GREAT NORTHERN RAILWAY
CONDENSED HISTORY

Public Relations Department
Great Northern Railway
St. Paul 1, Minnesota
On the afternoon of June 28, 1862, a colorful little locomotive named the WILLIAM CROOKS chuffed out of St. Paul, a pioneer town on the banks of the Mississippi, and headed across the prairie to the Village of St. Anthony.

It was an impromptu but festive occasion. The two passenger cars pulled by the WILLIAM CROOKS had arrived by steamer just that morning, but they were quickly filled with excited passengers, and the departure was marked with cheers and a great waving of hats.

Second Century of Service

On June 28, 1962, in fitting commemoration of its Centennial of service, the Great Northern presented the WILLIAM CROOKS to the Minnesota Historical Society. The colorful engine may be seen on exhibit in the St. Paul Union Depot.
The Great Northern Railway serves a vast, diversified and productive region comprising the Upper Midwest and the Northwest.

On a system 8,270 miles in length, its trains carry freight, passengers, mail and express in the area between the Great Lakes and the Pacific Ocean. The railway operates in Wisconsin, Minnesota, North Dakota, Montana, South Dakota, Iowa, Idaho, Washington, Oregon and California, and in the Canadian provinces of Manitoba and British Columbia.

Principal main lines extend from the Twin Ports of Duluth, Minnesota, and Superior, Wisconsin, and the Twin Cities of St. Paul and Minneapolis, Minnesota, to Puget Sound on the Pacific Coast.

These lines serve the grain, potato, sugar beet and soy bean-growing areas of the Red River Valley, North Dakota; Montana and eastern Washington; the potato, Great Northern bean, pea and the vegetable-processing sections of the Columbia Basin; the cattle country of North Dakota and Montana, and the apple and soft fruit-processing districts of the Wenatchee River Valley in Washington.

The railway also serves the regions of oil and gas, lignite and salt deposits in North Dakota; the oil, copper, zinc and vermiculite deposits in Montana; the limestone, silica rock and sand, lead, zinc and magnesite deposits of Washington; the fish-packing industries of the Puget Sound country; the lumbering tracts there and in Montana; and the oil refineries, cement and aluminum-reduction plants, and the growing electro-chemical and hydro-electric industries of the Pacific Northwest.

Other main lines serve the Mesabi Iron Range in Minnesota, and the forests of South-central Oregon and northern California. The line serving southern Oregon and northern California is connected with the balance of Great Northern's system.
by trackage rights over lines of other companies, to form a north and south through route on the Pacific Coast and between the Northwest and California.

The Great Northern was founded by James J. Hill, known and remembered as "The Empire Builder." In 1912, upon retiring, he said: "Most men who have really lived have had, in some shape, their great adventure. This railway is mine."

Throughout his years of creating, encouraging and directing, Mr. Hill's creed was development of the resources of the region the railway served. He knew the railway could not prosper unless its territory prospered. That conception, that objective, has guided the Great Northern throughout its history.

Mr. Hill's "great adventure" began in 1856. Then 18 years of age, he left his birthplace, a farm carved from the forest by his parents near Rockwood, a settlement in eastern Ontario, Canada. He aspired to be a sea captain in Oriental commerce and headed for the Atlantic seaboard. Not finding a seafaring job, he started West to sign on a ship sailing to the Orient. En route he planned to visit a friend at Fort Garry, now Winnipeg, Manitoba.

The last ox-cart caravan of the season had left for the north before he arrived in July, 1856 at St. Paul, head of navigation on the Mississippi River. Mr. Hill had to find work for the winter and did, as shipping clerk in the office of a Mississippi River steamboat company. His career in transportation thus began.

The Minnesota legislature, eager for rail lines in its territory, granted charters as early as 1853 and issued one in 1857 to the Minnesota & Pacific Railroad Company. The latter provided for construction of a line from Stillwater, Minnesota, on the St. Croix River, to St. Paul, St. Anthony (now Minneapolis) and Breckenridge, and another by way of St. Cloud to St. Vincent on the Canadian border.

