

# The Upper Peninsula's railroad

Duluth, South Shore & Atlantic was born to carry copper and iron ore • **By Robert Oom**



Having just left Ewen, Mich., AS616s 210 and 204, their lettering intact despite the 1960 Soo merger, lead Superior–Marquette train 22 across the Baltimore River west of Bruce Crossing September 3, 1961. Heavy freights were handled by 12 C-C Baldwins like these, plus 4 center-cabs.

Robert C. Anderson

In the annals of Midwestern railroading, there have been two “South Shores.” Electric interurban Chicago South Shore & South Bend, known as the “South Shore Line,” follows the edge of Lake Michigan in connecting its namesake cities. It carries on, with diesels on freights and the electric passenger service operated by a regional transit agency. Those two words in the name of this article’s subject, the Duluth, South Shore & Atlantic Railway, refer to Lake Superior.

The DSS&A, which existed for 74 years, stretched from Minnesota’s big Lake Superior port due east 419 miles to Sault Ste. Marie, Mich., on the St. Mary’s River marking the Ontario border. A 43-mile branch to the south (considered the “main line”) reached St. Ignace on the

Straits of Mackinac, with a ferry to Mackinaw City on Michigan’s Lower Peninsula connecting with NYC’s Michigan Central and Pennsy’s Grand Rapids & Indiana. A 62-mile branch struck north into the copper country of Upper Michigan’s Keweenaw Peninsula.

DSS&A was incorporated in Michigan on March 9, 1887. Established by combining several predecessors, some not yet built, it did not yet extend to Duluth. Its history, though, began earlier.

The Upper Peninsula was a vast wilderness when Michigan became a state in 1837. Douglass Houghton [HOE-ton], the new state’s geologist, focused his mineral exploration on “the U.P.,” as most everyone calls it. He found vast amounts of copper, as expected, but also found iron. He died in 1845 before the magnitude of his iron-ore discovery would be known.

While surveying near present-day Negaunee in 1844, U.S. deputy surveyor William Burt discovered an outcropping of magnetic iron ore. The Jackson Mine was opened, 12 miles from Lake Superior, but the ore had to be moved to the lake at Marquette. Ten years would pass before the Iron Mountain Railroad, first in the U.P. and a DSS&A ancestor, came to be.

Congress in 1852 authorized a land grant to any entity that could complete a canal and locks at Sault Ste. Marie (“the Soo”). The project began in June 1853 and took two years, enabling ore loaded at Marquette to enter the lower Great Lakes.

A rail line south to Lake Michigan at

Bay de Noc was planned, but the competing Peninsula Railroad, backed by Chicago & North Western, opened first. Although the local road did keep C&NW out of Marquette, the future DSS&A would not reach a Lake Michigan port.

When iron ore was discovered west of Negaunee, the Marquette & Ontonagon Railway built west from Ishpeming, getting to Lake Michigamme by 1865. Five years later another group, aiming for Ontonagon [ON-tah-NAH-gon] on Lake Superior, built the Houghton & Ontonagon from Michigamme to L’Anse, where an ore dock was erected. The rival roads merged to form the Marquette, Houghton & Ontonagon, which reached East Houghton in 1883.

Meanwhile, faraway investors — including brothers James and Hugh McMillan of Detroit plus Chicagoans and New Yorkers — in 1879 planned a line from Marquette to St. Ignace: the Detroit, Mackinaw & Marquette. Construction proved to be costlier than expected, and the railroad passed south of Munising, an emerging Lake Superior port. DM&M reached St. Ignace in 1881, and Mackinac Transportation Co. [MACK-in-aw] was formed to cross the Straits, using the ferry *Algolah* and a barge that could carry four cars. In 1888 the wooden ferry *St. Ignace* (10 cars) entered service, joined in 1893 by the 18-car *Sainte Marie*.

Meanwhile in the Keweenaw [KEE-win-aw], the Mineral Range & L’Anse Bay was formed in 1871 to connect the



Typical of the DSS&A, 2-8-0 713 hauls a short train on stamp sand ballast near Paynesville.

