respect to various operating factors. Outstanding achievements of this type have been as follows:

Based on the first eight months of each year from 1923 to 1927, car-miles per freight car-day exhibit an almost continuous increase, from 27.4 miles in 1923 to 30.0 miles in 1927.

Net tons per freight train have shown an almost consistent increase, from 716 tons in 1923 to 778 tons in 1927.

Freight train speed has risen consistently, from 10.8 miles per hour in 1923 to 12.3 miles in 1927.

Gross ton-miles per freight train-hour have increased continuously and markedly, from 16,464 in 1923 to 21,768 in 1927.

Fuel consumed per thousand gross ton-miles in freight service has declined steadily, that is, has improved, from 163 pounds in 1923 to 130 pounds in 1927; in the passenger service, fuel consumption has also shown progressive improvement, from 18.4 pounds per passenger train car-mile in 1923 to 15.4 pounds in 1927.

All these comparisons are for eight-month periods in the respective years. The details underlying them, and other efficiency factors as well, will be found in Tables II and III of the Appendix.

Equipment Performance

Adequacy of railway equipment to meet possible future increase in traffic demands is a subject open at all times to economic analysis. Light is thrown on this problem by the situation that has existed during recent months in relation to railway equipment, its physical condition, and its performance.

The week of peak carloadings occurred this year during the month of October. At the middle of that month, the situation as to *freight* locomotives was as follows:

	October 15, 1927
Number of locomotives in freight service	32,226
Number stored	3,214
Number under repair	4,620
Number "active" (excluding stored and repair)	24,392
Ratio stored to "active"	13.2%

These 24,392 "active" freight locomotives handled the peak loading in October without difficulty, and with an actual margin of 3,214 stored freight locomotives, or 13.2 per cent of the active number, ready to be called upon in case of any increase in traffic. This was the margin of safety *at the peak*. It does not take into account stored passenger locomotives to the number of 1,233 in October, which have been and can be utilized for freight service if the traffic demands it. Nor does it include 954 switching locomotives in storage during the same month, some of which were also potentially available for freight service.