Boone suffered through the closing of coal mines in the area and a revolution in railroading in the switchover from steam to diesel power. The latter resulted in a large reduction in the number of workers needed to man the yards that previously had played an important part in the economy of the City. The loss of these economic factors contributed to the fluctuation in population that has taken place since 1920. Through the economic base study it appears that Boone has broadened its economic base sufficiently in recent years to the point where the growth at this time is even greater than the line on Chart 1 for 1950 to 1960 shows.

Statistics for births and deaths obtained for Boone from the Iowa State Department of Health are shown in Table 1.

TABLE 1

BIRTH AND DEATH STATISTICS

YEAR	BIRTHS	DEATHS
1945	185	174
1946	278	165
1947	311	182
1948	238	173
1949	250	177
1950	257	181
1951	294	171
1952	267	171
1953	257	165
1954	229	161
1955	214	164
1956	262	173
1957	253	180
1958	227	172
1959	241	164
1960	251	204

The preparation of this chart was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act. of 1954, as amended.

Urban Planning Grant: Project No. Iowa P-1

Prepared under the Contract for the Iowa Development Commission
by: Anderson Engineering Company
City Planning Consultants

POPULATION PROJECTION 1990

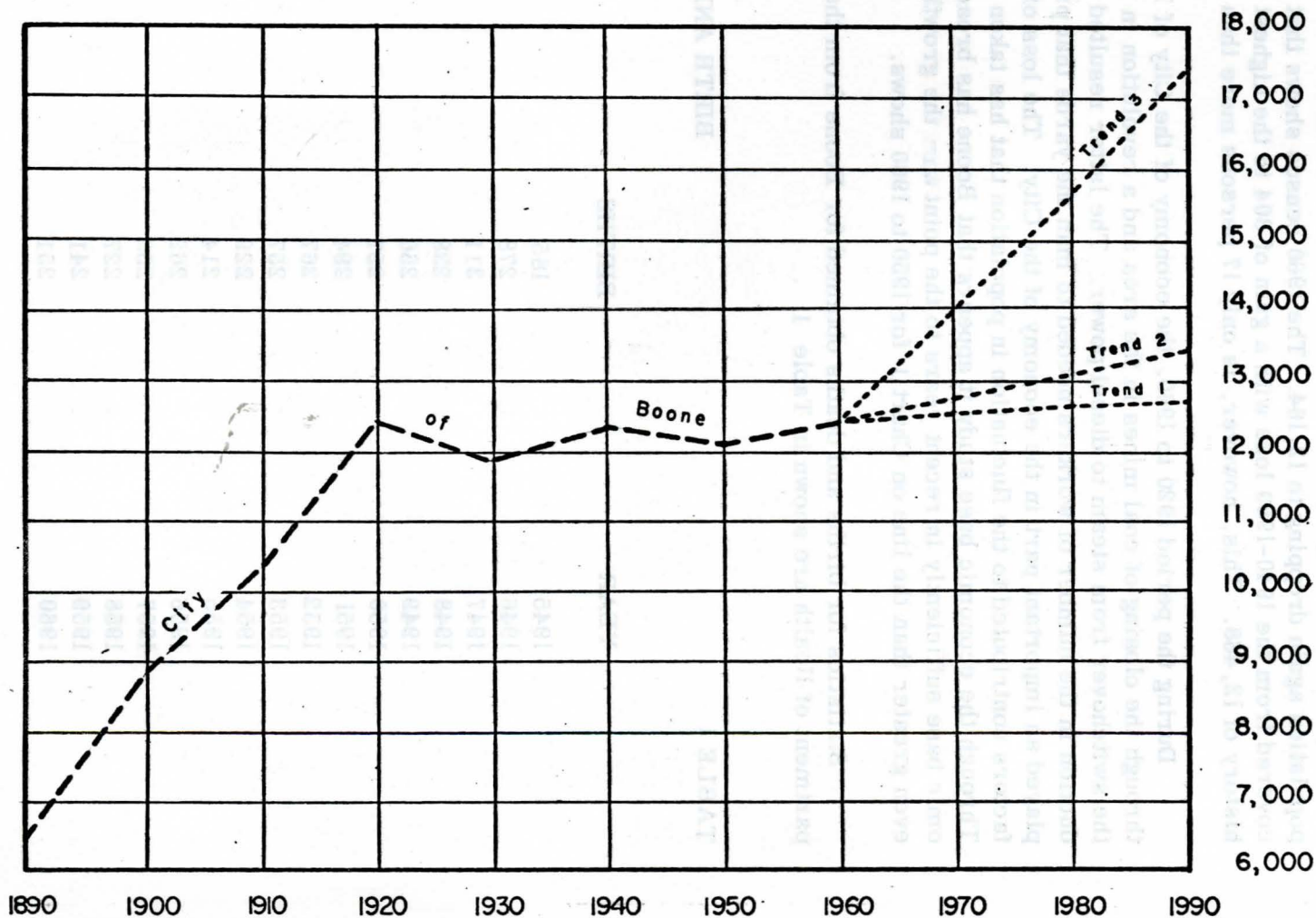


chart 1

aneco

These figures show that there has been an excess of births over deaths which is called natural increase. Comparing the natural increase, births minus deaths, for the period 1951 through 1960, 770, with the actual increase in population for the same period, 304, we find that the actual increase is less than the natural increase indicating a loss of some of the natural increase or an out-migration. This is characteristic of many Iowa cities comparable to Boone and is due to lack of economic opportunities sufficient to retain all of the natural increase. To retain more of its natural increase, Boone must expand its industrial base at an increasing rate. There is evidence that an increase in economic activity during the 1950's has resulted in a steady reduction in the out-migration from 93 in 1951 to 17 in 1960. This reduction is based on the assumption that the increase in population from 1950 to 1960 was fairly steady during the ten year period.

Table 3 showing the age distribution for Boone in 1950 and 1960 points up some rather interesting facts relative to the distribution of the total population by age. This table is divided into three groupings with the division at age 20 and age 65. A review of the 1960 census information shows that in 1960 there were more people in the age bracket from under one year up to 19 years than in 1950. There were fewer persons in each age group from 20 years through 64 years, the wage earning group, and there again were more persons in 1960 than in 1950 in the 65 and over age group. This lower population in the wage earning group points up the fact that the out-migration described earlier is in the age group of persons over high school age with the result that Boone is educating the children that leave the City for work or college after high school graduation and never return to Boone. Further examination of the census information indicates that the low population in the 20 through 64 group is fairly common among cities that have had a rather slow rate of growth such as Boone. On the other hand, cities that have had a high rate of growth have an increased population from 1950 to 1960 in all age groupings generally. Distribution of the population of Boone by sex for 1960 is shown in Table 2.

TABLE 2

AGE BY SEX - BOONE
1960 CENSUS

AGE GROUP	MALE	FEMALE
All ages	5,801	6,667
1 thru 20	2,112	2,132
21 and over	3,689	4,535
65 and over	901	1,334

TABLE 3

AGE DISTRIBUTION - BOONE
TOTAL POPULATION

AGE	NUMBER	
	1960	1950
Under 1 year	223	190
1 year	230	414
2 years	232	
3 "	246	417
4 "	236	
5 "	233	176
6 "	248	187
7 "	237	541
8 "	233	
9 "	206	683
10 "	213	
11 "	192	322
12 "	220	
13 "	253	295
14 "	168	
15 "	176	160
16 "	174	176
17 "	175	715
18 "	145	
19 "	108	740
20 to 24 years	551	758
25 to 29 years	650	774
30 to 34 "	692	792
35 to 39 "	667	772
40 to 44 "	680	749
45 to 49 "	704	783
50 to 54 "	723	700
55 to 59 "	723	597
60 to 64 "	695	516
65 to 69 years	677	577
70 to 74 years	582	
75 to 79 "	466	130
80 to 84 "	314	
85 and over	196	37.0
Median Age	36.4	

Table 2 shows that there are more females than males in all age brackets and that the difference is greater in the 21 and over group than in the 20 and under group. Considered in light of this also should be statistics on widowed and divorced persons in the City as shown below:

	Male	Female
Widowed	198	944
Divorced	80	173

Information on non-white population in Boone has not been included in any of the tables since it is very insignificant as a segment of the total population. The 1960 census shows that there is a total of only 9 persons in the City in the non-white category.

TABLE 4

HOUSEHOLDS - FERTILITY RATIO

Total number households -	Boone - 1960	4,320
Population per household -	Boone - 1960	2.8
" " "	Urban places of 10,000 or more	3.01
" " "	Boone County	3.02
" " "	State	3.19
" " "	Nation	3.65
* Fertility Ratio -	Boone - 1960	469
" " "	Urban Places of 10,000 or more	472
" " "	State	517

* Number of children under 5 years old per 1,000 women 15 to 49 years old.

Table 4 shows current information on households in Boone and the fertility ratio. The population per household of 2.8 persons in Boone is quite low although it would not appear so comparing it with other cities over 10,000 population or comparing it with the State as a whole as shown in the Table. Considering, however, that the number of persons per household for the nation is much higher, 3.65, and that many of the fast growing cities in Iowa have a figure of 3.3 or better, one can see that this low number of persons per dwelling unit, below 3.0, is characteristic of the many Iowa communities that are growing very slowly or are not growing at all. Also, this low number of persons per household is related to what should be considered as a relatively high median age for the population of Boone. Table 3 shows that the median age in 1960 was 36.4 years. Examination of the census reports shows that most of the cities that had a higher number of persons per household also have a lower median age as shown in Table 5.

TABLE 5

POPULATION PER HOUSEHOLD
AND FERTILITY RATIO OF SOME
GROWING IOWA CITIES

City	Population		Population per Household	Fertility Ratio	Median Age
	1950	1960			
Bettendorf	5,132	11,534	3.55	540	26.9
Carroll	6,231	7,682	3.38	586	N.A.
Clear Lake	4,977	6,158	3.03	483	N.A.
Clinton	30,379	33,589	3.11	496	32.7
Council Bluffs	45,429	54,361	3.23	574	28.0
Davenport	74,549	88,981	3.15	524	29.8
Dubuque	49,671	56,606	3.37	546	27.8
Estherville	6,719	7,927	3.17	587	N.A.
Fort Dodge	25,115	28,399	3.01	524	30.7
Independence	4,865	7,069	3.06	553	N.A.
Marion	5,916	10,882	3.36	622	26.0
Newton	11,723	15,381	3.02	507	30.4
Boone	12,164	12,468	2.83	469	36.4

In many of these cities the median age level is 30 years or less and as low as 26 in a few cases.

The fertility ratio as shown in Table 4 for Boone is 469. This figure is the number of children under 5 years old per 1,000 women 15 to 49 years old. Comparing the figure on Boone with that of the average of urban places over 10,000 population, the difference of only 3 does not appear very great. When comparing Boone's figure of 469 with the average for the State of 517, however, it appears that Boone is low. Again comparing the figure on Boone with that of some of the faster growing cities listed in Table 5 it is found that Boone is low according to these comparison cities which generally run well over 500 and in some cases over 600.

From the foregoing statistics it can be seen that the characteristics of the Boone population as of the 1960 census are those of a typical slow growing Iowa community that has a slightly older population, fewer persons per household and relatively low fertility ratio indicative of fewer children.

If the City improves its industrial base, the statistics on these characteristics of the population will probably change as follows:

<u>Characteristic</u>	<u>Presently</u>	<u>Would Be</u>
Number persons per household	low	higher
Fertility ratio	low	higher
Median age	high	lower

The conclusions drawn from the studies made in the preparation of this report are that Boone is making economic gains at an increasing rate and that this will continue in the foreseeable future resulting in a more rapid growth picture and a basic change in the characteristics of the population as shown above.

Since the economic base of the City is growing and there appears to be valid reason for an optimistic view on an increased rate of growth, the projection of the population increase into the future becomes more difficult. If the trends over the last ten or fifteen years are used for projection of the population using the increase according to the census figures coupled with the birth and death statistics, the outlook for the future is a slow, steady growth. On the other hand, the economic study indicates that a more rapid rate of growth can be anticipated if Boone continues its very recent upward trend in economic development. As a result, both methods will be discussed herein showing trends as they appear at this time.

Chart 1 shows graphically the population projection to 1990. Trends 1 and 2 were derived using the actual gain in population with the birth and death statistics as described above.

Trend 1 is based upon the population trends and the birth and death statistics from 1945 through 1960. This takes into consideration the fact that there was a loss in population from 1940 to 1950 and a gain from 1950 to 1960. Through algebraic addition we add the natural increase and migration expressed in persons per 1000 population to arrive at a gain in population per year, again expressed in persons per 1000 population; thus 6.27 (natural increase) plus -5.55 (out-migration) equals a plus 0.72 persons per 1000 population gain in population per year. This results in a total gain in population of 9 persons per year. In this projection, out-migration is 88.5 percent of the natural increase which is rather high.

Trend 2 is similarly calculated using population and birth and death statistics for the period 1951 through 1960 which was a period of gain in population for the City. The figures for this trend are plus 6.50 (natural increase) plus -4.03 (out-migration) equals a plus 2.47 persons per 1000 population gain in population or an average gain of 31 persons per year. The out-migration on this method of figuring decreased to 62 percent of the natural increase. The natural increase factor of 6.50 for Boone for the period 1950 to 1960 is low when compared to the average figure of 9.26 for a group of Iowa cities for which information was available.

Trend 3 is derived from an estimated increase of 1500 persons by 1970 and is based entirely on the economic activity that has taken place in Boone in the past few years as the City made its recovery from the cutback in employment by the railroads. The number of jobs that have been added during this time along with the general increase in economic activity indicate that if the present economic pattern continues, one could optimistically see an increase of 1500 in the population of Boone by 1970. More discussion on this subject can be found in Section 8 on the Economic Base. Chart 1 reflects the projection of this trend through 1970, 1980 and 1990. The projection for the period 1970 to 1990 assumes a continuing pattern of economic development.

The population of Boone should increase during the period 1960 to 1990 at a rate greater than the 1950 to 1960 increase because of the greater economic activity that has been taking place recently. The population should increase approximately as follows:

Year	Estimated population
1970	13,250
1980	14,300
1990	15,400

TABLE 6

POPULATION PROJECTION - 1990

Year	Past Population	Trend 1	Trend 2	Trend 3
1870	2,415			
1880	3,330			
1890	6,520			
1900	8,880			
1910	10,347			
1920	12,451			
1930	11,886			
1940	12,373			
1950	12,164			
1960	12,468			
1970		12,558	12,778	13,950
1980		12,648	13,098	15,609
1990		12,738	13,426	17,464

Preface

The economic survey of Boone, Iowa, was undertaken as a part of the Comprehensive Plan for the City. The primary objective is to determine the principal economic potentials currently developing in Boone.

Most cities, large or small, exist because they offer services to others, either in the immediate vicinity or distant points, and thereby create an opportunity for the residents to earn a living. It is assumed that the greater the economic activity, the larger the population.

The services rendered to those outside the City and its immediate environs are in this report considered to be urban place building activities and constitute the economic base of the community. A second large classification of the economic activities concerns itself primarily with the services rendered to others living in the community. These might be termed "city serving activities", and are usually considered as being supported by the "exported" or "urban place building activities".

Those responsible for the preparation of this section of the over-all report have relied on certain statistical data obtained from recognized sources, such as federal and state publications, but in addition, every effort has been made to obtain relevant facts and figures by personal interviews and questionnaires. Questionnaires have been used to determine the attitudes of farmers living in the retail trade area, and of merchants and industrialists of the City of Boone.

Professor E. R. Stoddard of the Sociology Department of Drake University has analyzed and interpreted these value and attitude systems of individuals or groups. "The maximum practical significance of economics hinges on the development of explanations and evaluations which are sufficiently integrated with the explanations and evaluations of the other social sciences to provide an opportunity for intelligent choice in the formulation of public policy." (James, Clifford L, James D. Calderwood, and Frances W. Quantius, Economics, Basis Problems and Analysis, New York, Prentice-Hall, Inc., 1951.) Professor Stoddard has, in addition, conducted a number of interviews with the professional, business and civic leaders, in an effort to determine whether or not there is a general unanimity of opinion in regard to the objectives and the goals of those responsible for the development of Boone in years to come.

The data gathering process and the empirical studies cited are such as to contribute to the specific purpose of providing basic information to be utilized in the physical planning process. They do not meet to the fullest extent the degree of validity desired by one claiming to be a social scientist. Their broad implications, however, are extremely critical to the understanding of alternative adjustments and goals in community organization.

The following is a direct quotation from the "Editor's Prologue" of the publication The Techniques of Urban Economic Analysis, edited by Ralph W. Pfouts: "During the inter-war period a theory of urban growth and development that was named the Economic Base Theory, arose and was accepted by city planners and administrators, urban geographers, Chamber of Commerce officials and other professional groups interested in urban development. This theory may be characterized briefly by saying that it divides urban economic activity into two categories: exporting industry that brings money into the community from the outside world, and non-exporting industries whose goods and services are sold within the community. The exporting industries are referred to as basic industries, and the non-exporting industries are called service industries. It is also contended in discussion of the theory, that the exporting or basic industries provide the sources of urban growth; they are city building industries."

Editor Ralph W. Pfouts goes on to point out that this Economic Base Theory is not universally accepted by economists and there are, in fact, two other related means by which the growth rate of a community may be anticipated. The first of these economic concepts uses the "multiplier," the second is that of the input-output, or inter-industry methods to understand urban economics. The latter does not provide a theory of urban development, but rather a methodology for measuring and examining the structure of the urban economy. For the most part the above and the Economic Base Theory in particular seem more applicable to the highly industrialized centers of the country located east of the Mississippi River.

Those responsible for preparing this report are more inclined to consider Boone in its predominantly agricultural setting rather than in a setting of an industrial economic base. In such a rural setting, the towns are brought into existence by the demand, or necessity, of filling the demands of distant consumption centers for products from the local farms. Such towns or cities are also sustained and originate because of the demand of the farmers or those living in the surrounding countryside who wish to buy inputs for the operation of the farm or consumer good items for themselves or their families. The rural town and countryside have become partners in an economic relationship involving the importation of goods for local consumption, and the exportation of products produced on the farm. It is with this basic premise and definition that the following study was instituted and prepared.

The following is an elaboration upon the primary objectives, being an economic study of the potentials of Boone for planning purposes with an additional element as manifested in the sociological approach to community development.

To be effective and to justify the cost, a comprehensive plan must gain the acceptance of those for whom it was developed and be implemented over a period of time. It has been our endeavor to avoid a presentation with only an economic orientation and physical format in mind.

If planning programs are to be successful, those responsible for their implementation must be cognizant of the established channels of social exchange and communication in cultural terms. It is naive to assume that people will break away from the familiar, traditional norms merely for seeking possible economic and planning goals unless these be higher according to the community's values.

People may desire to work together to develop their community (1) economically, that is, in income per person or total income, (2) in size, (Population) (3) socially with new institutions, organizations, more and better personal relationships, (4) physically with better health, less accidents, more sports or improved physical fitness, (5) esthetically and culturally with better music, art, beauty in homes, parks, landscape and city planning or (6) intellectually with enriched school programs, adult education, more reading and discussion.

In the natural course of national, state and community growth and development, the complexity of the various institutions, and their functions becomes increasingly more difficult to understand by each individual concerned. The myriads of problems which arise from this complex development and rapid technological and social change cannot be attacked on an individual basis. Thus, a greater and greater part of community activity becomes the responsibility of fewer and fewer individuals. As the responsibility for direct involvement with community affairs is lifted from the individual, apathy becomes the norm among the great segment of the population. When an assumption is made that "the entire community" is united for a given goal, empirical research demonstrates time and time again that this is a reflection of those interested few who have traditionally guided and decided for those of the community. General reaction occurs most often in a veto or negative response to what is being done rather than a positive alternative in facing a local problem. Under this condition, action programming is carried out on a narrow base and quite commonly, without the consent or even the knowledge of those who will be affected by the actions taken. When ideal plans are prepared for community development without regard for these leaders, the combination of individual apathy and lack of enthusiastic support from traditional decisionmakers is an automatic prelude to failure by the physical and social engineers involved.

Moreover, in situations where powerful individuals are all united on the problem confronting them in general terms, it is not uncommon that they vary so greatly in their individual perception of the means to resolve the problem that they unknowingly work in contradistinction to each other. Where efforts to initiate and legitimize action is neither opposed nor upheld by key decision-makers, the general populace feel qualified to assert themselves negatively without rationally considering long-range goals or the total effect on the community as a whole.

It must be stated that the communities are also limited in their development possibilities no matter which ends they pursue. Individuals acting as a group do not have more total energy, talent, numbers or money after than before they embark on a community development project. They can bring forth latent qualities and these may be considerable, but creation from within the group of new talent, energy or economic potential not already latently present is very limited. It frequently will require working with other towns or people that may have been considered adversaries before.

Communities serve a purpose to the economy and the nation. As the community performs its economic tasks, the members receive their income for their part in the community's economy. This income permits people to accomplish their individual goals. As the over-all national economy changes, the functions desired from communities change. This means employment changes in type and volume. Let us take a look at the economic functions of rural communities, how these are changing and the kinds of adjustments in community economic organization needed.

The question "Why do population centers like towns and cities exist?" will be considered at various points throughout this report, but it is generally recognized that "Cities do not grow up by themselves, countrysides set them up to do tasks that must be performed in central places." (Mark Jefferson, Geographical Review, Vol. 21, 1931, p. 453.) No city lives to itself -- it serves other areas which can be said to constitute the city's "market region". In a rural area towns are called into existence by the distant consumption centers and local producing farms. For consuming population centers, the town performs the services of collecting and shipping farm products off to processing plants. The rural town is called into existence also by the surrounding countryside dotted with producing farms which want a central place from which to buy production inputs, consumer goods, obtain education, attend social affairs, go to church, and so on. As they perform services they are in turn sustained and provided for by the countryside and the consuming population centers.

The pattern of land settlement under Iowa homestead law introduced the element of social isolation and is a historical deterrent to the urbanization and industrialization of rural service centers. Unlike the New England pattern in which the farmer lived in the village and traveled out to his land to work, in Iowa he leaves his home for an infrequent visit to the community. Urbanism

and industrialization are regarded with suspicion as a potential threat to the institutions of the open country community with its highly personal relationships.

There are other dimensions to community development. The town may develop socially, culturally, intellectually or even in income per person without changing the size of the economic base. In fact for many communities it is not a matter of how to expand the base or even how to maintain the economic base but rather how to live effectively and well on the total economic base available. This is a grim prospect for communities. To accept this and find the ways to make the most of opportunities available probably will require considerable group study, decision, planning and effort.

Let us look at the factors which are changing the type, volume and location of basic employment in rural areas. The reshaping of the basic economic activity in rural communities is also rocking the service sector and the entire social and cultural structure of many communities. As the foundation of the community economy undergoes change, the entire superstructure of the community as a social organism is under stress.

The purpose of this report requires that we consider the city of Boone primarily from the standpoint of its economic organization. This organization is the result of both the existing conditions and the conditions of the past. Technology and market preference are the two main changes affecting economic organization. Desired or planned economic organization of a farm or a town is the result of what can be done technically and the preferences of the production consumers. Consequently the economic organization of Boone, as is true of other cities, is continually in the process of adjustment because of changes in technology and changes in preferences of the market.

One of the problems and objections of both farmers and rural towns is the rate at which our system requests that they adjust to modern technology.

A changed agricultural technology calls for a different pattern of purchases from towns. To provide the array of specialized services desired requires expensive inventories, specialized machinery, fertilizers and chemicals and a variety of skills. New technology calls for larger farms. As farm consolidation evolves, the number of farm workers declines and less people are needed to service the needs of farmers as consumers. This trend has been countered by the fact that improved technology has increased the total volume of agricultural output. The increased volume calls for more services from grain elevators, livestock buyers, truckers and others involved with handling the larger volume of output. Agriculture is a growing industry in volume of output and value of purchased inputs even though prices and number of farmers are declining.

Agricultural adjustment, be it an increased or a decreased volume, is reflected as a change in the market desires to those earning their livelihood in the central places. Employment in the town is also influenced by changes in technology and such urban technology has advanced substantially. Examples of such change are wider use of labor saving machines such as power tools, testing devices, power loading equipment, larger trucks, etc.

Technology has made larger scale firms able to offer better services at a lower price. Urban technology has substituted capital for labor in providing service.

The agricultural technology together with urban technology operate together to change, usually reduce, the basic employment of small communities. In general, better transportation, economies of size in urban firms and preferences of people to be near a community offering the most services, has caused the larger towns to get larger and the smaller ones to get smaller. Some people will have moved to the larger community for the additional services. Others will have moved away from the smaller towns because of high taxes and the inability of each small town to provide the services desired at low cost.

Several suggested activities to facilitate adjustment of the smaller cities will be considered throughout the balance of this report. At this point, however, one activity should be developed and that is the possibility of expanding horizontally by working with other towns - even though historically the towns may have been considered to be competitive. (Fox - Expanding Horizontally, P. 14.)

What is done or what is not done with this report depends upon the attitudes and thinking of those affected.

A typical Iowa county contains sixteen townships with approximately 1500 farms having an annual sales value of \$2,500 or more. 6,000 people reside on these farms. Another four or five thousand people gain their livelihood from local agribusiness and an additional four or five thousand are supported by the commercial and public service sectors.

Towns with a population of 1,000 or more at present were usually situated along the railroad and then further stabilized in their location by the primary road system. The services offered in these communities were well established prior to 1900. It is only more recently that the pressures of a competitive economy have constantly tended to produce farm enlargement and continued the trend toward more capital and less labor employed in farming.

In every county there are a number of governmental units which are still operative even though the need for their existence has long passed. Towns were established because of the availability of employment and when the jobs were gone, people left, but in some cases the governmental framework was not altered. The existence of this multiplicity of residual governmental units restricts the freedom of choice the individual possesses to improve the governmental environment in which he exists.

The net result has been that the communities better situated geographically in relation to the railroad, highways, etc., have tended to increase in population at the expense of the smallest communities. The individual may consider that it is more desirable to live in his "home town" than to endeavor to overcome the inertia, the vested interests of the job holders, and the lack of appropriate legislation to achieve the ends he has in mind.

The emerging rural economy is, however, developing on a larger scale with fewer and larger central cities, fewer major consumer shopping centers, and in certain categories, fewer business functions in towns of a few hundred people. The very smallest towns have to some extent, become places of residence for those employed elsewhere and for retired farm couples. These towns continue to support a few convenience enterprises comparable with the corner grocery store and the neighborhood hardware store.

Towns of 2,000 to 3,000 population may contain the equivalent of the suburban shopping center.

The emerging pattern appears to indicate that there are in rural areas central places offering a wider variety of services and merchandise. The extent of such rural areas depends on the distance the rural population can be persuaded to travel in order to obtain the variety of goods desired. The government and business services now offered in Boone and its surrounding area might very well be reoriented in such a way as to include a greater territory, that is to expand horizontally.

Boone, in relation to its environs, could be considered equivalent to a minor central city, that is, a central city for the area within commuting distance and perhaps into a portion of Greene County.

One way to accomplish horizontal expansion is by greater cooperation between the governmental units that now exist and along with this a determined effort to eliminate those that prove to be uneconomical as to size and that contribute to a fragmentation of effort within the rural area.

To obtain a cohesive organization of governmental and business effort, the goals which the community sets to direct its effort ought to be closely related to the national economic goals and objectives which, apart from questions related to international policy and national defense, may be said to be as follows:

- (1) To increase the level of real income per person.
- (2) To improve the distribution of income.
- (3) To increase the stability of income.
- (4) To maintain or increase the freedom of individuals to make their own decisions concerning their occupations, uses of capital, and places of employment and residence.

Such an approach would be to make necessary adjustments to achieve an

"optimal" economy, consistent with economical optimum patterns for the nation as a whole. If the income level in one area is low, such adjustments may involve (1) out-migration of people, (2) substantial reorganization of local business and public services with an attendant transfer of capital to the area, (3) a realistic analysis of the existing economy could very well take into consideration the fact that little or no reliance should be placed on the in-movement of non-appropriate footloose industries and that in-movement of appropriate industries can be accomplished by presentation of reports including facts relevant to the establishment of such industries.

Considering the factors noted above, the economy of Boone might very well be enhanced by the following measures:

(1) Enlargement of the retail trade area by providing goods and services desired and required by the surrounding rural and rural non-farm population. Careful consideration should be given to developing trade Westward into Greene County.

(2) An industrial orientation to Ames, the objectives of this being to develop industry on the Eastern edge of Boone which would take advantage of the technical skills and knowledge available at Iowa State University in agriculture and the atomic energy facilities situated thereat. Research facilities attracted to the area between Ames and Boone would contribute to the development of industry at Boone and would be beneficial to both cities and their areas surrounding. Boone should actively seek defense industry oriented particularly to meet the requirements of the aero-space age. Ames and Boone are both served by the Chicago, Northwestern and the Fort Dodge, Des Moines and Southern Railroads together with adequate truck lines; thus transportation-wise are in a position to supply component parts to industries situated in cities either to the North or South or East or West.

Excerpts of a study just completed by the Northern Natural Gas Company regarding benefits of the Ames - Des Moines area for research-oriented industries can be found in the Appendix of this section beginning on Page 3A. A discussion on a study being made by the National Aeronautics and Space Administration and the Midwest Research Institute on the future role of the Midwest in the space age is also included in the Appendix beginning on Page 1A.

(3) With the new highway between the two cities, Boone might very well serve as a dormitory city for additional employees of the University, the Iowa Highway Commission and such research organizations as may exist or be established. The friendliness of the people of Boone can here be stressed.

(4) Residents of Ames in turn can certainly look to the Boone region as a recreation area of considerable potential. These two cities are furthermore oriented one to the other by virtue of the fact that they are both part of the metropolitan structure of the City of Des Moines.

SOURCES

Fox, Karl A., The Concept of Community Development, Community Development Seminar, 1961, Center for Agricultural & Economic Adjustment, Iowa State University, Ames, Iowa.

Paulsen, Arnold, Community Development and the Economic Base, Community Development Seminar, 1961, Center for Agricultural and Economic Adjustment, Iowa State University, Ames, Iowa.

Urban Responses to Agricultural Change, Clyde F. Kohn, Committee on Urban Economic and Social Development of Iowa, State University of Iowa, Iowa City, Iowa, 1961.

INTERVIEWS

Dr. Eber Eldridge, Department of Economics and Sociology, Iowa State University.

Dr. Wallace E. Ogg, Department of Economics and Sociology, Iowa State University

Dr. Wilbur R. Maki, Department of Economics and Sociology, Iowa State University

Dr. Geoffrey Shepard, Department of Economics and Sociology, Iowa State University

Dr. Clyde F. Kohn, Department of Geography, State University of Iowa

Dr. Edwin N. Thomas, Department of Geography, State University of Iowa

Dr. Clifford M. Baumbach, Bureau of Business and Economic Research, State University of Iowa

Dr. Conrad C. Stuckey, Bureau of Business and Economic Research, State University of Iowa

Mrs. Ethel Vatter, Research Associate, Bureau of Business and Economic Research, State University of Iowa.

Labor Force

The employable population herein referred to as the labor force is that portion of the population on which falls the principal burden of providing the desired living standards of the community.

The following quotation from Urban Land Use Planning by F. Stewart Chapin, Jr., indicates the significance of the employment-labor force trends to planning: "Apart from their significance in understanding the dynamics of land use changes, studies of the urban economy have very fundamental implications for land use planning analyses. With a knowledge of the trends of growth, leveling off, or decline in economic activity, the city planner is better able to develop yardsticks which assist him in estimating the extent and character of changing land requirements that form the basis for a land development plan. For example, studies of employment are a key element in population forecasts, and population estimates are used in scaling land development needs. Estimates of future land requirements for industrial uses are based on manufacturing employment trends, and future space needs for commercial uses draw upon employment trends in wholesale trade, and so on."

The following is quoted from Economic Impact of Channel Improvement on the Iowa Segment of the Missouri River by the Midwest Research Institute.

A. General Considerations

The following discussion is based on a series of fundamental assumptions. These are:

1. An increase in population results in an expanding economy, provided that the per capita income does not decline.
2. An increase in per capita income results in an expanding economy, provided that the population does not decline.
3. An increase in population and per capita income results in an economy expanding at a geometric rate; the effect is greater than the sum of the two components.

B. Economic Factors and Problems

As a result of the general considerations given previously, it is probable that a continuation of the existing trends of declining population and slowly rising income in the rural counties will result in little if any significant economic expansion. Two of the basic factors controlling the economy are acting in opposition to each other. One of the problems is, therefore, to raise both per capita income and population.

As has been noted, the population of rural Boone County is declining. If the area is to industrialize, and thus raise per capita incomes, this trend must be reversed. The fundamental reasons for this are:

1. The present loss of population consists chiefly of those persons who would provide the labor force for industry. If they could be retained, they would constitute a labor surplus that could be diverted to manufacturing and other industries. If they are lost, industrialization becomes more difficult.

2. The migration of young people from the rural areas implies that one important segment of the local market is vanishing. If they could be retained, the young people would constitute an important segment of the local market, which would support a number of local industries. Local industries catering to local markets constitute an important manufacturing nucleus in any industrial community.

3. The steadily increasing mean age of workers implies that over-all efficiency is declining. This suggests that, even if such persons could be diverted into industrial effort, the lower labor efficiency would place the industries in a poor competitive position with respect to similar industries located elsewhere. Further, training such persons in the skills required by modern industry is more difficult, thus placing still another burden on the company.

A growing town implies a labor demand. This demand is normally met by rural youths commuting between rural home and city job. The resulting supplementation of farm incomes serves to raise the general per capita income, but fully as important, it permits the continued operation of the farm. A farm can be operated on a reduced margin of profit if the family income is augmented from other sources.

Questionnaires submitted to rural residents, Boone merchants and management of industry elicited the following responses as a reflection of the value and attitudes systems prevalent in Boone. There were in addition, specific questions as to labor force, place of residence of the labor force, worker productivity, and estimates of future population.

The questionnaires sent to 300 farm families in Boone County contained the question "Do you consider Boone a desirable place in which to work?" 59 families answered this question, yes, 49 answered, no, and 25 did not answer. Affecting the farm families' responses, is their desire as expressed in their answers in the questionnaire for a high wage scale, concentrating in the \$1.75 to \$2.25 per hour bracket.

In answer to the question as to whether Boone would be a desirable place in which to live, an overwhelming majority of 88 families responded, yes. Certain of the City's services and facilities including schools and parks and recreation were evaluated highly.

A questionnaire to Boone merchants and personal interviews with business and professional leaders indicate a population increase now that there has been an adjustment to the reduction of railroad employment. The majority of those answering the questionnaire thought the population of Boone would expand by 1,500 in the next ten years. By far the greatest number of businesses in Boone employed from one to five persons according to a questionnaire response from 27 businessmen out of 100 contacted. Eighteen out of 27 employed part time help, ten, 1 part time employee, and three, 2 part time employees. Several others employed seasonal part time help. Most of the part time employees worked from ten to twenty hours per week. Fifteen of the establishments reported their total work force lived in the City of Boone.

Presently there is a need for low-cost housing and rental housing, and local support for codes covering rental housing. Rents do not expand with facilities (i. e. , a \$7,000 home and an \$11,000 home are rented for approximately the same amount).

Respondents to a questionnaire submitted to management of industry in Boone provided the following in regard to the labor force.

A high proportion of those employed are considered to be skilled and semi-skilled. The opportunities for unskilled are limited. The large majority of industrial workers live in the City of Boone, with a small percentage living in other towns, rural routes or other counties.

There were reported to be enough applicants for employment both regularly and in peak seasons with the thought expressed that the labor supply has received adequate training in schools and that productivity is largely satisfactory. Slightly more than half of the firms indicated that their employment levels go up or down at certain times every year. The spring, summer and fall months are the peak months of activity with the winter months being the low time.

Everyone in Boone is conscious of the fact that there are a number of youth leaving the City for employment either at such centers as Des Moines, or in many instances, entirely out of the State of Iowa. These individuals have received their education and training in Boone, and by leaving, do not make any contribution to the community by which they were educated.

Boone County experienced a population loss for 1950-1960 of less than the State average of 8.76%. However, 30.0-44.9% of those who left were ages 20-24 and 20-0-29.9% were 25-59 years of age ("Iowa in 1975", Iowa Business Digest, State University of Iowa, August, 1961).

TABLE 7

NUMBER OF MALES & FEMALES ENGAGED
IN MAJOR OCCUPATIONS
U.S. Census of Population

Industry Groups	1960			
	Total County	Boone	Male Boone	Female Boone
Agriculture	1,985	101	97	4
Forestry & Fisheries	---	---		
Mining	16	12	361	15
Construction	642	364		
Manufacturing	1,125	490	378	112
Railroads & Railway				
Express Service	474	413	662	47
Trucking Service & Warehousing	152	102		
Other Transportation	32	16		
Telecommunications	76	40		
Utilities & Sanitary Service	253	138	103	5
Wholesale Trade	204	108		
Food-Dairy Product Stores & Milk Retail	283	178	120	58
Eating & Drinking Places	324	216	40	176
Other Retail Trade	986	547	393	154
Finance, Insurance & Real Estate	250	152	80	72
Business Services (2)	59	35	48	31
Repair Services (2)	108	44		
Private Households (3)	225	109	97	198
Hotels & Lodgings	*			
Other Personal Services	254	186	17	31
Entertainment & Recreation Serv.	72	48		
Medical & Other Health Services (1)	210	149	26	123
Educational Services, Private	76	47	9	38
Educational Services, Government	568	300	135	165
Other Professional & Related Services (4)	225	106	---	---
Public Administration (5)	334	261	190	71
Industry Not Reported	191	69	32	37
(Motor Vehicles & Accessories & Filling Stations) (2)				
(Auto Storage Rental & Repair Services) (2)				
Welfare Religious & Non-Profit Membership Organizations	202	124		
TOTAL	9,326	4,355	2,788	1,472

(1) See Pages 167-168 for detailed information on the medical profession.

(2) 1940 Census gives designation "business and repair services except automobile" and also "auto storage, rental & repair services"

*Not included in 1960 listing.

1950						1940					
Total	Male		Female			Total	Male		Female		
County Boone	County Boone	County Boone	County Boone	County Boone		County Boone	County Boone	County Boone	County Boone	County Boone	
2801	110	2738	101	63	9	3397	103	3334	98	63	5
1	1	---	--	1	1	1	--	1	--	--	--
60	20	59	20	1	--	497	115	497	115	--	--
615	356	602	349	13	7	360	219	354	213	6	6
615	317	548	285	67	32	274	207	199	146	75	61
<hr/>											
926	829	913	816	13	13	752	692	742	682	10	10
130	52	124	48	6	4	140	65	139	64	1	1
443	35	42	34	1	1	97	77	92	74	5	3
84	53	20	13	64	40	70	45	26	19	44	26
193	102	183	195	10	7	135	77	128	72	7	5
246	153	217	133	29	20	186	119	174	112	12	7
<hr/>											
248	171	167	126	81	45	293	198	218	150	75	48
248	162	76	50	172	112	207	136	84	51	123	85
679	606	653	440	226	166	549	394	390	274	159	120
195	147	121	90	74	57	188	146	132	97	56	49
18	19	15	11	3	3						
187	108	181	105	6	3	57	30	52	25	5	5
127	76	9	4	118	72	361	192	9	6	352	186
46	33	20	13	26	20	58	43	23	19	35	24
193	151	91	72	102	79	203	145	101	66	102	79
81	62	57	44	24	18	69	41	53	29	16	12
307	139	117	48	190	91						
49	31	10	5	39	26						
304	164	114	65	190	99						
<hr/>											
173	125	100	63	73	62	790	357	307	139	483	218
247	175	184	128	63	47	216	150	168	116	48	34
244	132	143	69	101	63	79	35	58	24	21	11
<hr/>											
						171	105	166	101	5	4
<hr/>											
						119	84	114	80	4	4
<hr/>											

9260 4324 7504 3227 1756 1097 9358 3849 7621 2826 1737 1023

(3) 1940 Census gives designation as "domestic service".

(4) 1940 Census includes teachers in "other professional and related services".

(5) 1940 Census gives designation as "government".

There has been limited in-migration to Boone. Farm families moving to Boone following World War II offset some of the loss experienced as a result of closing of railroad shops and curtailment of trains. Those moving to Boone including traveling salesmen, staff members and students attending Iowa State University at Ames are an importation. Such in-migration as there has been, together with excess of births over deaths, has offset loss of population resulting from changes in the economic base. Several hundred individuals living in Boone commute daily from Boone to Des Moines for employment or from Boone to Ames.

The various tables and charts of this section are developed from data presented by the U. S. Bureau of the Census, Mr. Floyd A. Sievers, manager of the Boone office of the Iowa Employment Security Commission, and Mr. T. N. Nelson, Boone County Extension Director.

Special note should be taken of the fact that as the figures in the following labor force table are taken from U. S. Census figures they represent only those persons living in Boone. They do not include those individuals who live in other counties and commute to Boone to their work. (See Table 7)

Persons employed in the major occupations can be grouped under more general occupational headings. Following is a table prepared by the Boone County Extension Service showing those employed in 1950 under eleven designations by type of work performed.

TABLE 8

MAJOR OCCUPATION GROUPS
BOONE COUNTY

<u>Occupation Group</u>	<u>Total Number Employed</u>	
	<u>1960</u>	<u>1950</u>
Professional, Technical & Kindred Workers	815	611
Farmers & Farm Managers	1,603	2,236
Managers, Officials & Proprietors, Exc. Farm	789	820
Clerical & Kindred Workers	954	699
Sales Workers	679	568
Craftsmen, Foremen & Kindred Workers	1,135	1,275
Operatives & Kindred Workers	1,285	1,068
Private Household Workers	217	116
Service Workers, Exc. Private Household	885	611
Farm Laborers & Farm Foremen	324	407
Laborers, Exc. Farm & Mine	399	520
Occupation Not Reported	<u>241</u>	<u>--</u>
TOTAL	9,326	9,260

Source: U. S. Census and Boone County Extension Service

The 1960 Census figures for the number of persons engaged in each occupational category are not yet available. The Bureau of Old Age and Survivor's Insurance reports a different occupational categorization. In the first quarter, 1959, the total number of employees in Boone County was 3,117. This number was broken down as follows:

TABLE 9

NUMBER OF EMPLOYEES
BOONE COUNTY

Contract Construction	233 employees
Manufacturing	468 "
Wholesale Trade	209 "
Retail Trade	1,093 "
Finance, Insurance & Real Estate	141 "
Services	459 "
Unclassified	44 "

These figures necessarily include part-time workers as well as full-time workers, and are by place of employment rather than place of residence. Also, they give no record for persons employed by the railroad who are covered by Railroad Retirement Fund nor for persons employed by the government.

The United States Bureau of Labor projects the following change in total U. S. employment by 1970.

TABLE 10

PER CENT CHANGE IN
EMPLOYMENT 1960-1970*

<u>Classification of Worker</u>	<u>Per Cent Change</u>
Professional & Technical	45
Proprietors & Managers	24
Clerical & Sales Workers	34
Skilled Workers	24
Semi-skilled Workers	15
Service Workers	35
Unskilled Workers	0
Farmers and Farm Workers	15

* United States Bureau of Labor, Manpower, Challenge of the 1960's, P. 11.

In view of the desire of Boone residents to remain in Boone, it seems necessary that the community as a whole be acutely aware of the trends in the occupational picture.

Boone residents being in an agricultural area, well know that farm employment has declined. Lawyers and doctors in Boone have confirmed their need of additional personnel in their fields. Another profession which has expanded to meet need over the past decade is that of teaching.

"During the 1950's, professional, office and sales workers together exceeded the number of workers in manual occupations for the first time in America's history. This trend will continue in the 1960's according to the United States Department of Labor, Bureau of Statistics (United States Bureau of Labor, Manpower, Challenge of the 1960's, P. 10.) The most significant growth and the most rapid rate of growth in the next decade will be in the professional and technical occupations, especially engineers, technicians and scientists. The needs for skilled craftsmen will continue to increase as the unskilled occupations will continue to decline over a long period.

What is the significance of this information? The fact is that these large increases in numbers of workers and job opportunities are occurring in occupations which require the most education and training. "Table 10, P. 45" shows the per cent of change in employment predicted for the next decade." (Gibson, Raymond C., Director of the Study, Resources and Needs for Higher Education in Iowa, prepared for the Iowa Legislative Research Bureau, State House, Des Moines, Iowa, October, 1960.)

Chart 2, Page 47 shows number of men and women in Boone County employed from 1930 through 1950 with projections from 1950 through 1965.

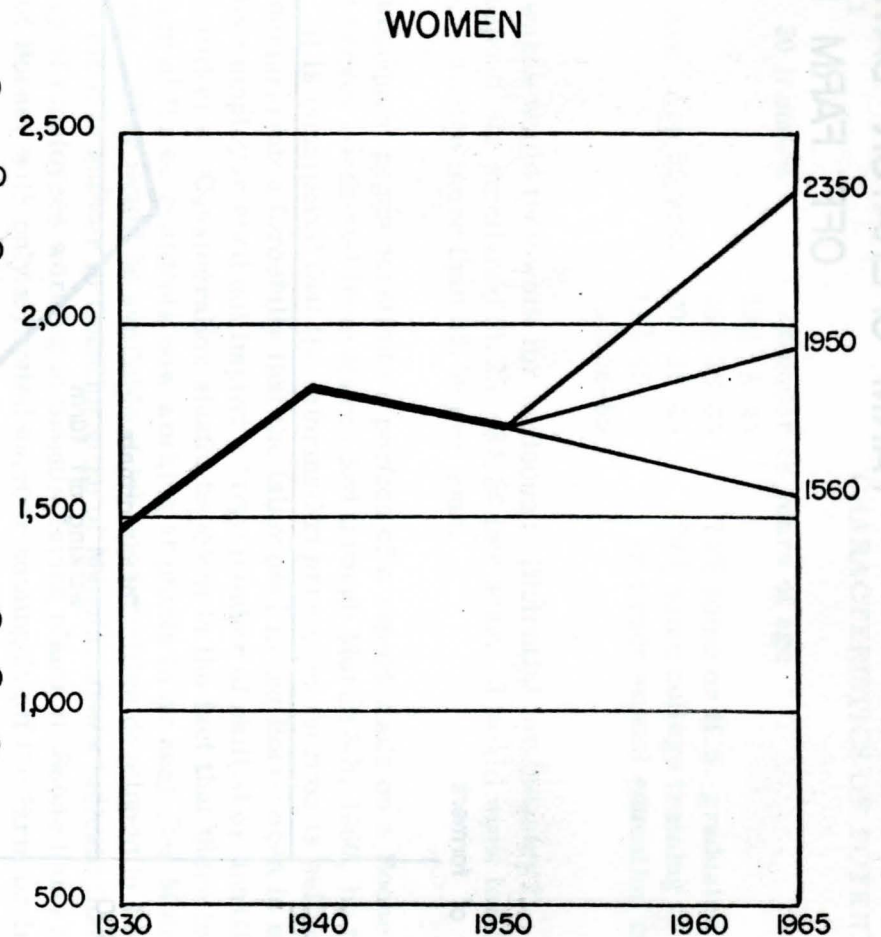
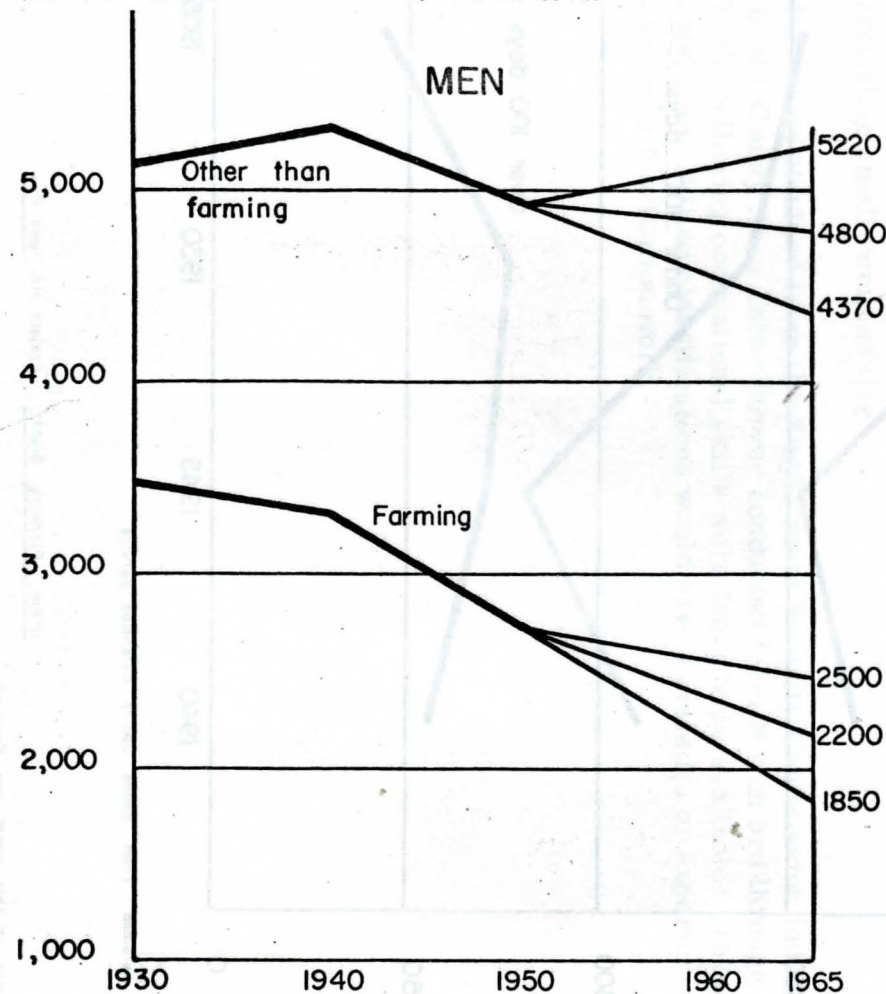
State Economic Area 2b, C was found to have 10.0% of the farm operators working 100 days or more off the farms by Donald Bogue in his Economic Areas of the United States. State Economic Area 2b, C is comprised of Boone, Calhoun, Dallas, Franklin, Greene, Hamilton, Hardin, Humboldt, Pocahontas, Polk, Story, Webster, and Wright Counties. The 10.0% is the second highest percentage in the State of Iowa, reflecting the employment opportunities in Des Moines, Ames, Ft. Dodge, and Boone. The highest percentage was found in the area including two tiers of counties in Southeast Iowa. (See Chart 3)

The survey of 300 farm families brought to light the following information regarding the potential labor force.

BOONE COUNTY EMPLOYED

1965 PROJECTIONS

Information obtained from Boone County Extension Service



Urban Planning Grant: Project No. Iowa P-1

The preparation of this chart was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act, of 1954, as amended.

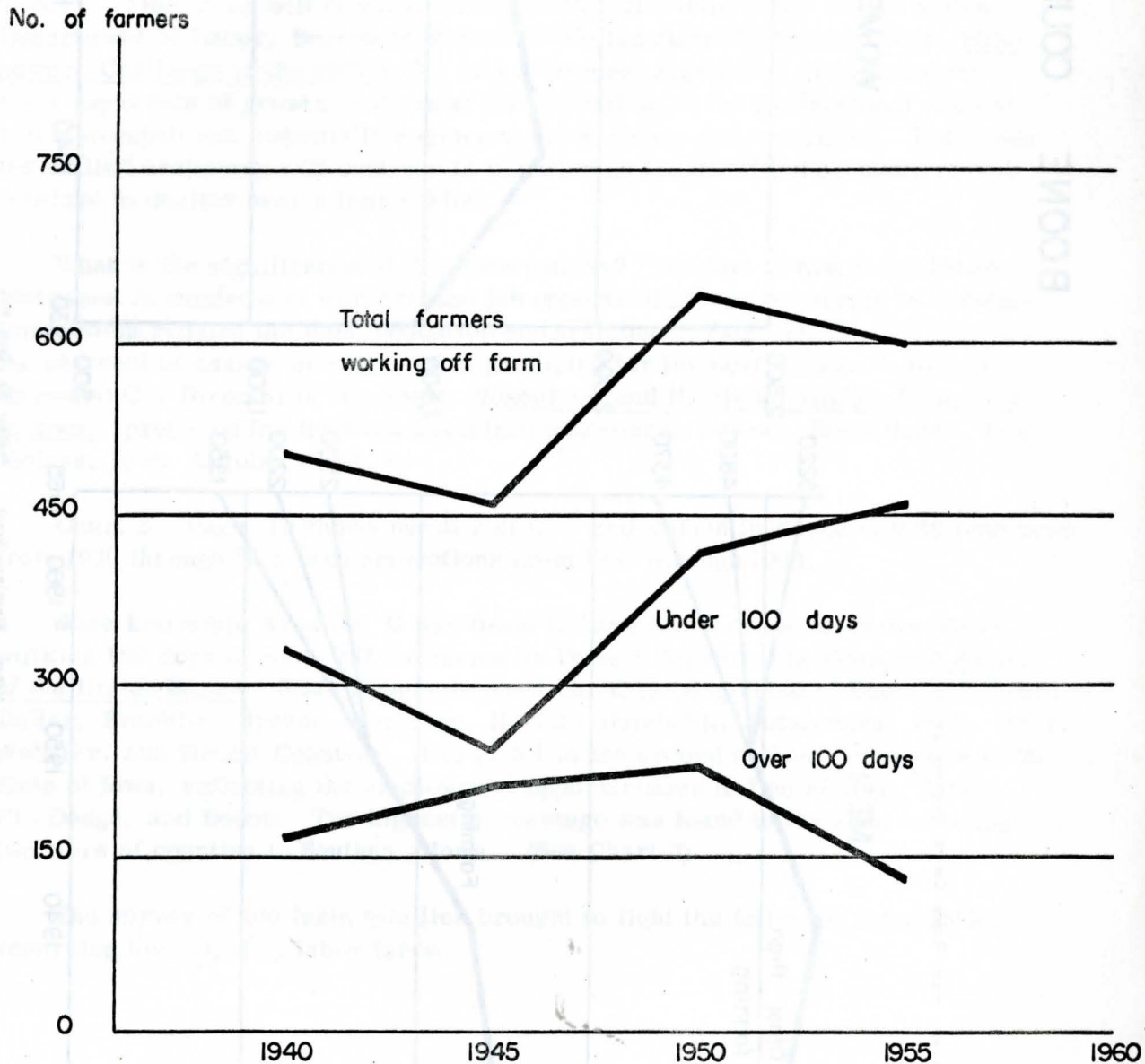
Prepared under the Contract for the Iowa Development Commission
by: Anderson Engineering Company
City Planning Consultants

chart 2

aneco

FARM OPERATOR DAYS WORKED OFF FARM PER YEAR

BOONE COUNTY



Information obtained from Boone County Extension Service

Urban Planning Grant: Project No. Iowa P-1

The preparation of this chart was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act, of 1954, as amended.

Prepared under the Contract for the Iowa Development Commission
by: Anderson Engineering Company
City Planning Consultants

chart 3

TABLE 11

CHARACTERISTICS OF POTENTIAL WORKERS

45 males, 30 females	7% under 18 years of age	
	29% 18-25	
	26% 26-35	75% some or H. S. graduates
Ave. Age 35 yrs.	20% 36-45	20% some college training
	11% 46-55	5% grade school education only
	5% 56-65	

What wages would they work for in Boone? (Potential for Industry?)
 36 of 43 respondents mentioned \$1. 25 - \$2. 50 per hour. 3 would work for less than \$1. 25, 4 wanted more than \$2. 50 per hour.

The subsequent pages constitute a portion of a report made on a Boone County area labor survey conducted from March 3rd through March 8th, 1960, by the I. E. S. C. It is considered that the information presented thereon is self-explanatory and demonstrates forcefully that the labor pool in the Boone area is such that a prospective employer need not import a large number of skilled or unskilled production workers. Consideration should be given to the fact that there is a large number of Boone residents now working at plants in or near Des Moines and also at Ames. They would be available if job opportunities developed in Boone. The figures cited in answer to Questionnaire of Manufacturers indicate that the big majority of employees working in manufacturing plants in Boone today are residents of Boone, with only a limited number coming in off the farm or from the surrounding small communities.

Information obtained from the Employment Security Commission indicates that in the Boone County Area Labor Survey conducted from March 3rd through March 8, 1960, the following occupational skills were found to be available. These skilled and semi-skilled classifications would have knowledge or experience background to metal fabrication work.

TABLE 12

OCCUPATIONAL SKILLS AVAILABLE

1960

<u>SKILLED</u>		<u>SEMI-SKILLED</u>	
Sheet Metal Workers	20	Grinder Operators	1
Machinists	45	Spot Welders	76
Mechanics (could be fitted into skilled or semi-skilled)	84	Press Operators	14
Steamfitters	8	Lathe Operators	3
Iron Workers	21	Spray Painters	4
Maintenance Mechanics	10	Inspection	2
Molders	5	Assemblers	9
Arc Welders	9	Shear Operators	1
Plumbers	12	Millwright Helper	1
Heat Treater	1	Sand Blaster	1
Tool and Die Men	5		
Electrician(Maintenance- Service)	5		
Machine Shop Foremen	2		
Blacksmith	2		
TOTALS	229		112

It should be noted that while skilled far outnumber the semi-skilled this does not indicate any serious shortage of semi-skilled workers. High literacy and fine school systems develop potential. This with short training periods produce wants in a short period of time. The area is well supplied with skilled workers. This is encouraging to potential industry who must have skills ready to reach maximum production with less per worker costs.

This survey was to determine potential. Citizenry were not promised anything. They were told the purpose of the survey and the results were more than expected. If industrial development comes about, there would be no question within the minds of the leaders of the community that the workers needed could not be recruited.

TABLE 13

LABOR AVAILABILITY IN THE
BOONE AREA

In March of 1960 a labor survey was carried out under the auspices of the Iowa State Employment Service to find the availability and skills of those in the Boone area interested in industrial employment. The area to which this survey was directed did not include by any means the entire section from which labor might be drawn. In fact, it covered only a radius of 15 miles from Boone. The results of this survey according to age groups are as follows:

<u>Age</u>	<u>Male</u>	<u>Female</u>
17-25	389	233
26-35	278	207
36-45	299	274
46-up	493	294

The skills prevalent in the area as indicated by the survey are listed in the above mentioned report. It should be remembered that it was explicitly pointed out in the survey that only those interested in industrial employment should complete the survey. Therefore, it is felt that the figures indicated regarding the availability represent a true potential.

TABLE 14

JOURNEYMAN AND APPRENTICE WAGES

	<u>Apprentice</u>	<u>Journeyman</u>
Plumber	\$ 1.75	\$ 2.50 non-union
Electrician	45%-90%	3.50 union
	- -	2.00 non-union
Carpenter	50%	2.45
Machinist	-	1.85 non-union
Bricklayer	50%	3.50 union

The entire industrial labor pool in Boone, Iowa, according to the Iowa State Employment Service, totals approximately 600. The following skills make up that total:

TABLE 15

BOONE INDUSTRIAL LABOR POOL

Drill Press Operator	Shear Operator, Heavy
Engine Lathe Operator	Shear Operator, Light
Fork Lift Truck Operator	Sheet Metal Worker
Forming Press Operator	Shipping Clerk
Grinder, Tool & Cutter	Steam Fitter
Grinder, Tool & Cutter-Precision	Stockroom Attendant
Helper, Trades & Crafts	Storekeeper
Janitor	Tool & Die Maker
Laborer, Common	Tool Grinder
Maintenance Carpenter	Truck Driver
Maintenance Electrician	Turrent Lathe Operator
Maintenance Machinist	Welder, Acetylene
Milling Machine Operator	Welder, Arc
Millwright	Welder, Combination
Painter, Spray	Welder, Spot
Painter, Hand	Worker, Production Line-Electrical
Punch Press Operator	Assembly
Receiving Clerk	Worker, Production Line-Heavy Assembly
	Worker, Production Line-Light Assembly

OFFICE EMPLOYEES

Accounting Clerk	IBM Operator
Billing Clerk	Industrial Nurse, Registered
Calculating Machine Operator	Messenger/ Mail Clerk
Clerk, General	Payroll Clerk
Draftsman	Stenographer
File Clerk	Telephone Operator
Guard	Typist

Labor Force Table 16 indicates the number of persons registered for work at the Iowa Employment Security Commission in Boone County and the number of active unemployment compensation claims filed. Persons registered include both those new to the labor force and those who have registered to find another job. Claims filed represent the total number of all weekly claims filed during the month. Thus the figure for each month can be divided by 4 1/3 to obtain the approximate number of persons drawing unemployment compensation each week during the month. Of course, claims can be first entered at any time during the month and a worker on taking a job may not continue to file.

The figure for 1961 in regard to active unemployment compensation claims is rather disturbing inasmuch as it seems considerably higher than would be assumed by the other tables presented herewith.

On May 1, 1961 the Employment Security Commission had 310 applications for work in their files of which 152 were women. There are about 400 Boone men working out of Boone and driving to work in Des Moines, Ames and other towns, and an estimate of an additional 200 men from surrounding rural areas who are driving to Fort Dodge, Webster City, Ames and Des Moines. These men would prefer to work in Boone if jobs were available. We also have 300 women from 18-45 who would work in manufacturing plants in Boone, if work were available. They are not registered for the reason that there is no incentive to register because of lack of job opportunities at this time. The file count as of the dates listed below represents registrations of applicants. The following are registered for work in the active file but there are many women that have not registered because of lack of job openings.

TABLE 17 APPLICATIONS FOR WORK AND UNEMPLOYMENT COMPENSATION

Total No. Active Claims for Unemployment Compensation Filed in Terms of Weeks Claimed		Total No. New Applications for Work	
1961 (12 months)	432	197	197
1960 (12 months)	341	1038	1038
1959 (12 months)	301	439	439
1958 (12 months)	283	819	819
1957 (12 months)	208	333	333

TABLE 16

UNEMPLOYMENT

Active File of Persons Unemployed and Registered For Work

	<u>1960</u>		<u>1961</u>			<u>1960</u>		<u>1961</u>	
	<u>Total</u>	<u>Female</u>	<u>Total</u>	<u>Female</u>		<u>Total</u>	<u>Female</u>	<u>Total</u>	<u>Female</u>
January	307	112	342	102	July	373	167	321	136
February	355	149	274	110	August	247	103	208	123
March	428	173	279	117	September	194	85	226	114
April	344	178	310	152	October	258	109		
May	345	170	371	162	November	251	86		
June	418	187	349	126	December	326	105		

Active Unemployment Compensation Claims

(In terms of weeks claimed)

	<u>1960</u>	<u>1961</u>		<u>1960</u>	<u>1961</u>
January	657	835	July	154	349
February	692	906	August	145	305
March	875	1124	September	191	311
April	569	769	October	240	
May	242	481	November	304	
June	182	362	December	506	

Yearly records kept at the Employment Security office in Boone since 1957, including 1960 and 1961 which are broken down by month in the tables above, show the total number of applications for work filed and the total claims for unemployment compensation in terms of weeks claimed.

TABLE 17

APPLICATIONS FOR WORK AND UNEMPLOYMENT COMPENSATION

	<u>Total No. New Applications for Work</u>	<u>Total No. Active Claims for Unemployment Compensation Filed, in Terms of Weeks Claimed</u>
1961 (10 months)	997	452
1960	1038	764
1959 (1/2 year)	439	291
1958	819	693
1957 (1/2 year)	532	368

The following is a table showing non-agricultural work placements made by the Boone County Employment Security Commission over a period of years:

TABLE 18

NON-AGRICULTURAL WORKERS PLACED BY THE
IOWA EMPLOYMENT SECURITY COMMISSION, BOONE CO.

	To Sept. 1961	1960	Last 6 Mo. 1959	1958	Last 6 Mo. 1957
Professional & Clerical	108	101	42	92	35
Skilled & Semi-skilled	118	121	58	84	48
Unskilled	173	232	74	182	89
Service Workers	142	233	71	107	37
Casual & Day Workers	<u>39</u>	<u>92</u>	<u>48</u>	<u>48</u>	<u>40</u>
Total	580	789	293	513	242

In non-agricultural work, the major placement occurs in the unskilled and service worker classifications. In regard to agricultural workers, the Commission is mainly of help to hired hands seeking work. As can be seen from the table, the number of workers placed has consistently increased. Employers have sought the help of the Commission more in recent years with regard to listing job openings, especially during the last year among those classified as major employers--those employing eight or more persons. As the Commission can seek for the right man for any job through its nationwide clearance service, and conversely can place any of its applicants nationwide, the increasing use business and manufacture of Boone have made of its services speaks well of the efficiency and quality of its present services and bodes well for its usual or increased use in the future. Mr. Sievers of the Boone office also counsels high school seniors on job opportunities, more those with an undecided major than those with their careers already decided.

A follow-up study of 1955 and 1958 Boone High School graduates made by Don E. Riemenschneider for the purpose of curriculum appraisal pointed up a need for counselling regarding their vocational choices. The choices made by the graduates are significant to the economy of Boone because they may well determine whether the students will find work available in Boone in their chosen field or whether they will have to leave Boone to find such work or whether they must attend college first.

