

## Chapter Two

### Railroad Construction and Influence in Iowa

#### Introduction

The linking of the Eastern cities to Chicago made inevitable the westward move of railroads to the Mississippi River, thence through Iowa to the Pacific Coast. Efforts to improve transportation on rivers and roads did not aid in rapid development of Iowa, which in the early decades was still in the pioneer stages of growth. So while the interior settlers plowed the tough prairie sod, eastern settlements began to plan for the railroad era, influenced by developments in the states east of her borders. Iowa's railroad history, therefore, was tied directly to the construction of railroads from Chicago, since the great trunk lines built across the state were extensions of the roads to the Mississippi River.

The railroad era in Iowa is replete with railroads chartered but not built; those built but often leaving a trail of bankruptcies, insolvencies, and reorganizations; of roads named and renamed. From this atmosphere of change and confusion, the major railroads emerged, forming the systems so well known. They influenced the development of settlements, expanded the agricultural and industrial base, and were supported and controlled by political attitudes which prevailed during the period. The story of railroad construction and its impact on Iowa is one of the most interesting chapters in the history of the state.

#### Building to the Mississippi River

In the middle of the 19th Century, the Mississippi Valley was engaged in a struggle which pitted forces advocating north-south transportation against those advocating the east-west movement. Parish suggests that "it was a contest between the old lines of migration and the new; the South and the East; between the slow and cheap transportation by water and the rapid but more expensive transportation by rail and it arrayed St. Louis and Chicago against each other in intensive rivalry."<sup>1</sup> Joseph Sheffield and Henry Farnam built the Michigan Central (MC) into Chicago in 1852 and wanted a line to the Mississippi. The Chicago & Rock Island (CRI), previously known as the Rock Island & La Salle, was incorporated in 1851, with John B. Jervis as president, later replaced by Farnam. Among those involved were Peter

Anthony Dey and his assistant, Grenville M. Dodge, engineers and surveyors, who were to become famous in Iowa railroad construction and regulation. By October 1852, the road had been built as far west as La Salle and reached Rock Island in February 1854, the first to build to the river (Fig. 2-1). So great was the traffic that the rolling stock stipulated in the contract was inadequate to meet the demand.

Three men, James Frederick Joy, John Murray Forbes and John W. Brooks, brought the Burlington (CB&Q) to Iowa. Forbes, the financier, was convinced that not only were there economic, political and military advantages to be gained by a transcontinental railroad, but also the rich prairies of Illinois and Iowa would yield investors substantial rewards. The CRI was already under construction and the Illinois Central (IC) and Galena & Chicago Union (G&CU) were building through northwestern Illinois. So Joy turned to the southwest to find an outlet by combining four lines which "sprawled aimlessly" in a westward direction. Three, the Aurora Branch, the Northern Cross (Quincy & Chicago) and Peoria and Oquawka (P&Q), had been incorporated in 1849 by local interests. The fourth, the Central Military Tract (CMT), was chartered by Galesburg citizens in 1851.

The nucleus of the CB&Q was the Aurora Branch, built to Mendota in 1852 and extended by the CMT to Galesburg in 1854. Through the P&Q, it reached East Burlington in 1855. The Chicago & Aurora was incorporated as the CB&Q in 1855, absorbed the CMT in 1856, and purchased the Northern Cross in 1864. That portion of the P&Q built between Peoria and East Burlington was acquired in the consolidation of 1864 (Fig. 2-2).

<sup>1</sup> John C. Parish, "The First Mississippi Bridge," *Palimpsest* 3 (May 1922); p. 153.

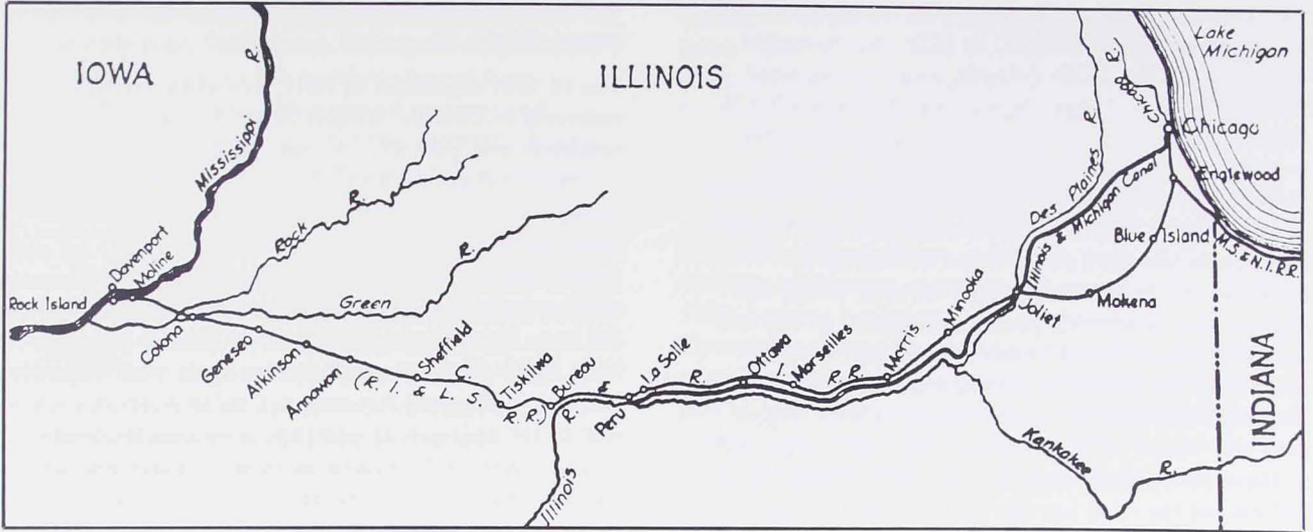


Figure 2-1  
The Route of the Chicago and Rock Island Railroad  
(Courtesy: State Historical Society of Iowa)

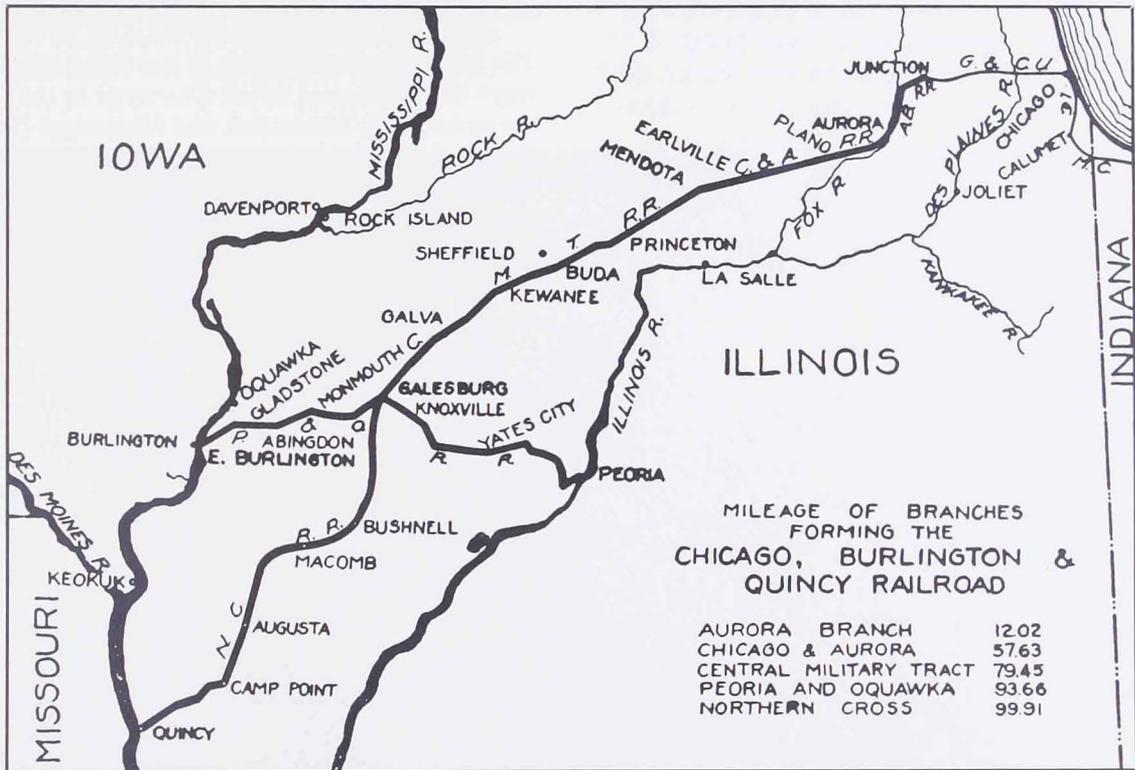


Figure 2-2  
(Courtesy: State Historical Society of Iowa)

The Chicago & North Western (CNW) began with the incorporation of the G&CU in 1836. An economic depression in the 1830s delayed construction until 1848. William B. Ogden was president and built 121 miles from Chicago to Freeport in 1853, where the westward extension ended. From there to Galena, there were two possible routes for the G&CU and IC to build to the River: one northwest through Warren and Scales Mound and the other southwest to Savanna. But it was feared that the area would not support two competing parallel railroads, so the two roads agreed to jointly construct one line. The IC completed the Freeport-Galena route in 1854. Although opposed by Galena residents who hoped their city would be the terminus, the track continued to Dunleith opposite Dubuque in 1855. The IC built and owned the road but the G&CU operated its equipment over the line during the construction period.

As a result of failure to gain the northwestern route, a line was planned through consolidations and mergers from Junction, 30 miles west of Chicago, to continue through DeKalb, Dixon, Sterling, and Morrison to Fulton on the river, arriving there in December 1855. Connections were made with the IC from Dixon to Freeport and with the CRI from Dixon to Rockford. By use of the tracks of the IC to Dunleith, the G&CU had two contacts with the river, an accomplishment not duplicated by any other railroad. The pioneer name of the G&CU was eventually discontinued and the CNW emerged as the result of purchases and mergers with other roads, the name considered

sufficiently comprehensive to indicate the territory served (Fig. 2-3).

The IC was organized in 1851, five weeks after receiving its charter. Robert Schuyler was elected president and guided it through its formative years. Federal land grants were obtained after seven years of congressional debates. Under the terms of the land grant, the first to be given any railroad, approximately two and one-half million of the 11 million acres in the public domain were transferred to the state for railroad construction. The grants called for a right-of-way through public lands with alternate sections (640 acres) in a strip six miles wide on each side of the railroad. It was stipulated that the lands would revert to the federal government if construction had not begun within two years and finished within 10 years from passage of the legislation, signed into law by President Fillmore in 1850. The Illinois land grant marked the beginning of a national policy which disposed of public lands for railroad development and was of particular significance in construction of Iowa's railroads. When finally built, the railroad covered 705 miles and was considered the best built road in the West at that time (Fig. 2-4).

The Milwaukee was the last of the major railroads to reach the Mississippi River. Chartered in 1847 under the name of the Milwaukee and Mississippi (Mil&M) Railroad, it reached Madison in 1854. From there, it took three years to get to Prairie du Chien, opposite McGregor. The road was in constant financial difficulty, for no state or federal aid was forthcoming, and it was necessary to call upon cities, towns,

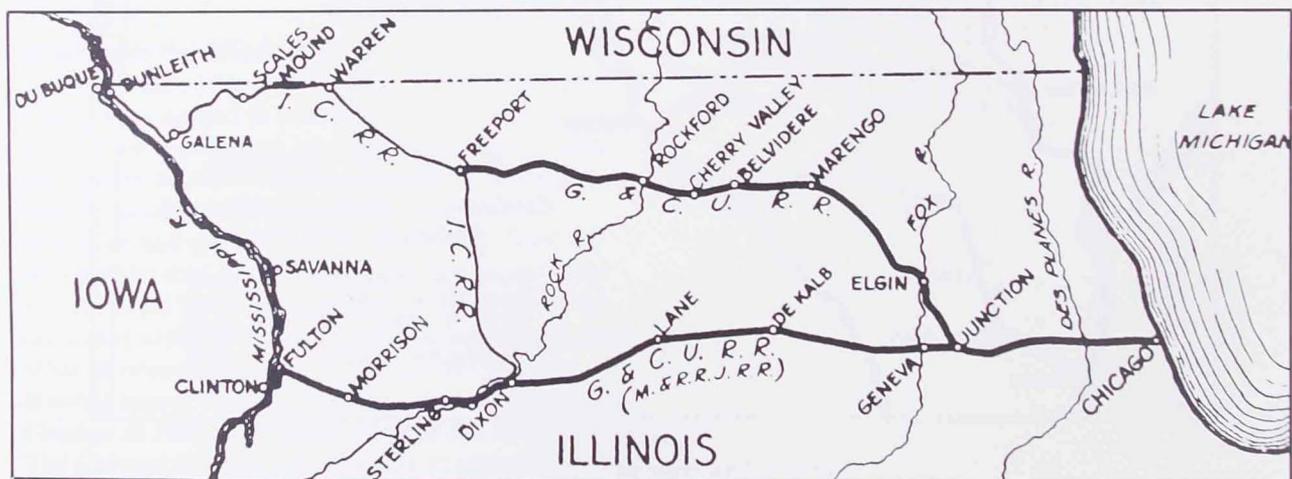


Figure 2-3

The Galena & Chicago Union Railroad, forerunner of the Chicago & North Western  
(Courtesy: State Historical Society of Iowa)

farmers and merchants to finance the project. This was the only road built across Wisconsin and became an important route for the northern tier of Iowa counties. It tapped valuable areas of mineral and agricultural wealth in Wisconsin and attracted a large share of the business of Dubuque and northeastern Iowa (Fig. 2-5).

Thus, by 1857, of the 10 railroads linking the Atlantic seaboard with the Mississippi River prior to the Civil War, five reached the river opposite Iowa: the CRI in 1854, CB&Q in March, IC in June, G&CU in December 1855, and the Milwaukee in April 1857. There, construction slowed in their extensions to the West by the necessity of building permanent structures across the river.

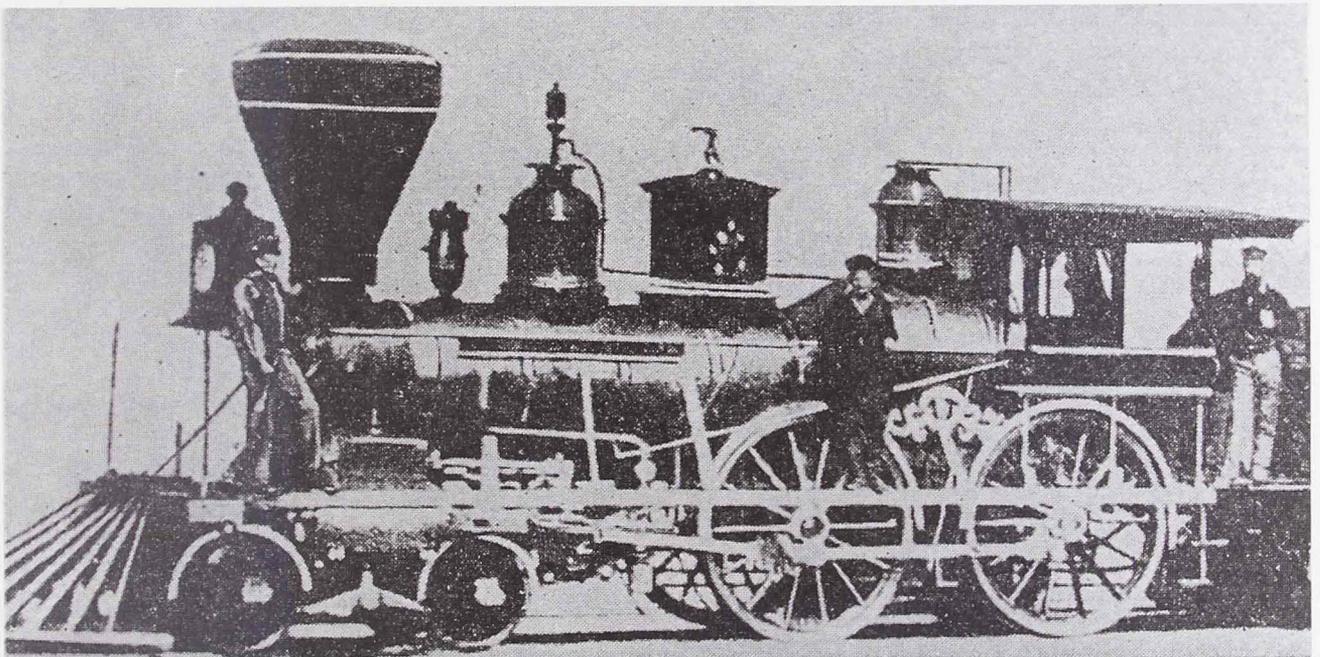
### Crossing the Mississippi River—Ferries

Ferries and canoes provided the only means of crossing the river before railroads, meeting the needs of early explorers, travelers, and the occasional homesteader. But when migration reached the wagon-train era, regular ferries developed. The first ferries were licensed by Illinois, the first recipient being James White of Hancock County in 1833, to operate to Fort Madison. In that same year, 19 licenses were

issued, 10 of which were for ferries crossing into Iowa. Half of these were granted to operators in the Dubuque mining area, and by the close of 1833, 15 ferries operated into Iowa, of which at least eight served Dubuque and Davenport.

