# TRANSPORTATION

#### RAILROADS

## THE CHICAGO & NORTH WESTERN RAILWAY

At the time of the acquisition of the original acreage for the campus there was no railroad crossing the prairie land, nor did the sound of a steam engine or train whistle come to the ears of the men building the Farm House or the barns in 1860.

It was 1865 when the Cedar Rapids and Missouri River Railroad was built between Nevada and Boone. It had reached Nevada from the east in 1864 and was completed to Council Bluffs by the end of 1866. In 1862 the entire line had been leased to the predecessor of the Chicago & North Western Railway Company, and under a new lease in 1865 to the latter company, until its purchase of the line in 1884.(1)

During construction of the railroad, "an opening for the accommodation of the farm was put in on the bottom high and wide enough for a load of hay to pass through." (2) This is the underpass at today's Haber Road. In 1882 arrangements were made to have the railroad install a switch and spur track to serve the college needs, especially for delivery of coal and building materials.

Land to provide for another track, parallel to and on the north side of the original, was deeded to the railroad in 1900 and the second line was constructed across the campus that year.(3)

Underpasses are discussed with "Roads" rather than under this heading.

# AMES and COLLEGE RAILWAY ("THE DINKEY")

The earliest known reference to a rail line between the college and Ames is in the first issue of the <u>IAC Student</u>, August 7, 1890, where it is reported:

The Junior Civils are at work in laying out a railroad to Ames. There has been much speculation upon the advisability of putting in a motor line between the college and town. The first cost,

<sup>(1)</sup> Yesterday and Today. A History of the Chicago & North Western Railway System 1910.

<sup>(2)</sup> Minutes March 23-24, 1865

<sup>(3)</sup> Minutes July 17-20, 1900 and IAC Student, Oct. 22, 1900

it is true would be rather great, but think of the advantages of a rapid transit line. We believe if such a line was constructed and properly managed, that the attendance of the college could be easily doubled, provided, that students were given the option of rooming in Ames or at the College. Again, this would result in more friendly relations between the people of the city and school; under the present system, they know little and care less for college matters, because they know but little about them. Three hundred students boarding in town would change all this. It would change Ames into one of the most enthusiastic college towns in the west, and we would no longer be regarded as the inmates of some charitable institution.

During the fall of 1890 various proposals for a rail line were made. The October issue of The Aurora records one for an electric line:

C.D. Davidson and J.A. Bramhall of the senior class in mechanical engineering, in working up their theses, the subject being an electrical railroad between Ames and the college, have succeeded in working up, also, sufficient interest in the matter so that a company has been incorporated to build the road. A representative of the Edison company, B.M. Barr & Co., of Chicago, has been out to look over the ground. He pronounces the line run to establish the grade an excellent one for an electric motor. Judge Stevens, of Ames, Whitaker and Jordan, of Boone, furnished the enterprise and capital. It is a noteworthy fact that they are all I.A.C. men.

The October 2, 1890, issue of the IAC Student also reports:

The rapid transit line is to be a reality. Since our last issue a company has been incorporated to put it in. The company is composed of the best business men of Ames and Boone. This one thing alone will do more to advance the interests of the college, as well as Ames, than \$10,000 spent in advertising, or the erecting of a dozen college buildings. When this line is completed the college will be in communication with the world at large, and the people all over the state will know that there is such a place as the I.A.C. Truly we are entering an era of increasing prosperity.

The first recorded action, on a rail line, by the Board of Trustees appears in the minutes of its meeting of November 12-14, 1890, when a proposal for a horse car railway was submitted by the Ames Railway Co. The proposal was rejected because the Board committee to whom the matter was referred felt that a better solution was possible.

In January 1891 the Trustees entered into a formal agreement for construction of the railroad. The terms of that agreement are of sufficient interest to justify their inclusion here.

# Report on Ames Street Ry. Co.

Be it resolved by the Board of Trustees of the Iowa Agricultural College and Farm that there is hereby granted to the Ames Street Railway Company their successors and Assigns right of way not exceeding fifty feet wide across the College grounds from the East line of the College Farm owned by said Agricultural College to the machine shops on said Farm for Railway purposes. Said strip to be twenty five feet wide on each side of the centre of the rail-way track to be built by said Company said road to be built substantially in conformity with the survey and plat made by Bramhall and Davidson in the year 1890, and that the several requests and privileges asked by said Ames Street Railway Company contained in the eight (8) propositions hereto annexed and made a part of this concession be granted subject to the following modifications.