It has been indicated that about one-half of Boone's high school graduates do go on to college. The degree of relationship between the advanced course of study these graduates undertook and the course of study they thought they would follow was high. A surprisingly high percentage of those graduates who did not go to college, but were immediately employed indicated that their work was only very little or somewhat related to the type of work they thought they would do.

It would appear that a counselling program to prepare these young people for the job opportunities that will exist in Boone in the years to come is imperative.

Mr. Riemenschneider reported the following types of employment and percentages of graduates so employed for men and for women:

TABLE 19 PERCENTAGE HIGH SCHOOL GRADUATES FOR VARIOUS SKILLS

	<u>Men</u>	<u>Women</u>
Semiskilled	23.6%	2.4%
Clerical	10.9%	53.0%
Service	10.9%	17.1%
Unskilled	10.9%	
Agriculture	9.0%	
Sales	7.3%	4.8%
Technical	7.3%	
Skilled	7.3%	
Managerial	5.5%	
Professional	5.5%	22.0%
No Answer	1.8%	

Provisions that citizens of Boone might make to maintain a high level of education, and its concomitant advantages to the student over his full life time, are given in the section on Education under Government.

Labor Force - Income

The latest Census figures available for incomes of Boone residents (until publication of the 1960 Census figures in the Spring of 1962) are for 1950. These are shown in the table entitled "Incomes of Families & Unrelated Individuals".

Per capita income, or the amount of cash available for spending by each person in the population, regardless of age, provides a convenient measure of relative prosperity within an area.

Per capita income is a term somewhat synonymous with the U. S. Department of Commerce's "Per Capita Disposable Income" and the "Per Capita Effective Buying Income" used by the editors of Sales Management in their Survey of Buying Power dated May 10, 1961. "Copyright 1961, Sales Management Survey of Buying Power; further reproduction is forbidden." "Effective Buying Income" is after federal and local taxes have been deducted. This leaves "Disposable Personal Income".

TABLE 20

INCOME OF FAMILIES - BOONE, IOWA

Income Brackets	Number of Families	
	1959 Income	1949 Income
Under \$1,000	131	375
1,000 - 1,999	244	335
2,000 - 2,999	375	650
3,000 - 3,999	428	880
4,000 - 4,999	502	540
5,000 - 5,999	416	310
6,000 - 6,999	369	110
7,000 - 7,999	319	125
8,000 - 8,999	317	
9,000 - 9,999	145	100
10,000 - 14,999	220	
15,000 - 24,999	53	160
25,000 & Over	78	
Income not reported		
Median Income	\$5,032	
Total Number Families	3,387	

Source: U. S. Census, 1950 and 1960

TABLE 21

EFFECTIVE BUYING INCOME -- ESTIMATES -- 1960

	Total \$1,000	% of U. S. A.	Per Capita	Per Household	Income Per Consumer Unit	Cash Income Per Household
Boone County	49,876	.0139	1,781	5,938	5,421	5,401
Boone	25,270	.0071	2,038	6,064	5,537	5,520

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"There appears to be a general connection between per capita income and two other economic factors--the absolute loss of county population, and the rate of rural population loss. In general, a high per capita income implies a relatively slow rate of population loss and a relatively small absolute loss."

"Thus, both urban and rural population variations are controlled to some degree by per capita income. A county with a plummeting rural population and a declining county town will also have a low per capita income; one with a moderately declining population

and a growing county town will be characterized by a relatively high per capita income. So a county with a growing population and a growing county town should be expected to have a high per capita income." (Economic Impact of Channel Improvement on the Iowa Segment of the Missouri River, p. 4.)

The local Iowa Employment Security Office prepared for the Boone Chamber of Commerce the following two tables in which the approximate wages of employees are noted.

TABLE 22

APPROXIMATE WAGES OF PRODUCTION EMPLOYEES

	Male		Female	
	<u>Minimum - Maximum</u>		<u>Minimum - Maximum</u>	
Engine Lathe Operator	1.75			
Fork Lift Truck Operator	1.25			
Helper, Trades & Crafts	1.00		1.00	
Janitor	200 mo.	275 mo.		
Laborer, Common	1.25		1.00	
Maintenance Carpenter	1.25	2.45		
Maintenance Electrician	1.80			
Receiving Clerk	1.25			
Shear Operator, Heavy	1.35			
Sheet Metal Worker	1.25	1.50		
Shipping Clerk	1.40			
Welder, Acetylene	1.35	1.60		
Painter, Spray	1.35			
Painter, Hand	1.35			
Stockroom Attendant	1.25			
Storekeeper	1.25			
Tool and Die Maker	2.00			
Truck Driver	1.50			
Welder, Arc	1.35	1.60		
Worker, Prod. Line Electrical				
Assembly	1.25			
Worker, Prod. Line-Heavy				
Assembly	1.25			
Worker, Prod. Line-Light				
Assembly			1.00	1.20

Average Hourly Wage for all Production Workers Employed by Manufacturing Companies in our City.

Male \$1.55 Female \$1.00

TABLE 23

APPROXIMATE WAGES OF OFFICE EMPLOYEES*

	Male		Female	
	Minimum - Maximum		Minimum - Maximum	
Accounting Clerk	270 mo.			
Billing Clerk			1.15	1.25
Calculating Machine Operator			1.25	1.50
Clerk, General			1.00	1.25
Draftsman	250 mo.			
File Clerk			160 mo.	195 mo.
Guard	200 mo.	275 mo.		
Industrial Nurse, Registered			275 mo.	375 mo.
Key Punch Machine Operator			1.25	1.50
Messenger/Mail Clerk	1.00	1.35		
Payroll Clerk	1.50			
Stenographer			1.25	1.50
Telephone Operator			1.25	1.50
Typist			1.15	1.25
IBM Operator			1.25	1.50

*None of these wages are union scale.

There may or may not be a change in the composition of the population as industry expands. Local industries expanding into larger manufacturing plants will require fewer outside managerial personnel. Management from within the community will be more oriented toward the community and the present style of life in Boone than managers sent in by larger corporations from larger urban centers.

It has been suggested by various Boone leaders that an immigration of trained, educated personnel associated with industries, it is hoped would be attracted to Boone, should provide support for the apparent lack of formal leadership which is generally found in similar size communities. A branch of a larger industrial company will have local managers who interpret and implement company policy which is somewhat independent of local community goals except to maintain "good will". This new white collared group would most likely be company-oriented rather than community-oriented, hence only community activities which would enhance their company standing might be attractive. In many community studies which have been done along this line, there is a tendency for the incoming group to immediately spot the deficiencies in the local community (if they are community oriented to any degree) and if they assume any local responsibility, it always has been concerned with change, thus a latent threat to the status quo interests.

Labor Force - Summary

One of the concepts referred to in this report has been that there would be a proportionate increase in the population of a community as a result of additional industrial jobs, or, as in the case of Boone, additional employment in the other categories of the basic economy. Reference is made to a study prepared for the Chamber of Commerce of the United States in which it was determined by sampling of nine counties in individual states that the employment changes set out below occurred:

TABLE 24 WHAT 100 NEW FACTORY WORKERS MEANT TO A COMMUNITY

<u>Employment Changes</u>	<u>No. of Workers</u>
Manufacturing	100
Retail Trade	33
Construction	25
Professional and related services	14
Transportation, communication and other public utilities	13
Business and repair services	5
Wholesale trade	5
Public administration	5
Finance, insurance and real estate	4
Entertainment and recreation services	2
Industry not reported	2
Forestry and fisheries	1
Personal services	- 2
Mining	- 2
Agriculture	-31
Total, all industry	174

Counties used in this analysis met the following criteria:

"(1) Manufacturing employment in 1950 at least doubled that of 1940 with a numerical increase of at least one thousand manufacturing employees;

"(2) Manufacturing employment in 1950 was at least 20% of total employment;

"(3) The major employment change between 1940 and 1950 was an increase in manufacturing employment; and

"(4) The county was not part of and did not adjoin a Metropolitan area."

It is apparent that Boone County does not fulfill requirement No. 1, but for comparative purposes this does not invalidate the study.

The 100 new factory workers studied by the U.S. Chamber of Commerce meant an increase of 296 more people, 112 more households, and 51 more school children to their communities. Also, bank deposits increased by \$270,000, 107 more passenger cars were registered, and 174 more workers in the total economy employed.

As stated in the introduction to the labor force section, the consensus was that there would be an increase in the population of approximately 1,500 persons during the next ten years. This is substantiated by the figures previously stated -- the above quoted figure of 296 more persons per 100 new workers and the estimate made in the manufacturing section of a minimum of five hundred new job openings in the next ten years.

The above should be qualified with some general observations on the multiplier effects of future increases in basic employment. The report considers increases in annual retail sales and numbers of additional retail establishments. "Leakage" To Des Moines and Ames would be a limitation on the validity of these estimates of increase in retail trade.

Many businesses in Boone are of such a size as to yield but low returns to labor employed therein.

The above two considerations suggest that population and income increases will yield only relatively small growth in the non-basic employment in the area. "In addition, this increase in demand will simply stimulate growth in size of local suppliers -- reducing their ratios of labor to capital used -- with the consequences of only slowly growing employment but with higher returns to labor." (Clifford M. Baumback and Clark C. Bloom, "Non-Agricultural Industries and Businesses in Southern Iowa", Seminar on Adjustment and its Problems in Southern Iowa, The Center for Agricultural and Economic Adjustment, College of Agriculture, Iowa State University, Ames, Iowa, p. 56.)

Agriculture - Preface



Urban Planning Grant: Project No. Iowa P-1

The preparation of this photo was financed in part through an urban planning grant from the Housing and Home Finance Agency under the provisions of Section 701 of the Housing Act, of 1954, as amended.

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The above picture was selected because the co-op elevator close to the central business district and the farm fields in the distance express better than words the agri-business economy of the City. Agriculture is the largest single basic industry in Boone County. A major portion of production is exported. A comparison of the total farm income figures over a period of 30 years, with those of the surrounding counties, indicates that Boone County's relative ranking has become progressively higher, particularly in respect to livestock production and sales. 95.3% of the total of 366,720 acres is in farmland.

The 1952 Sales Management's Survey of Buying Power rated Boone County 198th of the top 200 counties in farm income over the nation as a whole. (Copyright 1961, Sales Management's Survey of Buying Power, further reproduction is forbidden). In 1961 the rating had improved to the extent that Boone County is now 153rd of the top nationally rated 200 counties.

Agriculture

Reportedly, the first settler in Boone County, a frontier soldier by the name of Charles W. Gaston, located at Elk Rapids, west of the present site of Madrid, January 12, 1846. The first land sale to Mathias Hoffman was entered in October, 1848. These were soon followed by many others who came to settle and farm the land. A Mr. Clark Luther bought 160 acres from the government in 1851 for a price of \$1.25 an acre. This quarter section was situated two miles west of the town of Luther. The virgin sod, like so much of that of Boone County, was turned with an ox team and breaking plow. Opening farms was comparatively easy as the natural prairies supplied the fields except for the breaking. The tough prairie sod proved to be rich soil of extreme fertility, unbroken by stumps, swamps, or other obstructions.

The earliest settlers in Iowa brought with them a somewhat distinct culture and value system; ownership of land, for instance, remains the dominant value regardless of the year to year fluctuations in price of the agricultural products or the land itself.

Donald Bogue, in his volume, *Economic Areas of the United States*, includes Boone in what he terms the southern portion of Iowa's central grain area. (Area Iowa 2b). "In this southern portion of Iowa's 'Central Grain Area,' the growing of corn, oats, and soybeans for cash sale is a major supplement to the feeding of cattle and hogs. Because so little of the land is poor enough to be kept in permanent pasture, and because hay crops yield a smaller income than tilled crops, there is a comparative scarcity of forage for animals. Therefore, a high proportion of the crops are sold for cash instead of being fed to meat animals."

There are many small and part-time farms. "Also dairy farming is a little more important than in the cash grain area to the northwest. (Area Iowa 2a) A higher proportion of farm operators work 100 or more days at jobs off their farms (10 percent, as compared with 6 percent).

"These differences probably are due, for the most part, to the fact that the Area is adjacent to a metropolis (Des Moines), and that it contains more and larger cities than Area Iowa 2a....

"Although this area is predominantly rural (only 42 percent urban in 1960), it is more urban than Area Iowa 2a (23 percent urban), with which it is combined for population tabulation."

The economy of the city of Boone has been predominantly one cast in a completely rural setting with the possible exception of the activity in past years resulting from mining operations. While it is recognized that the railroad was the determining factor in the location of the central business district of Boone, it is also true that the railroad was there to serve the mining interests and even more so the agricultural interests.

A clear distinction must be drawn between the goods purchased by the farmer for his own or his family's use, generally classified as consumer items, and those goods purchased by a farmer for the purpose of increasing production on the farm, which might very well be termed agri-industrial goods.

There has been a very substantial increase in the volume of non-farm "inputs" sold to farmers during the past decade. Thus urban businesses in Boone County serving the farmer have benefited during the 1940-1950 and 1950-1960 decades. This greater use of off the farm "inputs" is a direct result of the trend toward larger farm operating units, greater mechanization to save on farm labor costs, and over-all technological developments. It is improbable that the increase experienced in the use of fertilizer, manufactured feed, buildings, and machinery, will continue at the same rate. The future may be characterized by greater emphasis on livestock production equipment, feed handling equipment, insecticides and processed feed materials.

The charts and figures have been included primarily to provide a means of evaluating the potential market to Boone merchants for feeds, livestock handling equipment and related services. The income stream produced from agricultural sources is a valid part of the economic base because the great preponderance of the total volume is exported to other areas.

The consuming centers for farm commodities are in and near large cities, usually far from the producing areas and where manufacturing and trade are concentrated. This situation profoundly influences the mechanism and the processes by which these articles are marketed. It necessitates long-haul transportation in spite of their bulk and perishability. Marketing machinery to distribute farm products, must of necessity, be such as to facilitate their efficient, speedy and economical movement.

The Soils of Boone County

The soils of Boone county may be arranged in three groups according to their origin and location, drift soils, terrace soils, and swamp and bottom land soils. Drift soils are formed from materials carried by glaciers or ice sheets and left behind on the surface of the land when the glacier retreated. They are extremely variable in composition and are filled with pebbles and boulders. Terrace soils are old bottomlands which have been raised above overflow by a decrease in the volume of the streams which deposited them or by a deepening of the river channel. Swamp and bottomland soils are those occurring in low poorly drained areas along streams and subject to more or less frequent overflow.

The extent and occurrence of these groups of soils in Boone county are shown in Table 25. By far the larger part of the county, 93.3 percent, is covered by the upland drift soils. There is a small area of terrace amounting to 1.9 percent and the bottomlands are somewhat larger, covering 4.8 percent of the total area.

TABLE 25
AREAS OF DIFFERENT GROUPS OF SOILS
IN BOONE COUNTY

<u>Soil group</u>	<u>Acres</u>	<u>% of Total Area of County</u>
Drift soils	339,840	93.3
Terrace soils	6,592	1.9
Swamp and bottomland soils	17,728	4.8
Total	364,160	

The entire county was covered during the more recent glacial age with the later deposit of till which is known as the Wisconsin. It varies in thickness from 40 to 90 feet. It is composed of a mass of clays, sands, gravels and boulders. In its unoxidized condition it is grayish-blue in color and in the lower depth this original color still prevails. Toward the surface oxidation has occurred and the drift is yellow to yellowish-brown from depths varying from 10 to 40 feet. Boulders are commonly found on the surface and the soils formed from the Wisconsin deposit are characterized by their content of pebbles, gravel and small boulders. In most cases calcareous concretions are found within the three foot soil section. In the other cases lime is not found except at extreme depths.

Since the deposition of this glacial material upon the retreat of the Wisconsin ice sheet, the soils have been formed under varying topographic conditions. Drainage conditions and the character of the vegetation which prevailed in local areas have led to the differentiation of various soil types. On the level, poorly drained prairie areas, the Webster soils have been formed and are characterized by a black color, the result of intensive accumulation of vegetation residues. On the more rolling areas with better drainage the Carrington and Clarion soils have developed. They are dark in color but much lighter than the Webster series. Plant food has been washed away to a larger extent and there has been less accumulation of vegetation residues. The timber transition soils have been developed on the forested upland areas, rolling to rough in topography, and have but little accumulation of organic matter and even smaller amounts of plant constituents. These soils are very light in color.

The Des Moines River flows through a deep narrow valley, and the topography on both sides may be described as gently rolling to rough and broken. These steeper slopes may extend from one to three miles back from the stream following the channels of the tributary creeks.

To obtain maximum agricultural production, there must be adequate tile drainage provided in Boone County soils, together with adequate and proper application of fertilizer. The subsequent charts relating to soil types and land capability classification of the soils in Boone County are relatively self-explanatory, as are the charts on the volume of fertilizer and limestone used.

TABLE 26

MAJOR SOIL TYPES IN BOONE COUNTY

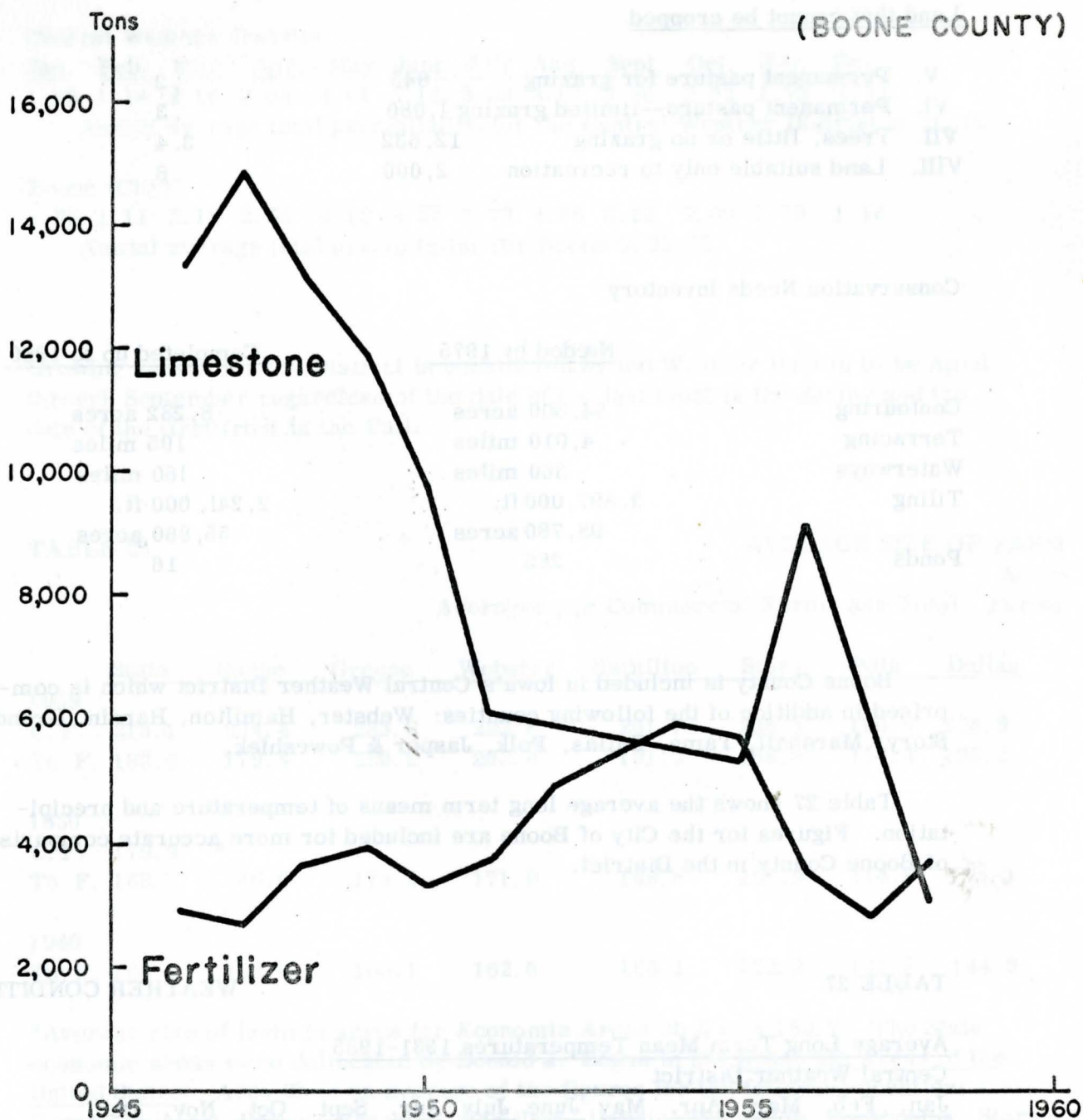
	<u>Acres</u>	<u>%</u>
Clarion Loam	105,934	23.8
Nicollet	59,399	16.2
Webster Silty Clay Loam	86,957	23.7
Glencoe (wet pot holes)	5,327	1.5
Harpster (alkali)	5,618	1.5
Ames (flat timber soils)	15,000	4.5
Hayden (rolling timber soil)	24,284	6.6
Bottomland Soils (along streams)	16,200	4.8
Terrace Soils (next to bottomland)	6,400	1.9
Misc. Soils	21,000	5.8
Land Used for Roads, Bldgs., Cities & Towns	15,320	4.5

Classes of Land in Boone County

Land that can be cropped

<u>Description</u>	<u>Acres</u>	<u>%</u>
I. No cropping problems	63,265	17.2
II. Some cropping problems	218,471	59.7
Too wet, erosion or drouthy		
Needs some conservation practices		
III. More severe cropping problems	56,777	15.5
Wet, erosion, drouthy		
Needs considerable conservation practices		
IV. Land suitable for just occasional cropping	2,107	.6

TONS OF FERTILIZER & LIMESTONE USED (BOONE COUNTY)



Information obtained from Boone County Extension Service

Urban Planning Grant: Project No. Iowa P-1

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Land that cannot be cropped

V. Permanent pasture for grazing	845	.2
VI. Permanent pasture--limited grazing	1,080	.3
VII. Trees, little or no grazing	12,632	3.4
VIII. Land suitable only to recreation	2,000	.6

Conservation Needs Inventory

	<u>Needed by 1975</u>	<u>Completed up to 1960</u>
Contouring	54,500 acres	8,282 acres
Terracing	4,010 miles	105 miles
Waterways	360 miles	160 miles
Tiling	3,897,000 ft.	2,241,000 ft.
	98,780 acres	55,860 acres
Ponds	285	16

Boone County is included in Iowa's Central Weather District which is comprised in addition of the following counties: Webster, Hamilton, Hardin, Grundy, Story, Marshall, Tama, Dallas, Polk, Jasper & Poweshiek.

Table 27 shows the average long term means of temperature and precipitation. Figures for the City of Boone are included for more accurate comparison of Boone County in the District.

TABLE 27

WEATHER CONDITIONS

Average Long Term Mean Temperatures 1931-1955

Central Weather District

<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
20.5	24.5	34.6	49.1	60.5	70.4	75.4	72.8	64.8	53.7	36.9	24.8

Annual average temperature for the Central Weather District is 49.0

Boone (City)

21.9	25.0	35.2	49.6	61.2	71.2	76.6	73.7	65.5	54.4	37.4	25.5
------	------	------	------	------	------	------	------	------	------	------	------

Annual average temperature for Boone is 49.7

Average Long Term Mean Precipitation 1931-1955

Central Weather District

<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
1.19	1.14	2.16	2.64	4.01	5.16	3.39	3.67	3.20	2.02	1.78	1.17

Annual average total precipitation for the Central Weather District is 31.53.

Boone (City)

1.33	1.11	2.18	2.68	4.12	5.37	3.73	4.06	3.23	2.08	1.70	1.18
------	------	------	------	------	------	------	------	------	------	------	------

Annual average total precipitation for Boone is 32.77.

Growing season for the District is considered by the Weather Bureau to be April through September regardless of the date of the last frost in the Spring and the date of the first frost in the Fall.

TABLE 28

AVERAGE SIZE OF FARM Acres

Averages per Commercial Farms and Total Farms

	State	Boone	Greene	Webster	Hamilton	Story	Polk	Dallas
1959								
C. F.	213.1	204.4	233.2	222.8	201.7	208.4	196.0	225.9
To. F.	193.6	179.4	210.8	203.4	191.3	188.8	154.4	198.2
1950								
C. F.	179.9	*						
To. F.	168.7	146.9	174.3	171.9	169.8	158.9	114.8	155.3
1940								
To. F.	160.1	139.6	165.1	162.0	166.1	153.2	101.8	144.9

*Average size of farm in acres for Economic Areas 2b & c is 162.7. The State economic areas were delineated by Donald J. Bogue in his Economic Areas of the United States. Area 2b is an average of the figures for the following counties; Boone, Calhoun, Dallas, Franklin, Hamilton, Hardin, Humboldt, Pocahontas, Story, Webster, Wright, and Greene. Polk County alone comprises state economic area C.

As shown in Table 28, the period 1950-1959 witnessed a considerable expansion in the average size of farm in Boone County as well as in adjoining counties. The increase of 32.5 acres per farm from 1950-1959 in Boone County compares to an increase of 7.3 acres per farm from 1940-1950. In 1959 the Census Bureau reported two categories of farms, the distinction being a matter of definition relating primarily

to the value of products sold off the farm. Commercial farms, which have been designated C. F., were those with a value of sales in excess of \$2,500 annually. Consequently, the average size of such a farm was determined to be 204.4 acres rather than the 179.4 enumerated under the category of total farms, that is semi-subsistence and commercial farms.

A continued increase in the average size of farms is to be expected in the next ten years, although it may be at a lower rate of increase than in the decade of 1950 to 1960. Generally speaking, it is considered that a farm of from 240 to 320 acres represents the optimum size for efficiency with the equipment and techniques now used in farming by the average to superior operator.

It is interesting to note how the average farm size varies by township over the county as shown in Chart 7. Farms of townships in which Boone and Madrid are located average as the smallest. Those to the East of the River are generally smaller than those to the West. Townships around Ogden, that is, Yell, Amaqua, and Beaver in particular, and where there are more than adequate elevator and storage facilities, show the largest average size farms.

Chart 8, page 74, indicates very forcefully the greater efficiency achieved today in the operation of the farm. The number of persons provided for by one farm worker has increased almost 400% since the turn of the century, whereas the hours of labor necessary to produce one acre of corn have been reduced to less than 1/2 between the periods of 1900 to 1950 and this trend has been continued if not accelerated during the 1950 to 1960 decade.

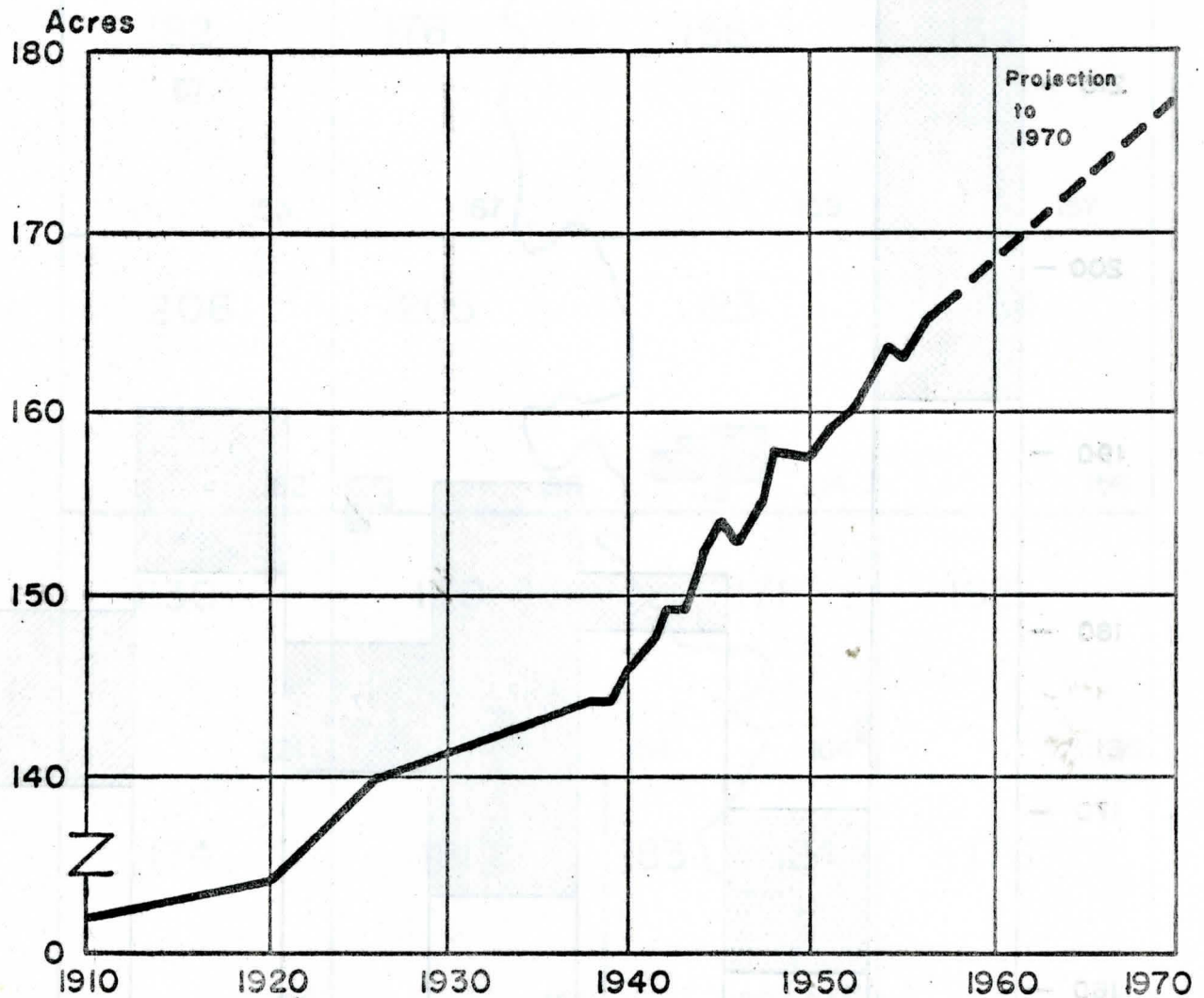
Chart 9 entitled "Number of Farms in Boone County", page 75, has a particular value since the figures have been projected to the year 1970. The declining number of farms will have the result of maintaining the income level of those who stay in farming, but will tend to reduce the farm based population with a consequent shrinkage in the number of potential customers for consumer goods. Merchants, both of consumer goods and of agri-industrial farm inputs need to study this trend. For the former, it would appear to portend a possibility of lower sales (unless the trade area of Boone in consumer goods is enlarged) and for the latter a probability of increased volume of purchases of farm inputs produced off the farm. These trends are discussed in greater detail later in the report.

It will be noticed on Chart 10, page 76, entitled "Number of Farms in Boone County According to Different Size Groups" that the number of larger farms has increased and the number of smaller farms has decreased. Farms of the size 10-99 acres have been reduced drastically. Very possibly the total number of farms in the County would have decreased even more rapidly had there not been an increase in the number of part time and residential farms, for instance, near to Boone and in the southern part of the county near to Des Moines.

AVERAGE FARM SIZE

(BOONE COUNTY)

1910-1958



Information obtained from Boone County Extension Service

Urban Planning Grant: Project No. Iowa P-1

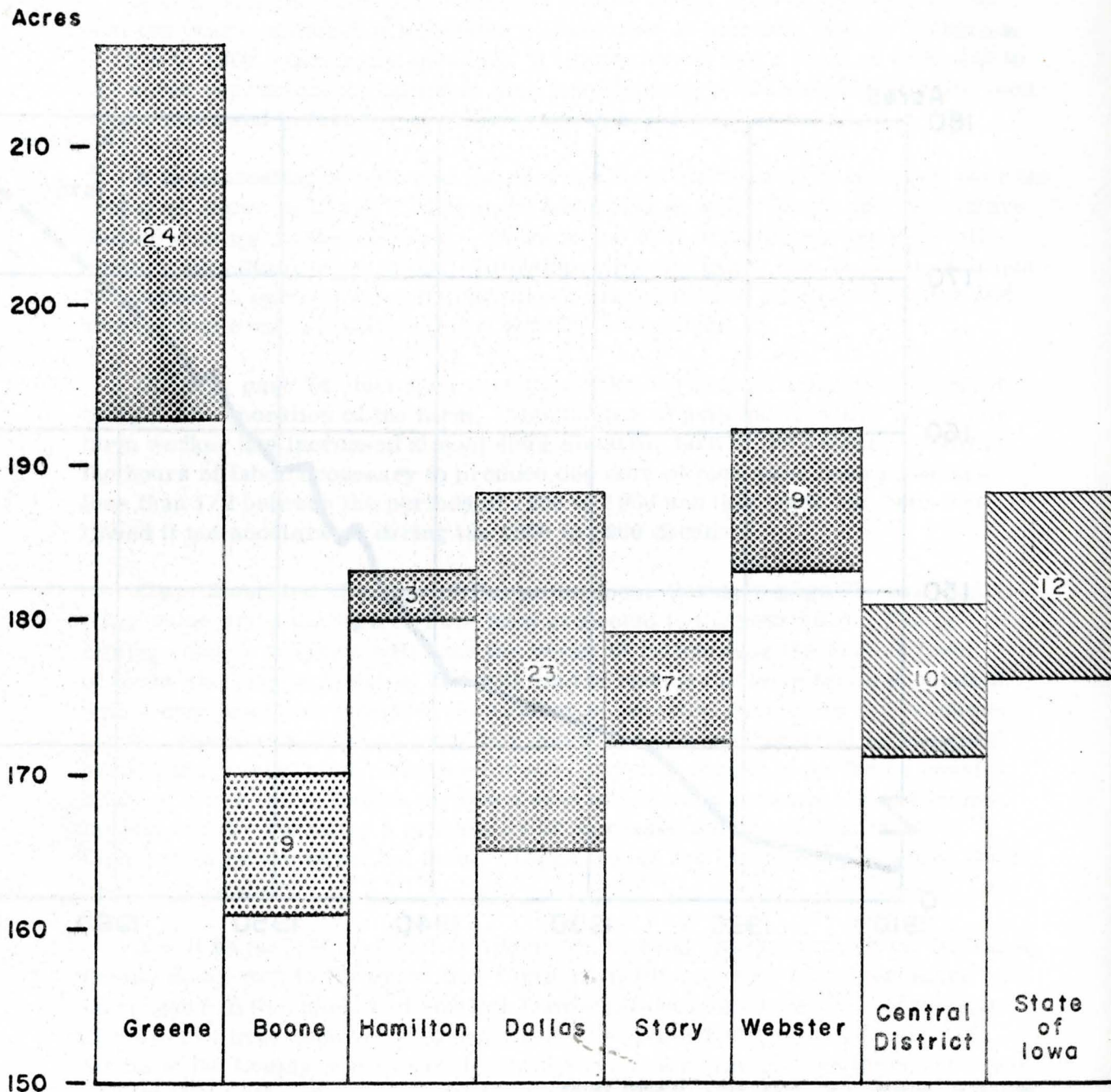
The preparation of this chart was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act, of 1954, as amended.

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chart 5

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AVERAGE FARM SIZE AND INCREASE 1950-1958



Information obtained from Boone County Extension Service

Urban Planning Grant: Project No. Iowa P-1

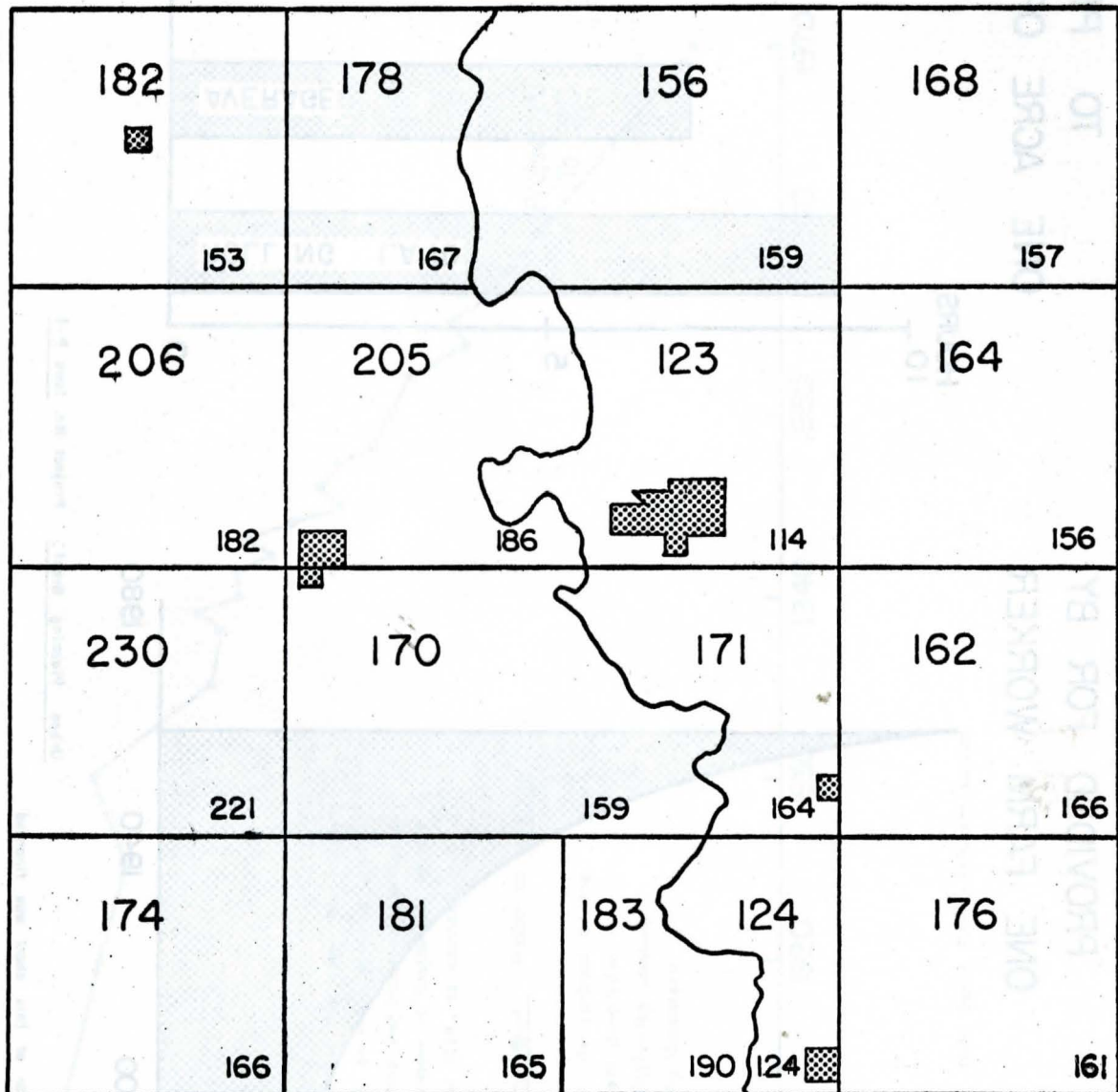
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chart 6

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AVERAGE FARM SIZE BY TOWNSHIP (1950 - 1958)



COUNTY AVERAGE 1958 - 166.6 1950 - 157.9

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Information obtained from Boone County Extension Service

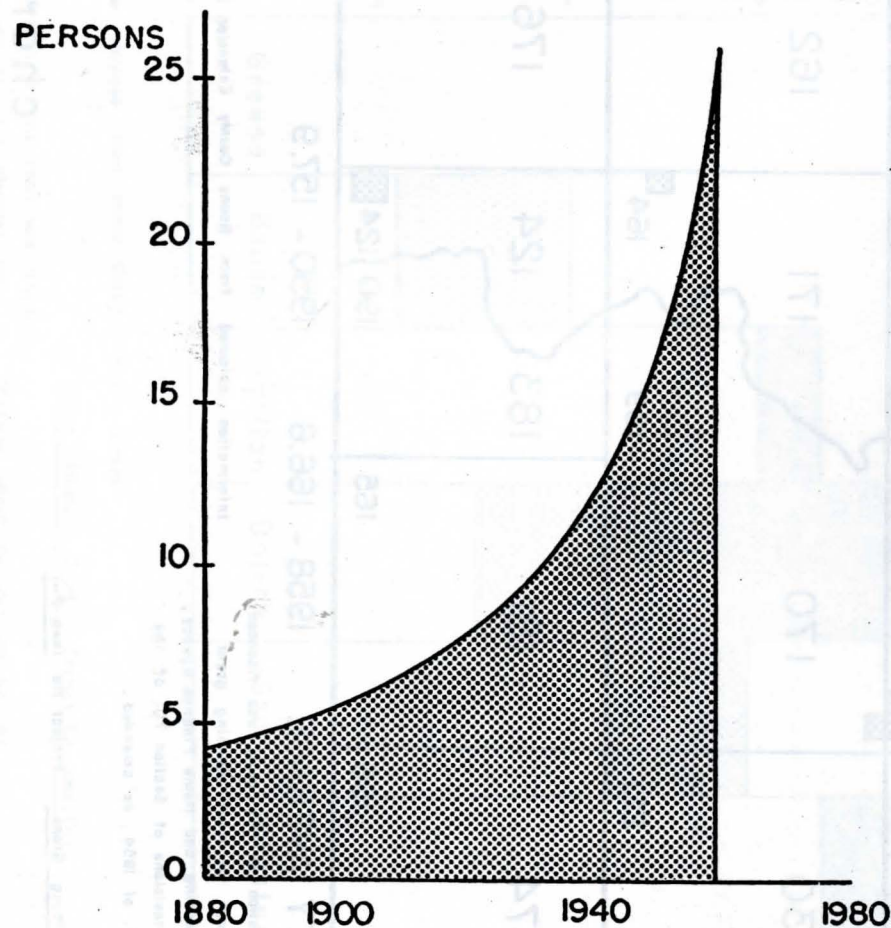
Urban Planning Grant: Project No. Iowa P-1

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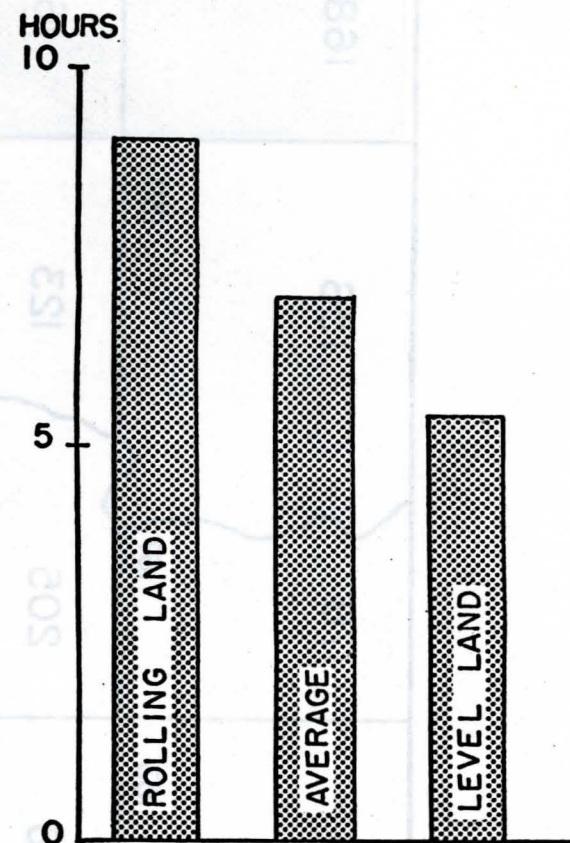
chart 7

aneco

NUMBER OF PERSONS PROVIDED FOR BY ONE FARM WORKER



HOURS OF LABOR TO PRODUCE ONE ACRE OF CORN



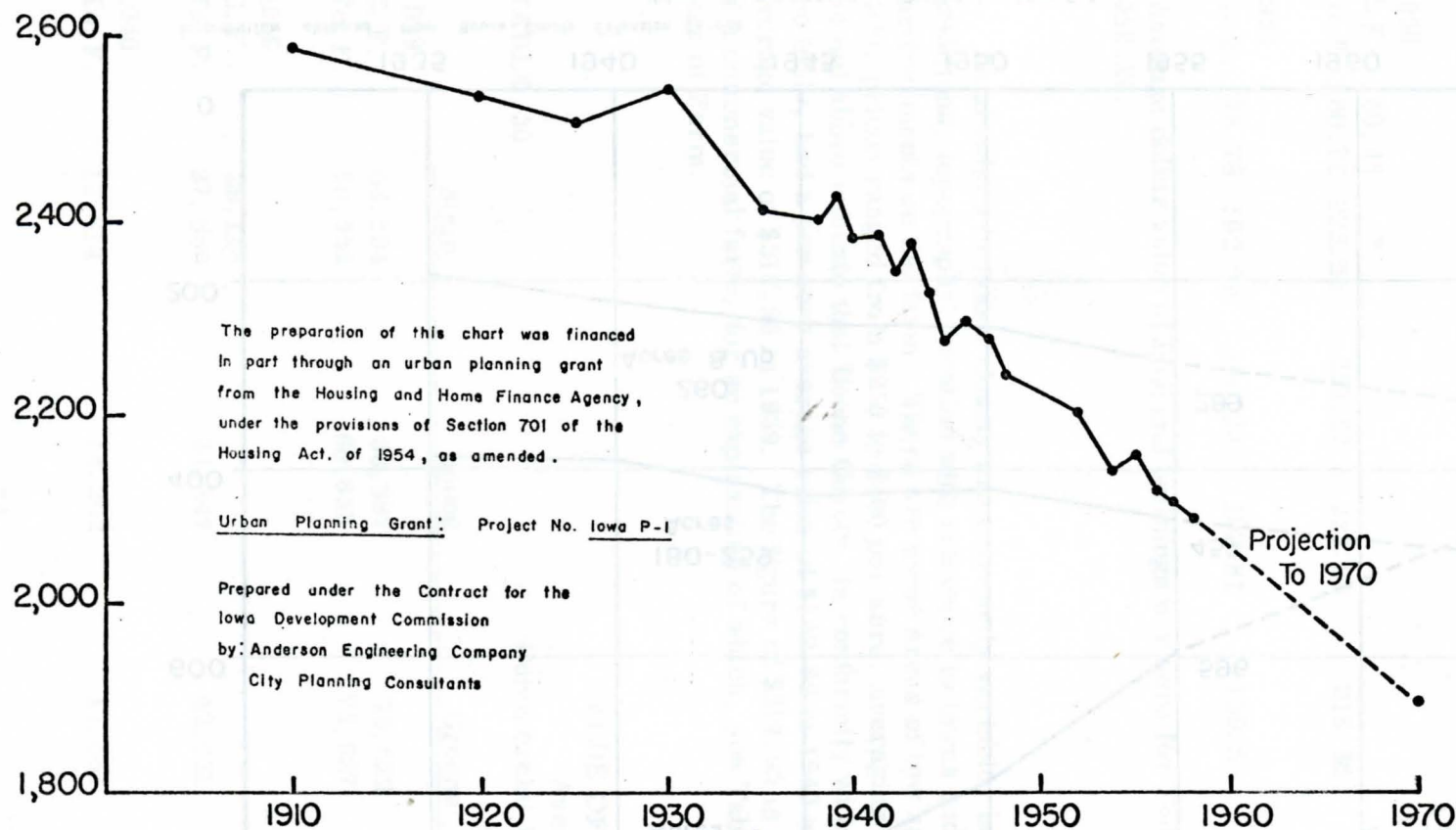
Urban Planning Grant: Project No. Iowa P-1

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chart

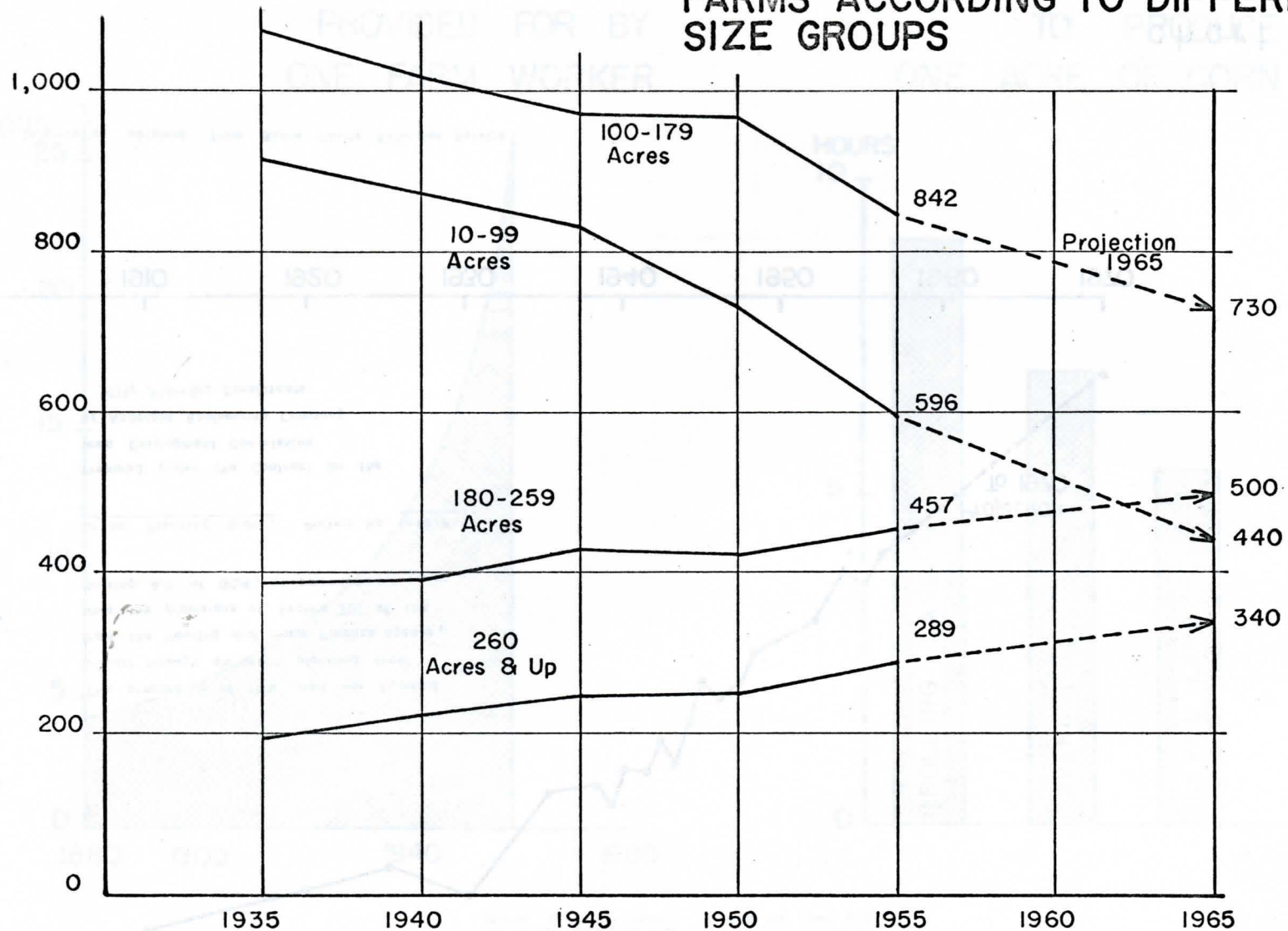
NUMBER OF FARMS IN BOONE COUNTY



Information obtained from Boone County Extension Service

chart 9

NUMBER OF BOONE COUNTY FARMS ACCORDING TO DIFFERENT SIZE GROUPS



Information obtained from Boone County Extension Service

Urban Planning Grant: Project No. Iowa P-1

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chart 10

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VALUE OF LAND AND BUILDINGS
Average Per Acre - Dollars
Commercial Farms and Total Farms

TABLE 29

	State	Boone	Greene	Webster	Hamilton	Story	Polk	Dallas
1959								
C. F.	254.63	317.95	351.61	351.68	349.50	344.16	363.38	295.85
To. F.	254.34	320.01	351.44	351.18	351.42	350.66	372.13	296.94
1950								
C. F.	160.46	*						
To. F.	160.71	222.25	232.87	223.26	218.38	224.19	218.99	198.17
1940								
To. F.	78.79	102.89	106.39	103.81	109.56	98.69	108.04	92.55

*Average dollar value of land and buildings per acre for Economic Areas 2b & c is \$218.26.

Land values in Boone County are extremely variable, being determined by soil conditions, topography, location with reference to towns and railroads, and by the improvements on the farm. There are some areas of low agricultural value. In 1920, prices ranged from \$250 to \$400 per acre, averaging about \$325. The figures set out above indicate that Boone County, in conformity with the other counties of the table, had a per acre average value of \$102.89 in 1940 which increased to an average value of \$317.95 in 1959. The figure of \$317.95 is the per acre valuation of a commercial farm, for an explanation of which, see Table 28 regarding Average Size of Farm.

VALUE OF LAND AND BUILDINGS
Average Per Farm-Dollars
Commercial Farms and Total Farms

TABLE 30

	State	Boone	Greene	Webster
1959				
C. F.	54,594	66,387	79,622	78,869
To. F.	50,334	60,833	73,937	73,554
1950				
C. F.	29,128	*		
To. F.	27,566	31,847	42,621	38,586
1940				
To. F.	12,614	14,362	17,561	16,816

	Hamilton	Story	Polk	Dallas
1959				
C. F.	71,439	72,729	71,096	71,109
To. F.	67,596	68,156	60,077	66,318
1950				
To. F.	38,443	35,652	24,546	33,645
1940				
To. F.	18,201	16,395	10,997	13,408

*Average dollar value of land and buildings per farm for Economic Areas 2b & c is \$36,356.

Table 30 above in which the average price per farm is shown demonstrates very conclusively the problem faced by a younger man attempting to acquire ownership. The large sum of money required is the reflection of both a higher price per acre and a larger average size.

Land Tenure

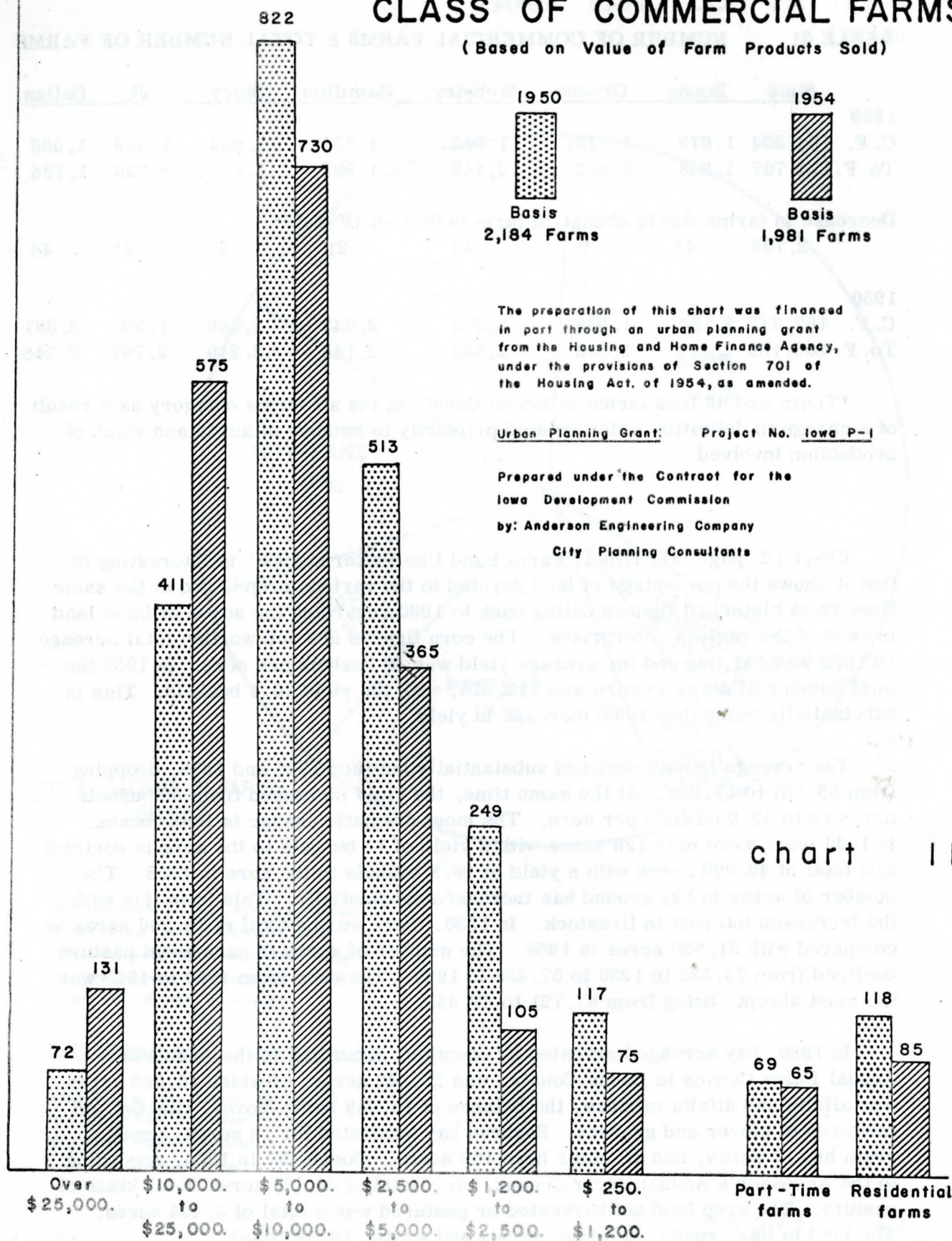
Quoted from publication, Annual Farm Census 1960, Iowa Department of Agriculture, part of the Assessors Annual Farm Census.

Boone County is a part of the Central District. The Assessors Annual Farm Census reported 6,923 people living on a total of 1,993 farms with an average size of 174 acres. The total land in farms is 346,877, of this total 133,765 or 38.6% was owned by operators, - the balance of 213,112 or 61.4% was rented by the operators. The Central District total of land in farms in acres is 4,473,529. 1,804,816 or 40.3% of the total owned by operators - the balance of 2,668,713 acres or 59.7% of the total land was rented by operators.

The Chart entitled Class of Commercial Farms, Chart 11, page 79, indicates by means of a bar graph the relative number of farms that fall within certain limitations of value of farm products sold. There appears to be an absence of extremes of either low income or exceedingly high income, and further there apparently was a substantial shift in number of farms whose value of products sold exceeded \$10,000. This is to be expected in view of the broad decline in agricultural income.

CLASS OF COMMERCIAL FARMS

(Based on Value of Farm Products Sold)



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chart 11

Information obtained from Boone County Extension Service

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TABLE 31 NUMBER OF COMMERCIAL FARMS & TOTAL NUMBER OF FARMS

	State	Boone	Greene	Webster	Hamilton	Story	Polk	Dallas
1959								
C. F.	154,334	1,672	1,510	1,985	1,730	1,663	1,509	1,566
To. F.	174,707	1,948	1,682	2,149	1,902	1,845	1,926	1,786
Decrease in farms due to change in farm definition 1954-59*								
	2,793	43	9	49	21	33	88	44
1950								
C. F.	187,717	2,184	1,938	2,368	2,043	2,060	1,995	2,081
To. F.	203,159	2,372	2,043	2,546	2,145	2,210	2,767	2,346

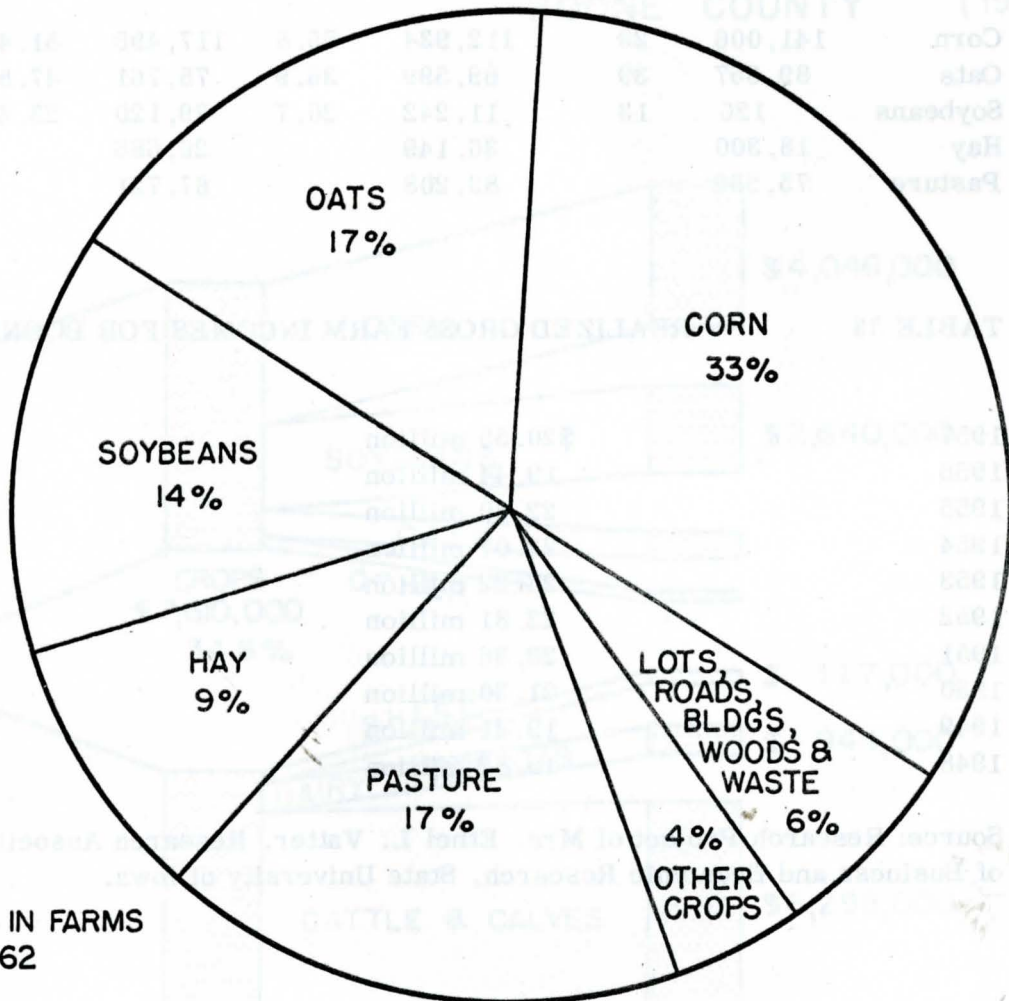
*There are 43 less farms in Boone County in the all farms category as a result of a change in definition which related primarily to number of acres and value of production involved.

Chart 12, page 81, titled "Farm Land Use Pattern, 1958" is interesting in that it shows the percentage of land devoted to the various crops, and at the same time gives historical figures dating back to 1930 regarding the acres of farm land in each of the various enterprises. The corn figures are noteworthy: total acreage in 1930 was 141,006 and the average yield was 29 bushels per acre. In 1958 the total number of acres in corn was 112,475, with the yield 70.6 bushels. This is substantially more than 100% increase in yield.

The acreage in oats declined substantially between 1930 and 1958, dropping from 89,657 to 58,690. At the same time, the yield increased from 39 bushels per acre to 49.9 bushels per acre. The most dramatic change is in soybeans; in 1930 there were only 126 acres with a yield of 13 bushels to the acre in contrast to a total of 49,000 acres with a yield of 28.8 bushels to the acre in 1958. The number of acres in hay ground has increased substantially. This is in line with the increased interest in livestock. In 1930, there were a total of 18,300 acres as compared with 31,920 acres in 1958. The number of acres in permanent pasture declined from 75,532 in 1930 to 57,455 in 1958. The drop from 1950 to 1958 was the most abrupt, being from 67,721 to 57,455.

In 1960, hay acreage harvested by counties, according to the Assessor's Annual Farm Census in Boone County, was 25,642 acres, of which 10,069 acres was alfalfa and alfalfa mixture, the balance of 15,349 being clover, timothy, and mixtures of clover and grasses. Soybean hay accounted for 18 acres, small grain hay 97 acres, and all other hays 109 acres. Boone Co. in 1960, according to the Assessor's Annual Farm Census, had a total of 56,126 acres in all kinds of pasture. The crop land not harvested or pastured was a total of 5,424 acres. The land in lots, roads, building, woods and waste, 19,545 total.

FARM LAND USE PATTERN (1958)



**TOTAL ACRES IN FARMS
348,662**

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Urban Planning Grant: Project No. Iowa P-1

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chart 12

aneco

Information obtained from Boone County Extension Service

TABLE 32

ACRES & YIELDS OF MAJOR CROPS IN BOONE COUNTY

	<u>1930</u>		<u>1940</u>		<u>1950</u>		<u>1958</u>	
	Acres	Yield	Acres	Yield	Acres	Yield	Acres	Yield
Corn	141,006	29	112,934	55.8	117,495	51.4	112,475	70.6
Oats	89,657	39	69,599	36.9	75,761	47.8	58,690	49.9
Soybeans	126	13	11,242	20.7	39,120	23.4	49,803	28.8
Hay	18,300		36,149		26,685		31,920	
Pasture	75,532		83,208		67,721		57,455	

TABLE 33

REALIZED GROSS FARM INCOMES FOR BOONE COUNTY, IOWA
1948-57

1957	\$20.55 million
1956	19.44 million
1955	22.80 million
1954	23.07 million
1953	24.22 million
1952	22.81 million
1951	23.36 million
1950	21.30 million
1949	19.41 million
1948	19.82 million

Source: Research Project of Mrs. Ethel L. Vatter, Research Associate, Bureau of Business and Economic Research, State University of Iowa.