Public ferries progressed from the flatboats and skiffs, with power provided by men manning sweeps, oars and poles. Clark's Ferry at Buffalo marked the opening of flatboat crossings in Iowa in 1833, and in 1836 Antoine LeClaire began operations at Davenport. Horse ferries followed in 1841, but the most important step was the introduction of steam power, shortening the crossing from several hours to regular trips of five to 15 minutes. The first steam ferry was operated by John Wilson in 1852 at Davenport.

On the Iowa side, jurisdiction over ferrying was first exercised directly through charters by the General Assembly. Boards of county commissioners were empowered to grant licenses for river points not provided by charter. Ferries, however, were not to be established within two miles of each other, and rates were fixed by county courts. Most were privately owned and operated. The demand was so brisk at the onset of territorial history that ferries were running



The Antoine LeClaire, a pioneer Rock Island locomotive, is said to be the first railroad engine ferried across the Mississippi into Iowa. Since the Rock Island was the first railroad to reach the Mississippi (1854), it was natural that the first bridge across the Father of Waters should bracket Davenport and Rock Island in 1856.

(Courtesy: Iowa State Printer)

from and to all major cities and towns along the river.<sup>2</sup> When the bridges were built, the once prosperous ferry business practically disappeared.

**Bridging the Mississippi River**

The topic of steam transportation was frequently

discussed in eastern villages and towns as the railroads slowly crept across Illinois and Wisconsin. The interests of the people were crystallized through the laws of Iowa in 1850, "granting rights-of-way to a number of companies for construction." Many of the proposals proved to be dreams, as was John Plumbe's

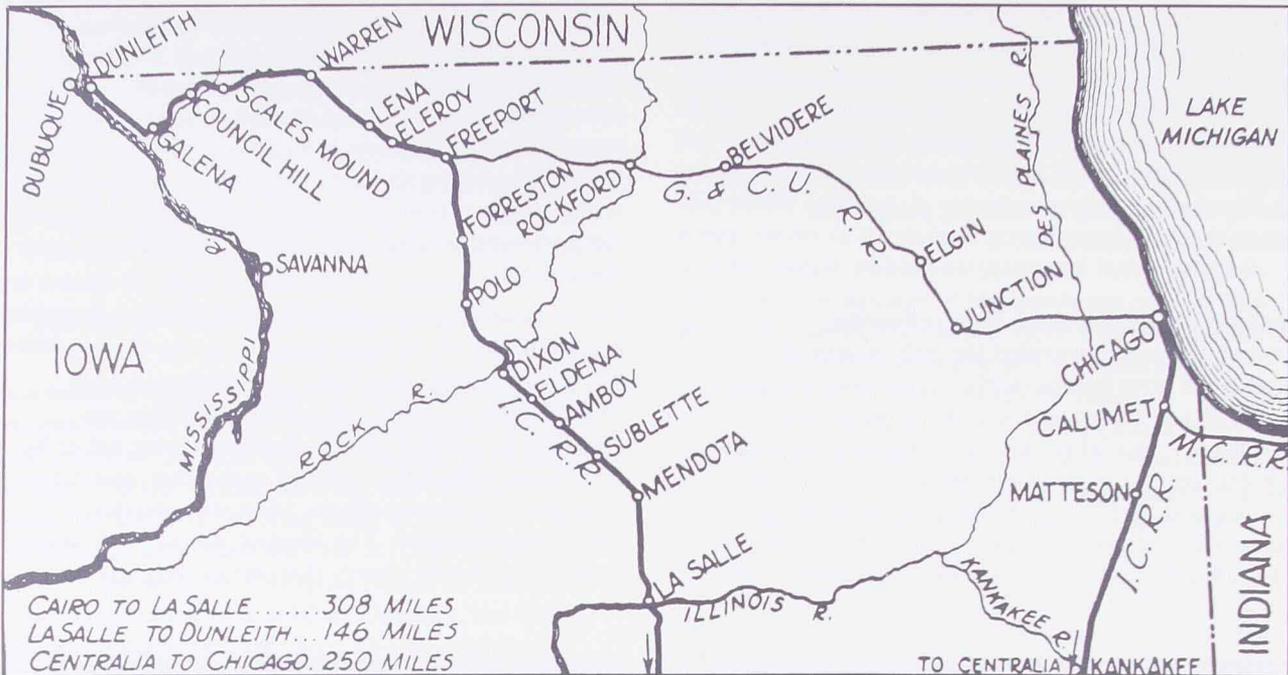


Figure 2-4  
The Route of the Illinois Central  
(Courtesy: State Historical Society of Iowa)



Figure 2-5  
The Route of the Milwaukee & Mississippi  
(Courtesy: State Historical Society of Iowa)

<sup>2</sup> William S. Johnson, "Crossing the Mississippi," *Palimpsest* 1 (December 1920): pp. 173, 175-176.

transcontinental railroad, first proposed in 1833.<sup>3</sup> Sharp suggests that “they merited the description of the Philadelphia, Fort Wayne and Platte Valley Air Line Road; it was an airline—hot air. It so exhausted the corporation to write the whole name, no energy nor breath was left to build the road.”<sup>4</sup> However, the determination to have railroads resulted in the incorporation of the Mississippi and Missouri Railroad (M&M) in 1853, one year before the CRI reached the river. The M&M was eventually an extension of the CRI and numbered among its organizers, Jervis, Sheffield and Farnam, of the MC and CRI roads.

To unite the two lines it was necessary to bridge the river, and the Railroad Bridge Company was incorporated in Illinois in 1853. It was authorized to build, maintain and use a railroad bridge over the Mississippi River across that portion of the river lying in the state at or near Rock Island. Farnam was president and chief engineer of construction. Bonds to finance the project were guaranteed by both railroads. The Iowa section was to be built under authority of the laws of Iowa. Antoine LeClaire deeded the land on the west side of the river, and the right-of-way was cleared on the Iowa side to the middle of the channel. Construction involved three segments: a span across the narrow part of the river from the east bank to the island; tracks across the island; and a long bridge with a draw span from the island to the Iowa shore. The middle of the channel running west of the island was the boundary between the two states.

Complications arose immediately. The federal government owned the island and steamboat interests brought pressures to prevent construction on federal land, arguing also that bridges hampered navigation which violated bridge authority. The case of the *United States v. Railroad Bridge Company et al* came before Judge John McClean in the U.S. Circuit Court in July 1855. An injunction against the bridge company sought by the Secretary of War was denied and the rights of the company upheld.<sup>5</sup> The bridge was completed in April 1856. A second complication arose in May of that year when the steamboat *Effie Afton* was wrecked against the piers. The boat caught fire and was destroyed, also destroying part of the bridge and putting it out of commission for four months. The owners sued the Bridge Company, hoping to recover damages by proving that the bridge was a menace to navigation. The case of *Heard et al v. Railroad Bridge Company* again came before Judge McClean in September 1857. Abraham Lincoln was a member of the defense team, and after a bitter

trial, the Bridge Company gained a temporary victory through a hung jury.

The verdict was recognized by both sides as an uneasy truce. The struggle reached Congress, where a House committee concluded that the courts should make the final decision. Judge John M. Love of the U. S. Circuit Court of Southern Iowa ruled on a petition of James Ward, a St. Louis steamboat operator, that the bridge was “a common and public nuisance” and, further, that the piers and structure on the Iowa side should be removed. The Company appealed to the U.S. Supreme Court, which in 1862 reversed the lower court and allowed the bridge to remain.<sup>6</sup> The CRI not only built the first bridge across the river and won the right to keep it but also opened the way for other railroads to cross the river with legal approval. From this time and for many years afterward, steamboats played a subordinate role to the railroads.

## Railroads in Iowa

### The Initial Phase

The development of Chicago as a center of inland commerce practically guaranteed that Iowa would be on the rail routes to the Pacific, so attention centered on potential routes across the state. The two that seemed to offer the most promise were the M&M and Lyons and Central railroads. The first General Assembly had provided for incorporation of “railroads and other works of internal improvement” in 1846. An extra session in the following year

<sup>3</sup> Jack T. Johnson, “Plumbe’s Railroad to the Moon,” *Palimpsest* 58 (March 1938): pp. 89-97; John King, “John Plumbe, Originator of the Pacific Railroad,” *Annals of Iowa* 6 (January 1904): pp. 289-296.

<sup>4</sup> Mildred J. Sharp, “The M&M Railroad,” *Palimpsest* 3 (January 1922): pp. 1-2.

<sup>5</sup> *United States v. Railroad Bridge Company*, Fed. Case No. 16114 (6 McClean) 517 (1855).

<sup>6</sup> *The Mississippi and Missouri Railroad Co. v. Ward*, 67 U.S. (2 Black) 485 (1862). For a complete discussion of the case, see John W. Starr Jr., *Lincoln and the Railroads*, New York: Dodd, Meads & Co., 1927, pp. 90-117. The Court supported the arguments of Lincoln who stated: “But there is travel from east to west whose demands are not less important than the river... This current of travel has its rights as well as that of north and south... the statement of its business is in evidence from September 8, 1856 to August 8, 1857; 12,586 freight cars and 74,179 passengers passed over the bridge... This shows that the bridge must be treated with respect in this Court and is not to be kicked around with contempt.” Of interest was the position of the two leaders of the warring states in the Civil War, involved in this controversy. Jefferson Davis was Secretary of War at the time of the initial protest of the steamboat owners, and Abraham Lincoln was one of the lawyers defending the railroad.

requested of Congress “a grant of land to aid in the construction of a Rail Road from Davenport by way of Iowa City, Monroe City, Raccoon Forks to some point near Council Bluffs on the Missouri River in this state.”<sup>7</sup> However, this request as well as others went unheeded for eight years.

The M&M planned to build in three directions across Iowa. The main line would run west from Davenport through Iowa City to Fort Des Moines and continue to Council Bluffs, a distance of 311 miles at an estimated cost of \$9 million. A second line would run from Wilton Junction through Muscatine, thence southwest through Oskaloosa to the Missouri state line or Missouri River or both. A third was to be built from Muscatine to Cedar Rapids and north to the Minnesota border. Peter Dey and Grenville Dodge had surveyed the projected main line in 1853 and 1854. Antoine LeClaire turned the first shovelful of dirt at Davenport in September 1853, but actual work did not begin until July 1855. The road entered Iowa City on December 31, 1856, encouraged by a bonus of \$50,000 and stock subscriptions if they reached the city by that date.

Meanwhile, other railroads were being organized and planned. The Iowa Central Air Line (ICAL), also known as the Lyons and Iowa Central, organized in 1853, was to run from Lyons, near Clinton, to Tipton, Iowa City and on to Council Bluffs. However, the road was never built beyond the grading stage because of misappropriation of funds by H.P. Adams, principal backer and a director, and later found to be a fugitive from justice. The financial collapse in 1854 left families of construction workers stranded in Lyons, paid off in groceries, dry goods and miscellaneous articles instead of money. Thereafter, the road was known as the “Calico Road.” Backed by eastern capitalists, among whom was Oakes Ames, the Chicago, Iowa and Nebraska (CI&N) was organized and began construction at Clinton in 1856. It reached Cedar Rapids in 1859, the farthest west of any railroads built to that time.

To the north, the germ planted by John Plumbe in 1833 culminated in the 1850s, the decade of Dubuque’s “railroad fever.” George W. Jones and Augustus C. Dodge, Iowa’s first senators, were instrumental in getting the IC extension from Galena to Dunleith (East Dubuque) in 1851. Once that line was assured, Jones, Platt Smith, General C.H. Booth, Jessie Farley, Edward Slossan and Judge John J. Dyer formed the Dubuque and Pacific (D&P) in 1853. At the time of organization, not one mile of

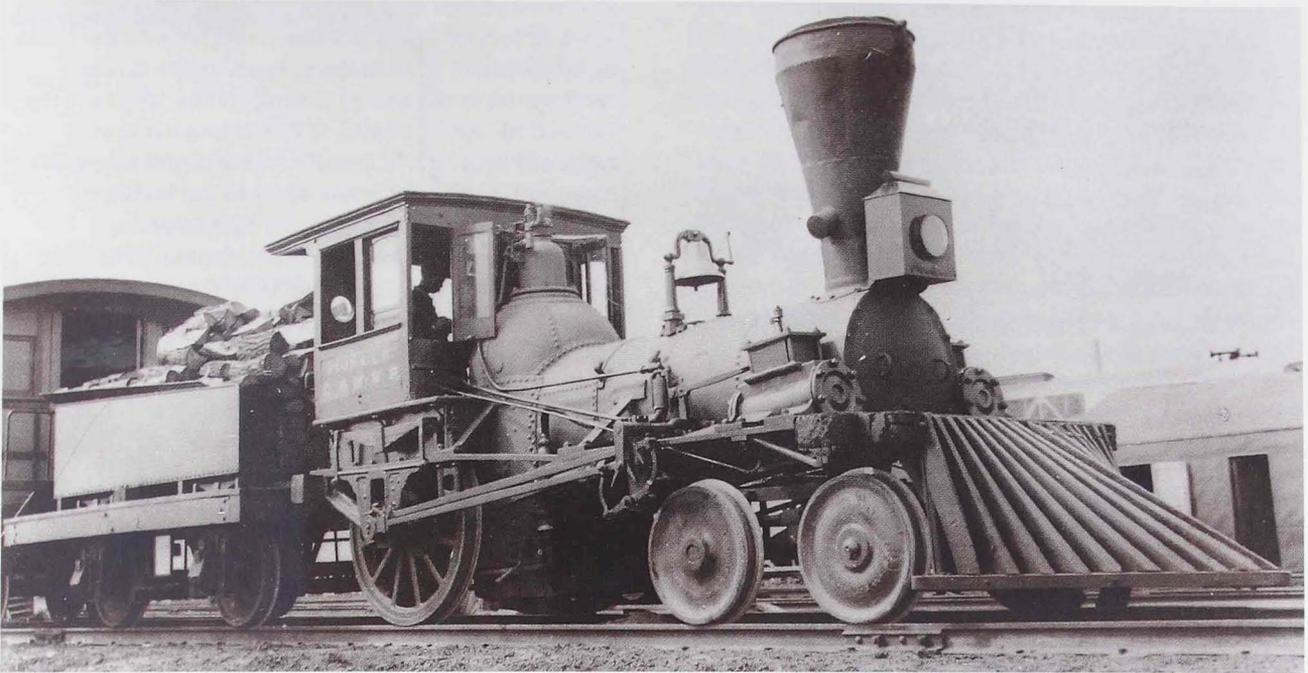
railroad had been built in Iowa, and in the 29 counties eventually traversed by the IC, there were fewer than 5,000 families, concentrated primarily in Dubuque and Linn Counties.

Financial problems delayed construction until October 1855, and it was not until May 1857, that trains ran to Dyersville, making the trip of 79 miles in three hours. The road was extended to Earlville, eight miles west, where construction halted because of poor credit, unfavorable economic conditions and the lack of a western terminus. Building was resumed in the summer of 1859 under John Edgar Thompson, builder of the Pennsylvania Railroad, and reached Independence in December. By March 1860, the line moved to the western border of Buchanan County where a station was named Jesup, after Morris K. Jesup, a financial backer and later president of the road. He held many of the bonds which were in default, forced the railroad into receivership, and reorganized it as the Dubuque and Sioux City (D&SC) in 1860.

Forty-six men—lawyers, businessmen and public officials—organized the Burlington and Missouri River Railroad (B&MR) in January 1851, some three years before the CB&Q arrived at the Mississippi. William Coolbaugh, a merchant, was elected president, and James W. Grimes, banker and soon to be Governor of Iowa, worked for a land grant. Capital was raised through bond issues voted by the people of Des Moines, Jefferson and Wapello counties, where 85 percent of the population was concentrated. But the bond issues did not provide the necessary funds, so the founders turned to the “Boston Group” led by John M. Forbes, who had been involved in the financing of the MC and CB&Q in Illinois.

In August 1856, the track came into Mt. Pleasant via Danville and New London, two years after it began. Another year passed before the five miles were built to Rome on the Skunk River, where construction stalled. In 1857, Edward Baker of Massachusetts was elected president, indicating the growing eastern control. Forbes also placed Charles Russell Lowell, a 23-year-old nephew of James Russell Lowell, as assistant treasurer to protect his interests.

<sup>7</sup> 1847 Laws of Iowa, Chapter 81; 1848 Laws of Iowa, Extra Session, Joint Resolution 5.