- 1°. That said right of way hereby granted shall not at any point upon the ornamental grounds or through the stock yards of the Farm be wider than actually necessary for road-bed, berm ditches necessary siding platform Y and turn table.
- 2°. That after said road is fenced by the College the said railway Company shall maintain keep in repair and renew said fences as may be required from time to time. That said Railway Company shall construct and maintain all needed crossings over said road and protect the same by proper cattle guards and shall also provide where needed suitable undercrossings.
- 3°. That said College shall not be liable for any damage to the property of said Company or any other persons who may patronize said road.
- 4°. That nothing in this contract shall be construed to prevent any department of the College from doing its own necessary hauling to or from the College to Ames or elsewhere. It being only intended to grant to said Railway Company the franchise as common carrier between Ames and the College reserving to the College the right to do such part of its own hauling as convenience or necessity may require.
- $5^{\circ}$ . That no unnecessary cuts or fills or accumulation of dirt shall be permitted upon the ornamental grounds and all such cuts, fills or removal of dirt shall be made under the supervision of the Committee of Public grounds or some person to be designated by the Board.

# Eight Propositions of Said Company

- 1°. The Ames Street Railway Company request the Board of Trustees of the Iowa Agricultural College to grant said Company the right of way over a strip of land for railway purposes from some point on or near the Machine shops on the college grounds substantially in accordance with the survey made by Bramhall and Davidson to the East side of said farm including also grounds for a turn table switches side tracks and borrowing pit.
- $2^{\circ}$ . We ask said Board of Trustees to fence said ground so granted wherever the same passes over or through any cultivated field or pasture land and to keep fence and gates if any in proper repair.
- 3°. To erect suitable platforms for the accommodation of passengers and such stations on the College grounds as will accommodate the traffic and such facilities as the board may require for loading stock or freight.
- 4°. We also ask an agreement from the said Board not to allow or permit the Collège authorities to run or operate any teams or trains or other conveyances for the carrying of freight, the same to be used as common carriers of passengers or freight between Ames and the College Grounds.
- $5^{\circ}$ . We ask the Board to relinquish the carrying of mail and express and to contract with the said Company for carrying the same.
- 6°. To at all times give said Company the preference in conveying of all freight merchandise and other articles between said College grounds and Ames but not at a higher rate than could be contracted for with any common carrier or teamster provided said rates shall include terminal charges for loading and unloading.
- 7°. In consideration of the granting of the privileges rights and requests above mentioned the said Ames Street Railway Company hereby agrees to construct and have in operation a standard gauge railway to be operated by a steam motor or other improved motive power as may be hereafter determined—animal power is hereby expressly prohibited said railway to be completed and in operation on or before November 1, A.D. 1892.
- 8°. That during the time the said College is in regular session and during the day time thereof said Company shall make hourly round trips between the College and Ames and during vacations such trips as will accommodate the needs of the College. That the passenger fare shall not exceed five cents for each person

one way over said road. That said Company will provide comfortable and suitable passenger cars for the transportation of passengers between said College and Ames.

Construction started the following April (1891) and by August the Ames and College Railway was in service. The route from the east was on a line just south of what is today the Power and Heating Plant, and a little north of the Farm House; then in a west south west direction across the open campus to a point between Morrill Hall and Old Main where it went straight west to about where Marston Hall stands now, thence on a large curve to the south to terminate just west of the old Workshop. The depot (see The Hub) was built in 1892 on the south side of the track, north of Old Main and southwest of Morrill Hall.

In one twenty-four hour period in November 1892 the railroad carried over a thousand passengers.(1) Operation was not without problems. Snow frequently delayed or stopped the running of the motor during the winter; derailments often occurred; on some occasions the tracks were damaged by flood water.

Complaints by the students about the rail service are voiced from time to time in the student paper. Typical is the editorial in the January 27, 1904, copy of the <u>ISC Student</u>:

Every student of the last decade has cheerfully, or otherwise, parted with his cherished nickels for the privilege of riding in a dirty tram car which follows in the wake of an engine which beggars description.

On March 5, 1904 the editor of the student paper wrote:

In our last issue we mentioned an accident on the motor line in a sort of joking manner, but there is really a serious side to this question. These numerous little accidents are only the forerunners of something that may be more than funny. The present motor track is constructed of about the smallest rails that could possibly be obtained, and yet, the regular, heavily loaded freight cars are run over it continually till it is a great wonder that the track is not always breaking. And run over in your mind the list of rolling stock upon this wonderful railroad. Two locomotives that are in themselves the most wonderful relics of antiquity, and three cars that would not be used for anything but junk carriers upon a decent street car line; place these upon mere ribbons of steel laid upon a roadbed that has more jogs in it than the road to success, and you have the entire equipment of a road that is listed as the best paying railroad in the United States....

