

MACKINAC BRIDGE DEDICATION

Special Edition
of the

Upper Peninsula
Weekly Newspapers

*The
Joining
Together*

Michigan's Two Peninsulas Linked Together By Huge Span

Michigan's governor, G. Mennen Williams, phrased it aptly when the great Mackinac Bridge was opened to traffic on Nov. 1, 1957.

"Here," he said, "is the new and great Northwest Passage." As the countless thousands gather for the final, and most colorful ceremony, connected with the bridge—the formal dedication festival June 26, 27 and 28, 1958—the truth of the governor's words will become more and more significant to the people of the Upper Peninsula of Michigan.

World's Largest Bridge

For the stupendous Mackinac Bridge—the mightiest span on earth—at long last links the two parts of Michigan which nature had divided by the waters of the Mackinac Straits since the woolly mammoth roamed the earth.

Although connected politically since the beginning of statehood back in 1837, the two peninsulas have otherwise been divided, with the populous lower peninsula pay-

ing scant heed to the north, and the Upper Peninsula economically wedded to Wisconsin and Minnesota.

U.P. Rediscovered

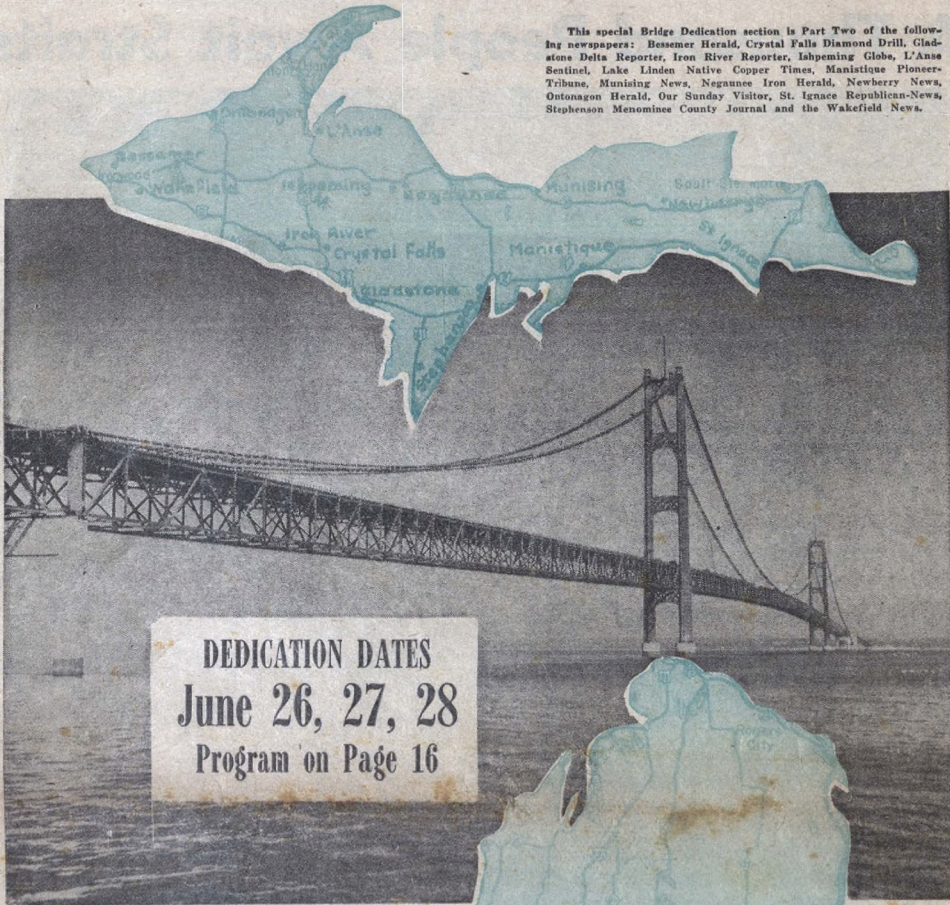
Now, it is hoped and believed, all this will change. More and more people will discover the Upper Peninsula, often called America's last frontier. They will discover not only its breath-taking miles of wilderness, its meandering rivers and streams, its hundreds and hundreds of inland lakes, its rich heritage of wild-life; they will discover, too, that it is a great place to live, to establish businesses, and build industrial plants.

They will find modern highways passing through the wilderness, linking modern and small towns together and connecting them with the big cities south and west. They will find byways leading off into the far reaches of the forests—to resorts and lake shore cabins, to fine hunting and fishing areas, and to man's last refuge from the tormenting demands of civilization—the reverent quietness of a sylvan glade where only birdsong and the melody of the wind through the pine trees is audible.

People's Vacationland

Thousands of people in the mid-west have already discovered the Upper Peninsula of Michigan, and have been coming north for years to hunt, fish and rest. With the great bridge now unlocking the gate to the north, countless thousands more during the coming years will discover the Upper Peninsula.

Impact of the bridge on the upper part of Michigan is expected to affect the lives of all the peninsula's 300,000 residents, one way or another. Vacation travel is expected to mount at an accelerated pace over the years immediately ahead, resulting in a great-



This special Bridge Dedication section is Part Two of the following newspapers: Bessemer Herald, Crystal Falls Diamond Drill, Gladstone Delta Reporter, Iron River Reporter, Ishpeming Globe, L'Anse Sentinel, Lake Linden Native Copper Times, Manistique Pioneer-Tribune, Munising News, Negaunee Iron Herald, Newberry News, Ontonagon Herald, Our Sunday Visitor, St. Ignace Republican-News, Stephenson Menominee County Journal and the Wakefield News.



Prentiss M. Brown

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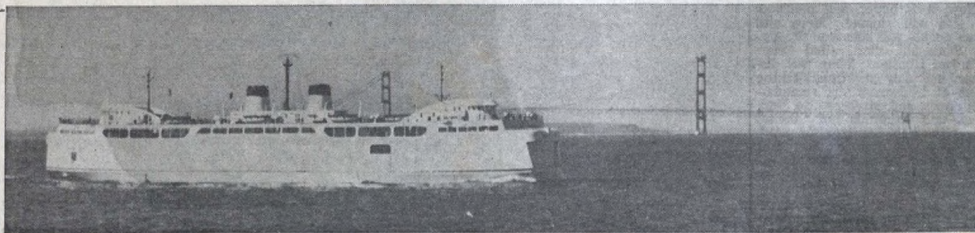
Government, science and labor get together at the bridge opening. Here Michigan's Governor, G. Mennen Williams, at left, is talking with the bridge builder, Dr. D. B. Steinman, and "Big Louie" Stepmann, a bridge employe who made headlines when he survived a fall from the bridge.

A Thousand People Await Straits Passage



Pictured above is the state ferry, City of Petoskey, at its berth at the Mackinaw City pier as hundreds of autos carrying a thousand people await passage across the Straits of Mackinac. This was pictured

Just before the Mackinac Bridge was opened last November, an event which dramatically erased this "bottleneck" at the Straits. The crossing by bridge now is accomplished in about 10 minutes.



The old and the new. The Straits of Mackinac ferry, the Vacationland, makes one of its final trips between St. Ignace and Mackinaw City. The deluxe auto ferry made its last trip November 1,

1957, carrying hundreds of townfolk from the two communities. As a final salute the vessel passed under the bridge before tying up at Mackinaw City.

Persistence Of U.P. Leader Results In World's Largest Bridge

Michigan's mighty Mackinac bridge, once a dream of William Saulson, energetic St. Ignace dry-goods dealer back in 1884, was opened to traffic nearly three-quarters of a century later. It is a tribute to the energy, resource and faith of one of the upper peninsula's dramatic leaders, Prentiss M. Brown of St. Ignace.

Brown, born in St. Ignace, June 18, 1869, was educated in local public schools, tutored by his father, Atty. James J. Brown, was graduated at Albion college and the University of Illinois. After a lifetime of service to the public interest as prosecuting attorney, congressman and U. S. Senator, he was a leader of the Office of Price Administration. As chairman of

the board of the Detroit Edison and chairman of the Michigan Historical society, he contributed his energies, but to fulfill his life of service he recognized and accepted the need for a link between the two peninsulas of Michigan other than the age-old water-plying ferries.

Brown seriously considered the bridge in 1933 and its feasibility was examined by ranking engineers, such as Modjeski and Masters of Harrisburg, Pa.; Leon Moisseff, noted Russian engineering consultant; Prof. James H. Cissel of the University of Michigan.

Gradually there developed expert opinion that engineers could do the work, but the financing

proved an obstacle.

Drawing on the tremendous resources of his persuasive personality and business acumen, Brown won support for the bridge from the public and his influential friends.

In 1950 the State of Michigan established the Mackinac Bridge Authority comprised of Prentiss M. Brown, chairman; Charles T. Fisher, Jr., vice-chairman; William J. Cochran, George A. Osborn, Murray D. VanWagoner, and Mead L. Bricker, serving in the place of Fred M. Zeder, now deceased. Mr. Fisher died this year. Also on the authority was Charles M. Ziegler, since succeeded by Highway Commissioner John C. Mackie. Consulting engineer was

David B. Steinman.

The authority made an extended survey of traffic and engineering problems and finally after three years of effort a bond issue of \$99,000,000 was floated, largely through the persistence of the bridge's most dynamic believer, Prentiss Brown, aided by the late Charles Fisher, Jr. The bonds are being retired through earnings.

Construction started in May, 1954, and by November of that year the anchorages were completed to elevation 10.

Work resumed the following spring and continued, less winter shutdowns, until by November 1, 1957, the bridge was opened to traffic.

With the opening of the Mackinac Bridge on Nov. 1, 1957, the Michigan State Ferry fleet went into "mothballs."

Conceived as a state highway service in 1923, the ferry service was inaugurated with the commissioning at the Straits of the steamer, Ariel, with a capacity of 20 autos. The first year it carried 10,351 vehicles. Two government boats, the St. Ignace and Mackinaw City, were purchased to succeed the Ariel and in 1925 were enlarged to handle 60 cars. In 1938 the Straits of Mackinac, considered the flagship of the little fleet, was acquired.

Winter boat service for autos was begun in 1936-37 by the leasing of the railway ferry icecrushers.

In 1937 the state bought two Lake Michigan carferries and converted them for Straits use. They are the City of Cheboygan and City of Munising. When the federal government took over the Mackinaw City and St. Ignace in 1940 to transport troops in the New York area, the state obtained a railway ferry which was named City of Petoskey.

This expansion, which permitted transporting as many as 9,000 cars per day, proved insufficient and the state authorized the construction of a huge ice-breaking auto ferry. Diesel electric powered twin propellers at each end, and since this ship was commissioned, the ferries handled as many as 900,000 motor vehicles annually.

More Than 100 Insurance Firms Protect Bridge

Investments in the Mackinac Bridge are so large that more than one hundred insurance companies joined to cover it.

Investors who provided the large amount of money needed to finance the Bridge building requested that their interests be protected against all physical damage hazards to which the bridge may be subjected. Insurance underwriters had to consider some of the great possible catastrophic hazards such as earthquake, fire, wind and ice. All investors, large and small, wanted to be protected against any possible loss, including loss of income to the bridge because of physical damage. Although it is hard to visualize any damage to all the steel and concrete, it is simply a matter of good business to carry insurance.

This protection was accomplished by setting up an insurance program which was carefully administered from the time the bridge went on the drawing boards. Many insurance companies are not interested in writing bridge insurance at all, and those who do accept any coverage usually participate in a relatively small amount on any one structure. It therefore became necessary to deal with an insurance organization that makes a specialty of work insurance markets. Finally about 100 companies joined to cover the hazard in the All Risk Physical Damage coverage. Numerous tours to the bridge site by leading insurance underwriters were arranged.

The J. S. Frelinghuysen Corporation, nationally known bridge insurance specialists, report that they can assure the bondholders that their interests are adequately protected.

THE BRIDGE BRINGS IMPROVED

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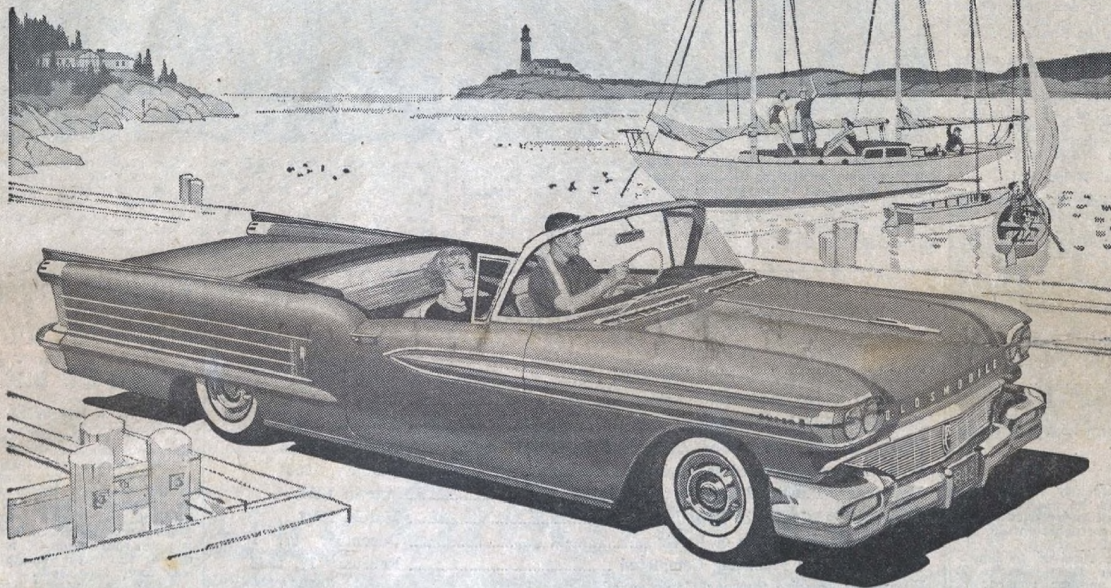
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June 29, 1958

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\$100,000,000 Is A Lot Of Money—Ask P.M.B.

A problem about as gigantic as the designing and construction of the fabulous Mackinac Bridge was its financing.