There were delays and difficulties. The St. Paul & Pacific Railroad Company acquired the Minnesota & Pacific's rights, completed the first ten miles of construction in Minnesota -- from St. Paul to St. Anthony, now Minneapolis -- and began regular operations on July 2, 1862.

Train equipment came up the Mississippi on barges. The pioneer wood-burning locomotive of the St. Paul & Pacific was named the William Crooks, after the
railway's chief engineer. In 1939 the William Crooks went to and returned from the New York World's Fair under its own power.

Mr. Hill watched and learned as rail expansion progressed slowly. In 1865 he entered the transportation field on his own account, to represent a steamboat line connecting with east-bound rails at lower Mississippi River points. A year later he was agent for the First Division of the St. Paul & Pacific. By 1870 he was in a partnership doing general business in wood, coal and commissions, and in another to operate a steamboat service on the Red River of the North.

Success here preceded acquisition in 1878 of the St. Paul & Pacific, and the First Division, St. Paul & Pacific. Mr. Hill interested three men in joining him. One was Norman W. Kittson; the others were George Stephen, president of the Bank of Montreal who became Lord Mount Stephen, and Donald A. Smith, chief commissioner of the Hudson's Bay Company, later to become Lord Strathcona. The latter two subsequently gained fame as pioneer railway builders in Canada.

The properties were reorganized in 1879 as the St. Paul, Minneapolis & Manitoba Railway Company. Settlers came. By 1881 the Manitoba company operated 695 miles of track. Rail reached west to Devils Lake, N. D. by 1885 and on some north and south branches. Colonization progressed and traffic grew. Montana was reached in 1887 to connect with other lines operating to the Pacific Northwest.

On September 18, 1889 the name of the old Minneapolis & St. Cloud Railroad Company was changed to Great Northern Railway Company. The latter, on February 1, 1890, took over properties of the St. Paul, Minneapolis & Manitoba Railway Company and when 1890 ended was operating 3,260 miles. The Minneapolis & St. Cloud charter, issued in 1856, had been purchased by the Hill group in 1881.

The Rocky Mountains loomed ahead, and beyond, the Pacific. John F. Stevens, a locating engineer, was engaged to determine an easy, low-altitude route over the Rocky Mountains. He found Marias Pass, at the headwaters of the Marias river in Montana. A bronze statue of the engineer as he appeared that wintry day in 1889 now
stands at Summit, Montana, 12 miles west of Glacier Park station, within a stone's throw of Great Northern's passing transcontinental trains. Summit, 5,213 feet above sea level, is the highest point on the railway's transcontinental line.

Construction of the Pacific Coast extension westward from near Havre, Montana began in 1890. The final spike was driven near Scenic, Washington, on January 6, 1893, completing the transcontinental project. By midsummer of 1893 Seattle and the East were linked by regular service.

Other development in the territory moved forward with main and branch line construction, for success of Mr. Hill's plans depended upon quick and sound colonization. He had to sell his country, to make good after the settler moved in. Only then would more settlers come.

Earlier Mr. Hill had sold and set up one of Minnesota's first threshing machines, handled the first shipment of Minnesota-grown wheat and from brown office paper cut a stencil for the label on the first barrel of Minnesota-milled flour. Now he advocated crop diversification, showed farmers how to improve methods. He imported purebred cattle from abroad and distributed them among the farmers. He laid his rails, then labored to create traffic for his trains.

Subsidies of large grants of land and cash had helped build earlier lines to the Pacific coast. Mr. Hill's venture was unique in that land grants or other government aids were neither sought nor given. Only government lands ever received by Mr. Hill's company were those attached to 600 miles of railway in Minnesota constructed by predecessor companies and acquired by purchase.

The rails' expansion cut into what proved to be the large iron ore deposits in Northern Minnesota. Increasing tonnages of ore were moved to the nation's iron and steel-producing centers. The Great Northern-owned and operated Allouez Docks at Superior, Wisconsin, are the world's largest iron ore docks. There the ore is loaded on Great Lakes vessels for shipment eastward.