In view of the fewer number of farms, the larger average farm size, the increased use of fertilizer, and the greater productivity of a single farmer it would seem that the gross incomes of Boone County farmers would increase.

However, as can be seen from the table above, the amount of gross farm income has remained almost constant from 1948-57. Hoped for greater dollar returns commensurate with greater efficiency and productivity of the farmer have been absorbed in the same or lesser prices the consumer pays for agricultural products.

Chart 13, page 83, shows the source of farm income for Boone County in 1954, and indicates the broad diversification of farm income sources. The total income figure of \$21,882,946 for the year 1958 represents the second largest segment of income in the county, exceeded only by the total of retail sales.

The gross sales give no accurate picture of net farm income since expenditures in different aspects of farming vary widely.

TABLE 34

CAPITAL INVESTMENT PER FARM
Average Size Farm in Boone County1945, 1955 and projected to 1965 for Average Farm
of 175 Acres and a Farm of 240 Acres

	<u>1945</u>	<u>1955</u>	<u>1965</u>	
Acres	159	163	175	240
Land & Buildings	23,000	42,000	51,000	70,000
Feed & Livestock	4,000	12,000	16,000	19,000
Machinery & Power	4,000	7,000	9,000	11,000
Operating Capital	2,000	3,000	4,000	5,000
Total	<u>33,000</u>	<u>64,000</u>	<u>80,000</u>	<u>105,000</u>

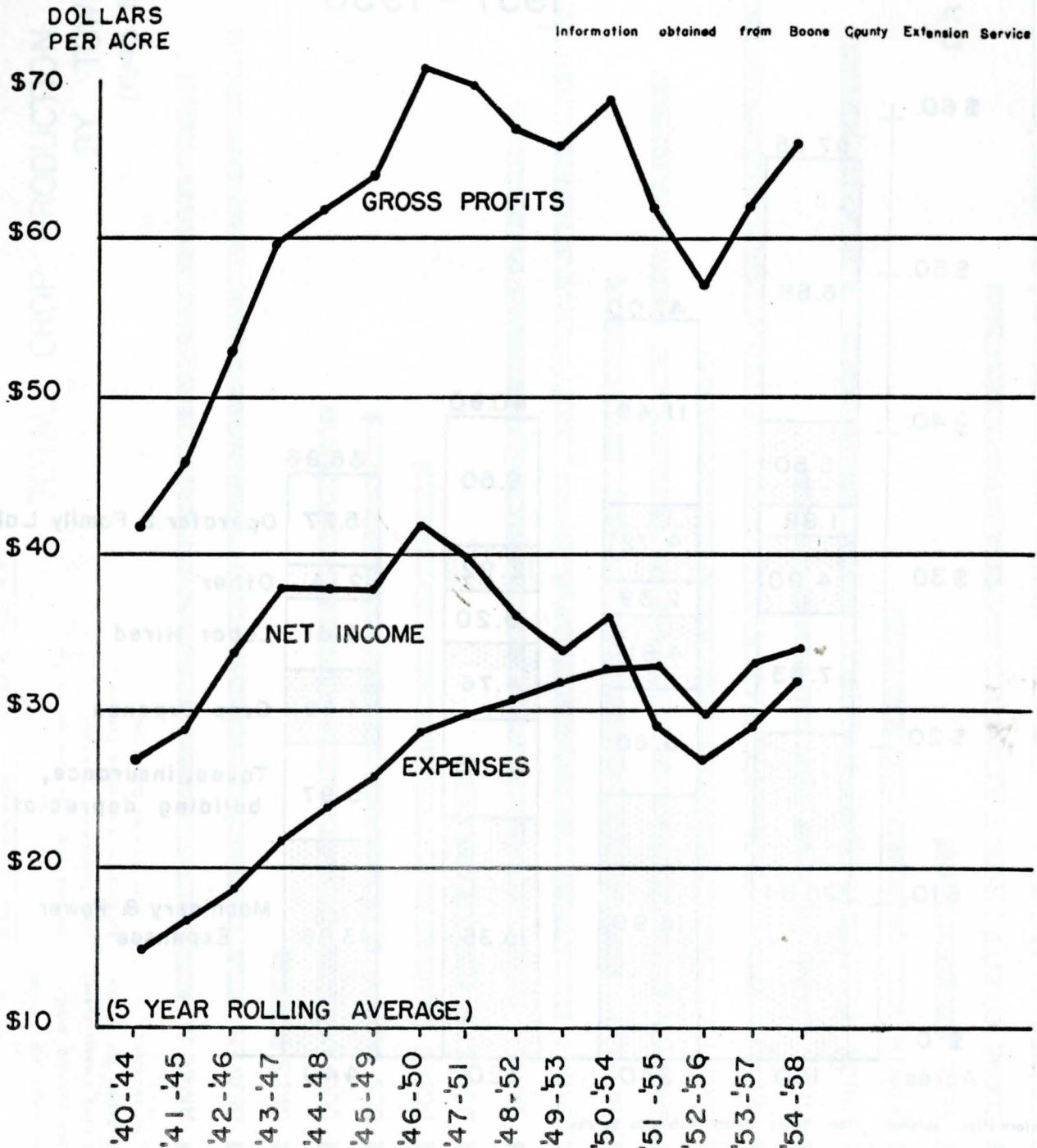
The Table titled "Capital Investment Per Farm", Table 34, page 84, with its projection of figures to 1965 very forcibly emphasizes the necessity of having a substantial amount of money plus adequate credit facilities in order to operate on a profitable level. This is particularly true if one desires to maximize his production in accordance with the newest techniques of agricultural production.

The chart titled "Gross Profits, Expenses & Net Income Per Acres", Chart 14, page 85, reflects the price squeeze that the farmers have been subjected to since the early 1950's, with expenses constantly on the increase and net income trending downward until recently. Figures for the latter part of 1961 are not included.

The price of land sometimes does not really properly reflect the differences in the crop production capability per township. Chart 16, page 87, entitled "Total Crop Production Index By Township (1945 figures)" is a valuable guide in the purchase of farm land.

As shown in Table 35, page 88, Boone County has, during the past 30 years, ranked either fifth or sixth in relation to the surrounding counties in terms of total value of field crops sold. A very high percentage of the total production is fed out on the farm. Corn is the most important crop, occupying the largest acreage, and having the greatest value. Corn production gives a higher labor return than any of the other farm enterprises. During marketing, handling and storage is a big volume operation in the Boone vicinity. The Farmers Co-op does a big volume in the purchasing of grain for shipment, and storage, as well as grinding for feed. The price support programs of the Federal Government have prompted the storage programs of such concerns as the Berry Seed Company in the buildings formerly occupied by the shops of the Chicago, Northwestern Railroad. The grain department of the Berry Seed Company is headquartered in Boone. Eventually these grains either find their way back to the farm for feed or they are shipped

GROSS PROFITS, EXPENSES AND NET INCOME PER ACRE



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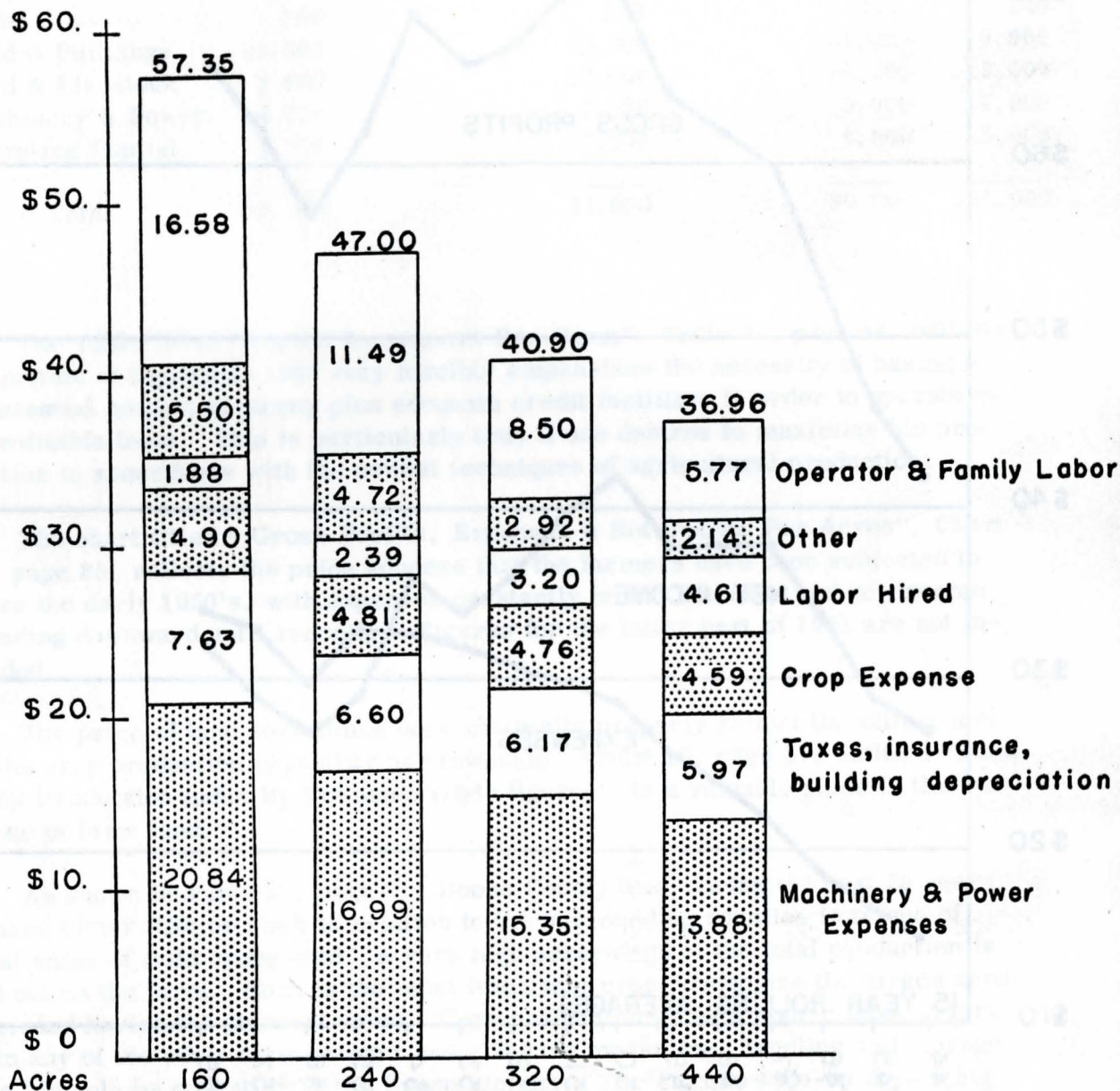
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chart 14

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EXPENSES PER ACRE BY SIZE OF FARM 1957-1958



Information obtained from Boone County Extension Service

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chart 15

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TOTAL CROP PRODUCTION INDEX BY TOWNSHIPS (1945 FIGURES)

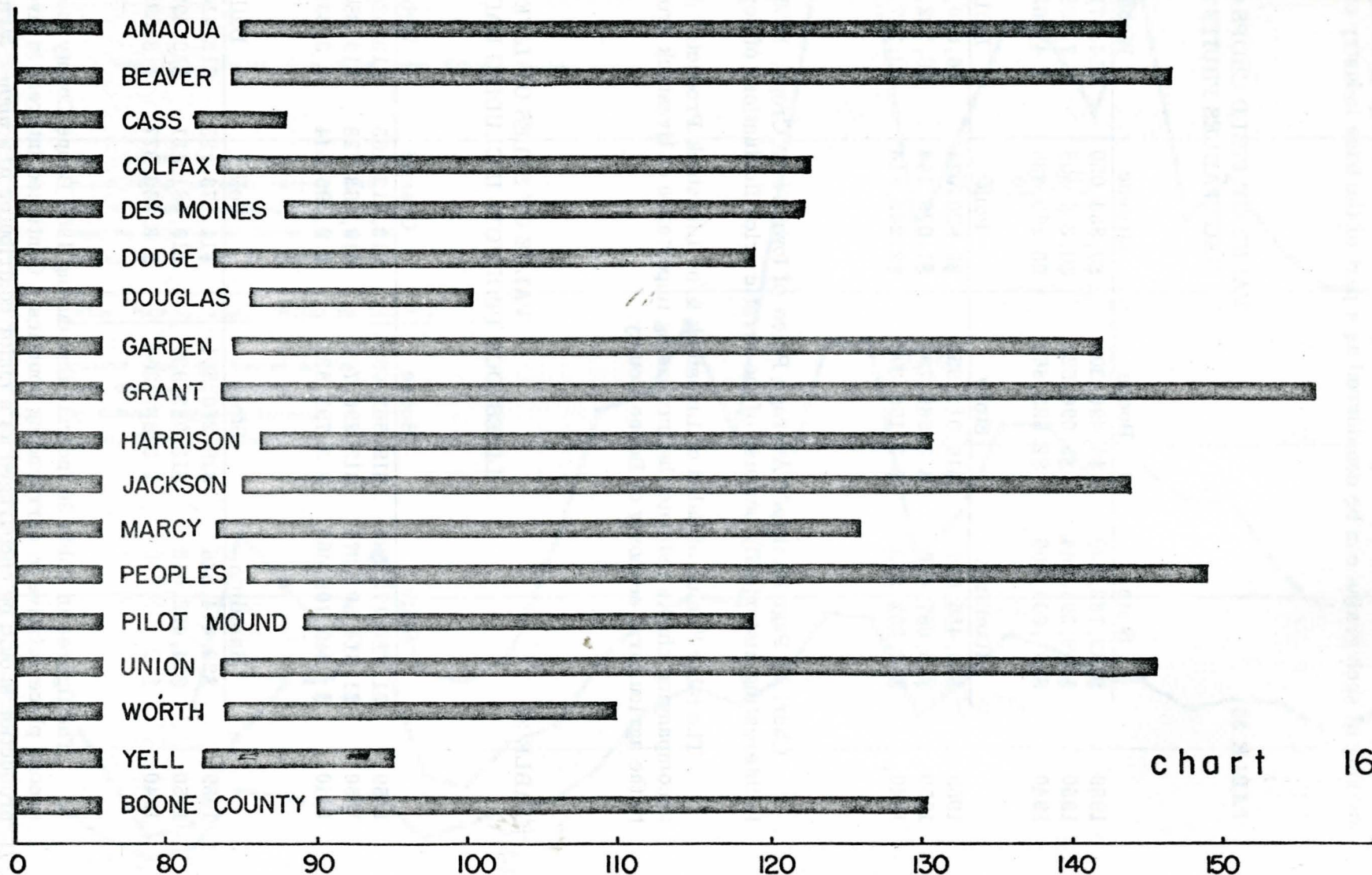


chart 16

completely out of the community and county. Thus the handling, grinding and storing of such grains can be considered as a part of the base industry of Boone.

TABLE 35

VALUE OF FIELD CROPS OTHER THAN
VEGETABLES FRUITS & NUTS SOLD

	State	Boone	Greene	Webster
1959	\$482,722,430	\$8,496,301	\$9,854,050	\$14,971,259
1950	\$308,391,064	\$5,696,529	\$6,330,558	\$7,892,234
1940	\$161,001,006	\$2,625,864	\$3,153,438	\$4,263,443
	Hamilton	Story	Polk	Dallas
1959	\$10,485,017	\$10,013,954	\$6,920,024	\$6,626,778
1950	\$5,667,416	\$5,989,797	\$7,079,144	\$5,732,124
1940	\$3,202,223	\$3,196,396	\$2,243,814	\$2,247,306

Chart 17, Page 89, titled "Average Price of Iowa Farm Crops, 1930 to 1959," is interesting historically because of the erratic price fluctuations of soybeans.

The table "Value of Sales of Livestock &/or Livestock Products" and the accompanying charts indicate the increasing importance of livestock production to the agricultural economy of Boone County.

TABLE 36

VALUE OF SALES OF LIVESTOCK &/OR
LIVESTOCK PRODUCTS INCLUDING DAIRY PRODUCTS

	State	Boone	Greene	Webster
1959	\$1,787,173,520	\$19,562,099	\$13,013,165	\$13,529,383
1950	\$1,314,601,371	\$12,296,776	\$10,763,728	\$10,384,884
1940	\$345,709,468	\$3,795,829	\$2,995,444	\$3,358,645
	Hamilton	Story	Polk	Dallas
1959	\$23,414,546	\$19,266,891	\$11,276,735	\$13,414,226
1950	\$14,452,012	\$13,043,939	\$10,481,131	\$12,499,985
1940	\$3,933,200	\$3,837,264	\$3,263,377	\$3,398,460

The figures in Table 36 indicate that during 1959 Boone County moved into second place relative to surrounding counties. Continued interest in livestock production should be encouraged as a major contributor to a higher farm income.

AVERAGE PRICES OF IOWA FARM CROPS (1930 - 1959)

PRICES PER BUSHELS

\$3.00

\$2.50

\$2.00

\$1.50

\$1.00

\$.50

0

Information obtained from Boone County Extension Service

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SOYBEANS

CORN

OATS

chart 17

aneco

1930

1935

1940

1945

1950

1955

1959

-68-

The raising and feeding of beef cattle is a very important industry. The raising of hogs is practiced quite generally throughout the county, and some are found on most every farm. Most of the hogs produced are sold on outside markets. An expanding livestock production will require additional services and will result in greater income for transportation service, marketing services and feed sales - all part of the urban center building activities.

Boone, in common with other cities of the area, has developed a "decentralized" market for the sale and concentration of livestock. The past 20 years has witnessed a marked decline in the volume of livestock sold through terminal markets. In contrast, the sales have been increasing in the smaller communities through order buyers, dealers and auction markets or in concentration yards maintained by the meat packers. There has, within recent years, been a distinct trend toward the operation of packing houses in communities such as Boone, and this is a possibility that should be considered by those seeking new industry for the area, because it would be in line with, rather than in opposition to an established trend throughout the nation.

Chart 18, page 91, titled "Prices of Cattle & Hogs 1930 to 1959" inclusive, is included as a matter of interest, and also to call attention to lower prices received in certain years for both cattle and hogs.

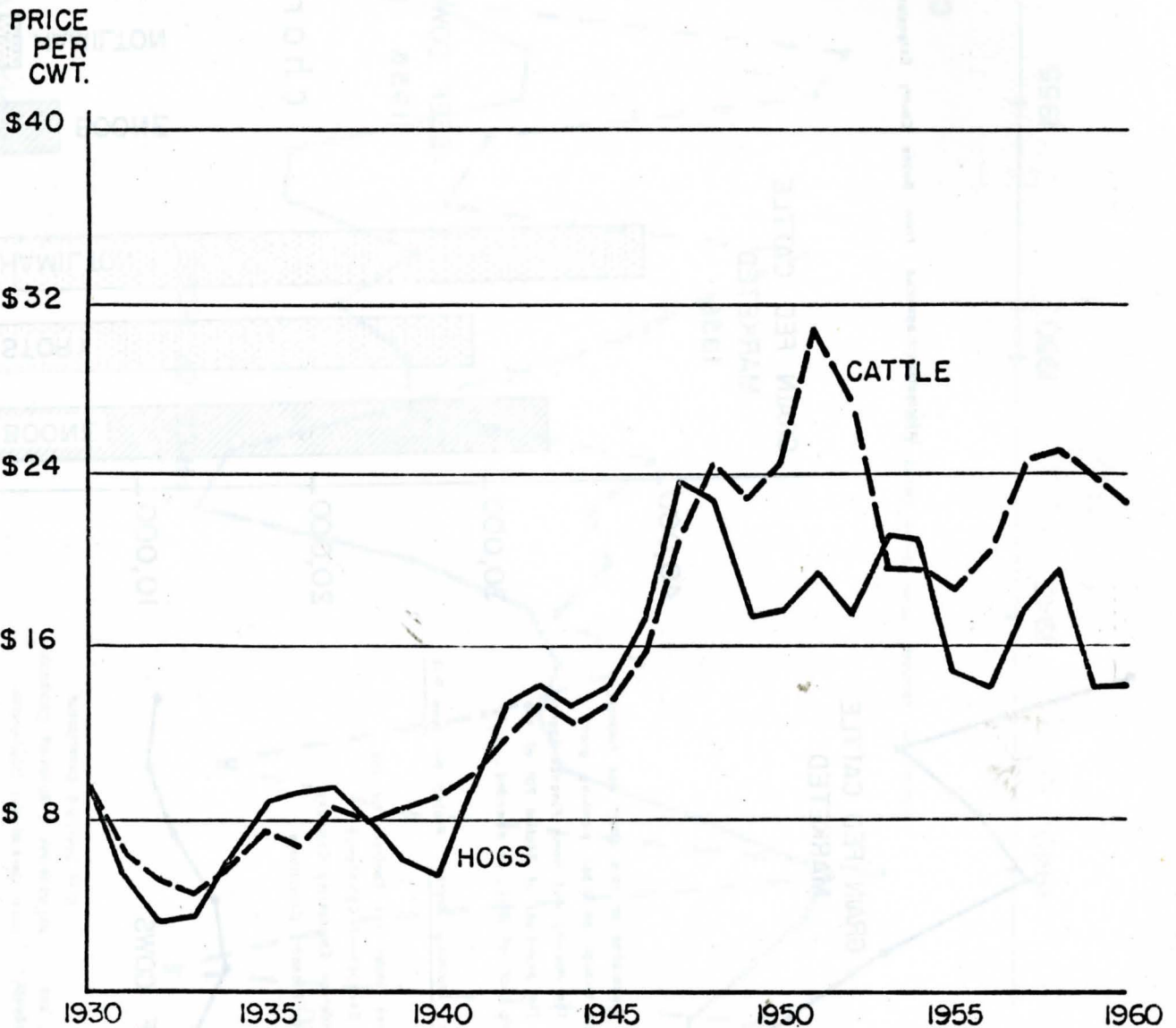
Chart 19, page 92 titled "Beef" is particularly interesting in that it brings out the very sizable increase in the number of grain fed cattle marketed during the past ten years. Contrasted to this is the relatively stable number of beef cattle on the Boone County farms. A bar graph, a part of this same chart, shows Boone County's relative position in relation to Story and Hamilton Counties.

According to the Assessor's Annual Farm Census of 1960, there were 34,527 grain fed cattle marketed, and 5,854 grain fed sheep and lambs marketed in Boone County.

The chart titled "Prices of Hogs compared to hog: corn ratio", Chart 20, page 93, is also included as a matter of interest because there is a degree of relativity profit-wise in the raising of hogs which has been recognized through the years, and commonly referred to as a hog-corn ratio. That is to say, the price of hogs alone is only a part of the story.

Chart 21, page 94 is interesting because it reflects both the variance in numbers, the result of the hog production cycle, and more particularly might indicate a downtrend in the over-all number of hogs on Boone County farms. The spring farrow in the year 1956 to 1957, apparently having dropped to approximately 11,000 head, is considerably below the lowest figure for any time since 1945. The same Chart also reflects the increase in the number of fall pigs farrowed, such increase having got under way in about 1949, steadily increasing until the present time with a dip during the years 1956-1957.

PRICES OF CATTLE AND HOGS (STATE) (1930 - 1960)



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Information obtained from ISU Extension Service

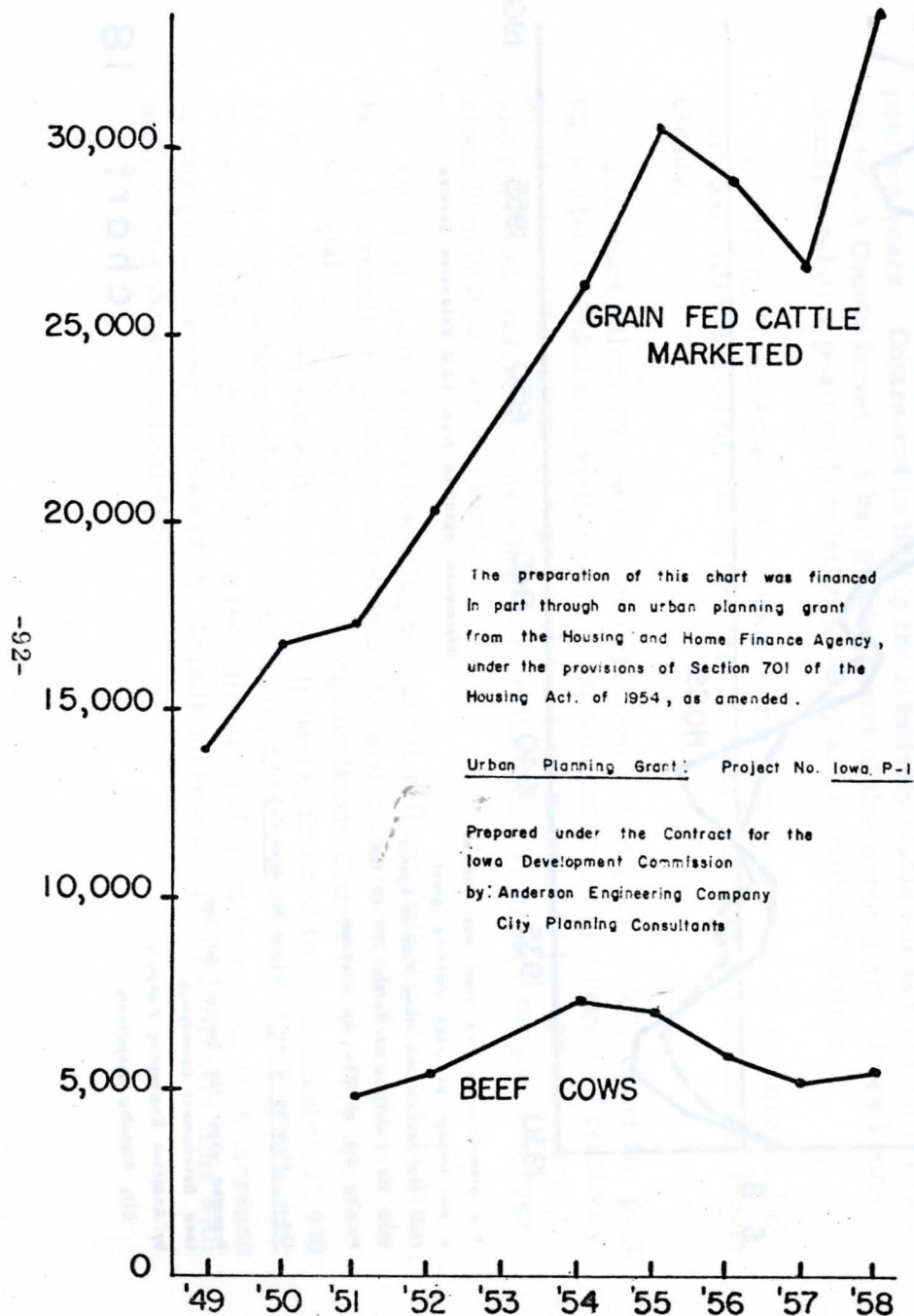
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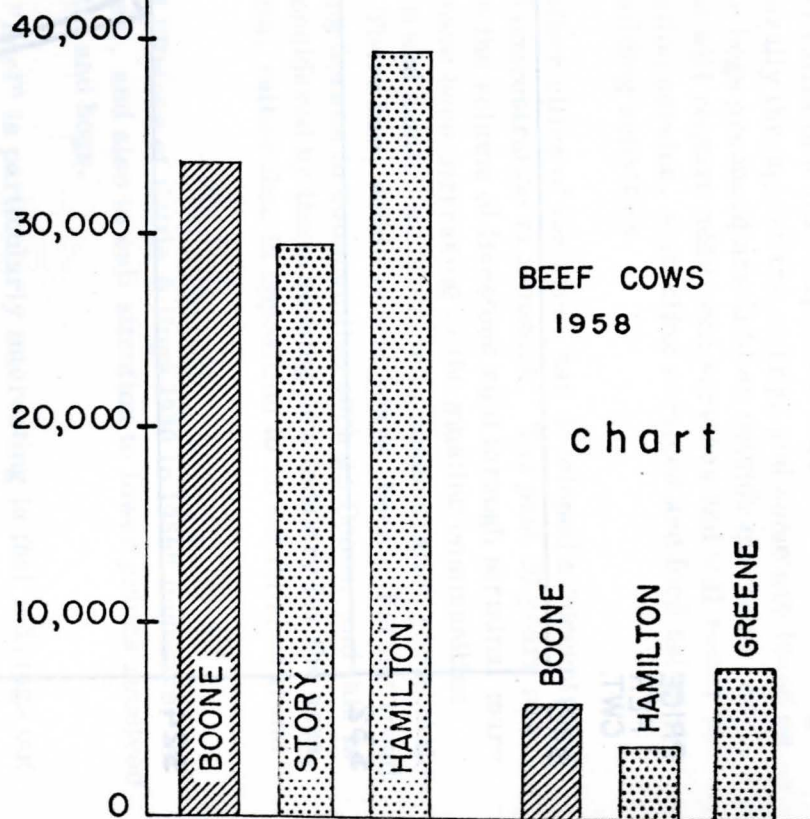
chart 18

BEEF

Information obtained from Boone County Extension Service



GRAIN FED CATTLE MARKETED 1958



PRICE OF HOGS COMPARED TO HOG : CORN RATIO

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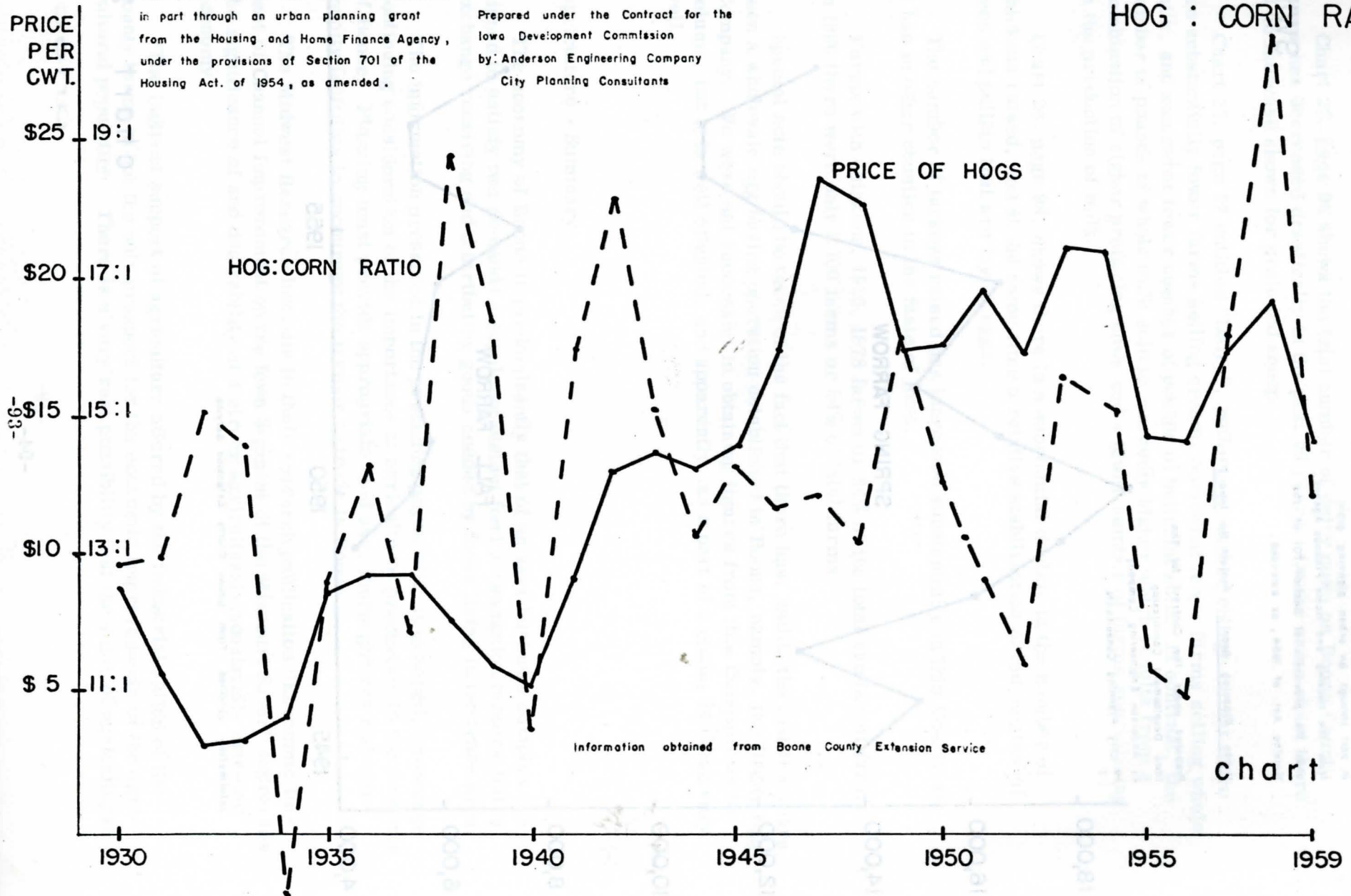


chart 20

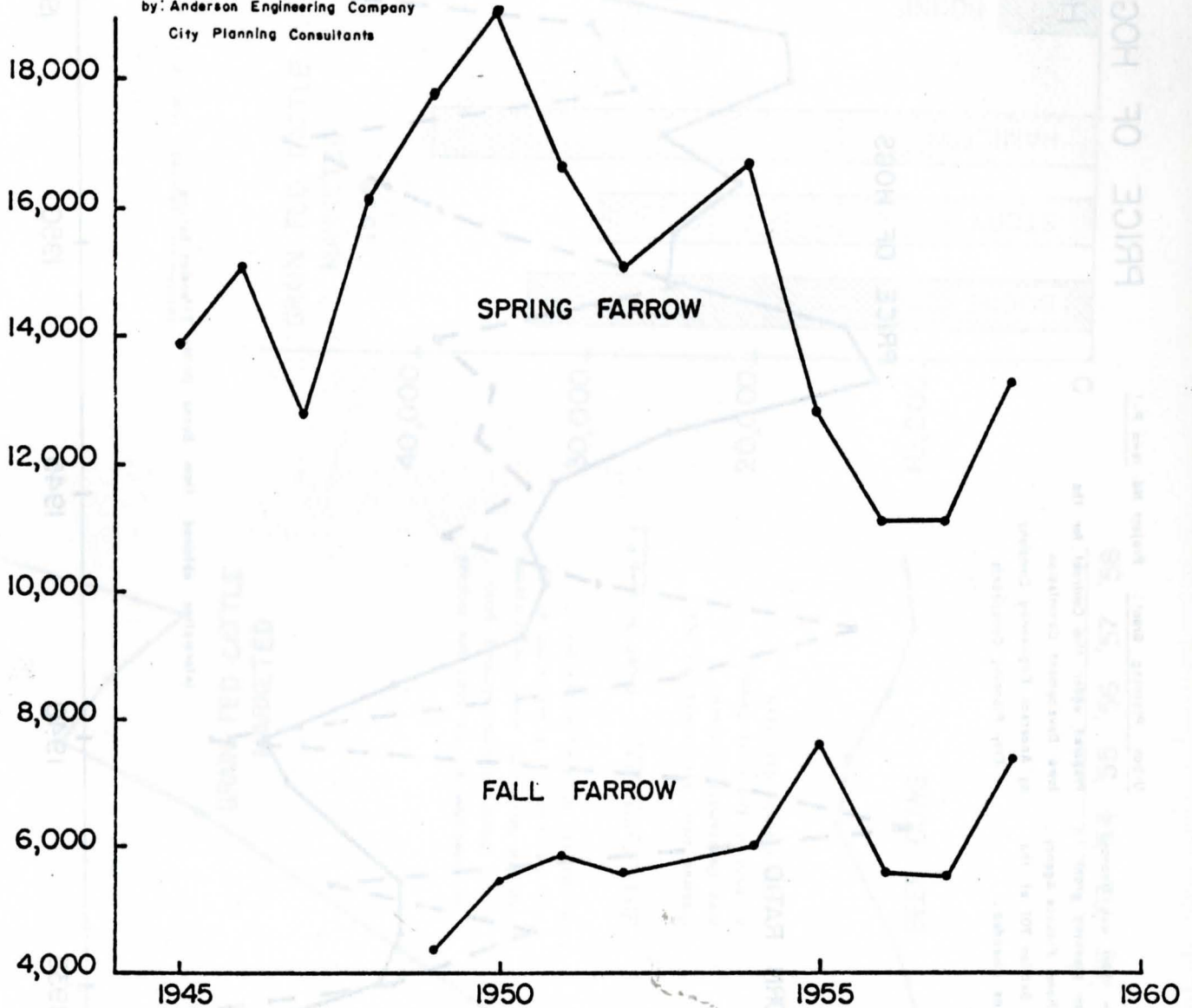
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The preparation of this chart was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act. of 1954, as amended.

SWINE

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Information obtained from Boone County Extension Service

chart 21

aneco

Chart 22, page 96 shows the total number of dairy cows on Boone County farms has decreased drastically in the past 20 years. On the same chart there is an increase shown for grain fed sheep.

Chart 23, page 97 entitled "Dairy", reflects a marked change in that there are substantially fewer farms selling cream, somewhat fewer farms selling whole milk, and somewhat fewer number of pounds of butterfat sold. In contrast, the number of pounds of whole milk sold is markedly higher which results from a combination of higher producing cows and a fewer number of farms specializing in the production of milk.

Chart 24, page 98, shows there is a substantial decline in the number of chickens raised, and at the same time a relative stabilization of the number of hens and pullets that are laying eggs.

The number of turkeys raised has increased substantially in this County as it has in other counties in the State of Iowa.

Farms with chickens, 1950, 1878 farms or 84% of the total number of farms. In 1960 there were only 1,100 farms or 54% of total farms.

Special note should be taken of the fact that there has, within the last few years, been a wholesale egg buying operation established in Boone, namely, the Haddy Egg Company. We were not successful in obtaining figures from this Company as to volume, but it is well situated, and apparently, as a part of a chain, is doing very well.

Agriculture - Summary

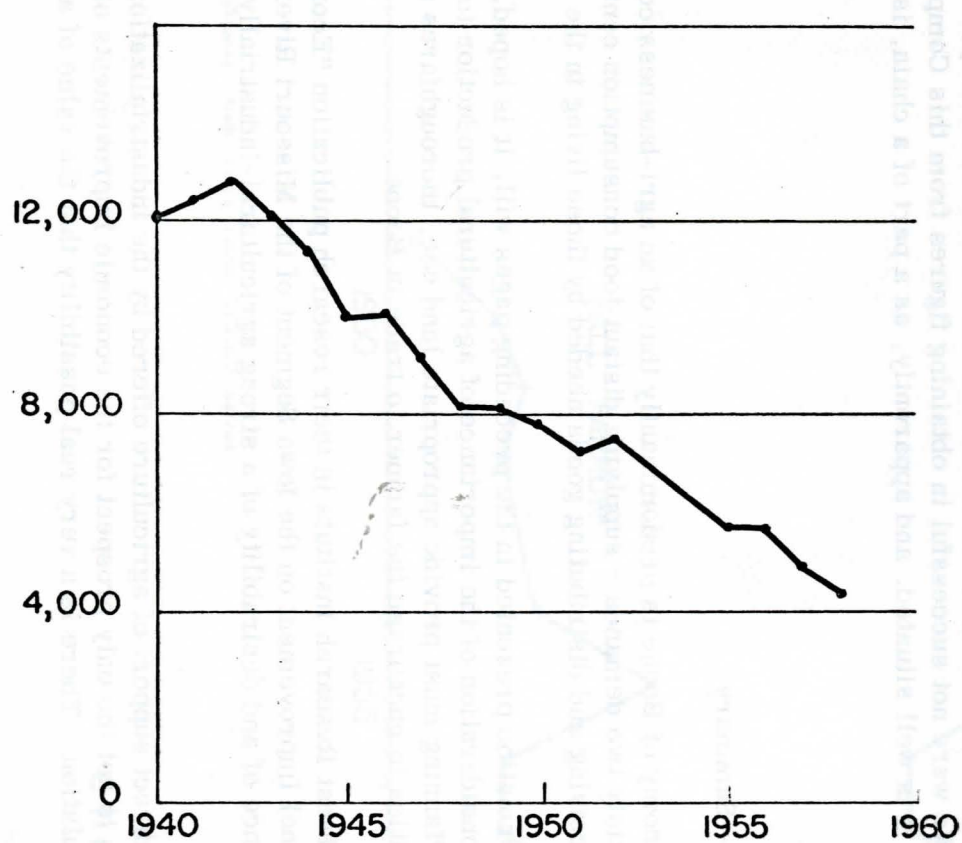
The economy of Boone is predominantly that of an agri-business complex designed to satisfy two demands - supplying distant food consumption centers and in exchange receiving and distributing goods needed by those living in the trade area.

The information presented in the preceding pages will, it is hoped, encourage continuing consideration of the importance of agricultural production to the economy of Boone. Planning must provide appropriate land use, thoroughfares and community facilities to encourage the farmer to trade in Boone.

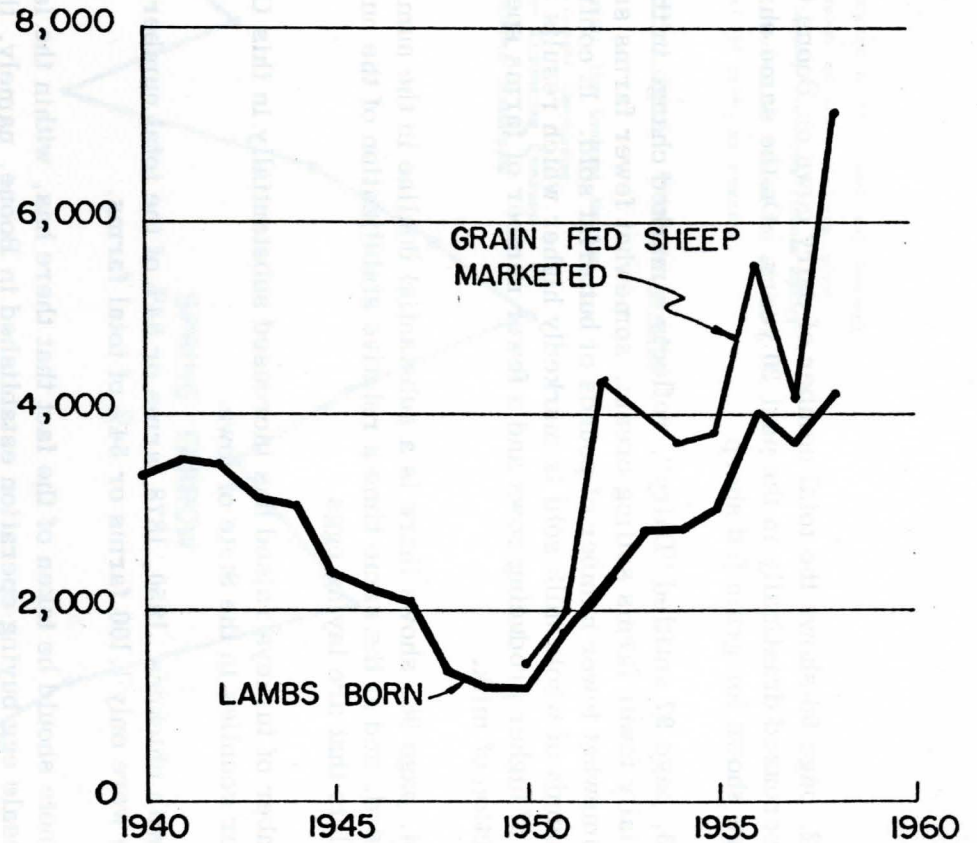
The Midwest Research Institute in their research publication "Economic Impact of Channel Improvement on the Iowa Segment of the Missouri River" expresses the significance of and desirability of a strong agricultural-industrially oriented economy.

"The indirect support of agriculture offered by the industrialization of the county towns is not the only prospect for the economic improvements of the agricultural population. There is a very real possibility that the value of agricultural

DAIRY COWS (NUMBERS)



SHEEP & LAMBS



-96-

Urban Planning Grant: Project No. Iowa P-1

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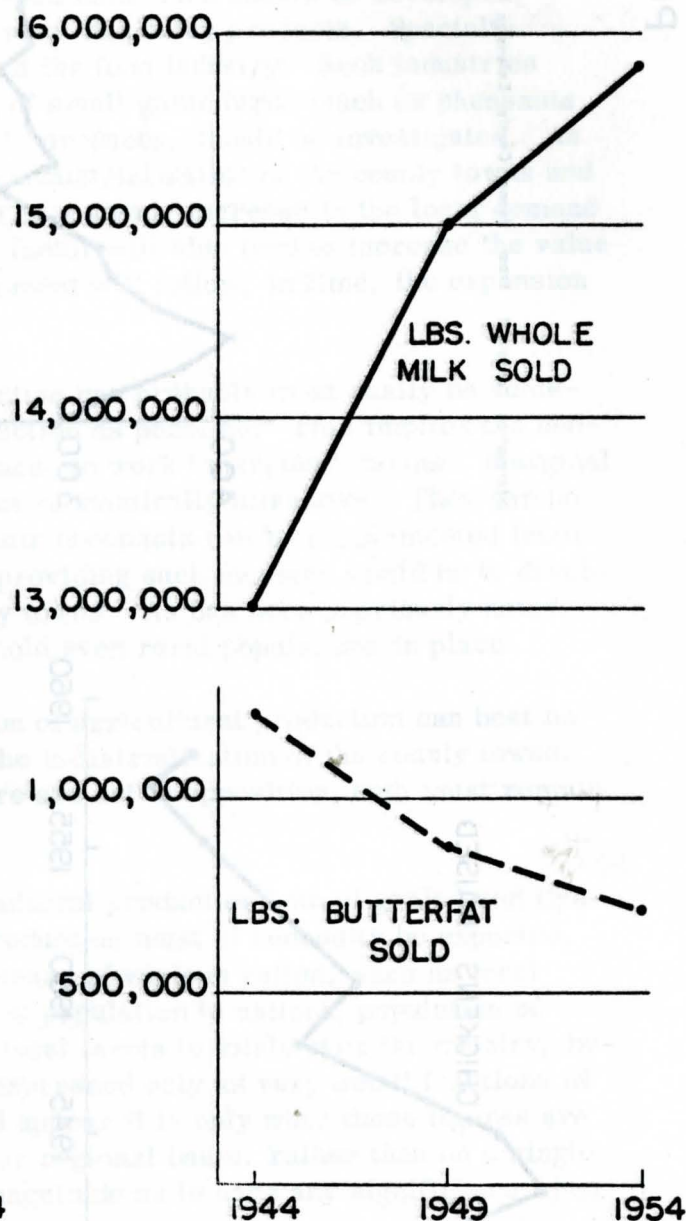
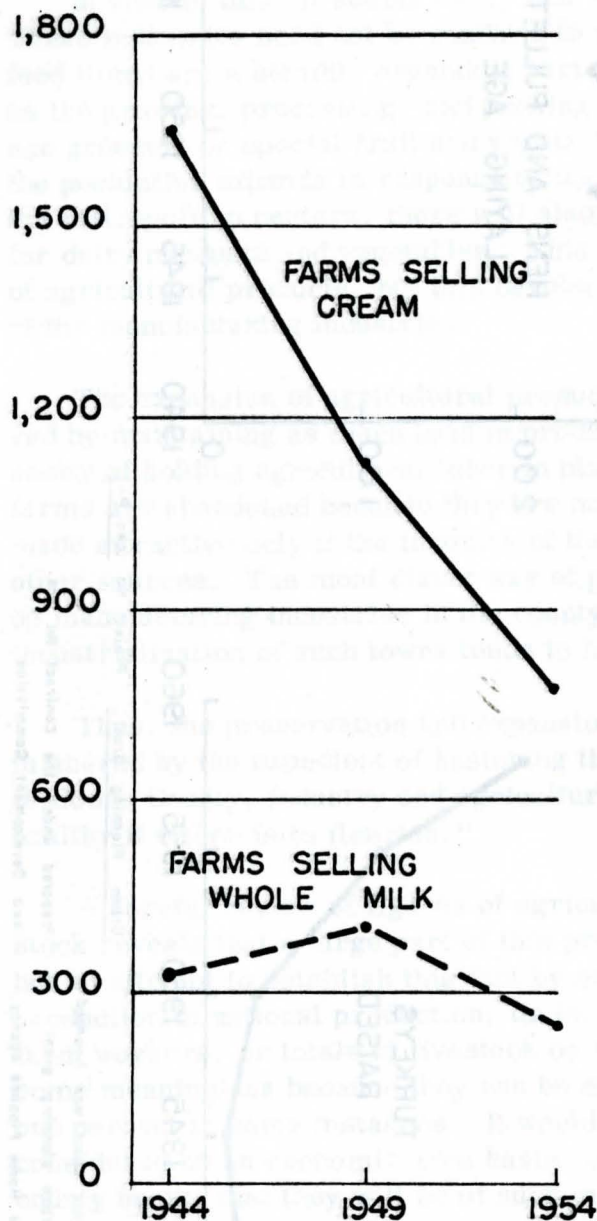
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Information obtained from Boone County Extension Service

chart 22

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DAIRY



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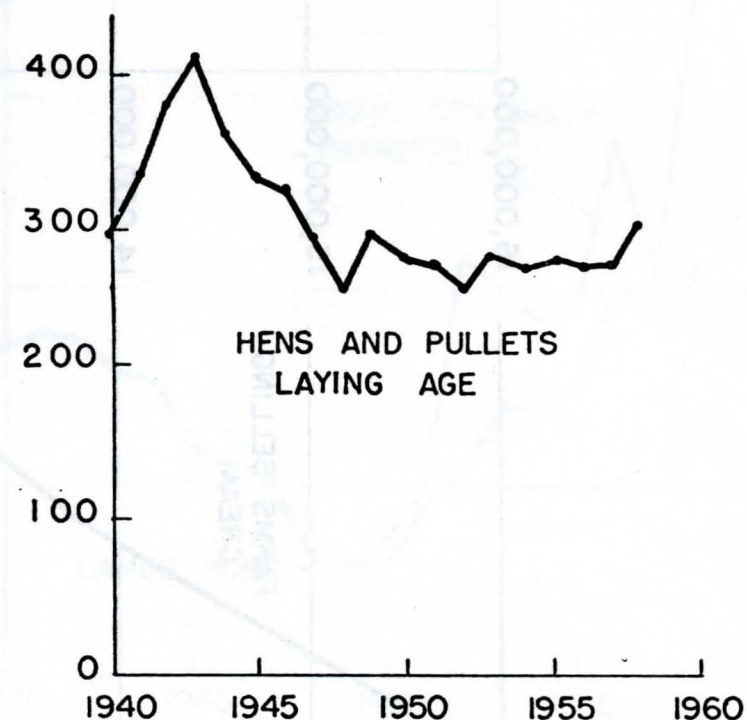
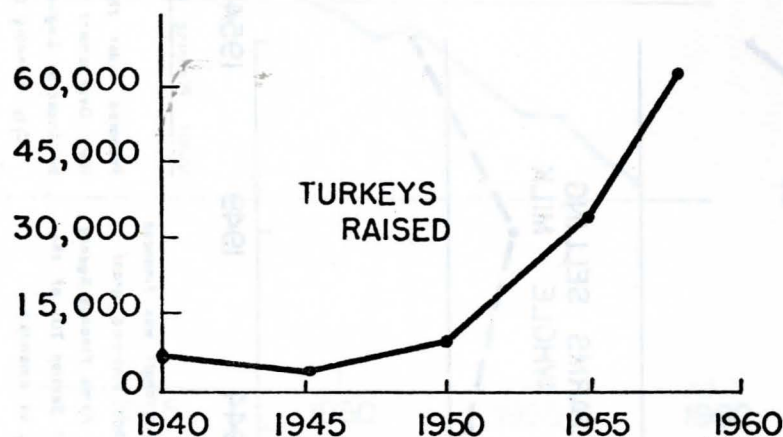
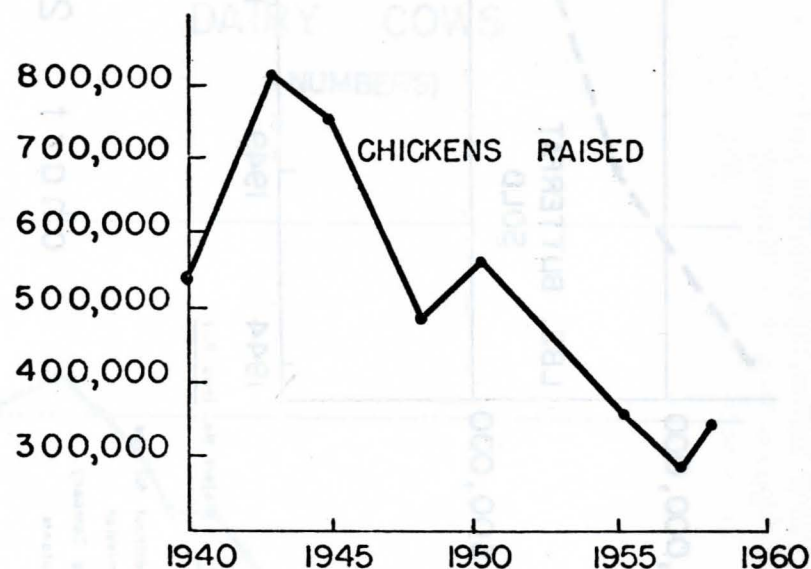
chart 23

aneco

Information obtained from Boone County Extension Service

POULTRY

Information obtained from Boone County Extension Service



Urban Planning Grant: Project No. Iowa P-1

The preparation of this chart was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act, of 1954, as amended.

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City Planning Consultants

chart 24

products is concomitant upon some form of union between industry and farm. It is generally more economically advantageous to both grow and process a product in a single area, and ship it to market as a finished product, than it is to grow the product and ship it as a raw material. The shipping of a finished product reaps the benefits of both agriculture and industry for an area.

In view of this, it seems likely that such industries should be developed. These industries need not be confined to meat and dairy products. Specialty food items are a steadily expanding part of the food industry. Such industries as the growing, processing, and packing of small game birds (such as pheasants and grouse), or special fruit and vegetable products, should be investigated. As the population expands in response to the industrialization of the county towns and the metropolitan centers, there will also be a steady increase in the local demand for dairy products and vegetables. This factor will also tend to increase the value of agricultural products, but this development will follow, in time, the expansion of the manufacturing industries.

The expansion of agricultural production can probably most easily be achieved by maintaining as much land in production as possible. This implies the necessity of holding agricultural labor in place, to work "marginal" farms. Marginal farms are abandoned because they are not economically attractive. They can be made attractive only if the incomes of their occupants can be supplemented from other sources. The most direct way of providing such incomes would be to develop manufacturing industries in the county towns. As has been previously noted, industrialization of such towns tends to hold even rural populations in place.

Thus, the preservation and expansion of agricultural production can best be furthered by the expedient of hastening the industrialization of the county towns. In Boone County, industry and agriculture are not in opposition; both must remain healthy if either is to flourish."

A careful review of figures of agricultural production both of grains and livestock reveals that a large part of this production must of necessity be exported, but an attempt to establish this fact by means of various ratios, such as local production to national production, or local population to national population of farm workers, or totals of livestock on local farms to totals over the country, become meaningless because they can be expressed only as very small fractions of one percent in some instances. It would appear it is only when these figures are considered on an economic area basis, or regional basis, rather than on a single county basis, that they will be of such magnitude as to have any significance when compared with national figures.

Manufacture - Introduction

As indicated in personal interviews and in response to mailed questionnaires, responses were 110 to 1 for more industry. There is almost a universal acceptance of the theme that Boone must have additional industry. The desirability of industry for Boone is not questioned. It is hoped, however, that this report can place industry in Boone in proper perspective with other occupational activities there and can make clear what types of industries would be most desirable, and why. Along with this, there must be recognition of the inherent limitations in promotional efforts that are not well conceived and effectively executed.

The economic base of a city can be changed only over relatively long periods of time, and such a change is usually accompanied by basic economic disturbances - unemployment, falling property values, inadequate tax revenues, failure of business establishments, etc. Thus, for at least a generation, fortunes are inextricably tied to agriculture and trade in Boone and to the trend, in the future, of manufacturing in the city.

A too heavy emphasis on one aspect of a city's economy to the exclusion of others can be an obstacle to future growth and development. Such emphasis ignores some very important factors.

1. The presence of many manufacturing firms in a community is prima facie evidence that a city has certain economic advantages for industrial firms that other cities do not. Few people would recommend that tourist trade in Miami be ignored and concentrate on building an industrial city; such a step would ignore the natural climatic and geographical advantages which that city possesses. Such advantages are "inevitably" converted into economic advantages only after their value is recognized and often only after much patient work to enhance them. The greatest growth results from exploitation of all of a city's economic advantages.

Boone has relied heavily on the railroads for employment in the past. This experience has demonstrated the necessity of developing each and every segment of the city's economy. Boone has many advantages to offer industry:

1. An adequate and highly skilled labor force.
2. A well developed rail and highway transportation system.
3. An excellent school system with a modern curricula.
4. Industrial services, including electric power, water, sanitary facilities and natural gas.
5. An already established industrial area provided with a paved road and industrial services.
6. A program of urban planning to accomodate future development.

Industry can be classified by any number of descriptive designations. A useful classification is given by Arnold Paulsen in his paper entitled "Community Development and Economic Base" as (1) supply based, (2) demand based, and (3) foot loose industries. Obviously, rural areas such as Boone County have the best chance to secure a supply based industry to process the locally produced agricultural raw materials. Iowa, with its relatively low population and distance from the larger metropolitan areas, affords relatively little opportunity to attract demand based industry, except those that are input items purchased by the farmers for operation of their farms.

Foot loose industries, the third classification, are sought after by the literally hundreds of development corporations over the country. Their demands for raw materials are limited and the end product is capable of being transported at a low cost.

Industry can also be classified by the extent of its reliance on any one or a combination of the four factors of production: land, labor, capital, and management. Because Iowa has a highly productive, intelligent labor force, it is attractive to labor-oriented industry. In many cases, labor-oriented industries do not produce a high value added by manufacture. "However, when comparing the ratio of the value added to total employment or production workers for Iowa and the nation, we see that Iowa leads the nation on both measures for a majority of the years between 1929 and 1954. (This means that Iowa achieved greater value added with fewer employees).

One might expect that this advantage, in attracting industry to Iowa, will become less important as industries continue to mechanize and automate. However, this probably will not greatly reduce our advantage as early as 1975." (Thompson, C. Woody and Stucky, Conrad C., "Iowa-1975", Iowa Business Digest, Bureau of Business and Economic Research, College of Business Administration, State University of Iowa, August, 1961, Page 4.)

The present industrial labor force potential in Boone has a high percentage of skilled workers and industry is well satisfied with the educational preparation of Boone High School graduates as they are added to the labor force. There are a large number of women available for industrial work. In addition, approximately one-half of the young people who graduate from Boone's High School go on to college for additional education. Thus Boone stands in an excellent position from the standpoint of an adequate labor force in attracting industry.

2. "Manufacturing is a general term which covers everything from the manufacture of vitamins to the manufacture of automobiles. It includes firms with one employee and firms with thousands of employees. No decision as to the effect of manufacturing on the future of a community can be made unless the characteristics of such manufacturing have been analyzed and interpreted." (Dr. W. G. Pinnell, An Analysis of the Economic Base of Evansville, Indiana., Indiana University School of Business, 1954.)

In all probability development of industry in Boone will result in expansion of certain plants, establishment of new branch plants, and/or relocation of main plants. Support of homegrown or locally originated industries can result in the establishment of a good many of this type of industry. Very serious consideration might be given to the following two thoughts as a means of assisting in the development of plants started by local individuals: Build a shell building with all of the required facilities and power in such a way that it could be divided to accommodate several small businesses all under one roof. It would, in effect, be an apartment house type of arrangement for small industry. The second consideration for assistance to small industry would be that of adequate financing. There are several means by which this could be accomplished, and Boone with its Industrial Development Corporation seems to be in a favorable position to provide capital required for a sound and realistic prospect. Programs of help offered by the Federal government should not be overlooked.

We have, in our interviews, been given to understand by those interested in industrial development, that they expect to attract industry capable of providing jobs for some 700 to 1000 production workers in the course of the next ten years. This total would represent a very outstanding achievement and must be considered in light of what is required to provide that number of jobs. A new plant approximating the Rolfes Manufacturing Company would have to be attracted at the rate of one a year. On the other hand, a plant employing half or so of those now employed at the John Deere plant at Ankeny, would provide this total of industrial job openings. Considering the effort being made to attract industry, the many advantages offered, the attitudes of those active in business and financial circles, it would appear that a figure of 500 new industrial job openings in the next ten years would be conservative and entirely within the range of possibility.

To secure industry to provide 750 job openings would require exceptional effort and skill while the figure of 1,000 job openings in this next ten years, would require even greater capability and skill, plus some fortuitous circumstance which would prompt a larger than average industry to situate in Boone. For the purposes of this report, it would appear that a figure of 500 new industrial job openings and its attendant increase in population, would be the one to use in planning. The Planning would be of such a nature that should it be necessary, it could be rapidly updated to meet the requirements of an additional expanded population.

Boone is rather unique in Iowa in that its industrial component is small in comparison to its population. Boone's population has remained almost constant since 1920. Many persons have remained in Boone to live, but work elsewhere. Many persons have left the county altogether. Manufacturing has increased but not fast enough to absorb the total excess population available each year.

The following table shows the steady increase of manufacturing in Boone, 1939-1958. The number of establishments over the 20-year period increased by 2 with a high of 19 establishments in 1954. The total number of employees increased from 243 to 326 or by 34%. The value added by manufacture has increased significantly. (Value added by manufacture was reported on a different basis prior to the 1958 Census and thus a valid percentage of increase cannot be figured. "Because some manufacturers produce goods which are sold to other manufacturers, e.g., a producer of shipping containers, a simple summation of the value of all goods produced in a locality would involve a certain amount of double-counting, and consequently, would not measure accurately the importance of manufacturing in the locality. Value added avoids this difficulty and is computed for each firm by subtracting the cost of materials purchased, etc., from the value of shipments." (Gerald L. Nordquist, "The Fort Dodge Economy, The Industrial Structure of an Economy in Transition", Iowa Business Digest, June, 1959, Page 10.)

TABLE 37

MANUFACTURE - CITY OF BOONE

Year	Estab- lishments	20 or More Em- ployees	Total No. of Employees	Total Payroll
1958	16	5	326	\$1,482,000
1954	19	NA	309	\$1,090,000
1948	15	NA	243	\$ 574,000
1939	14	NA	NA	NA

Year	Number of Production Workers	Wages	Value Added by Manufacture	Capital Expenditures
1958	231	\$978,000	\$2,407,000 adjusted	\$109,000
1954	237	\$798,000	\$1,797,000 unadjusted	\$ 87,000
1948	182	\$406,000	\$ 900,000 unadjusted	\$ NA
1939	158	\$164,552	\$ 545,000 unadjusted	\$971,370
	avg./yr.			(cost of materials, supplies, fuel, pur- chased electrical energy, & contract work)

Figures cited for Boone by the U. S. Census on number of establishments and employees do not show the full extent of manufacturing associated with the City. A number of industrial plants are situated outside the City limits and are included in "county" figures by the Census. Table 38 shows figures for manufacturing in the county.

TABLE 38

MANUFACTURE - BOONE COUNTY

Year	Estab- lishments	20 or More Em- ployees	Total No. of Employees	Total Payroll
1958	27	6	464	\$1,812,000
1954	28	5	398	\$1,361,000
1948	19	5	289	\$ 634,000
1939	17	NA	274	NA

Year	Number of Production Workers	Wages	Value Added by Manufacture	Capital Expenditures
1958	314	\$1,247,000	\$2,873,000 adjusted	\$136,000
1954	308	\$ 987,000	\$2,293,000 unadjusted	\$ 95,000
1948	216	\$ 448,000	\$1,069,000 unadjusted	NA
1939	173	\$ 178,845	\$ 583,000 unadjusted	\$1,004,344
	avg./yr.			(Cost of materials, supplies, fuel, pur- chased electrical energy, & contract work)

The figures in Table 38 are extracted from the U. S. Census of Manufacturing, dates of issue being as noted, 1939, 1948, 1954 and 1958. It is appropriate that there be considered the relatively low volume of manufacturing in Boone County. This is readily apparent when the figure of \$2,873,000 under the heading "Value Added By Manufacturing" is noted, and of this total the great preponderance is due to manufacturing activities within the City of Boone itself.

Following is a list of the individual manufacturing plants "in" Boone. The list, prepared by the Iowa Development Commission, gives the approximate number of employees, indicated by code letters following the name of the firm. (A) Under 20, (B) 20-50, (C) 50-100, and (D) 100-250, and one kind of products manufactured. Also included are names of manufacturers provided by the Chamber of Commerce.

Aluminum Products Co.
915- 20th Street

Andekraft Mfg. Co. (A)
1023 Story St.

Beckett, L. A. , & Co. (A)
R #4

Berry Seed Co. (B)
5th & Delaware

Boone Blank Book Co. (A)
528 Story St.

Boone All Star Dairy Inc.
932 8th St.