\$100,000,000 is a lot of money. And if you happen to need that much for a pet project, take the word of Prentiss M. Brown—there is only one place you're likely to get it, and that is in a forbidding, narrow, gray granite street called Wall in the City of New York.

Failed Two Times

Brown ought to know. Twice he tried, and failed, to get his hands in Wall Street's pocket for money to build the Mackinac Bridge.

The third time he appeared to have learned how the trick should be done. He came home with the money.

Up to that time nobody, not even the federal government, seemed interested in handing out that much money for the Mackinac Bridge. In fact, some of the people talked to had difficulty even finding the Straits of Mackinac on the map.

But the men who made up the Mackinac Bridge Authority were persuasive talkers, more than that, they were completely "sold" on the merit of the bridge project. Finally they talked Wall Street into going along with the idea, but it wasn't easy.

State Helps Out

The first time they were cold-shouldered because no provisions had been made for bridge maintenance. The State of Michigan, after much prodding from the Authority, came through with \$417,000 a year for bridge upkeep, providing the bonds were sold by the following December.

Again Chairman Brown and his men went back to Wall Street, and again they were met with frosty stares.

Most men might quit after two turn downs, but not Brown. He is a persistent man and he had a dream to which he was completely dedicated.

The Third Try

For a third day at the Wall Street coffers, he abandoned the frontal assault and started a softening up campaign with the "right" people.

In this he received monumental assistance from Charles F. Fisher Jr., another member of the authority.

The story of the third, and successful, effort to pry the necessary funds loose from Wall Street is a tribute to the persistence of Chairman Brown and his fellow Authority members, particularly Fisher.

Bond Are Sold

Class A four per cent bonds in the amount of \$79,800,000 and Class B 5½ per cent bonds in the amount of \$20,000,000 were finally decided on. They had to undergo a court test to determine their legality, and in January, 1954, the whole issue was sold.

On Feb. 17, 1954, the Bridge Authority met with underwriters in New York and received a check from Joseph King, president of the Union Securities Corporation, for \$96,400,003.33. On the same date the Authority's contractors were given the green light to proceed with construction and they began immediately to mobilize their equipment and personnel for the great task ahead.

Members of at least 13 unions worked on the Mackinac Bridge during its four years of construction. It is reported.

IT'S "MACKIN-AW"

There is Mackinaw City and the Straits of Mackinac, as well as the new Straits of Mackinac Bridge. But those pronunciations are all the same. It's Mackinaw City, "Straits of Mackinaw" and the "Mackinaw Straits Bridge."

The roadway of the Mackinac Bridge at its highest point is 199 feet above the Straits of Mackinac.

The 552 foot towers of the bridge are painted ivory. The rest of the span is in green.

June 29, 1958

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Pictured above is Gov. G. Mennen Williams addressing the big crowd which attended the opening of the Mackinac Bridge on Nov. 1, 1957. The throng at the opening, however, is expected to be pigmy compared to the countless thousands anticipated for the dedication program June 26, 27 and 28. One estimate places the expected throng at nearly 300,000, about as large as the normal native population of the Upper Peninsula.



After nearly 3 years abuilding, traffic starts moving across the Mackinac Straits bridge. Prentiss M. Brown, chairman of the Bridge Authority, is pictured above selling first toll ticket to Governor G. Mennen Williams on Nov. 1, 1957. The event capped the huge construction project and marked the first step toward refunding the bonds which made financing of the bridge possible.

IMPORTANT BRIDGE DATES

| | |
|---|-------------------|
| Mackinac Bridge Authority Appointed | June, 1950 |
| Board of Three Engineers Retained | June, 1950 |
| Report of Board of Engineers | January, 1951 |
| Financing and Construction Authorized by Legislature | April 30, 1952 |
| D. B. Steinman Selected as Engineer | January, 1953 |
| Preliminary Plans and Estimates Completed | March, 1953 |
| Construction Contracts Negotiated | March, 1953 |
| Bids Received for Sale of Bonds | December 17, 1953 |
| Bonds Sold and Financing Completed | February 17, 1954 |
| Engineers' Precise Surveys Commenced | March 6, 1954 |
| Floating Equipment Assembled for Construction | March, 1954 |
| Construction Commenced (Foundations) | May, 1954 |
| Anchorage Completed to Elevation plus 10 | November, 1954 |
| First Winter Shut Down | January 14, 1955 |
| Pier No. 19 Reached Bedrock | April 30, 1955 |
| Pier No. 20 Reached Bedrock | May 6, 1955 |
| Concrete Record Established (6,250 cubic yards in a single pier in one day) | May 16, 1955 |
| Steel Erection Commenced (Main Towers) | July 13, 1955 |
| Towers Completed to Full Height | November, 1955 |
| Worst Storm (78 miles per hour) | November 16, 1955 |
| South Backstay Span Floated to Position | November 19, 1955 |
| North Backstay Span Floated to Position | December 18, 1955 |
| Second Winter Shut Down | December 19, 1955 |
| Cable Spinning Commenced | July 18, 1956 |
| Cable Spinning Commenced | October 19, 1956 |
| Third Winter Shut Down | December, 1956 |
| Final Gap Closed with Steel | May 17, 1957 |
| Erection of Suspended Spans Completed | July, 1957 |
| Scheduled Opening of Bridge to Traffic | November 1, 1957 |
| Formal Dedication of the Bridge | June 25-28, 1958 |

Dr. David Steinman Selected As Bridge Engineer

Actual building of the Mackinac Bridge was done through negotiated contracts, rather than competitive bidding by contractors, thus saving millions of dollars.

The bridge designer and engineer, Dr. David B. Steinman, was able to cut about \$35 million from estimated costs through contract negotiations and design changes.

A group of bankers, who had been authorized to arrange the financing of the bridge, invited Dr. Steinman in 1952 to a con-

ference. They reported that if formal bidding for contracts was necessary, the project would be delayed a year or two and engineering plans would cost about \$2,000,000. Dr. Steinman stated that in his opinion the only way to handle the project was through negotiated contracts.

On January 8, 1953 the bankers told the Authority that the bridge could not be built without Dr. Steinman in charge of its design and construction. Subsequently, Dr. Steinman was contracted for the project. He and his staff immediately began assembling

specifications for the giant structure, and within two months produced the necessary plans.

Dr. Steinman began negotiating contracts with various firms for both the materials and construction. By working closely with these firms, the engineers were able to hold the contracts to a minimum, thereby saving millions in the cost of the bridge. In addition to saving money, Dr. Steinman is credited with making every effort to make the bridge one of the safest and most beautiful structures of its kind in the world.

Prodded Michigan Legislature Into Action On Bridge

W. S. WOODFILL

W. Stewart Woodfill, owner of Mackinac Island's Grand Hotel, is responsible, more than any other individual, for reactivation of the Mackinac Bridge Authority following World War II. Without his "mad" effort in prodding the Michigan State Legislature into action, it is doubtful if the great bridge would ever have been built.

Woodfill's interest in the bridge began in 1933 and by 1941 the first Mackinac Bridge Authority was approaching a solution to the problem. World War II effectively buried the bridge plans, and, in 1946, the state legislature permitted the bridge authority to die.

Aroused by the lack of interest in what could become the greatest achievement in mid-western history, Woodfill began his campaign to get a new authority created. It was a frustrating and discouraging campaign he waged, but he succeeded by persistent effort and by walking a tight-rope to keep from offending either political party. The result of his effort was a truly bipartisan Bridge Authority.

Michigan's

Continued from page 1B

ly expanded service for accommodating the visitors. Already motels and modern dining spots are increasing, land values are going up, new roads are under construction, communities are alerting themselves to the possibilities of the future.

Water Wonderland

Because of its vast water supplies, its road, rail and boat connections, and the very fact that life is broad and unburied, industry is expected to examine the Upper Peninsula for new plant sites.

Also expected to come north are people looking for summer homes, and some seeking permanent residences in the small communities that are only 15 minutes' drive from the forest depths.

Look To Future

All this—and more—is expected to flow into the Upper Peninsula from the mighty new Mackinac Bridge, and in return the northern peninsula people are going to begin looking to lower Michigan, and to its factories and wholesalers for the supplies they need.

Mackinac Bridge Weighs A Million Tons

Two gigantic caissons 116 feet in diameter underlie the lofty twin towers of the Mackinac Bridge.

They were shaped like cookie cutters so they would slice down through the overburden to solid rock more than 200 feet be-

low the surface of the Straits of Mackinac.

Both the tower caissons were put together on dry land near Alpena and towed to their final destination at the bridge site by tug during the 1954 construction season.

Each of the caissons were circular in shape, with watertight inner and outer walls, and an inner dredging well. The caisson walls narrowed to a sharp cutting edge at the bottom.

The caissons were built with hollow walls to make them buoy-

ant for the floating job.

Crushed stone was added to the hollow walls to submerge the caissons at the bridge site, and as they went down into the water, welding crews kept adding additional double-wall sections to the top until the bottom section hit the floor of the Straits at 140 feet.

This however wasn't bedrock. At this point the open dredging wells in the center of the caissons, and the cutting edges around the bottom came into action. Clam shell buckets reached down through the open dredging well and hauled out the overburden, while more weight was added to the hollow compartments. The cutting edge sliced down through the hole thus formed, and finally reached bedrock.

Engineers, however, were not satisfied with just having the cutting edge on bedrock. They wanted the bedrock on the inside to be clean so concrete would get a firm bond, so they wringed up a sort of vacuum cleaner and swept the rock face clean.

The rock supporting the bridge, based on data supplied by boring tests, can support from 11 to 57 times the weight of the bridge. This bedrock was compacted millions of years ago by vast glaciers, and the weight of the bridge is puny compared to the tonnage of these mammoth glacial monsters.

Cofferdams were used in the construction of most of the 34 piers of the Mackinac Bridge.

Definition of a cofferdam is a watertight enclosure, usually of interlocking steel sheet piling, that is driven firmly into the bottom around the space to be occupied by the pier. The interior of the cofferdam is firmly braced by a framework of steel, to resist external pressures. Once sheet piling and bracing is in place, the bottom is excavated from within the cofferdam to the depth at which the pier is to be

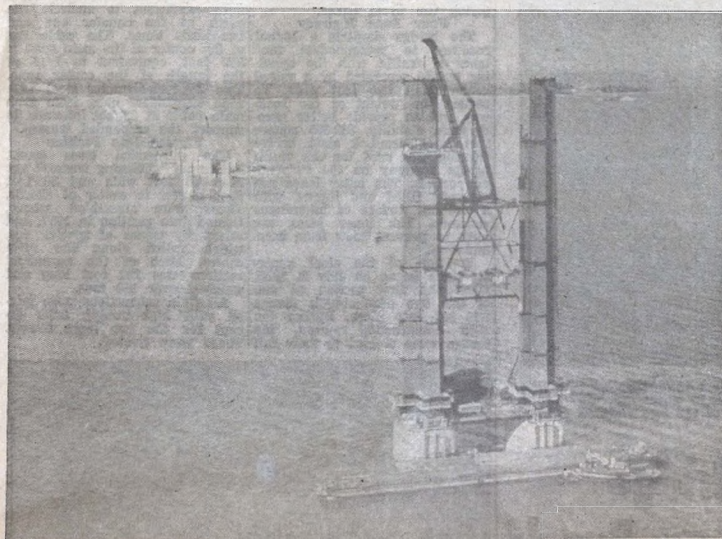
found. If supporting piles are needed, these are driven into the bottom within the cofferdam. The pier is then built up within the cofferdam by placing concrete under water. After the base of the pier has been constructed under water, the cofferdam can be pumped out and work can proceed.

The anchorage piers, 115 feet wide by 135 feet long, required the largest cofferdams. Because of their large size, bracing was fabricated and installed in three vertical sections, which were bolted together underwater by divers. Each of the three bracing sections, for the south anchorage cofferdam for example, was 115 feet long, 44 feet wide and 75 feet high, and weighed about 107 tons each. They were assembled ashore and barged into position, then lowered into exact place by floating derricks.

There is only one toll gate at the Mackinac Straits Bridge. It is on the St. Ignace side of the span.

June 29, 1958

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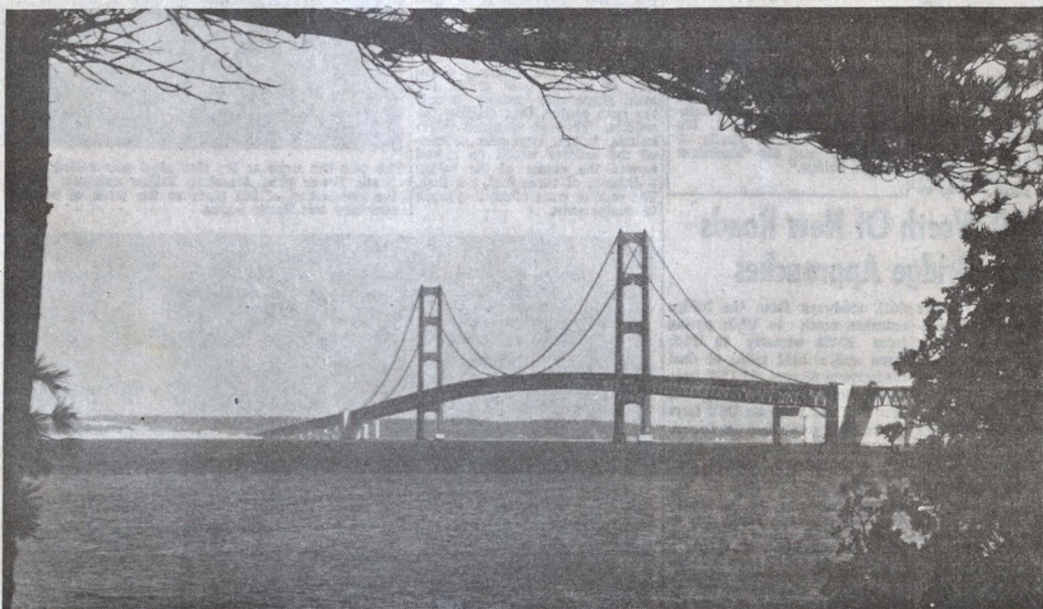


Designed to resist any pressure of winter ice, the Mackinac Bridge boasts anchorage piers containing some 184,000 tons of concrete and steel. The above picture shows the massive north cable anchorage pier. The pier was sunk 94 feet below the water surface to bedrock, and rises 118 feet above water. It is capable of resisting a total pull from both cables of 60,000,000 pounds. Construction of the pier started with the building of a cofferdam, 115 feet wide by 135 feet long. Bracing was installed in three large sections fabricated ashore and barged into position. Floating derricks were used to lower the 107 ton braces into exact position.

