Presenting the

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 ft.
Length overall—81 ft.
Height—13 ft., nearly 152 feet lower than conventional coach.
Weight—102,000 pounds fully equipped, nearly 10,000 pounds less than conventional coach.
Seating capacity—54 persons (78 are seated in conventional coaches).
Floor space per passenger—over 16 square feet (less than 6 sq. ft. per passenger in conventional coaches).
Alcove—four inches wider than in conventional coach.
Double seats in a row, evolving revolving type.
Extra radio equipped.
Mans’ smoking room—seats nine persons.
Women’s smoking room—seats two persons.
Men’s and women’s rest rooms.
Rear overhang.

Heralding .
A New Era in Comfort
for Coach Passengers

THERE IS NO DOUBT about it. The new 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 long-distance equipment. The Milwaukee Road has always been progressive in every respect and the new Progress Coach is no exception.

The Milwaukee Road takes pride in presenting this car at a Century of Progress; first, because it was designed and built by our own engineers and craftsmen, and second, because it is the first car built for regular coach passengers, not extra radio, 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 silks, belt rails and cornices. Stop 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 the aisles in the conventional coach are only two-thirds as wide inside than the conventional coach—yet seats only two-thirds of 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 square feet in the conventional coaches.

The deeply upholstered, luxurious double seats are of a new revelling, reclining type. Each 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 back being 16½ inches higher than the seat. The backs may be lowered separately to a restful reclining position by means of small cranks concealed 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 allowance of parcel room in the aisles, 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.

New Interior Finish

The interior of the car is very pleasing in appearance. The woodwork is replaced by smooth panels covered with brown cloth. These panels are finished with no noticeable seam or edge, all the corners rounded off, the color scheme of the walls may be changed to correspond with the seasons or to keep pace with changing styles. The ceiling of the car is light colored, the floor patterned dark green rubber tile, while the seats are upholstered in green with green large-leaf figured moquette. Single-pane windows of polished plate glass similar to automobile windows sit Gladly up and down in felt channels.

At one end of the car is a men’s smoking room containing two portable chairs, a portable divan and a built-in divan 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.

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 the car is automatically controlled by a scientifically designed system of con-

tact-air fans, sheet metal 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 extraction of the Progress Coach and blown gently into the car from grilles in the pillars 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, by sucking out the air—drifting from open windows, no sound, no clatter, or dirt. A complete change of air within the car is obtained about every five minutes.

Interesting Mechanical Features of the Progress Coach

Though the turtleneck roof, smooth side panels and flush windows represent obvious differences between

the coach and the ordinary car, there are even more important differences in construction which cannot be

seen. By the use of special alloys, all-welded construc-

tion in place of riveting, and radical changes in design, the weight of the car has been reduced to 102,000-

pounds—that is, about 50,000 pounds less than the conventional car—with

out any loss of strength or stability.

The saving of 21 pounds in weight has not been made at the sacrifice of strength is evidenced by the

fact that Coach 4909 was in actual service, for over two months, in the heavy 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 Progress Coach's side walls permits a reduction

in thickness of 2/5". The extra 5" thus gained is ad

vanced in increasing the width of the aisle and seat.

Every effort has been made to eliminate unnecessary

vibration and to reduce the noise of operation. To ac-

complish this, the four-wheel-trucks are made up of

steel and are equipped with silent roller bearings. Si-

milar silent air brakes of the new type are mounted on the trucks to deal with the car itself, in addition to the

trolleys themselves are insulated with Liners of live rubber wherever metal touches metal. Further insu-

lation has been provided by covering 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 the

density of material construction of the Progress Coach of this type. Somewhere on the Progress Coach will be

found sheets of zinc, glass, sheet metal, and alloys, aluminum, brass, bronze, copper, bronze, silicon, copper,

lead, magnesium, magnesium, molybdenum, nickel, silver, tin, vanadium and zinc. Although the car is

being primarily an electrically operated car, we are anxious to put the following words 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:

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
<th>Equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloth</td>
<td>1,154 sq. ft.</td>
<td>8 men's size, web, covering, etc.</td>
</tr>
<tr>
<td>Leather</td>
<td>117 lb.</td>
<td>30 men's size, black, tan, and white, belts, hand bags, garters, and boots.</td>
</tr>
<tr>
<td>Glass</td>
<td>1 barrel</td>
<td>144 men's size, black, tan, and white, belts, hand bags, garters, and boots.</td>
</tr>
<tr>
<td>Facial</td>
<td>144 men's size</td>
<td>144 men's size, black, tan, and white, belts, hand bags, garters, and boots.</td>
</tr>
<tr>
<td>Lambs</td>
<td>144 men's size</td>
<td>144 men's size, black, tan, and white, belts, hand bags, garters, and boots.</td>
</tr>
<tr>
<td>Paint and Varnish</td>
<td>1 gallon</td>
<td>144 men's size, black, tan, and white, belts, hand bags, garters, and boots.</td>
</tr>
<tr>
<td>Wire and Cables</td>
<td>5,170 lb.</td>
<td>144 men's size, black, tan, and white, belts, hand bags, garters, and boots.</td>
</tr>
<tr>
<td>Pipe</td>
<td>1,141 lb.</td>
<td>144 men's size, black, tan, and white, belts, hand bags, garters, and boots.</td>
</tr>
</tbody>
</table>

The Progress Coach is 72 feet 6 inches long over the

body and parts, 11 feet 4 inches over the coach itself; it weighs 102,000 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 con-

struction or electrification, he is interested in them insofar as they affect rail service. It is only by means of

constant improvement and the savings in the use of materials that railroads can offer to every desirable feature of transportation—speed, safety, comfort and low cost.

The giant electric locomotive (in the dome) and the Progress Coach exhibit by The Milwaukee Road is very substantial evidence of our unceasing efforts to keep our

service and equipment in the front rank of modern progress. With its great load of leadership in pac-

ning along the railroad as our guiding light, we have a constant demand for lightweight, silent roller

bearings, coil spring mattresses, open observation cars and electric power for operating trans-

transportation trains. If it is found necessary to streamline our equipment, we should be the first to present the new type of light-

weight equipment which is being used on 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 speed and lower cost of operation. They represent a long stride forward in streamlining the miles of 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 increased thousands of people with the com-

fort and economy of railroad travel. The Milwaukee Road is continuing these special fares this year and, in

addition, all fares have been drastically reduced. You can travel at all rates between all cities, subject to

all restrictions, at fares representing reductions of from 16.67 to 44.45 per cent.

Round Trip Fares

1st CENTS A MILE every way in Coach: Also in Coach and Tourist Sleeping Cars on main line St. Paul to Seattle-Tacoma—space in Sleeping Cars extra. Return limit 10 days.

2nd CENTS A MILE every way in Parlor or Sleep-

ing Cars... Space extra. Return limit 10 days.

3rd CENTS A MILE every way in Coach, Par-

lor or Sleeping Cars... Space extra. Return limit 6 months.

One Way Fares

2 CENTS A MILE every way in Coach or 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 Mil-

waukee Road invites your patronage. Our Travel Bus-

ness Bureau, located in some of the major cities at The World's Fair are eager to tell you the advan-

tages that the Miles of Milwaukee Road service in the West and Northwest, Vac-

tation or business, you will find this fare quite

cheerful arranged so that you may enjoy the cost and convenience of that with any other fare, a trip which is fast dependable transportation.

Courts of Women's Lounge
Quick Facts About
THE PROGRESS COACH

Length of body—72' 6".
Length overall—81' 8".
Height—13' 1", nearly 1 1/2 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 6 1/4 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  W. B. DIXON
Passenger Traffic Manager  General Passenger Agent

CHICAGO

Electric Water Cooler