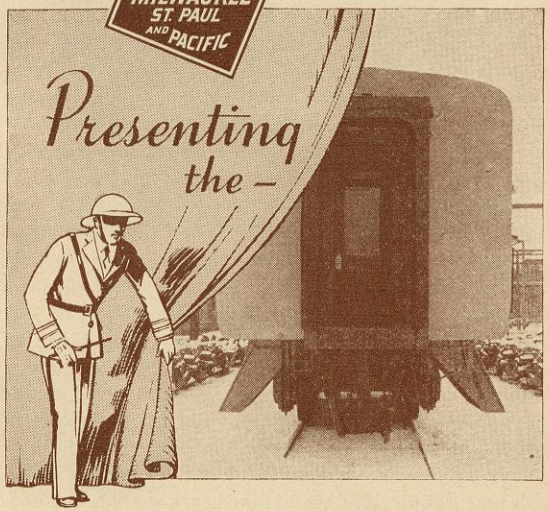
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CHICAGO MILWAUKEE ST. PAUL AND PACIFIC



PROGRESS COACH

one of

The Milwaukee Road's

contributions to

A Century of Progress in Transportation

Quick Facts About
THE PROGRESS COACH

Length of body—72′ 6″.

Length overall—81′ 8″.

Height—13′ 1″, nearly 1½ feet lower than conventional coach.

Weight—102,600 pounds fully equipped, nearly 50,000 pounds less than conventional coach.

Seating capacity—54 persons (78 are seated in conventional coach).

Floor space per passenger—over 10 square feet (less than 6¼ sq. ft. per passenger in conventional coach).

Aisles—four inches wider than in conventional coach.

Double seats of a new, revolving-reclining type, backs lowered individually with hand cranks.

Men's smoking room—seats nine persons, two porcelain wash basins.

Women's lounge—seats five, two porcelain wash basins, large mirror.

Rubber cushioned trucks.

Automobile type windows sliding in felt-lined channels.

Continuous circulation of fresh filtered air.

Heating thermostatically controlled, maintaining uniform temperature.

The MILWAUKEE ROAD

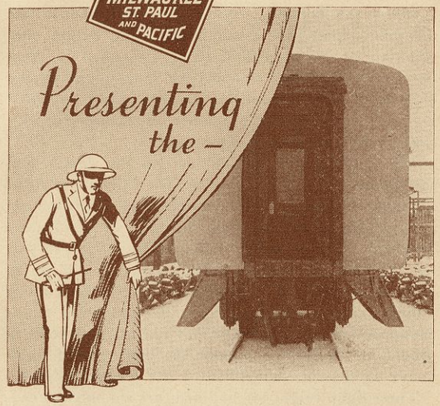
GEO. B. HAYNES, *Passenger Traffic Manager*
W. B. DIXON, *General Passenger Agent*
CHICAGO



Electric Water Cooler

9A

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Heralding . . . .
A New Era in Comfort for Coach Passengers

THE Progress Coach (4400) is the forerunner of a series of fifty similar cars now under construction, in our own shops at Milwaukee, which represent a new type of light-weight equipment.

The Milwaukee Road takes special pride in presenting this car at A Century of Progress; first, because it was designed and built by our own employees; second, because it is the first car built for regular coach passengers, no extra charge, that embodies the newest principles of modern design.

The first thing that impresses you upon seeing the Progress Coach is its sleek, streamlined appearance—the complete absence of window sills, belt rails and roof projections. Step inside and you are struck instantly by its beauty and spaciousness.

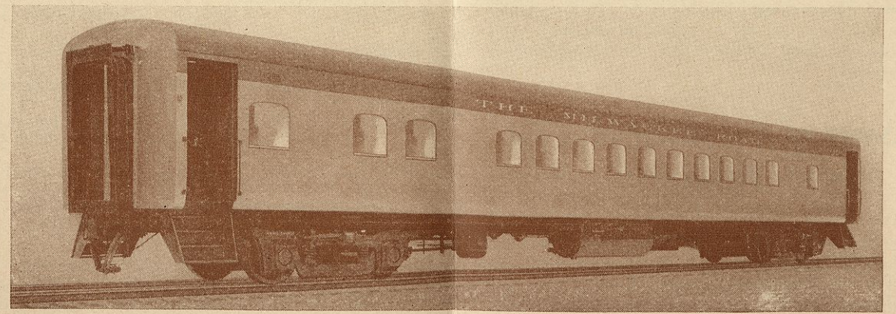
The Progress Coach represents a complete break with tradition. It is streamlined, it embodies new materials and new principles of construction, it weighs only two-thirds as much as a standard coach and, most important of all, it was built entirely with the passenger's viewpoint in mind.