Early Wood Burning Locomotive  
(Courtesy: State Historical Society of Iowa)

Capital was relatively scarce during these early years. Iowa granted rights for incorporation and of eminent domain, but the Constitution prohibited giving or lending state credits to individuals, associations or corporations, and that prohibition was continued in 1857. Borrowing through bond issues for construction was allowed but the interest rate was not to exceed 10 percent. European and eastern financiers provided funds which, together with local aid, formed the financial base. Municipalities, counties and individuals made loans, purchased and guaranteed railroad bonds, and made outright contributions of cash, land, materials and labor. Some local governments also exempted railroads from taxes. Locklin states that "it is impossible to determine what proportion of such aid consisted of donations by county and municipal governments and what proportions consisted of donations by private individuals, corporations or associations."<sup>8</sup> But the result was creation of public and private debt, since the necessary finances were essentially borrowed and the load of indebtedness sometimes exceeded the assessed value of all taxable property in the political subdivision. Financial distress was a principal reason for pressures on Congress for land grants to complete the railroad systems.

### The Land Grants

The land grant to the IC was typical of those made later, with some variations. Whereas the Illinois railroad received a right-of-way 200 feet wide and six sections of land for each mile of road, others received 10 to 40 sections per mile and a right-of-way of 400 feet. In 1856, congressmen Augustus Hall of Iowa and Henry Bennett of New York introduced bills requesting grants for the railroads, approved on May 15, and Iowa received grants for construction of four railroads: the M&M, ICAL, D&P and B&MR. On July 14, 1856, the General Assembly accepted the grants with the following terms, conditions and restrictions as contained in the act:

<sup>8</sup> Phillip Locklin, *Economics of Transportation*, 7th ed., Homewood, Ill.:Richard D. Irwin Inc., p. 127. See also Hobert C. Carr, *Early History of Iowa Railroads*, New York: Arno Press, 1981, pp. 65-82.

1. The railroads were required to build and equip 75 miles within three years and 30 miles in addition for each year thereafter for a period of five years. If the railroad failed in any particular, the state could resume the lands unearned and regrant them to another company.
2. The gauge was fixed at four feet, eight and one-half inches.<sup>9</sup>
3. The rights of any claimant or occupant of any of the lands granted were protected and the company was required under certain conditions to deed the land to claimants.
4. Companies were required to file written acceptance of the act and were subject to such rules and regulations as may from time to time be enacted by the General Assembly of Iowa, and to make annual reports to the Secretary of State.

The federal grants were made to states, which could grant, revoke, resume or transfer the lands. Railroads could use the lands not necessary for construction as a source of funds by either selling or mortgaging them. Over three and one-half million acres were disposed of, and when sold averaged approximately seven to eight dollars per acre. It was claimed that through the grants the entire cost of construction might be recovered, that proceeds would eventually pay for bonds issued and make stockholders owners of unencumbered properties. The Civil War temporarily suspended the activity, but it was vigorously pursued at its conclusion. The press, public and politicians in both state and federal legislatures promoted the grants as their patriotic duty. Grants were expected to provide increased economic opportunities for settlers who migrated to the new regions to obtain farms, for others who aimed at becoming founders of new towns, and also for profits to investors. Sales of land by the "Iowa Roads" were over \$6.6 million of federal granted lands and \$26.2 million of state granted lands by 1880. Generally, the sales did not cover the total or, in some instances, the interest on the cost of construction. But acceptance of the grants by railroads carried certain obligations. For example, the federal government required land grant railroads to carry mail, troops and government property at reduced rates. Mail was moved at 80 percent and troops and property at approximately 50 percent of published tariffs.

It was estimated that the the value of the 131 million acres of federal lands granted from 1851 to 1871 was approximately \$130 million, based upon prices received from the sale of federal public lands during the period. Additionally, it was estimated that railroads received 48.8 million acres from the states. The total of all land grant deductions, including voluntary equalization of rates by competing railroads from 1851 to 1943, was estimated at \$580 million. Iowa received 3.7 million acres, roughly 13.1 percent of the state's area, although some history texts indicated that about 90 percent of the state's lands had been given away (Table 2-1).

### The War and Postwar Period

By 1860, there were 655 miles of railroads built in Iowa (Fig. 2-6). Westward movement was slowed by the Panic of 1857 and political issues between North and South. In 1862, the Pacific Railroad Act was signed by President Lincoln, chartering the Union Pacific (UP) and setting the conditions for building the transcontinental line between Omaha and Sacramento. The railroad which reached Omaha would reap rich rewards offered by the connection with the UP, and as soon as conditions permitted, the race across the state was accelerated. The strategic location of Iowa as a bridge state was solidified in railroad construction to either coast and was equally important in later years in the evolution of the national highway programs.

<sup>9</sup> The standard gauge was determined by British locomotives imported into the United States. The wheel span corresponded to the width of the early English road cart, measured from inside to inside rim. In 1860, there were seven widths of gauge in the nation, ranging from four feet, eight inches to six feet. However, because of agitation for cheaper and more economical roads, 14 narrow gauge railroads were built in Iowa, independent of the major systems and of relatively short distances. The first line to be abandoned was the 12-mile wooden track narrow gauge line built from Loscomb through Conrad to Beaman. Descriptions of narrow gauge railroads and those built in Iowa are found in Ben Hur Wilson, "The Matter of Gauge," and "Iowa and the Narrow Gauge," *Palimpsest* 13 (April 1932): pp. 133-165.

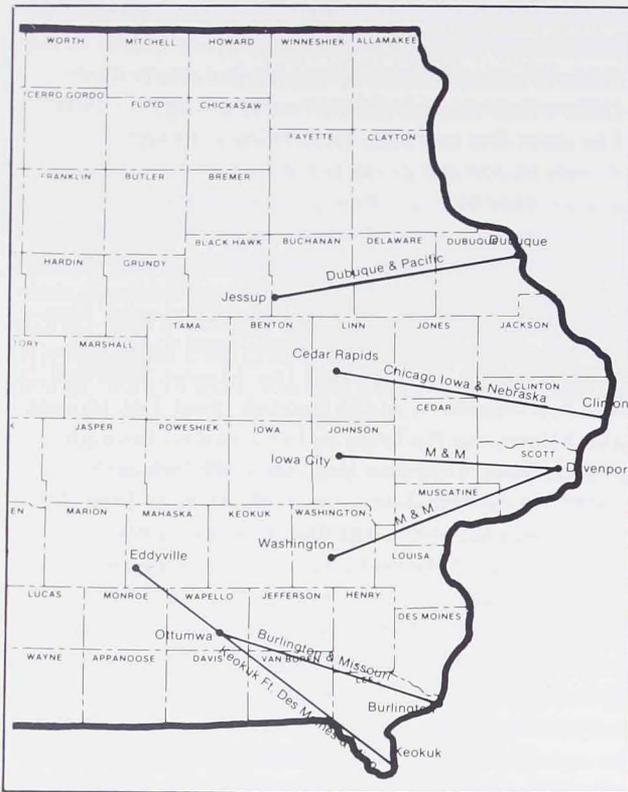


Figure 2-6  
Iowa Railroads 1860  
(Map by author)

**The Chicago and North Western**

A new road, the Cedar Rapids and Missouri River (CR&MR), was incorporated in 1859 and given the land grant of the defunct ICAL. Improved economic conditions and the infusion of eastern capital plus local backers such as John F. Ely and John Weare of Cedar Rapids and G. M. Woodberg of Marshalltown furnished the impetus for further construction. It was at this time that John I. Blair of New Jersey became interested in the possibilities of a prosperous railroad west of Cedar Rapids. Donovan describes him as one who “built railroads faster and more extensively in the state than anyone else—before or since,” and further “as a human dynamo let loose in railway-mad Iowa.”<sup>10</sup>

After Blair became involved in the management in 1861, the railroad began to move. By 1866, it reached Denison, built through Marshalltown (1863), Nevada (1864) and Boone (1865). From Denison the line ran down the valley of the Boyer River and into Council Bluffs in January 1867. Within the period required to complete the Cedar Rapids-Marshalltown segment, both the CI&N and CR&MR railroads were leased to the G&CU, later incorporated into the CNW system.

**Table 2-1**  
**Acres Granted and Values of Lands Realized by Iowa Railroads**

Railroad	Acres	Values
Milwaukee	372,656 <sup>1</sup>	\$ 1,601,730 <sup>1</sup>
Rock Island	550,193	4,984,341
Burlington	385,424	3,870,890
Des Moines & Fort Dodge	42,636	117,972
Iowa Falls & Sioux City	640,256	3,676,902
Sioux City & St. Paul	320,002	742,148
Cedar Rapids & Missouri River	956,597	6,017,259
Dubuque & Sioux City	444,161	No Report
Sioux City & Pacific	39,876	299,000
<b>Total</b>	<b>3,751,801</b>	<b>\$21,310,232</b>

Summarized from the Reports of the Iowa Railroad Commission, 1874, 1878, and Reports of Land Commissioners of Iowa Railway Land Company, et al, 1874. Values estimated on average prices received for the land. Figures were revised in 1901 to 4,802,878 acres and \$26,373,518 for values received.

<sup>1</sup> Fractions and cents omitted.

<sup>10</sup> Frank P. Donovan, “The North Western in Iowa,” *Palimpsest* 43 (December 1962): pp. 549-551.

### The Rock Island

While Blair was building across Iowa, his competitors were not idle. The M&M built to Marengo in 1862 and was in Kellogg by 1864. The road was heavily in debt with foreclosure a probability, and to protect its land grant, a new company, the Chicago, Rock Island & Pacific (CRI&P), was formed in Iowa and purchased the M&M in July 1866. It was authorized to build from Kellogg to Des Moines, arriving there in 1867. With clear title, including land grants, the Illinois and Iowa lines were consolidated. The charter called for construction between Des Moines and Council Bluffs, completed on May 11, 1869, the day after the UP-Central Pacific tracks were joined at Promontory Point, Utah. The CNW had a monopoly into Council Bluffs for two and one-half years before the CRI&P arrived and had been hauling much of the material used for building the UP.

The original plan of the M&M had been to build in three directions in the state. While the Council Bluffs line was being constructed, the southwest segment was extended beyond Muscatine to Washington in 1858. It continued southwesterly to Lineville through Fairfield, crossing the Missouri border, thence to Stallings Junction opposite Leavenworth, a military post, with operations commencing in 1871. In the enthusiasm to build west and southwest, the third division to Cedar Rapids was ignored. But other interests were planning a north-south route through the city. Between 1865 and 1867 two railroads, the Cedar Rapids and St. Paul (CR&STP) and the Cedar Rapids and Minnesota (CR&M), were organized and merged into the Burlington, Cedar Rapids and Minnesota (BCR&M) in 1868. Known as "Judge Greene's Railroad," it was unique in that it was organized by Iowans and headquartered in the state. Judge George Greene of Cedar Rapids was president; Charles Mason of Burlington, vice-president; and J. D. Cameron of Burlington, chief engineer. The road was built south to cross the main line of the CRI&P at West Liberty and the Muscatine line at Columbus Junction. To the north, it ran through Cedar Falls to Plymouth Junction, connecting with the Milwaukee to St. Paul, with segments to Independence, Oelwein and Postville. A feeder line was built from Vinton to Traer by 1873. With funds raised in the East, the railroad had built 368 miles by 1874.

The BCR&M suffered financial reverses after the Panic of 1873, and the Blair interests reorganized it as the Burlington, Cedar Rapids and Northern (BCR&N). Affiliated with the BCR&N was the Cedar

Falls, Iowa Falls and Northwestern, incorporated in 1880, which built the bulk of new construction in the 1880s. It was absorbed by the parent company in 1902, which was purchased by the CRI&P in 1903. The main line ran from Burlington through Cedar Rapids and Waterloo into Albert Lea, Minnesota, and another line ran through Emmetsburg and Sibley to Watertown, South Dakota. In 1903, the CRI&P had 1,310 miles of track in operation in three states.

The CRI&P was not the first railroad to enter Des Moines. That honor or glory belonged to the Des Moines Valley, Keokuk and Des Moines Railroad. It was first organized as the Keokuk, Fort Des Moines and Minnesota Railroad in 1853, routed through Bentonsport, Ottumwa and Eddyville, where construction halted because of the war. In 1864 the name was changed to the Des Moines Valley Railroad, reaching that city in 1866.<sup>11</sup> Considered a secondary road, it was important to the development of Des Moines, to which considerable traffic moved from Keokuk by land and water. Des Moines had a growing population and wanted the state capital moved from Iowa City. Polk and Lee counties made an agreement whereby financial support would be given the railroad in exchange for votes for adoption of the Constitution of 1857 which transferred the capital to Des Moines. Lee county voters swung the election. Keokuk saw the railroad started and Des Moines became the capital.

With finances apparently exhausted, construction north of Des Moines stopped, to the disappointment of Fort Dodge, whose residents promised land and tax assistance. When the line was finally built, instead of taking the direct route up the Des Moines River Valley, it ran circuitously through Perry, Grand Junction, Gowrie and Tura, reaching Fort Dodge in 1870. In 1873 the road was declared bankrupt. The northern section was sold to Colonel C. H. Perry and was known as the Fort Dodge and Des Moines Railway. The southern section was purchased by John E. Henry of New York and became the Keokuk and Des Moines Railroad, serving as a direct line to Keokuk with connections to St. Louis. It was integrated into the CRI&P system in 1878.

<sup>11</sup> This was the railroad that received the land grants of the Des Moines River Navigation Company.

### The Burlington

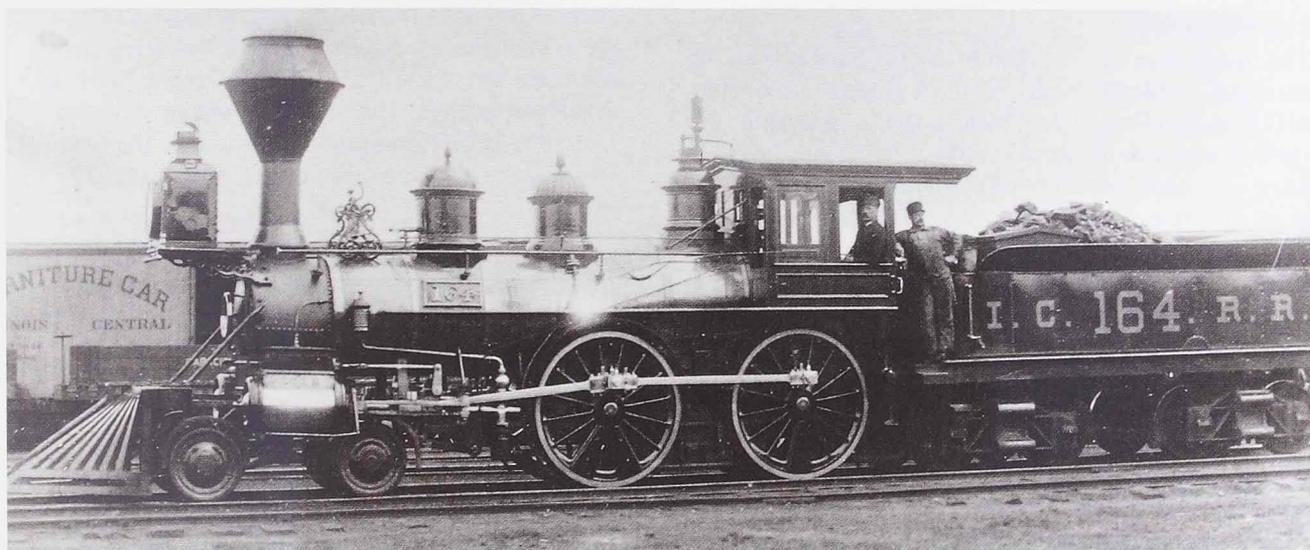
The CB&Q was in Ottumwa by 1859, in time to meet the requirements of the land grant. Charles Elliot Perkins, 18 years of age, was hired to assist Lowell, whose duties of managing the treasury and land department had become too heavy for one person. Twenty-two years later, he would be president and continue his close association with the “Boston Group” to whom he turned for capital from time to time. The two lines to the north—the CRI&P and CNW—had built their bridges across the Mississippi River, but the CB&Q still relied on ferries. Their bridge, built in 1868, enabled the road to redouble its efforts to reach the Missouri River.

The energy and enthusiasm of James Joy and Charles Perkins, spurred on by new capital, pushed the road to Chariton and Woodburn by the end of 1867. Trains ran into Osceola in January 1868 and by November the tracks had reached Red Oak. Crews started east from East Plattsburg and met the westbound track at Hastings in November 1869, without formal ceremony. To compete for the business of the Omaha gateway, regular service was started over the St. Joseph and Council Bluffs (StJ&CB) Railway from Pacific Junction in January

1870. The CB&Q was the third railroad to reach Council Bluffs and was the only federal land grant road that never filed for bankruptcy during construction. It was also one of the very few railroads that had never been in receivership.

### The Illinois Central

Sioux City was the objective of the D&SC Railroad, which meant building 250 miles west of Jesup. Sioux City was expected to rival St. Joseph, Missouri and Omaha as gateways to the west—a possibility that excited and stimulated other interests. Within a short time at least six railroads were chartered to build to that city.<sup>12</sup> Construction from Jesup reached Cedar Falls in 1861, and with exception of a feeder line to Waverly, the war stopped further building. Five years later, the main line was at Iowa Falls, with regular service by June 1866. Both the western and northern lines out of Cedar Falls were moving into virgin territory and trains from Dubuque brought settlers from eastern and midwestern states and from Scandinavia, Ireland, Scotland and England. These settlers purchased land at prices from \$2.50 to \$10 per acre.