THE BRIDGE BRINGS
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Planned for a **Greater Future**



The new Mackinac Straits bridge and the Michigan Dairy Industry have this in common. Each leads to better living and a greater future for the people of Michigan.

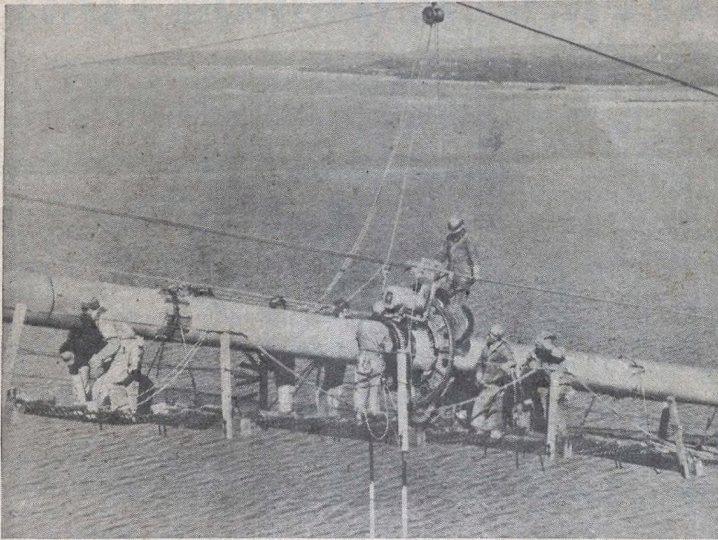
In dedicating the new Mackinac bridge, Michigan Dairy Farmers remind you that you never outgrow your need for milk or the good foods made from milk.



Drink 3 glasses
of Milk
every day

American Dairy Association of Michigan

Mackinac Bridge Is World's Largest Suspension Span



Men and machines worked high over the waters of the Straits of Mackinac to tie-together "Big Mac." Spinning the main cables and making each of them a single, stronger-than-necessary "tie" for the huge main was one of the most important parts of construction. Each of the two finished cables is 24 inches in diameter.

Fabrication Of Mackinac Bridge Like Huge Jig-Saw Puzzle

A huge jigsaw puzzle with parts weighing up to 75 tons—that was the problem encountered in fabricating the mighty Mackinac Bridge.

When the vast amount of material—made in various parts of the country—began piling up in St. Ignace where the "puzzle" was put together, visitors were prone to ask: "How do you know where everything goes?"

About were strewn big frames of steel. Some were curved, some were straight. Sizes ranged from two and three foot squares of material up to sections weighing as much as 75 tons.

Steel Jungle

This seemingly endless steel jungle was further complicated by the fact that a single strut for one of the bridge towers might have as many as 70 different pieces of steel needed to complete the section, and each piece had to be

attached in its proper order or the strut could not be fabricated.

Key to the seemingly steel confusion was the blueprint, and using these the bridge workers quietly and efficiently put the jigsaw together—a feat of no small measure.

Paul Bunyan Job

Even the mighty Paul Bunyan, premier logger of the north country, would have been stumped if faced with the weighty problem of

It's "Mackin-aw"

There is Mackinaw City and the Straits of Mackinac, as well as the new Straits of Mackinac Bridge. But those pronunciations are all the same. It's "Mackinaw City," "Straits of Mackinaw" and the "Mackinaw Straits Bridge."

\$4,000,000 Worth Of New Roads For Mackinac Bridge Approaches

More than four million dollars is being spent in new road construction to link the new Straits Bridge to present state trunklines, according to the Michigan State Highway Department.

On the St. Ignace side of the Bridge new construction contracts amounted to more than \$2,500,000, and additional plans are under way for a divided highway around the west side of St. Ignace for through traffic.

Major projects on the north side of the Straits included new

dual roadways from the bridge entrance north to US-2; paving from M-122 westerly to US-2; three and a half miles of dual roadways to replace old US-2 from Castle Rock north of St. Ignace; new dual roadways on US-2 from Castle Rock south into St. Ignace.

South of the Bridge new highway construction included dual roadways from the south city limits of Mackinaw City to the bridge; structures in the Mackinaw City approach work: one to carry a US-23, US-27 connection over the relocation of US-31; a span to carry US-31 over the New York Central and Pennsylvania railroads. In addition to the relocation of the three main routes at Mackinaw City, the Highway Department placed a bituminous surface on 7.3 miles of US-31 from Mackinaw City south to the vicinity of Carp Lake. These contracts amounted to more than one and a half million dollars.

Four lanes are provided for traffic on Michigan's one hundred million dollar bridge. The 48-foot roadway has a small center mall two feet wide to separate opposing traffic. The two outer lanes are each 12 feet wide, the inner lanes 11 feet wide.

The steel superstructure for the Mackinac Bridge has a total uninterrupted length of 19,205 feet, including the beam spans at its north and south approaches. This magnificent structure features the world's longest suspension bridge with a length of 8,614 feet, including anchorages.

A vertical clearance of 148 feet is provided at the center of the main span—sufficient to allow passage of the largest ships plying the Great Lakes.

Four Lane Highway

The bridge supports a 48-foot roadway to accommodate four lanes of traffic, with the opposing traffic separated by a raised center mall two feet wide. To reduce the weight of the roadway and to provide better aerodynamic stability, 362,600 square feet of I-Beam-Lok steel bridge flooring was used for the entire bridge roadway on the suspended portion. The outer lanes are concrete filled and topped with a wearing surface of bituminous concrete. The inner lanes are open to prevent snow from accumulating.

Erection of the steel superstructure began on July 2, 1955, when the first section of one of the two 552-foot-high towers was set into place. During the 1955 construction season, the towers were erected to their full

height and the two backstay spans floated into position to make ready for the spinning of the main cables.

During the 1956 work season, the cables were spun and most of the approach spans were erected.

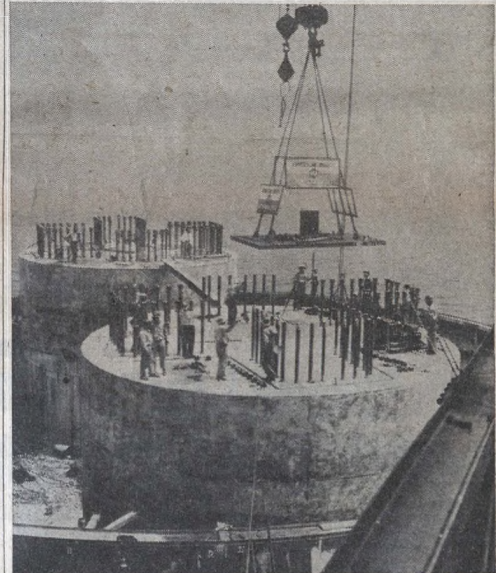
42,000 Miles Of Wire

The main cables are each 24½ inches in diameter, 68 feet apart, center to center. A total of 12,876 wires were required for each cable, or a total length of 42,000 miles—sufficient to encircle the earth at the equator one and two-thirds times. The cable sag at the center of the main span is 350 feet, equivalent to 1/11 of the length of the center span. Two 2¼-inch-diameter steel wire rope suspenders hang from each main cable at 39-foot intervals to support the suspended trusses.

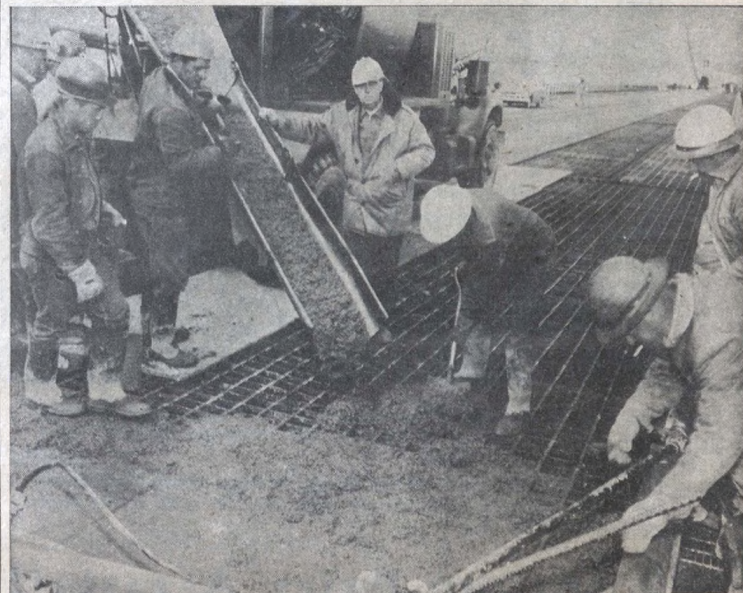
Floated Into Position

The suspended truss spans, known as "stiffening trusses," are each 68 feet wide and 38 feet deep center to center of chords. These were assembled ashore, floated into position in 1957, and raised by means of special rigs, which rolled along the main cables. Each of the assembled sections was 120 feet long and weighed over 100 tons.

All field connections were joined with high-strength bolts except for the two main towers. These were riveted.



This was the scene as the first steel was bolted into place on the North Tower pier. American Bridge company workers supervise the installation of bed plate as the work of building the superstructure was finally begun.

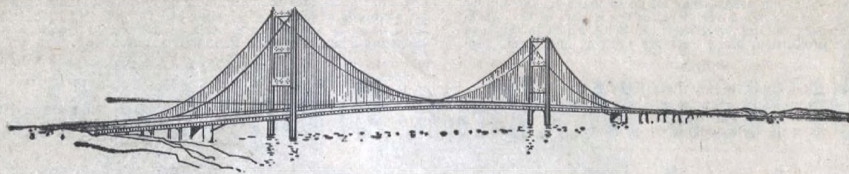


Men and machines combined, too, to lay the deck of the bridge. Beslite, weighing a third less than ordinary concrete, fills the steel road deck to a depth of 4½ inches in the outer traffic lanes, and is topped with asphalt. This type of construction saved weight and structural steel requirements.

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Congratulations
to the forward-looking citizens
of our home state
on the completion of the
Mackinac Bridge!



from Chrysler Corporation

The Forward Look

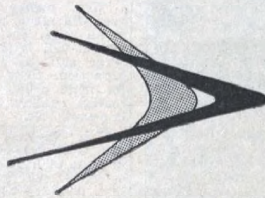
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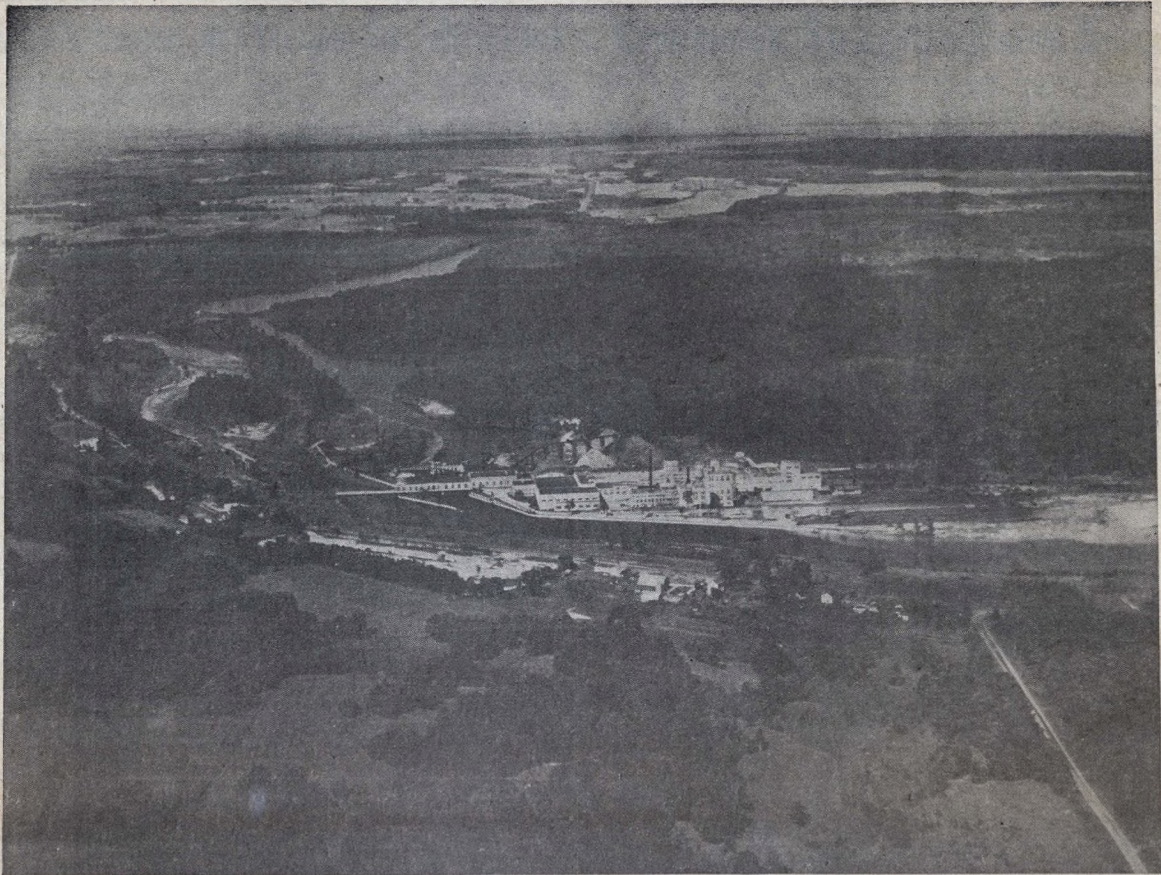
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CHRYSLER

IMPERIAL





Industry—Agriculture—Forestry—Vacation areas—they all go to make up the Upper Peninsula of Michigan and these are the prime recipients of the impact of the Mackinac Bridge. New industry is already coming. New steps are being taken to improve farming techniques to increase production. More trees are growing and forest products are going into industry, building and manufacturing uses. This vast area, with its hundreds of lakes and streams and forests is looking to the future confident of its position as one of the nation's outstanding year-around vacation centers and anticipating a new interest in its industrial advantages.

ducts are going into industry, building and manufacturing uses. This vast area, with its hundreds of lakes and streams and forests is looking to the future confident of its position as one of the nation's outstanding year-around vacation centers and anticipating a new interest in its industrial advantages.