<sup>(1)</sup> The Aurora Nov. 1892

Other problems were of even more concern to the Board of Trustees, principally the threat of fire from the sparks from the engine's smokestack. Smoke and soot were also problems as were maintenance of fences and control of weeds along the right-of-way. By the fall of 1905 these various complaints had created sufficient aggravation to prompt the Board to consider changing the route and having the owners convert to electric power for the line.(1)

In February of 1906 The ISC Student reported that the Ames & College Railway had been sold to the Newton & North Western. The first of May the line became part of the Des Moines, Fort Dodge & Southern Railroad Co.(2)

The Dinkey made its final trip in early September, 1907, when it was replaced by an electric line, on a new route through the campus. (3)

# THE INTERURBAN

The Fort Dodge, Des Moines and Southern Railway was granted a right-of-way across the campus by act of the Legislature in 1906.(4) The terms of the agreement were approved at the Board meeting of June 27, 1906. The agreement provided for the "main line" between Ames and Des Moines as well as for a new route to serve the Ames and College line.

The main line extended southwest from the Power Plant along what is now Union Drive between Wallace Road and Knoll Road, and continued on to cross Boone Street (now Lincoln Way) at Lynn Avenue, thence south along a line between Welch and Stanton Avenues on past the east side of today's Tower Residence Halls and along the east boundary of the Dairy Farm.

The campus line was changed from the route of the "Dinkey" south of Botany and Morrill Halls by having it turn north just north of the Farm House and thence west along what is now Osborn Drive until it turned south to terminate at West Street on Sheldon Avenue, where a

<sup>(1)</sup> Minutes Sept. 29, 1905

<sup>(2)</sup> ISC Student, May 5, 1906

<sup>(3)</sup> ISC Student Sept. 9, 1907

<sup>(4)</sup> Biennial Report 1905-06

platform served passengers. Central Station was built in 1908 on the south side of Osborn across the street from where Gilman Hall stands today. Another platform was constructed on the curve northwest of the Farm House, providing a third loading point for the campus. A platform was also provided on the main line south of the Dairy Building (East Hall now).(1)

The new lines were electrically operated and eliminated the old problems created by sparks, soot and smoke. The line between Ames and Des Moines began service on July first 1907, and the college line started operation in September.(2)

The interurban came in for its share of criticism by the students. The reason was explained in an <u>ISC Student</u> editorial on February 10, 1908:

The great trouble was that the cars did not run on time and passengers had to wait nearly every time they went down town or came out to the college. The second difficulty was that the service was inadequate to accommodate the number of passengers at certain hours.

Again, on April 12, 1909, the editor complained:

The Ames students and townspeople all winter have tried to swallow the poor accommodations offered by the college branch of the Ft. Dodge, Des Moines and Southern electric railway, without giving publicity to their sentiments. Some times the cars are on time, and sometimes not. If waiting at the West Gate or Farm Stations, we stood under the corrugated iron roofing, so the cold raw northwest wind could get a strong sweep through our clothing and over the goose flesh. If fortunate enough to have to wait at the Central Station, we danced and kicked about, trying to forget there was no heat in the building, and we said we didn't need lights anyhow. Last Saturday morning, however, was capped the climax, which legalizes the student body to land on the company with both feet, and ten finger nails. west bound college car met an unloaded baggage car at the Farm Station. Mr. college-car conductor says "Your're imposing on our regular schedule, give us the right of way." Mr. Baggage conductor answers "There's a switch right behind you. Back onto it and let us pass." Both conductors waited there for halfan-hour, while passengers with important business suffered the consequences. How long will we submit to the pigheaded stub-

<sup>(1) 1909</sup> campus map

<sup>(2)</sup> ISC Student, Sept. 2 and 9, 1907

born tyranny of the man in the baggage car?

A change in the interurban approach from Ames was made in the summer of 1914. This new route eliminated the two sharp curves north of the Farm House and brought the track north of the Power Plant on a line to reach the Osborn Drive section with gradual curves, allowing large engines access to the Transportation Building (now Engineering Research Institute), by means of a spur from the west segment of the Osborn Drive run.(1) Various switches and spurs were installed from time to time as needed for specific college building operations.