Illinois Central Locomotive - 4-4-0  
Design in 1860s  
(Courtesy: State Historical Society of Iowa)

<sup>12</sup> Poor's *Manual of Railroads, 1871-1872*. The six were the Iowa Falls & Sioux City, St. Paul & Sioux City, Sioux City & Columbus, Sioux City & Pacific, Sioux City & St. Paul, and the McGregor & Sioux City Railroads.

It was at this point that the IC purchased the properties, fearful that rival companies would move in and deprive the company of its western connection and eliminate it from northwest Iowa. Platt Smith, vice president of the D&P, was a leader in the leasing arrangements. He organized a subsidiary, the Iowa Falls and Sioux City Railroad, in 1867, to build the 167 miles between the two cities. Blair, who had built the CNW, was named to head the new company which acquired the franchise, rights-of-way and land grants to Sioux City. The line moved westward to Fort Dodge in 1869. While continuing westward, another crew moved the rails east and met at the "Sag" (milepost 431.5), some three miles west of Storm Lake in January 1870. Blair and his men had built more miles in two years than had any one else in the history of east-west railroad construction in Iowa.<sup>13</sup> During the extension of the main line, tracks on the Waverly branch were built to Charles City in 1868, to St. Ansgar in 1869, and the gap to the Minnesota border was closed by 1870. The final link joining Sioux City with the UP was built by the Sioux City and Pacific Railroad along the east bank of the Missouri River to Missouri Valley Junction on the CNW, which eventually incorporated the road into its system. By the close of 1870, the IC operated 1,107 miles of railroad: 705 in Illinois and 402 in Iowa.

### The Milwaukee

The Milwaukee was the fifth main line built across the state. Its history began with the completion of the MIL&M into Prairie du Chien in 1857. McGregor, on the opposite side of the river, like other towns, was filled with excitement for railroads and planned them in all directions, including a horse-powered line to Fort Atkinson. Actually, the Milwaukee built two lines across Iowa. At the close of the war, the McGregor Western (MCGW), incorporated in 1863, reached Monona. The railroad was promoted by William B. Ogden of the CNW, Judge Greene of Cedar Rapids, and William Larrabee of Clermont, later Governor and a leading proponent of regulation. In 1866 it was completed to Cresco and the following year into Owatonna, Minnesota, thence to the Twin Cities, already connected by the Milwaukee and St. Paul to the city of Milwaukee. The MCGW and MIL&M were purchased by the Milwaukee and St. Paul which in turn became the Chicago, Milwaukee and St. Paul (CM&StP) Railway in 1874, the same year that John Lawler completed the pontoon bridge across the Mississippi River.

The McGregor and Sioux City Railroad was incorporated in 1868 to resume construction across northern Iowa and to get the land grant. By 1869 it had built the 64 miles from Calmar to Nora Springs. Renamed the McGregor and Missouri River Railway, it reached Algona in 1870, the point to which the land grant applied, but progress was halted by the Panic of 1873. The grant expired in 1875 since the railroad had not met the mileage requirements. The CM&StP, which had absorbed the McGregor and Missouri, got the grant transferred, and by 1878 the segment from Algona to Hull, through Sheldon, was in operation.

The second line across the state was started by the Sabula Valley and Dakota Railroad, organized in 1870. The road was built with assistance of the Western Union Railroad (no relation to the telegraph company), controlled by the CM&StP which had reached Savanna, Illinois, opposite Sabula. Twenty miles were built in 1870 and in less than two years, the rails were laid to Marion. The Sabula was purchased by the CM&StP, enabling through service from Cedar Rapids to Milwaukee. But the usual financial problems halted westward movement for the next decade. When building resumed, the 260 mile line through Tama, Perry, and Coon Rapids to Council Bluffs was built in one year.

The remaining link in the system in Iowa was known as the River Road from Clinton through Dubuque to the Minnesota border. Platt Smith was a leading promoter of the Dubuque and McGregor Railroad, organized in 1868. The name was changed to the Dubuque and Minnesota in 1869 and to the Chicago, Dubuque and Minnesota in 1871. Crews started

<sup>13</sup> Blair was not only well known for his promotional and managerial ability but also for naming towns along the lines he built. Among those were Aurelia and Marcus in Cherokee County, named for his daughter and son. Ames was named for Oakes Ames, friend and backer. Belle Plaine was named for his granddaughter, Ogden for the first president of the CNW. Remsen, in Plymouth County was named for a friend in Sioux City. LeMars in the same county was named during an excursion party when the ladies were given an opportunity to name a new settlement. By using the first initials of their Christian names, the result was "Selmar or LeMars," the latter chosen by majority vote. Towns were also named on the two roads on which Blair built the highest mileage. They are Blairsburg on the IC in Hamilton County, and Blairstown on the CNW in Benton County. Towns named for railroad officials, directors, employees, relatives or persons who donated land number 119 of the 835 listed by Harold, Ann, and Linda Joe Dilts in *From Ackley to Zwingle*, Ames: Carter Press, 1975. See also Donovan, "The North Western in Iowa," *Palimpsest* 43 (December 1962): p. 579, and "The Illinois Central in Iowa," *Palimpsest* 43 (June 1962): pp. 282-283.

construction north from Dubuque and an affiliate, the Dubuque, Bellevue and Mississippi Railway built south, reaching Sabula Junction in 1871. From there, using the tracks of the CNW and other roads, it operated into Clinton (Fig. 2-7). Dubuque served as headquarters of the two roads, was the location of the repair shops, and later became the operating center of the "Dubuque Division" of the CM&StP. The Panic of 1873 put the River Road into receivership, and the roads were combined in 1878. The CM&StP took title in 1880.

**The North-South Lines**

East-west construction did not dim the enthusiasm of Iowans for railroads to connect major cities to the north and south of the state. Josiah B. Grinnell headed a company in pre-Civil War days to initiate

such a project, but it was dropped because of economic conditions and the war. In 1865 the Iowa Central was organized with headquarters at Oskaloosa, to be built from the terminus of the North Missouri (NM) road on the southern border and connect at Cedar Falls with the Cedar Falls and Minnesota Railroad (Fig. 2-8). Two of the early promoters were David Morgan of New Sharon, first president, and Peter Melandy of Cedar Rapids.

Local and regional interests supported the railroad. Oskaloosa and Montezuma had been bypassed by the east-west trunk lines and wanted railroad service. Others urged construction as a means of competing with these roads since the line would cross each one and hopefully provide additional gateways for traffic. But perhaps more important was the fact that the road would be an integral part of "the grandest

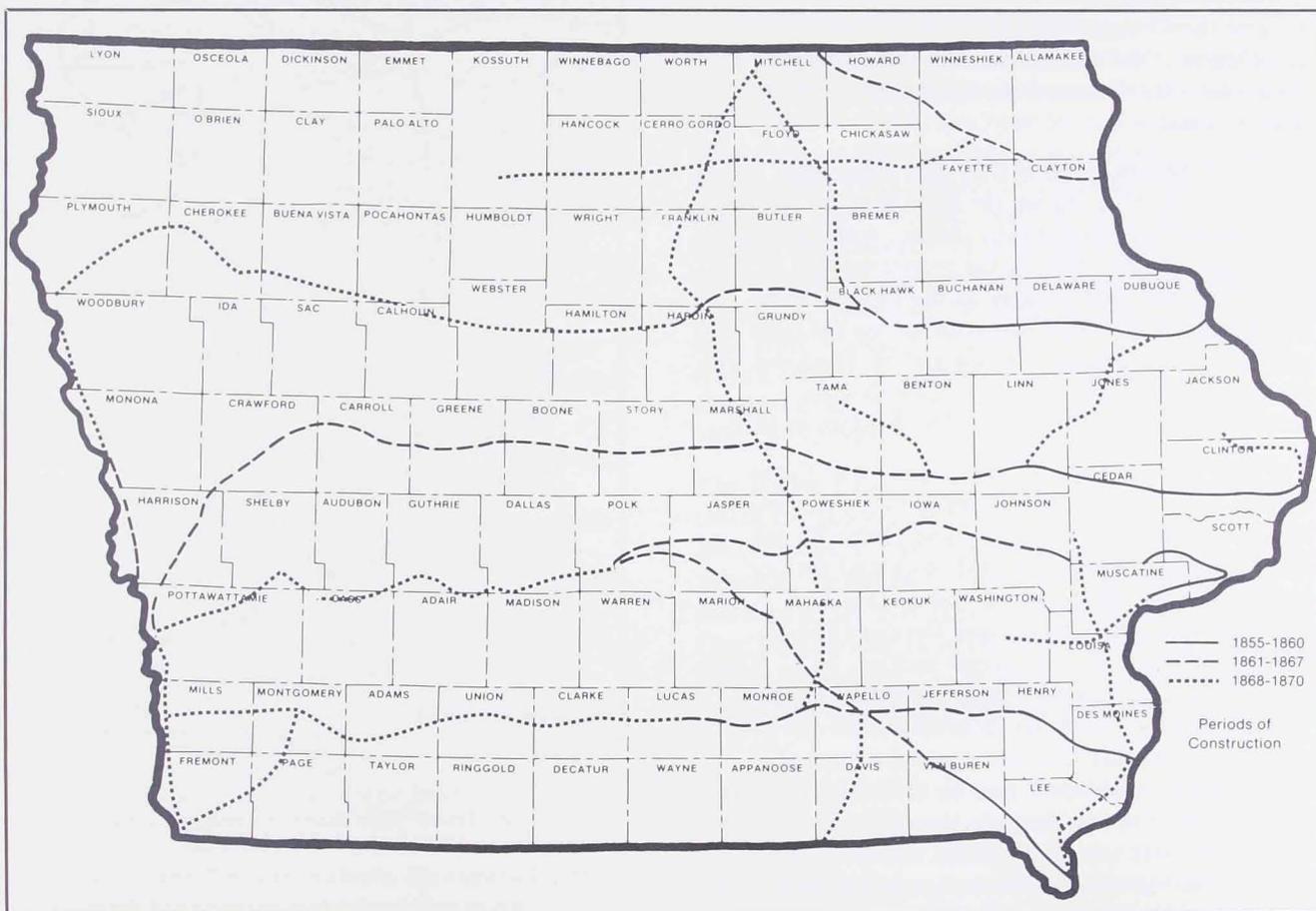


Figure 2-7  
 Railroad Construction in Iowa to 1870  
 (Reprinted by permission of William Whitehill from *The Ups and Downs of Iowa's Railroads.*)

railroad project of the age”—an interregional railroad which would connect St. Louis with St. Paul.<sup>14</sup> St. Louis was especially interested because of loss of river traffic and saw the Iowa Central as an answer to recapturing some of the business.

After grading between Albia and Oskaloosa, between Cedar Falls and Toledo, and in the vicinity of Tama, the “grandest project” was terminated when finances became exhausted. The dream of a north-south line seemed to be doomed, but such was not to be the case, for the main line of the Minnesota and St. Louis (M&StL) was built through the middle of the state. The railroad traced its ancestry in Iowa to the Eldora Railroad and Coal Company, formed after discovery of coal at Eldora. It was organized in 1866 to build 16 miles north to Ackley where it would connect with the main line of the IC. The company was taken over by the Iowa River Railway in 1868 to build the 28 miles south of Eldora to connect with the main line of the CNW at Marshalltown. In turn, the Iowa River became the Central Railroad of Iowa before the completion of the Marshalltown line in 1869, the same year that witnessed the death warrant of the Iowa Central.

The route between Mason City and Albia was completed in 1872, but for the next 30 years the road was plagued with financial problems, reorganizations and name changes. During the reorganization of the mid-1870s, the road emerged as the Central Iowa Railway in 1879. It built the road across the state as part of the line linking St. Louis and St. Paul and was merged with the M&StL in 1912, which also purchased the Fort Dodge and Des Moines in 1915.

The NM planned to build to Ottumwa and Cedar Rapids to connect with the lines serving these cities. For this purpose, the St. Louis and Cedar Rapids Railroad was organized in 1865 to extend the line from Coatsville, Missouri, to Cedar Rapids. J. P. Farley of Dubuque County and George Gillespie, Wapello County, were principal backers. H. C. Angel of Cedar Rapids was president, succeeded by H. H. Trimble of Bloomfield. By December 1866 the road reached Appanoose County, where the town of Moulton was established, and by 1870 the tracks were in Ottumwa. The new line was leased by the NM and both roads were soon in financial trouble. The Iowa road was reorganized as the St. Louis, Ottumwa and Cedar Rapids in 1875 and the NM became the St. Louis, Kansas City and Northern Railway (StLKC&N) which continued to lease the Iowa road.

But their interests shifted to Des Moines, abandoning the plan to build to Cedar Rapids.

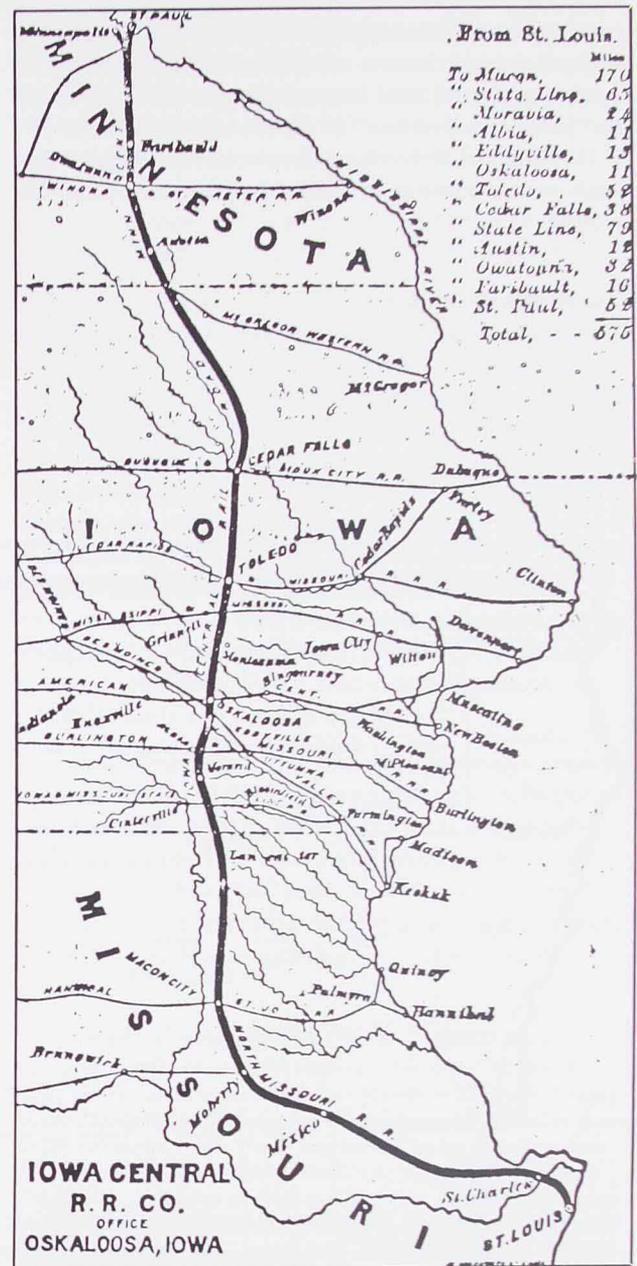


Figure 2-8  
The proposed route of the Iowa Central Railroad.  
(Courtesy: State Historical Society of Iowa)

<sup>14</sup> Donald L. Hofsommer, “The Grandest Railroad Project of the Age,” *Annals of Iowa* 44 (fall 1977): p. 120.

At this stage, Jay Gould, the notorious financier, entered the picture. He controlled the StLKC&N and united it with other roads to form the Wabash, St. Louis and Pacific (Wabash) Railway.<sup>15</sup> Gould wanted Des Moines in his system and Des Moines responded by incorporating the Des Moines and St. Louis Railroad in 1881 to build to Albia, 68 miles away. In 1882 the first passenger train arrived in Des Moines from St. Louis. The Des Moines Company was headed by James Clarkson, former editor of the *Iowa State Register* and then postmaster; John S. Runnels, vice president; Frederick M. Hubbell, secretary; and Jefferson S. Polk, treasurer. Both Hubbell and Polk were active in promoting narrow-gauge lines radiating from the city. The railroad, from the time of completion, was leased to Gould. The outlet from Des Moines was built over a patchwork of short lines connected to the Wabash properties.

The Wabash in Des Moines also included the Des Moines Union Railway, a terminal facility with 42 miles of industrial and terminal tracks, jointly administered by it and the CM&StP. The Union was incorporated in 1864, promoted by Hubbell, Polk and Grenville Dodge. It was part of a small "railroad empire" created by Hubbell which included the narrow-gauge lines from Des Moines to Boone and Panora. Hubbell also assisted in building the three-foot gauge line to Ames and Jewell, later the Des Moines branch of the CNW. In 1902 Hubbell organized the Des Moines Terminal Company, consisting of 10 miles of track and operated by the Union. Charges for cars interchanged with the Union resulted in a long period of litigation which was decided by the Iowa Supreme Court in 1932.