Boone Mattress Co. (A)
904 W. 3rd

Boone News-Republican (B)
812 Keeler St.

Coca-Cola Bottling Co. (A)
812 6th St.

Continental Furniture Mfg. Co. (A)
916 Story St.

Duncan Machine Works
933 - 10th

Grarok, Inc. (A)
C & NW Yards

Heinrich Envelope, Inc. (A)
Box 222 RFD

Holst Publishing Co.
810 Arden

Hyatt Ornametal Co. (A)
2308 Story

Iowa Electric Light & Power
812 8th Street

Commercial printing

Pre-treated peat products

Hybrid seed corn

County government printed
supplies

Mattresses

Newspaper

Carbonated Beverages

Upholstered furniture

Mortar Mix

Envelopes

Metal troughs, stairs,
rails, steel fabrication

Merit Baking Co. (B) 916 6th St.	Cookies
Mid-States Steel Corp. (A) RFD	Bar joists, beams, lintels angles, columns
Percival Refrigeration & Mfg. Co. (B) 1805 N Eisenhower	Commercial refrigeration
Quinn Wire & Iron Works (D) 1518 - 12th St.	Concrete pipemaking equip.
Randy's Frozen Meats (B) 1st & Brainard	Frozen Meat Products
Rolfe's Grain Aeration Co. (B) 821 - 15th St.	Grain aeration equipment
Russell Iron Works 715 Tama	Blacksmith
Schultz Laboratories (A) 823 Arden St.	Solvent Soap, abrasive soap
Sunstrom-Miller Press (A) 807 Keeler St.	Commercial printing
Tubular Crafts Co. (A) P. O. Box 204	Invalid Walkers
Vert Cosmetic Co. (A) 1026 8th St.	Shampoo, shaving cream, hair oil, wave set, tire cleaner

Highlights of the companies who are the larger employers of labor and shippers of manufactured goods, first on a national basis and secondly those who ship on a statewide and local basis follows.

Manufacturing Companies National Distribution

Quinn Wire & Iron Works - Ralph Kirk

A brief synopsis of the history of the Quinn Wire & Iron Works, Boone, Iowa, was presented in their two-page ad which appeared in the 75th Anniversary edition of the Boone News Republican, October, 1940. The firm was originally

established in the town of Scranton, Green County, Iowa, by C. J. Quinn and his son, C. C. Quinn. The Company started in a small way with the first products being automatic hog waterers and calf weaners. A few years later, the Company began to experiment with a machine for producing concrete drain tile, which were in large demand. The first machine was designed to make sizes 12 to 36 inches in diameter in two foot lengths.

In 1909, due to the interest and cooperation of the then existing Boone Commercial Association, the Quinn Wire & Iron Works moved to Boone. About the year 1921, the Company entered into the manufacture of machinery and equipment for the production of sewer and culvert pipes, and produced a machine of a heavy duty type for making large size concrete pipes. Quinn products have become standard for quality. With a small beginning, the Company has grown to a position that commands the respect and the patronage of the trade in many parts of the world. A brochure provided by the Company illustrates the present line of Daisy Hog Waterers and Poultry Waterers being offered to the trade. There is a broad range of types and design.

The brochure in which the concrete pipe forms produced by Quinn Wire & Iron Works Company are described, is very interesting in itself because of the completeness of the data and the pictures showing the various plants in which this equipment is used in all parts of the United States and in some foreign countries. The pictures of the various steps of manufacture taken inside the shops are particularly interesting and certainly speak volumes for the capability of the management and labor force in Boone. The management of this Company has expressed a sincere interest in the future of the City of Boone, and has been most cooperative in providing data which has become a part of our total of economic facts relating to the manufacturing in Boone.

Percival Refrigeration & Manufacturing Company - Stephen Radnich - Manager

Another large firm with home office in Boone, Iowa, distributing their product line on a nationwide basis is the Percival Refrigeration & Manufacturing Company. As the name would suggest, the major products of this Company are showcases, candy cases, dairy cases, walk-in coolers, freezers, environmental chambers, vegetable cases and special bodies made for the Cushman Motor Works. The management states that they are in a position, and have equipment necessary to fabricate most anything made of light gauge metal requiring forming and painting.

While the industry questionnaire we submitted was completed for us in detail and has become part of the total of facts pertaining to manufacturing in Boone, we were not fortunate enough to receive a brochure from the Company describing their products in a little more detail.

Heinrich Envelope Company - D. J. Gisvold, - Manager (See P. 110 for picture)

This firm was established as a branch plant in Boone in 1958. The home office is located in Minneapolis, Minnesota, with an additional branch plant being situated in Winnipeg, Canada. This firm, too, indicates that the major portion of their product is sold on the national market with emphasis on Iowa, Illinois, Wisconsin, Nebraska and Missouri in particular. A small percentage of the total product is sold directly to the consumer, with the balance being sold to larger firms who use the envelope in the sale of their own product. This plant is situated in the new industrial area immediately located to the east of the City of Boone, and described elsewhere in this section on manufacturing.

Merit Baking Company - Max L. Frazier, Vice President & General Manager

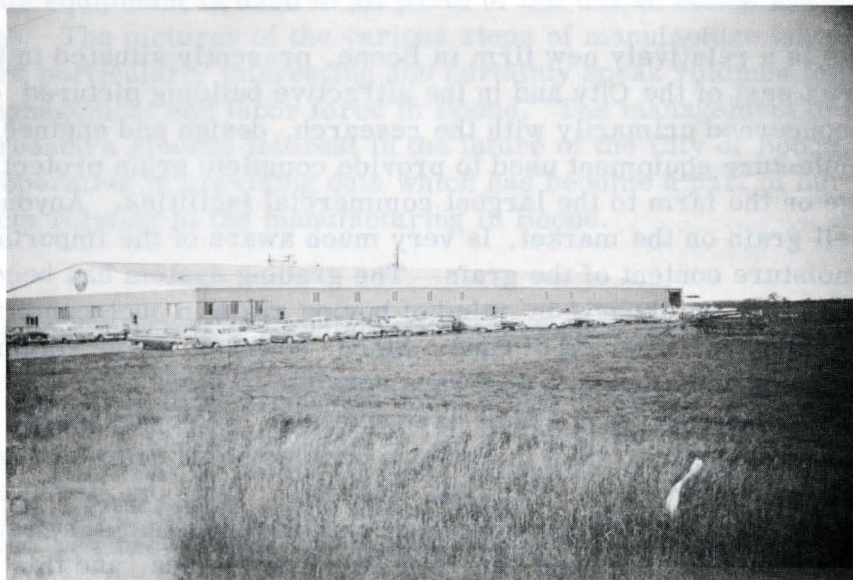
The bakery products, specifically being Archway Home Style cookies, are distributed from Boone nationally, with a small percentage going to the consumer market in an area with a radius of 75 miles. The management expressed themselves as liking Boone very well. There is no question but what the cookies have established themselves in the consumer market since the firm was started in Boone in 1953.

Rolfes Grain Aeration Company & Electronics Corporation (See P. 110 for picture)

This is a relatively new firm in Boone, presently situated in the Industrial District east of the City and in the attractive building pictured on P. 110. This firm is concerned primarily with the research, design and engineering required to manufacture equipment used to provide complete grain protection service in storage on the farm to the largest commercial facilities. Anyone who has occasion to sell grain on the market, is very much aware of the importance of the relative moisture content of the grain. The grading system has been established primarily with the thought in mind of buying grain in such condition that it would store safely for a period of time. Since, however, large volumes of grain are purchased and stored, it is always possible to store even a small amount of high moisture grain, and as a result have spoilage. Over the years, the grain has been turned from time to time in order to provide some degree of aeration and to eliminate spots where the grain was "heating". This can be scientifically determined and controlled with the equipment manufactured and serviced by Rolfes. The products are sold and serviced over a wide area, and this Company is one of the largest employers of labor in the Boone area. This particular Company would, in all probability, be considered to be a growth situation, because on a national basis, there is a continuing and expanding demand for the protection of farm products and the work now being done in electronics might very well provide an entree into some other phase of the rapidly expanding electronics field associated with the national defense effort. It should be emphasized, that due to time limitations, an extended personal interview with the management of this Company was not possible.



Heinrich Envelope Company



Rolfes Grain Aeration Company & Electronics Corporation

Urban Planning Grant: Project No. Iowa P-1

The preparation of this photo was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act. of 1954, as amended.

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City Planning Consultants

Companies with a State & Local Distribution of their Products

Boone Blank Book Company - C. V. Waychoff - President

The Old Reliable, in this particular category, is the Boone Blank Book Company. C. V. Waychoff, President. This firm was established in Boone in 1879. This Company maintains a very smart retail store as part of their business, and indicates that otherwise their products are distributed over the balance of the State of Iowa. The management indicated that Blank books and printing is their major line, requiring paper, binder boards, letters, and binding cloth. The business is conducted in an attractive building on Story Street immediately south of the central business district.

Mid-States Steel Corporation - Don Hubby - President

The Mid-States Steel Corporation was formed as a corporation in April of 1956. Prior to that time it had been operated since 1946 as the Boone Welding Shop. The principal products of the Company are structural steel, reinforcing products, bins, hoppers, pipe rails, stairs and miscellaneous metals. The corporation's principal sales area is in the State of Iowa. However, on rare occasions, its products were sold in Illinois and Minnesota. The business is situated in the industrial district to the east of Boone in buildings suitable for the requirements of the particular business.

Iowa Electric Light & Power Company - J. A. Flanagan - Division Commercial Manager

The firm was established in Boone about 50 years ago, home office in Cedar Rapids, Iowa. It is now one of the larger employers of labor requiring a high percentage of skilled personnel, the majority of whom live in the City of Boone. The major portion of the electricity is sold over an area within a 75 mile radius of the City of Boone. Mr. Flanagan, in addition to his responsibilities as manager of the Company's operations, is also President of the Boone Development Corporation, and a member of the Iowa Development Commission. It is the opinion of others with whom we conducted interviews that Mr. Flanagan is making every effort personally and through the Corporation to attract industry to Boone. This too, is another situation similar to the Boone Blank Book Company, in which a retail sales center is maintained in the central business district of Boone.

Randys Frozen Meats - G. W. Creasman - Partner.

The firm was established in Boone in 1955 with a home office at Boone. This is a partnership. As the name indicates, their product is meat specialties consisting of beef, veal and pork, distributed over the state as a whole.

Grarok, Inc. - James K. Mitchell - President

The firm was established in Boone in 1921 with a home office in Boone. It is a corporation, producing a clay and shale additive for mortar and concrete. Approximately 80% of the product is sold over an area of a 75 mile radius of Boone, with a very small percentage sold locally, and some nationally. This is a local company which is typical of many over the state. It might very well deserve a little more consideration from the Development Corporation as to its requirements.

Boone All Star Dairy - R. B. Clymer - Manager

Firm established in Boone in 1924. Home office, Boone; branch plants located in Gowrie, Paton and Stratford. The firm was originally organized by a group of farmers desiring a market for their milk and cream. In 1946 it was purchased by the present management; men who have devoted their life to the production and distribution of dairy products. This firm is somewhat different from the others that we have discussed previously in that they are farm oriented, and the product is sold on the consumer market, a large percentage in the City of Boone, the balance within a radius of 75 miles. As noted previously in one or two of the other interviews held with management, there is an expression here of the desirability of getting more people interested in working to attract and hold good small businesses in the City of Boone.

Coca Cola Bottling Company - Frank Linderblood - President

Established in Boone in 1918, home office being located in this City. The product, as the name indicates is soft drinks, with major distribution within the City of Boone, and the balance within a radius of 75 miles of Boone. Mr. Linderblood has expressed some constructive thinking on community attitudes toward local business.

The Boone Mattress Company - Joe C. Johnson - Owner

Established in Boone in 1938, with home office in this City. Products manufactured are mattresses and box springs, with a large portion of the sales being made locally, but the major portion within an area of 75 miles of the City of Boone. This business may, like Grarok, Inc, be one that should be given consideration by the Development Corporation to determine if there is an interest in expansion. It is a sole proprietorship, consequently, whatever is done would depend on the attitude of Mr. Johnson, but perhaps the first responsibility of any Development Corporation is to do what they can to enhance or enlarge the potential of the already existing businesses in the community. Very often this is more productive of additional jobs and income than continual effort to attract a "foot loose" plant from another area. Specific facts and figures reported on "confidential" industrial questionnaire have not been recorded above. Such specific figures as reported in the "1958 Iowa Census of Manufactures" are set out in appendix of this section.

Pertinent suggestions were made by the respondents to the industrial questionnaires in regard to several questions concerning improvements needed in Boone and what Boone can do to retain its present industries.

Often the interviewee would comment that there was a great lack of information relative to the industrialization plans of the City and/or the Industrial Development Corporation. The people of Boone should know more of what is under way to attract industry and should know more of what has actually been accomplished; that is, they should be able to obtain information which will contribute to their better understanding of the over-all problems that exist in this process of attracting new industry to the community. There was also feeling that the officers of the existing industries in Boone could offer a great deal of help, "could do something", if they were kept informed of progress of the industrial development plans.

Further comment concerned the desirability of maintaining and improving community facilities available so people would want to live in Boone, the thought being that this would be a long step forward in attracting industry to the City of Boone. Also, it is considered better that several small industries be attracted to Boone so that the economic situation of one company or two companies would not have a drastic effect on the over-all economy of the City.

The above-referred to businesses are those from which we received either the questionnaires and brochures and do not necessarily represent the full manufacturing activity of Boone, but certainly include the major manufacturers. Their cooperation in permitting personal interviews and completing the industrial questionnaire is very much appreciated.

Transportation

In view of the fact that the subject of transportation has been covered to a degree in the planning sections of the report, discussion of the railroad service available to Boone follows as part of the industrial or manufacturing section, the reason being that the railroads are now, as in the past, very important to the over-all industrial economy of the City of Boone.

Chicago, Northwestern Railroad

The following is a quotation from the Boonesboro Index of July 28, 1865, which in turn was quoted from the 75th Anniversary Edition of the Boone News Republican, Boone, Iowa, published October, 1940. "Thursday, July 20, 1865 - Cars are here. The long looked for time when the cars should make their regular trips, has arrived. On Monday of this week the passenger train left the depot at 1:15. Communication is now open. Boone County has an outlet and an inlet. The railroad has reached the heart of the county. Let the citizens rejoice at the County's prospective prosperity. We hope the years are very few

before we have a railroad running north and south through this County. We earnestly look forward to that time with an expectation that at some future day, not far distant, it will be realized. Speed the day.

The mails now arrive at this place from the east at 1 o'clock and 15 minutes and leave for the east at 11:50. We now get the mails about five hours earlier than when it was brought by stage from Nevada and the time is as much shortened in going east. All hail to the locomotive."

From the date indicated above until shortly after World War II, the railroad has been one of the dominant, if not the dominant factor of the economy in Boone. Over a period of years, various shops or round houses were built, and the families of the mechanics lived in the City until the facilities were all moved to Clinton, Iowa, as conversion to Diesel operation was accomplished. During these years, particularly in the 1930's and 1940's, Boone was considered to be the streamline train capitol of central Iowa. People from Des Moines and even more distant places traveled to Boone to board these streamliners on their way to Chicago or Denver and the Pacific Coast. Boone continues to be the division point on the Chicago Northwestern Railroad, but the number of employees, as indicated above, has been drastically curtailed. The Northwestern and Union Pacific Railroads discontinued their contract operation of passenger service through Boone so that gradually the number of passenger trains decreased, until now there are no passenger trains out of Boone at all on the Chicago Northwestern.

The Fort Dodge-Des Moines & Southern Railroad Company

The Fort Dodge-Des Moines & Southern is headquartered at Boone and has provided service to that City, Fort Dodge, Ames, Des Moines, and at one time Newton.

The road was built originally to serve the coal mine areas around Fraser and Colfax, Iowa, and at the same time, extension of the road into the downtown areas of the above mentioned cities was achieved by acquiring local transit systems.

Passenger service is no longer provided on the Fort Dodge-Des Moines & Southern, although at one time this was a very active service offered to those living in central Iowa. Mr. W. A. Kern, Auditor of the railway, provided us with the following information. The railroad employs 106 persons in Boone. Of that number six are women, 27 are office employees, and the average wage is approximately \$22.00 per day.

Chicago, Milwaukee, St. Paul & Pacific Railroad

Inquiry at the local offices of the Milwaukee Railroad revealed that there is a station agent and two or three section hands located at Boone to provide necessary services at that point for the railroad.

The importance of the railways to Boone can hardly be over-emphasized, particularly if it is considered from an historical standpoint. The management of the Chicago, Northwestern Railroad has during the past few years been very aggressive in their efforts to attract industry to sites along their lines. They have cooperated fully with local industrial development corporations. The Fort Dodge-Des Moines & Southern, likewise is well situated to provide service to prospective industrial companies, particularly should these companies be in a position to supply component parts for products being manufactured at Des Moines or Fort Dodge or Ames.

Industrial Development in Boone (See picture on P. 116)

The Chamber of Commerce of the City of Boone is considered to be the spearhead for the development of industry in the area. An interview with Mr. Tom Schwieger, Chamber of Commerce Secretary, revealed the following facts: The Chamber keeps on file, active, semi-active, and dead files, of all industrial prospects. Six to twelve industrial prospect files can be considered active at any one time. Since September 1961, three active prospects have been referred to the Chamber through the Iowa Development Commission and one referral on a tentative basis only. The identity of these prospects remains anonymous to persons in Boone until such time as the Company has decided to accept a proposal and to move to Boone. Leads are also brought in by local people, salesmen, and follow-up on advertisements appearing in the leading financial newspapers. The Chamber hopes to attract to Boone such industry as has a fairly stable financial background, a potential for growth, which will provide a type of employment in which there will be a demand for a relatively high number of skilled workers, and be such as to afford standard wage rates.

Preference was also expressed for industry not directly related to agriculture, such as, manufacture of textiles, electronics, or an assembly plant of a type that is market oriented rather than agriculturally oriented. Too, the pressure is to provide employment for men, but it is recognized that there is a considerable force of women available for industry in the Boone vicinity. Mr. Schwieger reports, that since September of 1961, two industries, which were locally organized, that is to say, home grown industries, have been helped by the Boone Industrial Development Corporation, through the Chamber of Commerce. Management suggestions and financial backing have been provided, together with help in meeting the requirements for Small Business Administration funds.

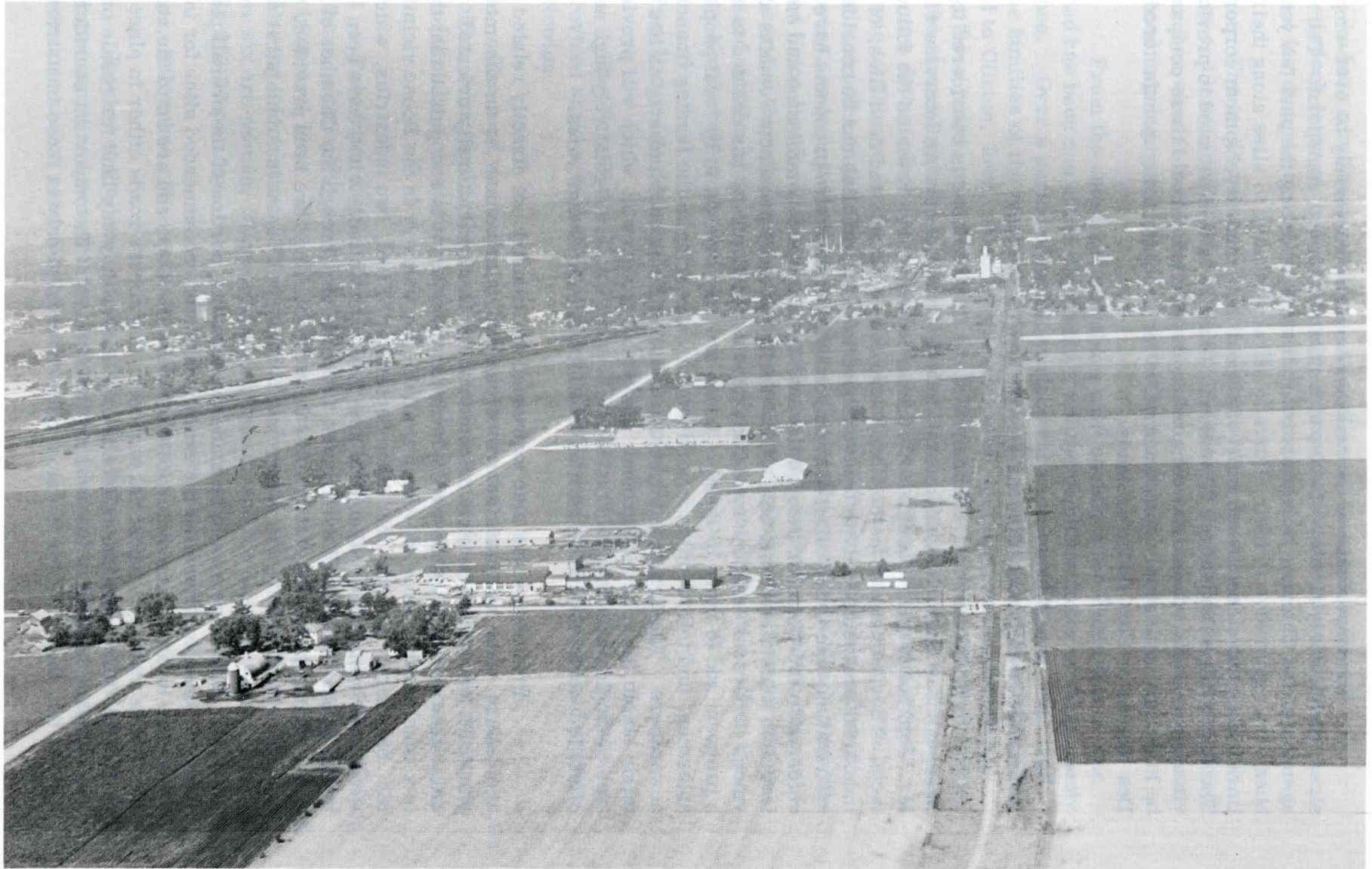
Reference should be made to the zoning portion of the overall planning study of Boone to determine the exact location of recommended sites for industry. These are located immediately to the east of the City, and are so to the north and west, with trackage, industrial services, and access roads either in place or available. Very often the railroads own land or may buy land for resale or lease to a company wishing to locate along their tracks. The important consideration here is that they are, for the most part, interested only in those industries which

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EAST INDUSTRIAL AREA



will provide traffic for their railroad. However, since they conduct their industrial development organizations on a nation-wide basis, and have men constantly calling on prospective shippers, it is to be recognized that they are in a preferential position to attract industry to the Boone vicinity.

Mr. Schwieger is endeavoring to establish a list of all available buildings for industrial, commercial and warehouse use, together with the appropriate description as to size, floor loadings, sprinkler protection, zoning and location for rail and truck pick-up and delivery. Special note will be made of the availability of the different industrial services such as electricity, water and other utilities. It should be noted at this point too, that there are individuals in the larger cities, including Des Moines, who are interested in building for responsible tenants. The Company with a nationally recognized credit rating can very often lease a building which has been erected and furnished on funds borrowed on the strength of the lease which they execute. Particular note should be made at this point though, of the fact that such companies need not rely only on individual investors, but in the case of Boone there are available funds through the Boone Industrial Development Corporation. The Boone Industrial Development Corporation has as one of its purposes, the financing and erection of industrial buildings for firms on a lease or lease-purchase basis.

The leases have been on a net basis consisting of four components, - depreciation, taxes, insurance and interest. The result of such leases has been that the plants already built had been available on a monthly rental of approximately three-quarters or 1% of the gross investment. The lessee has an option to purchase the plant at any time at a price representing the depreciated book value. The Articles of Incorporation provide for a wide range of activities, including housing.

This Corporation was established as a profit Corporation, with such profits to be used for reinvestment in industrial projects. A 2% dividend was paid for the first time in April 1959. The Corporation was chartered early in 1955, and capitalized for \$250,000 - 210 persons made pledges, the paid in capital donated at earned surplus, totals \$90,664. All stockholders are Boone people, who are interested in the future of their community, and it is an integral part of the Chamber of Commerce program to attract industry to the Boone vicinity.

In regard to the attitude survey submitted to 300 rural residents of Boone County, it was determined that out of a total of 100 answers to the following question, "Would you consider purchasing stock to buy land for industrial sites as an inducement for prospective industry?" 30 answered yes, 70 answered no. The answer to the next question, "Would you consider purchasing stock to finance a building for a new industry?" - "With a guaranteed interest return on your investment?" - was more favorable in that 49 answered yes, and only 51 answered no. The answers to these questions indicate that the farm people living in the Boone area, recognize the value of industry to them as well as to those living within the City Limits of Boone itself. Possibly some of these people have not been approached by the leadership of the Boone Industrial Development Corporation as

to their interest in making an investment.

TABLE 39

REPORT OF BOONE CHAMBER OF COMMERCE

	Industrial Sites Available						Is Site Optional or Owned
	Acres	Price	Sewer	Water	Gas	Electricity	
A.	28	600	No ¹	Yes	Yes	Yes	Owned by Develop- ment Corp.
B.	38	1000	No ¹	Yes	Yes	Yes	No
C.	72	To be negotiated	Yes	Yes	Yes	Yes	Owned by C&NW RR Development Corp.. will assist in nego- tiation
D. ³	12	1000 ²	No ¹	Yes	Yes	Yes	Owned by one of the Directors of Devel- opment Corp.
E	143	525	No ¹	Yes	Yes	Yes	Owned by one of the Directors of Devel- opment Corp.
F	12	To be negotiated	Yes	Yes	Yes	Yes	No

Sites A through D are on railroads with good concrete highways servicing them.

1. At City limits. Will be extended to this industry at no cost to one industry.
2. Site D includes existing buildings.
3. Sites A & D are adjoining, therefore, if more acreage is desired than is in Site D, expansion into Site A can be arranged.

The Industrial Park is located East of Boone. New paving has been laid to one site, and it is also serviced by the railroads. An eight-inch intermain and gas pipe line also services one area. A new power station has been constructed near the site, thereby guaranteeing full utilities to any size industry.

Although Boone is located near the Des Moines River, the City and the Industrial Park are both approximately two hundred feet above the level of the river, thereby eliminating any chance of flooding.

Summary

Professor E. R. Stoddard, Department of Sociology, Drake University, expressed himself as follows in regard to industrial development in the Boone vicinity. Perhaps it should be emphasized again that these conclusions are based on personal interviews held with a number of the leading business men and professional and civic leaders. Brief interviews were also conducted with those in Boone for purposes of shopping.

"Boone has served in a dual capacity as a County seat and farm service center, and its rapid expansion was heavily dependent upon the railroads merging at this point. A few industries and increased tourist mobility along U. S. 30 through part of town have produced some slight diversification in income and business potential. More recently industries have come in from the outside and others have locally been founded or expanded, but Boone has assimilated these slowly or hardly at all, and the impact of these establishments on the local style of life appears to be rather small. Plans for future industrialization which would be of a slightly more disjunctive nature will have ramifications in the economic base, community services and institutions, and to the social structure and sources of legitimation and power.

1. New Industry is seen as a potential source of high class management personnel who will provide community leadership.

a. These persons might provide more customers for the fashionable stores of Ames and Des Moines rather than for local consumption (except of staples). Their social club memberships might also be "elsewhere".

b. A manager of a larger firm, with this as one of many plants, is somewhat organization-oriented rather than community oriented. He wants vertical mobility within the organization, and will only furnish enough "leadership" to the local community to maintain satisfactory "community relations".

c. Local expansion into larger industrial plants will provide fewer outside managerial personnel. They will be oriented toward the community and the present style of life than the new managers of the larger corporations sent in from larger urban centers. **THIS TYPE OF EXPANSION IS THROTTLED BY LACK OF LARGE QUANTITIES OF EXPANSION CAPITAL LOCALLY AVAILABLE AT REASONABLE RATES.**

2. The local citizenry are somewhat uniformed about the efforts of local industrial leaders to get more industry in. There appears to be a general feeling among the populace that C of C leaders and industrial leaders are trying to keep industry out. Some also attribute this attitude to the older traditional families. **FROM OUR PERSONAL INVESTIGATION, THIS IS CONTRARY TO FACT.** These last-mentioned persons are the most active in trying to attract industry, at least on the surface and in their verbal commitments.

3. The orientation toward type of industry varied. To those desiring an even, uncyclical economy, an industry not related to agriculture is desired. To those who see a genuine problem of attracting an industry at all, they see that one of the greatest sources of drawing power is attracting an industry which corresponds with local resources - i. e., a packing plant, food processing plant, canning factory, etc.

In order to better evaluate both the present industrial situation in Boone and the potential growth of industry there, questionnaires were submitted to the manufacturers for completion.

Several manufacturing firms in Boone expect to expand in the near future. In response to the industrial questionnaire, three firms with a total of over 100 employees reported they expect to expand by 50% during the next five years and three firms with approximately 75 employees total expect 25% expansion. Two small firms felt they would expand but did not venture by what per cent. No firm of the ten responding indicated there would be a cut-back of production.

Six firms indicated the need of additional financing as follows:

Plant expansion	- 3 firms
Modernizing existing plant	- 1 firm
Improving equipment	1 firm
More operating capital	1 firm
Market development	1 firm

Regular sources of borrowing are considered adequate to meet the above needs by four firms. Five other firms indicated that local sources of borrowing were not adequate.

Respondents to the industrial questionnaire were asked to appraise the location of their plants in Boone in regard to the following list of items:

X Plant site (available land)	Zoning Ordinance
X Adequate building (factory space)	X Equipment
X Community attitude	X Local taxes
Community facilities (sewage, etc.)	Sewage (or other charges)
Water supply (characteristics)	X Water cost
X Power supply	X Power cost

Fuel supply (esp. natural gas)	X	Fuel cost
X Labor supply (quantity)	X	Labor cost (wage rates)
X Labor situation (work stoppages)		Labor productivity (in general)
Distance from raw materials		Distance from your major markets
Product competition		Price competition
X Rail transportation service		Rail rates
Truck transport service		Truck rates
X Air service		Air rates
Pipelines		Pipeline rates
X Distribution facilities (storage, warehouse, terminal facilities)	X	Financial institutions (banks, etc.)
X Climate	X	State taxes

The items were marked only if the factor involved was important to the pursuit of the business. Most of the responses were favorable. Those items most often considered unfavorable in regard to the firm's location in Boone are marked with an X in the above list.

An unfavorable designation may not indicate dissatisfaction with the Boone area. For instance, of the two firms which indicated their plant site as unfavorable in their present location, one planned on staying in Boone. One indicated a move would be necessitated by plant expansion.

Again, in regard to labor, one item was regarded as satisfactory and three as unsatisfactory. In three cases the lack of a sufficient continual supply of skilled labor to meet the needs of the individual industry, was deemed unfavorable and one respondent noted that wage rates were deemed unfavorable.

In view of the expected expansion of industry in and near Boone, consideration should be given to the sum total of the unfavorable responses. Each item might not affect every industry to the same extent, but industry planning to locate in Boone will more than likely take into consideration all of the items. Most often noted are cost items: water cost, power cost, fuel cost, labor cost, local and state taxes. In addition, the adequacy of local banks in regard to regular banking facilities and in regard to financing, as noted before, was questioned when banking services needed extended beyond the local Boone community. In regard to equipment, it was questioned whether adequate repair

services and parts suppliers were available in Boone. Community attitude was singled out as unfavorable toward industry. (This is interesting in view of the responses from interviews and other questionnaires. One answer indicated the problem might be one of an absence of positive industrial promotion.)

The manufacturers offered the following suggestions as to what Boone might do to encourage more industry in the community and/or area:

1. Provide more housing and rental housing.
2. Actively promote small business.
3. Enlarge the scope of banking activity.
4. Supply houses might gear their products more to the specific needs of Boone industries.
5. Encourage a high school curriculum offering courses to develop skilled shopmen; also adult education to the same end.
6. Plan toward a community center.
7. Support the planning and zoning commission.
8. Work toward an industrially knowledgeable climate and publicize industry-attraction efforts.

It is the opinion of many in the community that not enough is being done to exploit the availability of the technical know-how available through the Iowa State University and its faculty and staff in regard to agriculture, mechanical arts and to the Atomic Energy Institute on the campus.

With world-wide political tensions remaining high, large sums of money are being spent for defense oriented items, which are many times high in value and low in transportation costs, thus lending themselves to distribution from centralized locations such as Boone. Here again the educational institutions of the State of Iowa, both public and private, are in a position to make substantial contributions. Real economies might be realized by producing these products at Boone.

An editorial entitled Plans for "Waking Up" the Midwest appeared in a recent issue of the Kansas City Star. The import of this editorial is that space-age manufacturing and laboratory projects are not developing in the Midwest as in other areas of the country - particularly in the immediate vicinity of the larger universities.

The National Aeronautics and Space Administration and the Midwest Research Institute of Kansas City are working with business and 14 universities in a six-state area to determine what this region has to offer and what it needs to join in the general space effort. (See Page 1A, Appendix)

What this region can do in the way of catching up will be reflected in the economy for years to come.

Page 3A - 8A, Appendix, contain portions of a report on locating research-oriented industries in the Ames - Des Moines area.

The December 1, 1961, issue of the Chicago Daily Tribune reported a speech by Dr. Haldon A. Leedy, director of Armour Research Foundation of the Illinois Institute of Technology. He "charged that midwest states are not receiving a proportionate share of military electronics and aerospace research and development contracts because of apathy on the part of local business and industry leaders."

Leedy told the group that immediate steps must be taken toward a planned effort to increase midwest research and development. He cautioned that future technological advances will determine the progress of industrial growth.

"This growing indifference to the value of research and development on one hand, the over-emphasis on strict hardware manufacturing on the other, may already have caused a percentage decline in the number of midwest research laboratories," Leedy asserted.

Leedy noted that since 1950 midwest laboratories have dropped from 27 to 24 per cent of the national total while the west coast region in the same period rose 12 per cent.

"Failing to keep up will result in far-reaching consequences to the midwest's entire industrial complex," Leedy said. "To win more government research and development work, a thorough study of military and defense requirement is needed," Leedy asserted. "Then we must be willing to invest in facilities to meet those needs," he said.

Even so, Iowa has witnessed pronounced growth in certain industries related to manufacturing in the "more heavily concentrated areas to the East and should continue to do so" The most outstanding of those has been the electrical machinery industry, including electronics.

The census group of which it is a part—electrical machinery, better than doubled in value added in Iowa in the four years, 1954-1958. Other manufacturing categories, not related to agriculture, which underwent increases in excess of the State increase in that same period, and their percentage increases are:

Chemicals and products	54.1 per cent
Pulp, paper and products	53.9 "
Stone, clay & glass products	52.1 "
Fabricated metal products	39.6 "
Apparel & related products	39.4 "

We see no reason why this trend should not continue into the future."
(Iowa - 1975)

"The net result of all this is that the relation of manufacturing to agriculture may be about to undergo an important change. In particular, its reliance on farm inputs and outputs may be diminishing, relatively speaking." (Iowa - 1975) That is, income derived from a most volatile component of the Iowan economy - that from farming - is being diminished relative to the total and a more stable annual total personal income should result.

A relative increase in manufacturing and the concomitant decrease in number of persons employed in agricultural pursuits, is bringing about a change in the consumer goods and services offered in communities in Iowa.

A careful analysis might very well be made of the demand for component parts of products manufactured in Des Moines or Fort Dodge and other towns in Iowa.

There are 289 manufacturing plants in Des Moines, 45 in Fort Dodge, and more in Ames and Marshalltown and other nearby concentrations of industrial development. The Iowa Development Commission, publication Iowa Manufacturers Directory, 1959, is the source of the breakdown of the number of employees as shown in Table 40.

TABLE 40

NUMBER OF MANUFACTURING PLANTS
BY NUMBER OF EMPLOYEES

	Total	A	B	C	D	E	F	G
Ames	27	19	6	1	1	0	0	0
Ft. Dodge	45	18	9	10	4	3	1	0
Des Moines	289	155	60	31	29	4	4	6
Marshall- town	45	23	9	3	8	0	1	1

Number of employees: A under 20, B 20-50, C 50-100, D 100-250, E 250-500, F 500-1000, & G over 1000

Information by firm, location, and products is available in lists prepared by the Iowa Development Commission for use by those concerned with manufacturing in the State.

In Des Moines and Fort Dodge industry has concentrated in several major categories. In Des Moines, these have been printing and publishing, food and kindred products, machinery (except electrical) and fabricated metal industries, with two large manufacturers of tires and farm machinery in Ankeny and Des Moines. In Fort Dodge the emphasis has been on meat processing and manufacture concerned with gypsum and clay products.

Existing and potential growth industries in Des Moines include light metal products, small machines and tools, electrical equipment, miscellaneous housewares, specialty food products, sporting goods, toys and children's vehicles. In Fort Dodge, industry diversified from meat processing and clay and gypsum products include feeds and commodity oils, electronic equipment, pleasure boats, animal pharmaceuticals, play and work clothing, fishing tackle, farm machinery, and corrugated paper boxes.

Industrial development in Des Moines, Fort Dodge and Ames for the two years, 1959 and 1960 is set out below according to a report of the Iowa Development Commission. (See Table 41 Page 126)

In view of the rapidly changing economic base in Iowa, the following comments from the Report of the Governor's Commission on Economic and Social Trends in Iowa, December, 1958, Iowa's Future: A Citizen's View, emphasizing the importance of intercommunity cooperation and effort in attracting industry - and in expansion of industry already existing, are especially pertinent:

"It is not at all uncommon in Iowa for two or more cities of comparable size, in the same area of the State, to "fight one another" for new industries. Neither is it uncommon for larger cities to ignore the needs and activities of their satellite communities.

This kind of cooperation eliminates duplication and waste in local promotional efforts; it provides the kind of "area boasting" which cannot fail to impress industry itself. Iowa communities need a keen sense of balance between inter-community competition and inter-community cooperation to foster sound Iowa regional growth. The Commission recommends that the Iowa Development Commission encourage and facilitate metropolitan area, county and/or multi-county organizations for cooperative growth activities.

Competition among cities is healthy; it helps to get new industries in the best location. Not only does this aid the locating firm but insures the maximum growth and stability for the economy of the city selected. At the same time, it must be remembered that a new industry has a buying up effect not only on the specific community in which it locates, but also on nearby towns which are in the same shopping and labor market area.

Thus it is important to realize that while the force of competition is a valuable tool in getting resources in the right place (in the same way that it tends to allocate resources among industries), needless competition among neighboring interconnected communities should be avoided. Industrial development planned on a county-wide (or multi-county) basis could help eliminate much overlapping and duplication of effort. True, while each specific community wants a new factory in "our town" they should realize that significant gains will accrue to their economy so long as the plant locates within "our area". "

TABLE 41

INDUSTRIAL DEVELOPMENT

Firm	Probable Employment	Products Manufactured
AMES: <u>Newly Organized</u>		
Ames Concrete & Industrial Corp.	13	Concrete Pipe
AMES: <u>Expansions</u>		
Bourns Laboratories, Inc.	80	Electronic equipment
DES MOINES: <u>Newly Organized</u>		
New Way Manufacturing Co.	10	Bulk feed bodies
DES MOINES: <u>Expansions</u>		
Iowa Paint Mfg. Co.	10	Paints
Iowa Tubular Steel Products	8	Steel culverts & Tubing
Midwest Burlap Bag Co.	50	Paper & cloth bags
Firestone Tire & Rubber Co.	(figure not disclosed)	Passenger car & Industrial tires
General Mills, Inc.	60	Flour
Home Plastics, Inc.	3	Plastic bags & printing roll stock
Western Tool	--	Lawn mowers, lawn equip. garden tillers
FORT DODGE: <u>Expansions</u>		
Fort Dodge Laboratories	--	Veterinary drugs & Supplies
Avco Mfg. Co., New Idea Div.	100	Farm equipment
Fort Dodge Container Co.	--	Paper shipping containers
Fort Dodge Packing Co.	(figure not disclosed)	Meat processing--beef



Urban Planning Grant: Project No. Iowa P-1

The preparation of this photo was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act, of 1954, as amended.

Prepared under the Contract for the Iowa Development Commission by: Anderson Engineering Company City Planning Consultants

Boone Central Business District

The retail stores and financial institutions are for the most part situated in a two block strip along Story Street with probably the 100% corner being at the intersection of Story and 8th. There has been some lateral deviation from the 100% corner along 8th Street but this is limited. Sears Roebuck is the one large store not situated in the immediate vicinity of 8th and Story.

Retail Trade

The primary function of the City of Boone in the over-all economy is that of a trading center. Employment in wholesale and retail trade accounted for 25.3% of total employment in 1950. In 1950, the only other category to account for as large a percentage of total employment was transportation, communications, and other public utilities which contributed 24.8% of total employment. Though the loss of railroad employment has been great, it is considered to have gone as far as it will go.

Too often industry is regarded as the true economic base of every city. In Boone, manufacturing accounted for only 7.3% of total employment in 1950.

In a community such as Boone, situated as it is in the midst of a rich agricultural area, the wholesale-retail trade business component is in effect the major element responsible for the existence of the town as an urban central place in that it serves as the service center in the accumulation and distribution of agriculturally produced raw materials to the larger consumption centers of the nation and as the distribution point of consumer and farm input goods to those living in Boone and near it.

The relative importance of employment in retail trade varies in counties over the State. Five separate variables were found to be both individually and collectively related to variation in retail trade employment by Clark C. Bloom and M. Jarvin Emerson, "Trends in Retail Employment in Iowa, 1948-1958", Iowa Business Digest, Bureau of Business and Economic Research, College of Business Administration, State University of Iowa, July, 1960.

Messrs. Bloom and Emerson found the five variables explained 41% of the county to county variations in retail employment, a disappointing percentage because it leaves unexplained the remaining 59% and because the five factors considered "were those which a carefully informed, a priori judgment would suggest as likely to most influence the level of retail employment per 10,000 population". (For purposes of comparability, the variations were stated in terms of variations in retail employment per 10,000 population.)

The five variables are "(1) per capita income, (2) gross cash receipts from farm marketings per rural-farm person, (3) the proportion of urban to total population, (4) total of distances in each of the four directions to the nearest place of the same or larger population, and (5) rate of population change."

Although Boone County increased the number of persons employed in retail trade 1948-1958 by a percentage category of 9.8% to 11.62%, the total number of retail trade employees per 10,000 population is fairly low due to the effects of Boone's nearness to Des Moines, Fort Dodge, and Ames and to the slow rate of population change.

The relative importance of the retail trade sector of Boone will depend upon how effectively the merchants perform two functions. First the demand of the local consumers for goods and services at the retail level must be satisfied and such services are not usually regarded as a part of the economic base but rather a part of the city serving functions.

Secondly, the City building functions of the retail trade sector is that which concerns itself with the sale and distribution of goods at retail to those living outside the geographical boundaries of the City of Boone. Successful execution of this function produces an income stream into the City which contributes to the employment of those serving the "outside" customers and thus contributes directly to the growth and development of the City.

It is appropriate to refer briefly to one segment of the personal services classification which has an important bearing on the volume of retail trade in the community. This specifically is the professional element as represented by the legal, medical and financial practitioners. The choice of those who live outside of Boone as to where they will seek such professional services and certain other personal services is highly relevant to their choice of a trading center.

In any consideration of the retail trade activities of a community such as Boone, there must be a clearly defined distinction made between those purchases which the farmer makes for his use and the use of his family in contrast to the purchases he makes for the purpose of contributing to his farm production.

The first of these of course, is customarily referred to as consumer goods sales whereas the second as noted earlier in the report might very well be referred to as agri-industrial inputs to farm production of crops or livestock.

In terms of dollar value, farm industrial purchases, that is inputs, used in the operation of the farm business, are two to three times larger than purchases of consumer goods for the average farm family in Iowa. For example, in 1955 production expense accounted for 70% of the farmer's cash receipts, leaving approximately 30% for either capital goods, buildings, farm equipment, etc., and consumer goods and services.

It is highly probable that small towns throughout Iowa, serve to a larger degree, the agri-industrial needs of farms in the surrounding areas and the sale of farm input items comprises the largest part of the total retail sales. In contrast, the largest part of retail sales in the large urban centers, is composed of consumer goods sales. Increased sales within the small towns is not solely due to rapidly increasing purchases of farm production items by farmers. There is evidence to suggest that there is, in fact, a shift from the larger urban center to the community of 2,500 people or under, for the purchase of these agri-industrial goods. Included within which are, in the first category, sales of lumber, farm equipment, hardware items. The second category is comprised primarily of the sale of feed to farmers. There is enough of a trend evident to

indicate that there may, in fact, be a substantial decline in the volume of consumer goods purchased in the smaller towns throughout Iowa.

Reference was made in the summary section of this report to four categories of activity that might be explored to achieve a great degree of economic well being in the community.

Two of these are appropriate to this general section of retail trade. The first of the two is numerical or physical expansion of the service component of the economy and the second is expansion by improving the efficiency, that is, by reducing the cost of locally produced goods and services (Paulsen).

Considering the possibility of expanding the service component of a community economy, the very real possibility exists that the addition of a service which already duplicates an existing service would not result in any economic gain providing the services rendered by the first establishment were adequate.

The addition of a new business supplying a service not already provided might represent gain provided the money spent therein would not detract from the amount previously spent with other establishments in the community. To be beneficial there must be extra spending by non-local people to prevent the other stores from being worse off than before the new business was added.

The second of the above two possibility activities, namely improving the efficiency of local institutions, might represent an opportunity for considerable gain by reducing the cost of providing services. If the money saved as a result of greater efficiency of service is spent for another service or in another establishment, then that amount would represent gain and would not change the economic base but would in effect expand the variety of services offered.

By way of illustration, should two or more elevators located in close proximity be consolidated, a medical clinic might be provided without changing the economic base. (Paulsen)

In the expansion of local business and/or services, local financing appears to be the main consideration. Since this would be a somewhat gradual growth, initiated by local interests, it would not have the extreme effects of outside industry coming in. Hence, in this whole discussion, the proposition of how likely is Boone to "land" a semi-large industry, what economic and social changes would develop, and what effects this would have on present customers and extant trade area is of strategic importance.

New industry as a taxable base might augment present Boone resources, nevertheless, there is a danger in expecting local industry to increase customers without affecting present clientele. Thus, some type of empirical studies are crucial to find out the values, service demands, and attitudes of present customers, and a corollary to that of delimiting the general trade area of Boone.

The following portion of the Retail Trade section is concerned primarily with the results obtained in the course of such empirical studies.

It must be emphasized again that this account is not to recommend solutions, but to provide evidence upon which somewhat valid definitions of the existing problems might be made and realistic solutions concluded.

A farm - non-farm and Boone - non-Boone survey of those walking past the northwest corner of 8th Street and Story, was conducted as a means of sampling shoppers in the downtown Boone business district. This was accomplished with a total of 201 adults during four one-half hour periods, two of which were on consecutive Friday afternoons and two of which were accomplished on consecutive Friday nights. The following characteristics of these "shoppers" were determined.

Out-of-state shoppers account for a small percentage (under 4%) and seem to be more prevalent during traditional eating hours. During the afternoon about 20% are farmers, but evening shoppers are more than 50% (approx., 53%) farm people. The non-farm resident of Boone, while accounting for the majority of daytime shoppers (65-80%) account for only one-half of the shoppers in the evening (38-52%).

An additional effort was made to determine origin of shoppers by means of checking 1,000 car licenses in the central business district of Boone. This was done on two consecutive Friday afternoons and two consecutive Friday evenings. Cost would not allow evaluation of true residences of car operators, consequently, the above referred to personal interview technique was also used.

The out-of-state cars varied from 2% afternoons to 4% evenings, or an insignificant group as represented by cars parked in the business district. Roughly 20% of the licenses were from counties other than Boone, both in the afternoon and in the evening.

A mail questionnaire with one follow-up postal card reminder was sent to 302 randomly selected farmers of Boone County. 136 were returned or a 45% response. Assuming that those most negatively oriented are heavily represented in those returned, it should be noted that if biases exist

in the sample, it might safely be assumed that farmer attitudes are, if anything, better toward Boone than our sample represents.

First some characteristics of those sampled. It is a traditional and stable population.

Completed questionnaires were returned by 136 farm families and 133 were tabulated on IBM equipment.

TABLE 42 STATISTICS FROM FARM FAMILY QUESTIONNAIRES

Average Length Time Lived in This Region 36.6 years.

Only 20% in area for less than 20 years.

20% have lived in area 50 years or longer.

Size of family ranged from one person to ten.

Two families had more than seven members.

80% of sample had from two to five members.

Average size of family - total of four members.

Head of Families Age - Range 25 to 87 years.

10% over 65 years of age.

25% between the ages of 40-46.

Majority had some high school education (55%).

25% have had some college.

20% of the respondents had only a grammar school education.

Distance of residents from Boone.

25% live between 12-15 miles away.

Approximately 34% live within seven miles of Boone.

44% live over 8 and under 16 miles.

22% live 16 miles or more.

Of those indicating their future plans in farming,

- 12% are going to sell their farm.
- 30% are going to pass farm on to their children.
- 50% plan to expand operation and acquire more land.
- 30% increase the mechanization potential of present farm.

Two-thirds own their own farms or homes.

Breakdown of income - Over half the respondents make from \$3-7,000 per year. The rest are equally distributed above and below that range.

The returns showed a range of returned questionnaires to those sent out as follows:

- 18% Garden Township
- 27% Dodge Township
- 30% and 31% Douglas-Cass and Yell respectively
- 62% Harrison
- 58% Grant
- 54% Des Moines and Pilot Mound Townships

The following scores represent the feelings of our sample of Boone county farmers to the following facilities and service in Boone.....

	Excellent (1.00)	Good (2.00)	Fair (3.00)	Poor (4.00)
Churches	1.58			
Bank & Finance	1.63			
Parks & Recreation	1.68			
Library	1.72			
Feed & Farm Suppliers	1.73			
Schools	1.73			
Fire Protection	1.75			
Hospital, Medicine	1.86			
Elevators, Stockyards	1.96			
Machine Parts & Services		2.28		
Roads & Streets		2.72		
Police & Legal		2.94		
Parking			3.04	
Bus & Train Connections			3.20	

IMPROVEMENT OF CITY: Suggestions from farmers

25 said "Improve streets"

24 said "Better parking facilities, better access streets for farm trucks, or free parking for customers. Truck parking.

10 said "Get some industry with jobs."

5 said "Need public rest rooms". Many more mentioned dirty rest rooms at County Court House - Rest rooms needed in downtown Business District.

10 related "Political stuffed-shirts, graft, city council biased against farmer, etc.

9 wanted improved youth recreation facilities for youth of farm and town provided by City if by no one else.

Rating of Boone Business Section

	Excellent (1.00)	Good (2.00)	Fair (3.00)	Poor (4.00)
Credit facilities		1.89		
Heat/air conditioning & physical comfort in stores		1.96		
Accessibility from residence		2.06		
Varied selection of mdse.		2.13		
Sales courtesy & attention		2.24		
Competitive prices		2.26		
Knowledge of new products		2.32		
Guarantee of products sold		2.33		
Store fronts		2.26		
Machinery parts & service		2.42		

All respondents were more critical of Boone businesses than of Boone city services. It appears that self-identification on part of Boone has not been developed in those beyond the immediate environs of Boone itself.

A questionnaire adapted from that used by the Bureau of Business & Economics Research at Iowa City was distributed to 100 or so of the businessmen in Boone. The sample was selected with the thought that there should be a wide representation in the types of businesses and location of businesses. There were a number of the retail stores situated in the central business district, because their volume is so great, they do not know their customers as do the operators of smaller businesses. The opportunity to explain the

significance of the questionnaires to the Economic Base Study was not afforded, and the answers were not elicited by means of personal interview, but rather by mailing the questionnaires, and in some instances delivering them personally with limited discussion. One of the primary objectives of this study was to determine the approximate percentage of the total purchases made by those living in Boone, those living in towns other than Boone, and farmers with a further determination as to whether theirs were consumers goods or agri-industrial inputs used in the operation of the farm.

A second series of questions endeavored to determine the agri-cultural commodities purchased by middle-men and assemblers of Boone. The response to this section of the questionnaire was particularly disappointing. Very possibly the management is more oriented to the farmers and the national markets than to the City of Boone.

The third series of questions was concerned with generalized questions relating to personal matters, competition encountered, and suggestions as to what might be done to achieve a more desirable community of Boone. A specific question was asked as to what would be the probable increase in population of the City of Boone during the next ten years. As indicated elsewhere in this report, the majority concluded that there would be an increase in population of approximately 1,500 persons. The replies received from the questionnaires, personal interviews, etc., were evaluated by Professor E. R. Stoddard of the Department of Sociology, Drake University, Des Moines.

It is not the intent of this report to minimize the desirability of providing adequate services and goods to those persons living in the city, but rather to point out that by virtue of location there does not have to be the same degree of effort made to sell to these customers as in the case of those who live outside the City and have a choice of shopping in Boone - or Des Moines, or Ames, or Fort Dodge.

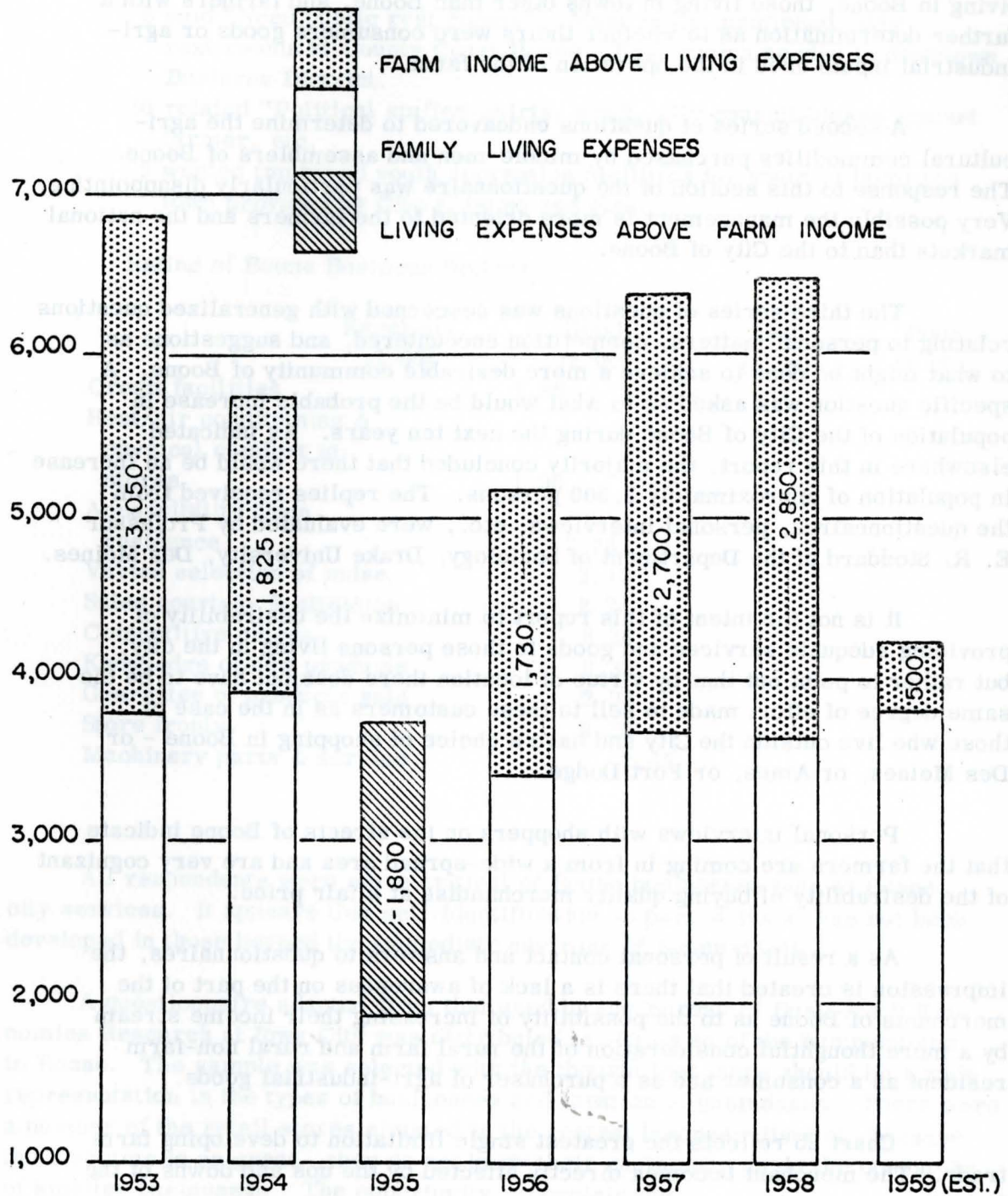
Personal interviews with shoppers on the streets of Boone indicate that the farmers are coming in from a wide-spread area and are very cognizant of the desirability of buying quality merchandise at a fair price.

As a result of personal contact and answers to questionnaires, the impression is created that there is a lack of awareness on the part of the merchants of Boone as to the possibility of increasing their income stream by a more thoughtful consideration of the rural farm and rural non-farm resident as a consumer and as a purchaser of agri-industrial goods.

Chart 25 reflects the greatest single limitation to developing farm trade. The merchant becomes directly affected by the ups and downs of the farm income.

NET FARM INCOME - FAMILY LIVING EXPENDITURES

(245 ACRE AVE)



Information obtained from Boone County Extension Service

Urban Planning Grant: Project No. Iowa P-1

The preparation of this chart was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act, of 1954, as amended.

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chart 25

aneco

Suggestions made by the farm folk to encourage them to shop in Boone business establishments are given as follows:

- 30 said "more courteous, friendly, competent sales personnel."
- 22 said "Improved parking facilities."
- 21 said "Provide a wider selection."
- 17 said "Get some competitive prices with other communities."
- 24 said "Machine shops, Bank, etc. have special hours during harvest season when so difficult to get into town anyway... Machine shop needed Saturday afternoon, Bank also."
- Only 5 mentioned to remodel buildings, tear down old ones.

Some others of lesser importance were to provide rest rooms in some stores, especially for children; advertise early enough for farmers to get rural delivery, stay open more evenings and have more entertainment in town; and even one suggestion for benches in stores to wait for family members while shopping.

The preferences of respondents to night shopping are indicated below.

TABLE 43

NIGHT SHOPPING PREFERENCES

Should some stores remain open for shopping at night?		Yes 89	No 21
What night would you prefer to have stores open for you to shop in Boone?			
	Friday		33
	Saturday		40
	Friday & Monday		3
	Monday		7
	Every night		1
	No preference		17
Why?	Convenient night		11
	Nothing competing		5
	Not compete with school functions		5
	Fits farmer's schedule		
	Saturday evening		36
	End of week -- know needs		4

A section of the questionnaire was designed to determine the number of respondents who shop in other towns, frequency of shopping trips, and the kind of merchandise that is purchased in towns other than Boone. The following questions were asked and responses made as indicated:

TABLE 44 ANALYSIS OF SHOPPING HABITS

Do you make occasional shopping trips to Des Moines?	Yes	90
	No	43

How often?	Weekly	3
	Monthly	15
	Three months	54
	Yearly	17

Do you shop at	Merle Hay Plaza*	64
	Park Fair	26
	Down Town	63

For what commodities or services do you make these trips?	Food	6
	Clothing	55
	Machinery & Parts	12
	Supplies	2
	Doctor/Medical	7
	Appliances-Furnishings	12
	Business Trips	3
	Christmas Gifts	17
	Entertainment	4

Why do you shop in Des Moines for these items or services?	Unavailable in Boone	18
	Better selection & quality	78
	Better price	17
	Parking	4
	Sales/Evening Shopping	3
	Courtesy of Clerks	2
	Change	3
	Accessibility	1
	Miscellaneous	2

*A Merle Hay Plaza survey of November 25-26, 1960 shows that 248 Boone county cars (1.5%) of the total traffic, were in the plaza over Friday and Saturday. Other than Dallas and Story Counties, Boone furnished a greater percentage of out of Polk County cars in that two day period of any County in Iowa.

While in Des Moines do you buy other items you would normally buy in Boone?	Yes 50
	No 51

Does any member of your family work in the Des Moines area?	Yes 9
	No 113

Does this person shop regularly in Des Moines?	
While en route to and from a job?	Yes 5
	No 32

Do you make shopping trips to Ames?	Yes 64
	No 66

How Often?	Weekly	13
	Monthly	10
	Three Months	35
	Yearly	8

For what commodities or services do you make these trips?	Various	10
	Christmas	1
	Food	16
	Clothing	23
	Machinery/Parts	5
	Supplies	5
	Doctor/Medical	15
	Appliances/Furnishings	3
	Buy/sell produce	1
	Entertainment/Music	2

Why do you shop in Ames for these items or services?	Unavailable in Boone	9
	Selection	19
	Better price	10
	Sales/Week nights	5
	Courtesy	8
	Change	3
	Accessibility	4
	Miscellaneous	6

While in Ames, do you buy other items that you would normally buy in Boone?	Yes 33
	No 42

If yes, what are these items? Food	14
Clothing	10
Machinery/Parts	2
Various and Christmas Gifts	10

Does any member of your family work in the Ames area?	Yes 15
	No 104

Does this person shop regularly in Ames while en route to and from the job?	Yes 9
	No 43

Do you make shopping trips to other towns on occasion?	Yes 81
	No 44

What town or towns?	Ogden	21
	Madrid	5
	Perry & Woodward	28
	Fort Dodge	34
	Story City	5
	Jefferson	4
	Webster City	11
	Miscellaneous	9

How often?	Weekly	24
	Monthly	20
	Three Months	33
	Yearly	3

For what commodities or services do you make these trips?	Food	31
	Clothing	28
	Machinery/Parts, etc.	26
	Supplies/Materials	6
	Doctor/Dentist	8
	Household items	4
	Business/sell produce	6
	Music or entertainment	2
	Various-Christmas shopping	13

Why do you shop in other towns for

these items or services?	Unavailable in Boone	6
	Selection	21
	Price	7
	Parking	5
	Weekend shop/Sales	3
	Competency/Courtesy	9
	Change	4
	Closer/better roads	23
	Miscellaneous	6

While in other towns do you buy other items that you would normally buy in Boone?

Yes 45
No 30

If yes, what are these items?

Food	21
Clothing	13
Machinery/Parts, etc.	3
Sell produce	1
Medical	1
Supplies	6
Miscellaneous	7
Household merchandise	1

Do trading stamps influence your buying habits?

Yes 48
No 79

If yes, what kind do you save?

Gift House	21
Gold Bond	23
S & H	44
Top Value	1
Regal	5
All Others	1

A survey of the retail trade activities in Boone would not be complete without a consideration of the purchases made by the average farm family. The Boone County Extension Service has provided a chart of the distribution of farm family living expenditures (120 farm families) in the year 1958. The dominant impression gained from observation of this particular chart is that the purchases of the average farm family are becoming very similar to those of the average urban family.

"The reasons for this narrowing gap in the 'quality' of living are many. Contributing to this narrowing of the gap are such things as the increased ownership and use of automobiles, increased awareness of the goods and services offered by cities, increased leisure time brought about by mechanization of farm work, increased education, and so on. Because of these and other factors, the similarities between farm and city families in Iowa are becoming more common than the differences." (Dean S. Roussos, "The Farmer as a Consumer," Urban Responses to Agricultural Change, (Ed., Clyde F. Kohn), State University of Iowa, 1961.)

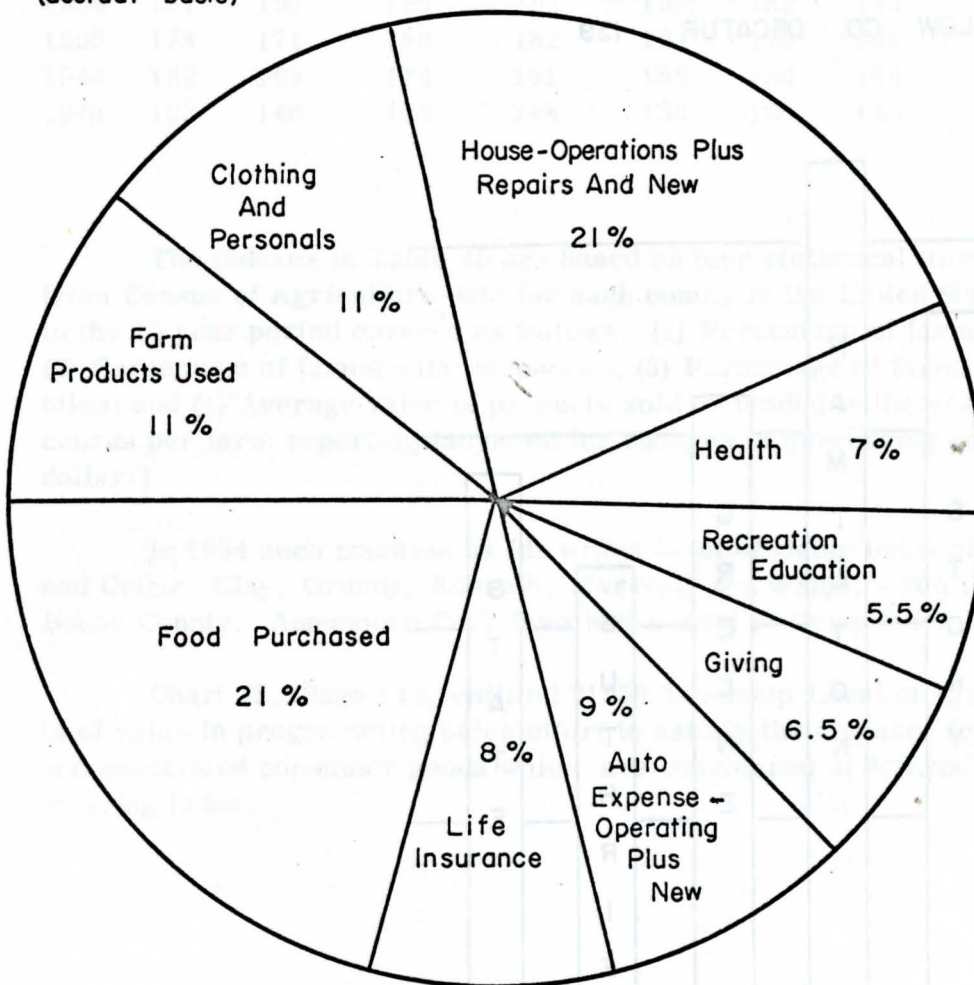
Chart 27, page 144, entitled "Level of Living Index, 1950" is primarily of importance as a measure of relative standard of living of the Boone County farmer in contrast to farm families in Story, Hamilton, Greene, and the State of Iowa. The Boone County level may be said to be moderately favorable but perhaps is lower than it otherwise might be because of the relatively large number of smaller farms.