Mileage exceeded 5,000 by 1901. An outlet to and from Chicago was needed. To provide this, Great Northern and the Northern Pacific Railway Company jointly acquired control of the Chicago, Burlington & Quincy Railroad in 1901.
Great Northern and the Northern Pacific in 1905 formed the Spokane, Portland & Seattle Railway Company, which built a line between Spokane and Portland. Subsequently, that company acquired various lines in Oregon by purchase, lease and building.

Utilizing trackage rights, Great Northern began operating trains between Seattle and Portland in 1910.

In 1912 completion of Great Northern's Surrey cutoff, between Fargo and Surrey, N. D., reduced the transcontinental route by 52 miles.

In 1907 Mr. Hill left the railway's presidency to become chairman of the board. He retired in 1912 from the chairmanship and active direction of the railroad system his genius had created.

On May 29, 1916 Mr. Hill died in St. Paul, the headquarters city of the strong railway he had founded and developed. Thus ended the life span which began with his birth on September 16, 1838 in a log house on the Canadian frontier.

Fame as a transportation genius and "Empire Builder" has largely eclipsed Mr. Hill's other noteworthy accomplishments. He helped build the Canadian Pacific. His addresses on economic topics are well worth reading in the light of later history. He became an authority on agriculture and livestock. Experimental farms and credit facilities for producers were established. Conservation of natural resources was advocated. Many character-building and educational institutions carry on now with the aid of his endowments.

World War I and federal control of the nation's rail lines preceded the 1920-1930 period of extensive improvements to Great Northern's facilities. About $160,000,000 was spent in the decade.

An easier crossing of the Cascade mountains in Western Washington was completed in 1929. This included construction of the Cascade tunnel, 7.79 miles in length and longest railway tunnel today in the Western Hemisphere; relocation of 43 miles of line, and electrification of 74 miles between Wenatchee and Skykomish, Washington. Maximum elevation in crossing the Cascades was reduced from 3,383 to 2,881 feet above sea level. Forty-three miles of steep and winding mountain
trackage was replaced by 34 miles of easier, faster, electrified line.

With the completion of a giant ventilation project for the Cascade tunnel in late summer of 1956, the era of electrified operation on Great Northern ended. At that time the 74 miles of main line and 21 miles of yards and sidings then electrified became fully dieselized.

The original line built in the Cascades in 1892 was carried over the summit on a series of switchbacks, with maximum elevation of 4,059 feet above sea level. In 1900 a tunnel 2.63 miles in length was completed, reducing summit elevation to 3,383 feet. This bore, electrified in 1909, was supplanted by the tunnel completed in 1929.

The Empire Builder, the top transcontinental passenger train of the line, began operating in daily service between Chicago and the Pacific Coast in 1929, soon after completion of the Cascade project. In 1947 and again in 1951 the Empire Builder name passed to a fleet of new transcontinental streamliners. The addition of 22 colorful "Great Domes" to the Empire Builder fleet in 1955 further embellished its long-standing reputation as one of the finest trains in the nation.

The Great Northern system is known as "The Route of the Empire Builder." The basis of this is dual, for it pays tribute to the memory and achievements of James J. Hill and also distinguishes the line's principal passenger train, which traverses the large territory to which Mr. Hill devoted his life.

The first Great Northern train into Klamath Falls, Oregon, was operated in 1928, after construction and acquisition of trackage. Construction from Klamath Falls to Bieber, California, gave a direct connection, through the Western Pacific, with San Francisco in 1931. Only freight service is maintained on this line.

Increased maintenance and improvement programs were inaugurated. When traffic soared from the low planes of the 1930's to ever-higher levels in the pre-war and war periods, Great Northern was ready for its big task.

The railway was busy as a military supply line in World War II. New yearly all-time records for freight traffic were set consecutively in 1942, 1943 and 1944, and for passenger volume in 1944 and 1945.
The heavy wartime traffic was handled by a growing number of diesel locomotives, as well as oil and coal-burning steam locomotives and by electric motive power in the Cascades area. Improvement of other railway facilities continued also, subject to wartime conditions, and with the war's end, the program was accelerated.