Gould wanted to get to Omaha for a share of the transcontinental traffic. The competition of the lines built across the state was not conducive to the construction of another direct road, so the alternative was to gain control of secondary lines and extend them to meet his goals. Before 1869 a road had connected St. Louis to Kansas City, later incorporated into the Wabash system, but it was not until he gained control of the Council Bluffs and St. Louis Railway that the route was cleared to Omaha. It had been built from Council Bluffs to the Missouri border and Gould operated the 143 mile road as the "Omaha Division" of the Wabash. He controlled the UP through heavy investments and was in an excellent position to bargain for traffic through the advantage of having a road to cities east of Chicago.

Following the same patterns, Gould picked up the 142

mile Missouri, Iowa and Nebraska Railway, serving Keokuk, Centerville, Corydon, Humeston and Van Wert. From Shenandoah, it was only 95 miles to Council Bluffs, and by extending the road, he would have a shorter line into Chicago. But Gould's plans were upset by the CB&Q which considered southern Iowa as its exclusive territory. When he attempted to build the line, he was threatened by the CB&Q with possible construction into Wabash territory. The outcome was a joint ownership of the Humeston and Shenandoah Railroad, completed in 1882. The Wabash went into receivership in 1884, and the narrow-gauge lines leased or owned around Des Moines were later purchased by the CM&StP.

### Other Railroads

The Chicago Great Western (CGW) Railroad was known as "Stickney's Road." He founded, built and headed the 1,500-mile railroad in Iowa, Minnesota, Illinois, Missouri and to a limited extent, in Kansas and Nebraska. Acquiring the charter of the Minnesota and North Western (M&NW), he built from St. Paul to Manly Junction in Worth County in 1885. In 1886 a stem was built from Mayfield, Minnesota to Dubuque and construction continued across Illinois to Chicago. To avoid possible confusion with the name M&NW, the Chicago, St. Paul and Kansas City (CStP&KC) was incorporated in Iowa in 1886, and purchased the Wisconsin, Iowa and Nebraska Railway which had built from Waterloo to Des Moines with a branch from Cedar Falls Junction to Cedar Falls. The CStP&KC purchased all of the properties of the M&NW in 1887.

The Stickney road then moved toward Kansas City, closed the gap between Waterloo and Oelwein in 1887, and built from Des Moines to St. Joseph, Missouri, by the end of 1888. Through leases and trackage rights over other roads, it ran into Kansas City, thus serving all of the cities in its name. Over half of the mileage was in Iowa. Its history can be traced to the Iowa Pacific in 1870 which had graded

<sup>15</sup> Jay Gould, together with Jim Fisk and Daniel Drew fought Commodore Vanderbilt in the Erie-New York Central War in the late 1860s. He bought into the UP during the Panic of 1873 and by 1874 was made a director and virtually controlled the railroad. Stewart H. Holbrook, *The Age of the Moguls*, New York: Doubleday & Co., 1954, pp. 30-43, 97-100.

from Fayette Junction in Fayette County west through Sumner, Waverly and Hampton to Belmont in Wright County. Another section went from Belmont to Fort Dodge. Tracks were laid from Sumner to Hampton in the late 1880s. A line had been built from Mason City to Fort Dodge by the railroad of the same name, controlled by Stickney, in 1886. Building the 133 miles from Fort Dodge to Council Bluffs was completed in 1901, including a bridge over the Des Moines River at Fort Dodge. The 2,588-foot structure was considered to be the second

largest bridge in Iowa. From Council Bluffs the CGW had trackage rights into Omaha. To complete the "Maple Leaf" system, the Hampton-Clarion gap was closed in 1902 and the Waverly-Oelwein segment in 1904. At the turn of the century, the repair shops, later supervised by Walter P. Chrysler, were moved from South Park, Minnesota to Oelwein, which was to be the key strategic location on the system. When the CSTP&KC became insolvent, it was reorganized in 1892 as the CGW (Fig. 2-9).

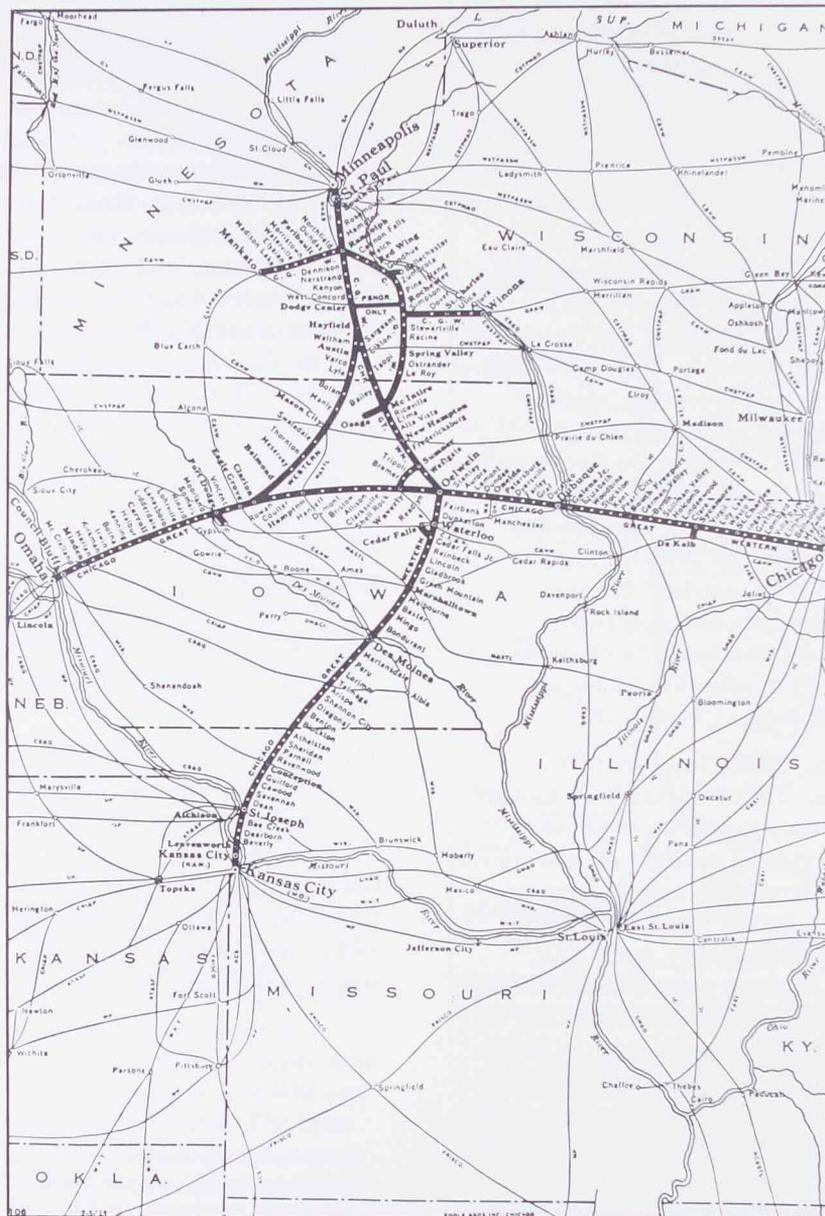


Figure 2-9  
Route of the Chicago, Great Western  
(Courtesy: State Historical Society of Iowa)

Although Sioux City in the 1880s was well supplied with railroads that ran in all directions, commercial interests and meat packers wanted an independent railroad built to the north to connect with the transcontinental lines serving the Pacific Northwest. Such a line, it was envisioned, would allow a direct route to Duluth for export, bypassing Chicago, and would provide for expanded shipments of grain and livestock. This was the incentive for organizing the Sioux City and Northern (SC&N) in 1887, projected east to Duluth and north to Minot, North Dakota. Actually, the most feasible connection for the 96-mile line was at Garretson, South Dakota, on the Wilmar and Sioux Falls (W&SF) Railway, a James Hill road, and was opened in 1890. A 30-year contract was signed with the W&SF road, an arrangement which proved profitable for both railroads. But the prosperity was interrupted by the Panic of 1893 which depressed the economic structure of the city. When the SC&N went bankrupt, it was integrated into the W&SF, purchased by the Great Northern (GN) in 1907. The Sioux City line became the southernmost leg of the GN system.

When President Lincoln signed the Pacific Railroad Act of 1862, the eastern terminus was not clearly specified, other than the road was to be built westward from the Missouri River. After consultation with Grenville Dodge and others, Executive Orders were issued in 1863 and 1864 which established the eastern terminus at the "western boundary of the state of Iowa, east of and opposite to the east line of section 10, in township 15 north, of range 13, east of the sixth principal meridian in the territory of Nebraska."<sup>16</sup> The Missouri River was bridged as a single structure in 1869, rebuilt for double track in 1887 and later in 1916. It was the first to cross the Missouri and the only one between Council Bluffs and Omaha. The UP, with only 2.08 miles of track across the bridge, is the shortest railroad line into Iowa. The major trackage of 84 miles in the area consists of spurs and yard tracks in the terminal at Council Bluffs, covering 725 acres. It became a vital exchange point for eastern and western transcontinental trains. Only in passenger service (before termination) did Omaha supercede Council Bluffs as a major terminal.

The Santa Fe (AT&SF) concluded that its interests dictated the control of an independent line from Kansas City into Chicago. The extension of the lines from Chicago beyond the Missouri River could bring new competition to their 6,500 mile system from

Kansas City to the West Coast and jeopardize further growth. There were three possibilities to gain entrance into Chicago. One was to buy the Chicago and Alton, or the financially ailing Chicago and St. Louis, or to build its own line. It chose the second alternative—use 100 miles of the Chicago and St. Louis and build the remainder. If a ruler were laid on a map tracing the route from Kansas City to Chicago, it would cut across the southeast corner of Iowa, and while the railroad was not constructed "as the crow flies," there was little deviation from the ruler's straight line.

Originally, the AT&SF considered Keokuk for the river crossing, but when citizens of Fort Madison learned of the proposal, they agreed to a grant of 80 acres of land for construction and to pay one-fourth of the expense of the right-of-way through Lee County. These inducements and other factors were sufficient to change the route from Keokuk to Fort Madison. The Chicago, Santa Fe and California Railroad was incorporated in Illinois in 1886, with a separate charter in Iowa and Missouri for construction. The entire line from Kansas City to Chicago, including the Mississippi River and Toll Bridge, was completed in 1887, although service was not begun until the following year. The bridge was designed for both railroad and highway traffic, and at the time it was built, its 525-foot draw span near the Iowa shore was considered the longest in the world. The Bridge Company and railroad were absorbed into the AT&SF system in 1900.

Although the railroad had only 19 miles of track in Iowa, it has had an important place in the state's railroad history. Fort Madison was the Illinois Division headquarters between 1901 and 1903 and again from 1956 to at least 1965. Shopton, two miles west, was the site of shop facilities, an employee hospital, blacksmith shop and roundhouse. The shops and hospital were closed in 1951, and the hospital building together with five acres of land were given to Fort Madison to be administered by a trust fund. Shopton remained as a yard facility.

<sup>16</sup> Frank P. Donovan, "The Union Pacific in Iowa," *Palimpsest* 46 (April 1965): pp. 193-194.

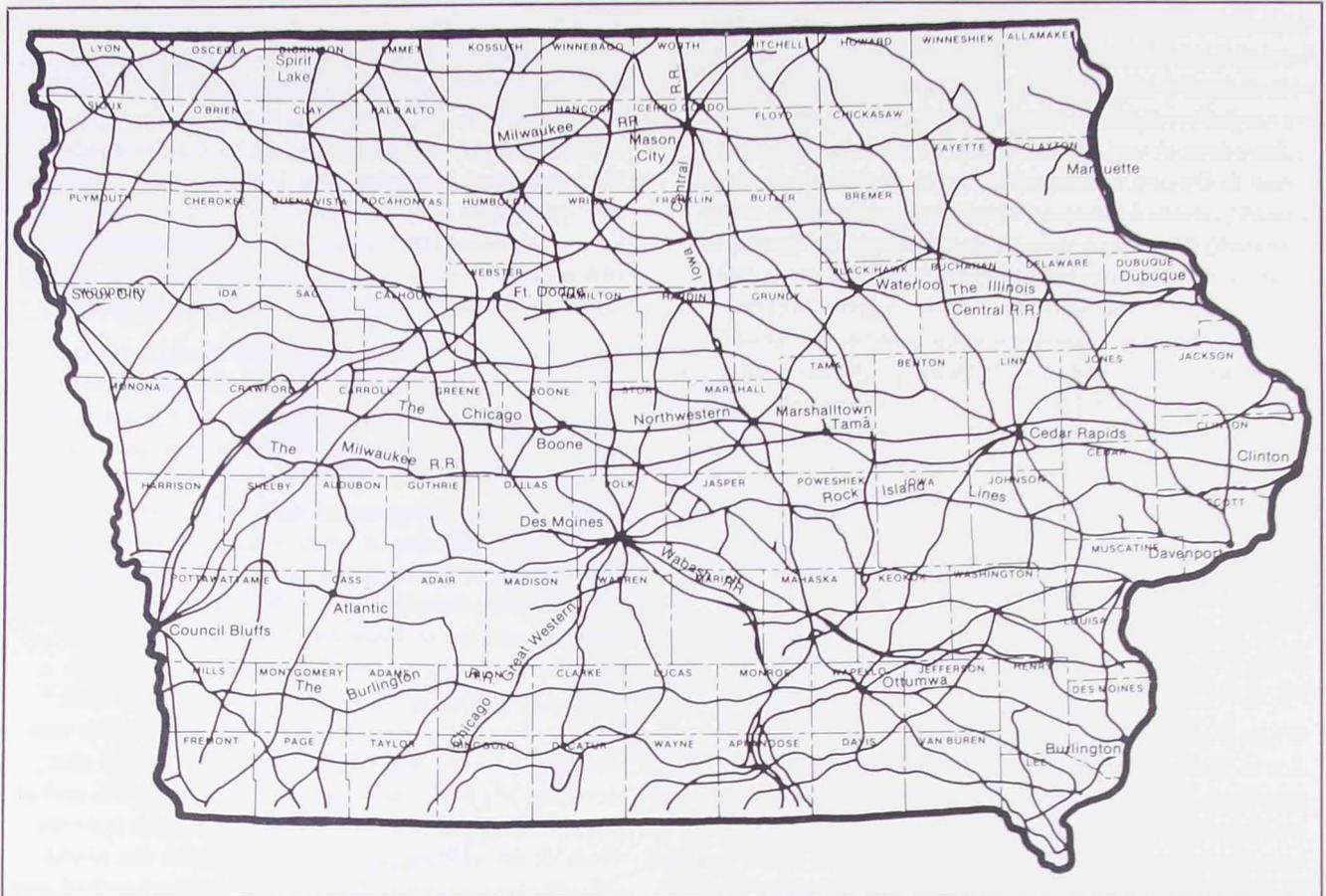


Figure 2-10

Iowa's Steam Railways in 1900

(Reprinted by permission of William N. Whitehill from *The Ups and Downs of Iowa's Railroads.*)

### Narrow Gauge Railroads

The narrow gauge movement began in Colorado in 1870 when the Denver and Rio Grande Railroad was organized to build through the mountains south and west of Denver into the Rio Grande valley. During the next decade, railroads with track width of three to three feet, six inches, sprang up over the nation, and by 1880, there were at least 154 of these roads in operation. The movement reached its peak in the early 1880s. The principal reasons for this type of construction were economy in building and maintenance and also the equipment was less expensive than that used on standard gauge roads. On level terrain without bridging, laid with 25-35 pound rail, the roads could be built for as little as \$5,000 per mile, exclusive of right-of-way, as compared with about \$25,000 for standard width railroads.

Their greatest disadvantage was the interchange of traffic without reloading and the lower volume hauled when contrasted to standard gauge roads. The level of wages paid was the same on both types and the narrow gauge paid, if not fully, the taxes per mile. These and other factors gradually led to conversion of narrow gauge to standard gauge, but nearly every major railroad system originally included narrow gauge lines. Narrow gauge lines are shown below with names, dates of organization, mileage and final disposition:

1. Farmers Union Railroad, 1875. Liscomb through Conrad Grove (Conrad) to Beaman, 12 miles. Abandoned.
2. Crooked Creek Railway and Coal Company, 1876. Judd to Lehigh on the Des Moines River, eight miles. Ft. Dodge, Des Moines & Southern.