DISTRIBUTION OF FARM FAMILY LIVING EXPENDITURES

(120 FARM FAMILIES)

TOTAL CASH EXPENDITURES \$ 3,198

NET FARM INCOME \$ 6,441
(accrual basis)



Information obtained from Boone County Extension Service

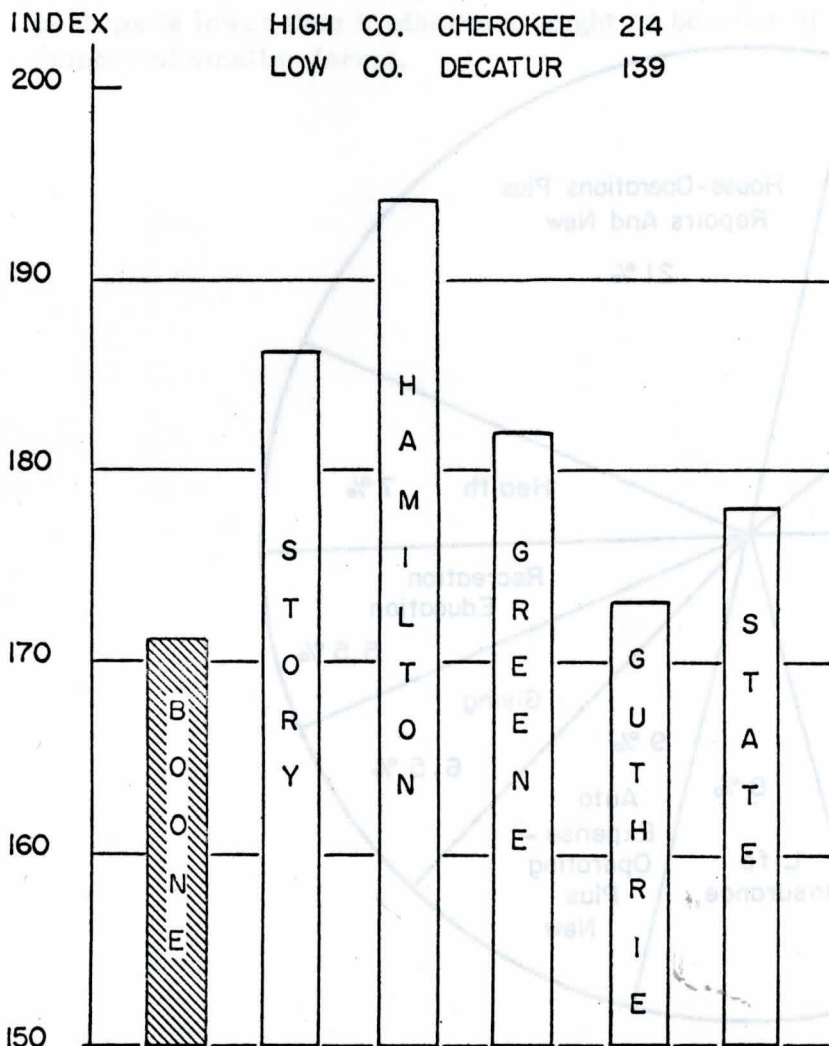
Urban Planning Grant: Project No. Iowa P-1

The preparation of this chart was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act, of 1954, as amended.

Prepared under the Contract for the Iowa Development Commission by: Anderson Engineering Company
City Planning Consultants

chart 26

LEVEL OF LIVING 1950



Information obtained from Boone County Extension Service.

Urban Planning Grant: Project No. Iowa P-1

The preparation of this chart was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act, of 1954, as amended.

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chart 27

aneco

Following is a Table giving the level of living index for Boone County for years 1940, 1945, 1950 and 1954, along with index figures for counties surrounding Boone County, for the State, and for Mahaska County which includes the City of Oskaloosa. These figures are important in showing the trend toward a higher level of living for Boone County families and are useful to merchants in determining sales possibilities for goods associated with the facilities which contribute to the indexes.

TABLE 45

FARM OPERATOR FAMILY LEVEL OF
LIVING INDEXES BY COUNTIES:
1940 TO 1954

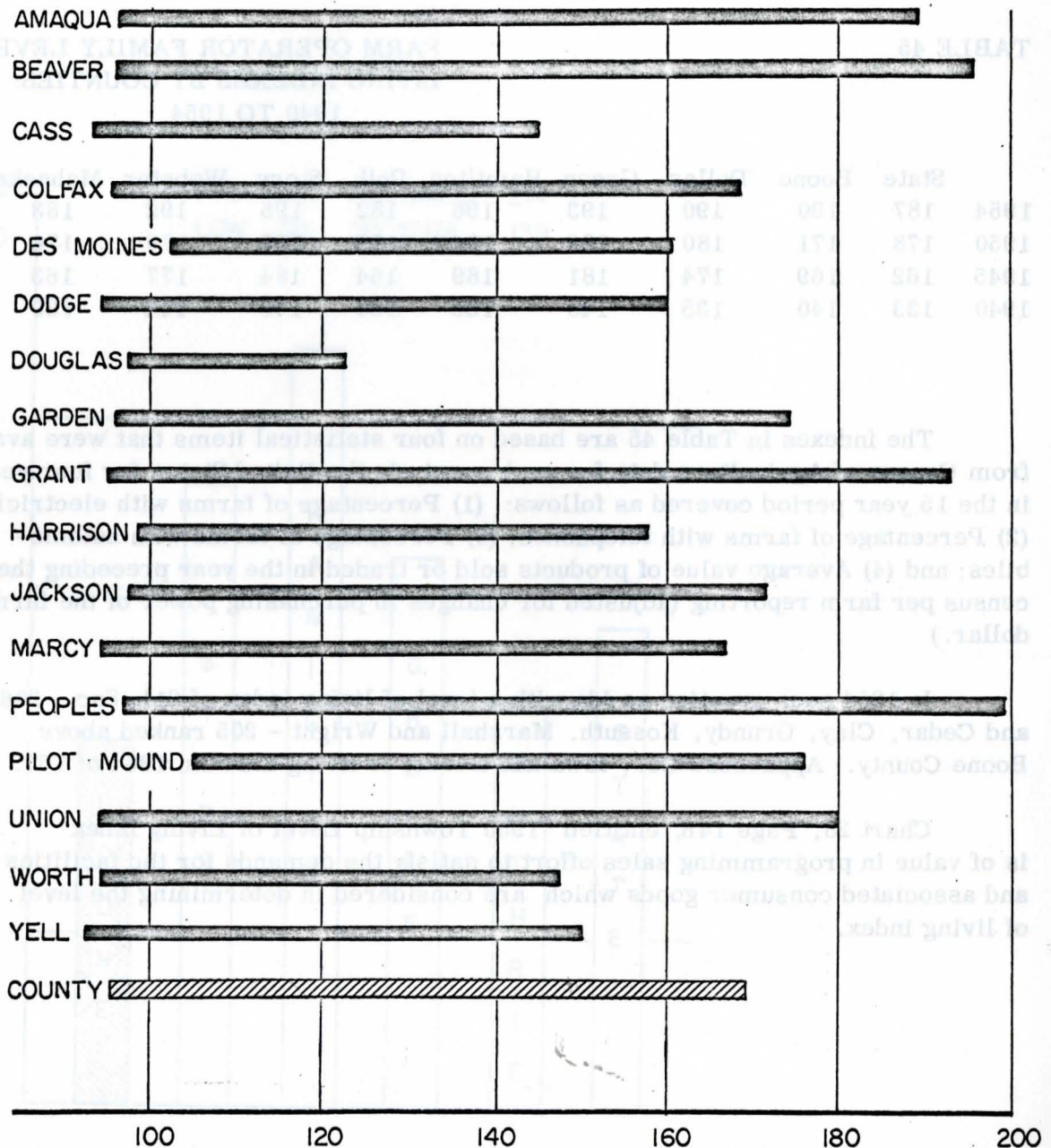
	State	Boone	Dallas	Green	Hamilton	Polk	Story	Webster	Mahaska
1954	187	190	190	193	196	182	195	192	183
1950	178	171	180	182	194	175	186	179	176
1945	162	169	174	181	189	164	184	177	163
1940	133	140	135	148	155	130	145	144	130

The indexes in Table 45 are based on four statistical items that were available from Census of Agriculture data for each county in the United States for four years in the 15 year period covered as follows: (1) Percentage of farms with electricity; (2) Percentage of farms with telephones; (3) Percentage of farms with automobiles; and (4) Average value of products sold or traded in the year preceding the census per farm reporting (adjusted for changes in purchasing power of the farmer's dollar.)

In 1954 such counties as Ida with a level of living index of 211; Sac - 206; and Cedar, Clay, Grundy, Kossuth, Marshall and Wright - 205 ranked above Boone County. Appanoose Co., Iowa had a level of living index in 1954 of 155.

Chart 28, Page 146, entitled "1950 Township Level of Living Index" is of value in programming sales effort to satisfy the demands for the facilities and associated consumer goods which are considered in determining the level of living index.

1950 TOWNSHIP LEVEL OF LIVING INDEX



Information obtained from Boone County Extension Service

Urban Planning Grant; Project No. Iowa P-1

The preparation of this chart was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act. of 1954, as amended.

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City Planning Consultants

chart 28

aneco

The trend of retail sales in Boone County, Boone and the remainder of the county present the picture as shown below:

TABLE 46

US CENSUS OF RETAIL TRADE

	Total Establishments	Sales (\$000)	% of Co. Sales	Paid Employees Work week ending Nov. 15 (Full work week)
1958				
Boone County	344	\$29,537		787
Boone	183	18,719	63.4	550
Remainder of Co.	161	10,818		237
1954				
Boone County	367	\$27,902		854
Boone	236	19,119	68.5	659
Remainder of Co.	131	8,783		195
1948				
Boone County	304	\$22,384		
Boone	173	15,873	70.9	
Remainder of Co.	131	6,511		
1939				
Boone County	451	\$ 8,577		848
Boone	234	6,222	71.3	657
Remainder of Co.	217	2,355		191

In 1939 the City of Boone accounted for roughly $\frac{3}{4}$, 71.3%, of total sales of the county. By 1948 this approximation of fraction of sales had not changed appreciably, 70.9%. By 1954 it had. Boone then accounted for slightly over $\frac{2}{3}$, 68.5%, of the county total sales and by 1958 the fraction had dropped to less than $\frac{2}{3}$, 63.4% of total sales of the county. Though the proportion to the county sales dropped, the total dollar volume of sales increased. Boone's retail sales do not differ much from sales of other cities in the state of similar size.

TABLE 47

RETAIL SALES TAX COLLECTIONS

	Boone Co.	Boone *	Madrid	Ogden	Other	Non-Permit
# Ret.]						
1961]	2, 491	1, 378	290	283	407	133
Amount of Tax]	\$548, 770. 70	\$398, 270. 21	\$57, 562. 06	\$51, 699. 73	\$39, 219. 64	\$ 2, 019. 06
# Ret.]						
1960]	2, 589	1, 450	307	299	415	118
Amount of Tax]	\$551, 562. 36	\$401, 957. 94	\$59, 136. 48	\$51, 978. 27	\$36, 384. 77	\$ 2, 104. 90
# Ret.]						
1959]	2, 624	1, 499	308	290	441	86
Amount of Tax]	\$534, 704. 69	\$391, 185. 22	\$57, 607. 71	\$49, 131. 59	\$35, 164. 25	\$ 1, 615. 92
# Ret.]						
1950]	2, 935	1, 816	307	326	486 (Rural)	
Amount of Tax]	\$462, 840. 72	\$348, 737. 26	\$49, 279. 54	\$38, 305. 24	\$26, 518. 68 (Rural)	

The period covered in Table 47 is from 1950 through 1961, specific dates being 1950, 1959, 1960 and 1961. A very cursory observation reveals that the towns of Madrid and Ogden both do about the same amount of business. Their combined business represents approximately 20% of the total business done in Boone County. The City of Boone is so located that there is not free-access from the northern half of Dallas County and the eastern half of Greene County, as well as the western half of Boone County. Both Madrid and Ogden benefit from this circumstance. The merchants in Boone feel that a new bridge should be built to replace the bridge washed out by flooding a few years ago in the general vicinity of the Ledges State Park which would help to increase the trade from the areas mentioned above.

Cities of 10,000 to 20,000 population increased their total sales 1948 to 1954 by 21.8% according to a study done by Dean S. Roussos under the sponsorship of the Committee on Urban Economic and Social Development of Iowa, State University of Iowa, entitled "A Study of Changes in Retail Sales Patterns," Urban Response to Agricultural Change, (Ed. Clyde F. Kohn), State University of Iowa, 1961.

Boone retail sales increased between 1948 and 1954 from \$15,873,000 to \$19,119,000 or 20.4%, in spite of the adjustments in population resulting from curtailment of the railroad employment. Retail sales from 1954 to 1958 decreased from \$19,119,000 to \$18,719,000 or -2.1%. This compares with an increase 1954-1958 of 23.0% in the "remainder of the county" category.

Both absolute increases or decreases in total retail sales for the county, Boone, and the remainder of the county for the years 1948, 1954, and 1958 and per cent change are shown in the following table.

TABLE 48

A COMPARISON OF PER CENT CHANGE
AND ABSOLUTE DOLLAR CHANGE IN
RETAIL TRADE, 1948, 1954 AND 1958

	Sales (\$000) 1948	Sales (\$000) 1954	% Change	Sales (\$000) 1958	% Change
Boone County	\$22,384	\$27,902	24.6	\$29,537	5.8
Boone	15,873	19,119	20.4	18,719	-2.1
Remainder of County	6,511	8,783	34.8	10,818	23.0

ABSOLUTE DOLLAR CHANGE (\$000)

Boone County	5,518	1,635
Boone	3,246	- 400
Remainder of County	2,272	2,035

Mr. Roussos, in his study, states that in towns smaller than Boone, i. e., under 2,500 population but over 500 population, retail sales are increasing due to increased sales in two retail trade categories: 1. "Lumber, Building Materials, Hardware, Farm Equipment Dealers" and 2. "Other Retail Stores" (which includes commercial feed sales, for instance).

However, merchants of Boone have gained in sales in the first category, counter to the trend. Sales in the "Lumber, Building Materials, Etc." category not only do not decline for Boone during 1954-1958, they increase by 12% (from \$2,547,000 to \$2,850,000) and they decrease for the remainder of the county by 7% (from \$2,170,000 to \$2,071,000).

Boone County's total "Other Retail" sales dropped by 20%, 1954-1958, from \$3,750,000 to \$2,998,000. Figures for the City of Boone in the second category are not available.

"Apparel and Accessory Store" sales for the county increased by 37% from 1954-1958. It is probably valid to say that a high proportion of apparel and accessory sales take place in the City of Boone. The Boone merchants obviously provided greater service and variety of goods. It is interesting to note the response from the questionnaire to the 300 farm families, which indicated dissatisfaction among the respondents with goods and services provided by Boone merchants, and in particular that clothing was one item most often mentioned as having been purchased in Des Moines and other towns.

In two other retail trade categories, Boone lost large percentages of business. These two are "Gasoline Service Stations" where the percentage of change for Boone County between 1954 and 1958 was 2%, for Boone-20%, and for the remainder of the county 34%, and "Eating, Drinking Places" where the change taking place 1954-1958 was for the county 4%, Boone-27%, and the remainder of the county 111%. The reason for the large percentage increase for remainder of the county sales for "Eating, Drinking Places" is that the initial sales volume was very small. The trend would appear unmistakeable, however.

The shift of automobile service sales to smaller communities of Boone County is consistent with state wide trends.

Table 49 reflects short term trends regarding the number of retail trade establishments and their total sales between the years 1954 and 1958.

TABLE 49

RETAIL TRADE BUSINESS CLASSIFICATION

Business Classification	Establishments		Establishments	
	County	Boone	County	Boone
	<u>1954</u>		<u>1958</u>	
Total	367	236	344	183
1. Lumber, Bldg. Mtls., Hardware, Farm Equipment Dealers	41	21	39	20
*2. General Mdse. Group Stores	14	8	11	6
3. Food Stores	72	53	50	30
4. Automotive Dealers	19	13	16	10
5. Gasoline Service Stations	62	36	47	16
6. Apparel, Accessory Stores	19	15	18	16
7. Furniture, Home Furnishings, Equipment Stores	15	11	17	14
8. Eating & Drinking Places	66	40	66	28
9. Drug Stores, Proprietary Stores	13	9	9	6
10. Other Retail Stores	37	23	53	29
*11. Non-Store Retailers	9	7	18	8

*Non-store retailers shown separately from General Merchandise Group Stores.

One of the major premises of this report is that a community such as Boone may increase the income stream and the volume of the basic economy by greater retail sales. The following retail trade table reflects the comparative per capita sales of Boone and certain other Iowa cities of similar total population. It should be pointed out that such per capita figures are calculated only on the basis of those living in the community.

TABLE 50

TOTAL AND PER CAPITA SALES, 1954 & 1958

	Sales (1,000)	Per Capita Sales (Dollars)	Sales (\$1,000)	Per Capita Sales (Dollars)
	1954	1954	1958	1958
Boone	19,119	1,572	18,719	1,501
Keokuk	19,411	1,202	21,538	1,320
Newton	23,848	2,034	26,017	1,692
Oskaloosa	24,263	2,181	24,435	2,211

* 1954 per capita sales are figured on the basis of 1950 population and the 1958 per capita sales are figured on the basis of 1960 population.

The merchants of Boone could very well enhance their position by developing customers among those living West of the Des Moines River and those living in Eastern Greene County and Northern Dallas County. A special effort must be made to attract this business because most farmers tend to trade at towns near to them. The 1950 Census of Agriculture showed that 84% of the farmers traded most often at towns within 10 miles of their farms. Farmers today are more highly mobile when purchasing quality clothing, appliances, machinery, and major grocery items, etc. This high degree of mobility will be even more of a factor when re-located U. S. Highway 30 is opened.

The merchants should re-evaluate the inventories and services offered to fulfill the needs of this major trade area. The reward for such effort might very well be imagined when it is realized that the total value of crops and livestock products in Boone County in 1960 amounted to \$28,213,000. According to Roussos, P. 121, about 70% of this goes for farm production items and the remainder is available for savings, capital expenditures and consumer purchases.

Broadening the trade area to the West and somewhat to the South will tend to offset the loss of business to such centers as Ames, Fort Dodge, and Des Moines. There will always be the element of going to the "Big City" which has no competition in Boone.

As noted elsewhere in this section of the report, personal service practitioners bring money and improvements to the community as their services are sought by those living in the trade area. They cluster where the facilities of their professions are situated. The person seeking such services is likely to satisfy other consumer needs at the same time. The possibility that some of the doctors in Boone contemplate a clinic in the near future has been mentioned. Also, the necessity of paying a toll charge to call Boone doctors from some of the nearby smaller communities was mentioned as a handicap to the medical profession of the City.

Professor E. R. Stoddard, in his analysis of retail trade in Boone concluded:

"Can expanding services to the present trade area be considered an industry? If so, local merchants are not aware of their problems in this area.

They do not know who their clientele are (lack of selection in clothing for instance was the single greatest item why local farmers go elsewhere to shop).

The farmer feels that the merchants consider them as "something to take up the slack when other business is down".

Measuring the physical parking facilities and the amount of negative reaction of farmers to parking, it appears to be a symbol of unilateral treatment rather than something which more parking can solve.

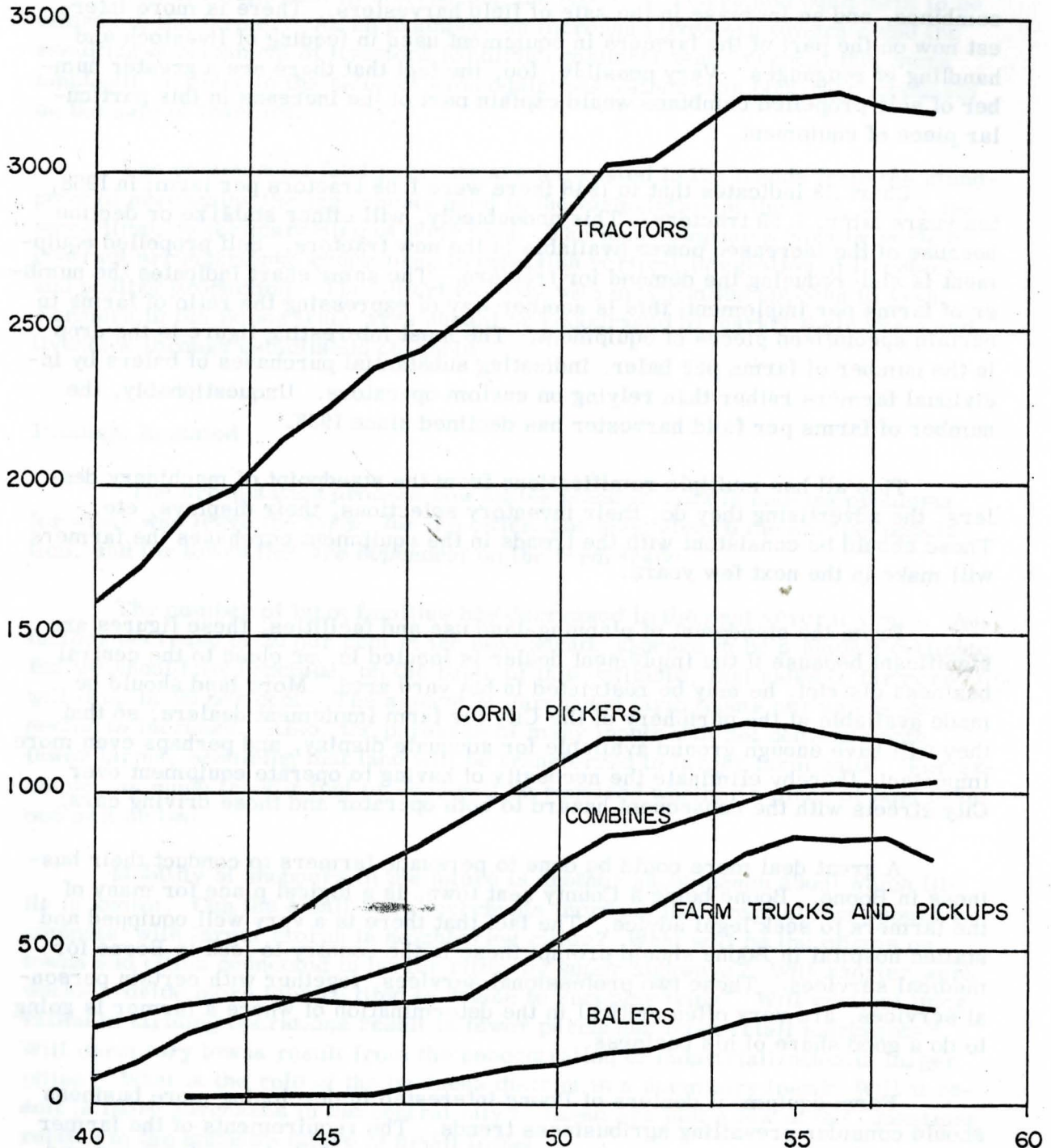
The image of the negative attitude toward farmers of local businessmen which is rather extensively held by farmers at the present time, is the greatest deterrent to increasing the consumer buying in Boone from rural customers. Mass media and information programs must popularize this pro-farmer attitude. (The actual attitude toward farmers manifest by business owners seems to be much more positive than the farmers' evaluation of these businessmen's attitudes.)

The open country settlement pattern of Iowa has led to isolation and a lack of village community spirit of farmers. Farmers tend to regard the urban way of life with moral reservation. They tend to perceive a community as a service center for the basic industry, food production. As a sociologist, I feel that negative comments regarding Boone and Boone businessmen is a reaction to their feelings of being considered 'less important than as the only reason for Boone's existence'. I personally feel that the means of carrying out community programs and publicizing the results has created more farmer-Boone misunderstanding than the lack of facilities which the rural residents attribute to the City.

A rural-oriented type of clerk on farmer nights might be one way of increasing the personal attention desired by the farm folks. Also, special hours of business during harvest season would indicate local interest in the farmer's problem. There is a question as to whether the parking fines are increasing customer access or creating an irritant with prospective customers. This point needs more consideration by the local Chamber of Commerce and others. Whatever programs are inaugurated, there is a need to popularize what is being done and if possible, get some local farm folks working with local organizations to give the idea of the farmer being represented."

POWER MACHINES ON BOONE COUNTY FARMS

Information obtained from Boone County Extension Service



The preparation of this chart was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act. of 1954, as amended.

Urban Planning Grant; Project No. Iowa P-1

Prepared under the Contract for the Iowa Development Commission by: Anderson Engineering Company City Planning Consultants

chart 29

aneco

Using Chart 29, Page 153, entitled "Machines on Boone County Farms", it is evident that since 1952 or so there has been a leveling off in the number of tractors purchased. The number of corn pickers purchased is down, the number of combines up a little. The number of balers purchased is showing a slight decline. These figures are current up to 1958. Very probably figures for the last two or three years would show an even greater trend toward such equipment as combines, and an increase in the sale of field harvesters. There is more interest now on the part of the farmers in equipment used in feeding of livestock and handling of roughages. Very possibly, too, the fact that there are a greater number of self-propelled combines would explain part of the increase in this particular piece of equipment.

Chart 29 indicates that in 1948 there were 1.08 tractors per farm; in 1958, ten years later, 1.53 tractors. This undoubtedly, will either stabilize or decline because of the increased power available in the new tractors. Self propelled equipment is also reducing the demand for tractors. The same chart indicates the number of farms per implement; this is another way of expressing the ratio of farms to certain specialized pieces of equipment. The most interesting figure is the drop in the number of farms per baler, indicating substantial purchases of balers by individual farmers rather than relying on custom operators. Unquestionably, the number of farms per field harvester has declined since 1958.

This all has multiple ramifications from the standpoint of machinery dealers, the advertising they do, their inventory selections, their displays, etc. These should be consistent with the trends in the equipment purchases the farmers will make in the next few years.

From the standpoint of planning-land use and facilities, these figures are significant because if the implement dealer is located in, or close to the central business district, he may be restricted in his yard area. More land should be made available at the periphery of the City for farm implement dealers, so that they will have enough ground available for adequate display, and perhaps even more important, thereby eliminate the necessity of having to operate equipment over City streets with the consequent hazard to both operator and those driving cars.

A great deal more could be done to persuade farmers to conduct their business in Boone. Boone being a County seat town, is a logical place for many of the farmers to seek legal advice. The fact that there is a very well equipped and staffed hospital in Boone should prompt those in the country to look to Boone for medical services. These two professional services, together with certain personal services, are very often critical in the determination of where a farmer is going to do a good share of his business.

Farm equipment dealers of Boone interested in developing more business should consider prevailing agribusiness trends. The requirements of the farmer for competent, technical advice as to his equipment needs is becoming more and

more important because of the investment required. At the same time the investment is of such size that it may very well be that the farm equipment dealers will find it to their advantage to provide credit facilities which may not in their final result be a great deal different from a lease purchase program.

The greatest value in reviewing the accompanying charts is to discern the trends that are important in determining the type of services and equipment to be offered to the farmer. As an example, an increased livestock program and the resulting development of livestock handling equipment would suggest that more emphasis be given to the sales of such equipment rather than continued emphasis on the sale of tractors.

The commercial feed interests are interested in the trends from the standpoint of purchasing the ingredients used in the formulation of the feed, and at the same time, in the marketing of their feed. The feed companies have by various contract arrangements endeavored to establish vertical integration of livestock and poultry production. This effort has met with only limited success in Iowa. Farmers in the Boone trade area should be encouraged to market their grain and livestock through established channels.

Problem Restated

"The urbanization process now taking place in Iowa is causing problems for those who leave the farm, for the cities that must absorb the shifting population, and for towns that are dependent on the farm trade.

The number of farm families has decreased in the past several years. A further decrease of 20 per cent in the next decade appears to be a modest estimate. But we should not conclude, on the basis of this estimate, that sales to farmers will drop by 20 per cent. The amount of purchased farm inputs per unit is expected to increase. Also, the purchase of many inputs will not decrease with fewer farms, assuming that land will be transferred to larger farm units. For example, as much tractor fuel or seed will be required whether a piece of land is in one unit or two.

Mobility of shoppers in the future is another phenomenon about which little is known. Can the small-town merchants increase their capital fast enough to compete with larger stores in neighboring cities? What will be the effects on towns and cities connected to larger cities by super highways? Will shorter work weeks provide more leisure time to devote to shopping trips? Will vertical integration in farming operations result in fewer purchases from retail merchants? Will dormitory towns result from the concentration of industrialization in larger cities? What is the role of the business district in a dormitory town? Will it result in more purchases in the central city? These are just a few of the questions related to the unknown future of small towns.

Undoubtedly, the transition in which we now find ourselves will spell doom for many small businesses. There are those who predict that some towns will not survive. This is mere speculation. However, there is nothing magical about the present number and location of Iowa towns. They were developed years ago to serve needs that then existed. Needs have changed and will continue to change. There is no reason to believe that numbers and spatial distribution of towns will not alter, too. This will benefit some towns while it will destroy others."

"A Retail Trade Area Survey for Anamosa, Iowa," prepared by the Bureau of Business and Economic Research, College of Business Administration, State University of Iowa, April, 1961.

Tourist Trade

The scenery along the Des Moines River is most beautiful and Boone County contains the finest and most rugged portions of it. High bluffs, luxuriant timber, deep ravines, etc., make it a favorite location for parks and camps."

Such is the foundation of the tourist industry in central Iowa near Boone. Ledges State Park is 3 miles South of Boone. State Y. M. C. A., Y. W. C. A., and a Girl Scout Camp are located North of Boone, while to the South are Camp Hantesa, an area Campfire Girls Camp, Camp Mitigwa, the Tall Corn Area Boy Scout Camp, the State 4-H Club Camp that comprises an area of 544 acres, and the Salvation Army Camp.

Just North of Highway 30 across the Des Moines River is the Kate Shelley Bridge or High Bridge of the Chicago and Northwestern Railway, the longest and highest double-track railroad bridge in the world, a modern engineering triumph with an interesting history.

In Boone is the former home of Mamie Dodd Eisenhower, wife of the former President.

At the Ledges are available excellent camping and recreational facilities. An average of 275,000 persons visit the park annually.

Iowans responded enthusiastically to the opening of the wild life exhibits at the Conservation Department's State Game Farm in October, 1961. It is not uncommon to spot cars from every state in the nation at this "zoo" where the birds and beasts of Iowa are cared for, studied and displayed.

The experiences of those in the service station and restaurant business on the opening weekend as a result of an increased number of visitors to the Ledges State Park demonstrates very forcefully the gain to be realized from an expansion of the recreational facilities and tourist attractions now situated in the immediate vicinity of Boone. Money spent by tourists for lodging, food, and services such as gas and oil may on the "first round" benefit only those immediately concerned.

It is on the second and third rounds where they in turn make expenditures that the general economy of Boone will benefit. This would be an example of the multiplier effect of such an income stream into Boone.

Speaking in regard to the continued population growth of rural Dickinson County, Professor Clyde Kohn says "that growth . . . is related to the growth of a recreational industry in this section of the State." (P. 24, Iowa Business Digest, Winter, 1960)

The tourist trade contributes to the total of the retail sales. With proper development an even more substantial income could be realized from Iowan's and those from other States visiting these areas.

Wholesale Trade

The City of Boone demonstrates its function as a central urban place most effectively in respect to its wholesale trade, particularly, in relation to the smaller communities within a radius of 20 to 40 miles.

In discussing wholesale trade, it will be necessary to consider both the companies that are wholesale merchandisers of goods to retail outlets and those assemblers active in Boone who are buyers of farm products and at the same time distributors of the same products to other wholesalers or to (See definition of assemblers, Page 159) retail outlets. Figures tabulated below as to wholesale trade, Boone County and City of Boone cover a span of approximately 20 years. The most significant county figures are those for the years 1939 to 1948, with practically the same number of establishments in the County, volume rose from less than 4 million to 17-1/2 million dollars. Assuming these totals reflect prices paid by assemblers, it is revealing indication of the improvement in the farm income picture between the years 1939 and 1948. Unquestionably, there are other factors to explain this increase, but the figure in 1958 of 20,363,000 is not quite 3 million more than the 1948 figure, and this is a ten year interval during which the farm income dropped, (See 1954 figures in Chart) or at least was stable.

TABLE 51

WHOLESALE TRADE

	Establishments	Sales (\$1,000)	Paid Employees	Payroll Entire Yr. (\$1,000)
1958				
County	50	20,363	202	714
Boone City	29	11,287	121	471
Remainder of County	21	9,076	81	243
1954				
County	35	13,177	159	353
Boone City	20	(D)	(D)	(D)
Remainder of County	15	(D)	(D)	(D)
1948				
County	43	17,591	135	255
Boone City	18	4,737	65	139
Remainder of County	25	12,854	70	116
1939				
County	44	3,801	67	75
Boone City	17	1,933	35	38
Remainder of County	27	1,868	32	37

D - Not disclosed.

The various types of wholesale organizations are defined by the U. S. Department of Commerce (Census of Business) as follows:

Merchant Wholesalers: "This group of wholesalers consists of establishments primarily engaged in buying, taking title to, and where customary, physically storing and handling goods and selling the goods at wholesale, principally to retailers and to industrial and commercial users. This group also includes industrial distributors, cash-and-carry wholesalers, drop shippers, wagon distributors, etc. Establishments in this group may perform operations on the goods incidental to the wholesale trading and delivery function, such as installing machinery, equipment and fixtures; and collecting and baling waste materials."

Manufacturers' Branches and Offices: "This group of wholesalers consists of establishments maintained apart from plants by manufacturing and mining companies primarily for selling their products at wholesale. Manufacturers' sales branches are distinguished from sales office by the fact that the former maintain facilities for the physical storage, handling and delivery of at least a portion of the merchandise sold. Sales branches frequently install machinery, equipment and apparatus sold by them, and sometimes are engaged in leasing or renting machinery or equipment on a royalty basis."

Agents and Brokers: "This group of wholesalers includes the operators who are in business for themselves, negotiating sales and/or purchases in domestic and foreign trade, but who do not, as a rule, take title to the merchandise. One of the functions of agents and brokers is the furnishing of market information. They may represent a single client or a group of clients, either buyers or sellers, but not both in the same transaction, and compensation is usually in the form of commissions or brokerage. Included in this classification are such types of operations as auction companies, merchandise brokers, commission merchants, export agents, import agents, manufacturers' agents, selling agents, resident or syndicate buyers and cooperative sales agencies."

Assemblers: "This group of wholesalers consists of establishments primarily engaged in purchasing and assembling farm products in local growers' markets, at local producing points, and in the cities of producing regions. These establishments are primarily engaged in concentrating farm products on a relatively small scale and assembling larger lots for shipment to other wholesale buyers. In addition to the actual buying and wholesale distribution of farm products, establishments included in this group frequently grade, pack, store and, in some cases, finance the commodities they handle."

Petroleum bulk station: "This group of wholesalers consists of petroleum bulk station primarily engaged in the storage and wholesale distribution of gasoline, oil and other bulk petroleum products."

Following is a list of wholesalers in Boone. The list was prepared by the Chamber of Commerce. The Companies are listed according to major product sold or services provided. The names of certain assemblers, particularly of farm products have not been included on the Chamber of Commerce List.

Name of Firm

Address & Phone No.

Automobile Parts & Supplies

*Arnold Motor Supply (W)	713 Arden Ph. GE 2-4455
*Erickson Auto Electric Service (W)	7th & Keeler Ph. GE 2-3610
*Sidles Co. (W)	708 Arden Ph. GE 2-5122
*Sieg Company (W)	509 - 9th Ph. GE 2-4282

Bakeries - Cookies

*Irvine Baking Co. (M) (W)	916 - 6th Street Ph. GE 2-4084
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Beverages - Non-Alcoholic

- *Coca Cola Bottling Co. (M) (W) 816 - 6th Street
Ph. GE 2-4345
- *Seven-Up Iowa Co. (W) 622 Marshall
Ph. GE 2-3644

Cigars, Cigaretts & Tobacco

- *Caffrey Cigar Co. (W) 710 Arden
Ph. GE 2-6941

Dairy Products

- *Boone All-Star Dairy, Inc.
(M) (W) (R) 932 - 8th Street
Ph. GE 2-7370
- *Boyd's Ice Cream (M) (W) (R) 524 Story
Ph. GE 2-5902

Eggs

- *The Haddy Co. (W) Highway 30 East
Ph. GE 2-2908

Flowers

- *Boone Greenhouses, Inc. (M) (W) 1404 North Marion
Ph. GE 2-5381

General Merchandise

- *Thompson Distributing Co. (W) 1030 - 8th Street
Ph. GE 2-3236

Grocers

- Fareway Stores, Inc. (W) 915 - 7th
Ph. GE 2-2623

Music Suppliers

- *Alber Music Service (W) 706 - 8th Street

Newsdealers - Wholesale

E. H. White, Wholesale Newsdealer (W)	921 - 5th Street Ph. GE 2-3754
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Seeds

Berry Seed Co. (W)	420 Delaware Ph. GE 2-2914
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Welding Supplies

Duncan Machine Works (W)	933 - 10th Street Ph. GE 2-4526
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* Members of the Boone Chamber of Commerce

Key:

M - Manufacturer
P - Processor
R - Retail
T - Transportation
U - Utility
W - Wholesale

Prepared by: Boone Chamber of Commerce, Boone, Iowa

Many wholesalers of automobile parts or supplies are active in Boone. Elsewhere in this report it has been stated that farm people tend to have their automobiles and farm equipment serviced in the smaller communities - that is, in communities under 2,500 people in population. The automobile parts and supply wholesale houses represent manufacturers of automobile parts selling their products to car dealers, garages, body shops, filling stations, implement dealers. Response to our questionnaires indicated these companies do about 50% of their business in the vicinity of Boone and 50% or so, possibly a little less in the trade area they cover, which varies in size from 20 to 40 miles from Boone. There has been a decentralization of such wholesalers from cities such as Des Moines, primarily because car owners do not want to wait two or three days for parts to be shipped from Des Moines. However, larger and lesser used items are still stocked primarily in the larger cities.

Cigarettes

Cigarettes, cigars, candy are distributed to retail trade over a wide area of Central Iowa by the Caffrey Cigar Company of Boone.

Coca Cola Bottling Co., & The Seven-Up Iowa Company

These two companies are indicated as wholesalers of non-alcoholic beverages. Coca Cola Bottling Co., has been commented on more extensively in the section devoted to manufacturers.

General Merchandise

The Thompson Distributing Company is listed as a wholesaler of general merchandise, with offices located at 1030 - 8th Street.

The above referred to wholesalers are generally considered to be merchant wholesalers as defined by the Census. See Page 158 .

The following companies are primarily considered to be assemblers dealing in agricultural products for sale to other wholesalers or to retail dealers. (Definition of Assemblers, Page 159.)

The Haddy Company established in recent years, handles a large volume of eggs. This Company is situated in an attractive building at the East edge of Boone on Highway 30, thus providing ready accessibility for farmers wishing to bring in eggs. The management of this Company has proved to be very capable, with well-established markets, and it is anticipated this will be one of the more successful assemblies in Boone over the next few years.

Two concerns are listed as wholesalers of dairy products, The Boone All Star Dairy, Inc., and Boyd's Ice Cream. These Companies, again, perform a dual function in that they supply a market for the dairy products originating on the farm, and at the same time, maintain a wholesale distribution organization and sell at retail in Boone.

The Cooperative Elevator as a large volume assembler of farm products, is a market for grain and other products which must be delivered to the elevator over City streets. Several of the farmers in answering the questionnaire, indicated that the restriction of their trucks to certain streets was at least an aggravation, if not, in fact, a deterrent when they were harvesting crops. The same problem exists in the distribution of prepared feeds, fertilizers, etc., from the elevator to the farm. In addition to the Cooperative Elevator, there is Ericson Grain Company and Berry Seed Co.

Northwest Cattle Company situated on U. S. Highway 30 on the East edge of the City deals in livestock as order buyers and as dealer in feeder cattle.

Boone greenhouses, wholesale florists, and grower of flowers is a rather substantial employer of labor.

As can be seen by reference to the list of wholesalers, an attempt has been made to comment only on a representative list of the major categories of wholesale activity conducted in Boone.

Professional Services

The professional, personal and business services offered in a central urban place such as Boone are City building as they are often a critical factor in the determination of where the farmer decides to do business. These three elements of the economy are also City serving. Bookkeeping services, particularly in relation to taxation are oriented to the needs of business man and farmer alike. Boone is fortunate in having several well-recognized bookkeeping services available.

Banking and Finance

The bank officers have been most cooperative in providing detailed totals of their transactions. They have discussed with us some of the trends and developments in the economy of the City of Boone and the trade area. Interviews were also held with a Boone businessman active in the management of the Hawkeye Savings and Loan Association.

From the standpoint of the economic base, it must be recognized that the number of individuals active in the management of the financial institutions is relatively small, but their role is vastly important in the functioning of the economy of the area. It is in this sense that they are considered in the following discussion.

The responses to the questionnaires submitted to farmers, merchants and industrialists indicated that the local money market was adequate. The answers received may mean that they were either in such a strong capital position that borrowing was not essential or that the matter of availability was no problem if they were borrowers. Not all firms contacted considered the situation favorable, however. Several of the newer concerns felt that something should be done to assist them in securing funds.

Recent national studies of capital supply for new small business makes it clear that a problem exists in this respect in varying degrees throughout the country. The problem here appears as one of facilities for supplying "risk capital". Because of their operations, commercial banks are largely out of this type of finance. Other agencies are not organized for this kind of business.

The banks are somewhat handicapped in providing capital to manufacturing concerns distributing on a national basis. This is particularly true if the companies are seeking capital and endeavoring to use accounts receivable as basis for borrowing. Local banks do not have the facilities to properly service such accounts if they originate at points distant from their office.

It is imperative that the bankers and those active in the industrial development corporation confer so that a determination can be made as to just exactly what new business might reasonably expect in the way of financing in Boone.

Cattle loans to farmers are loans in which the Boone banks are in competition with banks in some of the smaller nearby communities. Also, all banks are faced with competition from some of the Federally sponsored lending agencies such as the Producers Credit Association. In summary, the trends in loan volume are of particular interest since these represent the movement of bank credit to business and individuals. The relationship of loans to assets is frequently taken as the most crucial measure of bank service to the community.

Boone has the Hawkeye Savings & Loan Association. It should be pointed out, however, that savings and loan associations differ from commercial banks in that their savings accounts are not liabilities but ownership shares which accordingly pay "dividends" rather than "interest", as that term is commonly understood. Loan activity also differs from banks in that funds are primarily committed to real estate mortgages. Funds not so assigned are either in United States Securities or cash.

The goal for savings and loan volume correlates with construction, of which it may be regarded as an integral part. Its savings volume, however, has also advanced rapidly, a fact which indicates public interest and acceptance of the stability of the institution generally.

Farmers have seen fit to make their savings available to the savings and loans institutions in some of the smaller communities being attracted by the higher rates of interest paid and notwithstanding the fact that by and large, the loans made are on urban property rather than rural property.

Small Loans Companies

Like savings and loan associations, these companies extend installment credit to consumers, primarily, rather than to business enterprise as such. The small loan companies confine their operations to small loans, usually under \$1,000 and on a short term basis which may or may not be secured. As distinguished from both banks and savings and loan associations, the smaller lenders for the most part acquire funds from their own resources rather than from deposits and savings accounts of the public.

Because of the cost of handling small loans, such companies must make an interest charge which appears high in relation to commercial loan standards - a fact frequently overlooked by the public in appraisal of the small loan credit market.

There are two small loan companies in Boone; Iowa Finance and Knodle Finance.

BANKS:

The Citizens National Bank of Boone:

Total Assets as of Sept. 27, 1961	\$9,854,307.04
Capital	200,000.00
Surplus	400,000.00
Undivided Profits	169,699.99
Deposits	8,963,977.26

Boone State Bank & Trust Company

Total Assets as of Sept. 27, 1961	\$8,983,954.17
Capital	150,000.00
Surplus	400,000.00
Undivided Profits	317,503.34
Deposits	7,914,556.49

SAVINGS & LOAN ASSOCIATIONS:

Hawkeye Savings & Loan Association

Assets

Total Assets as of June 30, 1961	\$6,889,775.90
First Mortgage Loans	5,850,296.89
Stock in Federal Home Loan Bank	100,000.00
Cash and Government Bonds	911,939.33
Office Building, Furniture, Fixtures and Equipment (less depreciation)	25,843.06
Deferred Charges and Other assets	1,696.62

Liabilities:

Savings accounts	\$6,281,507.53
Loans in process	124,446.87
Other Liabilities	5,010.69
General Reserves and Surplus	478,810.81

Table 53 is a comparison of the total bank clearings of the two Boone banks with total clearings of banks of a number of larger cities of Iowa.

TABLE 53

1960 BANK CLEARINGS

City	Amount	(1) Clearings & Debits
Des Moines	\$3,082,090,372.53	Clearing
Waterloo	279,272,216.00	Clearing
Mason City	113,682,657.16	Clearing
Fort Dodge	Not Available	Clearing
Ames	56,237,830.38	Clearing
Marshalltown	295,242,000.00	Clearing
Muscatine	126,934,694.00	Both
Newton	21,397,693.00	Clearing
Boone	165,219,621.89	Both

(1) Bank debits include the amounts of checks processed that were written on the same bank into which they were also deposited; thus circumventing the necessity of further processing through a clearing house. Consequently, towns that do not have the facilities of a clearing house, will include in the above figures, the debits as well as the clearings.

Clearing figures represent the total amount of checks that are received in deposits and written on other banks, necessarily requiring an additional process of distribution to the proper depositor. ("City & Community Measurement of 20 Largest Iowa Cities" prepared under the direction of the City Manager, Sioux City, Iowa, 1961.)

Specific figures as to the debits and clearings of the two banks in Boone have been provided by the banks as follows:

Debits	\$ 43,215,976.48
Clearings	<u>122,003,645.41</u>
Total	\$165,219,621.89

The clearings figure represents clearings of each of the two banks on the other bank in Boone.

TABLE 54

BANK DEPOSITS

County	<u>1956</u>		<u>1950</u>		<u>1944</u>	
	Total	Time	Total	Time	Total	Time
	Deposits (\$1,000)	Deposits (\$1,000)	Deposits (\$1,000)	Deposits (\$1,000)	Deposits (\$1,000)	Deposits (\$1,000)
Boone	\$ 19,993	\$ 5,315	\$ 16,391	\$ 4,332	\$ 12,094	\$ 3,809
Dallas	20,569	5,343	16,662	3,270	11,977	2,319
Greene	15,230	4,074	12,796	2,098	9,212	1,495
Hamilton	18,844	3,661	14,640	1,832	11,046	1,502
Polk	401,991	59,527	189,704	39,596	108,487	29,754
Story	38,363	8,193	25,374	4,613	17,308	3,550
Webster	39,467	11,446	32,385	8,992	19,221	4,786
Mahaska	16,032	4,270	13,790	3,533	9,062	2,589

Boone, as is common to County seat towns, attracts practicing attorneys. As in other communities, attorneys are active in politics and the business activities of the community. Reportedly, the practice of attorneys is made up of 50% farmer clientel and 50% clientel living in the City. The very nature of the practice permits them to gain a perspective as to the needs of both rural and urban interests. Their participation in the political life of the State also enables them to promote and support the legislation needed to expedite the adjustments required in the framework of local and county government. The opinion was voiced by one of the leading attorneys that there was an opportunity for additional attorneys to practice law in the City of Boone.

There are presently 13 practicing attorneys listed for the City, including Governor Norman Erbe and the Boone County Attorney.

Medical

Boone County Hospital is a 100-bed acute general hospital. The hospital is listed with the American Hospital Association and has institutional membership with the American Hospital Association and with the Iowa Hospital Association. The Iowa State Department of Health has approved the hospital for licensure. Accreditation by the Joint Commission on Accreditation of Hospitals has also been obtained. Hospital services are offered to the community both on an outpatient basis, as well as to inpatients. The emergency room is staffed twenty-four hours each day. Nursing services are offered to obstetrical patients, general medical and surgical patients and separate services have been established for pediatrics. Inpatient nursing services are provided around the clock by a competent nursing staff.

The hospital laboratory is under supervision of a board certified pathologist. A complete schedule of diagnostic laboratory tests are available. A registered pharmacist is employed on a full time basis to supervise the hospital pharmacy. Physical therapy services are provided by the hospital under the direction of a registered physical therapist. The X-Ray Department is unique in that it offers not only all x-ray diagnostic procedures, but also deep x-ray therapy and is licensed by the Atomic Energy Commission to provide radio active isotope diagnostic service and therapy. The two latter services are not offered by any other hospital within a radius of fifty miles. The department is under the constant supervision of a qualified Radiologist.

There are 15 doctors in Boone and 17 doctors in the County, five of whom are nationally certified specialists. In addition the hospital is serviced weekly by five other certified specialists. Two-thirds of the doctors are under fifty years of age and they would like to see a clinic type building constructed as financing becomes available. The doctors all actively support the preventive medicine programs of the community.

Real Estate and Insurance

Reportedly there are 23 insurance agencies serving Boone and the trade area. Land use, zoning, taxes and trends affecting real estate are of common interest to all property owners in a community. The sources of funds for the mortgage loans on commercial property are limited except in the instance of new construction. However, such new construction must be of such quality as to meet the standards sought by the various chain store organizations or other companies who are in a position to lend their credit rating by executing a long-term lease which makes the whole deal "bankable". Most of the nationally rated companies maintain their own real estate departments and have established criteria from which they do not deviate in determining their requirements. It is estimated that there are some 39 real estate brokers and salesmen in the City of Boone. This number includes those who may be relatively inactive or who are on a part-time basis. They are, however, licensed under State Law.

The types of activity engaged in by the various brokerage offices varies in wide degree between sale and transfer, financing, insurance and management of properties.

Real estate valuation is very often disproportionately influenced by the amenities found in the community. Among the attributes of Boone are many fine parks and schools, and 26 churches which serve the needs of 20 Christian faiths.

The Ericson Memorial Public Library contains more than 41,500 volumes with a museum on the second floor.

The manager of one of the major industrial plants, mentioned specifically that those with whom he did business and who had occasion to stay overnight in Boone were very favorably impressed with the facilities available, particularly the Holst Hotel. The manager of this hotel is very optimistic as to the potential

of the City of Boone, while at the same time, acknowledging that some business would be lost due to the re-routing of Highway 30.

He stated, however, that the recreational possibilities in Boone County were such that, with adequate development, the number of visitors to Boone could be increased substantially. As referred to in the Retail Trade Section (Tourist Trade), there were large numbers of people who visited the Ledges State Park on weekends during the Fall of 1961, particularly at the time the wild life exhibit was opened to the public.

It is the consensus that there will be a substantial commercial development of highway facilities including motels along re-routed U.S. Highway 30. As can be seen on the Land Use Plan of the Boone County Planning Report, provision has been made for general commercial use at the intersections of the major North-South thoroughfares and re-located U.S. 30.

The business developed by the hotels and motels is generally considered to be an addition to the economic base.

Other enterprises commonly referred to as business services, are so closely related in their orientation to the Boone trade area that they make a contribution to the basic economy similar to that of segments of retail trade. The possible exception to this would be warehouses and storage concerns and moving, trucking, and delivery services, who for the most part, do not deal directly with the consuming public but rather which tend to serve the requirements of wholesale trade for storage and distribution of merchandise.

The City of Boone is provided with telephone service by the Northwestern Bell Telephone Company, serving 6,905 phones in Boone and vicinity. Telegraph service by Western Union, and natural gas by Iowa Electric Light and Power. The Iowa Electric Light and Power Company was considered in the manufacturing section inasmuch as they operate a generating station at Boone for distribution of electricity in the City and a widespread area.

The local evening newspaper in Boone, the Boone News-Republican, has a daily circulation of 6,314. The paper is delivered in Boone and to nearby rural areas. To rural areas farther away in the County, the paper is mailed and usually arrives during the following day at the subscriber's home. The commercial radio station is KWBG, operated by Boone Broadcasting Company and affiliated with the Boone News-Republican.

The economic well-being of a community is very quickly reflected in the volume of business done by personal service establishments, such as beauty parlors, barber shops, photographers, and others. An interview with the proprietor of a shoe repair shop was rather revealing as to the extent of the trade area for such business inasmuch as it was indicated customers came in from communities as far north as Boxholm, and east to a point north of Ames, west 35 miles, and south to and including Madrid.

Professional, business and personal services are the essence of the concept of the central urban place, relying as they must on a volume of business

which can only develop from a relatively widespread trade area of rural and rural-non-farm residents. Such services are a contribution to the "City building activities" of the community while the services they must also perform for those living in the community are "City serving activities."

"Service activities geared to local needs will expand with population in the area, but the future importance of Boone as a regional service center will depend on its competitive facilities in such fields as medicine, education, commercial and public recreation, etc." ("The Des Moines Metropolitan Area - Its Economic Potentials," A Report to the Greater Des Moines Chamber of Commerce, September, 1956.) Though the above quotation referred to Des Moines in the Des Moines report, its application to Boone on the smaller local scale is equally valid, among all the services as well as education and medicine and tourism.

The number of groups and conventions meeting in Boone, because it is well situated in the center of the State, on excellent highways, and because of the proximity of Boone to the Ledges, will increase with greater leisure time and general business growth, to the benefit of the City in proportion to the degree that Boone is prepared to accommodate them. Services and facilities geared specifically to the needs of these groups are needed.

Table 55 shows the number of establishments and persons employed therein for selected services in Boone, the County, and the remainder of the County. The breakdown between "Personal Service", "Auto Repair, Auto Service, and Garages", and "All other Selected Services" is given in Table 56.

TABLE 55

SELECTED SERVICES: 1958-
BOONE COUNTY, BOONE, AND THE
REMAINDER OF THE COUNTY

	Total Establishments	Receipts (\$1, 000)	Paid Employees Work Week Ending November 15 Full Work Week
1958			
Boone County	145	2, 401	243
Boone	91	1, 799	205
Remainder of County	54	602	38
1954			
Boone County	147	1, 975	193
Boone	100	1, 587	177
Remainder of County	47	389	16

TABLE 56

KIND OF BUSINESS GROUP

	Personal Services Establish- ments	Receipts (\$1,000)	Auto Repair, Services, Garages Establish- ments	Auto Serv-All other Selected Receipts (\$1,000)	Service Estab- lishments	-Receipts (\$1,000)
1958						
Boone County	68	981	19	330	58	1,090
Boone	37	744	11	205	43	850
Remainder of County	31	237	8	125	15	240
1954						
Boone County	66	760	17	287	64	928
Boone	43	636	11	202	46	748
Remainder of County	23	124	6	85	18	180

A comparison with the State of those types of selected services for which figures for Boone are available is given in Table 57. It should be noted that the great percentage increases in the receipts 1954-1958 for the "remainder of the county" classification are due to the relatively small value of the 1954 receipts. "Auto Repair, Services and Garages" follow the trend seen for the sales at gasoline service stations in the remainder of the County area noted in the section on Retail Trade. In the personal services categories, both Boone and the remainder of the County evidenced gains.

TABLE 57

 PROFESSIONAL, BUSINESS AND PERSONAL SERVICES - CENSUS, 1954-1958
 PERCENT CHANGE

	Receipts			
	State	County	Boone	Remainder of County
Hotels, Motels, Tourist Courts, Camps	18%			
Personal Services	22%	29%	17%	91%
Miscellaneous Business Services	60%			
Auto Repair, Services, Garages	77%	15%	01%	47%
Miscellaneous Repair Services	21%			
Motion Pictures	-19%			
Amusements, Recreation, Services (excluding motion pictures)	24%			
All Other (See Previous County Chart)		17%	14%	33%

There are two rest homes in Boone. Evangelical Free Church Home and State Eastern Star-Masonic Home, to care for the needs of the aged.

Housing & Construction

Taxable residential units in Boone totalled 3,467 in 1953 and 3,688 in 1961. The State Tax Commission stated the 1961 figure is the more reliable as there were difficulties attendant to obtaining the figures during the first few years they were reported by the Counties on the Abstract of Assessment Reports.

The U. S. Bureau of the Census reported information on housing for 1950 and 1960 given in Table 58.

TABLE 58

HOUSING - BOONE, IOWA

	<u>1950</u>	<u>1960</u>
All housing units	4,016	4,559
Owner occupied housing units	2,772	3,099
Renter occupied housing units	1,163	666
Vacant, non-seasonal, not dilapidated and for rent	29	--
Vacant and available for rent	--	100
Vacant and available for rent but dilapidated	--	25
Housing units for sale	41	26

The 1950 Census figures show that 22 houses in Boone were considered dilapidated, but had a bath, running water and toilet facilities. 110 houses were considered dilapidated and had no bath, running water, nor toilet.

The Census definition as to what constitutes a dilapidated house has changed since 1950. Added is a category "deteriorating". Definitions for these housing conditions follow:

"Deteriorating - needs more repair than would be provided in the course of regular maintenance, such as rotten window sills or shakey porches.

"Dilapidated - does not provide safe or adequate shelter, has one or more serious defects or a combination of intermediate ones" such as included under deteriorating homes, "or is of inadequate original construction."

TABLE 59

CONDITION OF HOUSING IN BOONE,
1960

	<u>Number</u>
Lacking only hot water	25
Lacking toilet or bath or running water	161
Deteriorating	915
With complete Plumbing	656
Lacking hot water	26
Lacking toilet, bath or running water	233
Dilapidated	363
Dilapidated, vacant and for rent	25

As can be seen by Table 62, giving the number of plumbing permits issued in Boone during the years 1957-1960, a greater number of plumbing permits were issued during 1958-1960 and especially in 1959 than were issued in 1957. The number of plumbing permits also exceed the total building permits during each of these three years, indicating that Boone residents remodeled kitchen and bathroom facilities or installed them where none previously existed.

The major factor for the high number of dilapidated homes in Boone, is that so great a number of houses were built before 1919. However, many have been kept in an excellent state of repair, especially in the neighborhood south and east of the business district.

In 1950, the Housing Census gave the age of residential units as shown in Table 60. (1960 figures reportedly not yet available.)

TABLE 60

AGE OF HOUSING - 1950

<u>Date of Construction</u>	<u>Number of Units</u>
1945 or later	170
1940-1944	50
1930-1939	125
1920-1929	520
1919 and earlier	2,960
Total	3,825

The Census report acknowledges the gap in total housing as a result of incomplete information being available.

Mr. Hull, City building inspector, reported that during the spring of 1961 very few permits for building new homes were issued, this being during that part of the year which is considered ideal time to start new construction. However, the lag in building did not continue through the year and in November of 1961, seven new permits were issued. The trend so far this year indicates that total new building in Boone in 1961 will be comparable to that of the past years. Not included in building permit figures for Boone are those homes built outside of the City limits. The County does not require a permit for construction in the County.

The trend of new building in Boone has been to the south and east of the City and the homes built have been of fairly high value. Further building will advance beyond the City limits.

As shown on Map 7, Future Population Distribution, of the Boone Comprehensive Plan, the areas south and east of the City should be annexed as development trends become apparent. The following should be considered. Areas of deteriorating or dilapidated housing very often require services that are more costly to the City than those areas of new residences. Therefore, as feasible, new subdivisions of quality homes should be annexed to ensure application of the accompanying subdivision regulations, zoning, and building codes.

Most of the new homes constructed have been single family dwellings. There is a need in Boone for multiple dwelling units available on a rental basis. Provision has been made in the Comprehensive Plan for zoning the area close to the downtown business district for multiple family occupancy. Some effort should be made to construct rental units to satisfy the requirements of the basically renter-type military personnel, young married couples, semi-retired couples and personnel of nationally organized firms. The latter may in all probability be moved to different towns as they advance within the company organizations.

There are four major residential home contractors in Boone. Three custom build homes. A fourth, in addition, assembles prefabricated structures and does finish work necessary to prepare the homes for occupancy.

Residential, commercial and industrial construction indicates the state of the economy and closely reflects its growth. Housing construction responds more swiftly to population growth than does non-housing construction, that is, than does construction of commercial office buildings, retail food stores, professional offices and retail buildings among others. As the population of Boone increases in response to greater industrialization, the need for residential construction will increase, occupying a sizeable portion of the labor force.

In Boone, the dollar amount of reported value of new construction of all types has remained fairly stable over recent years, as indicated by the records of the Building Inspector's office.

Records kept since 1956 indicate the total reported values each year and the number of each type of building constructed each year. Note that the new Boone Elementary School and the two school additions raised the 1960 reported value. In 1959, the total reported value of all building in the City reflects a large number of new homes, three commercial buildings, two churches, one storage facility, and four warehouses.

TABLE 61 CONSTRUCTION IN BOONE

Year	New Homes	Commer- cial	Office	Church	Convent	Storage	Ware- House	School	Reported Values
1956	43	3	1		1			1	\$728,715.50
1957	27	3							689,921.00
1958	40	5		1		1			745,235.00
1959	55	3		2		1	4		1,256,322.50
1960	40	12	3					3	1,186,234.00

Table 62 shows the total number of permits issued not only for new building, but for electrical work, plumbing, heating, and signs.

TABLE 62 NUMBER OF PERMITS ISSUED IN BOONE

Type of Permits	Number of Permits issued			
	1957	1958	1959	1960
Building	99	103	153	127
Electrical	205	161	202	130
Plumbing	54	189	346	279
Heating	129	152	125	93
Signs	16	18	20	11
Total	503	623	846	640

There are three large contractors located in the Boone area who do heavy construction work, such as highways, streets, bridges, and erecting buildings such as schools, commercial properties, and apartment houses. These three are Hallett Construction Company, Boone Construction Company, and Grabau Construction Company. The work of the Hallett Company is principally concerned with highways, surfacing with asphalt, concrete and aggregates. 90% of their work is contracted with the State and covers the entire State area. Although the greater percentage of their work is outside of Boone County, a contract estimated at \$300,000 near Madrid is underway. During 1960 Hallett contracted with Boone and the Boone Airport for an estimated \$300,000 worth of street and runway paving. Hallett also paved the parking lot at Lawson's Food Market during 1960, although most small jobs are not feasible for the Company to undertake.

Both Grabau and Boone Construction Companies contract for work over the entire State, with about 90% of Grabau's work being done outside of the County.

All the major contract construction companies hold a nucleus force in Boone, composed chiefly of management and construction superintendents and foremen. All other labor is hired at the job site as needed. In this connection, the Boone office of the Iowa Employment Security Commission reported that the greatest number of jobs filled through its office in non-agricultural employment was in the construction worker category. Thus, while the major construction companies with home offices in Boone employ very few Boone men in the unskilled labor category over the entire State, any large construction job in Boone or the County will and does draw on the labor force available in Boone. Also, unskilled labor in Boone is employed on local home construction jobs.

As Hallett Construction Company keeps its winter station for repair of equipment at Boone, a number of mechanics and equipment operators are retained year around. The Hallett Company also processes sand and gravel for use in the area, 80% locally and 20% within 75 miles of Boone. The total labor force employed at the Boone station varies from a winter low of 20 to a summer high of from 50-75 men.

Government

The historical sequence of events provides a fitting introduction to the general topic of government in the City of Boone.

The first incorporation was effected May 7, 1866 as the Town of Montana. On March 28, 1868, it was incorporated as a city of the second class, with the name changed to the City of Boone, August 30, 1871.

Contrary to the customary plan of Iowa County seat towns, one might not realize by driving through the central business district that Boone was a county seat. This circumstance is explained by the fact that the court house was originally situated in the Town of Boonesboro which at one time was a separate town with a public square centered around the court house. On March 1, 1865, it was announced by the railroad that the new depot would be located between a mile and a mile and a quarter East of the public square and a little to the North. The article appearing in the Boonesboro Index of that date speculated, "It is not far enough away to make a new town. It may and without doubt will cause this town to be built up clear out to the depot and thereby enlarge its boundaries."