In the all-time record freight year of 1944, ton miles (a ton mile meaning movement of a ton of freight one mile) totaled 19,586,780,000. In the all-time record passenger year of 1945, passenger miles (each representing transportation of one passenger one mile) amounted to 1,305,138,000. In 1962, revenue ton miles totaled 16,137,000 and passenger miles, 503,000,000.

During 1961, the cash expenditure for property improvements was $20,591,907, and in 1962, $10,016,186. Of the latter, $5,701,116 went to fixed property and $4,315,070 was invested in new equipment to better meet the needs of shippers.

Great Northern's galaxy of streamlined trains began to take form with the announcement in 1944 -- during wartime -- that five completely new Empire Builders would go into service between Chicago and the Pacific Northwest as soon as they could be constructed.

On February 23, 1947 these streamliners, each of 12 cars and a 4,000-horsepower, two-unit diesel-electric locomotive, began daily service. Great Northern was the first northern transcontinental system to inaugurate this streamliner service and the first among these lines to offer passenger service on a 45-hour schedule between Chicago on the east, and Seattle and Portland on the west.

These were the first completely new sleeper and coach transcontinental trains built in the nation after World War II ended and since before the United States entered the conflict.

Another completely new fleet of five Empire Builder streamliners -- the third generation under this name -- entered service on June 3, 1951. Each had 15 cars and a 4,500-horsepower, three-unit diesel-electric locomotive. This train, again presenting the most modern equipment and accommodations, took over the run and schedule of its predecessor. In the summer and early fall of 1955, the addition of four dome cars -- three dome coaches and a full length dome lounge -- to each of
the five streamliners brought the ultimate in modernization. Although the present consist of the Empire Builder remains at 15 passenger-carrying cars, it is normally powered by a 6,000-horsepower, four-unit locomotive.

Also on June 3, 1951, the five streamliners that began operating in 1947, plus a sixth completely new train, were given the name of Western Star, and the Western Star became the companion train of the Empire Builder between Chicago on the east and Seattle and Portland on the west.

Thus travelers on Great Northern's transcontinental line have their choice of two daily streamliners both westward and eastward. Between Chicago and St. Paul the route of the Empire Builder and the Western Star is Burlington Lines, and between St. Paul and Seattle it is Great Northern. Between Spokane and Portland, cars from both streamliners are a part of connecting trains of the Spokane, Portland & Seattle Railway.

When the initial transcontinental streamliner fleet took over the Empire Builder name in 1947, another famous Great Northern train name was revived -- to be retired once more in 1951.

In 1947 the Oriental Limited name was given to the six conventional-type trains which since 1929 had operated as the first-generation Empire Builder. When the fleet of Empire Builders that was new in 1947 -- the second-generation of that train name -- was re-named Western Star in 1951, the latter took over the run and schedule of the Oriental Limited and the latter name was dropped.

Oriental Limited first became a Great Northern name in 1905, when the train began operating as an important link with trade of the Orient in the empire-building era of James J. Hill. New equipment in 1924 added to its reputation as the finest train of the time. In 1931, two years after the first fleet bearing the Empire Builder title went into operation, the Oriental Limited was "honorably discharged" as a name train. The Oriental Limited designation then remained unused until the 1947 revival.

In June, 1950 three additional and completely new streamliners, each of five cars and diesel powered, began operating, all on schedules faster than previously
effective. Two carry the International name and together make two round trips daily between Seattle and Vancouver, B.C. The third, the Red River, travels a round trip daily between St. Paul and Fargo, N.D.

Presidents of the Great Northern following James J. Hill have been Louis W. Hill Sr., 1907-1912; Carl R. Gray, 1912-1914; Louis W. Hill Sr., (who was chairman of the Board of Directors from 1912 to 1929), 1914-1919; Ralph Budd, 1919-1931; William P. Kenney, 1932-1939; Frank J. Gavin, 1939-1951, and since 1951, John M. Budd.

Throughout the years, the railway's Agricultural Development Department has been active in behalf of Great Northern's territory. With agents at various points, the department has furthered diversification, development of new crops and markets, irrigation in areas of inadequate precipitation, conservation and restoration of soil fertility, and other beneficial agricultural practices.