Roy Paananen; author’s collection

mining town of Calumet with Hancock. Opened in 1873 as a 3-foot-gauge line, it became known as the Mineral Range.

The Hancock & Calumet, also narrow-gauge, in 1885 was built east from Hancock along Portage Lake and Torch Lake to Calumet on a better gradient. Both the Mineral Range and H&C were taken over by the DSS&A in 1893, then standard-gauged in 1897 and 1901, respectively. The Mineral Range would continue as a subsidiary of DSS&A.

## Expanding in three directions

When DSS&A was incorporated, construction was planned on three fronts. A line had to be built to the Soo; this originated at Sage on the St. Ignace line. Further, a bridge to Sault Ste. Marie, Ont., was necessary to establish a link east. Finally, the line had to be extended west, to the Montreal River and a connection with Northern Pacific, to reach Duluth.

The line to the Soo was done quickly, beating the Minneapolis, St. Paul & Sault Ste. Marie ("Soo Line"), which was building east from Wisconsin, in September 1887. The St. Mary's rapids were bridged in 1888, giving DSS&A its Canadian Pacific connection. CP officials toured the DSS&A in May 1888 and two months later bought a controlling interest, which would prove financially important.

In late 1886 chief engineer J. A. Latcha had sited a railroad west from near Three Lakes, later named Nestoria, passing north of Lake Gogebic to a connection with NP at Iron River, Wis. Although superbly engineered, the line missed Ontonagon, Mich., and Ashland, Wis., to the south, and Bessemer and Ironwood, Mich., to the north, which kept DSS&A from having a presence on the Gogebic iron range. After being rebuffed by property owners on Lake Gogebic, DSS&A relocated its planned western division point from there 15 miles west to Thomaston.



**Unique arrival: Black DSS&A RS1 104 pulls train No. 1, which originated at NYC's Mackinaw City station (shared also with the Pennsy) off ferry *Chief Wawatam* at St. Ignace in July 1948.**

Cornelius W. Hauck

From the beginning, DSS&A and NP squabbled over trackage-rights payment. This ended when DSS&A built its own line to Superior, Wis., in 1892. It had little on-line business, though, and was abandoned in 1934. DSS&A then went back to NP rights, from Ashland to Duluth, using Soo rights into Ashland from Marengo.

In 1896 Lake Superior & Ishpeming, owned by Cleveland-Cliffs Iron Co., built its own line and an ore dock at Presque Isle, just north of Marquette, giving DSS&A competition for Marquette range ore. In 1900, Mineral Range opened a line from Keweenaw Bay west to Mass City to tap copper mines and connect with the Chicago, Milwaukee & St. Paul.

In reference to Duluth's then nickname, DSS&A became known as the "Zenith City Short Line," but "South Shore" became official in 1905. At this time, DSS&A passenger service reached its own zenith, with dining, sleeping, and parlor cars. The South Shore emblem would be painted on locomotive tenders and freight cars; the maroon passenger cars were lettered SOUTH SHORE in gold.

In 1911 a new steel carferry from Toledo Shipbuilding Co., the 26-car-capacity

ice-breaker *Chief Wawatam*, was delivered for Straits service. The old wooden *Sainte Marie* went to Toledo, where its components emerged as a smaller steel carferry, *Sainte Marie (II)*, in 1913.

## Copper's peak, and decline

Upper Michigan copper production peaked before World War I. An attempt to unionize miners in 1913 resulted in violence, and some mines closed. Copper could be produced elsewhere at lower cost, and after the price of copper declined in 1918, more mines closed.

United States Railroad Administration control in 1917 brought escalating costs. After Armistice Day, traffic sagged, and when USRA control ended in 1920, DSS&A was under control of Minneapolis-based Soo Line. Although some offices remained in Marquette, big decisions were made in Minneapolis, and DSS&A's meager overhead traffic was turned over to the Soo despite the longer routing.

The 1920s were both good and bad. Henry Ford was buying land and investing in Upper Peninsula sites including Imperial Mine west of Michigamme, Blueberry Mine west of Ishpeming, and a





At DSS&A's Marquette station on a September 1951 afternoon, 2-8-0 92 makes up train 7, which will run overnight to Duluth, as 4-6-2 556 pulls out with Mackinaw City-Calumet train 1.