Those working for the County government aside from men employed to maintain the roads live for the most part in the City of Boone. Purchases made for supplies and equipment for the conduct of county business are whenever possible made in Boone. The exceptions to this would be purchases of aggregates which must be purchased at the quarry site, road equipment not for sale in Boone, and trucks and automobiles purchased through dealers in Boone and other smaller county towns. It thus may be determined that the County government does make a contribution to the economic base of the City of Boone.

There has, within the last year or two, been a reorganization of the administration of the welfare service within the County government. This is a matter of consequence to the economy of the City and County of Boone because apparently the requirements have exceeded the budgeted amount substantially.

Central urban places such as Boone are experiencing increasing demands from those living in the trade area and those living in the city for more services. That such demands are being met in Boone has been fairly well substantiated by the answers received in the questionnaires and in personal interviews.

The City administration is faced with balancing facilities and services against the imposition of higher taxes and incurring of debt. Some of the larger cities of Iowa have seen fit to employ professional management to carry on the administration of the city. Whether the city manager system would be of any greater efficiency in Boone at the present time is questionable. The mayor-council type of government which Boone has at the present time is perhaps more responsive to the needs and desires of those living in the community, at least so long as it remains near its present population.

It is beyond the purview of this study to appraise the organization or efficiency of Boone's City government, though certain aspects of city government do affect the economic base of the City, for example city finances, City planning and the government's role in promoting the general attractiveness of the City.

TABLE 63

COMMUNITY DATA

Government of Boone

Type: Mayor and Council

Operating Budget - 1962 (Estimated)

City: \$ 840,263

Education: \$1,376,111

TABLE 64

TRENDS IN THE ASSESSED VALUATIONS,
MILLAGE RATES, BUDGET, AND BONDED
INDEBTEDNESS

<u>Year</u>	<u>Assessed Valuation</u> <u>All Property</u>	<u>City Tax</u> <u>Millage Rates</u>	<u>Budget</u> <u>City</u>	<u>Bonded</u> <u>Indebtedness</u>
1961-62	\$17,182,888.00	28.784	840,263	N. A.
Dec., 1960				553,000
1959-60	17,026,441.00	27.010	772,158	161,000
1956-57	15,088,472.00	22.259	862,014	95,000
1950-51	11,245,470.00	21.192	541,435	395,500
1940-41	6,960,255.00	17.840	235,714	240,500

(Annual Financial Reports, City of Boone and letter from County Auditor, December 7, 1961.)

TABLE 65

BOONE TAX LEVIES
(From 1960 Financial Report)

BOONE COUNTY

General	\$ 32,875
Court Expense	7,399
Poor	50,590
State Institution	26,640
County Mental Health	4,937
Soldiers Relief	13,380
Employees Retirement	7,399
County Fair Aid	1,846
Bang's Disease	1,230
County Conservation	13,380
Secondary Road	8,028
County Board of Education	11,400
City Assessor	13,701
Agricultural Extension Council	4,094
Hospital General	11,092
Hospital (Social Security)	3,425
Hospital (IPERS)	4,000
Hospital Bonds & Interest	12,323
Total	\$ 227,739
Per cent of Total	15.1%

BOONE PUBLIC SCHOOLS

General	\$ 698,388
Social Security	23,335
Public Employees Retirement	23,442
School House	32,915
Bonds & Interest	88,108
Special Courses	27,643
Total	\$ 893,831
Percent of Total	59.5%

CITY OF BOONE (City Council)

General	\$ 16,300
Street	49,000
Public Safety	124,594
Sanitation	29,000
Municipal Enterprise	43,700
Recreation	36,813
Utilities	21,000
Debt Service	18,000
Trust & Agency	35,359
Street (Agr. Land)	200
Total	\$ 373,966
Per Cent of Total	24.9%

STATE LEVY

\$ 6,958

Per cent of Total

0.5%

Grand Total

\$ 1,502.494

TABLE 66

PERCENTAGE DISTRIBUTION
OF TAX LEVIES

<u>YEAR</u>	<u>BOONE COUNTY</u>	<u>BOONE SCHOOLS</u>	<u>CITY OF BOONE</u>
1960	15.1%	59.5%	24.9%
1959	15.6%	58.7%	25.2%
1958	16.1%	58.5%	25.0%
1957	14.5%	57.6%	27.1%
1956	15.4%	57.4%	26.3%
1950-51	15.5%	56.0%	28.5%

The above percentage figures were set out to indicate trends. The only one consistently higher each year is that of Boone Schools.

TABLE 67

AMOUNT OF CASH IN BANKS AND IN
TREASURER'S HANDS ON DECEMBER 31, 1960

Citizens National Bank (General Account)	\$ 97,708.42
Citizens National Bank (Ericson Memorial Account)	205.34
Securities Held by Treasurer	547,956.57
Treasurer's Cash Not Deposited	None
Total Cash and Securities	\$ 645,870.33

TABLE 68

RESOURCES FOR THE FISCAL YEAR
BEGINNING JANUARY 1, 1961

FUND	Proposed Expend.	Est. Bal.	Est. Income*	Tax Entered	Mills
GENERAL	\$ 56,800	\$ 7,500	\$ 33,000	\$ 16,300	0.854
STREET	52,200		73,000	49,200	3.662
STREET ROAD USE TAX	70,000		70,000		
PUBLIC SAFETY					
Police	\$ 77,879				
Fire	61,842				
Fire Equip.	1,873				
Rural Fire	12,000				
Parking Meter	7,000	160,594	3,000	33,000	124,594 9.312
SANITATION					
Health	15,000				
Storm Sewer	8,000				
Sanitary Sewer	6,000				
Dump Grounds	2,000	31,000	2,000	29,000	2.167
SEWER RENTAL	38,000	10,000	28,000		
LIBRARY	34,400		2,400	32,000	2.392
AIRPORT	23,700	7,000	5,000	11,700	0.874
PARK	26,000		750	25,250	1.887
SWIMMING POOL	11,000		7,000	4,000	0.299
BAND	4,563			4,563	0.341
PLAYGROUND	3,000			3,000	0.224
WATER WORKS	155,000	35,000	120,000		
STREET LIGHTING	21,000			21,000	1.569
DEBT SERVICE	34,000	16,000		18,000	1.345
METER DEPOSIT	1,300		1,300		
FIRE PENSION	6,300	2,000		4,300	0.321
FIRE RETIREMENT	10,903		1,800	9,103	0.680
POLICE PENSION	9,200			9,200	0.688
POLICE RETIREMENT	12,756			12,756	0.954
PARKING METER 75% FUND	22,000		22,000		
CEMETERY MAINTENANCE (Int)	5,000		5,000		
HOUSING	500	500			
TOTAL	\$ 789,216	\$ 81,000	\$ 334,250	\$ 373,966	27.569

* Estimate income from sources other than taxes.

TABLE 69

SUMMARY OF BONDED INDEBTEDNESS
JANUARY 1, 1960 THROUGH
DECEMBER 30, 1960

<u>Obligation</u>	<u>Amount of Issue</u>	<u>Date of Issue</u>	<u>Rate of Interest</u>
<u>General Obligation Bonds:</u>			
Improvement Fund Certif.	\$ 60,000.00	4-1-1949	2-3/4
Airport	85,000.00	4-1-1960	3.4, 3.5
Storm Sewer	217,000.00	12-1-1960	3.25, 2.75, 3.00, 3.10
Total General Obligation Bonds			
<u>Special Assessment Bonds:</u>			
Street Improvement	31,000.00	10-15-1956	3.0
Street Improvement	23,000.00	2-1-1959	2.0, 3.0, 4.0
Storm Sewer	73,000.00	12-1-1960	2.0, 3.6, 4.0
Total Special Assessment Bonds			
<u>Revenue Bonds:</u>			
Sewer	130,000.00	12-1-1958	3-3/4, 4.0
Parking Lot	40,000.00	7-1-1960	3.70
Total Revenue Bonds			
Grand Total			

(TABLE 69 continued)

<u>Outstanding</u> <u>1-1-1960</u>	<u>Issued</u> <u>During</u> <u>Period</u>	<u>Total</u>	<u>Redeemed</u> <u>During</u> <u>Period</u>	<u>Outstanding</u> <u>12-31-1960</u>
\$ 7,000.00	\$ -	\$ 7,000.00	\$ 7,000.00	\$ -
-	85,000.00	85,000.00	-	85,000.00
<u>-</u>	<u>217,000.00</u>	<u>217,000.00</u>	<u>-</u>	<u>217,000.00</u>
\$ 7,000.00	\$302,000.00	\$309,000.00	\$ 7,000.00	\$302,000.00
<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
\$ 11,000.00	\$ -	\$ 11,000.00	\$ 5,000.00	\$ 6,000.00
18,000.00	-	18,000.00	6,000.00	12,000.00
<u>-</u>	<u>73,000.00</u>	<u>73,000.00</u>	<u>-</u>	<u>73,000.00</u>
\$ 29,000.00	\$ 73,000.00	\$102,000.00	\$ 11,000.00	\$ 91,000.00
<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
\$125,000.00	\$ -	\$125,000.00	\$ 5,000.00	\$120,000.00
-	40,000.00	40,000.00	-	40,000.00
\$125,000.00	\$ 40,000.00	\$165,000.00	\$ 5,000.00	\$160,000.00
<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
\$161,000.00	\$415,000.00	\$576,000.00	\$ 23,000.00	\$553,000.00
<u><u>-</u></u>	<u><u>-</u></u>	<u><u>-</u></u>	<u><u>-</u></u>	<u><u>-</u></u>

TABLE 70

BOND MATURITIES
DECEMBER 31, 1960

<u>Obligation</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
<u>General Obligation Bonds:</u>					
Airport:					
Issued 4-1-1960	\$ 7,000.00	\$ 7,000.00	\$ 7,000.00	\$ 7,000.00	\$ 7,000.00
Storm Sewer:					
Issued 12-1-1960	-	\$12,000.00	15,000.00	15,000.00	15,000.00
Total Gen. Obl.	\$ 7,000.00	\$19,000.00	\$22,000.00	\$22,000.00	\$22,000.00
<u>Special Assessment Bonds:</u>					
Street Improvement:					
Issued 10-15-1956	\$ -	\$ -	\$ -	\$ 2,000.00	\$ 4,000.00
Street Improvement:					
Issued 2-1-1959	-	-	-	-	3,000.00
Storm Sewer:					
Issued 12-1-1960	8,000.00	8,000.00	8,000.00	8,000.00	8,000.00
Total	\$ 8,000.00	\$ 8,000.00	\$ 8,000.00	\$10,000.00	\$15,000.00
<u>Revenue Bonds:</u>					
Sewer:					
Issued 12-1-1958	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00
Parking Lot:					
Issued 7-1-1960	8,000.00	8,000.00	8,000.00	8,000.00	8,000.00
Total Rev. Bonds	\$13,000.00	\$13,000.00	\$13,000.00	\$13,000.00	\$13,000.00
Grand Total	\$28,000.00	\$40,000.00	\$43,000.00	\$45,000.00	\$50,000.00

(TABLE 70 continued)

<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>Balance</u>	<u>Total</u>
\$ 7,000.00	\$ 7,000.00	\$ 7,000.00	\$ 7,000.00	\$ 22,000.00	\$ 85,000.00
<u>15,000.00</u>	<u>15,000.00</u>	<u>15,000.00</u>	<u>15,000.00</u>	<u>100,000.00</u>	<u>217,000.00</u>
<u>\$22,000.00</u>	<u>\$22,000.00</u>	<u>\$22,000.00</u>	<u>\$22,000.00</u>	<u>\$122,000.00</u>	<u>\$302,000.00</u>
\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,000.00
3,000.00	3,000.00	3,000.00	-	-	12,000.00
<u>8,000.00</u>	<u>8,000.00</u>	<u>8,000.00</u>	<u>9,000.00</u>	<u>-</u>	<u>73,000.00</u>
<u>\$11,000.00</u>	<u>\$11,000.00</u>	<u>\$11,000.00</u>	<u>\$ 9,000.00</u>	<u>\$ -</u>	<u>\$ 91,000.00</u>
\$ 5,000.00	\$ 5,000.00	\$10,000.00	\$10,000.00	\$ 65,000.00	\$120,000.00
<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>40,000.00</u>
<u>\$ 5,000.00</u>	<u>\$ 5,000.00</u>	<u>\$10,000.00</u>	<u>\$10,000.00</u>	<u>\$ 65,000.00</u>	<u>\$160,000.00</u>
<u>\$38,000.00</u>	<u>\$38,000.00</u>	<u>\$43,000.00</u>	<u>\$41,000.00</u>	<u>\$187,000.00</u>	<u>\$553,000.00</u>

TABLE 71

VALUE OF MUNICIPAL POSSESSIONS AS OF
DECEMBER 31, 1960 (VALUATION MADE
BY COUNCIL)

Municipal Building and Sites	176,500
Police Apparatus	8,750
Fire Equipment	72,000
Hospital Building and Equipment	-
Disposal Plant	325,000
Water Works	1,000,000
Electric Light Works	-
Library, Building, Site, Books, Etc.	60,000
Parks, Land and Buildings, Etc.	168,000
Airports, Land and Buildings and Equipment	275,000
Cemeteries and all Other Property	
Not Listed	298,850
TOTAL	2,384,100

TABLE 72

SUPPLEMENTARY INFORMATION

Name of City	Boone
Classification	City
Date of first incorporation, Town of Montana	May 7, 1866
Date of incorporation as City Second Class	March 28, 1868
Name changed to City of Boone	August 30, 1871
Limits of City of Boone extended	September 9, 1876
Boonsboro annexed	March 21, 1877
County Seat of Boone County changed to Boone	March 23, 1888
Limits of City of Boone extended	March 7, 1892
Limits of City of Boone extended	November 16, 1931
Limits of City of Boone extended	October 17, 1955
Limits of City of Boone extended (Park)	February 27, 1956
Limits of City of Boone extended	July 6, 1959
Limits of City of Boone extended	April 18, 1960
Number of square miles	5.22
Number of acres in City of Boone	3,340
Altitude - feet above sea level	1,133
Climate - mean annual temperature, degrees F	48.3
Number of miles of brick paving	.42
Number of miles of asphalt paving	21.69
Number of miles of concrete paving	14.90
Number of miles of bituminous surfacing	16.09
Number of miles of soil cement paving	.53
Number of miles of graveled streets	30.00
Number of miles of concrete sidewalks	68.17

TABLE 72 (Continued)

Number of miles of sanitary sewers	45.89
Number of miles of storm sewers	29.39
Number of sewer inlets	933
Number of miles of water mains	62.97
Number of fire hydrants in City	566
Number of water valves	598
Number of acres in Parks	241.46
Number of off street parking lots	10
Number of off street parking stalls	338

The day to day administration of the City and maintenance of facilities is the responsibility of the following City officials:

Mayor	Police Chief
City Clerk	Fire Chief
City Attorney	Building Inspector
City Treasurer	Health Officer
City Engineer	Health Inspector
Superintendent of Public Works	City Nurse
City Assessor	

These City offices (exclusive of the Police and Fire Departments) employ three secretaries and 23 full time laborers, all of whom live in Boone. An increase in the number of persons employed is not anticipated.

The Boone Police Department, under the Chief of Police, employs 14 patrolmen and 1 merchant policeman. All are required to live in Boone. There are always a sufficient number of applicants to fill any vacancies. The Department may add one man within the next two or three years.

The Boone Fire Department, under the Fire Chief and two assistant Chiefs, employs 10 regular firemen and 10 volunteers. All of the regular men are required to live in Boone. The Fire Department also hopes to add a man within the next two or three years and it also always has a sufficient number of applicants for positions open.

In 1955 the Boone Fire Department agreed to provide rural fire protection for six townships: Jackson, Des Moines, Dodge, Worth, Colfax and Harrison.

Employees of the County are listed below according to the number of persons employed in each of the various county offices. Most of these persons, except County road employees, live in Boone as well as work there.

TABLE 73

COUNTY OFFICIALS
AND EMPLOYEES

Members of the Board of Supervisors:

Myron E. Hanson, Chairman (Term expires January 1, 1962)
Charles P. Ball (Term expires January 1, 1963)
Glenn D. Lehman (Term expires January 1, 1964)

	No. of Employees
County Auditor's Office	4
County Treasurer's Office	7
County Recorder's Office	2
Clerk of the District Court	3
County Sheriff's Office	3
County Attorney's Office	2
Other County Officials	10
County Engineer's Office	4
Board of Education	5
County Road Employees	46 Full Time 9 Part Time

(Official Directory for 1961--Financial Report--Boone County, 1960.
County Salaries in Iowa--1960, Institute of Public Affairs of the State University
of Iowa, Iowa City, Iowa.)

That portion of tax dollars collected in remainder of Boone County and paid as salaries represents an increment to the economic base when spent in Boone.

The United States Department of Agriculture maintains an office for the County Agricultural Stabilization and Conservation Committee which maintains the following staff:

8 women working as clerks, stenographers and bookkeepers
2 men as administrators and technicians
Some part-time help
6 men working under their direction in the area as a bin crew
14 inspectors and sealers who work on call day to day

Of the 10 regular people, half live in Boone and the rest in the County.

Des Moines is the location of their supervisory office.

The Soil Conservation Service maintains six employees .

1 woman - 5 men as Technicians and administrators

2 live in Boone, 1 in Ames, the rest in Rural Boone County.

Des Moines is the location of the State Office.

Federal funds are also a factor in the economy through the employment of personnel at the County Extension Office and the local office of the Iowa Employment Security Commission.

Boone is outstanding among county seat towns in the extent of participation and support given to the National Guard and elements of the military establishment. Approximately 390 Boone City and County men are on drill status. The payroll and purchases made for supplies and equipment for them have made a substantial contribution to the economic base of the community.

The facilities at the Boone Airport are shared with the military for the maintenance and operation of the Air Arm of the Army National Guard. Twenty-four active duty men are assigned as permanent party personnel but are carried on a civilian payroll.

The Federal Government has 33 full-time employees at the Post Office, including the Postmaster and his Assistant, and it is the single largest group of Federal employees in the City.

Set out below is a table showing the postal receipts in the Boone Post Office.

TABLE 74

POST OFFICE - BOONE, IOWA

<u>Year</u>	<u>Receipts</u>
1960	\$175,826.11
1959	170,258.26
1958	152,038.14
1957	133,158.47
1956	136,360.46
1950	107,317.94
1940	71,233.20

The progressively greater receipts reflect the increased volume of manufacturing in Boone, wholesale trade, and to a certain extent, retail trade, as well as the increase in postal rates.

Taxation

Property taxes are a subject of interest to all owners and of special concern to farm land owners and owners of residential properties. The importance of the tax angle in regard to its effect on industry may be over-emphasized, but nevertheless it is one of the factors considered when industry looks for a new site. See "Taxation and Industry", Page 193.

"Real Estate is taxed according to its value, the ad valorem system. After the appraisal of every piece of land, each taxing body in the county levies a tax on each piece, a percentage of its value as determined by the taxing body's budget. In cities there are numerous bodies having independent powers to tax property, and the number is increasing. City planners recommend considerable consolidation.

Cities depend largely upon real estate taxes to support public services. This has placed a heavy burden on real estate that has grown greater and greater over the years, as standards of service have risen. As demands for more service and labor costs go up, the burden will become heavier. The only effective solution is greater proportion of revenue from other sources, and the supporting and enhancing of real estate values through City planning.

Industrial and commercial property pays higher taxes, and a large proportion of services are absorbed by residential property, which, with the ad valorem tax, creates problems for the City planner. Important to the community are industry and commerce, for they furnish jobs that make it possible for people to live where they do, and then they pay a good part of the bill." ("Real Estate & City Planning," by Richard L. Nelson and Frederick T. Aschman.

The State Government under constitutional authority, determines the taxing system in operation at the County and City level, and what the maximum levy shall be. Such statutory determinations are the authority for the activities of the lower levels of government. The County plays a dual role in the operation of the tax laws which the State Legislature adopts. The first role is that of administration of the State Laws and Regulations. The second role is that of determining within limits the local tax levy rates and the allocation of various revenues for County purposes. County officers have the responsibility of collecting all the tax money for the City and the County.

"In general, property taxation is a 'residual levy'. The amount to be raised by this form of taxation is determined by estimating total expenditures, and subtracting therefrom total revenues from aids, other taxes, and miscellaneous sources." (Johnson, Robert H. and Lewis E. Wagner, "A Comparative Study of the Tax Systems of Iowa and the Surrounding States," Bureau of Business and Economic Research, State University of Iowa, Iowa City, Iowa, June 1952.)

"The Expenditures Plan - of the budget

"This plan should contain an analysis of the cost of the proposed operations. An adequate budget will show considerable detail in regard to salary schedules, bond retirement schedules, material and equipment costs, and unit costs.

"The Financing Plan - of the budget

"This plan should show detailed revenue estimates for the school year. Such estimates should be based on those of previous years and also on trends in property valuations, State support funds, tuition receipts, and general economic conditions.

"Revenues must be estimated accurately and the expected revenue must fully satisfy the demands of the expenditures plan. When a budget becomes unbalanced, it ceases to perform the function for which it was intended." ("The Budget and Tax Levies", School Business, Department of Public Instruction, The State of Iowa, Des Moines, Iowa, 1958.)

"Actual, Assessed and Taxable Value. (Sec. 441.13 - Code of Iowa, 1958)

"All property subject to taxation shall be valued at its actual value which shall be entered opposite each item, and shall be assessed at 60% of its actual value. Such assessed value shall be taken and considered as taxable value of such property upon which the levy shall be made. The actual value in such cases shall be one and two-thirds times the assessed value as shown by the assessment rolls."

"The millage levy may be found by dividing the amount necessary to be raised by taxation by the assessed valuation of the district. The millage levy is numerically equal to the tax in dollars per one thousand dollars assessed valuation." ("The Budget and Tax Levies", ibid.)

"Indebtedness is limited to those financial obligations of a city or town that are guaranteed by the full faith and credit of the municipal corporation and that are not payable in full from the current fiscal year's tax revenue. These obligations must be paid by levying taxes on all property in the municipality, and the constitutional and statutory limits discussed below apply only to these obligations. Projects that are financed through the issuance of revenue bonds or by special assessments of benefited property are not considered "general obligations" of the community and hence are not considered in computing the legal indebtedness of a city or town.

Debt Limits

"Both the State Constitution and the Statutes in Iowa place a limit on the amount of debt that a city or town may have at any one time. The constitution

forbids any city or town to become indebted for any purpose in an amount greater than five percent of the actual value of the taxable property in the municipality. The value must be determined from the last state and county tax lists previous to incurring the debt." (Constitution, Art. XI, Sec. 3)

This restriction is restated in the Code of Iowa with certain additions. The value of property must be the 'actual' value, which is defined as one and two-thirds times the assessed value used for taxation purposes. Moreover, within the five percent limit, a municipal corporation may incur debt for its 'general and ordinary' purposes in an amount no greater than one and one-fourth per cent of the actual taxable value of the property. (Sections 407.1, .2, .4, 441.13) For other authorized purposes indebtedness may be incurred up to the five percent less the amount that has actually been incurred for general and ordinary purposes. ("The Clerk's Manual," Institute of Public Affairs of the State University of Iowa in cooperation with the League of Iowa Municipalities, Iowa City, 1958, Page 41-42.) See also; Measuring Capacity to Pay, Appendix, Page 11A.

Bonds

Municipal indebtedness usually is evidenced by bonds.

1. General obligation bonds have as security the general taxing power of the municipality which issues them.
2. Revenue bonds have as security only the revenues of the municipal enterprise or utility for which the bonds are issued. "The bonds issued for these purposes are not considered 'indebtedness' within the constitutional and statutory debt limits, nor are they guaranteed by the full faith and credit of the municipal corporation that issued them." ("The Clerk's Manual," *ibid.* Page 44-45.)

Assessment Bonds

"In order to pay the assessed cost of any street improvement or sewer, or any part of it, the council, by resolution, may issue street improvement bonds or sewer bonds in anticipation of the collection of the assessments.

Payment of Bonds

"Whenever bonds are issued, the Council by resolution must provide for a tax assessment on all property in the city or town sufficient to pay the interest and principal of the bonds in not more than twenty years. A certified copy of the resolution must be filed with the county auditor of the county in which the city or town is located." (Sections 76.1, .2)

"If a city or town has accumulated non-tax money that may be used for the same purposes as those that may be financed by the sale of bonds, the council may apply this money toward payment of interest or principal. Whenever this is done, a corresponding reduction in the required tax levy may be made." (Sec. 76.4)

"Chapter 76 does not apply to bonds that are payable from special assessments of benefited property." (Sec. 76.5) (The Clerk's Manual, *ibid.*, Page 50.)

Taxation and Industry

There is a divergence of opinion in Boone in respect to the effect of taxes on the attraction of new industry. This is apparent when the relatively low tax rate in the United Community School District is presented as an inducement to locate industry in the new industrial district immediately east and outside of the City Limits of Boone. The question has been raised as to the desirability of annexing this new industrial district to the City of Boone, and the certainty of a higher tax rate has been a deterrent. There are two considerations which have been brought out in personal interviews. One is that the necessity of a new High School will, in all probability, be responsible for a consolidation of the majority, if not all of the School Districts east of the River. This, in itself, will result in an adjustment of the prevailing millage. The second consideration is that new industry will receive benefit directly from the amenities and services offered by the City of Boone and should pay their proportionate share of taxes.

The following is quoted from the article "The Push - Pull Effects of the Real Estate Tax Upon Industrial Locations" by Robert Stuckenrath - Iowa Municipalities, January, 1961.

"A low tax rate which leaves the industry with a private highway program on its hands, the need to maintain order in the neighborhood at its own expense, and a costly installation to dispose of ordinary wastes is no bargain in taxation no matter how low the tax price may be. If, on the other hand, these services are supplied by the community, the savings to the company can be made apparent; since these things cost money, the tax rate must of necessity be higher, but it is shared by all property owners who will join to resist raising the rates beyond the point reasonably required by the benefits received.

It is idle, then to compare tax rates unless at the same time you compare services, just as any price is meaningless except in relation to what you buy for it. Real estate taxes are only one factor of many in the total tax burden. Their importance in the consideration that total tax burden varies not only with the nominal rate of the tax imposed but with the assessment base, with the extent of the tax imposed beyond bare land and structures, with the particular physical requirements of the prospective industry, its processes, its financial structure, and its cost-profit ratio, as well as with the comparative effects of all the other affecting taxes. Actually, as a proportionate part of the total cost of manufacture, the real estate tax is often a very small item indeed.

There is another aspect of the tax on real estate which makes it less filled with horrific possibilities than many other levies are. That is the fact that the property taxed, the land and building, are right out there where everyone can see them, and any attempt by the property assessor to soak the corporation is

also in plain view of everybody, all of which helps if an appeal from overvaluation is necessary. As to the rate of tax applied to the valuation, the company will have as its ally every other property owner in the area; it will not have to fight alone.

Town-shopping industries must compare the tax costs with their personnel problems, which vary with each prospective industry, and decide coldly whether what they get is worth what it costs. Generally, if the tax bite isn't so venomous as to be lethal and is fairly and impartially inflicted over the whole community, they will buy it because of the employment headaches it saves them. It is idle to say that people don't have to have all these things to be happy. Of course, they don't, but they do demand them. They don't have to live on sirloin steaks either, but your butcher has an awful time getting rid of the equally nourishing brisket."

Nelson & Aschman say:

"Any loss in the desirability of a community as a location for a residence, is critical, as is any loss in its attractiveness to industry, or a decline in desirability of shopping centers resulting in the construction of new shopping centers outside the community which capture its former business. Even the smallest of such losses represents the first step toward community bankruptcy. And the fact is that many communities are facing bankruptcy today as a direct result of loss in community desirability and a consequent proportionate decrease in the over-all tax base. Planning activities must be directed toward making the community a more desirable place for residents and industry and toward making its shopping areas so desirable and adequate that business does not go elsewhere.

The Cost to Industry and Commerce

"An analysis, however, of the cost of furnishing municipal services to these same property types showed a very different picture. In making this cost study the maintenance of schools was charged entirely to residences, cost of fire protection was divided among all properties by value, and there were other similar allocations.

It was found that each residential unit in the city (that is, each apartment, flat, and single family dwelling) used an average of \$210 of its municipal services paid out of property tax but that the average tax paid by each such unit was only \$90 per year, the differential being borne by commerce and industry. This comes about because:

1. In general, industrial and commercial property has a higher value than residential property.
2. The rate of collection is greater on industrial and commercial property. There are fewer instances of unpaid taxes than for residential property.
3. There exists a tendency for the assessor to favor residences

at the expense of industrial and commercial real estate. The latter properties are much more likely to be assessed near or above actual market value than are residences. The political reasons are obvious.

4. Whereas 1, 2, and 3, indicate that commercial and industrial properties pay higher taxes, this property, nevertheless, absorbs less services. Such property in virtually all communities covers less geographic area than the residential property, and a large proportion of the services relate directly to residential use and location. The office building has no children in school."

Table 76 shows "Per Capita Receipts" for Boone and other cities on tax receipts collected. Boone is at about the same level with Ames, Oskaloosa and Ft. Madison at 27 dollars per capita with Charles City and Ft. Dodge considerably higher. The high per capita tax receipts of Ft. Dodge do not necessarily indicate that there is an undue burden placed on the residents of that city because a large portion of this is possibly receipts from taxes levied against industrial property. These charges are usually reflected in the price to the ultimate consumer of the goods manufactured rather than to the residents of Ft. Dodge.

In the total receipts per capita column there is a much greater variation among the six cities shown. Boone with a per capita total receipts of 75 dollars is one of the four cities in the table falling below the average for the State of \$101.06. The other two, Ames and Charles City, are considerably over the average figure.

Personal inquiry with the City Manager of Ames indicated that a large proportion of the additional receipts was a direct result of the fact that Ames operates a municipally owned power plant, a municipal hospital, and a water and sewage treatment plant. A charge is also made for the services rendered by other sanitary utilities. This may very well be partial explanation for the somewhat higher than average per capita figure of Charles City. It should be recognized, of course, that these figures do not reflect the expense items that are charged against the operation of these services.

Table 78, Page 198, indicates that the "cities and towns" classification of taxes levied is higher in Boone County than in Dallas, Green, and Hamilton, but lower than that of Polk, Story, and Webster.

In summary, the above reference to the comparative tax position of Boone should prompt careful consideration of expenditures in the years ahead. Comparative figures are sound and valid only if government services rendered are also studied.

Comparative figures can be misleading, however, especially if not reduced to a per capita basis. Equally important is a review of figures as reported over a period of years to determine trends.

Reportedly, the City of Boone is not one of the cities presently under request by the State Tax Commission to raise assessed valuations.

TABLE 75

MILLAGE RATES AND NET
TAXABLE VALUATIONS

	1960 Millages	Net Taxable Valuations	
		Property	Moneys and Credits
Boone	111.913	\$13,481,803	\$1,898,323
Ames	112.958*	20,477.670	5,871,725
Charles City	89.206	11,622,347	2,431,600
Ft. Dodge	112.025	35,303,517	9,541,277
Oskaloosa	98.024	12,361,877	2,845,804
Ft. Madison	98.463	15,575,222	7,676,839

*The millage rate for schools in the City of Ames is much higher than that of other cities included in this table.

TABLE 76

PER CAPITA RECEIPTS
1960 Population and 1959 Receipts

	1960 Pop.	Tax Receipts (1959)	Per Capita Tax Receipts	Total Receipts (1959)	Per Capita Total Recpt.
Boone	12,468	\$ 346,842.30	\$27.82	\$ 937,623.12	\$ 75.20
Ames	27,003	729,025.80	27.00	6,271,713.91	232.30
Charles City	9,964	387,660.91	38.81	1,153,779.58	115.79
Ft. Dodge	28,399	1,329,816.32	46.83	2,462,274.88	86.70
Oskaloosa	11,053	302,845.81	27.40	652,479.29	59.03
Ft. Madison	14,954	413,672.19	27.66	703,563.10	47.05

Average total receipts per Capita for cities of the State of Iowa is \$101.06.

TABLE 77

1962 TAX LEVY

Tax Levy Voted For The Year 1962 On All Taxable Property In Boone

Purpose Levied	Levy in Mills	Levy in Dollars
General	1.489	20,228
Street	3.607	49,000
Public Safety	9.431	128,100
Sanitation	2.135	29,000
Municipal Enterprise	3.438	46,700
Recreation	3.089	41,963
Utilities	1.546	21,000
Debt Service	1.325	18,000
Trust and Agency	2.724	37,000
Street (Agr. Land)	<u>1.250</u>	<u>105</u>
Totals	28.784	390,991

(Adopted Budget and Certificate of Incorporation Taxes, Boone, Iowa)

TABLE 78 AMOUNT OF TAXES LEVIED AS REPORTED BY COUNTY AUDITORS
AVERAGE NET MILLAGES

County			Cities & Towns	Rural Districts	Total for County
Boone					
1960 (collectable in 1961)			105.538	58.662	74.244
1959	"	1960	101.699	57.063	71.652
1958	"	1959	91.161	52.348	65.004
1957	"	1958	82.846	47.390	58.977
1956	"	1957	81.641	46.801	58.032
Dallas					
1960	"	1961	82.747	57.135	64.623
1959	"	1960	78.929	55.619	62.754
1958	"	1959	81.129	51.978	61.051
1957	"	1958	73.229	50.668	57.669
1956	"	1957	74.021	49.237	56.932
Greene					
1960	"	1961	73.405	56.251	60.337
1959	"	1960	68.526	52.535	56.318
1958	"	1959	72.731	47.905	53.738
1957	"	1958	69.641	45.182	50.828
1956	"	1957	69.407	44.207	49.859
Hamilton					
1960	"	1961	69.963	51.154	56.828
1959	"	1960	67.868	50.447	55.599
1958	"	1959	68.479	46.722	53.140
1957	"	1958	66.746	45.171	51.472
1956	"	1957	63.597	42.597	48.537
Polk					
1960	"	1961	114.534	86.011	110.508
1959	"	1960	110.856	83.556	106.954
1958	"	1959	105.180	79.940	101.576
1957	"	1958	97.809	73.655	94.203
1956	"	1957	92.561	72.641	88.867
Story					
1960	"	1961	109.314	65.390	86.285
1959	"	1960	106.073	61.534	82.355
1958	"	1959	101.514	56.872	77.542
1957	"	1958	90.393	52.775	69.868
1956	"	1957	89.924	50.786	68.017
Webster					
1960	"	1961	108.561	64.675	85.305
1959	"	1960	106.024	56.338	79.554
1958	"	1959	94.304	50.265	70.670
1957	"	1958	88.292	49.408	67.328
1956	"	1957	82.054	47.113	63.012

TABLE 79

ASSESSMENT OF PROPERTY
FINAL ADJUSTED TAXABLE VALUES
FOR BOONE COUNTY

	*Final Total Net Adjusted Taxable Value of all Property (Except Moneys & Credits)	Total Net Taxable Value Of Moneys & Credits
1960	\$54,305,559	\$3,449,553
1959	\$53,789,627	\$3,374,462
1958	\$52,651,960	\$2,869,188
1957	\$53,038,603	\$3,356,698
1956	\$51,833,768	\$3,201,390

*Final adjusted assessment of property values as reported by the County Auditor and equalized by the Iowa State Tax Commission.

The above table sets out the total figures for Boone County over a period of five years. Little explanation need be made of this table but Chart 30, Page 200 does indicate County costs.

TABLE 80

VALUATION OF PROPERTY SUBJECT
TO TAXATION -
On Assessments of January 1, 1960

Class of Property	Assessed and Tax Value
1. Real Property	\$ 8,419,035
2. Personal Property	1,553,944
3. Railroad Property	58,449
4. Telephone, Telegraph and Express Companies	129,819
5. Utilities, including transmission lines and pipe lines	3,218,859
	<hr/>
Total taxable valuation of all property (Ex M&C)	\$ 13,380,106
6. Total valuation of Moneys and Credits	3,253,221
	<hr/>
Total Taxable Valuation of All Property	\$ 16,633,327

Education In Transition

As indicated previously, it is not within the scope of this report to consider at length the various suggestions that have been made as to what might be accomplished by the City Government. The exception to this is the following discussion related to the school system because of its consequence to Boone as a central urban place.

The educational facilities of a community are of prime importance in evaluating the desirability of that community as a place in which to live. This is so not only in regard to the excellence of the preparation the children will receive for adult life, but also in regard to the extent that the school provides a focal point for community activities which cement the drive toward common goals of the community.

The people of Boone have ever held education in high esteem, as have Iowans generally. The high level of general educational accomplishment has been manifest in the nation as a whole in many ways, among them an extremely low level of rejections from the armed forces and the ability of Iowans who leave the State to adjust to their new surroundings and maintain a decent life.

The extent to which Boone's citizens continue to provide a good education for their youngsters is evidenced by the new elementary school buildings in the community and by the figures of the following chart showing the increases in enrollments and the concomitant increases in the numbers of teachers and of other employees necessary for the conduct of the public schools.

TABLE 81 BOONE COMMUNITY SCHOOL DISTRICT

Year	No. of Teachers	No. of other Employees	Total * Enrollment	H. S. Enrollment
1960-1961	137	47	3102	761
1959-1960	137	47	3043	753
1958-1959	132	42	3069	748
1957-1958	126	41	2958	756
1956-1957	122	40	2990	754
1950-1951	111	23	2591	647
1940-1941	100	16	2758	958

*Total enrollment includes the junior college enrollment, and is the total number of different individuals registered during the year in all schools.

(Table continued on Page 202).

(Table 81 continued from Page 201)

Year	Elementary Enrollment	Resident Pupils	Tuition Pupils	Junior College Enrollment
1960-1961	2197	2622	336	144
1959-1960	2189	2606	336	101
1958-1959	2168	2591	325	153
1957-1958	2082	2494	344	120
1956-1957	2114	2543	325	122
1950-1951	1882	2244	285	62
1940-1941	1719	2564	113	81

There is also in Boone a Catholic School, grades 1 through High School, and a Lutheran School, Kindergarten through 8th grade.

Table 82 is a Table prepared by the Boone County Extension Service giving a comparison of courses offered in Boone and in other Public School districts of Boone County. The courses are set out in such a way as to indicate the rather heavy emphasis on the Industrial Arts, and Business Education courses. Mathematics and Science are also well represented. Vocational Agriculture is taught in two of the five school districts. Recognition must be given to the fact that there is a certain amount of vocational agricultural course curricula which lends itself to shop work and to developing skills in the use of hands and tools. The need for more technical training is recognized. Courses including such things as Engineering Drawing, Survey, Secretarial Training for Professional men, Photography, Service Classes, Mechanics, Plumbing and Building Trades are considered, and would be added to the curriculum, we assume, if the industrial potential should be such as to provide employment for graduates from these courses.

Boone High School has taken cognizance of the change of emphasis from Agriculture to Industry, in regard to its curricula offerings. For several years now there have been few requests for the Vocational Agriculture course and the High School has discontinued offering it.

The High School offers the following vocational courses, as defined by the Smith-Hughes Act, and related courses:

Machine Shop	-	High School & Adult Education
Woodworking	-	High School, Introduction and Advanced
Auto Mechanics	-	High School
Mechanical Drawing	-	High School and Junior College

The conclusion is that Boone County young people are suitably prepared to provide a well-trained labor force.

(Reference is here made to the labor force section and the study of Mr. Riemenschneider regarding an analysis of the adequacy of the Boone curricula for several graduating classes as preparation for their present employment.

TABLE 82 COMPARISON OF COURSES OFFERED
Semester Hours

	Boone	United Community	Madrid	Ogden	Grand Community
English & Speech	12	9	9	12	8
Foreign Language	8	4	0	4	0
Social Science	10	8	6	6	6
Mathematics	8	10	10	10	8
Science	13	6	6	8	8
Business Education	16	8	8	9	9
Art	6	0	0	0	0
Homemaking	8	4	8	6	6
Industrial Arts	14	2	8	8	6
Driver Education	1	1	0	1	1
Vocational Agriculture	0	8	0	8	0

Technical Training

A program for training in technical areas would be valuable to Boone and surrounding areas. Courses include such things as engineering drawing, survey, medical and dental secretary, photography, service classes, mechanics, plumbing, and building trades.

With the outflow of youth from this community, training in these areas would help them considerably in obtaining jobs elsewhere. Also, a better trained labor supply would tend to attract industry.

Several considerations point up the necessity for Boone and surrounding communities to evaluate the future of their school system in order to maintain their high educational standards. These are:

1. Increased enrollments which have reached the High School level.
2. Inadequacy of the present Junior-Senior High School and Junior College building to house any increased enrollment.
3. Bonded indebtedness limitation which precludes the building of new High School facilities under the present tax base.
4. The out-migration of young people in Iowa to areas in which the ways of life, in a sense, are becoming increasingly foreign to that of Boone and surrounding farm areas. (However, as Boone industrializes, this disparity will decrease.)
5. Additional educational requirements in a changing world.

With the building of one new Grade School in Boone and construction of additions to two others in the City, it would appear that the physical plant is adequate for the grades.

It is in the Junior and Senior High School that the squeeze comes - literally. The present building has sufficient classroom space for an enrollment of approximately 1,200 students. Additional classroom space needed can be computed on the basis of the commonly-used ratio of 25 students per classroom. Each of the classes which will enter the Junior High during the next three years will exceed the average of 200 per class by over 25 students. The three Junior High classes presently enrolled, which will by that time have advanced to Senior High, will exceed the average by approximately 70 students. In addition, the Junior College must, because of lack of space and facilities in the building it now occupies, use classroom space in the High School and also use the athletic facilities. (See the following Table)

TABLE 83

SCHOOL ENROLLMENT

September 11, 1961

Grade	Bryant			Franklin			Garfield			Lincoln		
	B	G	T	B	G	T	B	G	T	B	G	T
K	23	17	40	30	28	58	9	11	20	25	14	39
1	23	20	43	33	28	61	15	8	23	14	19	33
2	26	25	51	20	25	45	14	12	26	20	26	46
3	23	22	45	25	26	51	13	11	24	23	15	38
4	19	28	47	33	25	58	9	11	20	19	24	43
5	18	23	41	25	19	44	12	11	23	24	23	47
6	25	27	52	28	22	50	15	11	26	25	26	51
Spec. Ed.							8	3	11			
Totals	157	162	319	194	173	367	95	78	173	150	147	297

Grade	Lowell			Page			Totals		
	B	G	T	B	G	T	B	G	T
K	19	22	41	22	18	40	128	110	238
1	18	18	36	17	13	30	120	106	226
2	15	11	26	17	19	36	112	118	230
3	16	18	34	19	19	38	119	111	230
4	10	8	18	21	19	40	111	115	226
5	17	15	32	16	22	38	112	113	225
6	11	10	21	18	19	37	122	115	237
Spec. Ed.							8	3	11
Totals	106	102	208	130	129	259	832	791	1623

Junior High School			Senior High School			Junior College		
B	G	T	B	G	T	Men	Women	Total
7	94	96	190	Grade 10	103	103	206	Freshmen 61 25 86
8	111	102	213	" 11	78	86	164	Sophomores 27 9 36
9	137	129	266	" 12	80	97	177	Special 6 4 10
Totals	342	327	669		261	286	547	94 38 132
Totals in Elementary Grades					B 832	G 791	T 1623	
Totals in Secondary Grades					603	613	1216	
Grand Totals					1435	1404	2839	

B- Boys

G- Girls

T- Total

Donald Seaton, Boone's Superintendent of Schools, states that a new building would be constructed for the High School except that the debt limit has been almost reached, due to the construction of the new Elementary School and additions. There is not, at present, a sufficient remainder under the limit, nor prospect for additional valuation, to be able to finance a High School building.

A bi-county reorganization of the High School Districts into two districts for the County, which would provide a broader tax base and thus enlarge the dollar valuation controlling the debt limit, has been considered. An East Boone County district would comprise all of the territory east of the Des Moines River. A West Boone County District would be comprised of the land west of the River in Boone County. The present total of approximately \$50,000,000 actual valuation in the County east of the Des Moines River would support a bonded indebtedness of \$2,500,000, sufficient for the construction of the new buildings. There is also the possibility that a school building holding company could provide a building on a lease rental basis.

An East-West division of the County is the only logical solution for the expansion problems confronting Boone in regard to secondary education. Not only Boone, but the surrounding communities would benefit. A glance at Table 81 in this Section will reveal the number of students attending Boone Schools on a tuition basis. The number rose from 113 in 1940-41 to 336 in 1960-61. The 1961-1962 school year figure was not available. These students come from outside the Boone School District. The cost of their education is paid by the districts from which they come on the basis of cost per child in that district. State aid available to the home district on a proportional basis is also made available to the Boone district.

Should school plant facilities be found inadequate for the total school enrollment, there is the possibility that the Boone School district could notify the outlying districts that it can no longer provide High School facilities for their students. Though the teacher and classroom costs of educating these children are provided for, their education is a burden on the expansion program of Boone District Schools. The reason is that funds provided by the home districts to Boone School District apply only to cost per pupil. There is no way to transfer from one district to another, those bases for assessed valuation which control the debt limit in regard to the school building fund. However, though withdrawing these children from attendance in the Boone schools, would ease the financial problems for the Boone District, it would contribute nothing to the over-all solution of the problem for the entire East County area. The remaining chiefly rural area of the County would, of necessity, have to continue to provide education for a diminishing number of rural students (considering the rural outmigration in the county), probably at an even greater cost each year.

Even though the agricultural land tax credit is available for application toward mitigating taxes in the rural areas, in that a refund should be given for all taxes above the 15 mill levy, full refund has been paid only once since its inception. Each session of the legislature must decide the proportion to be paid each year.

No reliance can be given to any specific proportion or to any total amount of refund.

Two Charts, Nos 31 and 32, Pages 208 and 209, recently prepared by the Boone County Extension Service show the assessed valuation per census child of the High School and non-High School Districts of Boone County and the millage levys necessary to carry the High School programs of five districts in Boone County and the high-low variations for the non-High School Districts.

Viewing these Charts in concert it can be seen that where assessed valuation is lowest per child, as in Boone District, the general school millage levy is high and visa versa. The differentiation follows exactly the degree of rural-urban emphasis between the districts. The larger number of school children in Boone and Madrid reduces the amount of the assessed valuation drawn on to cover the educational expense of one school child; thus, the need to have a substantial school millage levy to provide adequate tax dollars.

Should Boone County residents east of the river adopt a proposal for a single district, millage levys would be equalized to a certain extent. A single district would include the industrial park to the east of Boone and the tax return on the high valuation of that property would have a tendency to lower the total millage requirements.

The funds now available provide a fairly consistent pupil-teacher ratio in the five districts and a consistent division of funds per pupil among the grade, junior high, and senior high level students. (See Charts 33 and 34.)

The pupil teacher ratio of public schools in other Iowa cities similar in size to Boone can be seen in Table 84. The figures represent the average for total pupil enrollment in the school systems.

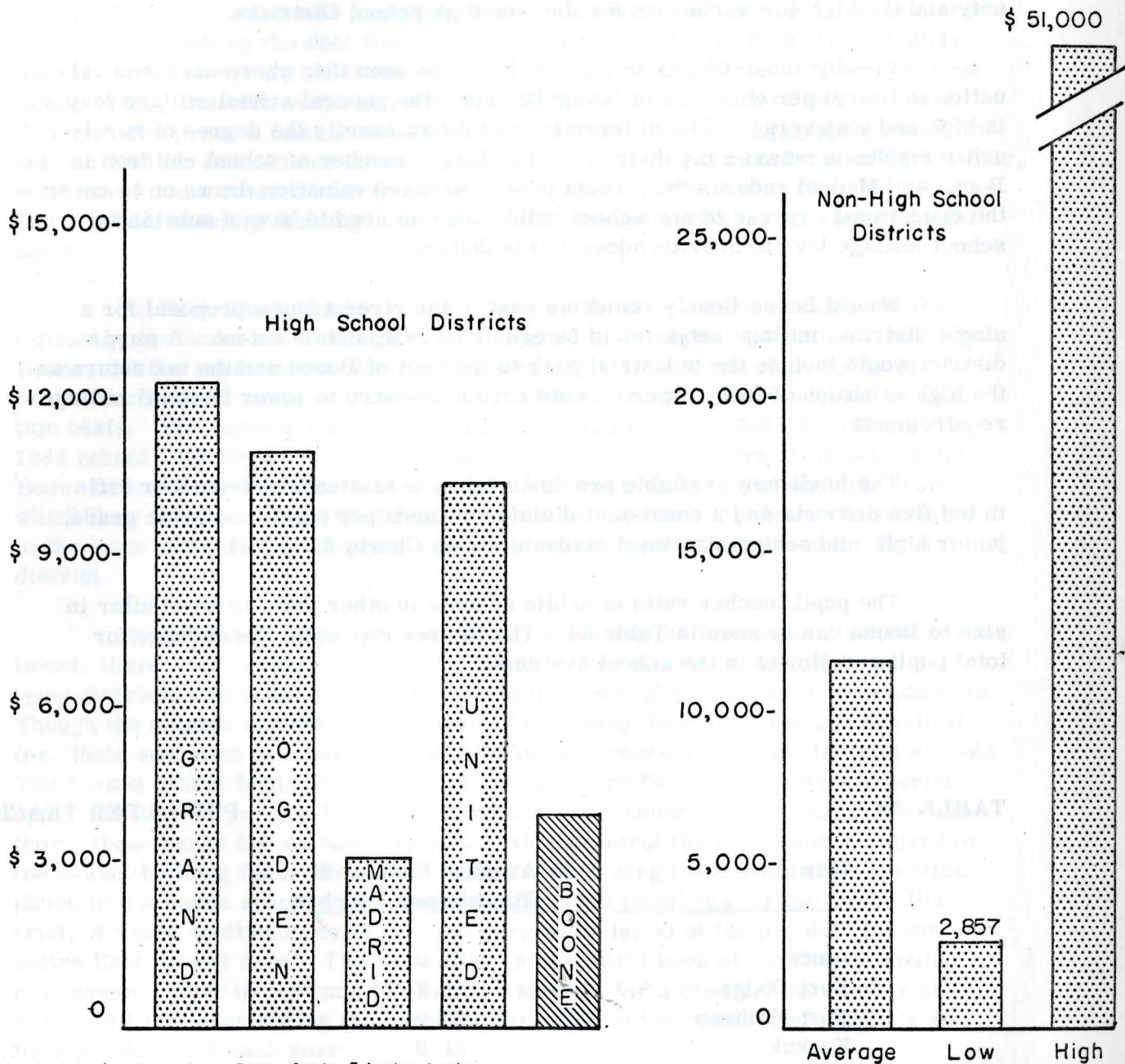
TABLE 84

PUPILS PER TEACHER

City	Average Number of Students per Teacher
Ames	21.0
Fort Dodge	21.7
Fort Madison	20.9
Keokuk	21.9
Newton	24.5

The pupil-teacher ratio in Des Moines is 23.5

ASSESSED VALUATION PER CENSUS CHILD



Information obtained from Boone County Extension Service

Urban Planning Grant: Project No. Iowa P-1

The preparation of this chart was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act. of 1954, as amended.

Prepared under the Contract for the Iowa Development Commission by Anderson Engineering Company City Planning Consultants

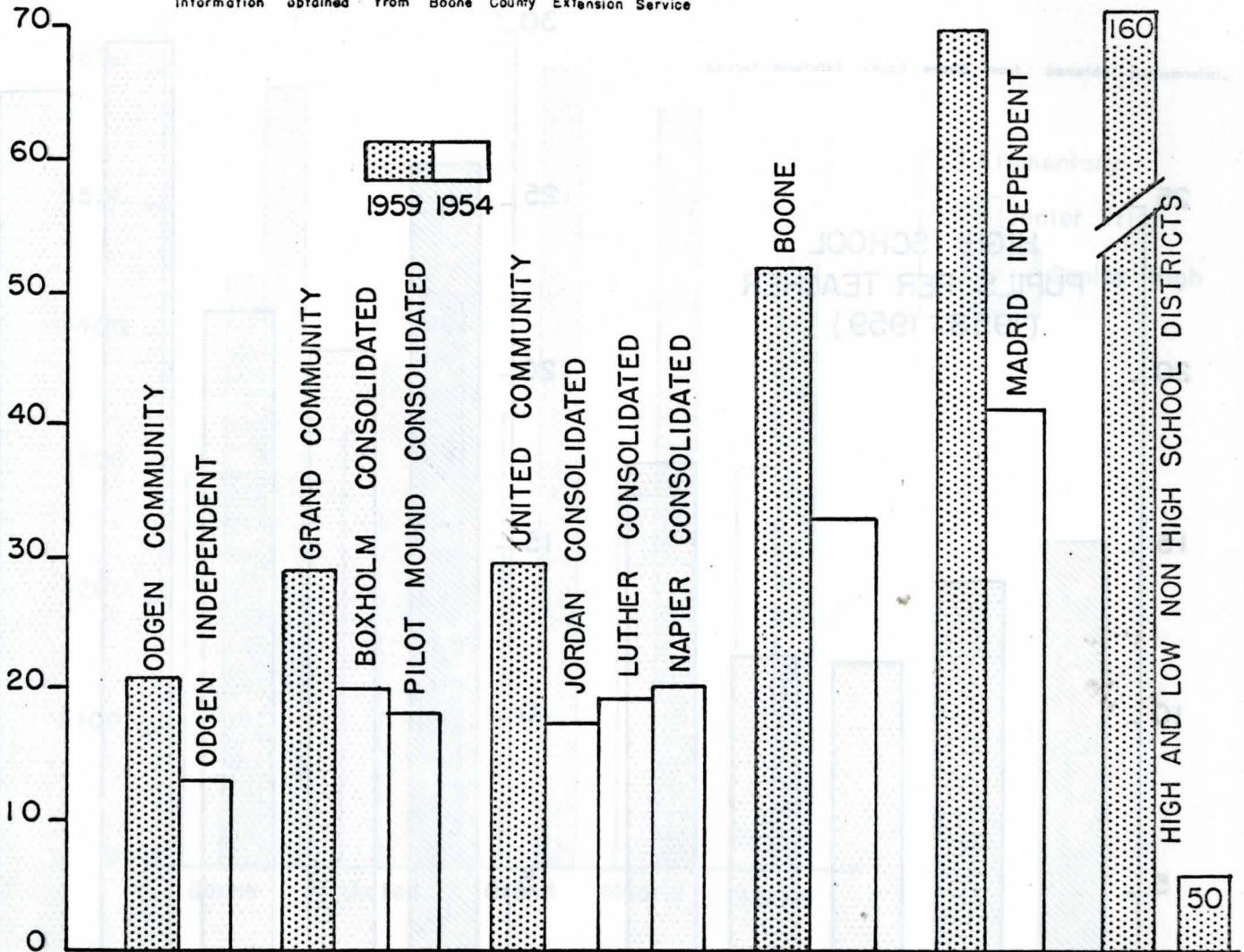
chart 31

aneco

GENERAL SCHOOL MILLAGE LEVY (1954 - 1959)

MILLS

Information obtained from Boone County Extension Service



The preparation of this chart was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act, of 1954, as amended.

Urban Planning Grant: Project No. Iowa P-1

Prepared under the Contract for the Iowa Development Commission
by: Anderson Engineering Company
City Planning Consultants

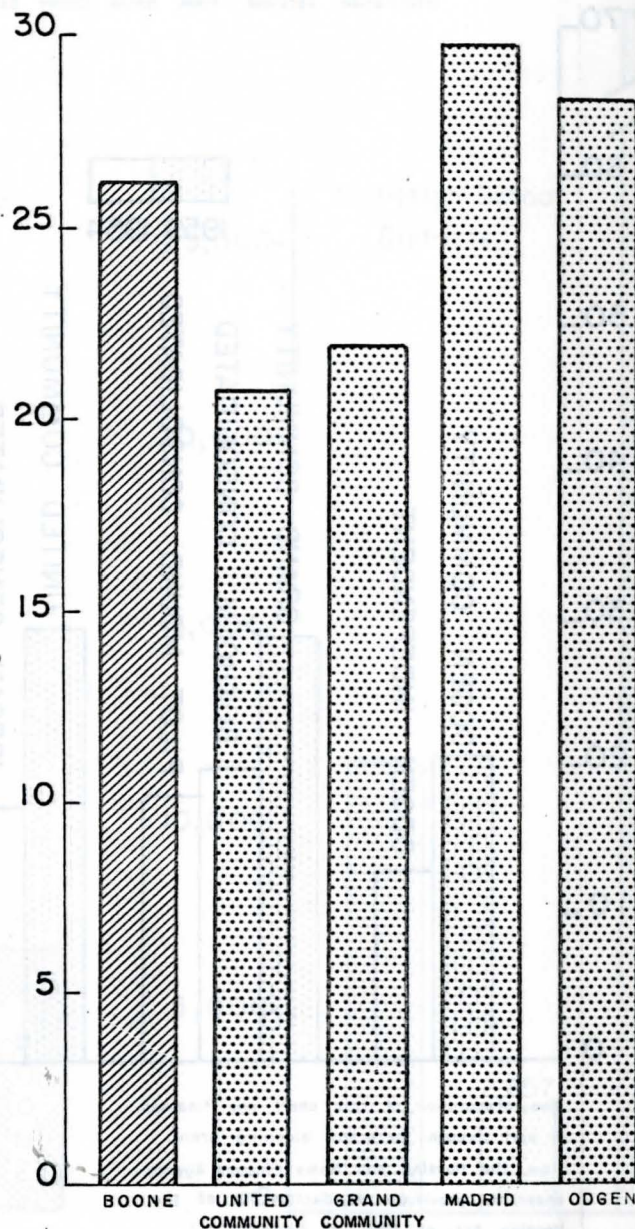
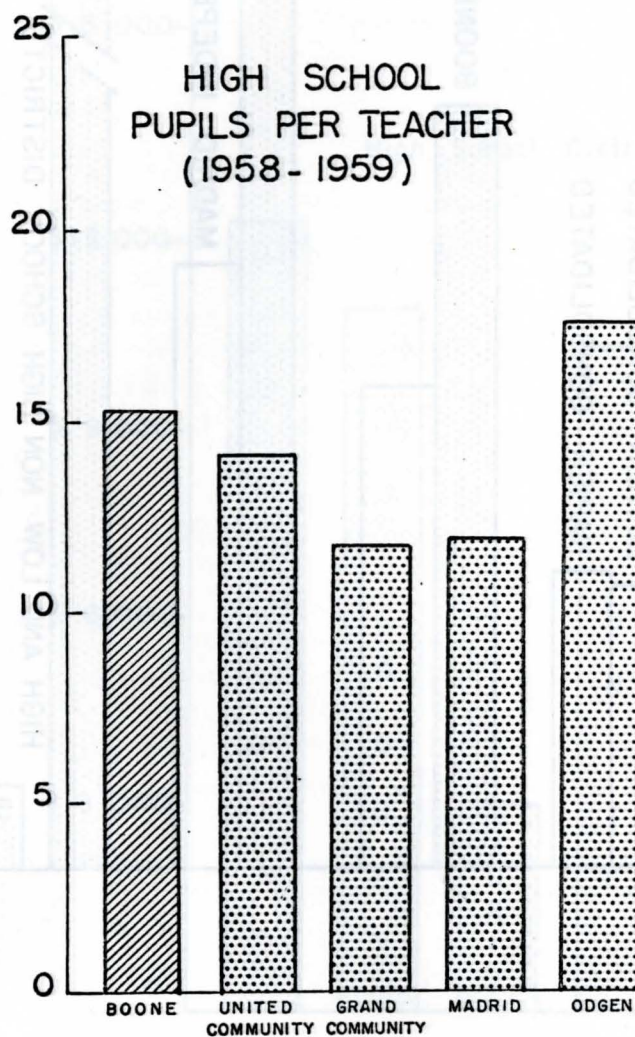
chart 32

aneco

	TOTAL PUPILS	PUPILS GRADES 9-12
BOONE	2,916	748
UNITED COMMUNITY	659	141
GRAND COMMUNITY	355	94
MADRID	628	154
ODGEN	766	228

GRADE SCHOOL PUPILS PER TEACHER

Information obtained from Boone County Extension Service



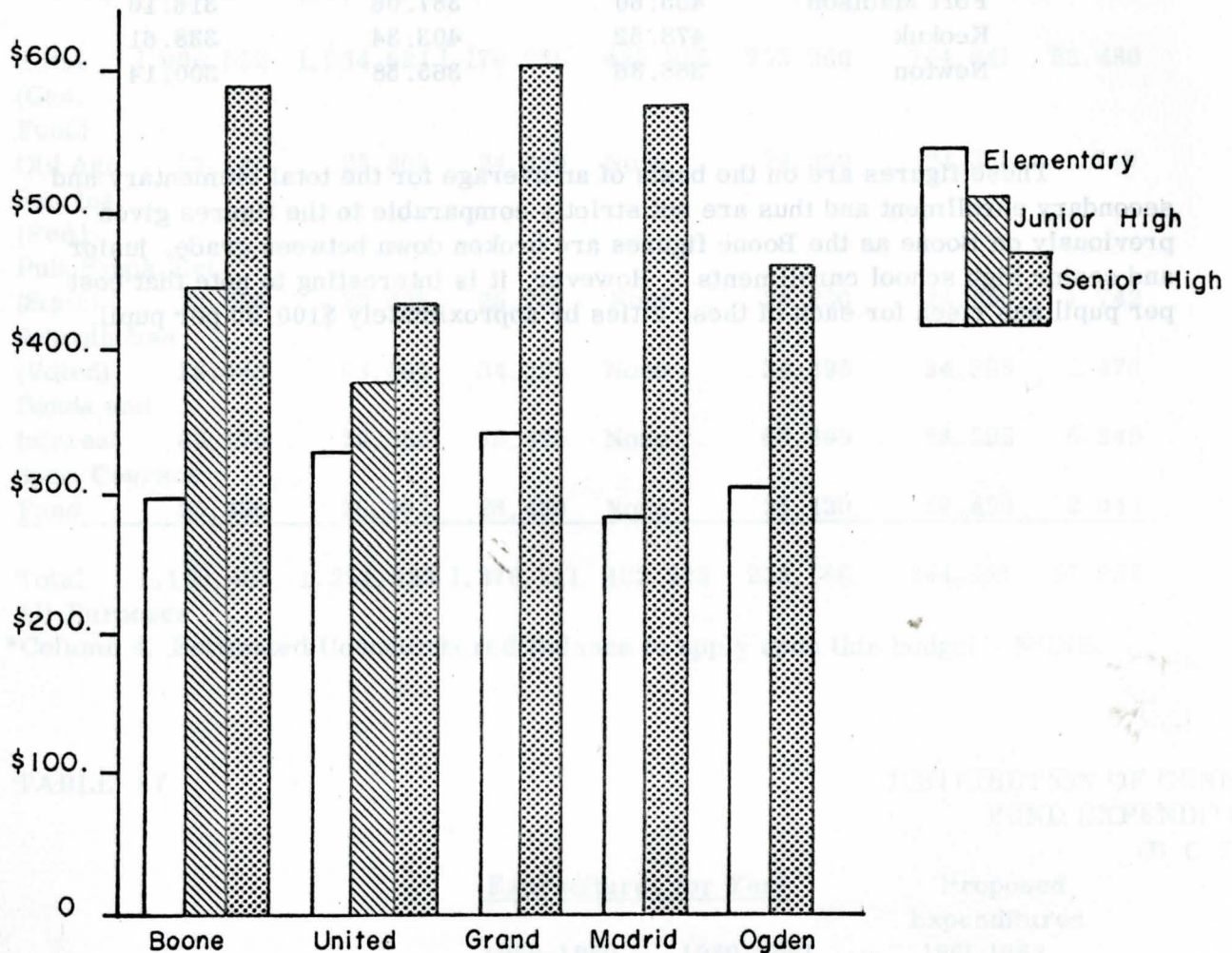
Urban Planning Grant: Project No. Iowa P-1

The preparation of this chart was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act of 1954, as amended.

Prepared under the Contract for the Iowa Development Commission by: Anderson Engineering Company
City Planning Consultants

chart 33

PER PUPIL COSTS 1958-1959



Information obtained from Boone County Extension Service

The preparation of this chart was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act, of 1954, as amended.

Urban Planning Grant Project No. Iowa P-1

Prepared under the Contract for the Iowa Development Commission by Anderson Engineering Company City Planning Consultants

chart 34

aneco

TABLE 85

SCHOOL OPERATING COST
PER PUPIL IN DOLLARS

City	1960-61	1959-60	1958-59
Ames	463.86	426.81	369.80
Fort Dodge	522.14	426.63	242.86
Fort Madison	455.60	387.06	316.10
Keokuk	478.52	403.34	338.61
Newton	368.86	365.58	300.14

These figures are on the basis of an average for the total elementary and secondary enrollment and thus are not strictly comparable to the figures given previously on Boone as the Boone figures are broken down between grade, junior and senior high school enrollments. However, it is interesting to note that cost per pupil has risen for each of these cities by approximately \$100.00 per pupil.