35% More Room Per Passenger

The amount of room in the car—the extra width in the aisles, the wide spacing of the seats, the commodious smoking rooms are immediately noticeable. How real this spaciousness is may be appreciated when you understand that this car is full size—in fact, is five inches wider inside than the conventional coach—yet seats only two-thirds the usual number of passengers. As a result, there is more than ten square feet of floor space for each passenger in the Progress Coach as opposed to less than six and one-half square feet in standard coaches.

The deeply upholstered, luxurious double seats are of a new revolving, reclining type. Each one is composed of two individual seats with arm rest between which can be lowered if desired. Seat bottoms are set at a comfortable angle, the front being 3″ higher than the rear. The backs may be lowered separately to a restful reclining position by means of small cranks recessed in the arms, and the whole seat may easily be swung about to face the aisle, the window or the chairs behind.

There is far more than the usual amount of leg room between these seats just as there is more than the customary allotment of parcel room in the wider, stronger luggage rack overhead. Ample lighting is afforded by individual diffused lights at each seat and by ceiling lights of simple and attractive modern design. Each car carries its own generator for supplying electric current.



Exterior Progress Coach

New Interior Finish

The interior of the car is very pleasing in appearance. The usual woodwork is replaced by smooth panels covered with brown cloth. These panels are removable so that the color scheme of the walls may easily be changed to correspond with the seasons or to keep pace with changing styles. The ceiling of the car is flesh colored; the floor patterned dark green rubber tile, while the seats are upholstered with a brown-gray-green large-leaf figured moquette. Single-pane windows of polished plate glass similar to automobile windows slide easily up and down in felt channels.

At one end of the car is a men's smoking room containing two portable chairs, a portable davenport and a built-in davenport upholstered in green leather. The room seats nine persons, contains two porcelain wash basins with hot and cold running water, and provides entrance to an adjoining toilet room larger than ordinary.

The women's lounge at the other end of the car is a new feature in coach accommodations. Seats for five persons are provided by a deep seated built-in davenport and a dressing chair upholstered in green plush. There is a large mirror, two porcelain wash basins and an entrance to the adjoining toilet room.

An electric water cooler at the end of the aisle of the car provides cold, filtered water for all passengers.

Improved Ventilation

Heating and ventilating of the car is automatically controlled by a scientifically designed system of concealed air ducts, steam pipes, motors and blowers. In the winter, stale air from within the car is drawn out through exhaust vents; fresh air is drawn in, filtered, heated by steam pipes and blown gently into the car from grilles in the pilasters between the seats. The entire heating system is thermostatically controlled to give unvarying comfort at all times. In the summer, the same system provides ventilation only, assuring pure, filtered air—no draughts from open windows, no soot, cinders or dirt. A complete change of air within the car is obtained about every five minutes.

Minor refinements of the Progress Coach include wider vestibules, platforms and steps, four tread steps in place of three, and the use of non-skid metal on platform steps and stair treads.

Interesting Mechanical Features of the Progress Coach

Though the turtle-back roof, smooth side panels and flush windows represent obvious differences between this coach and the ordinary car, there are even more important differences in construction that cannot be seen. By the use of special alloys, all-welded construction in place of riveting, and radical changes in design, the weight of the car has been reduced to 102,600 pounds —almost 50,000 less than the conventional car—without any loss of strength or safety.



Interior Progress Coach

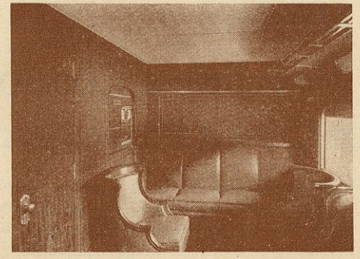
That this saving of 25 tons in dead weight has not been made at the sacrifice of strength is evidenced by the fact that Coach 4400 was in actual service, for over two months, in the heaviest trains operated by The Milwaukee Road. The fifty new coaches will therefore be available for use in any of the regular trains and will not have to be carried in trains made up exclusively of light-weight equipment.

The construction of the side walls permits a reduction in thickness of 2½". The extra 5" thus gained is utilized in increasing the width of the aisles and seats.

Every effort has been made to eliminate unnecessary vibration and to reduce the noise of operation. To accomplish this, the four-wheeled trucks are made of cast steel and are equipped with silent roller bearings. Special air brakes of a new type are mounted on the trucks instead of underneath the car body, and the trucks themselves are insulated with inserts of live rubber wherever metal touches metal. Further insulation has been provided by giving all the steel sheets of the car body a heavy coat of sound-deadening material.