3. Waukon and Mississippi Railroad Company, 1877. Waukon to the Mississippi River, 23 miles. Milwaukee.
4. Iowa Eastern Railroad Company, Elkader to Beulah, 19 miles. Milwaukee.
5. Cedar Rapids and Marion Street Railway, five miles. Street Railway Company of Cedar Rapids.
6. Fort Madison and Northwestern Narrow Gauge Railway Company, 1879, 12 miles. Reorganized into the Fort Madison and Northwestern Railroad Company which extended the line to Birmingham and McKee in 1883, 33 miles. Burlington.
7. Chicago, Bellevue and Western Railroad Company, 1880. Bellevue to Cascade, 36 miles. Milwaukee.
8. Iowa and Minnesota Railroad Company, 1874. Des Moines to Ames and Calanan (near Jewell), 57 miles. Chicago & Northwestern.
9. Des Moines, Adel and Western, 1878. Waukee to Adel, seven miles. St. Louis, Des Moines and Northern completed the line from Waukee to Des Moines in 1881. Wabash.
10. Wabash, St. Louis and Pacific Railroad, 1880. Adel to Jefferson and Fonda, 114 miles. Clive to Boone, 1882, 35 miles. Milwaukee.
11. Des Moines, Osceola and Southern, 1880. Osceola to Des Moines. Osceola through Leon to Cainsville, Missouri, 111 miles. Burlington.
12. Burlington and Northwestern Railroad, 1875. Washington to Burlington, 38 miles. Burlington.
13. Burlington and Western Railroad, 1881. Winfield to Oskaloosa, 71 miles. Burlington (Fig. 2-11)<sup>17</sup>.

### Branch Lines

Intense competition existed among communities for service along the trans-Iowa routes. Satisfaction was achieved when the main line was routed through them. Others who had been by-passed could either build their own independently chartered and often locally financed roads to connect with major routes, request the main line to build them, or cease to exist. In most instances, the railroads were sought through "feeders" or "branches," lured by monetary or physical rewards. Hofsummer lists approximately 40 railroads, including the five major east-west lines,



Narrow gauge line, 10 miles North of Ames in 1879  
(Courtesy: State Historical Society of Iowa)

<sup>17</sup> Ben Hur Wilson, "Iowa and the Narrow Gauge," *Palimpsest* 13 (April 1932): pp. 141-153.

which were built in Iowa.<sup>18</sup> Many of these were probably known as “branch lines” which the major railroads operated and later consolidated into their systems. Others were the “short lines” built to connect new settlements. Until World War I, with few exceptions, these relatively short lines were considered a source of strength for any railroad. They made easier and shorter the haul by horse and wagon to the towns and grain elevators, and generally, the railroad

that blanketed its territory got most of the traffic. The major railroads owned most of the branches, often spun off as laterals north and south of the main tracks. Expansion of branch line construction underscores the increase in railroad mileage between 1870 and 1880. By the latter year, 4,366 miles had been built, up from the 655 at the close of the 1850s and the 2,683 miles built by 1870.

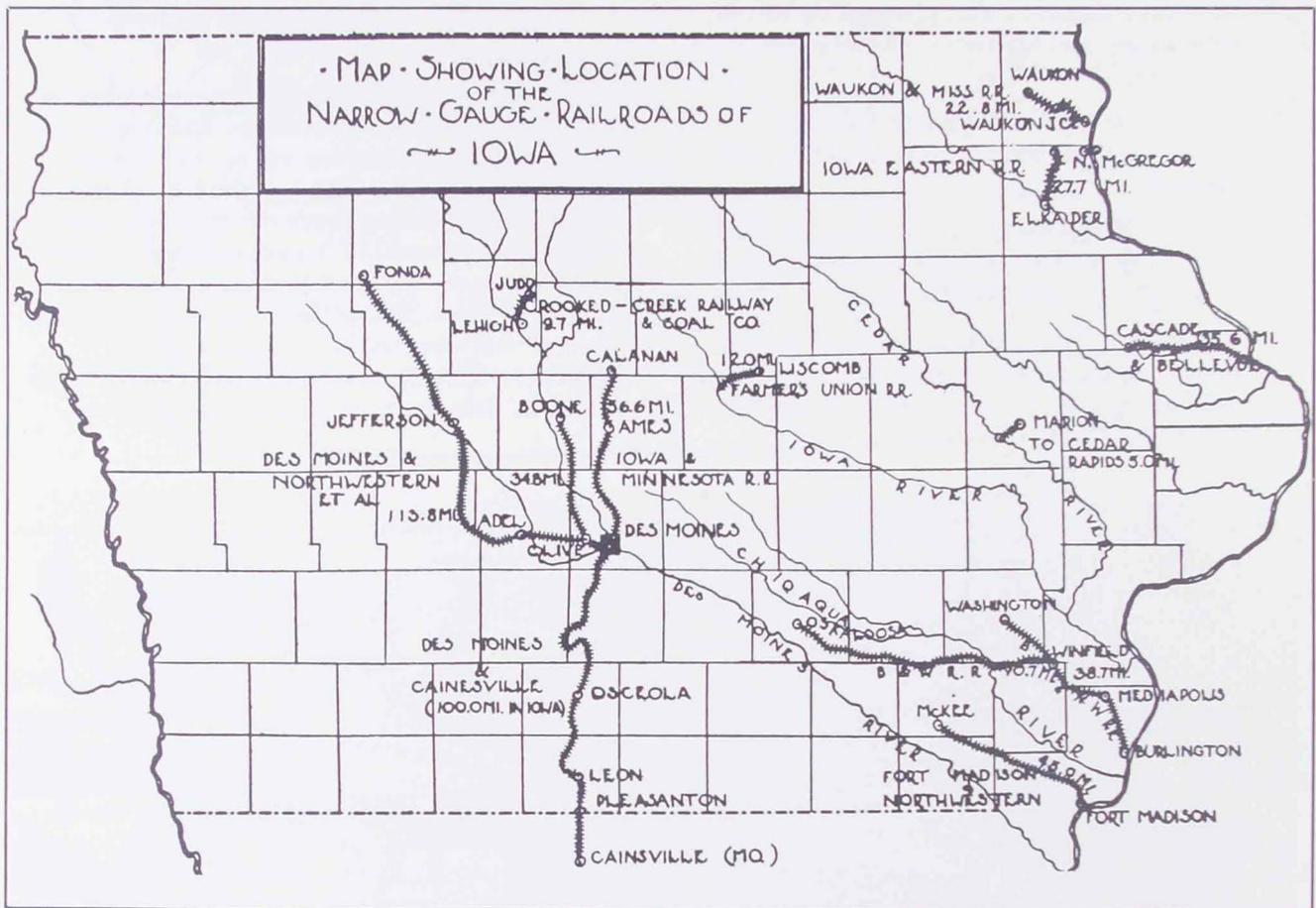


Figure 2-11  
(Courtesy: State Historical Society of Iowa)

<sup>18</sup> Donald L. Hofsommer, *Railroad Development in Iowa*, (mimeograph) Cedar Falls, 1965. The author counted almost 60 railroads built or partially built, including main lines, short or branch lines and interurbans.

### Evolution of the Passenger Train

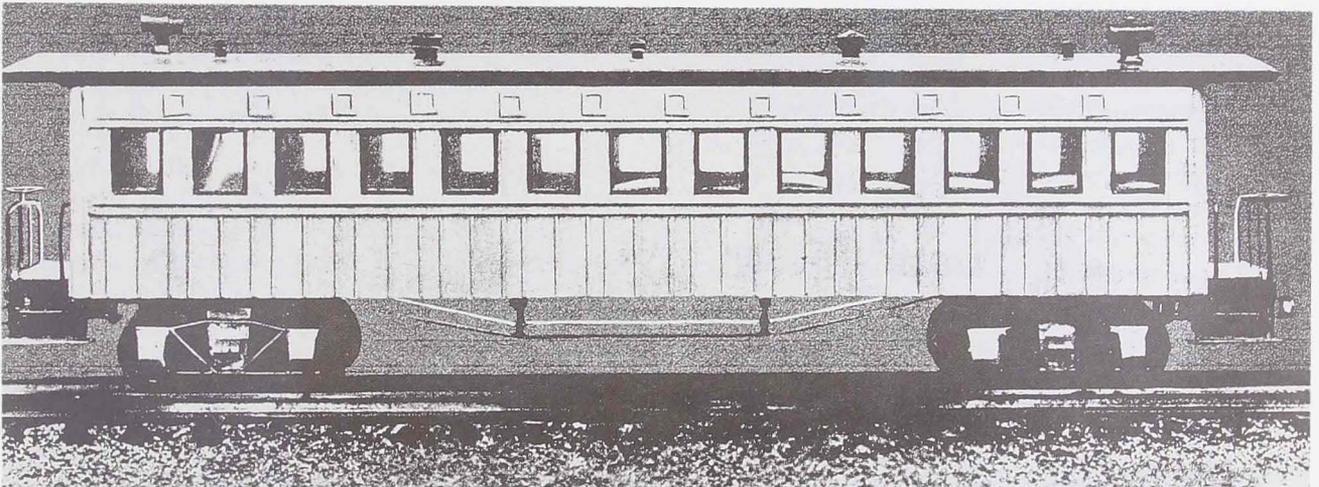
“Traveling on the cars” was an adventure not always pleasant in the early days when passenger trains, labeled by Henry as “Houses on Wheels,” were nothing more than renovated stagecoaches mounted on flanged wheels. These were soon replaced by vehicles with an appearance of boxcars with windows. Throne describes the first passenger train in Iowa as “consisting of two coaches and five flat cars decked with chairs and settees, protected by a temporary railing.”<sup>19</sup> The hardy pioneers sat on two-passenger wooden benches in cars hot and dirty in summer and cold and drafty in winter. Lighting was provided first by candles and then oil lamps; heat, by stoves, which were a dangerous hazard at any time but particularly when wrecks occurred.

The earliest significant improvement was the invention of an axle moving with the wheel, rather than the wheel revolving around the axle. The wheels were then combined into four-wheel trucks. Cars were linked together by three feet of chain. The engineer in charge of the train signaled the start of a trip by a blast on the locomotive whistle, and passengers braced themselves against the shocks as the slack in the chains was taken up. Gradually, passenger cars became larger and more comfortable, and by 1887,

travelers were enjoying steam heat, electricity and plumbing. The air brake replaced the hand brake, and the link and pin coupler, which replaced the connecting chains, gave way to a more safe and dependable automatic coupler. In the same year, open platforms between cars were enclosed, and the first all-vestibule train was placed in service on the Pennsylvania Railroad.

### Introduction of Pullman Cars

In the early 1850s, George M. Pullman could not sleep on the hard, springless bunk of a “sleeping car.” The wind whistled through cracks in the window, candles flickered and the coarse woolen blanket offered little comfort. Determined “to do something about this deplorable condition,” in 1857, he converted a coach on the Chicago and Alton Railroad into a sleeping car with berths and bedding but without sheets, because male passengers refused to take off their boots. The second experiment, the *Pioneer*, built in 1864, became the car that made the Pullman name famous, especially when it was used on the last leg of President Lincoln’s funeral train.<sup>20</sup> Pullman’s original contribution was the upper berth which could be closed during daytime. Dining and



In 1860, this coach was the last word in travel comfort. Enclosed vestibules and other improvements were unheard of. (Courtesy: American Association of Railroads)

<sup>19</sup> Mildred Throne, “Iowa’s Streamliners,” *Palimpsest* 32 (June 1951): p. 229.

<sup>20</sup> Robert S. Henry, *This Fascinating Railroad Business*, New York: Bobbs-Merrill Co., 1946, p. 262.

hotel car construction followed shortly thereafter and were in operation by the 1870s.

In 1894, steel replaced wood in construction of freight cars and between 1908 and 1910, the Pullman Standard Company began manufacturing all-steel passenger and sleeping cars. The sectioned sleeping cars reached their peak of popularity in the 1920s and will evoke memories for the older generation of what Lyons calls “the nights of the green curtains” and characterized by Robert Young as “rolling tenements.” Lyons described these cars as “ugly, uncomfortable dormitories as lacking in privacy as a jail house. Each passenger swayed longitudinally in a berth cloaked by a swaying curtain of heavy green fabric that might have been better used as upholstery for furniture in the lobbies of commercial hotels. At one end of the car was the men’s room—one toilet, one pseudo-leather couch and a meager triad of commercial wash basins inadequately equipped with mirrors . . . At the other end was the women’s room—similarly fitted but littered with someone else’s face powder and hair combings rather than cigar butts.”<sup>21</sup> The observation may seem somewhat harsh but was fairly accurate. During later years, single occupant “roomettes” and multi-person “bedrooms” replaced many of the sectioned pullmans.

### The Influence of Railroads on Iowa’s Development

Through colonization efforts, an activity little known and less understood, railroads made significant contributions toward development of permanent communities. Not all land granted was used for construction. The excess was available for sale by land departments organized for this purpose. Encouraging people to settle near the right-of-way or within territorial claims offered the prospect of good business in the future. Not only were special fares given to homesteaders by the railroads, but they also depended upon their skills, talents and industry to provide the traffic.

### Population Trends

Before railroads, the 192,214 Iowa residents in 1850 were primarily settled along the Mississippi River and its tributaries, except for some concentration in Pottawattamie County and a scattering in southwestern counties. Between 1850 and 1860, the population increased by 251 percent to 674,913. Fourteen counties experienced the greatest growth during the decade before railroads, all except Grundy,

Ringgold, and Webster in the eastern block, but within 10-20 years after construction, the greatest growth occurred in 27 counties. The four largest were Des Moines, Polk, Woodbury and Pottawattamie, with increases primarily in the major cities. Similar trends were noted in the rural population growth. Rural growth was less dependent upon the arrival of railroads and more so on the establishment and growth of towns. The population grew rapidly from 1860 to 1870, reaching a total of 1.2 million and advancing Iowa from 20th to 11th among the states (Fig. 2-12, 2-13). In the east and south central sections, railroads had little apparent effect on total or rural settlement, but the west, north central, central and southwest were settled after railroad construction. These areas witnessed the building of railroads in advance of demand, and settlement followed slowly due to the lack of lumber, poor drainage of land, and the lure of cheaper land in Nebraska and the Dakotas. The major growth in rural population did not occur until some years after railroads (Fig. 2-14, 2-15).

An example of rapid growth may be seen during the decade of the 1850s when the D&P was building westward. Dubuque County tripled its population, Delaware County increased sixfold, and the population of Buchanan County multiplied 14 times. Black Hawk County, with 135 residents in 1850, had 8,244 in 1860. Webster County had no settlers in 1850 and 2,414 in 1860. When it was learned that Iowa City would be the western terminus of the M&M, property values increased for several years.

As settlers moved west, towns were built 8 to 10 miles apart. They existed as markets for farmers and competed with each other in offering financial and other assistance for railroads to build to or through them. If bypassed, the merchants stood to lose their captive markets, since farmers would take their grain and livestock to the nearest railroad terminal and while there conduct business with stores built around the railroad complex. Wall commented that “it was far more important to get a railroad station than it was to have a courthouse. One reason why J. B. Grinnell founded his town on open prairie. . . was that he had advance information that the M&M Railroad would pass that point and be interested in building a station there.”<sup>22</sup>

<sup>21</sup> Peter Lyon, *To Hell in a Day Coach*, Philadelphia: J. P. Lippen-cott Co., 1968, p. 225.

<sup>22</sup> Joseph F. Wall, *Iowa—A Bicentennial History*, New York: W. W. Norton & Co., 1978, p. 141.

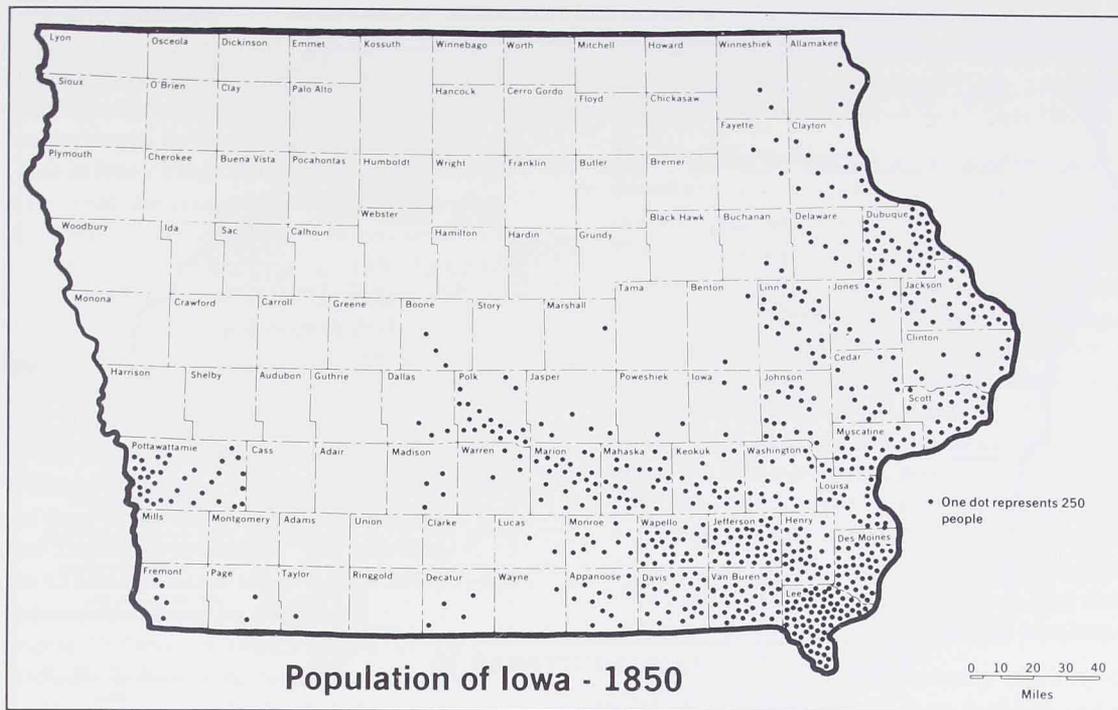


Figure 2-12

Population of Iowa - 1850

(Courtesy: Clare C. Cooper, "The Role of the Railroads in the Settlement of Iowa", M.A. thesis, University of Nebraska, Lincoln, 1958.)