A. C. Kalmbach

L'Anse sawmill. His efforts there, and near Iron Mountain, Mich., contributed forest products traffic to DSS&A. With CP financing, DSS&A bought two new 4-6-2s, 555 and 556, from Alco's Brooks Works in 1924. They, plus 2-8-0s 91 and 92, would remain its newest steam.

South Shore in 1930 announced a new \$1.8 million reinforced concrete ore dock, No. 6, for Marquette. Also financed by CP, it was 85 feet high and 968 feet long, with 150 pockets and a capacity of 43,000 tons. It remains standing today, though unused and minus its approach.

The 1930s Depression took its toll, and as 1937 began, DSS&A and Mineral Range entered receivership. Fewer trains ran, and surplus locomotives were cut up. The roads kept going with mainly old 2-8-0s. With new power out of the question, DSS&A bought two New York Central 2-8-2s, which became 1050 and 1051. World War II boosted traffic, and in 1941 DSS&A bought two more NYC 2-8-2s, then a fifth in 1942. Despite higher traffic, only 1942 and 1943 netted profits.

### Alco, Baldwin diesels arrive

In September 1945, copper mining ceased at Quincy Mining Co. near Hancock. Copper production elsewhere diminished, and traffic fell. Passenger traffic also slipped, owing to improved roads.

DSS&A bought its first diesels, Alco RS1s 100 and 101, in June 1945. Painted black with white lettering and visibility striping, they ran in multiple, and were doing so in September 1952 when they plunged into a large washout near Munising Junction, though without serious injuries. In 1946 DSS&A ordered five more RS1s, which arrived in '47, also in

black but with yellow, not white, diagonal stripes and lettering, looking like new switchers delivered to the Soo Line.

In November 1949 there was new optimism as DSS&A emerged from receivership, with a new name: Duluth, South Shore & Atlantic Railroad. The Mineral Range was included. Needing bigger power, DSS&A turned to Baldwin for three each DRS-6-6-1500 road-switchers and DT-6-6-2000 center-cab units, in the 200 and 300 series, respectively. These rugged haulers were delivered in fall '49 in a bright new paint scheme, using the yellow and green of Marquette's Northern Michigan University, accented in red.

When DSS&A steam was nearly gone, a Soo 2-8-2 was employed to haul Milwaukee Road's *Copper Country Limited*, a through run from Chicago, on DSS&A between Champion and Calumet. Great Northern 2-8-2s were also used on the west end when the center-cab Baldwins required repair. Further, DSS&A sometimes used LS&I 2-8-0s, and later it would borrow Calumet & Hecla and Copper Range Baldwin diesel switchers.

More diesels came in 1950-51. In August 1950, DRS-6-6-1500 203, built as Baldwin demonstrator 1500, was bought, as was a fourth big center-cab, 303. In '51, DSS&A took five of Baldwin's successor road-switcher AS616s, 204-208, and an eighth RS1, 107, the only RS1 delivered in yellow and green. The first seven RS1s were repainted from black.

A new diesel house went up next to the Marquette roundhouse in 1952, and two track extensions were made. A 14½-mile branch was planned from Bergland to the new White Pine Copper Co. mine. Near Negaunee, Tracy Mine was being

built by Jones & Laughlin Steel, and a bypass highway around Ishpeming resulted in a new joint DSS&A-C&NW-LS&I alignment with CTC signaling. Two more AS616s arrived, 209-210, and while DSS&A was "fully dieselized," 2-8-0 92 worked until January 1953 on constructing the White Pine branch. A final AS616, 211, arrived in August '52. Built as Baldwin-Lima-Hamilton demonstrator 1600, it differed in having dynamic brakes and outside-equalized Type C trucks.

A new emblem introduced in February 1953 included the full railroad name instead of just "South Shore." New freight cars were acquired, plus 10 secondhand hoppers and three ex-Lackawanna cabooses. Despite these expenditures, DSS&A declared a \$1 per share dividend.