Some of the Material Used in the Progress Coach

Few people realize the tremendous variety and amount of material used in the construction of a single car of this type. Somewhere on the Progress Coach will be found the following metals and alloys: aluminum, antimony, brass, bronze, cobalt, chromium, copper, gold, iron, lead, manganese, magnesium, mercury, nickel.



Men's Smoking Room

silver, tin, vanadium and zinc. Although the car is built primarily of steel, it was necessary to use the following woods for interior finish: ash, birch, fir, oak, pine, poplar and walnut.

The following table will give some idea of the large amount of certain materials required to build the Progress Coach:

Material	*Quantity*	*Equivalent to*
Cloth (upholstery, window shades, wall covering, etc.)	4,616 sq. ft.	136 men's three-piece suits.
Leather	420 sq. ft.	317 hand bags.
Glass (excluding light fixtures and bulbs)	161 sq. ft.	741 eight ounce water tumblers.
Lumber	5,789 BFM	12 logs 1 foot in diameter and 50 feet long.
Paint and Varnish	97 gallons	1 coat for nearly 1 acre of surface.
Wire and Cable	5,637 lin. ft.	1 and 1/15 miles.
Pipe	1,970 lin. ft.	Over ⅓ mile.

The Progress Coach is 72 feet 6 inches long over the body end posts, 81 feet 8 inches over the couplers. It seats a total of 54 persons, and weighs 102,600 pounds when fully equipped and with water tanks loaded.

Better Equipment—Better Service

While the layman may not be interested in the scientific aspects of streamlining, light weight construction or electrification, he is interested in them insofar as they affect rail service. It is only by means of constant improvement that the railroads are enabled to offer every desirable feature of transportation—***speed, safety, comfort and low cost.***

The giant electric locomotive (in the dome) and the Progress Coach exhibited by The Milwaukee Road are concrete evidence of our unremitting efforts to keep our service and equipment in the van of modern progress. With its great record of leadership in pioneering such railroading achievements as the use of silent roller bearings, coil spring mattresses, open observation cars and electric power for operating transcontinental trains, it is fitting that The Milwaukee Road should be the first to present the new type of light-heavy equipment exemplified by the Progress Coach.

These light weight, streamlined cars not only increase the comfort of the passenger, but reduce the dead-weight of the train, make possible increased speeds and lower cost of operation. They represent a long stride forward in fulfilling the aims of The Milwaukee Road —to provide its passengers with the utmost in modern transportation at the lowest possible cost.

New Low Basic Fares Special World's Fair Rates

Last year's heavy rail travel to the Fair at special low rates impressed thousands of people with the comfort and economy of railroad service. The Milwaukee Road is continuing these special fares this year and, in addition, all fares have been drastically reduced.

You can now travel at all times, between all stations, at fares representing reductions of from 16.67 to 44.45 per cent.

Round Trip Fares

1⅘ CENTS A MILE each way in Coaches; also in Coaches and Tourist Sleeping Cars on main line St. Paul to Seattle-Tacoma—space in Sleeping Cars extra. Return limit 10 days.

2 CENTS A MILE each way in Parlor or Sleeping Cars . . . Space extra. Return limit 10 days.

2½ CENTS A MILE each way in Coaches, Parlor or Sleeping Cars . . . Sleeping and Parlor Car space extra. Return limit 6 months.

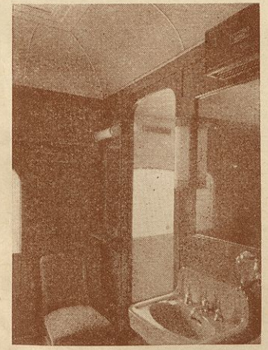
One Way Fares

2 CENTS A MILE in Coaches; also in Coaches and Tourist Sleeping Cars on main line St. Paul to Seattle-Tacoma—space in Sleeping Cars extra.

3 CENTS A MILE in Parlor or Sleeping Cars . . . Space extra.

Parlor and Sleeping Car Surcharge Repealed!

Traveling on either business or pleasure The Milwaukee Road invites your patronage. Our Travel Bureaus, located in principal cities and at The World's Fair are eager to tell you of the advantages of Milwaukee Road service in the West and Northwest. Vacation or business itineraries will be cheerfully arranged so that you may compare the cost and convenience with that of any other form of safe, fast dependable transportation.



Corner of Women's Lounge

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GEO. B. HAYNES — *Passenger Traffic Manager*

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CHICAGO



Electric Water Cooler