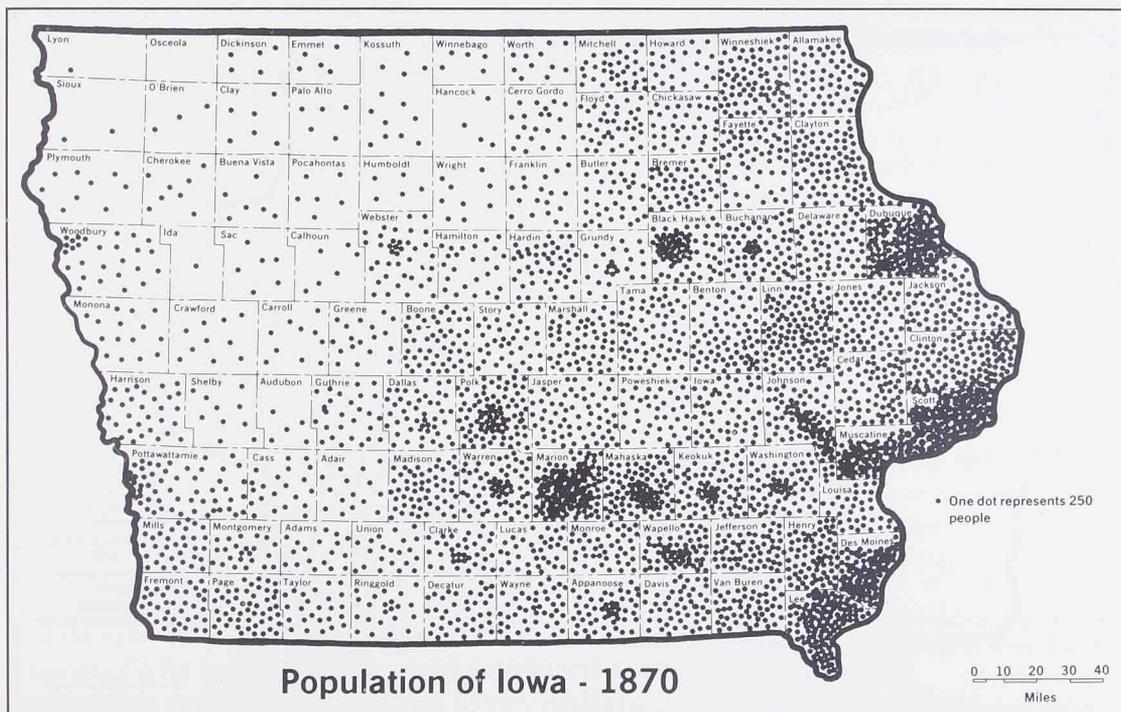


Figure 2-13

Population of Iowa - 1870

(Courtesy: Clare C. Cooper, "The Role of the Railroads in the Settlement of Iowa", M.A. thesis, University of Nebraska, Lincoln, 1958.)

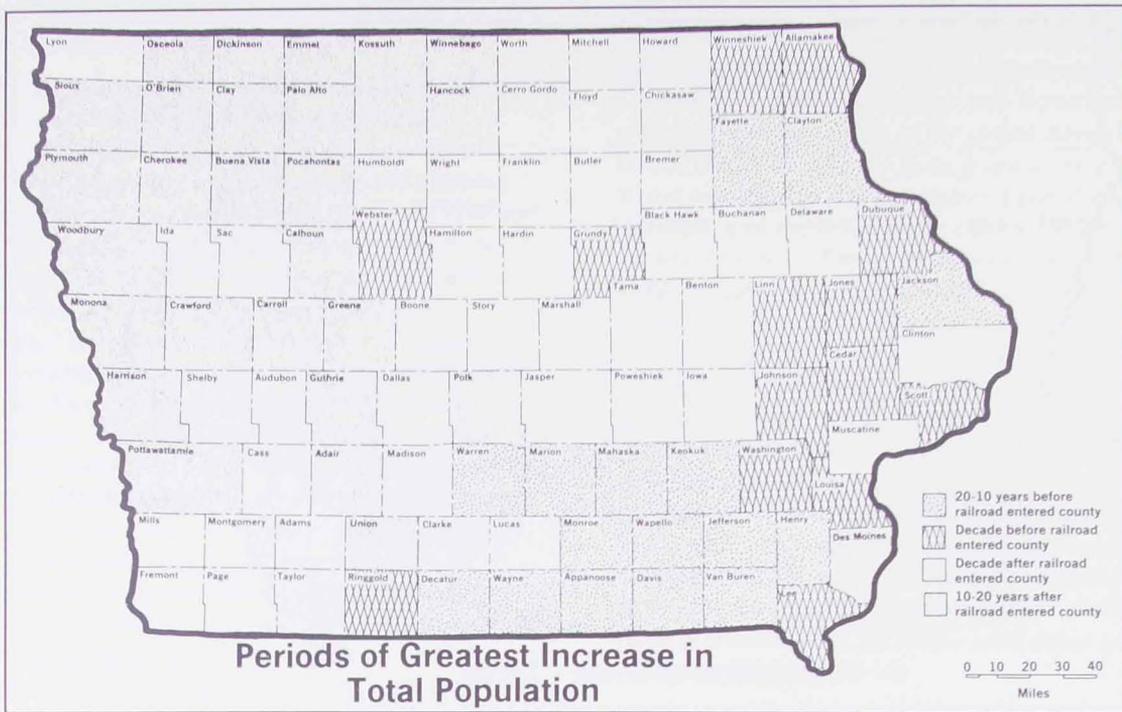


Figure 2-14

Periods of Greatest Increase In Total Population

(Courtesy: Clare C. Cooper, "The Role of the Railroads in the Settlement of Iowa", M.A. thesis, University of Nebraska, Lincoln, 1958.)

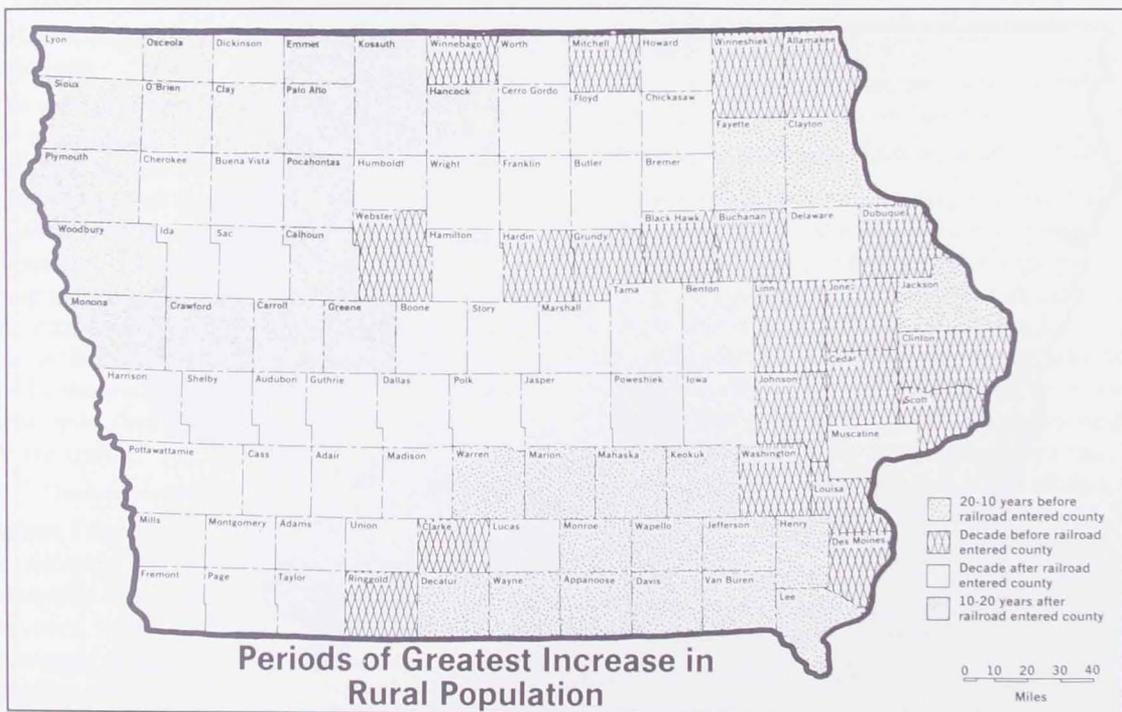


Figure 2-15

Periods of Greatest Increase In Rural Population

(Courtesy: Clare C. Cooper, "The Role of the Railroads in the Settlement of Iowa", M.A. thesis, University of Nebraska, Lincoln, 1958.)

### Agriculture and Industry

Henry Varnam Poor, a railroad analyst, in a speech in 1854, stated: "The pioneer, as he moves forward over the prairies of the West, carries with him the railway, as necessary to his life as are the axe and the plough. This railway keeps pace with the frontier of settlement so that the crop of the year on a frontier farm in the great march of civilization has only to be held to the next; to be sent whizzing to the Eastern markets at a speed of 30 miles to the hour."<sup>23</sup> There were 14,805 farms in the state in 1850 and 61,136 by 1860. Much of the land was undeveloped, with only 28 percent of the state's area in farms, valued at \$12 per acre. By 1900 land in farms had risen to 96 percent of the land area, and value per acre had risen to \$42. William G. Murray observed that "a substantial part of the farm value increase . . . represented farm improvements," but it seems reasonable to conclude that the presence of railroads had an important bearing on the "farm improvements."<sup>24</sup> Only six counties experienced their greatest increase in improved land acreage before railroads—the remaining 93 after railroad construction (Fig. 2-16). In 1850 the state ranked 18th in the nation in total grain production; by 1860 it was in 10th position. Corn led the list of grains, followed by wheat, oats, buckwheat, barley and rye. Potatoes were also an important crop. Hogs were raised where transportation facilities were available. Cattle were easier to drive and were raised where populations were sparse and transportation not fully developed. Cheap pasture, high wool prices, and easier transportation made the raising of sheep important in the 1860s but by the end of the decade it was on the decline.

Farmers quickly took advantage of the railroads once they were built. In a two-week period ending June 11, 1861, traffic to Chicago originating on the CI&N Railway alone included 38,445 bushels of wheat, 350 barrels of flour, 940 pounds of pork, 2,286 pounds of hides, 3,399 head of hogs and six cars of cattle. Freight was increasing so rapidly that special trains had to be run daily to accommodate the demand. Trading habits changed almost overnight. The *Marshall County Times* stated that "tide of trade had changed from the previous movement of wagons to Marengo to the railroad facilities at Otto Creek in Marshall County."<sup>25</sup> No longer was it necessary to deliver products long distances to river towns. Dozens of markets developed along railroad property and distances of hauling were reduced. The Mississippi River towns lost some of their advantage when the

bridges were built but gained otherwise as railroad centers. Chicago and the large Eastern cities were primary markets for Iowa products, and England, Scotland and Ireland were important foreign outlets.

The banking industry developed almost simultaneously with the railroads as a service organization which not only invested in but also handled finances for equipment and construction and arranged for sales of securities. Industry no longer had to concentrate along the rivers and began to scatter throughout the state. In 1860 the six leading manufacturing counties had production valued between \$500,000 and \$1.5 million. All six were served by short line railroads built into the interior and were also associated with river movements. By 1870, 14 counties had manufacturing facilities with values between \$1 and \$3 million. Agricultural processing and farm implement firms ranked first, followed by lumber, carriages, boots and shoes, saddles and harnesses, clothing and blacksmithing.<sup>26</sup>

The growth of the lumber industry was a natural result of the demand for homes, farm facilities and industrial structures. Iowa's hardwoods were not the most suitable for building purposes, so the white pine from Minnesota and Wisconsin was cut and floated down the Mississippi to saw mills in the river towns. Railroads hauled the finished lumber to the interior and were also customers for buildings and ties. In 1869 Clinton had five lumber companies and was considered the leading producer of milled lumber in the world, boasting 17 millionaires in lumbering and allied businesses. By 1870 these firms had established lumber yards at various points along the CNW Railroad. Sage

<sup>23</sup> Alfred D. Chandler Jr., ed., *The Railroads—The Nation's First Business: Sources and Readings*, New York: Harcourt Brace & World Co., 1965, p. 22.

<sup>24</sup> William G. Murray, "Iowa Land Values," *Palimpsest* 48 (October 1967): pp. 457-458.

<sup>25</sup> Klazie Mae Smith, "The Economic and Social Development of Iowa from 1860 to 1870," Masters thesis, Iowa State College, Ames, 1942, pp. 62-63.

<sup>26</sup> *Census of 1860*, volume on manufactures, pp. 146-161; *Census of 1870*. The six counties were Muscatine, Scott, Des Moines, Dubuque, Lee and Linn. They were joined later by Clinton, Polk, Wapello, Henry, Jackson, Clayton, Fremont, and Black Hawk.

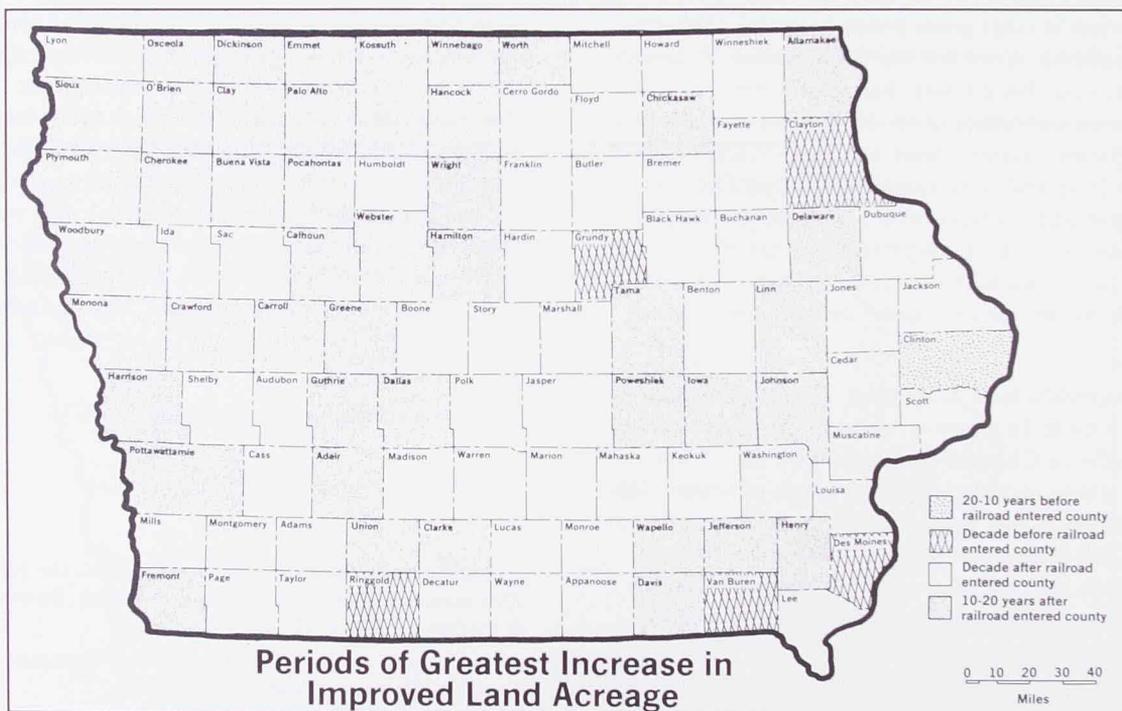
comments that "it is safe to say that . . . for a comparable number of years, roughly the 50 years from 1859 to 1900, no single business in Iowa's economic history accounted for a greater concentration of wealth than the Mississippi River lumber business in its heyday."<sup>27</sup>

Aside from its fertile soils, Iowa's greatest natural resource was coal fields, underlying 21 counties in the south central section. Without railroads, production and marketing would have been non-existent. Oskaloosa in Mahaska County was the first center of extensive operations, later developed in Polk, Jasper, Monroe, Appanoose and Wayne counties. New communities were organized, the most interesting that of Buxton in Monroe County, established in 1900 by the CNW which had title to over 30,000 acres of coal fields. Unable to hire labor at prevailing wages, they imported hundreds of blacks from Kentucky and Alabama to work the mines. In one year the town grew to 6,000 people, 5,500 of whom were black.