Impact Of New Mackinac Bridge On Michigan's Upper Peninsula Expected To Be Far-Reaching

They said it couldn't be done, that it wouldn't be done—but there it is, the Mackinac Straits bridge.

It took four years to build, and it cost about 100 million dollars, and traffic is rolling over it now. But the question comes up, "What will be the bridge's impact on the Upper Peninsula?"

There will be, for certain, an impact, and it will come in di-

verse forms . . . some communities will benefit and some may suffer temporarily, but as a whole, the "look ahead" for the Upper Peninsula is "good." Some say the future looks "wonderful."

Over the years just ahead, millions of people will come just to see "the bridge that couldn't be built," which now stands as the largest in the world.

Millions Will See It

In the wake must come new thinking—of roads to handle the traffic; sleeping accommodation to house the visitors, eating places to feed them and entertainment for them. There will have to be suppliers and distributors, each in its way adding to the economic force of the area. The effect will be felt farther back along the lines of supply to their very roots.

"New" money flowing into the area will mean more development in all ways. The Peninsula's population will begin a new upward surge and, as a result of this expansion, there will be a need for more schools, churches, recreation centers, places of entertainment, etc.

It is expected, too, that Michigan will now become "a" state in place of a divided one, that its commerce will expand because of that. A big proportion of the U-P's trade has been flowing down the west side of Lake Michigan, to Green Bay, Milwaukee and Chicago. Now, with direct highway contact with Lower Michigan centers, such as Detroit and Grand Rapids, that U-P trade will be diverted from Wisconsin and Illinois to "Michigan."

Some of the Peninsula's towns and townships are already awake to what the future can be and are planning accordingly. Some are being needed into action by Chambers of Commerce or individuals who anticipate the true impact of the future. Some business people see the light and are acting on their own.

Power-wise, the Upper Peninsula is putting more kilowatts of electricity and more drums of LP gas to work than ever before, and the outlook is for still greater

consumption. Natural gas, too, is promised within a few years. New industries, new businesses and new residences are the rule in every community.

The period from 1940 to 1950 witnessed a gradual dwindling of Peninsula population, but it is believed that trend has been reversed since 1950. Statistics will show that the volume of business generally is higher than before—and still growing.

These things can be attributed to national trends, to "progress," and also to "The Bridge." Those counties and towns closest to the Straits of Mackinac will, naturally, experience greater benefits from the big span than those farther away, but all will feel the impact of "Big Mac."

Those folks supposedly in the know, now consider that the tourist traffic is the No. 1 "industry" of the Upper Peninsula. They expect it to grow even more important. The region is regarded as one of the last few "frontiers" of the United States and it is ideally situated as a recreational area, adequately equipped by nature.

Boiling all these things together

it would seem that the really "great days" of the Upper Peninsula lie ahead.

Almost unlimited supplies of low-grade ores are now being tapped through the pelletizing processes to sustain the mining industry far beyond the expected life of "rich ones."

The Peninsula enjoys an ever-growing forest industry output, which has greater dollar volume today than during the days when the white pine was being logged off.

It is located right in the center of the greatest supply of fresh water in the world.

Excellent routes of communication by land, by air, and the soon-to-be completed St. Lawrence Seaway, make its every port a potential world shipping center.

All of these along with its great recreational advantages, its lakes, streams and forests are sure to keep the Peninsula' future bright.

The "Big Bridge" has made all America conscious of this great, though sometimes neglected, part of the North Country and the impact is sure to be felt in its every nook and cranny.



THE MACKINAC BRIDGE will lead millions of Summer visitors to such vacation spots as this. Cool breezes sweeping from Lakes Superior, Michigan and Huron "air condition" the Upper Peninsula . . . its lakes and streams are ready for fishing, boating and swimming. The bridge is a new gateway to one of America's grandest vacation lands.

Increased Population Will Create New Nearby Markets For Farm Produce

The agricultural life of the Upper Peninsula is one economic phase that is going to be affected by the new bridge. While the north is noted primarily for its recreational possibilities, large areas of its soil are rich and productive. With new people coming in, with accelerated vacation travel, and new facilities being devel-

oped, the market for farm crops is expected to increase tremendously.

Especially in demand will be the agricultural products for which the peninsula is famous — potatoes, apples, cabbage, celery, tams and cultivated berries, maple syrup, and dairy products, to name a few.

Upper Peninsula Full Of Surprises—Come, See

"If you're looking for something different, look around the Upper Peninsula of Michigan!"

From Michigan's grand new Mackinac Straits bridge to the cool tip of the Keweenaw Peninsula; from the busy Soo Locks to the dairyland of Menominee county there's something new — and there's something doing.

Fine new, safe highways, smooth-surfaced, carry the traveller to every corner of this "last frontier" of the United States. There are scenic marvels, there are woods, streams, lakes (the fishing and hunting are there!), there are the "awesome" things — like the "new Straits Bridge" at St. Ignace, the Soo Locks, busiest waterway in the world, tremendously beautiful Tahquamenon Falls near Newberry, the majestic Pictured Rocks along the south shore of Lake Superior, near Munising, the iron mines of the Marquette, Menominee and Gogebic ranges, the copper mines and majestic scenery of Houghton, Keweenaw and Ontonagon counties, the ore-loading docks at Escanaba and Marquette, the clear waters of "Kitch-iti-kiipi" near Manistique.

Here's a run-down of what to look for in these 15 Upper Peninsula counties:

MACKINAC COUNTY — "The Gateway to Upper Michigan" — is the burial place of Father

Jacques Marquette, early Jesuit missionary and explorer. He established a mission in St. Ignace in 1671, making the city the oldest in Michigan. Scenic rock formations, scenic routes, fishing "holes" and prime hunting areas.

CHIPPEWA COUNTY — Home of the world famous Soo Locks. One of Michigan's most historic areas. There are Dolomite quarries and fine farms, and scenery, too. Site of Kinross Air Force Base.

DELTA COUNTY — Bay de Noc Wall-eye fishing is famous the world over. Iron ore loading docks, yachting, agriculture, home of the Upper Peninsula State Fair.

DICKINSON COUNTY — It has the world's highest artificial ski jump, waterfalls and iron mines. 647 miles of streams, 125 inland lakes.

GOGBIC COUNTY — Iron mining, 1200 miles of rivers, 488 inland lakes. Summer sports and winter sports. Scenic and historical.

HOUGHTON COUNTY — Copper mining, potato growing, strawberry growing — these things help make Houghton county "great." Home of Michigan College of Mining and Technology and Suomi college. Portage canal divides the twin cities of Houghton and Hancock. Calumet was once the "copper capital" of the



The rifle hunting season hits its peak during the annual deer season in November, and it's the same old story in each of the 15 U-P counties. Young nimrods and old, men and women — they all get into the sport these days. The old days of "waiting" at the Straits to get across to the Upper Peninsula are gone, now that the Straits of Mackinac bridge carries traffic, night and day, the year-round. Archers, as well as rifle-hunters, have their "day" at deer hunting. Their season precedes the general rifle season.



Spring and summer visitors to the Upper Peninsula will certainly make an impact on lake and stream fish, but vice versa, UP fishing adds a wallop to the sport. These three anglers were mighty pleased with their catch of Northern Pike. The hundreds of Peninsula lakes and streams are favorite "holes" for trout, pike, bass and other fish. The State Conservation Department carries on a re-stocking program.

world.

ALGER COUNTY — It's known as the "waterfalls county," and is the site of famous "Pictured Rocks" along the Lake Superior shore. The Upper Peninsula Agricultural Experiment Station of Michigan State University is at Chatham.

IRON COUNTY — A popular vacation area with scenery, iron mining and year-round sports. Inland lakes and streams, forests and fine agricultural lands.

KEWEENAW COUNTY — "The tip of Michigan," famous for its deep and rich copper mines. Scenic and historic. Watch the fleet of Great Lakes freighters pass continually in front of Copper Harbor.

LUCY COUNTY — Newberry is the "gate" to the Tahquamenon falls country and some of the

finest fishing and hunting areas of Michigan.

MARQUETTE COUNTY — Iron mining, commercial fishing, an historical past help make Marquette county outstanding. Northern Michigan college is here.

MENOMINEE COUNTY — Southern gateway to the Upper Peninsula and the U-P's prime "dairyland." History has been made in this region, which is among the most industrialized counties of Upper Michigan.

ONTONAGON COUNTY — Copper and forests gave Ontonagon county its economic breaks. The region abounds in history and scenery. And this is where you'll find the Porcupine Mountains, highest point of land in Michigan.

SCHOOLCRAFT COUNTY — An area popular with vacationers, who are drawn particularly to

"Kitch-iti-kiipi" (The Big Spring) a marvel of nature. Lakes and streams and scenery and forest lands make it a tourist center.

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IN THE UPPER PENINSULA OF MICHIGAN

Serving 30,000 Customers In 10 Counties

UPPER PENINSULA POWER COMPANY

June 29, 1958
— 9B —

a tribute to
The Mackinac Bridge
and to those
who made it possible . . .

- the planners
- the designers
- the contractors
- the people of Michigan

Weighing approximately one-third less than ordinary concrete, strong, light weight Beslite concrete was poured into the outer two traffic lanes of the suspended road deck.

By using Beslite concrete, savings were realized in structural steel requirements and in total construction costs. The Beslite deck also aids in assuring aerodynamic stability.

LIGHT WEIGHT AGGREGATE CORPORATION
manufacturers of BESLITE . . . the light weight aggregate for better, stronger, lighter concrete products
12720 FARMINGTON ROAD • LIVONIA • MICHIGAN

Land Of Hiawatha Now Boasts 300,000 People

Michigan's Upper Peninsula, the one-time "land of Hiawatha," is now home to more than 300,000 people of mixed nationalities — but they're all Americans. You can find settlements of Swedes and Austrians, Germans and Finns, French and Slavs, English and Italians, with a sprinkling of others.

There are Peninsula residents who were born in other countries, but who have chosen to make their homes and spend their lives in Upper Michigan. In some places you can still find traces of "the Old Country" . . . some foreign languages are still spoken, but, of course, English is the tongue of the region. In some areas you may find the mode of living similar to that of another country — the architecture of the buildings, the "refinements" (for example, Finns must have their sauna — (steam bath) — the foods (Cornishmen gave us the pastry). But it's all Americana.

Territorially, Marquette is the largest county in Michigan population-wise, it is the most heavily populated in the Upper Peninsula. Little Keweenaw county, the tip of Michigan jutting into Lake Superior from the Copper Coun-

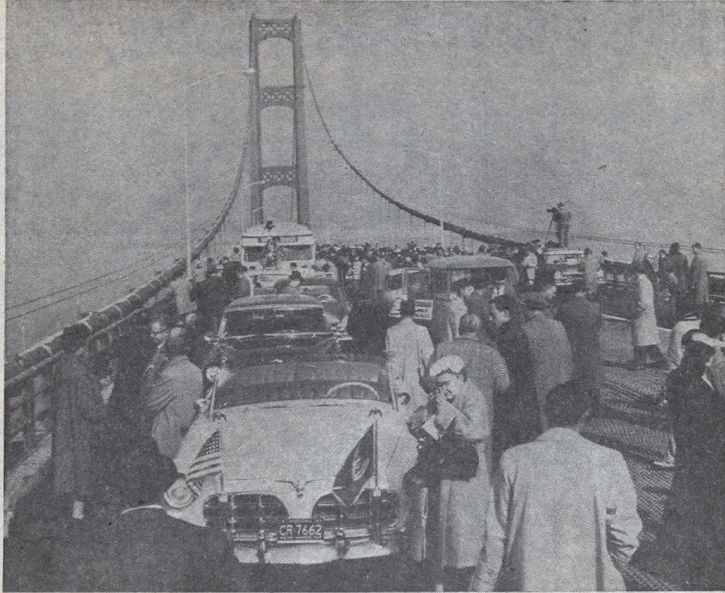
try, is the smallest in the state — in size and population.

The traveler will not find any "large" cities in the "UP" but there's Sault Ste. Marie with 17,912 residents, Marquette with 17,202, Escanaba with 15,170 and Ironwood with 11,466. There is also Alameda with 360, Alton with 156 and Arnold with 45. Between those extremes are St. Ignace with 2,946; Munising, 4,339; L'Anse, 2,376; Manistique, 5,086; Gladstone, 4,831; Negaunee, 6,742 and Stephenson, 791. There are others, too.

The Upper Peninsula's road system vary from dual-lane paved routes to scenic, quiet sideroads. With exception of a short distance on M-28 between Bruce's Crossing and Covington, every inch of all main roads are paved.

There are new roads abuilding everywhere — aimed at correcting current deficiencies and with an eye to "heavy future traffic." They are being built and planned for convenience in travel, ease in reaching destinations and to bring the traveler as close as can be to the scenic and historical points of the area.

Current construction does not interfere with travel.



Traffic began rolling over "Big Mac" on Nov. 1, 1957, as promised 4 years earlier by its builders. Reams of news copy and thousands of pictures flowed back to the rest of the world from the mass of newspapermen and photographers who covered the historic event. A motor caravan of Michigan state officials, the members of the Bridge Authority and newsmen made the initial crossing, after which the new "link" between the Michigan peninsulas was opened to general traffic.

Thousands Attend Bridge Opening

Almost shirt-sleeve weather greeted the thousands who jammed the Mackinac bridge at its opening Nov. 1, 1957.