TABLE 86

ADOPTED BUDGET
BOONE COMMUNITY SCHOOL DISTRICT

	1	2	3	*	5	6	7	8
Funds	<u>Expenditures for Yr.</u> 1959-1960	<u>Expenditures for Yr.</u> 1960-1961	Prop. Ex. decided at hearing 1961-1962		Est. Inc. other than Taxation 1961-1962	Amt. Nec. to be rai- sed by Tax. 1961-1962	Taxes finally ent. by Auditor	No. of Mills
	\$	\$	\$		\$	\$	\$	
General	1,006,552	1,064,927	1,176,291		422,925	753,366		
Total	1,006,552	1,064,927	1,176,291		422,925	753,366	744,641	53.480
(Gen. Fund)								
Old Age	21,143	23,308	24,350		None	24,350	24,350	1.749
Sur. Ins.								
(Fed.)								
Pub. Emps. Ret.								
(State)	23,996	23,025	25,250		None	24,250	24,250	1.742
Schoolhouse								
(Voted)	18,043	33,305	34,395		None	34,395	34,395	2.470
Bonds and								
Interest	63,175	79,566	88,395		None	88,395	88,395	6.349
Spec. Courses								
Fund	25,496	26,902	28,430		None	28,430	28,430	2.042
Total	1,158,405	1,251,023	1,376,111		422,925	953,186	944,461	67.832
All Purposes								

*Column 4, Estimated Unencumbered Balance to apply upon this budget - NONE.

TABLE 87

DISTRIBUTION OF GENERAL
FUND EXPENDITURES
(B. C. S. D.)

	<u>Expenditures for Year</u>		<u>Proposed</u> <u>Expenditures</u> <u>1961-1962</u>
	1959-1960	1960-1961	
1. General Control	\$ 33,688	\$ 34,662	\$ 38,636
2. Instruction	738,485	775,981	834,948
3. Auxiliary Services	67,325	70,635	77,423
4. Operation of Plant	99,852	96,939	105,663
5. Maintenance	39,649	22,939	40,779
6. Fixed Charges	53,466	58,807	59,348
7. Capital Outlay	41,096	48,341	64,294
8. Debt Service (G. F.)	3,625	2,955	3,300
Total (Same as General Fund above)	\$ 1,077,186	\$ 1,111,259	\$ 1,224,391

TABLE 88

DISTRIBUTION OF GENERAL FUND
RECEIPTS OTHER THAN TAXATION
BOONE COMMUNITY SCHOOL DISTRICT

	Receipts Other Than Taxation		Estimated Receipts
	1959-1960	1960-1961	1961-1962
Tuition	163,209	150,911	173,550
General State Aid	87,387	82,189	102,400
Supplementary State Aid	37,957	43,975	44,000
Transportation State Aid	5,875	5,899	7,400
Federal Aid	5,848	13,775	11,700
Military Service Tax Cr.	6,579	6,632	6,600
Semi-annual Apportionmt.	6,747	6,241	6,250
Transfers	25,496	26,902	28,000
Other Receipts	48,386	44,554	43,025
Totals (Last col. to col. 5 above)	387,484	381,078	422,925

In Tables 86, 87 and 88, the adopted budget for school taxes for the Boone Community School, show receipts and expenditures for the school years 1959-1960, 1960-1961, and proposals for 1961-1962. It should be noticed that expenditures have steadily increased over the three year period. Receipts other than taxation also have increased. The total taxes for 1961-1962 and the millage levys required are listed in columns 7 and 8.

Mr. Seaton, Superintendent of Schools in Boone, indicated a person could not assume that a single East Boone County School District would evidence any appreciable savings of tax money at present. While the tax mill levy would be equalized and, because of the efficiency of the system, the cost per pupil might be lowered, the single district would have additional expenses also. Transportation for students from outlying areas would have to be provided, for instance. Also, a combined school with more pupils would make provision of a wider curricula feasible. The school might offer many courses that are now deemed advisable but for which the school district cannot now provide funds.

The greatest advantage of a combined district is that the wider tax base would allow the construction of a modern school plant for a greater number of the county's children. The present overlapping of classroom space and schedules among the Junior High, the Senior High, and the Junior College would be discontinued. Athletic space would be provided, nearer the school, at least for the Senior High if it were to be built at the location proposed in the Comprehensive Plan at the Southeast edge of town. The community itself would benefit from use of the additional auditorium, gym, and classroom space made available for adults outside the regular school hours.

The problem of a life occupation does not become critical to the student until his Senior year of High School, the terminal year for many. Today, even High School graduation is not considered sufficient for a great many occupations.

Twenty-three High School graduates out of every 100, as compared to 13 out of 100 ten years ago, are going on for higher education. The percentage of each graduating class is expected to continue to increase. ("Go-To-College Trend Grows", Article by Jack Magarrell, Des Moines Sunday Register, Nov. 19, 1961, P. 1 of the Local News Section.) As the percentage increases, so has the number of students. Enrollment predictions at the three major Colleges in Iowa have been revised upward.

Boone, having a Junior College, is in an admirable position to capitalize on this need. The Boone Junior College is suited to the needs of the City and the surrounding area to provide a means for local students to attain a higher educational level, either by living at home and attending day school or by night school class attendance.

Industry has expressed the need for technicians who are conversant with general processes of the various types of manufacture and who will be able to understand and carry out directives from the management on their own. A recent study, "Resources and Needs for Higher Education in Iowa", Study No. IV, by Raymond C. Gibson, submitted to the Iowa Legislative Research Bureau, State House, Des Moines, Iowa, February, 1961, points up the part that Junior Colleges may play in developing the Iowa system. All educational institutions provide general educational functions but the Junior College is unique in the extent to which it can perform certain functions. Dr. Gibson lists the functions:

1. General education studies either for terminal programs or for transfer to four-year Colleges.
2. Guidance in assisting students in planning their careers.
3. In-service training of workers in local industry.
4. Terminal education program - either regional vocational or trade and industrial education, even for students who have not graduated from High School.

Under point four, Dr. Gibson states: "Another significant part of the terminal program is the training of technicians. If regional technical institutes are to be organized in Iowa, they should generally be a part of the community college.

The American Society for Engineering Education, Technical Institute Division makes the following statement concerning the technician: "American industry has made technical progress and has reached its high level of production more through engineering teamwork than through individual effort. We think of the engineering team as a three-part team:

- a. Engineers and scientists who formulate ideas and create new products and services.

- b. Engineering technicians who help develop, test, and apply these ideas and creations.
- c. Skilled workers who make the products and perform the routine services.

Since World War II, technological advancement and technical manpower shortages have focused increasing attention on the second group - the engineering technicians. "

"Some of the specific functions of the engineering technician are as follows: aeronautics; air conditioning; heating and refrigeration; building construction; chemistry technology; diesel technology; civil technology; electrical and electronics technology; industrial technology; instrumentation, mechanical, and metallurgical technologies.

The medical sciences have made significant uses of the technologist to extend and improve the services of the doctor.

A vast new area that needs to be explored is the place of the technician in teaching at all levels of education. In this profession perhaps more than any other, the professional person continues to perform tasks which are clerical and technical rather than professional. The result is the inevitable dissipation of great and expensive resources at a time when the shortage of qualified teachers is acute.

All terminal and general education programs should lead to an associate in science or associate in arts degree, granted upon the completion of approximately two full years of study beyond High School. "

Dr. Gibson concludes that the technical training is a particularly appropriate area for community college curricula courses. The proximity of Boone to Iowa State University makes it possible to draw on the faculty and resources of that University. Boone's proximity to Des Moines and Fort Dodge and its own plans for greater industrial development in the future make the Junior College program feasible and especially desirable.

A broad educational program and curricula such as has been outlined, constitutes one of the most constructive services the residents of the City of Boone could offer in fulfilling their responsibility as a central urban place.

In providing for the "needs of the community", it should be remembered that many students living in and near Boone will leave the area or the State. While Boone has not experienced the relatively high degree of out-migration that other areas of the State have experienced, in the development of the curricula, it should be recognized that in adulthood these students very possibly may be living in established industrial communities over the nation and consequently they will have need of a broad background of vocational education. These places also are changing and the need for a greater number of skilled, semi-skilled, and professionally educated persons is seen by national trends. (See Dept. of Labor Projections on Occupational Trends.)

The Midwest in the Space Age

The Midwest Research Institute of Kansas City, Missouri, has a large contract with the National Aeronautics and Space Administration (NASA) to work out a program which will make available to manufacturers in six Midwestern States the amazing technological advances coming out of the space program.

This assignment goes far deeper than merely keeping you "academically informed" on what's going on in space science. Its basic purpose is to disseminate the new knowledge so that you can use it for your own advantage to improve present manufacturing techniques or develop new products.

NASA and its Administrator, James E. Webb, are conscientiously trying to work out a way to feed back space technology into the American economy so that business can share in it and use it. Several companies have already used NASA data to create new products or improve the production of present ones.

Dr. Charles Kimball, President of Midwest Research Institute, and two associates, outlined their assignment with the Space Administration at a meeting earlier this month at the Northern Natural Gas Building in Omaha. This meeting was attended by business and industrial development representatives from Iowa and Nebraska. Here are some of the things the Midwest Research Institute people pointed out:

1. By 1970, the space effort may account for 5 percent of the gross national product.
2. In the same year, NASA expenditures will be several times their present level of 1.7 billion dollars, and 85¢ out of each dollar will go to industry for products and services.
3. Thus, "How can we spin off part of this to the Midwest?"
4. The atomic age "practically walked by the Midwest" -- and that should not be allowed to happen again in the space age.
5. The program is being applied first in the Midwestern Plains States because they need it most (less industrialized than other areas).

Following are the principal areas of new technology that can be secured from NASA and used -- now -- by manufacturing firms:

1. New materials
2. Novel use of materials
3. Fabricating techniques
4. Mechanical devices

5. Instruments and transducers
6. Electromechanical devices
7. Electromechanical devices and circuitry
8. Lubrication -- friction -- wear
9. Surface treatments
10. Corrosion controls
11. Power sources

Midwest Research Institute will collect, sort and translate NASA data into terms that fit specific types of industry and then disseminate this information to interested firms. One point should be stressed. This program is not primarily aimed at making it possible for you to bid for NASA "hardware" contracts, although such contracts could be one end result. Its basic concept is to help manufacturers improve or add to their present commercial lines.

The Midwest Research Institute assignment for NASA has two phases. The part relating to the technological benefits NASA hopes will accrue to industry has been briefly outlined. The second phase is this:

Upgrade the capabilities and interest of the 16 principal universities in these six states in the scientific developments of the space program, with a particular emphasis on graduate education and research. NASA wants the universities to participate more widely in space science.

Additional information on this program is available upon request.

The Ames-Des Moines Area as a Location for Research - Oriented Industry

This special report by the Northern Natural Gas Company endeavors to provide objective information on what the Ames-Des Moines area has to offer a company whose activities are oriented toward research and development. Since Boone is very close geographically to the City of Ames, the information quoted below from the report should be applicable to the City of Boone.

Location Criteria

An objective investigation of areas that might satisfy the site requirements of a technological research center leads to consideration of many factors.

The studies that led to this report indicate that the factors outlined below — all of which are interrelated to some extent — have a direct and significant bearing on the location of a research or science based facility.

- (1.) Availability of a continuing supply of adequately trained professional and technical personnel.
- (2.) Available facilities for advanced training in technical fields along with staff and facilities for consultation, special seminars and courses.
- (3.) A favorable community attitude and understanding of research activities along with the existence of the necessary supporting establishments for servicing and modification of technical equipment, instruments and machinery.
- (4.) Fast and convenient transportation service, both for the convenience of employees and to provide ready accessibility to the company's production facilities and company headquarters.
- (5.) A generally high level of living conditions, including better than average educational, recreational and cultural opportunities. This factor is likely to have a significant influence on the company's ability to attract and retain high quality personnel.

The above criteria appear to be most easily satisfied in or near a metropolitan area in close proximity to a major university. Detailed investigation leads to the conclusion that, among several good possibilities in the Northern Plains, the

1. The Ames - Des Moines Area as a Location for Research - Oriented Industry, by the Area Development Staff, Northern Natural Gas Company, 1962.

Ames - Des Moines area offers outstanding advantages for the location of a relatively large size research and scientific center and related production facilities.

The attributes of Iowa State University in Ames are given considerable emphasis in this report because of the contribution this institution can make to the successful operation of this type of facility. The principal advantages of being close to a major university are: (1) it is an aid in recruiting top caliber graduates; (2) it provides a means for employees to continue their education; (3) the scientific environment gives research people the opportunity to discuss common interests and problems with the university staff; (4) it makes available a major technical library; (5) consulting services and research facilities are available for supplementary research; and (6) the cultural, recreational, and educational advantages of a university community serve as an attraction to families of employees.

There are a number of highly regarded state and private colleges and universities in the Northern Plains area in communities having attributes similar to those described herein. However, Iowa State University, because of its size, location with respect to a metropolitan area, and the broad scope of its engineering and scientific curricula, provides the total environment required by a larger operation.

The purpose of this report is to describe the advantages of this area with respect to each of the locational considerations outlined above.

Supply of Trained Personnel

It is recognized that a company would not expect to recruit all of its technical and professional employees from a single university. Iowa State University, though, could furnish a continuing supply of highly trained graduates in engineering and technical fields. Iowa State's strengths are primarily in the fields of chemistry, physics, biological sciences, mathematics, engineering, statistics, metallurgy, veterinary medicine and agricultural science.

The distribution of students among the areas of study offered by the university this year was approximately 29% Engineering, 23% Sciences and Humanities, 16% Agriculture, 15% Home Economics, 2% Veterinary Medicine, 1% Agricultural Engineering, and 14% Graduate Study.

A recent study indicated that Iowa State ranked 13th among the nation's institutions of higher education in the number of advanced degrees granted in the fields of science, mathematics, engineering and converging areas of the social sciences in the 1953-58 period.

The Iowa State Technical Institute began operation in the fall of 1960 under the sponsorship of the College of Engineering and this institute will be furnishing

technicians and assistants for subprofessional positions. Enrollment was 75 in the first year of the program and in the fall of 1961 had reached 135.

The initial program is in three areas: Construction Technology, Electronics Technology, and Mechanical Technology. These are two-year programs leading to certificates in the appropriate fields but they are not entirely technical in nature since they include some work in English, speech, and other helpful areas.

In Ames, as would be true in most university communities, there is an opportunity to employ students on a part-time basis and student wives on a full-time basis.

Facilities for Advanced Study and Consultation

The graduate college of Iowa State is among the largest in the nation, standing 20th in number of Doctor of Philosophy Degrees granted in 1958-59. Enrollment in this college has grown from 972 in 1955 to 1,460 in 1961. This growth has been accompanied by expansion of research activities and expanded scope of the fields of study offered.

During World War II, Professors Frank H. Spedding and Harley A. Wilhelm of the Iowa State University Department of Chemistry developed a process for the recovery of uranium metal from the metallic salts which made the vital metal available in much greater quantities and at less than 5% of previous costs. During this and other work performed for the "Manhattan Project" the university produced more than two million pounds of high purity uranium metal, and was, thereby, the principal supplier for the Los Alamos, Hanford, and Oak Ridge reactors. This process is still the principal method used for uranium recovery on both sides of the Iron Curtain and, with modifications, has made metals such as the rare earths, thorium and yttrium available in quantity in pure form.

This wartime work has evolved into the Ames Laboratory, one of seven national laboratories of the Atomic Energy Commission, which is in reality operated as a portion of the Institute for Atomic Research of Iowa State University. The laboratory now has 620 employees, an annual budget of \$4.5 million, and a \$13 million capital investment on lands leased from the university. In May, 1961, ground was broken for a new \$4.4 million reactor, and following its completion the laboratory's budget will probably be increased to about \$7 million annually.

Most of the key personnel of the laboratory are also members of the university staff. These staff members may consult on a fee basis, carefully avoiding conflict of interest. They are limited to consultation time equal to their total vacation time. The laboratory itself does not do outside research work. The fact that this facility has been successful in attracting scores of scientists of world-wide reputation is an indication that other scientific endeavors could attract similar quality personnel with an Ames address.

The Engineering Experiment Station conducts about \$1 million of research annually, two-thirds of which is by contract with the federal government and private industrial firms. The other one-third is financed from state appropriations. The experiment station is staffed by members of the academic staff of the College of Engineering, and covers all fields of engineering taught at the university. Through the financial assistance provided under this arrangement, professors of the university have made significant contributions to knowledge in their respective fields, with work ranging from the effect of drag during rapid deceleration to various bio-medical electronic devices and improved concrete structures.

Other research groups include the Agricultural and Home Economics Experiment Station, the Industrial Science Research Institute, the Veterinary Medical Research Institute, and the Statistical Laboratory. The latter, organized in 1933, was the first of its kind, and many of the collegiate statistical labs of today are organized in a manner very similar to that of Iowa State University. Through the facilities of this laboratory the Department of Statistics is one of the strongest of the university departments and is one of the few in the United States which grant MS and PhD degrees in the field of statistics.

In addition to the wide variety of advanced study made possible by the research and graduate school facilities of the university, there is also an extensive program of short courses, seminars and workshops. The Engineering Extension Service has a fulltime staff of 25, and utilizes the academic staff of the College of Engineering. The College of Engineering and other segments of the university conduct courses on the Ames campus and at other locations across the state wherever demand is sufficient. In the academic year 1960-61, enrollment was about 12,000 in such varied fields as Custodial Training, Power Network Analysers and the application of the data resulting therefrom, Operations Research, and Work Management.

The University Library is worthy of mention because of its strong scientific emphasis. It contains 510,000 volumes, subscribes to 9,000-10,000 periodicals, and carries on an extensive exchange program. Physics and nuclear science have excellent coverage, and as an example of the scientific bias of the library, some 70 English translations of Russian scientific journals are received on a regular basis. The facilities of the library are made available to private industry.

Private industry could be assured of employee opportunities for advanced study as well as faculty consulting services. It is the policy of the Engineering College to "encourage a reasonable amount" of research by staff members so long as it contributes to professional development and does not interfere with other responsibilities.

Course schedules for advanced study have been arranged — at the request of private industry — in Des Moines and as far away as Cedar Rapids, 100 miles distant. According to the Dean of Engineering, the university would "lean

over backward" to arrange courses, particularly at the graduate level, at night and Saturdays or other times for the benefit of industry in the area.

Table 1 Degrees Granted by Iowa State University in Selected Engineering and Technical Fields

Department	1958-59			1959-60			1960-61		
	BS	MS	PhD	BS	MS	PhD	BS	MS	PhD
Aerospace Engineering	32	3	2	35	1		33	3	
Agricultural Engineering	25	5		28	5		19	4	
Architecture	13			12			24		
Architectural Engineering	16			13	1		9	1	
Ceramic Engineering	9			3	1		5	1	
Chemical Engineering	49	6	3	37	7	4	46	18	3
Civil Engineering	81	16	2	50	15	3	50	24	9
Electrical Engineering	142	7	2	130	12	4	116	22	3
Industrial Engineering	62	3		53	2		63	1	
Mechanical Engineering	116		1	120	4		78	3	
Theoretical and Applied Mechanics		3	2		2	1			1
Nuclear Engineering		10			13			15	2
Chemical Technology	10			14			13		
Chemistry	10	38	22	3	26	29	13	21	50
General Science	45			7	1		2		
Mathematics	27	7	4	51	6	7	56	12	3
Physics	8	8	4	12	5	4	12	8	12
Statistics	6	3	3	7	7	4	1	4	6
Metallurgy		4	2		3	4		4	3
Totals	651	106	47	575	111	60	538	143	92

Attitude Toward Research -- Supporting Facilities

In Ames, Iowa State University has a complete grouping of shops -- both electronic installations and machine shops -- to cover its particular needs. It has been indicated that the university could consider proposals permitting private firms, located in the Ames area, to utilize these facilities on a cooperative basis.

So far as production and service industries for the maintenance and modification of technical equipment are concerned, the city of Des Moines is reasonably well supplied with machine shops and similar facilities, if the need cannot be met in Ames.

The attitude of the community toward research type installations is probably best indicated by the acceptance of the Ames Laboratory for Atomic Research and the way in which scientific personnel employed by this facility have been integrated into the community.

The entire Ames community is strongly oriented toward academic and research activities. Its three principal employers are Iowa State University, the Iowa State Highway Commission and the National Animal Diseases Laboratory. There is, within the community, then, an exceptionally large number of scientists, engineers, technicians and research workers.

The construction of the \$16 1/2 million National Animal Diseases Laboratory is a recent development. It is operated by the federal government and will have an annual budget of several million dollars devoted entirely to research. This location was selected by the Department of Agriculture over locations proposed in nearly every state in the union. The laboratory began operations in 1961 and when fully operative will employ from 600 to 700 persons of whom about one-half will be technically and professionally trained research personnel. The community is demonstrating the ability to absorb this type of growth and to provide the amenities required by this type of research facility.

A Statistical Presentation of the Economic Processes

During recent years economists have made increasing use of statistics, and it is now possible to present a statistical picture, in simplified and summary form, of the five economic processes. In the following example, the figures are hypothetical and the fact that the nation has economic relations with foreign countries is for the moment ignored.

If the economic processes are considered from the point of view of the goods and services produced and sold in one year, the total of these produced and sold by private firms and made available by the government constitutes the GROSS NATIONAL PRODUCT. The GNP may be broken down into three parts on the basis of the expenditures of the buyers of the product. Thus:

Personal Consumption Expenditures	72
Gross Private Investment	14
Government Purchases of Goods and Services	<u>14</u>
Gross National Product	100

Personal Consumption Expenditure represents the total of consumer's goods and services produced by the nation and made available to consumers. Gross Private Investment represents the total of producer's goods produced and sold to private producers. Government Purchases represent the total goods and services of all kinds produced and sold to the government. Together, these three sources of expenditures constitute total demand for the national product. Because of the continuous circular flow of money, these sources also constitute the source of income out of which the expenditures are made.

If one considers the economic processes from the point of view of the income generated, the NATIONAL INCOME for the same period would be the sum total of the income payments made by productive units to the factors of production and of the profits earned by the owners of the production units. Thus:

Wages and Salaries	52
Rents and Royalties	4
Interest	5
Corporate Profits	8
Profits of Unincorporated Enterprises	<u>13</u>
National Income	82

These items are largely self-explanatory. Wages and salaries, rents and royalties, and interest represent payments made by production units to the factors of production in return for the contribution of these latter to the productive process. Corporate profits and the profits of unincorporated enterprises represent net income earned by the owners of the production units.

The Gross National Product and the National Income are two ways of describing the continuous circular flow of goods and income. The difference between them is accounted for by two items - namely capital consumption allowances and indirect business taxes. Both are charged as costs of production by the production units, and are therefore included in the sale price of goods and services, and consequently also appear in the Gross National Product. They do not appear in the National Income, however, because they do not represent income payments to anyone. Capital consumption allowances are mainly depreciation allowances which, as already indicated, constitute part of the gross saving for the firm. Indirect business taxes represent payments to the government. Thus:

Gross National Product	100
Less Capital Consumption	
Allowances	8
Less Indirect Business	
Taxes	10
	<u>18</u>
National Income	82

Since some of the National Income consists of corporate profits, not all of which are paid out in dividends, the amount of income actually received by individuals is smaller than the National Income. PERSONAL INCOME will be National Income less both undistributed corporate profits and the tax liability on corporate profits. Even Personal Income, however, is not all available for individuals to dispose of as they please. Personal taxes must be paid. What is left is called DISPOSABLE INCOME, which is the total of Personal Consumption Expenditure and Personal Saving. The only two ways in which a person can dispose of his income after taxes are paid is to spend it or save it.¹

1. Clifford L. James, Economic Basis, Problems and Analysis, Page 27-29.

Measuring Capacity to Pay

Equally as important as the purposes for which a municipality may justifiably borrow, are the limits as to the amount of debt which safely may be incurred. In general, debt-paying capacity must be gauged by the amount and quality of a community's resources and by its legal and practical ability to draw upon these resources for payment. There is no precise method of determining how much debt a municipality can carry and eventually repay; but there is ample evidence that no large proportion of any municipality's resources can be pledged to the payment of debt obligations without weakening it financially, undermining its operating efficiency, and narrowing its prospects for advancement.

It is an objective of sound borrowing policy, moreover, not to attempt to skirt the margin of insolvency but to keep debt within a range proved to be conservative. This can be done by the application of a few simple principles.

First, the legal borrowing limit established by most states is not a safe standard to follow. At best it constitutes a maximum limit; and usually it is either so high, or permits so many exceptions, or is so vitiated by the overlapping of local borrowing units, as to be quite ineffective. Thus, the only sound policy is to determine a realistic limit somewhere within the legal limit which fits the community.

Preliminary to determining safe borrowing limits is the need for computing a community's actual debt. Immediately, our unstandardized system of local government intrudes itself as a complicating factor. Anywhere from one to a half dozen or more local governing units may be doing the borrowing for the same community. While a city administration can control directly only its own debt, it cannot afford to be oblivious of overlapping school, county, and special district debt. The actual local public debt is that which the taxpayers of any community are called upon to support, irrespective of whether it is handled through one agency or a number of agencies.

Table 2 illustrates how the direct-and-overlapping, or overall, debt of a municipality i. e., its direct debt plus its proportionate share of the debts of overlapping units is computed. In the computation of the net overall debt, all utility debt, which is actually self-supporting, is deducted in order to show the amount which actually must be supported by taxes and also to provide a more accurate basis for comparison with the debts of other cities which may or may not own utilities.

The most commonly used methods of measuring municipal debt are by population and by the valuation of taxable property i. e., by expressing it in per capita figures and as a ratio of assessed valuation adjusted to estimated full value. Per capita figures have a reasonable degree of utility for comparative purposes if allowances are made for the fact that per capita resources vary from city to city. The ratio to taxable valuation is a more useful figure, for it endeavors to show a relationship to resources for payment. It falls short of

precision, however, because of the varying composition of tax bases and because of the difficulty of making an exact determination of full value. The two measures are, nevertheless, fairly dependable guides in gauging debt load if they are considered in conjunction with other available data respecting community resources.

Table 2 Direct & Over-All Debts of a City

Direct Debt:

General Improvement Bonds	\$ 1,000,000
Water Bonds	200,000
Tax Anticipation Notes	50,000
Gross Direct Debt	<u>\$ 1,250,000</u>

Less:

Water Bonds	\$ 200,000
General Bond Sinking Fund	100,000
Tax Anticipation Notes	50,000
Net Direct Debt	<u>\$ 900,000</u>

Overlapping Net Debt

School District	\$400,000	\$360,000* (90%)
Flood Control District	250,000	125,000* (50%)
County	300,000	<u>120,000* (40%)</u>

Net Over-all Debt \$ 1,505,000

*Proportionate share, based on percentages of district and county tax levies paid by city taxpayers.

Once these figures are ascertained for over-all net debt for a given city it is important to compare them with other cities of generally similar size and type. This permits determination of where the debt load ranks and how it compares both with cities which have never encountered difficulty in meeting their debts and with cities which have experienced default or forced refunding. Table 3 gives the median average and range of over-all net debts and ratios in 1940 for cities over 50,000 population by census groups.

The median average over-all net debt in 1940 for the country's 200 largest cities had a ratio of 6.4 percent to estimated full taxable value. Half were below this figure, ranging down to 0.5 percent, and half were above, ranging up to 38.9 percent. On the basis of experience in the depression, which was a genuine test

of debt-paying capacity, it may be said that very few of these cities with debt ratios falling below 10 percent encountered any serious difficulty in meeting their obligations. The range between 10 and 15 percent was in the doubtful zone with both good management and usually stable and substantial resources required to avoid trouble. Practically all cities with debts in the range above 15 percent met with financial disaster, and are carrying a lasting financial handicap. In general, therefore, a ratio of 10 percent seems to mark the upper limit of safety in acquiring debt.

There are conditions, however, under which modifications should be made. The 10 percent ratio is too high for cities which are approaching economic obsolescence, whose main support is upon some exhaustible natural resources or whose economic background is highly volatile. Allowances must be made, moreover, when chronic tax delinquency shows a substantial portion of the tax base to be undependable. Per capita debt figures serve as a means of checking. If per capita debt rises above the median, justification must be sought in actual local resources which are correspondingly above the average.

In appraising the direct debt of a municipality, it is often stated that the margin of safety rests in annual principal and interest requirements which do not rise above 25 percent of the budget. Such a standard would encourage false security if applied to a city which had deferred the bulk of its debt service requirements far into the future. A sounder rule is that retirement of 5 percent of the principal, plus the total interest requirement for the year, should not exceed 25 percent of a normal budget.

Table 3 Debt Ranges and Ratios for 200 Largest Cities, 1940

Range in Over-All Net Per Capita Debts

	<u>Low</u>	<u>Median</u>	<u>High</u>
Over 500,000 population	\$75.62	\$137.29	\$224.53
250,000 - 500,000 Population	33.43	102.17	219.04
100,000 - 250,000 "	34.22	90.29	334.65
50,000 - 100,000 "	9.38	86.39	548.89
200 Largest Cities	9.38	94.35	548.89

(Table 3 continued on next page.)

(Table 3 continued from preceeding page.)

Range in Debt Ratios

	<u>Low</u>	<u>Median</u>	<u>High</u>
Over 500,000 Population	3.7%	8.4%	13.8%
250,000 - 500,000 Population	3.0	7.6	15.4
100,000 - 250,000 "	3.1	6.4	16.7
50,000 - 100,000 "	0.5	6.1	38.9
200 Largest Cities	0.5	6.4	38.9

This discussion of paying capacity has thus far dealt with cities which have the power to levy taxes without legal limitation for the payment of debt. For those under an over-all tax rate limit, or handicapped by any unduly restrictive form of tax limitation, there appears to be little option except of making the best of an irrational situation and hope that the untenable conditions that arise will force the granting of relief. Any tax rate limitation which deprives a city of adequate current revenue inevitably forces the city to borrow as an alternative, and tends to prevent the maintenance of a sound debt policy.

A better index of a municipality's debt status would be the ratio of its net debt to the assessed valuation of taxable property, in those instances where the municipality has efficient assessment administration and the revenues for debt service are derived primarily from property taxes. As the Council of State Government has observed: A better basis than assessed valuation for measuring economic ability and debt capacity is total local revenue (perhaps excluding enterprise income and non-recurring grants from higher levels of government) - Once debts are pegged to local income averaged over a period of years, the limits as such, can be fixed on a rational basis so that debt service will not consume a dangerously large proportion of local income.

The present use of all property in the City of Boone is shown on the Existing Land Use Map, Page 219. The Land Use Map was prepared by means of actual field survey of all properties in the City and by use of the maps showing the outline of the buildings prepared from the aerial photographs used for the preparation of the topographic maps. After the field survey has been completed, the information obtained therefrom on the usage of property is platted on a large map in color. The map reproduced in this report is then prepared from the colored map by use of black and white symbols. The original colored map shows greater detail than the map herein; such as off-street parking facilities, type of use on most commercial and industrial uses and the number of dwelling units in a multiple dwelling. The map contained herein, of necessity, can be only a generalized picture of the land use throughout the City.

Table 89, Page 221, shows the amount of land in each existing land use category in terms of acres and in percent of the total area and developed area. Only the area inside the corporate limits is reflected in this table.

Chart 35, Page 222, shows the ratio of all land use areas in acres per 100 persons for the City of Boone in comparison with the averages of a group of Iowa communities. It can be seen from this Chart that Boone has a much smaller ratio of vacant or agriculture land inside its corporate limits than is the case with many Iowa communities.

Boone isn't actually as low in the industry and railroad categories as Chart 35 and Table 89 show since there is approximately 25 acres of industrial land and considerable land used for railroad purposes outside the corporate limits.

EXISTING
LAND
USE

The purpose of this report is to provide a detailed description of the land in question, as shown on the map. The land is located in the City of London, and is bounded by the River Thames to the south, the City Wall to the north, and the River Fleet to the east. The land is divided into several plots, and is currently occupied by a number of buildings. The map shows the location of the land, and the boundaries of the plots. The map also shows the location of the River Thames, the City Wall, and the River Fleet. The map is a detailed plan of the land, and is intended to provide a clear and accurate description of the land in question.

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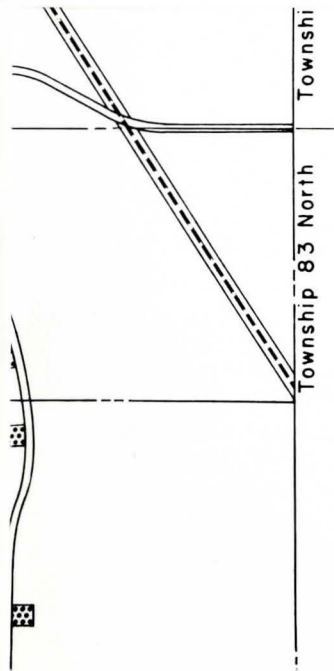
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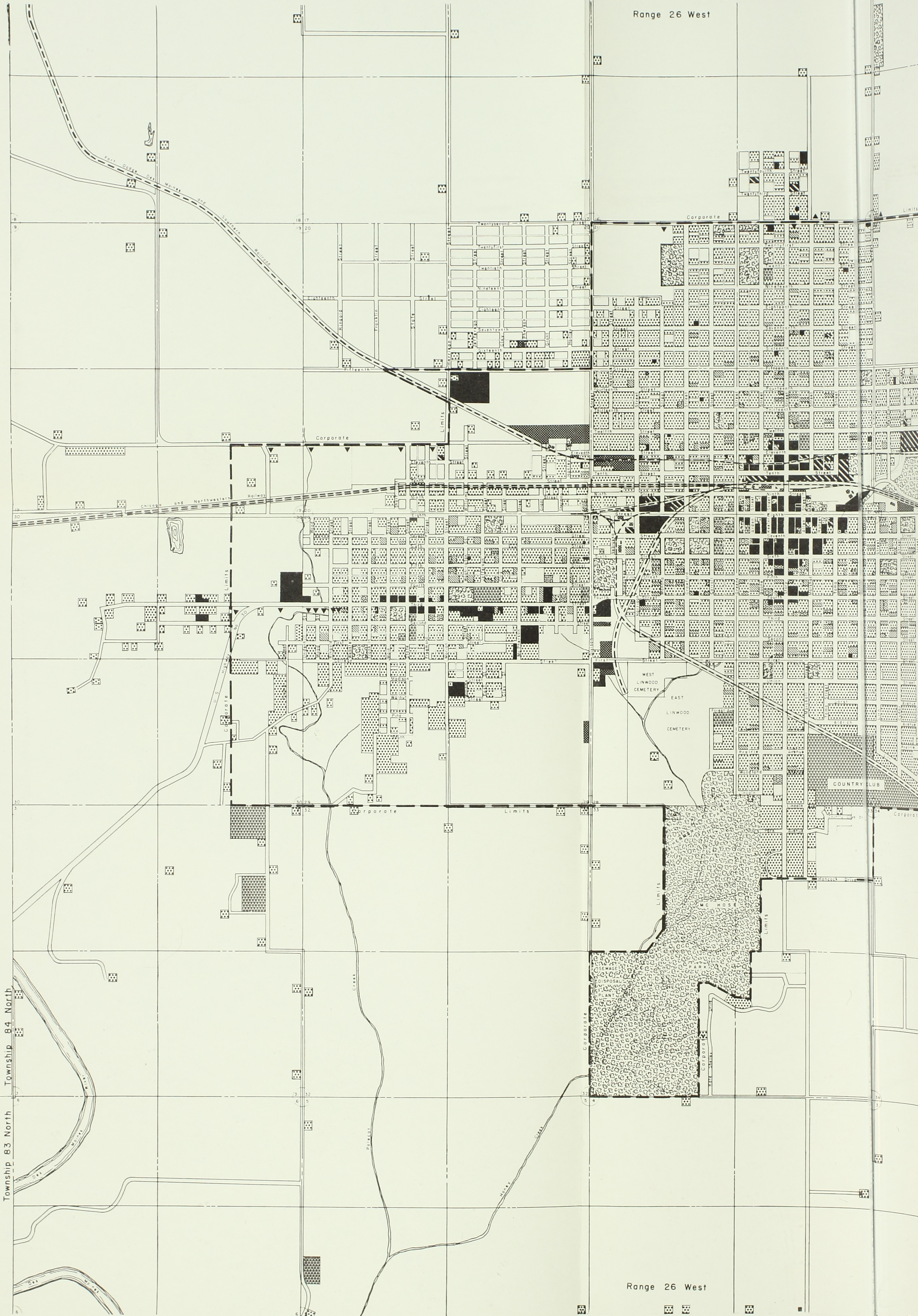


EXISTING LAND USE

map 6

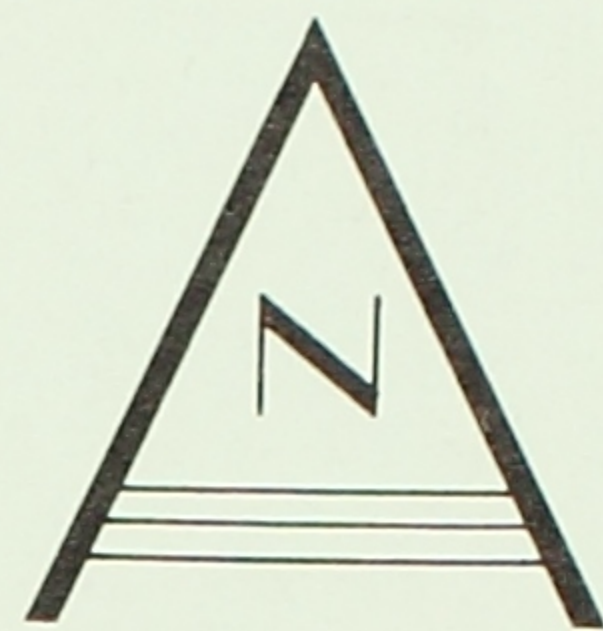
aneco

Range 26 West



Range 26 West

CITY OF BOONE, IOWA



0 400 800 1600 2400 3200 4000 4800 5600 feet

anderson engineering company
planning consultants
DES MOINES IOWA

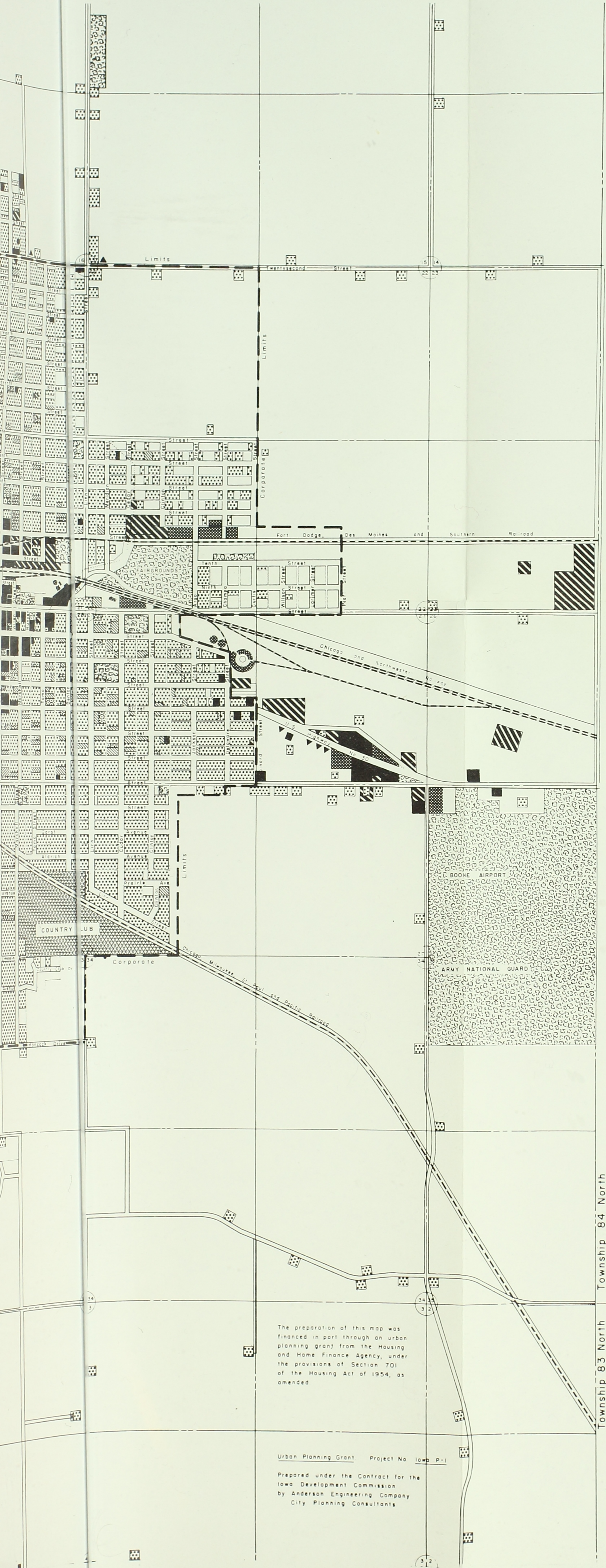
Legend

- one family residence
- two family residence
- multi-family residence
- commercial
- billboards
- light industrial
- heavy industrial
- public
- semi-public

EXISTING LAND USE

map 6

aneco



The preparation of this map was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act of 1954, as amended.

Urban Planning Grant Project No. 10-0 P-1
Prepared under the Contract for the Iowa Development Commission
by Anderson Engineering Company
City Planning Consultants

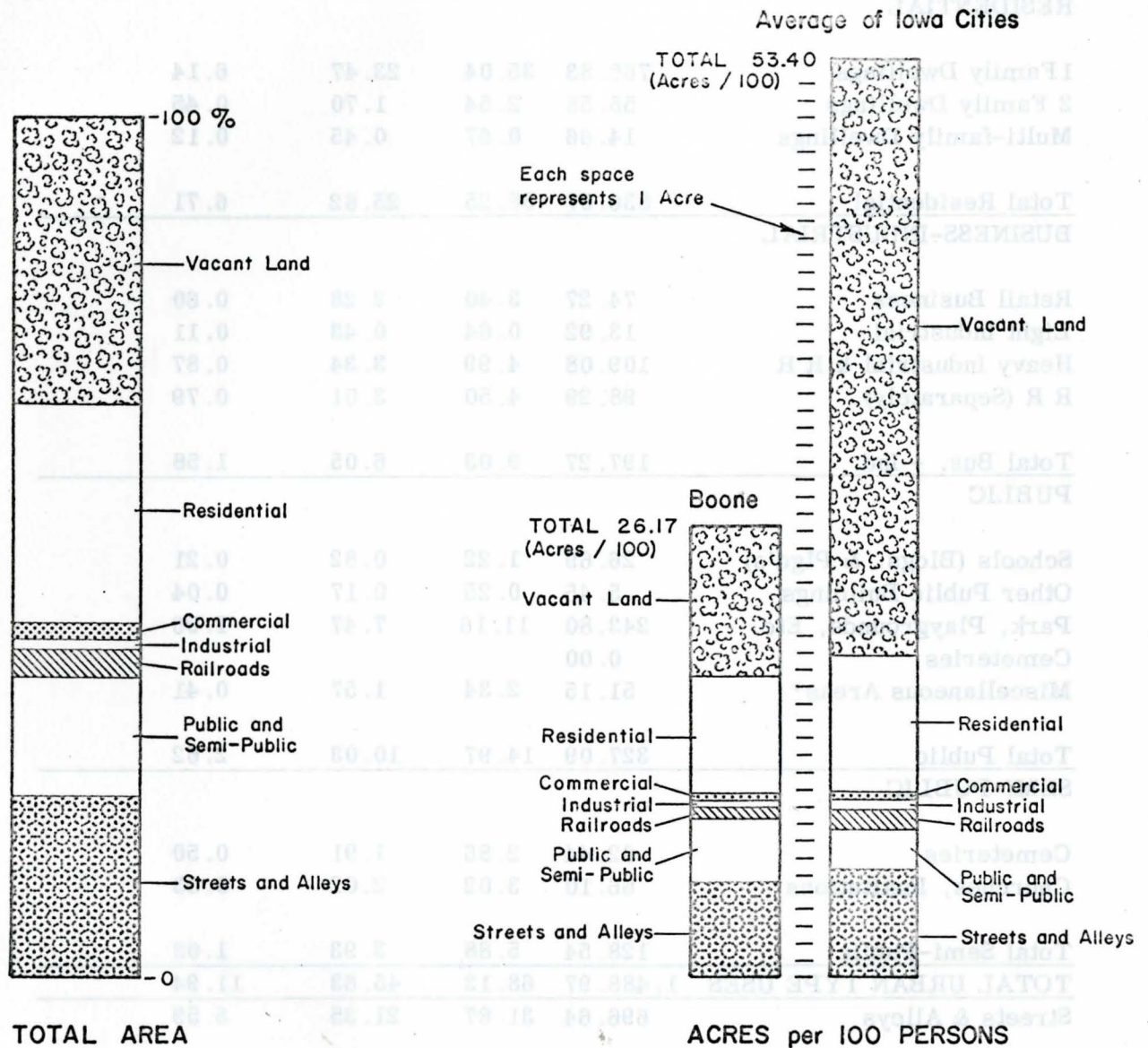
Table 89

LAND USE COMPARISONS

	Area in Acres	% of Devel- oped Area	% of Land Area of City	Acres/100 Persons for Land Area of City
RESIDENTIAL				
1 Family Dwellings	765.83	35.04	23.47	6.14
2 Family Dwellings	55.58	2.54	1.70	0.45
Multi-family Dwellings	14.66	0.67	0.45	0.12
Total Residential	836.07	38.25	25.62	6.71
BUSINESS-INDUSTRIAL				
Retail Business	74.27	3.40	2.28	0.60
Light Industrial	13.92	0.64	0.43	0.11
Heavy Industrial & R R	109.08	4.99	3.34	0.87
R R (Separately)	98.29	4.50	3.01	0.79
Total Bus. - Ind.	197.27	9.03	6.05	1.58
PUBLIC				
Schools (Bldgs. & Plgd's)	26.69	1.22	0.82	0.21
Other Public Buildings	5.45	0.25	0.17	0.04
Park, Playgrounds, Etc.	243.80	11.16	7.47	1.96
Cemeteries	0.00			
Miscellaneous Areas*	51.15	2.34	1.57	0.41
Total Public	327.09	14.97	10.03	2.62
SEMI-PUBLIC				
Cemeteries	62.44	2.86	1.91	0.50
Churches, Institutions	66.10	3.02	2.02	0.53
Total Semi-Public	128.54	5.88	3.93	1.03
TOTAL URBAN TYPE USES	1,488.97	68.13	45.63	11.94
Streets & Alleys	696.64	31.87	21.35	5.59
TOTAL DEVELOPED AREA	2,185.61	100.00	66.98	17.53
Agricultural or Vacant	1,077.45		33.02	8.64
TOTAL LAND AREA OF CITY	3,263.06		100.00	26.17

*Public "miscellaneous uses" include the city dump, municipal parking lots, etc.

LAND USE COMPARISONS

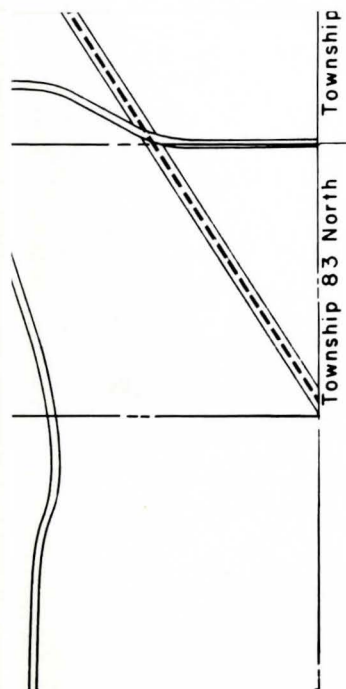


The preparation of this chart was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act, of 1954, as amended.

Urban Planning Grant: Project No. Iowa P-1

Prepared under the Contract for the Iowa Development Commission
by: Anderson Engineering Company
City Planning Consultants

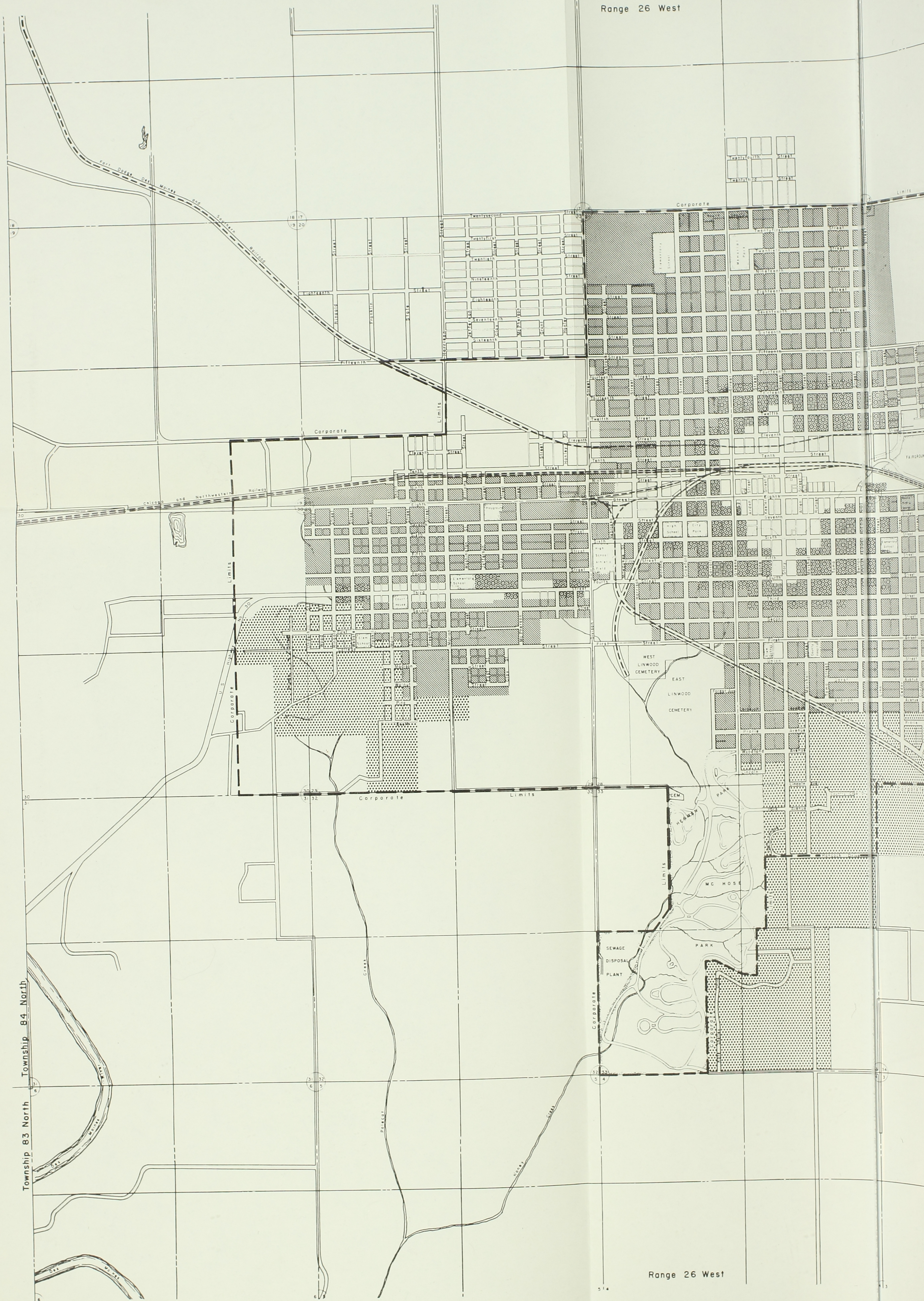
chart 35



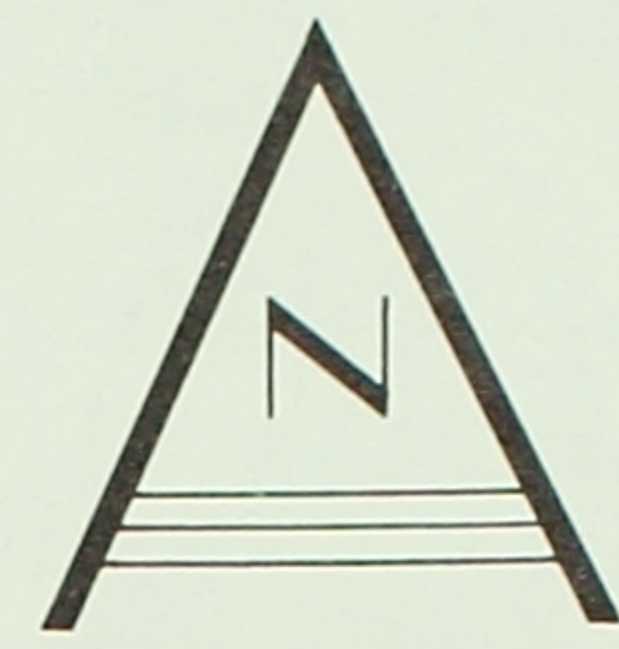
FUTURE POPULATION DISTRIBUTION

map 7

aneco



CITY OF BOONE, IOWA



0 400 800 1600 2400 3200 4000 4800 5600 feet

anderson engineering company
planning consultants
DES MOINES IOWA

legend

- 13 persons per acre
- 16 persons per acre
- 19 & up persons per acre

¹ see text

FUTURE POPULATION DISTRIBUTION

map 7

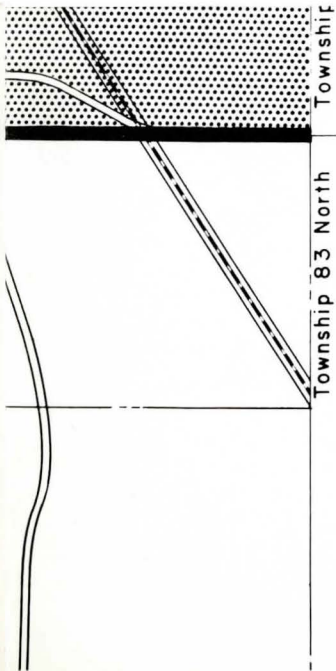
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The preparation of this map was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act of 1954, as amended.

Urban Planning Grant Project No. IOWA P-1

Prepared under the Contract for the Iowa Development Commission by Anderson Engineering Company City Planning Consultants

Township 84 North
Township 83 North

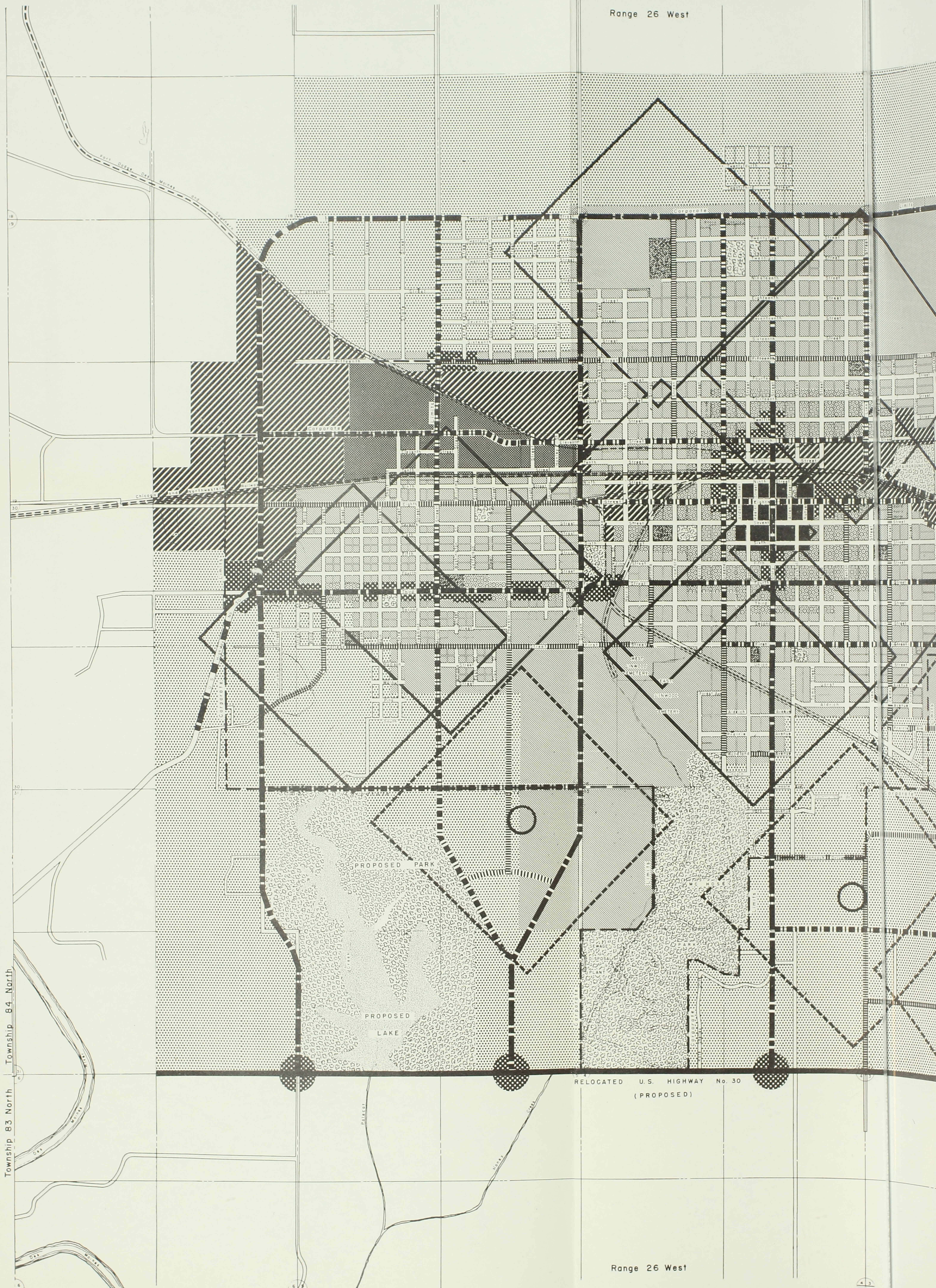


COMPREHENSIVE PLAN

map 8

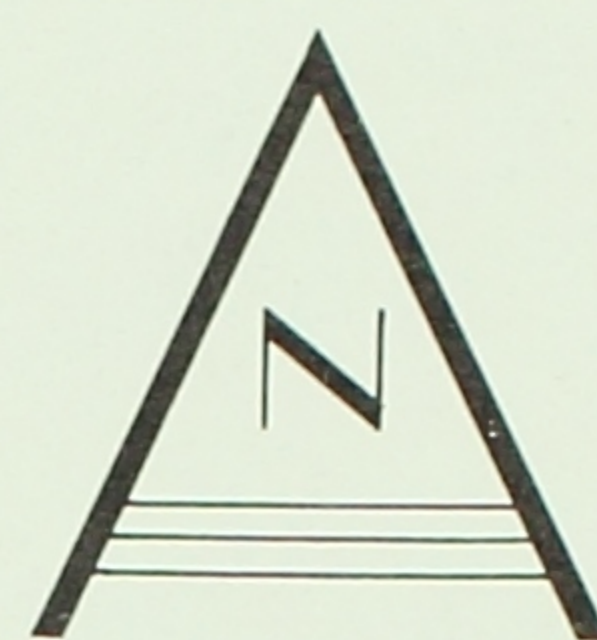
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Range 26 West



Range 26 West

CITY OF BOONE, IOWA



0 400 800 1600 2400 3200 4000 4800 5600 feet

anderson engineering company
planning consultants
DES MOINES IOWA

legend

land use plan

single family residence district	
1 & 2 family residence district	
multi-family residence district	
commercial district	
commercial district	
light industrial district	
heavy industrial district	
parks & other public areas	
schools: 1. proposed 2. existing	
school service area	

major thoroughfare plan

major highway	
primary thoroughfare	
secondary thoroughfare	
collector	

COMPREHENSIVE PLAN

map 8

aneco

The preparation of this map was financed in part through an urban planning grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act of 1954, as amended.

Urban Planning Grant Project No. Iowa P-1

Prepared under the Contract for the Iowa Development Commission by Anderson Engineering Company City Planning Consultants

The Proposed Land Use Plan as part of the Comprehensive Plan, Map 8, shows the recommended future use of property in the City of Boone and in the unincorporated area immediately surrounding the City. This Plan is intended to achieve a balanced distribution of land in the various use categories and to separate incompatible uses, insofar as possible, such as residential and industrial uses. Map 8 reflects the land requirements for all the Plans and forms a basis for delineation of the various district boundaries on the Zoning District Map.

The Land Use Plan proposes seven districts as follows:

Residence

- Single-Family District
- One and Two Family District
- Multi-Family District

Commercial

- (Local) Commercial District
- (Central Business) Commercial District

Industrial

- Light Industrial District
- Heavy Industrial District

The following is a discussion of the various districts proposed in the Land Use Plan as listed above.

Residential

Three districts have been proposed within the residential classification for the City of Boone which, if properly distributed, should fulfill the residential needs of the City. These are the Single-Family District, the One and Two family District and the Multi-Family District.

The Single-Family Residence District permits only single-family homes plus a few public and semi-public uses such as schools and churches. This district requires the largest lot size of the three residence districts resulting in the lowest density of population of any of the residence districts. The Single Family District is often found in the outlying areas of the City on the principle that the heaviest density of population generally should be close to the center of the City and there should be a reduction in the density as the distance from the center increases. These areas often include the most desirable area

for new residential construction and areas that will not be served by sanitary sewer for many years. Areas recommended for the Single-Family District are the southeast and southwest areas and north of the present north corporate limit as shown on Map 8.

The One and Two Family Residence District permits all uses permitted in the Single Family District and in addition permits two family dwellings (duplexes). This district, which permits smaller lots than in the Single Family District, encompasses most of the presently developed area of the City as well as some undeveloped area. The smaller lot sizes permitted in this district together with the fact that duplexes are permitted results in a higher density of population compared with the Single Family District as shown in the Table, Page 229. Lots in the district platted prior to the adoption of the Zoning Ordinance can be used for a single family residence regardless of the size of the lot. Provision has been made in the proposed Zoning Ordinance for reduction of the side yard requirements for existing lots. Any lots platted after the adoption of the Zoning Ordinance must meet the minimum size requirements specified therein.

The Multi-Family Residence District permits single-family dwellings, two family dwellings and dwellings with three or more dwelling units commonly known as multiple dwellings. The Multi-Family District as proposed on the Land Use Plan more or less surrounds the Central Business District. This is the area where the highest density of population is normally found where persons can walk downtown if they desire. In delineating this District in Boone, most of the existing multiple dwellings were included in the District.

The Multi-Family District permits single family homes on smaller lots than in the One and Two Family District which, coupled with the multiple dwellings permitted, results in the possibility of a considerably higher density of population. This District permits a number of transitional uses such as private clubs, motels, dental and medical offices, etc. in addition to the residential uses.

Provision has been made in the Zoning Ordinance to permit apartment developments in the Single-Family and One and Two Family Districts after public hearing. Occasionally, a valid request will be made for permission to locate a multiple dwelling development in an area otherwise restricted to one-family or two-family dwellings. This provision would permit such a development after public hearings without the danger of the other uses permitted going in as would be the case if the property was actually rezoned.

The table below shows the approximate density of population that regulations in the proposed Zoning Ordinance would permit in each of the three Residential Districts based upon 3.2 persons per dwelling unit. Anytime these figures are used in determining the amount of population that an undeveloped

area would contain, approximately 20 percent of each acre should be deducted for streets and other non-residential uses.

<u>District</u>	<u>Minimum Lot area Single Family Dwelling</u>	<u>Population Density</u>
Single Family	11,000 Sq. Ft.	12.73 Persons Per Acre
One & Two Family	9,000 Sq. Ft.	15.24 Persons Per Acre
Multi-Family	7,500 Sq. Ft.	18.6 Persons Per Acre and Up.

Commercial

The Land Use Map, Map 8, shows that two Commercial Districts are proposed for Boone. One is the Central Business District in which no off-street parking or loading facilities will be required by the Zoning Ordinance and maximum property development is permitted. Because of the special regulations provided for this District, no property outside the Central Business District should be so zoned. This District is referred to as the C-2 Commercial District in the Zoning Ordinance.

The second Commercial District referred to as the C-1 Commercial District in the Zoning Ordinance includes all of the commercial zoning outside the Central Business Districts. This District permits all retail commercial and service uses and professional offices. It is proposed to require a front yard and rear yard for permitted uses. The reason for this is that this District is generally surrounded by residential area and it is desirable to restrict the intensity of site development in such areas. The yard areas can be used for furnishing the off-street parking requirements provided for in the proposed Zoning Ordinance.

The following table shows a comparison of the amount of commercial land use presently existing and the amount of commercial area shown on the Proposed Land Use Plan. This includes only the area inside the corporate limits.

<u>Commercial Land Use Existing</u>	<u>Proposed Commercial Area</u>
74.3 Acres	96.9 Acres

Four circles are shown along the new alignment of U. S. Highway 30 south of the City at proposed points of access into the City. These are intended to indicate that at some future date there will probably be a need for some Commercial Zoning at these locations. Definite districts should be designated at a later date when the highway and access roads have been definitely located and the pattern of need becomes evident. Zoning of this area at the present time is the responsibility of the County since it is not in Boone.