While railroads were only one factor in the location

of industry in the early years, it could well have been the most important. A history of Iowa industries by Cheever shows the locational advantages provided by access to railroads.

Nor were recreational possibilities overlooked for the people. The vacation potential of the Spirit Lake country was promoted vigorously by several railroads. The initial route was developed by the BCF&N in 1882, followed by the CM&StP in 1883. Advertising campaigns were joined by other railroads that connected with them at various cities. The BCF&N's efforts were directed toward Spirit Lake and the famous Hotel Orleans, whereas the CM&StP stressed the advantages of visiting West Okoboji, and its stations as might be expected were near that lake. The railroads eventually terminated passenger services and dismantled their tracks. The area, however, continued to prosper with most visitors of the auto/air age probably unaware of the role of the railroads in the development of the Iowa Great Lakes Region.



**Periods of Greatest Increase in Improved Land Acreage**

Figure 2-16

Periods of Greatest Increase In Improved Land Acreage

(Courtesy: Clare C. Cooper, "The Role of the Railroads in the Settlement of Iowa", M.A. thesis, University of Nebraska, Lincoln, 1958.)

<sup>27</sup> Leland Sage, *A History of Iowa*, Ames: Iowa State University Press, 1974, pp. 98-99; George W. Sieber, "Railroads and the Lumber Industry, 1858-1878," *Annals of Iowa* 39 (summer 1967): pp. 33-46.

### Railroads and the Legislature

Railroad circumstances and conditions in the Eastern states were considerably different than those faced by Western legislatures. Eastern states had been founded and developed without railroads, which were introduced into an economic and social structure well advanced and capable of handling new problems as they arose. Railroad construction in the West largely preceded economic development and was in part responsible for it. There had been some legislative experiments concerning canals, roads and rivers, but generally, railroad legislation was first discussed by Western states.

By the early 1870s, railroads had considerably altered the economic structure of Iowa. Service had been established in all the major cities by one or more roads. Businessmen found new opportunities and new competition. One area after another emerged from subsistence farming, produced a surplus to be sold outside the home markets, developed industries and hoped to achieve economic prosperity. Populations had increased dramatically, and virtually every person was affected in one way or another by railroad progress. Initially, state support and assistance was practically unanimous. Railroads received the power of eminent domain; right-of-way privileges; were allowed to finance through bonding, mortgages or special classes of stocks; could make connections within and outside the state with other railroads; received permission to build bridges; and acquired generous grants of land. But the rapid expansion of railroads and their growing influence raised many questions, and the people turned to their government for answers. Government was essentially the legislature, dominating the political scene not only from their constitutional powers but also because governors were reluctant or unable to exercise their powers.

The newly formed Republican Party controlled the legislature during the era of railroad construction, starting with the election of Governor James W. Grimes, and solidified its position in the national elections of 1856. Among the issues endorsed, one emphasized support of the promoters and builders of railroads—a wise political move at that time. Sparks refers to Iowa as “a perfect illustration of the special place railroad builders and promoters usually achieved in frontier communities.”<sup>28</sup> Democrats and Whigs had long recognized the attitudes of the people toward encouragement for railroads, but the opposition of their national leadership to the northern

railroads gave the Republicans the opportunity to champion railroad progress. The Republican successes of the late 1850s seemed to come partly from their exploitation of railroad enthusiasm.

Two of the early problems faced by the legislature related to land grants and railroad taxes. A corollary was that of rates, rate control and railroad liability. On these questions there were conflicting opinions between the eastern and western sections of the state, since the pattern of building had resulted in an uneven development between the two areas. The settled eastern counties had urged the state to bring the railroads to Iowa, to aid in their further development and led the movement for action on railroad matters. Geographic rather than political or economic factors were the predominant influences in settling the controversies between the older and newer settled sections. Compromise was necessary and formed the beginning of a legal framework within which the people and railroads could live and prosper.

Title to the land grants was given the states, and decisions had to be made as to how the maximum results could be obtained from the railroads so favored. These decisions, in turn, were complicated by disagreements relative to the responsibilities of the state. Could the legislature hold the railroads to strict compliance for maximum construction, or should they accept substantial compliance to encourage construction? Should the railroads be forced to settle conflicting claims of land holders? Could routes be controlled and roads forced to build on the lands granted? Then there was the question of taxation—how to balance the eastern demand for “fair share” payments against the western desire to encourage building. What basis would be used for tax assessment—income or property? Who would make the assessment, the state or local communities? Concurrent were questions of railroad liability for livestock injured or killed along the right-of-way and for the safety of employees, persons and property. Rate control became a dominant and violent issue as a result of discriminatory practices. The response of the state to these questions involved different

<sup>28</sup> David S. Sparks, “Iowa Republicans and the Railroads,” *Iowa Journal* 53 (July 1955): p. 275.

attitudes, interests and concerns. One centered on the sectional conflicts; another on the position of the governors, many of whom were sympathetic to the railroads. A third was the influence of railroad lobbyists on the legislature; and finally there were the courts which formulated the legal structure of railroad operations by reviewing legislation and initiating support or constraints.

In the years following the original act, Congress increased land grants to Iowa several times. These had different conditions than those of previous years in that they specified that 10 miles instead of 20 would be the unit of construction for certification, and required that only 20 miles be built annually for 10 years. After 10 years, the unclaimed land would revert to the state, which then had five years to convince another railroad to complete the line. Ralston observed that "one must eventually conclude that the state earned the maximum results from the land grants. Although the companies received all the leeway needed in difficult circumstances, they had to build as required. The state gained well-built, busy and prosperous railroads; no streaks of rust across the prairies resulted from the land grants. The state government deserves no small credit for the management of the grants."<sup>29</sup>

The Ninth General Assembly in 1862 imposed a tax on railroads of "one percentum on gross receipts," while real and personal property were to be taxed locally. One-half was to be apportioned among counties through which the roads ran, in proportion to the miles of main track in each county. In 1868, the system was revised to enable townships, incorporated towns and cities to aid construction by levying a tax, collected by the state treasurer—not to exceed five percent of the assessed value of property when sanctioned by popular vote. The amount had to be expended in the township or one contiguous to it after an equal amount was matched by the railroads. The roads had to report not only their gross receipts but also the mileage in each county, and the one percent of gross receipts was retained. Again, in 1879, the system was changed to one percent of receipts of \$3,000 per mile, two percent on receipts of \$3,000 to \$6,000 per mile, and three percent on receipts over \$6,000. Instead of one-half, the new law provided that four-fifths of the tax should be apportioned among the counties. Taxation of real and personal property was left to local authorities.

Geography again determined positions pro and con on these tax measures. The fight to tax and regulate

freight rates further illustrates the conflict between Eastern businesses and interior rural communities. The river towns vigorously supported bills to regulate rates and just as vigorously opposed revision of the tax system. Under existing laws, towns on the river with large concentrations of railroad property could tax through local assessments. Opponents favoring tax revision sought to convince rural areas that by having the state control the assessment, the tax burdens would be equalized. Farmers, they charged, were paying the heavy taxes levied by cities through higher freight rates.

Under a bill passed by the 14th General Assembly in 1872, the Census Board, consisting of the Governor, State Treasurer, State Auditor and Secretary of State would assess railroad property. Exempted were lots, lands and other real estate not used in operations. The board required reports on the number of miles operated, amount of property in each county, numbers of rolling stock and gross earnings in the state. The data would be the base for assessment and prorating per mile of track. Taxes would then be collected from the railroads on the number of miles within the county.

Criticism of the new law was not long in coming and centered on the low level of taxes which resulted. Both Governor Merrill, in his last message to the legislature, and Governor Carpenter, in his inaugural address, agreed that the railroads should pay higher taxes but disagreed on the proper method of assessment. Carpenter stated that the railroads should not be assessed on the same basis as private property. While the State Constitution called for equal taxation, he argued that if railroads were equally assessed, a few townships in each county would receive all local taxes, and a few towns in the state, all taxes on rolling stock and other property. He further pointed out that the "value of a railroad was not in its right-of-way, embankments, masonry, bridges, ties, iron and machinery, locomotives, cars, buildings, etc., but in the essential franchise which was based upon dividends," and it was "very nearly impractical" to use the same assessment for railroads as for other

<sup>29</sup> Leonard F. Ralston, "Railroads and the Government of Iowa, 1850-1872," Ph.D. diss., University of Iowa, 1960, p. 249.

property. Merrill had stated that a great disparity existed between the taxes paid by railroads and those by the people, with the latter paying five times more. Despite criticism that Carpenter's position was in opposition to the Republican Party's platform which called for equal taxation and taxes based upon income, he signed the 1872 bill without comment, and a new basis was established for railroad taxation.

The legislation in 1868 which granted additional lands incorporated the following clause: "Provided said railroad company, accepting the provisions of the act shall at all times be subject to such rules, regulations and rates of tariff for the transportation of freight and passengers as may from time to time be enacted and provided for by the General Assembly of the State of Iowa, and further subject to the conditions, limitations, restrictions and provisions contained in the Act, and the Act of Congress granting such lands to the State of Iowa."<sup>30</sup> Actually, such reservations were in every bill distributing or redistributing such lands. Strictly interpreted, the railroad's acceptance of land grants could have the effect of establishing the principle of regulation through contract between the company and the state. The question, therefore, was whether or not the railroads would lose protection against regulation under provisions of the decision in the *Dartmouth College* case in 1819, which stated that charters were contracts between the state and corporation and could not be amended without consent of both parties.<sup>31</sup> However, the railroads apparently viewed the immediate value of the lands to be much greater than any disadvantages that might occur from possible future regulation.

Other legislation required that each company report under oath to the legislature the amount expended in construction, equipment, depots and other buildings, the length of road, average width of grade and number of ties laid per mile. In September of each year, they were to post passenger fares and freight rates at their stations. Proper safeguards were to be provided for cattle crossing from fenced lands when the railroad passed through such properties, and safe crossings were mandatory at road and highway intersections. If a railroad failed to fence both sides against livestock running at large, they were liable to the owners for injury or death. To recover damages, the owners needed only to prove the injury or death, and if the railroad refused or neglected to pay within 30 days, it became liable for double the value of the property destroyed. Equally, the railroads were responsible for damages sustained by any person or

employee.

Injury and death among employees was a matter of deep concern. Men switching or coupling cars by the link and pin technique often lost fingers, arms or their lives, crushed between cars or while twisting the hand brakes. George Westinghouse had patented the air brake in 1869, and Eli Hamilton Janney, the automatic coupler in 1868, but the railroads were slow to adopt the devices. Lorenzo Coffin, a chaplain during the war, who operated the Willow Eye Farm near Fort Dodge, attempted through the press to persuade the railroads to stop "the needless slaughter of workmen" which in 1881 numbered 30,000 employees killed or maimed in coupling or hand brake accidents. His was a lonely crusade, writing thousands of letters to groups for assistance in his campaign and visiting conventions of railroad officials and equipment manufacturers where he accused the roads of murder. The Master Car Builders finally tested the devices in the late 1880s. Coffin, at the age of 60, was one of the first Iowa railroad commissioners and drafted the first safety appliance law written, requiring all trains operating in the state to be equipped with automatic couplers and air brakes. The railroads promptly disregarded the law. However, his efforts prevailed through a congressional act signed by President Harrison in 1893.

### Growing Anti-Railroad Sentiment

It seemed inevitable that the railroads would be regulated as time passed. Through the period from 1850 to 1870, the public assumed that building numerous railroads would assure competition to guarantee fair and equal treatment and reasonable rates. Therefore, attention was centered primarily upon their construction rather than on any form of regulation, but by the early 1870s, the evils of unregulated competition began to appear. The belief that a state could control its corporations antedated Iowa's statehood. The principle was incorporated into the Constitutions of 1844 and 1846 and, although modified to satisfy Whig principles, retained the

<sup>30</sup> Benjamin Gue, *History of Iowa*, Vol. III, New York: Century History Co., 1903, p. 25.

<sup>31</sup> *Williams v. Peyton's*, 14 U.S. (4 Wheat.) 219 (1819).

theory of state supremacy over corporations that the state had created. A specific statement to this effect was contained in the Constitution of 1857 and in the Articles of Incorporation. Proponents of regulation, therefore, had a basis for their arguments when economic conditions in the post-Civil War years brought growing sentiment for railroad control, including the central issue of rates and rate relationships between commodities and communities.

All attempts to regulate were fought by the railroads who insisted that unlike other industries, they required huge injections of capital and control legislation would frighten investors and endanger the enterprise. Further, they argued that railroads had great value to the state, which no one disputed; that the "only reasonable explanation for restriction would be the hostility, malice, ignorance, cupidity or downright stupidity of legislators."<sup>32</sup>

Governors, though limited in power by the Constitution, were frequently embraced as allies by railroad interests. The only absolute power held by them was in certification of lands following completion of construction, and this power was later made subject to legislative approval. Governor Ralph Lowe, answering a request of Platt Smith of the D&P, was the only one to actively support state aid for the railroads despite the Constitutional prohibition, but opposition of the Republican Party killed the idea and was said to be partly responsible for his defeat for a second term.

It was to the General Assembly that the railroads turned in times of financial difficulties, made suggestions on taxation issues, and used the body as a primary target in attempts to hold off the increasing hostile positions which appeared to be growing in direct proportion to the rising pressures for regulatory action. Ralston commented that "those who concerned themselves with the legislature frequently expressed themselves on the subject, rarely in complimentary terms." A sample of correspondence he reviewed in his study of railroad interests in Iowa revealed Grenville Dodge's claim that the 1856 House had "not one smart man in it." David W. Kilbourne and Hugh Reid of the Des Moines Valley characterized the 1864 Legislature as "one with too many ministers and lawyers who wasted their time in oratory," and the 1866 body as very radical, introducing "all kinds of abominable anti-railroad bills." Charles Perkins was quoted as thinking that too many dishonest men were elected; too many "who understood very little about what real prosperity their

constituents depend upon." Henry Farnham criticized as hostile legislation the act which required railroads to build fences along their rights-of-way and award damages to owners of livestock killed or injured.<sup>33</sup>

The necessity to control the legislature resulted in the organization of the railroad lobby, and their representatives worked diligently to influence legislation as anti-railroad sentiment mounted. They played the western areas without railroads against the eastern railroad-developed counties, approached the "proper persons" to campaign for election, and distributed passes to members of both Houses and other prominent supporters, a practice quite common by 1868. Despite their persuasive efforts, however, railroad interests were never able to halt the growing demand for regulation, and the legislature, never captured, eventually responded.

Hardly had the agitation over the taxation bill subsided when a new bill concerning freight rates was introduced and revived the river town-rural interior conflict. River interests supported it and rural areas without transportation were in opposition. Maximum rate legislation passed both Houses after lengthy debates, but the Senate added an amendment providing for a Railroad Commission. Conference committees could not agree on the amendment and the bill failed, to the delight of the railroads and disappointment of eastern businesses.

There have been two interpretations by students of early railroad history as to the sources and support for control of freight rates. One suggests that it stemmed from the agricultural depression after the War, when prices fell and rates held steady. Others supported the thesis that controlling rates originated with the Eastern business groups who wished to eliminate the preference given to markets outside the state. The interstate rates they could not control, so to retain their competitive positions, they proposed schedules of maximum rates within the state. Some authorities agreed that regulation should set an upper limit on rates but disagreed as to the purpose, arguing in one case that railroads would be forced to equalize

<sup>32</sup> Leonard F. Ralston, "Railroad Interests in Early Iowa," *Annals of Iowa* 41 (winter 1973): p. 1136.

<sup>33</sup> Ralston, p. 1139.

rates and thus prevent discrimination against the river towns; another that such a move would lower rates to the benefit of all interests. But the positions of the river businesses and those of the agricultural communities, which numbered the largest percentage of the state's population in the early 1870s, did not necessarily coincide, and until rate control measures could serve the state without favoring one side or the other, they had little chance of legislative support.

### Summary

Iowa's exuberance and eagerness for easily accessible transportation formed a broad stage for the dramatic era of railroad construction. In the 1850s and 1860s, of the factors influencing the state's growth, railroads were the most prominent. Assisted by local, state, federal and foreign sources of capital, they fed the economic base with huge expenditures on materials and manpower and through taxes on gross receipts and property, encouraged the migration of settlers, and had a direct bearing on the organization and location of cities and towns and an important impact upon land values. They brought quick, dependable transportation and offered the prospect of relatively prosperous conditions to pioneers, farmers and industrialists by expanding markets and moving freight and passengers at relatively low costs.

Within the state, new and different trade routes were established. Traffic was diverted from water-oriented patterns to more direct and economical land transportation, and the railroad network placed communities a few miles from their stations. Beyond its borders, railroads linked commercial centers on east-west transcontinental routes and served cities north and south of the state, thereby thrusting Iowa into a key strategic position in the railroad structure. Equally important in the construction era were the attitudes of the political parties, governors, the public and legislature, as well as railroad reactions to issues debated on the proper courses of action needed to establish some semblance of order in the mad rush of building, and conflicting opinions regarding their operations and control.

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