The sun peaked through the haze at high noon when Gov. G. Mennen Williams, Prentiss M. Brown, chairman of the bridge authority, and Dr. D. B. Steinman, 100 cars, escorted by "the press," returned from Mackinaw City to designing engineer, members of

Bridge Opening Was Biggest News Story On Nov. 1, 1957

For one day back on Nov. 1, 1958, the Upper Peninsula of Michigan was the scene of the world's greatest news story. There to chronicle the official opening of the mighty new Mackinac Bridge came reporters, staff writers and cameramen from newspapers, television and radio. They came from New York, from Chicago, from the Pacific Coast and from all parts of Michigan, Wisconsin, Minnesota and Illinois. Mingling with the mighty throng of dignitaries and officials, they did an outstanding job of covering the historic event—the first linking of Michigan's two great peninsulas.

A chilling November wind did little to dampen the spirit and enthusiasm of the group that made the first epochal crossing of the mighty span, and thus, in the language of Michigan's governor, G. Mennen Williams, opened at last the almost legendary "Northwest Passage."

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the authority, official family of the state, distinguished guests, plus 151 newspaper, TV and radio men, gathered in the center of the huge span for interviews and pictures commemorating the opening of the bridge to traffic.

A cavalcade of dignitaries in St. Ignace where Prentiss M. Brown received from Gov. Williams a check for \$3.25, representing the first toll paid for crossing the bridge.

Thereupon, thousands of autos, lined up for miles at Mackinaw City and St. Ignace, commenced crossing the bridge. A total of 930 vehicles made the trip in the first hour and 3,005 during the 10 hours left in the first day. Vehicles ranged from Model T vintage to high-powered trucking units, many of which had been waiting in line for passage for three days.

Shortly afterwards, ceremonies signaled the demise of Michigan's Great White Fleet, the state ferry system, which since 1923 had ferried 12,000,000 vehicles and 30 million passengers across the Straits of Mackinac.

Final trip of the ferries was

made by the Diesel-electric Vacationland when Gov. Williams led a long line of autos aboard. Hundreds of persons went as foot passengers for the final trip from St. Ignace to Mackinaw City, marking the end of the fleet activity which was inaugurated on July 31, 1923.

The official opening on Friday, Nov. 1, was but the signal for a week end of hustling business for the new bridge.

Motorists jammed the toll gates at times both Saturday and Sunday and the gates were clearing a car each 20 or 30 seconds during rush periods. Many parties wanted to stop and chat with pursers about the bridge.

According to the Mackinac Bridge Authority, the traffic on Saturday reached 3,940 vehicles and on Sunday, 5,782, for the largest November weekend, other than the hunting season rushes, ever recorded at the Straits.

U.P. Is Part Of United States

Coming to Upper Michigan? Well, don't be "scared" . . . it's a living, breathing, working and important part of America.

There are some Indians, but they've definitely taken to American ways—live in houses, wear clothes and have tossed-away their tomahawks.

There are woods, but they're well-traversed by roads and trails. There are isolated areas, but electricity and telephones are practically everywhere.

You don't have to wear anything special in Upper Michigan. There's no special wardrobe necessary to travel or to enjoy yourself.

The weather is wonderful! Sure, there are rainy days, cool days, but generally the summers bring warm days and cool nights.

Conservation laws regulate hunting and fishing.

Snow Problem Isn't What It Used To Be; Asset Now

Despite what you read in the metropolitan newspapers, the people of Upper Michigan are seldom snow-bound. U.P. roads are kept open all winter, even in the snow-belt areas, and are usually in better condition for travel than are those in lower Michigan, Wisconsin, and other more southern areas.

Most of the Upper Peninsula has no more snow than the most of lower Michigan, and snow-belt areas of lower Michigan have far more of the fluffy white stuff than does most of the U.P.

What snow we do get usually stays and we have very little of the slush and wet snow of less favored areas.

Check carefully the next story you read about snow-bound U.P. roads and you'll find they are located in an isolated area of the snow-belt, and that they were op-

ened in a matter of hours by highway crews.

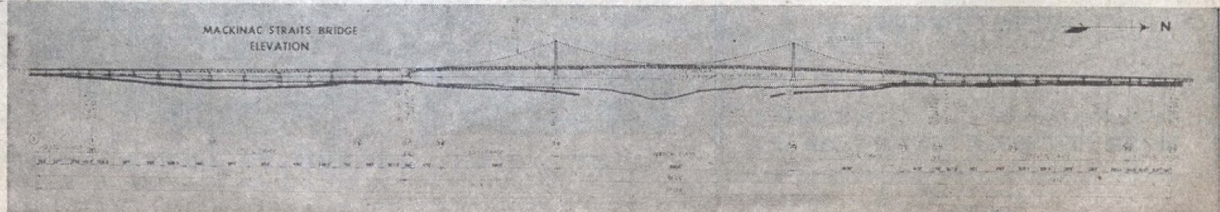
Check, too, the winter temperature reports and you will find Escanaba reports are seldom more than a few degrees colder than Chicago or Detroit, and that often they are higher.

The Upper Peninsula's reputation for rough winter weather developed when the only way to get snow off the streets was to shovel it. U.P. snow seldom melts during January and February and it took a lot of shoveling to do the job in those days.

With modern snow removal methods, the Peninsula's roads and sidewalks are now kept free of snow and slush and ice, while the good clean snow stays on the slopes, and ice forms on the lakes where it should be, for the recreation and not the tribulation of mankind.



This is a typical scene of Winter along Upper Peninsula highways. All roads are open to traffic through the Winter months, and there is as safe or safer than in the Summer months. Motorists in the U. P. find far more paved highway than gravel, and practically every mile of state and county road is paved.



ANOTHER GREAT CONQUEST OF RISK



Many triumphs of man helped build the Mackinac Straits Bridge —

- The perseverance of a few who overcame the doubts of many . . .
- The engineering genius which designed five miles of highway cradled on two steel towers and 34 concrete and steel piers . . .
- The construction skills which employed a multi-million-dollar armada of land and deep-water equipment to reach out through the shallows with great causeways . . . to anchor the piers as much as 205 feet under water . . . and to weave 41,000 miles of cable-wire into huge skeins, looped over the 552-foot towers, to suspend more than a mile and a half of roadway high above a busy shipping channel.

And one of man's greatest triumphs — the conquest of risk through insurance — made these accomplishments possible . . . supporting every step of the project as securely as bedrock holds the 1,000,000 tons of this longest of all suspension spans.

Here again, as it does millions of times every day in both the spectacular and the commonplace events in the progress of man, casualty insurance quietly performed its part of the job —

- Assurance against crippling financial loss from the many hazards faced by those who devoted 2,000,000 man hours to engineering work . . .
- By those who risked \$100,000,000 of capital to finance the bridge . . .
- By the quarries, mines, mills and shops and their 7,500 employees who produced the bridge materials . . .
- By those who transported the materials to the Straits . . .
- And by the construction firms and their 2,500 employees who furnished the costly equipment and did the work.

Yesterday's dream of a united Michigan and today's fulfillment have produced another contribution to a better tomorrow . . . a great job, well done.

But the job of casualty insurance is never done.

Through all the tomorrows it will be an unseen part of the great bridge, ready to restore any accidental damage. And it is the protective companion, throughout all their travels, of the millions of people who will cross the span.

Casualty insurance is silent partner to all mankind . . . to the builders of great structures, the developers of new products and processes, the man at his work, the family on the road, the babe in its crib . . . because casualty insurance is people working together, sharing the burden of their common hazards along man's passage through time — conquering risk.

It is the provider of confidence, destroyer of fear, without which there could be no material progress — the foundation of man's freedom of enterprise.

MICHIGAN INSURANCE
INFORMATION SERVICE
611 Bank of Lansing Building
Lansing, Michigan

History Of The Great Bridge Across Mackinac Straits

The Chippewa Indians, immortalized by H. W. Longfellow in the characters of Hiawatha and Minnehaha, must have given some thought to a permanent link across the Straits of Mackinac. The explorers, the traders and finally the settlers of St. Ignace and Mackinaw City must have dreamed some day of bridge or tunnel connecting their two communities.

There exists evidence of this last thought—now 70 years old. A faded news page of the Lansing Republican, dated February 5, 1884, reprints a story from the Grand Traverse Herald pointing out that the experiments to provide all year service across the Straits by boat had failed, and that if a great east-west route were ever to be established through Michigan a bridge or tunnel would be required. The editorialist considered both as practicable, the only question in his mind was that of cost.

Apparently the dedication of the Brooklyn Bridge in 1883 gave Mackinac Bridge backers encouragement. A St. Ignace store owner in 1884 applied to his advertising both in the local weekly and on his packaging paper. He reprinted an artist's conception of the famous New York structure and captioned it "Proposed bridge across the Straits of Mackinac."

Discussed In 1888

On July 1, 1888, the board of directors of the famous Grand Hotel at Mackinac Island held their first meeting. A bridge across the Straits was the main topic and the minutes show that Commodore Cornelius Vanderbilt said: "We now have the largest, well-equipped hotel of its kind in the world for a short season business. Now what we need is a bridge across the Straits." The great Firth of Forth Bridge in Scotland was under construction then and completed in 1889.

However, it was not until 1920 that any additional documentary evidence concerning the connection of Michigan's two Peninsulas was recorded. Then, the state highway commissioner, suggested a floating tunnel. He invited other engineers to suggest ideas for crossing the Straits. Mr. C. E. Fowler of New York City came forward with an ambitious project to solve the problem by a series of bridges and causeways that would start at Cheboygan, some 17 miles from the Straits, and traverse Bois Blanc and Round Islands, touch the southern tip of Mackinac Island and leap across the deep channel to St. Ignace.

Three years later the Legislature ordered the state highway department to establish a ferry service at the Straits. Within five years traffic on this facility became so heavy that the late Governor Fred Green ordered the same agency to make a study of bridge feasibility. The report was favorable and its cost was estimated at 30 million dollars. Some strides to get the project under way were taken but it was eventually dropped.

Writing in the Michigan Alumnus-Quarterly Review, Spring 1937, the late James H. Cissel, first Secretary of the Mackinac Straits Bridge Authority said:

Reviewed In 1934

"Early in 1934 the matter was again revived and proposed as a suitable P.W.A. project. In the extra session of 1934 the Legislature created the Mackinac Straits Bridge Authority of Michigan and empowered it to investigate the feasibility of such construction and to finance the work by issuance of revenue bonds. The Authority began its studies in May 1934 and has been continuously active since that date.

"Although limited funds precluded full and complete preliminary studies, the Authority was able to reach the conclusion that it was feasible to construct a bridge directly across the Straits at an estimated cost of not more than \$32,400,000, for a combined two lane highway and one-track railway bridge. In its studies the Authority utilized soundings made by the War Department Engineers and was aided by the gratuitous counsel and advice of engineers and contractors experienced in work of this magnitude."

The Authority made two at-

tempts between 1934 and 1936 to obtain loans and grants from the Federal Emergency Administration of Public Works, but P. W. A. refused both applications despite endorsement by the U. S. Army Corps of Engineers and the report that the late President Roosevelt favored the bridge.

Notwithstanding these setbacks, bridge backers resumed their efforts with their usual vigor. The state highway department lent its full support to the project and managed to have considerable work completed that ultimately was of great value to the present project.

Borings Made

From 1936 to 1940 borings were made, a new direct route selected, traffic, geologic, ice and water current studies of a very comprehensive nature were completed. A mole or causeway jutting 4,200 feet into the Straits from St. Ignace south was constructed. Preliminary plans for a double suspension span were drawn and the possibility of a bridge became very real. But the Armies of Europe began to march and bridge progress came to a halt. Finally in 1947 the State Legislature abolished the Mackinac Straits Bridge Authority.

Again the bridge backers swung into action and a citizens committee was established to obtain legislation recreating a bridge authority. By 1950 the legislation was enacted, but it limited the newly created Authority to determine feasibility only. The law required the Authority

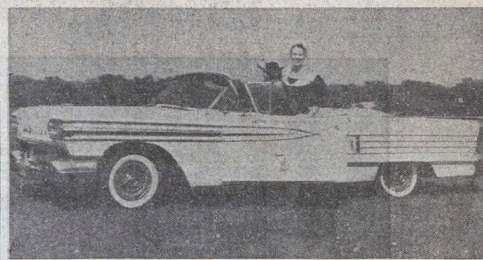
to consult with three of the world's foremost long span bridge engineers for advice on physical feasibility, and with traffic analysts to determine the possibility of the structure's becoming a self liquidating facility.

In January of 1951 the Authority submitted a very favorable preliminary report, stating that a bridge could be built and financed with revenue bonds for \$86,000,000, but did not request powers to finance and build the structure because of the shortage of materials due to the Korean outbreak. This situation eased early in 1952 and the aforementioned powers were granted to the Authority by law. Immediately the Authority asked the Reconstruction Finance Corporation to purchase \$85,000,000 worth of bonds.

State Comes To Rescue

While this agency was studying the request, a private investment banker became interested in the project and offered to manage a group of investment dealers who would underwrite the sale of the bonds. The Authority accepted the offer and while the investment group was being formed, the money market was weakening. By March of 1953 when the Authority was ready to offer its bonds for sale nobody wanted to buy them.

In order to increase their marketability the legislature passed an act during the Spring of 1953 whereby the operating and maintenance cost of structure would be paid out of highway depart-



Each of Michigan's 83 counties will be represented by its own queen at the 3-day Mackinac Bridge Dedication Festival, and each queen will have a new, white 1958 Oldsmobile convertible for her private use. The cars will pick the queens up at their homes and carry them to the Straits. In the picture above, "Miss Ingham County" (Georgia Coisikas of Lansing) extends a smiling welcome to the thousands of visitors expected to attend the Bridge Dedication June 26-28. Oldsmobile provided more than 100 new convertibles for use during the festival.

ment funds. Another effort to finance with this added inducement in June of 1953 was likewise unsuccessful, but toward the end of the year the market recovered and \$99,800,000 worth of Mackinac Bridge bonds were bought by investors all over the country.