In 1915 discussions began regarding the extension of the campus line to serve the residents south of Lincoln Way. The track was built to run south on Sheldon from West Street to Knapp, then east on Knapp to the intersection with the main line (Ames to Des Moines) and north on it back to the campus and on into Ames. It was put into operation in October 1916.(2)

From the time the original Ames to College line had been started the one-way fare had been five cents. In 1920 the railway requested approval of an increase to eight cents or sixteen tickets for a dollar.(3) That request was referred to a committee whose action is not recorded. However, in the Minutes for the meeting of the Board on May 6, 1927, when an increase to ten cents was asked for, it was said that "some years ago....this was raised to a seven cent fare."

A sharp drop in patronage of the line was reported, due primarily to the competition of bus service between downtown Ames and the campustown area, in March 1921.(4)

The combination of bus use and of more private automobile use resulted in continuing reduction of the street car patronage in the decade of the twenties. In the summer of 1928 the tracks south of Lincoln Way, on Sheldon Avenue and Knapp Street, were removed, but service was continued to the campus area. (5) By 1930 the electric line service was discontinued and the tracks across the campus, except those serving the Physical Plant, were removed. (6)

<sup>(1)</sup> Iowa State Student, Sept. 13, 1914

<sup>(2)</sup> Iowa State Student, Oct. 17, 1916

<sup>(3)</sup> Minutes Sept. 15, 1920

<sup>(4)</sup> Iowa State Student, May 23, 1921

<sup>(5)</sup> Minutes, July 6, 16 and Oct. 9, 1928

<sup>(6)</sup> Minutes, April 15 and Oct. 16-17, 1930

The tracks along Union Drive, part of the original main line, were removed in late 1965 and 1966.(1)

The automobile and the bus had become the dominant forms of transportation and the railroad era had come to an end.

<sup>(1)</sup> Iowa State Daily Oct. 29, 1965 and June 29, 1966

#### BUS

Very little has been learned about the early bus operation between the college and Ames. The vehicle was, of course, horse drawn, but beyond that a description is not to be found. The first reference to it, extremely short, appeared in the August 1874 Aurora:

Here at last! The new College bus.

In the April 1878 edition of the paper we learn that

It would be hard to tell how we could get along without our tri-daily bus between the College and Ames.

By September of 1880 service seems to have been even better:

Besides the regular mail carrier two busses each make three regular trips daily.

In the cyclone of April 8, 1882, as reported in the  $\underline{\text{Aurora}}$  the bus was one of the victims as the winds

....blew the top and body of the bus which was within 50 rods of the college over into the evergreens together with its passengers numbering not less than 10 or 12, among whome were Mrs. Prof. Bessey receiving slight injuries in the face, and Mr. Connell having three of his ribs broken and sustaining other internal injuries which have left him in a very critical condition.

Funds to operate the bus at a rate of \$1.50 per day were provided in 1882 and 1883 for two trips a day during the winter vacation period. In 1889 an appropriation of \$225 was made "to supply bus service for the College during the coming year."(1) On June 17, 1891, the <u>IAC Student</u> recorded that

The bus is on the retired list.

No more is heard about it after that date and the following year the "Dinkey" was in operation to provide transportation.

A jitney service was proposed in April 1915 but there is no evidence that it was put into operation.

Motor bus service between Ames and campustown was initiated in March or April 1921. This service had a drastic effect on the use of the

<sup>(1)</sup> Minutes Nov. 11-15, 1889

interurban line whose ridership dropped rapidly. Three new buses were added in 1925 and at that time the fare was seven cents, the same as for the street cars. When that service was discontinued has not been determined.

In the early 1970's bus service during the winter months was initiated from the Towers Residence Halls to campus and from University Village to campus. The latter route was subsequently extended to serve Schilletter Village as well. That bus system resumes in the late fall of each year.

### BICYCLES

"A good bicycle path to the town" was listed as a need by the editor of the <u>ISC Student</u> on March 13, 1900, and in September of that year the paper reported:

Bicycle racks have been provided for wheels left at Ag. Hall. It would be a pleasing surprise to find racks at each of the principal buildings about the grounds.

Bicycles were first seen as a problem on the campus when on October 2, 1911, the ISC Student editor wrote:

Campus authorities invite us to stay on the walks and then proceed to make life miserable for us by allowing them to be overrun with bicycles. Those cyclists who take to the walks are evidently well meaning and ordinarily the practice is not so very objectionable. But since school started the number of these two wheeled craft has multiplied so rapidly that the thing has become a nuisance....last week four accidents occurred....