### Modern touches, in vain

DSS&A reduced Marquette-Duluth passenger trains 7 and 8, which used Soo Line stations in Ashland, Superior, and Duluth, from daily to triweekly effective August 13, 1954. On non-train days, mail and express moved by road in yellow truck trailers with red lettering. White Pine Mine was completed in 1954 and Tracy Mine the following year. Trains 7 and 8 came off effective June 4, 1955, and while Marquette-St. Ignace trains 2 and 1 continued, the last RPO left Marquette on July 31, 1955, after which all mail and express was handled by truck. In August, a new Budd RDC1, 500 *Shoreliner*, was touted as a new and more luxurious service for the 332-mile Ishpeming-St. Ignace round trip on a faster schedule, but ridership did not increase, and the Mackinac Bridge opening on November 1, 1957, sealed the train's demise. It came off January 11, 1958, and the RDC was sold to Canadian Pacific.

Radios for locomotives and cabooses came in '56, and Duluth-St. Ignace fast



The second of four DT-66-2000 transfer units idles at Marquette's roundhouse July 7, 1961.

Robert C. Anderson



As a Baldwin works the city's lower yard, the RDC1 leaves Marquette in July '56 for St. Ignace.

James R. Wichman

freights 18 and 19 were instituted to try for more overhead traffic. Celotex Corp. planned to build a plant in L'Anse, and DSS&A declared a \$1.25 dividend. The plant didn't open until 1960, though.

In early 1957, financial prospects faded. Demand for forest products, iron ore, and copper all lagged, and trains 18 and 19 came off in March. After President Henry S. Mitchell died in November, Vice President Leonard Murray stepped up, and merger studies with Soo Line and Soo's Wisconsin Central were begun.

In 1959, a long steel strike and one at White Pine Mine resulted in DSS&A's net earnings being only \$704. After the steel strike ended November 9, the Marquette ore dock in December set a monthly record for tonnage. DSS&A incurred costs in track realignment related to a new rail and highway link between Houghton and Hancock — the world's heaviest and widest double-deck, vertical-lift span.

Directors of MStP&SSM, Wisconsin Central Railway, and DSS&A in March 1960, despite opposition from rail employees and business owners, approved a three-way merger. On 1960's last business day, MStP&SSM and WC were folded into DSS&A, since the latter had the corporate structure preferred by parent CP. The new entity's name was Soo Line, adopting MStP&SSM's longtime nickname. Thus the South Shore was no longer Marquette's railroad; the shops soon closed, and many employees were laid off.

DSS&A was a victim of changing times — bulk material could move cheaper by water across Lake Superior than by rail. Although its Mackinaw City connections were the two eastern giants, both lines were long branches — Pennsylvania's former Grand Rapids & Indi-

ana and NYC's 300-mile Michigan Central line from Detroit. Some overhead traffic from Detroit to western Canada and the Pacific Northwest went via NYC to Mackinaw City, but the 3- to-4-hour ferry connection (longer in winter) couldn't meet reliability and speed requirements for autos and manufactured goods. PRR conductors' wheel reports listed loads of lumber, pulpwood, and other forest products from DSS&A for points south, but by 1959 PRR interchange was down to triweekly.

Soo would operate the majority of the DSS&A into the 1980s, and some lines would be sold to the new Wisconsin Central Ltd., in 1987 and survive Canadian National's 2001 buyout of WCL. Marquette, though, would no longer be home to "the Upper Peninsula's railroad." ■

## DSS&A fact file



(comparative figures are for 1929 and 1960)

**Route-Miles:** 574; 544

**Locomotives:** 62; 24

**Freight cars:** 2,709; 1,625

**Passenger cars:** 58; 0

**Headquarters city:** Minneapolis, Minn.

**Special interest group:** Soo Line Historical & Technical Society, [www.sooline.org](http://www.sooline.org)

**Recommended reading:** *Wisconsin Central*, by Otto P. Dobnick and Steve Glischinski (Kalmbach, 1997); *Duluth, South Shore & Atlantic Railway: A History of the Lake Superior District's Pioneer Iron Ore Hauler*, by John Gaertner (Indiana Univ. Press, 2009)

**Source:** *Historical Guide to North American Railroads* (Kalmbach, 2014)