Contracts which had been awarded contingent upon this financing were immediately implemented. Merritt-Chapman & Scott Corporation's \$25,700,000 agreement to build all the foundations led to the mobilization of

the largest bridge construction fleet ever assembled. The American Bridge Division of United States Steel Corporation, awarded a \$44,500,000 contract to build the superstructure, began its work of planning and assembly. In U. S. Steel's mills the various shapes, plates, bars, wire and cables of steel necessary for the superstructure and for the caissons and cofferdams of the foundation, were prepared. The bridge was officially begun amid proper ceremonies on May 7 and 8, 1954, at St. Ignace and Mackinaw City.



Pictured Rocks, stretching eastward from Munising for 40 miles, are one of the premium scenic attractions of the Upper Peninsula. "Miners Castle," pictured above, is the best known of the many wind and water-carved sandstone formations. Cruises to Pictured

Rocks are made daily during the Summer months from the Munising city pier. Each trip takes 2 1/2 hours. You can drive to "Miners Castle," a 12-mile trip out of Munising, and get a view of the colorful formation.

PICTURED ROCKS CRUISES

5 TRIPS DAILY from Munising City Dock

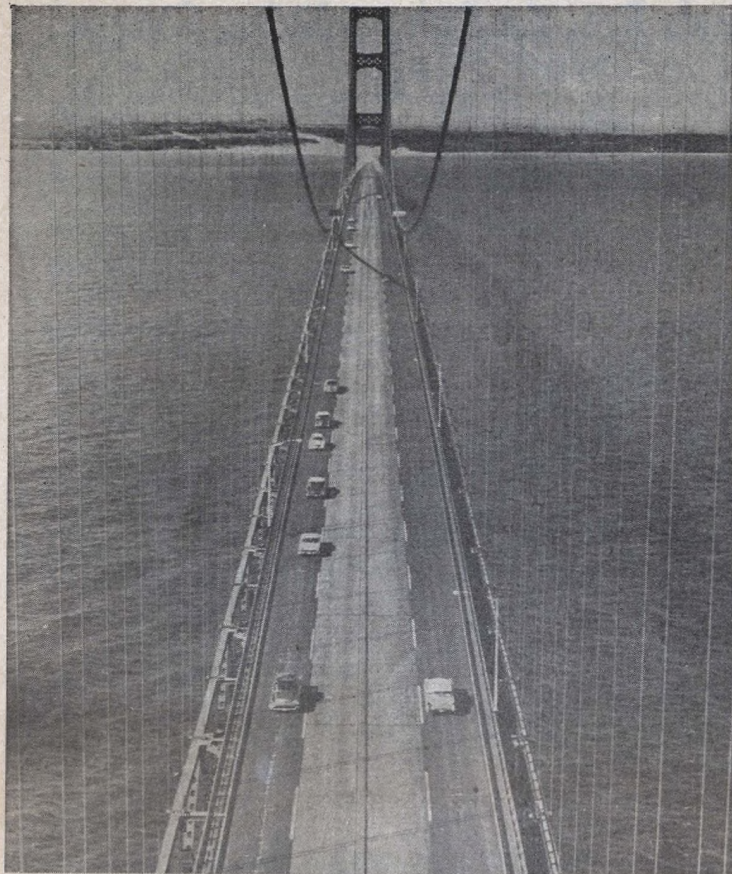
ABOARD THE

"TIGER LADY II"

Capt. Claude A. Hanson
PHONE 385-M

"SEA QUEEN II"

Capt. Everett Morrison
PHONE 109-M



U. P. Bridge Mileage Chart

| Miles From The Bridge To . . . | Miles From Upper Peninsula Points: | | Miles From |
|-----------------------------------|---------------------------------------|--------------------|------------|
| Sault Ste. Marie | 53 | Negaunee | 174 |
| Newberry | 70 | Ishpeming | 175 |
| Blaney | 73 | L'Anse | 229 |
| Manistique | 88 | Houghton | 252 |
| Gladstone | 135 | Copper Harbor | 308 |
| Escanaba | 142 | Ontonagon | 283 |
| Munising | 118 | Crystal Falls | 218 |
| Marquette | 161 | Stephenson | 182 |
| Menominee | 197 | Other Points . . . | |
| Iron Mountain | 194 | Detroit | 294 |
| Iron River | 232 | Chicago | 401 |
| Ironwood | 307 | Milwaukee | 320 |
| | | Grand Rapids | 229 |
| | | Toledo | 343 |
| | | New Buffalo | 337 |

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DEPENDABILITY



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direct-drive...

QUALITY



SUPER 55
gear-drive...

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LANGFORD-McCULLOCH CO.
P. O. BOX 4742
DETROIT 19, MICHIGAN

42,000 Miles Of Wire 'Hold Up' Bridge Span

The world's longest suspension bridge is also one of the most photogenic. This exceptional picture, showing a stream of cars approaching the Upper Peninsula side from Mackinaw City, was taken from the north tower, which rises 552 feet above the blue waters of the Straits of Mackinac, equal to the height of a 46-story building.

The main span, between the two towers, is 8,614 feet long and affords a vertical clearance of 148 feet for the passage of Great Lakes ships.

Each of the two main cables, 68 feet apart, is 24½ inches in diameter.

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to your family...

Milk is essential to the health of your family. It helps to build strong young bodies. Helps older bodies maintain natural vigor and vitality longer. A big step toward keeping yourself and your family fit is to drink plenty of whole fresh milk.

How important is milk?



to your community...

Milk is essential to the economy of your community. Much farm income, for example, is dependent upon milk. Local business, in turn, is largely dependent upon farm buying power. Sound milk marketing, therefore, is critically important. That is why the policies of the Michigan Milk Producers Association are based on guaranteed market and guaranteed payment, guided by long experience, supported by facts.



We join with our many friends from the north—
The great Mackinac Bridge
is the culmination of
a long cherished dream

HOTEL OLDS

Host to Michigan
LANSING

Michigan Milk
PRODUCERS ASSOCIATION



OWNED AND OPERATED BY 16,500 DAIRY FARMERS

'Far Along the Bridge of Legends Runs the Path to Gitchee Gummee'

To those from far places and those from near places and to those who once knew but may have forgotten, and to all others who tread the hallowed ground of Longfellow's legend:

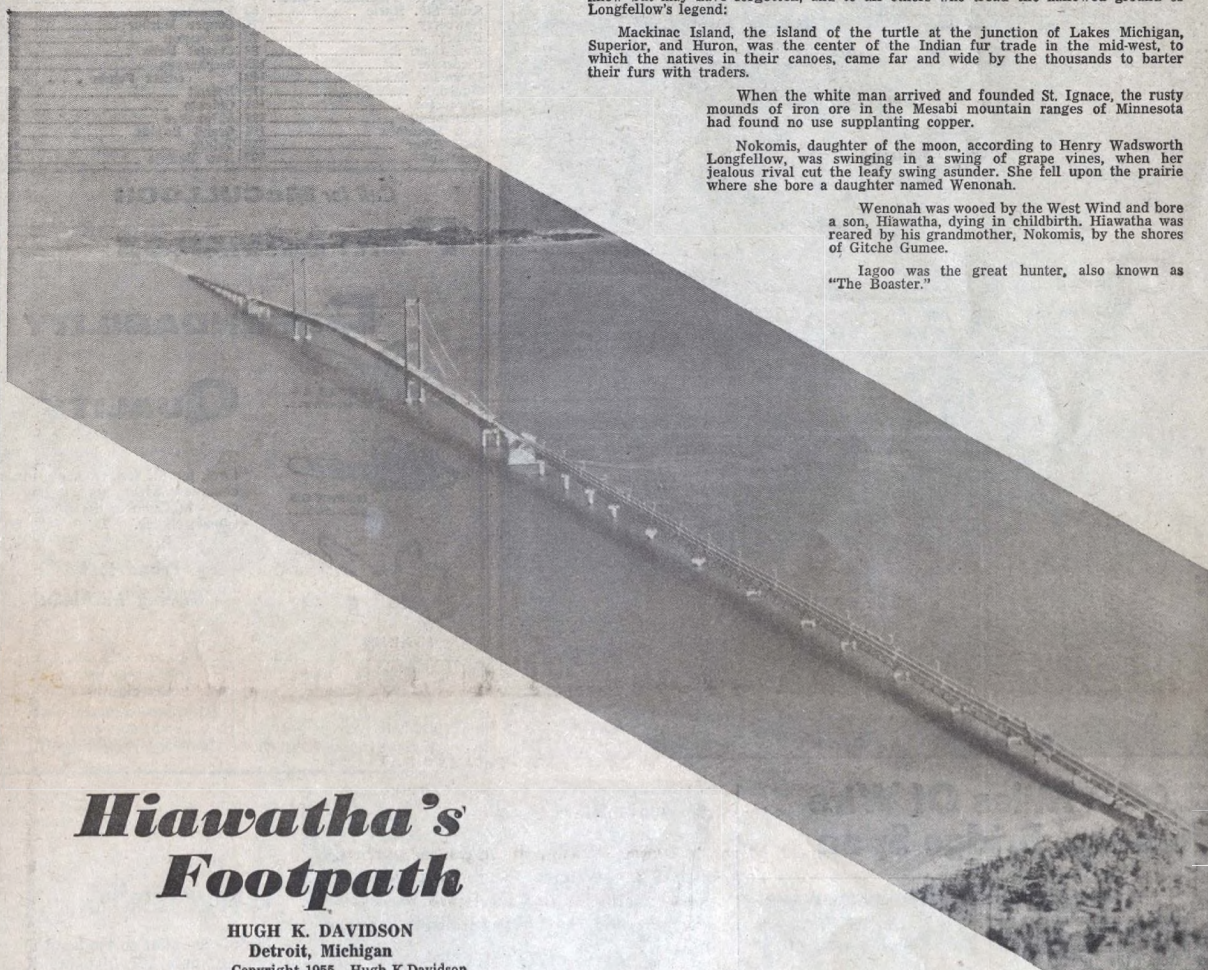
Mackinac Island, the island of the turtle at the junction of Lakes Michigan, Superior, and Huron, was the center of the Indian fur trade in the mid-west, to which the natives in their canoes, came far and wide by the thousands to barter their furs with traders.

When the white man arrived and founded St. Ignace, the rusty mounds of iron ore in the Mesabi mountain ranges of Minnesota had found no use supplanting copper.

Nokomis, daughter of the moon, according to Henry Wadsworth Longfellow, was swinging in a swing of grape vines, when her jealous rival cut the leafy swing asunder. She fell upon the prairie where she bore a daughter named Wenonah.

Wenonah was wooed by the West Wind and bore a son, Hiawatha, dying in childbirth. Hiawatha was reared by his grandmother, Nokomis, by the shores of Gitchee Gumece.

Iagoo was the great hunter, also known as "The Boaster."



Hiawatha's Footpath

HUGH K. DAVIDSON
Detroit, Michigan
Copyright 1955—Hugh K. Davidson

At the conflux of three waters,
Where the avarice of traders
Bartered European baubles
Of a culture superficial
For the silky skins of sables.
Lay the island of the turtle,
Fringed with pines and rocks foreboding,
Gateway to the Big Sea Water.

Where a simple native logic
Of a race espoused in magic
Never looked beneath the surface
Lay two leagues of surging water.
Surges of uneasy water,
Water of conflicting temper,
Never smooth and ever deeper,
Straits of Michilimackinac.

Where the son of sad Wenonah
Trailed the reindeer, filled his larder,
Where the mounds of rising metal
Hid the lodestone of the ancients,
Lay the force of dormant nature
In the shadow of the turtle,
Shores of Michilimackinac,
Memories of Hiawatha.

There two leagues of fretful water
Stayed the reach of easy conquest
For the lethargy of white men
Who know naught of bow and quiver.
Save to point the tufted arrow
Toward the hills of the Mesabi,
Toward the mounds of rusty treasure,
Yet unharnessed by the white man.

From the winter's traps and hunting
Came the natives from the rivers,
Came the braves and came Iagoo,
Came canoes of birth and leather,
Pale slivers from reclining moons,
Slim crescents from the Western moons,
Rescued rims of lingering moons
From beyond Mesabi's ranges.

Came the fathers and the settlers,
Came their robes and came their altars,
Came their forges and their anvils,
Came the sailboat, came the steamboat,
From the old land came their craftsmen,
Came their daring matching legend,
Forged the canon and the ploughshare,
White men of the mighty steel age.

On the grapevine of Nokomis
O're the rough and tumbling waters,
Ran a path on grape vines hanging,
Ran a path worn smooth in legend
In the uplands of the phantom,
And the footsteps of the hunter
On the ghost walk in the heavens
Live in memory forever.

In the rough and tumbling waters,
Where the pathway of the phantom
Swayed upon the grapevine hanging
Stand the pillars of Nokomis,
Near the sleeping dormant turtle
There a net of fringe and cross stitch
Floats upon a braided cable,
Far anchored in the Northern lights.

Generations of Iagoos
In tradition of the hunter
Trail across a concrete ribbon
Through the net on clouds suspended,
Ride on wheels all shod in rubber,
Moulded footsteps in a pattern,
Faultless imprints never ending
Glistening beetles skimming Northward.

Millions in succeeding ages,
Ride the highway snug in cradles
Far above the sparkling ripples
Ascending in the Milky Way
Trace the arc of an arrow's flight
On the contour of the rainbow,
To the land of the Great Hunter
To the land of Hiawatha.

Far below in swirling currents
Stately ships of world-wide commerce
White men's steamboats, fancy's playthings
Toys of Giant Micromegas,
Slowly pass the arching rainbows,
Graceful monsters in perspective,
Gently trailing soft gray smoke plumes,
Palfry progress scarcely moving.