Industrial

Two major industrial areas are shown on Map 8. The principal area lies east of the City where some industrial development has already taken place. This area is an excellent site for industrial development since the land is quite flat requiring a minimum of grading and is well served with rail facilities and access by road. The east location has advantages since the prevailing winds in summer are primarily from the south and southwest. Any undesirable odor or smoke that might be caused by industries in this area would be carried away from the City rather than over it.

The second major area is on the west side of the City and has advantages to offer such as flat topography and good rail facilities. The primary thoroughfare shown on the Major Thoroughfares Plan encircling the outer area of the City would provide better road facilities to this area than now exists.

There are two Industrial Districts proposed in the Zoning Ordinance which should meet the industrial development needs of the City. The Light Industrial District permits most manufacturing and processing uses along with all the commercial uses permitted in the Commercial Districts. The Heavy Industrial District permits all uses except some which may have undesirable characteristics such as excessive noise, odor, smoke, dust, etc. These uses can be established by permission of the City Council after public hearing if it is determined that they will not be injurious to the City as a whole or surrounding properties.

Neither Industrial District would permit the construction of residences in any area so zoned under the provisions of the proposed Zoning Ordinance. This provision is intended to protect industries that establish in an Industrial District from encroachment of homes and to preserve Industrial Districts for Industrial uses.

Map 11 shows a possible method of developing the east industrial area into industrial sites with trackage and streets. Lots could be combined to provide a larger site if necessary.

The following table shows a comparison of the amount of land now used for industrial purposes compared to the amount of land proposed for industrial use. This information covers only the area inside the corporate limits.

Industrial Land Use Existing	Proposed Industrial Area
14.7 Acres	334.4 Acres

Non-Conforming Uses

In the areas proposed for Residential and Commercial use, some uses will be made non-conforming through adoption of the Zoning Map and Zoning Ordinance. These are uses that exist at the time of adoption of the ordinance that are not a permitted use in the Zoning District in which they are located. Under the provisions of the proposed Zoning Ordinance, these non-conforming uses can continue as they presently exist and can be changed in use within prescribed limits. Reference should be made to the proposed Zoning Ordinance for more information on non-conforming uses.

Special Uses

Section 16 of the proposed Zoning Ordinance lists a number of "Exceptions to Prohibited Uses", under paragraph E. These are in most cases uses that require special consideration and in some cases are not listed in any district as a permitted use. This sub-section provides that any of the uses listed can be located in any district in which they are not otherwise permitted by special permit of the City Council after receiving a recommendation from the Planning Commission and after holding a public hearing thereon. Uses listed include airports, public buildings, mobile home parks, etc.

Recreation

The Boone Parks system appears in total area to be adequate for the present and anticipated future population by accepted standards of one acre per 100 persons. With a total area of 241.40 acres devoted to park and recreation purposes, Boone has 1.94 acres per 100 persons. Approximately 229 acres of this total is concentrated in the very excellent Herman and McHose Parks at the south edge of the City. The remaining 11.5 acres of area is devoted to small park and playground purposes throughout the City.

There are two playgrounds at present in the City. One is Memorial Park in the north part of the City and the other is a small playground in the west part of the City. City Park, a one square block park located immediately east of the High School is devoted to passive recreation. The elementary schools supplement the playgrounds to provide recreational facilities for small children. There are six elementary school sites situated throughout the City ranging in size from 1.5 acres to 7 acres.

There are a number of yardsticks that have been used in the past for determining recreational needs. Chapin's "Land Use Planning" states that playground facilities should be provided at the rate of 1 acre per 800 population. Boone has a ratio 1 acre per 733 population which includes approximately half of the area of each of the six elementary school sites along with Memorial Park and the playground at Seventh and Jefferson Streets. It does not include playground facilities in Herman and McHose Parks. The following table shows recommended standards for playgrounds.

TABLE 90

STANDARDS FOR PLAYGROUND SITES

Site size	3-6 acres
Population Standard	1 acre/800 pop.
Service Area	1/2 mile

The playground facilities of the City will be discussed on the basis of dividing the City into three natural areas. These are the North Area (all area north of the Chicago and Northwestern Railroad tracks) the Southwest Area (all area west of the High School and south of Eleventh Street) and the Southeast area (all area east of the High School and south of the Chicago and Northwestern tracks.)

North Area

This section of the City with an area of approximately 700 acres is served by Memorial Park and two Elementary Schools, Lowell and Franklin. Sizes of the three sites and facilities in Memorial Park are as follows:

Lowell School (Fifteenth & Linn Streets)	1.9 Acres
Franklin School (Nineteenth & Crawford Sts.)	6.9 Acres
Memorial Park (Nineteenth & Boone Streets)	6.9 Acres

Playground Equipment
Ball Diamond (lighted)
Tennis Courts 2 (surfaced)
Shelter House

502 elementary age children attend school in this area at the present time.

Southwest Area

This part of the City having an area of approximately 800 acres is served by one playground and two Elementary Schools. Sizes of the sites and facilities on the playground are as follows:

Garfield School (Franklin & First Streets)	1.8 Acres
Lincoln School (Third & Marion Streets)	2.3 Acres
Playground (Seventh & Jefferson Streets)	2.1 Acres

Playground Equipment
Tennis Court - Grass
Baseball Back-stop

363 elementary age children attend school in this area at the present time.

Southeast Area

The southeast area of the City has an area of approximately 700 acres and is served by two Elementary Schools plus the facilities of Herman and McHose Parks to the south. Sizes of the school sites and facilities available in the parks are as follows:

Page School (First and Boone Streets)	1.3 Acres
Bryant School (Fifth and Linn Streets)	2.4 Acres
Herman & McHose Parks	229 Acres

Playgrounds
Ball Diamonds
Tennis Courts
Wading Pool
Swimming Pool

514 elementary age children attend school in this area at the present time.

RECOMMENDATIONS

North Area

The facilities provided in the North Area appear to be adequate for the needs of the area in the foreseeable future.

Southwest Area

1. The playground at Seventh and Jefferson Streets should be enlarged from its present 2.1 acres to at least 3 acres in line with the minimum 3 to 6 acre site size standard.

Southeast Area

1. The Page School site should eventually be enlarged to include the east half of the block on which it is now located. This is a very small site of 1.3 acres that could be doubled in size by acquisition of the other half block.

2. A playground site should be acquired in this area consisting of approximately 5 acres. Since the City will tend to grow some to the southeast, a site in the vicinity of the water tower where vacant land is available should be considered.

Playfields

The North and Southeast areas are served by playfield facilities existing in Memorial Park and the Herman-McHose Park combination. These facilities should provide active recreation for young people and adults such as tennis, baseball, swimming and similar sports. The Southwest area is not presently served with such facilities as it should be. If the playground at Seventh and Jefferson Streets is enlarged as recommended, some playfield facilities could be incorporated on the site or a new site should be provided for these facilities.

By recommended standards a Playfield should be 10 to 30 acres in size.

Large Parks

Herman and McHose Parks at the south edge of Boone offer excellent facilities of the large park type for the City of Boone. These two parks have a total area of approximately 229 acres offering a wide variety of activities. Facilities in these parks include the following:

- Playgrounds
- Tennis Courts - 2
- Ball Diamond (lighted) - 2
- Swimming Pool
- Picnicing
- Nature Study
- Ice Skating
- Shelters
- Bridle Trails
- Wading Pool

The Ledges State Park located two miles south of Boone serves the City with additional facilities as follows:

- Picnicing
- Hiking
- Nature Study

RECOMMENDATIONS

The construction of U. S. Highway 30 in its proposed new location south of the City offers an excellent opportunity to create an artificial lake on Polecat Creek by using the fill across the Polecat Creek ravine as a dam. This ravine is deep with steep sides and there is some vegetation surrounding the ravine that would enhance the value of this area as a park and lake development. Map 8 shows how a lake might look with a fairly generous amount of public land around it for park purposes. This development would be of particular value for the lake that can be created. The park land surrounding it should be left in its natural state for the most part with some picnicing, camping and other facilities provided.

The possibility of creating this lake in connection with the construction of the highway should be investigated thoroughly before plans for the highway have developed to the point that a change in plans for the fill in the ravine, making it unsuitable for a dam, could not be made.

Such a lake would be a valuable asset to the City of Boone considering the popularity of water recreation areas and the importance of a diversified recreation system to the growth of a City.

Schools

The school system of the City of Boone consists of six elementary schools, and a combined Junior and Senior High located in the center of the City. Map 8 shows the location and general service area of the six elementary schools and shows suggested approximated locations for new schools in the out-lying areas if future growth indicates need for additional school sites. The locations shown are only intended to indicate the general area in which a school should be located.

Elementary Schools

TABLE 91 RESUME OF EXISTING ELEMENTARY SCHOOLS

Bryant School (Fifth & Linn Streets)	
Site size	2.4 Acres
Enrollment	269
Franklin School (Nineteenth & Crawford Streets)	
Site size	6.9 Acres
Enrollment	294
Garfield School (Franklin & First Streets)	
Site size	1.8 Acres
Enrollment	118
Lincoln School (Third & Marion Streets)	
Site size	2.3 Acres
Enrollment	245
Lowell School (Fifteenth & Linn Streets)	
Site size	1.9 Acres
Enrollment	208
Page School (First & Boone Streets)	
Site size	1.3 Acres
Enrollment	247

Eventually the Page School site should be enlarged by acquisition of the east half of the block on which the school is located. This would double

the size of the site giving more adequate play area.

Table 92 shows recommended standards for elementary school sites.

TABLE 92

ELEMENTARY SCHOOL SITE STANDARD

Minimum Area	5 acres
Desirable Minimum	5 acres plus 1/2 acre per 100 enrollment
Service Area	1/2 mile

Junior and Senior High

Junior and Senior High pupils presently occupy a common site at Sixth and Crawford Streets, approximately in the center of the City. The present facilities are fairly adequate for present needs but consideration should be given to separation of the Junior and Senior High Schools in the near future. It is recommended that the present facilities be retained for Junior High and that a new site be acquired for a Senior High in the near future. The new site should be adequate for athletic and recreation facilities as well as classroom buildings.

The school system of Boone as it relates to the economy of the City is discussed in Section 8 of this report beginning on Page 201. The material included in Section 8 discusses the possibility of school redistricting in Boone County with the area east of the Des Moines River encompassing a Senior High District. If such an East County district should become a reality, the new Senior High should be located at the southeast corner of the City, south of First Street and east of Clinton Street, for ease of access from the entire district.

Table 93 shows site standards for Junior and Senior High Schools.

TABLE 93

SCHOOL SITE STANDARD
JR. & SR. HIGH SCHOOLS

Junior High

Minimum area	10 Acres
Desirable Minimum Area	10 Acres plus 1 acre per 100 ultimate enrollment
Service Area	1 mile

Senior High

Minimum area	20 Acres
Desirable minimum area	20 Acres plus 1 acre per 100 ultimate enrollment

Table 94 below shows the biennial census of school children in the City of Boone from 1954 through 1960.

TABLE 94

SCHOOL CENSUS

Year	Under 1 Year	1	2	3	4	5	5-20	7-16
1960	226	225	246	253	250	226	3,310	2,203
1958	217	242	230	201	232	223	3,250	1,902
1956	216	222	239	228	262	215	3,150	2,009
1954	224	216	241	211	248	195	2,873	1,895

Public Facilities

Recommendations on acquisition of land for public buildings and other public purposes will be found in the various sub-sections of this Section, such as Recreation, Schools, Central Business District, etc. There has not been a plan suggested for an integrated civic center since many of the public buildings are in good condition and adequate for the needs. Such a plan is not deemed advisable at this time.

Consideration should eventually be given to the construction of a new Court House building in the area of the Central Business District of Boone where it is closer to the principal functions of the City. At that time, study should be given to the possibility of combining the City and County governmental functions into one building or in two separate buildings located together. Such a project, however, is no doubt a number of years in the future and further study including site selection should be made at a future time.

The Comprehensive Plan, Map 8, includes the Major Thoroughfares Plan showing proposed system of major thoroughfares or heavy traffic carrying streets. It is necessary to establish a system of such streets to carry traffic throughout the City on streets that are planned and constructed for a heavy traffic load, leaving the remaining streets for residential use. Four types of major thoroughfares have been suggested to handle the traffic needs of Boone as follows:

<u>Type</u>	<u>Width of Right-of-Way</u>
Major Highway	150 feet
Primary Thoroughfare	100 feet
Secondary Thoroughfare	80 feet
Collector	70 feet

New streets for which right-of-way is acquired in the future should be planned as specified in the Major Thoroughfares Plan to provide adequate right-of-way for future needs. The capacity of existing streets where acquisition of additional right-of-way is difficult can be improved by other means such as prohibiting parking on the street. Chart 36 shows suggested cross-sections for the various types of streets. The following is a brief discussion of the four types of thoroughfares listed above.

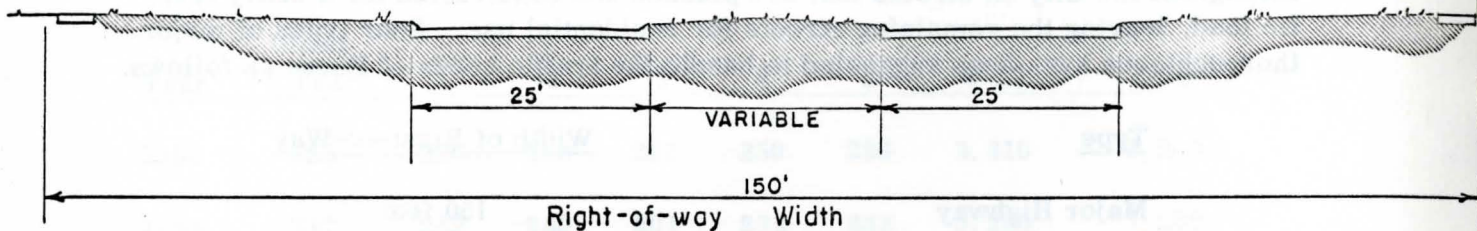
Major Highway

Construction of relocated U. S. Highway 30 south of Boone is to begin soon. This is the only Major Highway type road shown on the Major Thoroughfares Plan. The new highway which is to run straight east and west along the south line of McHose Park will take the through traffic off of Fourth Street leaving this Street to better serve as a means of circulating traffic within the City. Construction is to be completed on this segment of the highway relocation by 1963.

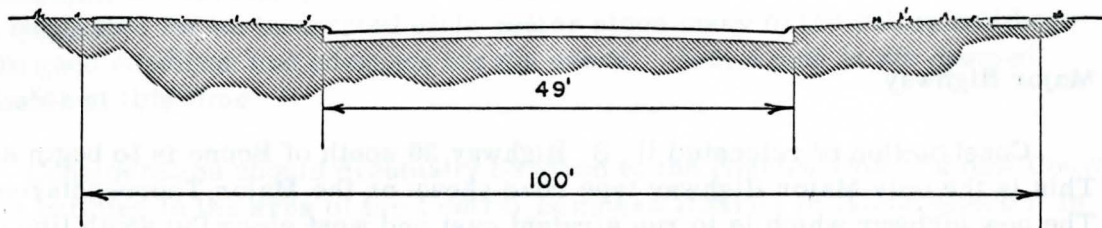
Highway 30 is a major cross-country highway and is a definite asset to the City. This relocation is a part of a statewide program to improve Highway 30 which carries an average of 750 trucks per day through Boone and carries the highest percentage of interstate traffic in Iowa at the present time. The highway will by-pass cities and is designed for a minimum safe operating speed of 60 miles per hour.

With proper access into Boone as shown by the system of Primary Thoroughfares on Map 8, the relocation of U. S. 30 as presently proposed should not have a detrimental effect on the overall economy or growth of the City. There will have to be adjustments made by some businesses along the present route through the City that serve exclusively the traveling public.

SUGGESTED STREET CROSS SECTIONS



MAJOR HIGHWAY

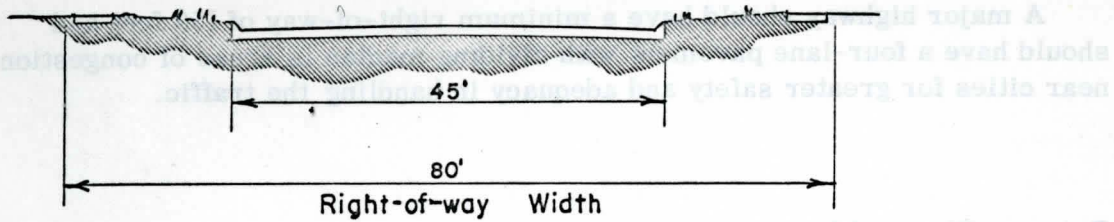


PRIMARY THOROUGHFARE

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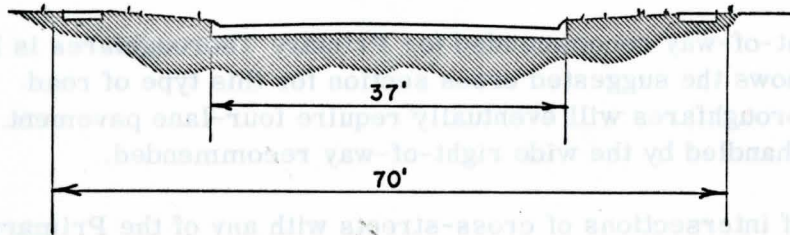
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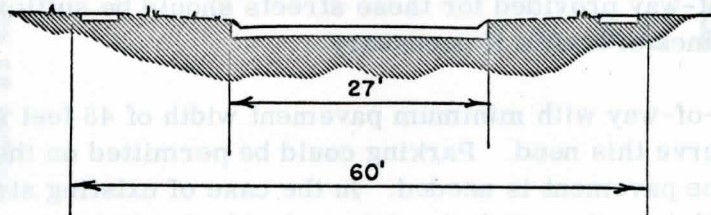
SECONDARY THOROUGHFARE

The system of Primary Thoroughfares serves as a principal means of distributing traffic throughout and around the City. On Map 8, Fourth and Third Streets (present U. S. 30), Story Street and Division Street will be the principal streets in carry traffic through the City. North-south Primary Thoroughfares at the west and east edges of the City and Tenth-second Street across the north in conjunction with the new location of U. S. 30 to the south will serve eventually to carry traffic around the periphery of the City. These peripheral roads will serve the traffic needs of the industrial areas and eliminate the necessity of traffic going through the City that is not destined for any point inside the peripheral thoroughfares.



COLLECTOR STREET

The number of intersections of cross-streets with any of the Primary Thoroughfares should be limited as much as possible in the future to reduce the number of points at which traffic enters the City. This will help to retain maximum efficiency of the Primary Thoroughfares. Distance between intersecting streets should be between 600 and 1200 feet where practicable.



RESIDENTIAL STREET

The Secondary Thoroughfares are designed to carry a smaller volume of traffic than the Primary Thoroughfares and distribute the traffic throughout the various sections of the City from the Primary Thoroughfares and the major Highway. The right-of-way provided for these streets should be sufficient to provide for the future expansion of the City. The 80-foot right-of-way with minimum pavement width of 45 feet shown in Chart 38 should serve this need. Parking should be permitted on the pavement until the four-lane pavement is necessary and widening is impractical where a pavement width less than 45 feet exists and widening is impractical. Parking should be prohibited on these streets as necessary to provide a minimum of two 11-foot unobstructed travel lanes. In industrial areas, if a street construction should consist of a 22 or 24-foot pavement without curb and gutter if four-lane pavement is not warranted immediately.

chart 36

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A major highway should have a minimum right-of-way of 150 feet and should have a four-lane pavement with dividing median in areas of congestion near cities for greater safety and adequacy in handling the traffic.

Primary Thoroughfare

The system of Primary Thoroughfares serves as a principal means of distributing traffic throughout and around the City. On Map 8, Fourth and Third Streets (present U. S. 30), Story Street and Division Street will be the principal streets to carry traffic through the City. North-south Primary Thoroughfares at the west and east edges of the City and Twenty-second Street across the north in conjunction with the new location of U. S. 30 to the south will serve eventually to carry traffic around the periphery of the City. These peripheral roads will serve the traffic needs of the industrial areas and eliminate the necessity of traffic going through the City that is not destined for any point inside the peripheral thoroughfares.

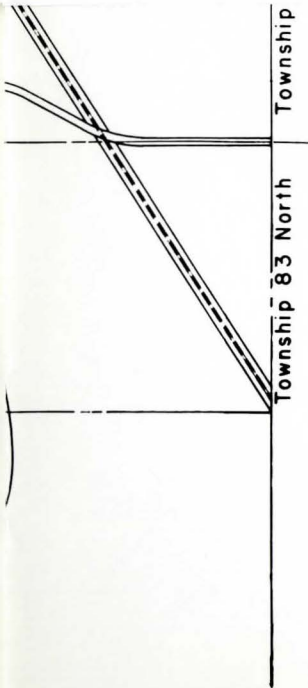
Minimum right-of-way recommended for Primary Thoroughfares is 100 feet. Chart 36 shows the suggested cross section for this type of road. Some of the Primary Thoroughfares will eventually require four-lane pavement which can be adequately handled by the wide right-of-way recommended.

The number of intersections of cross-streets with any of the Primary Thoroughfares should be limited as much as possible in the future to reduce the number of points at which traffic enters the Primary Thoroughfares. This will help to retain maximum efficiency of the Primary Thoroughfares. Distance between intersecting streets should be between 600 and 1320 feet where practicable.

Secondary Thoroughfare

The Secondary Thoroughfares are designed to carry a smaller volume of traffic than the Primary Thoroughfares and distribute the traffic throughout the various sections of the City from the Primary Thoroughfares and the Major Highway. The right-of-way provided for these streets should be sufficient to provide four moving lanes of traffic if necessary.

The 80-foot right-of-way with minimum pavement width of 45 feet shown in Chart 36 should serve this need. Parking could be permitted on the pavement until the four-lane pavement is needed. In the case of existing streets where a pavement width less than 45 feet exists and widening is impractical, parking should be prohibited on these streets as necessary to provide a minimum of two 11-foot unobstructed driving lanes at all times. In industrial areas, initial pavement construction should consist of a 22 or 24-foot pavement without curb and gutter if four-lane pavement is not warranted immediately.



STREET SURFACING

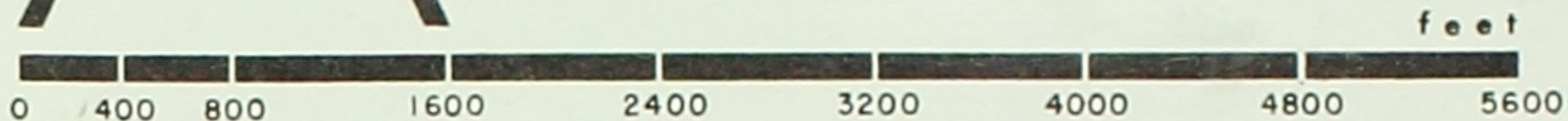
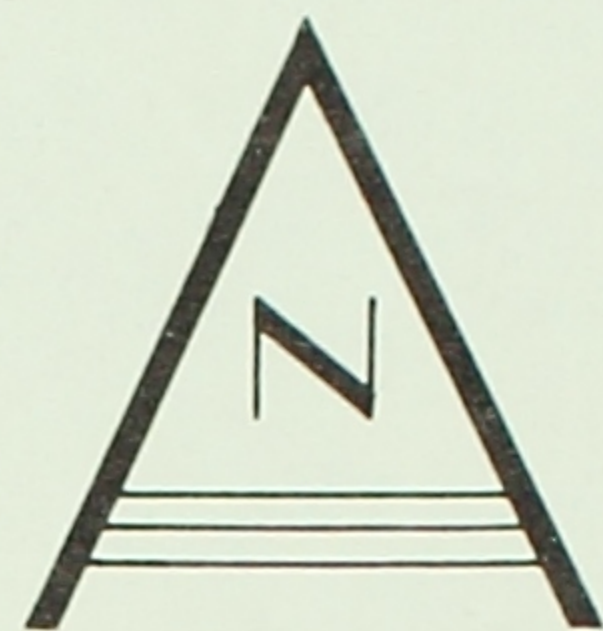
map 9

aneco

Range 26 West

Township 83 North	Township 84 North
-------------------	-------------------

CITY OF BOONE, IOWA



anderson engineering company
planning consultants
DES MOINES IOWA

Legend

pavement	
oil	
gravel	
dirt or not in	
curb and gutter	

STREET SURFACING

map 9

aneco

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The railroad overpass over the connection between Linn and Benton Streets north of Eighth Street should be replaced eventually with a longer structure giving greater roadway width beneath. Eighth Street has been shown as a Secondary Thoroughfare east to the Chicago Northwestern Railroad Tracks where a second-grade separation should be provided. This would give a more direct route between the east industrial area and the area south of the Chicago Northwestern tracks. Such a direct connection would be of value particularly if the east industrial area is developed to its greatest potential.

Collector

The system of Collector Streets serves to collect traffic from the residential streets and distribute it to the system of Secondary and Primary Thoroughfares. These streets should be wide enough to provide a minimum of two 11-foot unobstructed lanes of traffic. If on-street parking is to be permitted, the pavement should be sufficiently wide to handle the parking without interference with the traffic lanes.

Chart 36 shows that a minimum right-of-way of 70 feet is recommended for Collector Streets with a minimum pavement width of 37 feet in areas where parking is to be permitted on both sides of the street. In undeveloped areas, right-of-way should be acquired for these streets at the time of development of the land.

Street Surfacing

Map 9 shows the type of surfacing existing on all the streets within the City of Boone. Also shown on this map is existing curb and gutter.

Traffic Study

An interior traffic study was made for a period of 18 hours on September 1, 1961. Results of this survey are shown by "desire lines" on Map 10. A cordon of 14 interview stations was established around the Central Business District as shown on Map 10. This network of stations made it virtually impossible for a vehicle to enter or leave the Central Business District without being counted. Interviews to determine point of origin and point of destination were conducted on most vehicles leaving the Central Business District. All vehicles both entering and leaving this area were counted during the full 18-hour period to determine the load of traffic on the various streets. Table 95 on P. 249 shows the total counts at each station broken down by autos and trucks.

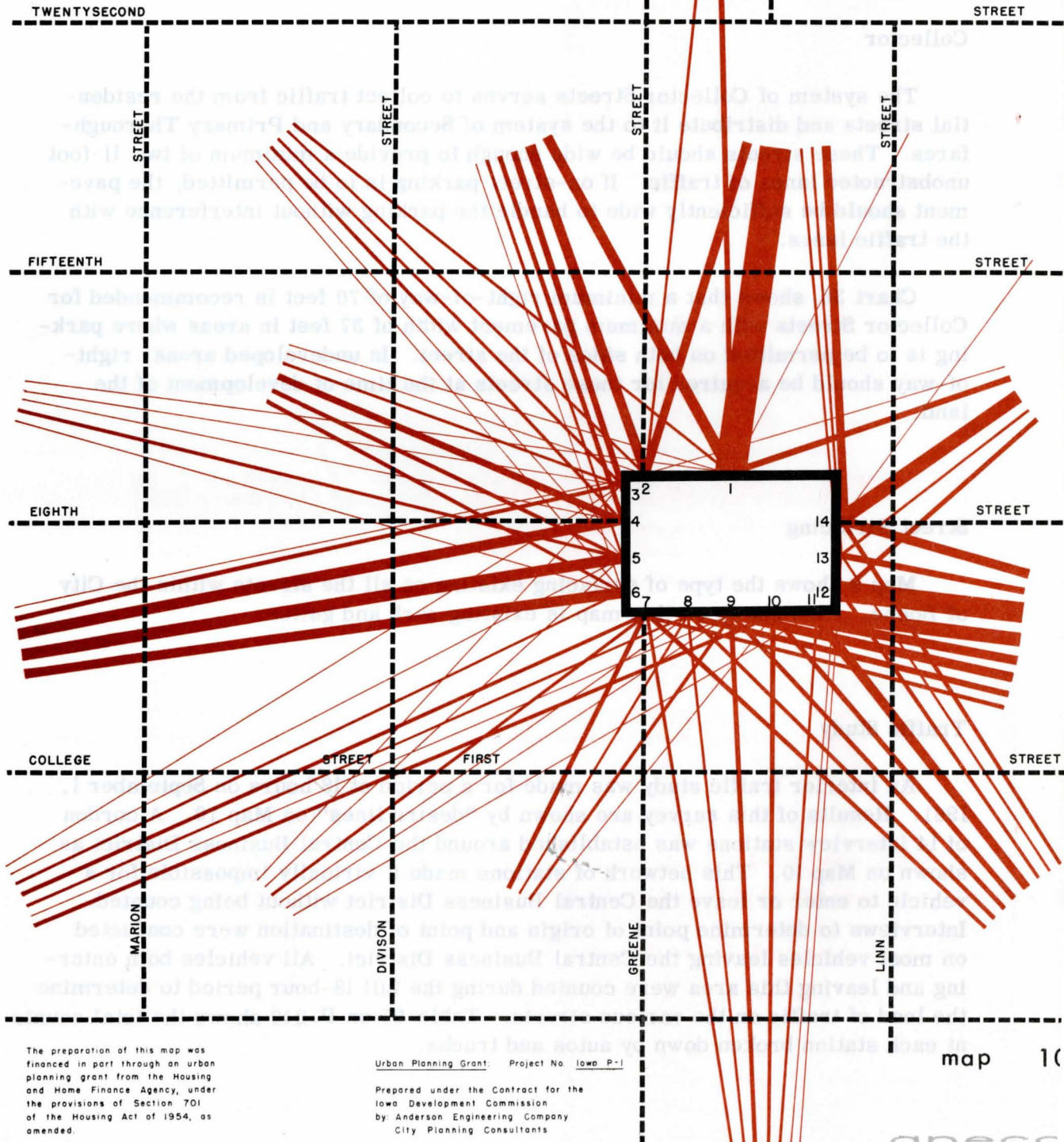
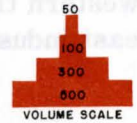
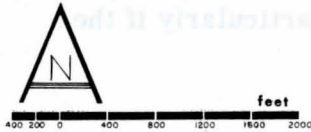
CITY OF BOONE - IOWA

TRAFFIC SURVEY - DESIRE LINES

INFORMATION ACQUIRED FROM 16 HOUR
SURVEY (6AM TO 10PM) SEPTEMBER 1, 1961

--- DESTINATION BOUNDARY LINES
— CORDON LINE

5 INTERVIEW STATION NUMBER



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map 10

anecc

Station No.	Street	Inbound		Outbound	
		Autos	Trucks	Autos	Trucks
1	Story St. - North	3,090	223	2,990	251
2	Greene St. - North	1,018	114	1,089	137
3	Ninth St. - West	420	44	482	84
4	Eighth St. - West	708	57	702	68
5	Seventh St. - West	1,138	44	640	14
6	Sixth St. - West	406	29	460	24
7	Greene St. - South	1,024	75	1,023	83
8	Boone St. - South	1,087	111	912	92
9	Story St. - South	3,017	166	2,608	133
10	Marshall St. - South	1,088	151	958	113
11	Tama St. - South	452	41	582	38
12	Sixth St. - East	307	15	406	24
13	Seventh St. - East	374	33	532	66
14	Eighth St. - East	1,235	147	1,319	139

Table 96 shows the number of vehicles entering and leaving the Central Business District by hour. From this table the heavy periods of traffic can be determined.

The number of vehicles revealed by the interviews that were passing through the Central Business District only for the purpose of getting from one part of the City to another, were negligible. It appeared from the results that most vehicles leaving the area inside the corridor were business to take care of in the area.

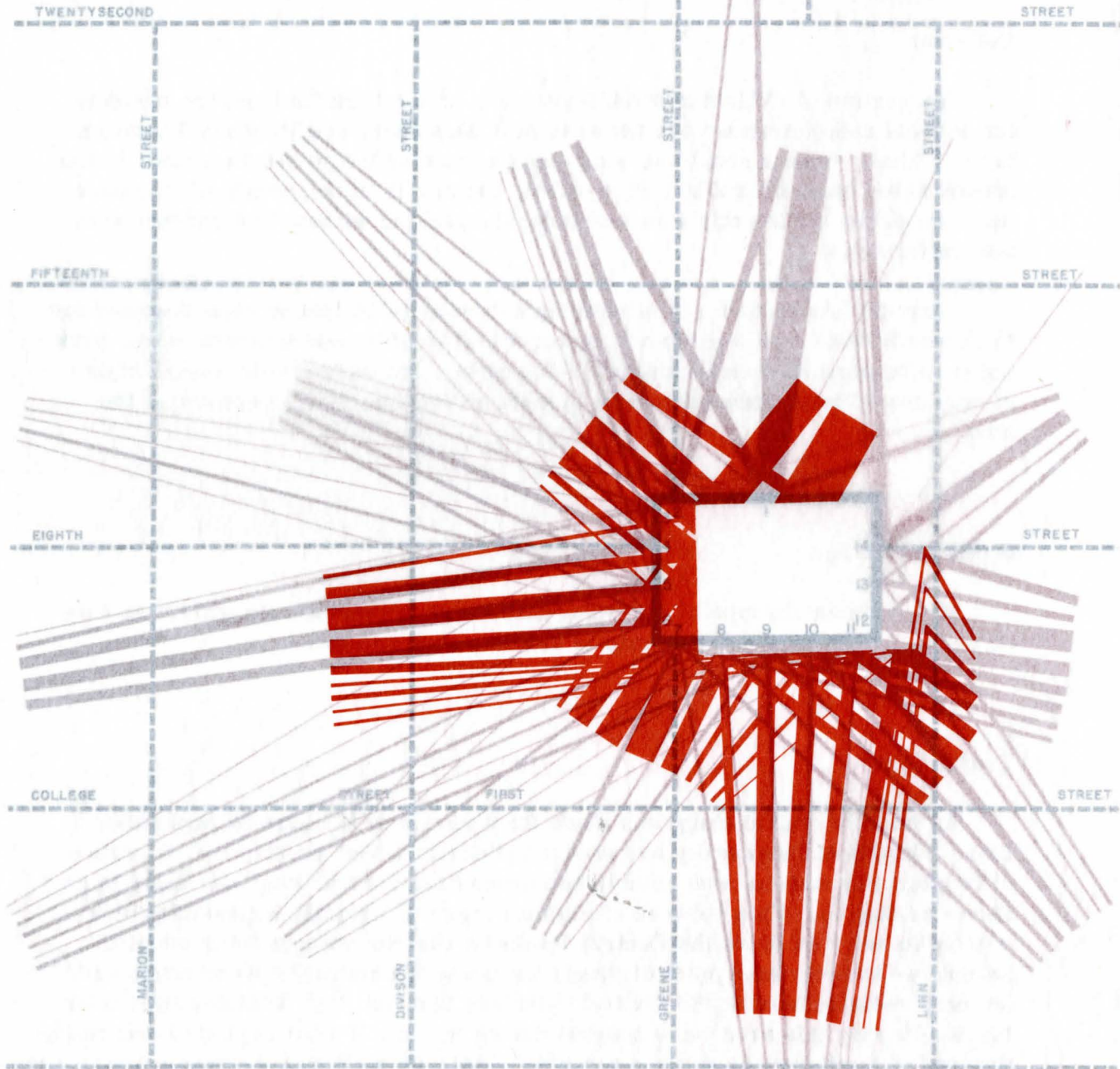
It was concluded that the existing street layout provided adequate circulation around the Central Business District to handle cross-town move-

CITY OF BOONE - IOWA

TRAFFIC SURVEY - DESIRE LINES

INFORMATION ACQUIRED FROM 15 HOUR
SURVEY (6AM TO 10PM) SEPTEMBER 1, 1961
DESTINATION BOUNDARY LINES
CORDON LINE

5 INTERVIEW STATION NUMBER



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Prepared under the Contract for the Iowa Development Commission
by Anderson Engineering Company
City Planning Consultants

map 10

aneco

TABLE 95

TRAFFIC COUNTS BY STATION
6 A. M.-Midnight - 18 Hour Period

Station No.	Street	Inbound		Outbound	
		Autos	Trucks	Autos	Trucks
1	Story St. - North	3,090	223	2,990	251
2	Greene St. - North	1,018	114	1,089	137
3	Ninth St. - West	420	44	482	64
4	Eighth St. - West	708	57	702	68
5	Seventh St. - West	1,138	44	640	14
6	Sixth St. - West	406	29	460	34
7	Greene St. - South	1,024	75	1,023	83
8	Boone St. - South	1,087	111	912	92
9	Story St. - South	3,017	166	2,608	133
10	Marshall St. - South	1,088	151	958	113
11	Tama St. - South	452	41	582	38
12	Sixth St. - East	307	15	406	24
13	Seventh St. - East	374	33	532	66
14	Eighth St. - East	1,235	147	1,319	139

Table 96 shows the number of vehicles entering and leaving the Central Business District by hour. From this Table the heavy periods of traffic can be determined.

The number of vehicles revealed by the interviews that were passing through the Central Business District only for the purpose of getting from one part of the City to another, were negligible. It appeared from the results that most vehicles leaving the area inside the cordon had some business to take care of in the area.

The Major Thoroughfares Plan, however, provides adequate circulation around the outer periphery of the Central Business District to handle cross-town movements.

TABLE 96

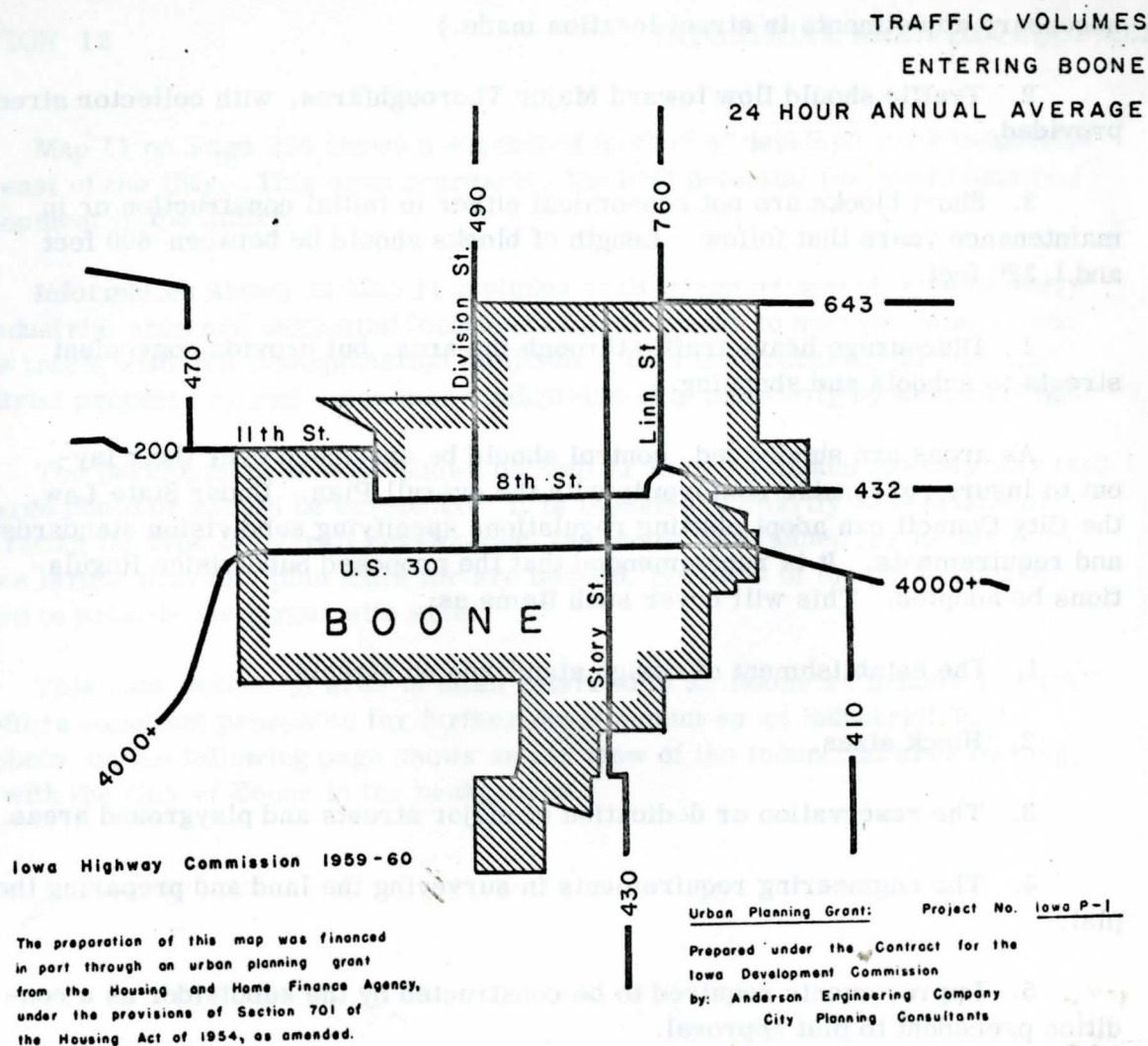
TRAFFIC COUNTS BY TIME

Total for all Stations

September 1, 1961

Time	Inbound			Outbound		
	Autos	Trucks	Total	Autos	Trucks	Total
6-7 AM	323	37	360	214	26	240
7-8	735	101	836	442	80	522
8-9	801	111	912	469	119	588
9-10	853	125	978	615	112	727
10-11	913	129	1,042	790	125	915
11-12	883	103	986	957	139	1,096
12-1 PM	1,052	122	1,174	1,115	103	1,218
1-2	1,076	121	1,197	883	145	1,028
2-3	1,002	104	1,106	891	103	994
3-4	980	99	1,079	906	91	997
4-5	1,006	89	1,095	1,116	91	1,207
5-6	1,013	45	1,058	1,275	50	1,325
6-7	994	18	1,012	914	28	942
7-8	1,321	25	1,346	1,004	14	1,018
8-9	967	11	978	1,176	7	1,183
9-10	647	5	652	1,098	10	1,108
10-11	499	3	502	643	6	649
11-12	299	2	301	375	7	382
TOTAL	15,364	1,250	16,614	14,883	1,256	16,139

In 1959 and 1960, the Iowa Highway Commission made traffic counts on primary and secondary roads in Boone County. The volumes for roads leading into Boone are shown on the sketch below. This information will give a good indication of the volume that the existing major thoroughfares carry. (See Page 251)



Residential Street Plan

A Plan for residential streets in undeveloped areas has been prepared as a part of these studies. The street pattern has been designed with a recognition of physical and topographic features and an effort has been made to create desirable residential areas. The Plan should serve as a guide to the Planning Commission and City Council in approving future subdivisions. Some modifications will probably be necessary, but the changes should be made in conformance with the overall Plan and the needs of the area.

Some of the principals of subdivision design that were used in designing the Street Plan are as follows:

1. Streets should fit contours of irregular land. (When the land is actually subdivided, an accurate topographic map should be made and any

necessary adjustments in street location made.)

2. Traffic should flow toward Major Thoroughfares, with collector streets provided.

3. Short blocks are not economical either in initial construction or in maintenance years that follow. Length of blocks should be between 600 feet and 1,320 feet.

4. Discourage heavy traffic through the area, but provide convenient streets to schools and shopping.

As areas are subdivided, control should be exercised over their layout to insure reasonable conformity with the overall Plan. Under State Law, the City Council can adopt platting regulations specifying subdivision standards and requirements. It is recommended that the proposed Subdivision Regulations be adopted. This will cover such items as:

1. The establishment of design standards on streets.
2. Block sizes.
3. The reservation or dedication of major streets and playground areas.
4. The engineering requirements in surveying the land and preparing the plat.
5. Improvements required to be constructed by the subdivider as a condition precedent to plat approval.
6. Specified procedure in preparing and submitting plats.

Map 11 on Page 255 shows a suggested method of developing the industrial area east of the City. This area represents the best potential for good industrial development in the future.

Information shown on Map 11 includes such things as new streets to serve the industrial area and suggested locations of spur tracks to service some of the future tracts with rail transportation facilities. It is not necessary to serve all industrial property by rail since many industries ship primarily by motor freight.

The development scheme shown on Map 11 is by no means the only way that this area could or should be developed. It is intended primarily as a means of illustrating the type of overall development that could be planned for in this area. If sites larger than this plan calls for are needed, portions of the plan could be altered to provide the larger site size.

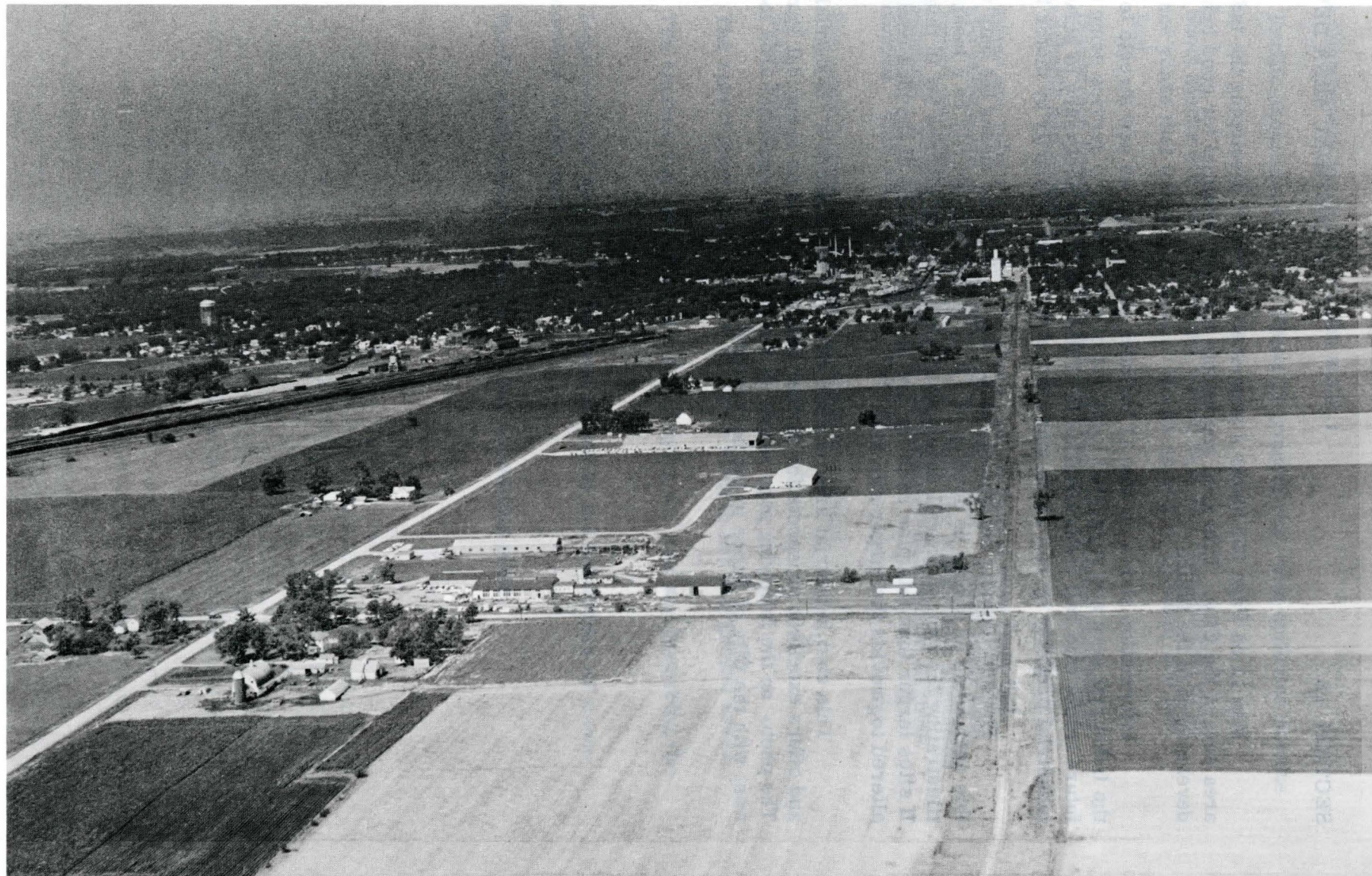
This east industrial area is often referred to as Boone's "Industrial Park" and offers excellent prospects for further development as an Industrial Park. The photo on the following page shows an air view of the industrial area looking west with the City of Boone in the background.

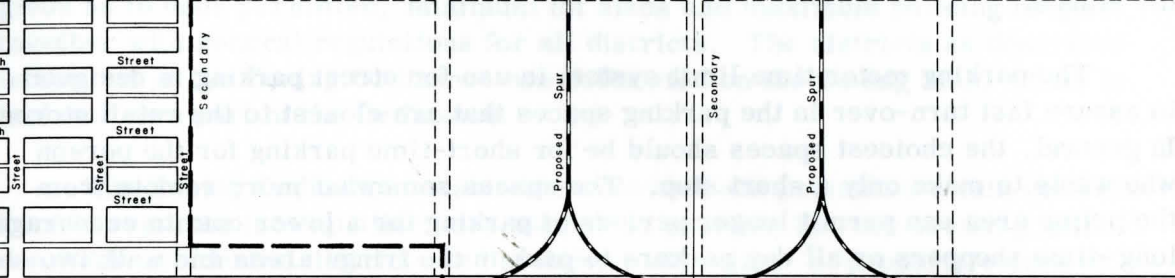
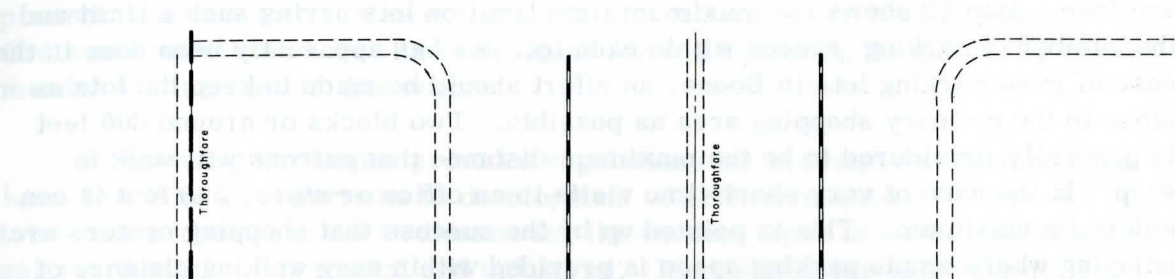
The preparation of this photo was financed
in part through an urban planning grant
from the Housing and Home Finance Agency,
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Housing Act of 1954, as amended.

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EAST INDUSTRIAL AREA





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Map 12 shows existing structures and parking facilities in the Central Business District along with recommendations on locations for future off-street parking facilities.

Boone presently has nine municipally owned off-street parking lots in the fringes of the Central Business District. Some of these are metered and others are free. Map 12 shows the maximum time limit on lots having such a limit and the number of parking spaces within each lot. As has apparently been done in the case of most parking lots in Boone, an effort should be made to keep the lots as close to the primary shopping area as possible. Two blocks or around 600 feet is generally considered to be the maximum distance that patrons will walk to shop. In the case of very short-time visits to an office or store, 300 feet is considered a maximum. This is pointed up by the success that shopping centers are enjoying where ample parking space is provided within easy walking distance of the stores.

The parking meter time limit system in use for street parking is designed to assure fast turn-over in the parking spaces that are closest to the retail stores. In general, the choicest spaces should be for short-time parking for the person who wants to make only a short stop. The spaces somewhat more remote from the prime area can permit longer periods of parking for a lower cost to encourage long-time shoppers or all day parkers to park in the fringe areas and walk two blocks or more. This same theory applies to parking lots. Map 12 shows that the on-street parking meters on Story Street and other streets close to the retail stores are one hour meters with two hour meters on Ninth Street and Allen Street as well as other miscellaneous fringe locations. Some 12-minute meters are scattered throughout the business district for very short stops. Map 12 also shows the no-parking areas and other information pertaining to parking in the Central Business District.

The nine parking lots now existing form the nucleus of a good off-street parking plan. Map 12 shows some additions to the off-street parking program that should be made as needed. Three areas for future off-street parking lots have been designated on Map 12 as follows:

1. Southeast corner of Seventh and Boone Streets. This is an "L" shaped piece of land that is presently used as a used car lot. This property is well located at the southwest corner of the main retail area and should be acquired in the near future. Potential capacity of this property is 61 cars. Some filling would be necessary to raise this property to a useable level for access from Boone Street.

2. West side of Allen Street between Seventh and Eighth Streets. This property consists of five lots, three of which are occupied by a structure

Zoning Ordinance

A proposed Zoning Ordinance has been prepared as a separate publication in conjunction with this report. The City has a Zoning Ordinance in force at the present time that does not meet the needs of a modern city. The proposed Ordinance submitted herewith is designed for implementing the plans and recommendations included in this report.

The Zoning Ordinance provides regulations for the implementation of the Land Use Plan as it pertains to development of private property. Seven use districts are proposed in the Ordinance for the various types of development; such as, residential, commercial and industrial. Regulations for each district are given as to uses permitted, minimum lot sizes and maximum building heights together with general regulations for all districts. The districts as described in the text of the Zoning Ordinance are delineated on the Zoning Map, which is included as a part of the Ordinance.

The Zoning Ordinance establishes uses that are permitted within each district to separate incompatible uses insofar as possible thereby creating more desirable residential districts and assures maintenance of property values at proper levels. It also assures the proper amount of light and air to residential properties through provision of adequate yard areas. A zoning ordinance is one of the tools recommended by leading authorities for the prevention of blighted residential areas.

The regulations contained in the Zoning Ordinance apply only to the area inside the corporate limits of the City since the City does not have authority to regulate use of land outside its boundaries. This authority rests with Boone County which has had a study on zoning regulations for the County prepared.

It is recommended that the proposed Zoning Ordinance and Zoning Map be adopted as a means of implementing the Plans and recommendations included in this Comprehensive Plan.

Subdivision Ordinance.

A proposed Subdivision Ordinance has also been prepared as a separate publication in conjunction with this report. The City has authority to establish regulations governing the dividing of land into lots and blocks within its corporate limits and for a distance of one mile outside the corporate limits. This latter authority, which includes only the design of the street system and the information to be shown on the proposed plat, was granted by a recent session of the

Legislature to apply to all cities and town that have a Planning Commission and have adopted subdivision regulations. Previously, this authority rested only with cities with 25,000 or more population.

The Subdivision Ordinance specifies information to be shown on a plat and minimum standards for design of the streets, lots, blocks and improvements in a new subdivision. The Ordinance assures the Town that all new subdivisions will be prepared in accordance with minimum standards and in accordance with the Comprehensive Plan.

It is recommended that the Subdivision Ordinance be adopted.

The Capital Improvements Program lists the physical improvements which should be planned for development over the next six years, 1963 through 1968. A revised program should be similarly developed each year hereafter.

Capital Improvements are those major facilities required for providing municipal services such as streets, parking, water, sewage, parks and playgrounds, and public buildings. It is anticipated that this report will serve as a guide to the City Council in the preparation of the City's regular annual budget and, after such revisions as the City Council sees fit, will be approved as the official Capital Improvements Program for the year.

Most projects, of necessity, must be financed through the sale of general obligation bonds. If a proposed project has the ability to pay for itself through revenues derived from it, then it could be financed at least in part through the sale of revenue bonds. As indicated on page 11A in the Appendix of this Report, the total indebtedness must stay within the limits prescribed by statute and sound municipal financing criteria.

The table entitled "Capital Improvements Program" on the following page represents the projects that we consider to be worthy of consideration during the 1963 through 1968 period. Other projects have been considered which could be added to this list in the years that are ahead. Some of these projects are:

1. Story Street widening from 4th Street to 6th Street.
2. Sixth Street widening from west of Story Street to Greene Street.
3. Benton Street widening south of 8th Street.
4. Pedestrian tunnel east of Benton Street.
5. Viaduct over railroad on 8th Street to serve the east industrial area.
6. Off-street parking site acquisition.

CAPITAL IMPROVEMENTS PROGRAM

1963 through 1968

Item No.	Project Name	Total Est. Cost	Non-City Financing Available	Total Net City Cost	1963	Recommended Six-Year Program				
						1964	1965	1966	1967	1968
1	Division Street Paving 11th St. to 15th St.	\$ 36,700	\$28,800 (assessment)	\$ 7,900	\$ 7,900					
2	Linn Street Paving 15th St. to 22nd St.	80,800	29,300 (assessment)	51,500		\$51,500				
3	Story Street Storm Sewer (Connection to New U.S. 30 paving to be done by I.H.C.)	18,000		18,000	18,000					
4	Kate Shelley Dr. and Industrial Area Sani- tary Sewer	183,000	90,500 (assessment)	92,500				\$46,000	\$46,500	
5	West End Sanitary Sewer	108,500	45,000 (assessment)	63,500						\$63,500
6	McPherson St. Storm Sewer (W 3rd St. to 9th St.) (East to 12th & Division)	49,000	25,000 (assessment)	24,000		\$24,000				
7	11th St. R/W Acquisition Division to Marion	7,500		7,500	7,500					
8	8th St. Pavement widen- ing - Benton to Tama	9,500		9,500		9,500				

PROJECT DESCRIPTIONS

ITEM 1. Division Street Paving - 11th Street to 15th Street.

Division Street is one of the important north-south primary thoroughfares shown on the Comprehensive Plan. The total estimated cost of \$36,700.00 is based on a pavement width of 37 feet, back to back of curbs. Of this amount, \$28,800.00 could be assessed to benefited properties.

ITEM 2. Linn Street Paving - 15th Street to 22nd Street.

Linn Street north of the Chicago & Northwestern Railway is a north-south secondary thoroughfare. It also ties in with the County Road Network north of Boone. It is recommended that this street be improved with a 37 foot pavement section in the 1965 program. The total estimated cost is \$80,800.00, of which \$29,300.00 can be assessed to benefited properties.

ITEM 3. Story Street Storm Sewer

The storm sewer work on South Story Street is required to be done prior to the paving of this street to the new U. S. 30 highway. The Iowa Highway Commission will construct the pavement, but the storm sewer work will be the responsibility of the City of Boone. This work has been shown for the 1963 program so as to be properly tied in with the Highway Commission paving project.

ITEM 4. Kate Shelley Drive and Industrial Area Sanitary Sewer.

This project involves the construction of a sanitary sewer east and north to the industrial area along the east edge of Boone. This important project would provide sanitary sewer service for much of the undeveloped residential areas in the southeast portion of Boone as well as providing a sanitary sewer outlet for the east industrial area. For future expansion of industry, it is imperative that sanitary sewer facilities be made available. Total project cost is estimated at \$183,000.00 of which approximately one-half (1/2) could be paid for by assessments to benefited properties. We have indicated that the job could be constructed in stages in 1966 and 1967.

ITEM 5. West End Sanitary Sewer.

There is presently an area in the west portion of Boone that does not have sanitary sewer service. In general, this project would provide service in the upper Polecat Creek area and would involve a lift station to pump over the ridge to the existing treatment plant. This project is estimated at \$108,500.00, of which \$45,000.00 could be assessed to benefited properties. We have recommended this project for consideration in 1968.

ITEM 6. McPherson Street Storm Sewer - West 3rd Street to 9th Street East to 12th Street and Division.

The McPherson Street storm sewer project involves the construction of a storm sewer from West 3rd Street to 9th Street and thence in a northeasterly direction to 12th and Division Streets. During periods of heavy rainfall this area

has an acute problem in handling the runoff. The proposed project would adequately handle storm water drainage in the future. The estimated project cost is \$49,000.00 of which approximately one-half (1/2) could be assessed as benefits to the area.

ITEM 7. 11th Street Right-of-Way Acquisition - Division Street to Marion Street.

Eleventh Street has been designated as a secondary thoroughfare on the Comprehensive Plan. It would be highly desirable to acquire the necessary right-of-way to insure a connection between Division Street and Marion Street on 11th Street. This right-of-way should be tagged for acquisition as soon as possible.

ITEM 8. 8th Street Pavement Widening - Benton to Tama.

Although this project involves widening for only one block, it is important to the Central Business District. Going east from the Central Business District on 8th Street, the pavement narrows from 65 feet to 31 feet in this block. Much of the traffic divides at Benton Street. Therefore, it would certainly be desirable to extend the 8th Street width in the Central Business District to Benton Street. This project has been recommended in the 1964 program. Estimated cost of the project is \$9,500.00

TABLE 97

RECENTLY PUBLISHED HOUSING DATA¹

BOONE, IOWA, 1960

Population in Housing Units, 1960	12,331
Per Occupied Unit	2.9
Owner	3.0
Renter	2.6
Population in Dwelling Units, 1950	11,792
Per occupied unit	3.0
All Housing Units	4,559
Tenure, Color & Vacancy Status	
Occupied	4,320
Owner Occupied	3,099
Percent of all occupied	71.7
Renter Occupied	1,221
Vacant	239
Year Round	197
Sound or deteriorating	172
Available	126
For sale only	26
Homeowner vacancy rate	0.8
For rent	100
Rental vacancy rate	7.6
Rented or sold, awaiting occupancy	21
Held for occasional use	5
Held for other reasons	20
Dilapidated	25
Seasonal	42
Condition and Plumbing	
All Units	4,559
Sound	3,291
With all plumbing facilities	3,098
Lacking hot water	28
Lacking other plumbing	165
Deteriorating	935
With all plumbing facilities	679
Lacking hot water	36
Lacking other plumbing facilities	220
Dilapidated	333
Renter Occupied	1,221
Sound	771
With all plumbing facilities	686
Lacking some plumbing facilities	85

(Table cont'd on next page)

Deteriorating	309
With all plumbing facilities	231
Lacking some plumbing	78
Dilapidated	141
Vacant Available For Sale	26
With all plumbing facilities	20
Lacking some plumbing facilities	6
Vacant Available For Rent	100
With all plumbing facilities	47
Lacking some plumbing facilities	53
Water Supply	
Hot & cold piped water inside structure	4,220
Only cold piped water inside structure	295
Piped outside structure	4
No piped water	40
Toilet Facilities	
Flush toilet - exclusive use	4,194
Flush toilet - shared	242
Other toilet facilities or none	123
Bathing Facilities	
Bathtub or shower - exclusive use	4,030
Bathtub or shower - shared	258
No bathtub or shower	271
Bathrooms	
One	3,197
More than one	794
Shared or none	568
Rooms	
All Units	4,559
Median	5.2
Owner Occupied	3,099
Median	5.6
Renter Occupied	1,221
Median	3.9

(Table cont'd on next page)

Vacant Available For Sale	2.6
Median	--
Vacant Available For Rent	100
Median	1.8
Year Structure Built	
1955 to March, 1960	296
1950 to 1954	236
1940 to 1949	187
1939 or earlier	3,840
Persons Per Room	
Owner occupied - all units	3,099
0.50 or less	1,850
0.51 to 1.00	1,137
1.01 or more	112
Renter Occupied	1,221
0.50 or less	541
0.51 to 1.00	599
1.01 or more	81
Year Moved Into Unit	
Owner Occupied	3,099
1959 to March, 1960	267
1958	244
1954 to 1957	660
1940 to 1953	1,196
1939 or earlier	732
Renter Occupied	1,221
1959 to March, 1960	462
1958	177
1954 to 1957	300
1940 to 1953	240
1939 or earlier	42
Value	
Owner Occupied (all units)	2,903
Less than \$5,000	503
\$5,000 to \$7,400	626
\$7,500 - \$9,900	639

(Table cont'd on next page)

\$10,000 to \$12,400	504
\$12,500 to \$14,900	260
\$15,000 to \$19,900	264
\$20,000 to \$24,900	52
\$25,000 or more	55
Median	8,800

Gross Rent

Renter Occupied	1,221
Less than \$20.00	--
\$20 to \$39	162
\$40 to \$59	348
\$60 to \$79	319
\$80 to \$99	177
\$100 to \$119	85
\$120 or more	28
No cash rent	102
Median	63

Contract Rent

Renter Occupied	1,119
Median	51

Vacant Available For Rent	89
Median Rent Asked	--

The following excerpts from the definitions of the words "sound", "deteriorating," and "dilapidated" are taken from the United States Census Report on housing as an aid in understanding the information given in the preceding table:

"Sound housing is defined as that which has no defects, or only slight defects which normally are corrected during the course of regular maintenance"

"Deteriorating housing needs more repair than would be provided in the course of regular maintenance. "

"Dilapidated housing does not provide safe and adequate shelter and in its present condition endangers the health, safety, or well being of the occupants. The defects are either so critical or so widespread that the structure should be extensively repaired, rebuilt, or torn down. "

1. Refer back to Pages 172 through 176 in text.

GENERAL REFERENCES

Boone Public Library	Boone County Offices
Boone City Offices	Assessor
Boone Chamber of Commerce	Recorder
Office of Superintendent of Schools	Auditor
United States Census Bureau Reports	Iowa State Highway Commission
Iowa State Department of Health	United States Geological Survey Maps
Iowa State Auditors Office	Sales Management Survey of Buying Power
Des Moines Public Library	Iowa State University, Ames, Iowa
Boone County Extension Service	State University of Iowa, Iowa City, Iowa

Other selected references as stated in the Text

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Boone County Office
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Boone Chamber of Commerce
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Assessor
Recorder
Auditor
Iowa State Highway Commission
United States Geological Survey Maps
Sales Management Survey of Boying Power
Iowa State University, Ames, Iowa
State University of Iowa, Iowa City, Iowa

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