A year later the paper objected to bicycles -- and motorcycles -- using the cinder path to Ames and stated that walk should be limited to pedestrian use. Bicycle racks were asked for in an editorial in the <u>Iowa State Daily Student</u> on October 3, 1942. The same editorial requested ramps at street curbs. Twenty years later the paper noted that new racks had been installed in front of the Library, East Hall and the Agronomy Hall. Thirty more racks were placed in 1966. Special bicycle paths have been built from Wallace Road east along the south side of 6th Street to Hazel Avenue in Ames, from Hawthorn Court to Brookside Park, along the south side of 13th Street from Stange Road to Ridgewood, and from the south end of University Village to 16th Street and Ridgewood Avenue.

In 1979 even more bicycles than before are in use, due, in part, to the gasoline shortage and its higher cost. Many additional bicycle racks have been installed.

#### TRAFFIC and PARKING

The first recognition of motorized traffic problems seems to have come in 1913.

On September 30 the ISC Student said:

Minor accidents due to careless driving of automobiles and motorcycles are constantly occurring about the campus, and narrow escapes are frequently reported. It is becoming more and more unsafe to cross the street. If the speed maniacs and careless drivers do not discontinue reckless driving on the campus some more serious accidents will result.

In December of the same year the Board ordered

that a speed limit of ten miles per hour be put into effect on the campus roads, and the Superintendent of Grounds is authorized and instructed to put up signs to this effect.

Motor busses were banned from campus drives by action of the Board in June 1921. "Development of space for parking automobiles" was among several improvements for which funds were allocated by the Board in Dec. 1923.

In 1925 new parking space was prepared west of the Post Office (the Hub).

President Hughes, in the March 29, 1928, edition of the <u>Iowa State</u> Student, wrote:

Owing to the fact that Iowa State has extremely large parking areas available, it has been possible to permit the students to use cars, provided they park them on one of the parking areas and do not drive them over the campus from building to building between classes. In general, the students have cooperated in an effective way and on the whole we are getting along pretty well in spite of the fact that we have between 300 and 350 student automobiles on and about the campus at different times during the year. .... We will greatly appreciate the cooperation of the students and the faculty in making it possible to keep the college drives open to automobiles.

A traffic count in June 1928 showed that 1265 cars crossed the sidewalk just south of the Library in one day. That was across an access drive to reach the central parking lot from Morrill Road at that time.

Student operated cars were increasing in number. The <u>lowa State</u> <u>Student</u>, on February 16, 1929, reported that there were 460 registered in the fall of 1928. In the fall of 1929 students were required

to display Iowa State license tags for the first time. Those were cardinal and gold plates.

During the early 1930's more parking lots were built and various regulatory steps were taken. Numerous stop signs were installed at intersections and crossings.

The 20-year plan for the campus developed in 1935 included the elimination of Morrill Road and other changes to improve pedestrian safety on the campus.

Additional development of parking lots increased the total parking capacity to between 1200 and 1500 cars by May 1938.(1)

New traffic regulations in the fall of 1938 called for all student vehicles to be inspected and proof of liability insurance presented before the car could be registered, and for the first time a registration fee (\$1.00) was charged.

Morrill and Knoll Roads, north of Union Drive, became one way streets in the spring of 1946.

In September 1947 it was reported that "2000 vehicles found their way to the campus the first week of school."(2) By 1955 it was noted that

More than 5,000 cars on the campus with only approximately 2,000 parking spaces available creates one of the biggest problems facing Iowa State College personnel.(3)

Until 1958 parking lots were cinder or gravel surfaced, or in some lots only dirt. The central parking lot west of the Hub was hard surfaced that year, using funds collected from parking fees. Additional lots were built in the fifties thru seventies, and older lots were black-topped.

The fall of 1961 saw 2625 staff cars and 5073 student vehicles on the campus.

A new concept was introduced in 1972 to reduce traffic in the central campus area. Morrill and Knoll Roads, north of Union Drive, Osborn

<sup>(1)</sup> Daily Iowa State Student, May 12, 1938

<sup>(2)</sup> Iowa State Daily, September 24, 1947

<sup>(3)</sup> Iowa State Daily, March 10, 1955

Drive and parts of Union Drive were closed to vehicular access by the installation of gates. Access to those routes was then limited to service vehicles, some delivery trucks and to police and fire equipment during daytime weekday hours. That system continues in force and has been helpful in reducing accidents and in improving pedestrian conditions for the campus.

Automobile parking space continues to be less than the demand for it, and is especially lacking in readily available space for visitors to the campus.