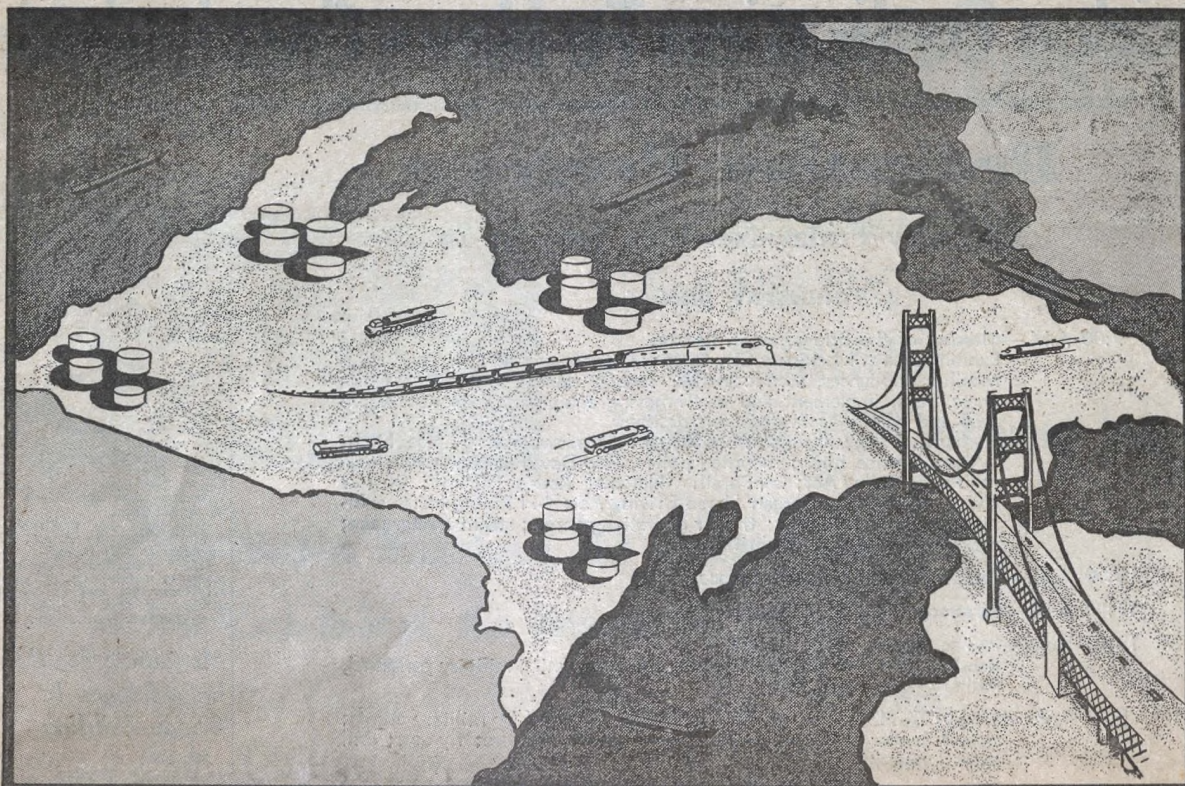
Far along the bridge of legend
Runs the pathway to Mesabi
Runs the path to Gitchee Gumece
To the shining Big Sea water
Spanning wonder of the New World
Sparkling dew in the early dawn
Lace of gold in the setting sun
Majesty in sweeping splendor.

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MICHIGAN ARTIFICIAL
BREEDERS COOPERATIVE
INC.
3655 FOREST ROAD BOX 511
EAST LANSING, MICHIGAN

June 29, 1958

— 14B —



MAN'S age-old search for the NORTHWEST PASSAGE now becomes a reality with the opening of Michigan's magnificent Mackinac Straits Bridge.

From St. Ignace, Mich., to Everett, Wash., the neglected northern transcontinental highway US-2 now lures the jaded traveler to the cool lakes of Northern Michigan, and westward to Glacier National Park, the Yellowstone and the Columbia River running down to the Blue Pacific.

From the Bridge end, the tourist may turn east to the world-famed Soo Locks, the Ontario lake country, Niagara Falls and Old World Quebec.

Truly, the Mackinac Straits Bridge opens a new wonderland to the traveler seeking new pleasures—and to a vast hinterland of awakening commerce.

And, as tourism and commerce depend on the auto, so the auto depends on petroleum.

Throughout Northern Michigan, thousands of men in the petroleum industry have made ready the tank storage, the distribution systems and the modern service stations to serve the people of the area and their best customers, the tourists who come to stay and those who pass through our Water Wonderland.

Michigan Petroleum Industries Committee

118½ West Ottawa, Lansing 7, Mich.

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Bridge Dedication To Have Carnival Air

Dedication Program

Thursday-Friday-Saturday, June 26-28

THURSDAY, JUNE 26

- 9:00 A.M.—Blessing of the Bridge, at St. Ignace.
Exhibits area at Mackinaw City Open: military equipment, aircraft, automobiles, appliances, atomic energy, mobile homes, boat and sports show, farm implement and earth-moving equipment, historical Michigan and Mackinac Bridge construction.
Agriculture Show Opens at Cheboygan: Meadowbrook 6-horse hitch; Wilson 6-horse hitch; mounted police, Skip Dowd Dressage Act; Carroll Payne Riding Act; Jan Porath (National Rodeo Queen); Quarter Horse exhibition; Morgan Horse Driving Act; 4-H Riding Horse exhibition; 4-H Talent Acts; tractor operation contest; steam tractor race; agriculture displays; celebrities.
- 10:00 A.M.—Parade Assembly, At St. Ignace.
- 11:00 A.M.—Paratroop Drop, at St. Ignace.
- 12:00 Noon—Parade Begins, at St. Ignace.
Bands, celebrities, floats, horsemen, marching units, military personnel, military equipment.
- 8:00 P.M.—Military Band Concert, at Mackinaw City, followed by military events: assault landing; air-sea rescue; Naval vessels offshore; fly-over; drill team competition.
- 7:00 P.M.—Military Band Concert, at St. Ignace.
Tourist and Sporting Show opens, at Cheboygan: archery, Chickagami Girls, Fly and Bait Casting; Chippewa Indian pageant; trick gun-shooting; trampoline act. Early arrival of Queens at Sault Ste. Marie.
- 8:00 P.M.—Square Dancing, at St. Ignace.
- 9:00 P.M.—Fireworks, at St. Ignace, followed by public dancing.
- 9:30 P.M.—Fireworks, at Mackinaw City.

FRIDAY, JUNE 27

- 9:00 A.M.—Blessing of the Bridge, at Mackinaw City.
Exhibit areas open at Mackinaw City, St. Ignace.
Agriculture Show opens, at Cheboygan.
Queens registration, at Sault Ste. Marie.
- 10:00 A.M.—Parade Assembly, at Mackinaw City.
- 11:00 A.M.—Paratroop Drop, at Mackinaw City.
- 12:00 Noon—Parade Begins.
- 8:00 P.M.—Military Band concert and military events, at St. Ignace.
Queens assembly and parade, Sault Ste. Marie to St. Ignace, Mackinaw City and Cheboygan.
- 6:00 P.M.—State Legislature reception and dinner honoring 83 Queens from Michigan counties, at Cheboygan.
- 7:00 P.M.—Military band concert, at Mackinaw City.
Tourist and Sports Show opens at Cheboygan.
- 8:00 P.M.—Square Dancing, at Mackinaw City.
- 9:00 P.M.—Fireworks, at Mackinaw City, followed by public dancing.
- 9:30 P.M.—Fireworks, at St. Ignace, followed by public dancing.

SATURDAY, JUNE 28

- 9:00 A.M.—Queens breakfast and departure from Sault Ste. Marie for the bridge.
Exhibit areas open at St. Ignace and Mackinaw City.
- 10:00 A.M.—Parade assembly, in bridge area.
- 11:00 A.M.—Parade of Queens to center of bridge; daylight fireworks.
- 12:00 Noon—Dedication Festival Ceremony:
Blessing of Bridge; Speeches; Jet stunt team; Fly-overs; Naval gun salute; freighter salute; lunch on bridge.
- 2:00 P.M.—Labor Dedication, at bridge.
Inboard utility boat race, at St. Ignace.
- 5:00 P.M.—Marathon canoe race ends, at Mackinaw City.
Mackinac Bridge Dedication Festival Concludes.

A carnival air is encompassing the Straits county over June 26, 27 and 28, dedication festivities for the Mackinac Bridge.

Girls, fireworks, parades, floats, dignitaries, military and naval exhibitions, great name entertainers, all highlight various activities during the three-day festival which culminates at noon on Saturday with the official dedication of the Mackinac bridge.

Girls representing sovereign beauty from each of Michigan's 83 counties are on hand to participate in several parades.

St. Ignace, Mackinaw City and Cheboygan have military and naval demonstrations, exhibits and performers.

Not the least in public appeal are the great pyrotechnic displays, the listing of which required 125 typewritten pages to be detailed.

More than 600 varieties of aerial bombs will be fired, including 924 multiple break shells and a grand finale of 1,050 color breaks, 3,000 heavy reports and 12 American flags with 50,000 candle power lights.

Eight men are furnished to erect and fire the display. The operation is fully insured.

Other attractions include a marathon canoe race ending at Mackinaw City and an inboard utility race from St. Ignace to Les Cheneaux and return.

Magnitude For U.P. Is Re-Defined In Bridge-Building

Magnitude was re-defined for the people of northern Michigan by the construction of the Mackinac Bridge.

First insight to this expression was the assembling of \$4,000,000 worth of floating equipment at St. Ignace by Merritt-Chapman and Scott Corp. in 1954 for its project to build the substructure of the bridge.

Major items in this valuable fleet ranged from ten powerful whirley derricks to five work tugs and included 20 material and equipment barges.

At the same time came an influx of construction men from all corners of the United States, reaching during construction peaks a payroll of more than 800 persons.

More dramatic work consisted of reaching bedrock with huge steel caissons measuring 92 feet by 44 feet. Within these caissons worked bulldozers and dredging cranes.

Afterwards came the miraculous underwater concreting developed by Merritt-Chapman and Scott for just this purpose. The concreting record was established in May, 1955, when 6,250 cubic yards were placed in a single pier in one day.

Steel erection commenced on the main towers to rise 552 feet above the water on July 2, 1955, reaching full height in November that year. On Nov. 16 was registered the worst storm of the construction period, 76 miles per hour.

In July of 1956 the spinning of the huge cables was commenced and with substructure, steel erection and cable work all underway, great strides across the Straits were made.

Offices of the Mackinac Bridge Authority, established by the Michigan legislature, are located in a new building on the St. Ignace side of the span in the Upper Peninsula.

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EAST LANSING, MICHIGAN

June 29, 1958

—16B—

Come to Glorious Schoolcraft County



- ✓ For RELAXATION
- ✓ For FISHING
- ✓ For HUNTING
- ✓ For the REST of your Life

- Visit Modern Manistique, the Beautiful "Motel City"
- See Kitch-iti-ki-pi, the Famous Big Spring
- Visit the Seney Wildlife Refuge, the Thompson Fish Hatchery, the Wyman Forest Nursery
- Roam Through the Hiawatha National Forest
- Fish our Streams, Swim in and Boat on our Numerous Inland Lakes, Camp at Beautiful Indian Lake State Park
- Play Golf at Indian Lake and Blaney Park

Come By Car, By Bus, By Train or By Air



This Invitation Issued
In Behalf of the People
Of Schoolcraft County By:

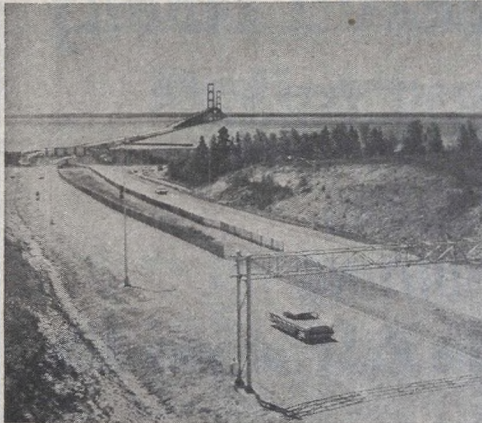
Schoolcraft County
Board of Supervisors

The City of Manistique
Top O'Lake Michigan

Chamber of Commerce
MANISTIQUE, MICHIGAN



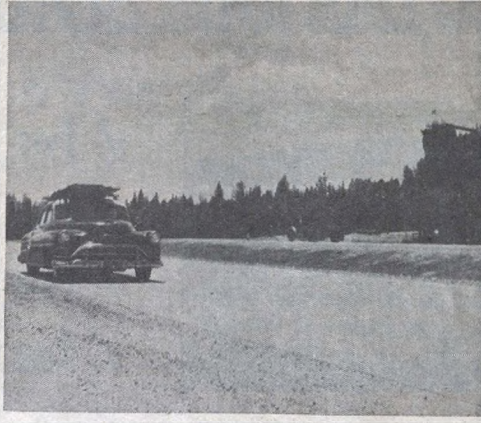
Tunnel, Straits Wind Prove Bridge Safe



Northern Michigan's highways are striving to keep pace with the vast Mackinac bridge.

Pictured above are the four-lane divided highway approach to the span and the non-access four-lane divided highway which will form a link from the Straits to Canada.

The million dollar link designed to connect the bridge approach route to a similar non-access federal inter-state highway leading to the Canadian border, is now open to traffic. In the pic-



ture is a glimpse of historic Castle Rock, ancient lookout of the Ojibways, where annually thousands of tourists climb and view the Straits country.

When the entire length of the inter-state highway is constructed, it will carry motor vehicle traffic from the Ohio border to the Mackinac Bridge and thence to Canada — a super roadway connecting with similar east-west routes now complete or under construction.

BRIDGE LIGHTS PROVIDE NIGHTTIME SPECTACLE

Workmen braved ice-blocked waters and chilled winds as they clambered 200 feet above the Straits to hook up the lights which illuminate the Mackinac Bridge.

Nighttime brings a magnificent display of red, amber, green and white lights twinkling high above the water.

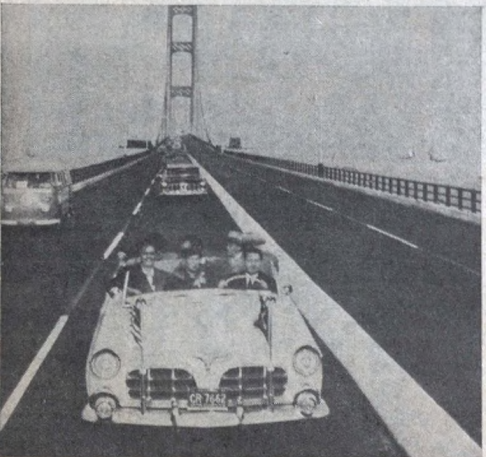
The system carried 314 lights. Newest lights added have been amber cable lights and white spot lights at the bases of the 47-story-high towers.