In a closely allied field, the railway's Industrial Department has fostered industrial opportunities and development in the territory. New industries established along the Great Northern tracks in 1962 numbered 90, with a total of nearly 4,041 located on the company's properties in the period from 1946 through 1962.

In 1956, in the interests of more effective coordination, these two activities were consolidated in a single Industrial and Agricultural Development Department. Another related function is that of the Mineral Research and Development Department, which is concerned with mineral resources and their development.

Glacier Park Company, wholly-owned subsidiary of the GN, has conducted miscellaneous activities since its incorporation in 1905, but probably it is best known for its ownership and operation of the hotels and motels in Glacier National Park in Montana and Waterton Lakes National Park in Alberta, Canada.

This association of almost 50 years ended on December 31, 1960, when the properties were sold to experienced resort hotel operators, Glacier Park, Incorporated. Great Northern continues its friendly interest in the parks' activities and operates passenger service to the park entrances.

The Rocky Mountain Goat, often seen by park visitors, is the distinguishing
feature of the railway's well-known trade mark.

As 1963 began, freight train cars numbered 44,830, and passenger train cars, 579. Locomotives totaled 642 units. Great Northern retired its fleet of 15 electric locomotives in 1956, with the termination of electrified operations through the Cascade Mountains.

The old "iron horse" had all but disappeared from Great Northern in August, 1957. The 36 engines remaining on standby through the winter were never fired again and the steam era on the GN officially ended in the Spring of 1958. All regularly-scheduled freight and passenger trains are now powered by diesel-electric locomotives.

The ever-increasing use of electronics by the Great Northern is exemplified in many ways. At the railway's data processing center in St. Paul, the Univac electronic computer is used for such diverse duties as payroll, accounting, labor distribution and inventory control. The installation, which was completed in 1957, was the second among United States railroads and first among Western railroads.

Extensive use of radio in freight train operation and in switching and yard areas began in 1953, and early 1956 saw the completion of Great Northern's very high frequency radio network between the Twin Cities and the Pacific Coast. Radio is now found on passenger, freight and yard engines, on cabooses, on snow-fighting and other maintenance equipment, and on supervisors' rail cars and automobiles.

Still another application in electronics is the railway's centralized traffic control system projects authorized for 1962 which boosted the railway's CTC mileage to 874 by the end of the year. At the same time, the mileage of continuous welded rail ("ribbon rail") was increased 323.46.

Construction of Great Northern's largest freight classification yard, at Minot, North Dakota, was begun in 1955 and completed in the early Fall of 1956. This ultra-modern electronic "push-button" yard, built at a cost of 6-1/2 million dollars, was dedicated on October 12, 1956, and named in honor of Frank J. Gavin, Great Northern's seventh president.
Freight piggybacking, or trailer-on-flat-car service, was inaugurated on Great Northern in 1954 and has been substantially expanded since that time. The railway reported 10,853 straight loads moved in trailers in 1962 with an increase in tonnage of 14 per cent, and an increase in revenue of 15 per cent over 1961.

Most impressive recent development has been the introduction of multi-level auto rack cars, which have enabled the railroads to recapture from highway carriers a substantial movement of new automobiles. Great Northern acquired its first bi-level and tri-level cars in late 1960, and in 1962 moved 5,174 carloads of new automobiles on this type of equipment. The tri-level racks carry as many as 12 standard-sized automobiles or 15 compacts.

To further meet its expanded requirements for specialized piggyback and auto rack flat cars, Great Northern in 1960 joined the Trailer Train Company, a railway-owned agency operating the largest fleet of such equipment in the country.

The railway had an average of 18,128 full-time employees in 1962. Total payroll for the year was $117,973,630, while taxes were $25,650,369. At the close of 1962, the company's 6,073,029 shares of capital stock were owned by 44,351 stockholders.

The diversified character of the territory served and traffic carried is revealed in the following analysis of Great Northern gross freight revenues by commodity groups in 1962: Products of agriculture, 27.13 per cent; animals and products, 1.72; products of mines, 16.40; products of forests, 18.02; manufactures and miscellaneous, 34.70, and all less-than-carload freight, 2.03 per cent.
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Revised 1963