There are 98 amber cable lights of 107 watts each which stretch from the north anchorage to the top of the north tower, down to the center of the suspension span, back up to the south tower and down again to the south anchorage.

There are eight 2,000-watt white spotlights illuminating the towers. Previously installed on the bridge have been 164 400-watt mercury vapor road lights which have a bluish tinge; four red aerial beacons that bling on and off at the top of the towers, and 70 red and green navigation lights which are 100 to 200 watts each.



Final touch prior to opening of the Mackinac Bridge (November 1). U. S. Steel's American Bridge Division workmen weld steel bridge flooring sections together. The two inner lanes are of open I-Beam-Lok steel flooring, while outer two lanes are concrete filled. Concrete later was topped with asphalt.



In the van of the motorcade which "rode the bridge" at its opening last November was Governor and Mrs. Williams and Larry Rubin, executive secretary of the Mackinac Straits Bridge Authority, making the crossing in a white Chrysler Imperial bedecked with the American and Michigan State flags.

Wind tunnel tests on a large-scale model of the Mackinac Bridge, plus actual demonstrations in the 70 to 80-mile-an-hour winds of the Straits of Mackinac, have proven that the great peninsular link is pronounced safe.

Intensive studies of the structure's aerodynamic characteristics, directed by Prof. F. B. Farquharson, were carried out in the Suspension Bridge laboratory at the University of Washington at the request of Dr. David B. Steinman, designer of the bridge.

Scientists were amazed to find that they had to modify their test equipment since this bridge has features of stability much higher than had ever been previously investigated.

The model was tested for the hypothetical and abnormal condition where all openings in the bridge deck are assumed to be completely closed by ice. Even here it was found that the Mackinac Bridge has complete and absolute aerodynamic stability. Its first full winter in use has more than demonstrated the correctness of these test results. Winds that have leveled as many as 80 television towers in one small area failed to register against the big bridge.

Dr. Steinman explains that the outstanding feature of the design is the provision of wide open spaces between the stiffening trusses and outer edges of the roadway. Bridge trusses are placed 68 feet apart and the roadway is only 48 feet wide. This leaves 10-foot-wide open spaces along the entire length of the bridge. Torsional stability has been achieved by providing two systems of lateral bracing.

Don't Try To Count As You Cross Bridge

They're there, 5,868,300 of them, but don't try to count them as you cross the Mackinac Bridge.

They're rivets and bolts, 4,851,700 steel rivets and 1,016,600 high-strength steel bolts, all individually sealed in place by steel workers and calculated by Dr. D. B. Steinman's engineer.

Prime material specifications were required and the spacing of the rivets was such that when out in the field the workman found an occasional hole not perfectly matched, the hole could be reamed to the next rivet size. Diameters were 7/8 inch, 1 inch and 1 and 1/8 inch.

Shortage of skilled riveters moved contractors to substitute high-strength bolts for field rivets.

The calculation of six million rivets and bolts and their accurate location and spacing on the office drawings; the individual inspecting and sorting of the rivets and bolts in the shop and field constitute a picture of infinite detail. This is also reflected in the fact that the design and erection of the Mackinac Bridge required a total of 85,000 blueprints.

Approximately 10,350 men were employed in designing and building the Mackinac Bridge.

Workers used 4,851,700 steel rivets and 1,016,600 steel bolts in building the Mackinac Bridge.

A total of 85,000 blueprints and 4,000 engineering drawings were used in the construction of the Mackinac Bridge.



This Emergency and Service vehicle on duty 24 hours a day, is equipped to cope with virtually any problem encountered in keeping traffic moving safely on the new Mackinac Straits Bridge.

Designed by Bridge Authorities, the special vehicle is capable of fighting fires resulting from ignited fuels or other causes with both mobile and portable extinguishers. It is equipped with a two-way radio, portable generator for emergency electrical power, acetylene torches, a stretcher and other first aid equipment. A three-section telescoping tower mounted atop the unit, extends for 30 feet for servicing bridge lights. Twin towing booms coupled with special lifts permit removal of vehicles stalled on bridge in a matter of minutes. The vehicle is equipped with driving power to all four wheels to assure ability to reach the scene of any emergency regardless of bridge or weather conditions.

Bridge Builders Watched From Crumbling Ramparts

Crumbling ramparts of historic Fort DeBuade in St. Ignace, Fort Michilimackinac at Mackinaw City and the restored Fort Mackinac high above the "Emerald Isle of the North," beautiful Mackinac Island, for the past four years have been the locale for the daily operations of thousands of "Sidewalk Superintendents."

Gathered, oftentimes in capacity crowds, the onlookers, hailing from the far corners of the earth, grasped telescopes, binoculars and cameras to view the rapid growth of the Mackinac Bridge. Established in the 17th century, the sites of the Straits Triumvirate, at one time the major military outposts in the middle west, have lent their historic lure and commanding position to aid the witnesses of the bridging of the Straits.

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MICHIGAN ARTIFICIAL BREEDERS COOPERATIVE INC.

3655 FOREST ROAD BOX 511 EAST LANSING, MICHIGAN

Michigan's back together again!



Separated since the Ice Age, Upper and Lower Michigan are once again joined by the fabulous new Mackinac Bridge—and New York Life is proud to have been able to help in bringing them together.

100,000 years ago, it would have been possible to cross the Straits of Mackinac on a natural bridge of solid ice. But as the glaciers disappeared, the Straits were filled with a 5-mile expanse of water—and ever since, what is now called Michigan has been a land divided.

For almost a century, Michigan's men of vision have recognized the physical and economic need for a man-made link between the two peninsulas. Today, that dream has become a reality in a 5-mile long colossus of steel girders and cable.

The new Mackinac Bridge represents not only one of the spectacular engineering feats of our time, it is also a 100-million dollar tribute to the foresight, skill and faith of those who planned it, labored on it and backed it financially. The New York Life Insurance Company is privileged to be numbered among them.

Having grown and prospered here with the state of Michigan for over one hundred years, New York Life is happy to have contributed to its progress by backing construction of the span with the purchase of 10 million dollars in Mackinac Bridge bonds. The Company considers it an investment in the future of Michigan... in a new era of industrial and recreational opportunity in this state... to the benefit of the nation.

FACTS ABOUT MACKINAC BRIDGE

Location—Across the Straits of Mackinac, almost due north from Mackinaw City in Michigan's Lower Peninsula to St. Ignace in the Upper Peninsula.

Length—Including approaches, 26,444 feet—just over five miles—making it one of the longest single bridge structures in the world. Cables contain 41,000 miles of wire—enough to circle the earth at the equator more than one and a half times.

Vehicle capacity—3,000 per hour in each direction.

FACTS ABOUT NEW YORK LIFE IN MICHIGAN

New York Life, one of the oldest and strongest legal reserve mutual life insurance companies, has been serving the people of Michigan for over 100 years.

At the end of 1957, New York Life policies in force in Michigan totaled over \$506 million dollars.



New York Life Insurance Company

Life Insurance • Group Insurance
Accident & Sickness Insurance
Employee Pension Plans

..... New York Life Agents serve the people of Michigan from these offices

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660 Woodward Avenue
Detroit 26, Michigan
GENERAL MANAGER: Frank Crum

GRAND RAPIDS
646 Cherry Street, S. E.
Grand Rapids 6, Michigan
GENERAL MANAGER: George B. Skiff

MICHIGAN
500 Griswold Street
Detroit 26, Michigan
GENERAL MANAGER: Louis F. Gopford, C.L.U.

LANSING
109 West Michigan Avenue
Lansing 16, Michigan
GENERAL MANAGER: Edward R. Litten

DEARBORN
1390 North Telegraph Road
GENERAL MANAGER: J. Neil McNabney, C.L.U.

UPPER MICHIGAN
1811 North Michigan Avenue
Saginaw, Michigan
GENERAL MANAGER: Donald K. Olney, C.L.U.

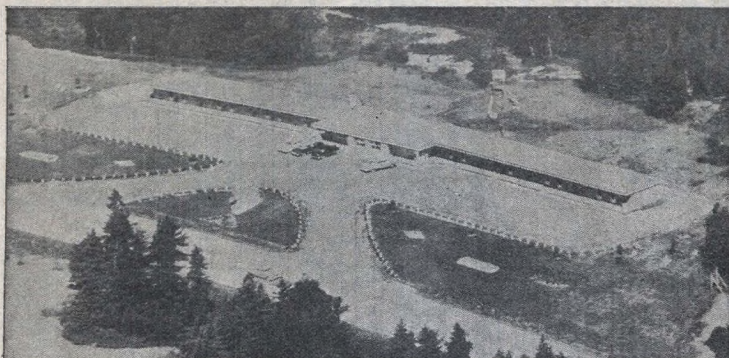
SALES OFFICES:

NORTHLAND
18107 James Couzens Highway
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FLINT
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GROSSE POINTE
19599 Mack Avenue
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U.P. Offers Finest Tourist, Vacation Accommodations



Aerial View of Typical Upper Peninsula Motel

16 U.P. Weekly Newspapers Join In This Special Bridge Edition

Formal dedication of the Mackinac Straits bridge, one of the outstanding historical events in Upper Peninsula history, is "covered" by the U.P.'s 16 weekly newspapers in this special edition. An event in itself, it represents the most concentrated promotion ever undertaken by any Peninsula newspapers.

These newspapers believe that the bridge "story" is worth telling and needs to be told in the most widespread manner. Here are factual pictures and factual information which tell the bridge story and with it the "Upper Peninsula story" across the U.P., across the state and across the nation and beyond.

The weekly newspapers participating are: the Bessemer Herald, Crystal Falls Diamond Drill, Gladstone Delta Reporter, Iron River Reporter, L'Anse Sentinel, Lake Linden Native Copper Times, Manistique Pioneer-Tribune, Muni-

May 1951, Marked Turning Point In Bridge Plans

The turning point in the plan to build the Mackinac Bridge came on May 1, 1951.

It was on that date that the state legislature was finally sold on the feasibility of the Bridge. The Bridge Authority, re-created by the legislature in June, 1950, returned on May 1, 1951 to report its findings. The Legislature was so impressed with the facts and figures that even the most sincere doubters could no longer oppose the idea.

Originally the Bridge Authority was authorized to only investigate the physical and financial feasibility of building a bridge. They employed the three most outstanding bridge engineers in the country: Othmar H. Ammann and David B. Steinman of New York, and Glenn B. Woodruff of San Francisco. The Authority submitted its report May 1, 1951 and concluded: "Investigation shows that in the opinion of the most competent bridge engineers in the country, the great project connecting the two Michigan peninsulas can be realized." It was signed by George A. Osborn, William L. Cochran, Mead L. Bricker, Charles T. Fisher, Jr., Murray D. Van Wagoner, Charles M. Ziegler, chairman Prentiss M. Brown, and secretary Larry Rubin.

THE BRIDGE BRINGS IMPROVED

M-A-B-C

SERVICE TO ALL MICHIGAN DAIRY FARMERS

MICHIGAN ARTIFICIAL BREEDERS COOPERATIVE INC.

3655 FOREST ROAD BOX 511 EAST LANSING, MICHIGAN

June 29, 1958

— 20B —

Shown at left is one of the beautiful modern motels that line the highways of the Upper Peninsula.

Motels began to appear in the peninsula several years ago, and since construction of the new Mackinac Bridge started the investment in modern motels has grown at a prodigious rate. Hundreds of these fine establishments now line the U.P.'s highways, offering accommodation facilities comparable to the best metropolitan hotels.

In addition to the fine motels, the Upper Peninsula also has many modern hotels and there are eating places—both in the small

cities and in wooded retreats along the highways—that stand in comparison with some of the best in the nation.

Automotive service for the motorist can be found almost everywhere in the Upper Peninsula. Every community has modern garages and dozens of service stations, and fine service stations dot the highways, most of them only a few miles apart. No motorist need be stranded anywhere, either for car service or accommodations.

Contrary to many erroneous reports published in magazines and metropolitan newspapers, the Upper Peninsula has complete facilities for the traveler and vacationer.

Unique **BLANEY PARK RESORT**

72 MILES WEST OF MACKINAC STRAITS BRIDGE

- SCENIC GOLF COURSE • LIGHTED SWIM POOL
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Great Ideas Have A Common Purpose

On November 15, 1957, a great idea became a reality when the first vehicle crossed over the new Mackinac Straits Bridge. Now, and for the years to come, it will serve as the physical link between the peoples of the two "pleasant peninsulas."

Time has proven another great idea. One held by a group of far-sighted Michigan Farmers back in 1919 when they founded the Michigan Farm Bureau. The Farm Bureau serves as an active all-round link in the interests of better—more prosperous—agriculture.

SERVING MICHIGAN FARMERS FOR 41 YEARS

VOICE FOR AGRICULTURE

The voice of Michigan farmers is heard in all branches of government through membership in the Farm Bureau, the Organization that promotes and protects the interests of farmers legislatively, educationally and economically. Three out of four Michigan farm families participate in and benefit from Farm Bureau activities . . . they know IT PAYS TO BELONG.

Michigan Farm Bureau
MEMBERSHIP DIVISION



FARM SUPPLIES

Whatever the need for your farm — be it seed, feed, fertilizer, fencing, poles, paints, dairy equipment, home appliances or hundreds of other quality products — you'll find them all at your nearest Farm Bureau Services Store.

FARM BUREAU
SERVICES, INCORPORATED



INSURANCE

All Farm Bureau Insurance — auto, liability, fire, life — is designed especially for farm families. With Farm Bureau Insurance, you get insurance "tailor-made" to fit your needs at the lowest possible cost.

FARM BUREAU
INSURANCE COMPANIES



PETROLEUM PRODUCTS

The Farmers Petroleum Cooperative brings quality gasoline, fuel oil, motor oil and many other fine products, such as tires and batteries, to many Michigan farms. Farmers Petroleum Cooperative is the convenient way to buy all your petroleum needs at low cost.

FARMERS PETROLEUM
COOPERATIVE, INCORPORATED



71,000 FARMER MEMBERS STRONG